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Data Validation Summary

Second Quarter 2019 Groundwater Monitoring Event - Annual Monitoring under 40 CFR 264 Appendix IX For HWMU-16; and Corrective Action Annual Groundwater Monitoring Event for HWMU-5

Final Hazardous Waste Post-Closure Care Permit for Hazardous Waste Management Units 5 and 16 Radford Facility Army Ammunition Plant, Radford, Virginia EPA ID# VA1210020730

Draper Aden Associates performed data validation of the analytical results for the Second Quarter 2019 semiannual groundwater monitoring event at Hazardous Waste Management Units (HWMUs) 5 and 16 located at the Radford Army Ammunition Plant (RFAAP), in Radford, Virginia. The monitoring event also served as annual monitoring under 40 CFR 264 Appendix IX for HWMU-16. As well, the event served as the corrective action semiannual groundwater monitoring event for HWMU-5 conducted in accordance with the *Final Hazardous Waste Post-Closure Care Permit for HWMU 5 and 16* (reissued August 16, 2014, Class 1 Permit Modification dated September 12, 2014 and Class 1 Permit Modification dated December 1, 2016). The following information and attached tables summarize the data validation results.

Sample Collection/Analytical Services

Draper Aden Associates, of Blacksburg, Virginia, collected groundwater samples during April 9 - 11, 2019.

Samples were submitted for laboratory analysis to Eurofins Lancaster Laboratories Environmental, (ELLE) - TestAmerica Canton, (TestAmerica) of North Canton, Ohio; Shealy Environmental (Shealy), West Columbia, South Carolina, ELLE of Lancaster, Pennsylvania, Microbac Laboratories (Microbac) of Marietta, Ohio and to Pace Analytical National Center for Testing and Innovation (Pace), Mt Juliet, Tennessee (split sample verification).

Receipt of Monitoring Event Data

On behalf of BAE SYSTEMS, Ordnance Systems, Inc., each laboratory submitted results to Draper Aden Associates in a final certificate of analysis which included analytical results as well as relevant documentation to verify and validate the results. The final certificate of analysis for these events was received on July 11, 2019.

Verification Events

Verification monitoring was conducted on June 25, 2019 to confirm or refute the initial results for total cobalt and total silver in 16MW8 and vinyl chloride in 16WC1A. The verification sample results were less than the AL and the verification event results were reported as the final results. Blind field sample duplicates for the verification event were also submitted as 16WDUP (16WC1A)

Summary of Monitoring Event Data by Analytical Method

Certificates of analysis were received from each laboratory in the following sample delivery groups (SDGs):

Summary of Required Analytical Methods and SDGs

Analytical Method	Hazardous Waste Management Unit	
	HWMU-5	**HWMU-16**
8260C Volatiles	RAF34	RAF35 RAF44 / L1116144 (verification)
8270D Semivolatiles	RAF34 / 240-110743-2	RAF35 / L19041033
6020B Inorganics	UD10056	UD13009 / UD13010 UF26007 (verification)
9012B Cyanide	Not required	UD13009 / UD13010
7470A Mercury	UD10056	UD13009 / UD13010

Each final certificate of analysis was complete in its presentation and the data were of acceptable quality. Chains of custody and permit required target analytes are provided in each SDG.

Data Analysis and Validation

Samples were analyzed by *SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates)*. Data were evaluated in general accordance with:

- *Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods*, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates
- *USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review*, January 2017, where applicable.
- *USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review*, January, 2017, where applicable.

Draper Aden Associates, of Blacksburg, Virginia, performed a comprehensive data validation, including recalculation of 10% of the data, where noted. For each HWMU, data validation reports and a summary table of data validation results are provided as an attachment (Appendix A – data validation summary tables, Appendix B – data validation reports).

Reporting of Results

For HWMU-16, all compliance groundwater monitoring network wells were sampled for the constituents listed in Appendix E to Permit Attachment 3 (Unit 16 Groundwater Compliance Monitoring (Semiannual) Constituent List). This event also served as the annual monitoring event in which the upgradient and point of compliance wells at HWMU-16 were sampled for the 40 CFR Part 264 Appendix IX constituents listed in Appendix I of Permit Attachment 1 of the Final Post-Closure Care Permit. Upgradient and point of compliance monitoring well results were reported to at or above the detection limit for the Appendix IX target analytes (constituents). The 8270D target analyte detection limits vary slightly from the permit required detection limit; however, no corrective action was needed. Results reported between the detection limit and quantitation limit should be considered estimated concentrations. Plume well results were reported to at or above the permit quantitation limit for the constituents listed in the semiannual compliance monitoring lists (Attachment 3 Appendix E).

Additionally, for HWMU-16, a footnote presented in Appendix G of Permit Attachment 3 of the August 16, 2014 reissuance of the Permit indicates that verification is required for constituents detected at concentrations less than the QL if their associated GPSs are equal to the QL and are greater than the applicable risk-based concentrations (i.e., ACL or RSL). In these instances, verification must be conducted using an alternate low-level analytical method in order to confirm or refute the observed initial detections if the QL achievable by that method is less than, or equal to, the ACL or RSL for the subject constituent. If a concentration greater than the low-level analytical method QL is observed, then the GPS for that constituent will be updated, if warranted. During Second Quarter 2019, no constituents with GPSs equal to their respective QLs and greater than the applicable risk-based concentrations were detected.

For HWMU-5, results were reported to at or above the permit detection limit for constituents listed in Appendix J to Permit Attachment 2 and Appendix K to Permit Attachment 2 of Module VI-Groundwater Corrective Action & Monitoring Program for Unit-5, with the exception of Methods 8260C and 8270D target analytes. Select target analyte detection limits based on current laboratory method detection limit studies varied slightly from the detection limit listed in the permit; however, no corrective action was needed. Results reported between the detection limit and quantitation limit should be considered estimated concentrations.

The USEPA periodically updates the Regional Screening Levels (RSLS). As stated in section VI.E.3 of Module IV of the Permit for HWMU-5, "The Permittee shall use the most up-to-date USEPA MCL, the Department ACL, or EPA Region 3 RBC as the GPS. If USEPA implements any changes to MCLs or RBCs, the GPS defined by that MCL or RBC will be updated to reflect the most current value established by USEPA." At the time of the Second Quarter 2019 groundwater monitoring event, the May 2019 USEPA RSL table reflected the most current value. The USEPA RSL for one constituent, diethyl ether, listed in Appendix K to Attachment 2, was updated from 7,300 µg/l to 3,900 µg/l; therefore, the GPS comparison value for diethyl ether listed in Appendix A-2 of this report is 3,900 µg/l. Diethyl ether is the only constituent listed in Appendix K to Attachment 2 whose GPS is based on an EPA RSL that was updated. Diethyl ether was detected below the quantitation limit (QL) (12 µg/l) at estimated values in 5WC21, 5WC22, and in 5WC23; detected results are below the GPS listed Appendix K to Attachment 2 of the permit (7,300 µg/l) and the May 2019 USEPA RSL of 3,900 µg/l. Diethyl ether was not detected in any other wells comprising the CA groundwater monitoring network.

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This Report has been prepared by:

_____KO_____ _____7/16/19_____

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Comprehensive Data Validation Report
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-5 Groundwater Monitoring Event:Second Quarter 2019

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Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 6020B											
Laboratory: Shealy Environmental, West Columbia, SC											
Antimony	5W5B	2	U	U		2	0.5	2	0.4	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	2	U	U		2	0.5	2	0.4	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	2	U	U		2	0.5	2	0.4	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	2	U	U		2	0.5	2	0.4	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	2	U	U		2	0.5	2	0.4	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	2	U	U		2	0.5	2	0.4	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Arsenic	5W5B	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Barium	5W5B	22		22		10	1.3	10	1	ug/L	No action taken.
	5W7B	25		25		10	1.3	10	1	ug/L	No action taken.
	5WC21	14		14		10	1.3	10	1	ug/L	No action taken.
	5WC22	28		28		10	1.3	10	1	ug/L	No action taken.
	5WC23	21		21		10	1.3	10	1	ug/L	No action taken.
	5WDUP	14		14		10	1.3	10	1	ug/L	No action taken. Blind field dupllicate of 5WC21 (RPD <2).
Beryllium	5W5B	1	U	U	J	1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL. MS/MSD recovered low (72%/71%).
	5W7B	1	U	U	J	1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL. MS/MSD recovered low (72%/71%).
	5WC21	0.27	J	0.27	J	1	0.2	1	0.2	ug/L	Result < QL. MS/MSD recovered low (72%/71%).
	5WC22	1	U	U	J	1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL. MS/MSD recovered low (72%/71%).
	5WC23	1	U	U	J	1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL. MS/MSD recovered low (72%/71%).

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 6020B											
Laboratory: Shealy Environmental, West Columbia, SC											
Beryllium	5WDUP	0.25	J	0.25	J	1	0.2	1	0.2	ug/L	Result < QL. MS/MSD recovered low (72%/71%). Blind field dupllicate of 5WC21.
Cadmium	5W5B	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	0.25	J	0.25	J	1	0.2	1	0.2	ug/L	Result < QL.
	5WC22	0.2	J	0.2	J	1	0.2	1	0.2	ug/L	Result < QL.
	5WC23	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	0.25	J	0.25	J	1	0.2	1	0.2	ug/L	Result < QL. Blind field dupllicate of 5WC21.
Chromium	5W5B	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	1.7	J	1.7	J	5	1.3	5	1	ug/L	Result < QL.
	5WC21	2.1	J	2.1	J	5	1.3	5	1	ug/L	Result < QL.
	5WC22	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	2	J	2	J	5	1.3	5	1	ug/L	Result < QL. Blind field dupllicate of 5WC21.
Cobalt	5W8B	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5W5B	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	2.4	J	2.4	J	5	1.3	5	1	ug/L	Result < QL.
	5WC21	32		32		5	1.3	5	1	ug/L	No action taken.
	5WC22	4.8	J	4.8	J	5	1.3	5	1	ug/L	Result < QL.
	5WC23	1.7	J	1.7	J	5	1.3	5	1	ug/L	Result < QL.
	5WDUP	32		32		5	1.3	5	1	ug/L	No action taken. Blind field dupllicate of 5WC21 (RPD <2).
	5W12A	5	U	U		5	1.3	5	1	ug/L	Analyte not detected at or above the DL or QL.
Copper	5W5B	40	U	U		40	10	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	40	U	U		40	10	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	40	U	U		40	10	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	40	U	U		40	10	5	1	ug/L	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 6020B											
Laboratory: Shealy Environmental, West Columbia, SC											
Copper	5WC23	40	U	U		40	10	5	1	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	40	U	U		40	10	5	1	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Lead	5W5B	3	U	U		3	1	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	3	U	U		3	1	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	3	U	U		3	1	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	3	U	U		3	1	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	3	U	U		3	1	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	3	U	U		3	1	2	0.2	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Nickel	5W5B	10	U	U		10	2	10	2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	2.8	J	2.8	J	10	2	10	2	ug/L	Result < QL.
	5WC21	17		17		10	2	10	2	ug/L	No action taken.
	5WC22	4.6	J	4.6	J	10	2	10	2	ug/L	Result < QL.
	5WC23	3.1	J	3.1	J	10	2	10	2	ug/L	Result < QL.
	5WDUP	16		16		10	2	10	2	ug/L	No action taken. Blind field dupllicate of 5WC21 (RPD <10).
Selenium	5W5B	10	U	U		10	3	10	3	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	10	U	U		10	3	10	3	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	10	U	U		10	3	10	3	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	10	U	U		10	3	10	3	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	10	U	U		10	3	10	3	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	10	U	U		10	3	10	3	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Silver	5W5B	2	U	U		2	0.3	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	2	U	U		2	0.3	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	2	U	U		2	0.3	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	2	U	U		2	0.3	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	2	U	U		2	0.3	2	0.2	ug/L	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 6020B											
Laboratory: Shealy Environmental, West Columbia, SC											
Silver	5WDUP	2	U	U		2	0.3	2	0.2	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Thallium	5W5B	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	1	U	U		1	0.2	1	0.2	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Vanadium	5W5B	10	U	U		10	2.5	10	1	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	10	U	U		10	2.5	10	1	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	10	U	U		10	2.5	10	1	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	10	U	U		10	2.5	10	1	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	10	U	U		10	2.5	10	1	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	10	U	U		10	2.5	10	1	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Zinc	5W5B	30	U	U		30	7.3	30	7.3	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	10	J	10	J	30	7.3	30	7.3	ug/L	Result < QL.
	5WC21	15	J	15	J	30	7.3	30	7.3	ug/L	Result < QL.
	5WC22	30	U	U		30	7.3	30	7.3	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	30	U	U		30	7.3	30	7.3	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	15	J	15	J	30	7.3	30	7.3	ug/L	Result < QL. Blind field dupllicate of 5WC21.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 7470A											
Laboratory: Shealy Environmental, West Columbia, SC											
Mercury	5W5B	0.2	U	U		0.2	0.12	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5W7B	0.2	U	U		0.2	0.12	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC21	0.2	U	U		0.2	0.12	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC22	0.2	U	U		0.2	0.12	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WC23	0.2	U	U		0.2	0.12	2	0.2	ug/L	Analyte not detected at or above the DL or QL.
	5WDUP	0.2	U	U		0.2	0.12	2	0.2	ug/L	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
Acetone	5W5B	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	Trip Blank 1	3	U	U		10	3	10	3	ug/l	Analyte not detected at or above the DL or QL.
2-Butanone	5W5B	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	Trip Blank 1	1	U	U		10	1	10	1	ug/l	Analyte not detected at or above the DL or QL.
Chloroform	5W5B	2		2		1	0.1	1	0.1	ug/l	No action taken.
	5W7B	20		20		1	0.1	1	0.1	ug/l	No action taken.
	5WC21	1.8		1.8		1	0.1	1	0.1	ug/l	No action taken.
	5WC22	1.8		1.8		1	0.1	1	0.1	ug/l	No action taken.
	5WC23	1.4		1.4		1	0.1	1	0.1	ug/l	No action taken.
	5WDUP	1.8		1.8		1	0.1	1	0.1	ug/l	No action taken. Blind field dupllicate of 5WC21 (RPD<2).
	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
Dichlorodifluoromethane	5W5B	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%).
	5W7B	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%).
	5WC21	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%).
	5WC22	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%).

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Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
Dichlorodifluoromethane	5WC23	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%).
	5WDUP	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%). Blind field dupllicate of 5WC21.
	Trip Blank 1	0.3	U	U	J	1	0.3	1	0.28	ug/l	Analyte not detected at or above the DL or QL. LCS recovered low (66%).
1,2-Dichloroethane	5W5B	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	Trip Blank 1	0.1	U	U		1	0.1	1	0.147	ug/l	Analyte not detected at or above the DL or QL.
1,1-Dichloroethene	5W8B	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	5W5B	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	5W12A	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.4	U	U		1	0.4	1	0.44	ug/l	Analyte not detected at or above the DL or QL.
cis-1,2-Dichloroethene	5W8B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5W5B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL
	5WC22	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
cis-1,2-Dichloroethene	5WDUP	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	5W12A	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
trans-1,2-Dichloroethene	5W8B	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5W5B	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	5W12A	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.8	U	U		1	0.8	1	0.8	ug/l	Analyte not detected at or above the DL or QL.
Diethyl ether	5W5B	0.4	U	U		12	0.4	12	0.39	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.4	U	U		12	0.4	12	0.39	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	2.3	J	2.3	J	12	0.4	12	0.39	ug/l	Result < QL.
	5WC22	5.3	J	5.3	J	12	0.4	12	0.39	ug/l	Result < QL.
	5WC23	10	J	10	J	12	0.4	12	0.39	ug/l	Result < QL.
	5WDUP	2.3	J	2.3	J	12	0.4	12	0.39	ug/l	Result < QL. Blind field dupllicate of 5WC21.
	Trip Blank 1	0.4	U	U		12	0.4	12	0.39	ug/l	Analyte not detected at or above the DL or QL.
Methylene chloride	5W5B	0.2	U	U		1	0.2	1	0.182	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.4	J	0.4	J	1	0.2	1	0.182	ug/l	Result < QL.
	5WC21	0.2	U	U		1	0.2	1	0.182	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.2	U	U		1	0.2	1	0.182	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.2	U	U		1	0.2	1	0.182	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.2	U	U		1	0.2	1	0.182	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.

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Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
Methylene chloride	Trip Blank 1	0.2	U	U		1	0.2	1	0.182	ug/l	Analyte not detected at or above the DL or QL.
Toluene	5W5B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
Trichloroethene	5W8B	0.2	U	U		1	0.2	1	0.177	ug/l	Analyte not detected at or above the DL or QL.
	5W5B	0.2	U	U		1	0.2	1	0.177	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.2	U	U		1	0.2	1	0.177	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	2.8		2.8		1	0.2	1	0.177	ug/l	No action taken.
	5WC22	2.9		2.9		1	0.2	1	0.177	ug/l	No action taken.
	5WC23	3.9		3.9		1	0.2	1	0.177	ug/l	No action taken.
	5WDUP	2.7		2.7		1	0.2	1	0.177	ug/l	No action taken. Blind field dupllicate of 5WC21 (RPD<10).
	5W12A	0.2	U	U		1	0.2	1	0.177	ug/l	Analyte not detected at or above the DL or QL.
	Trip Blank 1	0.2	U	U		1	0.2	1	0.177	ug/l	Analyte not detected at or above the DL or QL.
Vinyl chloride	5W8B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5W5B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	5W12A	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8260C											
Laboratory: ELLE, Lancaster, PA											
Vinyl chloride	Trip Blank 1	0.1	U	U		1	0.1	1	0.1	ug/l	Analyte not detected at or above the DL or QL.
Xylenes (Total)	5W5B	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
	Trip Blank 1	0.2	U	U		3	0.2	3	0.208	ug/l	Analyte not detected at or above the DL or QL.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8270D											
Laboratory: ELLE, Lancaster, PA											
bis(2-Ethylhexyl)phthalate	5W5B	5	U	U		6	5	6	1.5	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	5	U	U		6	5	6	1.5	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	5	U	U		6	5	6	1.5	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	5	U	U		6	5	6	1.5	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	5	U	U		6	5	6	1.5	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	5	U	U		6	5	6	1.5	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Diethyl phthalate	5W5B	2	U	U		10	2	10	0.5	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	2	U	U		10	2	10	0.5	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	2	U	U		10	2	10	0.5	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	2	U	U		10	2	10	0.5	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	2	U	U		10	2	10	0.5	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	2	U	U		10	2	10	0.5	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
2,4-Dinitrotoluene	5W5B	1	U	U		10	1	10	0.6	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	1	U	U		10	1	10	0.6	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	1	U	U		10	1	10	0.6	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	1	J	1	J	10	1	10	0.6	ug/l	Result < QL.
	5WC23	1	U	U		10	1	10	0.6	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	1	U	U		10	1	10	0.6	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
2,6-Dinitrotoluene	5W5B	0.7	U	U		10	0.7	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.7	U	U		10	0.7	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	0.7	U	U		10	0.7	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	0.7	U	U		10	0.7	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	0.7	U	U		10	0.7	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5WDUP	0.7	U	U		10	0.7	10	0.7	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.

Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes
Method: 8270D											
Laboratory: ELLE, Lancaster, PA											
o-Nitroaniline	5W5B	2	U	U		10	2	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	2	U	U		10	2	10	0.7	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	2	J	2	J	10	2	10	0.7	ug/l	Result < QL.
	5WC22	2	J	2	J	10	2	10	0.7	ug/l	Result < QL.
	5WC23	3	J	3	J	10	2	10	0.7	ug/l	Result < QL.
	5WDUP	2	J	2	J	10	2	10	0.7	ug/l	Result < QL. Blind field dupllicate of 5WC21.
p-Nitroaniline	5W5B	1.3	U	U		20	1.3	20	1.3	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	1.3	U	U		20	1.3	20	1.3	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	1.3	U	U		20	1.3	20	1.3	ug/l	Analyte not detected at or above the DL or QL.
	5WC22	1.3	U	U		20	1.3	20	1.3	ug/l	Analyte not detected at or above the DL or QL.
	5WC23	1.3	U	U		20	1.3	20	1.3	ug/l	Analyte not detected at or above the DL or QL. Result reported from verification-split. ND to RL (1.8 ug/l) / DL (0.82 ug/l). Original result < QL (1 ug/l J).
	5WDUP	1.3	U	U		20	1.3	20	1.3	ug/l	Analyte not detected at or above the DL or QL. Blind field dupllicate of 5WC21.
Nitrobenzene	5W5B	0.8	U	U		10	0.8	10	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5W7B	0.8	U	U		10	0.8	10	0.8	ug/l	Analyte not detected at or above the DL or QL.
	5WC21	1	J	1	J	10	0.8	10	0.8	ug/l	Result < QL.
	5WC22	1	J	1	J	10	0.8	10	0.8	ug/l	Result < QL.
	5WC23	1	J	1	J	10	0.8	10	0.8	ug/l	Result < QL.
	5WDUP	0.9	J	0.9	J	10	0.8	10	0.8	ug/l	Result < QL. Blind field dupllicate of 5WC21.

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Analyte	Sample ID	Lab Result	Q	Validated Result	Q	Lab QL	Lab DL	Permit QL	Permit DL	Units	Validation Notes

Definitions:

QL Denotes quantitation limit.
DL Denotes detection limit
Q Denotes data qualifier.
U Denotes analyte not detected at or above Detection Limit (DL) or Quantitation Limit (QL).
UA Denotes analyte not detected at or above adjusted sample DL or QL.
J Denotes analyte reported at or above the DL and associated result is estimated. When used with "U" (i.e., "UJ"), denotes analyte not detected at or above DL and QL and DL and QL are estimated. When used with "UA" (i.e., "UAJ"), denotes analyte not detected at or above adjusted DL and QL and adjusted DL and QL are estimated.
R Denotes result rejected.
Laboratory Data Qualifiers, "U" and "<", denote not detected at or above the DL or QL.

SW-846 METHOD 8260C VOLATILE ORGANIC DATA REVIEW SUMMARY

Draper Aden Associates performed a manual comprehensive review of the analytical results for the April 9, 2019 semiannual groundwater monitoring event at Hazardous Waste Management Unit 5 (HWMU 5) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia. Draper Aden Associates collected the groundwater samples from monitoring wells 5W8B, 5W5B, 5W7B, 5WC21, 5WC22, 5WC23 and 5W12A. Groundwater sample 5WDUP was submitted to the laboratory as a blind sample duplicate for 5WC21. The following information and attached table summarize the Method 8260C data validation results. Validation of other required methods is presented on separate reports.

For this Corrective Action annual groundwater monitoring event, samples 5W5B, 5W7B, 5WC21, 5WC22 and 5WC23 (downgradient point of compliance (POC) wells) and a trip blank for each day of sample collection were analyzed for five Appendix J and nine Appendix K volatile organic target analytes, as listed in the facility's permit, by USEPA SW-846 Method 8260C. Samples 5W8B (upgradient groundwater monitoring well) and 5W12A (plume monitoring well) were analyzed for the five Appendix J volatile organic target analytes by USEPA SW-846 Method 8260C.

Draper Aden Associates sent samples to Eurofins Lancaster Laboratories Environmental, (ELLE), of Lancaster, Pennsylvania. ELLE performed the SW-846 Method 8260C volatile analysis. ELLE is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the analytes, method and matrix as reported on the certificate of analysis. On behalf of RFAAP, ELLE submitted results to Draper Aden Associates in a final certificate of analysis that included sample analytical results as well as relevant documentation to validate and verify the results (SDG#: RAF34).

The evaluation of ELLE's compliance with Method 8260C and validation of the results were based on a review of the following items: quality control (QC) deliverables package, QC history documentation, technical holding time and preservation requirements, instrument performance (tune) check, instrument calibration and calibration verification, blank, surrogate spike, matrix spike and matrix spike duplicate (MS/MSD), laboratory control sample (LCS), internal standard, and/or target analyte identification and quantitation results. A review of transcriptions from instrument data to sample summary sheets was performed. Calculation verifications were performed on ten percent of the data set, where applicable. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

ELLE received the samples on ice and in good condition, with custody seals intact. The chain of custody was appropriately signed and dated by field and laboratory personnel. Applicable holding time and preservation criteria were met for the samples.

The original certificate of analysis was received on May 9, 2019. The original certificate of analysis appeared complete in its presentation and the data were of acceptable quality. The certificate of analysis demonstrated the ability of the laboratory to achieve the permit required quantitation limit (QL) for each target analyte, except where noted below.

QC deliverables package requirements were met. QC history documentation and instrument performance check criteria were met. Sample holding time, preservation, initial calibration, calibration verification, blanks, surrogates, MS/MSD, LCS, and internal standards criteria were met, except where noted below. Target analyte identification and quantitation criteria were met except where noted below. Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

Dichlorodifluoromethane recovered low from the LCS. Dichlorodifluoromethane was not detected at or above the detection limit or QL in any project sample and sample results for this analyte were validated and qualified "UJ" to note that the QL was estimated due to the observed QC deficiency. Cis-1,2-dichloroethene recovered high in the MSD; however, this analyte was not detected at or above the detection limit or QL in any project sample and no data qualification was required. The remaining MS/MSD/LCS criteria were met.

Field duplicate/sample results exhibited acceptable precision, where applicable. Target analyte detections at or above the QL were verified through calculations from the instrument data. No transcription errors were observed with the reporting of sample results.

A 25 ml sample purge volume was used for the analysis of the target analytes.

Results were reported by the laboratory to at or above the laboratory method detection limit (MDL) for this Corrective Action monitoring event. The laboratory MDL was at or below the permit specified detection limit (DL), or slightly above, due to rounding.

Results for samples unaffected by the data validation process and reported as not detected at or above the MDL were validated and qualified "U." Except where noted above, reported values less than the quantitation limit (QL) should be considered estimated concentrations and were validated and qualified "J." No results were rejected based on the data validation criteria.

SW-846 METHOD 8260C (GC/MS) VOLATILE ORGANIC DATA VALIDATION

Comments: *Volatile organic analysis uses a purge and trap system to remove volatile organic target analytes from a 25 ml water sample (SW-846 5030C). Target analytes are separated and quantified using a capillary column gas chromatograph (GC)/mass spectrometer (MS).*

A. QC DELIVERABLES PACKAGE:

1.	Was the case narrative present/signed by a lab representative?	☑ YES ☐ NO
2.	Was the Chain of Custody present/signed by a lab representative?	☑ YES ☐ NO
3.	Were the sample results included for the sample locations?	☑ YES ☐ NO
4.	Did the laboratory report the required target analytes?	☑ YES ☐ NO
5.	Were the analyte QLs reported on reports in agreement with the instrument specific MDL study and project required QL?	☑ YES ☐ NO
6.	Were the sample locations, analytes and QLs in agreement with the electronic deliverable (EDD)?	☑ YES ☐ NO

Comments: QC deliverables package requirements were met.

B. QC HISTORY DOCUMENTATION CRITERIA:

1.	Were instrument specific detection limits provided for analytes?	☑ YES ☐ NO
2.	Were the instrument specific QLs for target analytes provided?	☑ YES ☐ NO
3.	Was calibration range specified for the target analytes?	☑ YES ☐ NO

Comments: QC history documentation was provided and met criteria. The laboratory analyzed a MDL check sample at 0.1 µg/l (25 ml purge) for most target analytes.

C. TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

1.	Was the 14-day sample collection to analysis holding time met?	☑ YES ☐ NO
2.	Were the samples received at ≤6°C, zero headspace?	☑ YES ☐ NO
3.	Were the sample pHs adjusted to < 2 with HCl?	☑ YES ☐ NO
4.	Were sample pHs adjusted to 4-5 with HCl? (Acrolein)	☑ NA ☐ YES ☐ NO
5.	Were samples analyzed unpreserved (2-Chloroethyl vinyl)	☑ NA ☐ YES ☐ NO

Comments: Technical holding time and sample preservation criteria were met.

D. GC/MS INSTRUMENT PERFORMANCE (TUNING) CHECK CRITERIA:

1.	Was analysis of the instrument performance check solution performed at the beginning of each 12-hour period during which standards or samples were analyzed?	☑ YES ☐ NO
2.	Was there documentation of the injection of 5-50 ng bromofluorobenzene (BFB)?	☑ YES ☐ NO
3.	Were the ion abundance criteria met?	☑ YES ☐ NO

4. Were calibration, blank, and sample analyses performed within 12 hours of tuning? ☑ YES ☐ NO

Comments: Instrument performance check criteria were met.

E. INITIAL GC/MS CALIBRATION CRITERIA:

SW-846 Criteria*:*

1. Did the internal standard (IS) which was selected for target analyte RF calculation have a retention time close to the IS? ☑ YES ☐ NO
2. Were the target analytes included in the ICAL? ☑ YES ☐ NO
3. Were any calibration levels removed from the curve that would negatively influence the data integrity? ☐ YES ☑ NO
4. Did the ICALs consist of a minimum of 5 calibration levels? ☑ YES ☐ NO
5. Was the lowest concentration calibration standard at or below the associated MCL? ☑ YES ☐ NO
6. Was the calibration curve developed using the same purge volume used for sample analysis? ☑ YES ☐ NO
7. Were 8260C minimum Relative Response Factor (RRF) criteria met? ☑ YES ☐ NO
   Refer to Table 4- SW-846 Method 8260C (Rev3 8/06) for specific analyte RRFs
8. Was each target analyte %RSD ≤ 20%? ☑ YES ☐ NO
9. Was the correlation coefficient >0.99 for target analytes with ≥20 % RSD? (*System recalibrated if >10% analytes fail above condition)* ☑ NA ☐ YES ☐ NO
10. Was an initial calibration verification (ICV) standard analyzed immediately following the ICAL? ☑ YES ☐ NO
11. Was the recovery within 70-130%? ☑ YES ☐ NO
12. Was the ICV standard prepared from a different source from the ICAL? ☑ YES ☐ NO

Method Validation Performance Criteria:

1. Did target analytes and surrogates that have RSDs > 20% have ≥0.99 correlation coefficient or coefficient of determination? ☑ NA ☐ YES ☐ NO
2. For linear regression curves, was the recalculated concentration of the low calibration point within ±30%? ☑ NA ☐ YES ☐ NO
3. For quadratic curves, was a minimum six standards used? ☑ NA ☐ YES ☐ NO

Comments: Initial calibration criteria were met.

F. CALIBRATION VERIFICATION (CV) CRITERIA:

SW-846 Criteria:

1. Was a calibration verification analyzed at the beginning of each 12-hour period following the analysis of the instrument performance check and prior to analysis of the method blank and samples? The calibration verification may be part of the ICAL or analyzed independently during another 12-hour analysis period. ☑ YES ☐ NO
2. Were 8260C minimum Relative Response Factor (RRF) criteria met?
   Refer to Table 4- SW-846 Method 8260C (Rev3 8/06) for specific analyte RRFs ☑ YES ☐ NO
3. Did the target analytes and system monitoring analytes

(surrogates) have the % D within ± 20%? ☑ YES ☐ NO
If "NO", list analytes that exceed these criteria: *None*

Draper Aden Associates Contractual Requirements:

1. Did the target analytes and system monitoring analytes (surrogates) have % Ds within ± 20%? ☑ YES ☐ NO

Comments: The CV standard criteria were met.

G. BLANK CRITERIA:

1. Was a method blank analyzed after the calibration standards, prior to sample analysis, and once for every 12-hour period beginning with the injection of BFB? ☑ YES ☐ NO
2. Was a trip blank analyzed with this sample batch? ☑ YES ☐ NO
3. Were the trip blanks and method blanks interference free? ☑ YES ☐ NO
4. Was the level of blank contamination less than 5% of the regulatory limit associated with an analyte or less than 5% of the sample result for the same analyte, whichever is greater? ☑ NA ☐ YES ☐ NO
5. List target analytes detected in the blanks: *None*
6. Did any result exceed the calibration range? ☐ YES ☑ NO
7. Were one or more blanks analyzed following the high concentration sample to prevent cross contamination? ☑ NA ☐ YES ☐ NO

Comments: A trip blank was submitted and analyzed. Blank criteria were met.

H. SURROGATE CRITERIA:

SW-846 Criteria:

1. Were the following surrogates used? ☑ YES ☐ NO
   - dibromofluoromethane (80-120%)
   - 4-bromofluorobenzene (80-120%)
   - toluene-d_8 (80-120%)
   - 1,2-dichloroethane-d_4 (80-120%)
2. Were recoveries within specified ranges? ☑ YES ☐ NO
   If "NO", corrective action is required. Flagging of the data as estimated is not acceptable until corrective action has been attempted
3. Were samples with surrogates outside the QC window reanalyzed as required? ☑ NA ☐ YES ☐ NO

Comments: Surrogate criteria were met.

I. MATRIX SPIKE, MATRIX SPIKE DUPLICATE (MS/MSD) CRITERIA:

(MS/MSD Requirements - CLP Guidelines)

Analyte	*% R Water*	*% RPD Water*
1,1-dichloroethene	61-145	14
trichloroethene	71-120	14
benzene	76-127	11
toluene	76-125	13
chlorobenzene	75-130	13

1. Was a MS/MSD analyzed per sample batch or every 20 samples? ☑ YES ☐ NO
2. Did the MS/MSD spike contain additional target analytes? ☑ YES ☐ NO
3. Was the MS/MSD analyzed on the specific project matrix? ☑ YES ☐ NO
4. List the MS % recovery range: 75-125%; 70-130% poor purge analytes; RPD ≤20
5. Were any analytes qualified as estimated? ☐ YES ☑ NO
    - If yes, and the LCS for the analyte(s) recovered within control limits, matrix interference is suspected.

Comments: MS/MSD criteria were met or no data qualification was required.

J. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

1. Was a LCS included in the sample analysis? ☑ YES ☐ NO
2. Did the LCS contain the required target analytes? ☑ YES ☐ NO
3. List the LCS acceptance criteria: 80-120% (most analytes).
4. List the LCS analytes which were not within the specified ranges: *See below*.
5. Were any analytes flagged as estimated due to LCS criteria? ☑ YES ☐ NO

Comments: LCS criteria were met except where noted in above summary.

K. INTERNAL STANDARDS (IS) CRITERIA:

1. Were the following internal standards (IS) used? ☑ YES ☐ NO
   t-butyl alcohol-d_{10}, fluorobenzene, chlorobenzene-d_5, 1,4-dichlorobenzene-d_4
2. Were the IS areas within - 50% to + 100% of the last CV? ☑ YES ☐ NO
3. Were the IS RTs within ± 30 seconds of the last CV? ☑ YES ☐ NO
4. Were samples failing Items 2 and/or 3 above reanalyzed as required by the method? ☑ NA ☐ YES ☐ NO

Comments: Internal standards criteria were met.

L. TARGET ANALYTE IDENTIFICATION:

1. Were the RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT? ☑ YES ☐ NO
2. Check the sample spectra against the laboratory standard spectra to see that the following criteria were met:
   * Did characteristic ions maximize in the same scan or within one scan of each other? ☑ YES ☐ NO
   * Were the characteristic ions present in the standard spectra and sample spectra for analytes detected above the QL? ☑ YES ☐ NO
   * Were the relative intensities of the ions between the standard and sample spectra within ± 30%? ☑ YES ☐ NO
3. Were the reported analytes confirmed? ☑ YES ☐ NO

Comments: See attached table for detected analytes. Identification criteria were met.

M. TARGET ANALYTE QUANTITATION:

* If the %RSD of an analyte was 20% or less, then the average relative response factor should have been used for quantitation.
* If the %RSD of an analyte was greater than 20%, then the quantitation should have been based on a calibration curve using the first or higher order regression fit of the five calibration points. (6 calibration points for 2nd order).

1. List the detected analytes whose %RSD was > 20%: *None*
   - Was quantitation based on a linear regression fit? ☑ NA ☐ YES ☐ NO
2. Did the initial analysis of any sample have a concentration of an analyte which exceeded the initial calibration range? ☐ YES ☑ NO
   If so, was the sample reanalyzed at a higher dilution? ☑ NA ☐ YES ☐ NO
3. Were the analyte concentrations that were recorded on the instrument data/quantitation reports accurately transferred to the sample summary sheets? ☑ YES ☐ NO
4. Were sample/ field duplicate RPDs <20% where applicable? ☑ YES ☐ NO

Comments: Target analyte quantitation criteria were met. Calculation checks were performed on ten percent of the data set and no errors were noted.

N. CORRECTIVE ACTION TAKEN AND GENERAL COMMENTS:

Comments: No corrective action was taken. Library searches were not requested. The initial demonstration of capability (IDOC) for analyst M. Campbell was submitted previously.

REFERENCES:

Draper Aden Associates conducted data validation of the above noted data set using summary tables and instrument data provided by the analyzing laboratory. Data were evaluated in general accordance with SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, January 2017, where applicable). Where QA/QC criteria differed, the analytical method acceptance criteria were used. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

LIMITATIONS:

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SW-846 METHOD 8270D SEMIVOLATILE ORGANIC DATA REVIEW SUMMARY

Draper Aden Associates performed a comprehensive manual review of the analytical results for the April 9, 2019 Corrective Action groundwater monitoring event at Hazardous Waste Management Unit 5 (HWMU 5) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia. Draper Aden Associates collected the groundwater samples from point of compliance (POC) monitoring wells 5W5B, 5W7B, 5WC21, 5WC22, and 5WC23. Sample 5WDUP was submitted to the laboratory as a blind field sample duplicate for 5WC21.

Samples were analyzed for the seven Appendix K semivolatile target analytes listed in the facility's permit by USEPA SW-846 Method 8270D. The following information and attached table summarize the Method 8270D data validation results. Other wells were listed on the chain of custody (COC); however, USEPA SW-846 Method 8270D analysis was not required for those sample locations.

Draper Aden Associates sent samples to Eurofins Lancaster Laboratories Environmental, (ELLE), of Lancaster, Pennsylvania. ELLE performed the Method 8270D analyses. ELLE is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the analytes, method and matrix as reported on the certificate of analysis. On behalf of RFAAP, ELLE submitted results to Draper Aden Associates in final certificates of analysis, which included sample analytical results, as well as relevant documentation to validate and verify the results (SDG# RAF34).

The evaluation of ELLE's compliance with Method 8270D and validation of the results was based on review of the following items: quality control (QC) deliverables package, QC history documentation, case narrative, technical holding time and preservation requirements, instrument performance (tune) check, instrument calibrations, blank analysis, surrogate spike recoveries, matrix spike and matrix spike duplicate (MS/MSD), laboratory control sample (LCS), internal standard and/or target analyte identification and quantitation results. A review of transcriptions from instrument data to sample summary sheets was performed. Calculations checks were performed on ten percent of the data set, where applicable. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

ELLE received the samples on ice and in good condition, with custody seals intact. The chain of custody (COC) was appropriately signed and dated by field and laboratory personnel, except as noted.

The original certificate of analysis was received on May 9, 2019. The certificate of analysis appeared complete and data were of acceptable quality, except where noted below. The data set demonstrated the laboratory's ability to achieve the reported permit required quantitation limit (QL).

QC history documentation (instrument specific initial demonstration of proficiency and method detection limit data) were provided. Applicable preservation and technical holding time

criteria were met. Instrument performance check (tuning) criteria, initial calibration, calibration verification, blank, MS/MSD, LCS, surrogate recoveries, and internal standard requirements were met, except where noted below. Target analyte identification and quantitation criteria were met except where noted below. No deviations from specific QA/QC criteria were identified during the data review process.

Field duplicate/sample results exhibited acceptable precision, where applicable. Target analyte detections at or above the QL were verified through calculations from the instrument data. No transcription errors were observed with the reporting of sample results.

A footnote presented in Appendix K, Groundwater Corrective Action Annual Monitoring List, of Permit Module VI - *Groundwater Corrective Action & Monitoring* P*rogram for Unit 5* indicates that verification is required for constituents detected at a concentration less than the Limit of Quantitation/Quantitation Limit (LOQ)/QL if their associated groundwater protection standard (GPS) is:

(1) based on a background value equal to the QL/LOQ/PQL
(2) greater than the applicable risk-based concentration (i.e., ACL or RBC/regional screening level).

During Second Quarter 2019, the following constituent listed in the table below with a GPS based on a background value equal to the QL/LOQ/PQL was detected at a concentration less than the respective QL. To confirm the observed detection below the QL, an additional aliquot, collected from sample location 5WC23 during the original sampling event and submitted to Eurofins TestAmerica Canton (TestAmerica), North Canton, Ohio, was analyzed using a low-level analysis. The result for p-nitroaniline at 5WC23, received April 29, 2019 (SDG 240-110743-2), was not detected at or above the laboratory QL. The additional low-level sample analysis refuted the initial detection of p-nitroaniline and no further action is warranted.

Sample Location	Constituent Detected Below the QL	GPS (µg/l)	Analytical Method (SW-846)	Confirming Laboratory QL (µg/l)	Permit ACL (µg/l)
5WC23	p-Nitroaniline	20	8270D	1.8	3.3

Except where noted above, results remain as reported by the laboratory. Sample results were reported by the laboratory to at or above the method detection limit (MDL). These current laboratory established MDLs slightly differ from the MDL listed in Appendix K of the permit.

Target analytes detected at or above the MDL or QL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table.

Sample results unaffected by the data validation process and reported as not detected at or above the MDL/detection limit (DL) were validated and qualified "U." Reported values less than the QL should be considered estimated concentrations and were validated and qualified "J." No results were rejected based on the data validation criteria.

SW-846 METHOD 8270D (GC/MS) SEMIVOLATILE ORGANIC DATA VALIDATION

Comments: *Semivolatile (a.k.a, base/neutral and acid extractables) analysis involves sample preparation using liquid/liquid extraction technique (SW-846 Method 3510C). The semivolatile extracts are concentrated through evaporation. Target analytes are separated and quantified using a capillary column gas chromatograph (GC)/mass spectrometer (MS).*

A. QC DELIVERABLES PACKAGE:

1. Was the case narrative present/signed by a lab representative? ☑ YES ☐ NO
2. Was the Chain of Custody present/signed by a lab representative? ☑ YES ☐ NO
3. Were the sample results included for the sample locations? ☑ YES ☐ NO
4. Did the data correspond to the project specific analyte list? ☑ YES ☐ NO
5. Were the analyte QLs reported on sample summary sheets in agreement with the instrument specific MDL study? ☑ YES ☐ NO

Comments: QC deliverables package criteria were met.

B. QC HISTORY DOCUMENTATION CRITERIA:

1. Were instrument specific detection limits provided for analytes? ☑ YES ☐ NO
2. Were the instrument specific QLs for target analytes provided? ☑ YES ☐ NO
3. Was calibration range specified for the target analytes? ☑ YES ☐ NO

Comments: QC history documentation criteria were met.

C. TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

1. Was the 7-day sample collection to extraction holding time met? ☑ YES ☐ NO
2. Was the 40-day extraction to analysis holding time met? ☑ YES ☐ NO
3. Were the samples received at ≤6°C? ☑ YES ☐ NO

Comments: Sample holding times and preservation criteria were met.

D. GC/MS INSTRUMENT PERFORMANCE CHECK CRITERIA:
(Tuning, Injection Port and Column Performance)

1. Was performance check solution analysis performed at the beginning of each 12-hour period of standard and/or sample analysis? ☑ YES ☐ NO
2. Was there documentation of the injection of 12.5 ng of DFTPP? ☑ YES ☐ NO
3. Were the ion abundance criteria met? ☑ YES ☐ NO
4. Was the injection port inertness verified by analysis of 4,4′-DDT? ☑ YES ☐ NO
   - If no, does associated data require qualification? ☑ NA ☐ YES ☐ NO
   - Was the injection port inertness check acceptable? ☑ YES ☐ NO
5. Was column performance checked through the analysis of peak tailing of pentachlorophenol and benzidine? ☑ YES ☐ NO

- If no, does associated data require qualification? ☑ NA ☐ YES ☐ NO
- Was column performance check acceptable? ☑ YES ☐ NO

Comments: Instrument performance check criteria were met.

E. INITIAL GC/MS CALIBRATION CRITERIA:

SW-846 Criteria:

1. Were the initial calibrations (ICAL) and any directly associated blanks and samples analyzed within 12-hours of the associated instrument performance (tune) check? ☑ YES ☐ NO
2. Were quantitation ions, used and listed on data, randomly checked against primary quantitation ions as required by Method 8270D? ☑ YES ☐ NO
3. Were the target analytes included in the ICAL? ☑ YES ☐ NO
4. Did the ICAL consist of a minimum of 5 calibration levels? ☑ YES ☐ NO
5. Was the lowest concentration calibration standard at or below the associated MCL, regulatory compliance, or action limit? ☑ YES ☐ NO
6. Were calibration levels removed from the curve that would negatively impact the data integrity? ☐ YES ☑ NO
7. Were 8270D minimum RRF criteria met? Relative Response Factor-range (RRF 0.010-0.900) ☑ YES ☐ NO
   **Refer to Table 4 of SW-846 Method 8270D (Rev4 2/07) for specific analyte RRFs*
8. Was each target analyte %RSD ≤ 20%? ☑ YES ☐ NO
9. Was the correlation coefficient or coefficient of determination >0.99 for target analytes with > 20% RSD? ☑ NA ☐ YES ☐ NO
   **System recalibrated if >10% analytes fail above condition*
10. Was an initial calibration verification (ICV) standard analyzed immediately following the ICAL? ☑ YES ☐ NO
11. Was the recovery within 70-130%? ☑ YES ☐ NO
12. Was the ICV standard prepared from a different source from the ICAL? ☑ YES ☐ NO

Method Validation Performance Criteria:

1. Did target analytes and surrogates that have RSDs > 20% have ≥0.99 correlation coefficient or coefficient of determination? ☑ NA ☐ YES ☐ NO
2. For linear regression curves, was the recalculated concentration of the low calibration point within ±30%? ☑ NA ☐ YES ☐ NO
3. For quadratic curves, was a minimum six standards used? ☑ NA ☐ YES ☐ NO

Comments: Initial calibration criteria were met.

F. CALIBRATION VERIFICATION CRITERIA:

SW-846 Criteria:

1. Was a calibration verification analyzed at the beginning of each 12-hour period following the analysis of the instrument performance check and prior to analysis of the method blank and samples? The calibration verification may be part of the ICAL or run independently on another 12-hour analysis period. ☑ YES ☐ NO

2. Was each target analyte % difference/drift ≤ 20%? ☑ YES ☐ NO
(Corrective action if >20%)
3. Were 8270D minimum RRF criteria met?
Relative Response Factor-range (RRF 0.010-0.900) ☑ YES ☐ NO
**Refer to Table 4 of SW-846 Method 8270D (Rev4 2/07) for specific analyte RRFs*

Method Validation Performance Criteria:

1. Did target analytes and system monitoring analytes (surrogates) have % Ds within ± 20.0%? ☑ YES ☐ NO
If "NO", list analytes that exceed this criterion:

Comments: Calibration verification criteria were met.

G. BLANK CRITERIA:

1. Was a method/extraction blank analyzed on each GC/MS system used for sample analysis? ☑ YES ☐ NO
2. Was a trip blank analyzed with this sample batch? ☑ NA ☐ YES ☐ NO
3. Were the blank samples interference free? ☑ YES ☐ NO
4. Was the level of blank contamination > 5% of the MCL? ☑ NA ☐ YES ☐ NO
5. List target analytes detected in the blanks: *None*

Comments: Blank criteria were met.

H. SURROGATE CRITERIA:

1. Were the following surrogates used? See comment
   - phenol - d_6 (10%-94%)
   - 2-fluorophenol (21%-100%)
   - 2,4,6-tribromophenol (10%-123%)
   - nitrobenzene – d_5 (35%-107%)
   - 2-fluorobiphenyl (44%-102%)
   - p-terphenyl - d_{14} (33%-126%)
2. Were recoveries within the specified ranges? ☑ YES ☐ NO
3. Were any two base/neutral or acid surrogates out of specification or did any one base/neutral or acid extractable surrogate have a recovery of less than 10%? ☑ NA ☐ YES ☐ NO
If yes, was a re-extraction and reanalysis performed to confirm that the non-compliance was due to sample matrix effects rather than laboratory deficiencies?

Comments: The laboratory only used the base/neutral surrogates as allowed by the method. The surrogate criteria were met.

I. MATRIX SPIKE/ MATRIX SPIKE DUPLICATE (MS/MSD) CRITERIA:

(MS/MSD Requirements - CLP Guidelines)

Analyte	*% R Water*	*% RPD Water*
Phenol	12-110	42
2-Chlorophenol	27-123	40

N-Nitroso-di-n-propylamine	41-116	38
4-Chloro-3-methylphenol	23-97	42
Acenaphthene	46-118	31
4-Nitrophenol	10-80	50
2,4-Dinitrotoluene	24-96	38
Pyrene	26-127	31

1. Was a MS/MSD analyzed per sample batch or every 20 samples, whichever may occur first? ☑ YES ☐ NO
2. Did the MS/MSD spike contain additional target analytes? ☑ YES ☐ NO
3. Was the MS/MSD analyzed on the specific project matrix? ☑ YES ☐ NO
4. List the MS % recovery range: *See certificate of analysis*
5. Were any analytes qualified as estimated? ☐ YES ☑ NO
    - If yes, and the LCS for the analyte(s) recovered within control limits, matrix interference is suspected.

Comments: MS/MSD criteria were met. Field duplicate/sample results exhibited acceptable precision, where applicable.

J. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

1. Was a LCS included in the sample analysis? ☑ YES ☐ NO
2. Did the LCS contain required target analytes? ☑ YES ☐ NO
3. List the LCS target analytes and laboratory recovery range: *See semivolatile certificate of analysis.*
4. Were any analytes qualified as estimated due to LCS criteria? ☐ YES ☑ NO

Comments: LCS criteria were met.

K. INTERNAL STANDARDS (IS) CRITERIA:

1. Were the following internal standards used? ☑ YES ☐ NO
    - 1,4-Dichlorobenzene-d_4
    - Naphthalene-d_8
    - Acenapththene-d_{10}
    - Phenanthrene-d_{10}
    - Pyrene-d_{10}
    - Perylene-d_{12}
2. Were the IS areas within - 50% to + 100% of the last CV? ☑ YES ☐ NO
3. Were the IS RTs within ± 30 seconds of last CV? ☑ YES ☐ NO

Comments: Internal standard criteria were met or no data qualification was required.

L. TARGET ANALYTE IDENTIFICATION:

1. Were the RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT? ☑ YES ☐ NO
2. Check the sample spectra against the laboratory standard

spectra to see that the following criteria were met: ☑ YES ☐ NO

* Did characteristic ions maximize in the same scan or within one scan of each other?
* Were characteristic ions present in the standard spectra present in the sample spectra for analytes detected above the QL?
* Were the relative ion intensities between the standard and sample spectra within ± 30%?

3. Were the reported analytes confirmed? ☑ YES ☐ NO

Comments*:* Target analyte identification criteria were met.

M. TARGET ANALYTE QUANTITATION:

* If the %RSD of an analyte was 20% or less, then the average relative response factor should have been used for quantitation.
* If the %RSD of an analyte was greater than 20%, then the quantitation should be based on a calibration curve using the first or higher order regression fit of the five calibration points (6 calibration points for 2nd order).

1. List the analytes detected above the QL whose %RSD was >20%: *None*
   a. Was quantitation based on a linear regression fit? ☑ NA ☐ YES ☐ NO
   b. Was the curve forced through the origin? ☑ NA ☐ YES ☐ NO
2. Did the initial analysis of any sample have a concentration of a target analyte that exceeded the initial calibration range? ☐ YES ☑ NO
   -If so, was the sample reanalyzed at a higher dilution? ☑ NA ☐ YES ☐ NO
3. Were the analyte concentrations that were recorded on the raw sample quantitation reports accurately transferred to the sample summary sheets? ☑ YES ☐ NO
4. Were sample/ field duplicate RPDs <20% where applicable? ☐ YES ☑ NO

Comments: Target analyte quantitation criteria were met except where noted above. Calculations checks were performed on ten percent of the data set, where applicable.

N. CORRECTIVE ACTION TAKEN AND GENERAL COMMENTS:

Comments: No corrective action was taken. Library searches were not requested with this data set. The initial demonstration of capability (IDOC) for analyst A. Transue was submitted previously.

REFERENCES:

Draper Aden Associates conducted data validation of the above noted data set using summary tables and instrument data provided by the analyzing laboratory. Data were evaluated in general accordance with SW-846 Method requirements (Test Methods for Evaluating Solid Wastes - Physical and Chemical Methods, USEPA SW-846, 3rd edition - Final Update I, II/IIA, III and subsequent updates) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, January 2017, where applicable). Where QA/QC criteria differed, the analytical method acceptance criteria were used. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

LIMITATIONS:

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Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

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Kathy Olsen, Project Environmental Scientist Date:
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SW-846 METHODS 6020B AND 7470A INORGANIC DATA REVIEW SUMMARY

Draper Aden Associates performed a manual comprehensive data review of the analytical results for the April 9, 2019 Corrective Action groundwater monitoring event for Hazardous Waste Management Unit 5 (HWMU 5) located at the Radford Army Ammunition Plant (RFAAP), Radford, Virginia.

Draper Aden Associates collected the groundwater samples from monitoring wells 5W8B, 5W5B, 5W7B, 5WC21, 5WC22, 5WC23, and 5W12A. Groundwater sample 5WDUP was submitted to the laboratory as a blind sample duplicate for 5WC21. The following information and attached table summarize the inorganic data validation results. Validation of other required methods is presented on separate reports.

For this Corrective Action annual groundwater monitoring event, samples 5W5B, 5W7B, 5WC21, 5WC22 and 5WC23 (downgradient point of compliance (POC) wells) were analyzed for the sixteen inorganic constituents listed in Appendix K of the facility's permit by SW-846 Method 6020B and SW-846 Method 7470A. Samples 5W8B (upgradient groundwater monitoring well) and 5W12A (plume monitoring well) were analyzed for cobalt only by SW-846 Method 6020B.

Inductively coupled plasma mass spectrometry (ICP-MS) and cold vapor atomic absorption (CVAA) were the techniques used for the metal analyses. ICP-MS Method 6020B was used to analyze for antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, nickel, selenium, silver, thallium, vanadium and zinc. CVAA Method 7470A was used to analyze for mercury. Target analytes were analyzed for total (T) concentrations.

Draper Aden Associates sent samples to Shealy Environmental Services of West Columbia, South Carolina. Shealy performed the Method 6020B and 7470A analyses. On behalf of RFAAP, Shealy submitted results to Draper Aden Associates in a final certificate of analysis, which included sample analytical results, as well as relevant documentation to validate and verify the results. Shealy is accredited under the Virginia Environmental Laboratory Accreditation Program (VELAP) for the above analytes, methods and matrix.

The evaluation of Shealy's compliance with the method and validation of results presented here are based upon a review of quality assurance/quality control (QA/QC) information including chain-of-custody, case narrative, holding time, preservation procedures, instrument calibration, tuning, blank (method, calibration and other blanks), interference check sample, matrix spike/matrix spike duplicate (MS/MSD), laboratory control sample (LCS), internal standard, and serial dilution data. A review of transcriptions from instrument data to sample summary sheets was performed. Calculation checks were performed on ten percent of the data set, where applicable. The following information is intended to summarize data review results and any observed significant deviations from method and/or contractual requirements.

Shealy received the samples on ice and in good condition with custody seals intact. The chain of custody was appropriately signed and dated by field and laboratory personnel, except where noted below. Applicable holding time and preservation criteria were met.

Method 6020B (ICP-MS)

The original certificate of analysis was received on May 14, 2019. The certificate of analysis appeared complete in its presentation and the data were of acceptable quality. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL).

QC history documentation was provided. Applicable preservation and technical holding time criteria were met. Instrument calibration, calibration verification and tuning requirements were met. QL check standards, blank, interference check samples (ICSAB), MS/MSD, LCS, internal standard data, and serial dilution sample results were within control limits, where applicable. Field duplicate/sample results exhibited acceptable precision, where applicable. Calculation checks were performed on ten percent of the data set. A review of transcriptions from instrument data to sample summary sheets was performed. Deviations from QA/QC criteria that were noted during the data review are summarized below.

Beryllium recovered low in the MS/MSD. Beryllium was not detected at or above the QL in any project sample and sample results for beryllium were validated and qualified "J" to note that the QL was estimated due to the observed QC deficiency. The remaining MS/MSD criteria were met.

For this Corrective Action groundwater monitoring event, sample results were reported to at or above the permit specified detection limit (DL). Target analytes detected at or above the DL or QL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table.

Results for samples unaffected by the data validation process and reported as not detected at or above the DL were validated and qualified "U" or as described above. Reported detected values less than the QL should be considered estimated concentrations and were validated and qualified "J" or as describe above. No results were rejected based on the data validation criteria.

Method 7470A (CVAA)

The original certificate of analysis was received on May 14, 2019. The certificate of analysis appeared complete in its presentation and the data were of acceptable quality. The data set demonstrated the laboratory's ability to achieve the reported permit quantitation limit (QL) or detection limit (DL).

QC history documentation was provided. Applicable preservation and technical holding time criteria were met. Instrument calibration and calibration verification criteria were met. QL standard, blank, MS/MSD and LCS results recovered within control limits. Field duplicate/sample results exhibited acceptable precision, where applicable. Calculation checks were performed on ten percent of the data set. A review of transcriptions from instrument data to sample summary sheets was performed. No deviations from QA/QC criteria were noted during data review.

For this Corrective Action groundwater monitoring event, sample results were reported to at or above the permit detection limit. Mercury detected at or above the detection limit or QL and/or analytical data that required a data validation qualifier due to quality control deviations noted above are summarized on the attached table.

For this Corrective Action groundwater monitoring event, mercury results for the samples unaffected by the data validation process and not detected at or above the detection limit and/or QL were validated and reported as "U." No results were rejected based on the data validation criteria.

INORGANIC DATA EVALUATION BY SW-846 ICP-MS METHOD 6020B

Shealy Environmental Services, West Columbia, South Carolina; Lot Number: UD10056
☑ - denotes items reviewed. See Data Validation Summary for additional comments.

A. DOCUMENTION COMPLETENESS CRITERIA:
Data Quality Objective: Representativeness
- ☑ Chain of custody – Custody transfers must be signed and dated
- ☑ Chain of custody properly and completely filled out including sampler signatures, date and time of sampling, sample ID, analysis requested

B. DETECTION LIMIT AND QUANTITATION LIMIT CRITERIA:
Data Quality Objective: Analytical Sensitivity
- ☑ Specific detection limit reported
- ☑ Specific quantitation limit reported
- ☑ Instrument detection limit (IDL) less than QL
- ☑ VELAP accredited for target analytes

C. INITIAL DEMONSTRATION OF CAPABILITY (IDOC) CRITERIA:
Data Quality Objective: Laboratory Method Sensitivity
- ☑ IDOC for analyst BNW submitted previously

D. SAMPLE AND STANDARD PREPARATION CRITERIA:
Data Quality Objective: Accuracy and Representativeness
- ☑ Digestion method: 3005A

E. TECHNICAL HOLDING TIME / PRESERVATION REQUIREMENTS:
Data Quality Objective: Representativeness
- ☑ 6 month holding time, pH<2 with Nitric Acid (HNO_3)

F. INSTRUMENT TUNE CRITERIA:
Data Quality Objective: Verify Operating Conditions
- ☑ Prior to calibration
- ☑ Relative Standard Deviation (RSD) </=5%
- ☑ Resolution < 0.9 amu full width at 10% peak height (or lower)
- ☑ Mass calibration </=0.1 amu difference from true value

G. INITIAL CALIBRATION CRITERIA:
Data Quality Objective: Laboratory Accuracy
- ☑ A single point calibration or a multi-point calibration with a calibration blank and at least 3 standards (low standard at or below the QL)
- ☑ Linear curve fit with correlation coefficient r≥0.995
- ☑ Daily calibration following tuning and prior to sample analysis

H. INITIAL CALIBRATION VERIFICATION (ICV) CRITERIA:
Data Quality Objective: Laboratory Accuracy
- ☑ Daily following initial calibration - Independent/second source used for standard
- ☑ ICV recovery 90-110% - concentration near mid-point of calibration curve
- ☑ Low level ICV (LLICV) – prior to sample analysis, at QL concentration, 80-120% recovery

I. INITIAL CALIBRATION BLANK CRITERIA:

Data Quality Objective: Laboratory Analytical Sensitivity/Instrument Drift/Contamination Evaluation

- ☑ Daily following ICV
- ☑ Interference free (< ±1/2 the QL concentration)

J. QL/LOQ CHECK STANDARD CRITERIA:

Data Quality Objective: Laboratory Analytical Sensitivity

- ☑ Standard analyzed at or below the QL (LLQC), digested, mean of 7 replicates with RSD <5%, analyzed after MDL determination and analyzed at least quarterly
- ☑ QL standard recovery 80-120%

K. CONTINUING CALIBRATION VERIFICATION (CCV) CRITERIA:

Data Quality Objective: Laboratory Analytical Accuracy

- ☑ CCV, prior to analysis, after every 10 samples, at end of analysis
- ☑ CCV recovery within 90-110%, mid-point of curve concentration

L. CONTINUING CALIBRATION BLANK CRITERIA:

Data Quality Objective: Laboratory Analytical Sensitivity/Instrument Drift/Contamination Evaluation

- ☑ Immediately after the CCV and after each group of 10 samples
- ☑ Interference free (<QL)

M. BLANK CRITERIA:

Data Quality Objective: Sensitivity/Instrument Drift/Contamination Evaluation

- N/A Trip Blank (check only if analyzed)
- ☑ Method/Other Lab Blanks (check only if analyzed), one per digestion batch
- ☑ Interference free (<1/2 LLOQ), where applicable

N. INTERFERENCE CHECK SAMPLE (ICS) CRITERIA:

Data Quality Objective: Analytical Accuracy/Verification of Isobaric Interference Corrections

- ☑ At beginning of analytical run or once every 12 hours of continuing sample analysis Results for elements not spiked in solution should be < 2 times the LLOQ. (Ti and Mo are spiked in addition to alkali metals)

O. MATRIX SPIKE DUPLICATE (MSD) CRITERIA:

Data Quality Objective: Method Precision in Sample Matrix

- ☑ All analytes, one MSD or sample duplicate per batch of 20 samples
- ☑ Spiked prior to sample preparation
- ☑ RPD ≤ 20 between MS & MSD results or sample & duplicate results, where applicable

P. MATRIX SPIKE (MS) CRITERIA:

Data Quality Objective: Method Accuracy in Sample Matrix

- ☑ All analytes, one MS per digestion batch of 20 samples
- ☑ Spiked prior to sample preparation
- ☑ Recovery: 75-125%, post-digestion spike analyzed for failed analytes, recovery 75-125%

Q. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

Data Quality Objective: Laboratory Method Accuracy, Laboratory Performance

- ☑ 1 LCS per 20 samples, all analytes, Recovery: 80-120%
- ☑ LCS solution same concentration as MS/MSD solution

R. INTERNAL STANDARDS (IS) CRITERIA:

Data Quality Objective: Analytical Accuracy in Sample Matrix

- ☑ IS added to each sample and QC sample
- ☑ Relative intensity (RI) should be within 70-125%
- ☑ If RI of CCB is <30%, terminate run and recalibrate

S. SERIAL DILUTION TEST CRITERIA:

Data Quality Objective: Accuracy in Sample Matrix

- ☑ <20% Difference (applicable when concentration >25X LLOQ)

T. SAMPLE QUANTITATION AND GENERAL REPORTING CRITERIA:

Data Quality Objective: n/a

- ☑ Sample results reported within instrument calibration range
- ☑ Sample results reported to the method detection limit

REFERENCES:

Draper Aden Associates conducted a limited data validation of the above noted data set using the data package provided by the analyzing laboratory. Data evaluation was conducted using SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA, III, and subsequent updates) method requirements and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017, where applicable). Validation of this data set is limited to review of items detailed in this data review report. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

DATA EVALUATION FOR MERCURY BY COLD VAPOR AA SW 846 -METHOD 7470A

Shealy Environmental Services, West Columbia, South Carolina; Lot Number: UD10056
☑ - denotes items reviewed. See Data Validation Summary for additional comments.

A. QC DOCUMENTATION CRITERIA:
- ☑ Specific detection limits/quantitation limit (QLs) for target analyte
- ☑ Standard analyzed at the QL (70-130% R)
- ☑ VELAP accredited within 12 months
- ☑ IDOC for analyst JMH submitted previously

B. METHOD INFORMATION DOCUMENTATION:
- ☑ Mercury analyzed by requested method

C. TECHNICAL HOLDING TIME / PRESERVATION REQUIREMENTS:
- ☑ 28 day holding time
- ☑ Adjust pH <2 w/ HNO_3

D. INSTRUMENT CALIBRATION CRITERIA:
- ☑ 1 calibration blank and at least 3 standards, correlation coefficient >0.995
- ☑ Instrument calibrated for every analytical sequence for every method

E. INITIAL / CONTINUING CALIBRATION VERIFICATION CRITERIA:
- ☑ 10 sample frequency for CCV
- ☑ Recovery within 80-120%

F. BLANK SAMPLE CRITERIA:
- N/A Trip Blank (check only if analyzed)
- N/A Equipment Blank (check only if analyzed)
- ☑ Method/other laboratory blanks (check only if analyzed)
- ☑ Interference free

G. MATRIX SPIKE DUPLICATE (MSD) SAMPLE CRITERIA:
- ☑ One MSD or sample duplicate per batch of 20 samples
- ☑ RPD ≤20 between MS and MSD or sample and duplicate results
- ☑ Recovery 75-125% for MSD

H. MATRIX SPIKE (MS) SAMPLE CRITERIA:
- ☑ Recovery within 75-125% range
- ☑ One MS per batch of 20 samples
- ☑ MS added prior to digestion

I. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:
- ☑ LCS for mercury
- ☑ Recovery within 80-120%
- ☑ Independent source for LCS

J. SAMPLE RESULTS CRITERIA:

- ☑ Sample results reported within instrument calibration range
- ☑ Sample results reported to the method detection limit

REFERENCES:

Draper Aden Associates conducted a limited data validation of the above noted data set using the data package provided by the analyzing laboratory. Data evaluation was conducted using SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA, III, and subsequent updates) method requirements and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Superfund Methods Data Review, January 2017, where applicable). Validation of this data set is limited to review of items detailed in this data review report. Additionally, laboratory specific acceptance criteria and/or historical program acceptance criteria were used when no other acceptance criteria were available. Validation of this data set is limited to the items detailed in this report.

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Kathy Olsen, Project Environmental Scientist Date:
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Comprehensive Data Validation Report
Sample/Blind Field Duplicate Results Greater Than the Quantitation Limit
Radford Army Ammunition Plant (RFAAP), Radford, Virginia
Facility: HWMU-5 Monitoring Event: Second Quarter 2019

Draper Aden Associates
Engineering ◆ Surveying ◆ Environmental Services

Analyte	Sample ID	Laboratory Result (ug/L)	Q	Validated Result (ug/L)	Q	QL (ug/L)	Validation Notes
Method: 6020B							
Laboratory: Shealy Environmental, West Columbia, SC							
Barium	5WC21	14		14		10	No action taken.
	5WDUP	14		14		10	No action taken. Blind field dupllicate of 5WC21 (RPD <2).
Cobalt	5WC21	32		32		5	No action taken.
	5WDUP	32		32		5	No action taken. Blind field dupllicate of 5WC21 (RPD <2).
Nickel	5WC21	17		17		10	No action taken.
	5WDUP	16		16		10	No action taken. Blind field dupllicate of 5WC21 (RPD <10).
Method: 8260C							
Laboratory: ELLE, Lancaster, PA							
Chloroform	5WC21	1.8		1.8		1	No action taken.
	5WDUP	1.8		1.8		1	No action taken. Blind field dupllicate of 5WC21 (RPD<2).
Trichloroethene	5WC21	2.8		2.8		1	No action taken.
	5WDUP	2.7		2.7		1	No action taken. Blind field dupllicate of 5WC21 (RPD<10).

Definitions:

Data Validation Qualifiers:
QL Denotes permit quantitation limit**. Q** Denotes data qualifier.
J Denotes analyte reported at or above quantitation limit and associated result is estimated.

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Type I Data Package

Prepared for:

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

Project: RAAP - Radford, VA - HWMU-5
Groundwater and Water Samples
Collected on 04/09/19

SDG# RAF34

GROUP	SAMPLE NUMBERS
2038327	1030976-1030986

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-18-27
AZ Cert. # AZ0780

Through our technical processes and second person review of data, we have established that our data/deliverables are in compliance with the methods and project requirements unless otherwise noted or previously resolved with the client.

Authorized by: Dana M Kauffman **Date:** **05/06/2019**

Dana M. Kauffman
Manager

Any questions or concerns you might have regarding this data package should be directed to your client representative, Barbara Weyandt at (717) 556-7264.

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Table of Contents for SDG# RAF34

1. Sample Reference List 3
2. Preservation Data 4
3. Methodology Summary/Reference 6
4. Analysis Reports / Field Chain of Custody 7
5. Volatiles by GC/MS Data 33
   a. Case Narrative/Conformance Summary 34
   b. Quality Control and Calibration Summary Forms 37
   c. Sample Data 62
   d. Standards Data 123
   e. Raw QC Data 491
6. Semivolatiles by GC/MS Data 534
   a. Case Narrative/Conformance Summary 535
   b. Quality Control and Calibration Summary Forms 538
   c. Sample Data 565
   d. Standards Data 611
   e. Raw QC Data 875
   f. Extraction/Distillation/Digestion Logs 892

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Sample Reference List for SDG Number RAF34
with a Data Package Type of I

11200 - Draper Aden Associates, Inc.
Project: RAAP - Radford, VA - HWMU-5

Lab Sample Number	Client Sample ID	Collection Date	Date Received
1030976	5W8B	04/09/2019 09:25	04/10/2019 09:45
1030977	5W5B	04/09/2019 12:00	04/10/2019 09:45
1030978	5W7B	04/09/2019 11:00	04/10/2019 09:45
1030979	5W7B Matrix Spike	04/09/2019 11:00	04/10/2019 09:45
1030980	5W7B Matrix Spike Dup	04/09/2019 11:00	04/10/2019 09:45
1030981	5WC21	04/09/2019 14:15	04/10/2019 09:45
1030982	5WDUP	04/09/2019 14:25	04/10/2019 09:45
1030983	5WC22	04/09/2019 12:50	04/10/2019 09:45
1030984	5WC23	04/09/2019 13:30	04/10/2019 09:45
1030985	5W12A	04/09/2019 10:15	04/10/2019 09:45
1030986	Trip Blank 1	04/09/2019 00:00	04/10/2019 09:45

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Sample pH Log

SDG: RAF34

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee
1030976	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:30PM	29284
1030977	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:27PM	29284
1030977	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:38PM	1382
1030977	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:25PM	1382
1030978	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:27PM	29284
1030978	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:40PM	1382
1030978	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:47PM	1382
1030979	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:27PM	29284
1030979	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:23PM	1382
1030979	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:18PM	1382
1030980	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:27PM	29284
1030980	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:45PM	1382
1030980	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:54PM	1382
1030981	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:27PM	29284
1030981	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:12PM	1382
1030981	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:52PM	1382
1030982	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:27PM	29284
1030982	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:05PM	1382
1030982	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:01PM	1382
1030983	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:28PM	29284
1030983	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:16PM	1382
1030983	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:10PM	1382
1030984	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:28PM	29284
1030984	153A		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:30PM	1382
1030984	153B		N/A	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	NA	NA	NA	4/11/2019 12:16:32PM	1382
1030985	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:28PM	29284
1030986	038A	<2	<2	NA	NA	NA	NA	NA	NA	Y	NA	NA	NA	N	NA	NA	4/17/2019 12:42:28PM	29284

LLI Sample Number	Bottle Code	Actual pH	Exp. pH	*pH Check Code	Adj. pH	Adjusted Date	Adjusted Time	Preservative Added	Preservative Lot #	LLI Supplied Bottle?	Sulfide Present?	Corrective Substance	CS Lot #	**Chlorine Present?	Corrective Substance	CS Lot #	Record Date	Employee

*pH Check Code Key
PK = Original container checked - pH is within the correct range. (No preservative was added)
PA = Original container checked - pH adjusted to correct range. (Preservative was added)
PV = Volatile container checked
PC = pH checked (unpreserved container)
SPK = Subsampled from an original container. Original container checked - pH is within correct range
SPA = Subsampled from an original container. Subsample container checked - pH adjusted to correct range.
SPC = Subsampled from an original container. pH checked (unpreserved container).
SUP = Subsampled from original container. Unable to be preserved due to the matrix of the sample.
UP = Unable to preserve due to matrix of the sample.
NA = Not applicable

**Chlorine Present Code Key
NA = Chlorine Not Checked
Y = Chlorine Present
N = Chlorine Not Present

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01163 GC/MS VOA Water Prep

An undiluted aliquot of the water sample or a dilution of the sample is purged with an inert gas and the volatiles are collected on an adsorbent trap that is subsequently desorbed onto a gas chromatographic column.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 5030C, May 2003.

11996 VOCs- 25ml Water by 8260C/D

The water sample is purged and the volatile compounds are collected on a sorbent trap that is subsequently desorbed onto the GC/MS system for chromatographic and mass spectral analysis.

Reference: Volatile Organic Compounds by Gas Chromatography/ Mass Spectrometry (GC/MS), SW-846 Method 8260C, August 2006.

11010 8270D BNA Extraction

The sample aliquot is extracted with methylene chloride by either separatory funnel or liquid/liquid apparatus. Extraction is performed at both a pH of 11 and 2. The extract is concentrated prior to analysis.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 3510C, Rev 3, December 1996

14241 SVOAs 8270D/E MINI

The sample extract is analyzed by capillary column Gas Chromatography/Mass Spectrometry.

Reference: Test Methods for Evaluating Solid Wastes, SW-846 Method 8270D, February 2007.

Analysis Reports / Field Chain of Custody

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ANALYSIS REPORT

Prepared by:

Eurofins Lancaster Laboratories Environmental
2425 New Holland Pike
Lancaster, PA 17601

Prepared for:

Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg VA 24060

Report Date: April 23, 2019 10:50

Project: RAAP - Radford, VA - HWMU-5

Account #: 11200
Group Number: 2038327
SDG: RAF34
State of Sample Origin: VA

Electronic Copy To	Draper Aden Associates, Inc.	Attn: Janet Frazier
Electronic Copy To	Draper Aden Associates, Inc.	Attn: Kathy Olsen

Respectfully Submitted,

Barbara Weyandt

Barbara A. Weyandt
Specialist

(717) 556-7264

To view our laboratory's current scopes of accreditation please go to https://www.eurofinsus.com/environment-testing/laboratories/eurofins-lancaster-laboratories-environmental/certifications-and-accreditations-eurofins-lancaster-laboratories-environmental/ . Historical copies may be requested through your project manager.



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SAMPLE INFORMATION

Client Sample Description	Sample Collection Date/Time	ELLE#
5W8B Grab Groundwater	04/09/2019 09:25	1030976
5W5B Grab Groundwater	04/09/2019 12:00	1030977
5W7B Grab Groundwater	04/09/2019 11:00	1030978
5W7B Matrix Spike Grab Groundwater	04/09/2019 11:00	1030979
5W7B Matrix Spike Dup Grab Groundwater	04/09/2019 11:00	1030980
5WC21 Grab Groundwater	04/09/2019 14:15	1030981
5WDUP Grab Groundwater	04/09/2019 14:25	1030982
5WC22 Grab Groundwater	04/09/2019 12:50	1030983
5WC23 Grab Groundwater	04/09/2019 13:30	1030984
5W12A Grab Groundwater	04/09/2019 10:15	1030985
Trip Blank 1 Water	04/09/2019	1030986

The specific methodologies used in obtaining the enclosed analytical results are indicated on the Laboratory Sample Analysis Record.

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Project Name: RAAP - Radford, VA - HWMU-5
ELLE Group #: 2038327

General Comments:

See the Laboratory Sample Analysis Record section of the Analysis Report for the method references.

All QC met criteria unless otherwise noted in an Analysis Specific Comment below.

Refer to the QC Summary for specific values and acceptance criteria.

Project specific QC samples are included in this data set.

Matrix QC may not be reported if site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

Surrogate recoveries (if applicable) which are outside of the QC window are confirmed unless attributed to a dilution or otherwise noted in an Analysis Specific Comment below.

The samples were received at the appropriate temperature and in accordance with the chain of custody unless otherwise noted.

Analysis Specific Comments:

SW-846 8260C 25mL purge, GC/MS Volatiles

Batch #: I191062AA (Sample number(s): 1030976-1030986 UNSPK: 1030978)

The recovery(ies) for the following analyte(s) in the MS and/or MSD exceeded the acceptance window indicating a positive bias: cis-1,2-Dichloroethene

Sample Description: **5W8B Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 09:25
SDG#: RAF34-01

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030976
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Trichloroethene	79-01-6	N.D.	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" list	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 17:48	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 17:47	Miranda Campbell	1

*=This limit was used in the evaluation of the final result

Sample Description: **5W5B Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 12:00
SDG#: RAF34-02

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030977
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.	3.0	10	1
11996	2-Butanone	78-93-3	N.D.	1.0	10	1
11996	Chloroform	67-66-3	2.0	0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Ethyl ether	60-29-7	N.D.	0.4	12	1
11996	Methylene Chloride	75-09-2	N.D.	0.2	1.0	1
11996	Toluene	108-88-3	N.D.	0.1	1.0	1
11996	Trichloroethene	79-01-6	N.D.	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.	0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	N.D.	2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5.0	6.0	1
14241	2-Nitroaniline	88-74-4	N.D.	2.0	10	1
14241	4-Nitroaniline	100-01-6	N.D.	1.3	20	1
14241	Nitrobenzene	98-95-3	N.D.	0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 18:31	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 18:30	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/15/2019 22:57	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5W7B Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 11:00
SDG#: RAF34-03BKG

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030978
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.	3.0	10	1
11996	2-Butanone	78-93-3	N.D.	1.0	10	1
11996	Chloroform	67-66-3	20	0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Ethyl ether	60-29-7	N.D.	0.4	12	1
11996	Methylene Chloride	75-09-2	0.4 J	0.2	1.0	1
11996	Toluene	108-88-3	N.D.	0.1	1.0	1
11996	Trichloroethene	79-01-6	N.D.	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.	0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	N.D.	2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5.0	6.0	1
14241	2-Nitroaniline	88-74-4	N.D.	2.0	10	1
14241	4-Nitroaniline	100-01-6	N.D.	1.3	20	1
14241	Nitrobenzene	98-95-3	N.D.	0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 18:52	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 18:51	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/15/2019 23:26	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5W7B Matrix Spike Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 11:00
SDG#: RAF34-03MS

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030979
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
11996	Acetone	67-64-1	36		3.0	10	1
11996	2-Butanone	78-93-3	40		1.0	10	1
11996	Chloroform	67-66-3	25.E		0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	3.6		0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	5.4		0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	6.1		0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	6.2		0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	5.3		0.8	1.0	1
11996	Ethyl ether	60-29-7	4.9	J	0.4	12	1
11996	Methylene Chloride	75-09-2	6.0		0.2	1.0	1
11996	Toluene	108-88-3	5.7		0.1	1.0	1
11996	Trichloroethene	79-01-6	6.0		0.2	1.0	1
11996	Vinyl Chloride	75-01-4	4.5		0.1	1.0	1
11996	Xylene (Total)	1330-20-7	17		0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	38		2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	39		1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	45		0.71	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	36		5.0	6.0	1
14241	2-Nitroaniline	88-74-4	46		2.0	10	1
14241	4-Nitroaniline	100-01-6	41		1.3	20	1
14241	Nitrobenzene	98-95-3	46		0.81	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 19:13	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 19:12	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/15/2019 23:55	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5W7B Matrix Spike Dup Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 11:00
SDG#: RAF34-03MSD

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030980
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
11996	Acetone	67-64-1	35		3.0	10	1
11996	2-Butanone	78-93-3	40		1.0	10	1
11996	Chloroform	67-66-3	25.E		0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	3.7		0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	5.3		0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	6.2		0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	6.4		0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	5.4		0.8	1.0	1
11996	Ethyl ether	60-29-7	5.0	J	0.4	12	1
11996	Methylene Chloride	75-09-2	6.1		0.2	1.0	1
11996	Toluene	108-88-3	5.7		0.1	1.0	1
11996	Trichloroethene	79-01-6	5.9		0.2	1.0	1
11996	Vinyl Chloride	75-01-4	4.6		0.1	1.0	1
11996	Xylene (Total)	1330-20-7	17		0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	42		2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	46		1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	47		0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	43		5.0	6.0	1
14241	2-Nitroaniline	88-74-4	50		2.0	10	1
14241	4-Nitroaniline	100-01-6	46		1.3	20	1
14241	Nitrobenzene	98-95-3	51		0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 19:34	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 19:33	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/16/2019 00:23	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5WC21 Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 14:15
SDG#: RAF34-04

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030981
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.	3.0	10	1
11996	2-Butanone	78-93-3	N.D.	1.0	10	1
11996	Chloroform	67-66-3	1.8	0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Ethyl ether	60-29-7	2.3 J	0.4	12	1
11996	Methylene Chloride	75-09-2	N.D.	0.2	1.0	1
11996	Toluene	108-88-3	N.D.	0.1	1.0	1
11996	Trichloroethene	79-01-6	2.8	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.	0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	N.D.	2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5.0	6.0	1
14241	2-Nitroaniline	88-74-4	2 J	2.0	10	1
14241	4-Nitroaniline	100-01-6	N.D.	1.3	20	1
14241	Nitrobenzene	98-95-3	1 J	0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 19:55	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 19:54	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/16/2019 00:52	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5WDUP Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 14:25
SDG#: RAF34-05FD

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030982
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.	3.0	10	1
11996	2-Butanone	78-93-3	N.D.	1.0	10	1
11996	Chloroform	67-66-3	1.8	0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Ethyl ether	60-29-7	2.3 J	0.4	12	1
11996	Methylene Chloride	75-09-2	N.D.	0.2	1.0	1
11996	Toluene	108-88-3	N.D.	0.1	1.0	1
11996	Trichloroethene	79-01-6	2.7	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.	0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	N.D.	2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.	1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5.0	6.0	1
14241	2-Nitroaniline	88-74-4	2 J	2.0	10	1
14241	4-Nitroaniline	100-01-6	N.D.	1.3	20	1
14241	Nitrobenzene	98-95-3	0.9 J	0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 20:17	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 20:16	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/16/2019 01:21	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5WC22 Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 12:50
SDG#: RAF34-06

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030983
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.	3.0	10	1
11996	2-Butanone	78-93-3	N.D.	1.0	10	1
11996	Chloroform	67-66-3	1.8	0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Ethyl ether	60-29-7	5.3 J	0.4	12	1
11996	Methylene Chloride	75-09-2	N.D.	0.2	1.0	1
11996	Toluene	108-88-3	N.D.	0.1	1.0	1
11996	Trichloroethene	79-01-6	2.9	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.	0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**	**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	N.D.	2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	1 J	1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.	0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.	5.0	6.0	1
14241	2-Nitroaniline	88-74-4	2 J	2.0	10	1
14241	4-Nitroaniline	100-01-6	N.D.	1.3	20	1
14241	Nitrobenzene	98-95-3	1 J	0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 20:38	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 20:37	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/16/2019 01:50	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5WC23 Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 13:30
SDG#: RAF34-07

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030984
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result		Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.		3.0	10	1
11996	2-Butanone	78-93-3	N.D.		1.0	10	1
11996	Chloroform	67-66-3	1.4		0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.		0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.		0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.		0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.		0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.		0.8	1.0	1
11996	Ethyl ether	60-29-7	10	J	0.4	12	1
11996	Methylene Chloride	75-09-2	N.D.		0.2	1.0	1
11996	Toluene	108-88-3	N.D.		0.1	1.0	1
11996	Trichloroethene	79-01-6	3.9		0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.		0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.		0.2	3.0	1
GC/MS Semivolatiles	**SW-846 8270D**		**ug/l**		**ug/l**	**ug/l**	
14241	Diethylphthalate	84-66-2	N.D.		2.0	10	1
14241	2,4-Dinitrotoluene	121-14-2	N.D.		1.0	10	1
14241	2,6-Dinitrotoluene	606-20-2	N.D.		0.70	10	1
14241	bis(2-Ethylhexyl)phthalate	117-81-7	N.D.		5.0	6.0	1
14241	2-Nitroaniline	88-74-4	3	J	2.0	10	1
14241	4-Nitroaniline	100-01-6	1	J	1.3	20	1
14241	Nitrobenzene	98-95-3	1	J	0.80	10	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 20:59	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 20:58	Miranda Campbell	1
14241	SVOAs 8270D/E MINI	SW-846 8270D	1	19102WAP026	04/16/2019 02:18	Ashley R Transue	1
11010	8270D BNA Extraction	SW-846 3510C	1	19102WAP026	04/15/2019 10:00	Logan M Brosemer	1

*=This limit was used in the evaluation of the final result

Sample Description: **5W12A Grab Groundwater**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019 10:15
SDG#: RAF34-08

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030985
ELLE Group #: 2038327
Matrix: Groundwater

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Trichloroethene	79-01-6	N.D.	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" list	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 18:10	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 18:09	Miranda Campbell	1

*=This limit was used in the evaluation of the final result

Sample Description: **Trip Blank 1 Water**
2Qtr 2019 Corrective Action Annual Monitoring
RAAP - Radford, VA - HWMU-5

Project Name: **RAAP - Radford, VA - HWMU-5**

Submittal Date/Time: 04/10/2019 09:45
Collection Date/Time: 04/09/2019
SDG#: RAF34-09TB

Draper Aden Associates, Inc.
ELLE Sample #: GW 1030986
ELLE Group #: 2038327
Matrix: Water

CAT No.	Analysis Name	CAS Number	Result	Method Detection Limit*	Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260C 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
11996	Acetone	67-64-1	N.D.	3.0	10	1
11996	2-Butanone	78-93-3	N.D.	1.0	10	1
11996	Chloroform	67-66-3	N.D.	0.1	1.0	1
11996	Dichlorodifluoromethane	75-71-8	N.D.	0.3	1.0	1
11996	1,2-Dichloroethane	107-06-2	N.D.	0.1	1.0	1
11996	1,1-Dichloroethene	75-35-4	N.D.	0.4	1.0	1
11996	cis-1,2-Dichloroethene	156-59-2	N.D.	0.1	1.0	1
11996	trans-1,2-Dichloroethene	156-60-5	N.D.	0.8	1.0	1
11996	Ethyl ether	60-29-7	N.D.	0.4	12	1
11996	Methylene Chloride	75-09-2	N.D.	0.2	1.0	1
11996	Toluene	108-88-3	N.D.	0.1	1.0	1
11996	Trichloroethene	79-01-6	N.D.	0.2	1.0	1
11996	Vinyl Chloride	75-01-4	N.D.	0.1	1.0	1
11996	Xylene (Total)	1330-20-7	N.D.	0.2	3.0	1

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
11996	RAAP Unit 5 "J" and "K" lists	SW-846 8260C 25mL purge	1	I191062AA	04/16/2019 14:59	Miranda Campbell	1
01163	GC/MS VOA Water Prep	SW-846 5030C	1	I191062AA	04/16/2019 14:58	Miranda Campbell	1

*=This limit was used in the evaluation of the final result

Quality Control Summary

Client Name: Draper Aden Associates, Inc. Group Number: 2038327
Reported: 04/23/2019 10:50

Matrix QC may not be reported if insufficient sample or site-specific QC samples were not submitted. In these situations, to demonstrate precision and accuracy at a batch level, a LCS/LCSD was performed, unless otherwise specified in the method.

All Inorganic Initial Calibration and Continuing Calibration Blanks met acceptable method criteria unless otherwise noted on the Analysis Report.

Method Blank

Analysis Name	Result	MDL**	LOQ
	ug/l	ug/l	ug/l
Batch number: I191062AA	Sample number(s): 1030976-1030986		
Acetone	N.D.	3.0	10
2-Butanone	N.D.	1.0	10
Chloroform	N.D.	0.1	1.0
Dichlorodifluoromethane	N.D.	0.3	1.0
1,2-Dichloroethane	N.D.	0.1	1.0
1,1-Dichloroethene	N.D.	0.4	1.0
cis-1,2-Dichloroethene	N.D.	0.1	1.0
trans-1,2-Dichloroethene	N.D.	0.8	1.0
Ethyl ether	N.D.	0.4	12
Methylene Chloride	N.D.	0.2	1.0
Toluene	N.D.	0.1	1.0
Trichloroethene	N.D.	0.2	1.0
Vinyl Chloride	N.D.	0.1	1.0
Xylene (Total)	N.D.	0.2	3.0
Batch number: 19102WAP026	Sample number(s): 1030977-1030984		
Diethylphthalate	N.D.	2.0	10
2,4-Dinitrotoluene	N.D.	1.0	10
2,6-Dinitrotoluene	N.D.	0.70	10
bis(2-Ethylhexyl)phthalate	N.D.	5.0	6.0
2-Nitroaniline	N.D.	2.0	10
4-Nitroaniline	N.D.	1.3	20
Nitrobenzene	N.D.	0.80	10

LCS/LCSD

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
Batch number: I191062AA	Sample number(s): 1030976-1030986								
Acetone	37.5	32.21			86		60-146		
2-Butanone	37.5	43.4			116		59-141		
Chloroform	5.00	5.31			106		80-120		
Dichlorodifluoromethane	5.00	3.30			66		43-123		
1,2-Dichloroethane	5.00	5.18			104		69-122		
1,1-Dichloroethene	5.00	5.70			114		80-131		

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Draper Aden Associates, Inc. Group Number: 2038327
Reported: 04/23/2019 10:50

LCS/LCSD (continued)

Analysis Name	LCS Spike Added ug/l	LCS Conc ug/l	LCSD Spike Added ug/l	LCSD Conc ug/l	LCS %REC	LCSD %REC	LCS/LCSD Limits	RPD	RPD Max
cis-1,2-Dichloroethene	5.00	5.96			119		80-120		
trans-1,2-Dichloroethene	5.00	5.00			100		80-120		
Ethyl ether	5.00	4.84			97		72-121		
Methylene Chloride	5.00	5.47			109		80-120		
Toluene	5.00	5.32			106		80-120		
Trichloroethene	5.00	5.43			109		80-120		
Vinyl Chloride	5.00	4.21			84		60-125		
Xylene (Total)	15	16.06			107		80-120		
	ug/l	ug/l	ug/l	ug/l					
Batch number: 19102WAP026	Sample number(s): 1030977-1030984								
Diethylphthalate	50	41.53			83		51-108		
2,4-Dinitrotoluene	50	40.56			81		69-117		
2,6-Dinitrotoluene	50	43.42			87		71-113		
bis(2-Ethylhexyl)phthalate	50	45.37			91		68-120		
2-Nitroaniline	50	45.96			92		66-126		
4-Nitroaniline	50	40.26			81		47-102		
Nitrobenzene	50	46.22			92		59-117		

MS/MSD

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: I191062AA	Sample number(s): 1030976-1030986 UNSPK: 1030978									
Acetone	N.D.	37.5	35.92	37.5	35.03	96	93	60-146	3	30
2-Butanone	N.D.	37.5	40.12	37.5	39.94	107	107	59-141	0	30
Chloroform	20.08	5.00	25.16	5.00	25.47	102 (2)	108 (2)	80-120	1	30
Dichlorodifluoromethane	N.D.	5.00	3.56	5.00	3.68	71	74	43-123	3	30
1,2-Dichloroethane	N.D.	5.00	5.42	5.00	5.32	108	106	69-122	2	30
1,1-Dichloroethene	N.D.	5.00	6.10	5.00	6.19	122	124	80-131	2	30
cis-1,2-Dichloroethene	N.D.	5.00	6.20	5.00	6.35	124*	127*	80-120	2	30
trans-1,2-Dichloroethene	N.D.	5.00	5.33	5.00	5.44	107	109	80-120	2	30
Ethyl ether	N.D.	5.00	4.94	5.00	5.02	99	100	72-121	2	30
Methylene Chloride	0.365	5.00	6.01	5.00	6.09	113	115	80-120	1	30
Toluene	N.D.	5.00	5.67	5.00	5.66	113	113	80-120	0	30
Trichloroethene	N.D.	5.00	5.99	5.00	5.86	120	117	80-120	2	30
Vinyl Chloride	N.D.	5.00	4.51	5.00	4.64	90	93	60-125	3	30
Xylene (Total)	N.D.	15	16.84	15	17.05	112	114	80-120	1	30

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Draper Aden Associates, Inc. Group Number: 2038327
Reported: 04/23/2019 10:50

MS/MSD (continued)

Unspiked (UNSPK) = the sample used in conjunction with the matrix spike

Analysis Name	Unspiked Conc ug/l	MS Spike Added ug/l	MS Conc ug/l	MSD Spike Added ug/l	MSD Conc ug/l	MS %Rec	MSD %Rec	MS/MSD Limits	RPD	RPD Max
Batch number: 19102WAP026	Sample number(s): 1030977-1030984 UNSPK: 1030978									
Diethylphthalate	N.D.	50.4	37.81	50.2	42.42	75	85	51-108	11	30
2,4-Dinitrotoluene	N.D.	50.4	39.39	50.2	45.59	78	91	69-117	15	30
2,6-Dinitrotoluene	N.D.	50.4	44.59	50.2	46.95	88	94	71-113	5	30
bis(2-Ethylhexyl)phthalate	N.D.	50.4	36.14	50.2	43.49	72	87	68-120	18	30
2-Nitroaniline	N.D.	50.4	46.02	50.2	50.11	91	100	66-126	9	30
4-Nitroaniline	N.D.	50.4	41.41	50.2	46.29	82	92	47-102	11	30
Nitrobenzene	N.D.	50.4	45.91	50.2	50.71	91	101	59-117	10	30

Surrogate Quality Control

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: RAAP Unit 5 "J" and "K" lists
Batch number: I191062AA

	Dibromofluoromethane	1,2-Dichloroethane-d4	Toluene-d8	4-Bromofluorobenzene
1030976	100	98	101	99
1030977	99	98	101	100
1030978	100	97	102	100
1030979	101	96	100	98
1030980	102	96	101	100
1030981	100	97	101	101
1030982	100	100	101	101
1030983	100	99	101	100
1030984	99	98	101	101
1030985	100	98	100	100
1030986	100	100	100	101
Blank	99	97	101	102
LCS	101	96	100	98
MS	101	96	100	98
MSD	102	96	101	100
Limits:	80-120	80-120	80-120	80-120

Analysis Name: SVOAs 8270D/E MINI
Batch number: 19102WAP026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
1030977	92	80	82
1030978	98	81	87

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

Quality Control Summary

Client Name: Draper Aden Associates, Inc. Group Number: 2038327
Reported: 04/23/2019 10:50

Surrogate Quality Control (continued)

Surrogate recoveries which are outside of the QC window are confirmed unless attributed to dilution or otherwise noted on the Analysis Report.

Analysis Name: SVOAs 8270D/E MINI
Batch number: 19102WAP026

	Nitrobenzene-d5	2-Fluorobiphenyl	Terphenyl-d14
1030979	88	76	44
1030980	96	85	65
1030981	99	82	68
1030982	78	65	58
1030983	96	80	69
1030984	97	85	78
Blank	98	82	86
LCS	91	78	81
MS	88	76	44
MSD	96	85	65
Limits:	35-107	44-102	33-126

*- Outside of specification
**-This limit was used in the evaluation of the final result for the blank
(1) The result for one or both determinations was less than five times the LOQ.
(2) The unspiked result was more than four times the spike added.

11200 | ~~2038377~~ 2038327 (B) 4/11/19

CHAIN OF CUSTODY RECORD S:1030976-86

OK JLK 3/19/19

Laboratory: Eurofins Lancaster Laboratories Environmental, LLC, 2425 New Holland Pike, Lancaster, PA, 17605-2425/ Barb Weyandt, Manager/ (717) 656-2300

Client: Draper Aden Associates **Attn:** 0 **Address:** 0 0 **Phone:** 0 **Fax:** 0 **Fax:** 0	**Consultant:** Draper Aden Associates **Attn:** Janet C. Frazier **Address:** 2206 South Main Street Blacksburg, Virginia 24060 **Phone:** (540) 552-0444 **Fax:** (540) 552-0291	**Sample Site:** RFAAP, Radford, Virginia **Location:** HWMU5 **Event:** 2Qtr 2019 Corrective Action Annual Monitoring Event **DAA JN:** B03204-19A **Lab JN:**	**Project Specific (PS) or Batch (B) QC:** **Sample Collection for Project Complete?** YES WBS: 12.75Y.02X.Y0.5578.9940 **Carrier:** **Tracking Number:**		

Box 1: Matrix		Box 2: Preservative		Box 3: Filtered/Unfiltered	Box 4: Sample Type	Invoice
SW Surface Water	T Trip Blank	A HCL	E NaOH	F Filtered	G Grab	Copy to Consultant: YES
GW Groundwater	E Equipment Blank	B HNO_3	F ZnAc	U Unfiltered	C Composite	Bill: CLIENT OTHER
L Leachate	P Product	C H_2SO_4	G Other (Specify)	**Box 5: Sample Container Type**		Preserved and shipped on Ice: YES
S Soil	O Other	D $Na_2S_2O_3$	H None	P Plastic V VOA AG Amber Glass CG Clear Glass		

Box 4 - Sample Type				G				G				
Box 3 - Filtered/Unfiltered				U				U				
Required pH of Sample				<2								
Box 2 - Preservative				A				H				
Box 5 - Sample Container Type				3-40ml V				2-250mL AG				
Sample ID	Date: 2019	Time	Box 1: Matrix	Number of Bottles	8260C/5030C 25 ml purge Appendix J Analyte List	8260C/5030C 25 ml purge Appendix K Analyte List		8270D/3510C (Semivolatiles)				
5W8B	4/09	0925	GW	3	X							upgradient monitoring well
5W5B	4/09	1200	GW	5	X	X		X				
5W7B	4/09	1100	GW	15	X	X		X				USE FOR QC
5WC21	4/09	1415	GW	5	X	X		X				
5WDUP	4/09	1425	GW	5	X	X		X				
5WC22	4/09	1250	GW	5	X	X		X				
5WC23	4/09	1330	GW	5	X	X		X				
5W12A	4/09	1015	GW	3	X							plume well
Trip Blank 1	4/09	—	T	2	X	X						1 per day. delete TripBlank 2 if not used. JLK 3/19
Trip Blank 2	—	—	T	2	X	X						NOT NEEDED - KJC 4-9-19

GENERAL NOTES:

1. See attached analyte list.
2. Report permit required LOQ/MDL or lab MDL if higher than permit MDL. Report Results to MDL with "J" Flags.
3. VELAP accreditation required.
4. Project specific MDL/QLs attached.

*ERIS deliverable. JLK 3/19/19

Clients Special Instructions: level 1 with edd.

Received by lab in Good Condition _____ Yes _____ No Custody Seal Intact _____ Yes _____ No Temperature upon arrival _____ Received on Ice _____ Yes _____ No

Describe problems, if any:

Sampler Name (Print): Ken Coddington	Date: 4/09/19	#1 Relinquished by (Signature): Ken Coddington	Date: 4/09/19	#2 Relinquished by (Signature):	Date:	Sample Storage Time Requested:
Sampler Signature:	Time: 0800	Company Name: DAA	Time: 1700	Company Name:	Time:	30 DYS ORG/6 MTHS INORG
Sampler Name (Print): Graham Snyder	Date: 4/09/19	#1 Received by (Signature):	Date:	#2 Received by (Signature):	Date: 4-10-19	
Sampler Signature:	Time: 0800	Company Name:	Time:	Company Name: ELLE	Time: 945	

1/4 JLK 3/19/19

20038327

ANALYTICAL METHOD: 8260C/5030C
TYPE METHOD: GCMS
CLASS: VOLATILE

Appendix – J Target Analyte List

No.	ANALYTE	CAS RN	Required QL (µg/l)	Required MDL*
1.	Trichloroethene	79-01-6	1	0.177
2.	1,1-Dichloroethene	75-35-4	1	0.44
3.	Cis-1,2-Dichloroethene	156-59-2	1	0.1
4.	Trans-1,2-Dichloroethene	156-60-5	1	0.8
5.	Vinyl Chloride	75-01-4	1	0.1

Note: *Report current lab MDL if higher.

25 ml purge volume

ANALYTICAL METHOD: 8260C/5030C
TYPE METHOD: GCMS
CLASS: VOLATILE

Appendix – K Target Analyte List

No.	ANALYTE	CAS RN	Required QL (µg/l)	Required MDL (µg/l)
1.	Acetone	67-64-1	10	3
2.	Chloroform (trichloromethane)	67-66-3	1	0.1
3.	2-butanone (methyl ethyl ketone - MEK)	78-93-3	10	1
4.	1,2-dichloroethane	107-06-2	1	0.147
5.	Methylene chloride (Dichloromethane)	75-09-2	1	0.182
6.	Toluene (methyl benzene)	108-88-3	1	0.1
7.	Xylenes (total)	1330-20-7	3	0.208
8.	Diethyl ether	60-29-7	12	0.39
9.	Dichlorodifluoromethane	75-71-8	1	0.28

Note.
2Q2010 is the first event under corrective action monitoring. Analyte list and monitoring wells sampled have changed from previous event.

Final Report must list the project required QLs and MDLs listed above. Report results between the project required QL and MDL as estimated value.

Rev 07-2014 permit mod. JCF

25 ml purge volume

2038327

ANALYTICAL METHOD: 8270D/3510C
TYPE METHOD: GCMS
CLASS: SEMIVOLATILE

No.	ANALYTE	CAS RN	Required QL (µg/l)	Required MDL (µg/l)
1.	Bis(2-ethylhexyl)phthalate	117-81-7	6	1.5
2.	Diethyl phthalate	84-66-2	10	0.5
3.	2,4-dinitrotoluene	121-14-2	10	0.6
4.	2,6-dinitrotoluene	606-20-2	10	0.7
5.	2-Nitroaniline (o-Nitroaniline)	88-74-4	10	0.7
6.	4-Nitroaniline (p-Nitroaniline)	100-01-6	20	1.3
7.	Nitrobenzene	98-95-3	10	0.8

Final Report must list the project required QLs listed above. Report results between the project required QL and MDL noted above as estimated value.

Note: # 5-7 added on Jan 2004 due To 4Q2003 detection. JCF 0104

Reviewed:
Revised and updated 1/15/2004 JCF.
Revised and updated 10/1/06.
Reviewed 4 Q 2006 -3/19/2019 1:39 PM
10/9/2007 JCF – 2007 switched to semiannual monitoring 2/4 Q.
Revised and updated 2/12/2010 kfc
QLs and MDLs noted above reflect permit modification data Nov 5, 2009. Checked 2015JCF

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Sample Administration Receipt Documentation Log

Doc Log ID: 246053

Group Number(s): 2038327

Client: Draper Aden Associates

Delivery and Receipt Information

Delivery Method:	UPS	Arrival Timestamp:	04/10/2019 9:45
Number of Packages:	1	Number of Projects:	1
State/Province of Origin:	VA		

Arrival Condition Summary

Shipping Container Sealed:	Yes	Sample IDs on COC match Containers:	Yes
Custody Seal Present:	Yes	Sample Date/Times match COC:	Yes
Custody Seal Intact:	Yes	VOA Vial Headspace ≥ 6mm:	N/A
Samples Chilled:	Yes	Total Trip Blank Qty:	0
Paperwork Enclosed:	Yes	Air Quality Samples Present:	No
Samples Intact:	Yes		
Missing Samples:	No		
Extra Samples:	No		
Discrepancy in Container Qty on COC:	No		

Unpacked by Melvin Sanchez (8943) at 21:13 on 04/10/2019

Samples Chilled Details

Thermometer Types: *DT = Digital (Temp. Bottle)* *IR = Infrared (Surface Temp)* *All Temperatures in °C.*

Cooler #	Thermometer ID	Corrected Temp	Therm. Type	Ice Type	Ice Present?	Ice Container	Elevated Temp?
1	DT42-01	2.3	DT	Wet	Y	Bagged	N

2425 New Holland Pike
Lancaster, PA 17601-2422
T | 717-656-2300
F | 717-656-2681
www.LancasterLabs.com

Explanation of Symbols and Abbreviations

The following defines common symbols and abbreviations used in reporting technical data:

BMQL	Below Minimum Quantitation Level	**mL**	milliliter(s)
C	degrees Celsius	**MPN**	Most Probable Number
cfu	colony forming units	**N.D.**	non-detect
CP Units	cobalt-chloroplatinate units	**ng**	nanogram(s)
F	degrees Fahrenheit	**NTU**	nephelometric turbidity units
g	gram(s)	**pg/L**	picogram/liter
IU	International Units	**RL**	Reporting Limit
kg	kilogram(s)	**TNTC**	Too Numerous To Count
L	liter(s)	**µg**	microgram(s)
lb.	pound(s)	**µL**	microliter(s)
m3	cubic meter(s)	**umhos/cm**	micromhos/cm
meq	milliequivalents	**MCL**	Maximum Contamination Limit
mg	milligram(s)		

<	less than
>	greater than
ppm	parts per million - One ppm is equivalent to one milligram per kilogram (mg/kg) or one gram per million grams. For aqueous liquids, ppm is usually taken to be equivalent to milligrams per liter (mg/l), because one liter of water has a weight very close to a kilogram. For gases or vapors, one ppm is equivalent to one microliter per liter of gas.
ppb	parts per billion
Dry weight basis	Results printed under this heading have been adjusted for moisture content. This increases the analyte weight concentration to approximate the value present in a similar sample without moisture. All other results are reported on an as-received basis.

Analytical test results meet all requirements of the associated regulatory program (i.e., NELAC (TNI), DoD, and ISO 17025) unless otherwise noted under the individual analysis.

Measurement uncertainty values, as applicable, are available upon request.

Tests results relate only to the sample tested. Clients should be aware that a critical step in a chemical or microbiological analysis is the collection of the sample. Unless the sample analyzed is truly representative of the bulk of material involved, the test results will be meaningless. If you have questions regarding the proper techniques of collecting samples, please contact us. We cannot be held responsible for sample integrity, however, unless sampling has been performed by a member of our staff.

This report shall not be reproduced except in full, without the written approval of the laboratory.

Times are local to the area of activity. Parameters listed in the 40 CFR Part 136 Table II as “analyze immediately” are not performed within 15 minutes.

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Data Qualifiers

Qualifier	Definition
C	Result confirmed by reanalysis
D1	Indicates for dual column analyses that the result is reported from column 1
D2	Indicates for dual column analyses that the result is reported from column 2
E	Concentration exceeds the calibration range
K1	Initial Calibration Blank is above the QC limit and the sample result is ND
K2	Continuing Calibration Blank is above the QC limit and the sample result is ND
K3	Initial Calibration Verification is above the QC limit and the sample result is ND
K4	Continuing Calibration Verification is above the QC limit and the sample result is ND
J (or G, I, X)	Estimated value >= the Method Detection Limit (MDL or DL) and < the Limit of Quantitation (LOQ or RL)
P	Concentration difference between the primary and confirmation column >40%. The lower result is reported.
P^	Concentration difference between the primary and confirmation column > 40%. The higher result is reported.
U	Analyte was not detected at the value indicated
V	Concentration difference between the primary and confirmation column >100%. The reporting limit is raised due to this disparity and evident interference.
W	The dissolved oxygen uptake for the unseeded blank is greater than 0.20 mg/L.
Z	Laboratory Defined - see analysis report

Additional Organic and Inorganic CLP qualifiers may be used with Form 1 reports as defined by the CLP methods.
Qualifiers specific to Dioxin/Furans and PCB Congeners are detailed on the individual Analysis Report.

Volatiles by GC/MS Data

Case Narrative/Conformance Summary

Volatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Draper Aden Associates, Inc.
SDG: RAF34

GC/MS Volatiles

Fraction: Volatiles by GC/MS

RAAP Unit 5 "J" and "K" lists

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
1030976	5W8B	X		1	
1030977	5W5B	X		1	
1030978	5W7B	X		1	Unspiked
1030979	5W7B Matrix Spike	X		1	Matrix Spike
1030980	5W7B Matrix Spike Dup	X		1	Matrix Spike Duplicate
1030981	5WC21	X		1	
1030982	5WDUP	X		1	Field Duplicate Sample
1030983	5WC22	X		1	
1030984	5WC23	X		1	
1030985	5W12A	X		1	
1030986	Trip Blank 1	X		1	Trip Blank

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

MS/MSD

Batch#: I191062AA (Sample number(s): 1030976-1030986, UNSPK: 1030978)
The recovery(ies) for the following analyte(s) in the MS and MSD exceeded the acceptance window indicating a positive bias: cis-1,2-Dichloroethene

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Case Narrative/Conformance Summary

CLIENT: Draper Aden Associates, Inc.
SDG: RAF34

GC/MS Volatiles

Fraction: Volatiles by GC/MS

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Quality Control and Calibration Summary Forms

Volatiles by GC/MS

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Quality Control Reference List
GC/MS Volatiles

CLIENT: Draper Aden Associates, Inc.
SDG: RAF34

Fraction: Volatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
RAAP Unit 5 "J" and "K" lists	I191062AA	VBLKI23	04/16/2019 12:46
		LCSI23	04/16/2019 12:04
		1030977	04/16/2019 18:31
		1030978 UNSPK	04/16/2019 18:52
		1030979 MS	04/16/2019 19:13
		1030980 MSD	04/16/2019 19:34
		1030981	04/16/2019 19:55
		1030982	04/16/2019 20:17
		1030983	04/16/2019 20:38
		1030984	04/16/2019 20:59
		1030986	04/16/2019 14:59
RAAP Unit 5 "J" list	I191062AA	1030976	04/16/2019 17:48
		1030985	04/16/2019 18:10

Quality Control Summary
Method Blank
GC/MS Volatiles
SDG: RAF34
Matrix: LIQUID

Fraction: Volatiles by GC/MS

I191062AA / VBLKI23 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Dichlorodifluoromethane	04/16/19	N.D.	ug/l	0.3	1.0
Vinyl Chloride	04/16/19	N.D.	ug/l	0.1	1.0
Ethyl ether	04/16/19	N.D.	ug/l	0.4	12
1,1-Dichloroethene	04/16/19	N.D.	ug/l	0.4	1.0
Acetone	04/16/19	N.D.	ug/l	3.0	10
Methylene Chloride	04/16/19	N.D.	ug/l	0.2	1.0
trans-1,2-Dichloroethene	04/16/19	N.D.	ug/l	0.8	1.0
2-Butanone	04/16/19	N.D.	ug/l	1.0	10
cis-1,2-Dichloroethene	04/16/19	N.D.	ug/l	0.1	1.0
Chloroform	04/16/19	N.D.	ug/l	0.1	1.0
1,2-Dichloroethane	04/16/19	N.D.	ug/l	0.1	1.0
Trichloroethene	04/16/19	N.D.	ug/l	0.2	1.0
Toluene	04/16/19	N.D.	ug/l	0.1	1.0
Xylene (Total)	04/16/19	N.D.	ug/l	0.2	3.0

Quality Control Summary
Surrogates
GC/MS Volatiles
SDG: RAF34
Matrix: LIQUID

Fraction: Volatiles by GC/MS

I191062AA	1,2-Dichloroethane-d4		4-Bromofluorobenzene		Dibromofluoromethane		Toluene-d8	
	Spike Added	10 ug/l	Spike Added	10 ug/l	Spike Added	10 ug/l	Spike Added	10 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
VBLKI23	97	80 - 120	102	80 - 120	99	80 - 120	101	80 - 120
LCSI23	96	80 - 120	98	80 - 120	101	80 - 120	100	80 - 120
1030976	98	80 - 120	99	80 - 120	100	80 - 120	101	80 - 120
1030977	98	80 - 120	100	80 - 120	99	80 - 120	101	80 - 120
1030978 UNSPK	97	80 - 120	100	80 - 120	100	80 - 120	102	80 - 120
1030979 MS	96	80 - 120	98	80 - 120	101	80 - 120	100	80 - 120
1030980 MSD	96	80 - 120	100	80 - 120	102	80 - 120	101	80 - 120
1030981	97	80 - 120	101	80 - 120	100	80 - 120	101	80 - 120
1030982	100	80 - 120	101	80 - 120	100	80 - 120	101	80 - 120
1030983	99	80 - 120	100	80 - 120	100	80 - 120	101	80 - 120
1030984	98	80 - 120	101	80 - 120	99	80 - 120	101	80 - 120
1030985	98	80 - 120	100	80 - 120	100	80 - 120	100	80 - 120
1030986	100	80 - 120	101	80 - 120	100	80 - 120	100	80 - 120

GC/MS Volatiles

Fraction: Volatiles by GC/MS

UNSPK: 1030978 MS: 1030979 MSD: 1030980 **Analyte**	Batch: **I191062AA** (Sample number(s): 1030976-1030986)								
	Spike Added ug/l	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	5.00	N.D.	3.56	3.68	71	74	43-123	3	30
Vinyl Chloride	5.00	N.D.	4.51	4.64	90	93	60-125	3	30
Ethyl ether	5.00	N.D.	4.94 J	5.02 J	99	100	72-121	2	30
1,1-Dichloroethene	5.00	N.D.	6.10	6.19	122	124	80-131	2	30
Acetone	37.5	N.D.	35.92	35.03	96	93	60-146	3	30
Methylene Chloride	5.00	0.365 J	6.01	6.09	113	115	80-120	1	30
trans-1,2-Dichloroethene	5.00	N.D.	5.33	5.44	107	109	80-120	2	30
2-Butanone	37.5	N.D.	40.12	39.94	107	107	59-141	0	30
cis-1,2-Dichloroethene	5.00	N.D.	6.20	6.35	124 *	127 *	80-120	2	30
Chloroform	5.00	20.08	25.16	25.47	102 (2)	108 (2)	80-120	1	30
1,2-Dichloroethane	5.00	N.D.	5.42	5.32	108	106	69-122	2	30
Trichloroethene	5.00	N.D.	5.99	5.86	120	117	80-120	2	30
Toluene	5.00	N.D.	5.67	5.66	113	113	80-120	0	30
Xylene (Total)	15	N.D.	16.84	17.05	112	114	80-120	1	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: RAF34
Matrix: LIQUID

GC/MS Volatiles

Fraction: Volatiles by GC/MS

LCS: LCSI23	Batch: **I191062AA** (Sample number(s): 1030976-1030986)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Dichlorodifluoromethane	5.00	3.30	NA	66	NA	43-123	NA	NA
Vinyl Chloride	5.00	4.21	NA	84	NA	60-125	NA	NA
Ethyl ether	5.00	4.84 J	NA	97	NA	72-121	NA	NA
1,1-Dichloroethene	5.00	5.70	NA	114	NA	80-131	NA	NA
Acetone	37.5	32.21	NA	86	NA	60-146	NA	NA
Methylene Chloride	5.00	5.47	NA	109	NA	80-120	NA	NA
trans-1,2-Dichloroethene	5.00	5.00	NA	100	NA	80-120	NA	NA
2-Butanone	37.5	43.4	NA	116	NA	59-141	NA	NA
cis-1,2-Dichloroethene	5.00	5.96	NA	119	NA	80-120	NA	NA
Chloroform	5.00	5.31	NA	106	NA	80-120	NA	NA
1,2-Dichloroethane	5.00	5.18	NA	104	NA	69-122	NA	NA
Trichloroethene	5.00	5.43	NA	109	NA	80-120	NA	NA
Toluene	5.00	5.32	NA	106	NA	80-120	NA	NA
Xylene (Total)	15	16.06	NA	107	NA	80-120	NA	NA

LOQ/MDL Summary
GC/MS Volatiles

SDG: RAF34

Fraction: Volatiles by GC/MS

11996: RAAP Unit 5 "J" and "K" lists Analyte Name	Default MDL	Default LOQ	Units
Dichlorodifluoromethane	0.3	1.0	ug/l
Vinyl Chloride	0.1	1.0	ug/l
Ethyl ether	0.4	12	ug/l
1,1-Dichloroethene	0.4	1.0	ug/l
Acetone	3.0	10	ug/l
Methylene Chloride	0.2	1.0	ug/l
trans-1,2-Dichloroethene	0.8	1.0	ug/l
2-Butanone	1.0	10	ug/l
cis-1,2-Dichloroethene	0.1	1.0	ug/l
Chloroform	0.1	1.0	ug/l
1,2-Dichloroethane	0.1	1.0	ug/l
Trichloroethene	0.2	1.0	ug/l
Toluene	0.1	1.0	ug/l
Xylene (Total)	0.2	3.0	ug/l

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: ia08t01.d BFB Injection Date: 04/08/19

Instrument ID: HP19930 BFB Injection Time: 15:37

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.17
75	30.0 - 60.0% of mass 95	47.26
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.52
173	Less than 2.0% of mass 174	1.39 (1.54)1
174	Greater than 50.0% of mass 95	90.35
175	5.0 - 9.0% of mass 174	6.71 (7.43)1
176	Greater than 95.0%, but less than 101.0% of mass 174	86.37 (95.59)1
177	5.0 - 9.0% of mass 176	5.60 (6.48)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD25	ia08i01.d	04/08/19	16:13
02	VSTD10	ia08i02.d	04/08/19	16:34
03	VSTD5	ia08i03.d	04/08/19	16:55
04	VSTD2	ia08i04.d	04/08/19	17:16
05	VSTD1	ia08i05.d	04/08/19	17:37
06	VSTD.5	ia08i06.d	04/08/19	17:59
07	VSTD.2	ia08i07.d	04/08/19	18:20
08	LCSILG	ia08v01.d	04/08/19	18:41

FORM V VOA

^

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: ia16t05.d BFB Injection Date: 04/16/19

Instrument ID: HP19930 BFB Injection Time: 10:49

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.23
75	30.0 - 60.0% of mass 95	47.87
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.58
173	Less than 2.0% of mass 174	1.05 (1.20)1
174	Greater than 50.0% of mass 95	87.08
175	5.0 - 9.0% of mass 174	7.15 (8.21)1
176	Greater than 95.0%, but less than 101.0% of mass 174	83.78 (96.21)1
177	5.0 - 9.0% of mass 176	5.39 (6.44)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD10	ia16c01.d	04/16/19	11:21
02	LCSI22	ia16l01.d	04/16/19	11:43
03	LCDI22	ia16l02.d	04/16/19	12:04
04	LCSI23	ia16l32.d	04/16/19	12:04
05	VBLKI22	ia16b01.d	04/16/19	12:46
06	VBLKI23	ia16b30.d	04/16/19	12:46
07	1030534	ia16s02.d	04/16/19	14:38
08	1030986	ia16s33.d	04/16/19	14:59
09	1030535	ia16s03.d	04/16/19	15:20
10	1030536	ia16s04.d	04/16/19	15:41
11	1030537	ia16s05.d	04/16/19	16:02
12	1030538	ia16s06.d	04/16/19	16:23
13	1030540	ia16s07.d	04/16/19	16:45
14	1030556	ia16s08.d	04/16/19	17:06
15	1030558	ia16s09.d	04/16/19	17:27
16	1030976	ia16s34.d	04/16/19	17:48
17	1030985	ia16s35.d	04/16/19	18:10
18	1030977	ia16s36.d	04/16/19	18:31
19	1030978	ia16s37.d	04/16/19	18:52
20	1030979MS	ia16s38.d	04/16/19	19:13
21	1030980MSD	ia16s39.d	04/16/19	19:34
22	1030981	ia16s40.d	04/16/19	19:55

FORM V VOA

5A
VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: ia16t05.d BFB Injection Date: 04/16/19

Instrument ID: HP19930 BFB Injection Time: 10:49

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
50	15.0 - 40.0% of mass 95	16.23
75	30.0 - 60.0% of mass 95	47.87
95	Base peak, 100% relative abundance	100.00
96	5.0 - 9.0% of mass 95	6.58
173	Less than 2.0% of mass 174	1.05 (1.20)1
174	Greater than 50.0% of mass 95	87.08
175	5.0 - 9.0% of mass 174	7.15 (8.21)1
176	Greater than 95.0%, but less than 101.0% of mass 174	83.78 (96.21)1
177	5.0 - 9.0% of mass 176	5.39 (6.44)2

1-Value is % mass 174 2-Value is % mass 176

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	1030982	ia16s41.d	04/16/19	20:17
24	1030983	ia16s42.d	04/16/19	20:38
25	1030984	ia16s43.d	04/16/19	20:59
26	SECC010	ia16ec1.d	04/16/19	21:20

FORM V VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date(s): 04/08/19 04/08/19

Heated Purge: (Y/N) Y Calibration Times: 16:13 18:20

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF0.2= ia08i07.d RRF0.5= ia08i06.d RRF 1 = ia08i05.d
RRF 2 = ia08i04.d RRF 5 = ia08i03.d RRF 10= ia08i02.d RRF 25= ia08i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Dichlorodifluoromethane	#0.5804	0.5664	0.5709	0.5915	0.5954	0.5841	0.5913	0.5828	2	AVG #
Chloromethane	#0.4624	0.4318	0.4222	0.4443	0.4234	0.4277	0.4101	0.4317	4	AVG #
Vinyl Chloride	#0.4335	0.4446	0.4326	0.4492	0.4404	0.4415	0.4306	0.4389	2	AVG #
1,3-Butadiene	0.4570	0.3894	0.3597	0.3423	0.3258	0.3433	0.3235	0.3630	13	AVG
Bromomethane	#0.4011	0.3862	0.3738	0.3872	0.3873	0.3876	0.4085	0.3902	3	AVG #
Chloroethane	#0.2519	0.2546	0.2491	0.2584	0.2513	0.2552	0.2643	0.2550	2	AVG #
Dichlorofluoromethane	0.6746	0.6572	0.6367	0.6608	0.6516	0.6571	0.6736	0.6588	2	AVG
Trichlorofluoromethane	#0.7352	0.6886	0.7109	0.7381	0.7527	0.7396	0.7681	0.7333	4	AVG #
Ethyl ether	0.1816	0.1980	0.1900	0.1808	0.2005	0.2034	0.1973	0.1931	5	AVG
Freon 123a	0.3454	0.3265	0.3269	0.3185	0.3250	0.3326	0.3332	0.3297	3	AVG
Acrolein	1.9694	2.0131	2.0283	2.1196	2.0868	2.3188	2.3199	2.1223	7	AVG
1,1-Dichloroethene	#0.2522	0.2576	0.2488	0.2536	0.2506	0.2598	0.2575	0.2543	2	AVG #
Freon 113	#0.3019	0.2920	0.3090	0.2992	0.3113	0.3183	0.3193	0.3073	3	AVG #
Acetone	#3.2666	3.0196	2.8110	2.8061	2.7743	2.9797	2.8488	2.9294	6	AVG #
Methyl Iodide	0.5250	0.5495	0.5294	0.5383	0.5546	0.5606	0.5609	0.5455	3	AVG
Carbon Disulfide	#0.8318	0.7689	0.7110	0.7142	0.7204	0.7357	0.7308	0.7447	6	AVG #
Allyl Chloride	0.3893	0.4049	0.3946	0.3646	0.3914	0.4015	0.3920	0.3912	3	AVG
Methyl Acetate	#7.3314	8.2646	7.7896	7.6014	7.9270	7.5971	7.6738	7.7407	4	AVG #
Methylene Chloride	#0.2568	0.2632	0.2579	0.2540	0.2612	0.2639	0.2640	0.2601	2	AVG #
t-Butyl Alcohol	1.1763	1.2495	1.1866	1.2440	1.1972	1.2639	1.1820	1.2142	3	AVG
Acrylonitrile	3.2593	3.3395	3.3981	3.4735	3.4745	3.8451	3.7387	3.5041	6	AVG
trans-1,2-Dichloroethene	#0.3193	0.2856	0.2751	0.2763	0.2765	0.2808	0.2788	0.2846	6	AVG #
Methyl Tertiary Butyl Ether	#0.6467	0.6720	0.6603	0.6556	0.6725	0.6919	0.6573	0.6652	2	AVG #
n-Hexane	0.3839	0.3882	0.3869	0.3848	0.4119	0.4273	0.4209	0.4006	5	AVG
1,1-Dichloroethane	#0.4522	0.4910	0.4589	0.4485	0.4614	0.4652	0.4635	0.4629	3	AVG #
di-Isopropyl Ether	0.7400	0.7695	0.7458	0.7815	0.7921	0.8110	0.7979	0.7768	3	AVG
2-Chloro-1,3-Butadiene	0.4024	0.4106	0.4030	0.4084	0.4173	0.4341	0.4341	0.4157	3	AVG
Ethyl t-butyl ether	0.7942	0.7706	0.7550	0.7718	0.7812	0.7760	0.7498	0.7712	2	AVG
cis-1,2-Dichloroethene	#0.3294	0.3231	0.3072	0.3084	0.3104	0.3217	0.3194	0.3171	3	AVG #
2,2-Dichloropropane	0.4429	0.4408	0.4179	0.4177	0.4249	0.4359	0.4363	0.4309	2	AVG
2-Butanone	#4.4895	4.5022	4.4994	4.7045	4.7694	5.2284	5.1145	4.7583	6	AVG #
Propionitrile	1.1643	1.2690	1.2420	1.2768	1.2972	1.3934	1.3003	1.2776	5	AVG
Methacrylonitrile	4.3666	4.4127	4.4585	4.6471	4.6993	5.1466	5.1811	4.7017	7	AVG
Bromochloromethane	0.1527	0.1626	0.1631	0.1444	0.1576	0.1561	0.1558	0.1560	4	AVG
Tetrahydrofuran	1.3928	1.4474	1.4020	1.5143	1.4695	1.6082	1.5812	1.4879	6	AVG
Chloroform	#0.5152	0.5132	0.5006	0.4869	0.4995	0.5107	0.5052	0.5045	2	AVG #
1,1,1-Trichloroethane	#0.4780	0.4918	0.4774	0.4787	0.4897	0.5015	0.4966	0.4877	2	AVG #
Cyclohexane	#0.4758	0.4553	0.4589	0.4794	0.4892	0.5013	0.4969	0.4795	4	AVG #
Cyclohexane(2)	#0.4317	0.4407	0.4477	0.4491	0.4622	0.4669	0.4686	0.4524	3	AVG #
Cyclohexane(3)	#0.1530	0.1562	0.1575	0.1602	0.1561	0.1600	0.1594	0.1575	2	AVG #
1,1-Dichloropropene	0.3586	0.3867	0.3666	0.3739	0.3810	0.3885	0.3873	0.3775	3	AVG
Carbon Tetrachloride	#0.4598	0.4566	0.4448	0.4453	0.4637	0.4761	0.4771	0.4605	3	AVG #
Isobutyl Alcohol	0.4003	0.3652	0.3626	0.3633	0.3712	0.3930	0.3695	0.3750	4	AVG
Benzene	#1.0876	1.1257	1.0718	1.0983	1.1172	1.1330	1.1363	1.1100	2	AVG #
1,2-Dichloroethane	#0.3315	0.3057	0.2901	0.2901	0.2857	0.2932	0.2880	0.2977	5	AVG #
1,2-Dichloroethane(2)	#0.0236	0.0270	0.0280	0.0302	0.0284	0.0287	0.0285	0.0278	7	AVG #<-
t-Amyl methyl ether	0.7569	0.7493	0.7188	0.7468	0.7489	0.7598	0.7262	0.7438	2	AVG
n-Heptane	0.4019	0.3840	0.3937	0.4029	0.4186	0.4378	0.4402	0.4113	5	AVG
n-Butanol	0.2759	0.2957	0.3070	0.3172	0.3262	0.3398	0.3289	0.3129	7	AVG
Trichloroethene	#0.3092	0.3179	0.2946	0.3085	0.3094	0.3152	0.3192	0.3106	3	AVG #
Methylcyclohexane	#0.4135	0.5706	0.5753	0.4979	0.6018	0.6120	0.6109	0.5546	13	AVG #
1,2-Dichloropropane	#0.2474	0.2607	0.2472	0.2506	0.2600	0.2651	0.2679	0.2570	3	AVG #

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

FORM VI VOA

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date(s): 04/08/19 04/08/19

Heated Purge: (Y/N) Y Calibration Times: 16:13 18:20

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF0.2= ia08i07.d RRF0.5= ia08i06.d RRF 1 = ia08i05.d
RRF 2 = ia08i04.d RRF 5 = ia08i03.d RRF 10= ia08i02.d RRF 25= ia08i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Methyl Methacrylate	7.8796	8.5979	8.5975	8.7212	9.0726	10.004	10.118	8.9987	9	AVG
Dibromomethane	0.1449	0.1445	0.1403	0.1421	0.1456	0.1464	0.1476	0.1445	2	AVG
1,4-Dioxane		0.0700	0.0806	0.0812	0.0771	0.0797	0.0731	0.0769	6	AVG
1,4-Dioxane(2)		0.0370	0.0479	0.0452	0.0485	0.0519	0.0446	0.0458	11	AVG
# Bromodichloromethane	0.3404	0.3439	0.3403	0.3530	0.3664	0.3734	0.3796	0.3567	5	AVG #
2-Nitropropane	2.5250	2.7402	2.7853	2.9779	3.0797	3.4124	3.4387	2.9942	11	AVG
# cis-1,3-Dichloropropene	0.3938	0.3921	0.3845	0.3953	0.4104	0.4269	0.4295	0.4047	4	AVG #
# 4-Methyl-2-Pentanone	10.379	11.147	11.178	11.875	12.292	13.635	13.815	12.045	11	AVG #
# Toluene	0.9086	0.9444	0.8862	0.9102	0.9220	0.9420	0.9417	0.9222	2	AVG #
# trans-1,3-Dichloropropene	0.4274	0.4267	0.4067	0.4276	0.4428	0.4591	0.4525	0.4347	4	AVG #
Ethyl Methacrylate	0.3362	0.3633	0.3421	0.3534	0.3830	0.3958	0.3959	0.3671	7	AVG
# 1,1,2-Trichloroethane	0.2599	0.2457	0.2455	0.2535	0.2582	0.2614	0.2596	0.2548	3	AVG #
# Tetrachloroethene	0.4865	0.4923	0.4820	0.4758	0.4817	0.4995	0.4982	0.4880	2	AVG #
1,3-Dichloropropane	0.4093	0.4105	0.3940	0.4056	0.4127	0.4224	0.4167	0.4102	2	AVG
# 2-Hexanone	7.5100	8.0073	7.9238	8.4444	8.6135	9.5644	9.7283	8.5417	10	AVG #
# Dibromochloromethane	0.3045	0.3524	0.3255	0.3387	0.3574	0.3728	0.3731	0.3464	7	AVG #
# 1,2-Dibromoethane	0.2562	0.2611	0.2491	0.2548	0.2600	0.2669	0.2685	0.2595	3	AVG #
1-Chlorohexane	0.5886	0.5507	0.5388	0.5341	0.5463	0.5638	0.5644	0.5552	3	AVG
# Chlorobenzene	1.0793	1.0612	1.0305	1.0356	1.0445	1.0795	1.0798	1.0586	2	AVG #
1,1,1,2-Tetrachloroethane	0.3669	0.3928	0.3834	0.3910	0.4081	0.4231	0.4298	0.3993	6	AVG
# Ethylbenzene	1.8218	1.8661	1.7692	1.7973	1.8448	1.9232	1.9416	1.8520	3	AVG #
# m+p-Xylene	0.7185	0.7279	0.7068	0.7196	0.7421	0.7680	0.7799	0.7375	4	AVG #
# o-Xylene	0.6622	0.7009	0.6954	0.6952	0.7276	0.7458	0.7561	0.7119	5	AVG #
# Styrene	1.0226	1.0790	1.0782	1.1028	1.1617	1.2151	1.2408	1.1286	7	AVG #
# Bromoform	0.1860	0.1929	0.1939	0.2104	0.2263	0.2380	0.2436	0.2130	11	AVG #
# Isopropylbenzene	1.8154	1.9139	1.8742	1.8819	1.9429	2.0256	2.0068	1.9229	4	AVG #
# 1,1,2,2-Tetrachloroethane	0.5532	0.5639	0.5462	0.5585	0.5749	0.5951	0.6037	0.5707	4	AVG #
Bromobenzene	0.8728	0.8804	0.8250	0.8262	0.8572	0.8904	0.9281	0.8686	4	AVG
trans-1,4-Dichloro-2-butene	3.2735	3.7334	3.8096	4.1072	4.3308	4.9854	5.3319	4.2245	17	AVG
1,2,3-Trichloropropane	0.1641	0.1713	0.1609	0.1665	0.1707	0.1774	0.1748	0.1694	3	AVG
n-Propylbenzene	3.7455	3.8605	3.7061	3.8210	3.9169	4.1022	4.0423	3.8849	4	AVG
2-Chlorotoluene	0.8153	0.8698	0.8057	0.8160	0.8187	0.8610	0.8613	0.8354	3	AVG
1,3,5-Trimethylbenzene	2.7388	2.7920	2.7513	2.8060	2.8927	3.0242	3.0829	2.8697	5	AVG
4-Chlorotoluene	0.8595	0.8183	0.8204	0.8090	0.8344	0.8673	0.8670	0.8394	3	AVG
tert-Butylbenzene	0.6107	0.6536	0.6361	0.6369	0.6533	0.6857	0.7012	0.6539	5	AVG
Pentachloroethane	0.4996	0.5629	0.5856	0.5342	0.5938	0.6142	0.6409	0.5759	8	AVG
1,2,4-Trimethylbenzene	2.7906	2.8606	2.7928	2.8383	2.9089	3.0993	3.1781	2.9241	5	AVG
sec-Butylbenzene	3.4828	3.5706	3.5226	3.6174	3.7766	4.0058	4.0264	3.7146	6	AVG
# 1,3-Dichlorobenzene	1.6289	1.6388	1.5984	1.5941	1.6399	1.7234	1.8148	1.6626	5	AVG #
p-Isopropyltoluene	2.9157	3.1278	3.0434	3.1597	3.3388	3.5513	3.6820	3.2598	9	AVG
# 1,4-Dichlorobenzene	1.6853	1.6358	1.5966	1.6052	1.6300	1.7144	1.7634	1.6615	4	AVG #
1,2,3-Trimethylbenzene	1.2862	1.4011	1.3636	1.2672	1.3691	1.4079	1.4701	1.3664	5	AVG
Benzyl Chloride	0.2199	0.2474	0.2489	0.2805	0.2810	0.3003	0.3045	0.2689	12	AVG
n-Butylbenzene	1.2813	1.3750	1.3937	1.4129	1.5269	1.6460	1.7430	1.4827	11	AVG
# 1,2-Dichlorobenzene	1.5105	1.4707	1.4437	1.4855	1.5121	1.5840	1.6173	1.5177	4	AVG #
# 1,2-Dibromo-3-chloropropane	2.2552	2.4977	2.6329	2.6728	2.7368	3.1696	3.2059	2.7387	13	AVG #
1,3,5-Trichlorobenzene	1.1281	1.1381	1.1246	1.1663	1.2272	1.3179	1.3836	1.2123	8	AVG
# 1,2,4-Trichlorobenzene	1.0266	0.9918	0.9799	1.0174	1.0767	1.1464	1.2001	1.0627	8	AVG #
Hexachlorobutadiene	0.3845	0.3988	0.3862	0.3991	0.4434	0.4912	0.5363	0.4342	14	AVG
Naphthalene	2.2161	2.1024	1.9866	2.0771	2.1312	2.2130	2.1708	2.1282	4	AVG
1,2,3-Trichlorobenzene	0.9269	0.9049	0.9132	0.9170	0.9711	1.0273	1.0375	0.9568	6	AVG
Dibromofluoromethane	0.2587	0.2582	0.2582	0.2594	0.2585	0.2565	0.2570	0.2581	0	AVG

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date(s): 04/08/19 04/08/19

Heated Purge: (Y/N) Y Calibration Times: 16:13 18:20

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

LAB FILE ID: RRF0.2= ia08i07.d RRF0.5= ia08i06.d RRF 1 = ia08i05.d
RRF 2 = ia08i04.d RRF 5 = ia08i03.d RRF 10= ia08i02.d RRF 25= ia08i01.d

COMPOUND	RRF0.2	RRF0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	% RSD	CAL. METHOD
Dibromofluoromethane(2)	0.2624	0.2646	0.2636	0.2637	0.2642	0.2645	0.2636	0.2638	0	AVG
1,2-Dichloroethane-d4	0.0497	0.0509	0.0498	0.0497	0.0493	0.0494	0.0494	0.0497	1	AVG
1,2-Dichloroethane-d4(2)	0.2244	0.2249	0.2198	0.2209	0.2238	0.2224	0.2242	0.2229	1	AVG
1,2-Dichloroethane-d4(3)	0.0315	0.0314	0.0312	0.0318	0.0319	0.0313	0.0307	0.0314	1	AVG
Toluene-d8	1.2448	1.2351	1.2304	1.2226	1.2272	1.2268	1.1991	1.2266	1	AVG
Toluene-d8(2)	0.7966	0.7911	0.7921	0.7826	0.7912	0.7883	0.7647	0.7866	1	AVG
4-Bromofluorobenzene	0.4677	0.4692	0.4606	0.4574	0.4593	0.4558	0.4475	0.4596	2	AVG
4-Bromofluorobenzene(2)	0.4334	0.4400	0.4403	0.4402	0.4507	0.4395	0.4356	0.4400	1	AVG

Average %RSD 5

Compounds with required minimum RRF.
All compounds must meet a maximum %RSD of 20.

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP19930.i/19apr08a.b/ia08i01.d	VSTD025
/chem2/HP19930.i/19apr08a.b/ia08i02.d	VSTD010
/chem2/HP19930.i/19apr08a.b/ia08i03.d	VSTD005
/chem2/HP19930.i/19apr08a.b/ia08i04.d	VSTD002
/chem2/HP19930.i/19apr08a.b/ia08i05.d	VSTD001
/chem2/HP19930.i/19apr08a.b/ia08i06.d	VSTD0.5
/chem2/HP19930.i/19apr08a.b/ia08i07.d	VSTD0.2

Area Summary

File ID:

Internal Standard Name	ia08i01.d	ia08i02.d	ia08i03.d	ia08i04.d	ia08i05.d	ia08i06.d	ia08i07.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	136489	135247	145276	144315	145694	149699	156860	144797	5	Yes
Fluorobenzene	1828378	1834755	1815436	1838321	1847494	1845545	1838389	1835474	1	Yes
Chlorobenzene-d5	1498173	1474409	1459007	1482784	1473334	1472238	1457542	1473927	1	Yes
1,4-Dichlorobenzene-d4	835590	825128	826324	829269	826954	822319	808996	824940	1	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

File ID:

Internal Standard Name	ia08i01.d	ia08i02.d	ia08i03.d	ia08i04.d	ia08i05.d	ia08i06.d	ia08i07.d	Avg. RT
t-Butyl Alcohol-d10	4.312	4.324	4.306	4.312	4.306	4.312	4.306	4.311
Fluorobenzene	7.805	7.805	7.805	7.805	7.805	7.805	7.805	7.805
Chlorobenzene-d5	11.256	11.256	11.256	11.256	11.256	11.256	11.256	11.256
1,4-Dichlorobenzene-d4	13.133	13.133	13.133	13.133	13.133	13.133	13.133	13.133

* indicates the retention time is greater than 30 seconds from the average RT.

Report generated on 04/09/2019 at 10:36.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 ICV Date: 04/08/19 Time: 18:41

Lab File ID: ia08v01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.5828	0.4271	3.66	5	-27	#
# Chloromethane	0.4317	0.3761	4.36	5	-13	#
# Vinyl Chloride	0.4389	0.4007	4.56	5	-9	#
1,3-Butadiene	0.3630	0.3152	4.34	5	-13	
# Bromomethane	0.3902	0.3391	4.35	5	-13	#
# Chloroethane	0.2550	0.2445	4.79	5	-4	#
Dichlorofluoromethane	0.6588	0.6540	4.96	5	-1	
# Trichlorofluoromethane	0.7333	0.6683	4.56	5	-9	#
Ethyl ether	0.1931	0.1901	4.92	5	-2	
Freon 123a	0.3297	0.3254	4.93	5	-1	
Acrolein	2.1223	1.8963	33.51	37.5	-11	
# 1,1-Dichloroethene	0.2543	0.2789	5.48	5	10	#
# Freon 113	0.3073	0.3164	5.15	5	3	#
# Acetone	2.9294	2.4206	30.99	37.5	-17	#
Methyl Iodide	0.5455	0.5369	4.92	5	-2	
# Carbon Disulfide	0.7447	0.7047	4.73	5	-5	#
Allyl Chloride	0.3912	0.3544	4.53	5	-9	
# Methyl Acetate	7.7407	6.5633	4.24	5	-15	#
# Methylene Chloride	0.2601	0.2735	5.26	5	5	#
t-Butyl Alcohol	1.2142	1.1138	45.87	50	-8	
Acrylonitrile	3.5041	3.1741	22.65	25	-9	
# trans-1,2-Dichloroethene	0.2846	0.2977	5.23	5	5	#
# Methyl Tertiary Butyl Ether	0.6652	0.6480	4.87	5	-3	#
n-Hexane	0.4006	0.3861	4.82	5	-4	
# 1,1-Dichloroethane	0.4629	0.4794	5.18	5	4	#
di-Isopropyl Ether	0.7768	0.7940	5.11	5	2	
2-Chloro-1,3-Butadiene	0.4157	0.4141	4.98	5	0	
Ethyl t-butyl ether	0.7712	0.7533	4.88	5	-2	
# cis-1,2-Dichloroethene	0.3171	0.3390	5.35	5	7	#
2,2-Dichloropropane	0.4309	0.4488	5.21	5	4	
# 2-Butanone	4.7583	4.2860	33.78	37.5	-10	#
Propionitrile	1.2776	1.1985	35.18	37.5	-6	
Methacrylonitrile	4.7017	4.4225	35.27	37.5	-6	
Bromochloromethane	0.1560	0.1434	4.59	5	-8	
Tetrahydrofuran	1.4879	1.3086	21.99	25	-12	
# Chloroform	0.5045	0.5288	5.24	5	5	#

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 ICV Date: 04/08/19 Time: 18:41

Lab File ID: ia08v01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# 1,1,1-Trichloroethane	0.4877	0.5122	5.25	5	5	#
# Cyclohexane	0.4795	0.4738	4.94	5	-1	#
1,1-Dichloropropene	0.3775	0.3901	5.17	5	3	
# Carbon Tetrachloride	0.4605	0.4831	5.25	5	5	#
Isobutyl Alcohol	0.3750	0.3532	117.73	125	-6	
# Benzene	1.1100	1.1497	5.18	5	4	#
# 1,2-Dichloroethane	0.2977	0.2994	5.03	5	1	#
t-Amyl methyl ether	0.7438	0.7386	4.96	5	-1	
n-Heptane	0.4113	0.3858	4.69	5	-6	
n-Butanol	0.3129	0.3111	248.53	250	-1	
# Trichloroethene	0.3106	0.3228	5.20	5	4	#
# Methylcyclohexane	0.5546	0.5330	4.81	5	-4	#
# 1,2-Dichloropropane	0.2570	0.2700	5.25	5	5	#
Methyl Methacrylate	8.9987	8.5358	4.74	5	-5	
Dibromomethane	0.1445	0.1477	5.11	5	2	
1,4-Dioxane	0.0769	0.0872	141.64	125	13	
# Bromodichloromethane	0.3567	0.3737	5.24	5	5	#
2-Nitropropane	2.9942	2.5894	4.32	5	-14	
# cis-1,3-Dichloropropene	0.4047	0.4172	5.16	5	3	#
# 4-Methyl-2-Pentanone	12.045	10.7348	22.28	25	-11	#
# Toluene	0.9222	0.9587	5.20	5	4	#
# trans-1,3-Dichloropropene	0.4347	0.4337	4.99	5	0	#
Ethyl Methacrylate	0.3671	0.3507	4.78	5	-4	
# 1,1,2-Trichloroethane	0.2548	0.2711	5.32	5	6	#
# Tetrachloroethene	0.4880	0.5056	5.18	5	4	#
1,3-Dichloropropane	0.4102	0.4111	5.01	5	0	
# 2-Hexanone	8.5417	7.6605	22.42	25	-10	#
# Dibromochloromethane	0.3464	0.3685	5.32	5	6	#
# 1,2-Dibromoethane	0.2595	0.2643	5.09	5	2	#
1-Chlorohexane	0.5552	0.5622	5.06	5	1	
# Chlorobenzene	1.0586	1.0907	5.15	5	3	#
1,1,1,2-Tetrachloroethane	0.3993	0.4200	5.26	5	5	
# Ethylbenzene	1.8520	1.8929	5.11	5	2	#
# m+p-Xylene	0.7375	0.7682	10.42	10	4	#
# o-Xylene	0.7119	0.7418	5.21	5	4	#
# Styrene	1.1286	1.1886	5.27	5	5	#

Compounds with required minimum RRF.
Maximum % Drift = 30 %

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 ICV Date: 04/08/19 Time: 18:41

Lab File ID: ia08v01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	$\overline{RRF}$	RRF	CONC.	CONC.	DRIFT	
# Bromoform	0.2130	0.2215	5.20	5	4	#
# Isopropylbenzene	1.9229	2.0409	5.31	5	6	#
# 1,1,2,2-Tetrachloroethane	0.5707	0.5797	5.08	5	2	#
Bromobenzene	0.8686	0.8851	5.09	5	2	
trans-1,4-Dichloro-2-butene	4.2245	3.9911	23.62	25	-6	
1,2,3-Trichloropropane	0.1694	0.1721	5.08	5	2	
n-Propylbenzene	3.8849	4.1441	5.33	5	7	
2-Chlorotoluene	0.8354	0.8686	5.20	5	4	
1,3,5-Trimethylbenzene	2.8697	3.0041	5.23	5	5	
4-Chlorotoluene	0.8394	0.8670	5.16	5	3	
tert-Butylbenzene	0.6539	0.6927	5.30	5	6	
Pentachloroethane	0.5759	0.5713	4.96	5	-1	
1,2,4-Trimethylbenzene	2.9241	3.0560	5.23	5	5	
sec-Butylbenzene	3.7146	4.0021	5.39	5	8	
# 1,3-Dichlorobenzene	1.6626	1.6992	5.11	5	2	#
p-Isopropyltoluene	3.2598	3.4918	5.36	5	7	
# 1,4-Dichlorobenzene	1.6615	1.7187	5.17	5	3	#
1,2,3-Trimethylbenzene	1.3664	1.3999	5.12	5	2	
Benzyl Chloride	0.2689	0.2677	4.98	5	0	
n-Butylbenzene	1.4827	1.5592	5.26	5	5	
# 1,2-Dichlorobenzene	1.5177	1.5817	5.21	5	4	#
# 1,2-Dibromo-3-chloropropane	2.7387	2.7040	4.94	5	-1	#
1,3,5-Trichlorobenzene	1.2123	1.2730	5.25	5	5	
# 1,2,4-Trichlorobenzene	1.0627	1.0958	5.16	5	3	#
Hexachlorobutadiene	0.4342	0.4679	5.39	5	8	
Naphthalene	2.1282	2.0701	4.86	5	-3	
1,2,3-Trichlorobenzene	0.9568	0.9610	5.02	5	0	
			Average %Drift		5	

Compounds with required minimum RRF.
Maximum % Drift = 30 %

^

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP19930.i/19apr08a.b/ia08i07.d
/chem2/HP19930.i/19apr08a.b/ia08i06.d
/chem2/HP19930.i/19apr08a.b/ia08i05.d
/chem2/HP19930.i/19apr08a.b/ia08i04.d
/chem2/HP19930.i/19apr08a.b/ia08i03.d
/chem2/HP19930.i/19apr08a.b/ia08i02.d
/chem2/HP19930.i/19apr08a.b/ia08i01.d

File /chem2/HP19930.i/19apr08a.b/ia08i02.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP19930.i/19apr16a.b/ia16c01.d

RT Summary

Internal Standard Name	File ID: ia16c01.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	4.306	4.324	Yes
Fluorobenzene	7.811	7.805	Yes
Chlorobenzene-d5	11.262	11.256	Yes
1,4-Dichlorobenzene-d4	13.133	13.133	Yes

A "No" indicates the retention time is greater than 10 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: ia16c01.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	109113	135247	67624	270494	Yes
Fluorobenzene	1548113	1834755	917378	3669510	Yes
Chlorobenzene-d5	1272342	1474409	737204	2948818	Yes
1,4-Dichlorobenzene-d4	709243	825128	412564	1650256	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

Comments: _____

report generated on 04/16/2019 at 11:51

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date: 04/16/19 Time: 11:21

Lab File ID: ia16c01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF10	CONC.	CONC.	DRIFT	
# Dichlorodifluoromethane	0.5828	0.5481	9.40	10	-6	#
# Chloromethane	0.4317	0.3848	8.91	10	-11	#
# Vinyl Chloride	0.4389	0.3997	9.11	10	-9	#
1,3-Butadiene	0.3630	0.5816	16.02	10	60	<-
# Bromomethane	0.3902	0.3729	9.56	10	-4	#
# Chloroethane	0.2550	0.2394	9.39	10	-6	#
Dichlorofluoromethane	0.6588	0.6556	9.95	10	0	
# Trichlorofluoromethane	0.7333	0.6877	9.38	10	-6	#
Ethyl ether	0.1931	0.1969	10.20	10	2	
Freon 123a	0.3297	0.3100	9.40	10	-6	
Acrolein	2.1223	1.8777	442.36	500	-12	
# 1,1-Dichloroethene	0.2543	0.2425	9.53	10	-5	#
# Freon 113	0.3073	0.3028	9.85	10	-1	#
# Acetone	2.9294	2.3384	79.82	100	-20	#
Methyl Iodide	0.5455	0.5155	9.45	10	-6	
# Carbon Disulfide	0.7447	0.6496	8.72	10	-13	#
Allyl Chloride	0.3912	0.3533	9.03	10	-10	
# Methyl Acetate	7.7407	8.6368	11.16	10	12	#
# Methylene Chloride	0.2601	0.2519	9.68	10	-3	#
t-Butyl Alcohol	1.2142	0.9060	149.24	200	-25	<-
Acrylonitrile	3.5041	3.2841	46.86	50	-6	
# trans-1,2-Dichloroethene	0.2846	0.2703	9.50	10	-5	#
# Methyl Tertiary Butyl Ether	0.6652	0.6114	9.19	10	-8	#
n-Hexane	0.4006	0.3812	9.52	10	-5	
# 1,1-Dichloroethane	0.4629	0.4408	9.52	10	-5	#
di-Isopropyl Ether	0.7768	0.7507	9.66	10	-3	
2-Chloro-1,3-Butadiene	0.4157	0.4055	9.75	10	-2	
Ethyl t-butyl ether	0.7712	0.7315	9.49	10	-5	
# cis-1,2-Dichloroethene	0.3171	0.3098	9.77	10	-2	#
2,2-Dichloropropane	0.4309	0.4209	9.77	10	-2	
# 2-Butanone	4.7583	4.6075	96.83	100	-3	#
Propionitrile	1.2776	1.3198	206.61	200	3	
Methacrylonitrile	4.7017	5.0812	108.07	100	8	
Bromochloromethane	0.1560	0.1539	9.86	10	-1	
Tetrahydrofuran	1.4879	1.4949	100.47	100	0	
# Chloroform	0.5045	0.4892	9.70	10	-3	#

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date: 04/16/19 Time: 11:21

Lab File ID: ia16c01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF10	CONC.	CONC.	DRIFT	
# 1,1,1-Trichloroethane	0.4877	0.4851	9.95	10	-1	#
# Cyclohexane	0.4795	0.4620	9.63	10	-4	#
# Cyclohexane(2)	0.4524	0.4310	9.53	10	-5	#
# Cyclohexane(3)	0.1575	0.1453	9.23	10	-8	#
1,1-Dichloropropene	0.3775	0.3720	9.86	10	-1	
# Carbon Tetrachloride	0.4605	0.4486	9.74	10	-3	#
Isobutyl Alcohol	0.3750	0.3252	433.62	500	-13	
# Benzene	1.1100	1.0896	9.82	10	-2	#
# 1,2-Dichloroethane	0.2977	0.2779	9.33	10	-7	#
# 1,2-Dichloroethane(2)	0.0278	0.0265	9.54	10	-5	#<-
t-Amyl methyl ether	0.7438	0.7197	9.68	10	-3	
n-Heptane	0.4113	0.3906	9.50	10	-5	
n-Butanol	0.3129	0.3269	1044.61	1000	4	
# Trichloroethene	0.3106	0.3107	10.00	10	0	#
# Methylcyclohexane	0.5546	0.5798	10.45	10	5	#
# 1,2-Dichloropropane	0.2570	0.2522	9.81	10	-2	#
Methyl Methacrylate	8.9987	9.9736	11.08	10	11	
Dibromomethane	0.1445	0.1428	9.88	10	-1	
1,4-Dioxane	0.0769	0.0802	556.15	500	11	
1,4-Dioxane(2)	0.0458	0.0481	572.04	500	14	
# Bromodichloromethane	0.3567	0.3513	9.85	10	-2	#
2-Nitropropane	2.9942	3.1825	106.29	100	6	
# cis-1,3-Dichloropropene	0.4047	0.3899	9.63	10	-4	#
# 4-Methyl-2-Pentanone	12.045	13.0278	108.15	100	8	#
# Toluene	0.9222	0.8862	9.61	10	-4	#
# trans-1,3-Dichloropropene	0.4347	0.3996	9.19	10	-8	#
Ethyl Methacrylate	0.3671	0.3630	9.89	10	-1	
# 1,1,2-Trichloroethane	0.2548	0.2472	9.70	10	-3	#
# Tetrachloroethene	0.4880	0.4621	9.47	10	-5	#
1,3-Dichloropropane	0.4102	0.3991	9.73	10	-3	
# 2-Hexanone	8.5417	9.2220	107.96	100	8	#
# Dibromochloromethane	0.3464	0.3362	9.71	10	-3	#
# 1,2-Dibromoethane	0.2595	0.2525	9.73	10	-3	#
1-Chlorohexane	0.5552	0.5247	9.45	10	-6	
# Chlorobenzene	1.0586	1.0214	9.65	10	-4	#
1,1,1,2-Tetrachloroethane	0.3993	0.3998	10.01	10	0	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date: 04/16/19 Time: 11:21

Lab File ID: ia16c01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF10	CONC.	CONC.	DRIFT	
# Ethylbenzene	1.8520	1.8185	9.82	10	-2	#
# m+p-Xylene	0.7375	0.7307	19.82	20	-1	#
# o-Xylene	0.7119	0.7045	9.90	10	-1	#
# Styrene	1.1286	1.1233	9.95	10	0	#
# Bromoform	0.2130	0.2003	9.40	10	-6	#
# Isopropylbenzene	1.9229	1.8925	9.84	10	-2	#
# 1,1,2,2-Tetrachloroethane	0.5707	0.5693	9.97	10	0	#
Bromobenzene	0.8686	0.8397	9.67	10	-3	
trans-1,4-Dichloro-2-butene	4.2245	3.1423	74.38	100	-26	<-
1,2,3-Trichloropropane	0.1694	0.1666	9.84	10	-2	
n-Propylbenzene	3.8849	3.8758	9.98	10	0	
2-Chlorotoluene	0.8354	0.8152	9.76	10	-2	
1,3,5-Trimethylbenzene	2.8697	2.8517	9.94	10	-1	
4-Chlorotoluene	0.8394	0.8161	9.72	10	-3	
tert-Butylbenzene	0.6539	0.6425	9.83	10	-2	
Pentachloroethane	0.5759	0.5920	10.28	10	3	
1,2,4-Trimethylbenzene	2.9241	2.9361	10.04	10	0	
sec-Butylbenzene	3.7146	3.7834	10.19	10	2	
# 1,3-Dichlorobenzene	1.6626	1.6411	9.87	10	-1	#
p-Isopropyltoluene	3.2598	3.3436	10.26	10	3	
# 1,4-Dichlorobenzene	1.6615	1.6365	9.85	10	-2	#
1,2,3-Trimethylbenzene	1.3664	1.3920	10.19	10	2	
Benzyl Chloride	0.2689	0.2856	10.62	10	6	
n-Butylbenzene	1.4827	1.5166	10.23	10	2	
# 1,2-Dichlorobenzene	1.5177	1.5073	9.93	10	-1	#
# 1,2-Dibromo-3-chloropropane	2.7387	3.0616	11.18	10	12	#
1,3,5-Trichlorobenzene	1.2123	1.2216	10.08	10	1	
# 1,2,4-Trichlorobenzene	1.0627	1.0399	9.79	10	-2	#
Hexachlorobutadiene	0.4342	0.4220	9.72	10	-3	
Naphthalene	2.1282	2.0300	9.54	10	-5	
1,2,3-Trichlorobenzene	0.9568	0.9273	9.69	10	-3	
Dibromofluoromethane	0.2581	0.2592	10.04	10	0	
Dibromofluoromethane(2)	0.2638	0.2655	10.06	10	1	
1,2-Dichloroethane-d4	0.0497	0.0487	9.79	10	-2	
1,2-Dichloroethane-d4(2)	0.2229	0.2173	9.75	10	-3	

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP19930 Calibration Date: 04/16/19 Time: 11:21

Lab File ID: ia16c01.d Init. Calib. Date(s): 04/08/19 04/08/19

Matrix: (soil/water) WATER Level: (low/med) LOW GC Column: Rxi-624Sil .25

COMPOUND	RRF	RRF10	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,2-Dichloroethane-d4(3)	0.0314	0.0311	9.89	10	-1
Toluene-d8	1.2266	1.2110	9.87	10	-1
Toluene-d8(2)	0.7866	0.7838	9.96	10	0
4-Bromofluorobenzene	0.4596	0.4502	9.79	10	-2
4-Bromofluorobenzene(2)	0.4400	0.4311	9.80	10	-2

Average %Drift 5

Compounds with required minimum RRF.
All compounds must meet a maximum % Drift of 20.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): ia16c01.d Date Analyzed: 04/16/19

Instrument ID: HP19930 Time Analyzed: 11:21

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA)		IS2(FBZ)		IS3(CBZ)		IS4(DCB)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	109113	4.306	1548113	7.811	1272342	11.262	709243	13.133
UPPER LIMIT	218226	4.806	3096226	8.311	2544684	11.762	1418486	13.633
LOWER LIMIT	54556	3.806	774056	7.311	636171	10.762	354622	12.633
LAB SAMPLE ID								
01 LCSI22	84344	4.306	1607382	7.805	1318863	11.262	728354	13.133
02 LCDI22	96480	4.312	1724708	7.811	1405602	11.262	775505	13.133
03 LCSI23	96480	4.312	1724708	7.811	1405602	11.262	775505	13.133
04 VBLKI22	106222	4.318	1546310	7.805	1257891	11.262	708369	13.133
05 VBLKI23	106222	4.318	1546310	7.805	1257891	11.262	708369	13.133
06 1030534	92585	4.324	1522201	7.805	1244297	11.256	694267	13.133
07 1030986	93756	4.318	1494256	7.805	1220307	11.256	687826	13.133
08 1030535	77088	4.318	1476752	7.805	1212825	11.256	676064	13.133
09 1030536	82299	4.324	1490353	7.805	1219944	11.256	675229	13.133
10 1030537	112122	4.330	1953137	7.811	1605798	11.262	904440	13.133
11 1030538	97479	4.324	1896744	7.805	1560500	11.262	872727	13.133
12 1030540	102245	4.306	1983160	7.811	1644715	11.262	922194	13.133
13 1030556	68822	4.306	1527944	7.805	1241764	11.256	689955	13.133
14 1030558	81476	4.300	1531050	7.805	1251945	11.262	691291	13.133
15 1030976	99355	4.312	1541940	7.811	1256415	11.262	693207	13.133
16 1030985	98280	4.306	1494866	7.805	1222569	11.256	671092	13.133
17 1030977	95086	4.306	1507100	7.805	1218927	11.256	674812	13.133
18 1030978	94355	4.318	1490414	7.805	1209325	11.256	667580	13.133
19 1030979MS	94297	4.342	1553274	7.811	1272437	11.262	705048	13.133
20 1030980MSD	99063	4.318	1559697	7.811	1266205	11.256	711103	13.133
21 1030981	100842	4.324	1556983	7.805	1262808	11.256	713528	13.133
22 1030982	96901	4.330	1517233	7.805	1242188	11.256	692837	13.133

IS1 (TBA)=t-Butyl Alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): ia16c01.d Date Analyzed: 04/16/19

Instrument ID: HP19930 Time Analyzed: 11:21

Matrix: (soil/water) WATER Level: (low/med) LOW Column: (pack/cap) CAP

	IS1(TBA) AREA #	RT #	IS2(FBZ) AREA #	RT #	IS3(CBZ) AREA #	RT #	IS4(DCB) AREA #	RT #
12 HOUR STD	109113	4.306	1548113	7.811	1272342	11.262	709243	13.133
UPPER LIMIT	218226	4.806	3096226	8.311	2544684	11.762	1418486	13.633
LOWER LIMIT	54556	3.806	774056	7.311	636171	10.762	354622	12.633
LAB SAMPLE ID								
23 1030983	102227	4.361	1525608	7.805	1245311	11.256	695109	13.133
24 1030984	98964	4.361	1515791	7.805	1235294	11.262	686613	13.133
25 SECC010	97692	4.312	1581552	7.805	1289044	11.256	723557	13.133

IS1 (TBA)=t-Butyl Alcohol-d10
IS2 (FBZ)=Fluorobenzene
IS3 (CBZ)=Chlorobenzene-d5
IS4 (DCB)=1,4-Dichlorobenzene-d4

UPPER LIMIT = + 100%
of internal standard area.
LOWER LIMIT = - 50%
of internal standard area.

Column used to flag values outside QC limits with an asterisk
* Values outside of QC limits.

FORM VIII VOA

^

Sample Data

Volatiles by GC/MS

Data file: /chem2/HP19930.i/19apr16a.b/ia16s34.d Injection date and time: **16-APR-2019 17:48**
Data file Sample Info. Line: 34R01;1030976;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:28 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12025**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.312	(-0.006)	447	65	99355	(-9)	50.00	
63) Fluorobenzene	7.811	(0.000)	1021	96	1541940	(0)	10.00	
97) Chlorobenzene-d5	11.262	(0.000)	1587	117	1256415	(-1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	693207	(-2)	10.00	

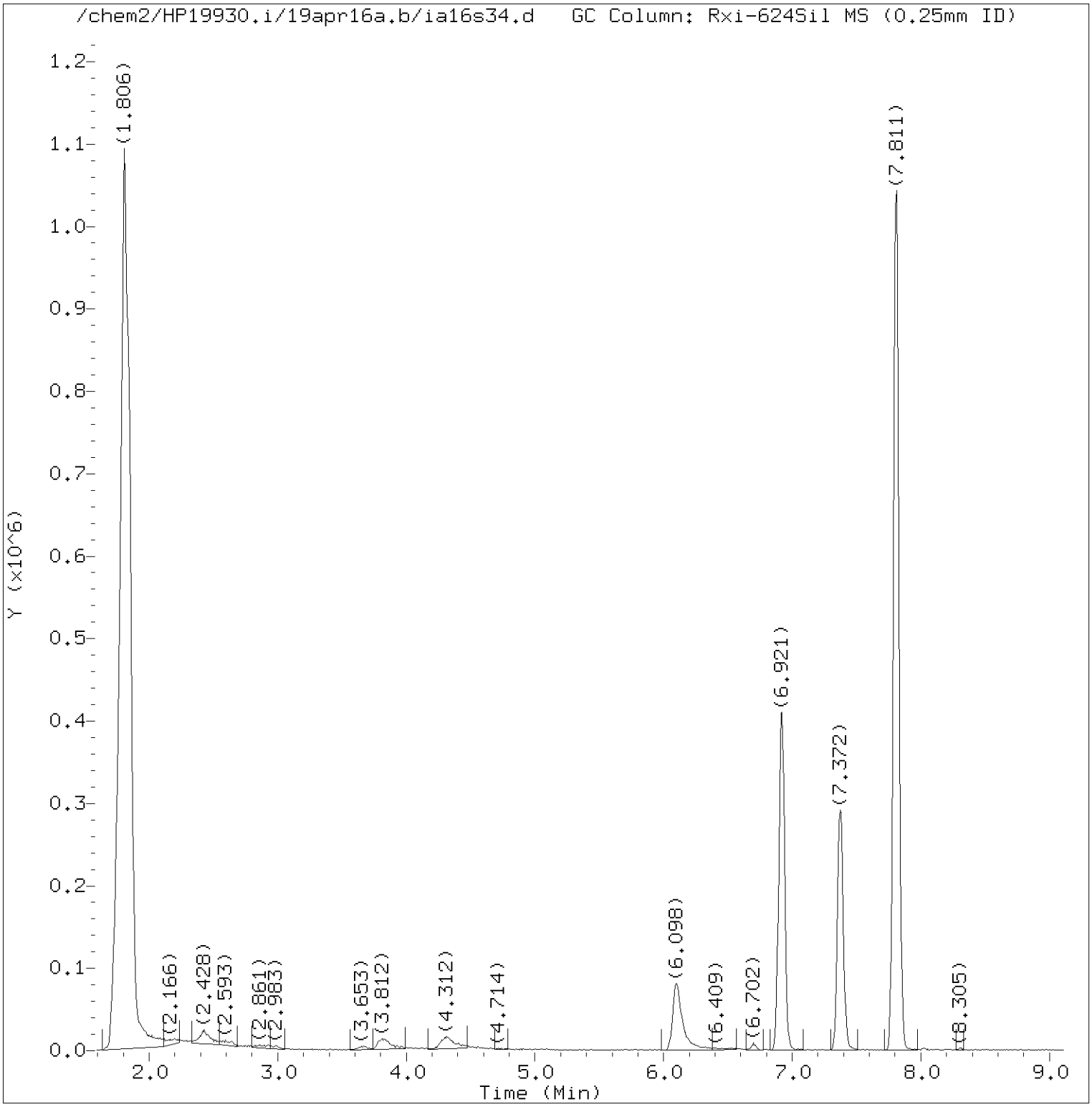
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(0.000)	113	398737	10.020	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.001)	102	75288	9.817	98%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1550219	10.059	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(0.000)	95	573054	9.923	99%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
5) Vinyl Chloride	(2)				Not Detected					0.1	1
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)				Not Detected					0.2	1

Total number of targets = 5

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

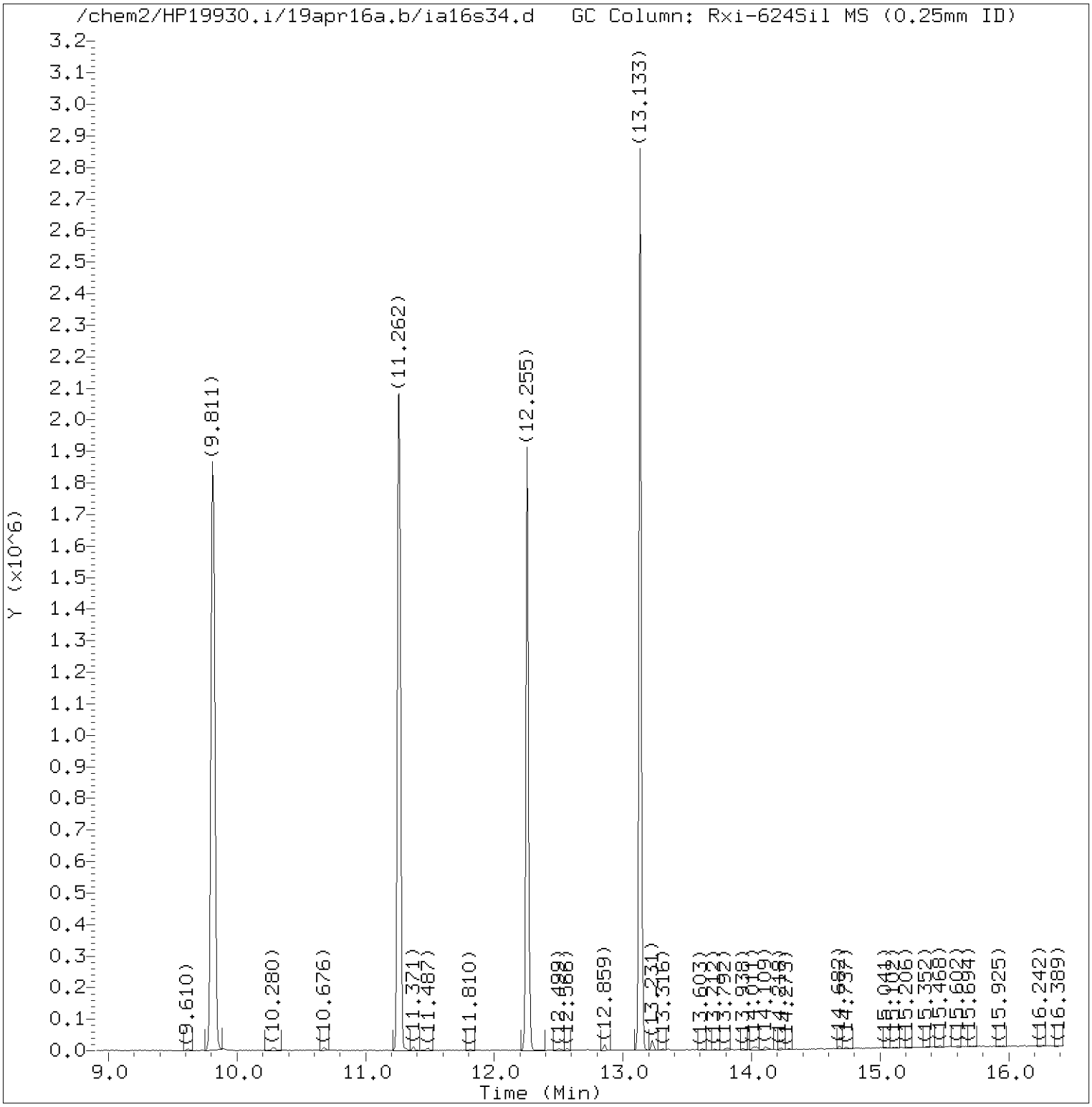
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s34.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 17:48 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12025
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:28 mec29284

Sample Name: 34R01 Lab Sample ID: 1030976

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s34.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 17:48 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12025
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:28 mec29284

Sample Name: 34R01 Lab Sample ID: 1030976

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s34.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 17:48 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12025
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:28 mec29284

Sample Name: 34R01 Lab Sample ID: 1030976

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.312	65	99355	50.000
50)$Dibromofluoromethane	(2)	6.915	113	398737	10.020
57)$1,2-Dichloroethane-d4	(2)	7.372	102	75288	9.817
63)*Fluorobenzene	(2)	7.811	96	1541940	10.000
82)$Toluene-d8	(3)	9.811	98	1550219	10.059
97)*Chlorobenzene-d5	(3)	11.262	117	1256415	10.000
111)$4-Bromofluorobenzene	(3)	12.255	95	573054	9.923
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	693207	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s36.d Injection date and time: **16-APR-2019 18:31**
Data file Sample Info. Line: 34R02;1030977;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 18:49 Automation

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.306	(0.000)	446	65	95086	(-13)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1507100	(-3)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1218927	(-4)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	674812	(-5)	10.00	

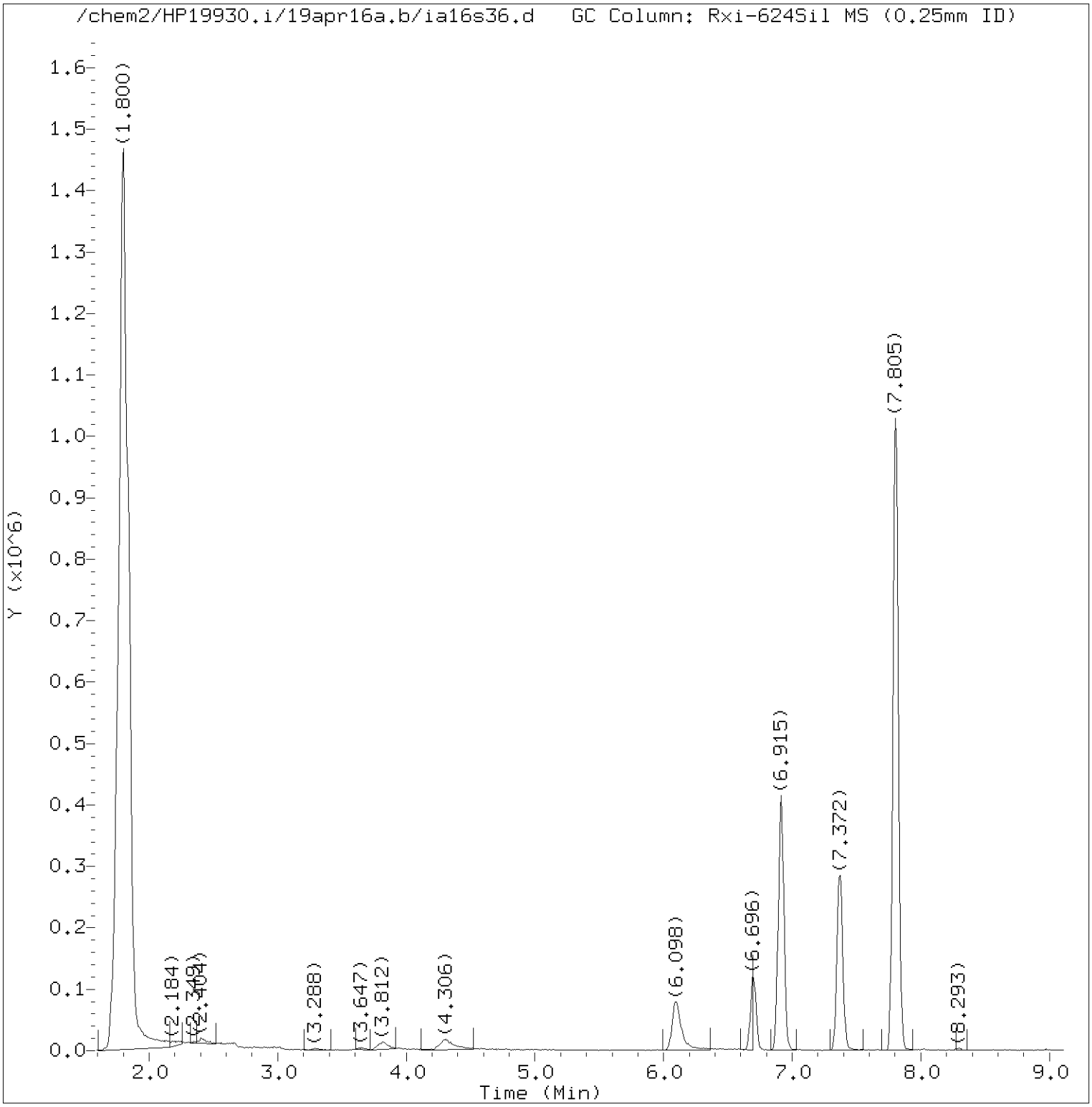
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	385987	9.924	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.000)	102	73671	9.828	98%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1508625	10.090	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(-0.001)	95	560605	10.006	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)				Not Detected					0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)	6.696	(0.000)	83	154339	2.030	2.03			0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)				Not Detected					0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

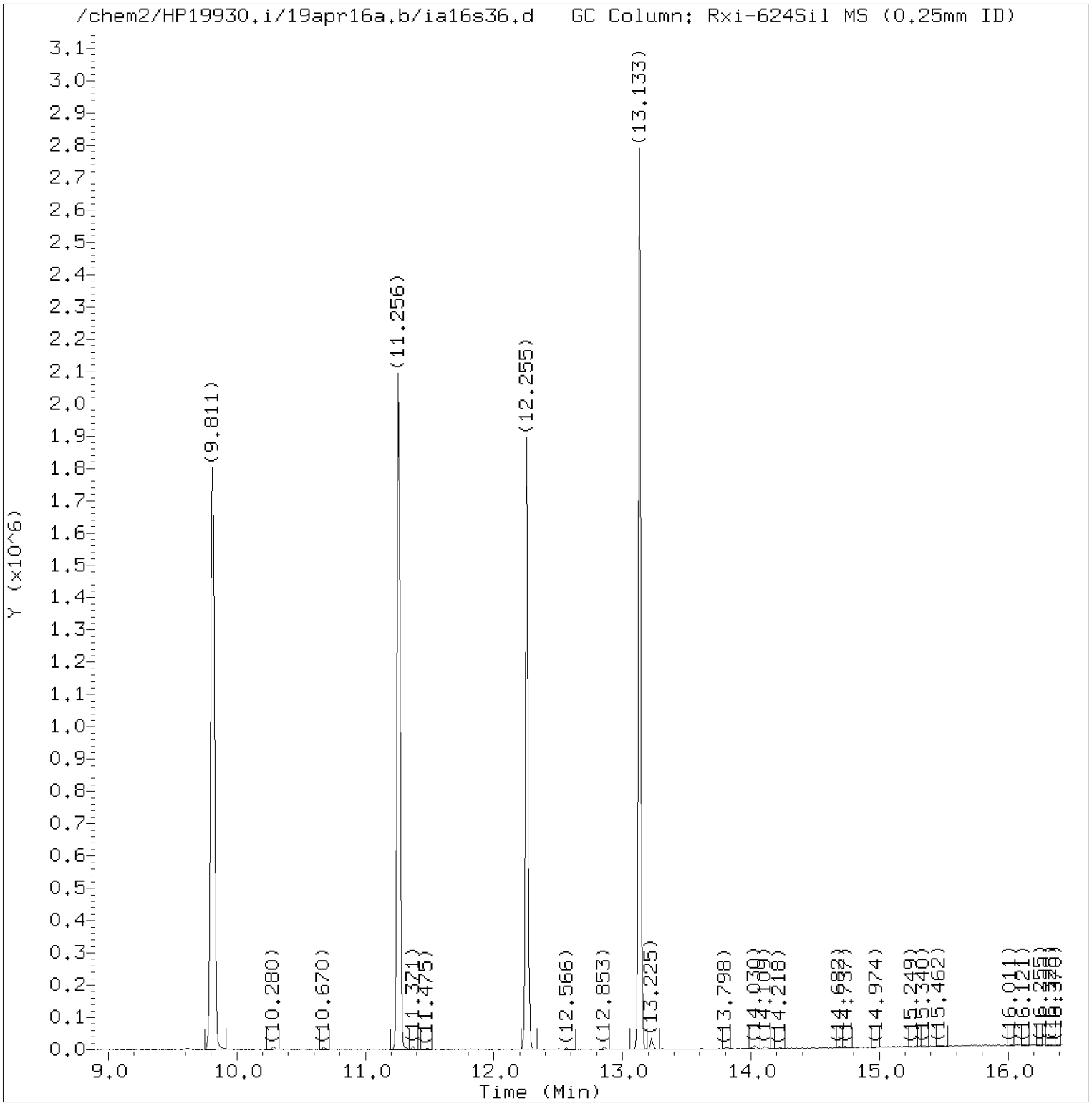
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s36.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:31 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 18:49 Automation

Sample Name: 34R02 Lab Sample ID: 1030977

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s36.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:31 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 18:49 Automation

Sample Name: 34R02 Lab Sample ID: 1030977

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s36.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:31 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 18:49 Automation

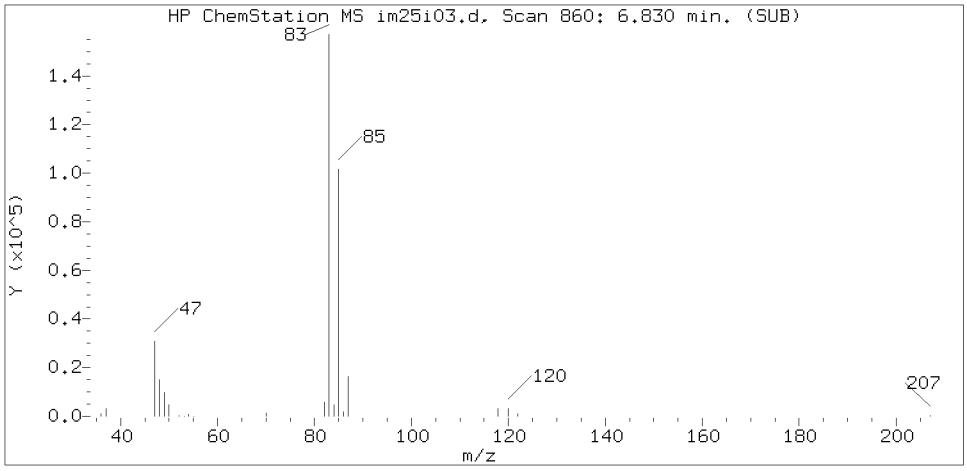
Sample Name: 34R02 Lab Sample ID: 1030977

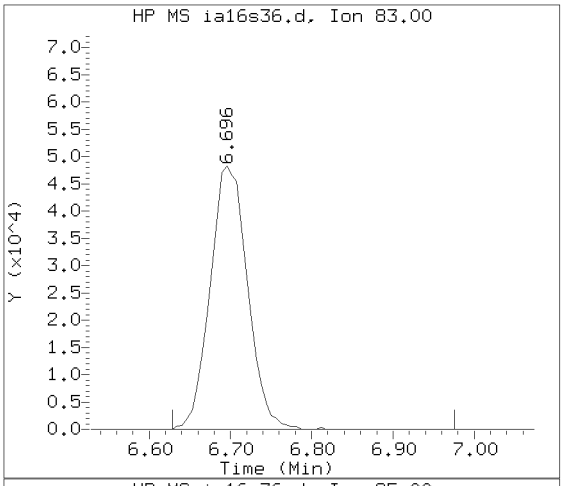
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.306	65	95086	50.000
49) Chloroform	(2)	6.696	83	154339	2.030
50)$Dibromofluoromethane	(2)	6.915	113	385987	9.924
57)$1,2-Dichloroethane-d4	(2)	7.372	102	73671	9.828
63)*Fluorobenzene	(2)	7.805	96	1507100	10.000
82)$Toluene-d8	(3)	9.811	98	1508625	10.090
97)*Chlorobenzene-d5	(3)	11.256	117	1218927	10.000
111)$4-Bromofluorobenzene	(3)	12.255	95	560605	10.006
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	674812	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

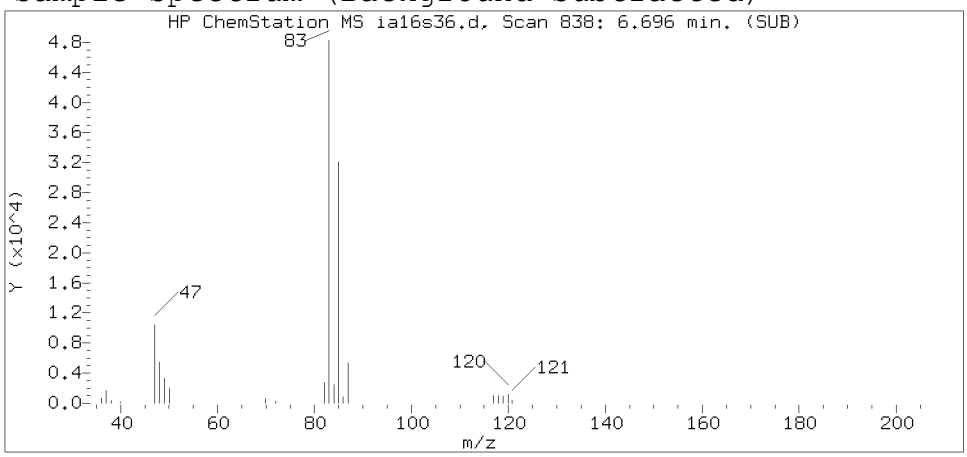
Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

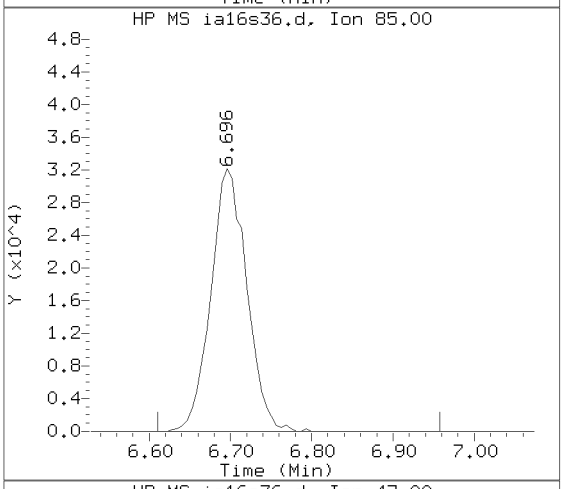
Reference Standard Spectrum for Chloroform



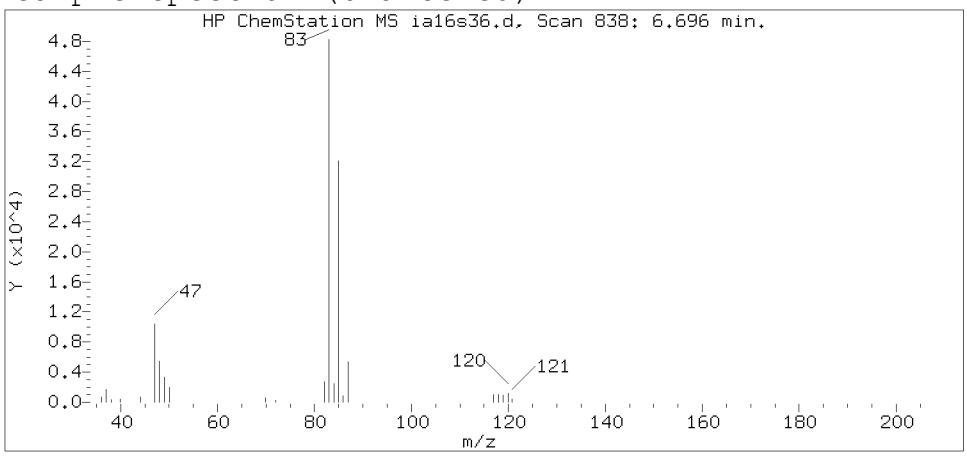


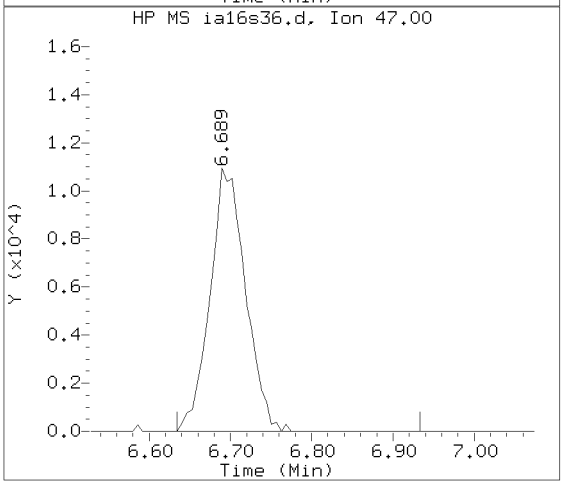
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s36.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:31 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 18:49 Automation

Sample Name: 34R02 Lab Sample ID: 1030977

Compound Number	: 49
Compound Name	: Chloroform
Scan Number	: 838
Retention Time (minutes)	: 6.696
Relative Retention Time	: 0.00011
Quant Ion	: 83.00
Area (flag)	: 154339
On-Column Amount (ng)	: 2.0300

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19930.i/19apr16a.b/ia16s37.d Injection date and time: **16-APR-2019 18:52**
Data file Sample Info. Line: 34R03;1030978;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 19:10 Automation

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.318	(-0.012)	448	65	94355	(-14)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1490414	(-4)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1209325	(-5)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	667580	(-6)	10.00	

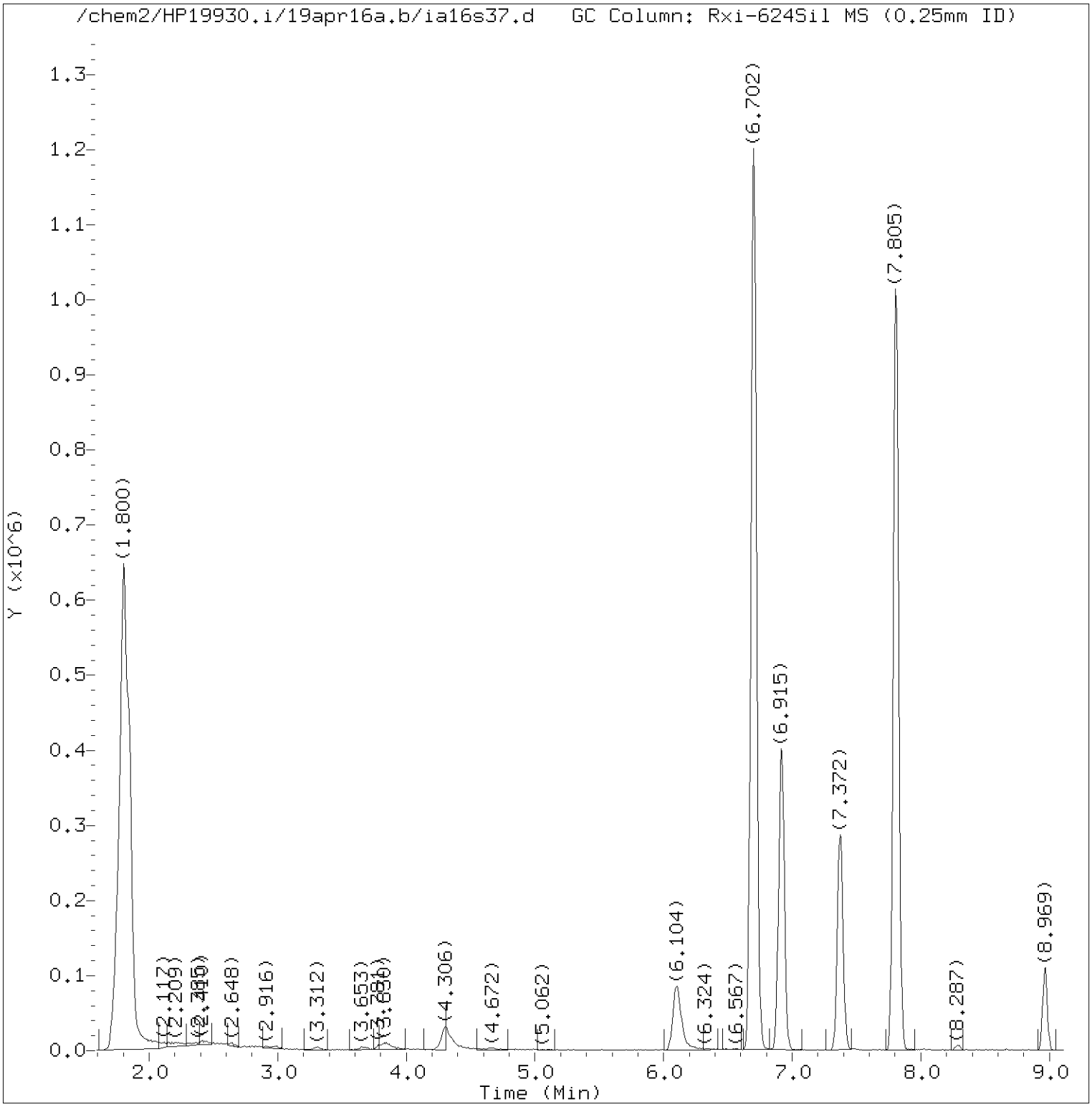
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	383872	9.980	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.000)	102	71620	9.662	97%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1508609	10.170	102%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(-0.001)	95	556621	10.014	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)				Not Detected					0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)	4.306	(-0.001)	84	14142	0.365	0.36		J	0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)	6.702	(-0.000)	83	1509857	20.081	20.08			0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)				Not Detected					0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

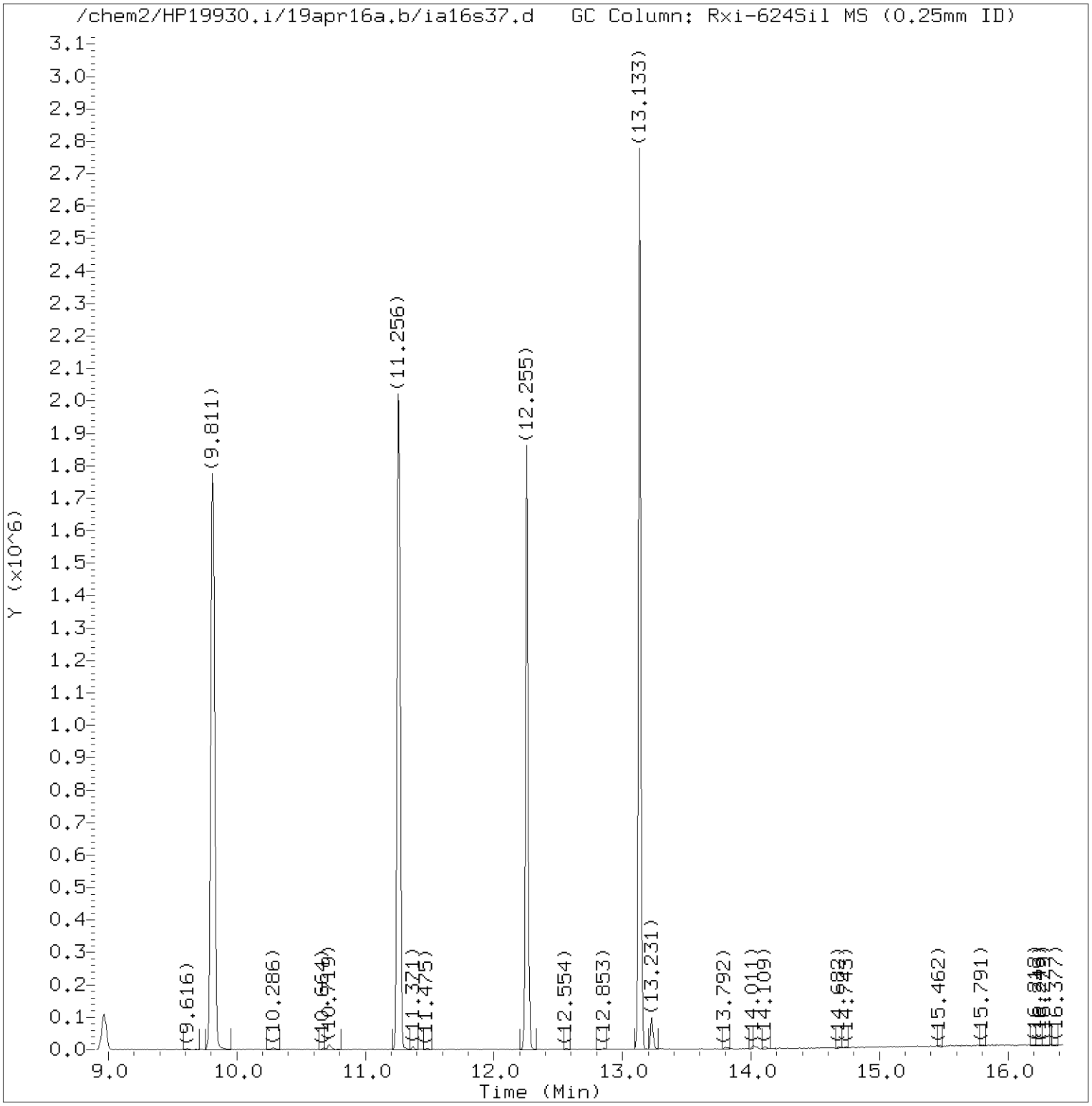
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s37.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:52 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:10 Automation

Sample Name: 34R03 Lab Sample ID: 1030978

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s37.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:52 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:10 Automation

Sample Name: 34R03 Lab Sample ID: 1030978

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s37.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:52 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:10 Automation

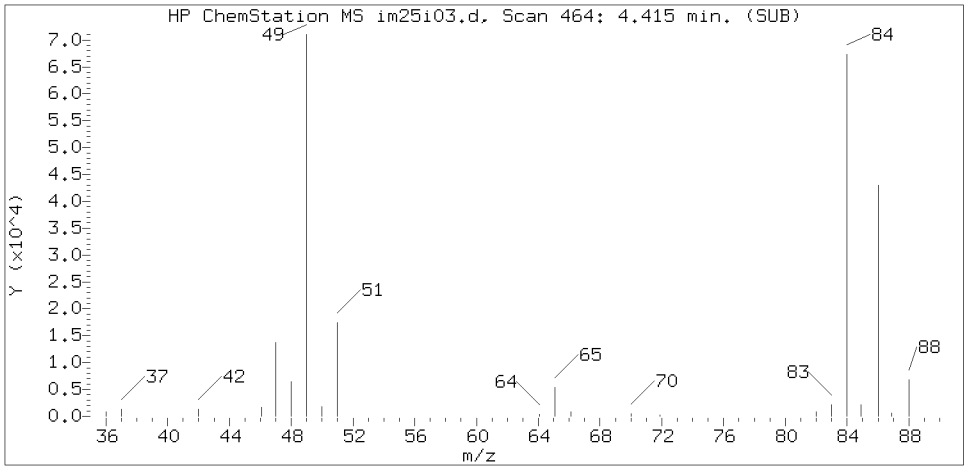
Sample Name: 34R03 Lab Sample ID: 1030978

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
23) Methylene Chloride	(2)	4.306	84	14142	0.365
26)*t-Butyl Alcohol-d10	(1)	4.318	65	94355	50.000
49) Chloroform	(2)	6.702	83	1509857	20.081
50)$Dibromofluoromethane	(2)	6.915	113	383872	9.980
57)$1,2-Dichloroethane-d4	(2)	7.372	102	71620	9.662
63)*Fluorobenzene	(2)	7.805	96	1490414	10.000
82)$Toluene-d8	(3)	9.811	98	1508609	10.170
97)*Chlorobenzene-d5	(3)	11.256	117	1209325	10.000
111)$4-Bromofluorobenzene	(3)	12.255	95	556621	10.014
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	667580	10.000

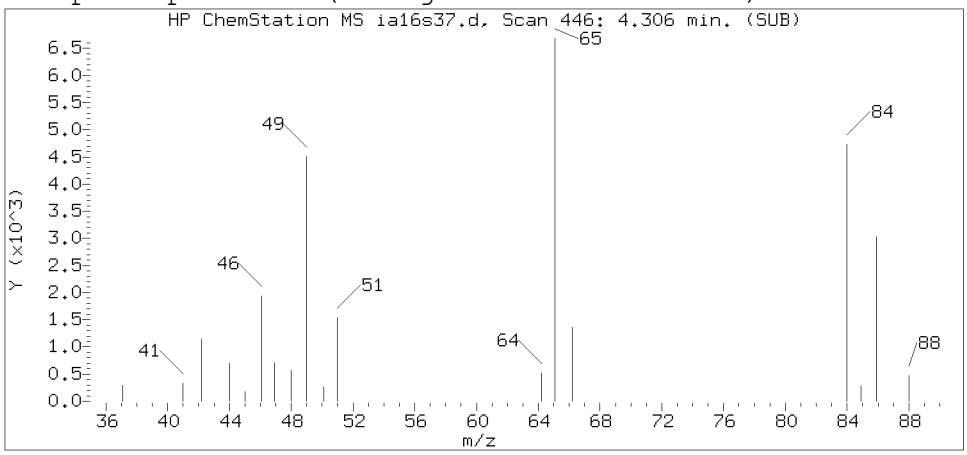
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

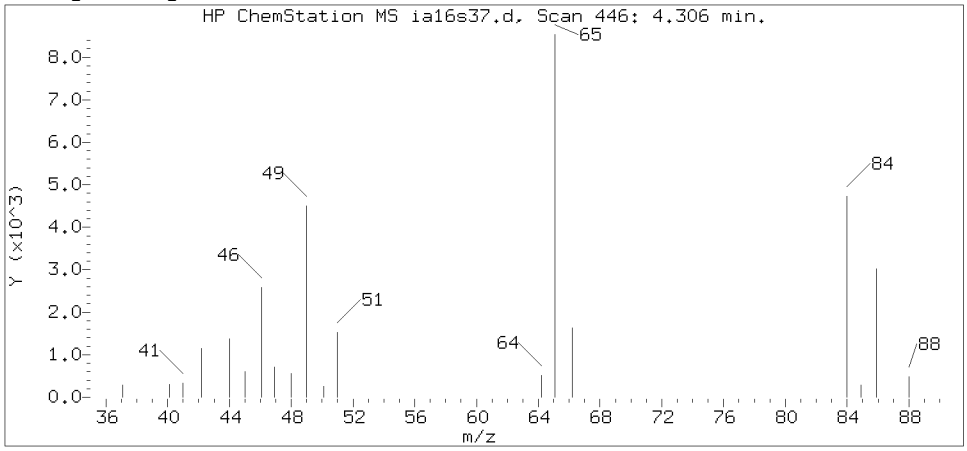
Reference Standard Spectrum for Methylene Chloride

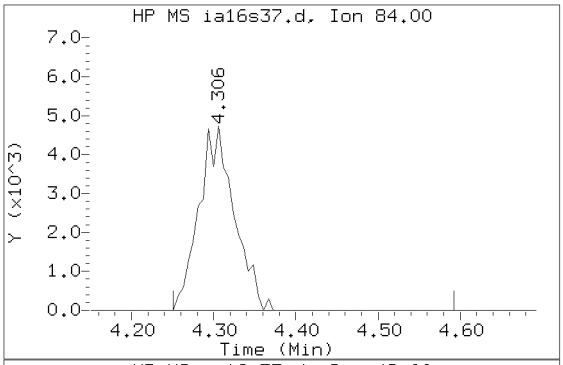


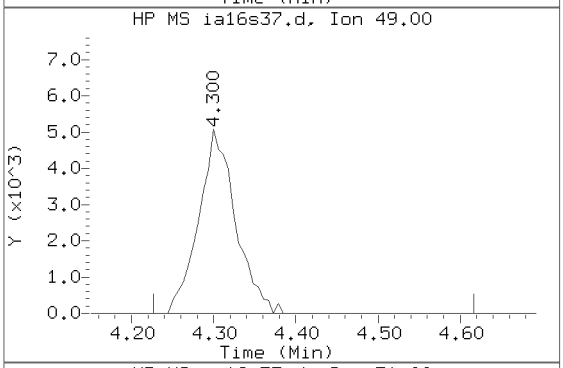
Sample Spectrum (Background Subtracted)

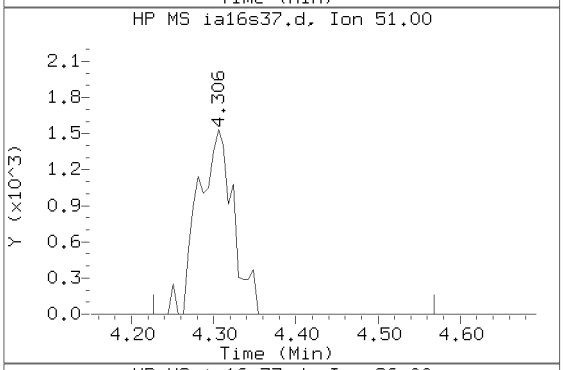


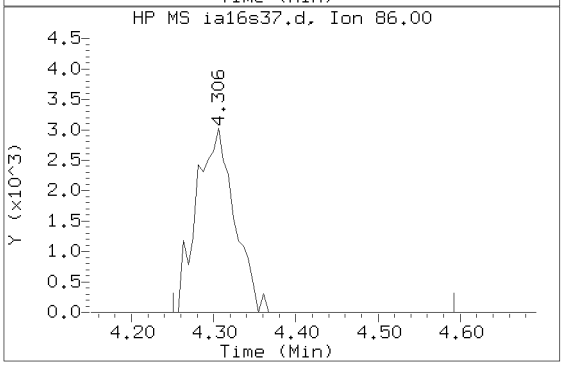
Sample Spectrum (Unaltered)











Data File: /chem2/HP19930.i/19apr16a.b/ia16s37.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:52 Analyst ID: MEC29284

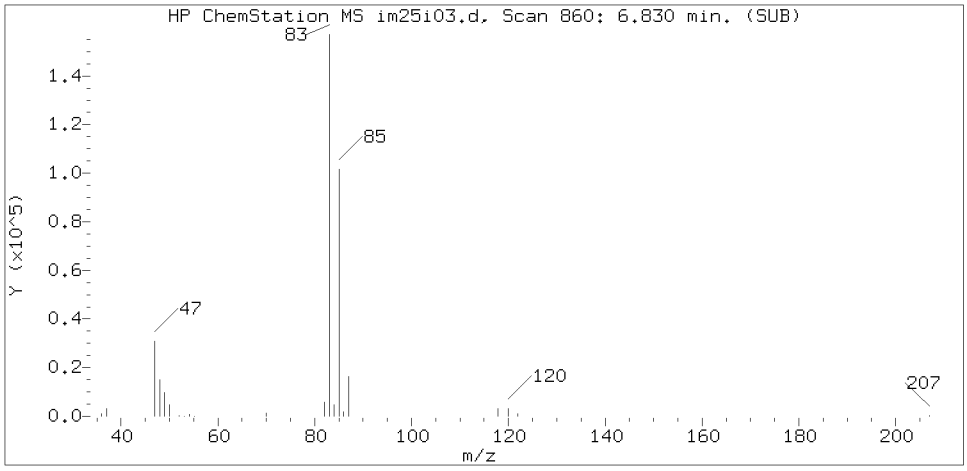
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:10 Automation

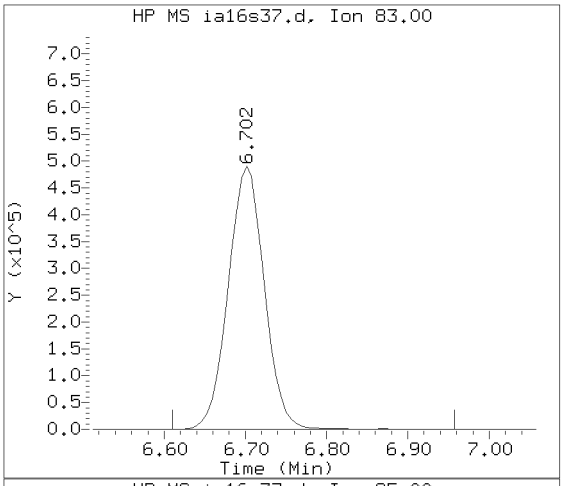
Sample Name: 34R03 Lab Sample ID: 1030978

Compound Number : 23
Compound Name : Methylene Chloride
Scan Number : 446
Retention Time (minutes): 4.306
Relative Retention Time :-0.00120
Quant Ion : 84.00
Area (flag) : 14142
On-Column Amount (ng) : 0.3648

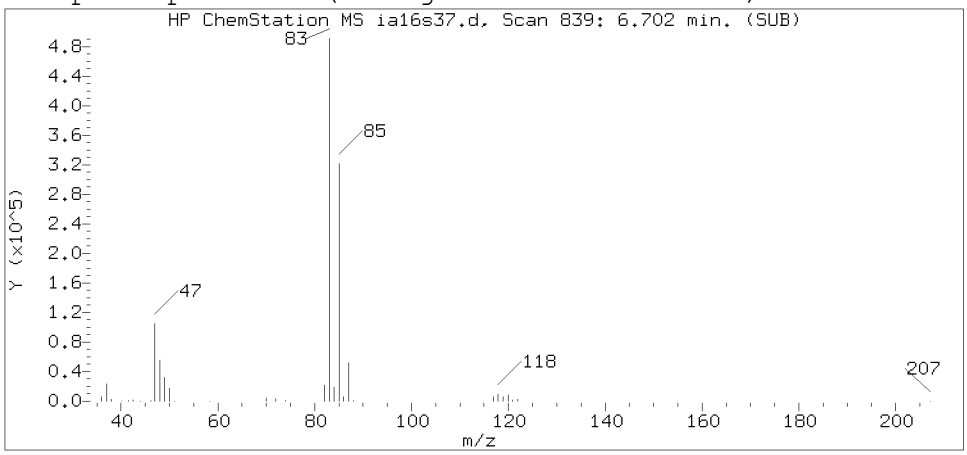
Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

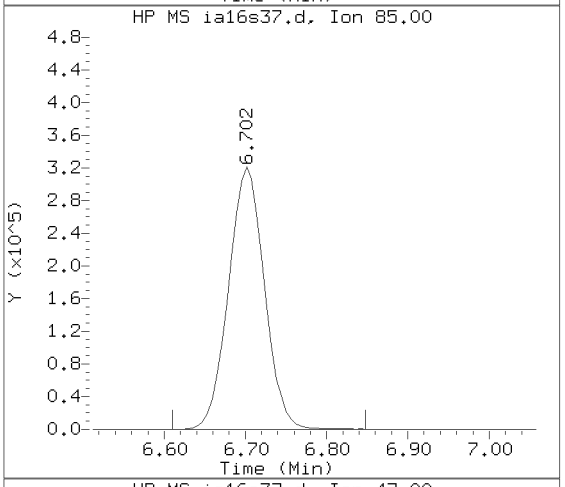
Reference Standard Spectrum for Chloroform



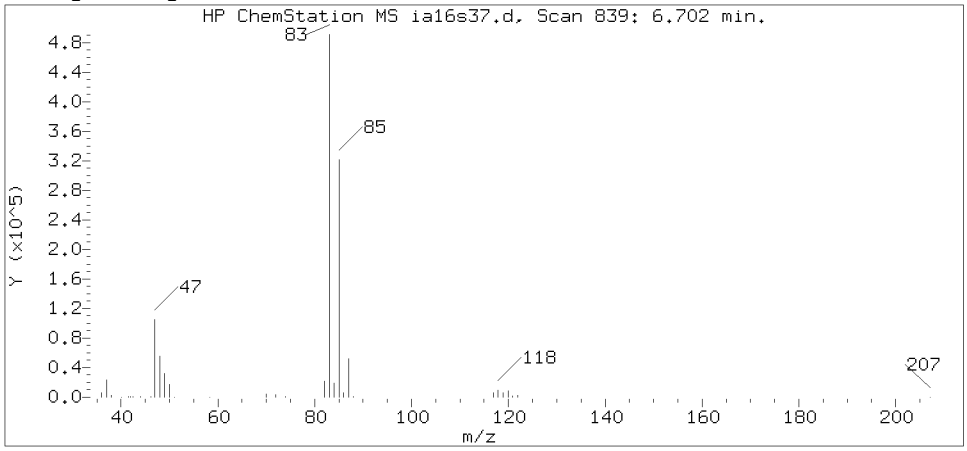


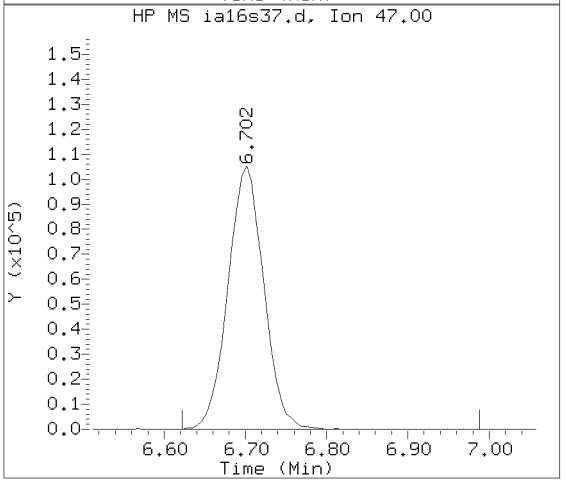
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s37.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:52 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:10 Automation

Sample Name: 34R03 Lab Sample ID: 1030978

Compound Number : 49
Compound Name : Chloroform
Scan Number : 839
Retention Time (minutes): 6.702
Relative Retention Time :-0.00067
Quant Ion : 83.00
Area (flag) : 1509857
On-Column Amount (ng) : 20.0811

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19930.i/19apr16a.b/ia16s40.d Injection date and time: **16-APR-2019 19:55**
Data file Sample Info. Line: 34R04;1030981;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.324	(-0.018)	449	65	100842	(-8)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1556983	(1)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1262808	(-1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	713528	(1)	10.00	

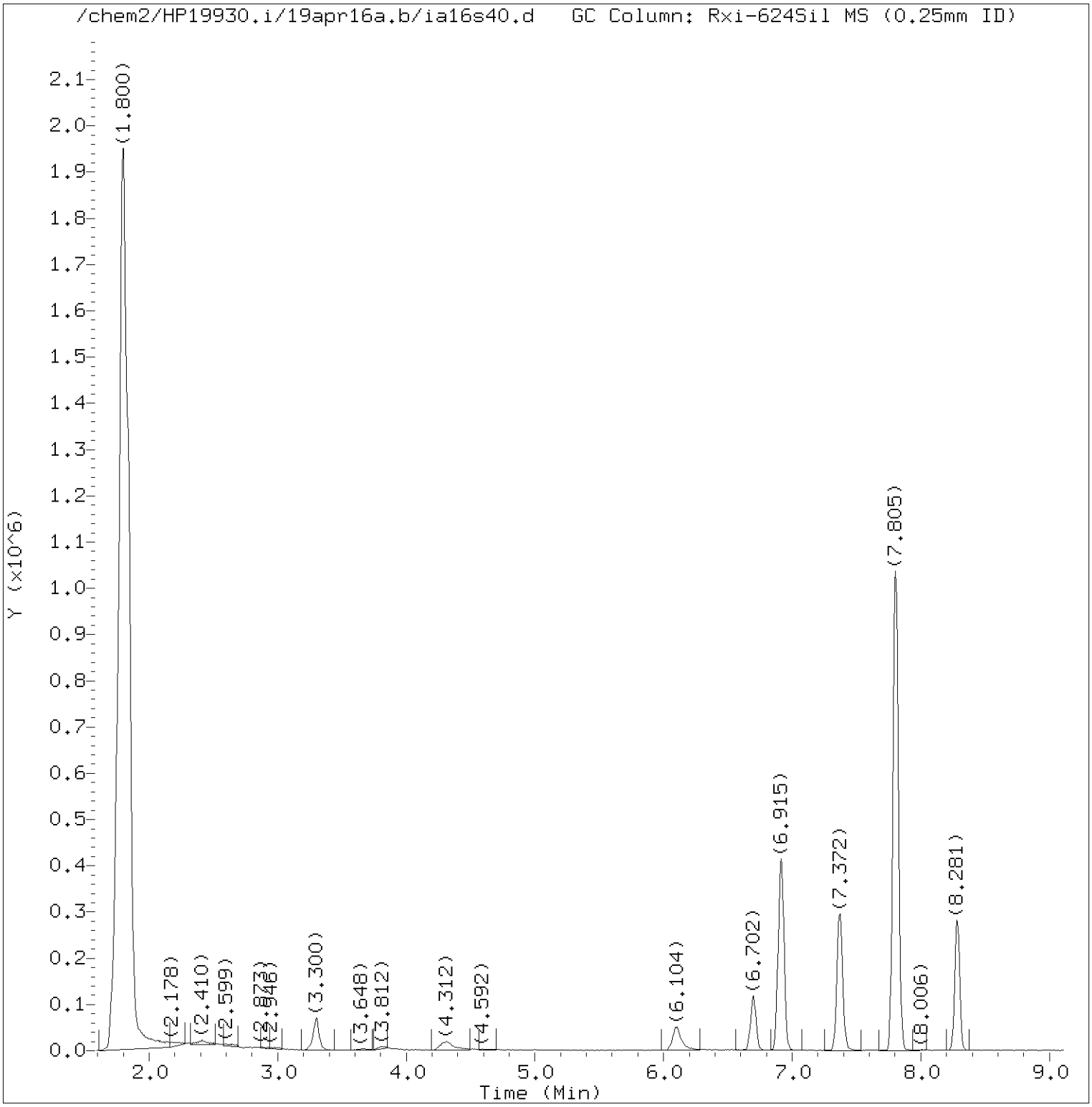
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	400070	9.956	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.366	(0.001)	102	75050	9.692	97%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1557876	10.058	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.256	(-0.001)	95	586457	10.104	101%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)	3.300	(0.000)	59	69398	2.308	2.31		J	0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)	6.696	(0.000)	83	144197	1.836	1.84			0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)	8.287	(-0.000)	95	134357	2.778	2.78			0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

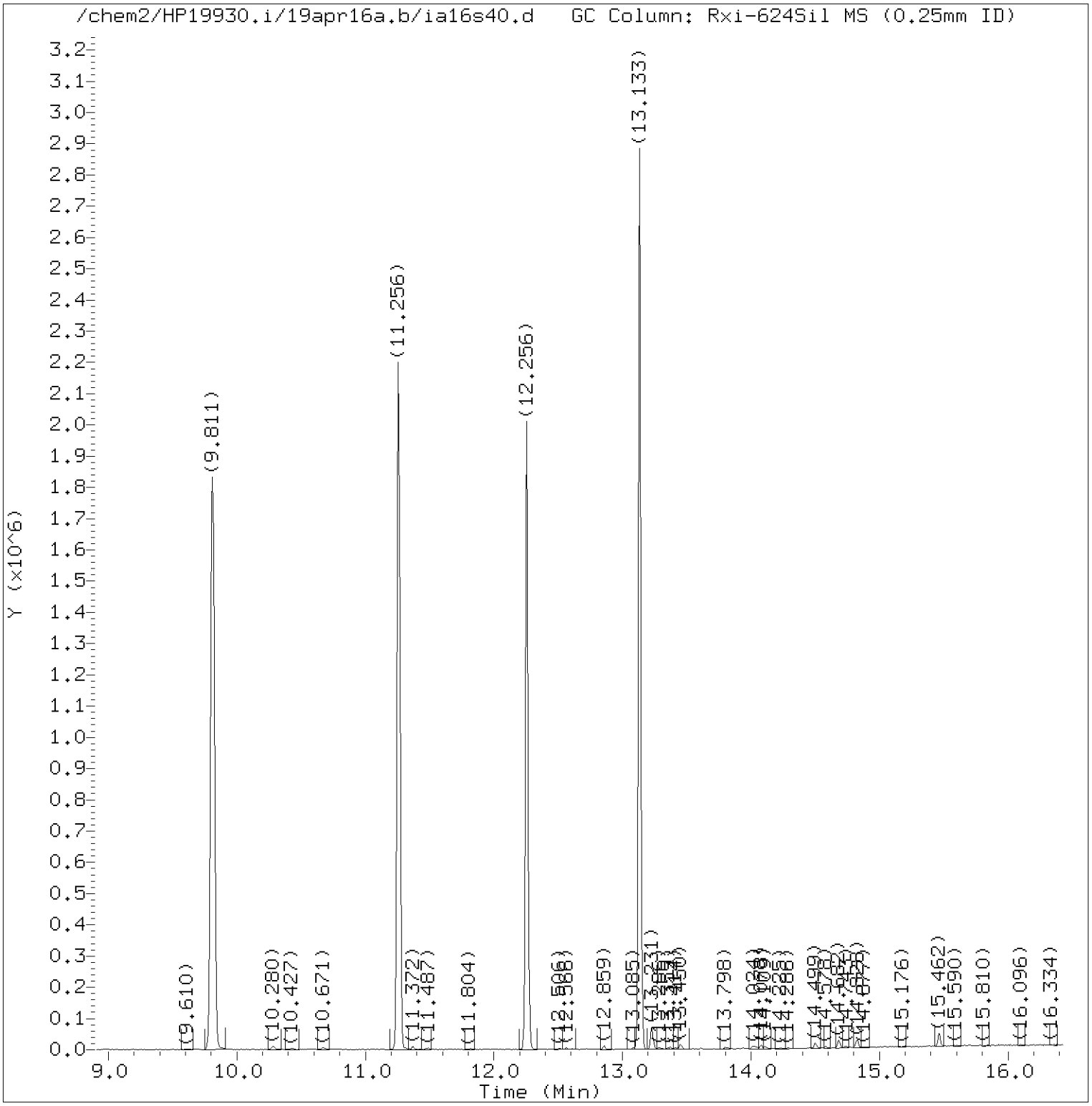
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s40.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

Sample Name: 34R04 Lab Sample ID: 1030981

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s40.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

Sample Name: 34R04 Lab Sample ID: 1030981

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s40.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

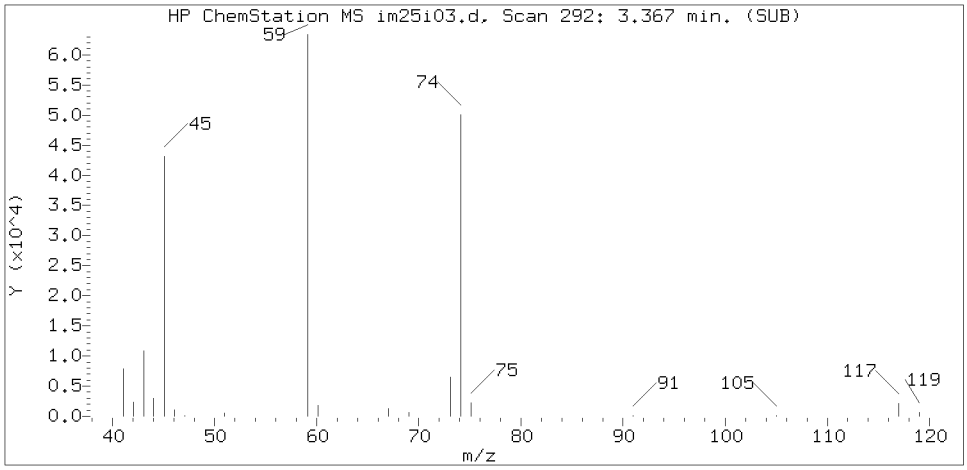
Sample Name: 34R04 Lab Sample ID: 1030981

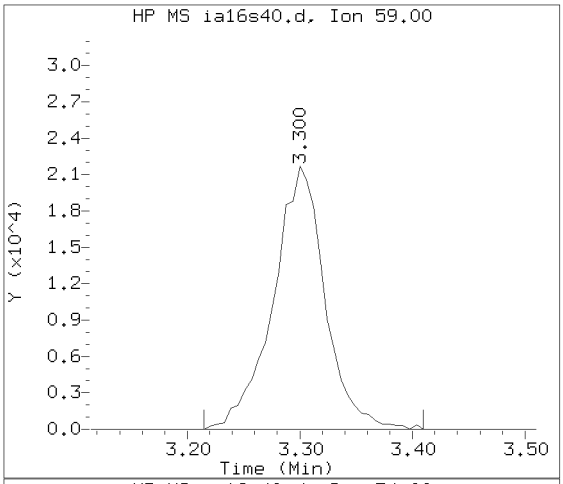
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
11) Ethyl ether	(2)	3.300	59	69398	2.308
26)*t-Butyl Alcohol-d10	(1)	4.324	65	100842	50.000
49) Chloroform	(2)	6.696	83	144197	1.836
50)$Dibromofluoromethane	(2)	6.915	113	400070	9.956
57)$1,2-Dichloroethane-d4	(2)	7.366	102	75050	9.692
63)*Fluorobenzene	(2)	7.805	96	1556983	10.000
67) Trichloroethene	(2)	8.287	95	134357	2.778
82)$Toluene-d8	(3)	9.811	98	1557876	10.058
97)*Chlorobenzene-d5	(3)	11.256	117	1262808	10.000
111)$4-Bromofluorobenzene	(3)	12.256	95	586457	10.104
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	713528	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

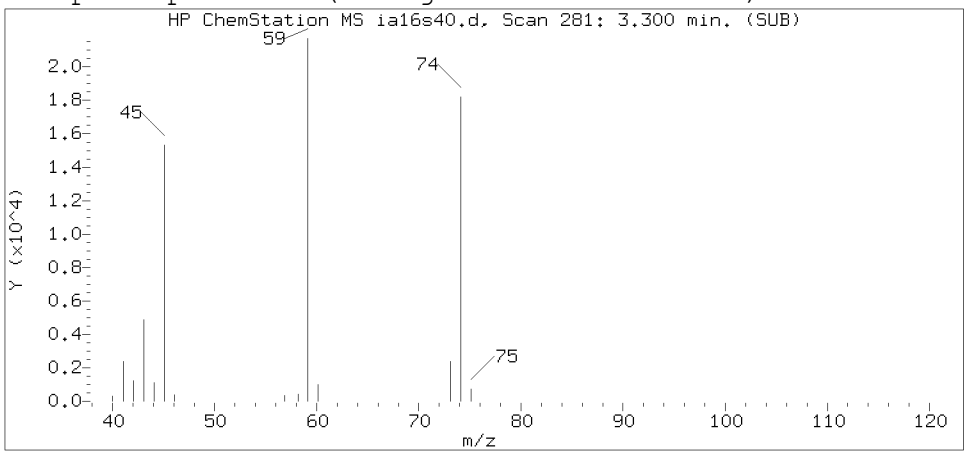
Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

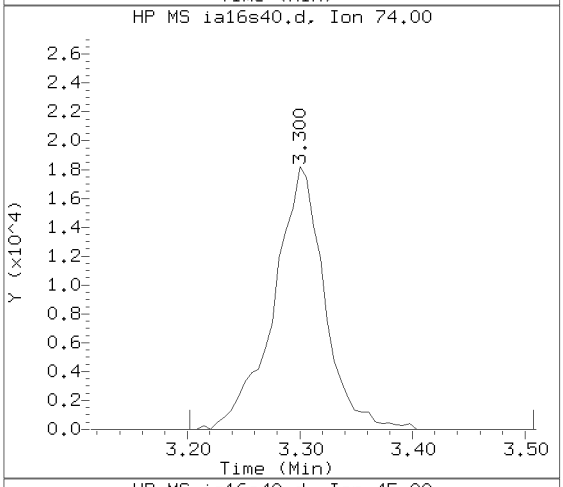
Reference Standard Spectrum for Ethyl ether



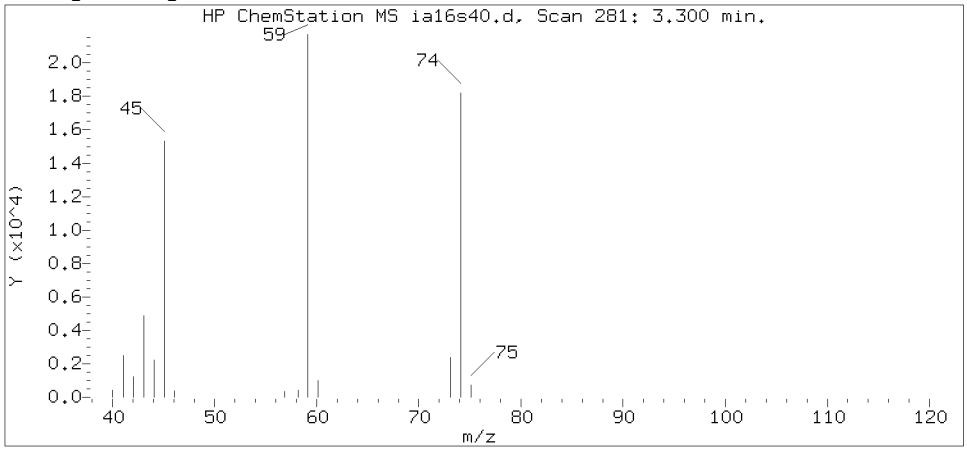


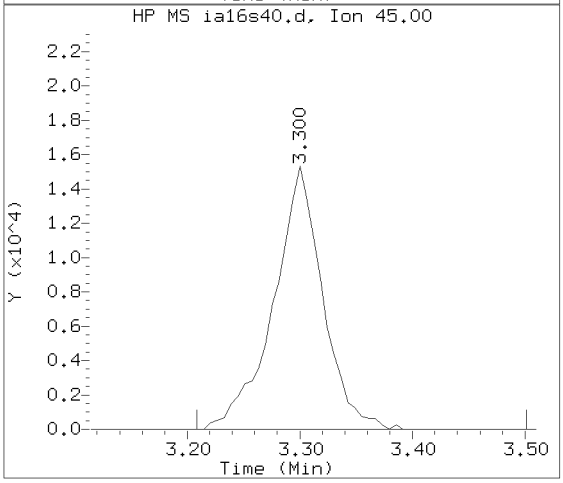
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s40.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:55 Analyst ID: MEC29284

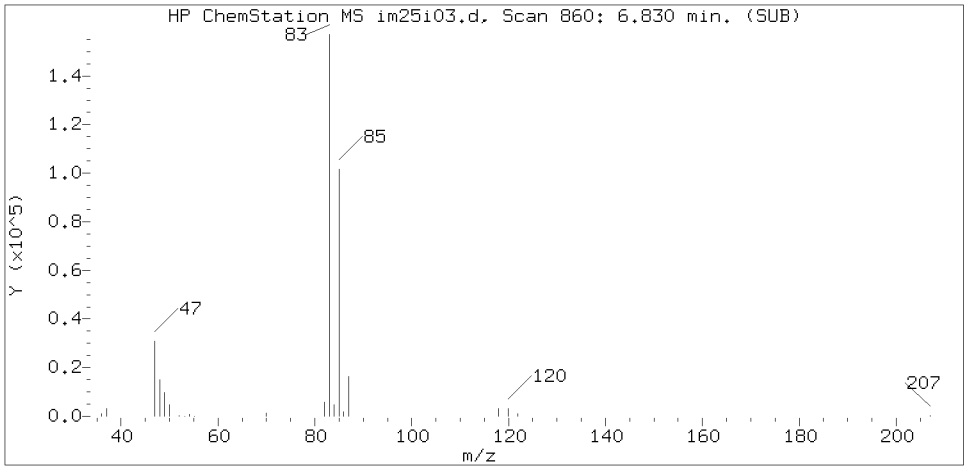
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

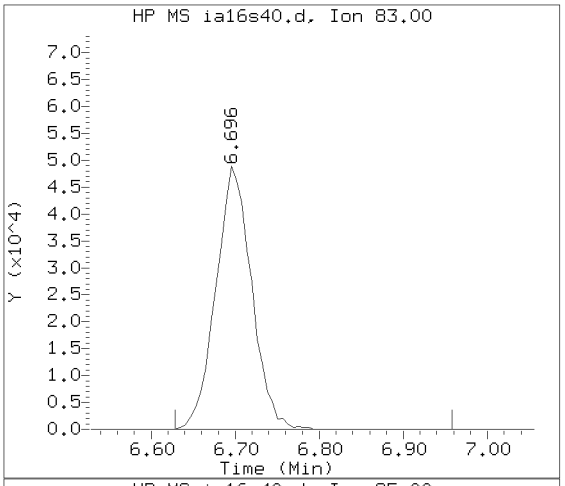
Sample Name: 34R04 Lab Sample ID: 1030981

Compound Number	: 11
Compound Name	: Ethyl ether
Scan Number	: 281
Retention Time (minutes)	: 3.300
Relative Retention Time	: 0.00045
Quant Ion	: 59.00
Area (flag)	: 69398
On-Column Amount (ng)	: 2.3083

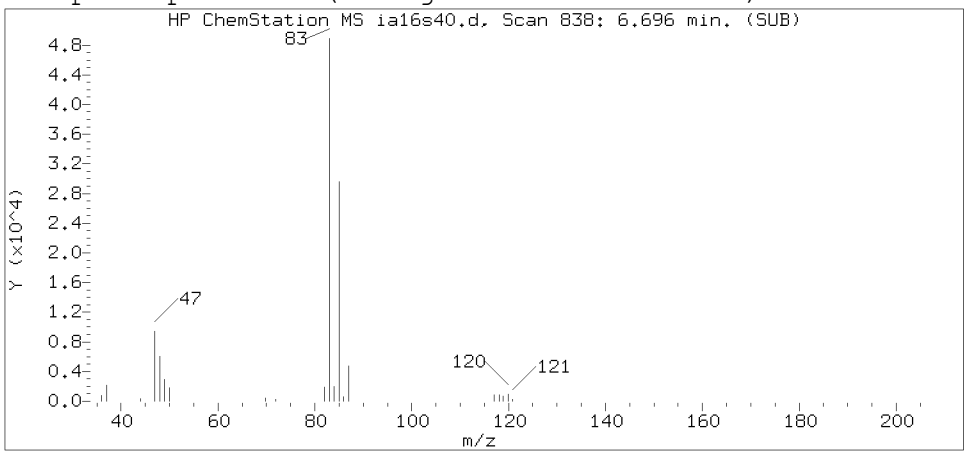
Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

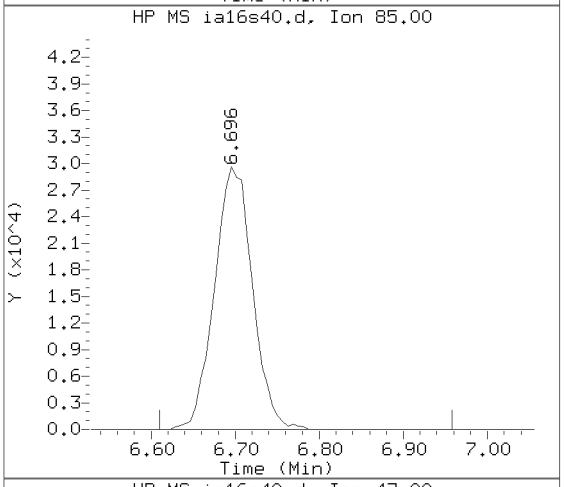
Reference Standard Spectrum for Chloroform



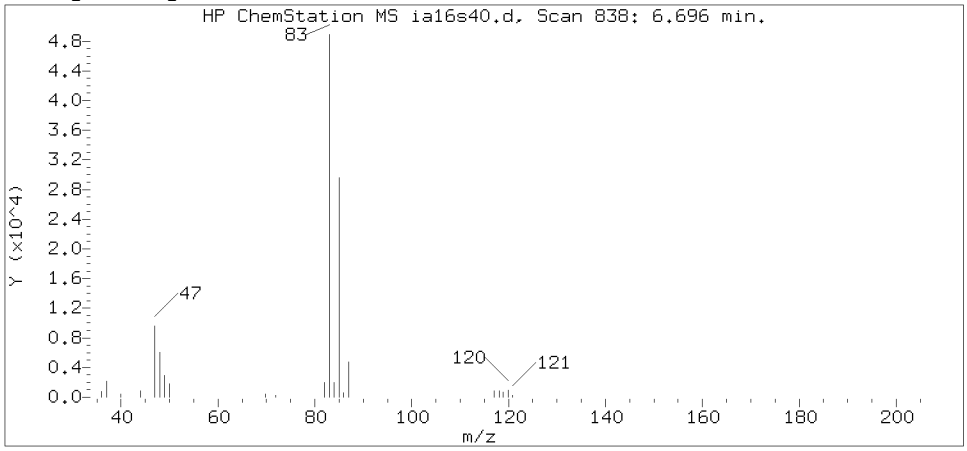


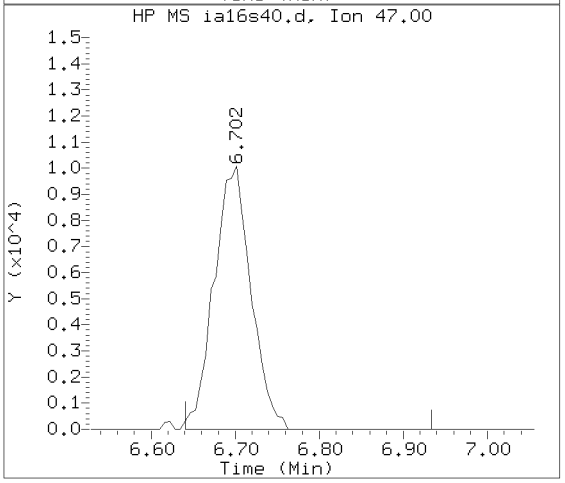
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s40.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:55 Analyst ID: MEC29284

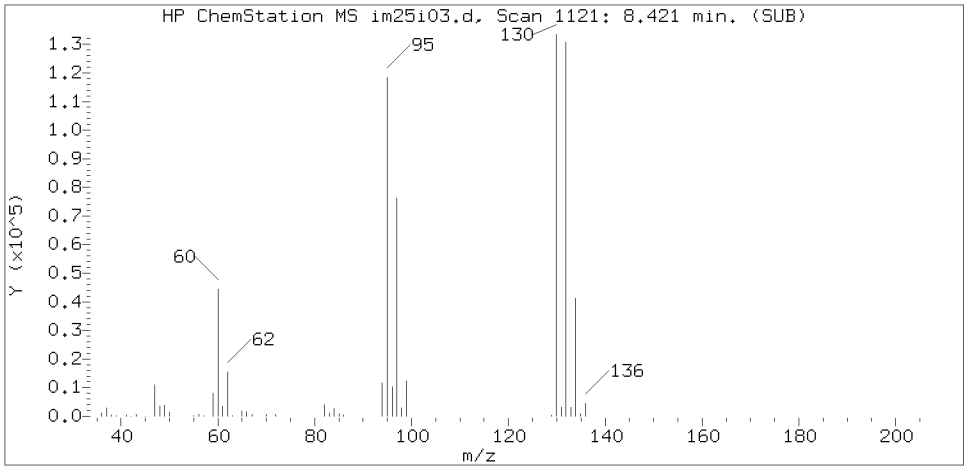
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

Sample Name: 34R04 Lab Sample ID: 1030981

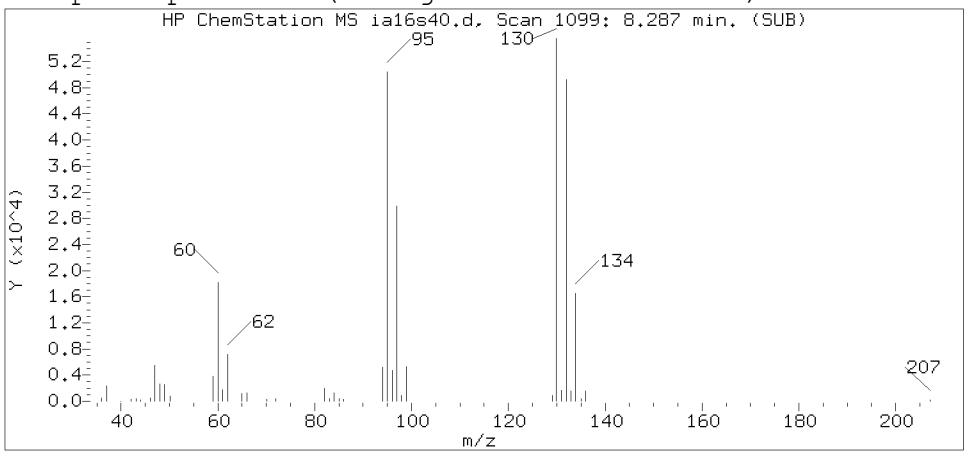
Compound Number	: 49
Compound Name	: Chloroform
Scan Number	: 838
Retention Time (minutes)	: 6.696
Relative Retention Time	: 0.00011
Quant Ion	: 83.00
Area (flag)	: 144197
On-Column Amount (ng)	: 1.8358

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

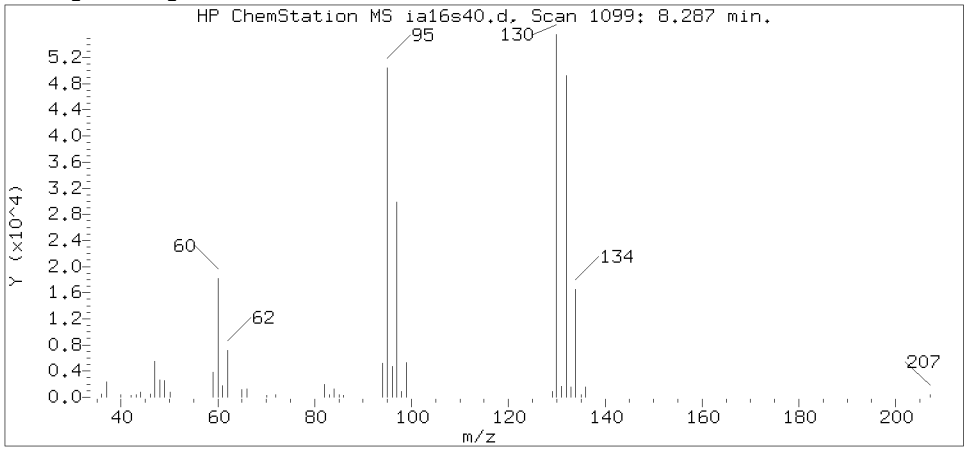
Reference Standard Spectrum for Trichloroethene

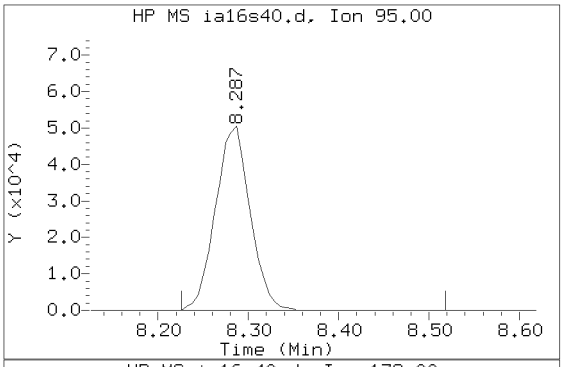


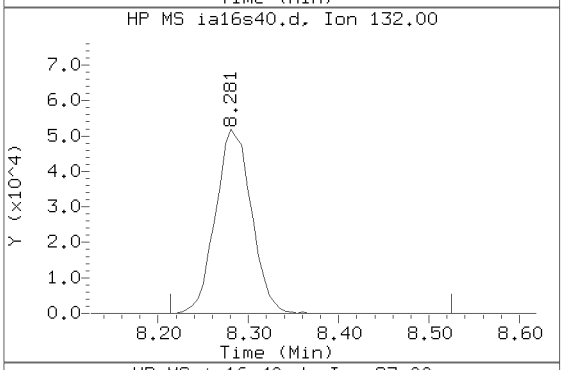
Sample Spectrum (Background Subtracted)

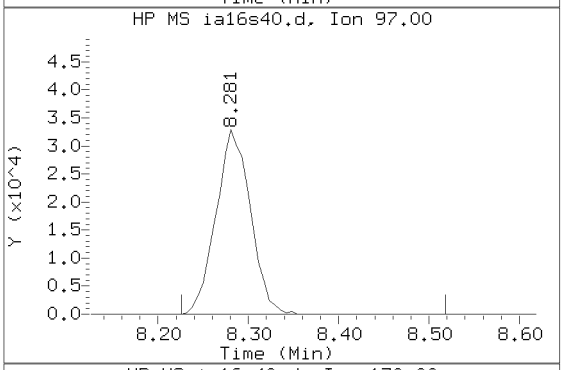


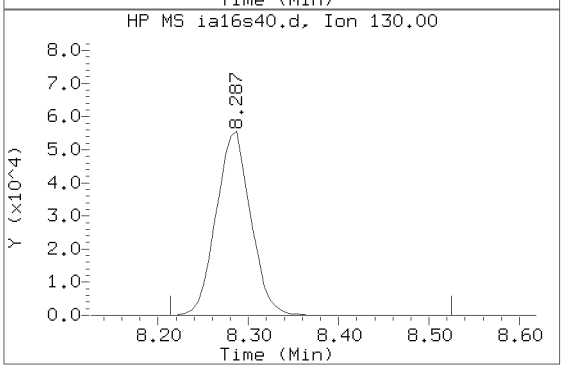
Sample Spectrum (Unaltered)











Data File: /chem2/HP19930.i/19apr16a.b/ia16s40.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:13 Automation

Sample Name: 34R04 Lab Sample ID: 1030981

Compound Number	: 67
Compound Name	: Trichloroethene
Scan Number	: 1099
Retention Time (minutes)	: 8.287
Relative Retention Time	:-0.00083
Quant Ion	: 95.00
Area (flag)	: 134357
On-Column Amount (ng)	: 2.7785

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

34R05 Lancaster Laboratories Analysis Summary for GC/MS Volatiles 1030982

Data file: /chem2/HP19930.i/19apr16a.b/ia16s41.d Injection date and time: **16-APR-2019 20:17**
Data file Sample Info. Line: 34R05;1030982;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.330	(-0.024)	450	65	96901M	(-11)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1517233	(-2)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1242188	(-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	692837	(-2)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.921	(-0.001)	113	390961	9.985	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.000)	102	75220	9.968	100%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1545052	10.141	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.256	(-0.001)	95	574143	10.056	101%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)	3.306	(-0.000)	59	68484	2.338	2.34		J	0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)	6.702	(-0.000)	83	141063	1.843	1.84			0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)	8.281	(-0.000)	95	128513	2.727	2.73			0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s41.d Injection date and time: **16-APR-2019 20:17**
Data file Sample Info. Line: 34R05;1030982;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

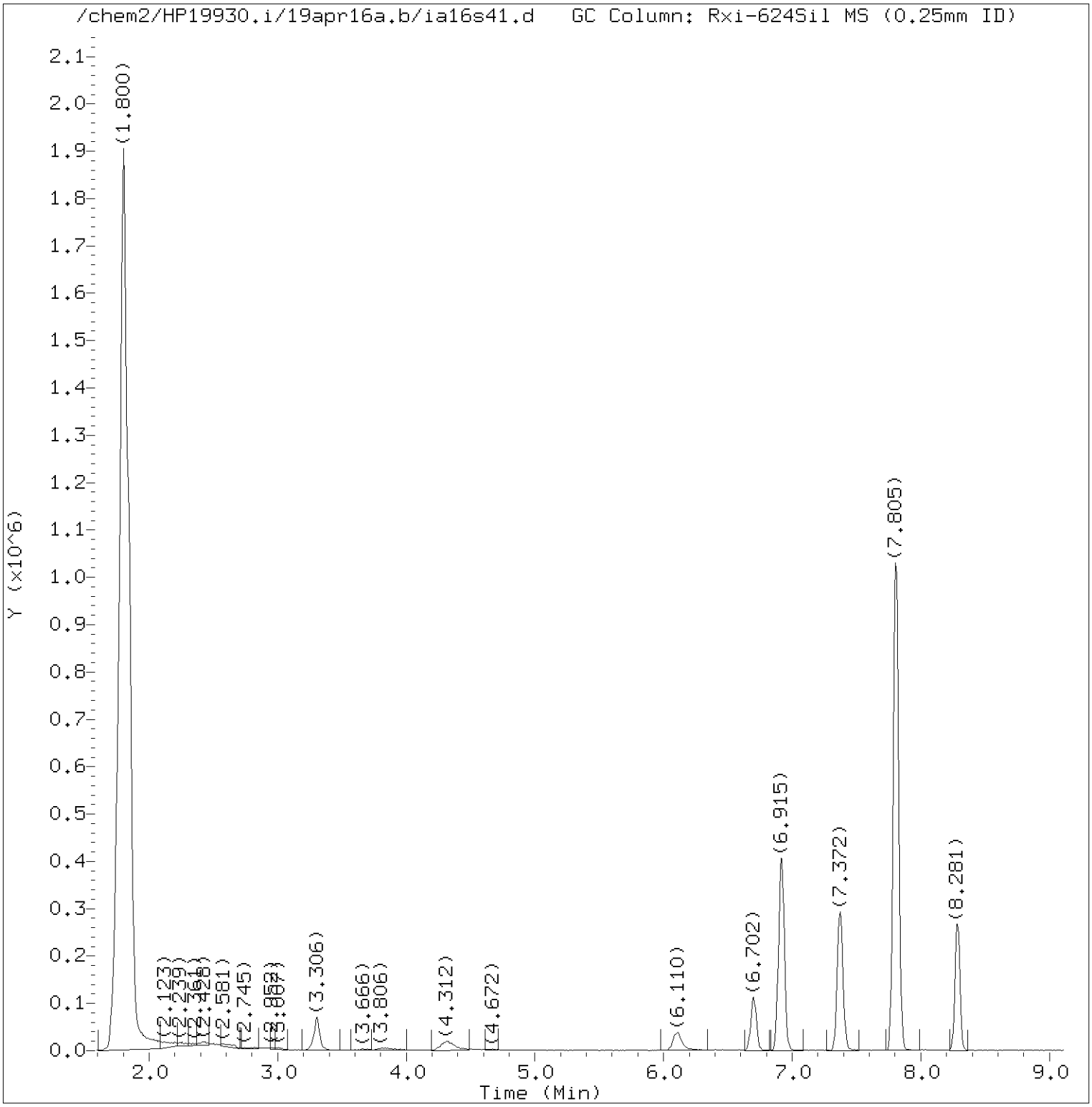
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

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WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

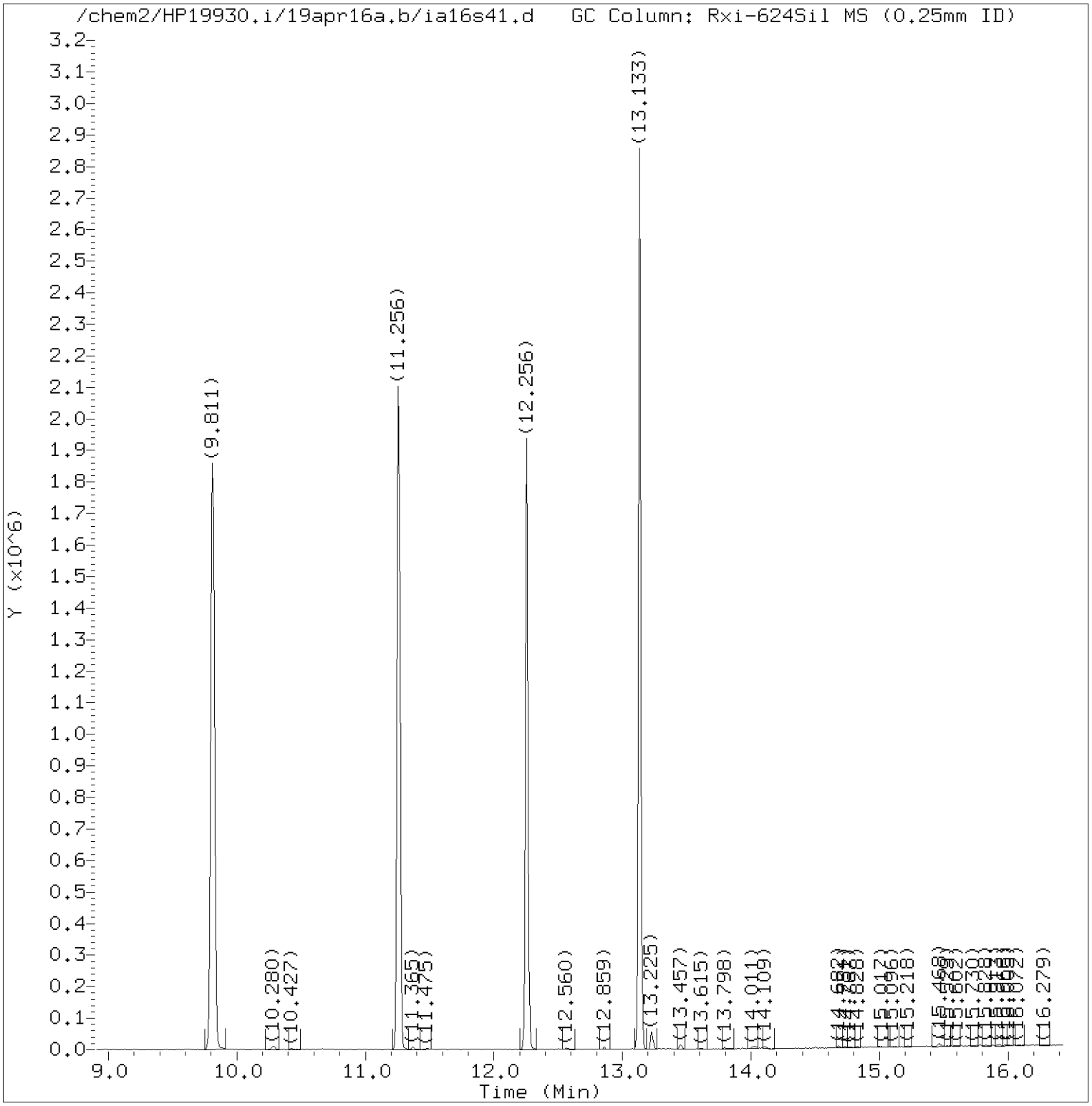
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Sample Name: 34R05 Lab Sample ID: 1030982

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Sample Name: 34R05 Lab Sample ID: 1030982

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

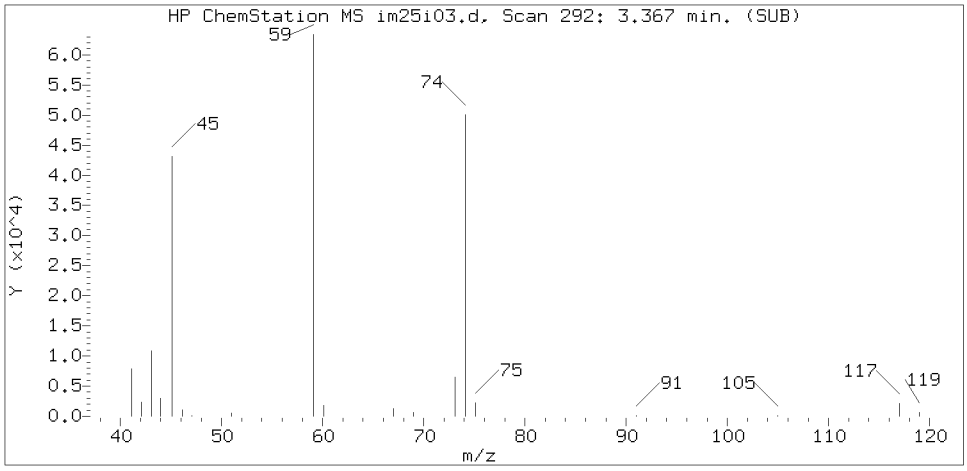
Sample Name: 34R05 Lab Sample ID: 1030982

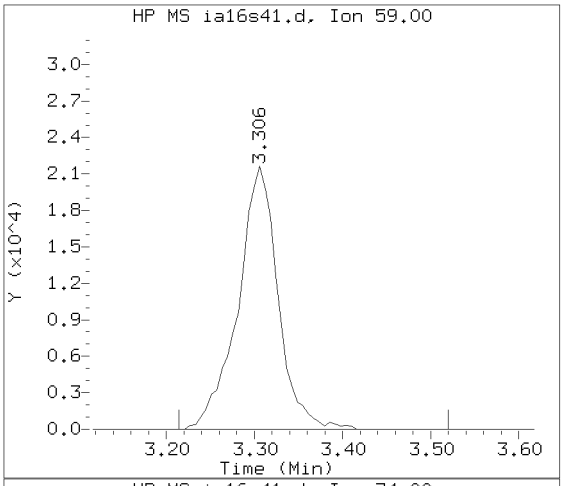
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
11) Ethyl ether	(2)	3.306	59	68484	2.338
26)*t-Butyl Alcohol-d10	(1)	4.330	65	96901M	50.000
49) Chloroform	(2)	6.702	83	141063	1.843
50)$Dibromofluoromethane	(2)	6.921	113	390961	9.985
57)$1,2-Dichloroethane-d4	(2)	7.372	102	75220	9.968
63)*Fluorobenzene	(2)	7.805	96	1517233	10.000
67) Trichloroethene	(2)	8.281	95	128513	2.727
82)$Toluene-d8	(3)	9.811	98	1545052	10.141
97)*Chlorobenzene-d5	(3)	11.256	117	1242188	10.000
111)$4-Bromofluorobenzene	(3)	12.256	95	574143	10.056
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	692837	10.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

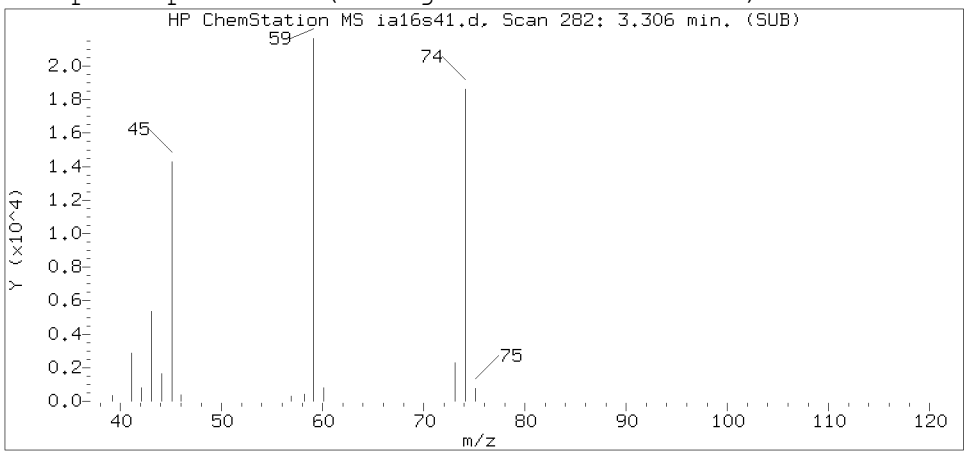
Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

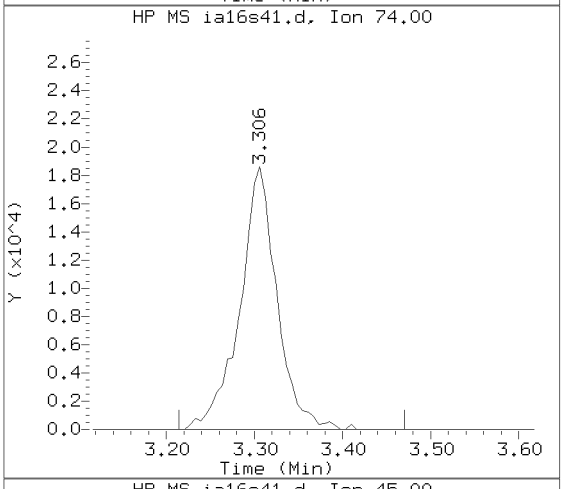
Reference Standard Spectrum for Ethyl ether



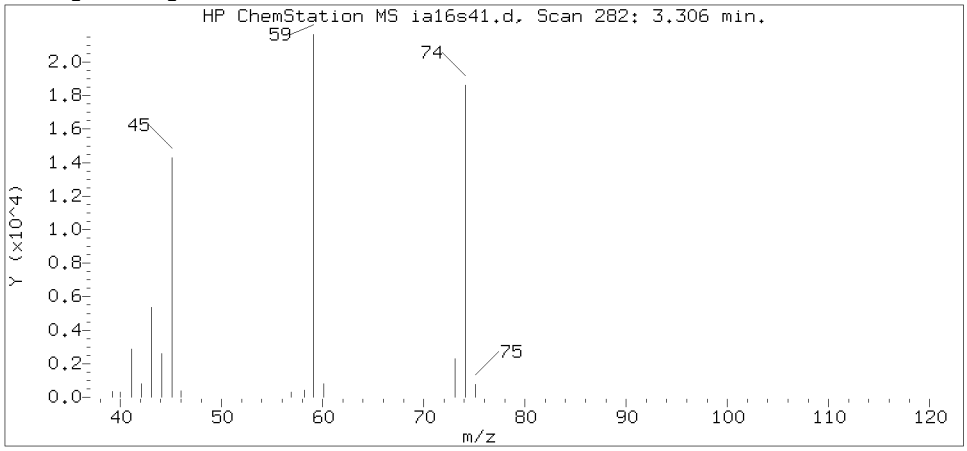


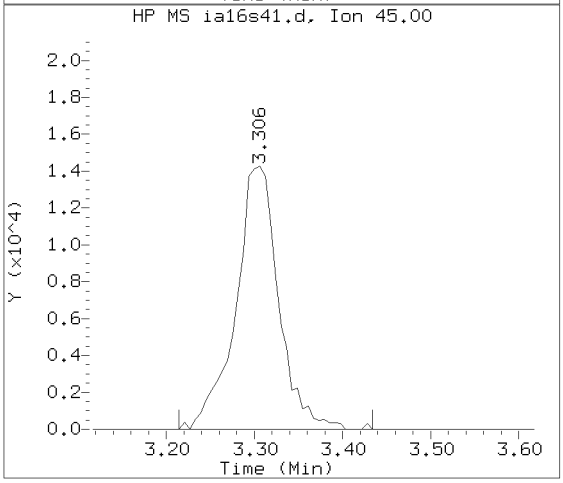
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

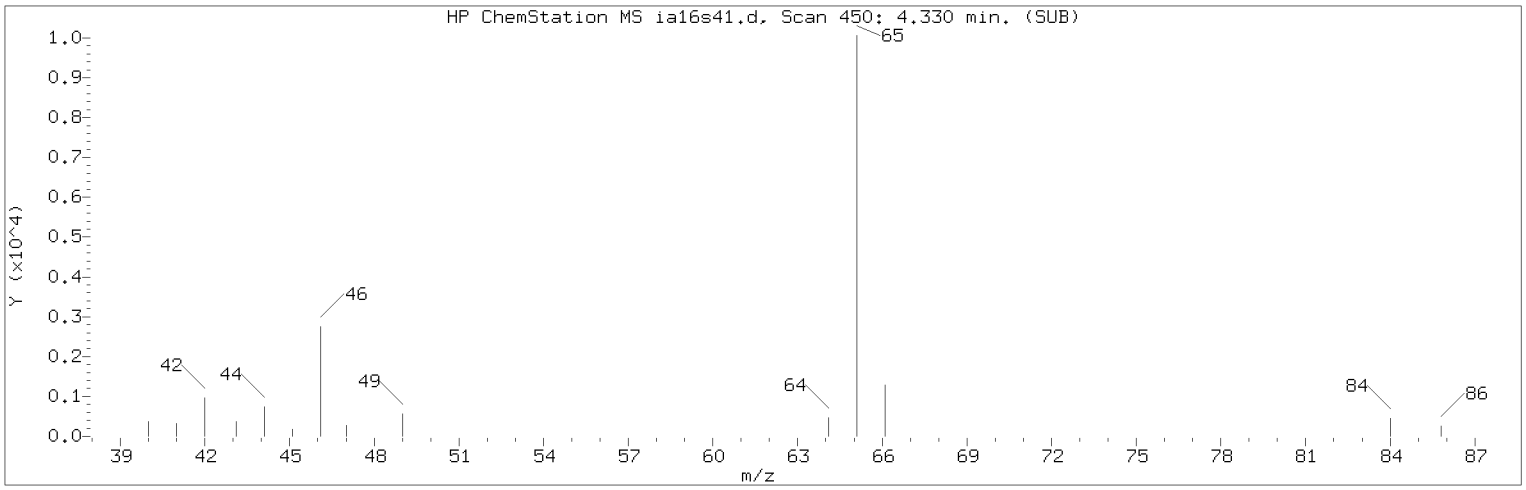
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Sample Name: 34R05 Lab Sample ID: 1030982

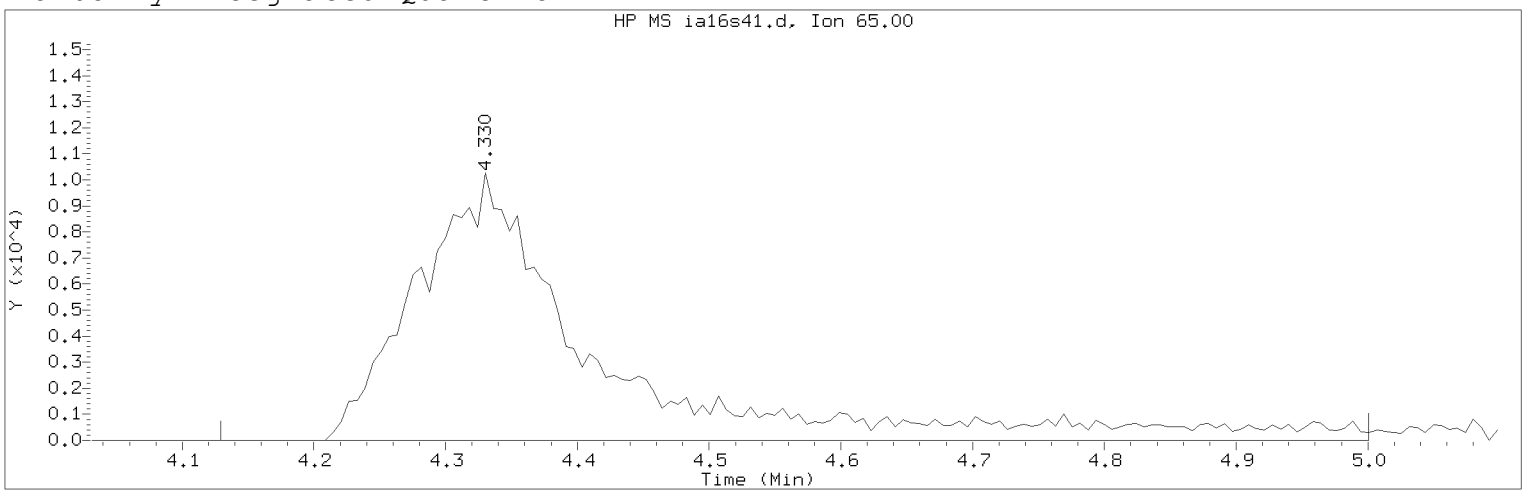
Compound Number : 11
Compound Name : Ethyl ether
Scan Number : 282
Retention Time (minutes): 3.306
Relative Retention Time :-0.00033
Quant Ion : 59.00
Area (flag) : 68484
On-Column Amount (ng) : 2.3376

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Sample Name: 34R05 Lab Sample ID: 1030982

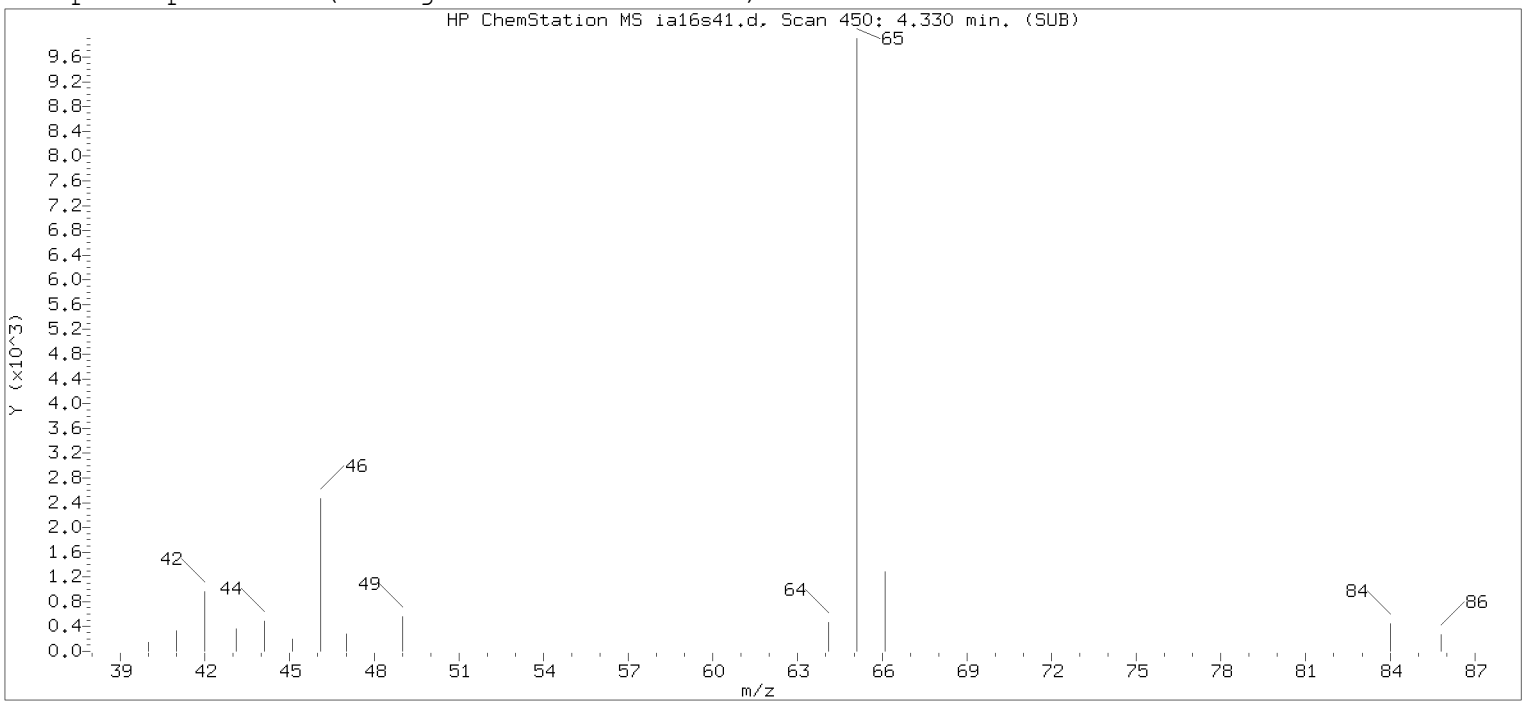
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 450
Retention Time (minutes): 4.330
Quant Ion : 65.00
Area (flag) : 96901M
On-Column Amount (ng) : 50.0000
Integration start scan : 416 Integration stop scan: 559
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

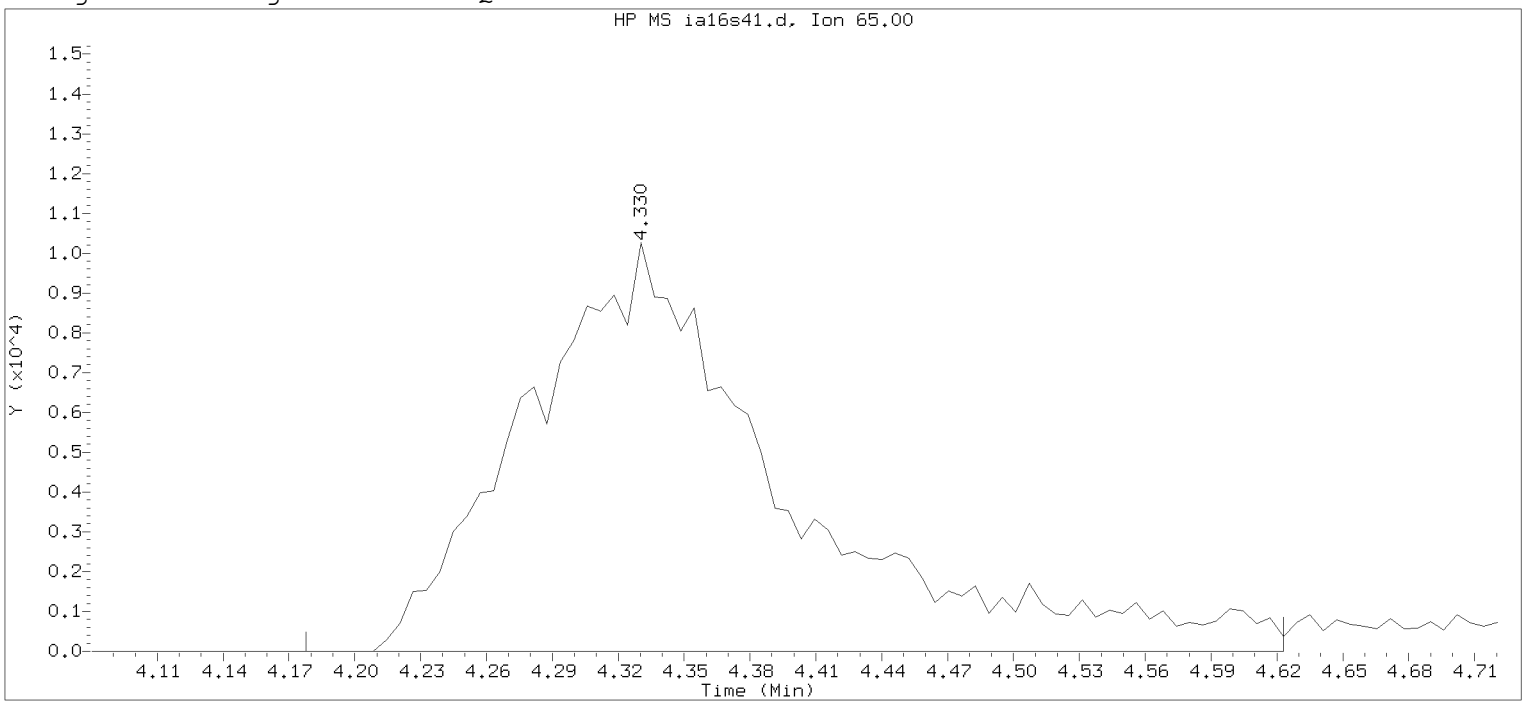
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

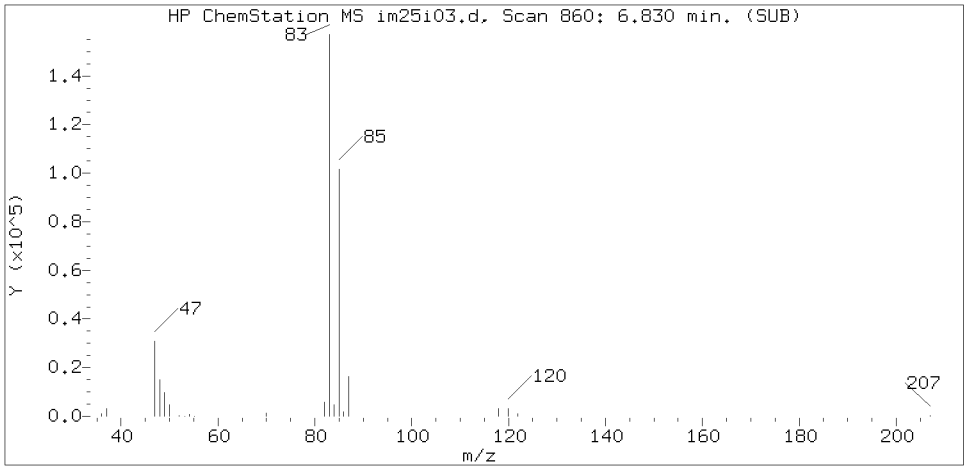
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:34 Automation

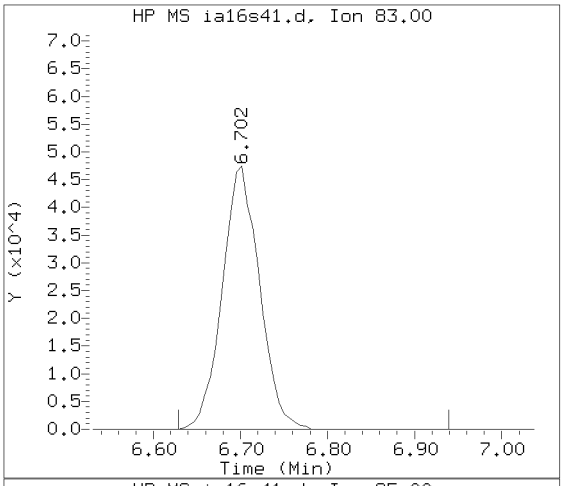
Sample Name: 34R05 Lab Sample ID: 1030982

Compound Number	: 26		
Compound Name	: t-Butyl Alcohol-d10		
Scan Number	: 450		
Retention Time (minutes)	: 4.330		
Quant Ion	: 65.00		
Area	: 83714		
On-column Amount (ng)	: 50.0000		
Integration start scan	: 424	Integration stop scan:	497
Y at integration start	: 0	Y at integration end:	0

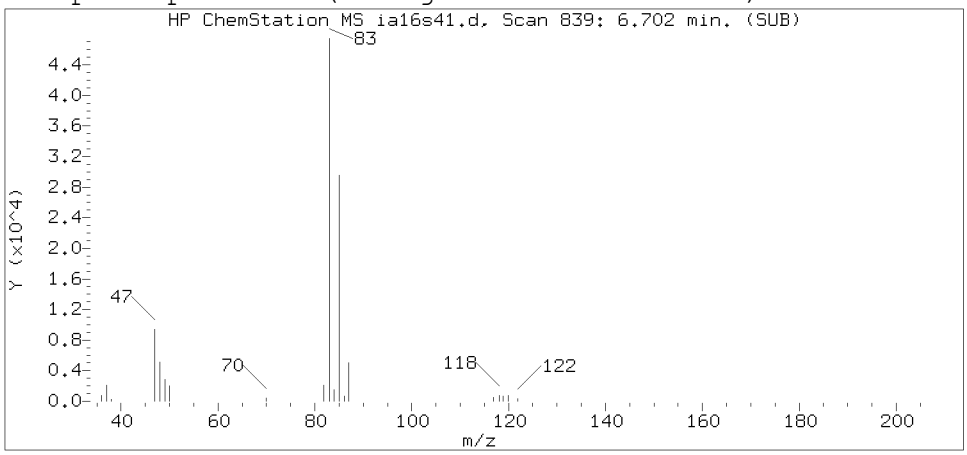
Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user name: Miranda E. Campbell

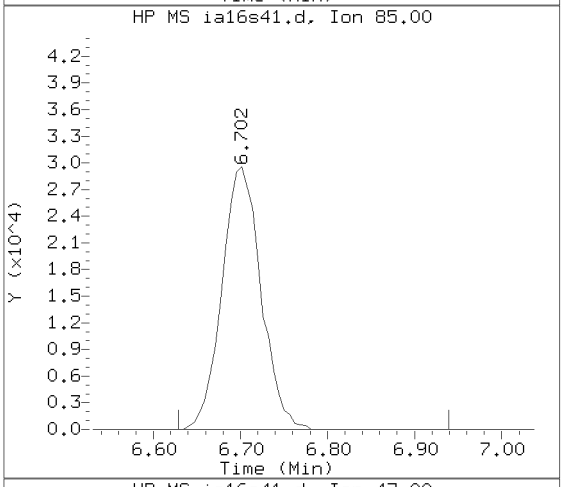
Reference Standard Spectrum for Chloroform



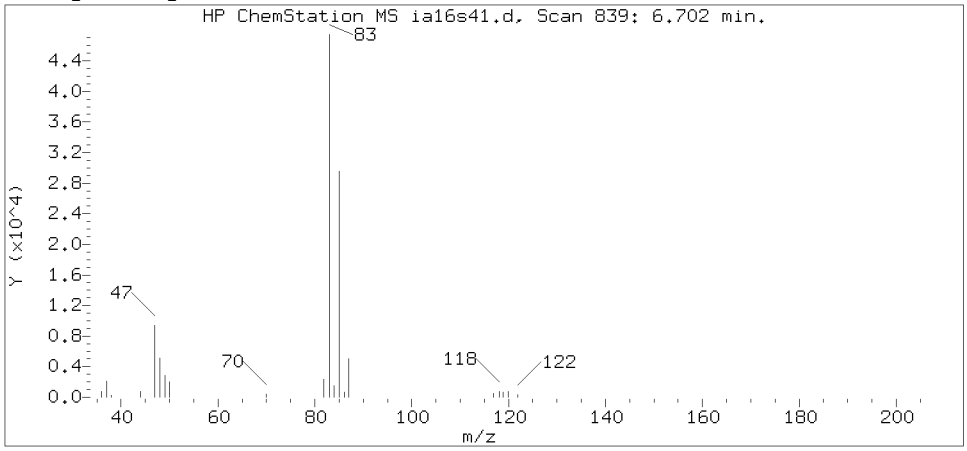


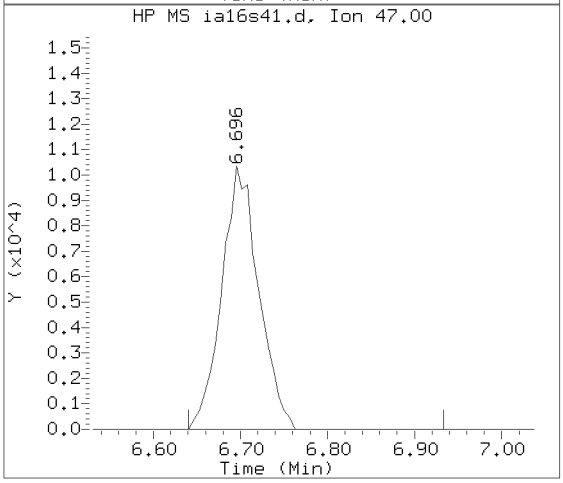
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

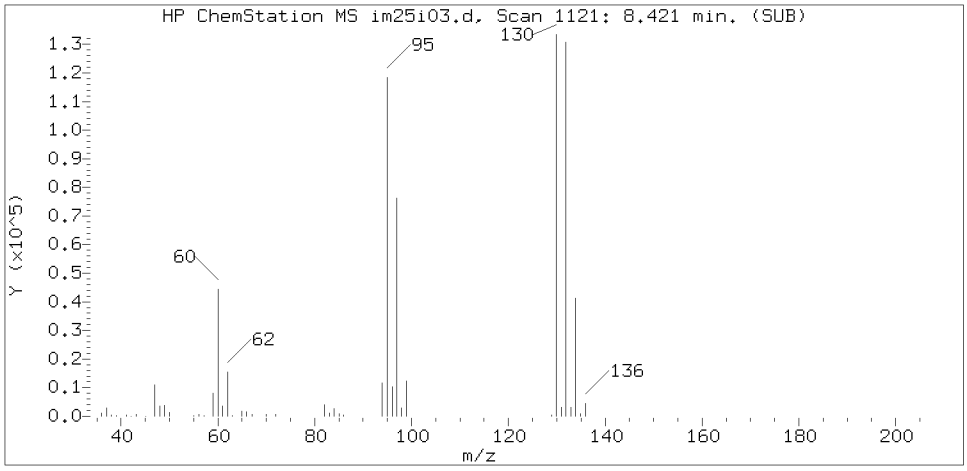
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Sample Name: 34R05 Lab Sample ID: 1030982

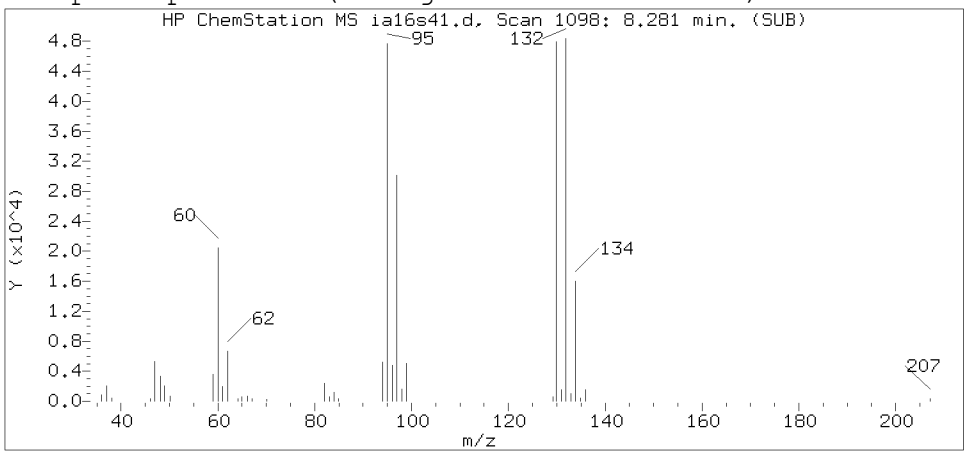
Compound Number : 49
Compound Name : Chloroform
Scan Number : 839
Retention Time (minutes): 6.702
Relative Retention Time :-0.00067
Quant Ion : 83.00
Area (flag) : 141063
On-Column Amount (ng) : 1.8430

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

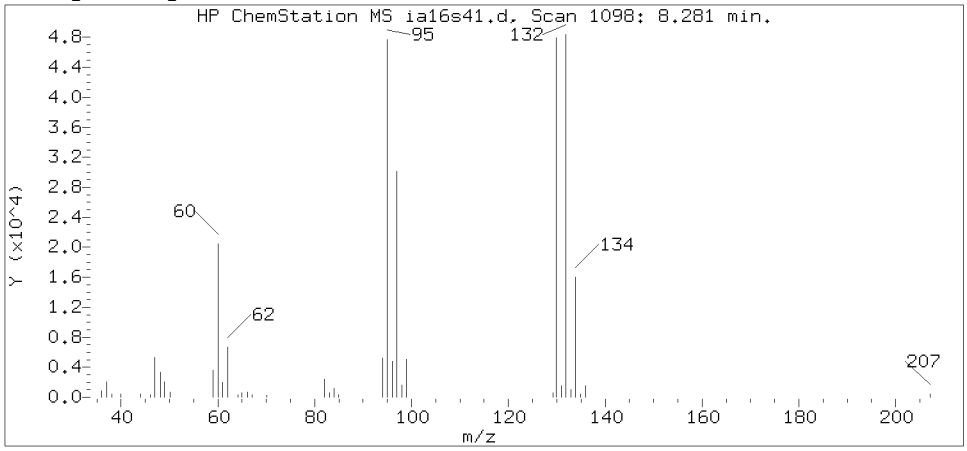
Reference Standard Spectrum for Trichloroethene

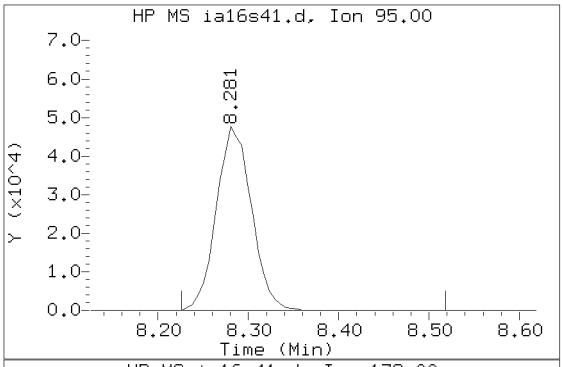


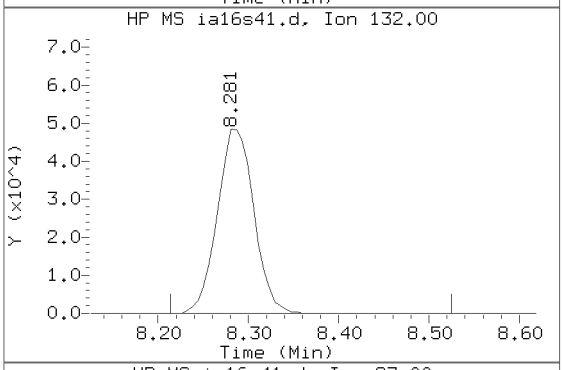
Sample Spectrum (Background Subtracted)

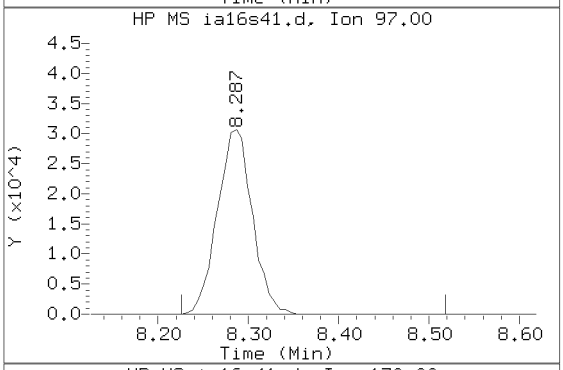


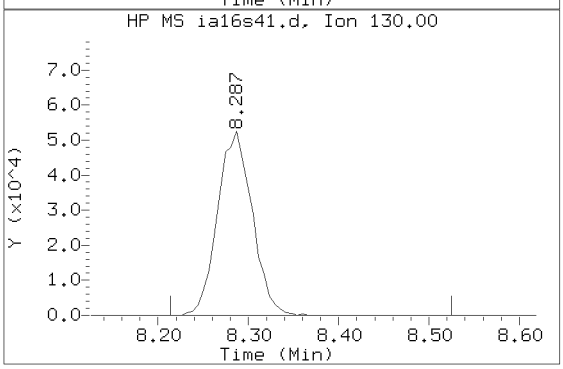
Sample Spectrum (Unaltered)











Data File: /chem2/HP19930.i/19apr16a.b/ia16s41.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:17 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:35 mec29284

Sample Name: 34R05 Lab Sample ID: 1030982

Compound Number : 67
Compound Name : Trichloroethene
Scan Number : 1098
Retention Time (minutes): 8.281
Relative Retention Time :-0.00005
Quant Ion : 95.00
Area (flag) : 128513
On-Column Amount (ng) : 2.7272

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s42.d Injection date and time: **16-APR-2019 20:38**
Data file Sample Info. Line: 34R06;1030983;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.361	(-0.055)	455	65	102227M	(-6)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1525608	(-1)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1245311	(-2)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	695109	(-2)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	394020	10.007	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.366	(0.001)	102	75113	9.899	99%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1541900	10.094	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(-0.001)	95	571743	9.989	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)	3.300	(0.000)	59	156659	5.318	5.32		J	0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)	6.696	(0.000)	83	139915	1.818	1.82			0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)	8.280	(-0.000)	95	137500	2.902	2.90			0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s42.d Injection date and time: **16-APR-2019 20:38**
Data file Sample Info. Line: 34R06;1030983;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

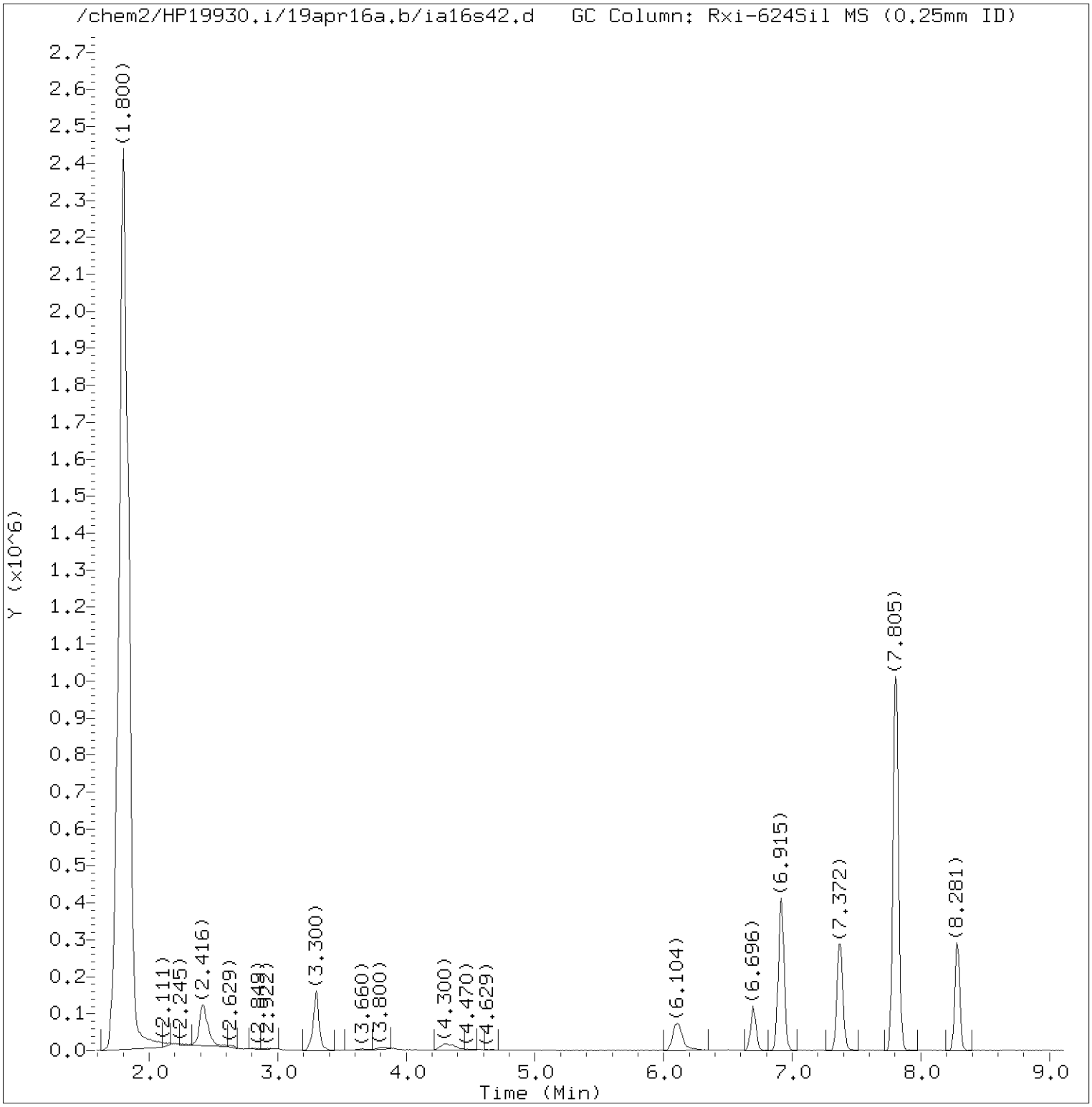
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

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WAS LEFT
BLANK INTENTIONALLY

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

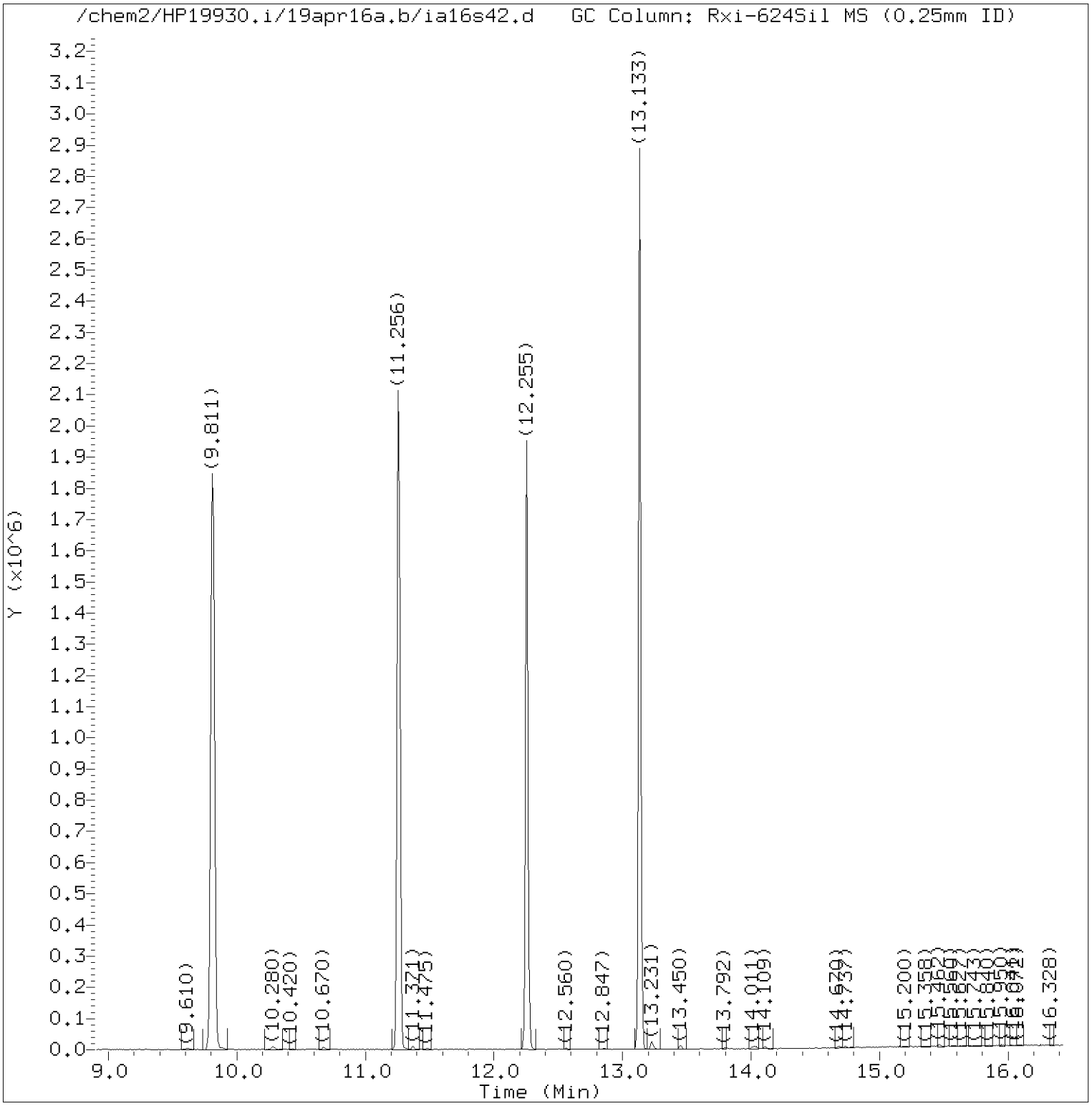
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Sample Name: 34R06 Lab Sample ID: 1030983

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Sample Name: 34R06 Lab Sample ID: 1030983

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

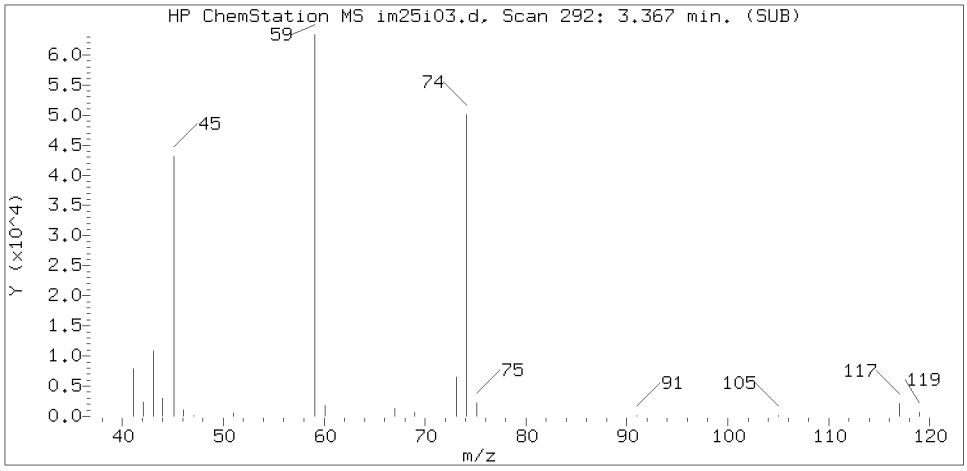
Sample Name: 34R06 Lab Sample ID: 1030983

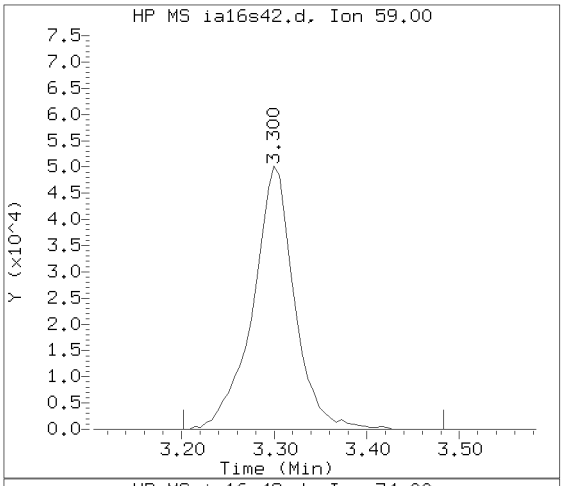
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
11) Ethyl ether	(2)	3.300	59	156659	5.318
26)*t-Butyl Alcohol-d10	(1)	4.361	65	102227M	50.000
49) Chloroform	(2)	6.696	83	139915	1.818
50)$Dibromofluoromethane	(2)	6.915	113	394020	10.007
57)$1,2-Dichloroethane-d4	(2)	7.366	102	75113	9.899
63)*Fluorobenzene	(2)	7.805	96	1525608	10.000
67) Trichloroethene	(2)	8.281	95	137500	2.902
82)$Toluene-d8	(3)	9.811	98	1541900	10.094
97)*Chlorobenzene-d5	(3)	11.256	117	1245311	10.000
111)$4-Bromofluorobenzene	(3)	12.255	95	571743	9.989
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	695109	10.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

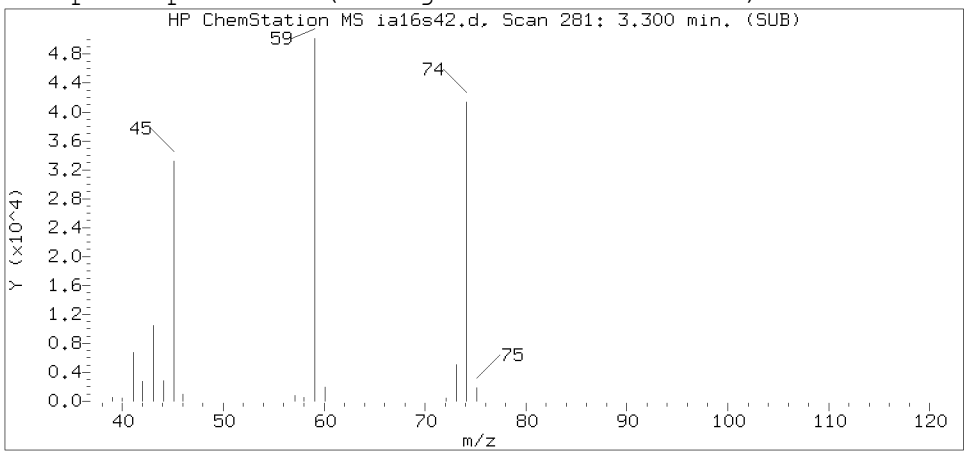
Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

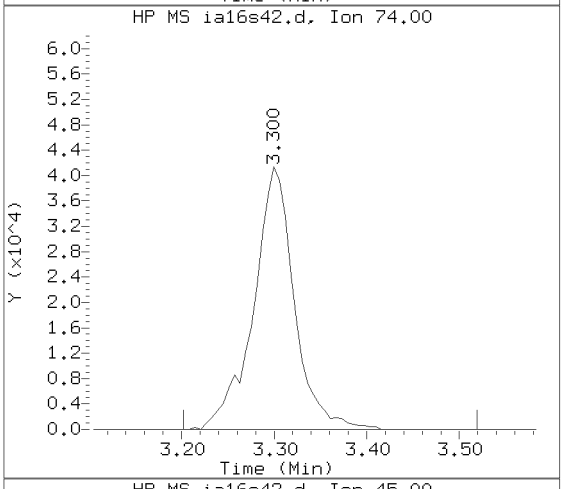
Reference Standard Spectrum for Ethyl ether



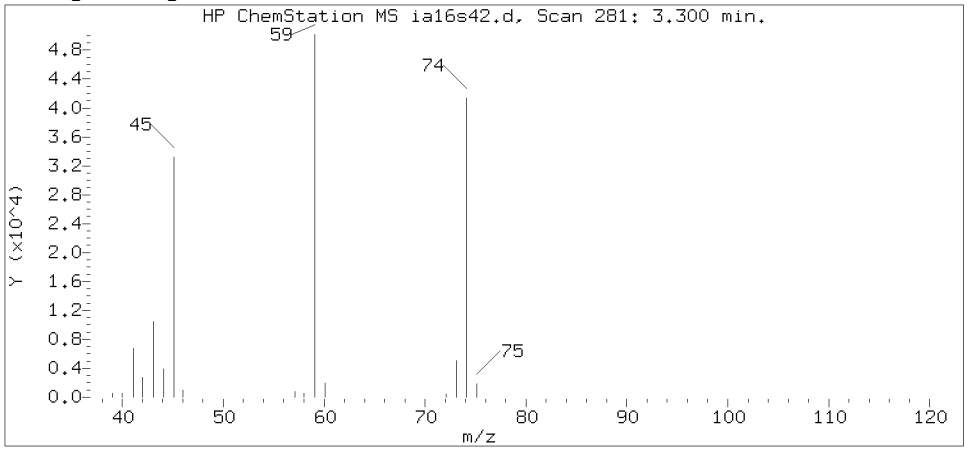


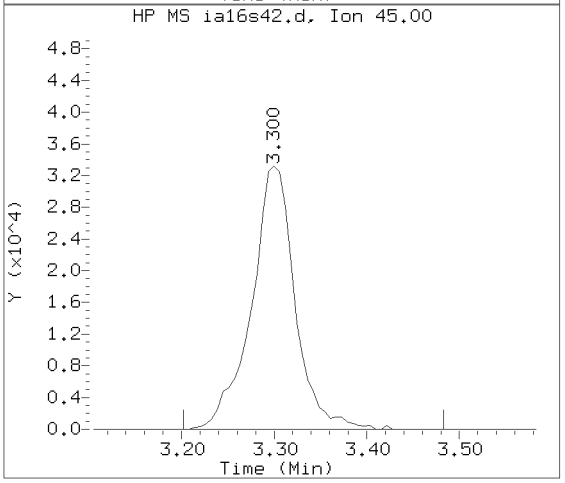
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

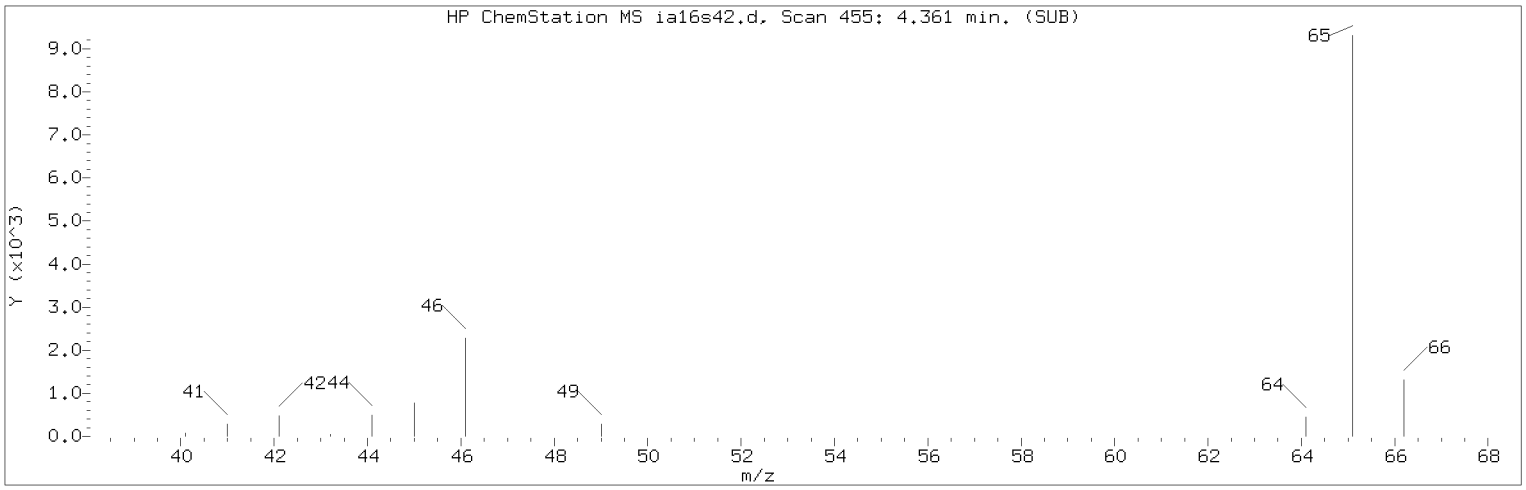
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Sample Name: 34R06 Lab Sample ID: 1030983

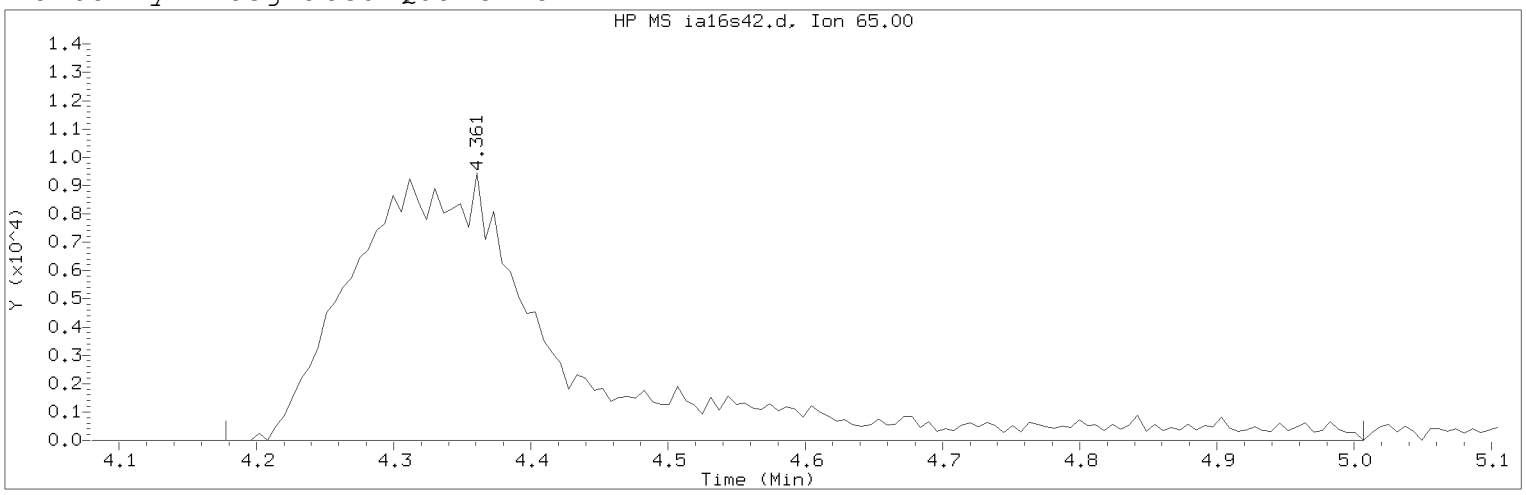
Compound Number	: 11
Compound Name	: Ethyl ether
Scan Number	: 281
Retention Time (minutes)	: 3.300
Relative Retention Time	: 0.00046
Quant Ion	: 59.00
Area (flag)	: 156659
On-Column Amount (ng)	: 5.3179

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Sample Name: 34R06 Lab Sample ID: 1030983

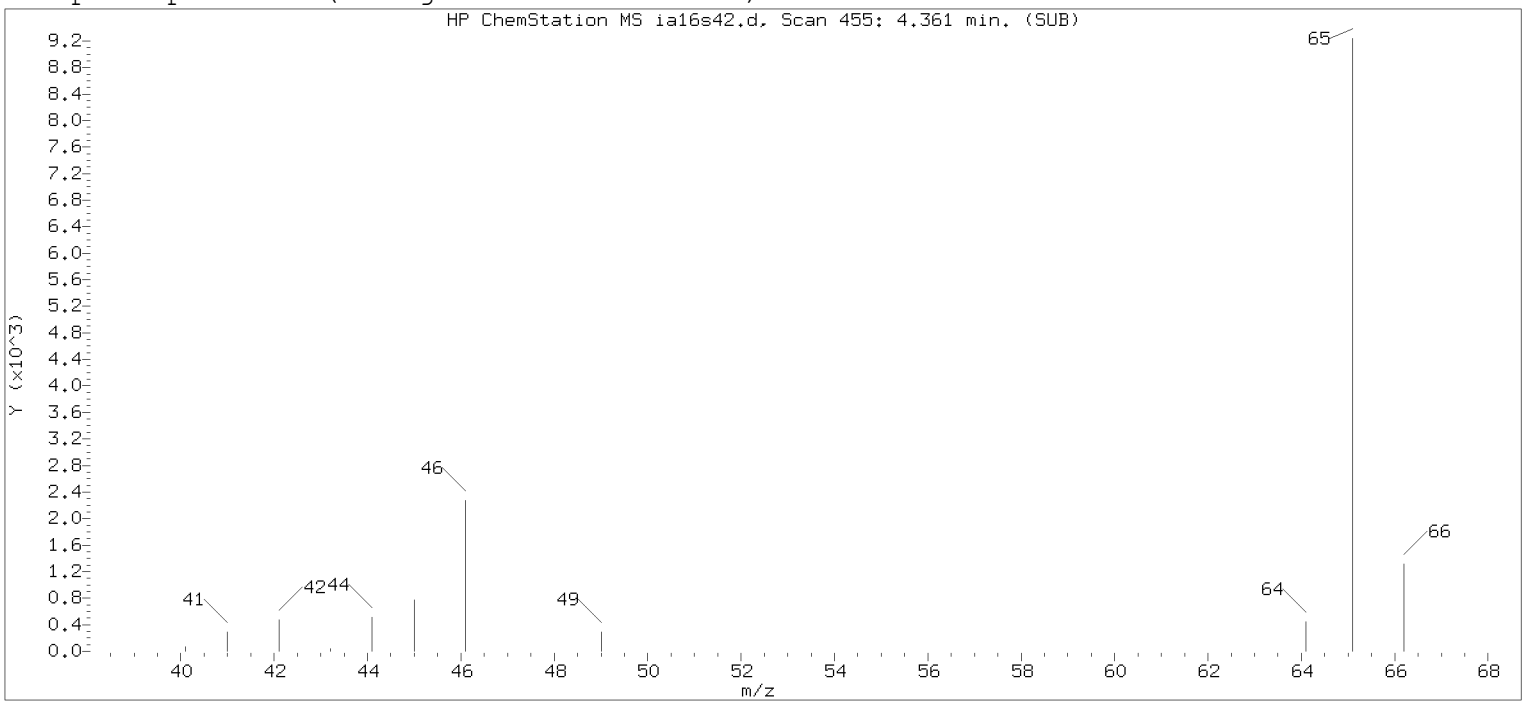
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 455
Retention Time (minutes): 4.361
Quant Ion : 65.00
Area (flag) : 102227M
On-Column Amount (ng) : 50.0000
Integration start scan : 424 Integration stop scan: 560
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

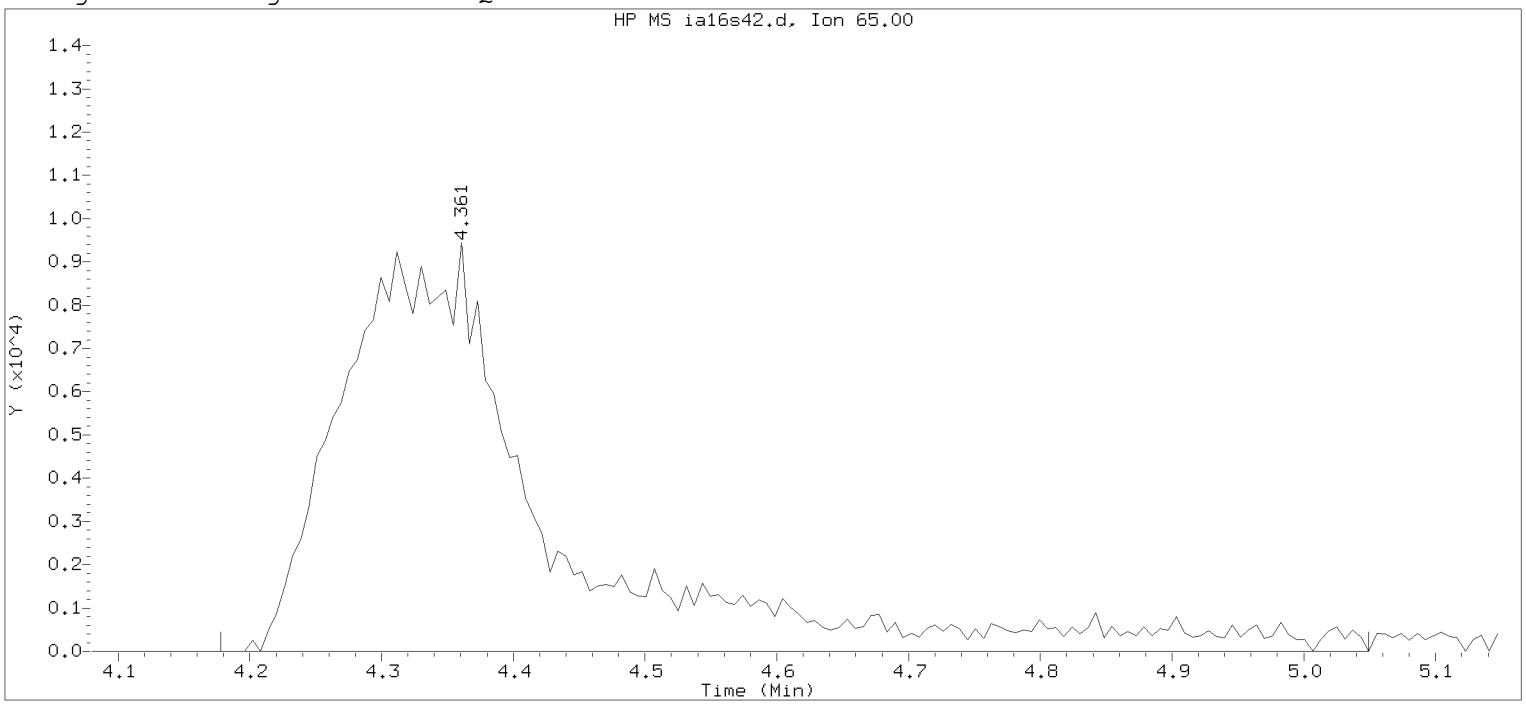
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

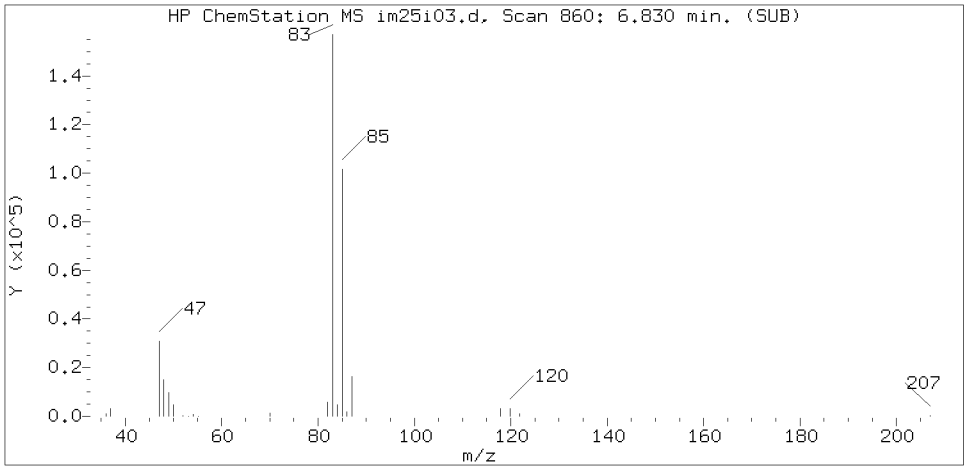
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 20:56 Automation

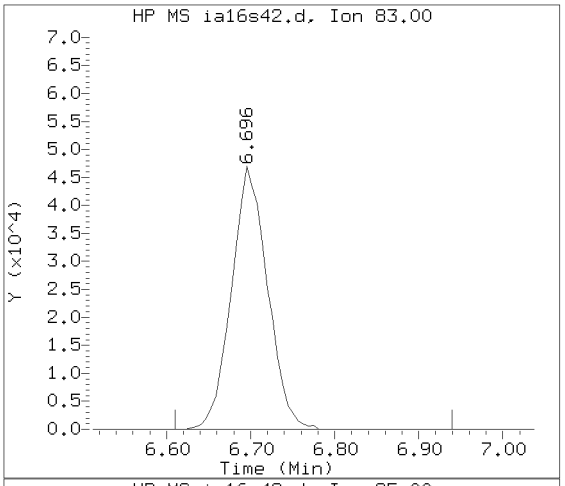
Sample Name: 34R06 Lab Sample ID: 1030983

Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 455
Retention Time (minutes): 4.361
Quant Ion : 65.00
Area : 103110
On-column Amount (ng) : 50.0000
Integration start scan : 424 Integration stop scan: 567
Y at integration start : 0 Y at integration end: 0

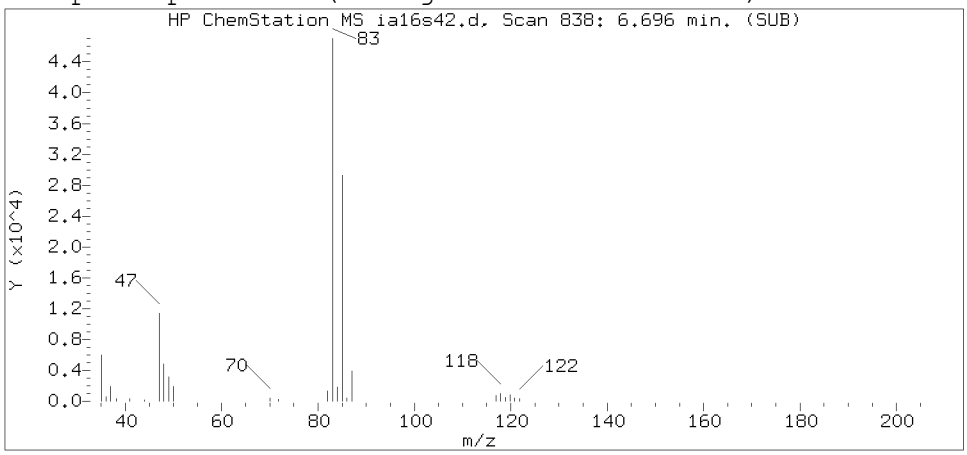
Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user name: MECampbell

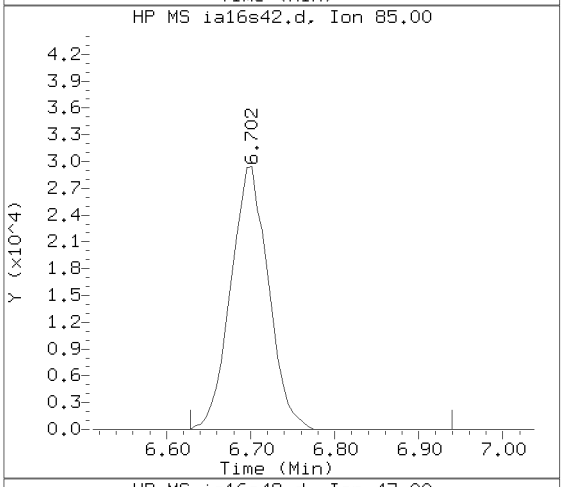
Reference Standard Spectrum for Chloroform



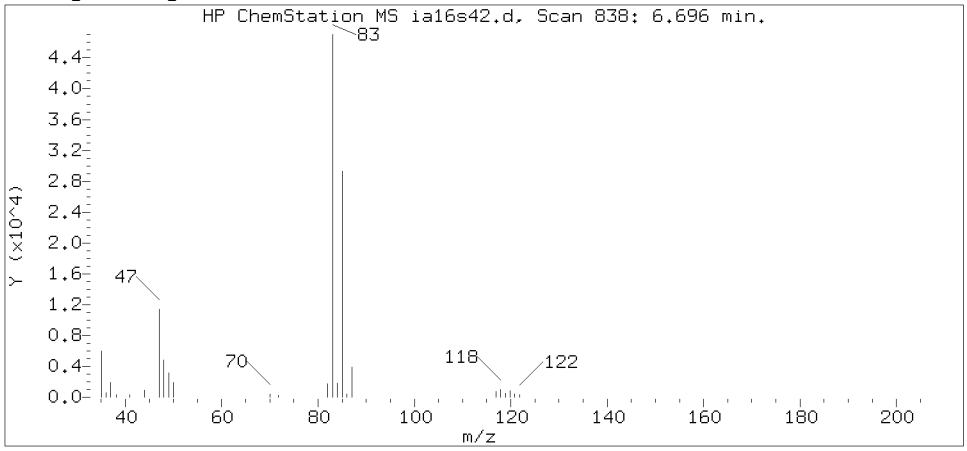


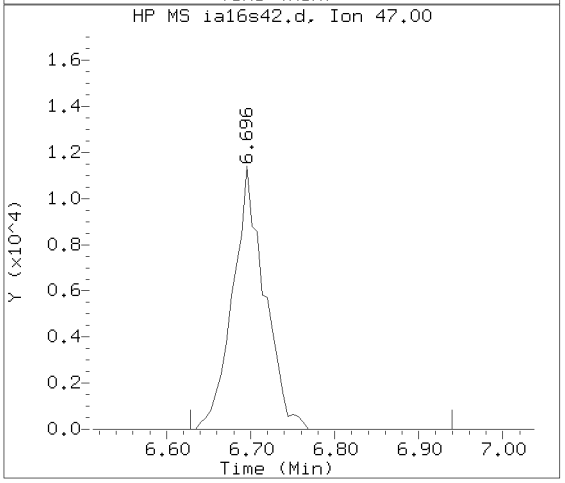
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

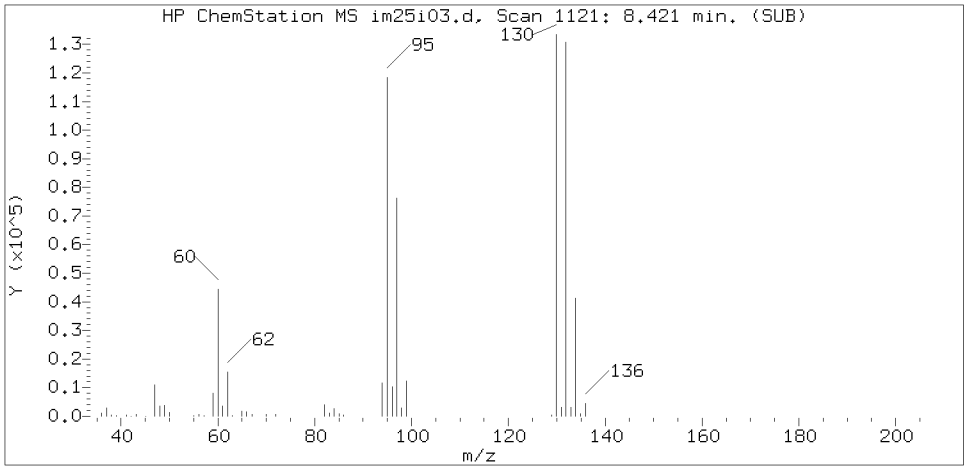
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Sample Name: 34R06 Lab Sample ID: 1030983

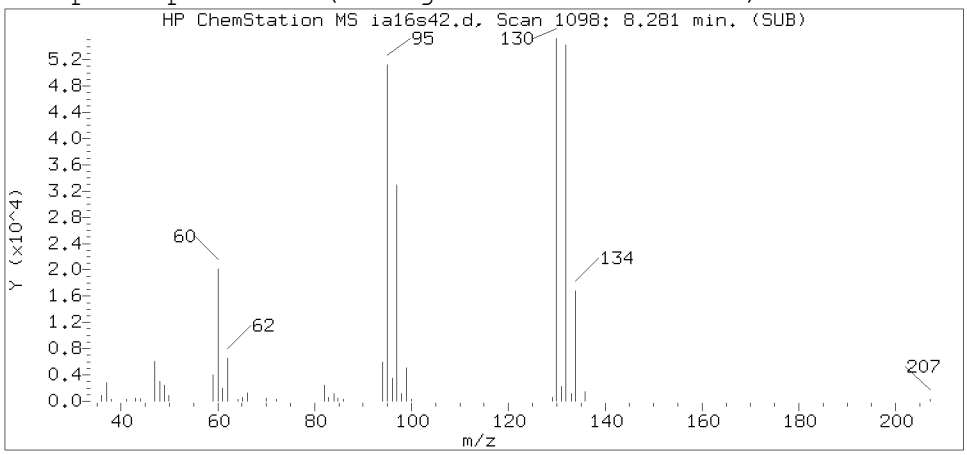
Compound Number	: 49
Compound Name	: Chloroform
Scan Number	: 838
Retention Time (minutes)	: 6.696
Relative Retention Time	: 0.00011
Quant Ion	: 83.00
Area (flag)	: 139915
On-Column Amount (ng)	: 1.8179

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

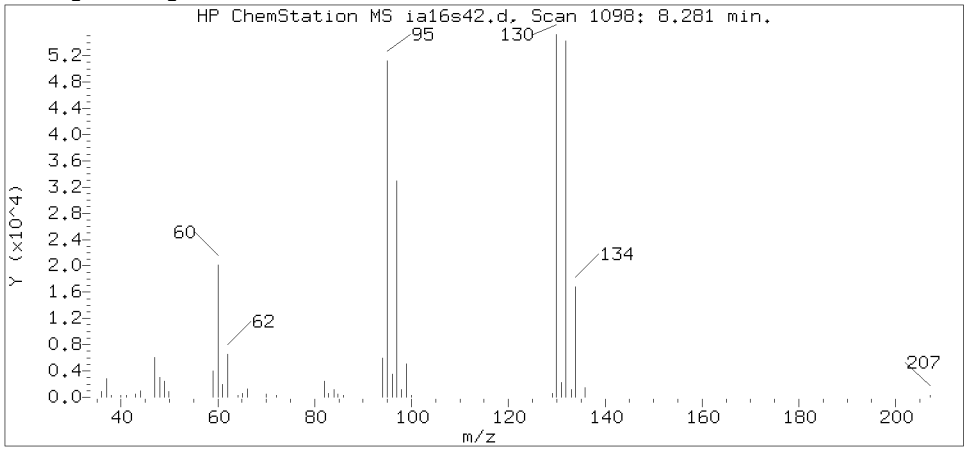
Reference Standard Spectrum for Trichloroethene

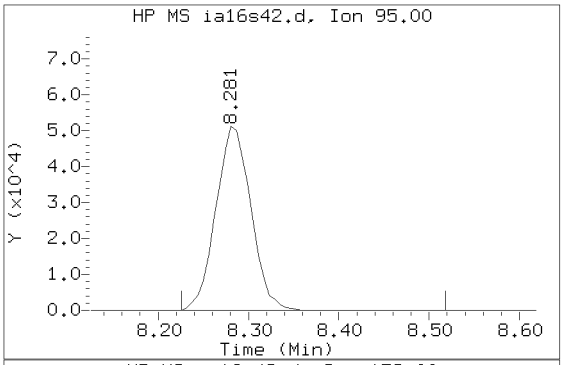


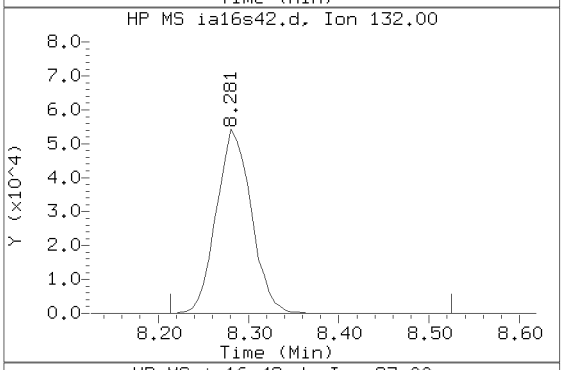
Sample Spectrum (Background Subtracted)

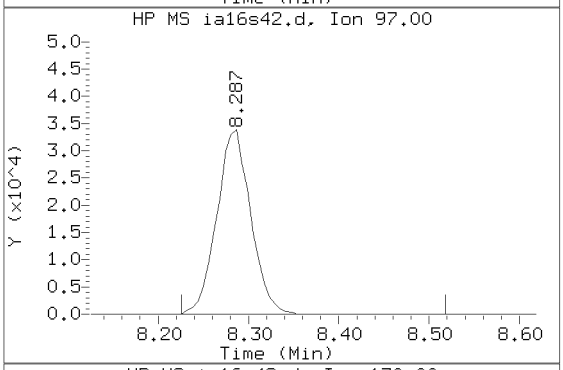


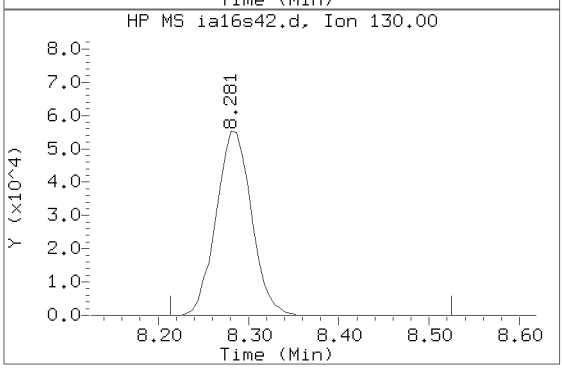
Sample Spectrum (Unaltered)











Data File: /chem2/HP19930.i/19apr16a.b/ia16s42.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:38 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:36 mec29284

Sample Name: 34R06 Lab Sample ID: 1030983

Compound Number : 67
Compound Name : Trichloroethene
Scan Number : 1098
Retention Time (minutes): 8.281
Relative Retention Time :-0.00005
Quant Ion : 95.00
Area (flag) : 137500
On-Column Amount (ng) : 2.9019

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s43.d Injection date and time: **16-APR-2019 20:59**
Data file Sample Info. Line: 34R07;1030984;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.361	(-0.055)	455	65	98964M	(-9)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1515791	(-2)	10.00	
97) Chlorobenzene-d5	11.262	(0.000)	1587	117	1235294	(-3)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	686613	(-3)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	388561	9.933	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.000)	102	73602	9.763	98%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1536851	10.143	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.256	(0.000)	95	570912	10.055	101%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)	3.306	(-0.000)	59	295296	10.089	10.09		J	0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)	6.696	(0.000)	83	110344	1.443	1.44			0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)	8.287	(-0.000)	95	183161	3.891	3.89			0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s43.d Injection date and time: **16-APR-2019 20:59**
Data file Sample Info. Line: 34R07;1030984;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

THIS SPACE

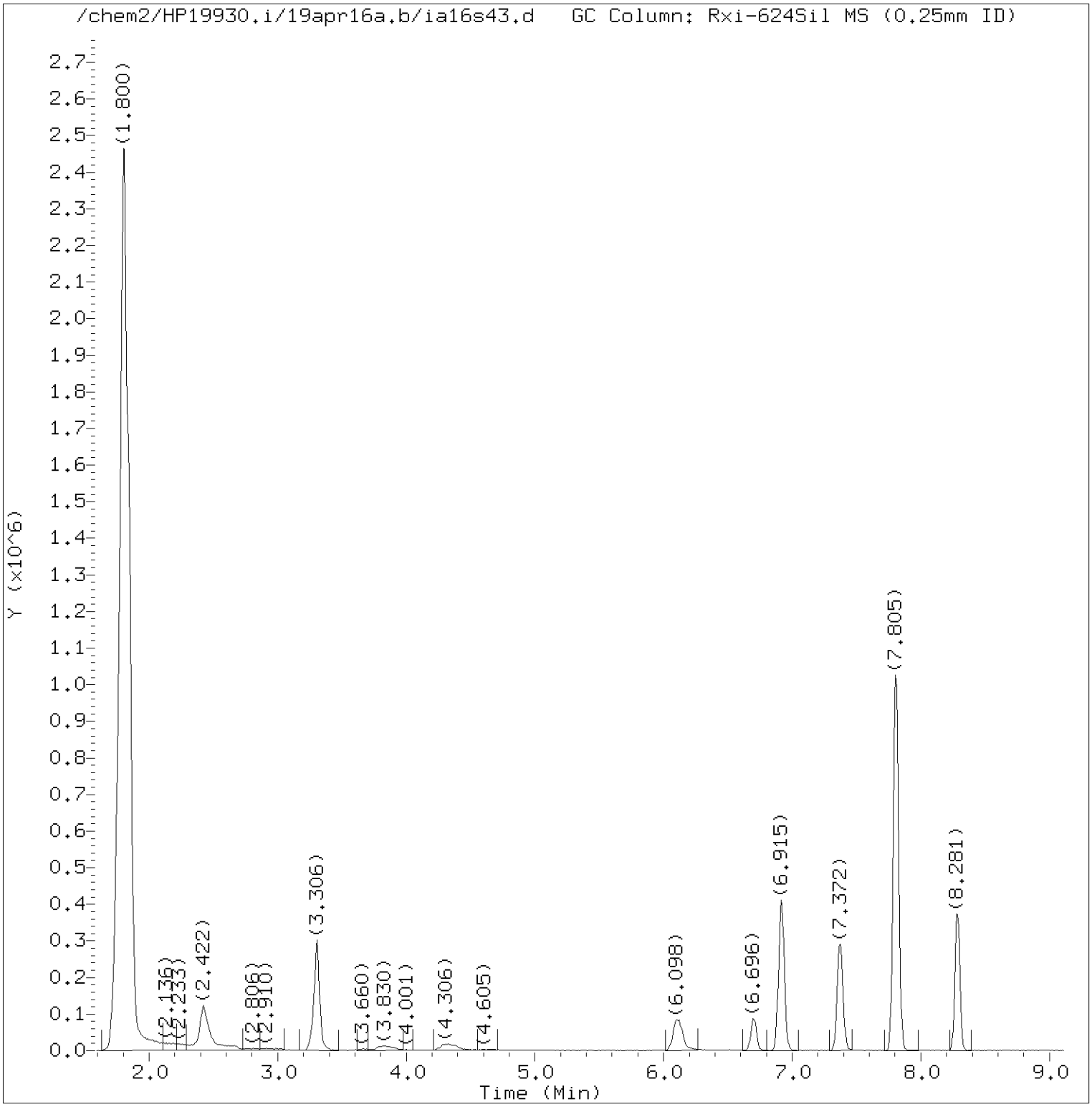
WAS LEFT

BLANK INTENTIONALLY

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

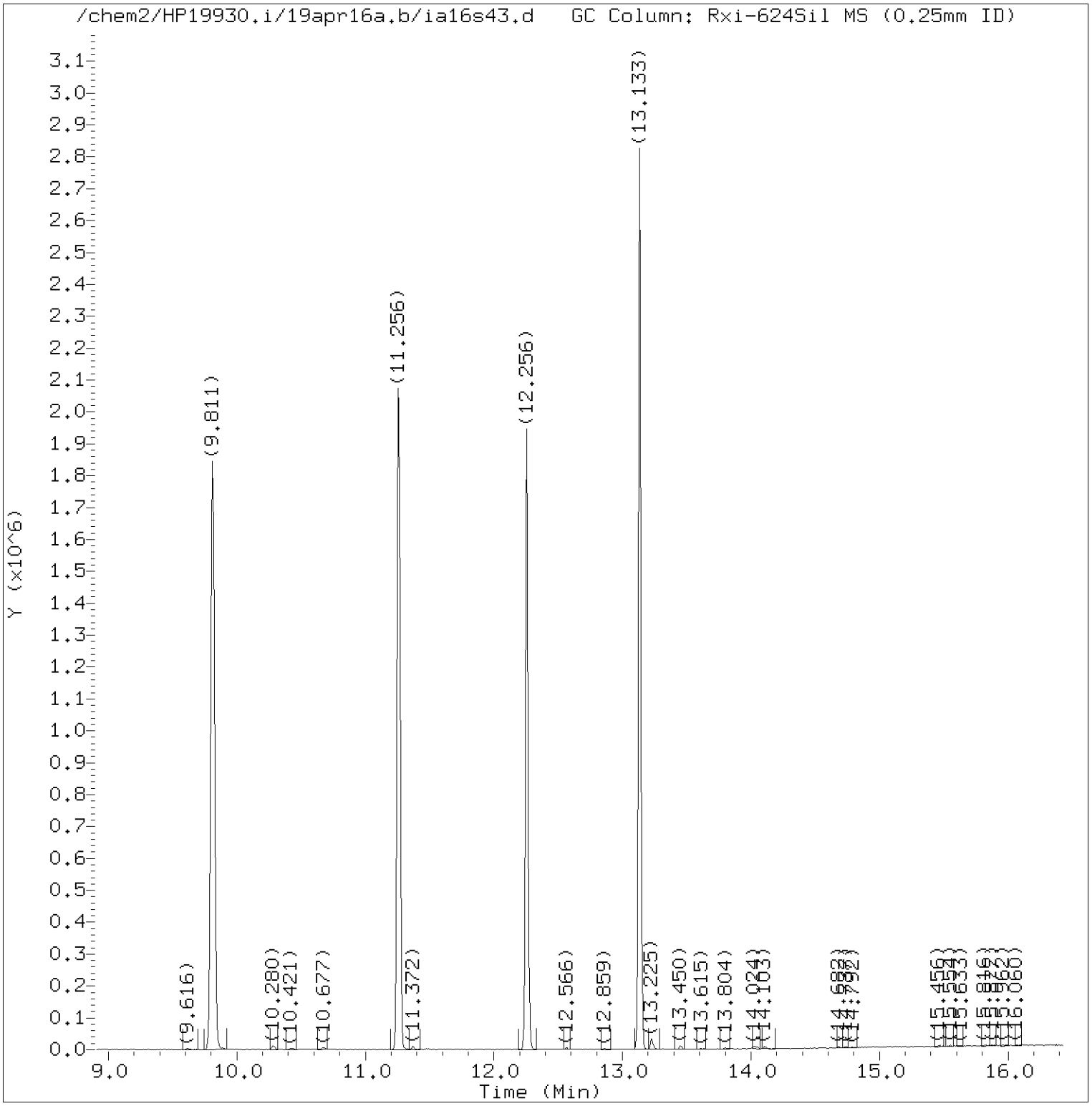
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Sample Name: 34R07 Lab Sample ID: 1030984

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Sample Name: 34R07 Lab Sample ID: 1030984

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

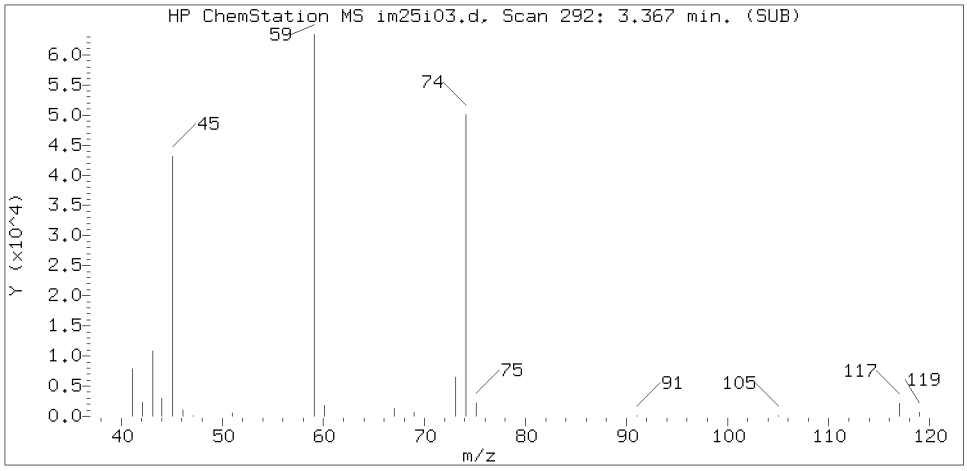
Sample Name: 34R07 Lab Sample ID: 1030984

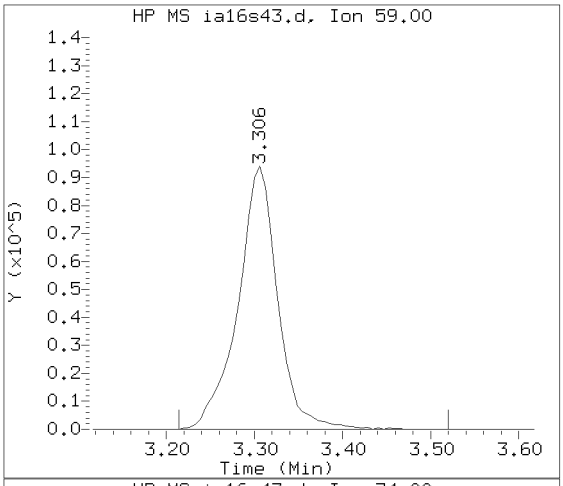
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
11) Ethyl ether	(2)	3.306	59	295296	10.089
26)*t-Butyl Alcohol-d10	(1)	4.361	65	98964M	50.000
49) Chloroform	(2)	6.696	83	110344	1.443
50)$Dibromofluoromethane	(2)	6.915	113	388561	9.933
57)$1,2-Dichloroethane-d4	(2)	7.372	102	73602	9.763
63)*Fluorobenzene	(2)	7.805	96	1515791	10.000
67) Trichloroethene	(2)	8.287	95	183161	3.891
82)$Toluene-d8	(3)	9.811	98	1536851	10.143
97)*Chlorobenzene-d5	(3)	11.262	117	1235294	10.000
111)$4-Bromofluorobenzene	(3)	12.256	95	570912	10.055
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	686613	10.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

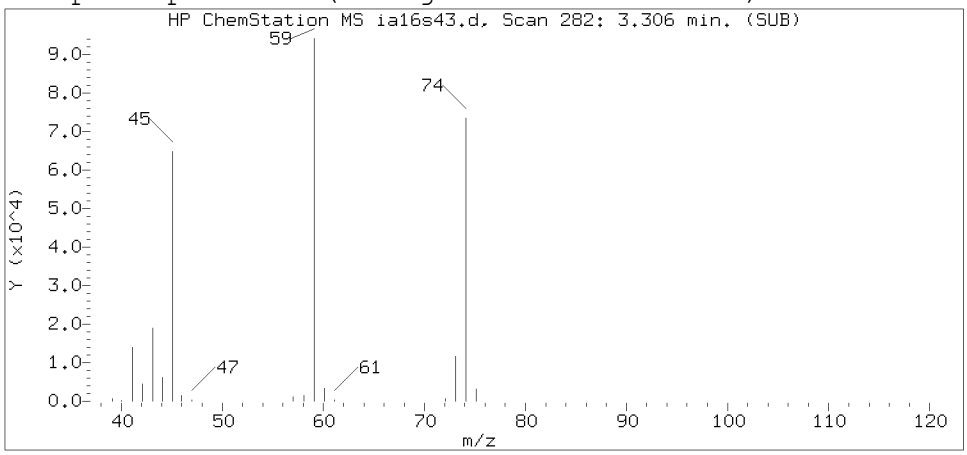
Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

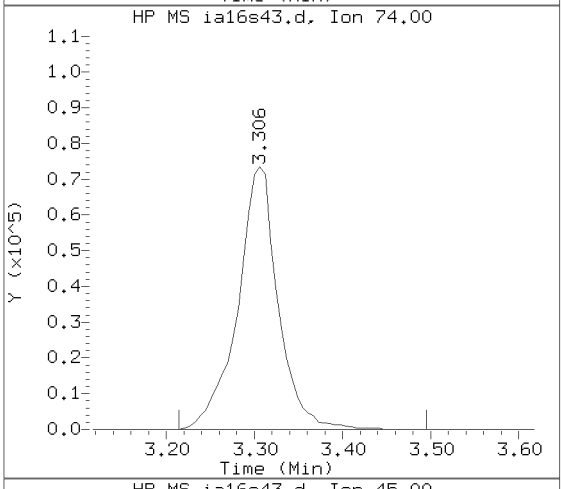
Reference Standard Spectrum for Ethyl ether



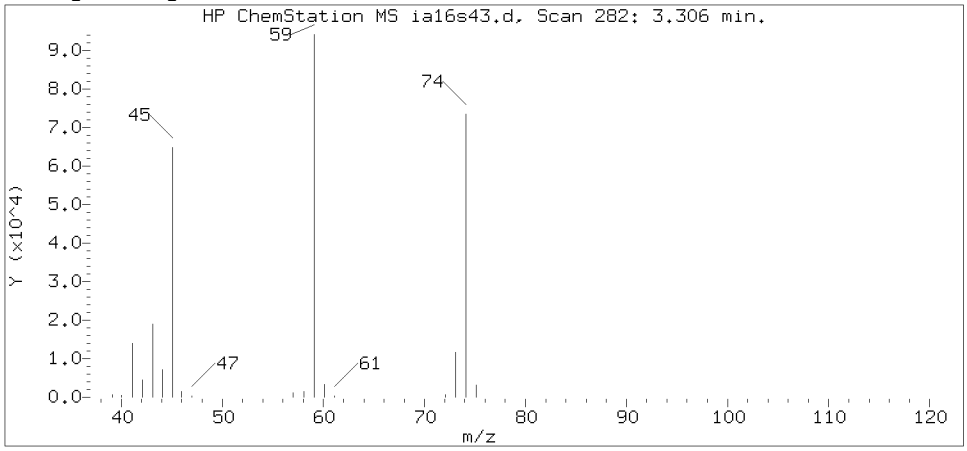


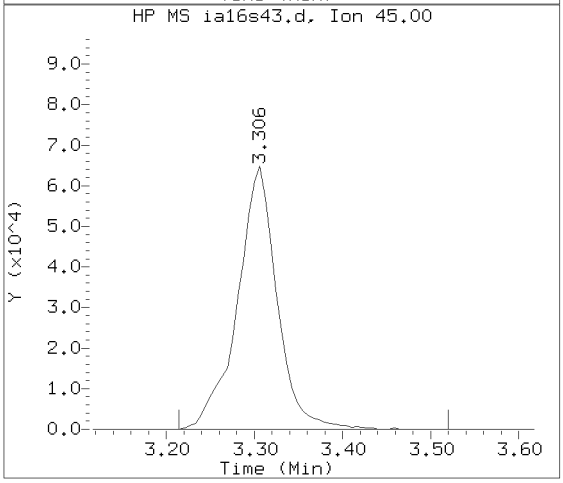
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

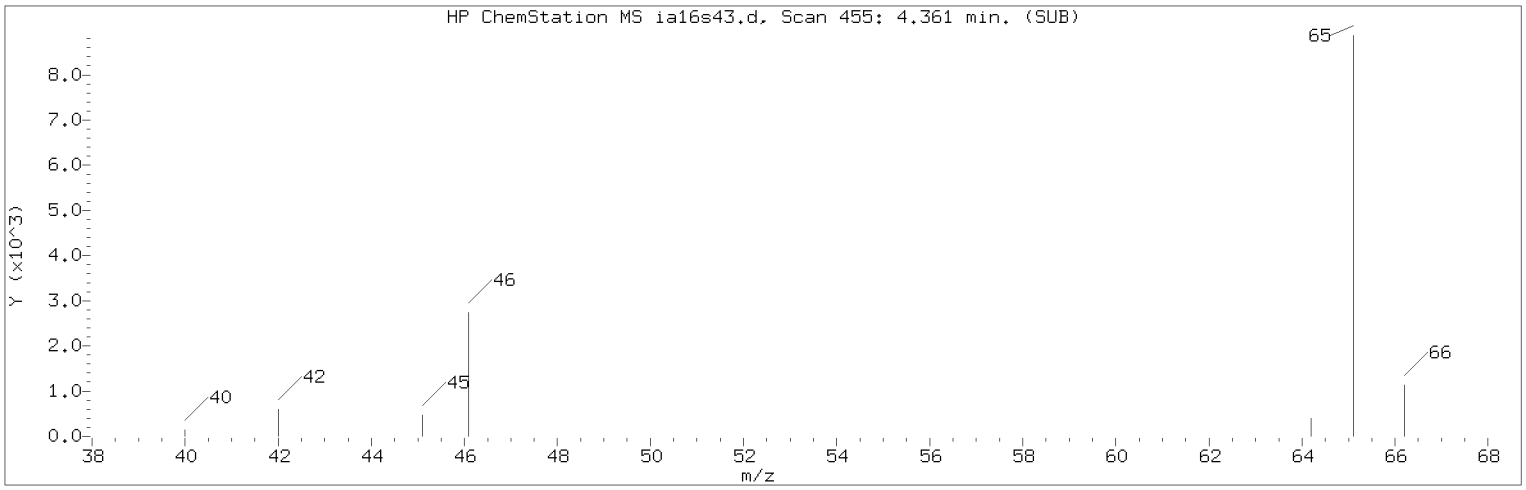
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Sample Name: 34R07 Lab Sample ID: 1030984

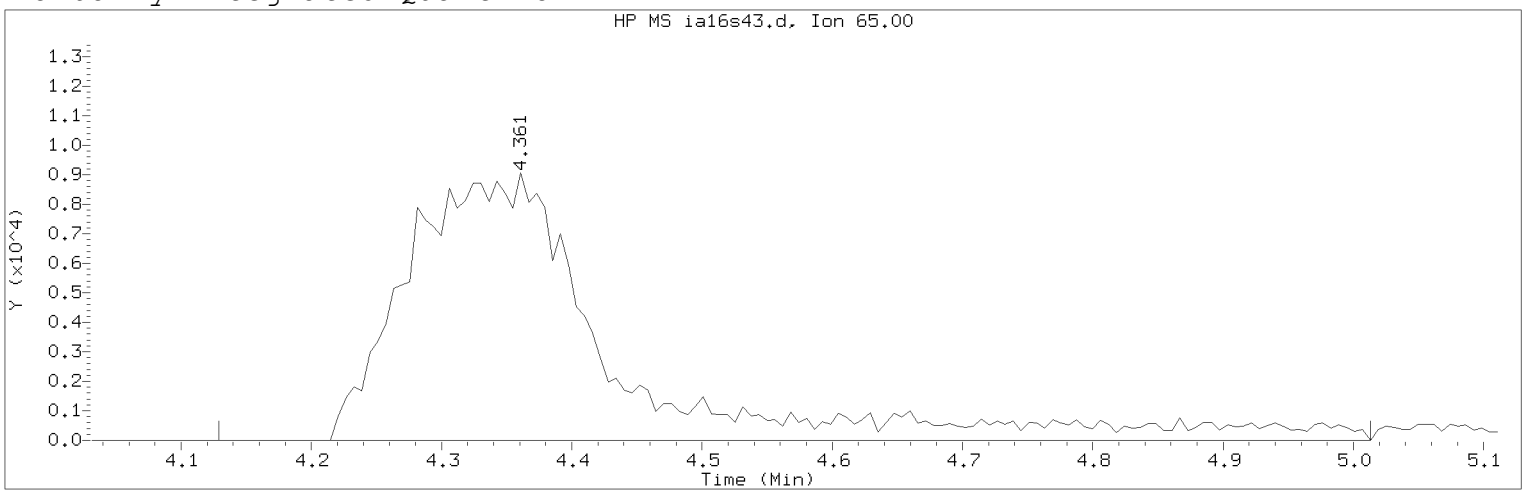
Compound Number : 11
Compound Name : Ethyl ether
Scan Number : 282
Retention Time (minutes): 3.306
Relative Retention Time :-0.00033
Quant Ion : 59.00
Area (flag) : 295296
On-Column Amount (ng) : 10.0890

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Sample Name: 34R07 Lab Sample ID: 1030984

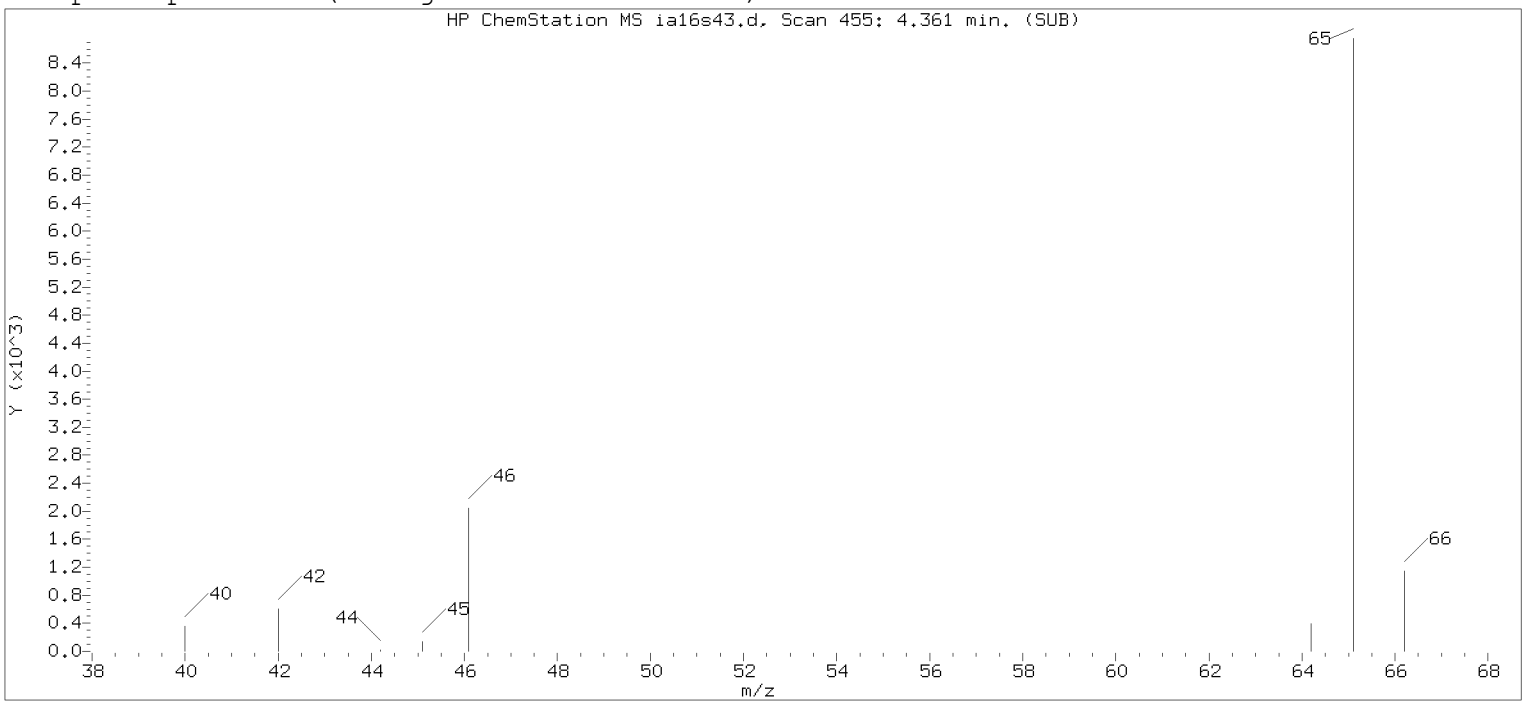
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 455
Retention Time (minutes): 4.361
Quant Ion : 65.00
Area (flag) : 98964M
On-Column Amount (ng) : 50.0000
Integration start scan : 416 Integration stop scan: 561
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

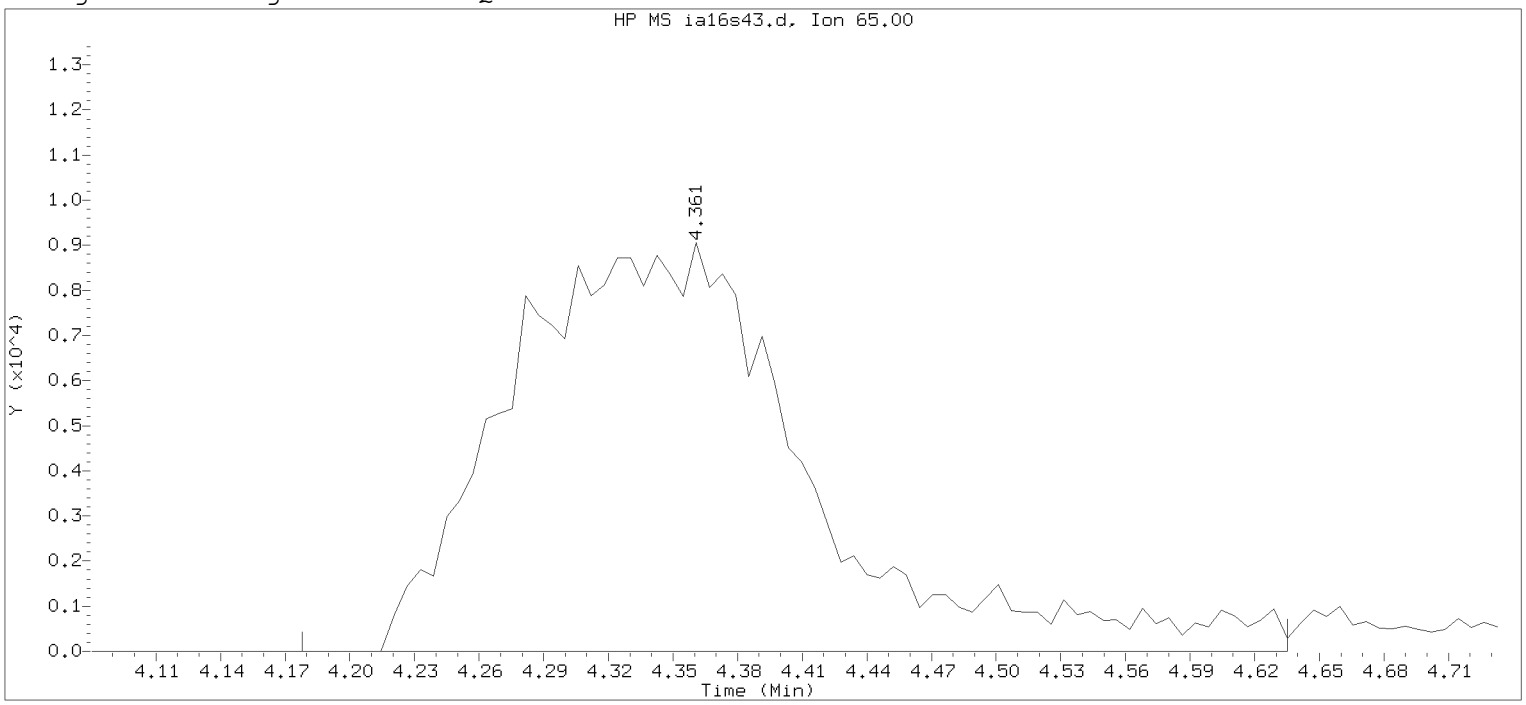
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

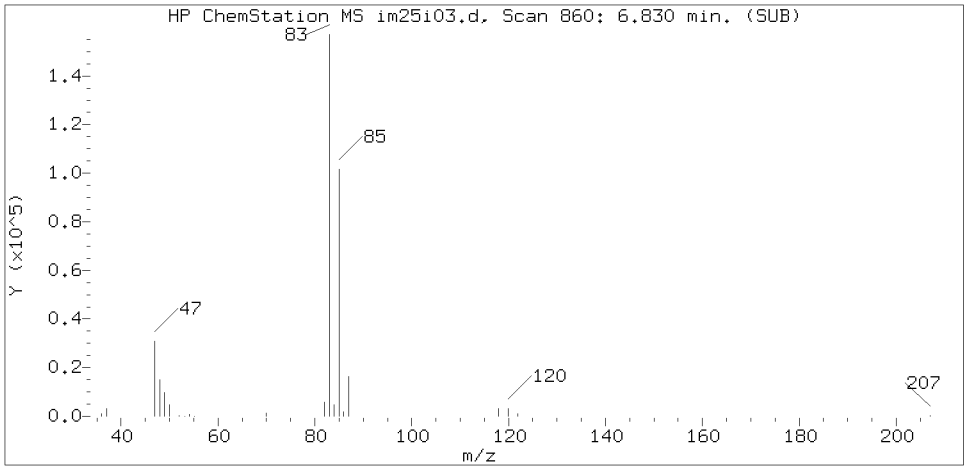
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 21:17 Automation

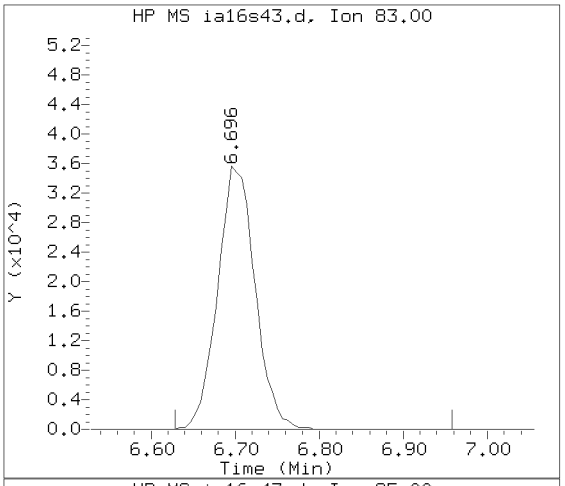
Sample Name: 34R07 Lab Sample ID: 1030984

Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 455
Retention Time (minutes): 4.361
Quant Ion : 65.00
Area : 87303
On-column Amount (ng) : 50.0000
Integration start scan : 424 Integration stop scan: 499
Y at integration start : 0 Y at integration end: 0

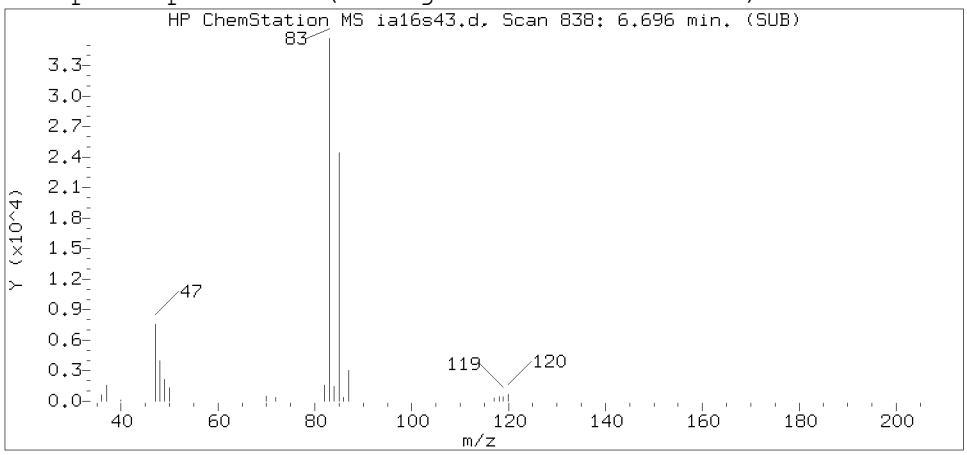
Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user name: MEC29284

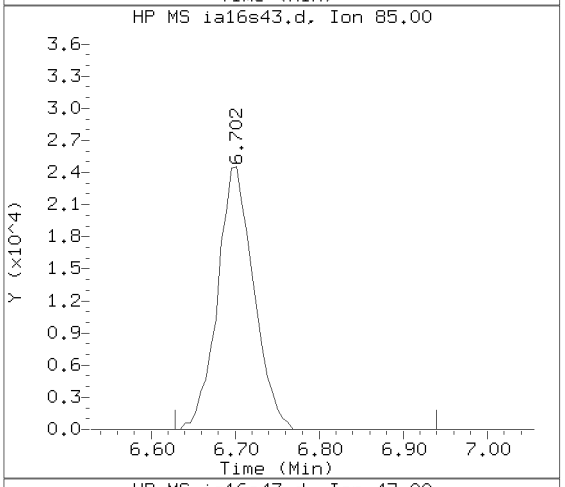
Reference Standard Spectrum for Chloroform



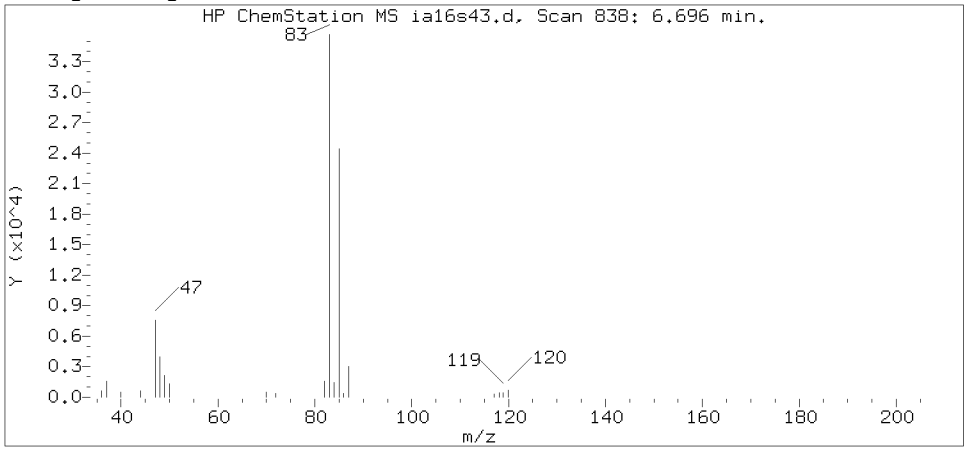


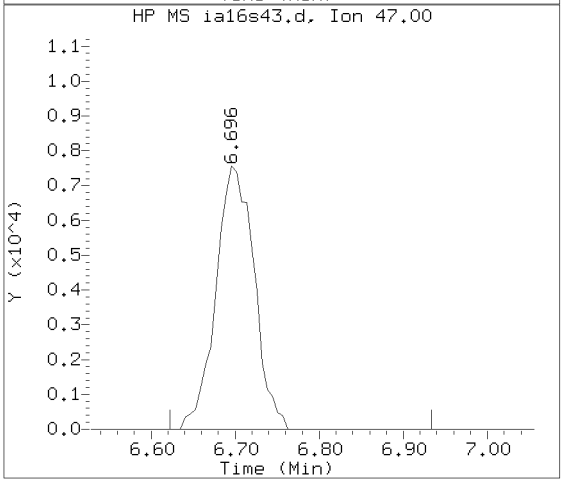
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

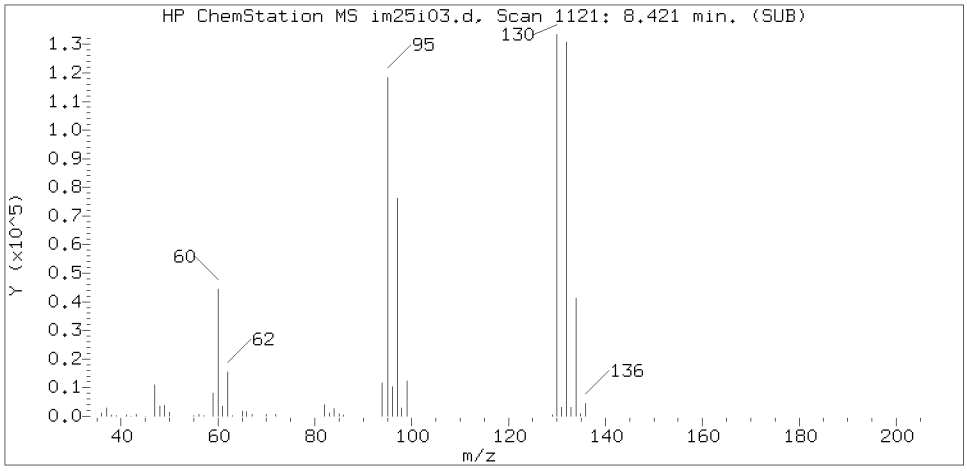
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Sample Name: 34R07 Lab Sample ID: 1030984

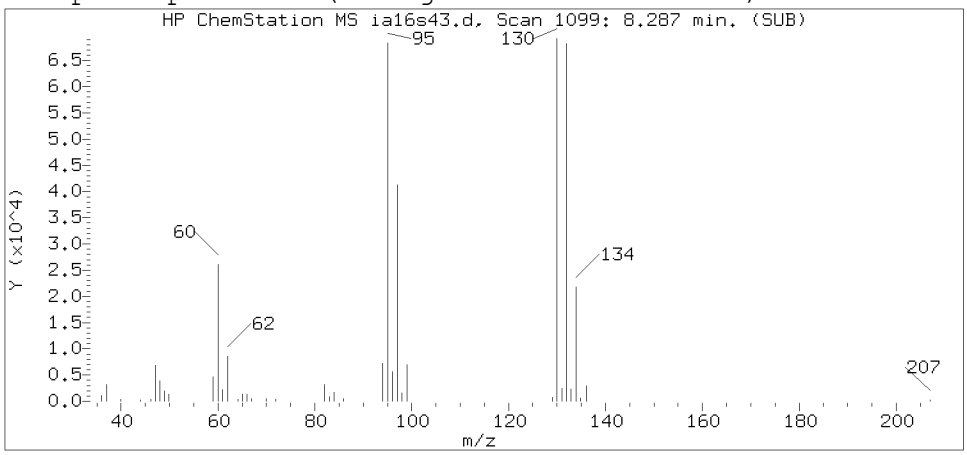
Compound Number	: 49
Compound Name	: Chloroform
Scan Number	: 838
Retention Time (minutes)	: 6.696
Relative Retention Time	: 0.00011
Quant Ion	: 83.00
Area (flag)	: 110344
On-Column Amount (ng)	: 1.4430

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

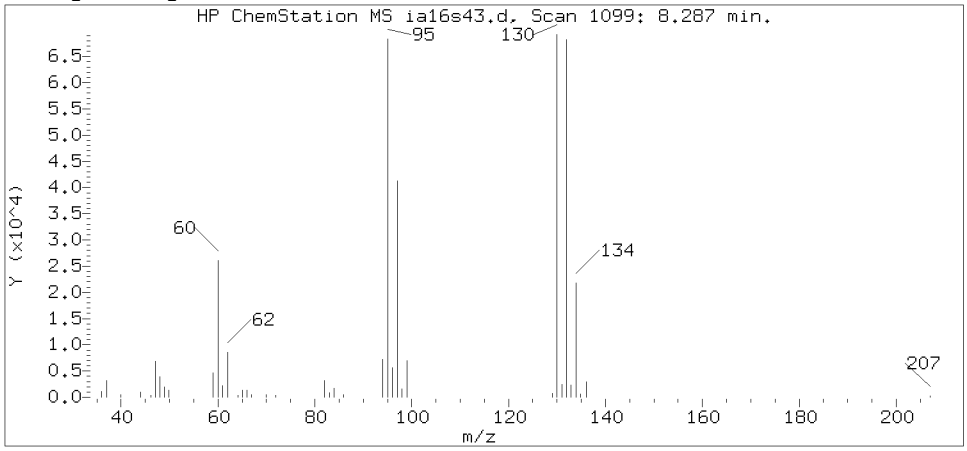
Reference Standard Spectrum for Trichloroethene

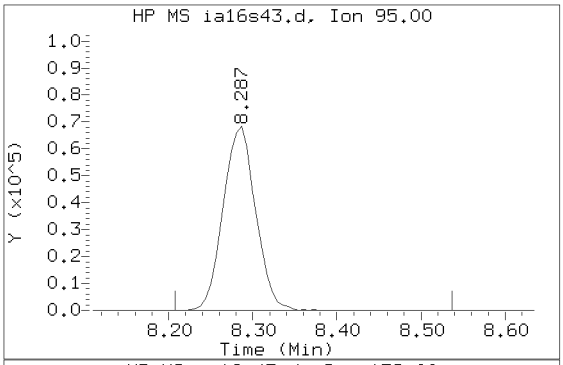


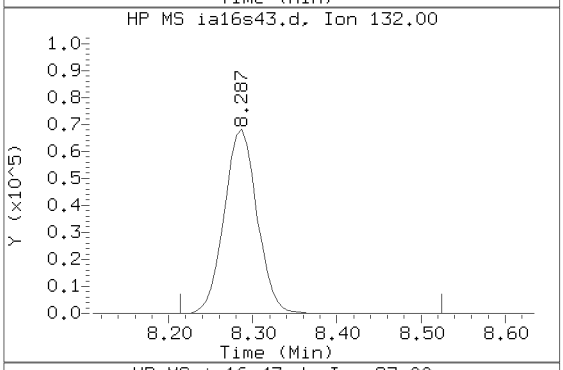
Sample Spectrum (Background Subtracted)

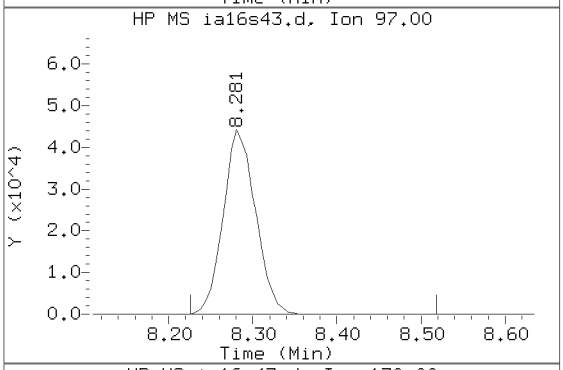


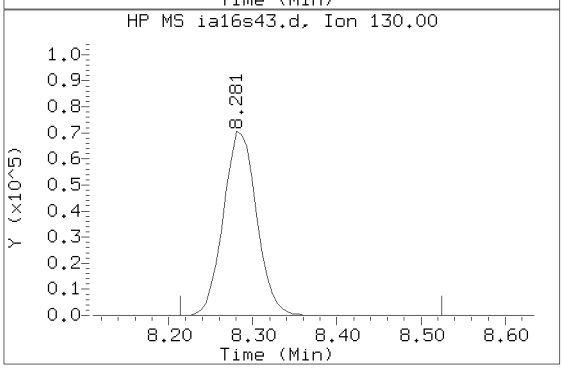
Sample Spectrum (Unaltered)











Data File: /chem2/HP19930.i/19apr16a.b/ia16s43.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 20:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:38 mec29284

Sample Name: 34R07 Lab Sample ID: 1030984

Compound Number : 67
Compound Name : Trichloroethene
Scan Number : 1099
Retention Time (minutes): 8.287
Relative Retention Time :-0.00083
Quant Ion : 95.00
Area (flag) : 183161
On-Column Amount (ng) : 3.8907

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:40.
Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s35.d Injection date and time: **16-APR-2019 18:10**
Data file Sample Info. Line: 34R08;1030985;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:29 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12025**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.306	(0.000)	446	65	98280	(-10)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1494866	(-3)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1222569	(-4)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	671092	(-5)	10.00	

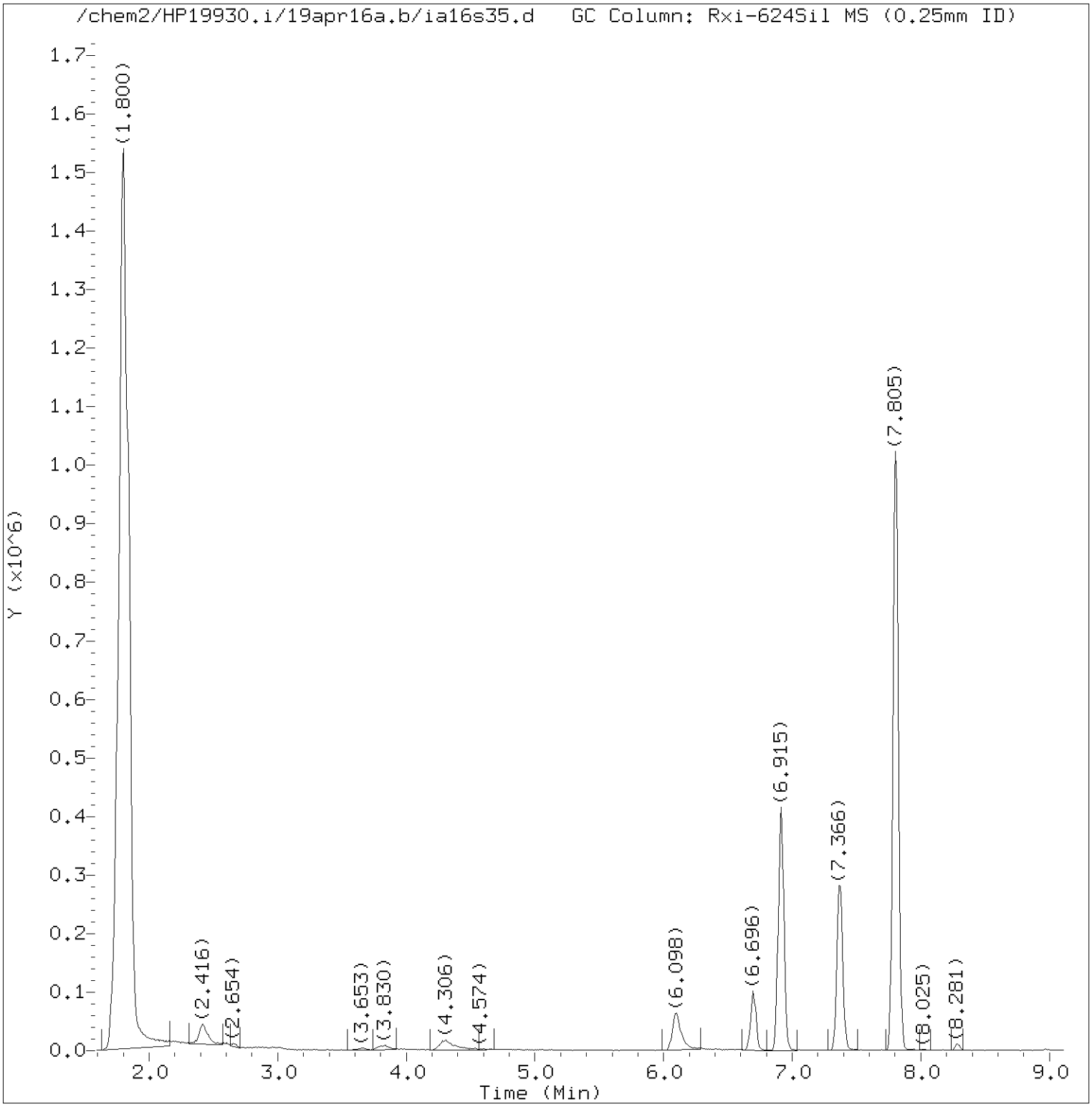
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	385644	9.996	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.366	(0.001)	102	72625	9.768	98%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1500868	10.009	100%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(-0.001)	95	561130	9.986	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
5) Vinyl Chloride	(2)				Not Detected					0.1	1
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)				Not Detected					0.2	1

Total number of targets = 5

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

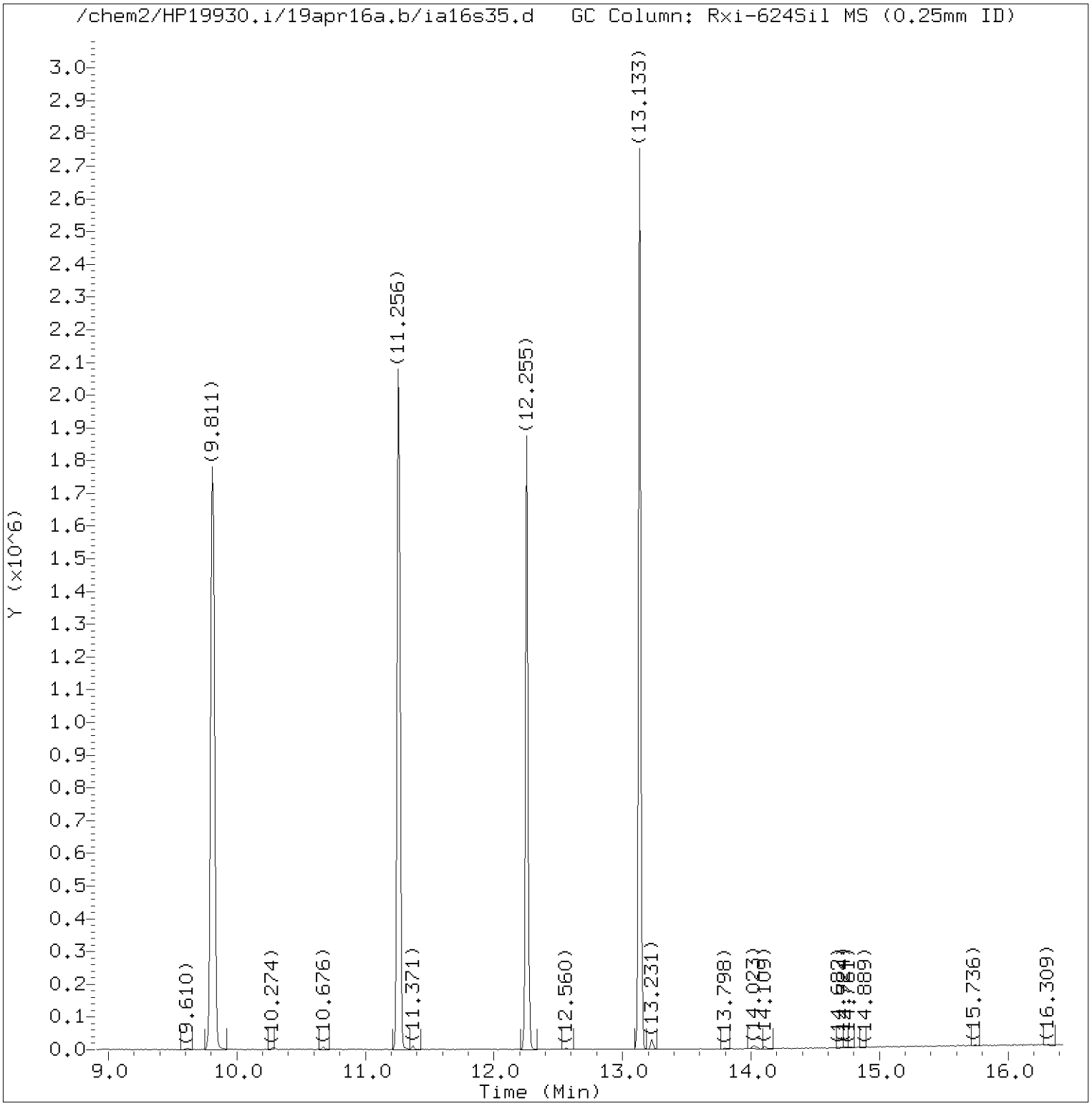
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s35.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:10 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12025
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:29 mec29284

Sample Name: 34R08 Lab Sample ID: 1030985

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s35.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:10 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12025
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:29 mec29284

Sample Name: 34R08 Lab Sample ID: 1030985

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s35.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 18:10 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12025
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:29 mec29284

Sample Name: 34R08 Lab Sample ID: 1030985

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.306	65	98280	50.000
50)$Dibromofluoromethane	(2)	6.915	113	385644	9.996
57)$1,2-Dichloroethane-d4	(2)	7.366	102	72625	9.768
63)*Fluorobenzene	(2)	7.805	96	1494866	10.000
82)$Toluene-d8	(3)	9.811	98	1500868	10.009
97)*Chlorobenzene-d5	(3)	11.256	117	1222569	10.000
111)$4-Bromofluorobenzene	(3)	12.255	95	561130	9.986
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	671092	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s33.d Injection date and time: **16-APR-2019 14:59**
Data file Sample Info. Line: 34R09;1030986;1;0;;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 16:11 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.318	(-0.012)	448	65	93756	(-14)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1494256	(-3)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1220307	(-4)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	687826	(-3)	10.00	

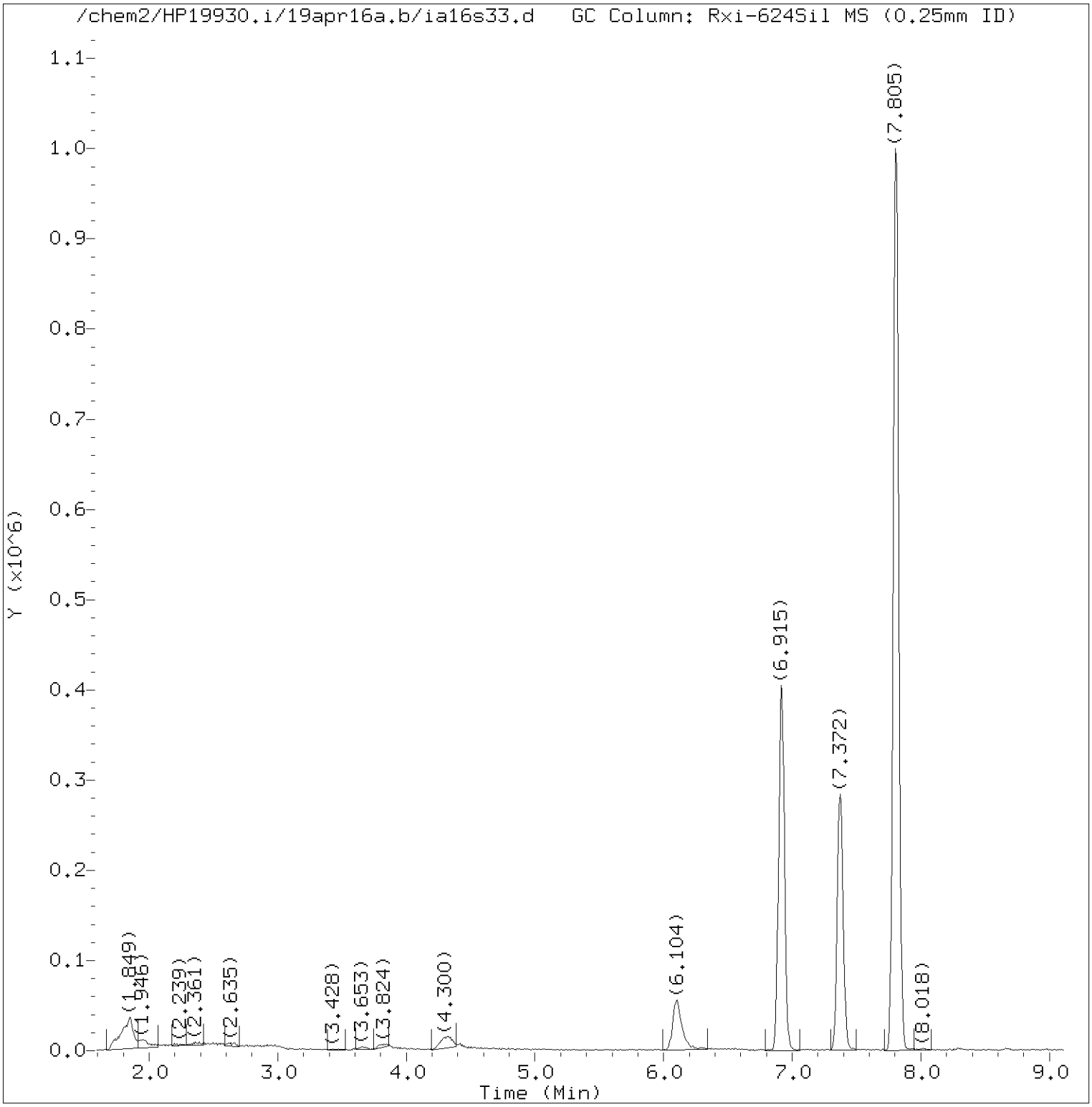
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(-0.001)	113	387014	10.036	100%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.000)	102	74120	9.973	100%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1496376	9.997	100%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(-0.001)	95	565381	10.080	101%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)				Not Detected					0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)				Not Detected					0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)				Not Detected					0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/16/2019 at 16:11. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

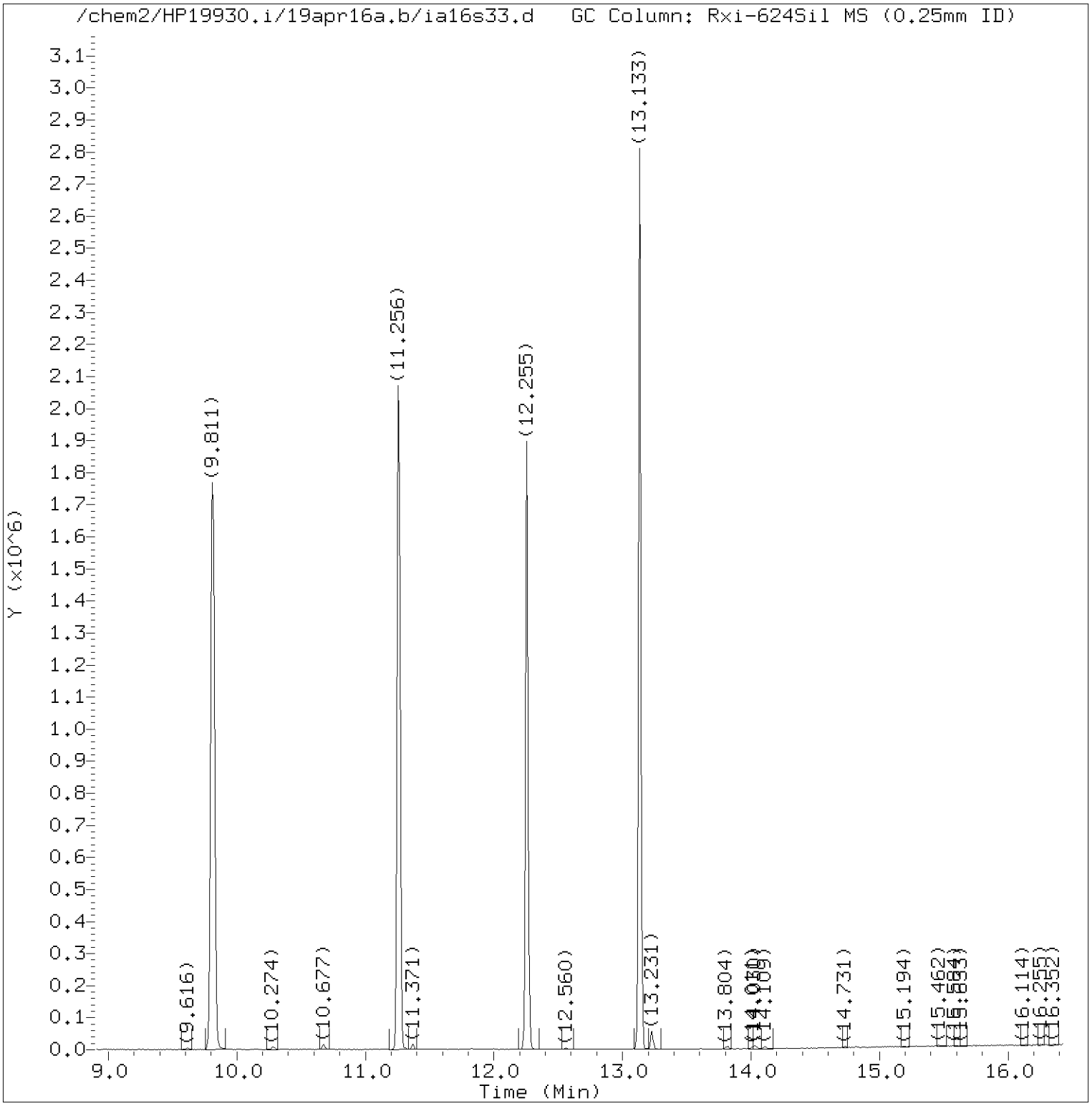
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s33.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 14:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 16:11 mec29284

Sample Name: 34R09 Lab Sample ID: 1030986

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 16:11.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s33.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 14:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 16:11 mec29284

Sample Name: 34R09 Lab Sample ID: 1030986

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 16:11.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s33.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 14:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 16:11 mec29284

Sample Name: 34R09 Lab Sample ID: 1030986

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.318	65	93756	50.000
50)$Dibromofluoromethane	(2)	6.915	113	387014	10.036
57)$1,2-Dichloroethane-d4	(2)	7.372	102	74120	9.973
63)*Fluorobenzene	(2)	7.805	96	1494256	10.000
82)$Toluene-d8	(3)	9.811	98	1496376	9.997
97)*Chlorobenzene-d5	(3)	11.256	117	1220307	10.000
111)$4-Bromofluorobenzene	(3)	12.255	95	565381	10.080
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	687826	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 16:11.
Target 3.5 esignature user ID: mec29284

Standards Data

Volatiles by GC/MS

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP19930 **HP #31**

Data Directory Path is - D:\DATA\19APR08A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
MEC29284	IA08T01.D	50NGBFB	04/08/2019	15:37		
MEC29284	IA08X00.D	blk	04/08/2019	15:52		
MEC29284	IA08I01.D	VSTD025	04/08/2019	16:13		
MEC29284	IA08I02.D	VSTD010	04/08/2019	16:34		
MEC29284	IA08I03.D	VSTD005	04/08/2019	16:55		
MEC29284	IA08I04.D	VSTD002	04/08/2019	17:16		
MEC29284	IA08I05.D	VSTD001	04/08/2019	17:37		
MEC29284	IA08I06.D	VSTD0.5	04/08/2019	17:59		
MEC29284	IA08I07.D	VSTD0.2	04/08/2019	18:20		
MEC29284	IA08V01.D	LCSILG	04/08/2019	18:41		
MEC29284	IA08X01.D	blk	04/08/2019	19:03		
MEC29284	IA08X02.D	blk	04/08/2019	19:24		
MEC29284	IA08D01.D	MECIDOC#1	04/08/2019	19:45		
MEC29284	IA08D02.D	MECIDOC#2	04/08/2019	20:06		
MEC29284	IA08D03.D	MECIDOC#3	04/08/2019	20:27		
MEC29284	IA08D04.D	MECIDOC#4	04/08/2019	20:48		
MEC29284	IA08D05.D	MECIDOC#5	04/08/2019	21:09		
MEC29284	IA08D06.D	MECIDOC#6	04/08/2019	21:31		
MEC29284	IA08D07.D	MECIDOC#7	04/08/2019	21:52		
MEC29284	IA08D08.D	MECIDOC#8	04/08/2019	22:13		

Lancaster Laboratories
Volatiles
Runlog for Agilent GC/MS System HP19930 **HP #31**

Data Directory Path is - D:\DATA\19APR16A\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
MEC29284	IA16T01.D	50NGBFB	04/16/2019	10:00		
MEC29284	IA16T02.D	50NGBFB	04/16/2019	10:09		
MEC29284	IA16T03.D	50NGBFB	04/16/2019	10:22		
MEC29284	IA16T04.D	50NGBFB	04/16/2019	10:38		
MEC29284	IA16T05.D	50NGBFB	04/16/2019	10:49		
MEC29284	IA16X00.D	VBLKI22	04/16/2019	11:00	I191061AA	
MEC29284	IA16C01.D	VSTD010	04/16/2019	11:21	I191061AA	
MEC29284	IA16L01.D	LCSI22	04/16/2019	11:43	I191061AA	
MEC29284	IA16L02.D	LCDI22	04/16/2019	12:04	I191061AA	
MEC29284	IA16M01.D	MDLI22	04/16/2019	12:25	I191061AA	
MEC29284	IA16B01.D	VBLKI22	04/16/2019	12:46	I191061AA	
MEC29284	IA16D01.D	DOD0.2	04/16/2019	13:13	I191062AA	
MEC29284	IA16D02.D	DOD0.4	04/16/2019	13:34	I191062AA	
MEC29284	IA16D03.D	DOD0.5	04/16/2019	13:55	I191062AA	
MEC29284	IA16D04.D	DOD1.0	04/16/2019	14:17	I191062AA	
MEC29284	IA16S02.D	1030534	04/16/2019	14:38	I191061AA	
MEC29284	IA16S33.D	1030986	04/16/2019	14:59	I191062AA	
MEC29284	IA16S03.D	1030535	04/16/2019	15:20	I191061AA	
MEC29284	IA16S04.D	1030536	04/16/2019	15:41	I191061AA	
MEC29284	IA16S05.D	1030537	04/16/2019	16:02	I191061AA	
MEC29284	IA16S06.D	1030538	04/16/2019	16:23	I191061AA	
MEC29284	IA16S07.D	1030540	04/16/2019	16:45	I191061AA	
MEC29284	IA16S08.D	1030556	04/16/2019	17:06	I191061AA	
MEC29284	IA16S09.D	1030558	04/16/2019	17:27	I191061AA	
MEC29284	IA16S34.D	1030976	04/16/2019	17:48	I191062AA	
MEC29284	IA16S35.D	1030985	04/16/2019	18:10	I191062AA	
MEC29284	IA16S36.D	1030977	04/16/2019	18:31	I191062AA	
MEC29284	IA16S37.D	1030978	04/16/2019	18:52	I191062AA	
MEC29284	IA16S38.D	1030979MS	04/16/2019	19:13	I191062AA	
MEC29284	IA16S39.D	1030980MSD	04/16/2019	19:34	I191062AA	
MEC29284	IA16S40.D	1030981	04/16/2019	19:55	I191062AA	
MEC29284	IA16S41.D	1030982	04/16/2019	20:17	I191062AA	
MEC29284	IA16S42.D	1030983	04/16/2019	20:38	I191062AA	
MEC29284	IA16S43.D	1030984	04/16/2019	20:59	I191062AA	
MEC29284	IA16EC1.D	SECC010	04/16/2019	21:20	I191061AA	

Data File: /chem2/HP19930.i/19apr08a.b/ia08t01.d

Page 1

Date : 08-APR-2019 15:37

Client ID: BFB FEB05-19

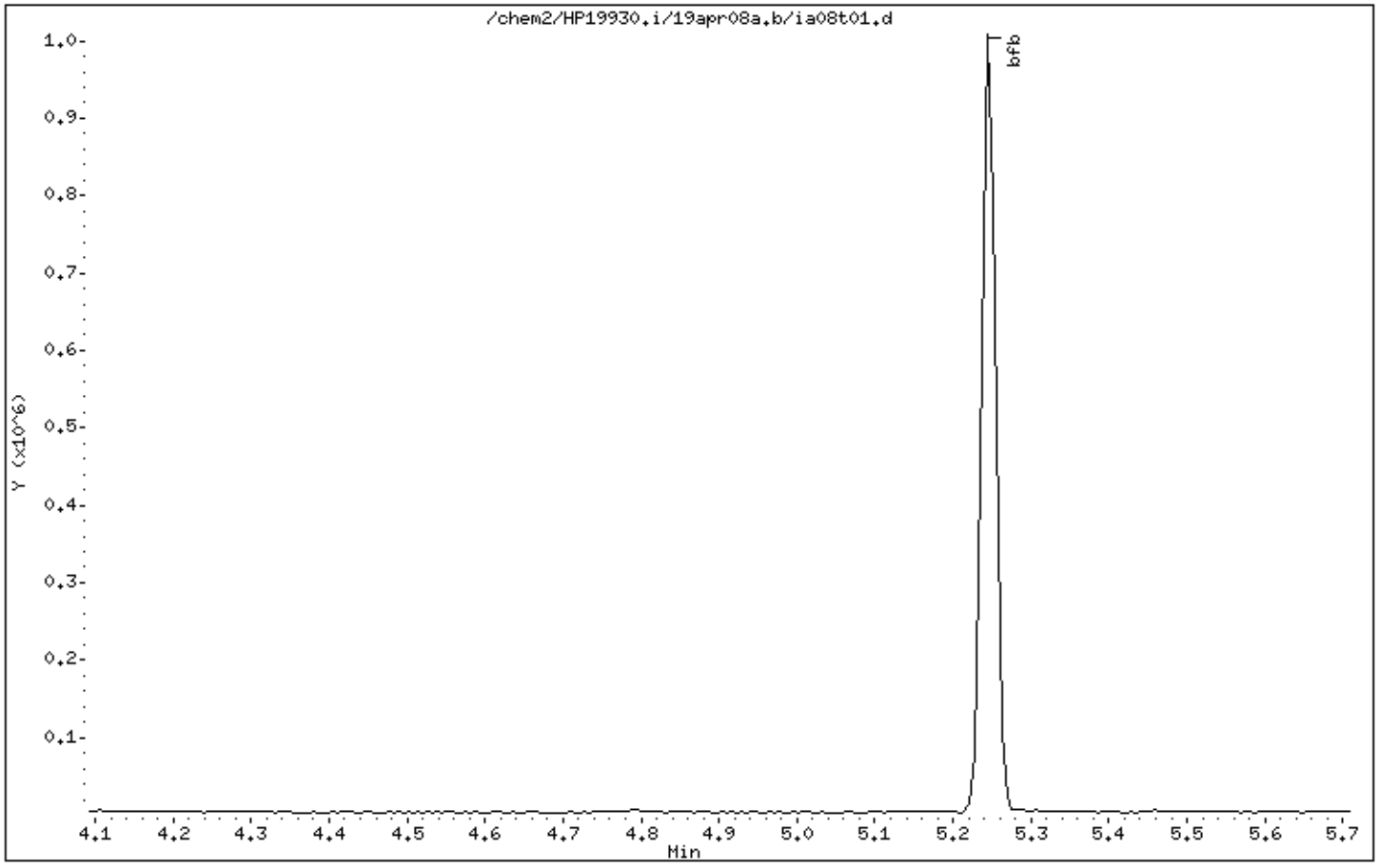
Instrument: HP19930.i

Sample Info: BFB FEB05-19;50NGBFB;1;3;;;;;;

Operator: MEC29284

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Jennifer K. Howe on 04/09/2019 at 10:38.
Target 3.5 esignature user ID: jkh09052

Data File: /chem2/HP19930.i/19apr08a.b/ia08t01.d

Date : 08-APR-2019 15:37

Client ID: BFB FEB05-19

Instrument: HP19930.i

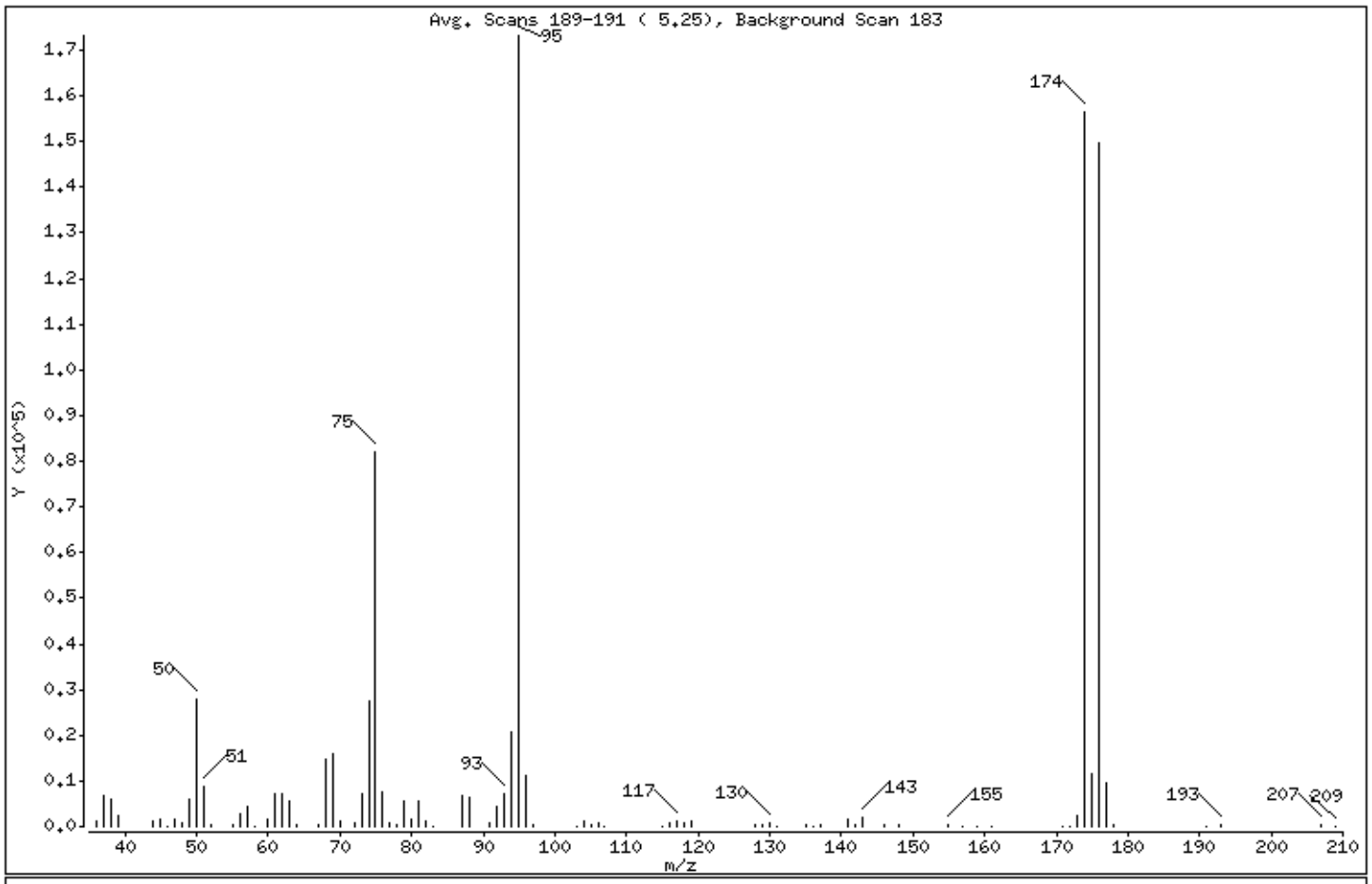
Sample Info: BFB FEB05-19;50NGBFB;1;3;;;;;;

Operator: MEC29284

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.17
75	30.00 - 60.00% of mass 95	47.26
96	5.00 - 9.00% of mass 95	6.52
173	Less than 2.00% of mass 174	1.39 (1.54)
174	50.00 - 100.00% of mass 95	90.35
175	5.00 - 9.00% of mass 174	6.71 (7.43)
176	95.00 - 101.00% of mass 174	86.37 (95.59)
177	5.00 - 9.00% of mass 176	5.60 (6.48)

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Target 3.5 esignature user ID: jkh09052

Data File: /chem2/HP19930.i/19apr08a.b/ia08t01.d

Date : 08-APR-2019 15:37

Client ID: BFB FEB05-19 Instrument: HP19930.i

Sample Info: BFB FEB05-19;50NGBFB;1;3;;;;;;

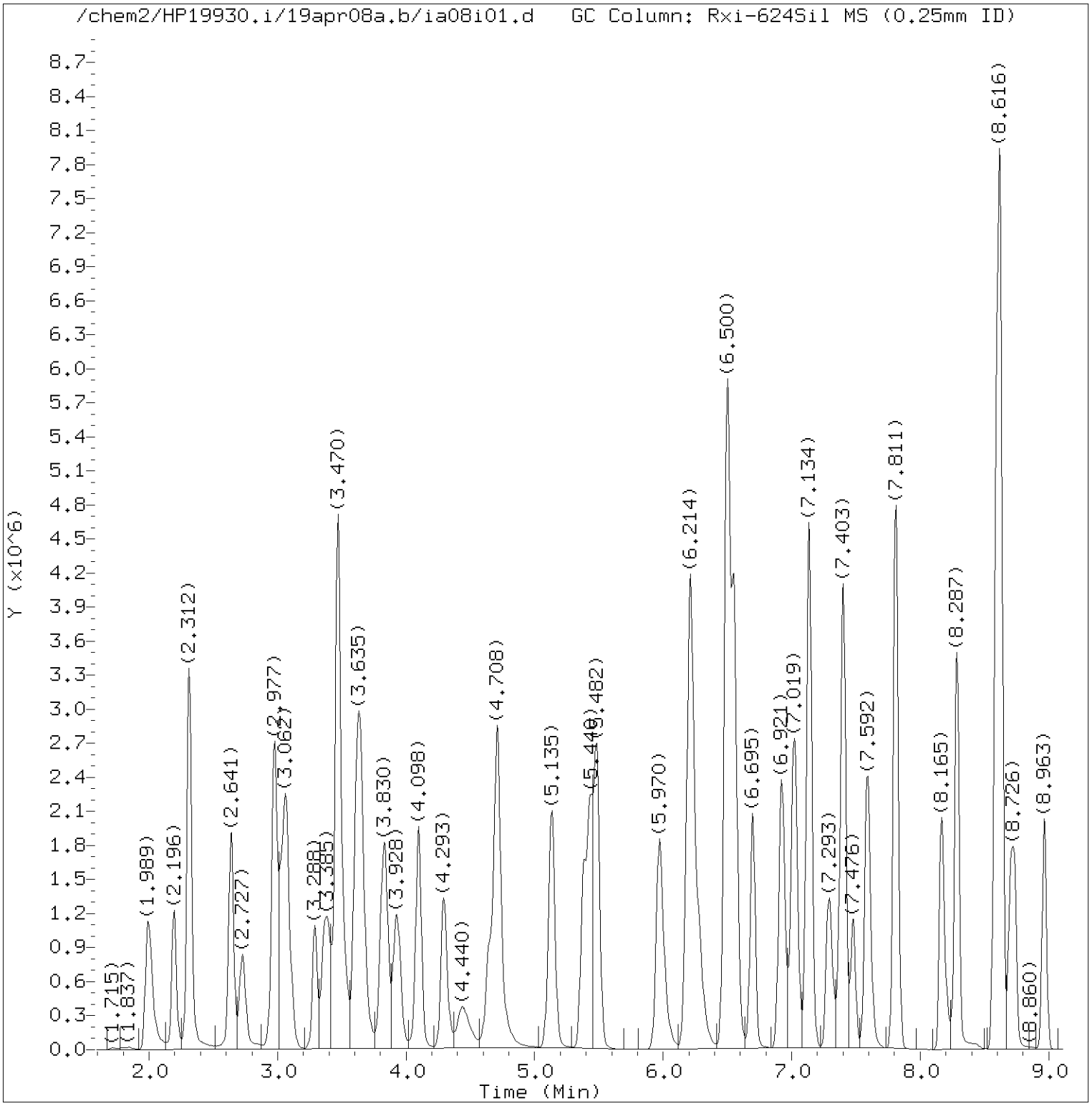
Operator: MEC29284

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: ia08t01.d
Spectrum: Avg. Scans 189-191 (5.25), Background Scan 183
Location of Maximum: 95.00
Number of points: 85

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	1317	67.00	559	95.00	173184	143.00	2120
37.00	6921	68.00	14790	96.00	11298	146.00	295
38.00	6126	69.00	16003	97.00	403	148.00	239
39.00	2572	70.00	1276	103.00	91	155.00	555
44.00	1259	72.00	717	104.00	1020	157.00	197
45.00	1412	73.00	7104	105.00	348	159.00	101
46.00	87	74.00	27488	106.00	731	161.00	138
47.00	1522	75.00	81840	107.00	92	171.00	196
48.00	798	76.00	7410	115.00	112	172.00	116
49.00	6104	77.00	859	116.00	901	173.00	2402
50.00	28000	78.00	593	117.00	1099	174.00	156480
51.00	8772	79.00	5609	118.00	736	175.00	11623
52.00	405	80.00	1659	119.00	1022	176.00	149568
55.00	468	81.00	5574	128.00	537	177.00	9697
56.00	2758	82.00	1055	129.00	302	178.00	382
57.00	4507	83.00	154	130.00	811	191.00	141
58.00	95	87.00	6788	131.00	102	193.00	239
60.00	1456	88.00	6266	135.00	399	207.00	369
61.00	7166	91.00	898	136.00	94	209.00	157
62.00	7050	92.00	4523	137.00	443		
63.00	5415	93.00	7174	141.00	1679		
64.00	454	94.00	20760	142.00	207		

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Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

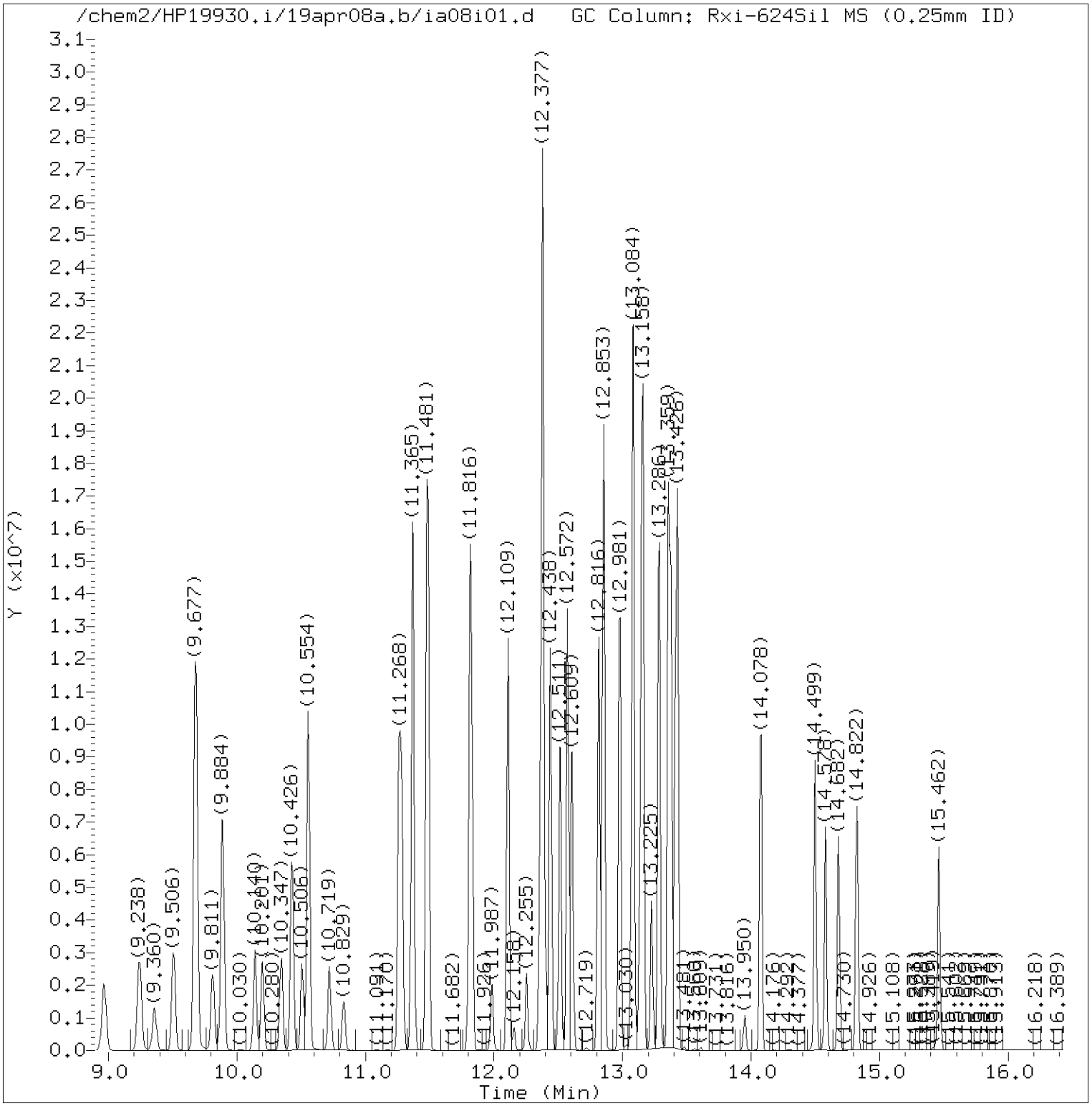
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.989	85	2702753	25.362
2) Chloromethane	(2)	2.196	50	1874759	23.751
5) Vinyl Chloride	(2)	2.312	62	1968192	24.526
6) 1,3-Butadiene	(2)	2.312	39	1478629M	22.278
7) Bromomethane	(2)	2.641	94	1867383	26.172
8) Chloroethane	(2)	2.727	64	1208062	25.914
9) Dichlorofluoromethane	(2)	2.977	67	3078902	25.561
10) Trichlorofluoromethane	(2)	3.032	101	3511073M	26.187
11) Ethyl ether	(2)	3.288	59	901892	25.546
12) Freon 123a	(2)	3.373	67	1523068MA	25.264
13) Acrolein	(1)	3.470	56	7916016	1366.385
15) 1,1-Dichloroethene	(2)	3.611	96	1177157	25.317
14) Acetone	(1)	3.641	43	1944148M	243.119
16) Freon 113	(2)	3.647	101	1459682	25.979
17) Methyl Iodide	(2)	3.818	142	2563816	25.706
18) Carbon Disulfide	(2)	3.928	76	3340647	24.535
21) Methyl Acetate	(1)	4.074	43	523698	24.784
22) Allyl Chloride	(2)	4.098	41	1791923	25.053
23) Methylene Chloride	(2)	4.293	84	1206522	25.366
26)*t-Butyl Alcohol-d10	(1)	4.312	65	136489M	50.000
28) t-Butyl Alcohol	(1)	4.440	59	1613359	486.751
29) Acrylonitrile	(1)	4.641	53	1275715	133.368
30) Methyl Tertiary Butyl Ether	(2)	4.702	73	3004451	24.704
31) trans-1,2-Dichloroethene	(2)	4.708	96	1274557	24.492
32) n-Hexane	(2)	5.135	57	1924019	26.271
33) 1,1-Dichloroethane	(2)	5.379	63	2118415M	25.027
34) di-Isopropyl Ether	(2)	5.434	45	3647207	25.678
35) 2-Chloro-1,3-Butadiene	(2)	5.482	53	1984350	26.108
37) Ethyl t-butyl ether	(2)	5.970	59	3427208	24.305
40) 1,2-Dichloroethene (Total)	(2)		96	2734425	49.675
38) 2-Butanone	(1)	6.189	43	3490340	268.714
39) cis-1,2-Dichloroethene	(2)	6.214	96	1459868	25.182
41) 2,2-Dichloropropane	(2)	6.226	77	1994187	25.311
42) Propionitrile	(1)	6.281	54	1774736	508.887
45) Methacrylonitrile	(1)	6.500	67	3535845	275.492
47) Bromochloromethane	(2)	6.549	128	712166	24.961
48) Tetrahydrofuran	(1)	6.561	71	1079049	265.668
49) Chloroform	(2)	6.695	83	2309445	25.038

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	469936	9.959
50)$Dibromofluoromethane	(2)	6.915	111	482047	9.994
51) 1,1,1-Trichloroethane	(2)	6.927	97	2269796	25.456
52) Cyclohexane	(2)	7.019	56	2271119	25.903
52) Cyclohexane	(2)	7.019	84	2141825M	25.893
52) Cyclohexane	(2)	7.019	69	728462M	25.301
54) Carbon Tetrachloride	(2)	7.134	117	2180926	25.903
55) 1,1-Dichloropropene	(2)	7.134	75	1770152	25.646
56) Isobutyl Alcohol	(1)	7.293	41	1260907	1231.683
57)$1,2-Dichloroethane-d4	(2)	7.372	102	90292	9.929
57)$1,2-Dichloroethane-d4	(2)	7.372	65	409918	10.057
57)$1,2-Dichloroethane-d4	(2)	7.378	104	56189	9.787
58) Benzene	(2)	7.403	78	5193807	25.591
59) 1,2-Dichloroethane	(2)	7.482	62	1316258	24.177
59) 1,2-Dichloroethane	(2)	7.476	98	130274	25.653
60) t-Amyl methyl ether	(2)	7.586	73	3319556	24.408
63)*Fluorobenzene	(2)	7.805	96	1828378	10.000
62) n-Heptane	(2)	7.811	43	2012199	26.758
65) n-Butanol	(1)	8.165	56	2244233	2627.151
67) Trichloroethene	(2)	8.287	95	1459234	25.697
69) Methylcyclohexane	(2)	8.591	83	2792499	27.540
70) 1,2-Dichloropropane	(2)	8.622	63	1224526	26.058
71) Methyl Methacrylate	(1)	8.701	69	690524	28.111
72) 1,4-Dioxane	(1)	8.707	88	249520M	1188.053
72) 1,4-Dioxane	(1)	8.701	58	152106M	1215.337
73) Dibromomethane	(2)	8.732	93	674465	25.532
74) Bromodichloromethane	(2)	8.963	83	1735361	26.608
76) 2-Nitropropane	(1)	9.238	41	2346708	287.113
80) cis-1,3-Dichloropropene	(2)	9.506	75	1963353	26.537
81) 4-Methyl-2-Pentanone	(1)	9.677	43	9428018	286.717
82)$Toluene-d8	(3)	9.811	98	1796518	9.776
82)$Toluene-d8	(3)	9.811	100	1145662	9.721
83) Toluene	(3)	9.884	92	3527231	25.530
84) trans-1,3-Dichloropropene	(3)	10.140	75	1694851	26.025
85) 1,3-Dichloropropene (total)	(3)		75	3658204	52.562
86) Ethyl Methacrylate	(3)	10.201	69	1482797	26.961
88) 1,1,2-Trichloroethane	(3)	10.347	97	972479	25.472
89) Tetrachloroethene	(3)	10.426	166	1865969	25.522

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	1560738	25.399
91) 2-Hexanone	(1)	10.554	43	6639006	284.729
93) Dibromochloromethane	(3)	10.719	129	1397256	26.927
95) 1,2-Dibromoethane	(3)	10.829	107	1005470	25.861
97)*Chlorobenzene-d5	(3)	11.256	117	1498173	10.000
96) 1-Chlorohexane	(3)	11.262	91	2113948	25.413
98) Chlorobenzene	(3)	11.286	112	4044333	25.500
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	1609784	26.910
100) Ethylbenzene	(3)	11.371	91	7272177	26.210
101) m+p-Xylene	(3)	11.481	106	5842268	52.873
105) Xylene (Total)	(3)		106	8674233	79.426
104) o-Xylene	(3)	11.810	106	2831965	26.553
106) Styrene	(3)	11.822	104	4647296	27.485
107) Bromoform	(3)	11.987	173	912458	28.591
108) Isopropylbenzene	(3)	12.109	105	7516284	26.090
111)$4-Bromofluorobenzene	(3)	12.255	95	670496	9.737
111)$4-Bromofluorobenzene	(3)	12.255	174	652625	9.901
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	1261135	26.443
114) Bromobenzene	(4)	12.371	156	1938694	26.711
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	3638712	315.531
116) 1,2,3-Trichloropropane	(4)	12.402	110	365225	25.806
117) n-Propylbenzene	(4)	12.438	91	8444345	26.013
119) 2-Chlorotoluene	(4)	12.517	126	1799212	25.775
121) 1,3,5-Trimethylbenzene	(4)	12.572	105	6440046	26.857
122) 4-Chlorotoluene	(4)	12.609	126	1811113	25.821
125) tert-Butylbenzene	(4)	12.816	134	1464844M	26.808
126) Pentachloroethane	(4)	12.847	167	1338909	27.824
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	6638877	27.171
128) sec-Butylbenzene	(4)	12.981	105	8411065	27.098
131) 1,3-Dichlorobenzene	(4)	13.078	146	3791003	27.288
132) p-Isopropyltoluene	(4)	13.084	119	7691551	28.238
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	835590	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	3683670	26.533
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	3070899	26.895
136) Benzyl Chloride	(4)	13.225	126	636102	28.307
138) n-Butylbenzene	(4)	13.377	92	3640985	29.388
139) 1,2-Dichlorobenzene	(4)	13.408	146	3378596	26.642
143) 1,2-Dibromo-3-chloropropane	(1)	13.950	155	218788	29.265

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

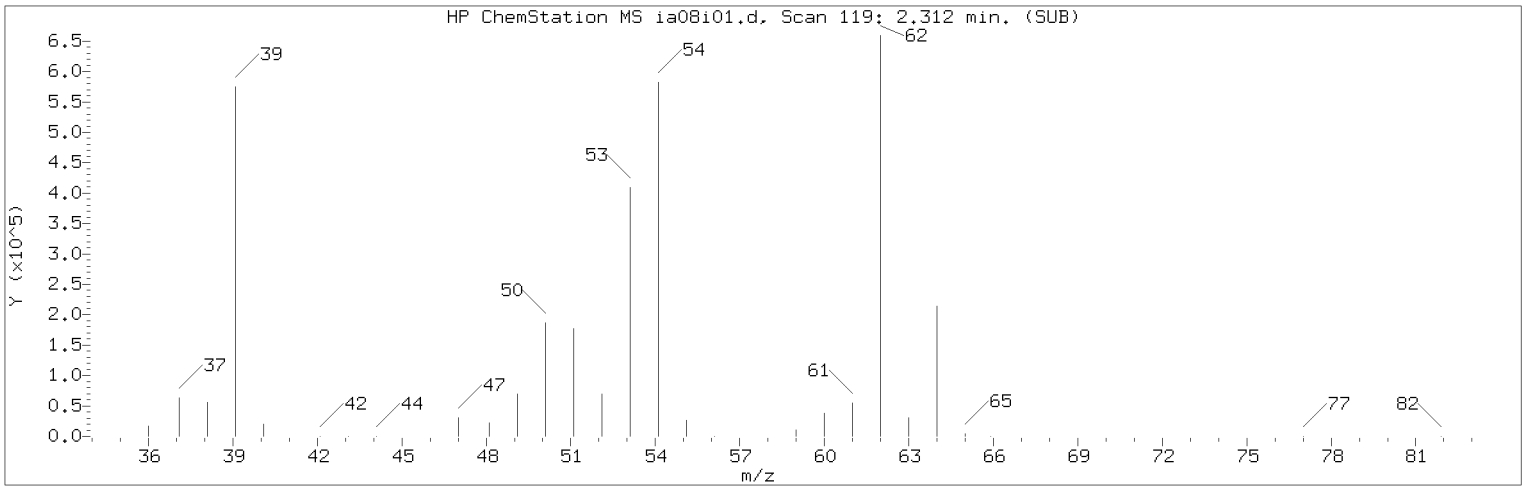
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

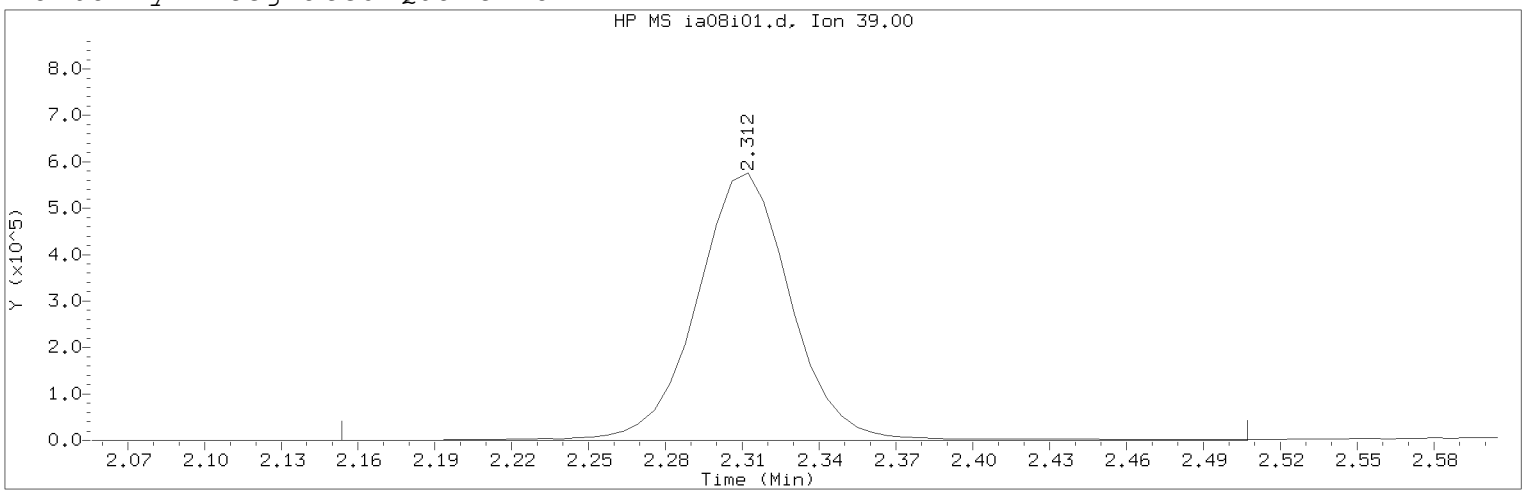
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	2890396	28.534
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	2506950	28.232
146) Hexachlorobutadiene	(4)	14.578	225	1120396	30.879
147) Naphthalene	(4)	14.682	128	4534780	25.501
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	2167375	27.108

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

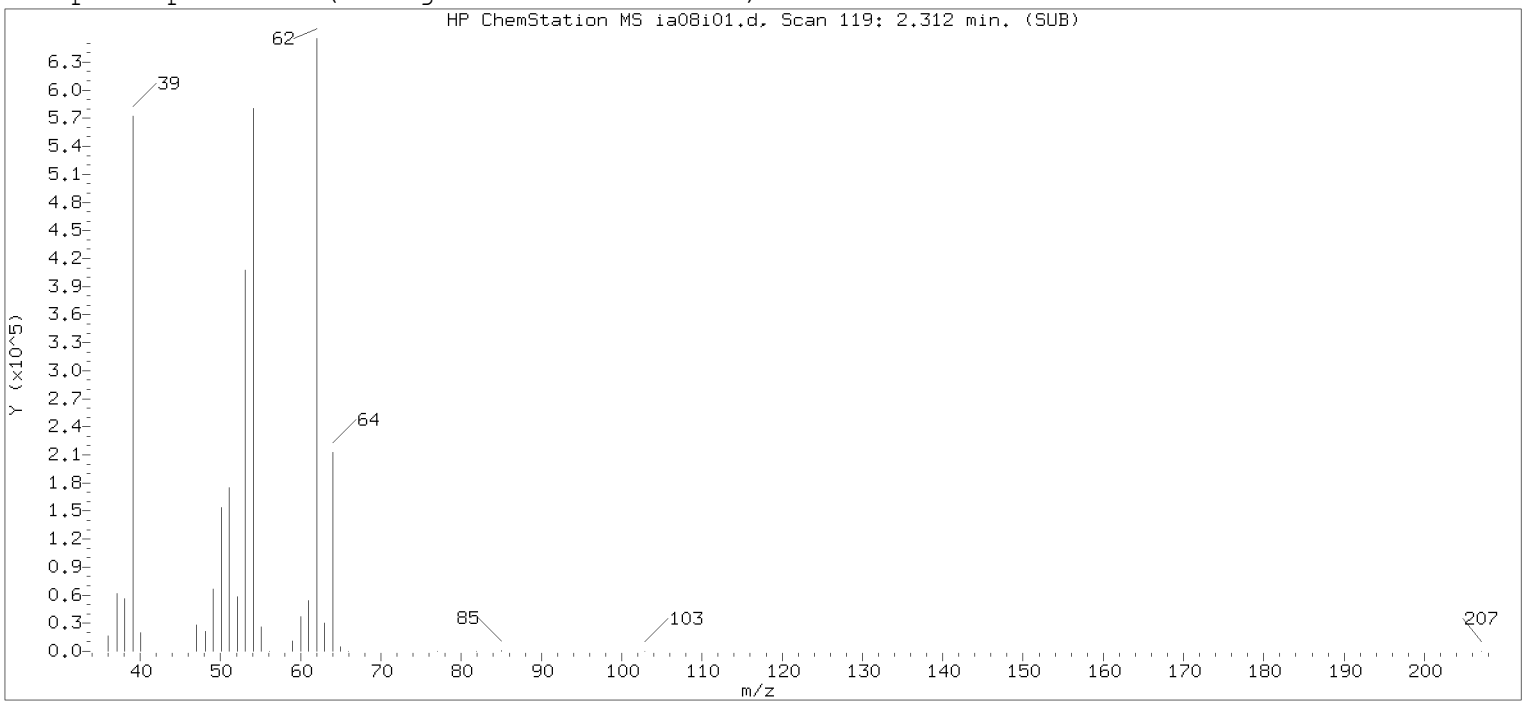
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area (flag) : 1478629M
On-Column Amount (ng) : 22.2784
Integration start scan : 92 Integration stop scan: 150
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

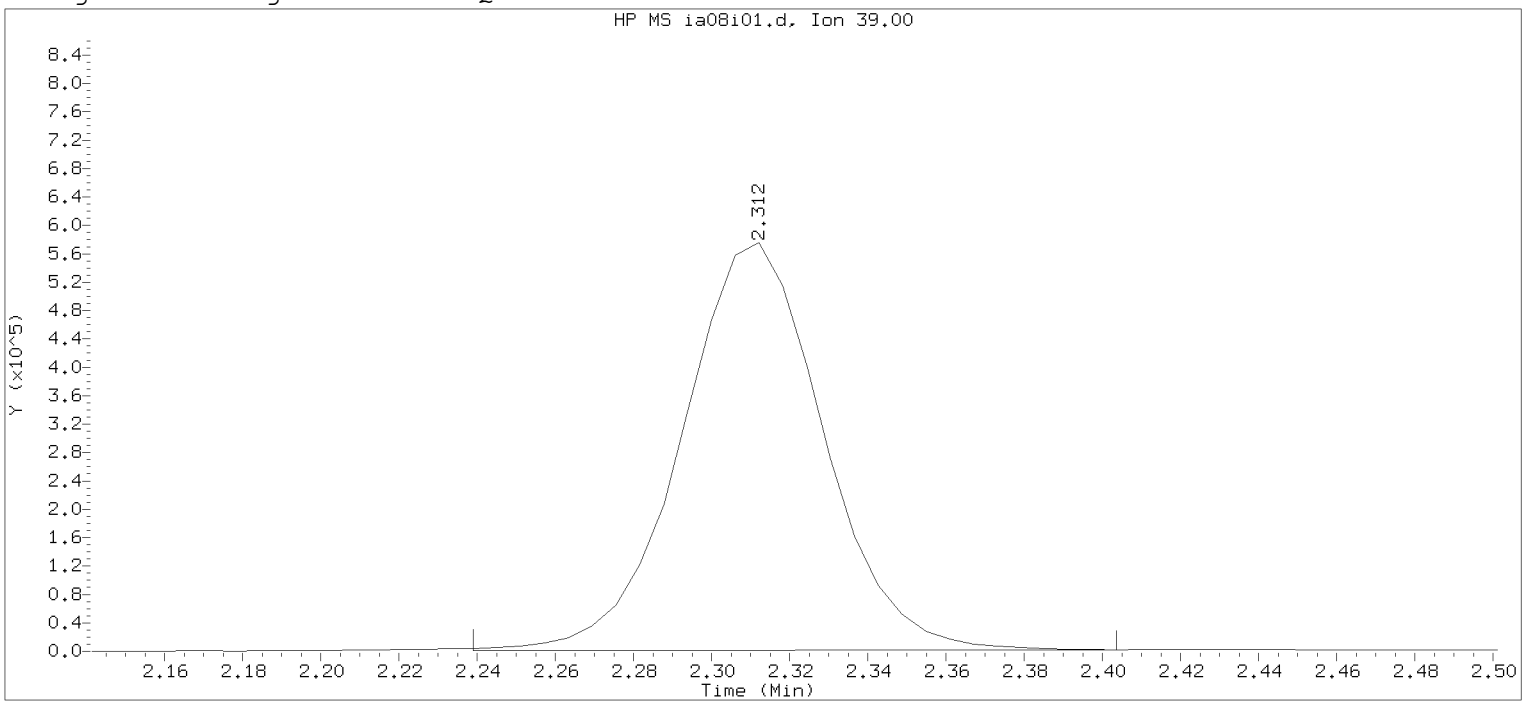
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

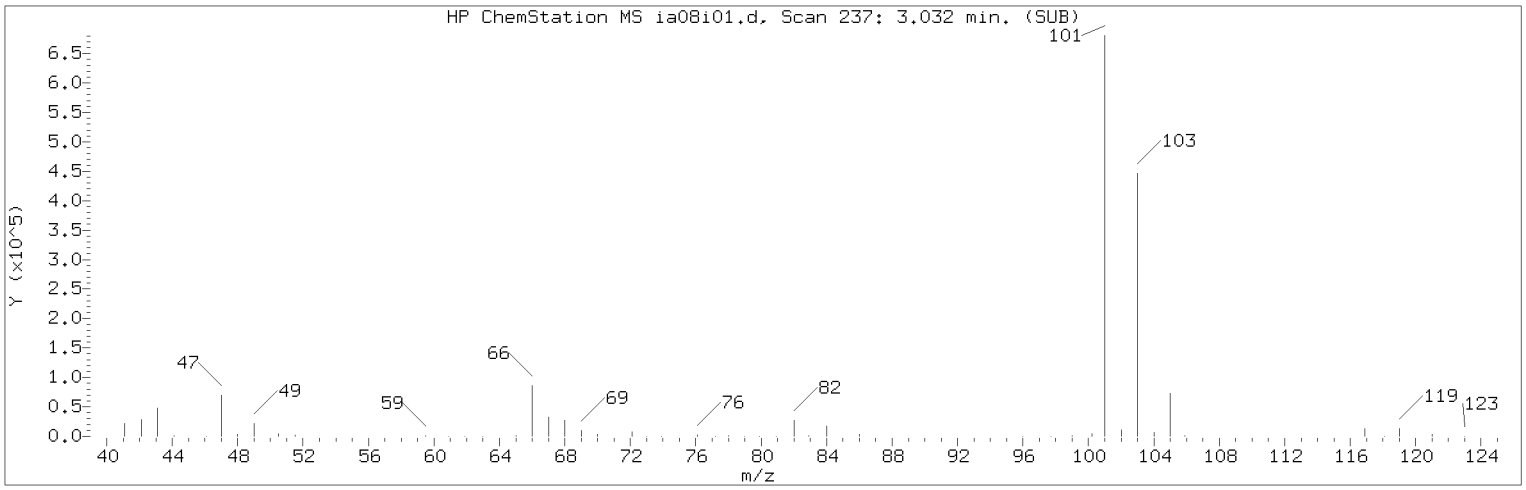
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

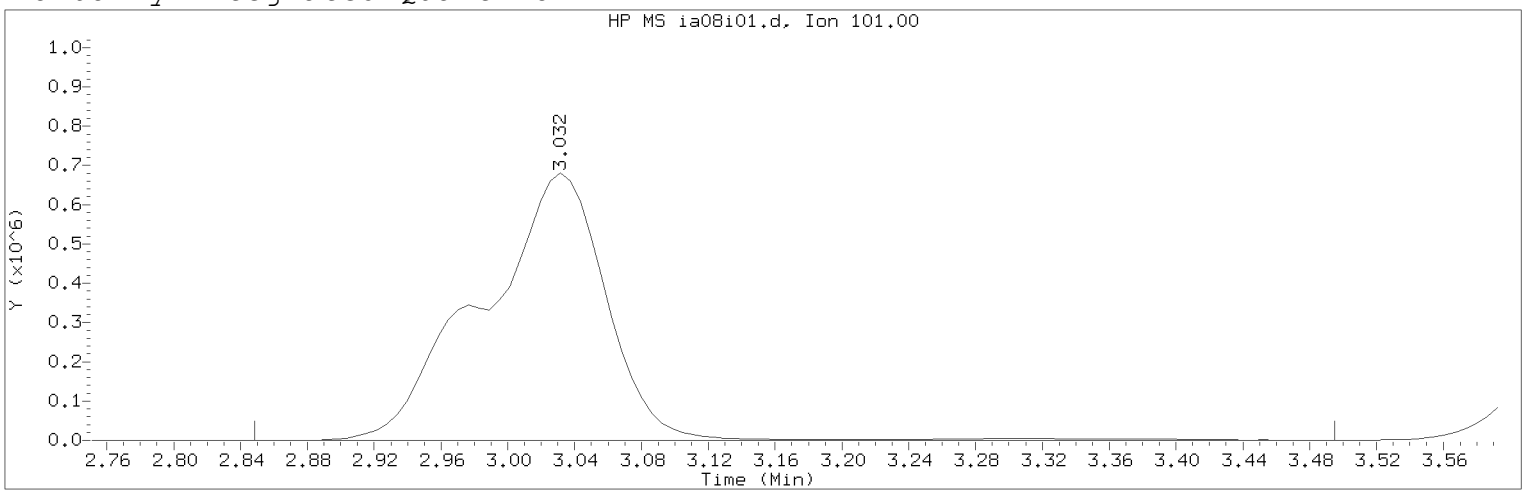
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area : 1443188
On-column Amount (ng) : 23.9537
Integration start scan : 106 Integration stop scan: 133
Y at integration start : 868 Y at integration end: 2212

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

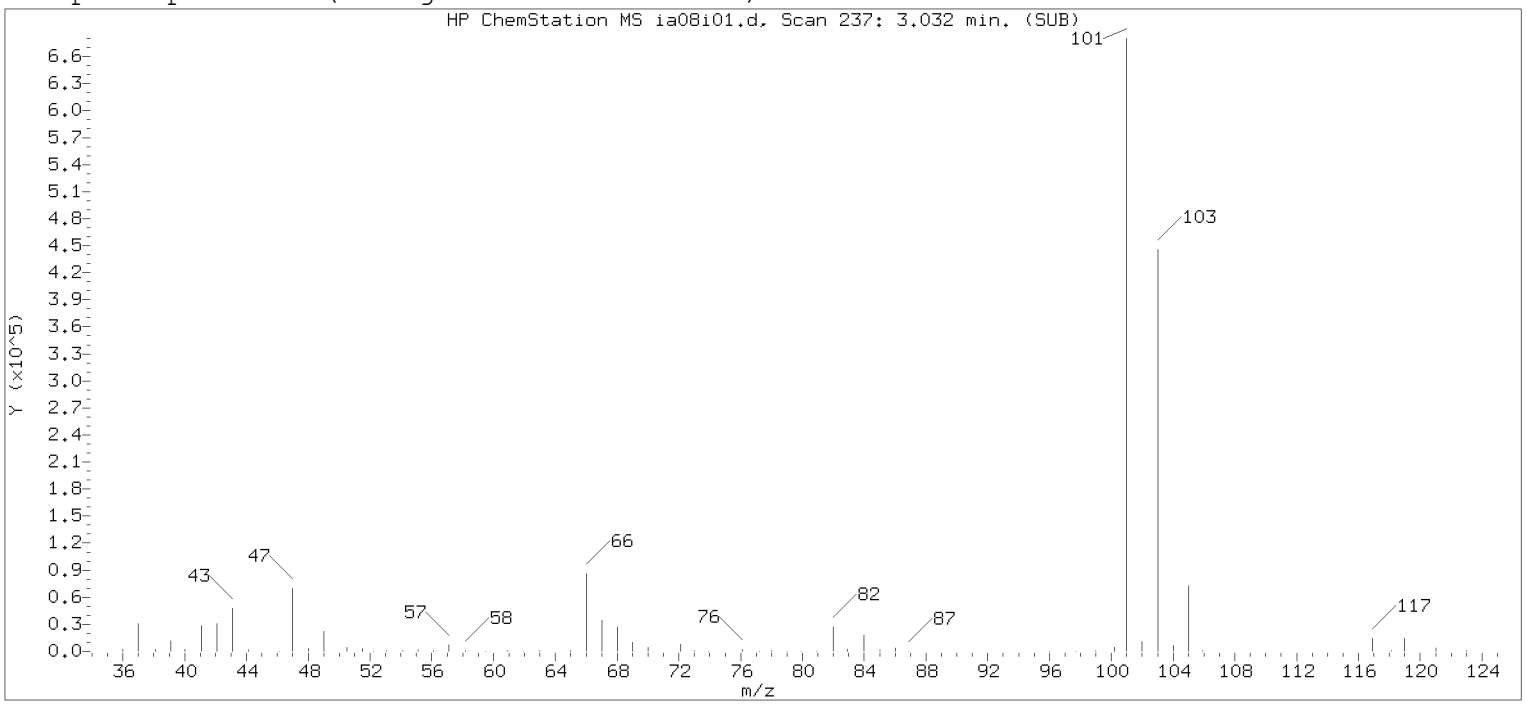
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 237
Retention Time (minutes): 3.032
Quant Ion : 101.00
Area (flag) : 3511073M
On-Column Amount (ng) : 26.1873
Integration start scan : 206 Integration stop scan: 312
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

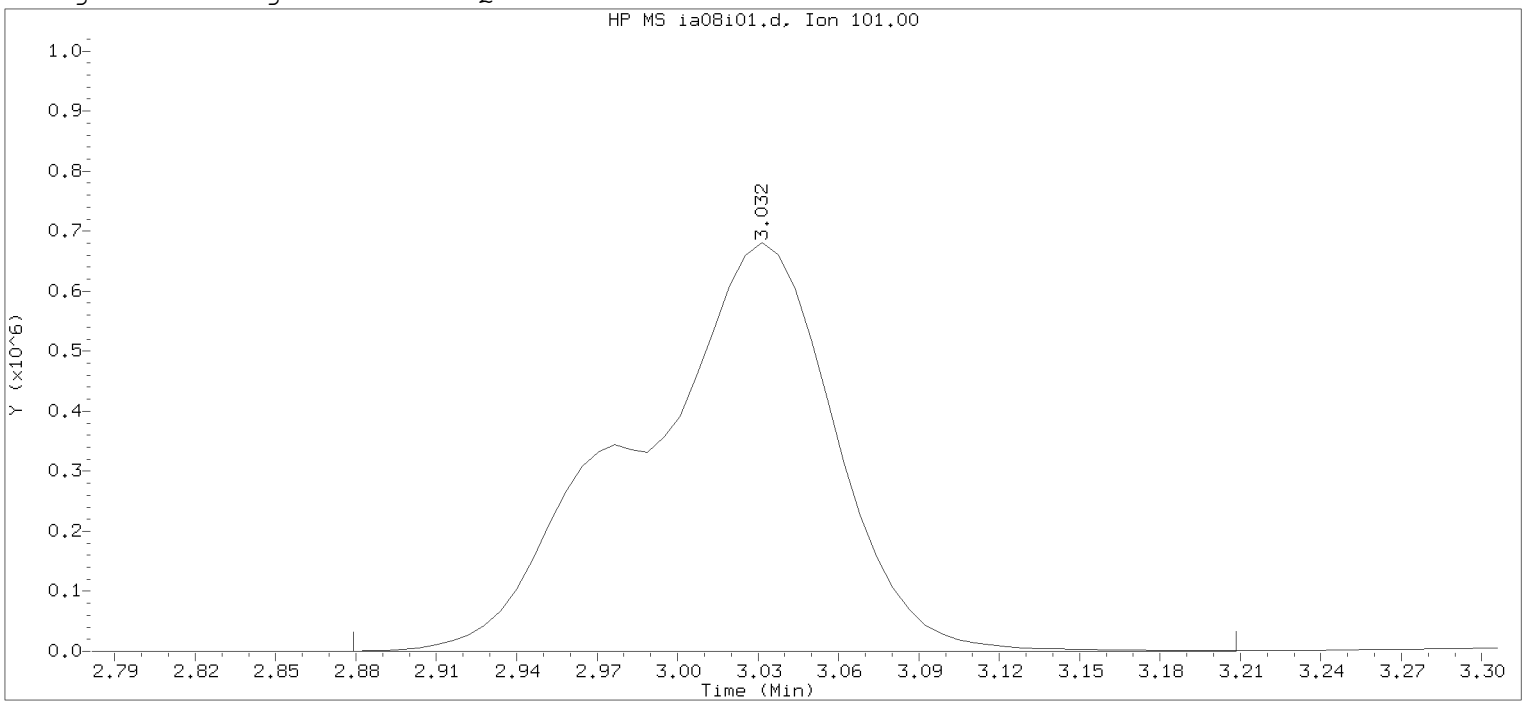
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

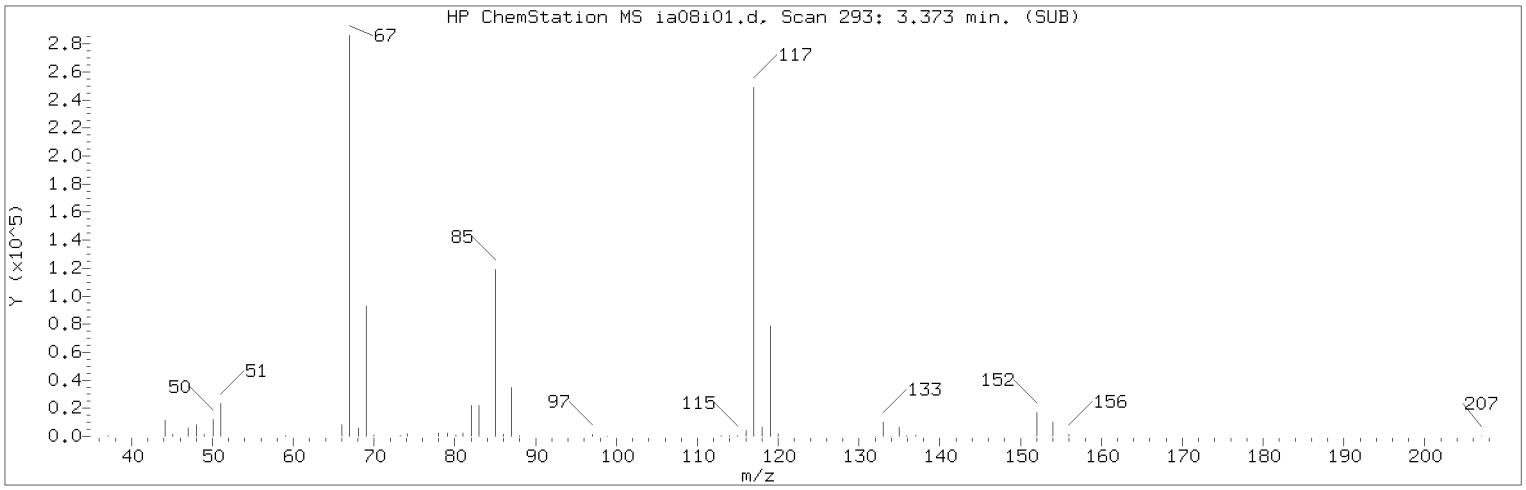
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

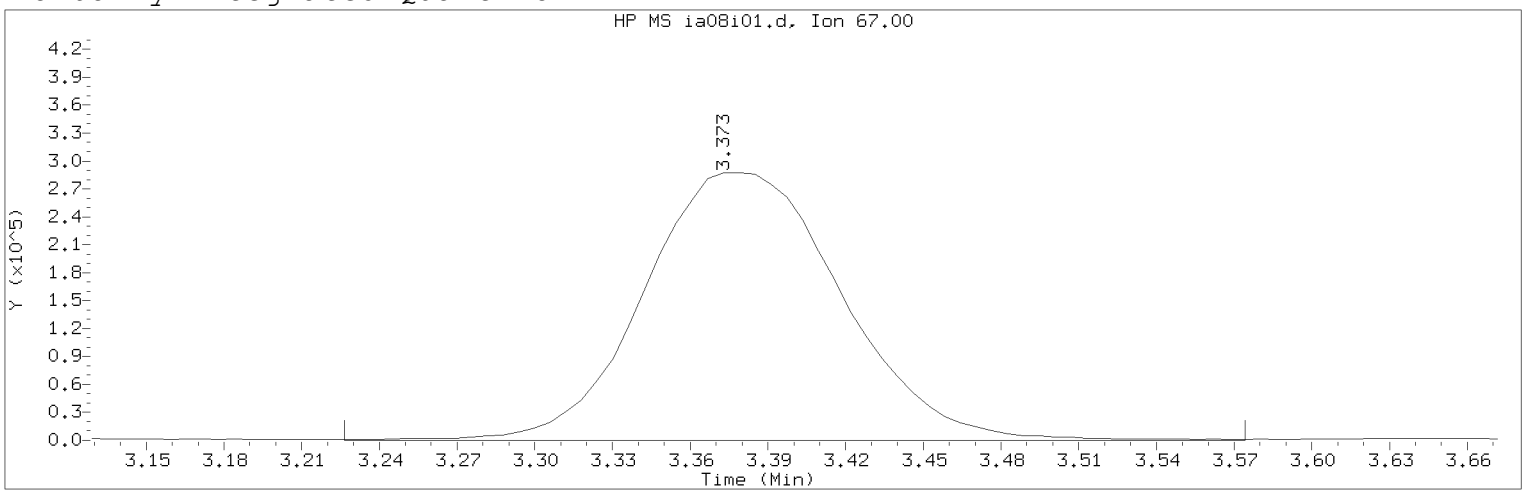
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 237
Retention Time (minutes): 3.032
Quant Ion : 101.00
Area : 3469295
On-column Amount (ng) : 25.3242
Integration start scan : 211 Integration stop scan: 265
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

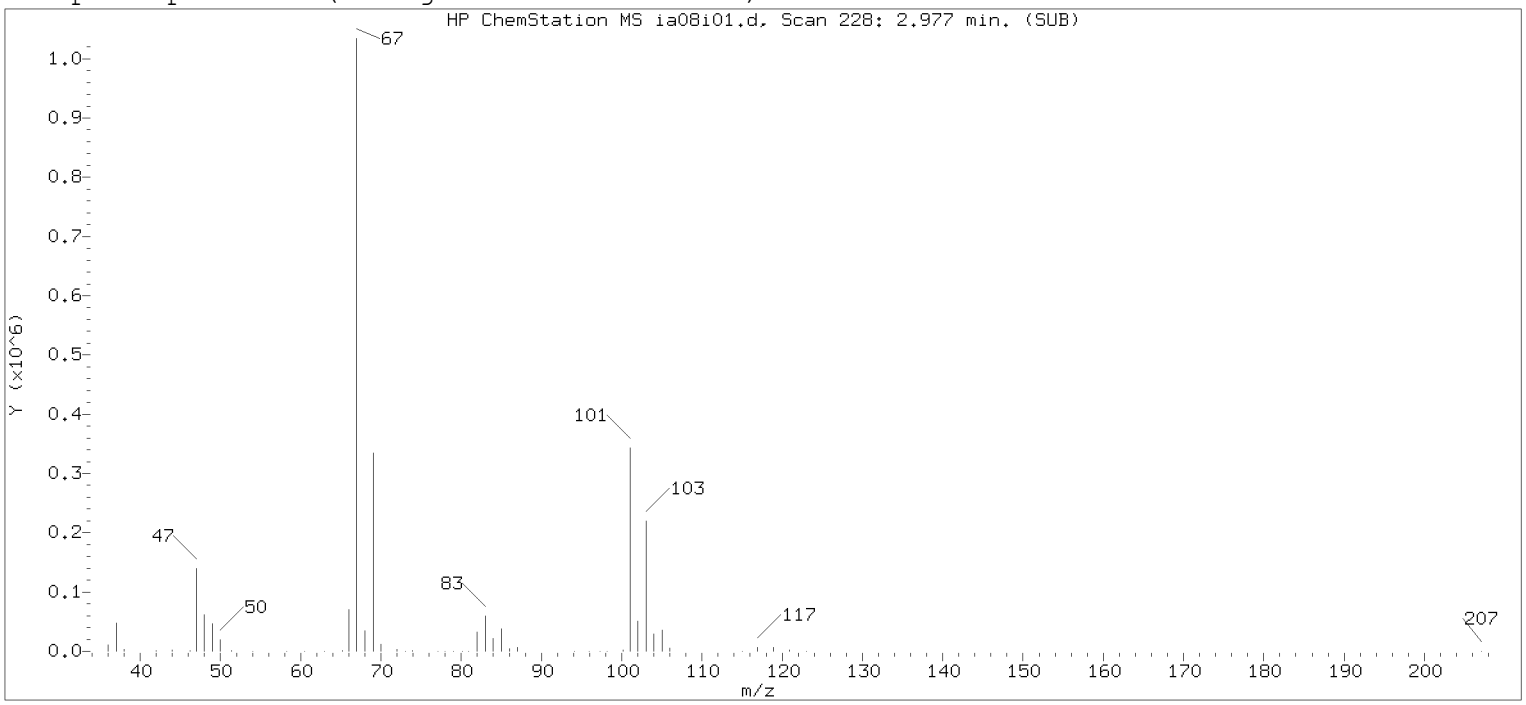
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 293
Retention Time (minutes): 3.373
Quant Ion : 67.00
Area (flag) : 1523068MA
On-Column Amount (ng) : 25.2639
Integration start scan : 268 Integration stop scan: 325
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

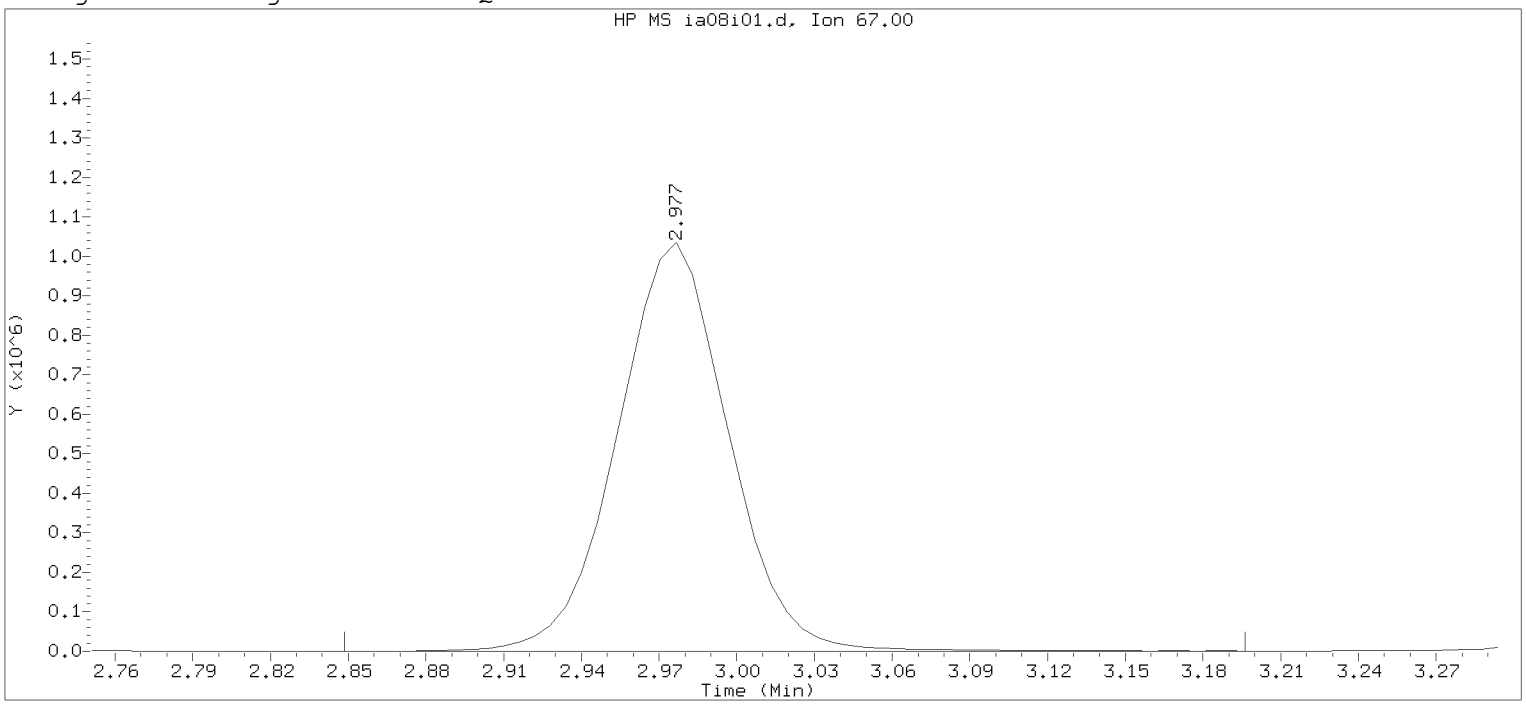
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

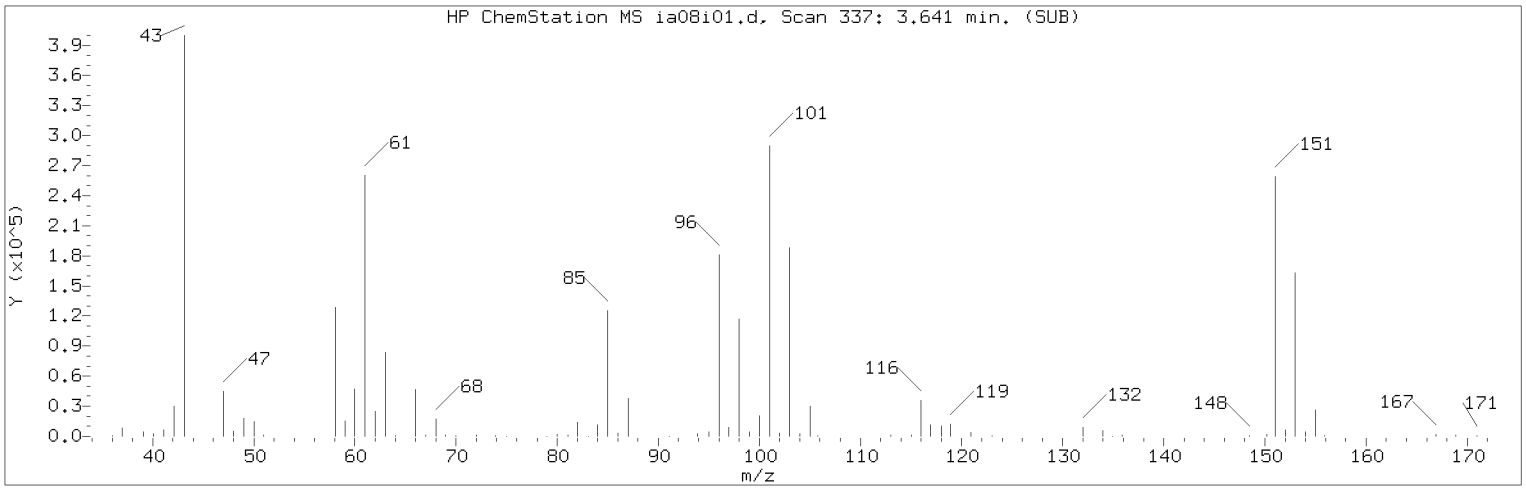
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

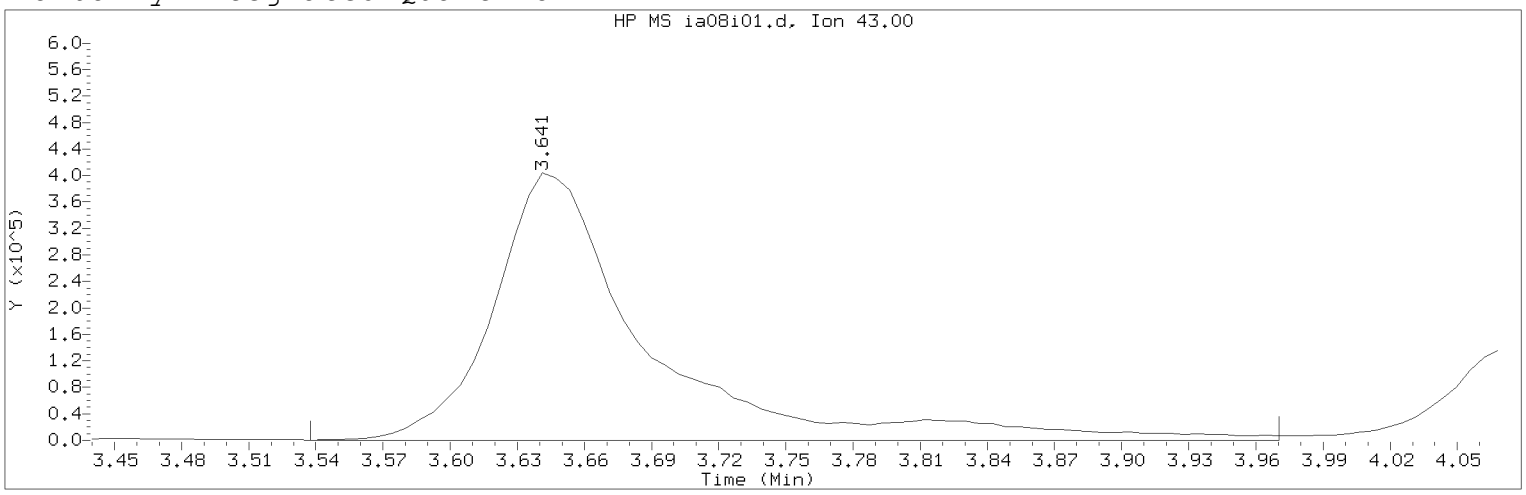
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area : 3077841
On-column Amount (ng) : 25.3056
Integration start scan : 206 Integration stop scan: 263
Y at integration start : 0 Y at integration end: 315

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

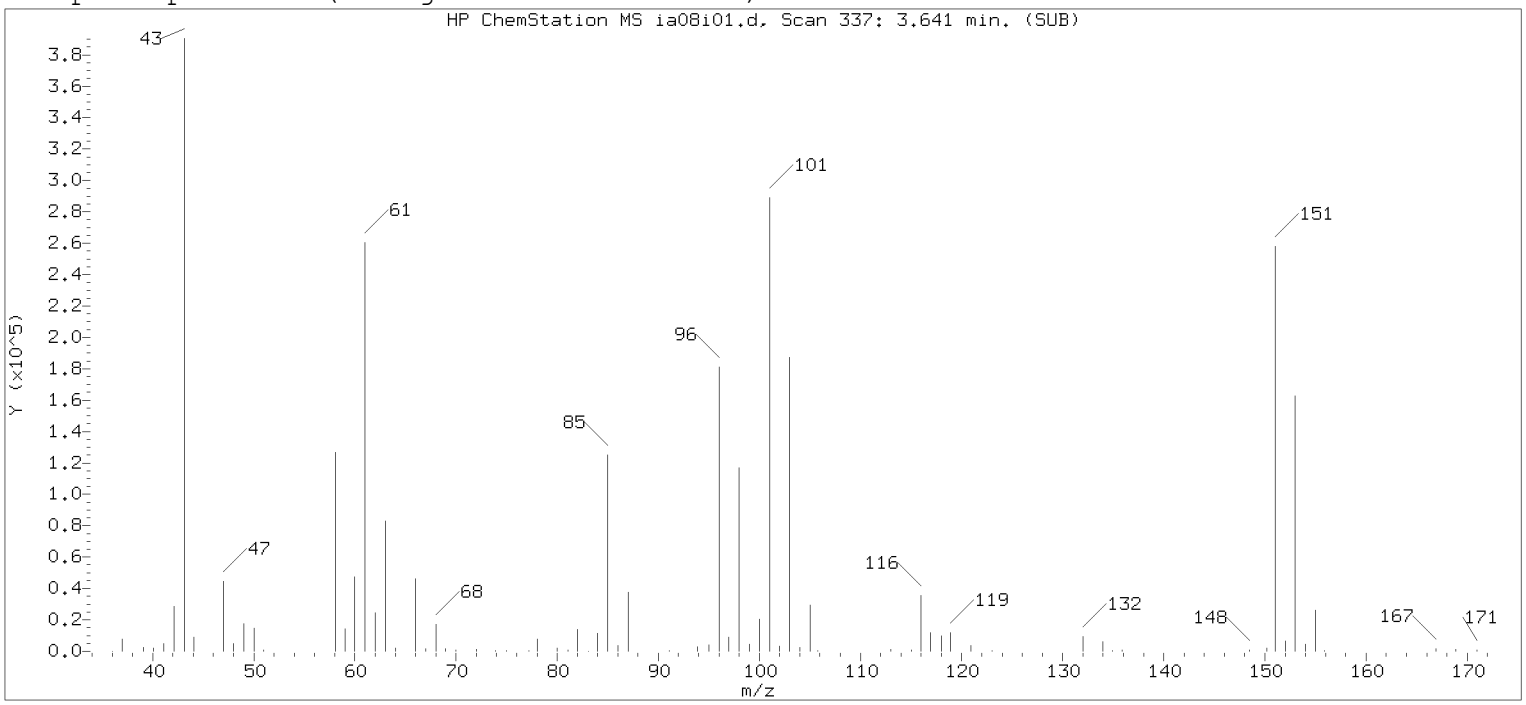
Compound Number : 14
Compound Name : Acetone
Scan Number : 337
Retention Time (minutes): 3.641
Quant Ion : 43.00
Area (flag) : 1944148M
On-Column Amount (ng) : 243.1190
Integration start scan : 319 Integration stop scan: 390
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

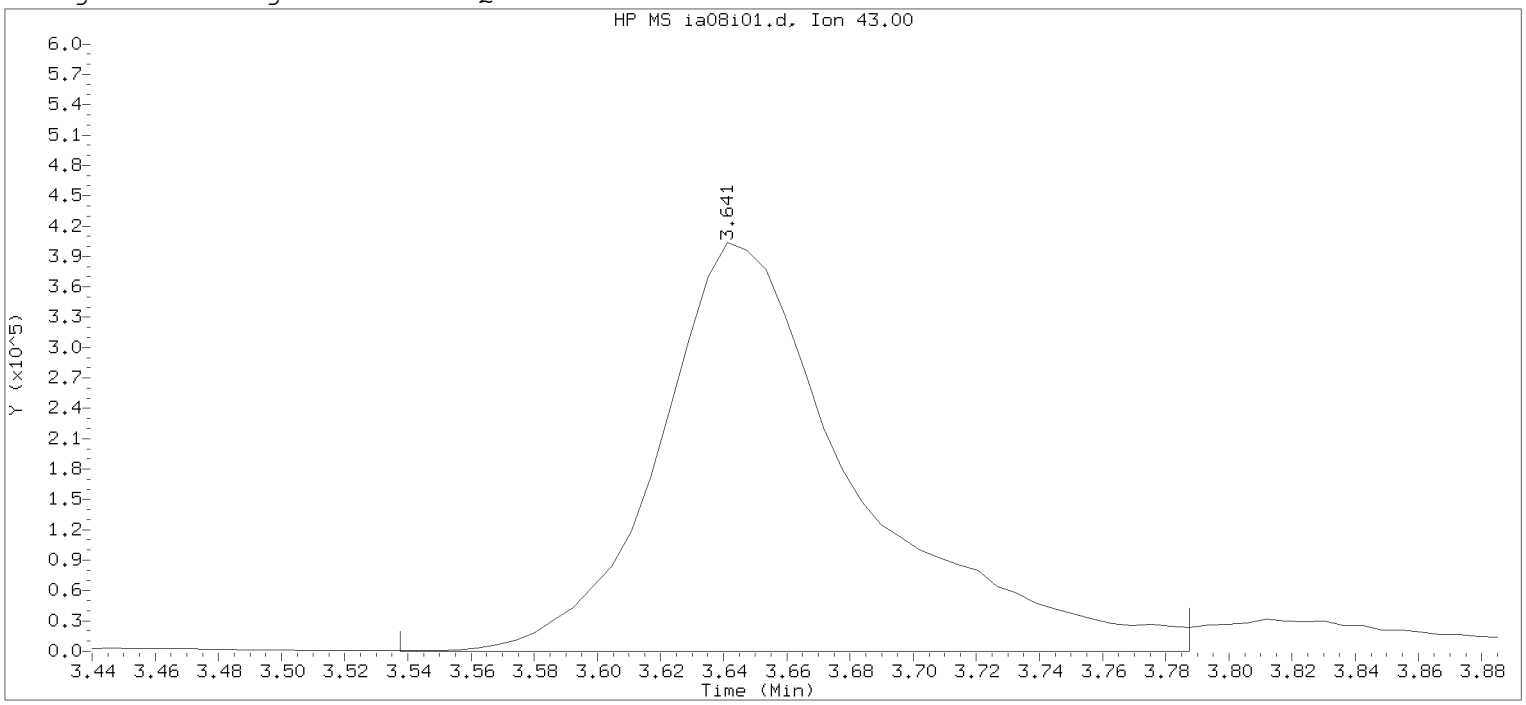
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

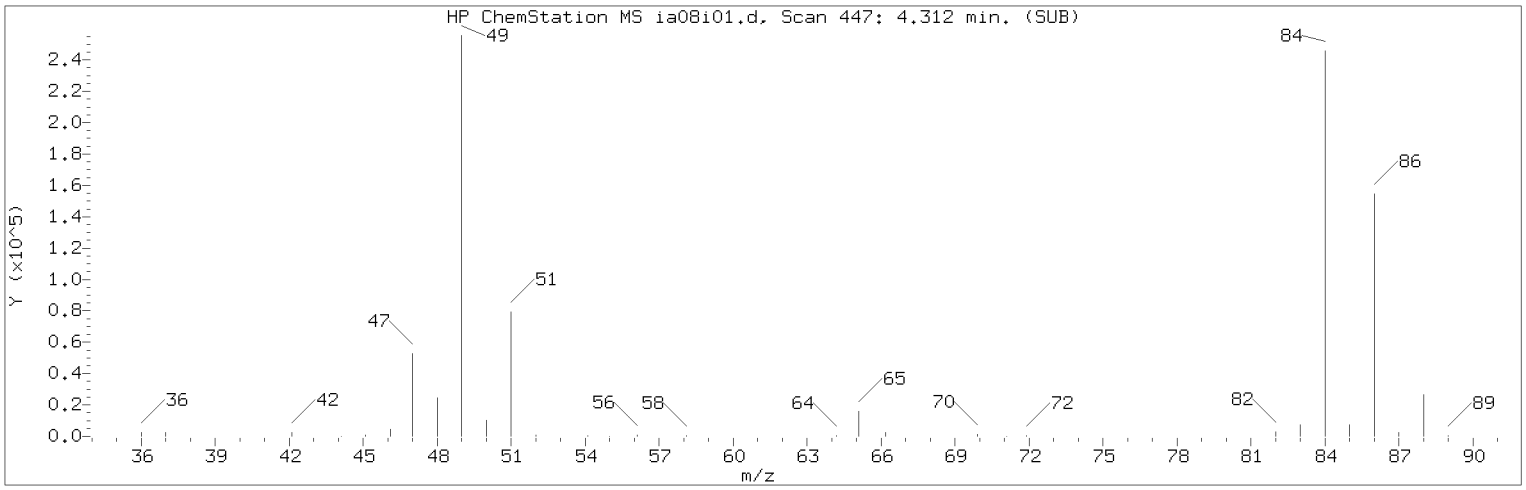
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

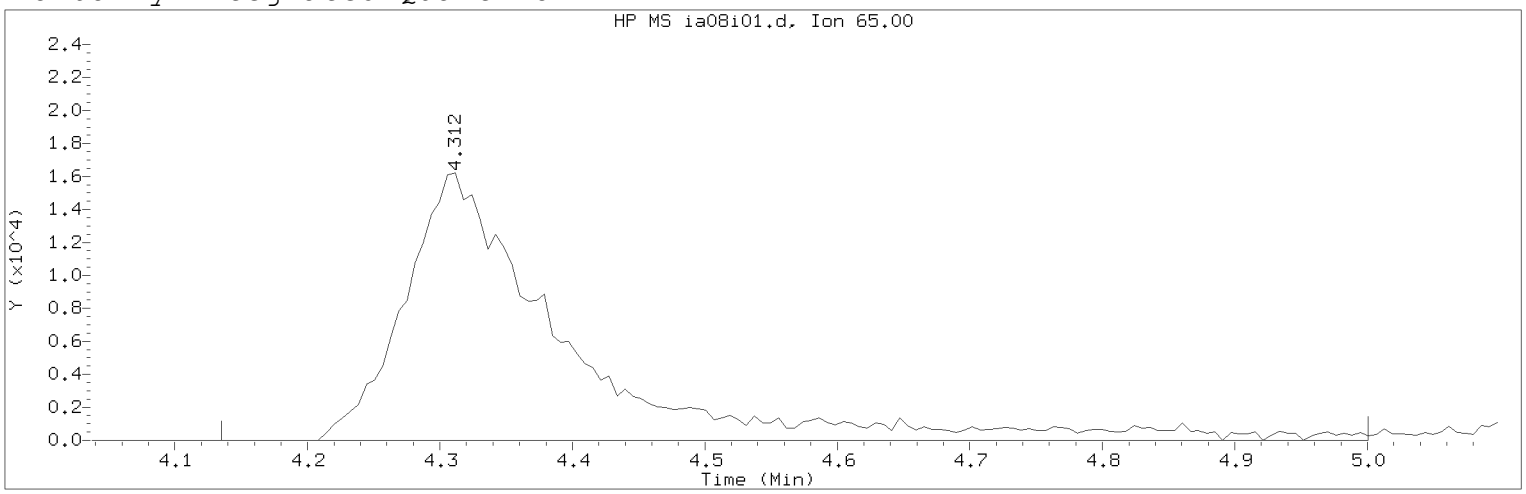
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 337		
Retention Time (minutes)	: 3.641		
Quant Ion	: 43.00		
Area	: 1754779		
On-column Amount (ng)	: 232.6087		
Integration start scan	: 319	Integration stop scan:	360
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

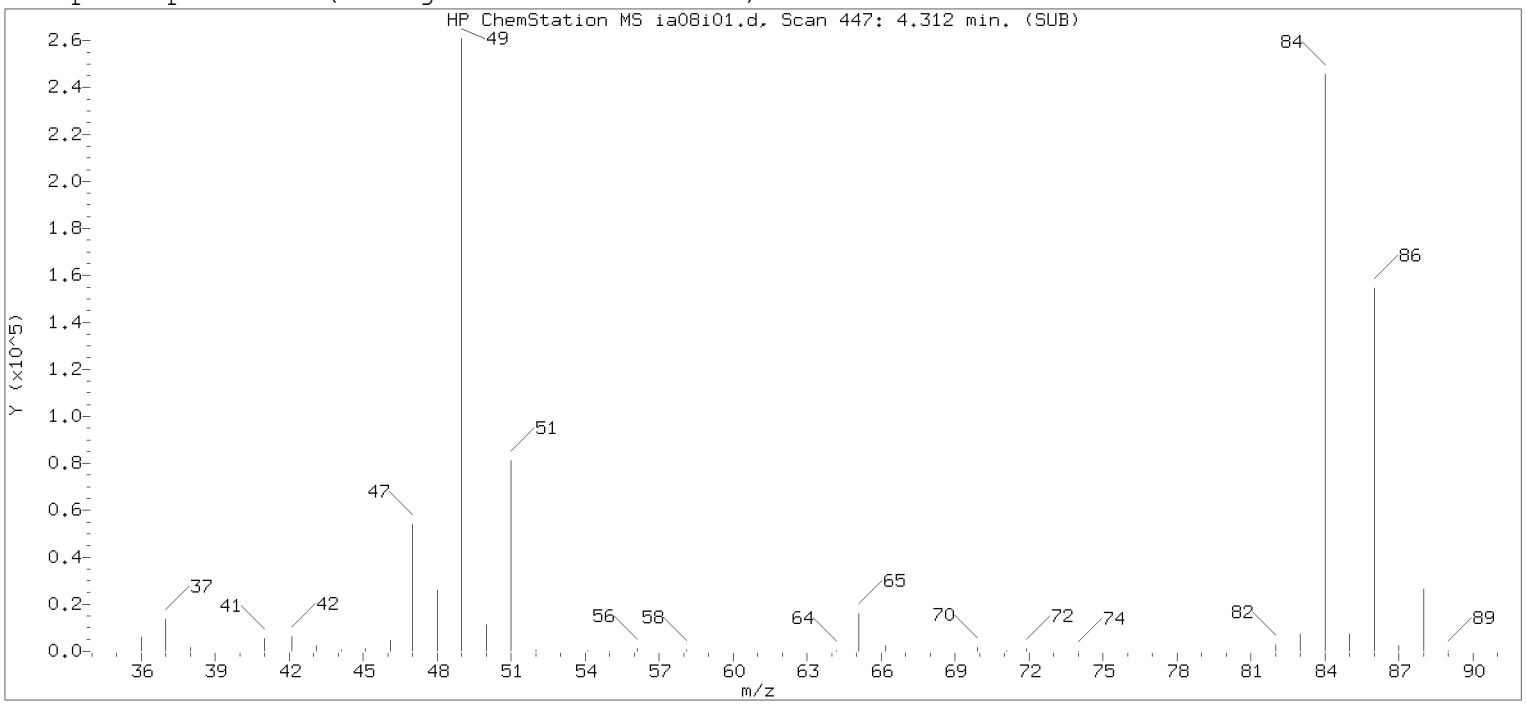
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 447
Retention Time (minutes): 4.312
Quant Ion : 65.00
Area (flag) : 136489M
On-Column Amount (ng) : 50.0000
Integration start scan : 417 Integration stop scan: 559
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

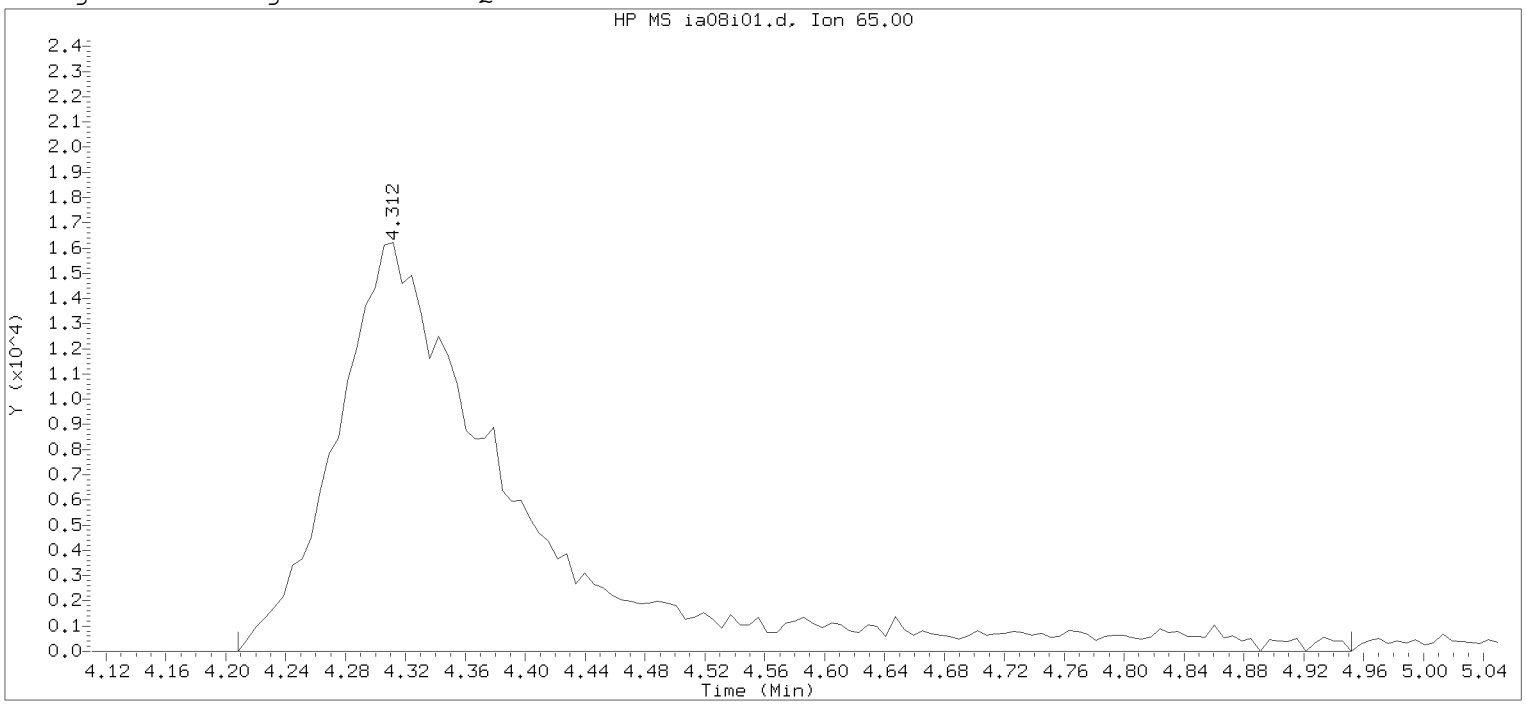
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

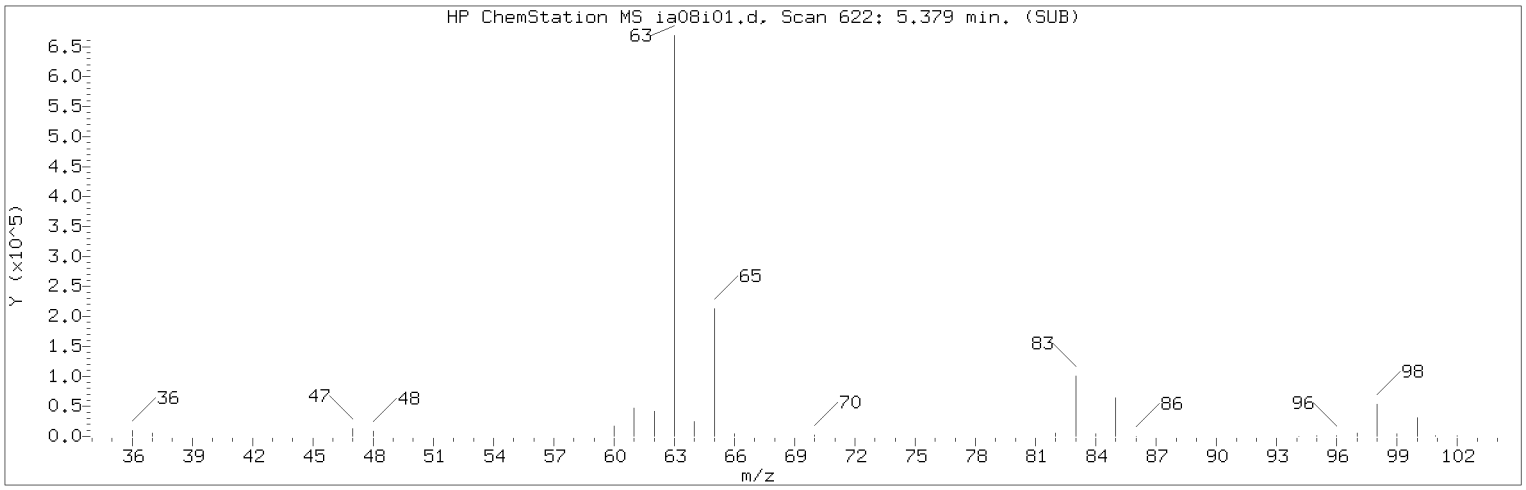
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

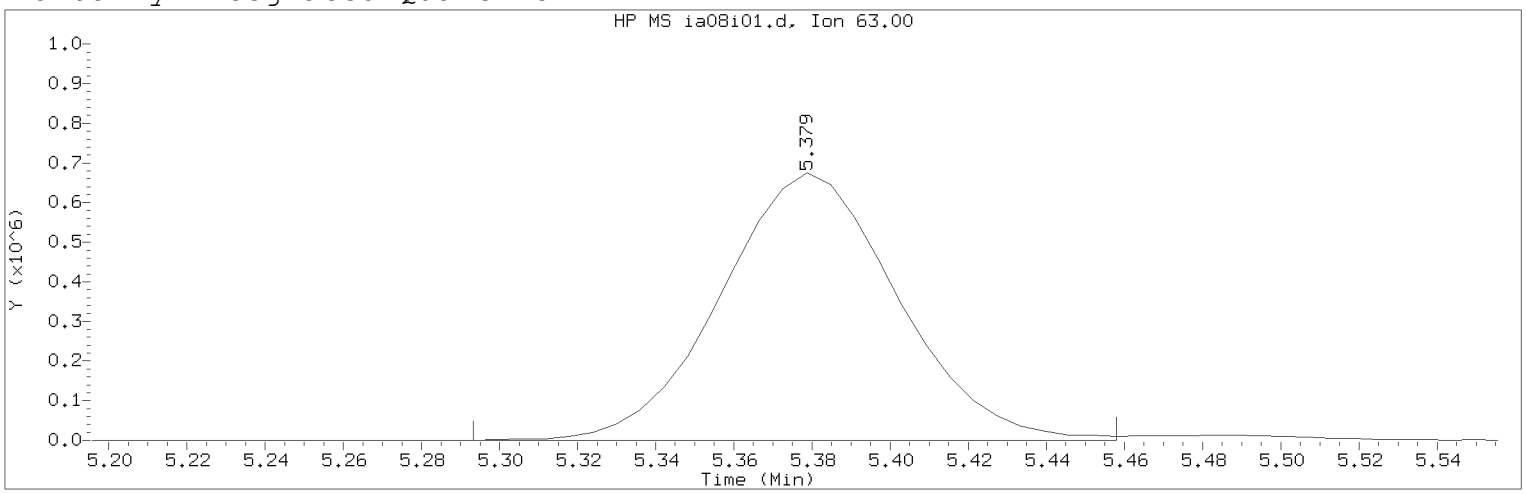
Compound Number	: 26		
Compound Name	: t-Butyl Alcohol-d10		
Scan Number	: 447		
Retention Time (minutes)	: 4.312		
Quant Ion	: 65.00		
Area	: 135396		
On-column Amount (ng)	: 50.0000		
Integration start scan	: 429	Integration stop scan:	551
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

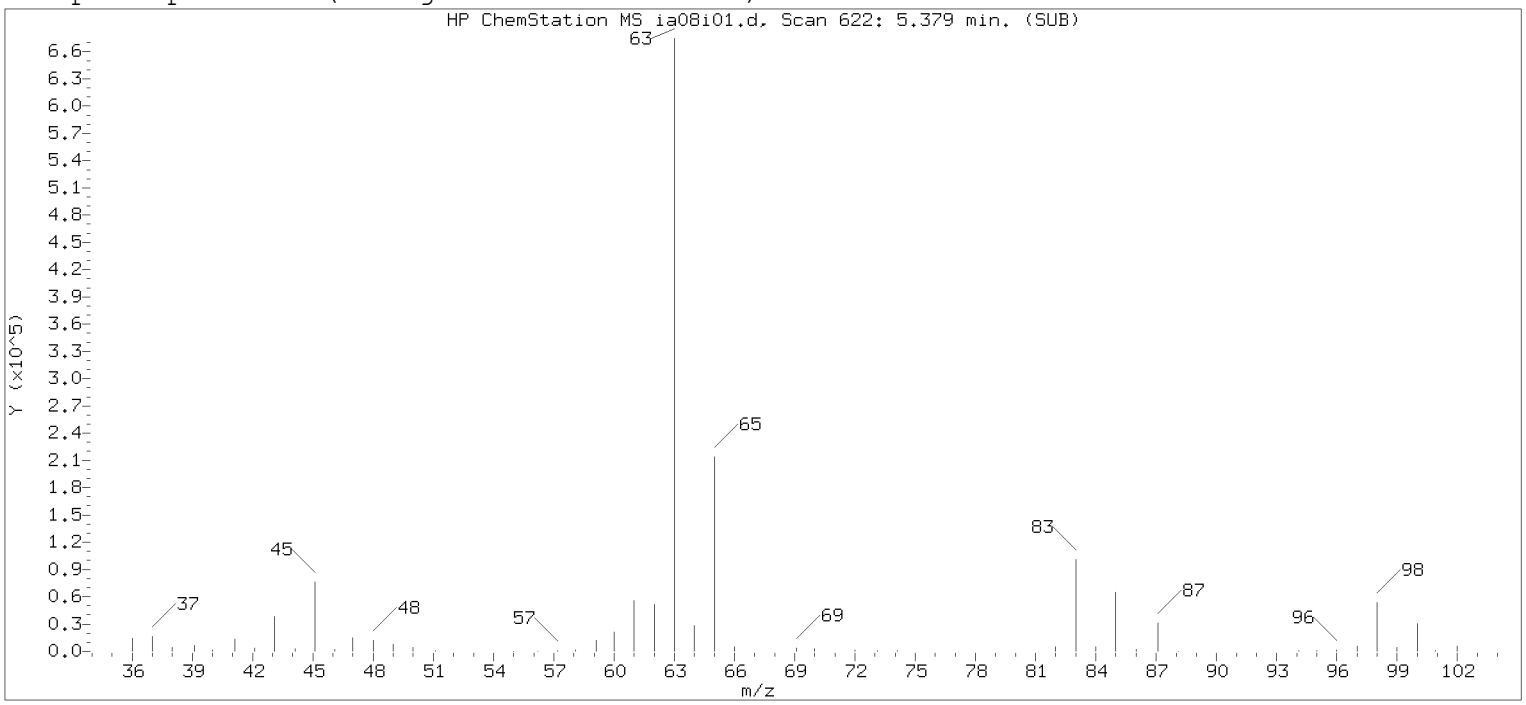
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 622
Retention Time (minutes): 5.379
Quant Ion : 63.00
Area (flag) : 2118415M
On-Column Amount (ng) : 25.0272
Integration start scan : 607 Integration stop scan: 634
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

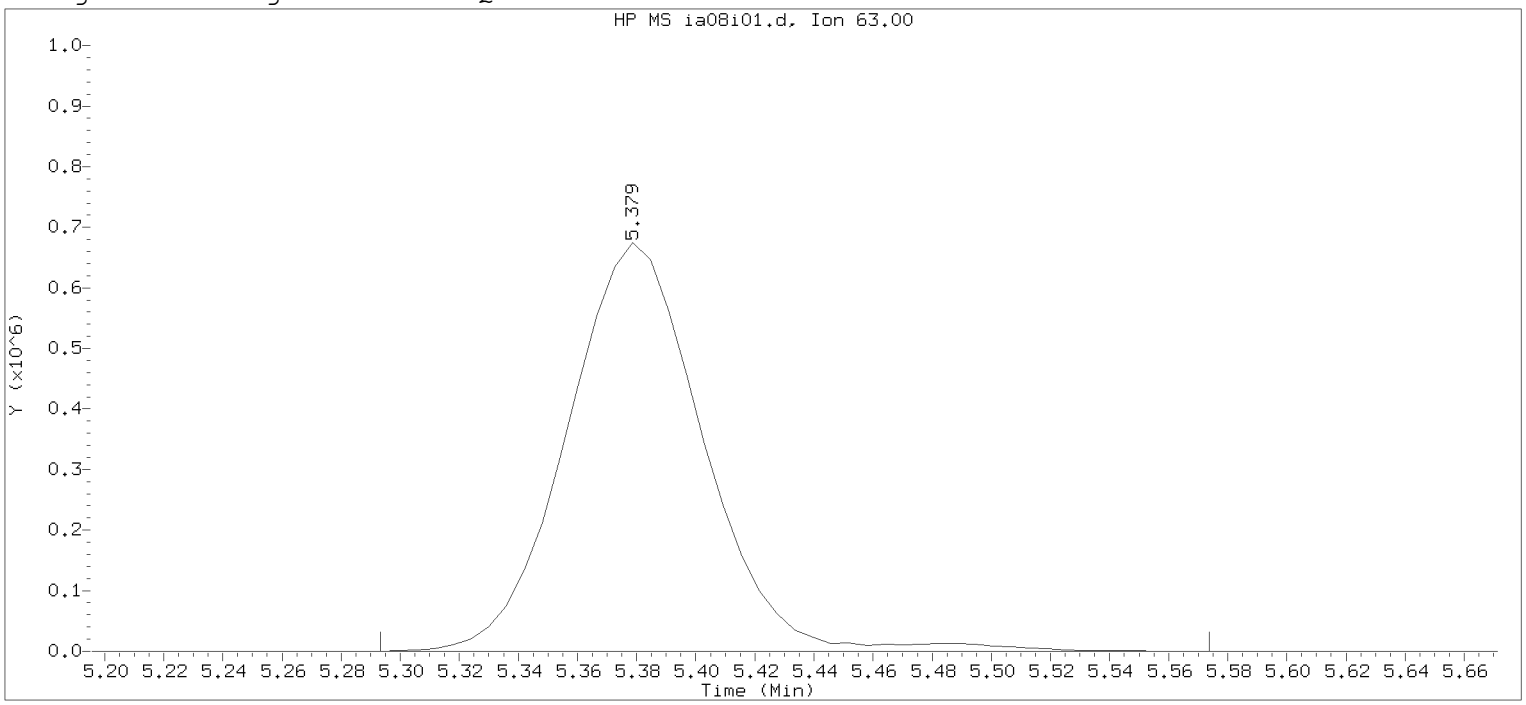
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

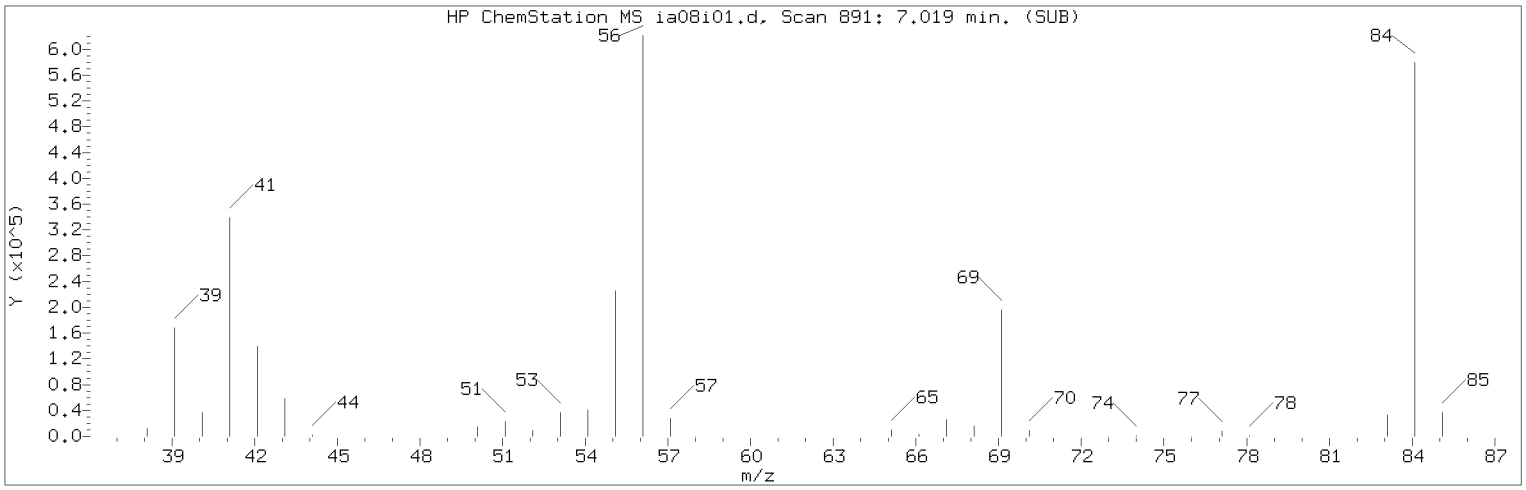
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

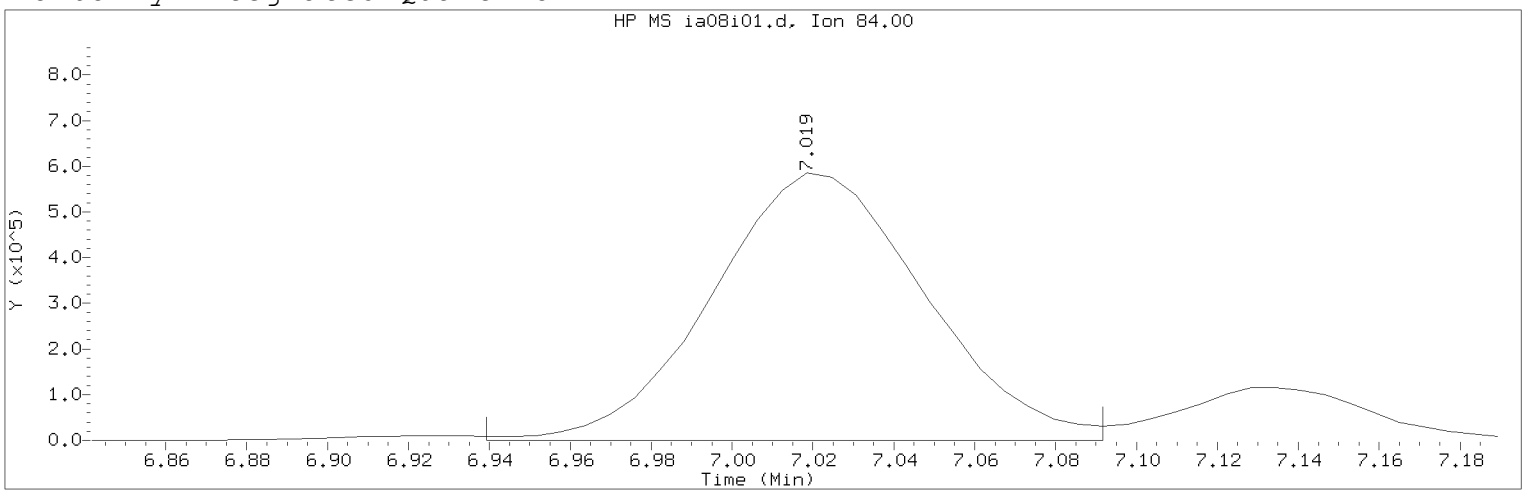
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 622
Retention Time (minutes): 5.379
Quant Ion : 63.00
Area : 2156342
On-column Amount (ng) : 25.1749
Integration start scan : 607 Integration stop scan: 653
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

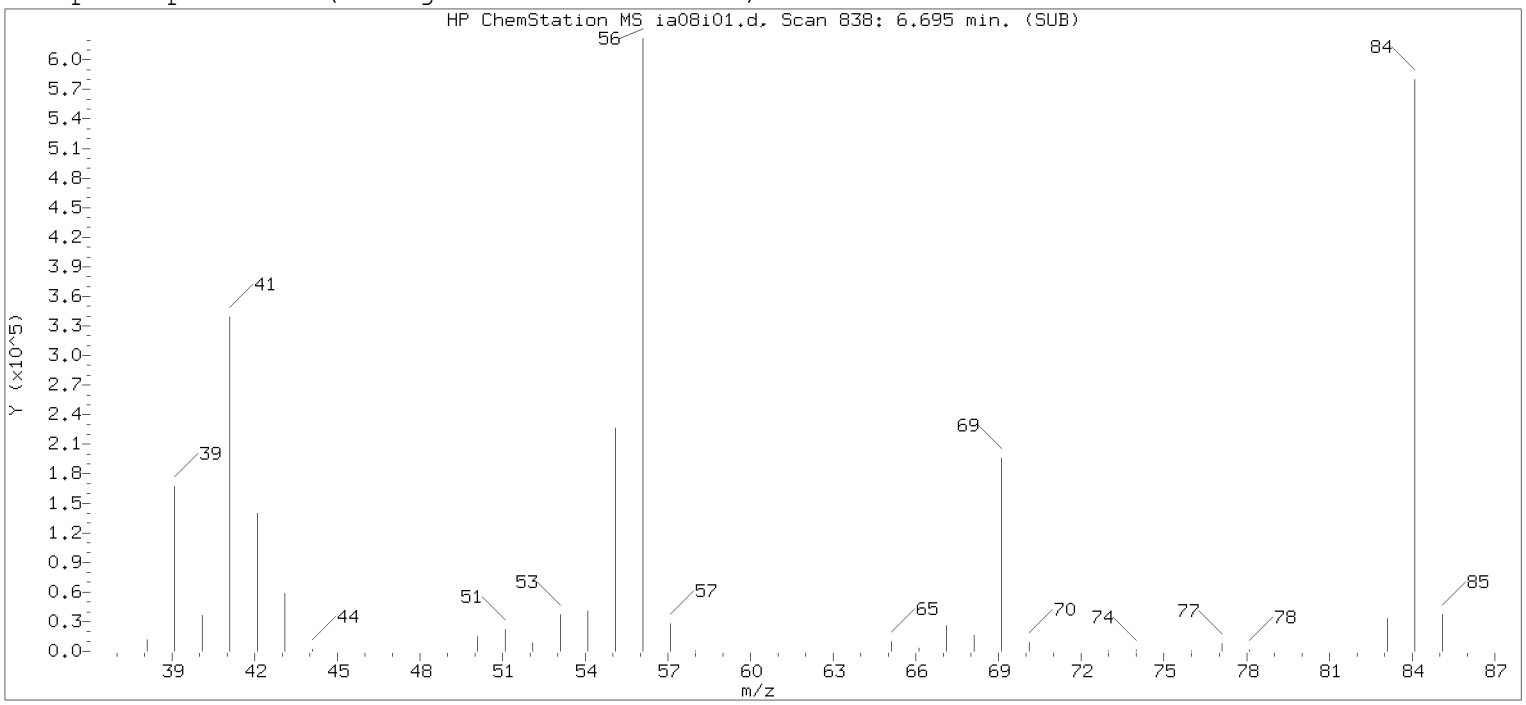
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 84.00
Area (flag) : 2141825M
On-Column Amount (ng) : 25.8934
Integration start scan : 877 Integration stop scan: 902
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

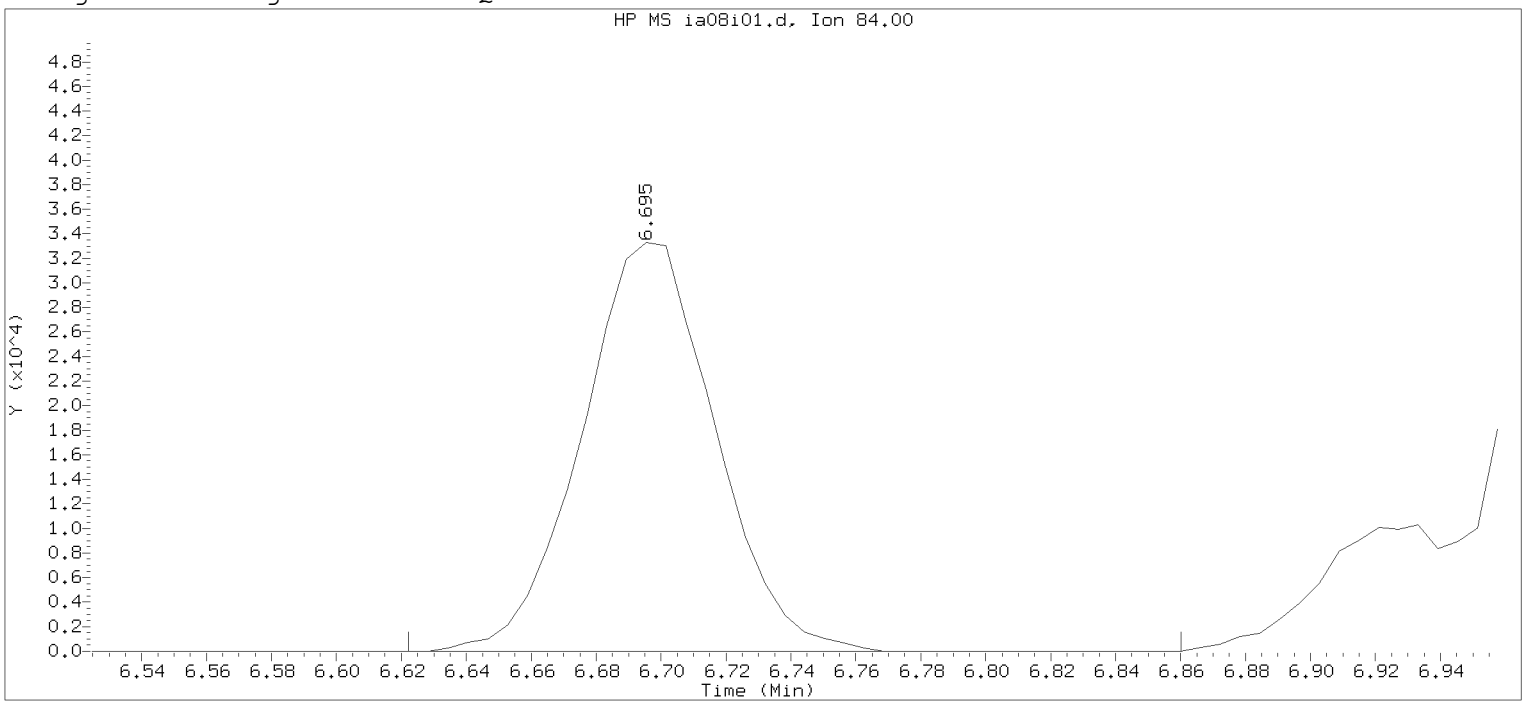
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

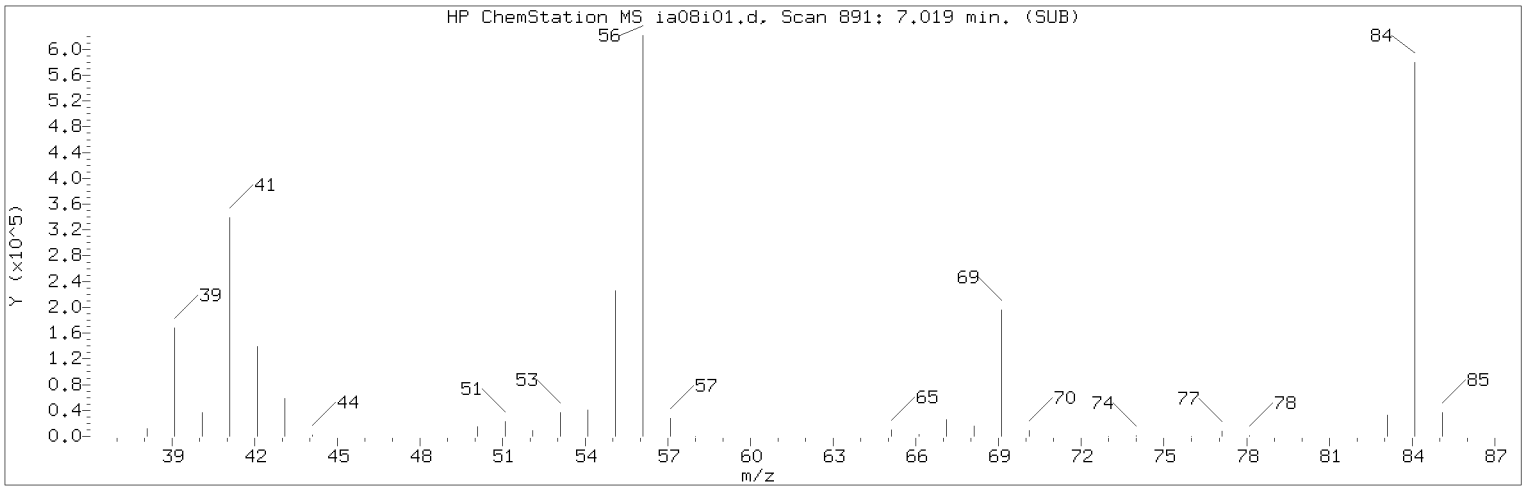
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

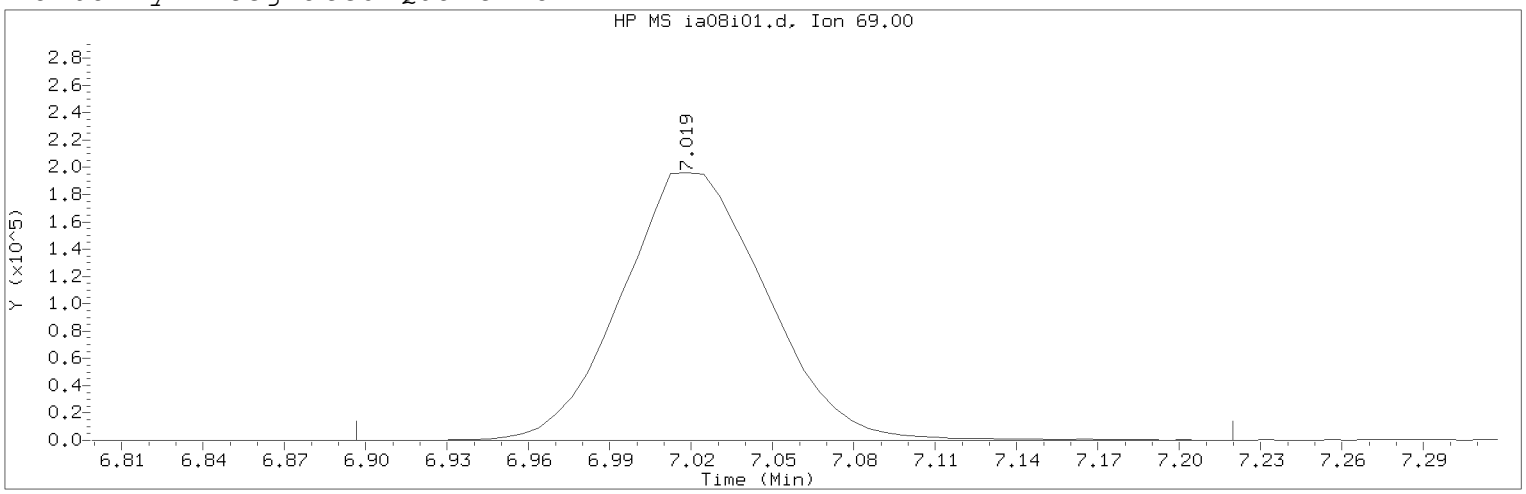
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 838
Retention Time (minutes): 6.695
Quant Ion : 84.00
Area : 94664
On-column Amount (ng) : 24.9934
Integration start scan : 825 Integration stop scan: 864
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

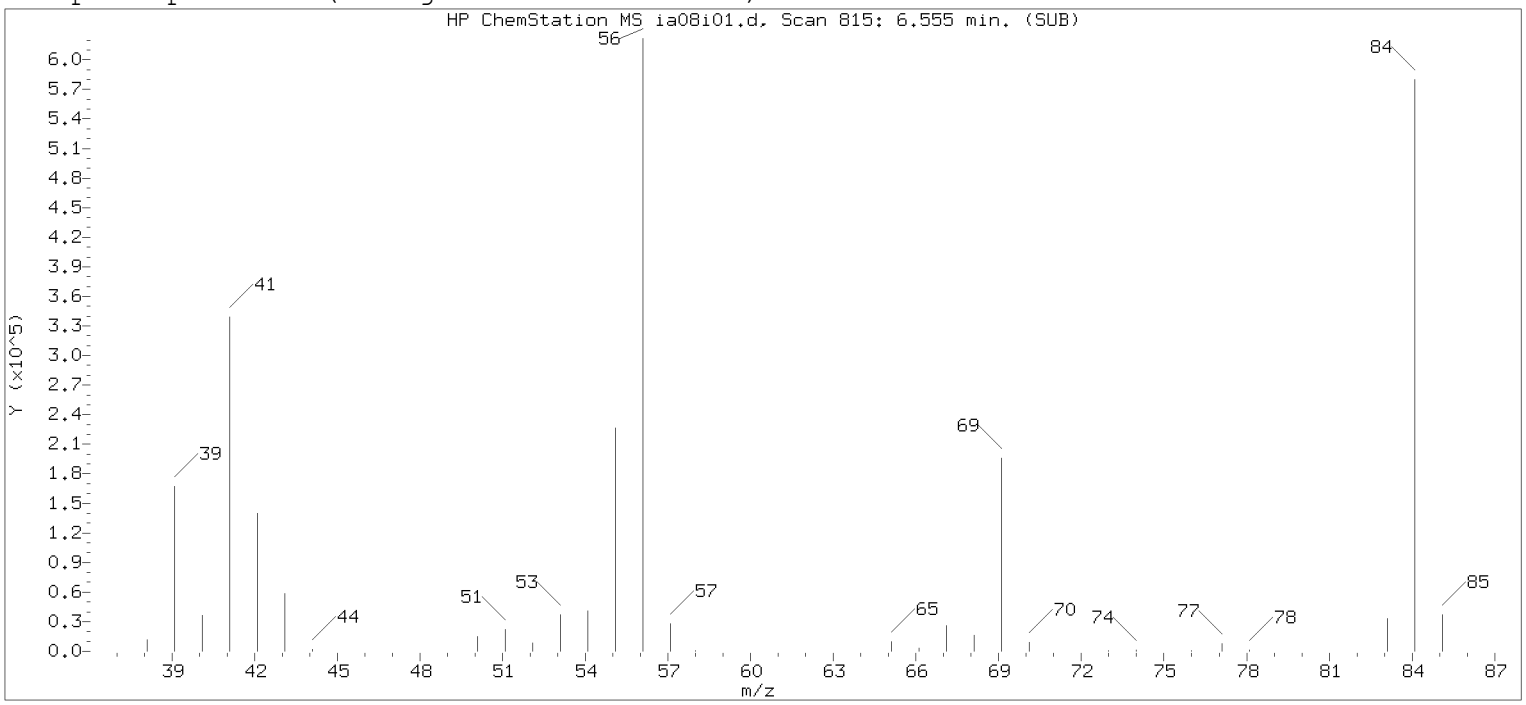
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 69.00
Area (flag) : 728462M
On-Column Amount (ng) : 25.3014
Integration start scan : 870 Integration stop scan: 923
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

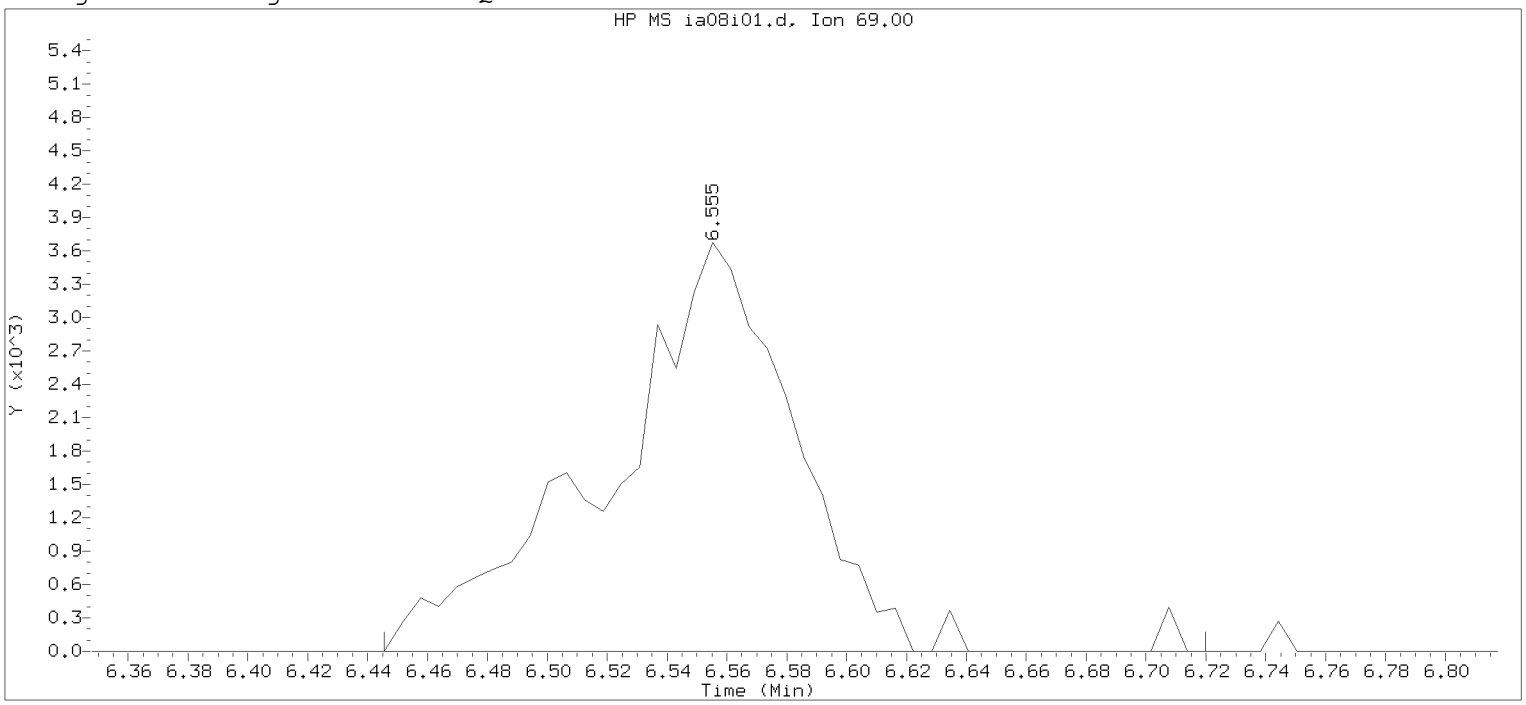
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

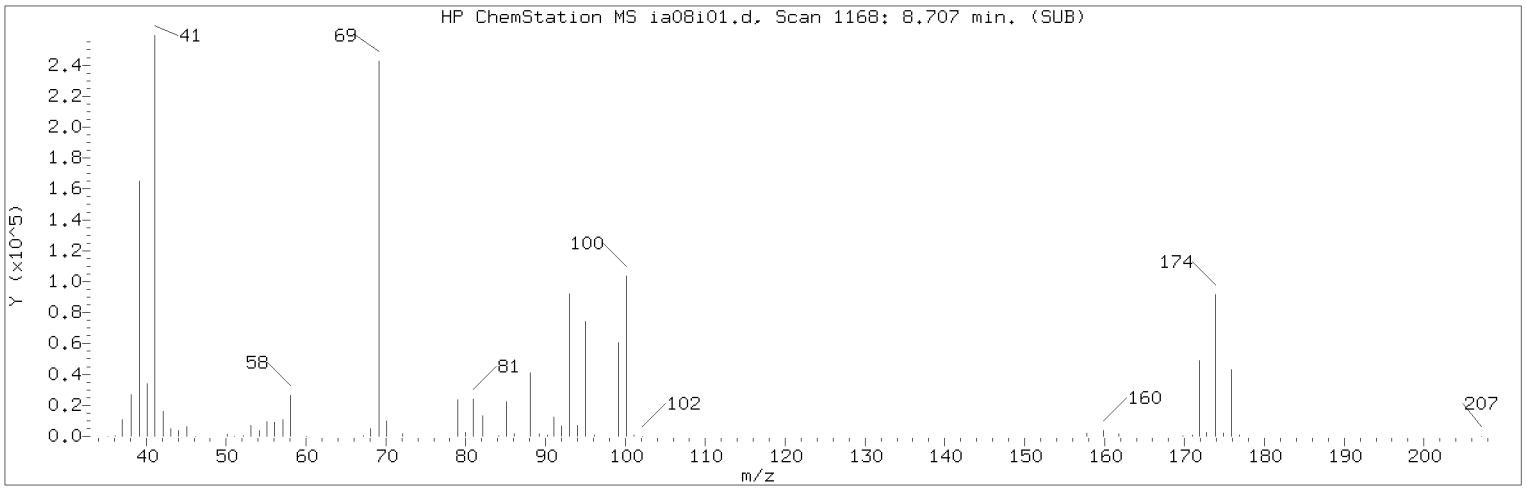
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

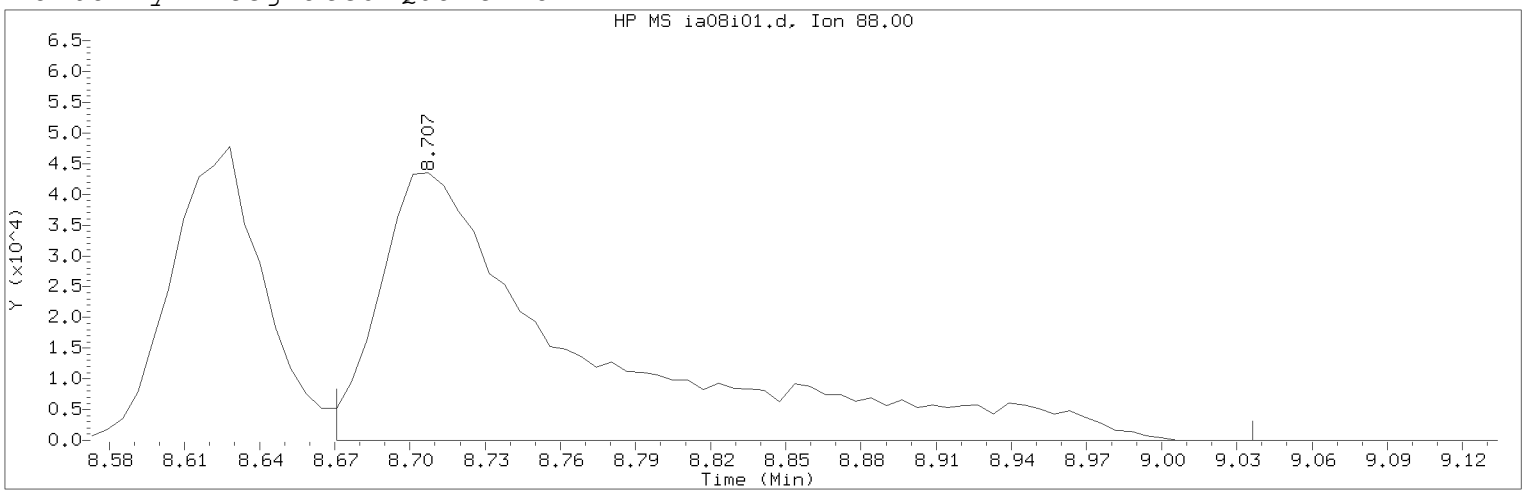
Compound Number	: 52		
Compound Name	: Cyclohexane		
Scan Number	: 815		
Retention Time (minutes)	: 6.555		
Quant Ion	: 69.00		
Area	: 16058		
On-column Amount (ng)	: 25.2207		
Integration start scan	: 796	Integration stop scan:	841
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

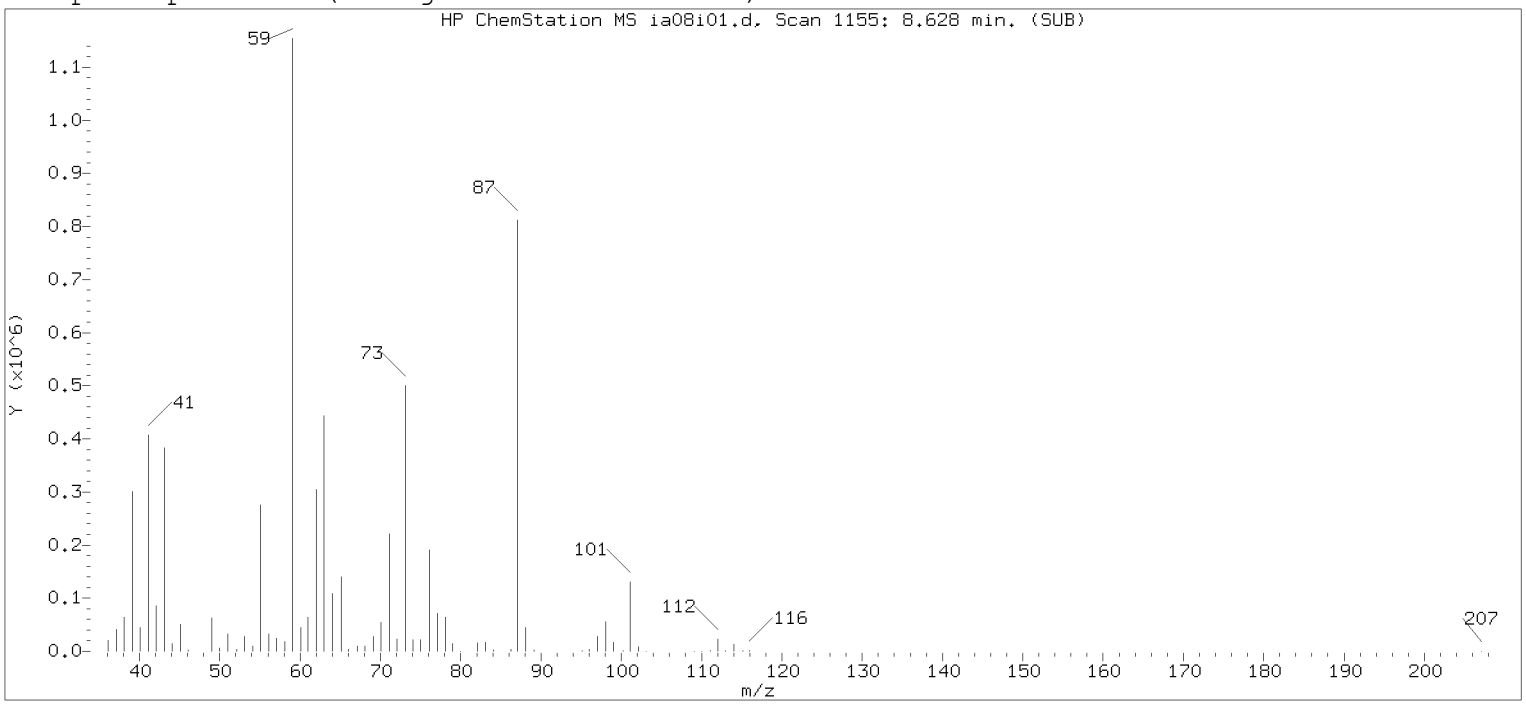
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1168
Retention Time (minutes): 8.707
Quant Ion : 88.00
Area (flag) : 249520M
On-Column Amount (ng) : 1188.0529
Integration start scan : 1161 Integration stop scan: 1221
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

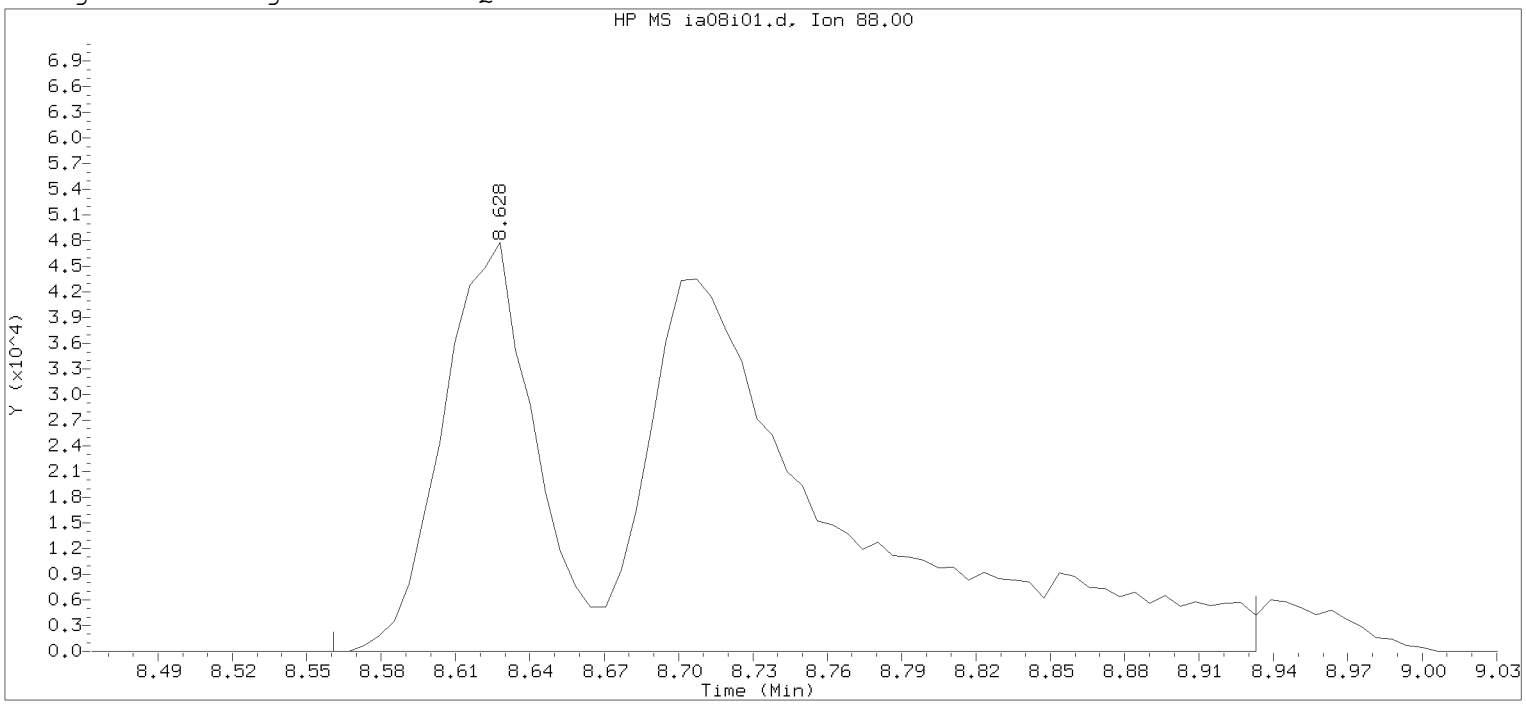
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

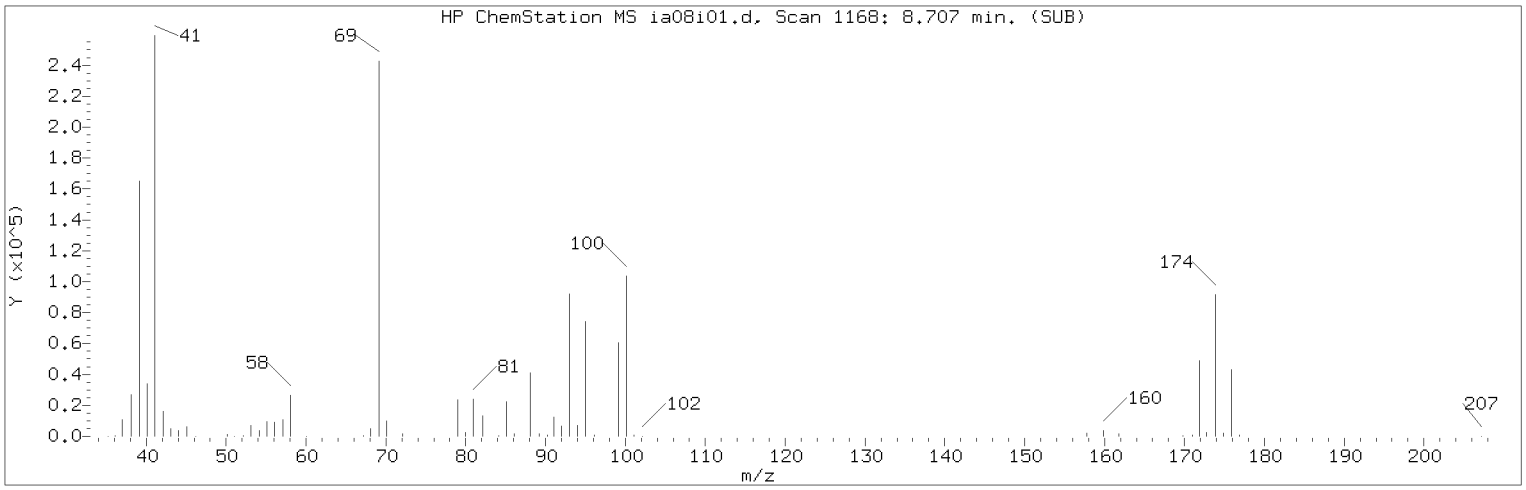
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

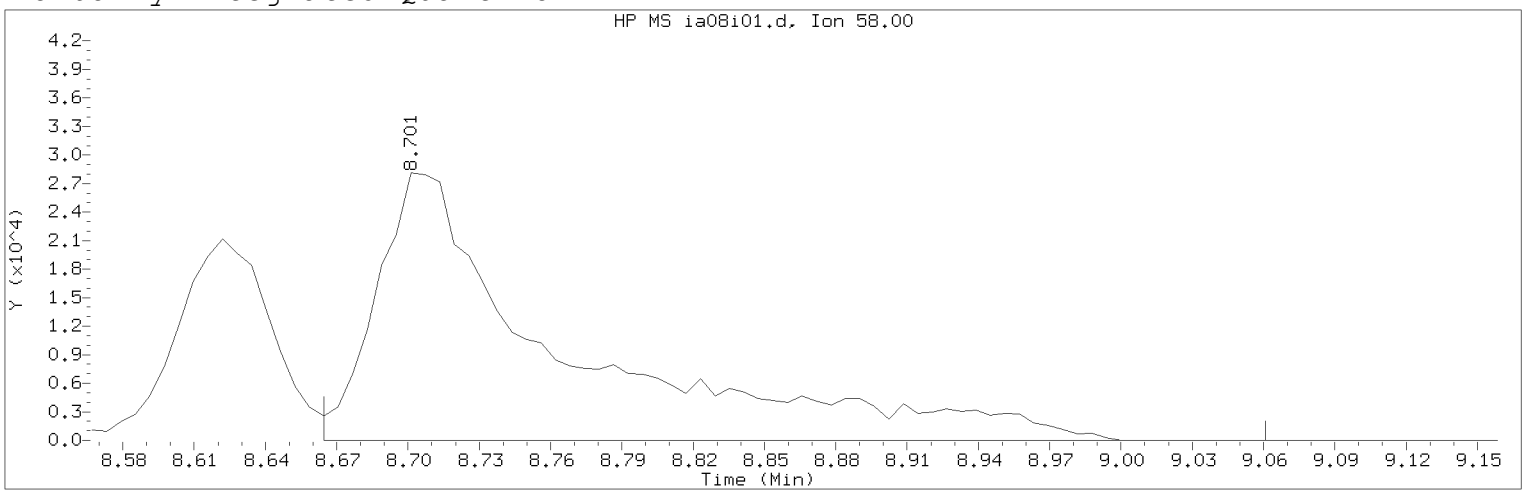
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1155		
Retention Time (minutes)	: 8.628		
Quant Ion	: 88.00		
Area	: 357152		
On-column Amount (ng)	: 1424.3471		
Integration start scan	: 1143	Integration stop scan:	1204
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

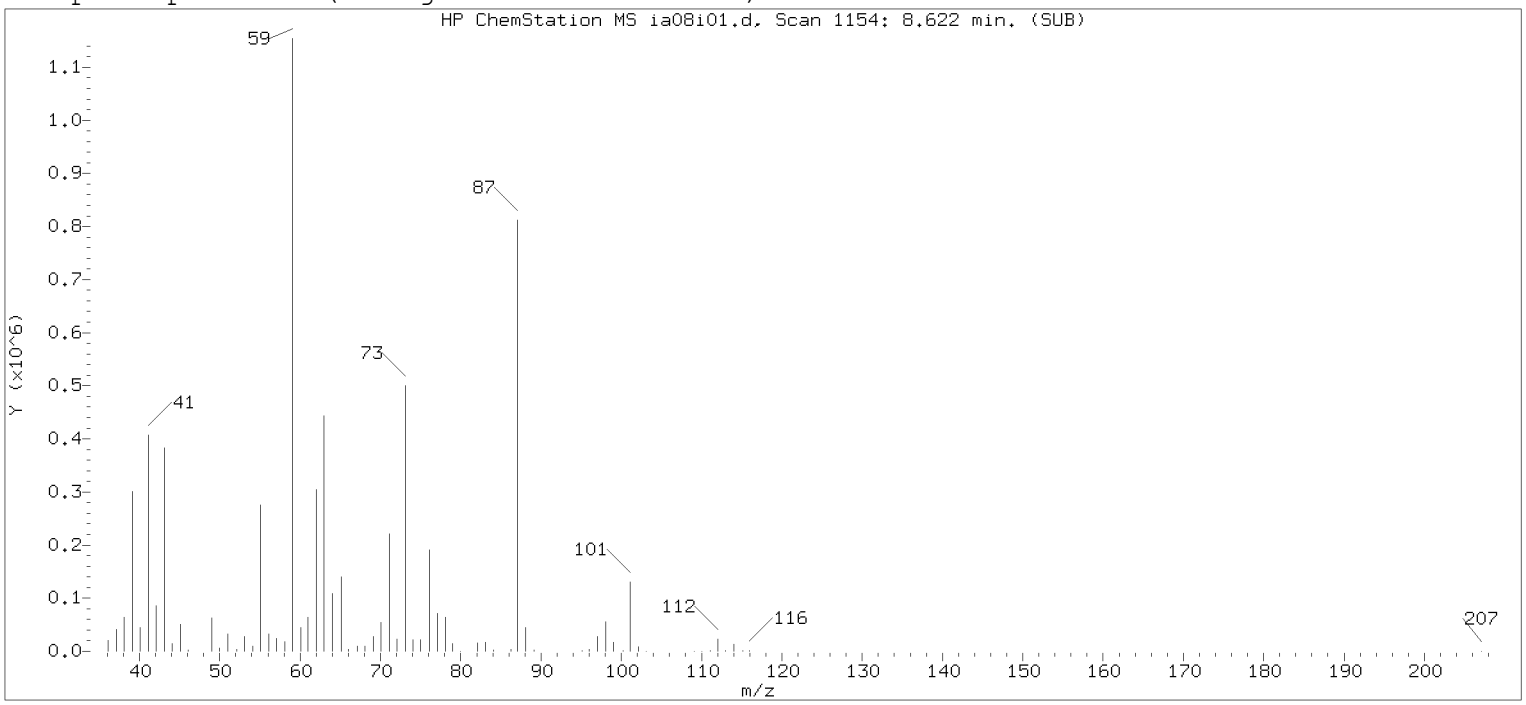
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1167
Retention Time (minutes): 8.701
Quant Ion : 58.00
Area (flag) : 152106M
On-Column Amount (ng) : 1215.3374
Integration start scan : 1160 Integration stop scan: 1225
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

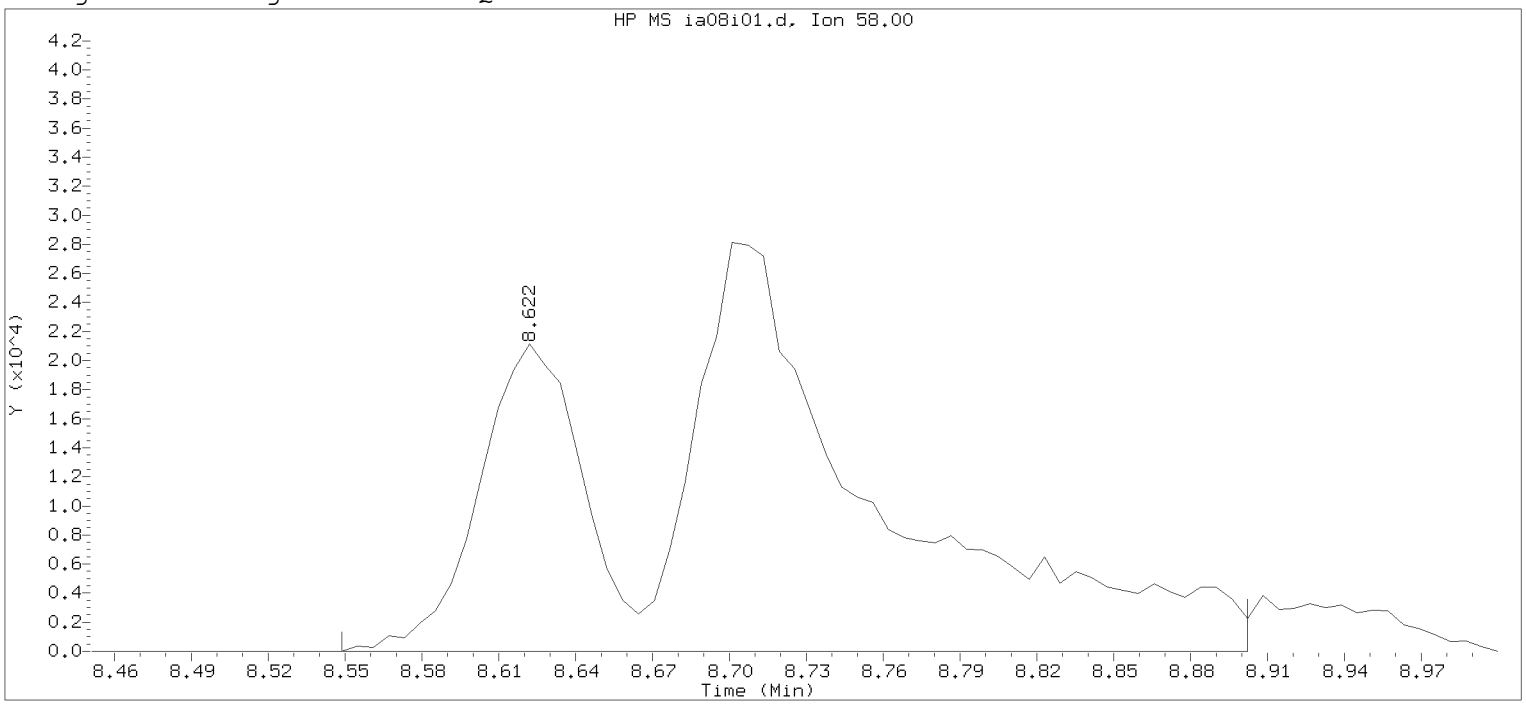
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

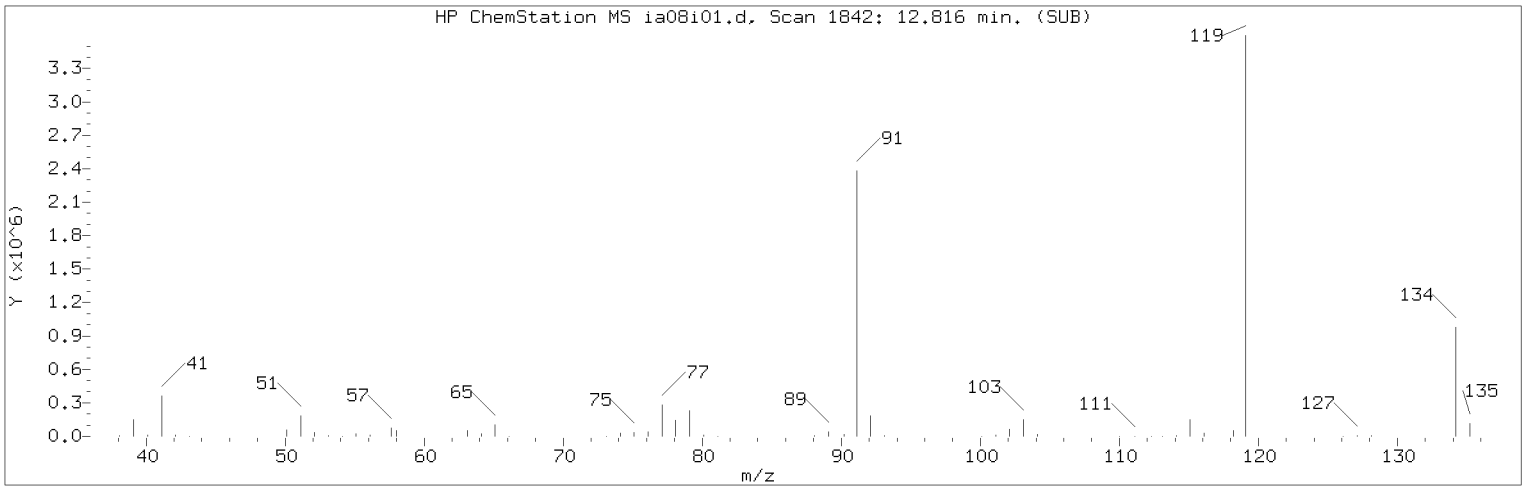
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

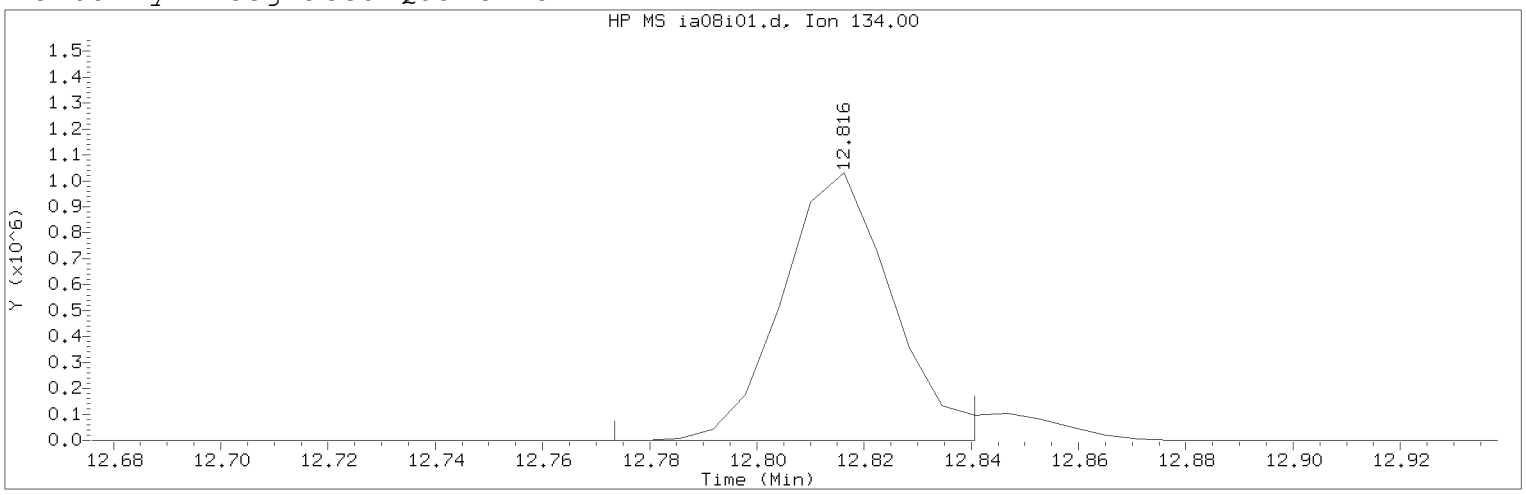
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1154		
Retention Time (minutes)	: 8.622		
Quant Ion	: 58.00		
Area	: 197843		
On-column Amount (ng)	: 1323.7562		
Integration start scan	: 1141	Integration stop scan:	1199
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

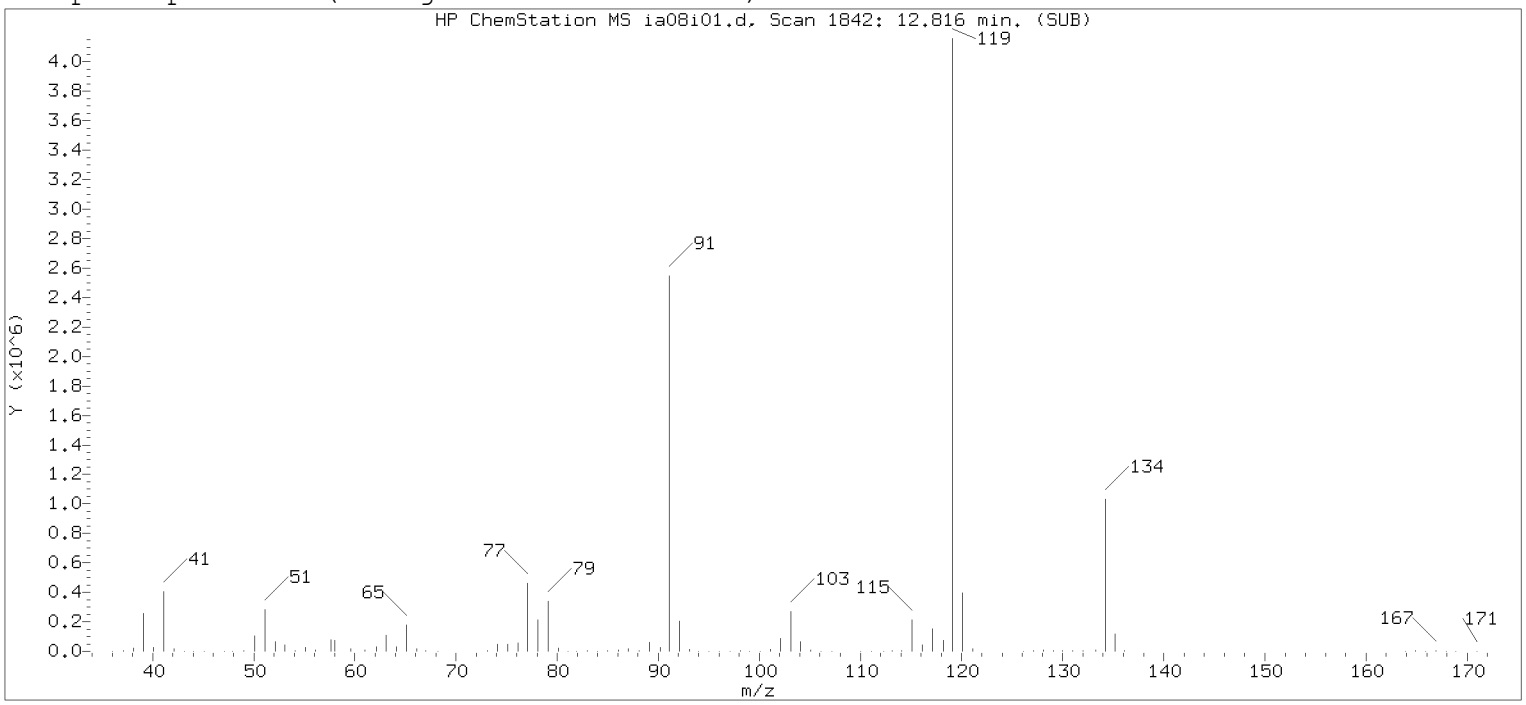
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 1464844M
On-Column Amount (ng) : 26.8079
Integration start scan : 1834 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

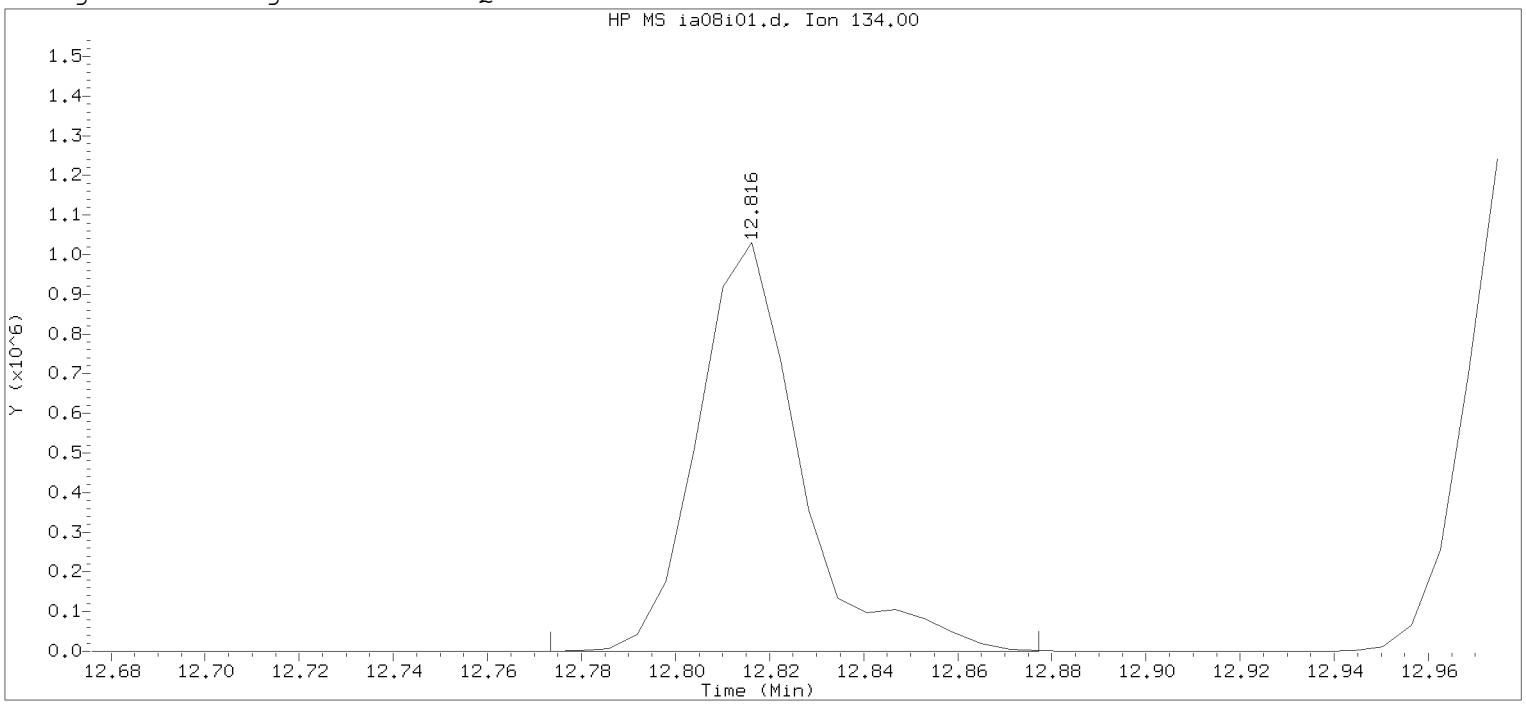
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 10:03.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



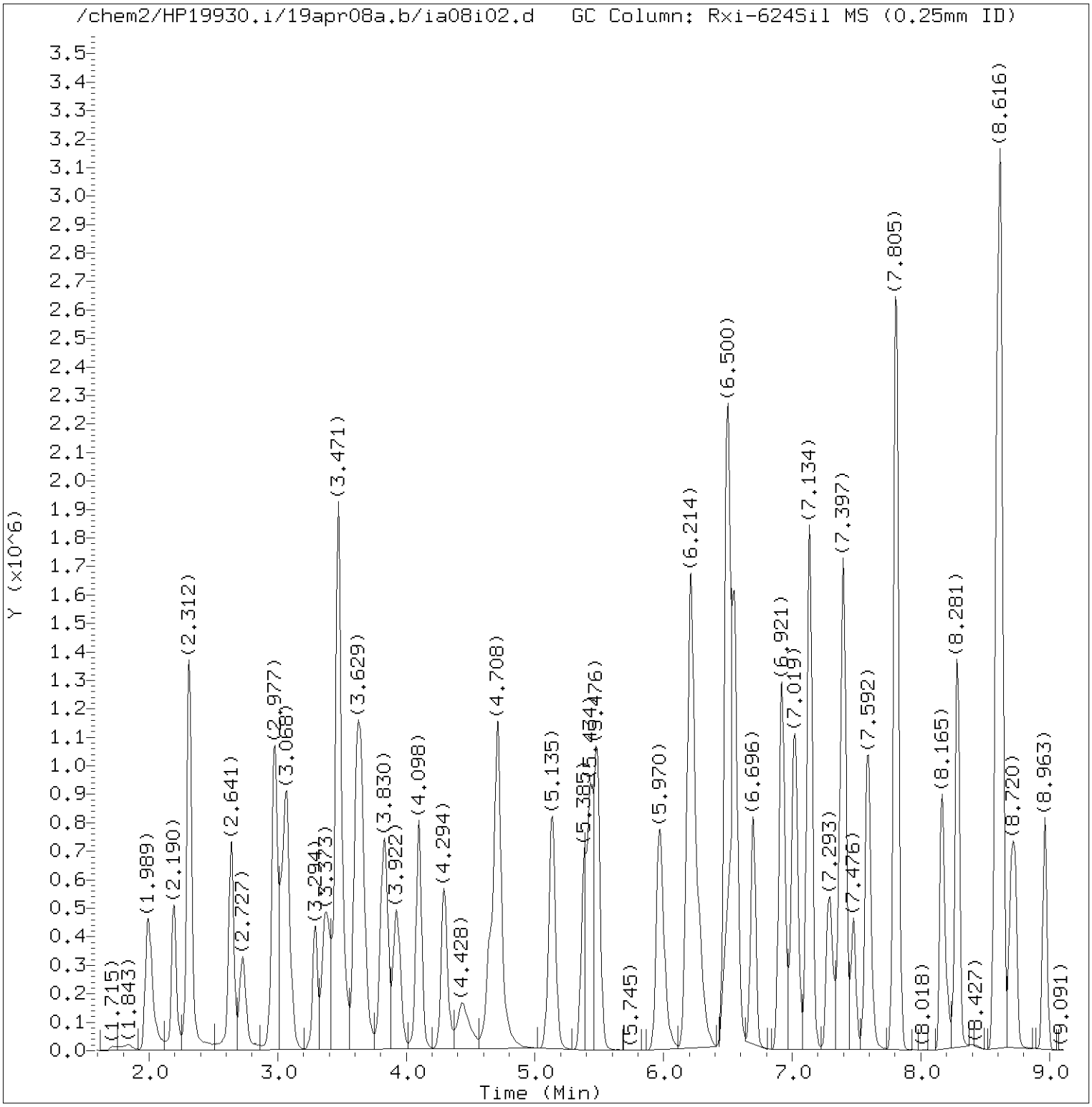
Data File: /chem2/HP19930.i/19apr08a.b/ia08i01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 1560441
On-column Amount (ng) : 26.0697
Integration start scan : 1834 Integration stop scan: 1851
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

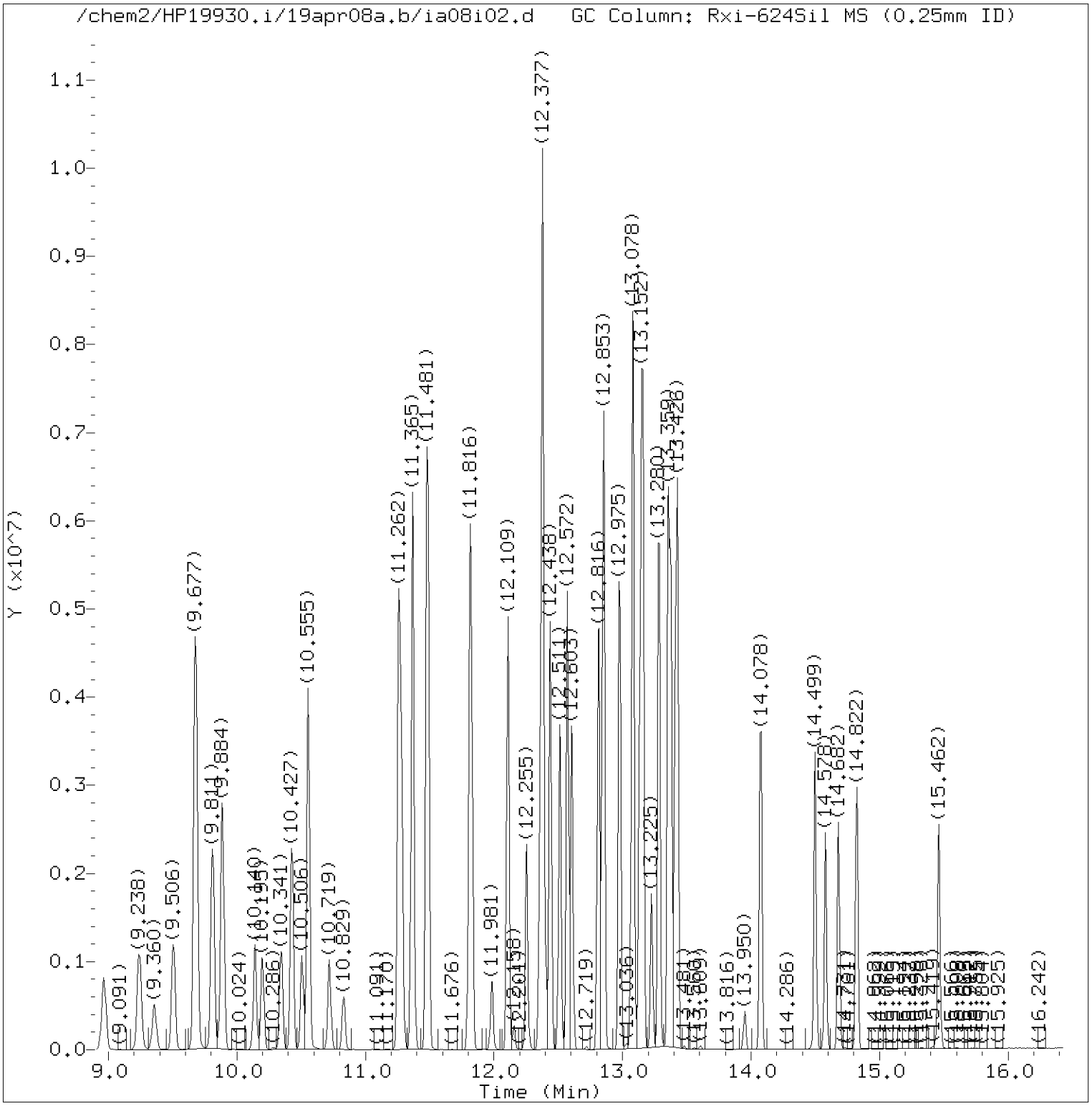
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.989	85	1071661	10.021
2) Chloromethane	(2)	2.190	50	784750M	9.907
5) Vinyl Chloride	(2)	2.312	62	810019	10.059
6) 1,3-Butadiene	(2)	2.312	39	629898M	9.458
7) Bromomethane	(2)	2.641	94	711125M	9.932
8) Chloroethane	(2)	2.727	64	468299M	10.010
9) Dichlorofluoromethane	(2)	2.977	67	1205684M	9.975
10) Trichlorofluoromethane	(2)	3.032	101	1356902M	10.085
11) Ethyl ether	(2)	3.288	59	373248	10.535
12) Freon 123a	(2)	3.373	67	610295M	10.088
13) Acrolein	(1)	3.471	56	3136143	546.301
15) 1,1-Dichloroethene	(2)	3.611	96	476760	10.218
14) Acetone	(1)	3.647	43	805979M	101.715
16) Freon 113	(2)	3.653	101	583964M	10.357
17) Methyl Iodide	(2)	3.812	142	1028608	10.277
18) Carbon Disulfide	(2)	3.922	76	1349756M	9.879
21) Methyl Acetate	(1)	4.074	43	205496	9.814
22) Allyl Chloride	(2)	4.098	41	736727M	10.264
23) Methylene Chloride	(2)	4.294	84	484234M	10.145
26)*t-Butyl Alcohol-d10	(1)	4.324	65	135247M	50.000
28) t-Butyl Alcohol	(1)	4.428	59	683763	208.186
29) Acrylonitrile	(1)	4.641	53	520042	54.866
30) Methyl Tertiary Butyl Ether	(2)	4.702	73	1269529M	10.402
31) trans-1,2-Dichloroethene	(2)	4.714	96	515158	9.865
32) n-Hexane	(2)	5.135	57	784077M	10.669
33) 1,1-Dichloroethane	(2)	5.379	63	853519M	10.049
34) di-Isopropyl Ether	(2)	5.434	45	1487933M	10.439
35) 2-Chloro-1,3-Butadiene	(2)	5.482	53	796502M	10.443
37) Ethyl t-butyl ether	(2)	5.964	59	1423714M	10.062
40) 1,2-Dichloroethene (Total)	(2)		96	1105408	20.011
38) 2-Butanone	(1)	6.190	43	1414257	109.881
39) cis-1,2-Dichloroethene	(2)	6.214	96	590250	10.146
41) 2,2-Dichloropropane	(2)	6.232	77	799721	10.115
42) Propionitrile	(1)	6.287	54	753819M	218.135
45) Methacrylonitrile	(1)	6.500	67	1392131M	109.463
47) Bromochloromethane	(2)	6.549	128	286405	10.003
48) Tetrahydrofuran	(1)	6.555	71	434997	108.082
49) Chloroform	(2)	6.696	83	936929M	10.122

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	470610	9.939
50)$Dibromofluoromethane	(2)	6.915	111	485255	10.026
51) 1,1,1-Trichloroethane	(2)	6.921	97	920216M	10.284
52) Cyclohexane	(2)	7.019	56	919785M	10.454
52) Cyclohexane	(2)	7.019	84	856707M	10.321
52) Cyclohexane	(2)	7.025	69	293581M	10.161
54) Carbon Tetrachloride	(2)	7.134	117	873580M	10.340
55) 1,1-Dichloropropene	(2)	7.134	75	712801M	10.291
56) Isobutyl Alcohol	(1)	7.293	41	531559M	524.007
57)$1,2-Dichloroethane-d4	(2)	7.372	102	90588M	9.927
57)$1,2-Dichloroethane-d4	(2)	7.372	65	408026M	9.976
57)$1,2-Dichloroethane-d4	(2)	7.372	104	57424	9.968
58) Benzene	(2)	7.397	78	2078869M	10.208
59) 1,2-Dichloroethane	(2)	7.476	62	537979M	9.847
59) 1,2-Dichloroethane	(2)	7.482	98	52654M	10.332
60) t-Amyl methyl ether	(2)	7.592	73	1394137M	10.215
63)*Fluorobenzene	(2)	7.805	96	1834755M	10.000
62) n-Heptane	(2)	7.811	43	803174M	10.643
65) n-Butanol	(1)	8.165	56	919238M	1085.963
67) Trichloroethene	(2)	8.281	95	578338M	10.149
69) Methylcyclohexane	(2)	8.591	83	1122903M	11.036
70) 1,2-Dichloropropane	(2)	8.622	63	486469M	10.316
71) Methyl Methacrylate	(1)	8.701	69	270591M	11.117
72) 1,4-Dioxane	(1)	8.707	88	107768	517.834
72) 1,4-Dioxane	(1)	8.701	58	70241	566.384
73) Dibromomethane	(2)	8.732	93	268687M	10.136
74) Bromodichloromethane	(2)	8.963	83	685081M	10.468
76) 2-Nitropropane	(1)	9.238	41	923046M	113.969
80) cis-1,3-Dichloropropene	(2)	9.506	75	783316	10.551
81) 4-Methyl-2-Pentanone	(1)	9.677	43	3688164M	113.191
82)$Toluene-d8	(3)	9.811	98	1808851M	10.002
82)$Toluene-d8	(3)	9.811	100	1162221M	10.021
83) Toluene	(3)	9.884	92	1388935	10.215
84) trans-1,3-Dichloropropene	(3)	10.140	75	676919	10.562
85) 1,3-Dichloropropene (total)	(3)		75	1460235	21.113
86) Ethyl Methacrylate	(3)	10.195	69	583560	10.781
88) 1,1,2-Trichloroethane	(3)	10.347	97	385369	10.257
89) Tetrachloroethene	(3)	10.427	166	736504	10.236

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	622754	10.298
91) 2-Hexanone	(1)	10.555	43	2587116M	111.973
93) Dibromochloromethane	(3)	10.719	129	549680	10.764
95) 1,2-Dibromoethane	(3)	10.829	107	393571	10.286
97)*Chlorobenzene-d5	(3)	11.256	117	1474409	10.000
96) 1-Chlorohexane	(3)	11.262	91	831202M	10.153
98) Chlorobenzene	(3)	11.280	112	1591631	10.197
100) Ethylbenzene	(3)	11.365	91	2835582M	10.384
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	623767	10.595
101) m+p-Xylene	(3)	11.481	106	2264672	20.826
105) Xylene (Total)	(3)		106	3364240	31.302
104) o-Xylene	(3)	11.810	106	1099568	10.476
106) Styrene	(3)	11.823	104	1791510	10.766
107) Bromoform	(3)	11.987	173	350929	11.173
108) Isopropylbenzene	(3)	12.109	105	2986520	10.534
111)$4-Bromofluorobenzene	(3)	12.255	95	671989	9.916
111)$4-Bromofluorobenzene	(3)	12.255	174	648060	9.990
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	491013	10.426
114) Bromobenzene	(4)	12.371	156	734715	10.251
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	1348519M	118.011
116) 1,2,3-Trichloropropane	(4)	12.402	110	146354M	10.472
117) n-Propylbenzene	(4)	12.438	91	3384825	10.559
119) 2-Chlorotoluene	(4)	12.511	126	710453	10.307
121) 1,3,5-Trimethylbenzene	(4)	12.572	105	2495352	10.538
122) 4-Chlorotoluene	(4)	12.609	126	715599	10.332
125) tert-Butylbenzene	(4)	12.816	134	565781M	10.486
126) Pentachloroethane	(4)	12.847	167	506769	10.665
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	2557284	10.599
128) sec-Butylbenzene	(4)	12.975	105	3305323	10.784
131) 1,3-Dichlorobenzene	(4)	13.078	146	1421993	10.365
132) p-Isopropyltoluene	(4)	13.085	119	2930259	10.894
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	825128	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	1414631	10.318
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	1161727	10.304
136) Benzyl Chloride	(4)	13.225	126	247776M	11.166
138) n-Butylbenzene	(4)	13.377	92	1358140	11.101
139) 1,2-Dichlorobenzene	(4)	13.408	146	1306986	10.437
143) 1,2-Dibromo-3-chloropropane	(1)	13.950	155	85736M	11.573

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on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

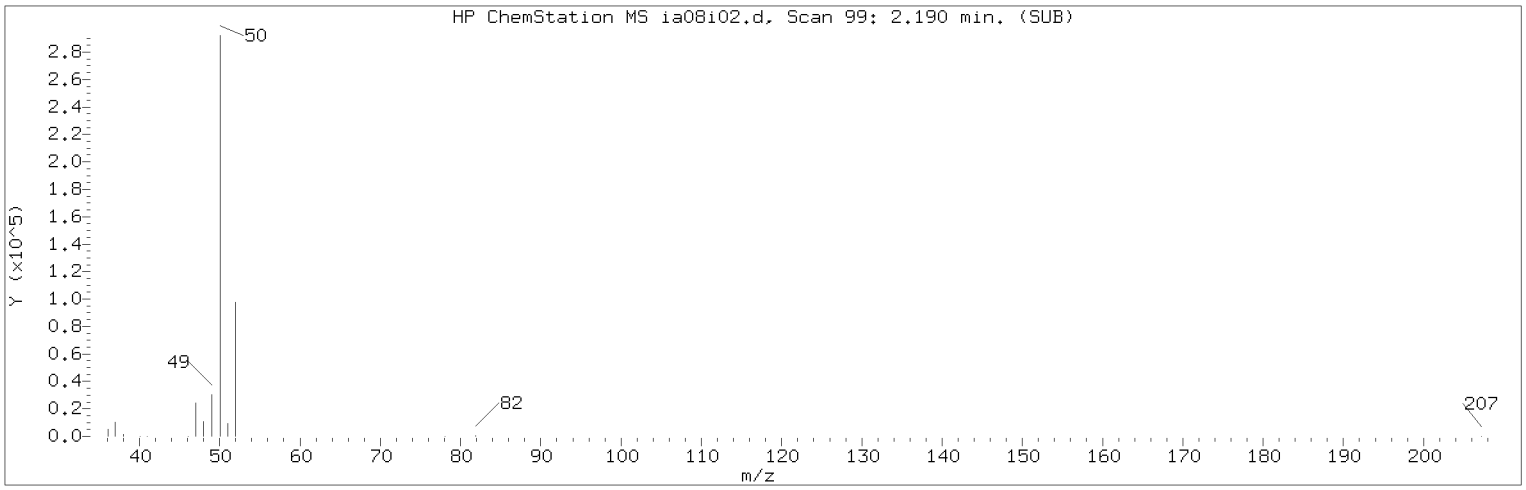
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

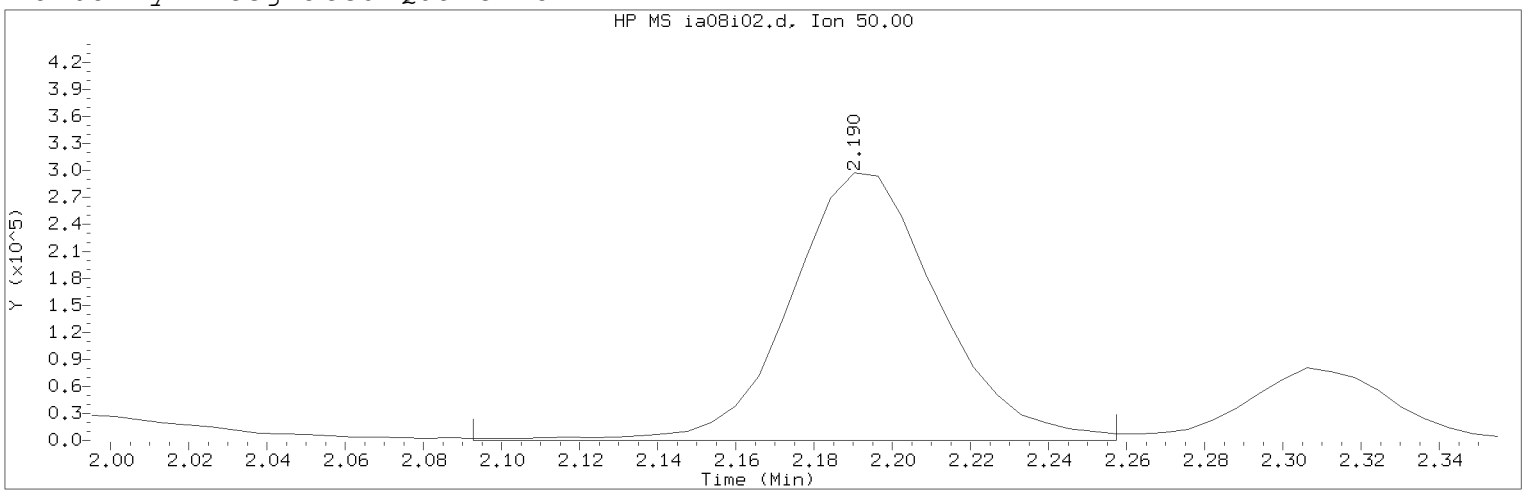
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	1087447	10.871
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	945935	10.788
146) Hexachlorobutadiene	(4)	14.578	225	405337	11.313
147) Naphthalene	(4)	14.682	128	1826001	10.399
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	847636	10.736

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on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

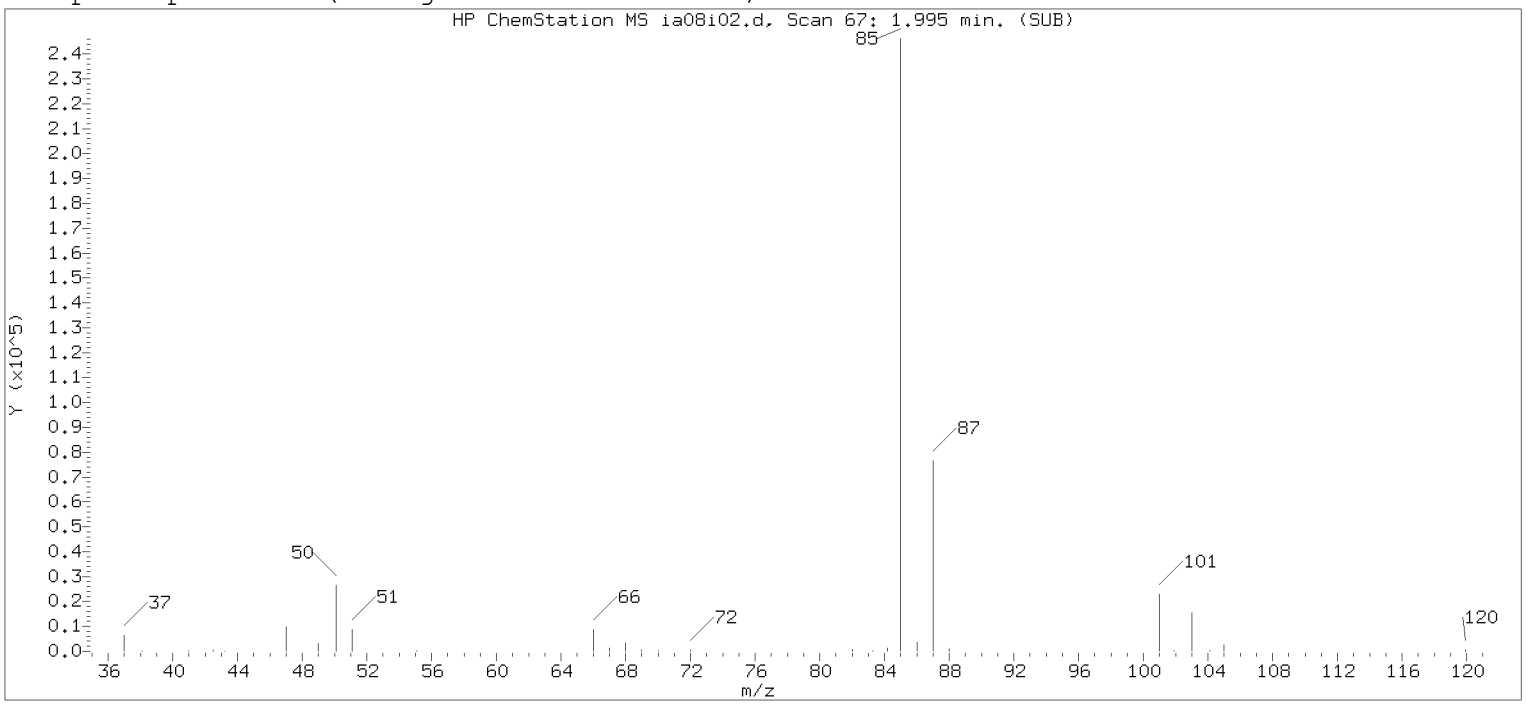
Compound Number : 2
Compound Name : Chloromethane
Scan Number : 99
Retention Time (minutes): 2.190
Quant Ion : 50.00
Area (flag) : 784750M
On-Column Amount (ng) : 9.9073
Integration start scan : 82 Integration stop scan: 109
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

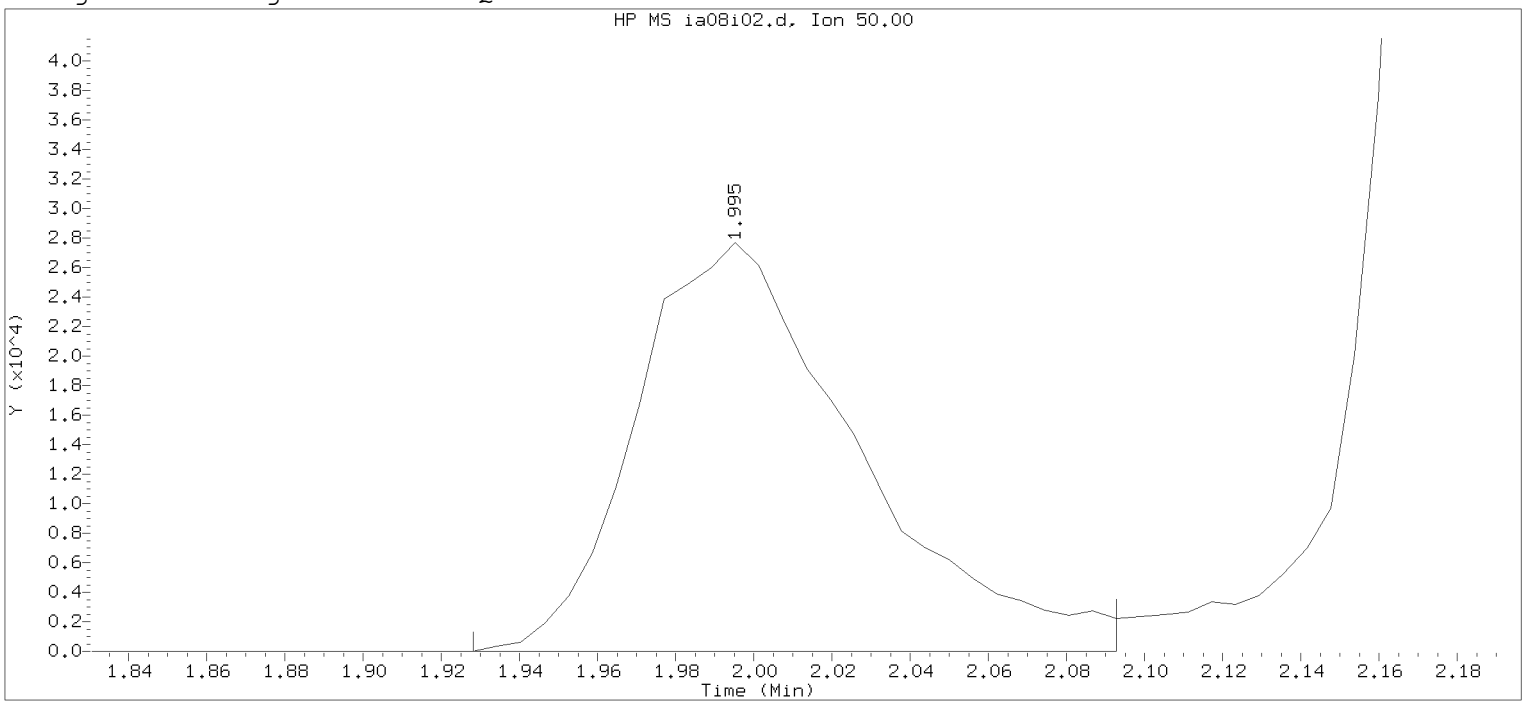
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

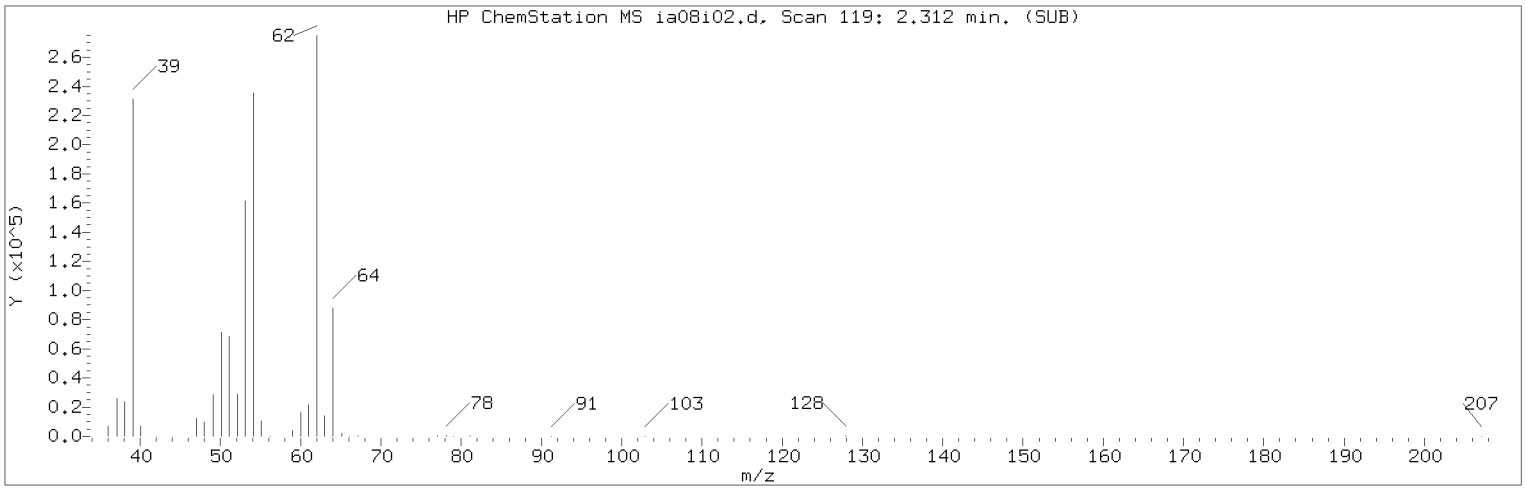
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

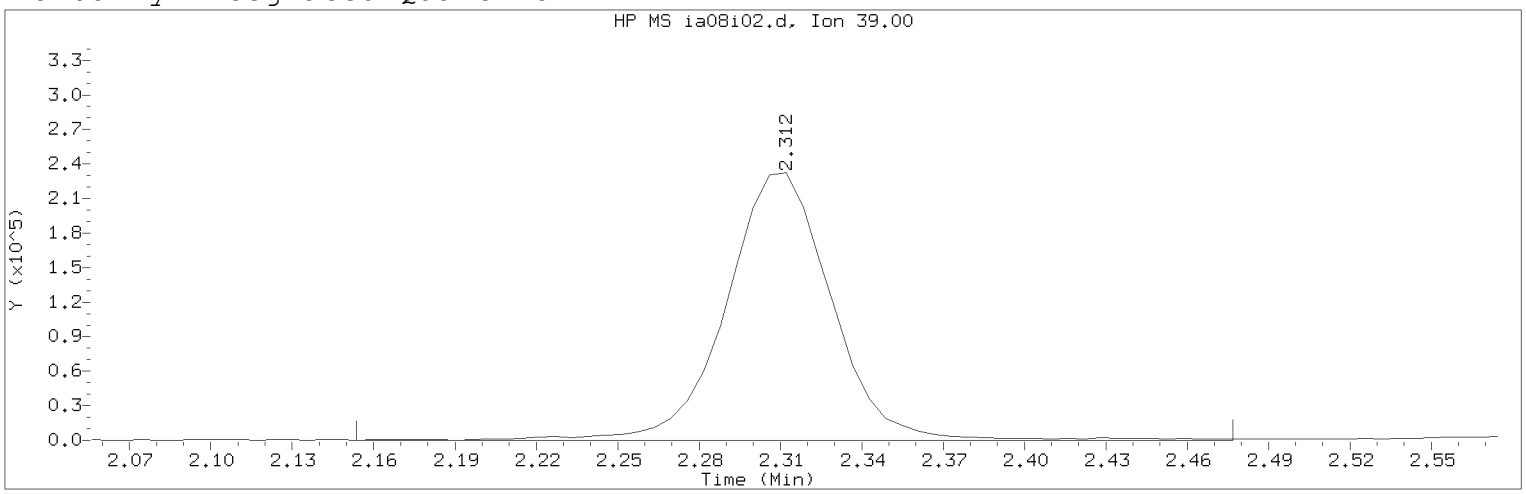
Compound Number : 2
Compound Name : Chloromethane
Scan Number : 67
Retention Time (minutes): 1.995
Quant Ion : 50.00
Area : 108686
On-column Amount (ng) : 46.7627
Integration start scan : 55 Integration stop scan: 82
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

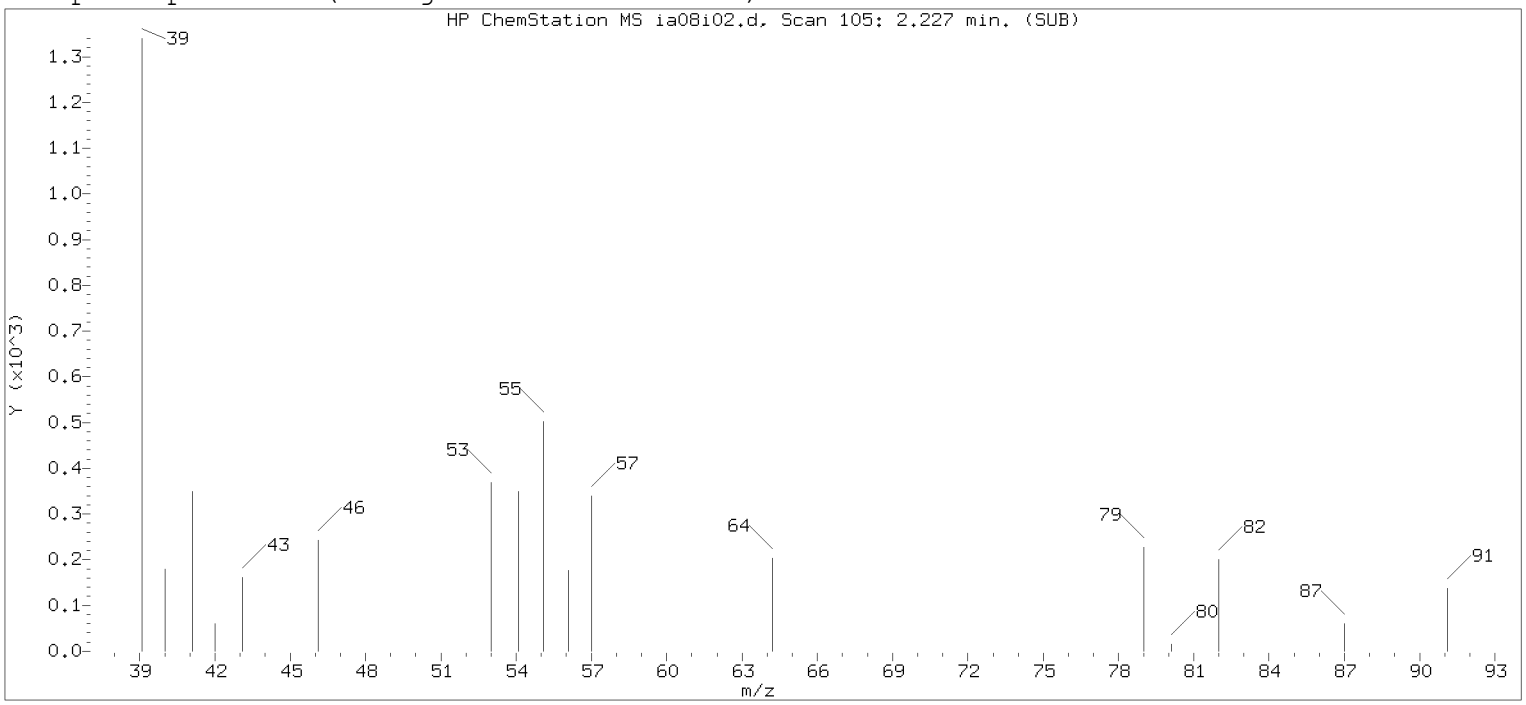
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area (flag) : 629898M
On-Column Amount (ng) : 9.4576
Integration start scan : 92 Integration stop scan: 145
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

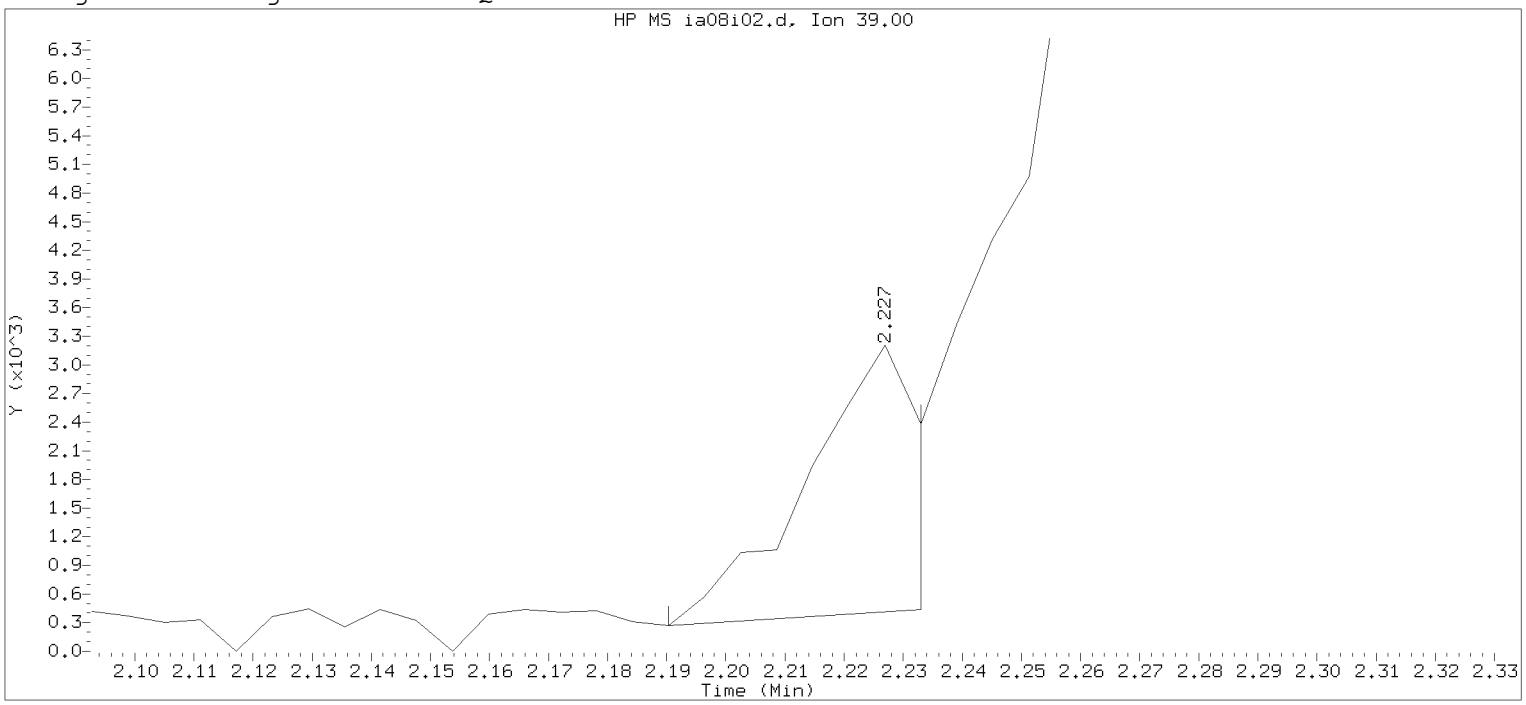
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

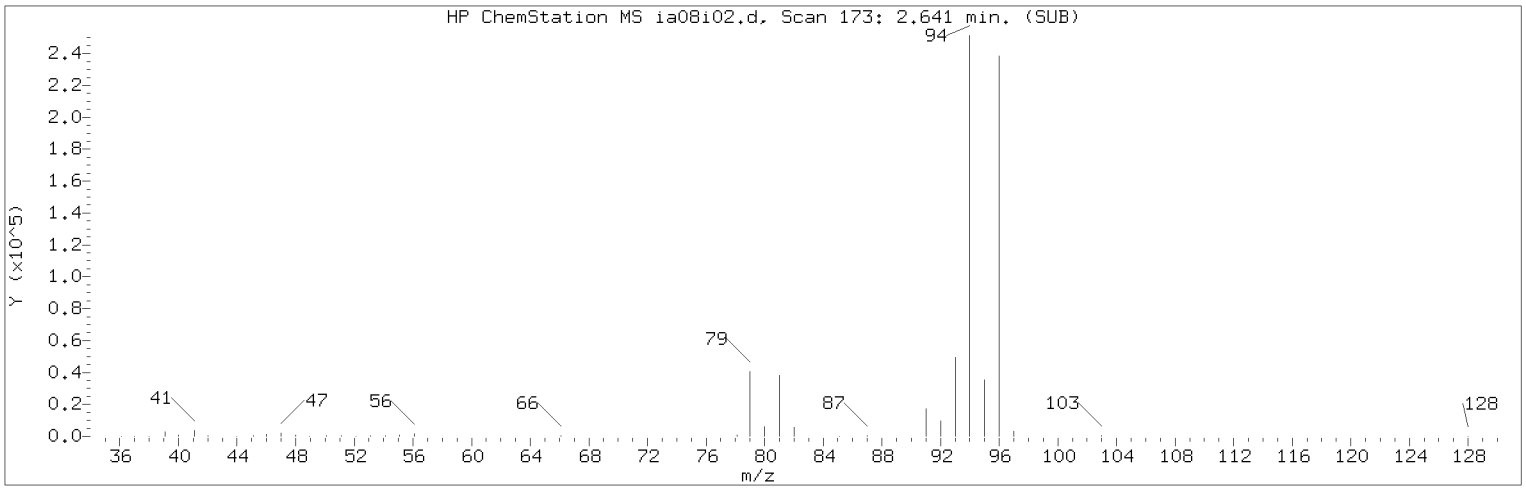
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

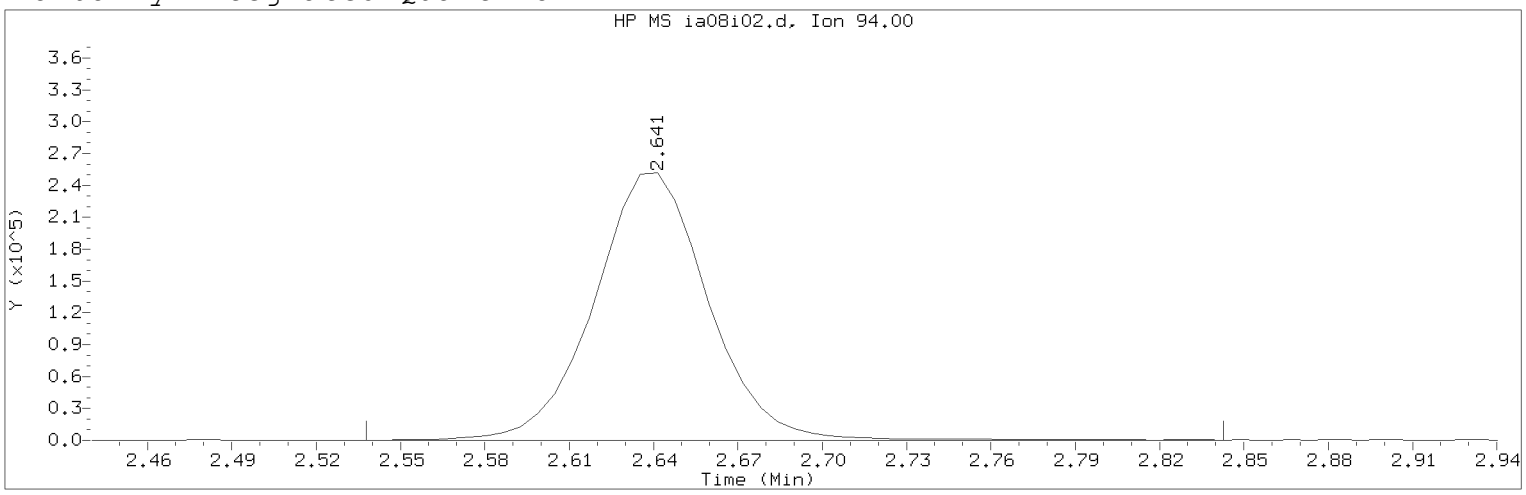
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 105
Retention Time (minutes): 2.227
Quant Ion : 39.00
Area : 3393
On-column Amount (ng) : 36.4468
Integration start scan : 98 Integration stop scan: 105
Y at integration start : 268 Y at integration end: 435

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Target 3.5 esignature user: JHowe0166

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

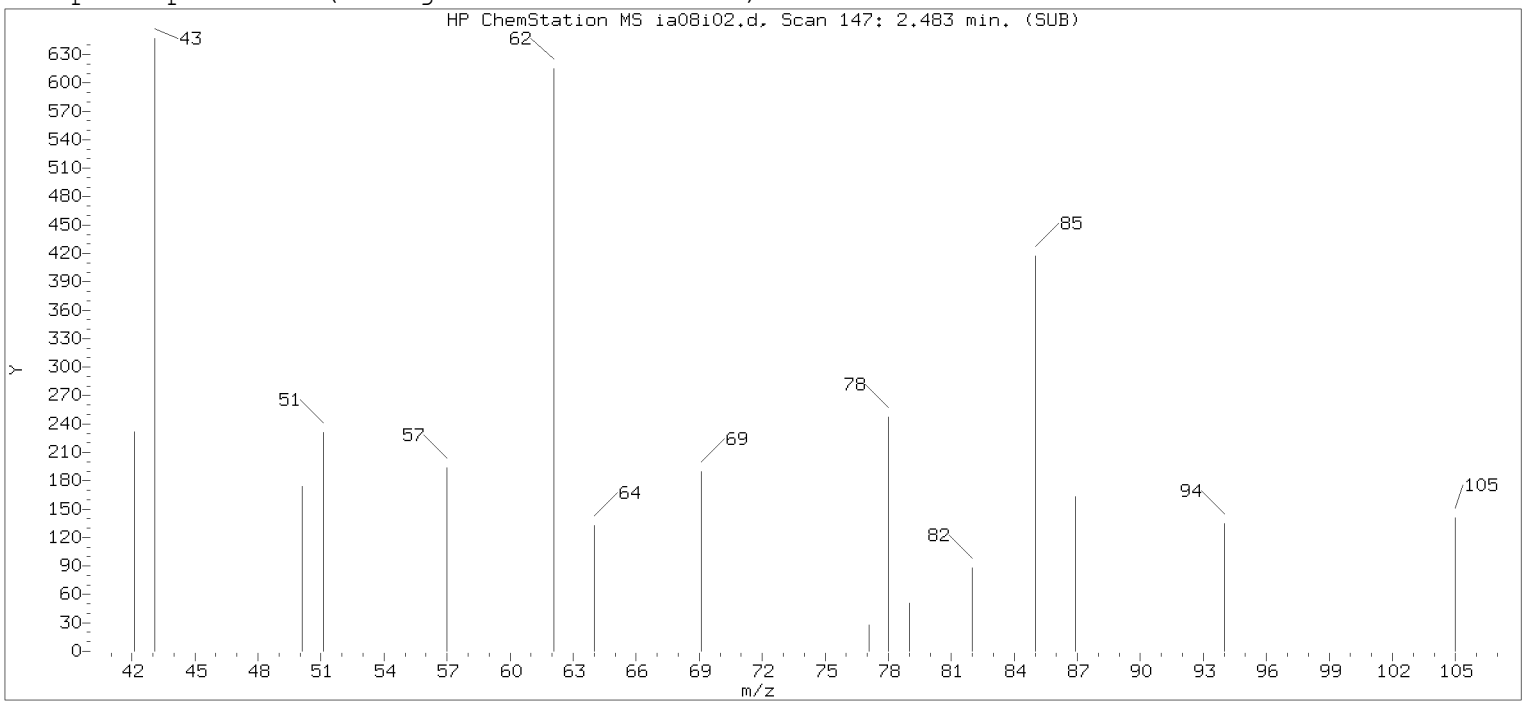
Compound Number : 7
Compound Name : Bromomethane
Scan Number : 173
Retention Time (minutes): 2.641
Quant Ion : 94.00
Area (flag) : 711125M
On-Column Amount (ng) : 9.9321
Integration start scan : 155 Integration stop scan: 205
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

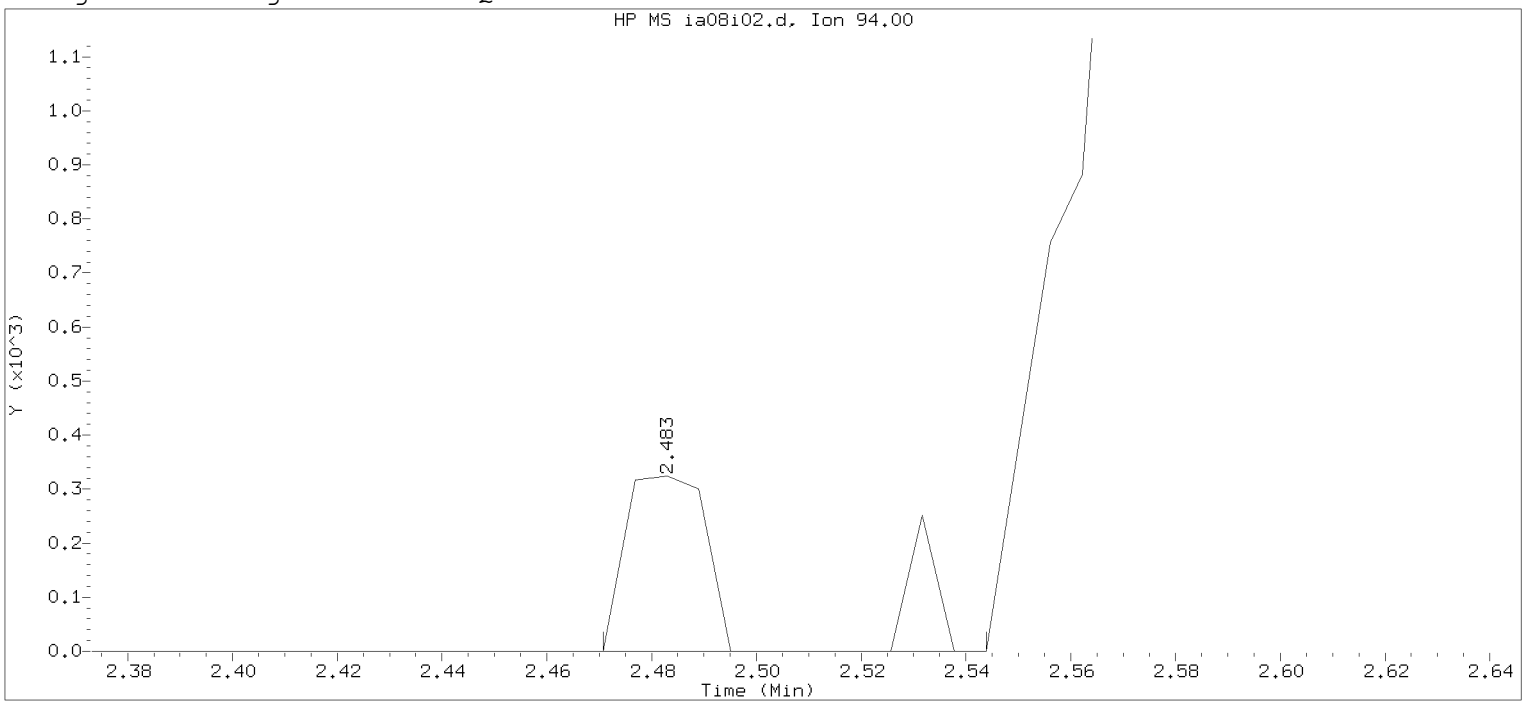
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

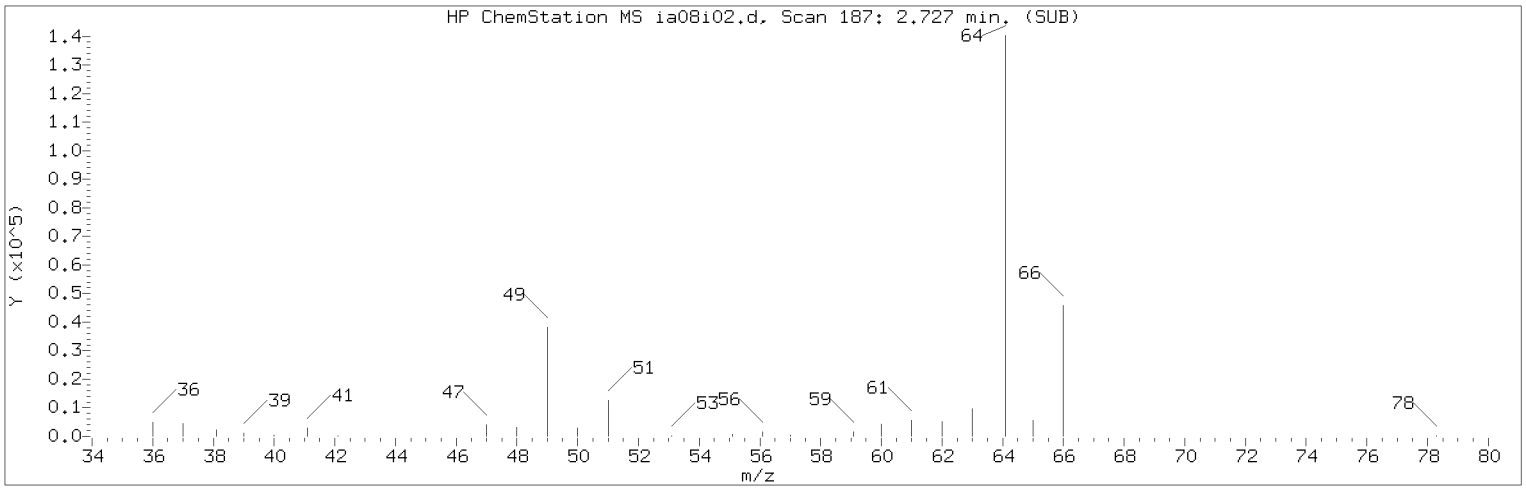
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

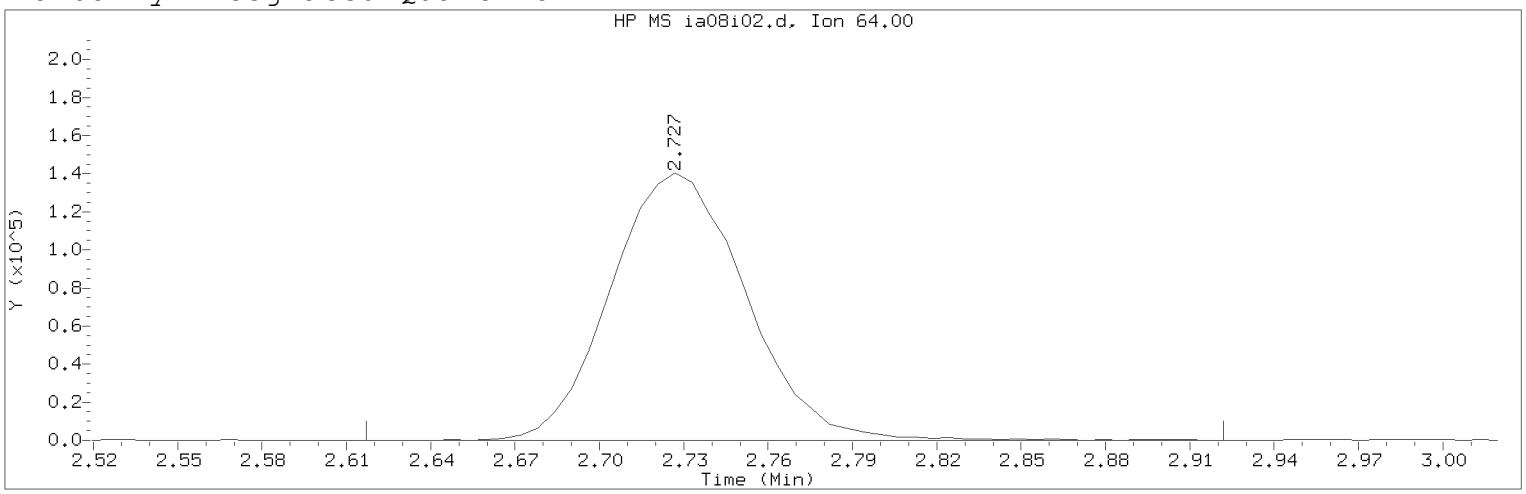
Compound Number	: 7		
Compound Name	: Bromomethane		
Scan Number	: 147		
Retention Time (minutes)	: 2.483		
Quant Ion	: 94.00		
Area	: 436		
On-column Amount (ng)	: 0.0876		
Integration start scan	: 144	Integration stop scan:	156
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

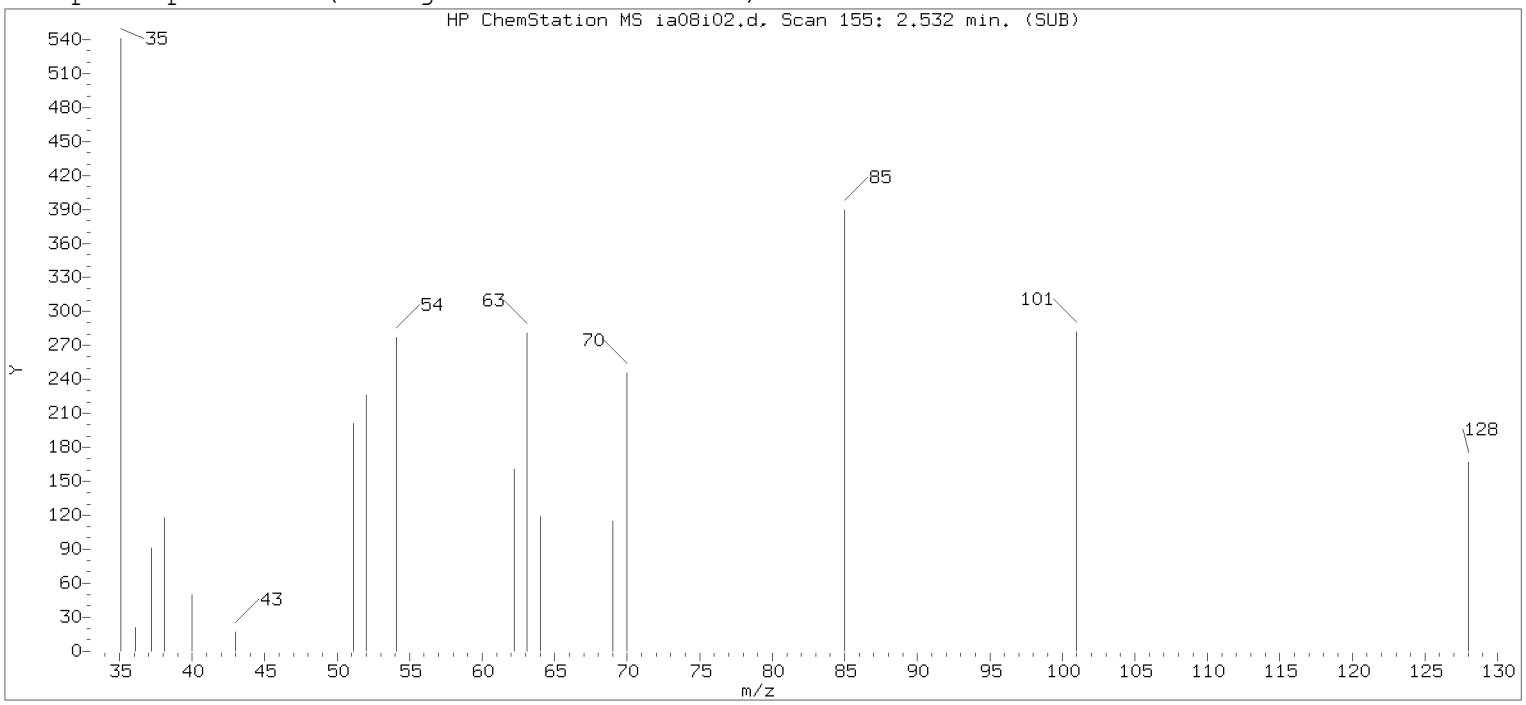
Compound Number : 8
Compound Name : Chloroethane
Scan Number : 187
Retention Time (minutes): 2.727
Quant Ion : 64.00
Area (flag) : 468299M
On-Column Amount (ng) : 10.0104
Integration start scan : 168 Integration stop scan: 218
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

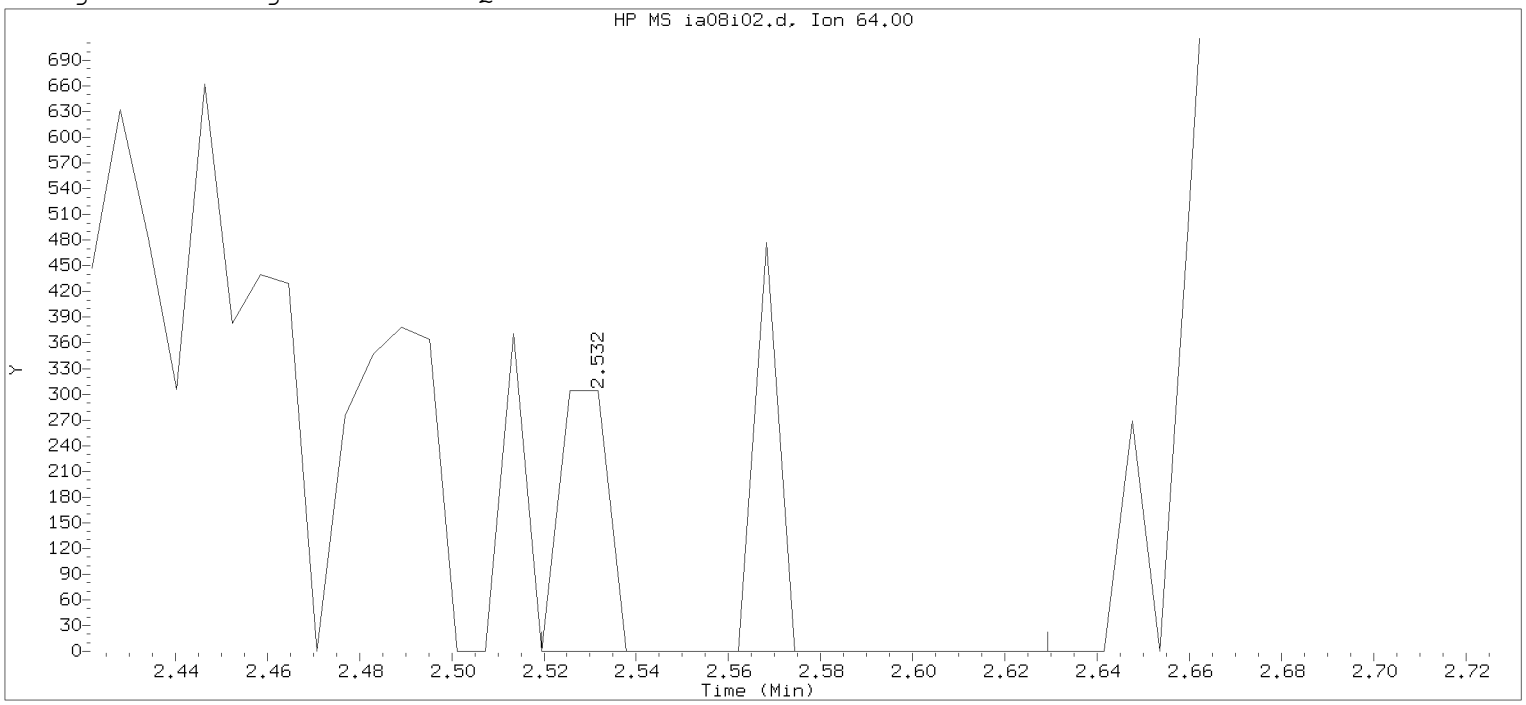
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

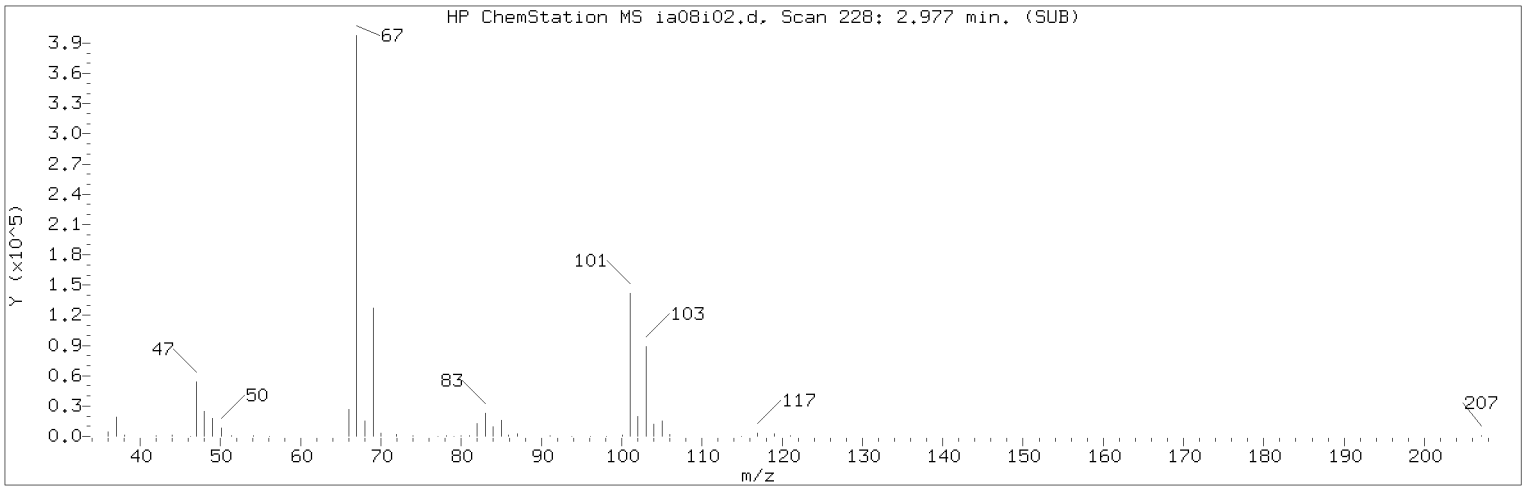
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Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

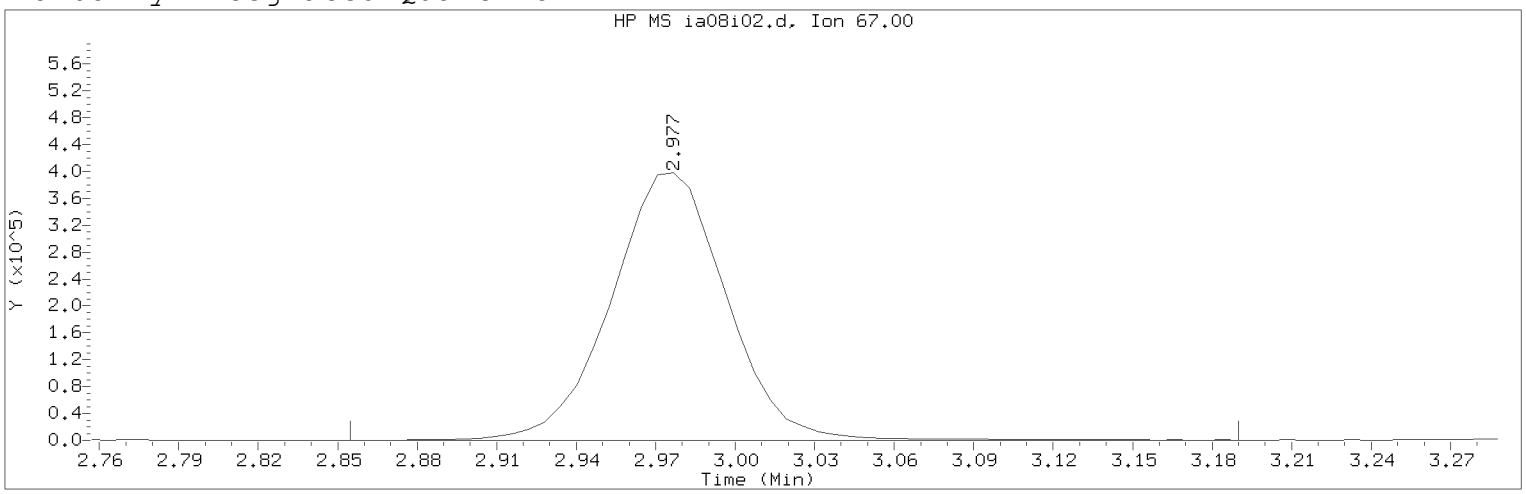
Compound Number : 8
Compound Name : Chloroethane
Scan Number : 155
Retention Time (minutes): 2.532
Quant Ion : 64.00
Area : 396
On-column Amount (ng) : 10.1733
Integration start scan : 152 Integration stop scan: 170
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: JHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

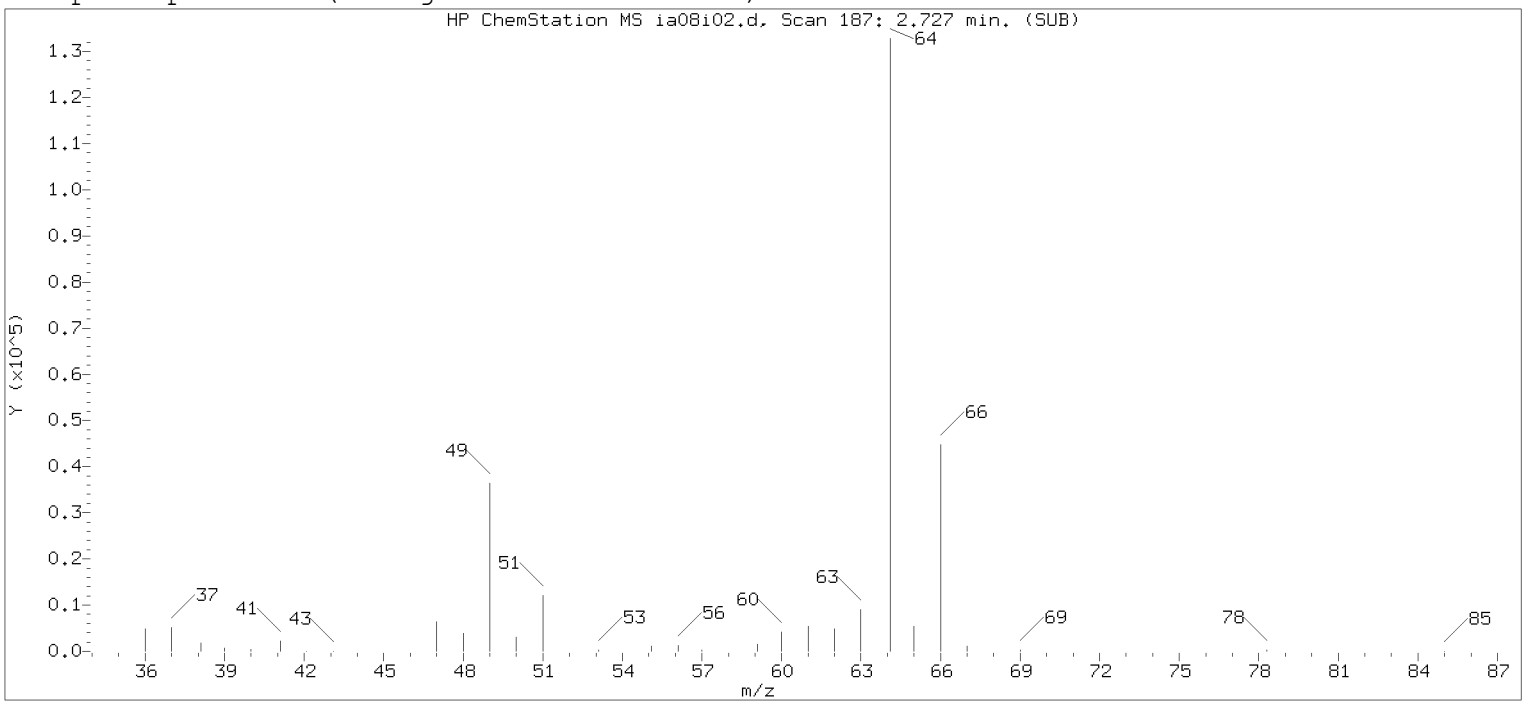
Compound Number : 9
Compound Name : Dichlorofluoromethane
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area (flag) : 1205684M
On-Column Amount (ng) : 9.9746
Integration start scan : 207 Integration stop scan: 262
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

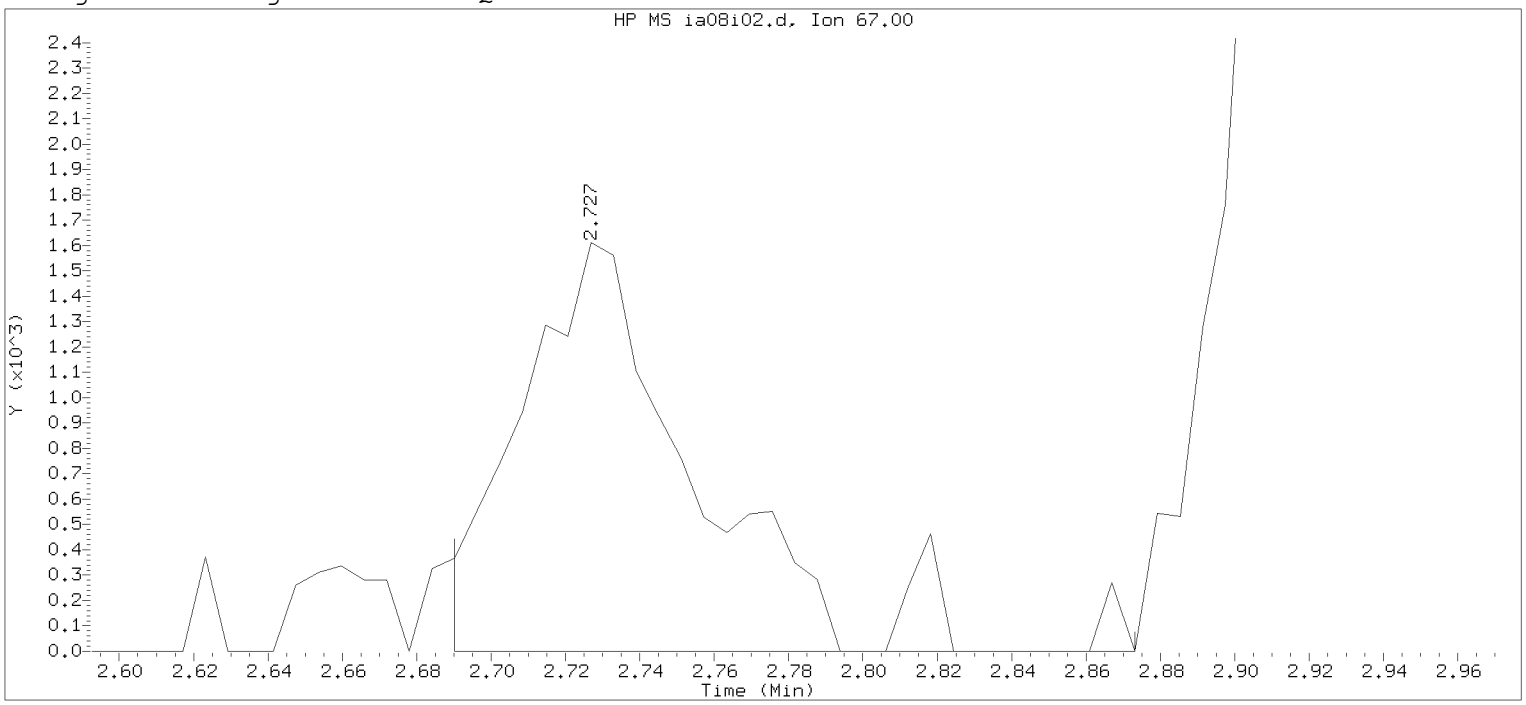
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

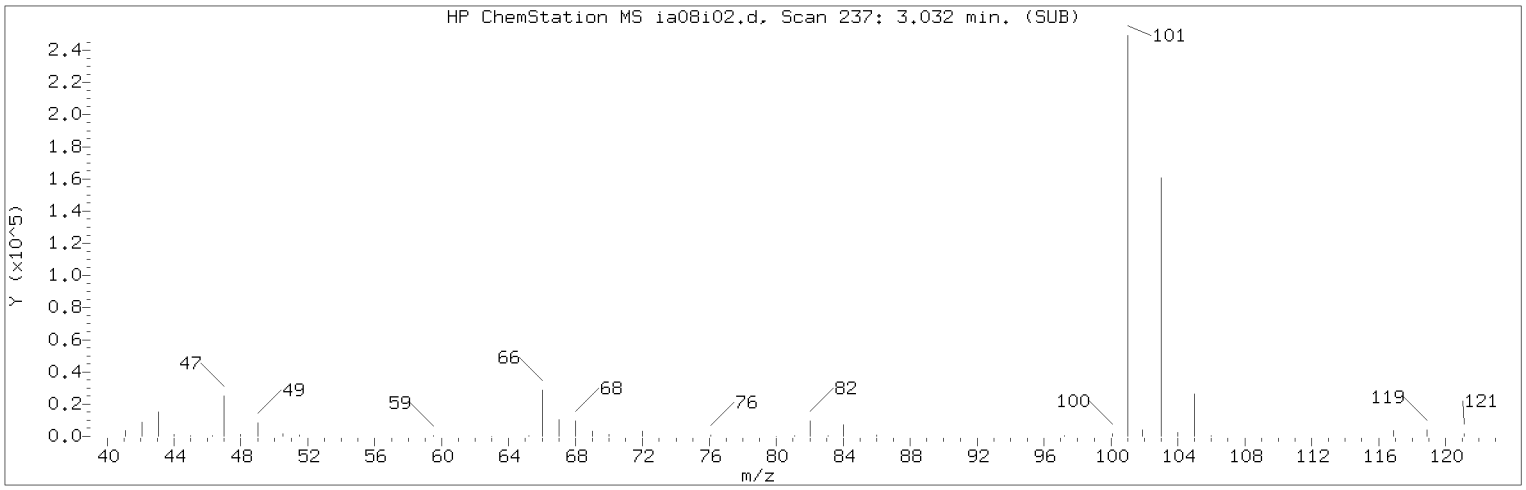
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

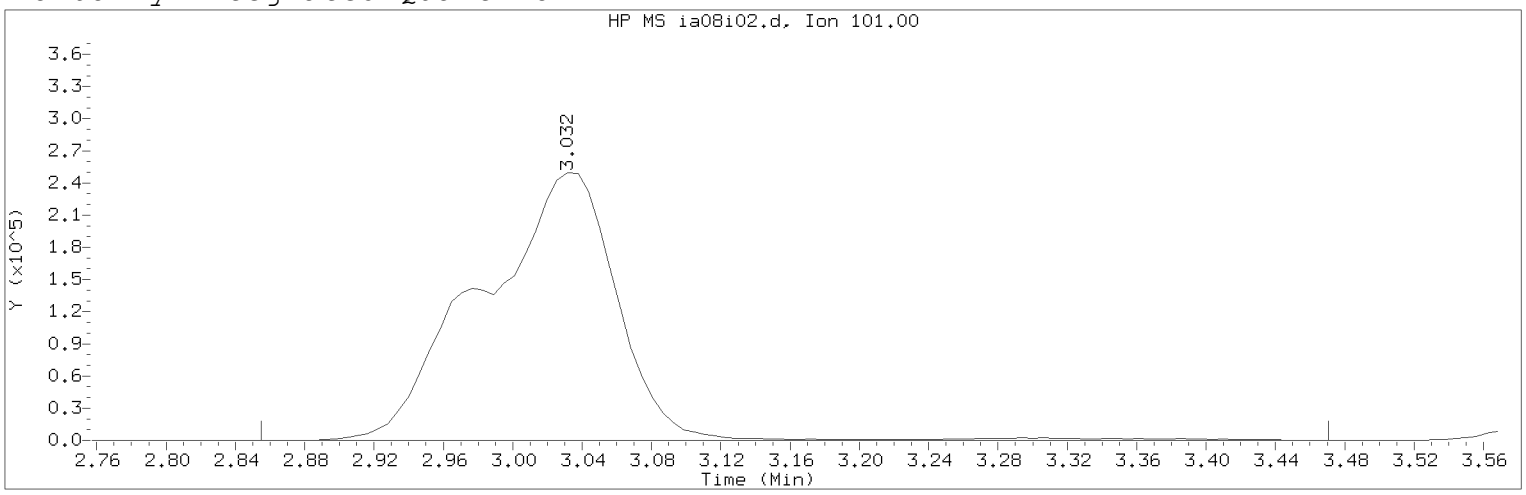
Compound Number : 9
Compound Name : Dichlorofluoromethane
Scan Number : 187
Retention Time (minutes): 2.727
Quant Ion : 67.00
Area : 5352
On-column Amount (ng) : 29.5940
Integration start scan : 180 Integration stop scan: 210
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user: JKHowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

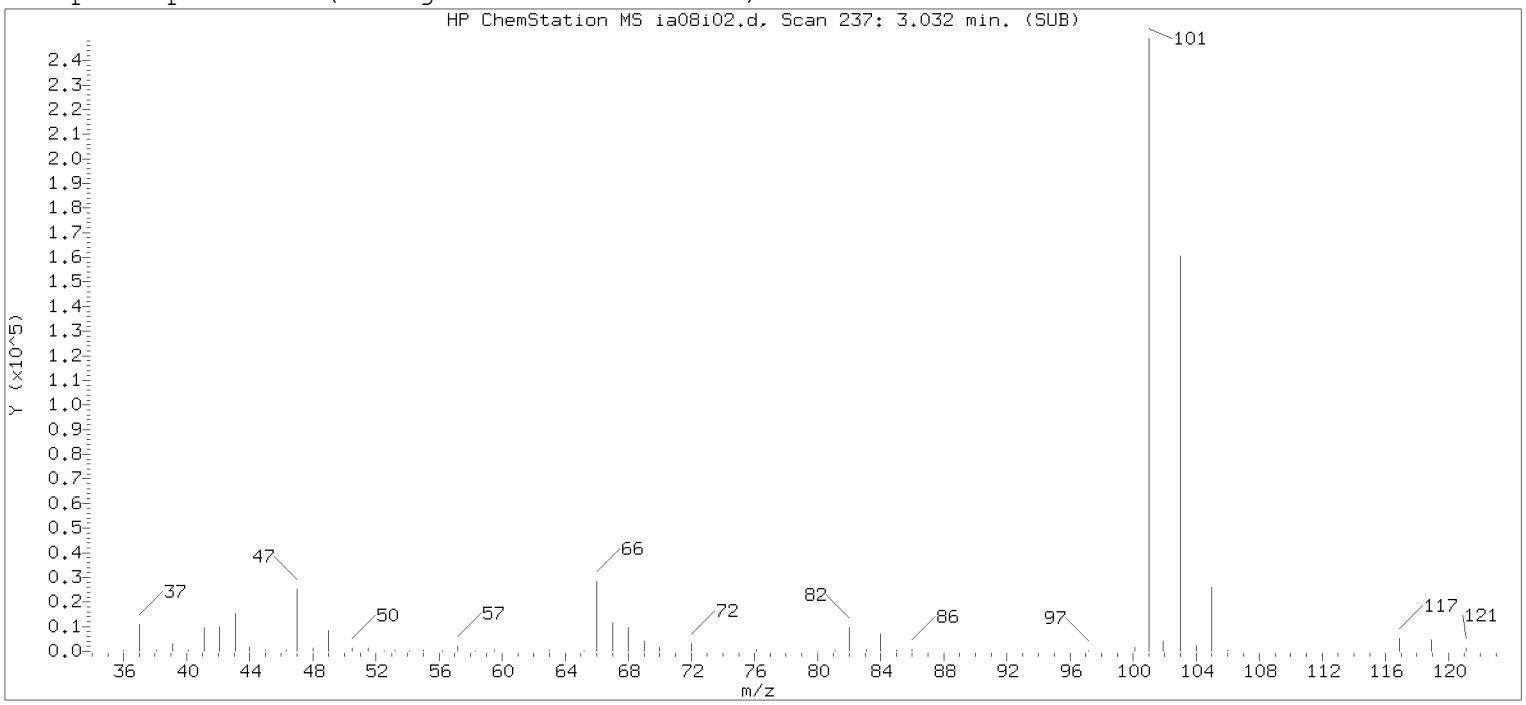
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 237
Retention Time (minutes): 3.032
Quant Ion : 101.00
Area (flag) : 1356902M
On-Column Amount (ng) : 10.0853
Integration start scan : 207 Integration stop scan: 308
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

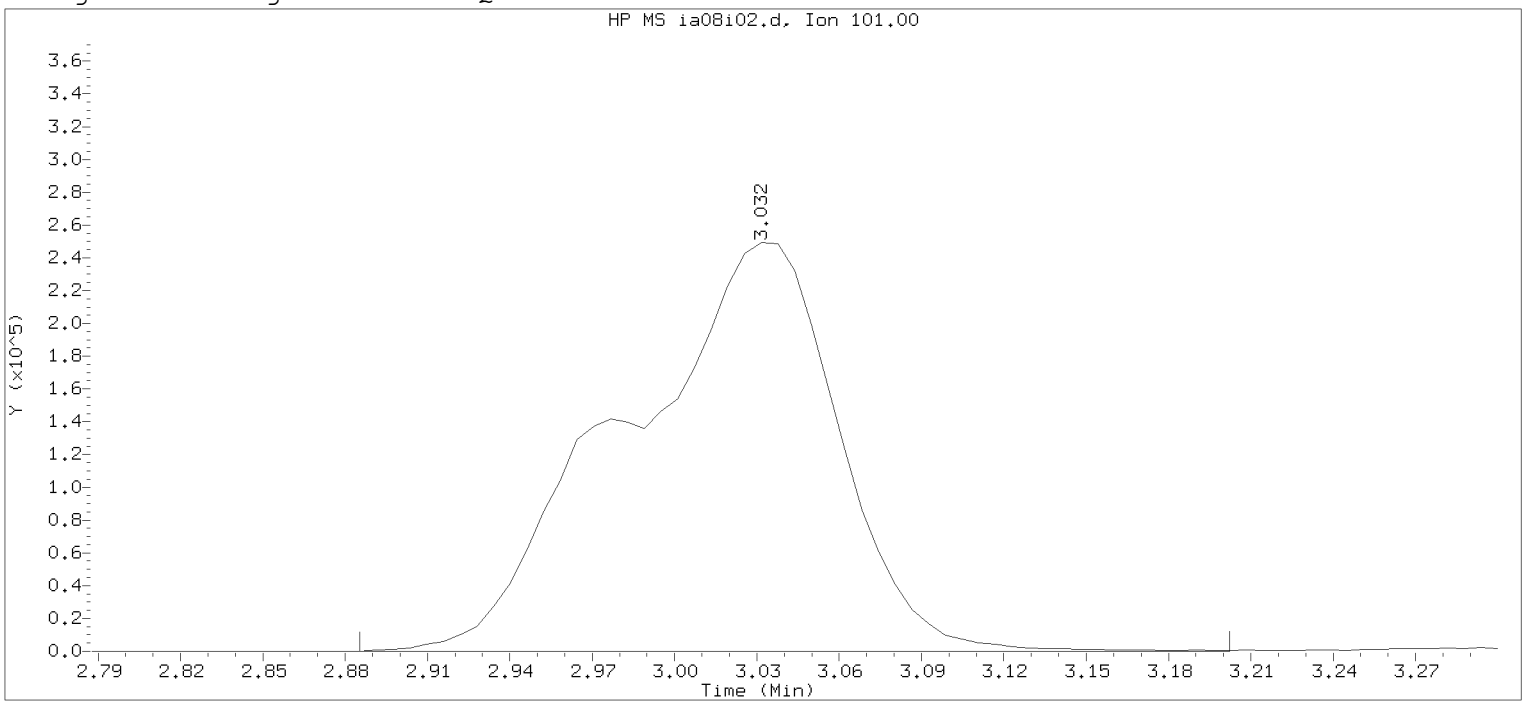
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

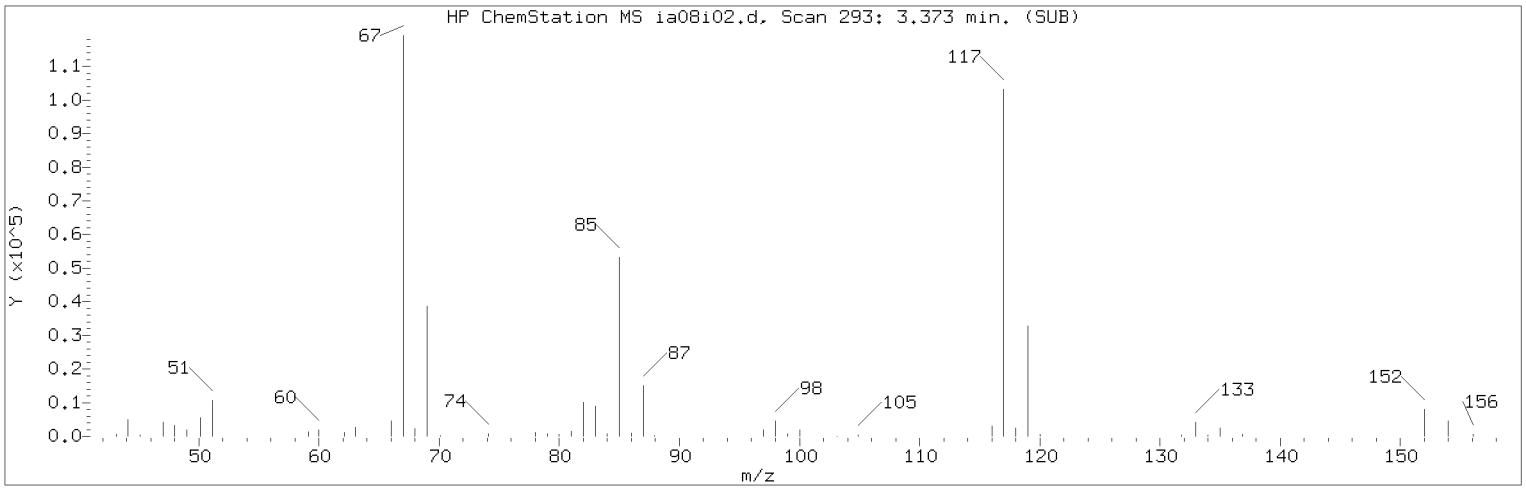
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

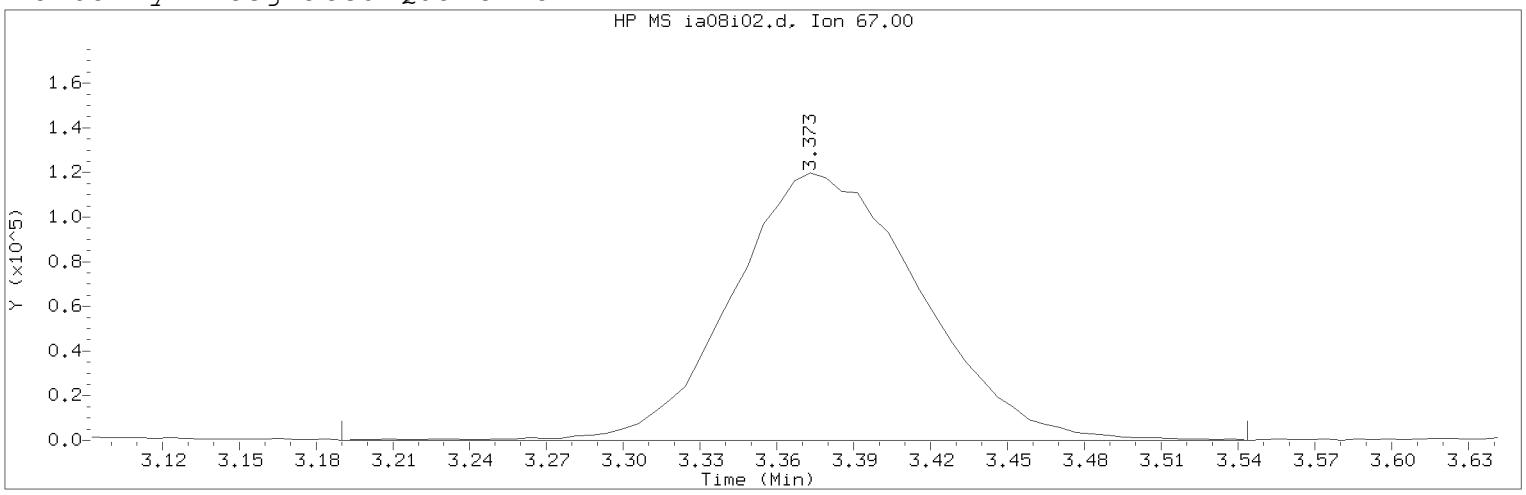
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 237
Retention Time (minutes): 3.032
Quant Ion : 101.00
Area : 1339707
On-column Amount (ng) : 47.1903
Integration start scan : 212 Integration stop scan: 264
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe174

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

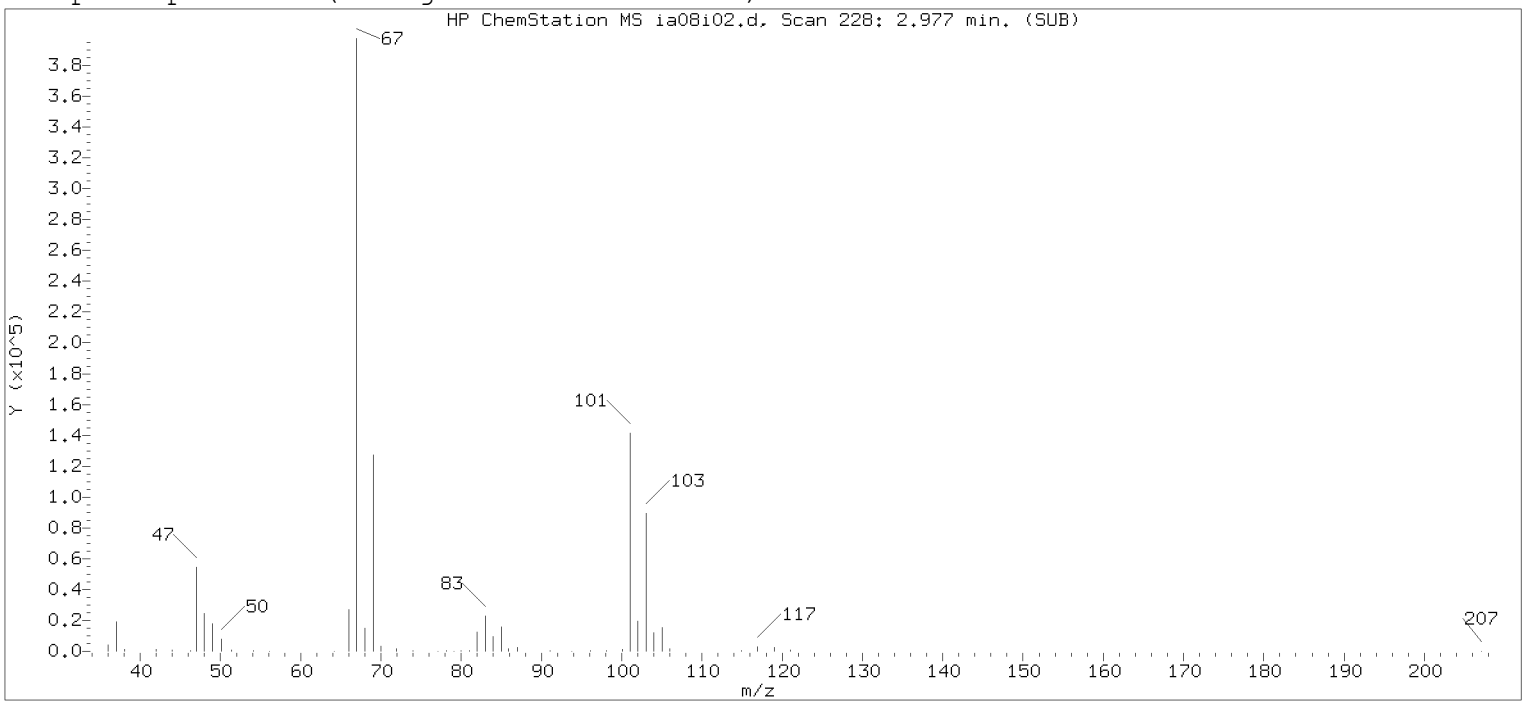
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 293
Retention Time (minutes): 3.373
Quant Ion : 67.00
Area (flag) : 610295M
On-Column Amount (ng) : 10.0881
Integration start scan : 262 Integration stop scan: 320
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

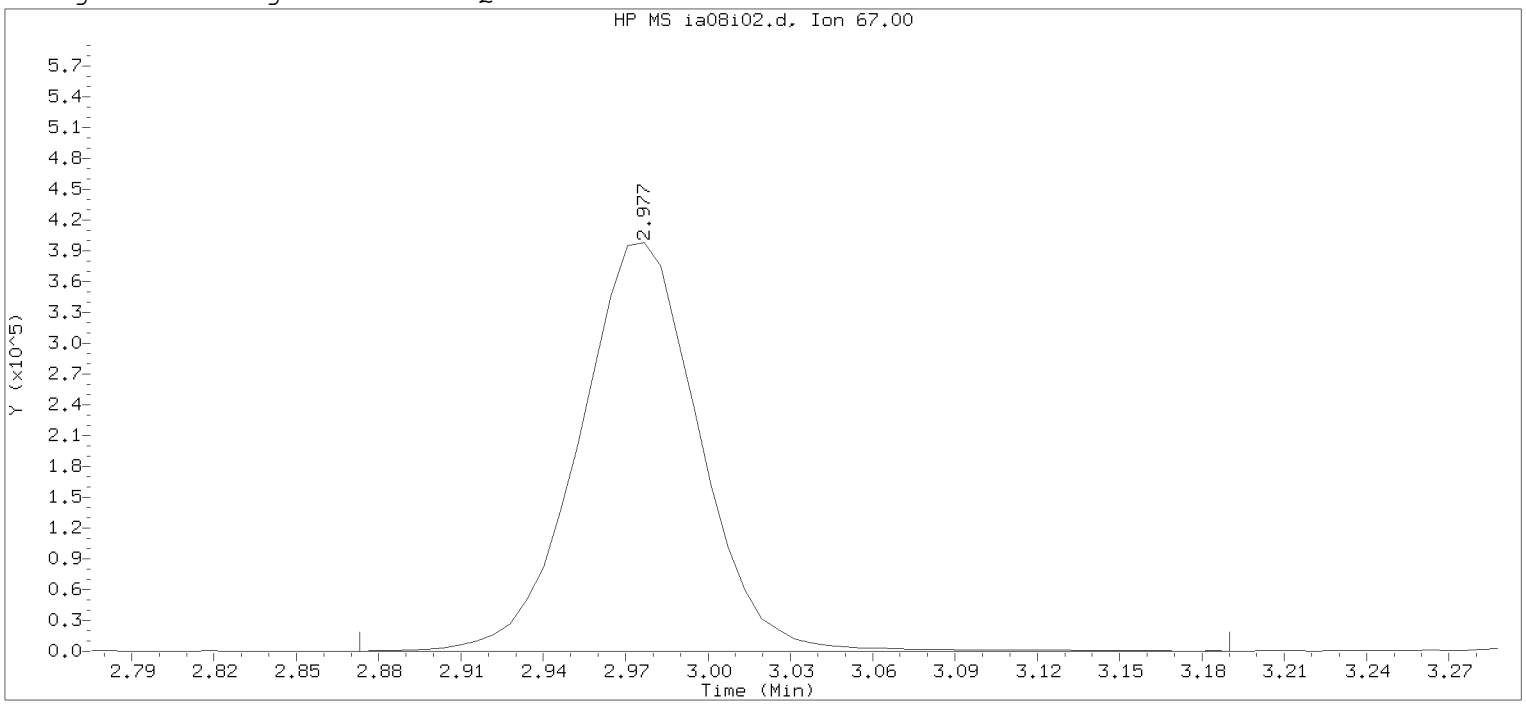
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

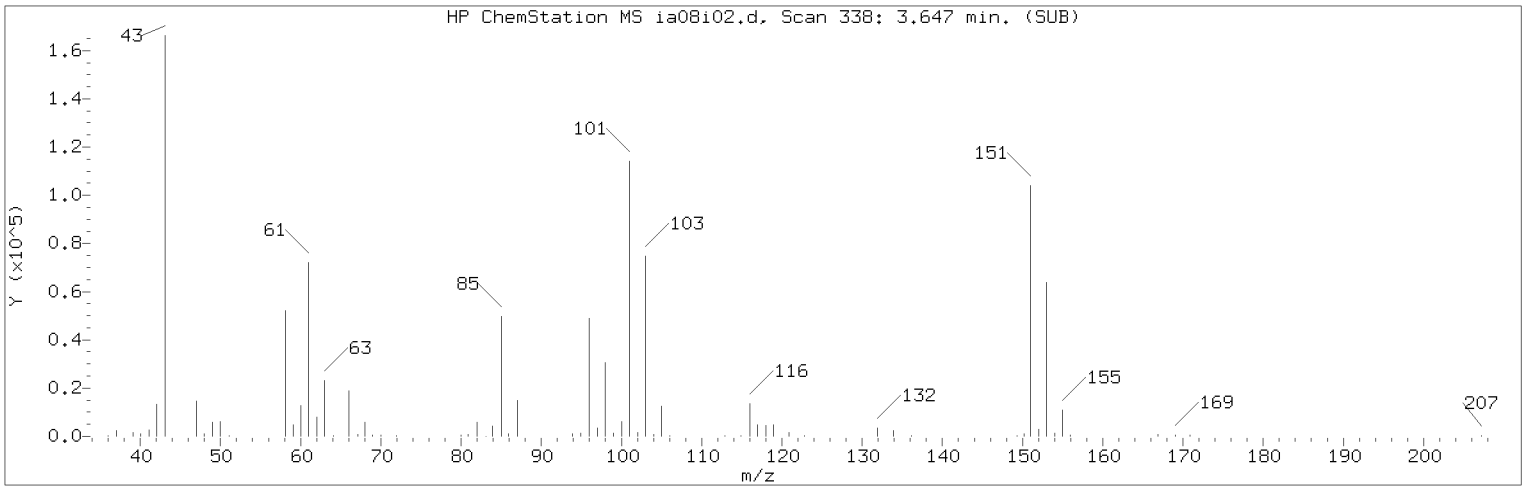
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

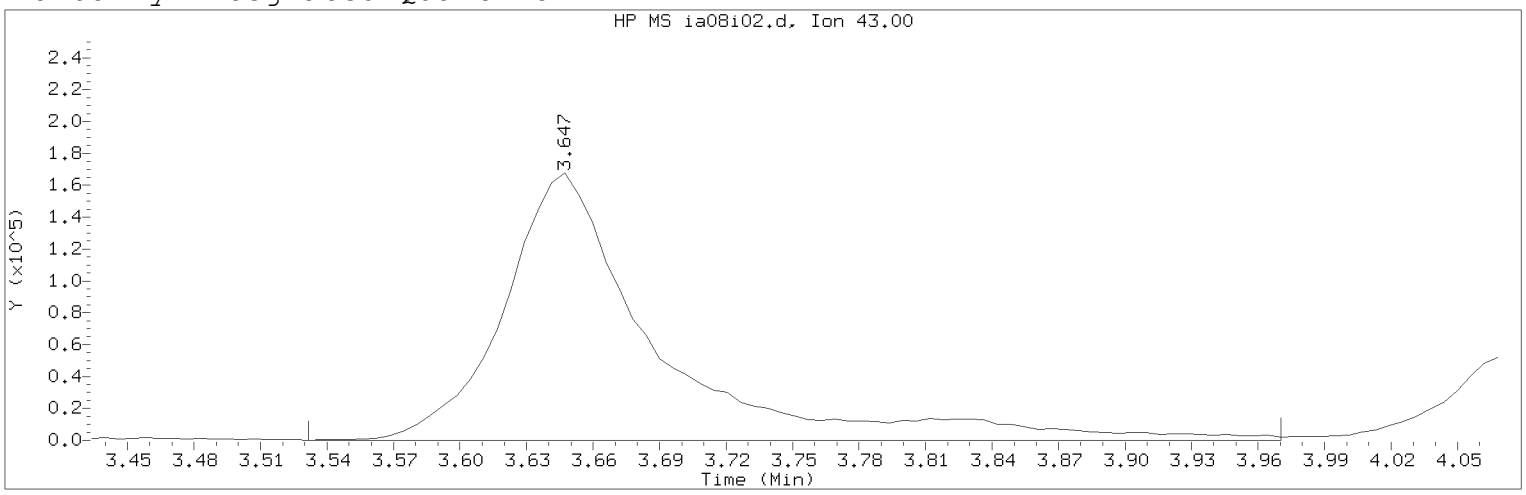
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area : 1205589
On-column Amount (ng) : 47.4705
Integration start scan : 210 Integration stop scan: 262
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe176

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

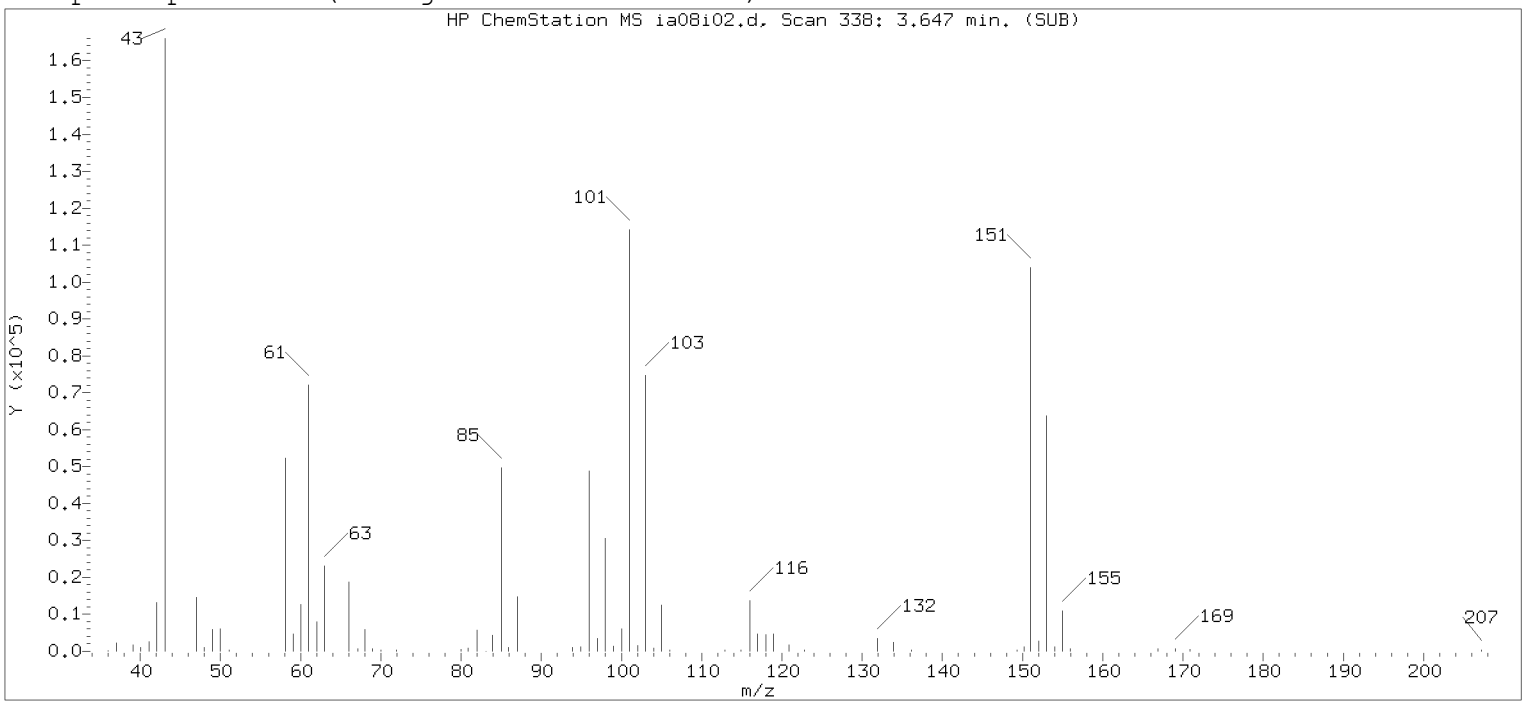
Compound Number : 14
Compound Name : Acetone
Scan Number : 338
Retention Time (minutes): 3.647
Quant Ion : 43.00
Area (flag) : 805979M
On-Column Amount (ng) : 101.7146
Integration start scan : 318 Integration stop scan: 390
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

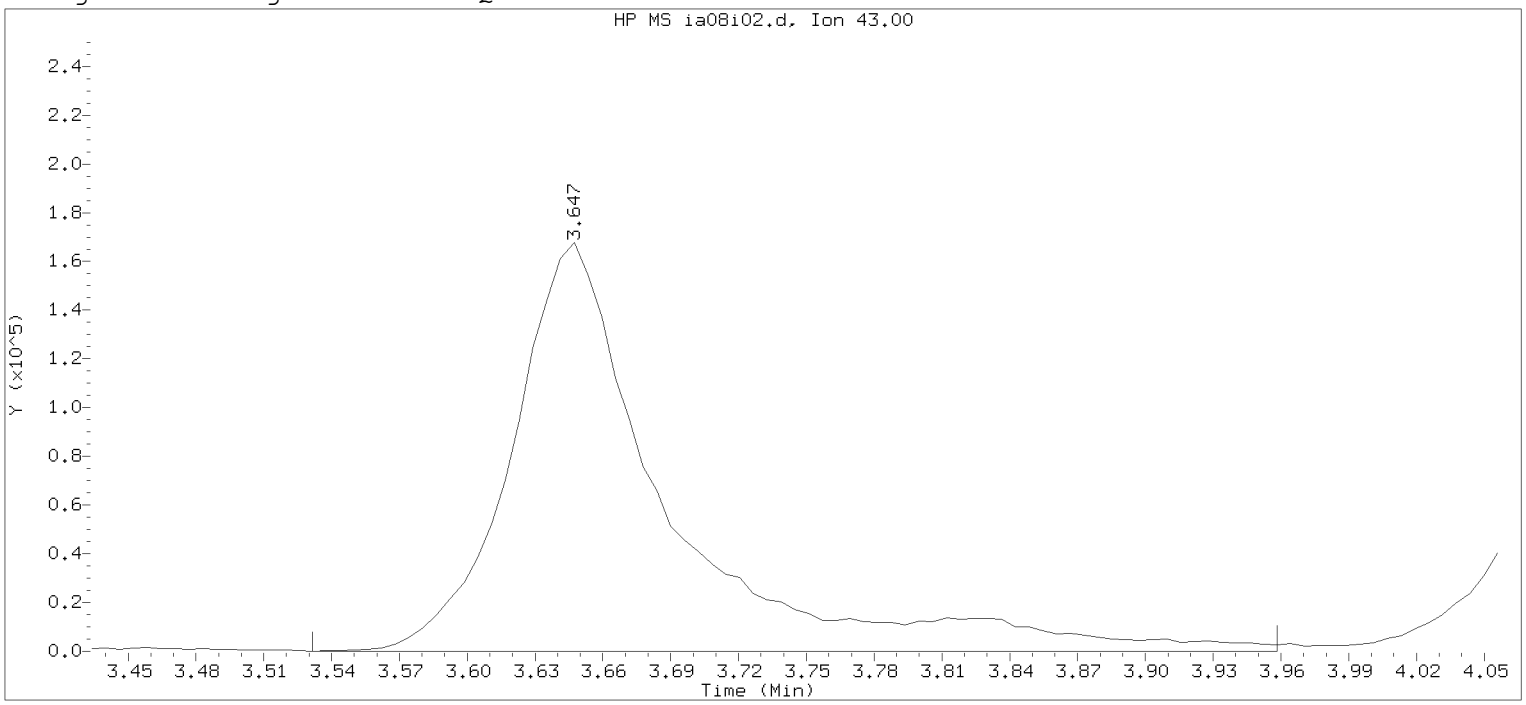
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

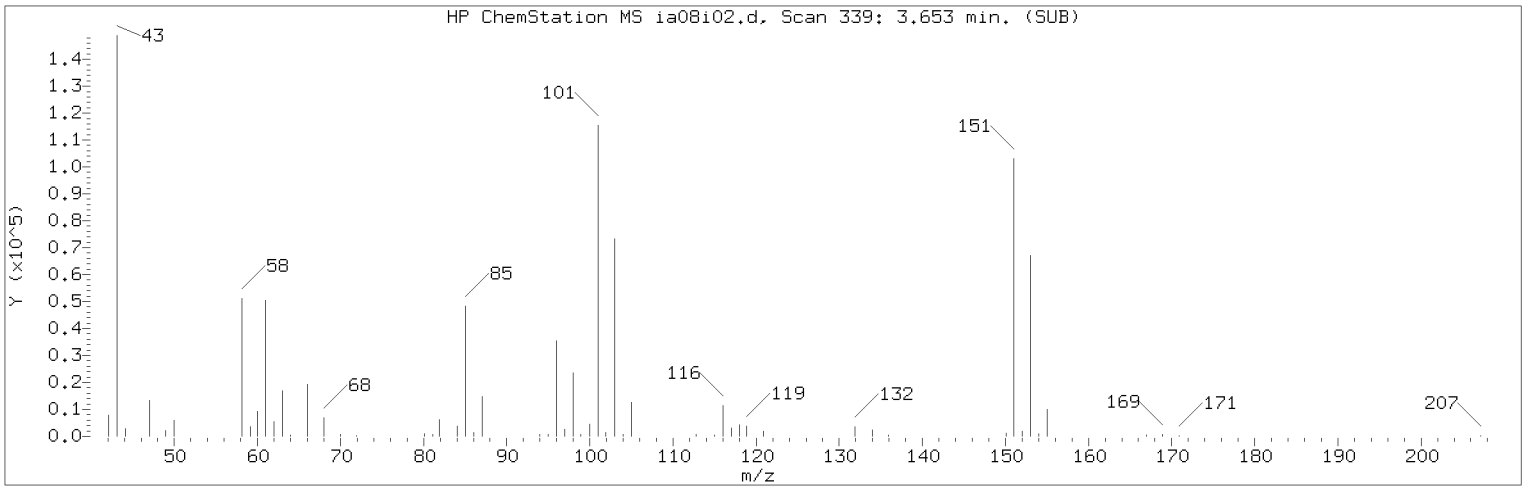
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

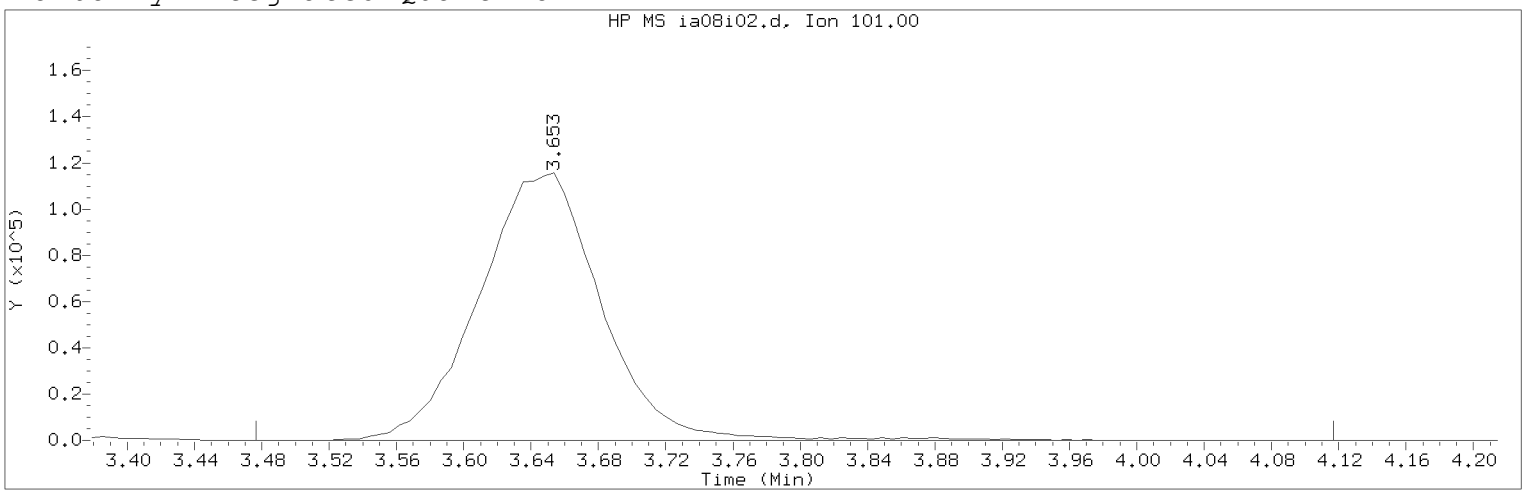
Compound Number : 14
Compound Name : Acetone
Scan Number : 338
Retention Time (minutes): 3.647
Quant Ion : 43.00
Area : 803613
On-column Amount (ng) : 21.5341
Integration start scan : 318 Integration stop scan: 388
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user AF34 jkhowe178

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

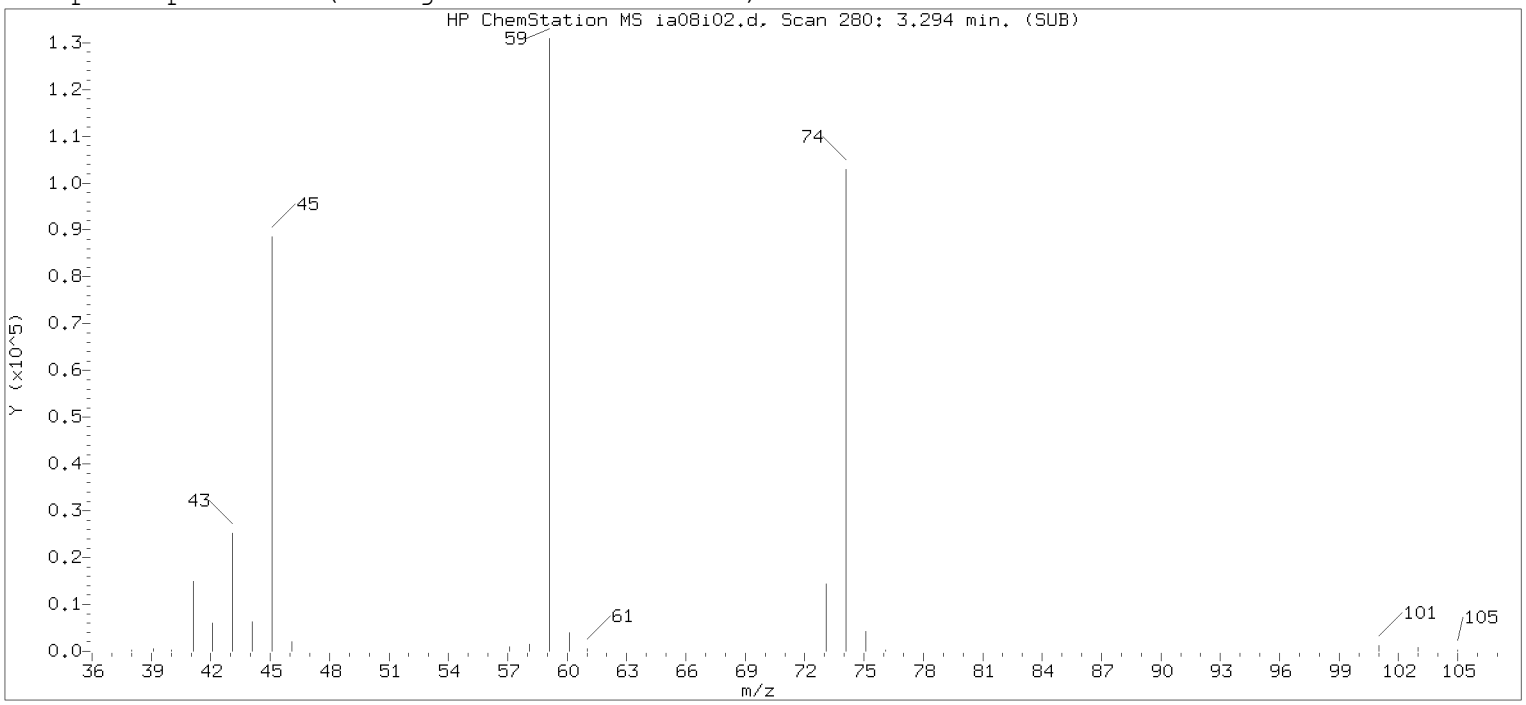
Compound Number : 16
Compound Name : Freon 113
Scan Number : 339
Retention Time (minutes): 3.653
Quant Ion : 101.00
Area (flag) : 583964M
On-Column Amount (ng) : 10.3573
Integration start scan : 309 Integration stop scan: 414
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

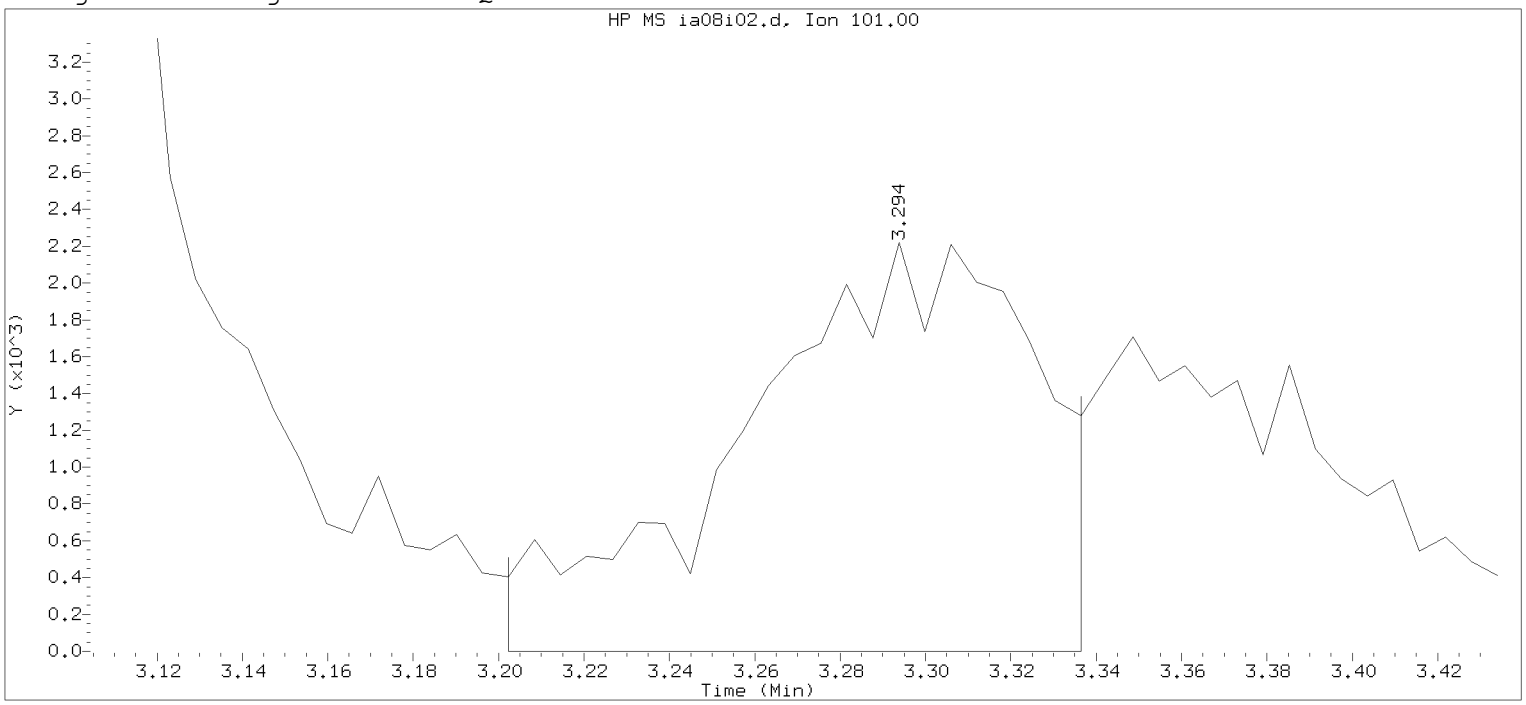
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

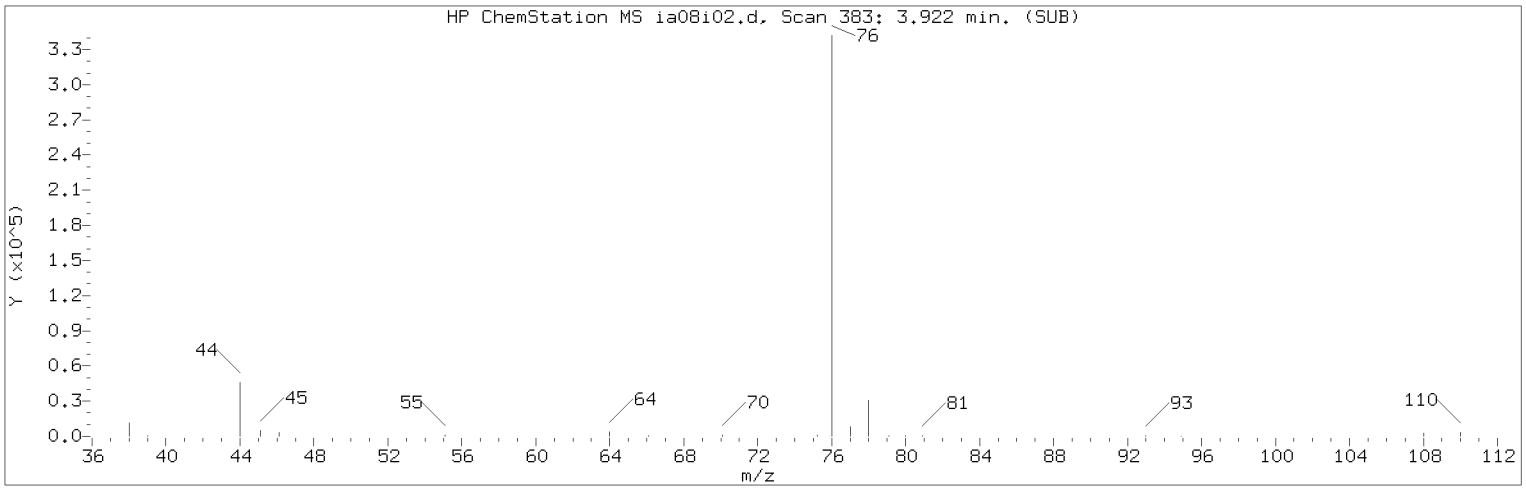
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

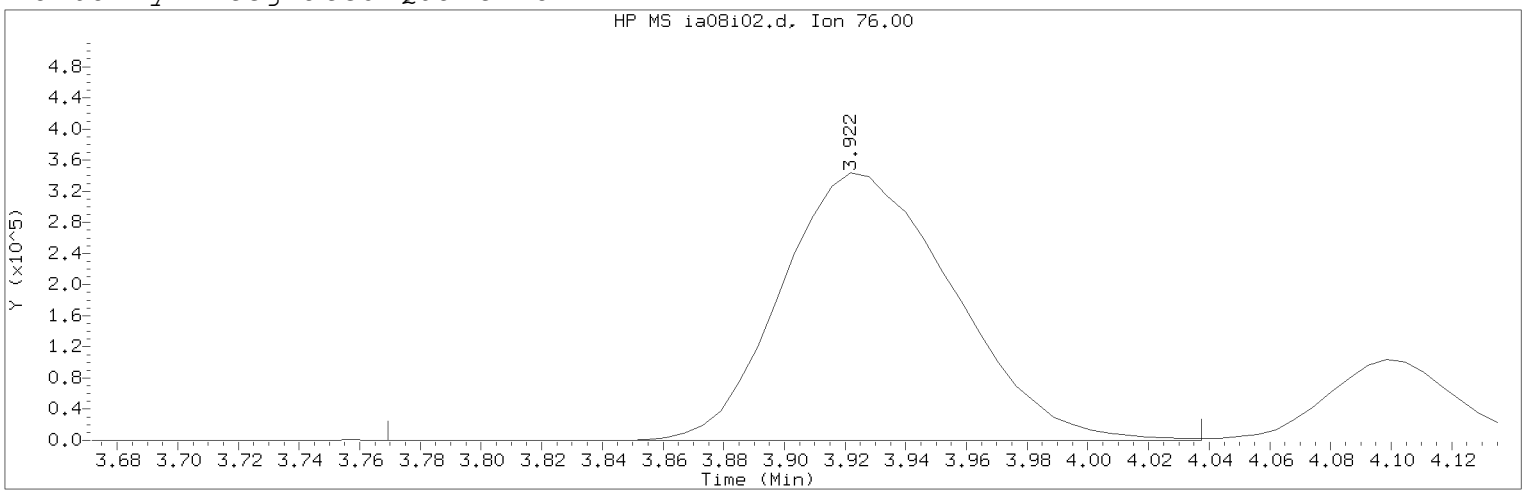
Compound Number : 16
Compound Name : Freon 113
Scan Number : 280
Retention Time (minutes): 3.294
Quant Ion : 101.00
Area : 10408
On-column Amount (ng) : 35.9963
Integration start scan : 264 Integration stop scan: 286
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: JHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

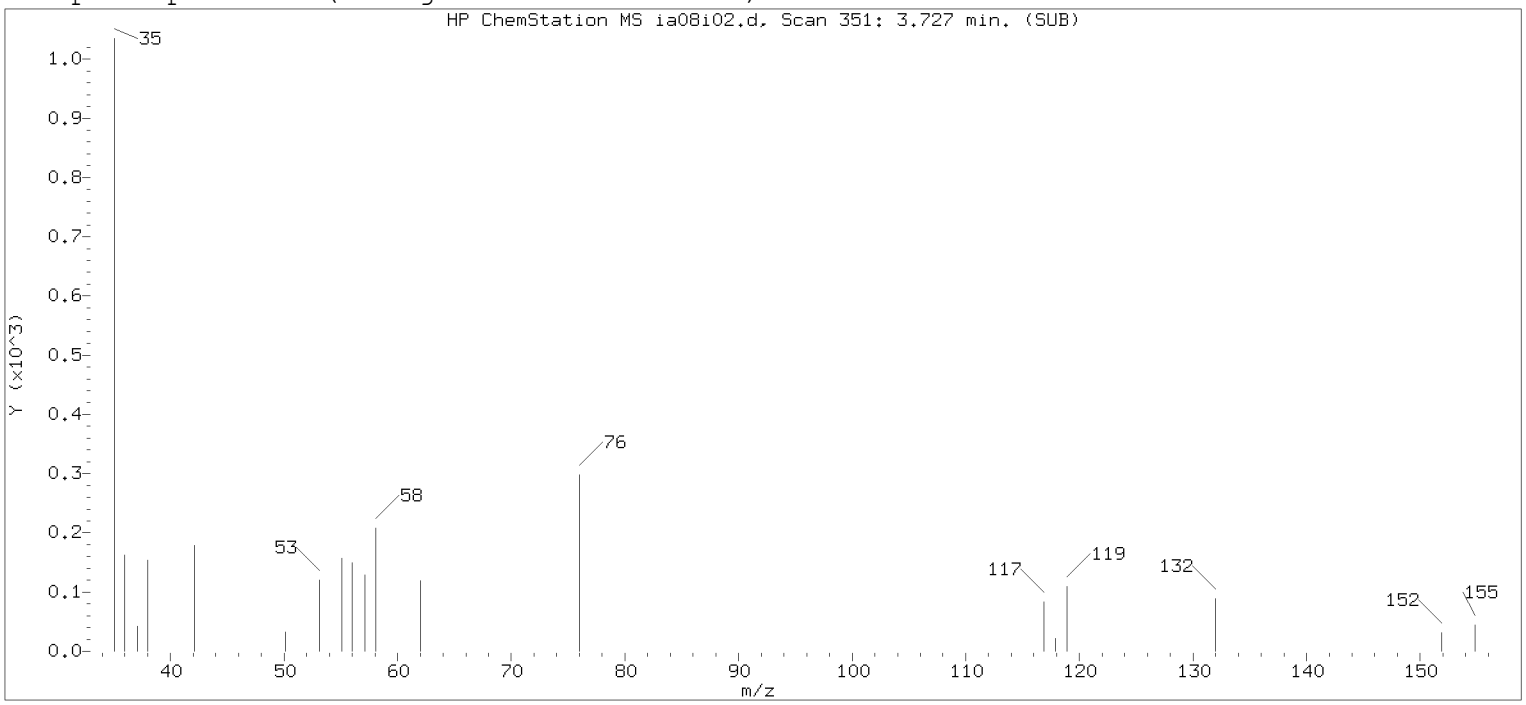
Compound Number : 18
Compound Name : Carbon Disulfide
Scan Number : 383
Retention Time (minutes): 3.922
Quant Ion : 76.00
Area (flag) : 1349756M
On-Column Amount (ng) : 9.8785
Integration start scan : 357 Integration stop scan: 401
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

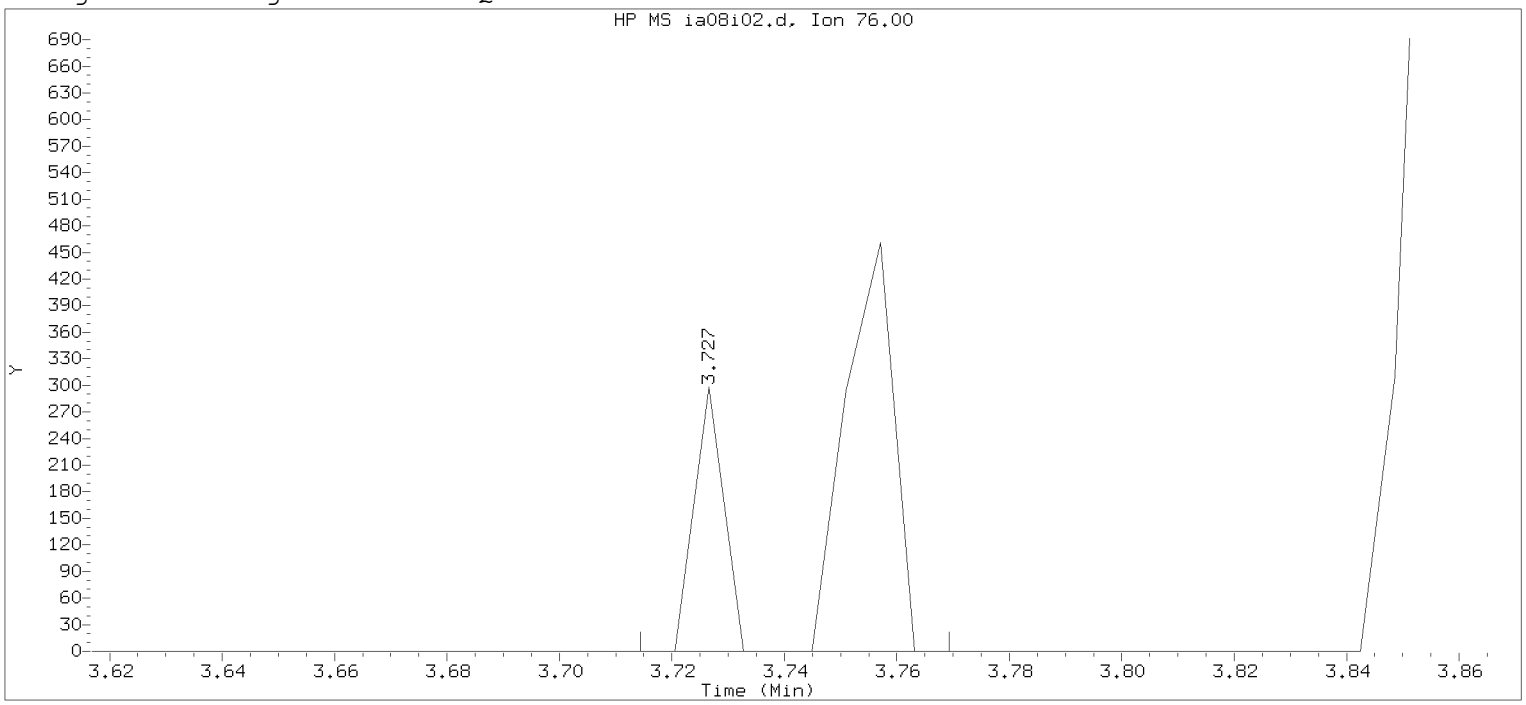
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

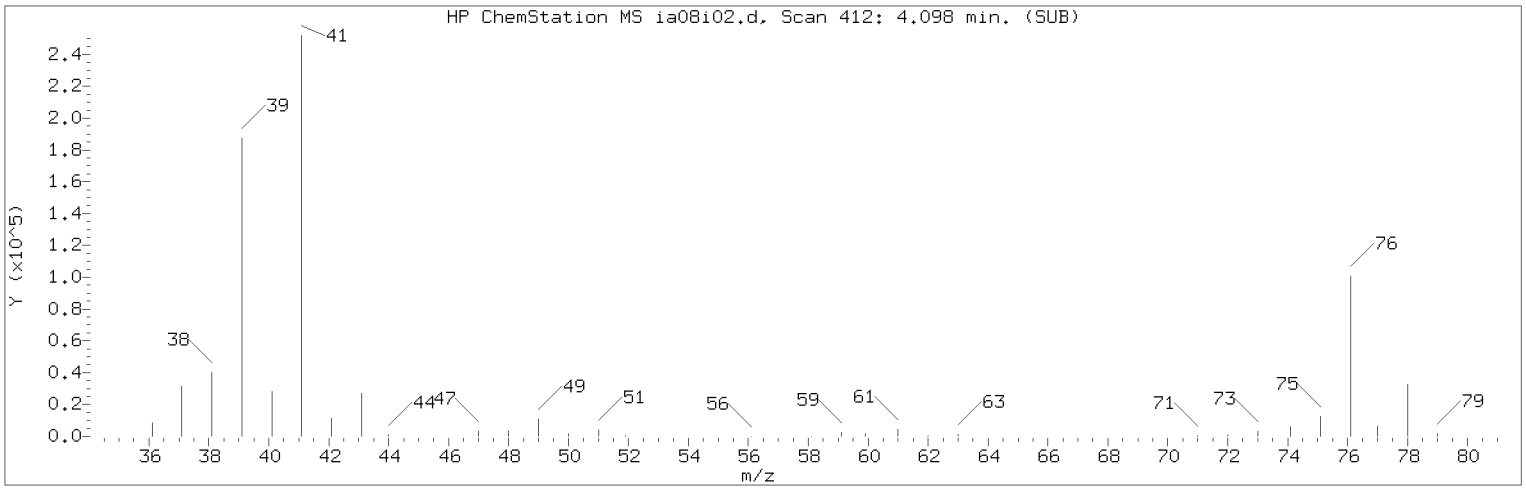
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

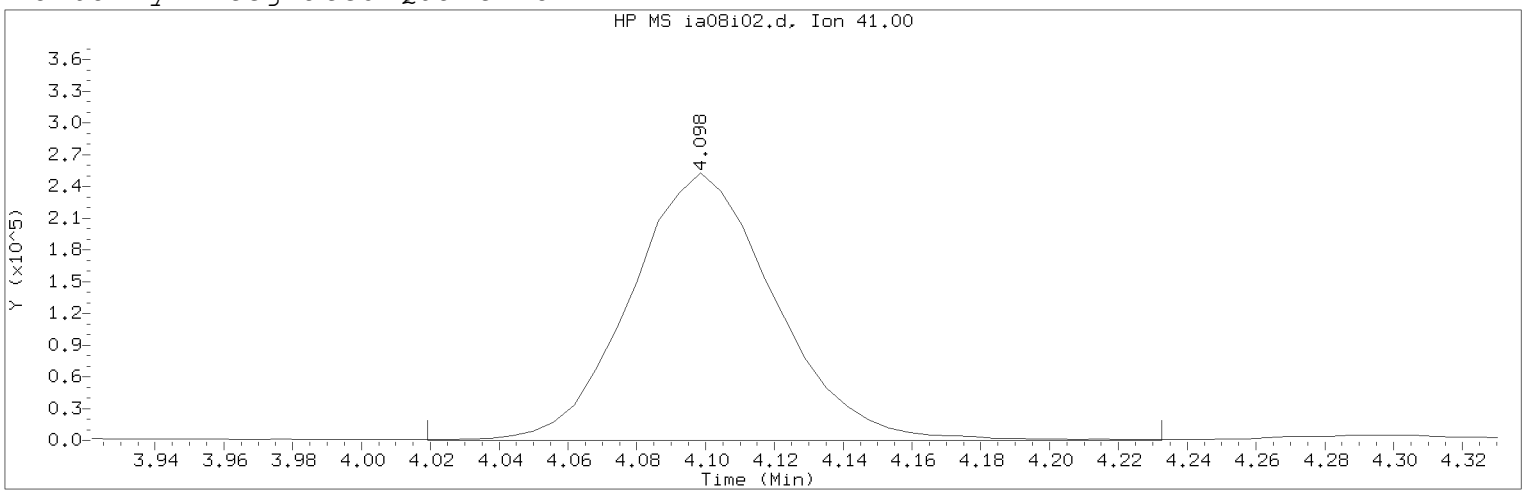
Compound Number : 18
Compound Name : Carbon Disulfide
Scan Number : 351
Retention Time (minutes): 3.727
Quant Ion : 76.00
Area : 385
On-column Amount (ng) : 4.1072
Integration start scan : 348 Integration stop scan: 357
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

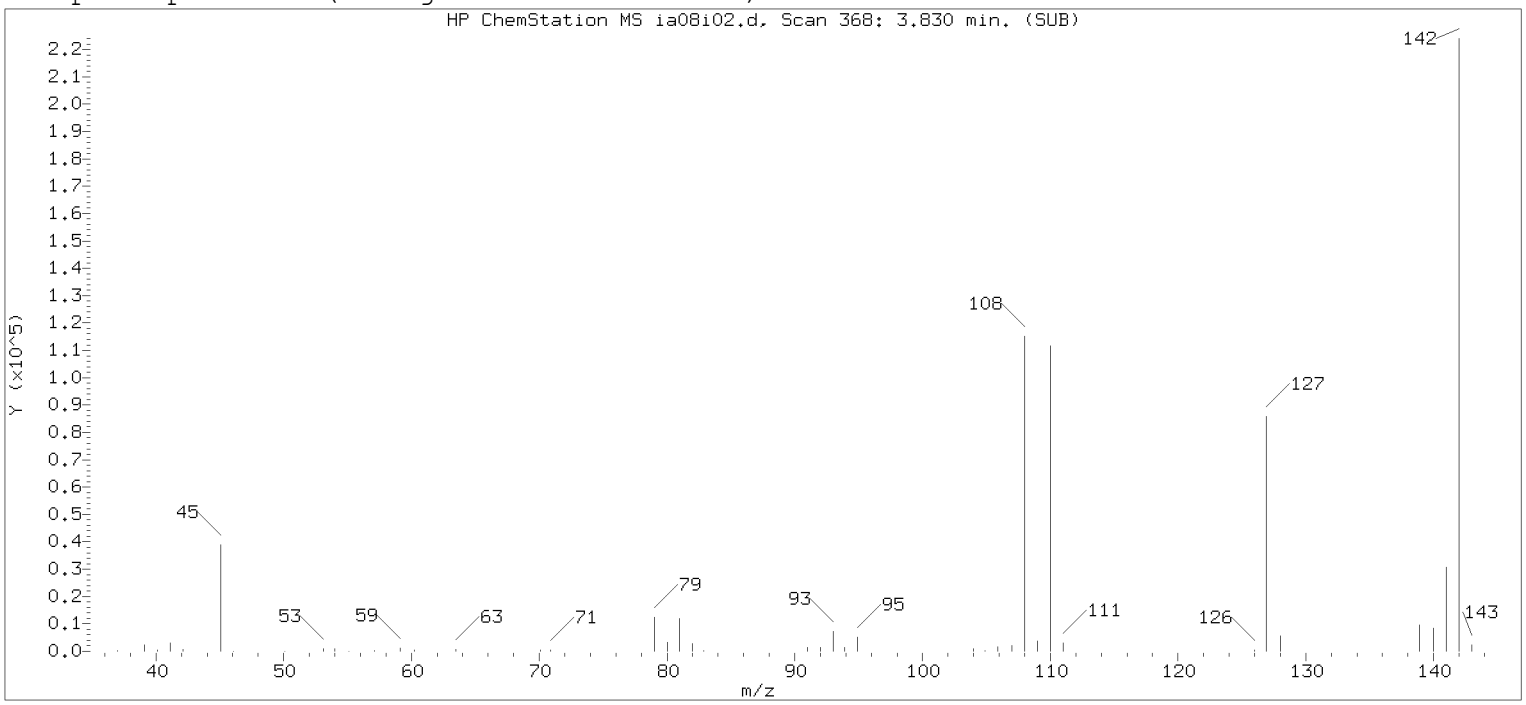
Compound Number : 22
Compound Name : Allyl Chloride
Scan Number : 412
Retention Time (minutes): 4.098
Quant Ion : 41.00
Area (flag) : 736727M
On-Column Amount (ng) : 10.2643
Integration start scan : 398 Integration stop scan: 433
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

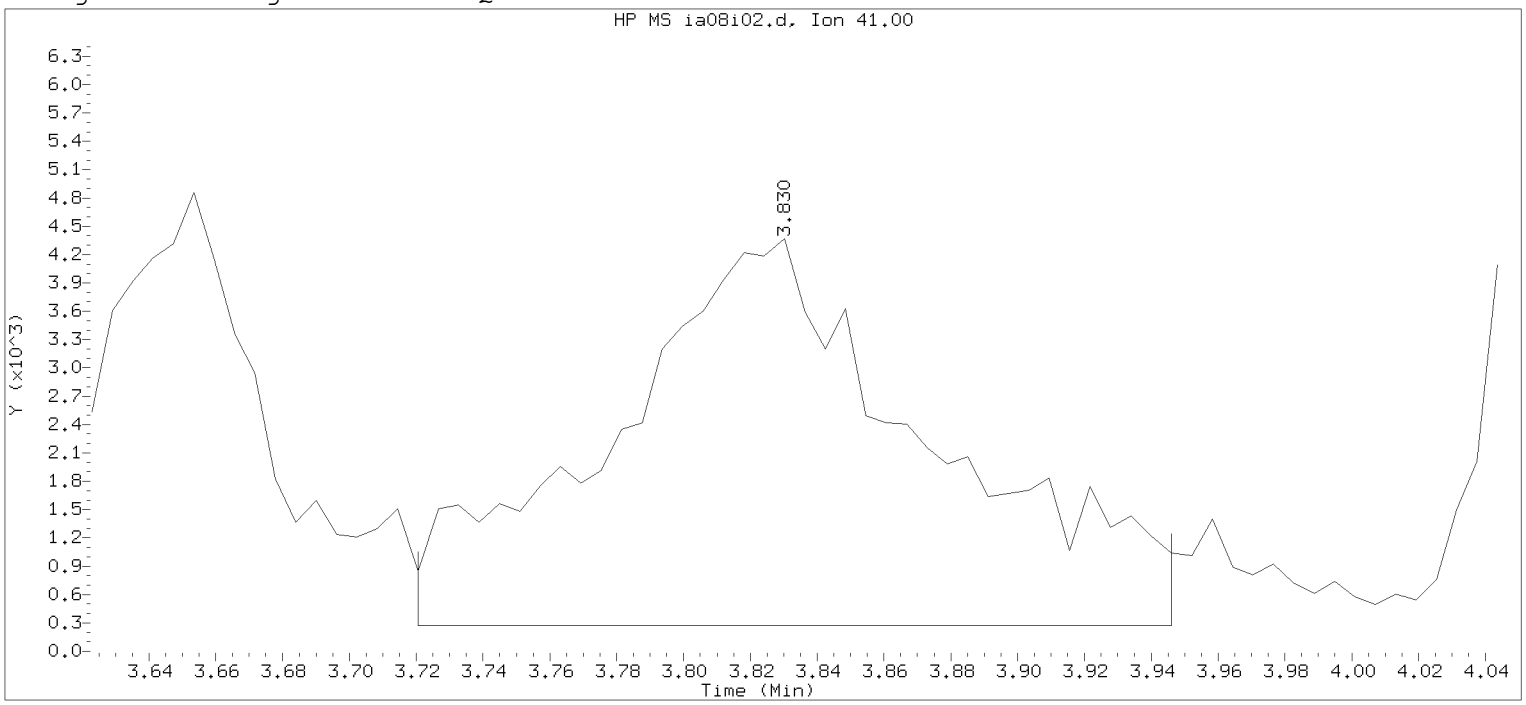
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

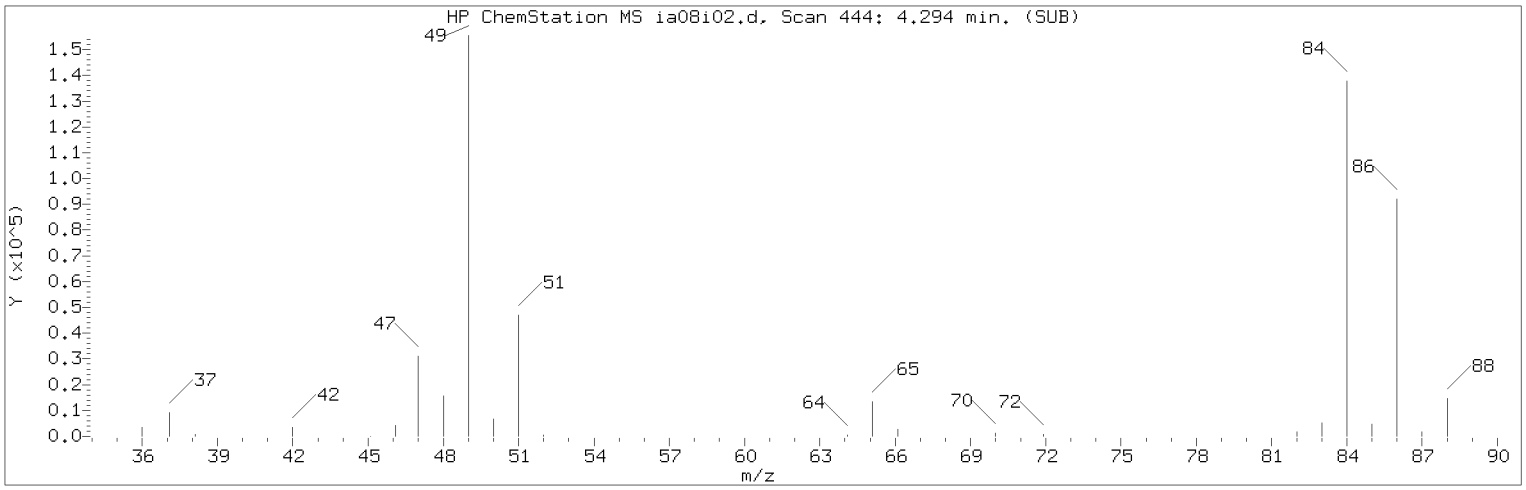
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

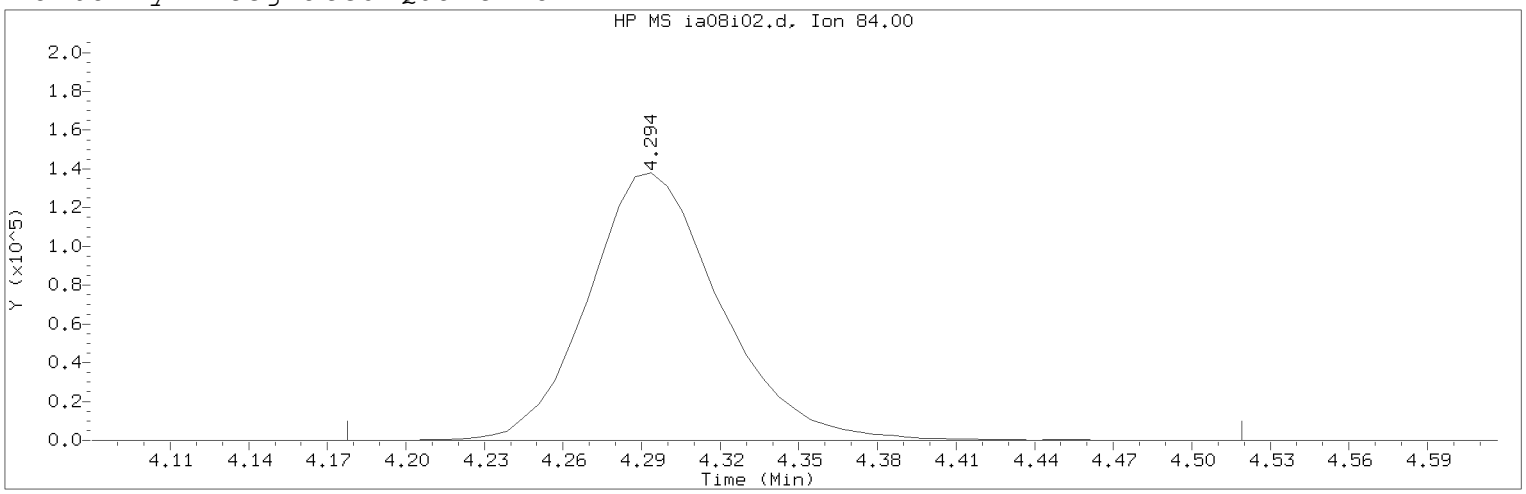
Compound Number : 22
Compound Name : Allyl Chloride
Scan Number : 368
Retention Time (minutes): 3.830
Quant Ion : 41.00
Area : 27464
On-column Amount (ng) : 58.9706
Integration start scan : 349 Integration stop scan: 386
Y at integration start : 271 Y at integration end: 271

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe184

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

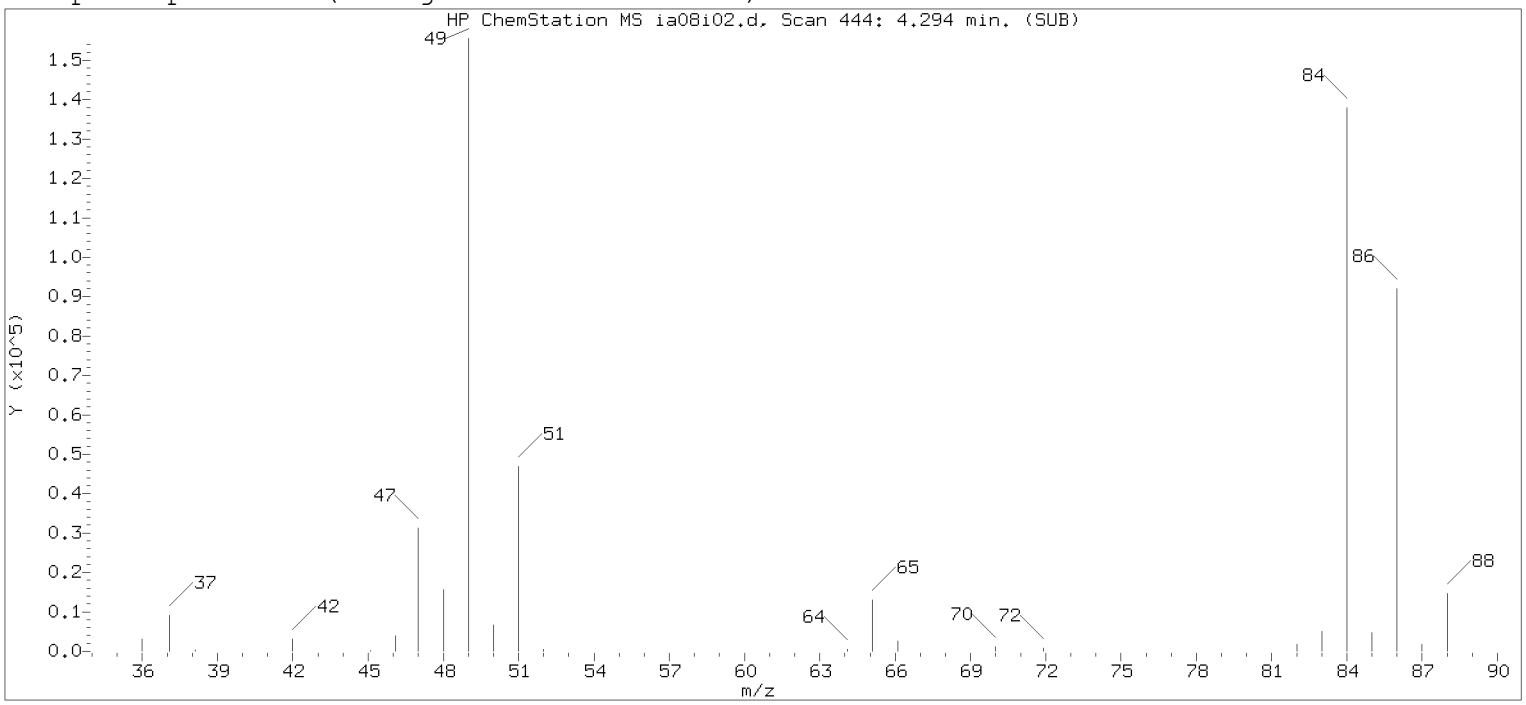
Compound Number : 23
Compound Name : Methylene Chloride
Scan Number : 444
Retention Time (minutes): 4.294
Quant Ion : 84.00
Area (flag) : 484234M
On-Column Amount (ng) : 10.1452
Integration start scan : 424 Integration stop scan: 480
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

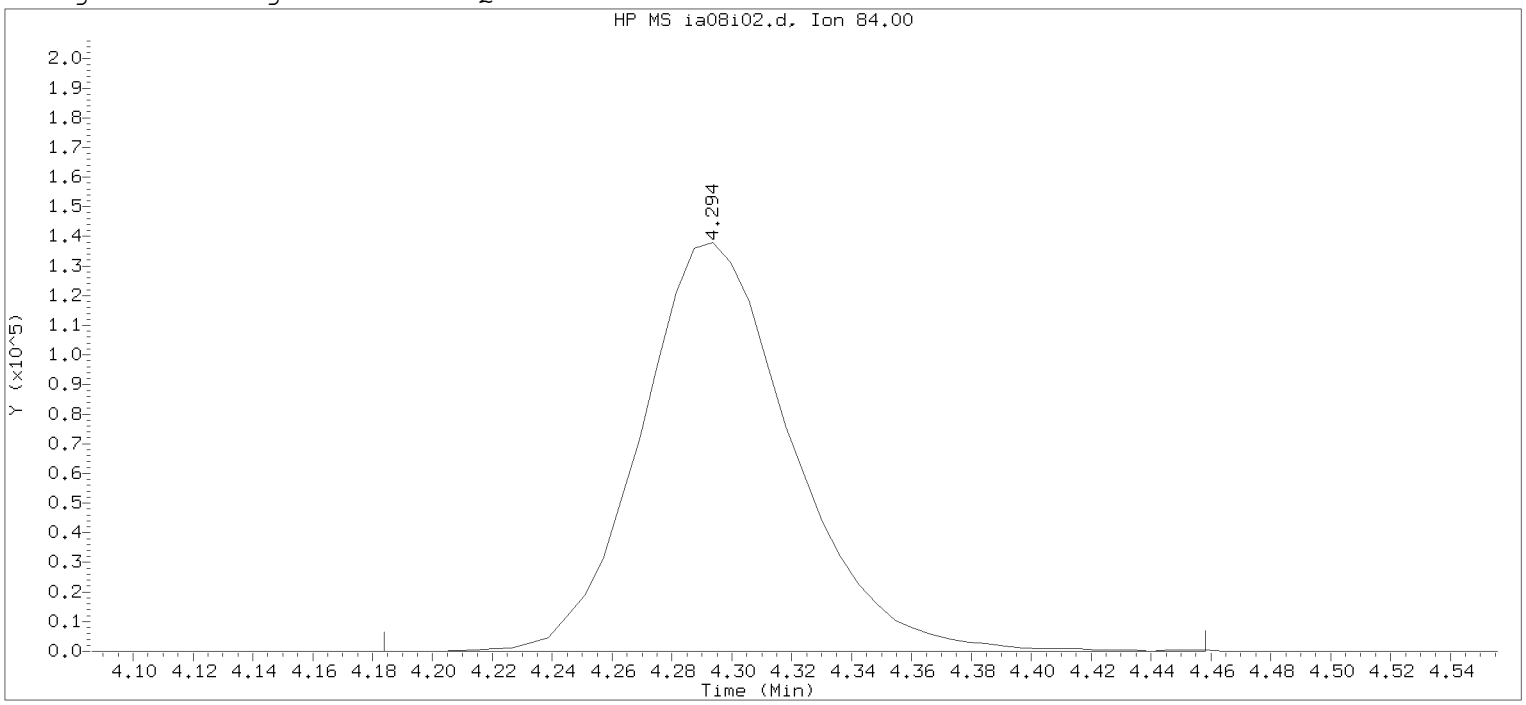
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

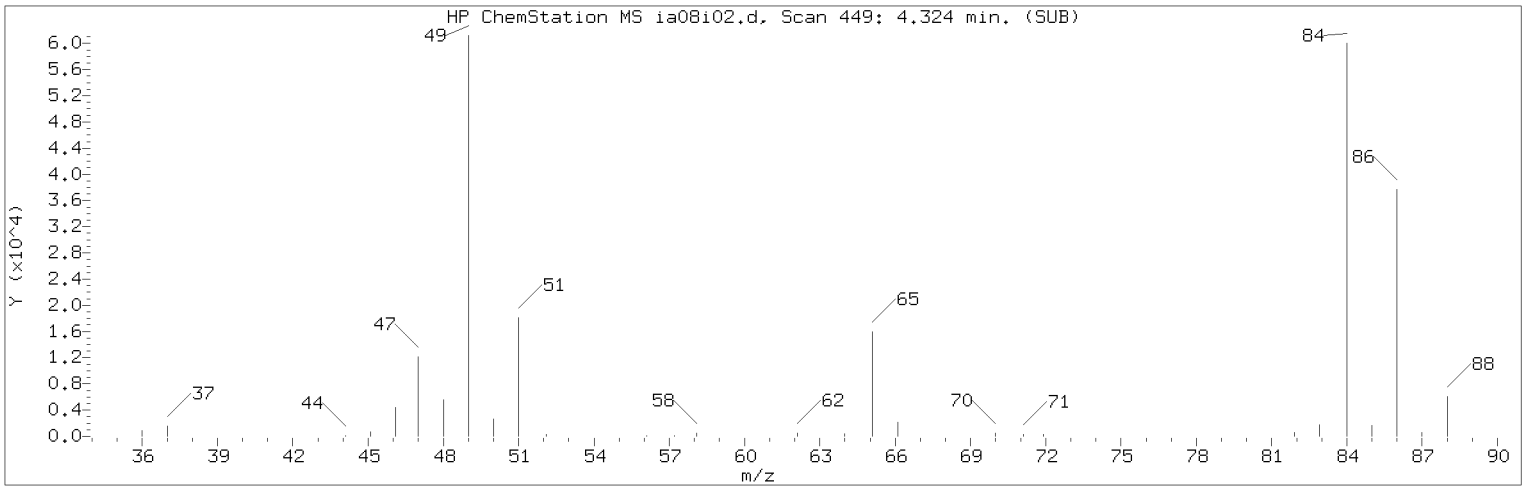
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

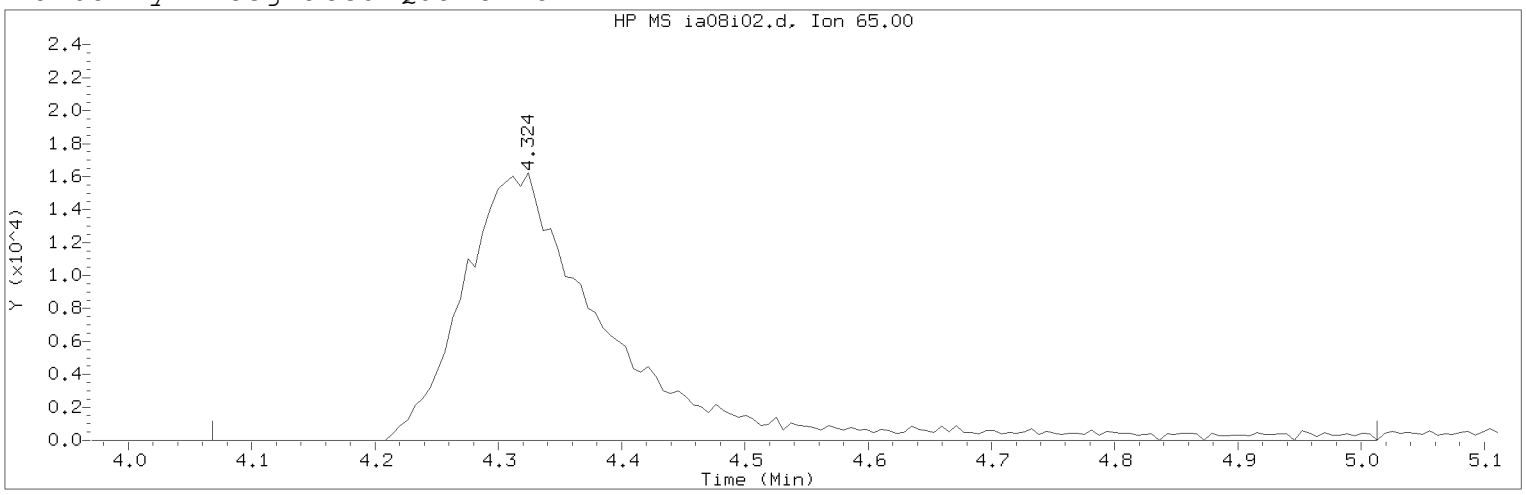
Compound Number	: 23		
Compound Name	: Methylene Chloride		
Scan Number	: 444		
Retention Time (minutes)	: 4.294		
Quant Ion	: 84.00		
Area	: 484182		
On-column Amount (ng)	: 68.2600		
Integration start scan	: 425	Integration stop scan:	470
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

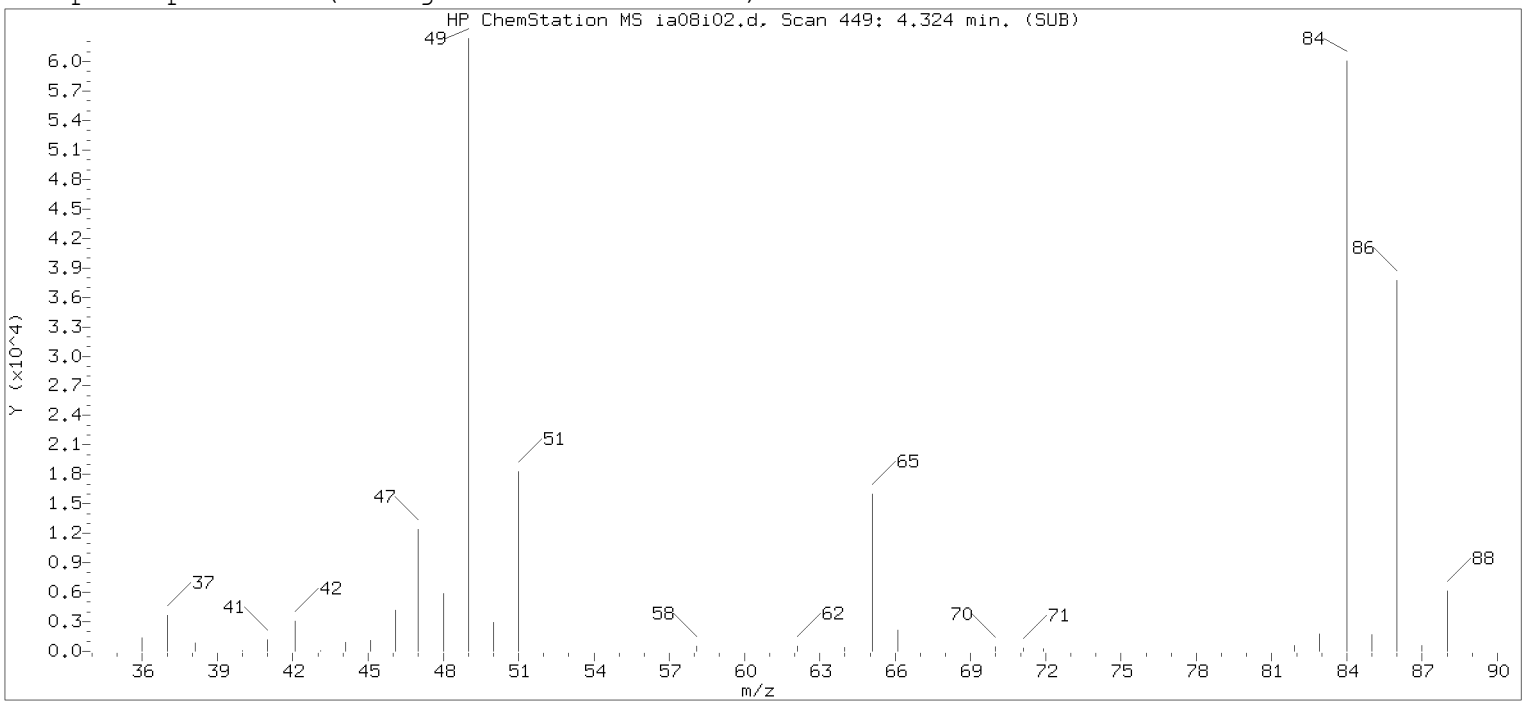
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 449
Retention Time (minutes): 4.324
Quant Ion : 65.00
Area (flag) : 135247M
On-Column Amount (ng) : 50.0000
Integration start scan : 406 Integration stop scan: 561
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

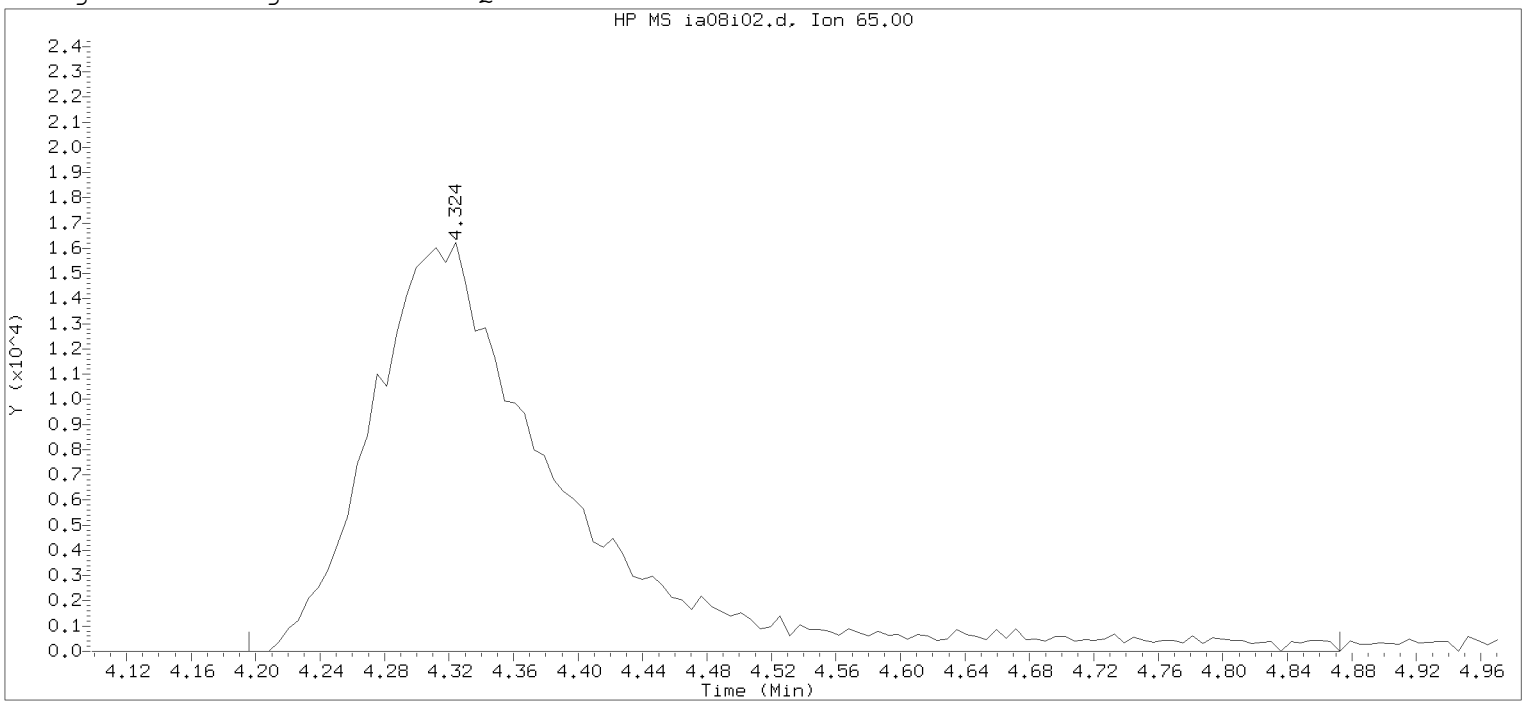
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

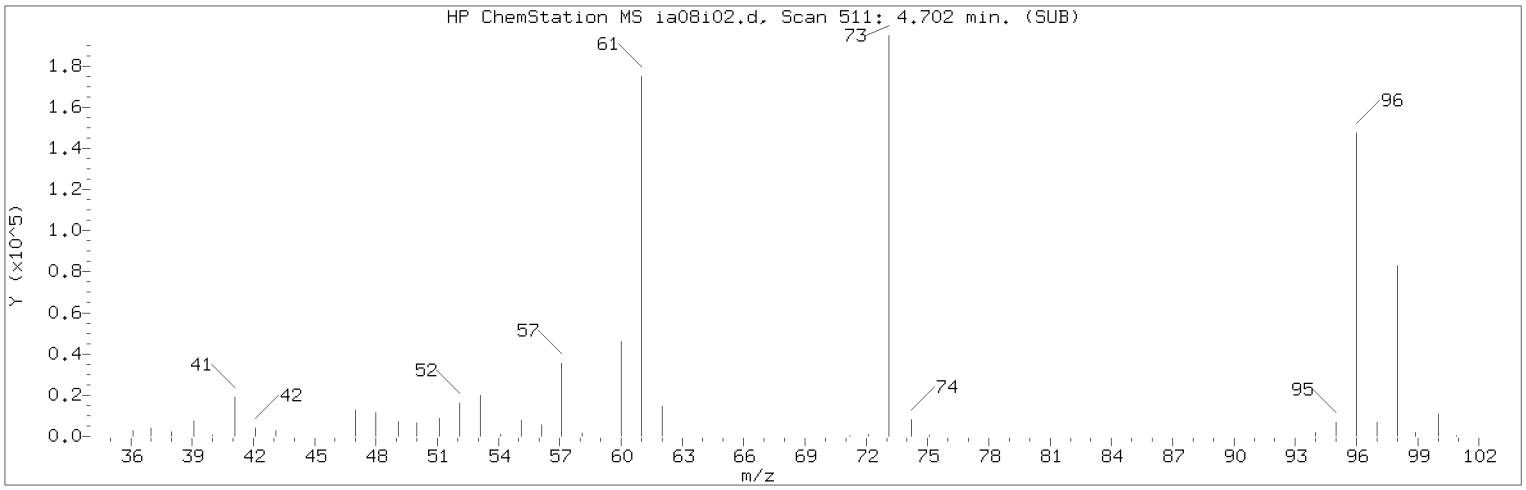
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

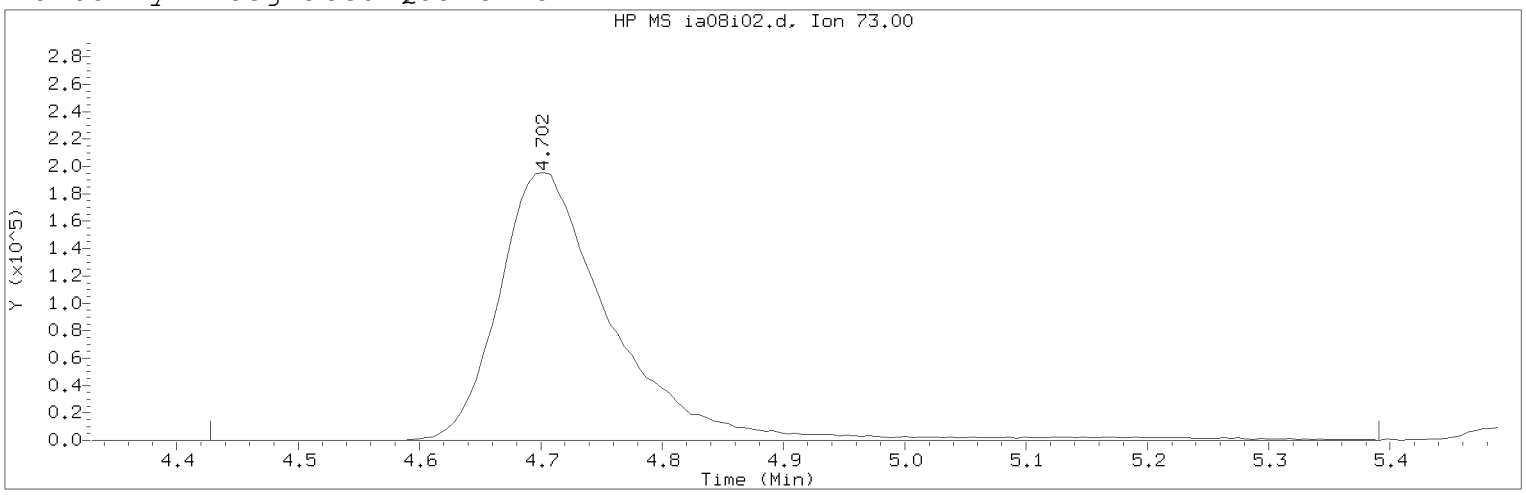
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 449
Retention Time (minutes): 4.324
Quant Ion : 65.00
Area : 132455
On-column Amount (ng) : 50.0000
Integration start scan : 427 Integration stop scan: 538
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

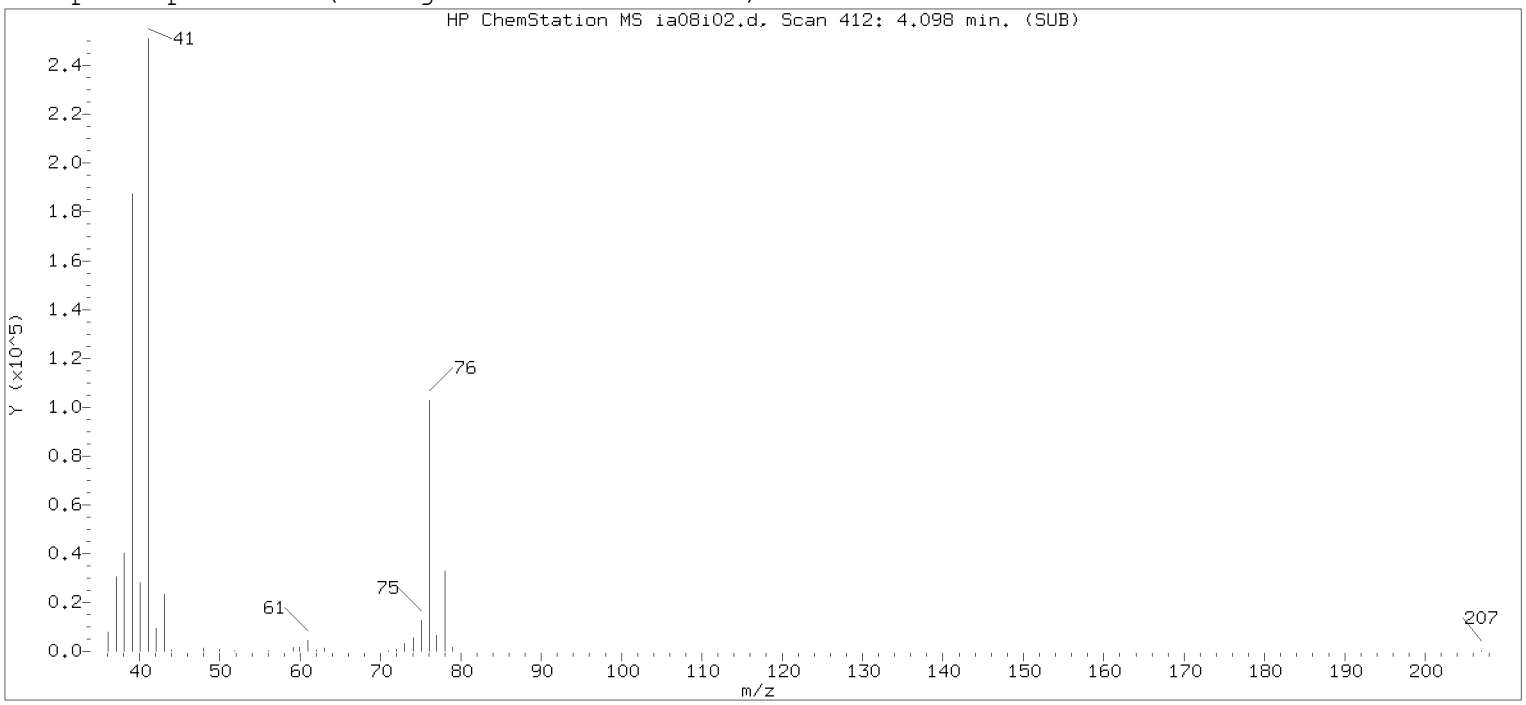
Compound Number : 30
Compound Name : Methyl Tertiary Butyl Ether
Scan Number : 511
Retention Time (minutes): 4.702
Quant Ion : 73.00
Area (flag) : 1269529M
On-Column Amount (ng) : 10.4022
Integration start scan : 465 Integration stop scan: 623
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

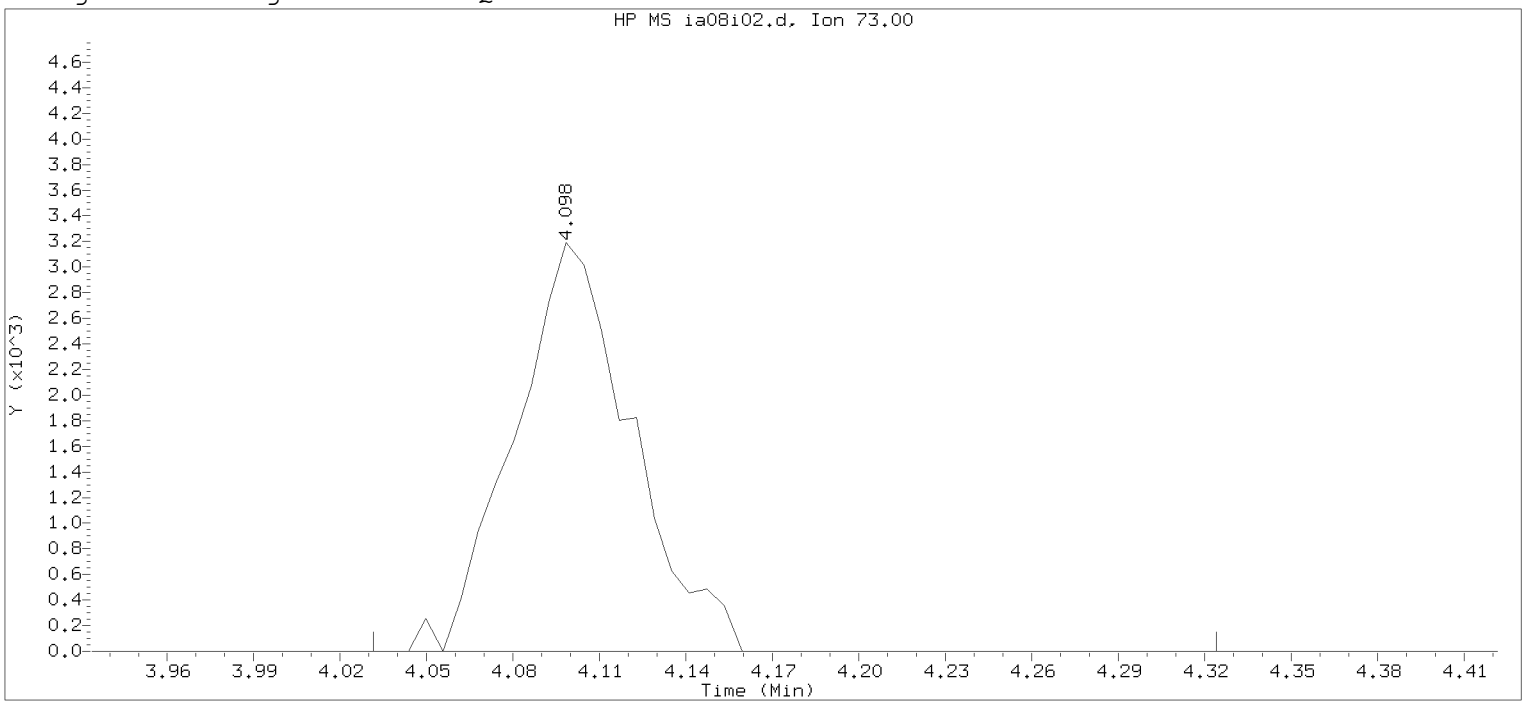
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

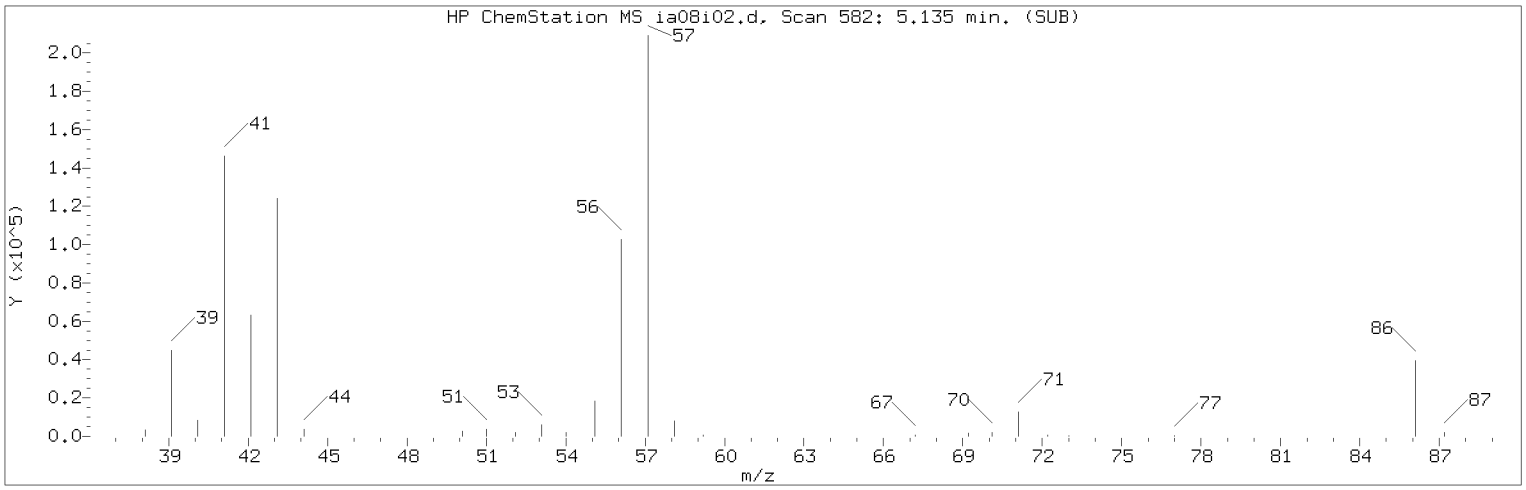
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

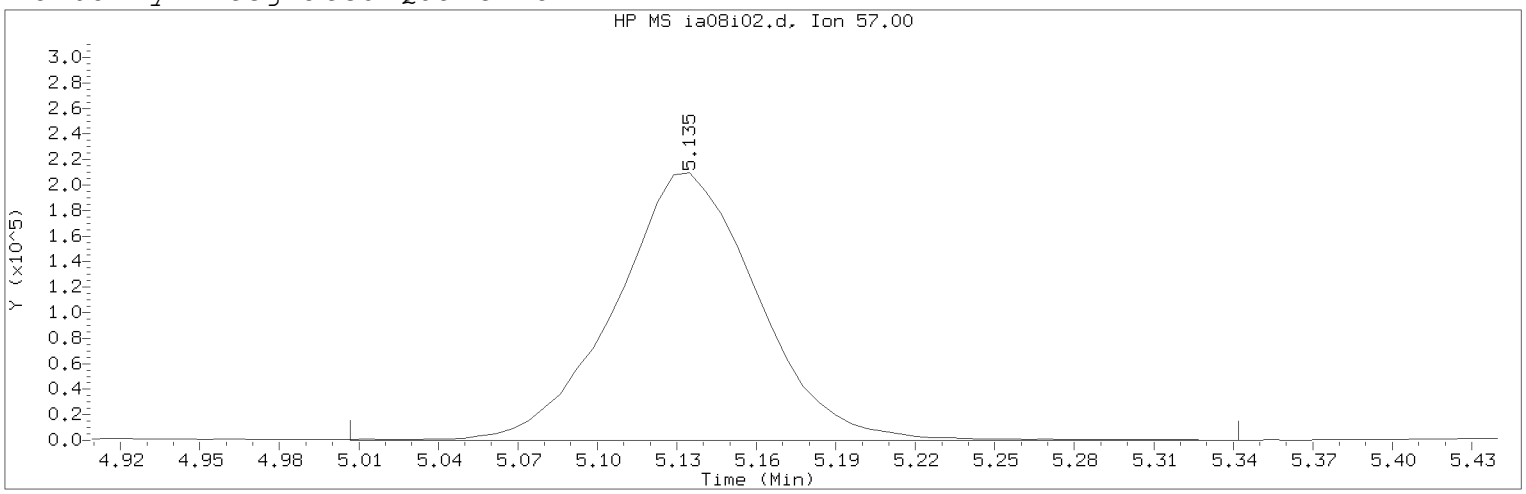
Compound Number : 30
Compound Name : Methyl Tertiary Butyl Ether
Scan Number : 412
Retention Time (minutes): 4.098
Quant Ion : 73.00
Area : 9025
On-column Amount (ng) : 34.9160
Integration start scan : 400 Integration stop scan: 448
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

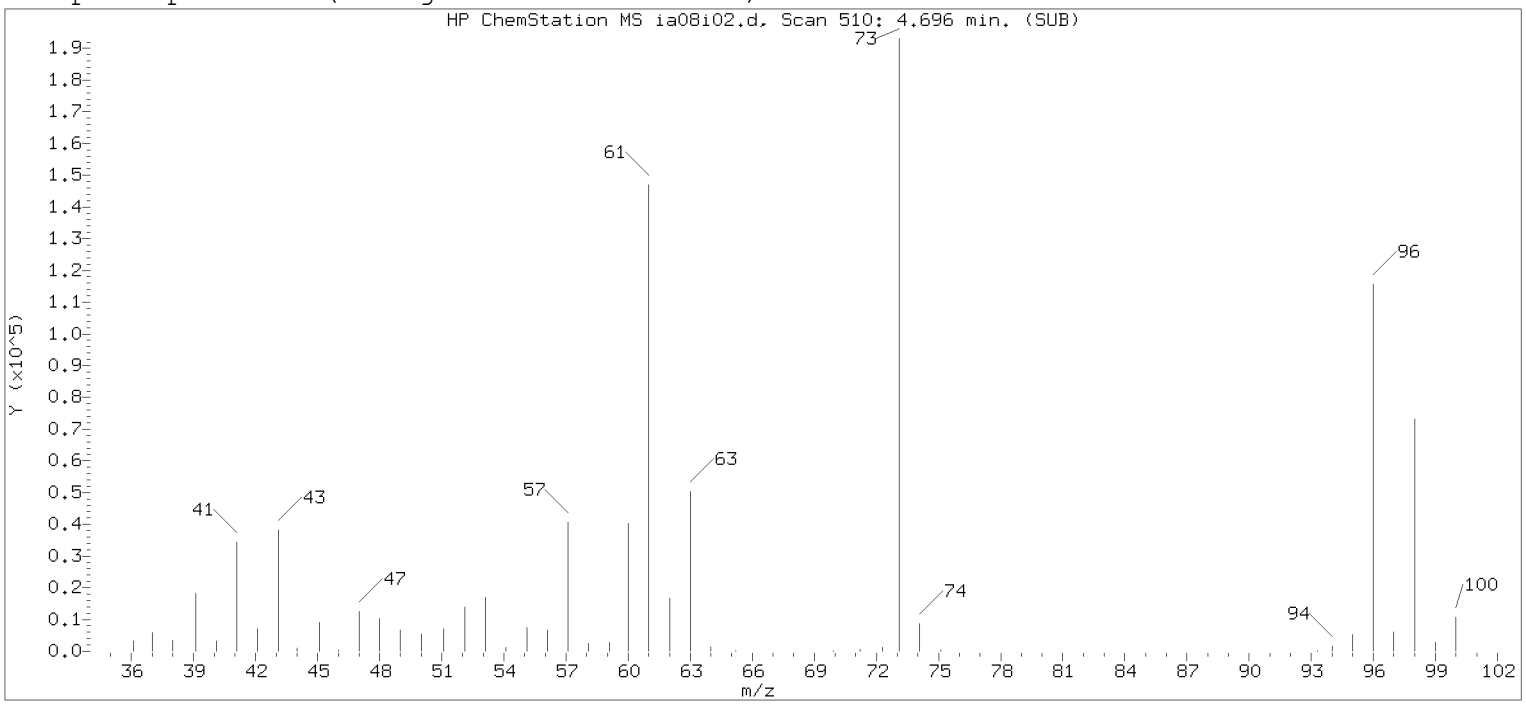
Compound Number : 32
Compound Name : n-Hexane
Scan Number : 582
Retention Time (minutes): 5.135
Quant Ion : 57.00
Area (flag) : 784077M
On-Column Amount (ng) : 10.6689
Integration start scan : 560 Integration stop scan: 615
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

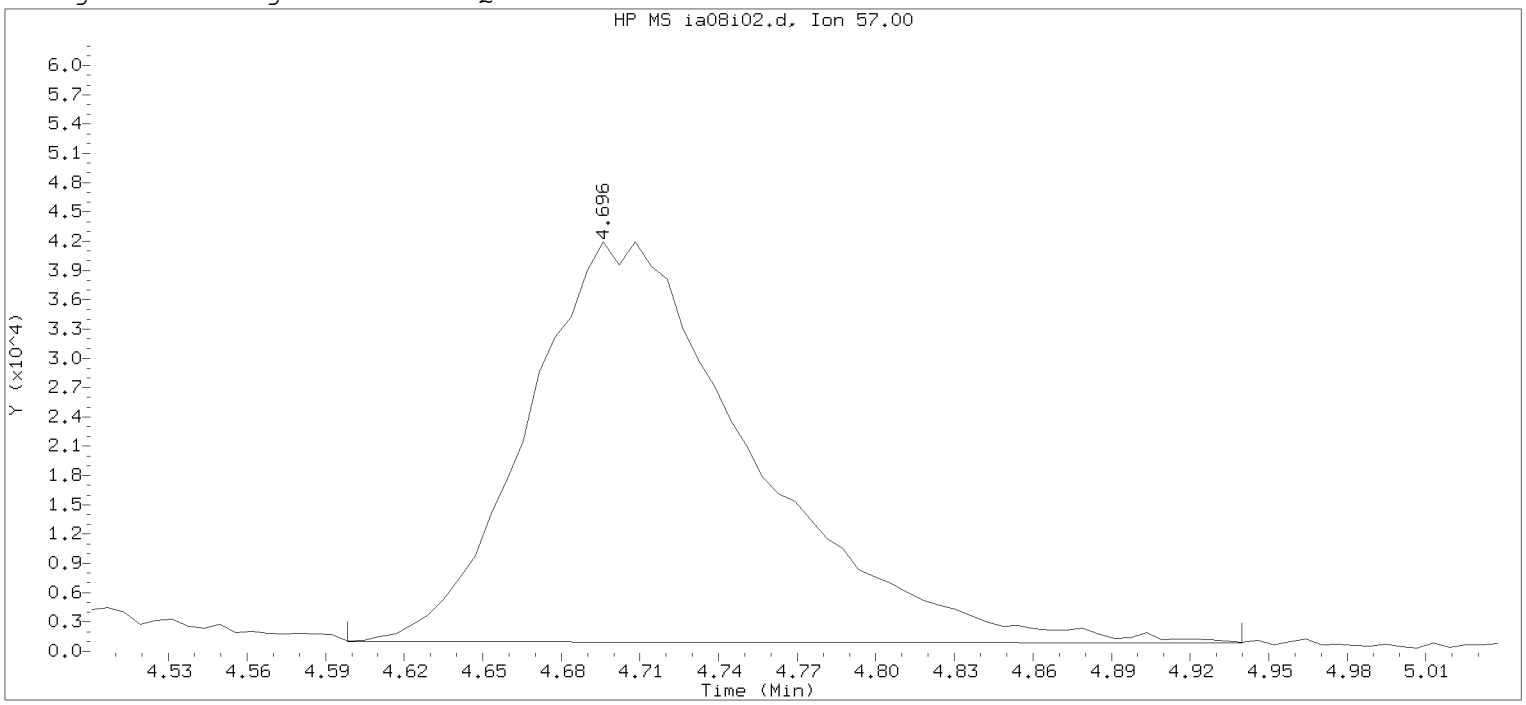
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

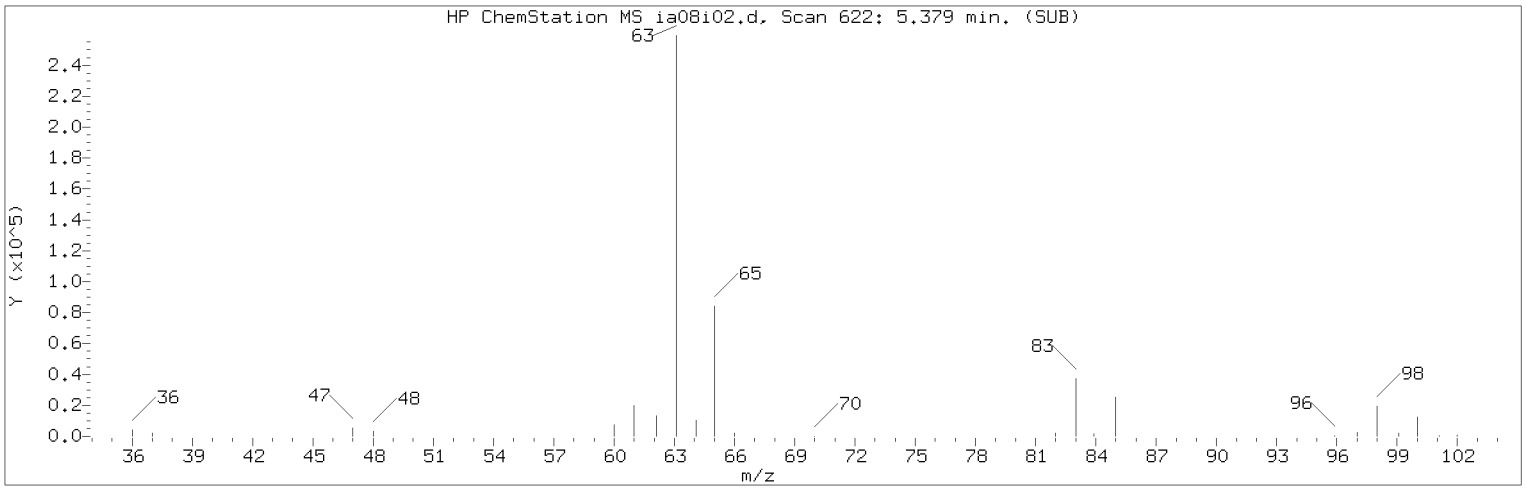
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

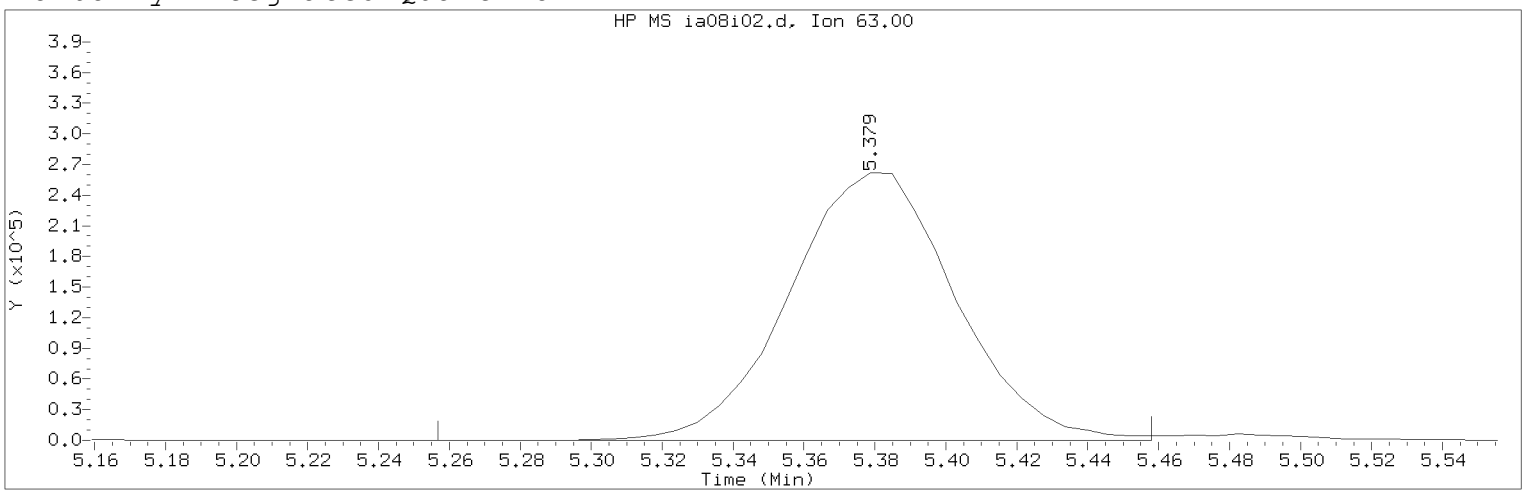
Compound Number : 32
Compound Name : n-Hexane
Scan Number : 510
Retention Time (minutes): 4.696
Quant Ion : 57.00
Area : 243866
On-column Amount (ng) : 47.0183
Integration start scan : 493 Integration stop scan: 549
Y at integration start : 967 Y at integration end: 882

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Target 3.5 esignature user ID: JHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

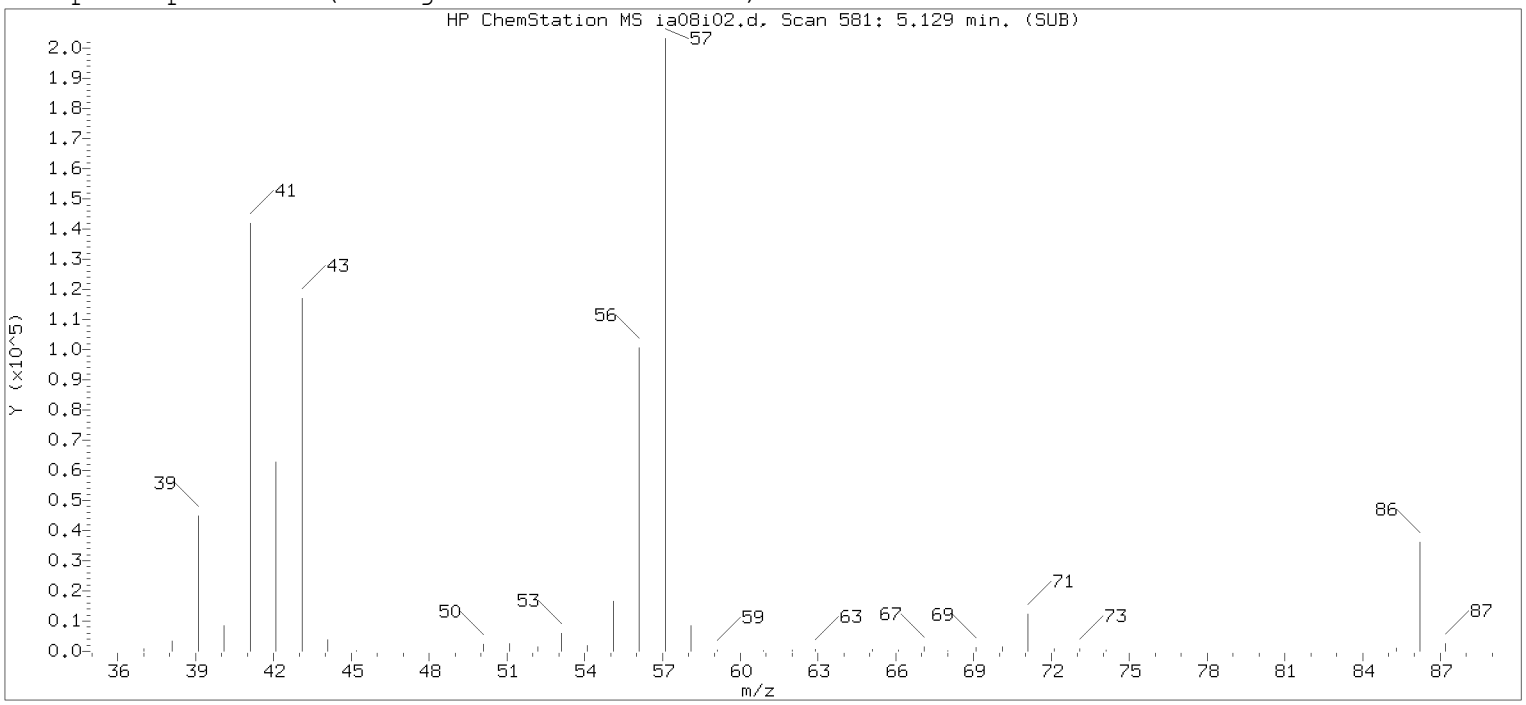
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 622
Retention Time (minutes): 5.379
Quant Ion : 63.00
Area (flag) : 853519M
On-Column Amount (ng) : 10.0485
Integration start scan : 601 Integration stop scan: 634
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

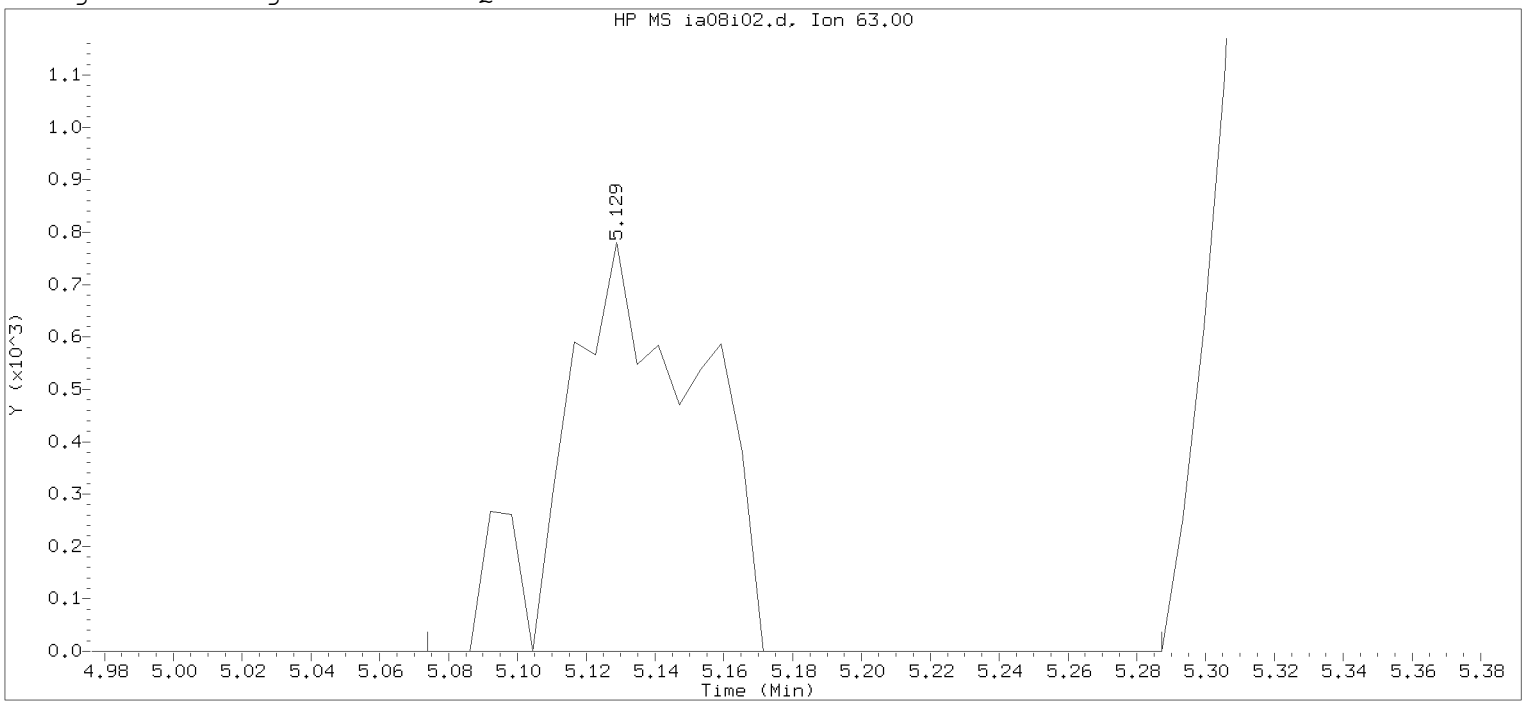
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

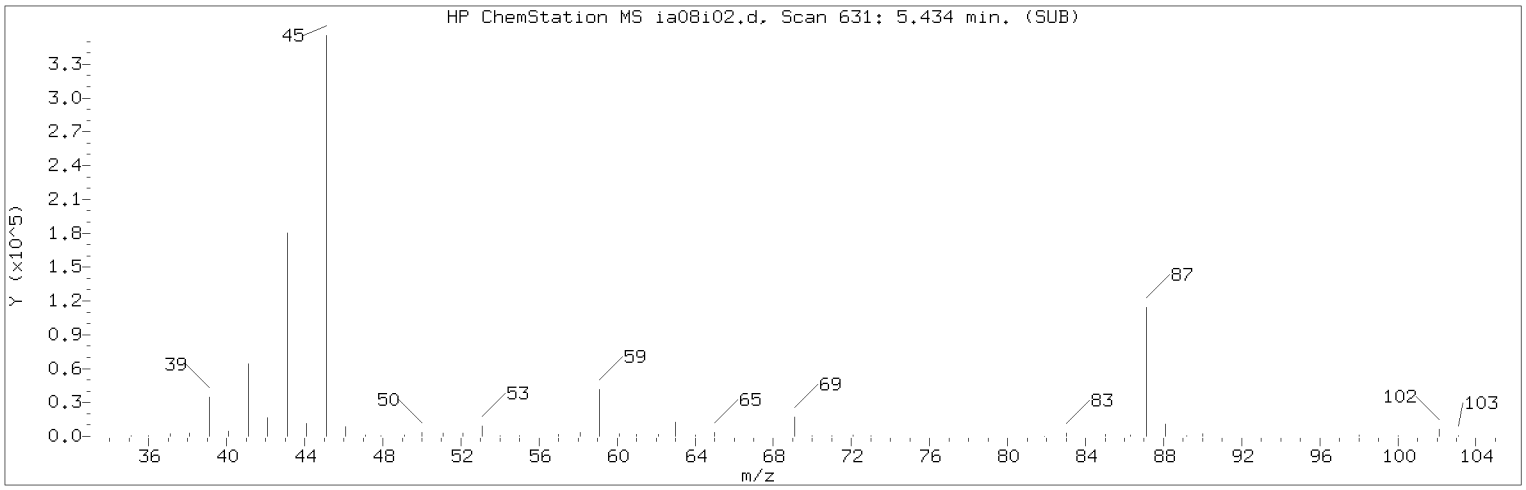
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

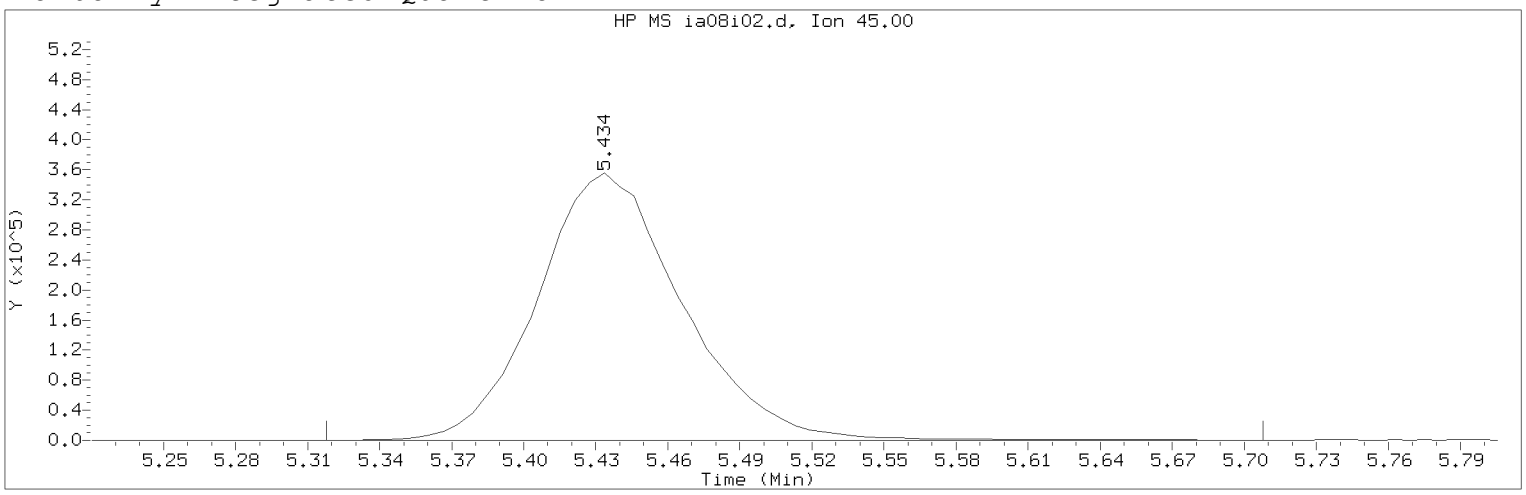
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 581
Retention Time (minutes): 5.129
Quant Ion : 63.00
Area : 2151
On-column Amount (ng) : 21.2217
Integration start scan : 571 Integration stop scan: 606
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user: JKHowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

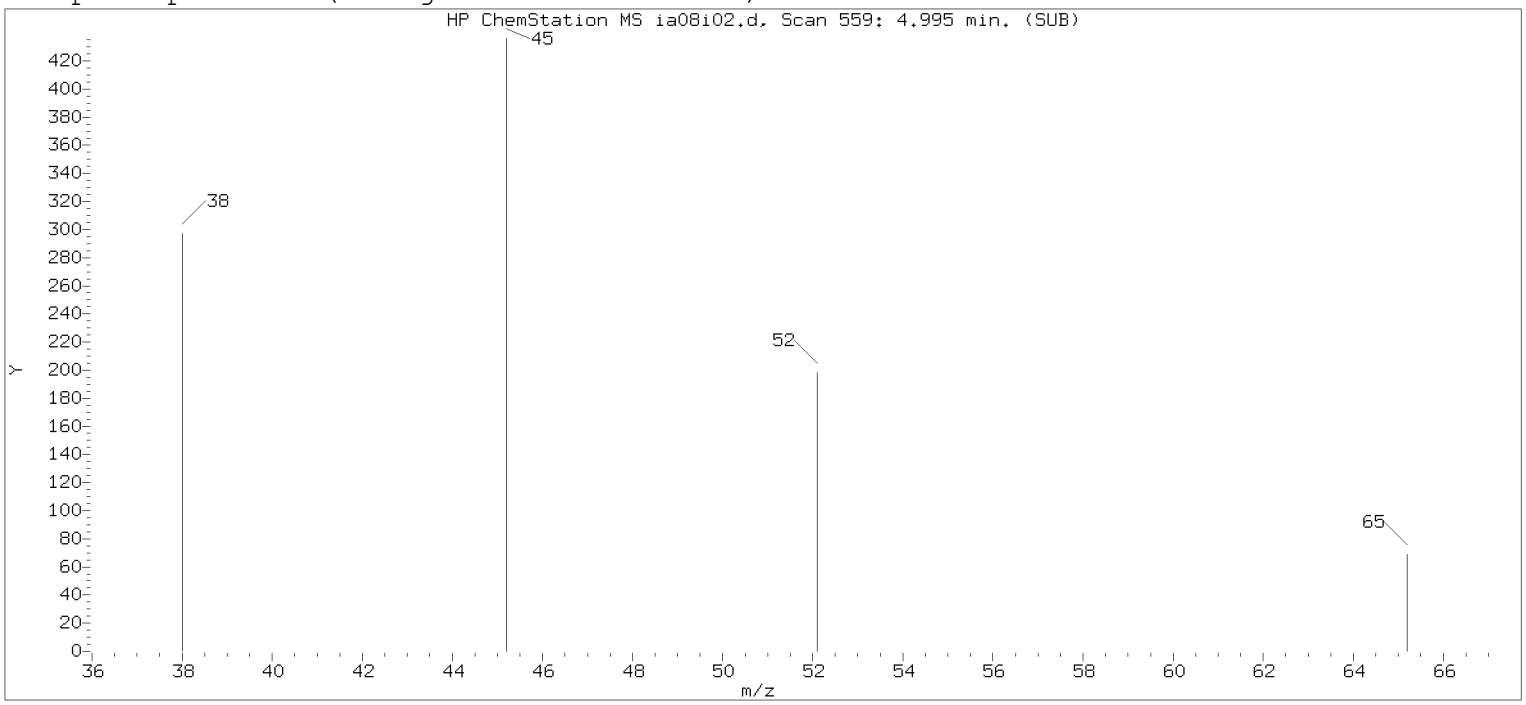
Compound Number : 34
Compound Name : di-Isopropyl Ether
Scan Number : 631
Retention Time (minutes): 5.434
Quant Ion : 45.00
Area (flag) : 1487933M
On-Column Amount (ng) : 10.4394
Integration start scan : 611 Integration stop scan: 675
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

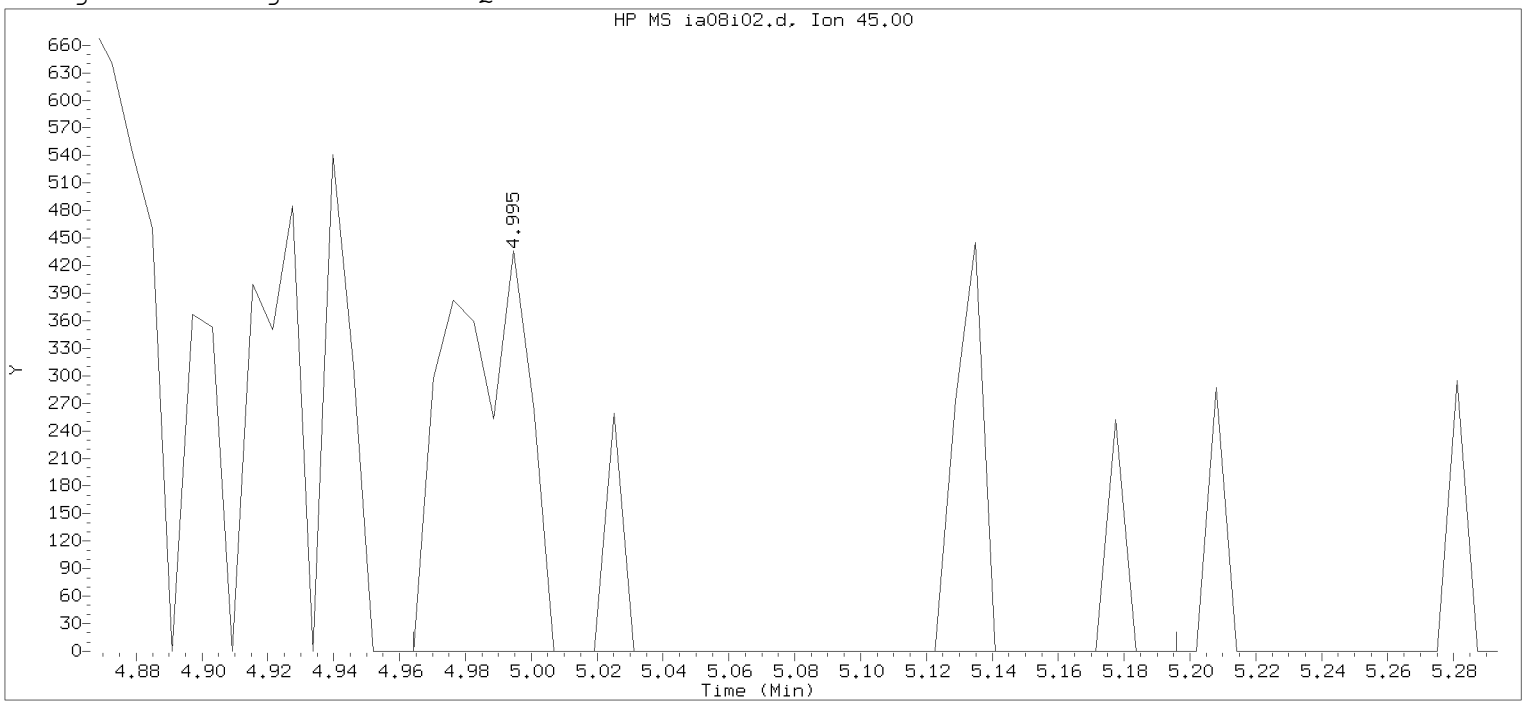
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

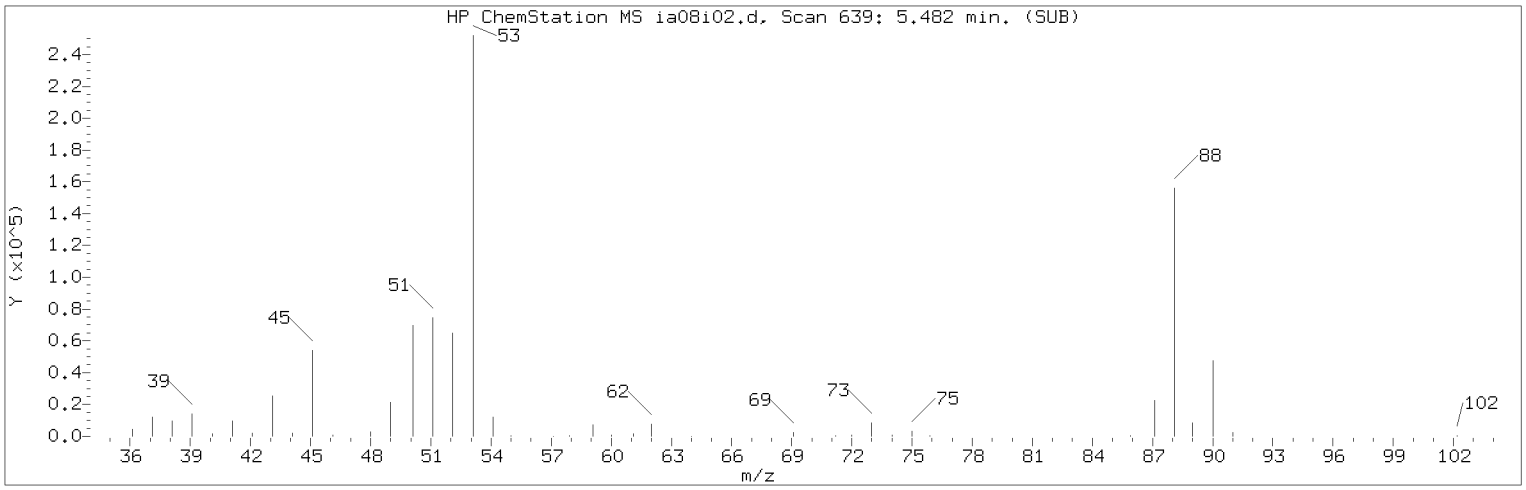
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

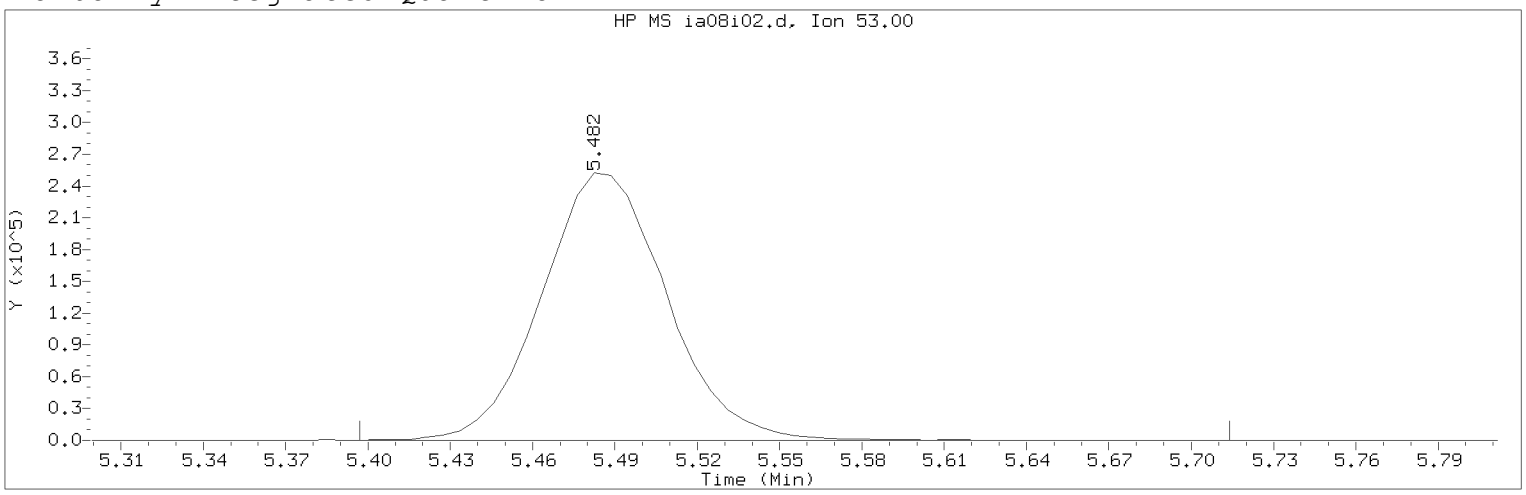
Compound Number : 34
Compound Name : di-Isopropyl Ether
Scan Number : 559
Retention Time (minutes): 4.995
Quant Ion : 45.00
Area : 1177
On-column Amount (ng) : 10.6353
Integration start scan : 553 Integration stop scan: 591
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

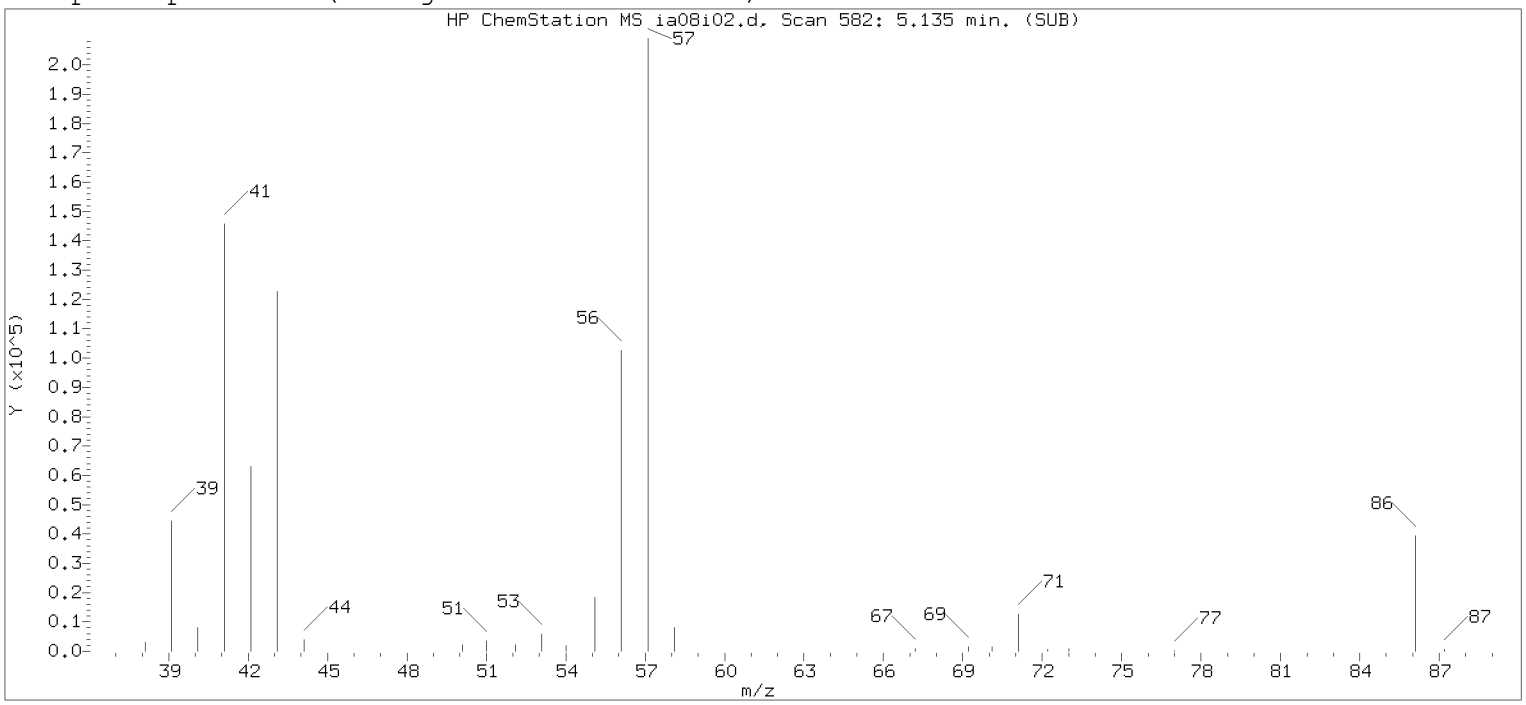
Compound Number : 35
Compound Name : 2-Chloro-1,3-Butadiene
Scan Number : 639
Retention Time (minutes): 5.482
Quant Ion : 53.00
Area (flag) : 796502M
On-Column Amount (ng) : 10.4430
Integration start scan : 624 Integration stop scan: 676
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

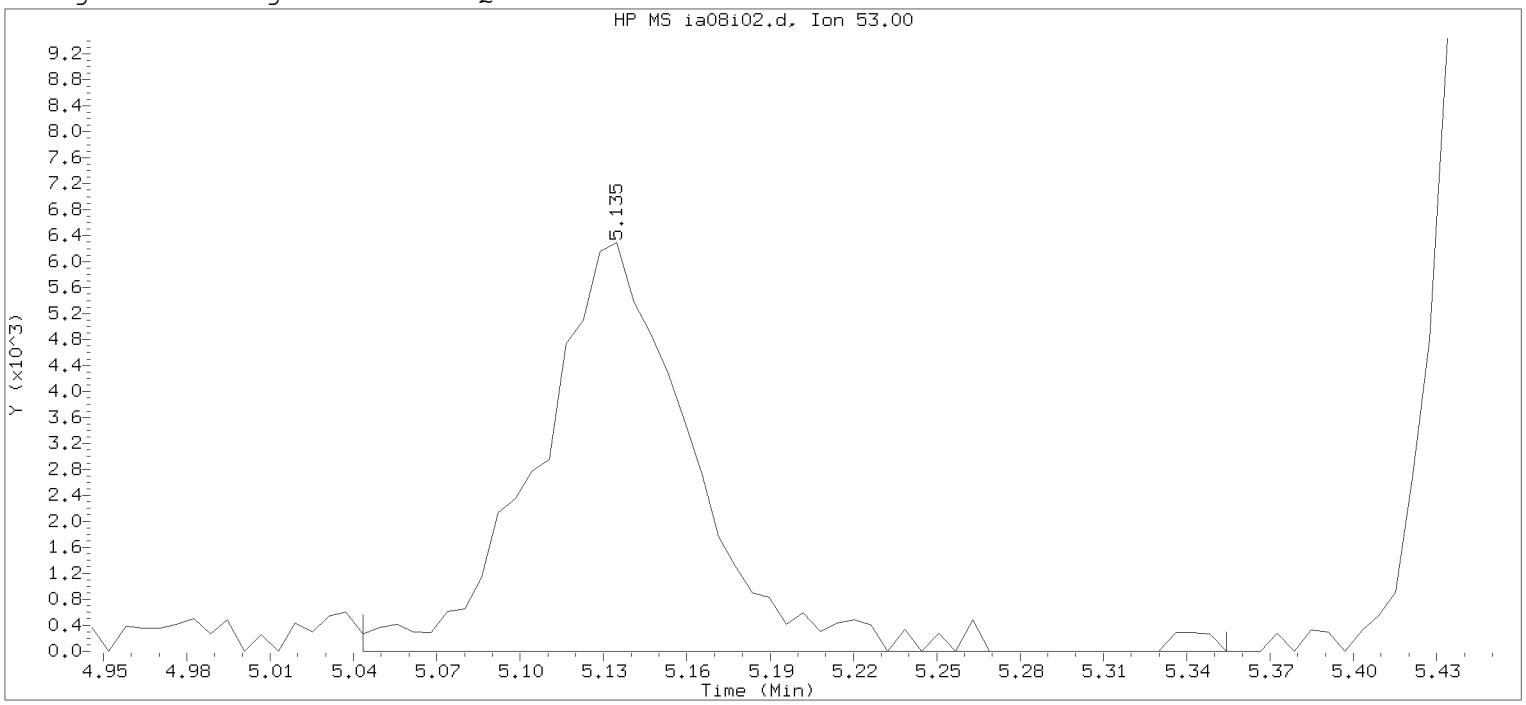
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

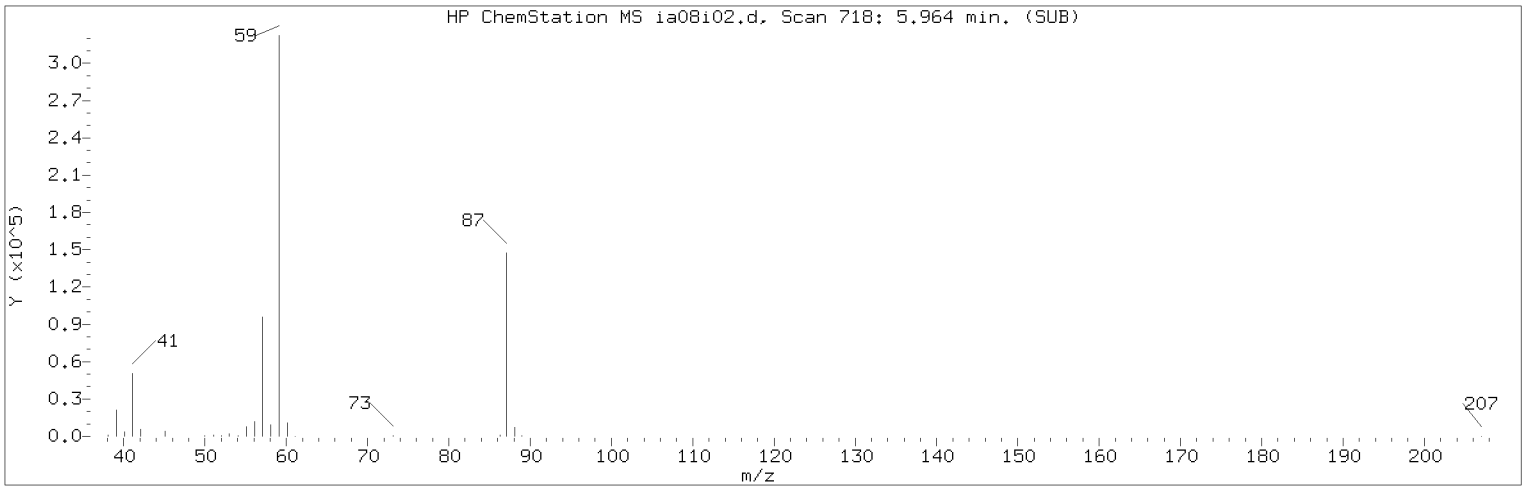
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

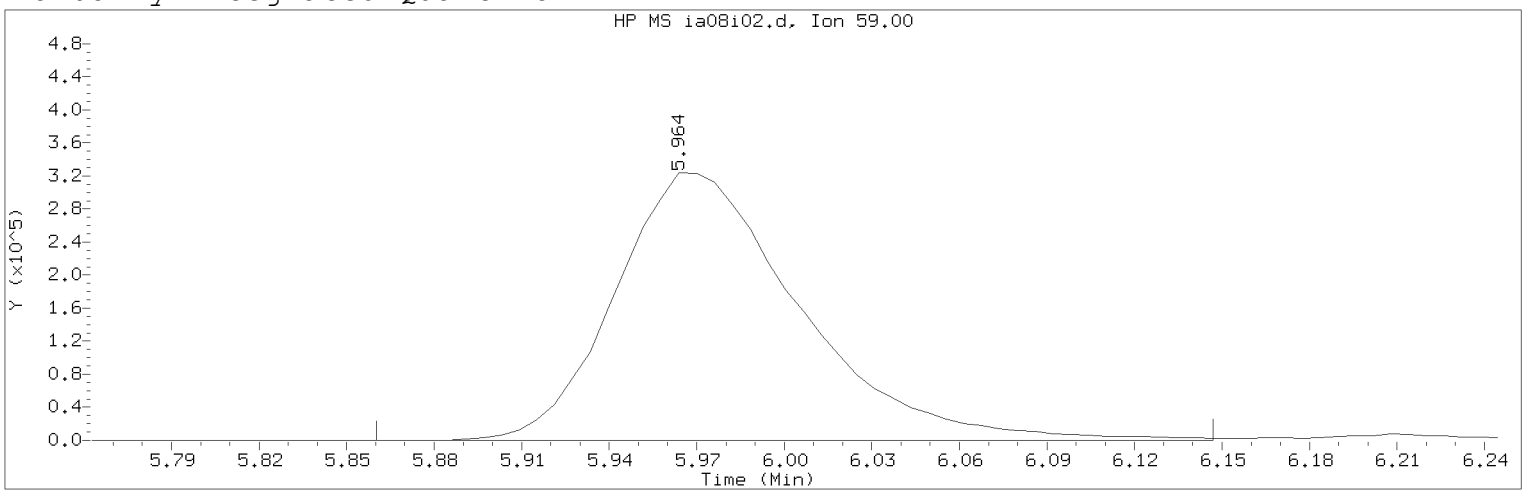
Compound Number : 35
Compound Name : 2-Chloro-1,3-Butadiene
Scan Number : 582
Retention Time (minutes): 5.135
Quant Ion : 53.00
Area : 24375
On-column Amount (ng) : 43.6848
Integration start scan : 566 Integration stop scan: 617
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe0198

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

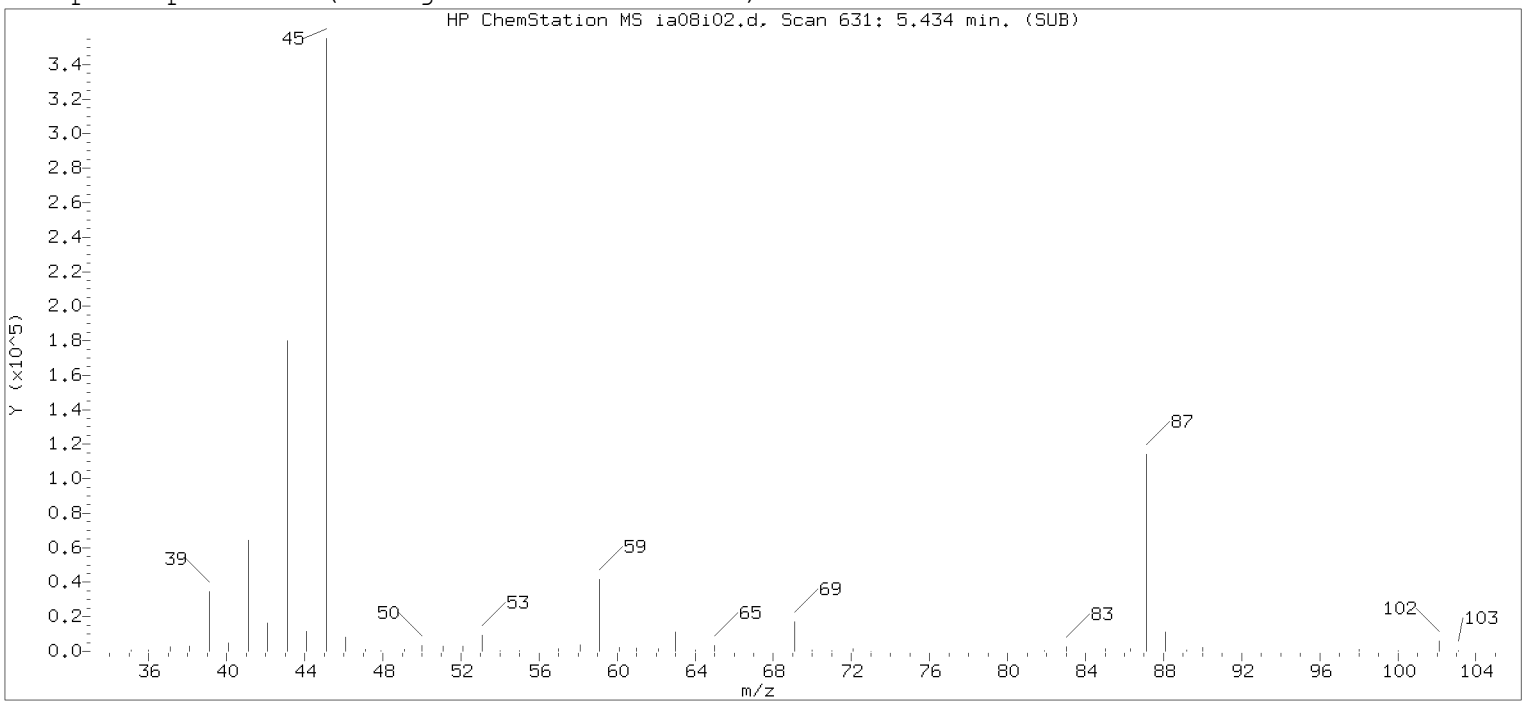
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 718
Retention Time (minutes): 5.964
Quant Ion : 59.00
Area (flag) : 1423714M
On-Column Amount (ng) : 10.0616
Integration start scan : 700 Integration stop scan: 747
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

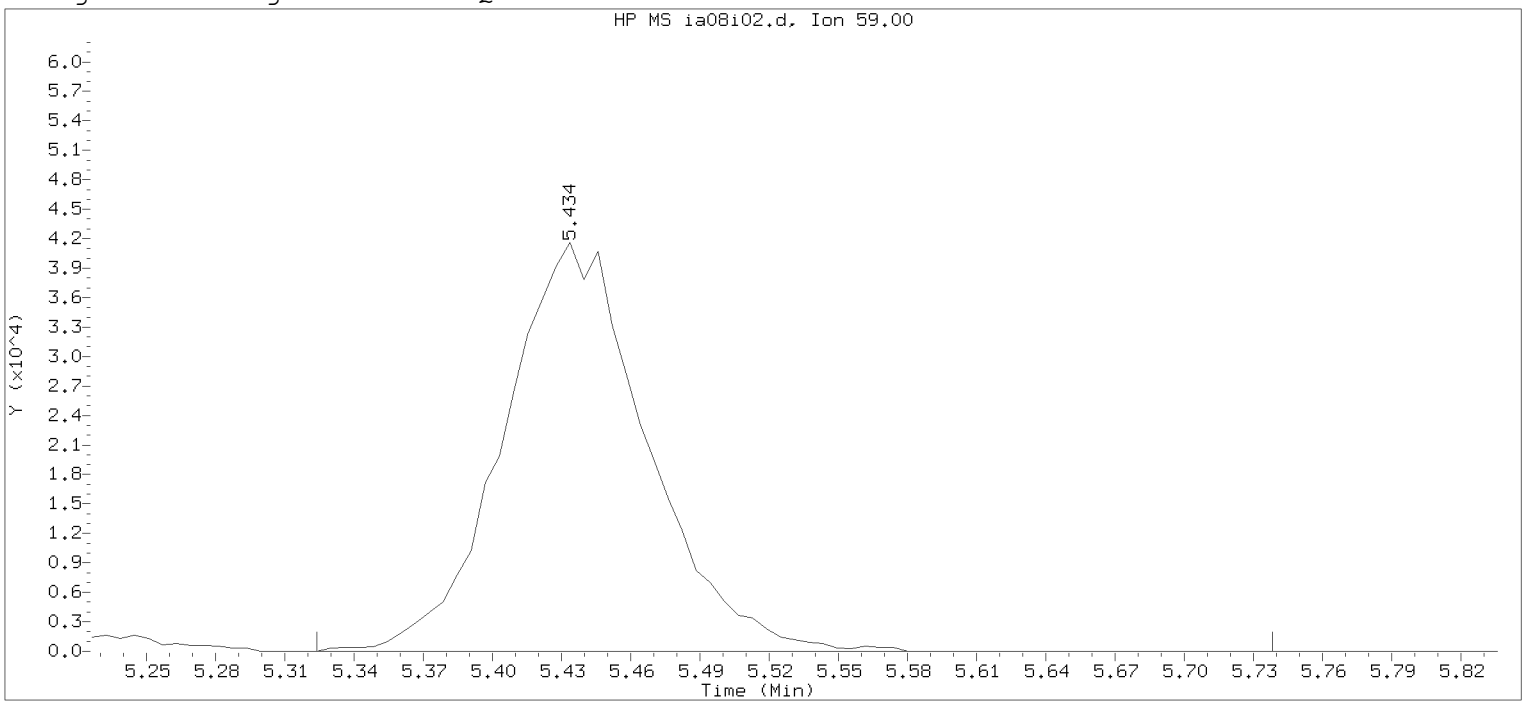
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

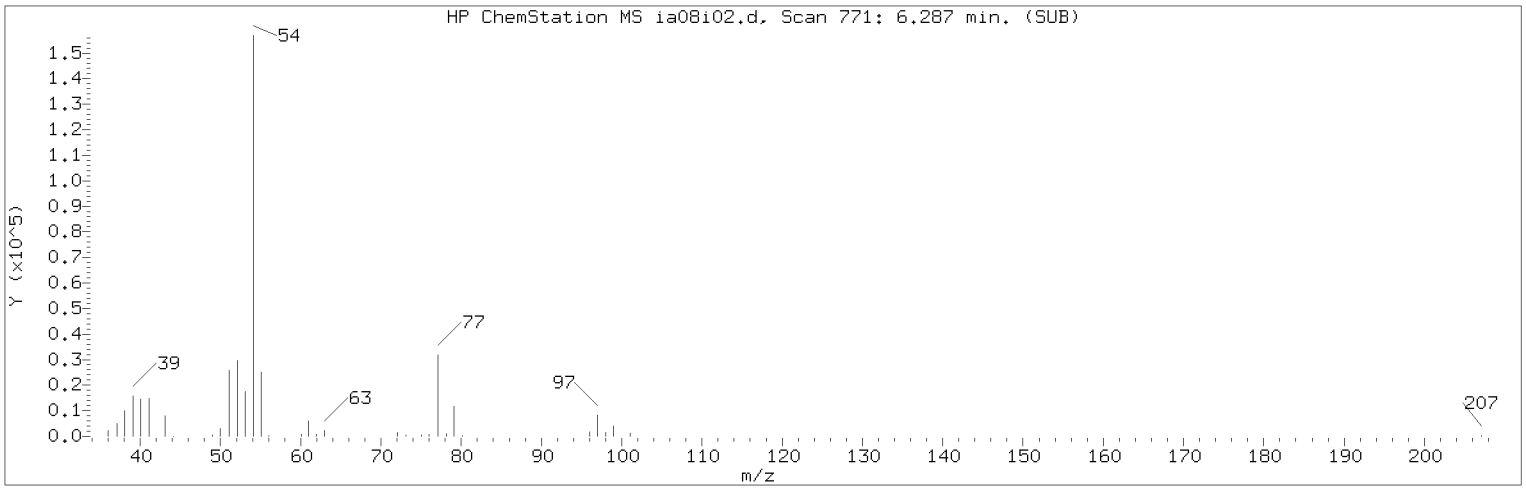
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

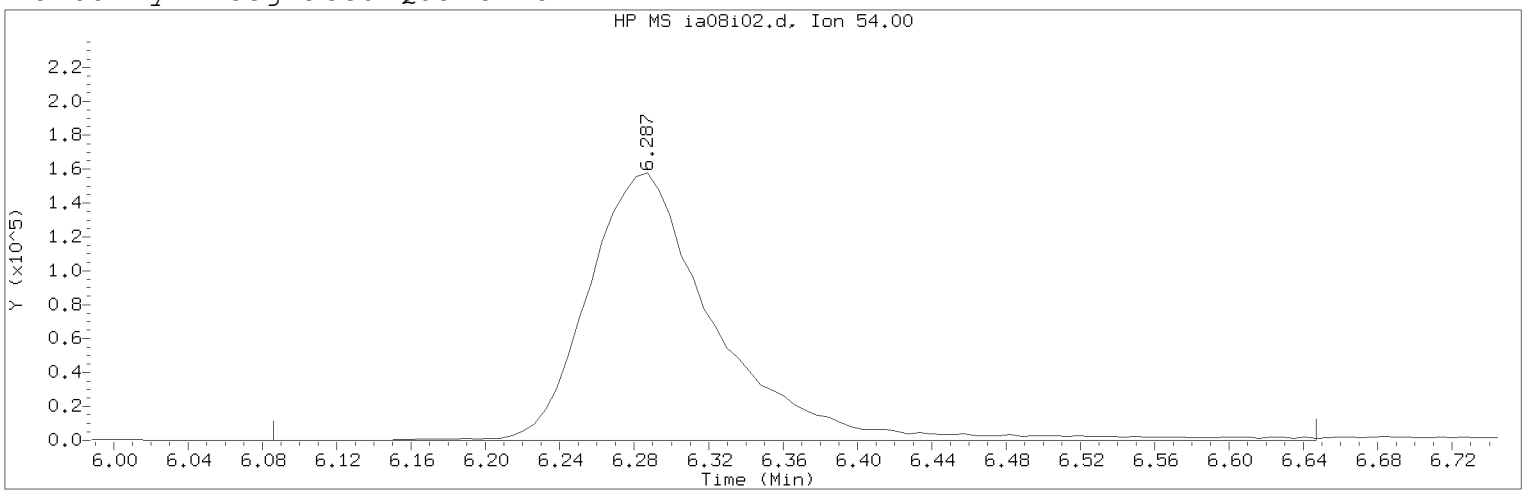
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 631
Retention Time (minutes): 5.434
Quant Ion : 59.00
Area : 180051
On-column Amount (ng) : 67.6755
Integration start scan : 612 Integration stop scan: 680
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

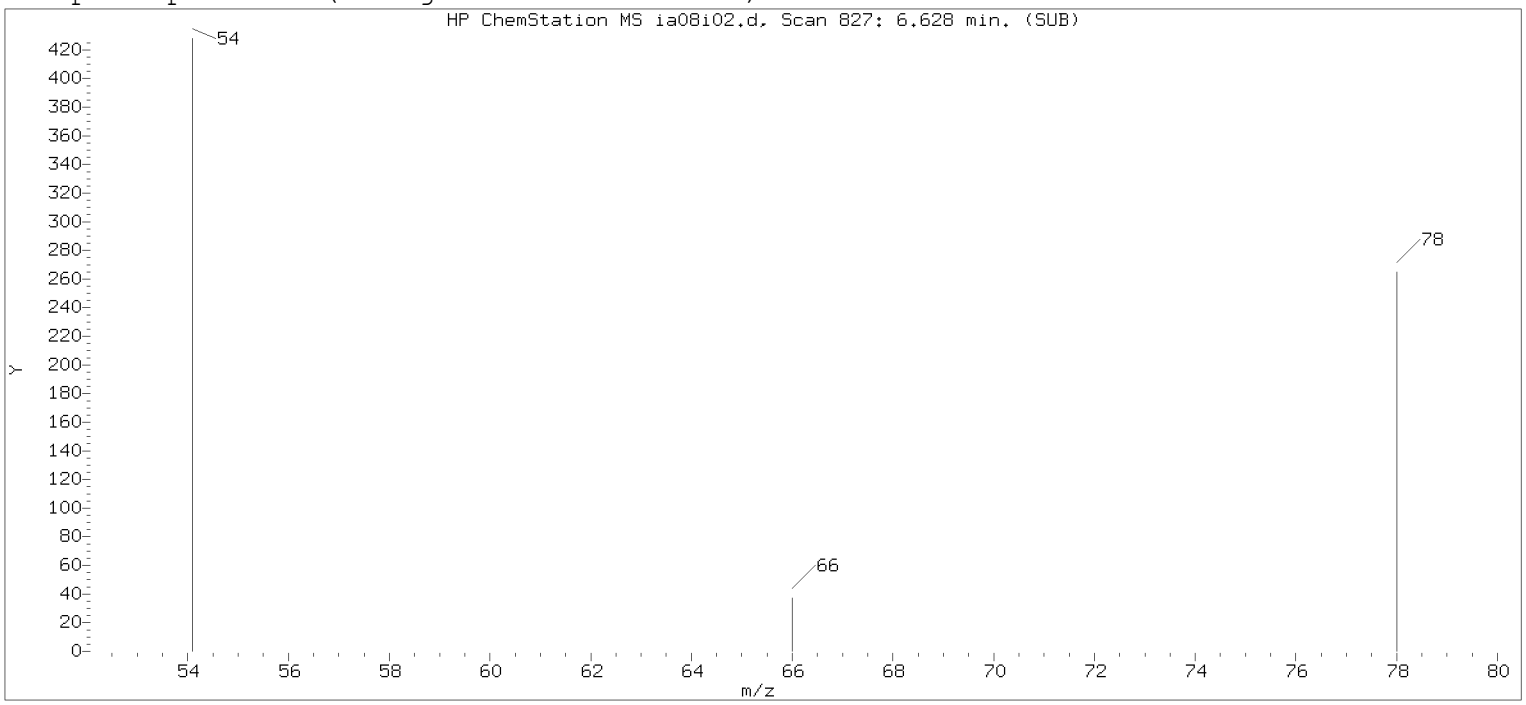
Compound Number : 42
Compound Name : Propionitrile
Scan Number : 771
Retention Time (minutes): 6.287
Quant Ion : 54.00
Area (flag) : 753819M
On-Column Amount (ng) : 218.1345
Integration start scan : 737 Integration stop scan: 829
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

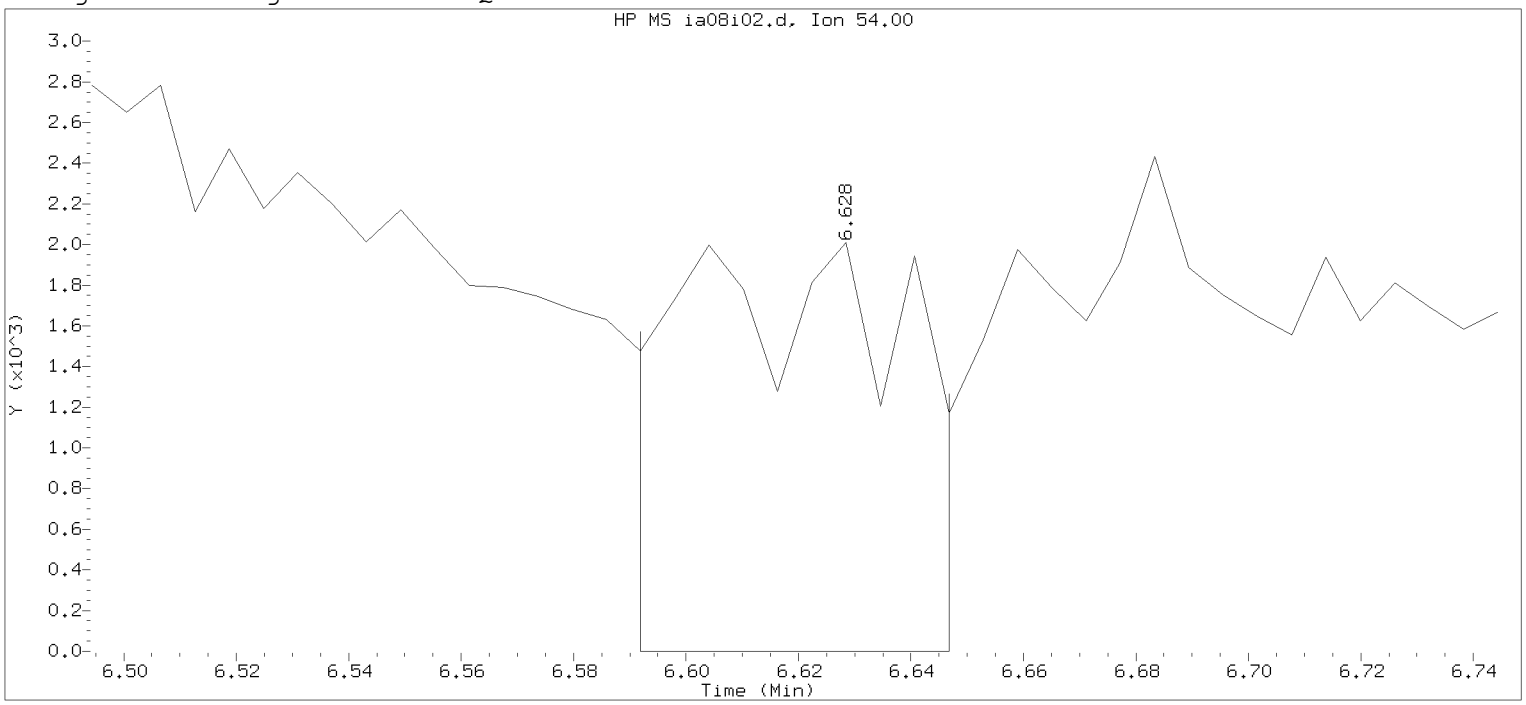
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

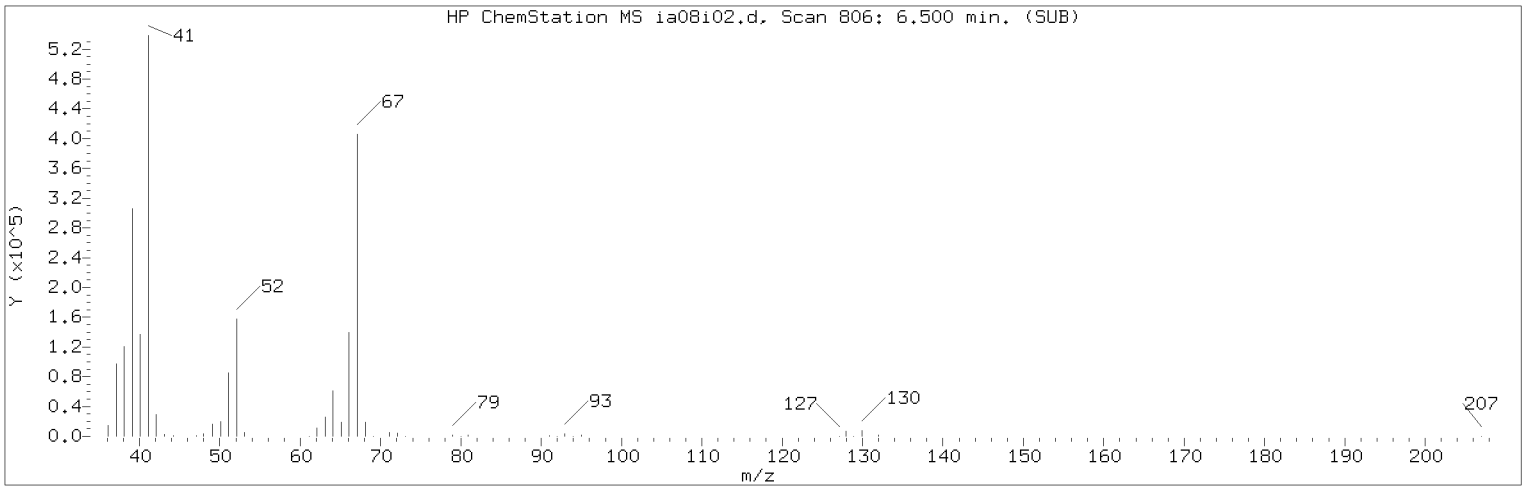
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

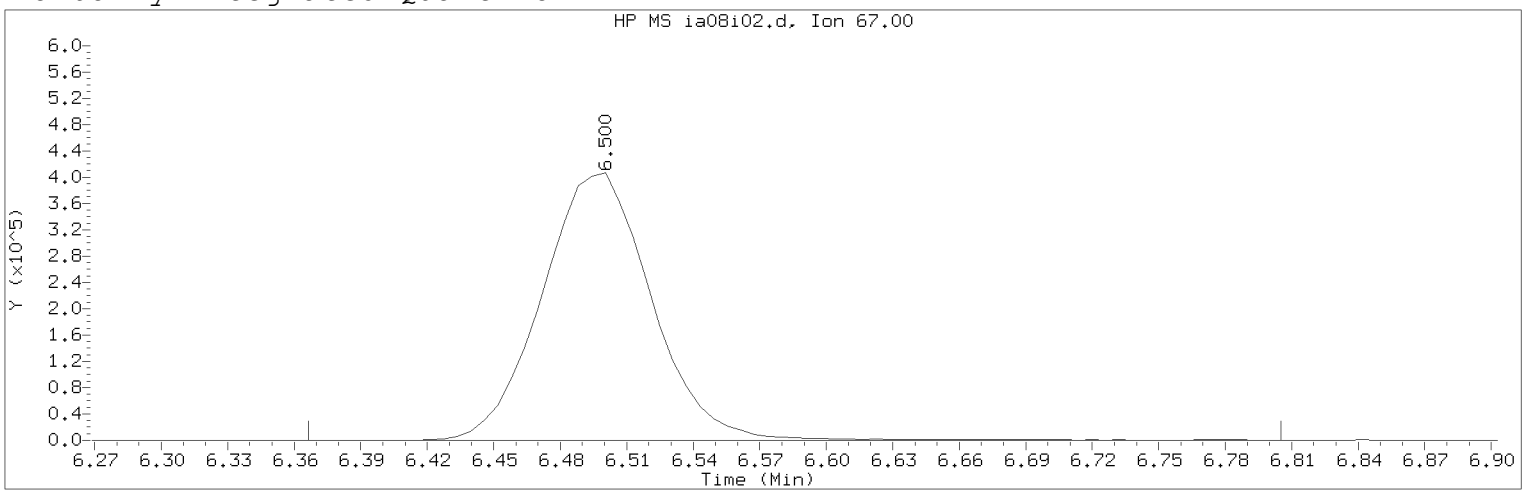
Compound Number : 42
Compound Name : Propionitrile
Scan Number : 827
Retention Time (minutes): 6.628
Quant Ion : 54.00
Area : 5517
On-column Amount (ng) : 2.3585
Integration start scan : 820 Integration stop scan: 829
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

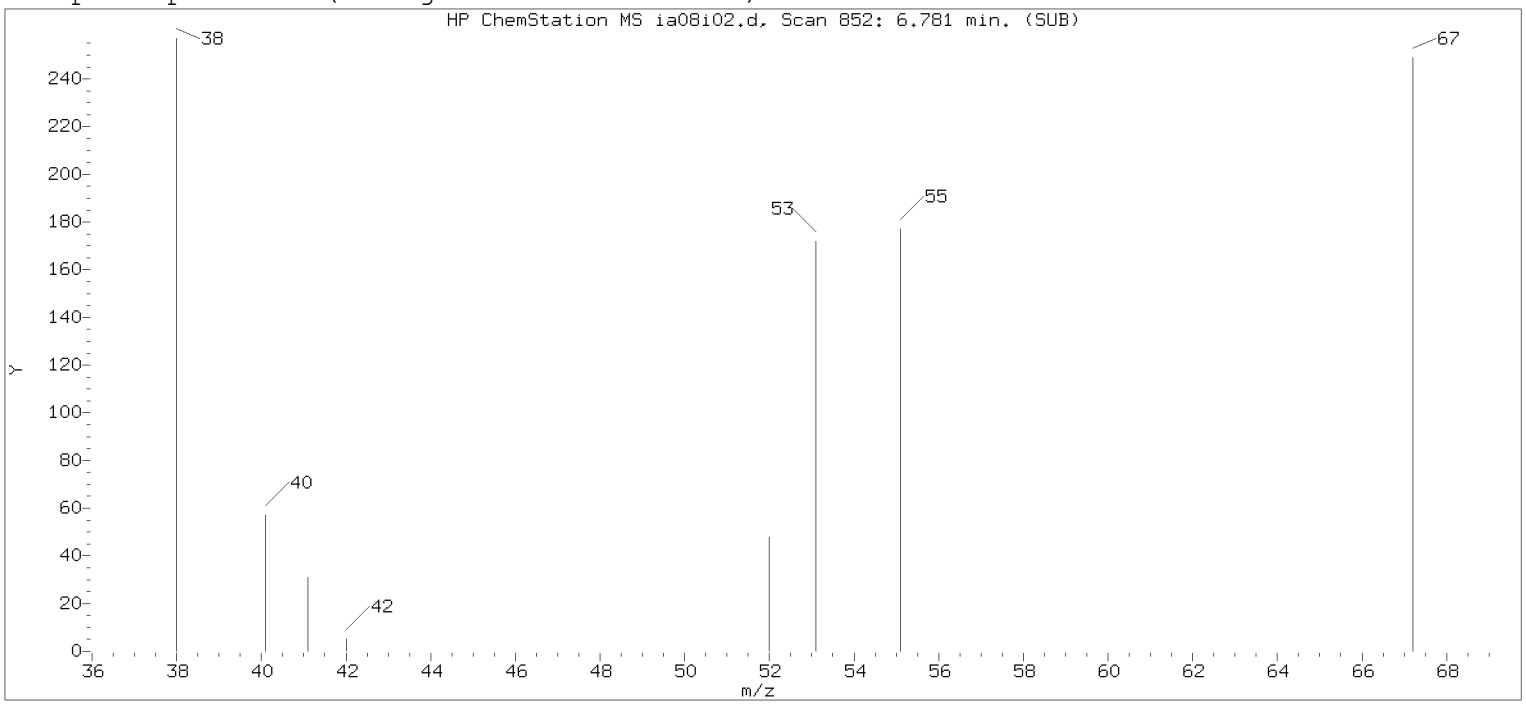
Compound Number : 45
Compound Name : Methacrylonitrile
Scan Number : 806
Retention Time (minutes): 6.500
Quant Ion : 67.00
Area (flag) : 1392131M
On-Column Amount (ng) : 109.4627
Integration start scan : 783 Integration stop scan: 855
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

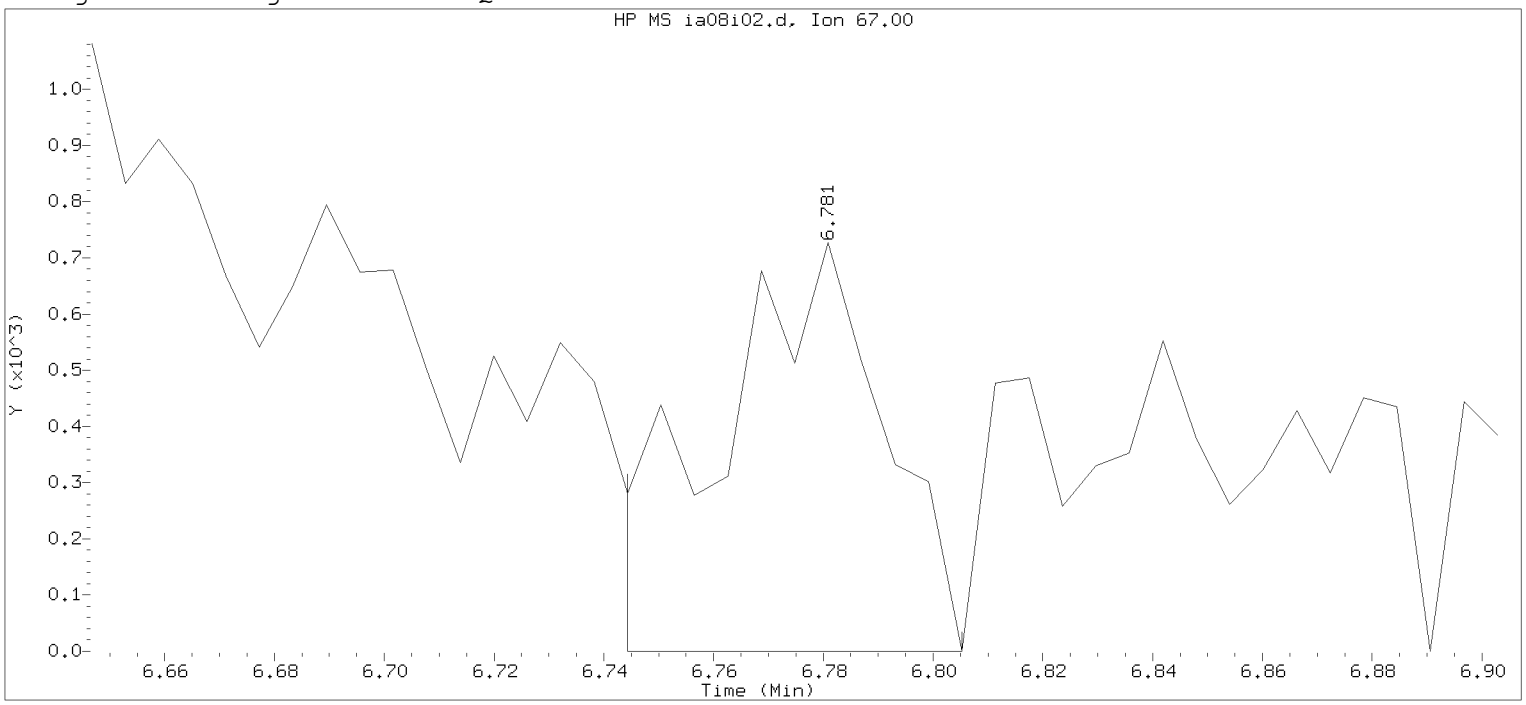
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

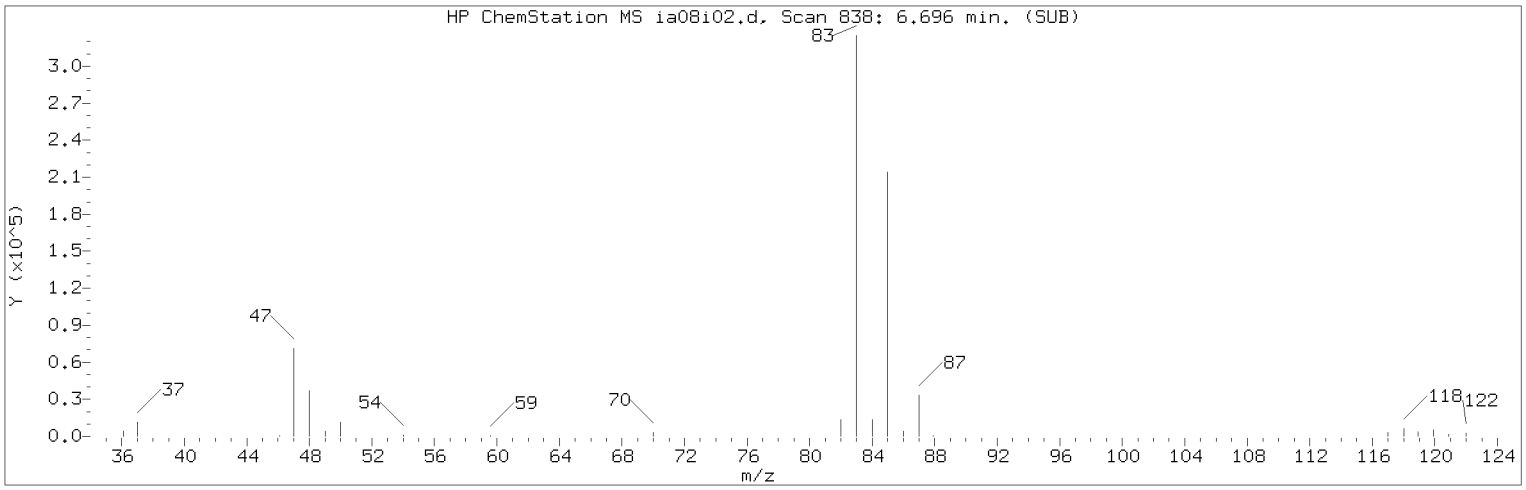
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

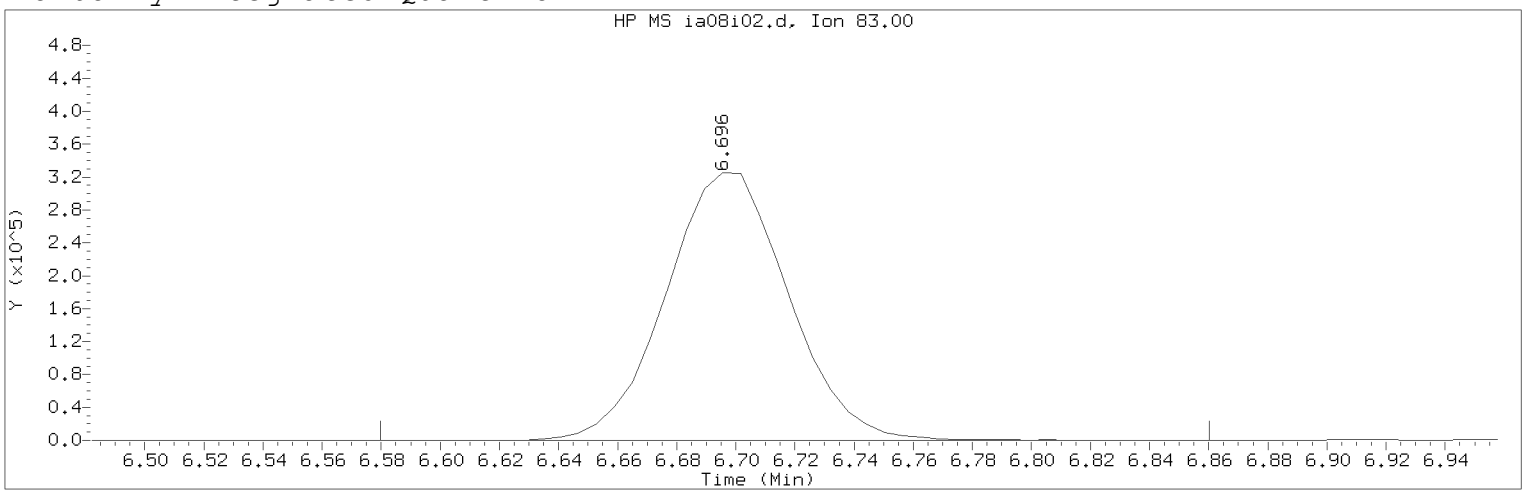
Compound Number : 45
Compound Name : Methacrylonitrile
Scan Number : 852
Retention Time (minutes): 6.781
Quant Ion : 67.00
Area : 1548
On-column Amount (ng) : 0.1925
Integration start scan : 845 Integration stop scan: 855
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

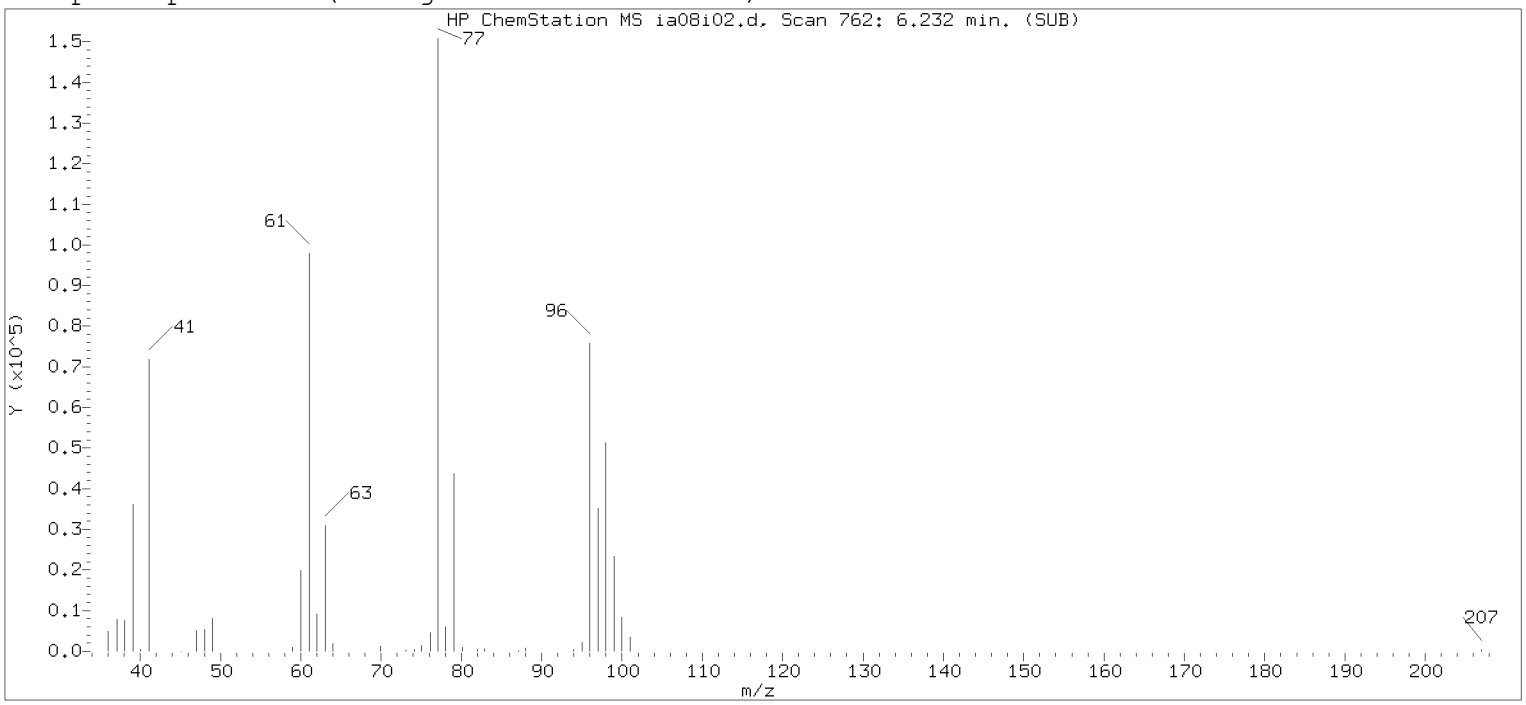
Compound Number : 49
Compound Name : Chloroform
Scan Number : 838
Retention Time (minutes): 6.696
Quant Ion : 83.00
Area (flag) : 936929M
On-Column Amount (ng) : 10.1225
Integration start scan : 818 Integration stop scan: 864
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

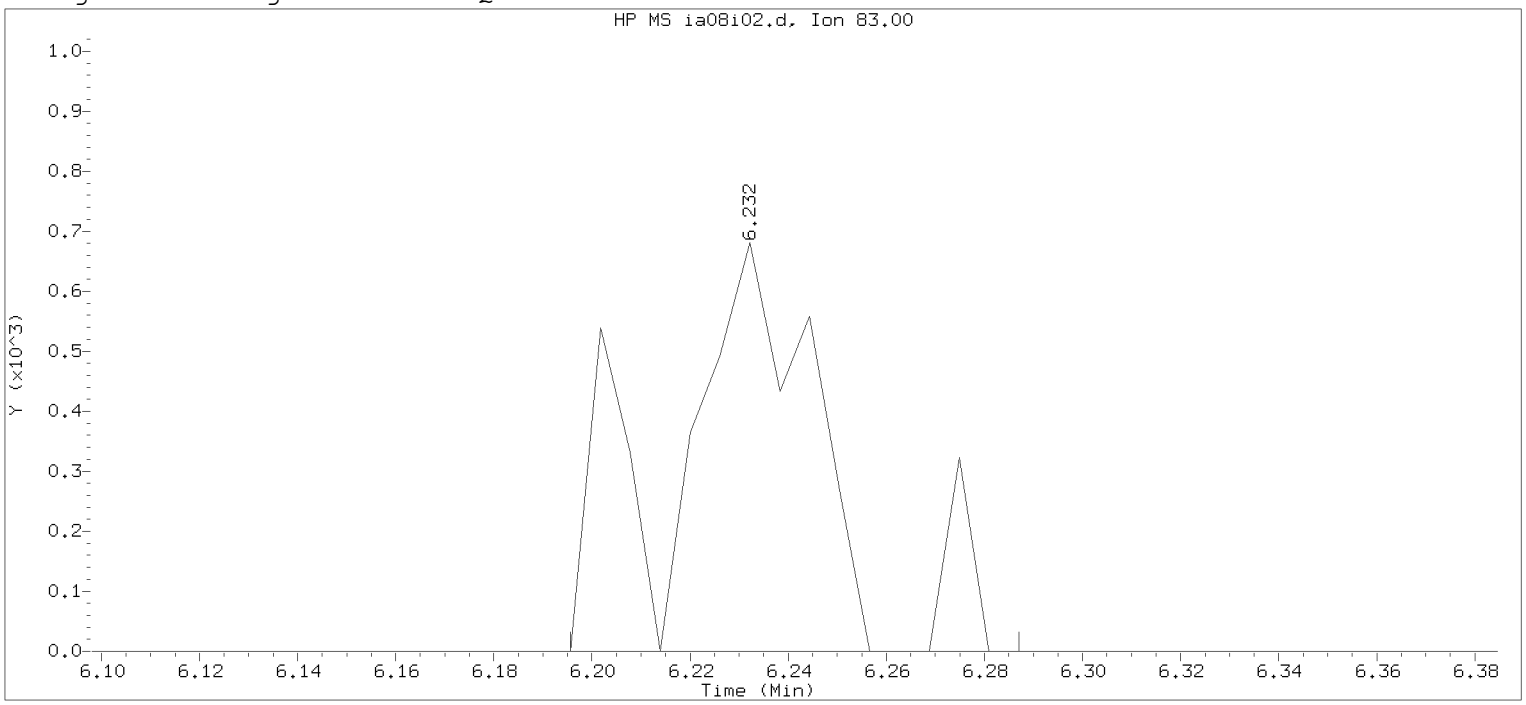
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

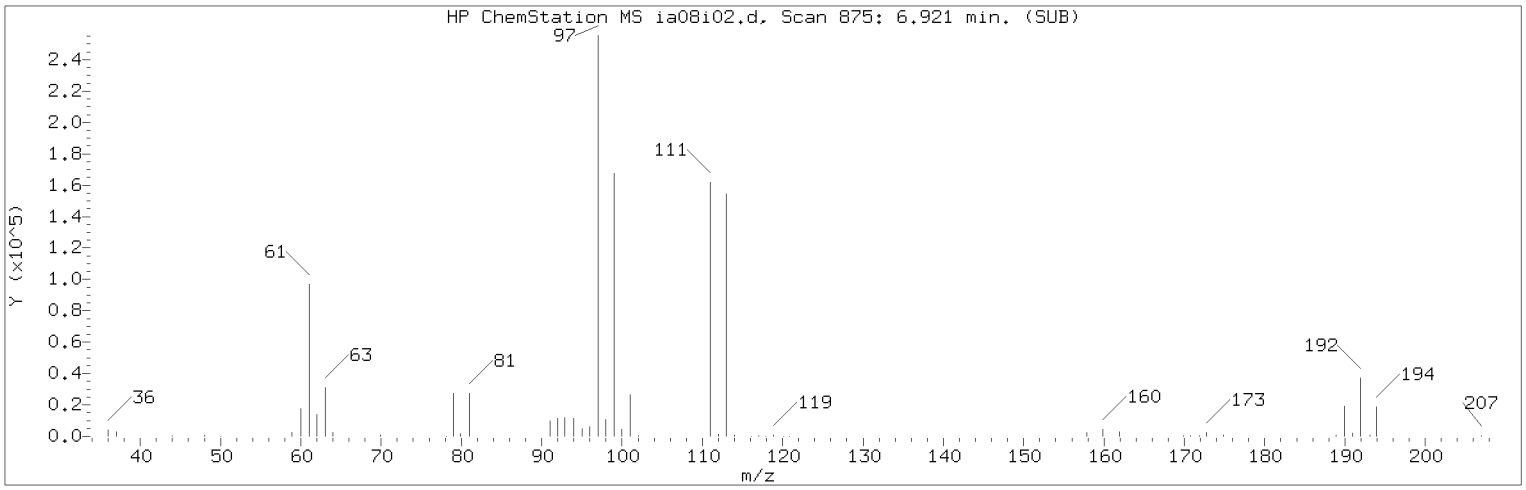
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

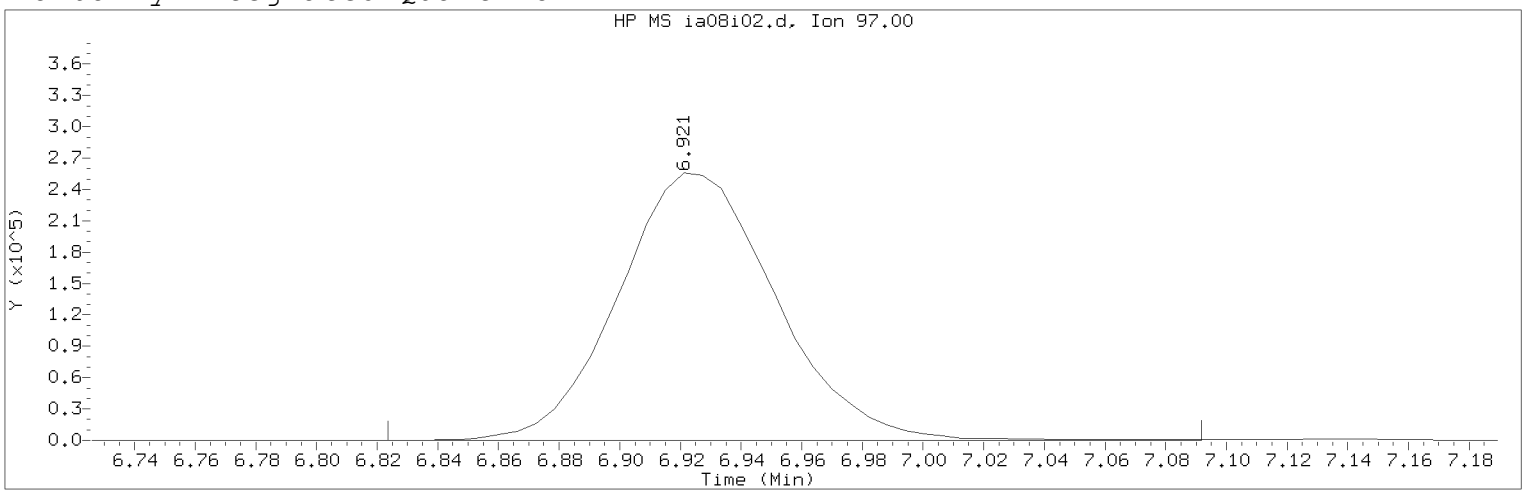
Compound Number : 49
Compound Name : Chloroform
Scan Number : 762
Retention Time (minutes): 6.232
Quant Ion : 83.00
Area : 1460
On-column Amount (ng) : 15.9175
Integration start scan : 755 Integration stop scan: 770
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

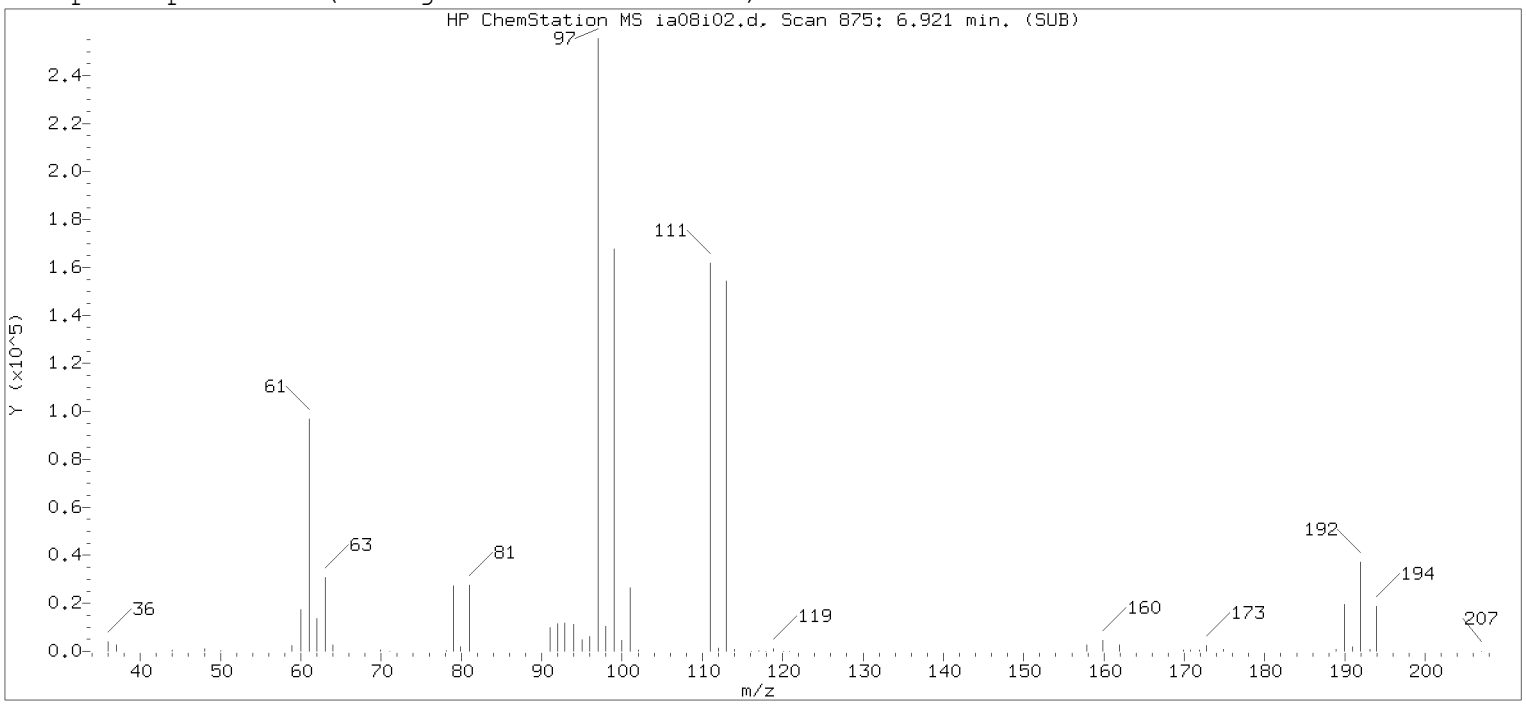
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 97.00
Area (flag) : 920216M
On-Column Amount (ng) : 10.2844
Integration start scan : 858 Integration stop scan: 902
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

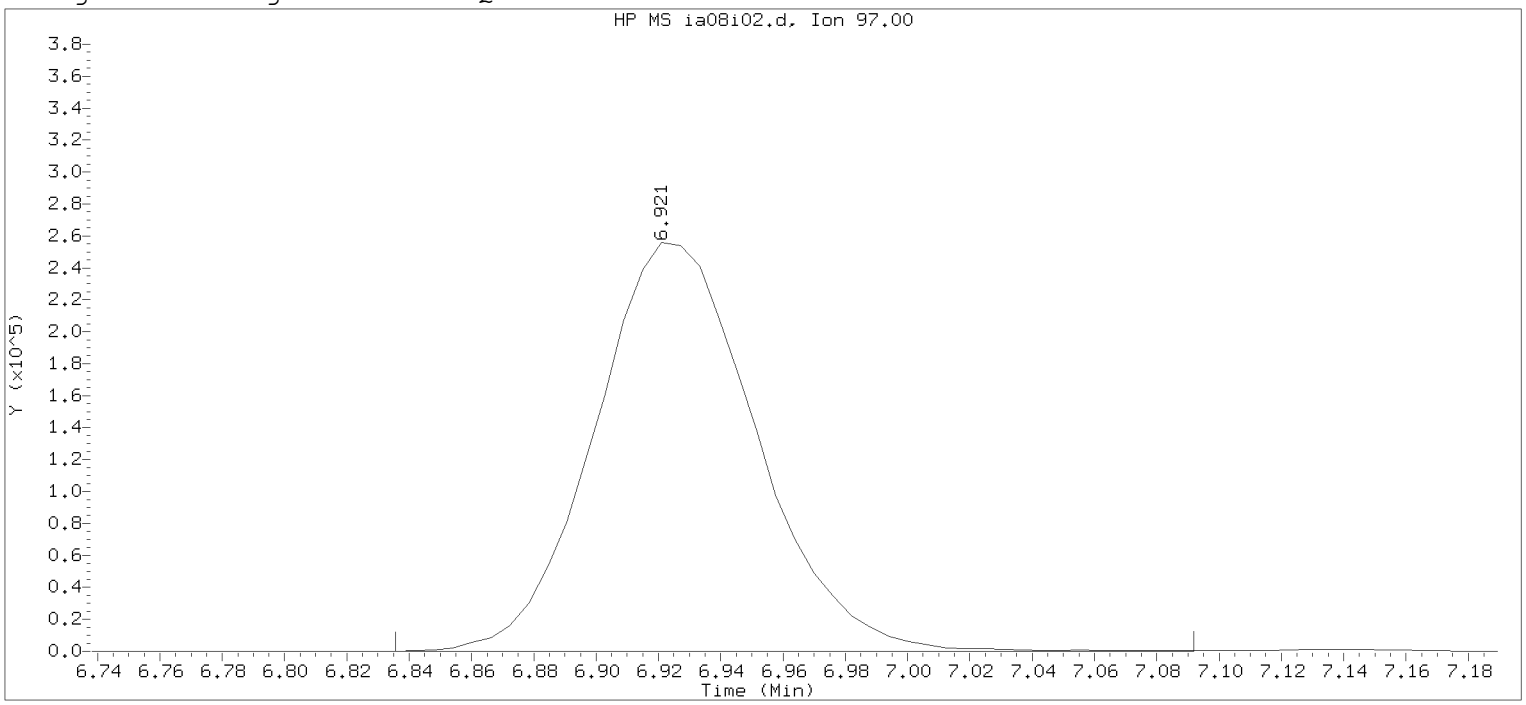
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

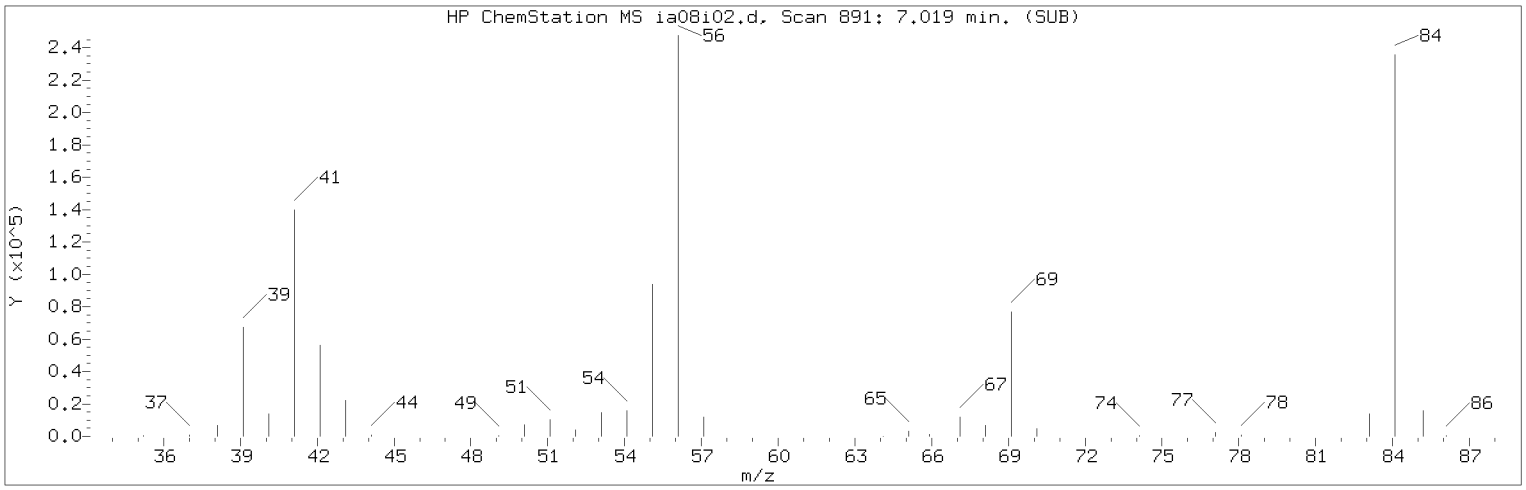
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

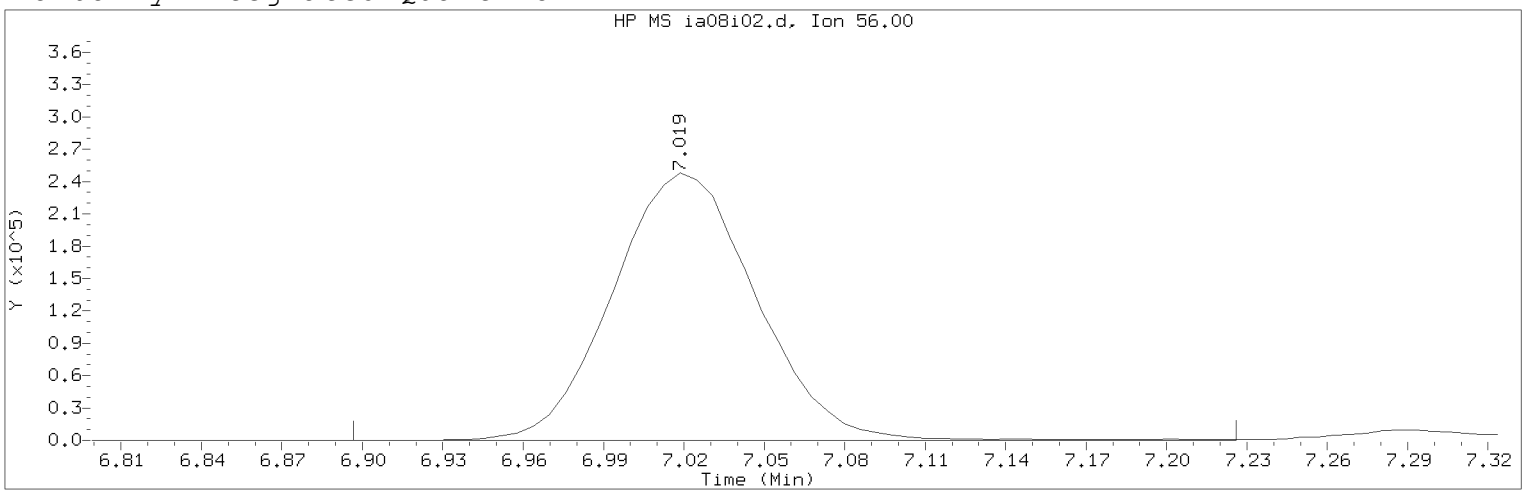
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 97.00
Area : 918931
On-column Amount (ng) : 47.9224
Integration start scan : 860 Integration stop scan: 902
Y at integration start : 0 Y at integration end: 162

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe208

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

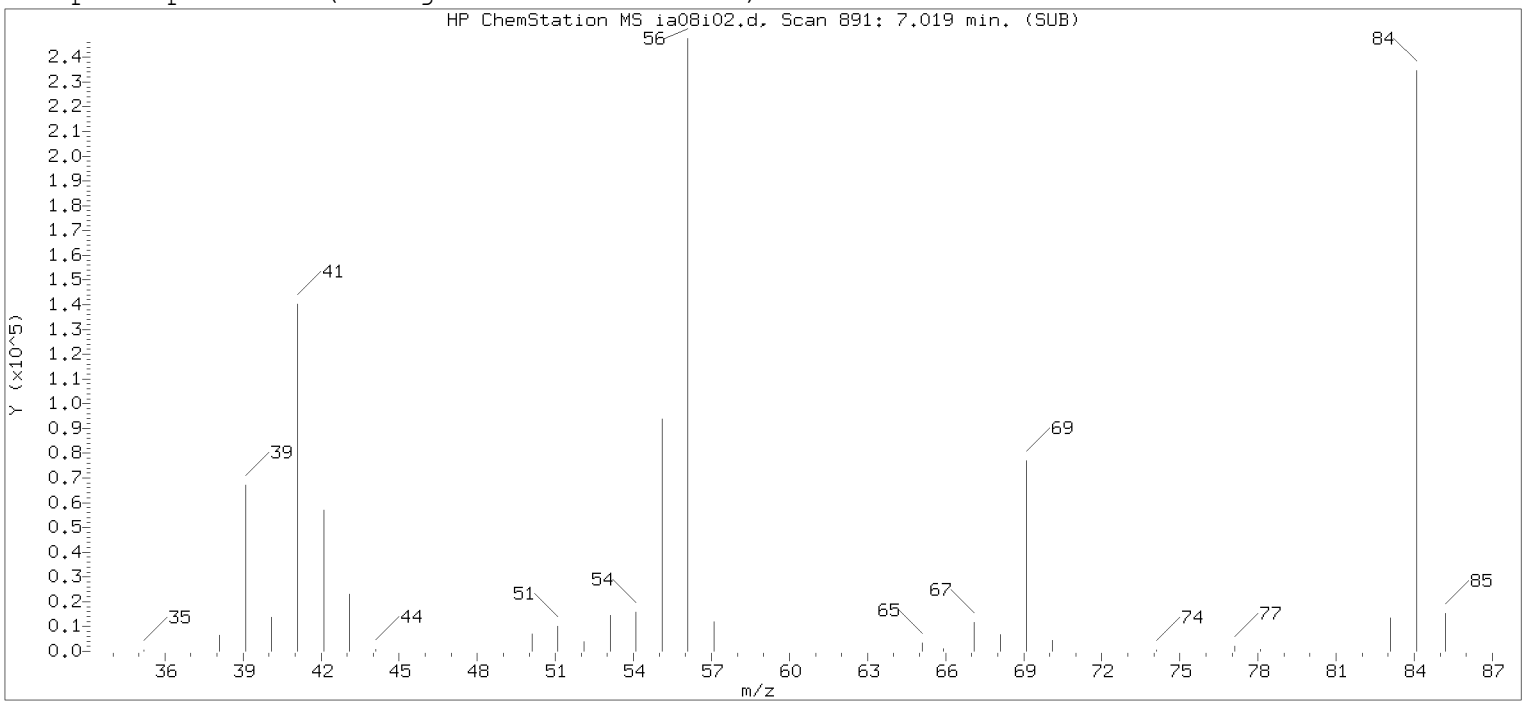
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 56.00
Area (flag) : 919785M
On-Column Amount (ng) : 10.4540
Integration start scan : 870 Integration stop scan: 924
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

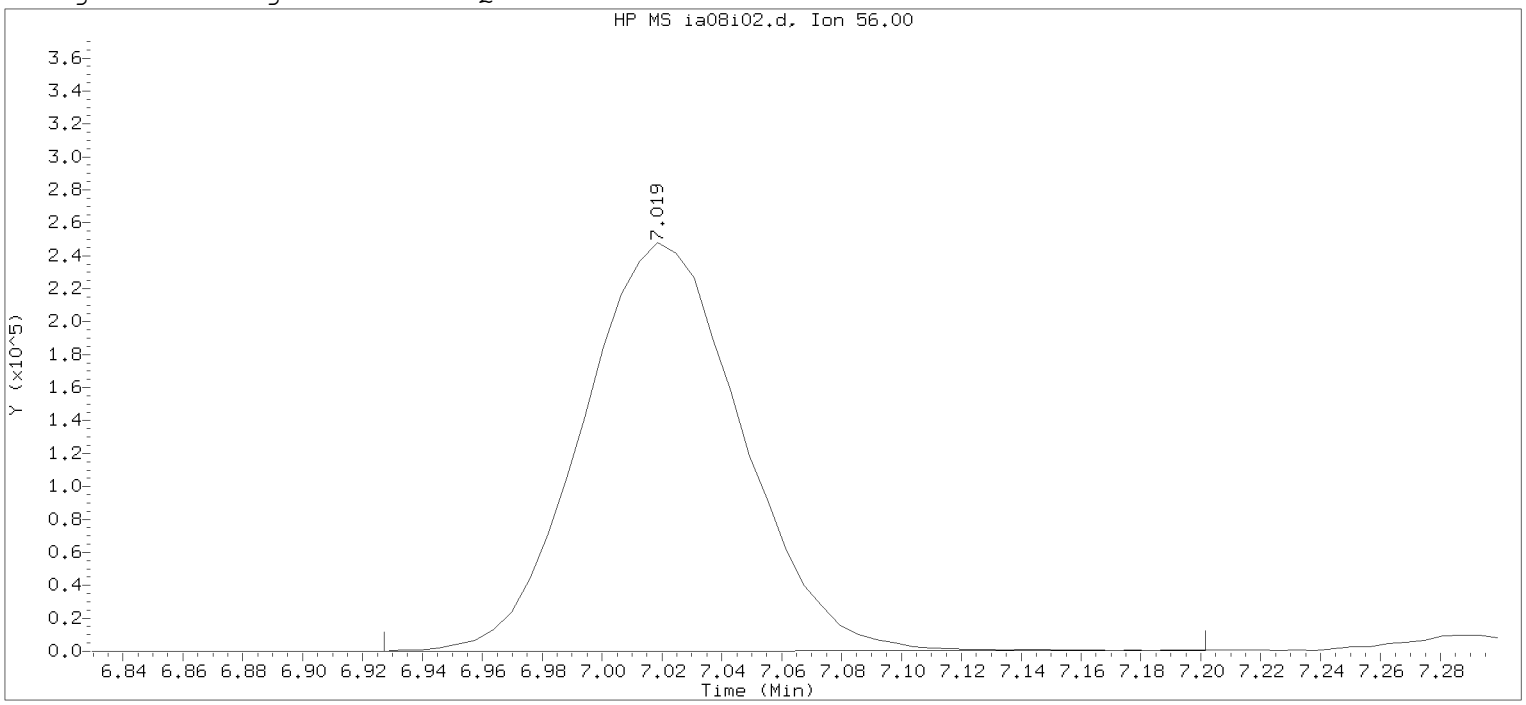
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

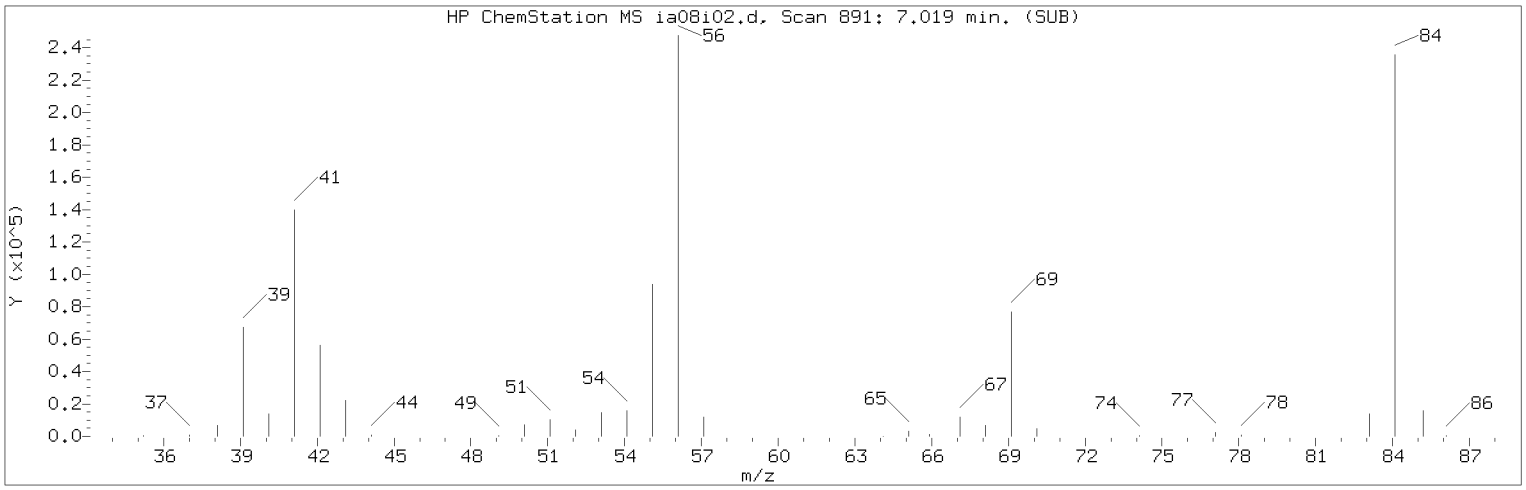
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

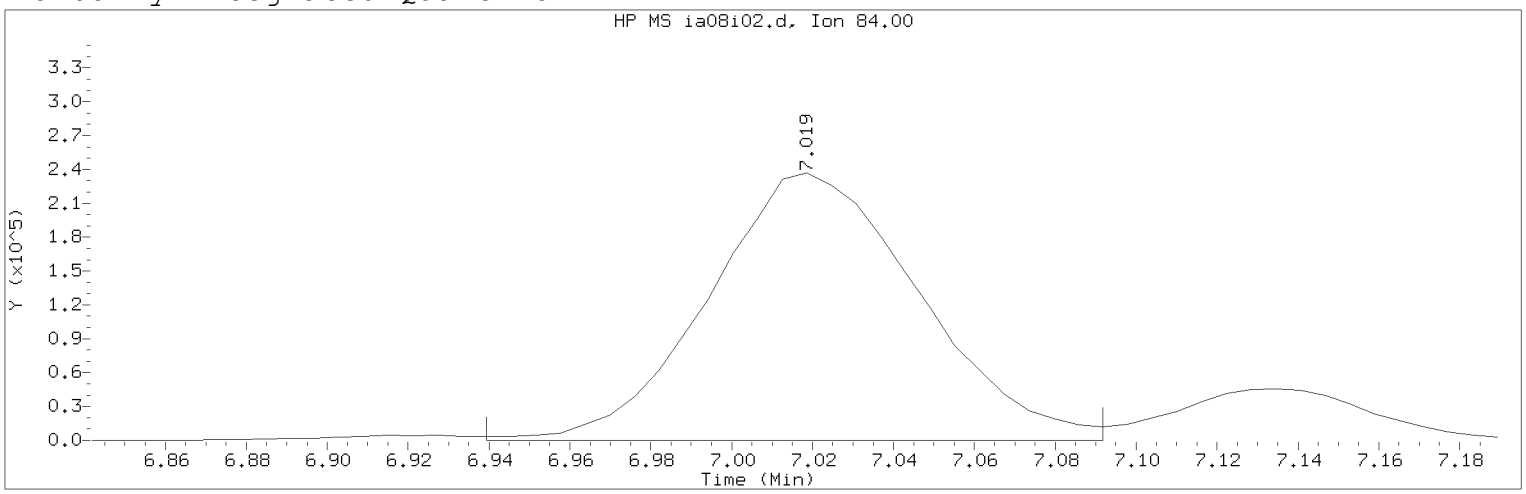
Compound Number	: 52		
Compound Name	: Cyclohexane		
Scan Number	: 891		
Retention Time (minutes)	: 7.019		
Quant Ion	: 56.00		
Area	: 914793		
On-column Amount (ng)	: 47.8701		
Integration start scan	: 875	Integration stop scan:	920
Y at integration start	: 0	Y at integration end:	467

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

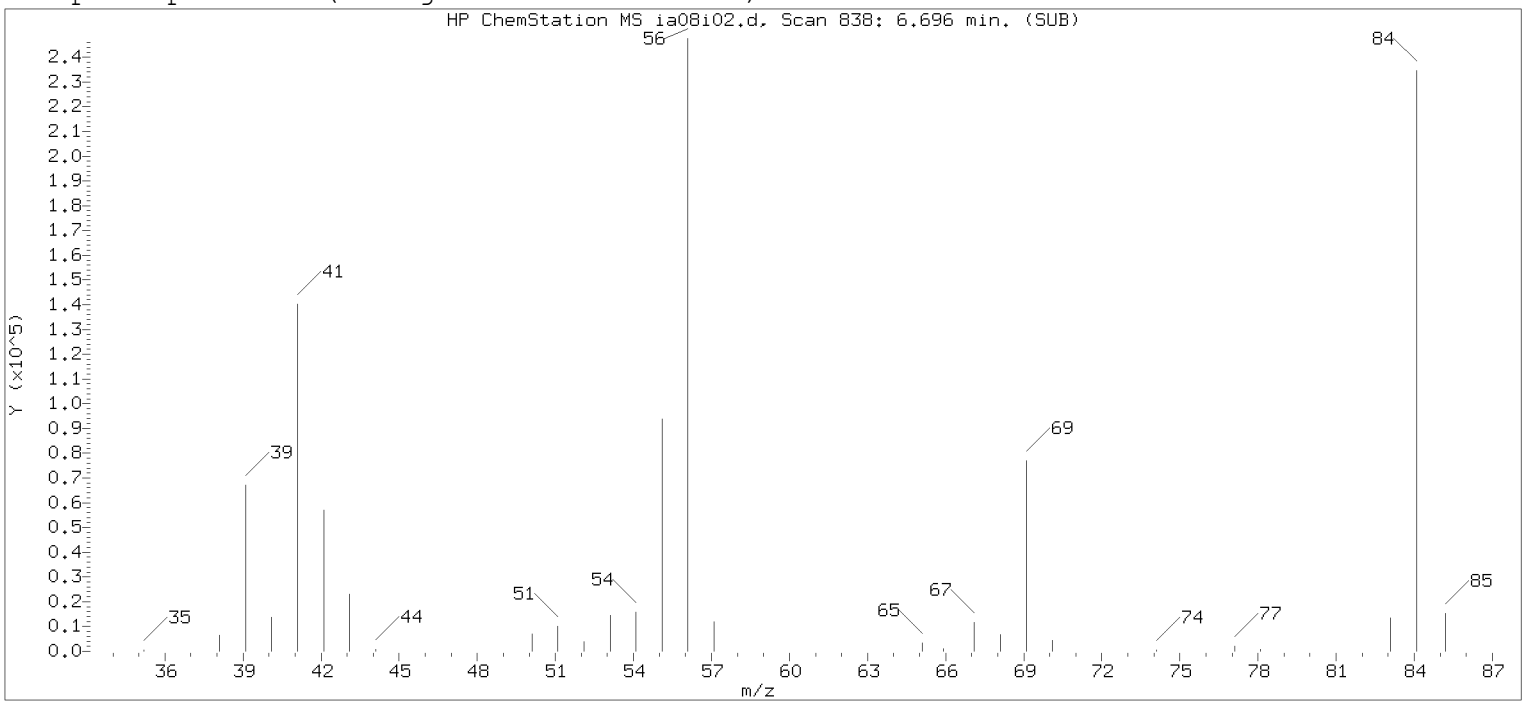
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 84.00
Area (flag) : 856707M
On-Column Amount (ng) : 10.3211
Integration start scan : 877 Integration stop scan: 902
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

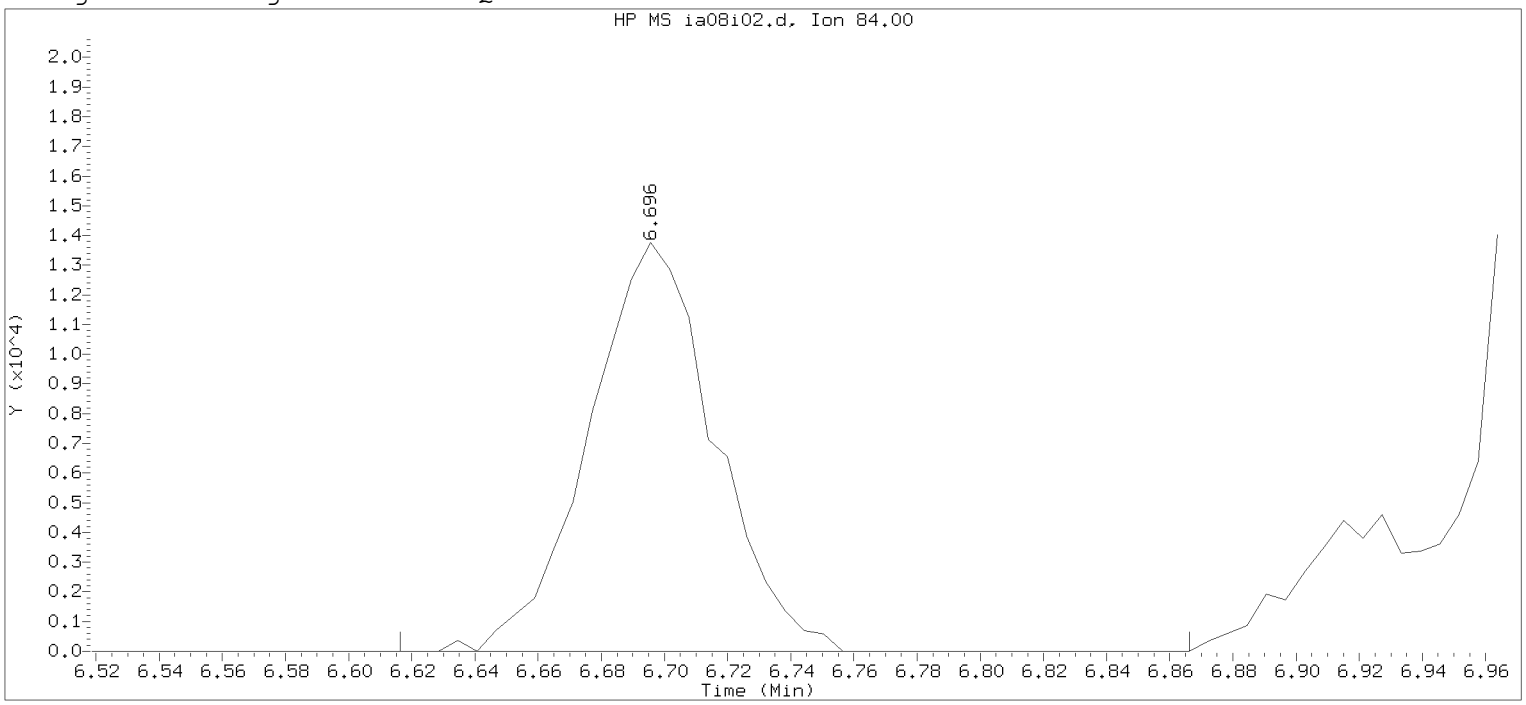
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

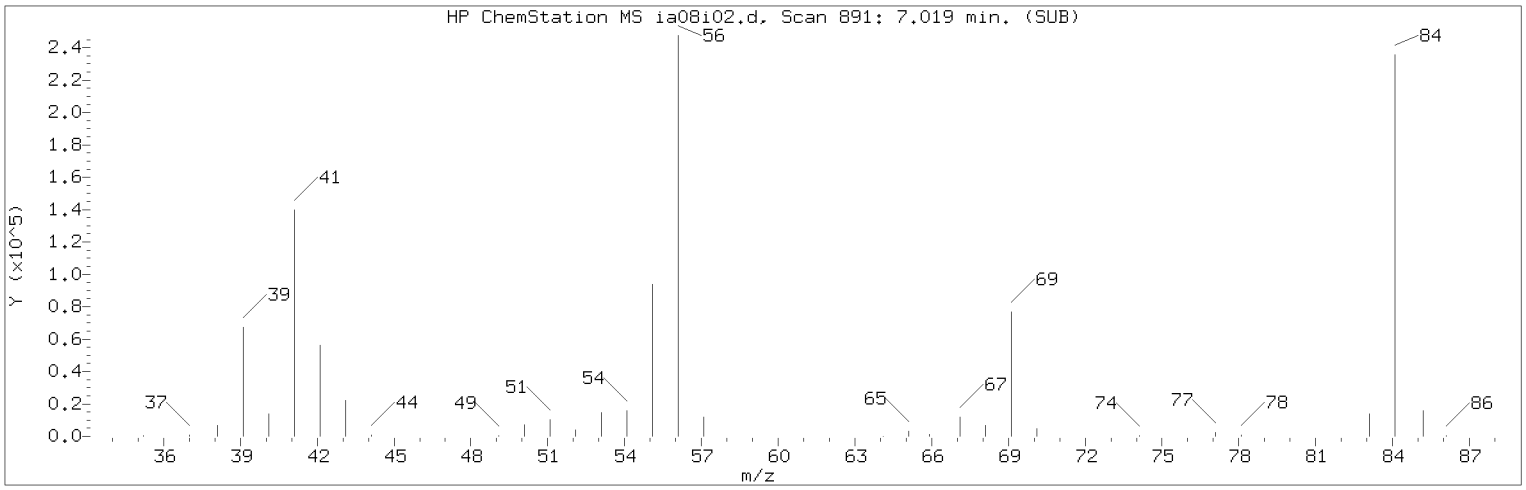
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

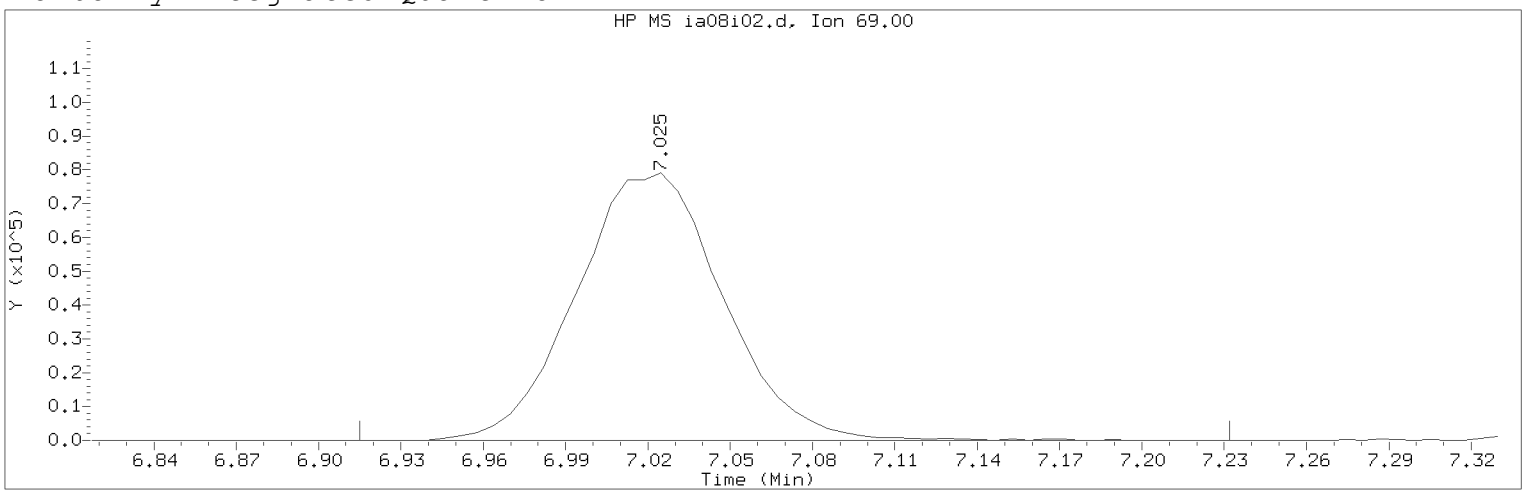
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 838
Retention Time (minutes): 6.696
Quant Ion : 84.00
Area : 38018
On-column Amount (ng) : 45.1415
Integration start scan : 824 Integration stop scan: 865
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

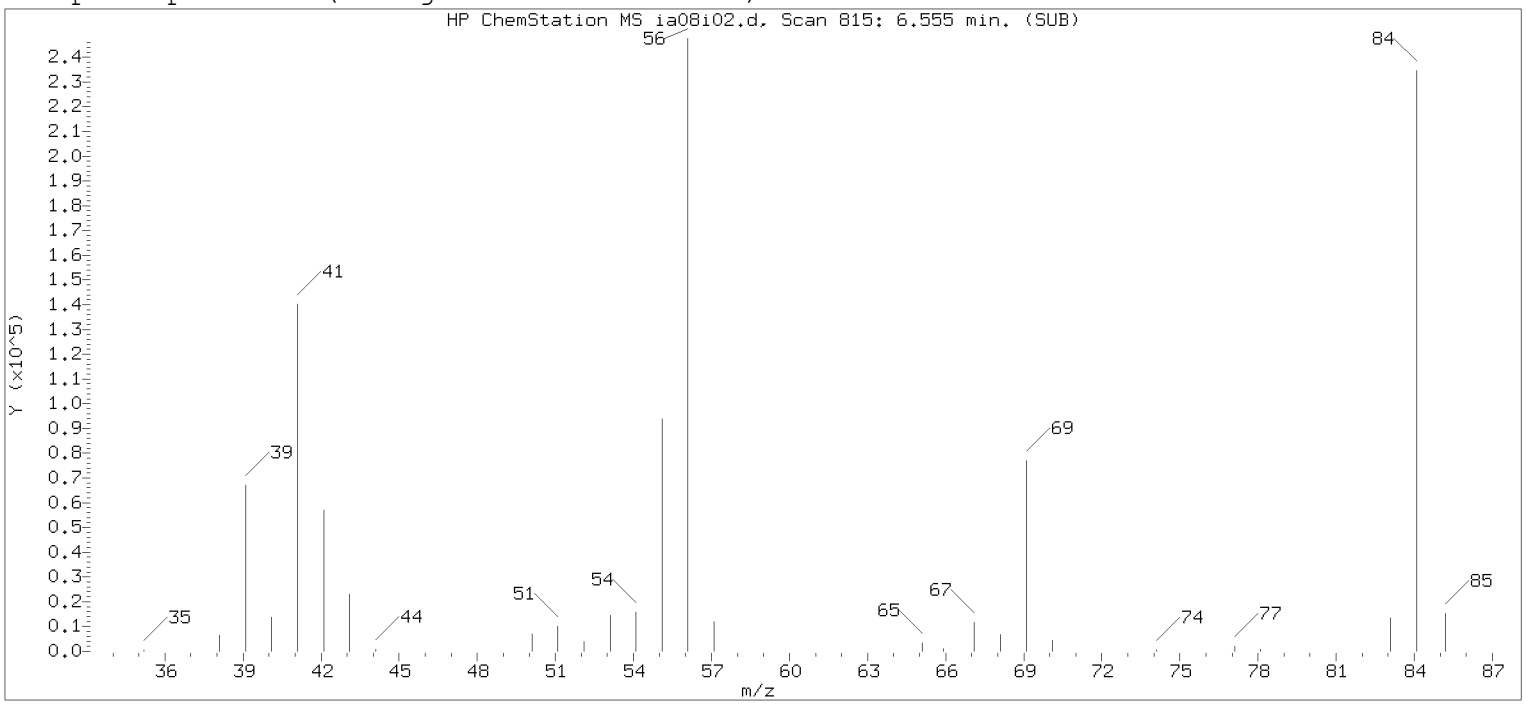
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 69.00
Area (flag) : 293581M
On-Column Amount (ng) : 10.1614
Integration start scan : 873 Integration stop scan: 925
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

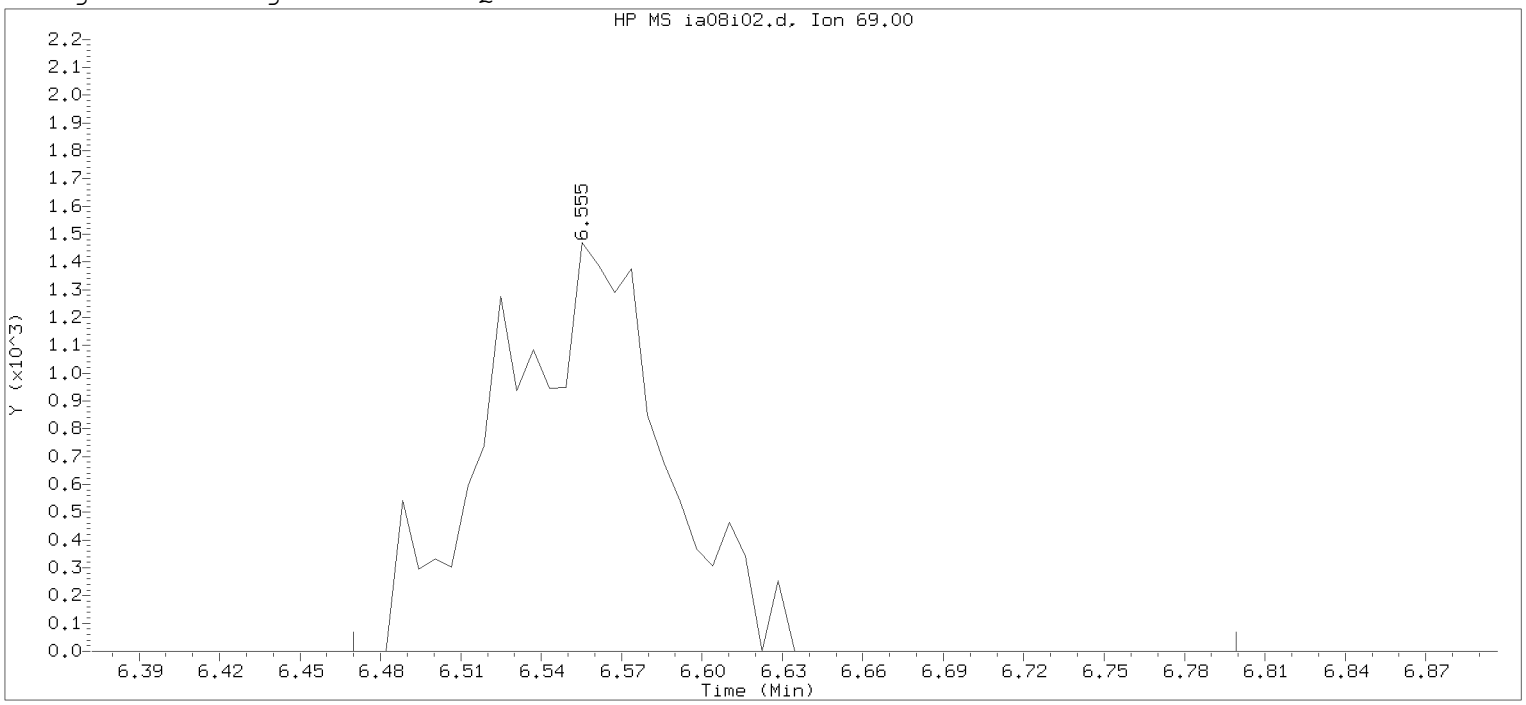
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

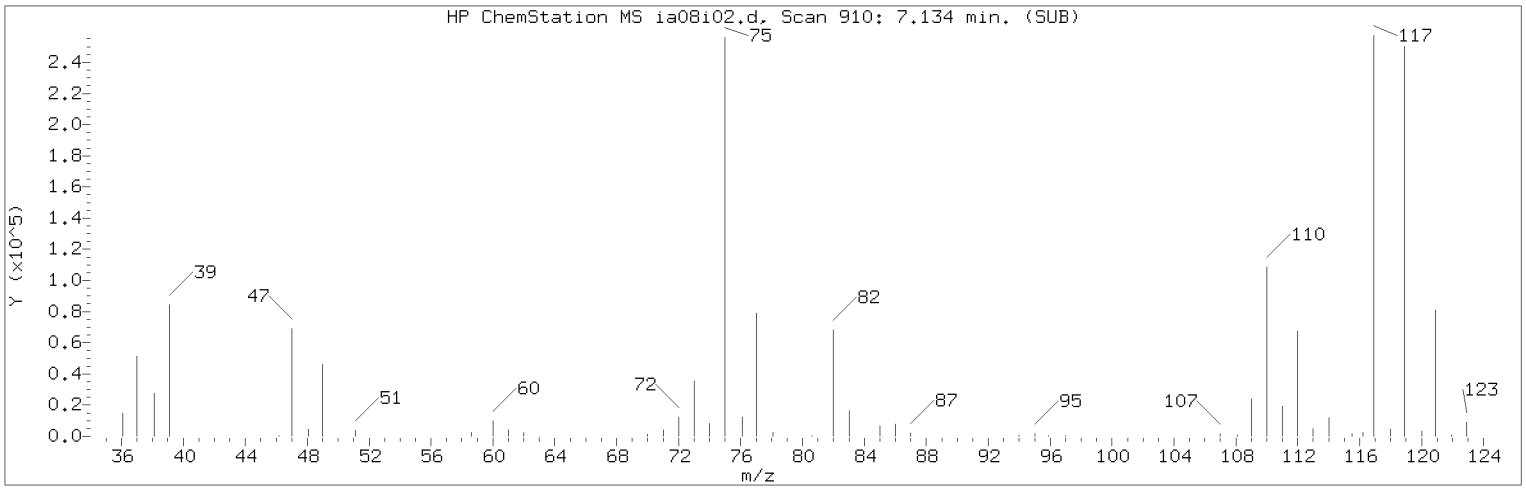
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

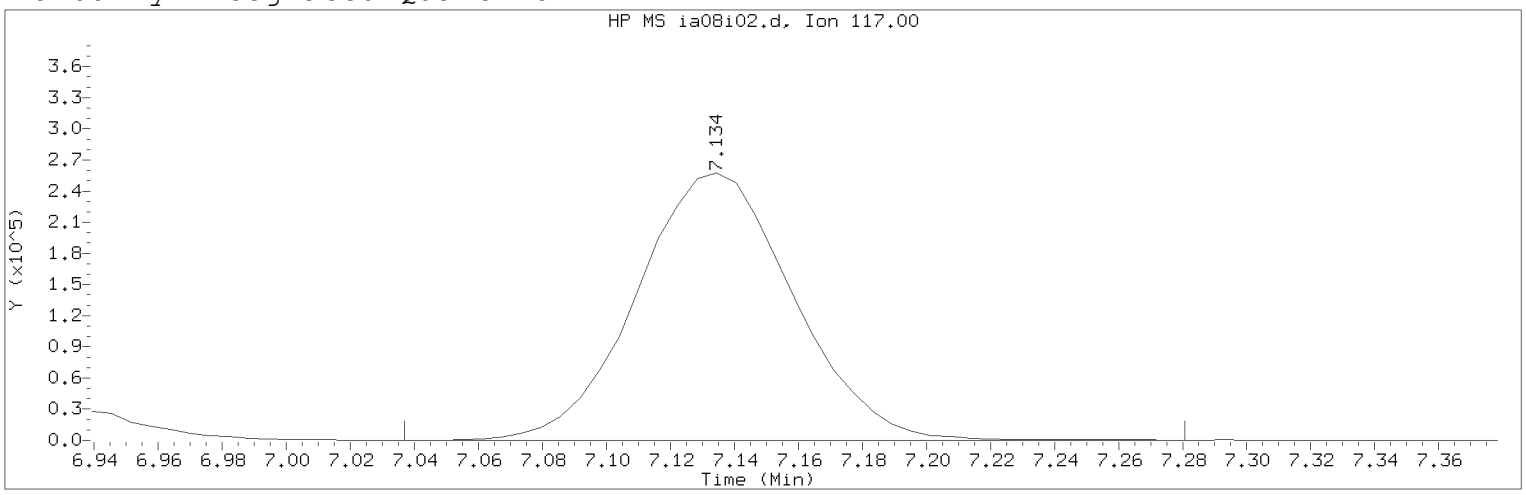
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 815
Retention Time (minutes): 6.555
Quant Ion : 69.00
Area : 6333
On-column Amount (ng) : 42.4323
Integration start scan : 800 Integration stop scan: 854
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

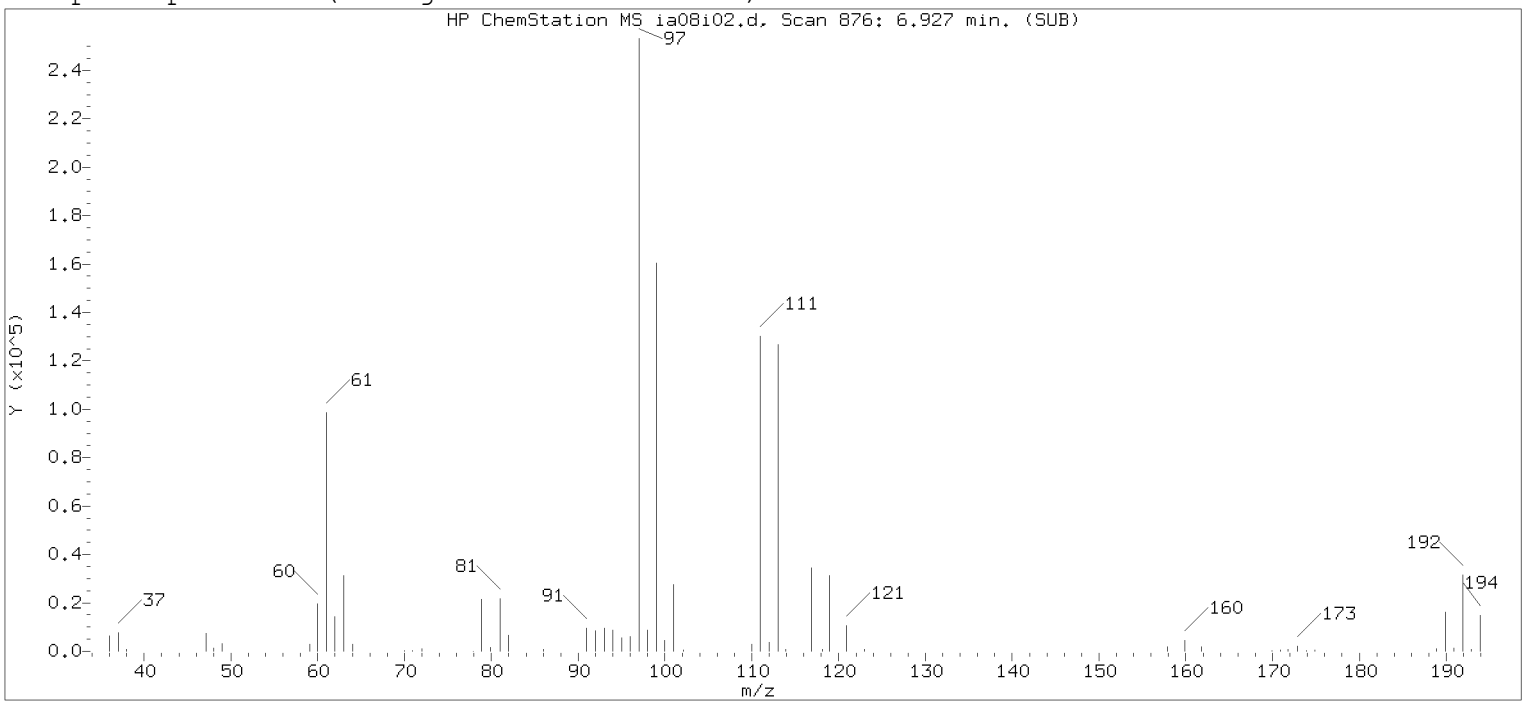
Compound Number : 54
Compound Name : Carbon Tetrachloride
Scan Number : 910
Retention Time (minutes): 7.134
Quant Ion : 117.00
Area (flag) : 873580M
On-Column Amount (ng) : 10.3396
Integration start scan : 893 Integration stop scan: 933
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

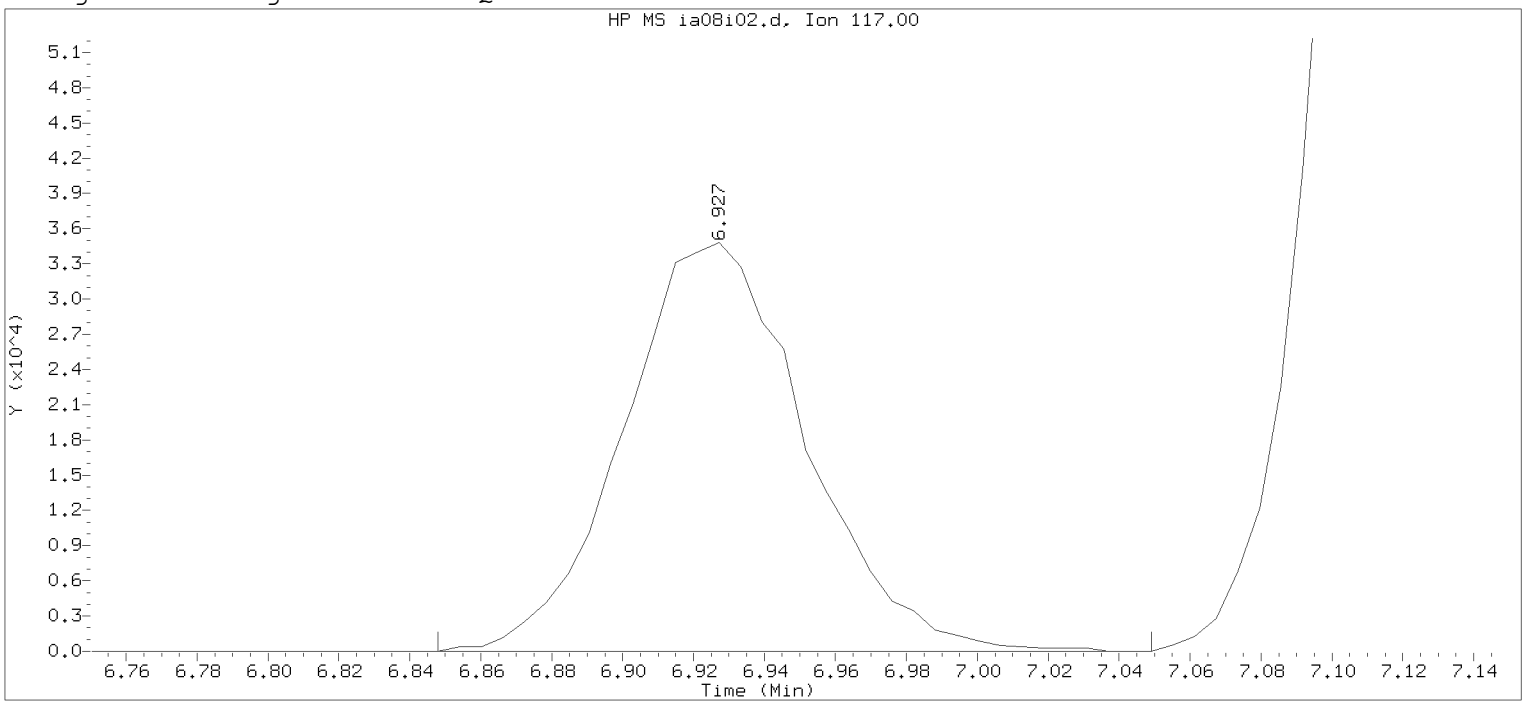
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

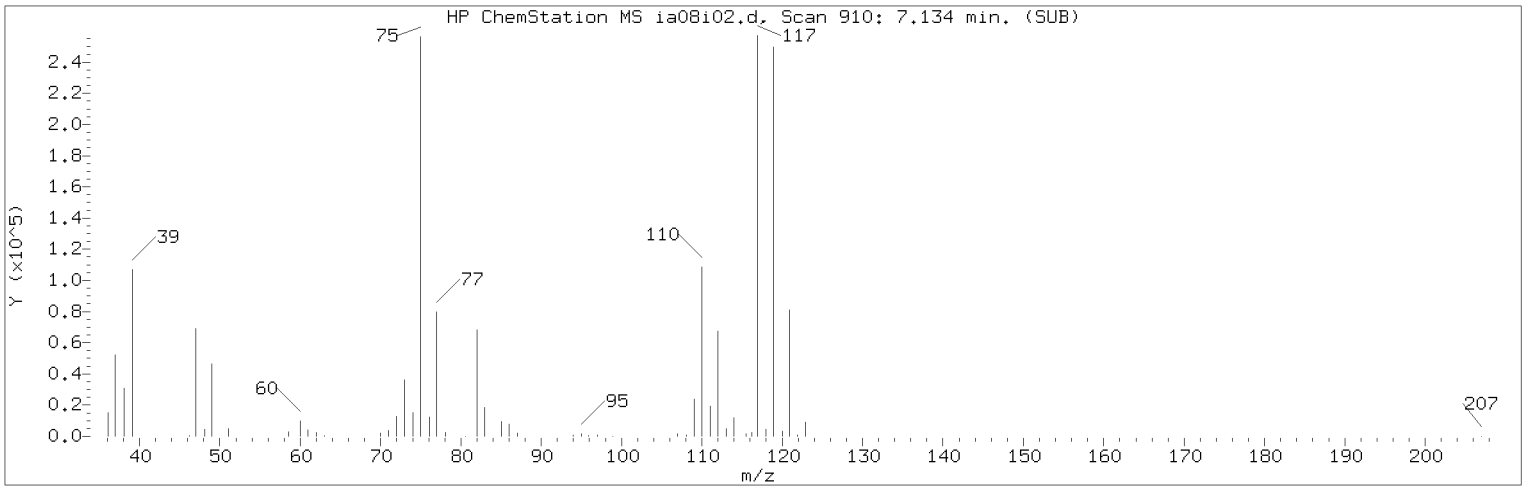
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

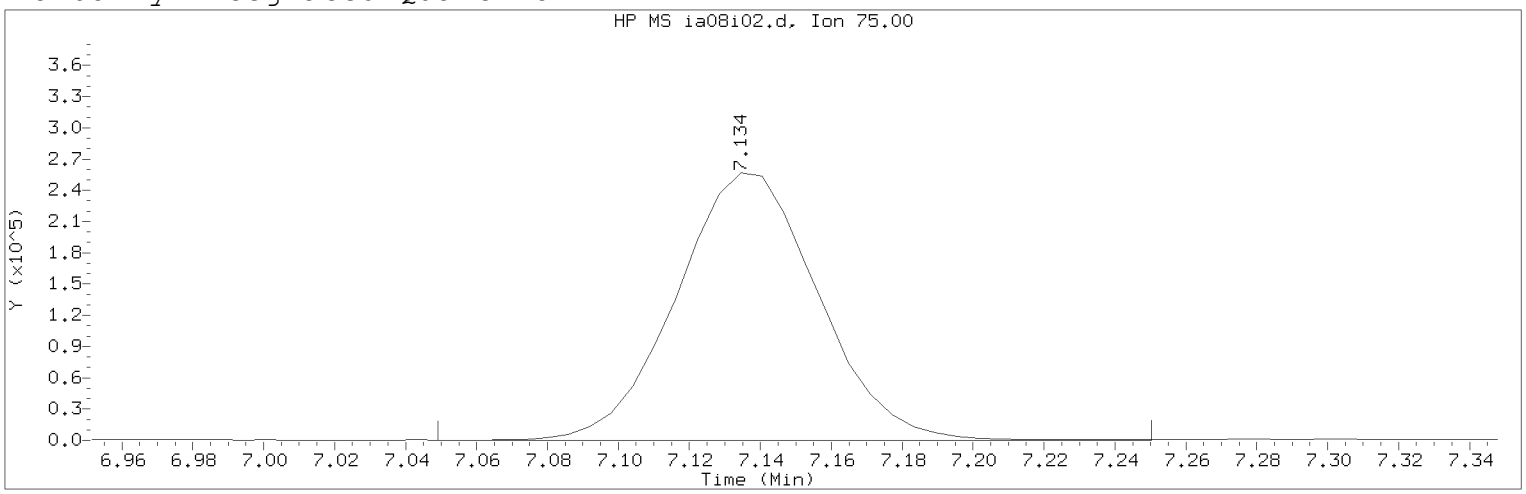
Compound Number : 54
Compound Name : Carbon Tetrachloride
Scan Number : 876
Retention Time (minutes): 6.927
Quant Ion : 117.00
Area : 123946
On-column Amount (ng) : 65.3708
Integration start scan : 862 Integration stop scan: 895
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user: JHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

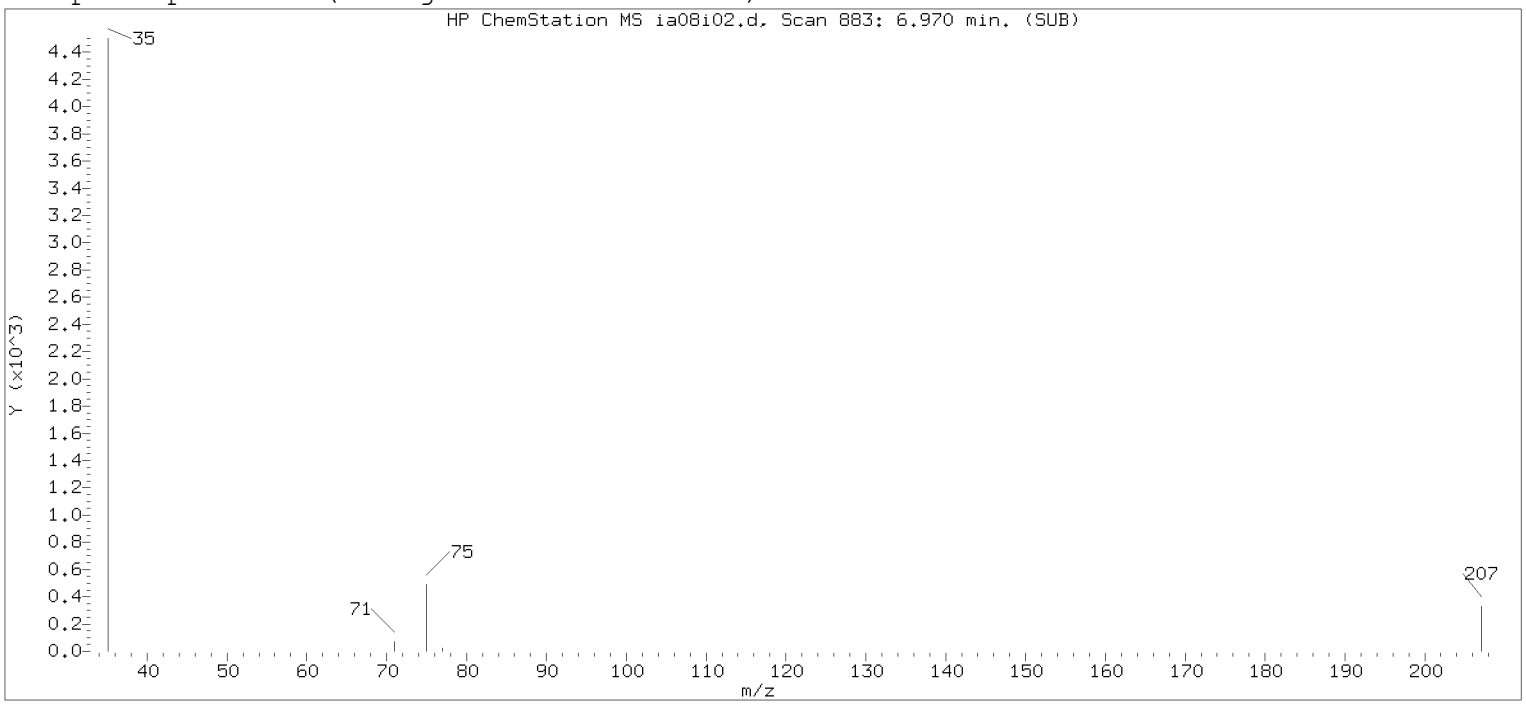
Compound Number : 55
Compound Name : 1,1-Dichloropropene
Scan Number : 910
Retention Time (minutes): 7.134
Quant Ion : 75.00
Area (flag) : 712801M
On-Column Amount (ng) : 10.2910
Integration start scan : 895 Integration stop scan: 928
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

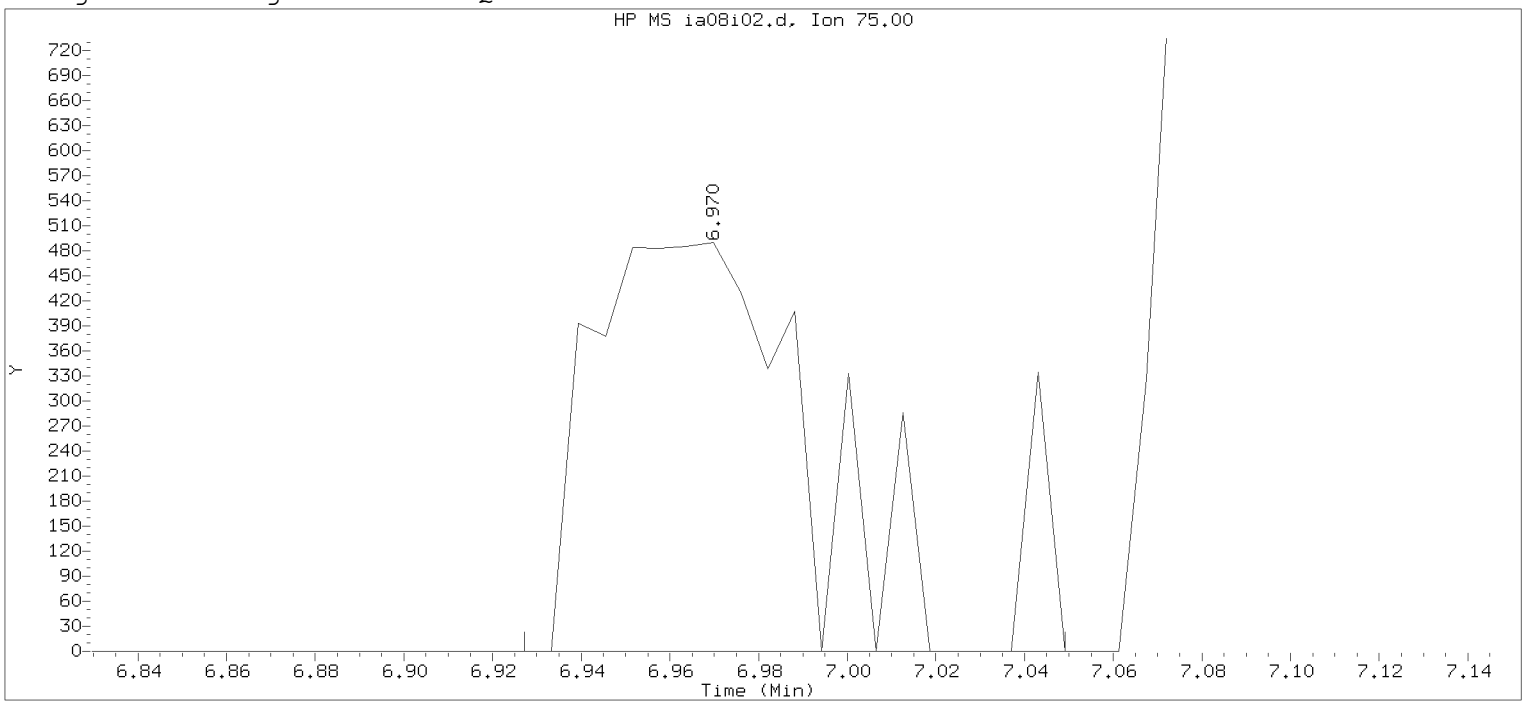
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

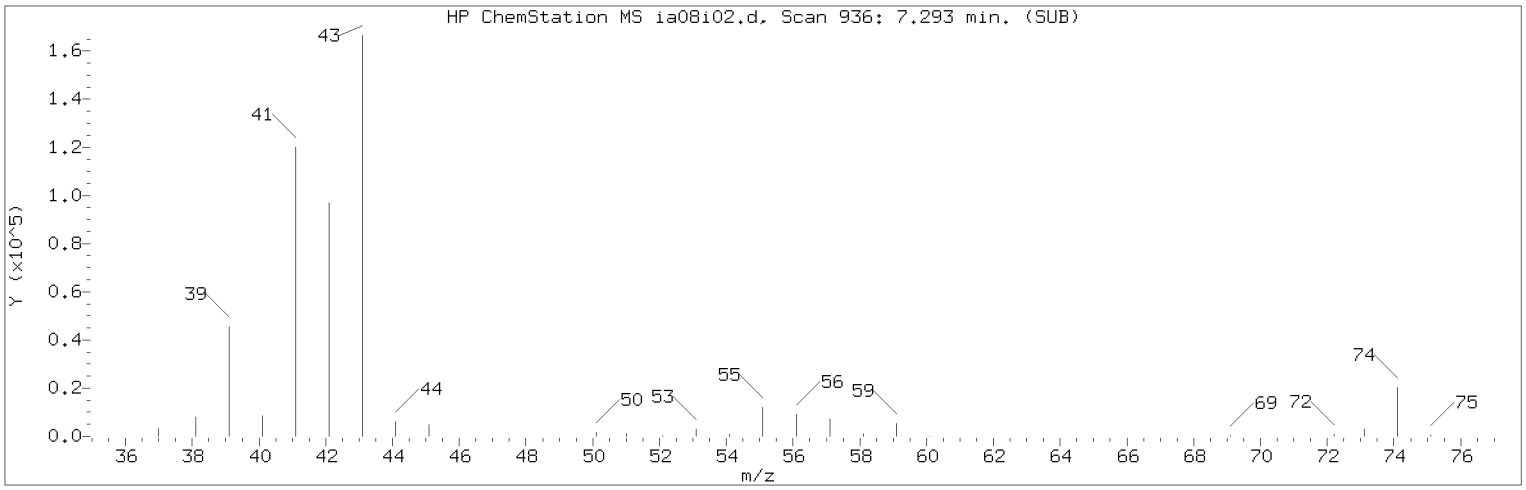
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Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

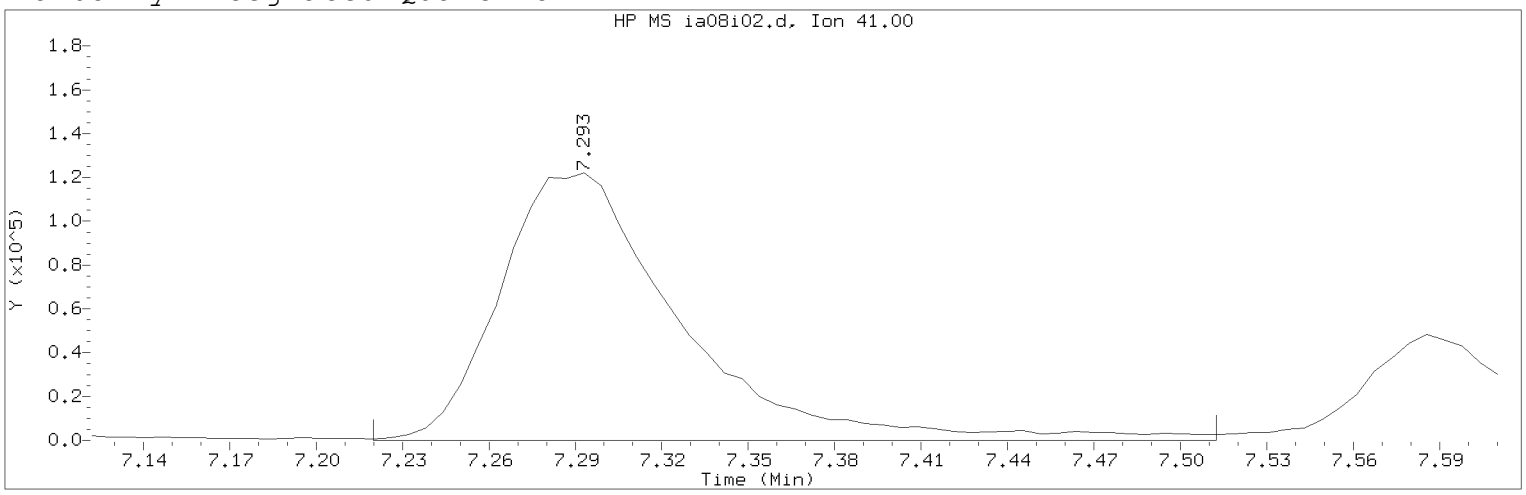
Compound Number : 55
Compound Name : 1,1-Dichloropropene
Scan Number : 883
Retention Time (minutes): 6.970
Quant Ion : 75.00
Area : 1772
On-column Amount (ng) : 20.9710
Integration start scan : 875 Integration stop scan: 895
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

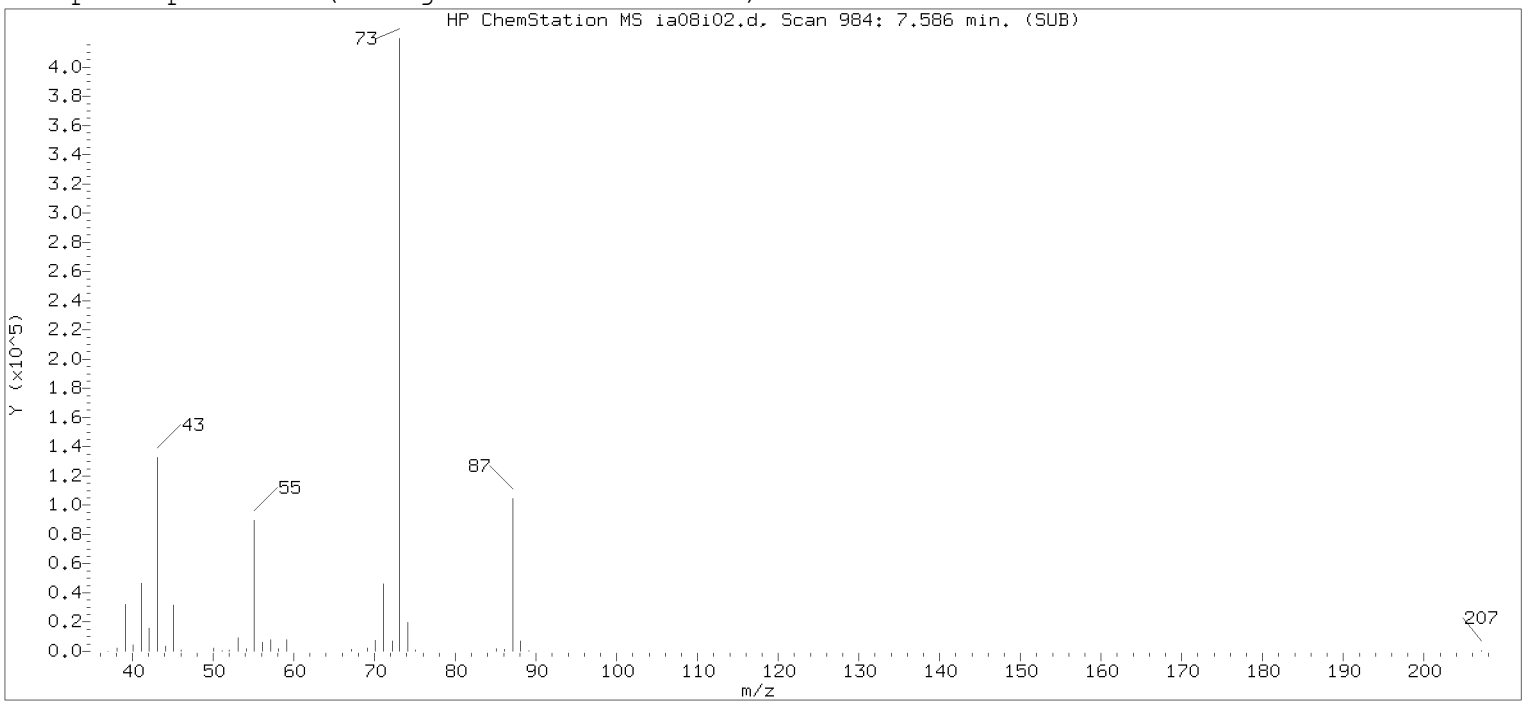
Compound Number : 56
Compound Name : Isobutyl Alcohol
Scan Number : 936
Retention Time (minutes): 7.293
Quant Ion : 41.00
Area (flag) : 531559M
On-Column Amount (ng) : 524.0073
Integration start scan : 923 Integration stop scan: 971
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

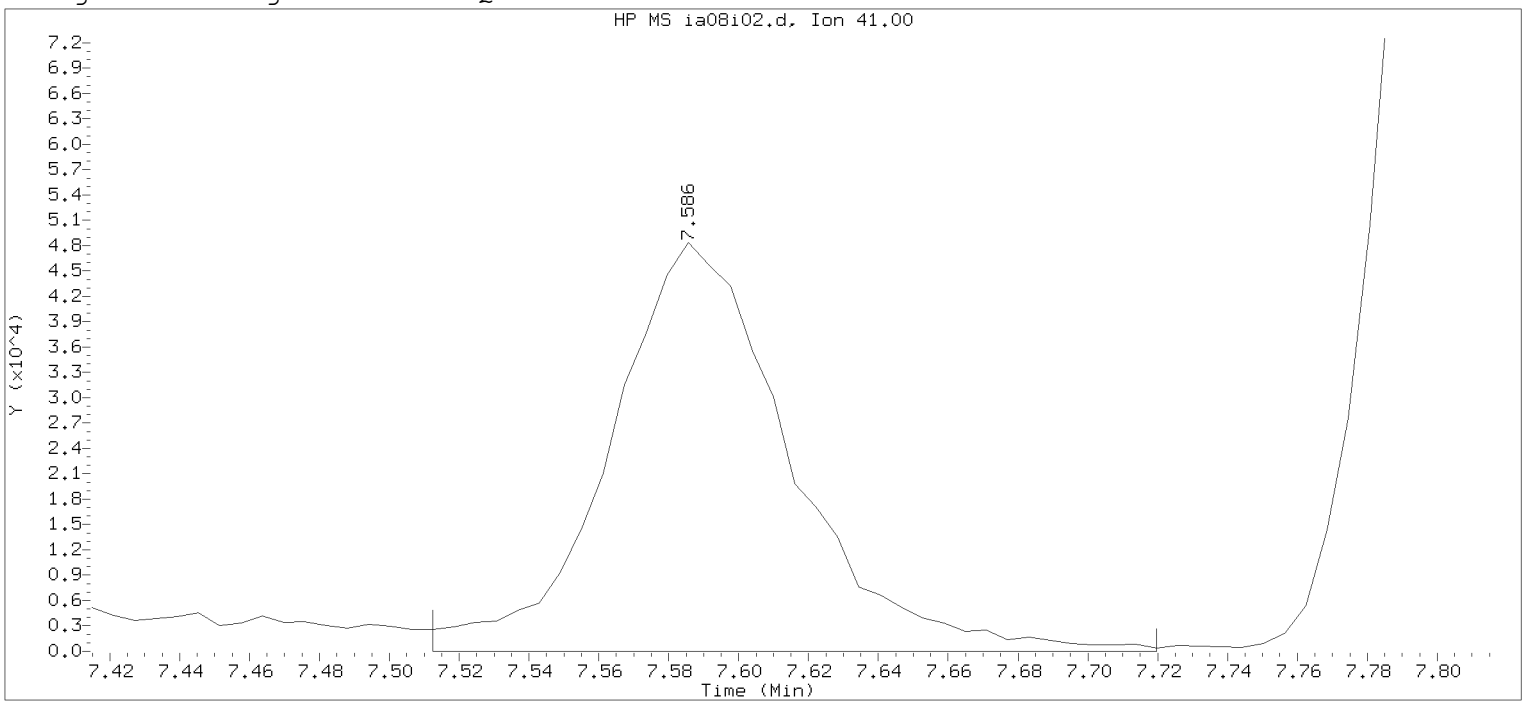
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

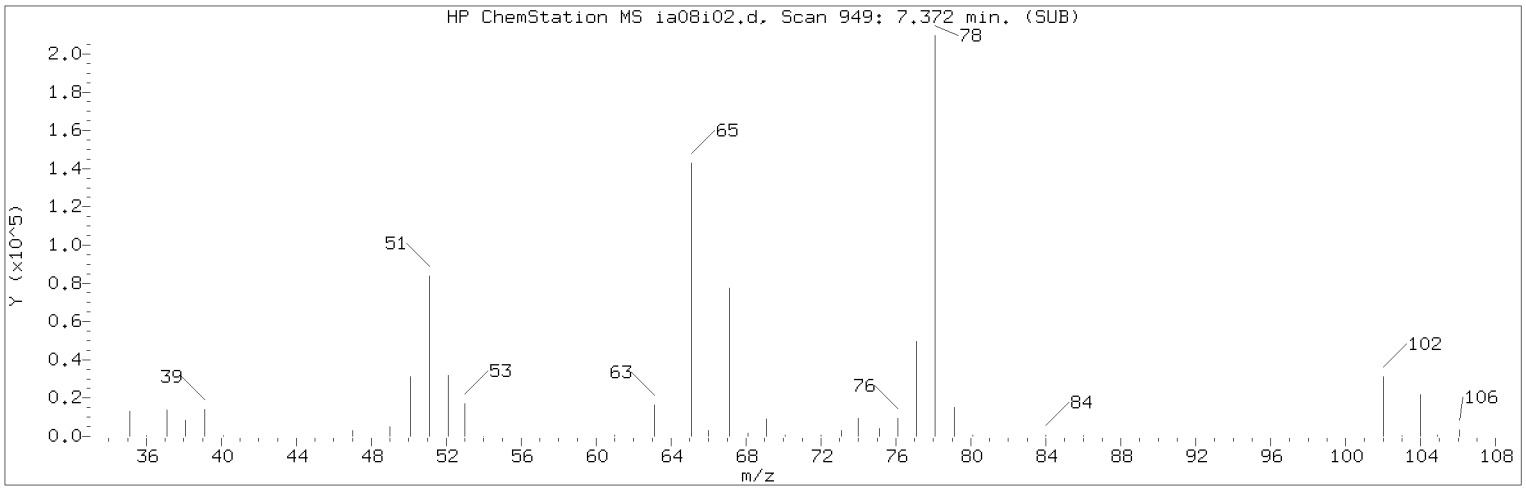
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

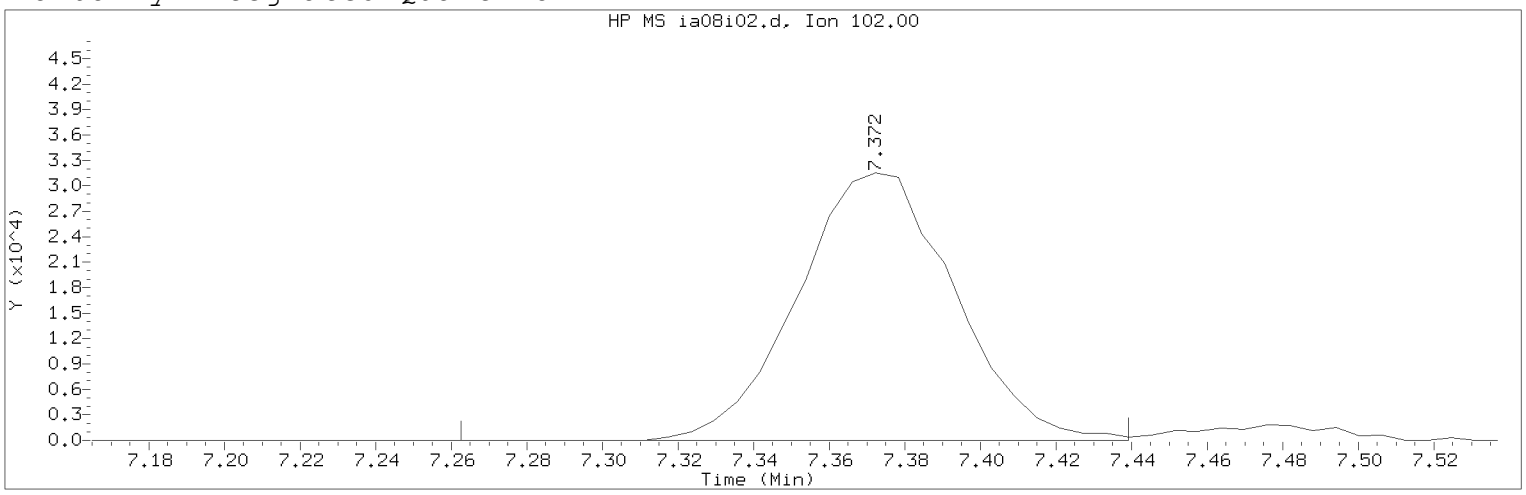
Compound Number : 56
Compound Name : Isobutyl Alcohol
Scan Number : 984
Retention Time (minutes): 7.586
Quant Ion : 41.00
Area : 172975
On-column Amount (ng) : 187.1168
Integration start scan : 971 Integration stop scan: 1005
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user AF34 jkhowe 220

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

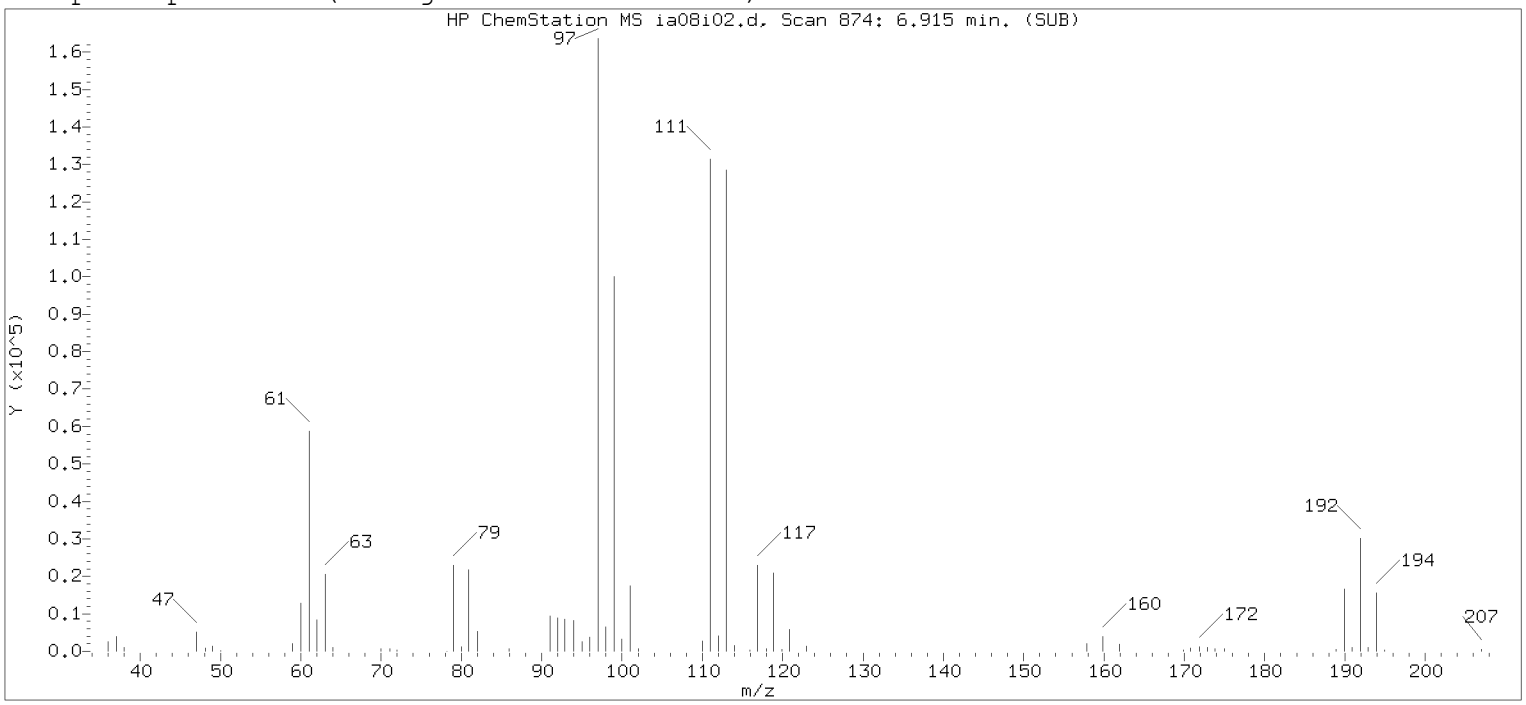
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 949
Retention Time (minutes): 7.372
Quant Ion : 102.00
Area (flag) : 90588M
On-Column Amount (ng) : 9.9271
Integration start scan : 930 Integration stop scan: 959
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

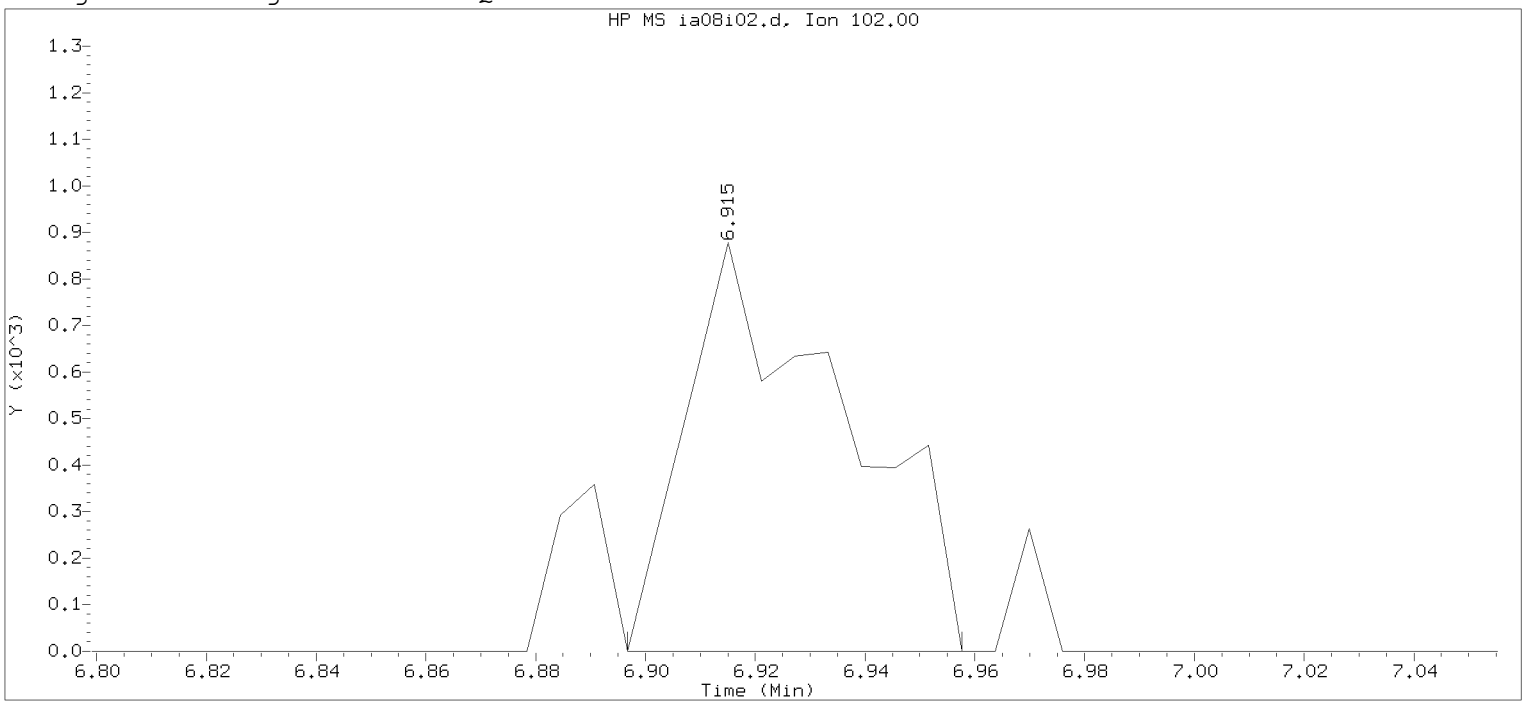
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

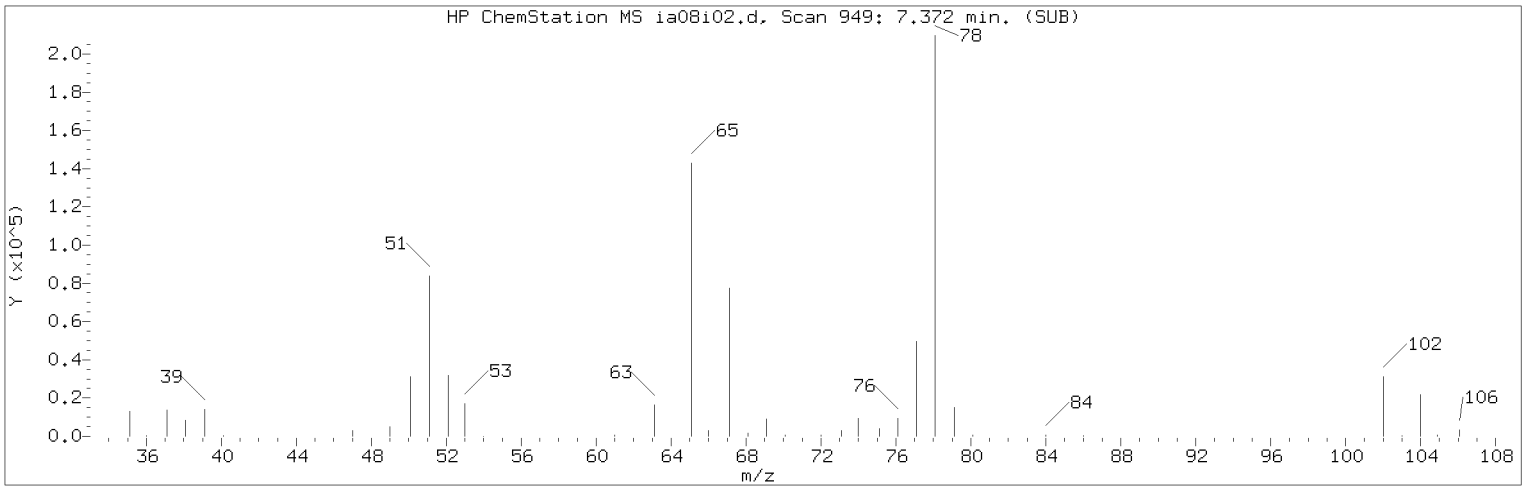
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

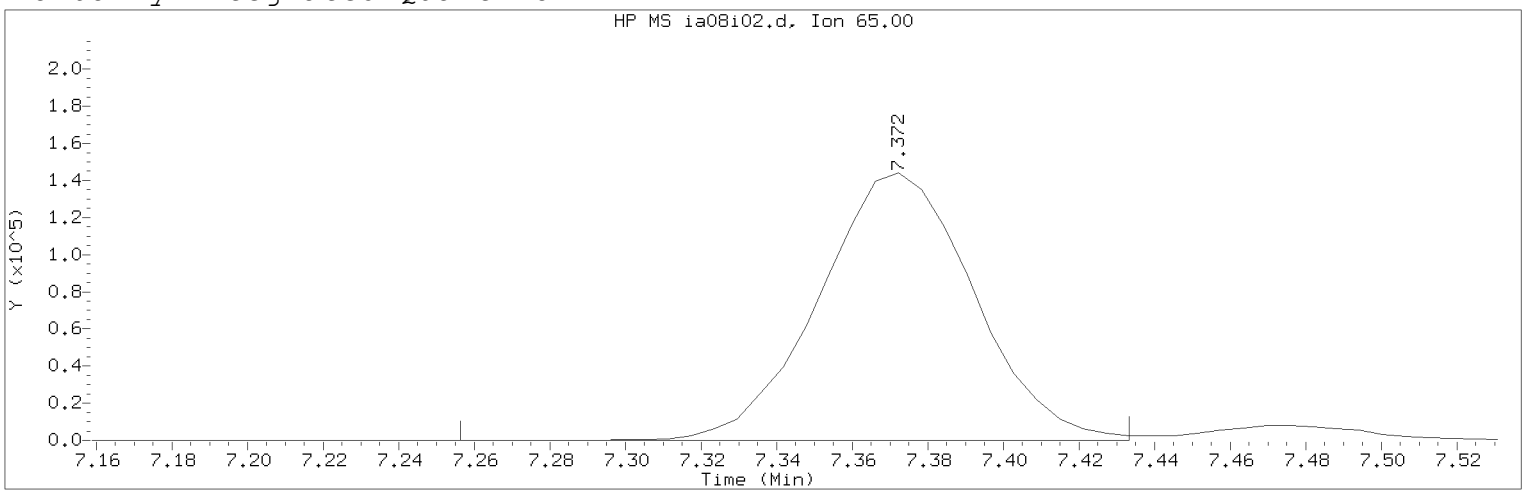
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 874
Retention Time (minutes): 6.915
Quant Ion : 102.00
Area : 1769
On-column Amount (ng) : 28.2677
Integration start scan : 870 Integration stop scan: 880
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: JKHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

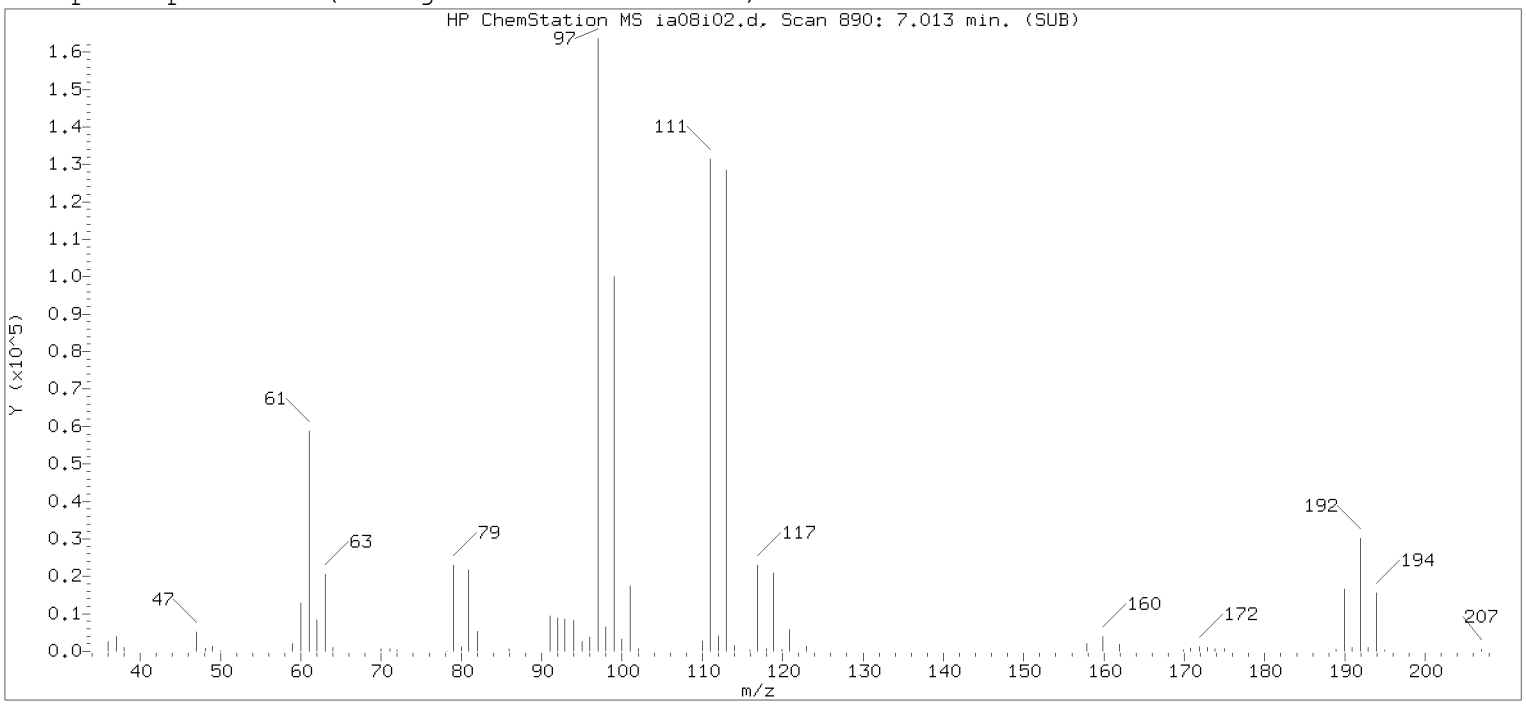
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 949
Retention Time (minutes): 7.372
Quant Ion : 65.00
Area (flag) : 408026M
On-Column Amount (ng) : 9.9762
Integration start scan : 929 Integration stop scan: 958
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

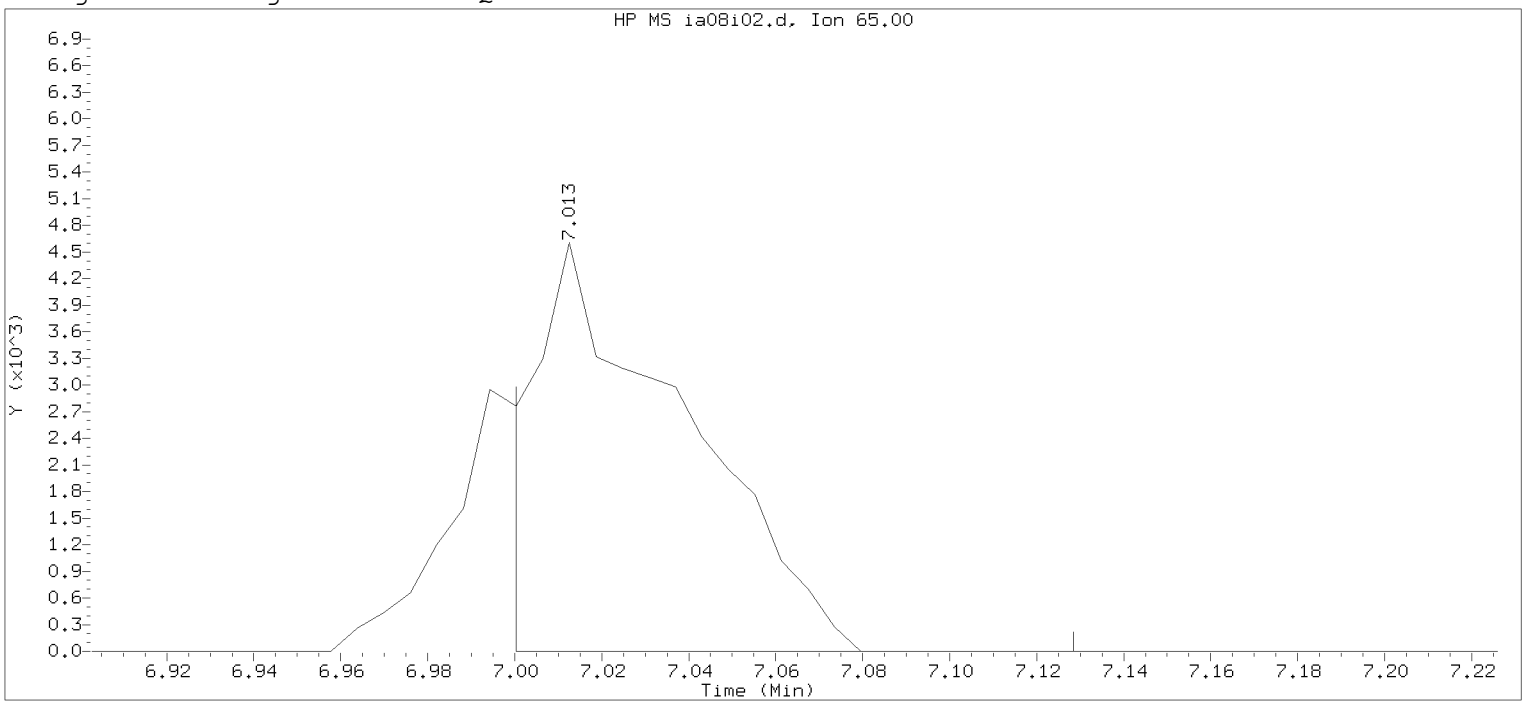
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

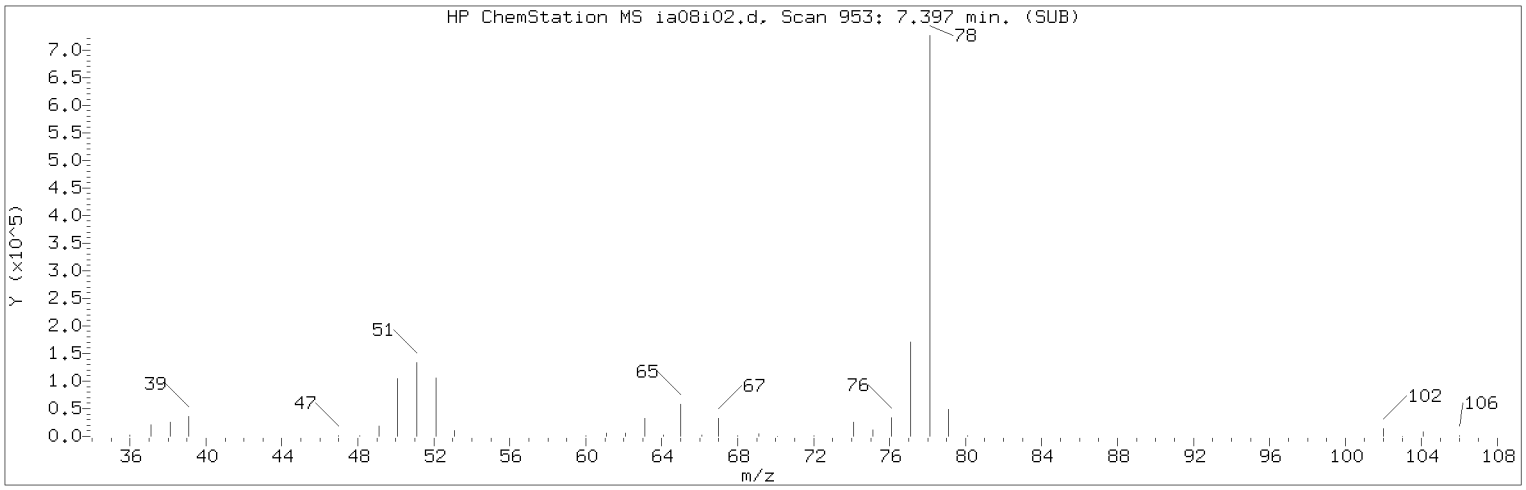
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

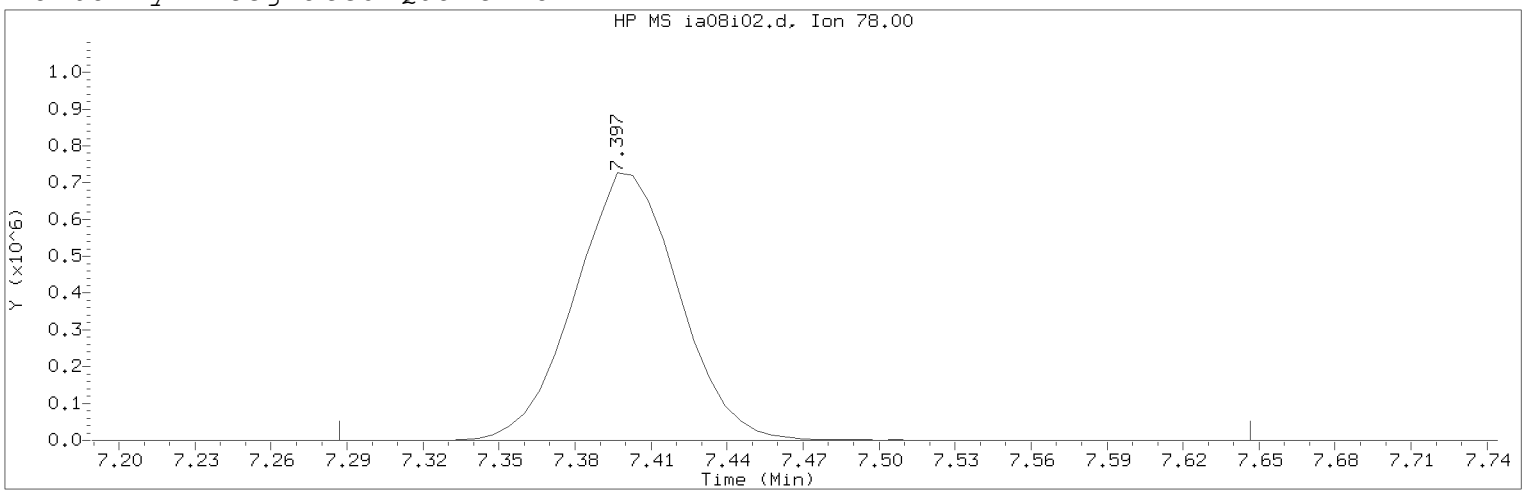
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 890
Retention Time (minutes): 7.013
Quant Ion : 65.00
Area : 11005
On-column Amount (ng) : 52.1062
Integration start scan : 887 Integration stop scan: 908
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe224

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

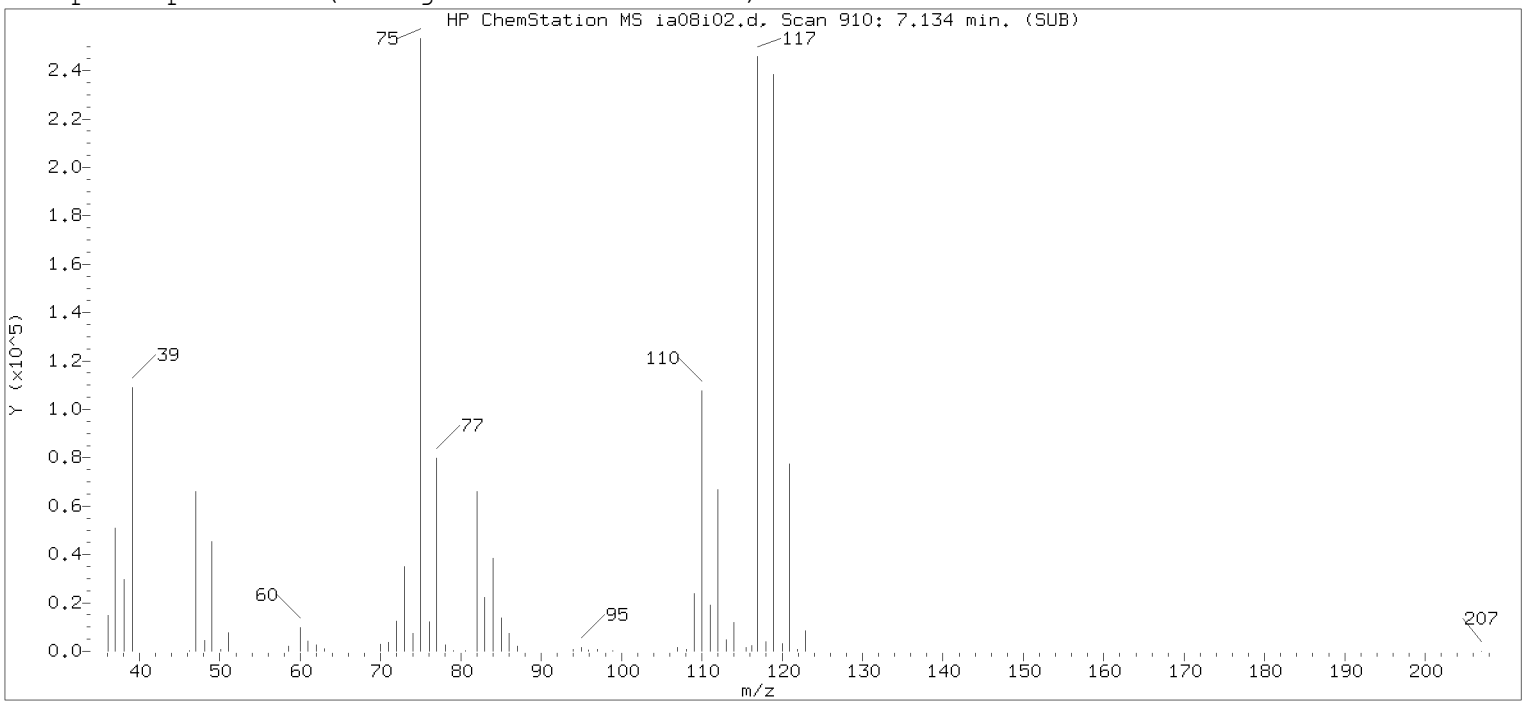
Compound Number : 58
Compound Name : Benzene
Scan Number : 953
Retention Time (minutes): 7.397
Quant Ion : 78.00
Area (flag) : 2078869M
On-Column Amount (ng) : 10.2076
Integration start scan : 934 Integration stop scan: 993
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

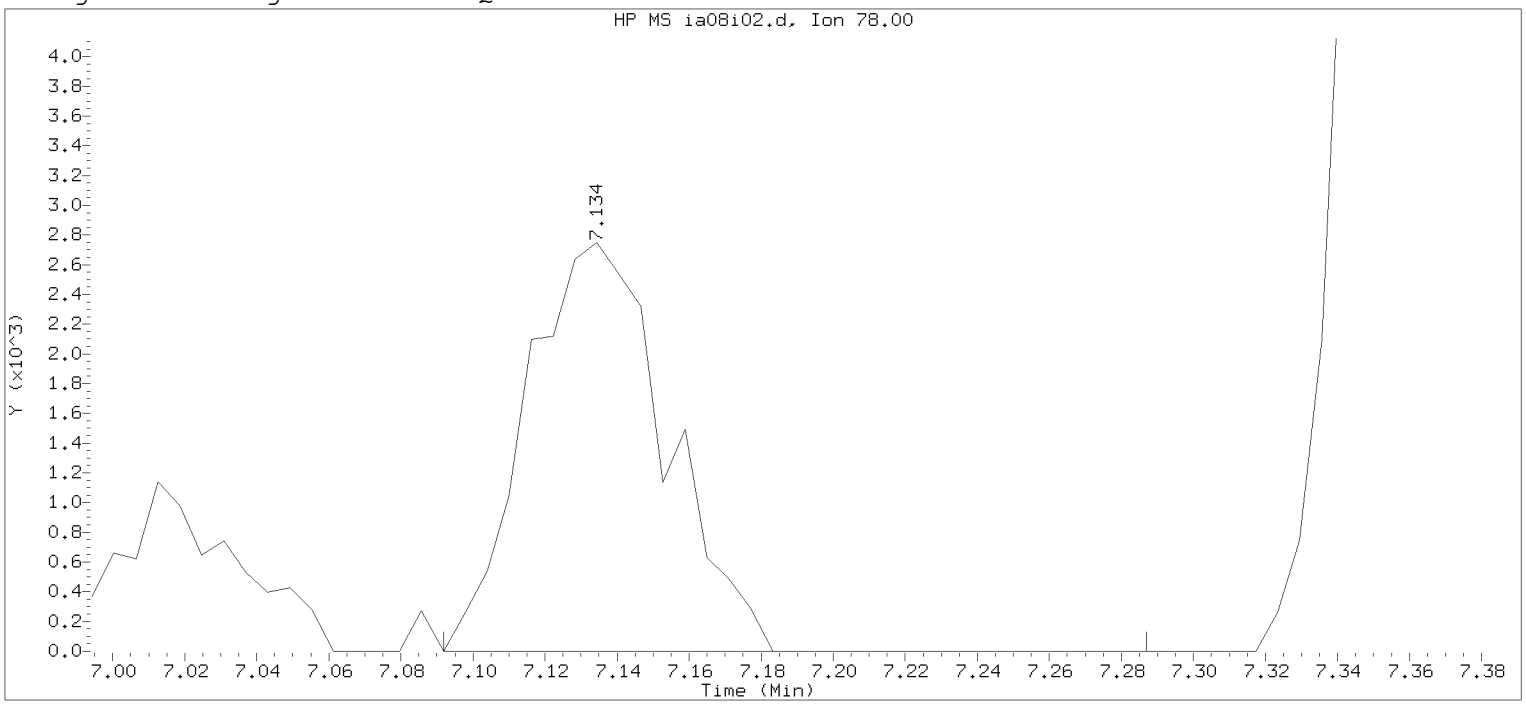
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

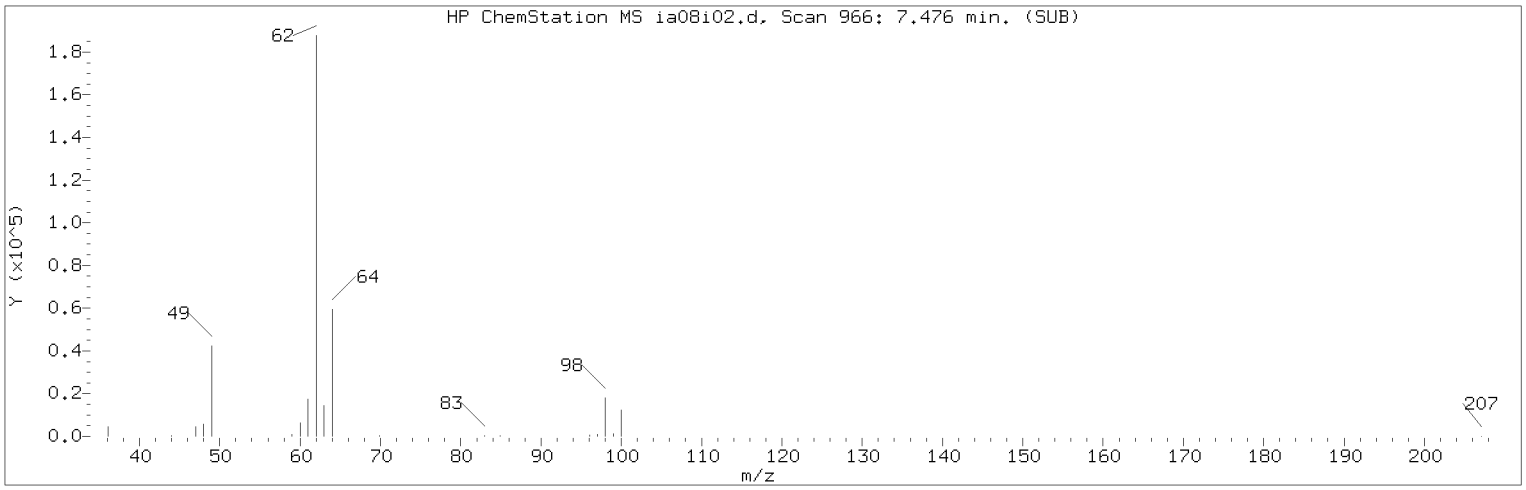
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

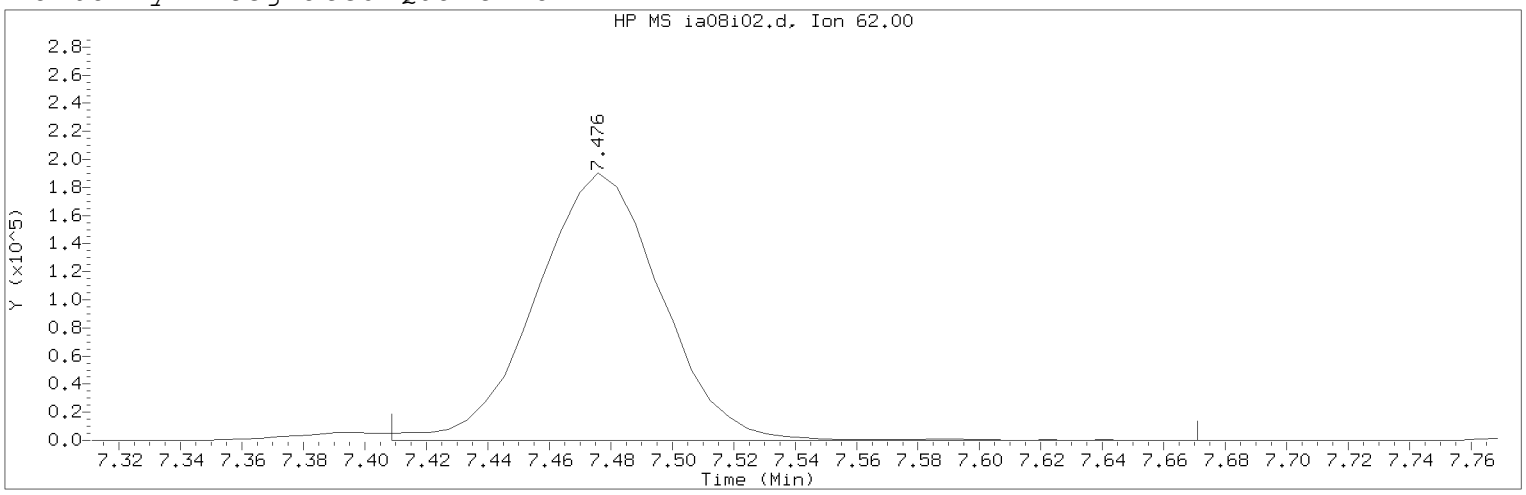
Compound Number	: 58		
Compound Name	: Benzene		
Scan Number	: 910		
Retention Time (minutes)	: 7.134		
Quant Ion	: 78.00		
Area	: 7441		
On-column Amount (ng)	: 29.2673		
Integration start scan	: 902	Integration stop scan:	934
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

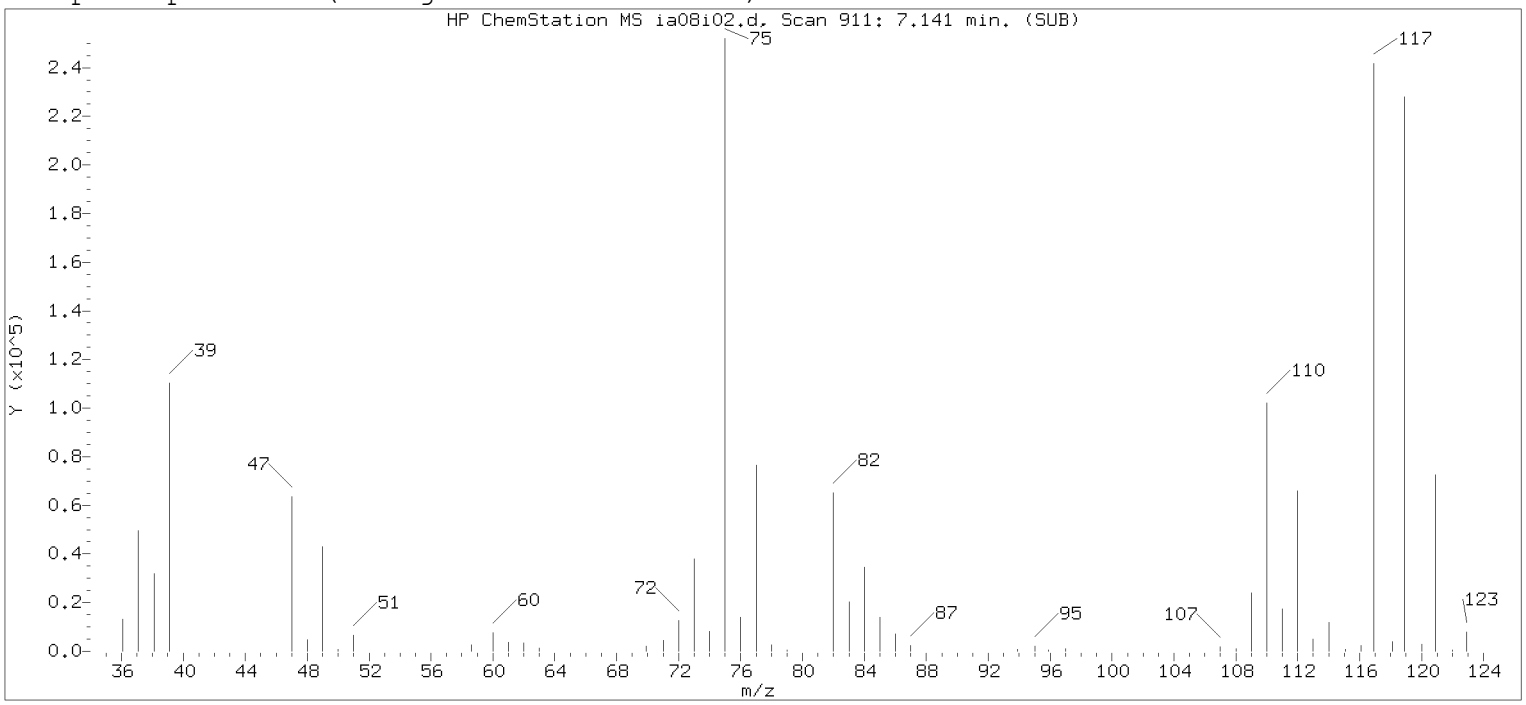
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 966
Retention Time (minutes): 7.476
Quant Ion : 62.00
Area (flag) : 537979M
On-Column Amount (ng) : 9.8474
Integration start scan : 954 Integration stop scan: 997
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

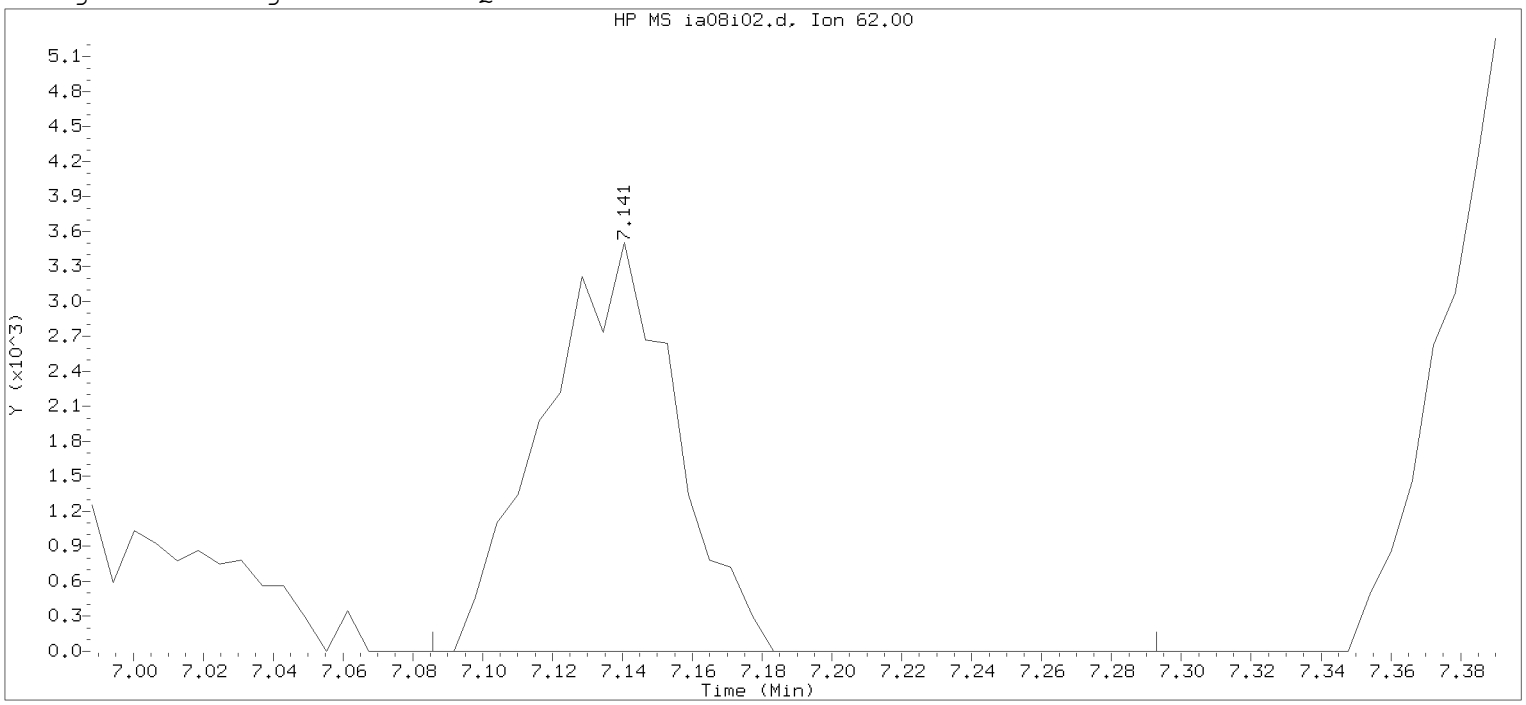
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

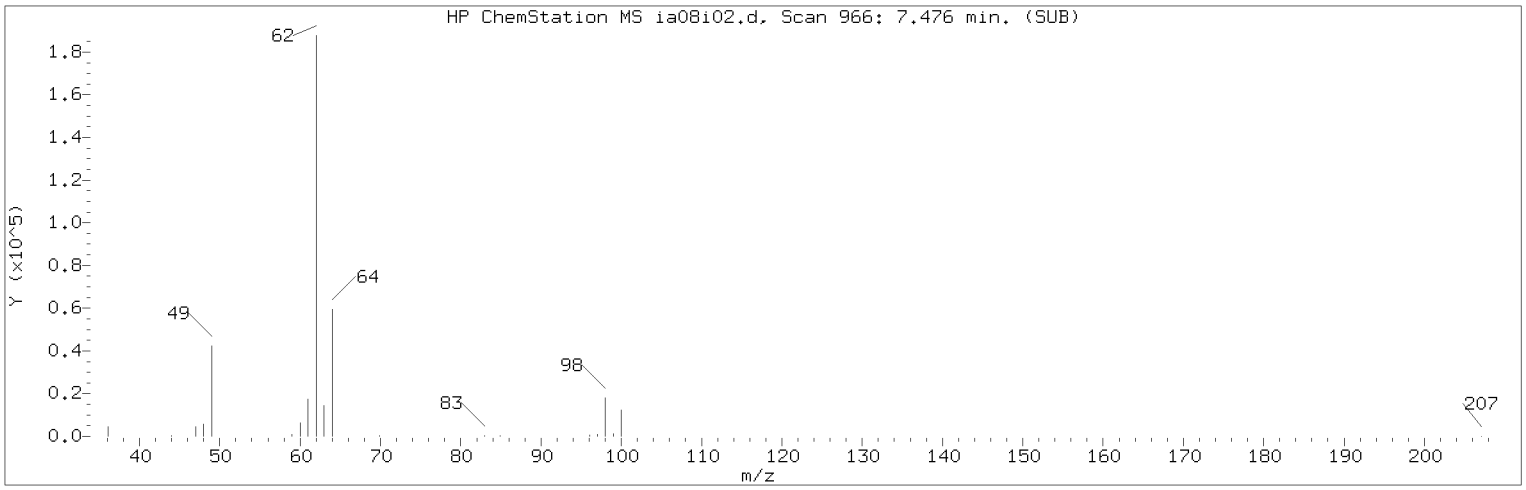
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

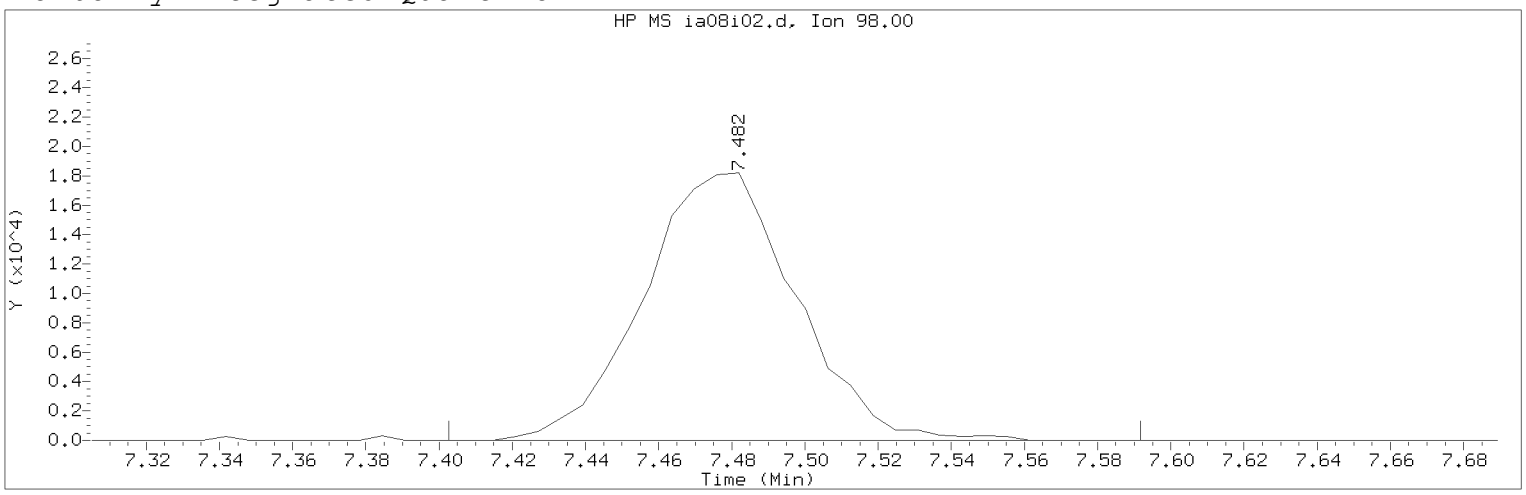
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 911
Retention Time (minutes): 7.141
Quant Ion : 62.00
Area : 9148
On-column Amount (ng) : 41.2552
Integration start scan : 901 Integration stop scan: 935
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

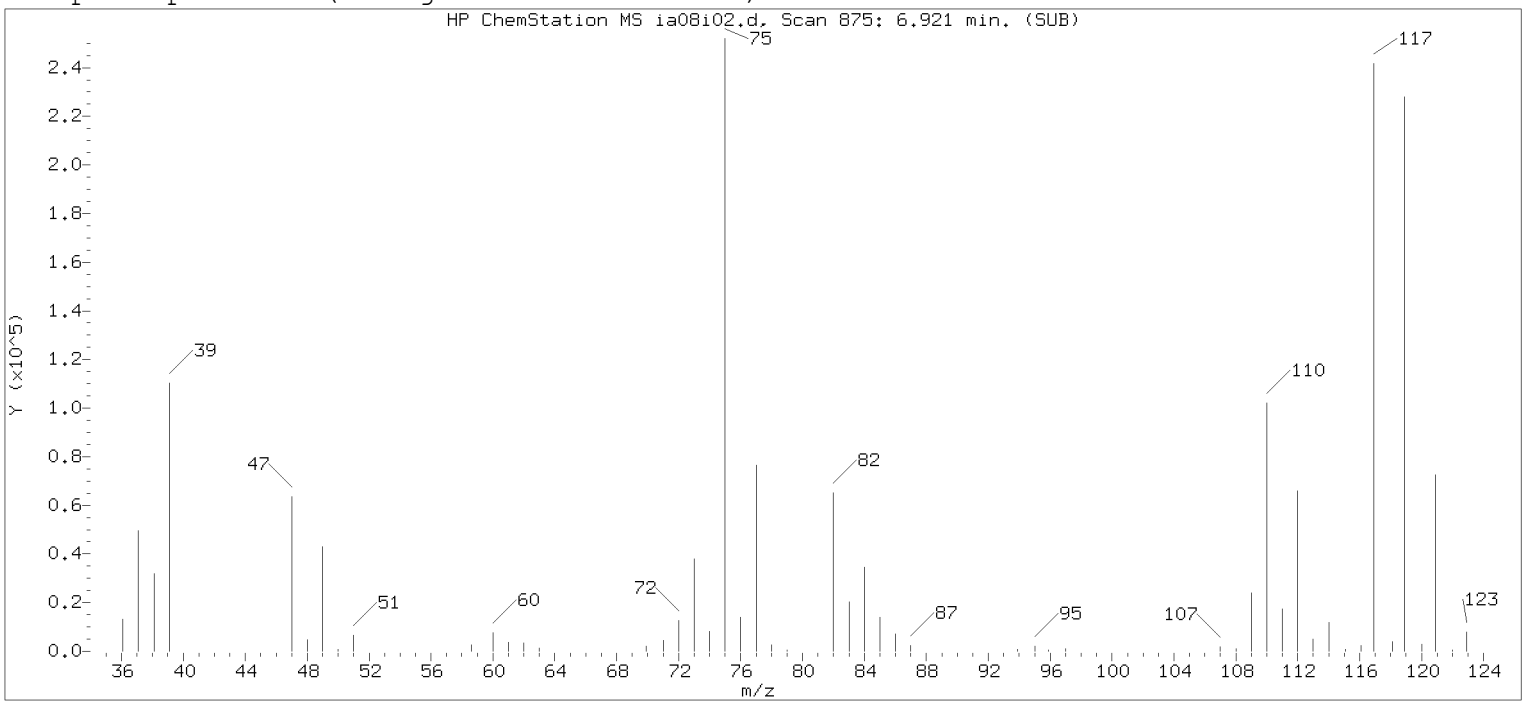
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 967
Retention Time (minutes): 7.482
Quant Ion : 98.00
Area (flag) : 52654M
On-Column Amount (ng) : 10.3325
Integration start scan : 953 Integration stop scan: 984
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

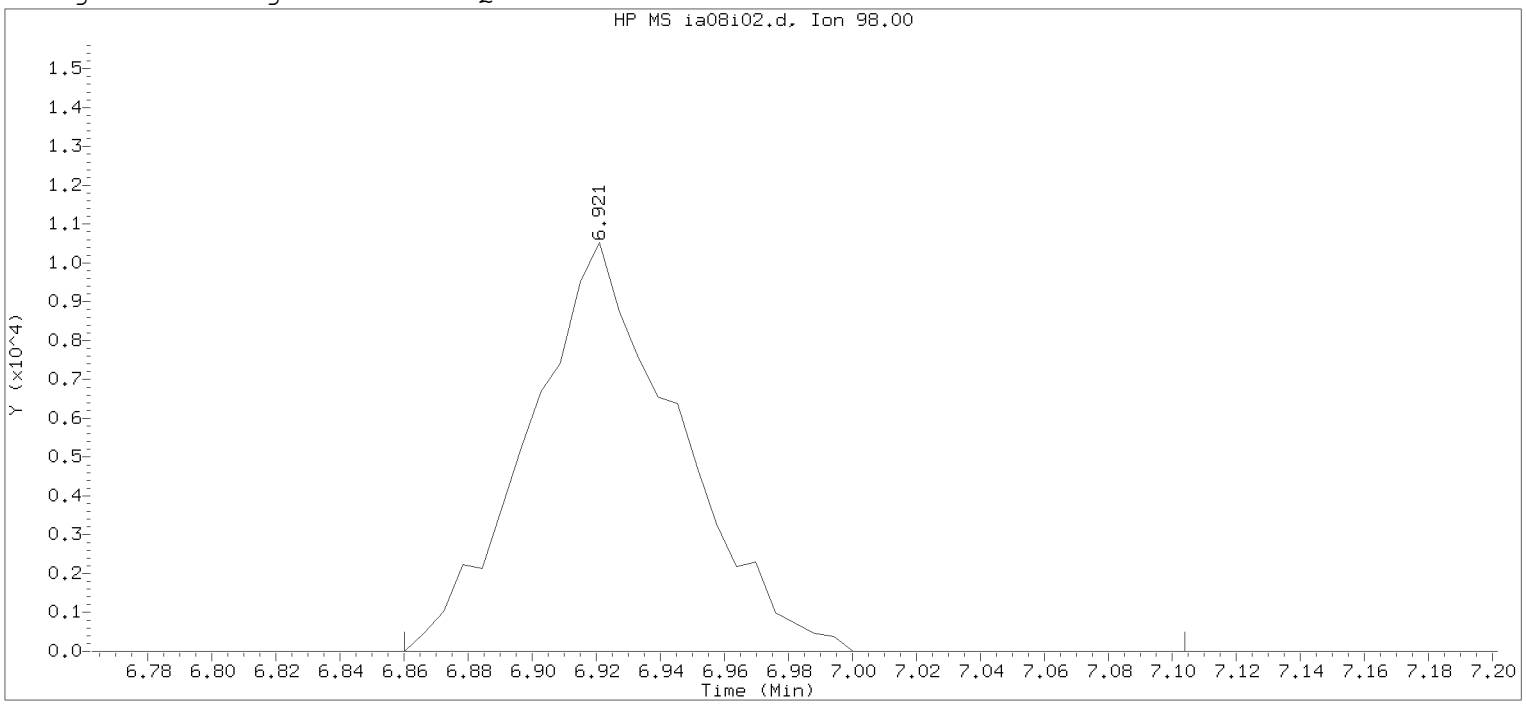
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

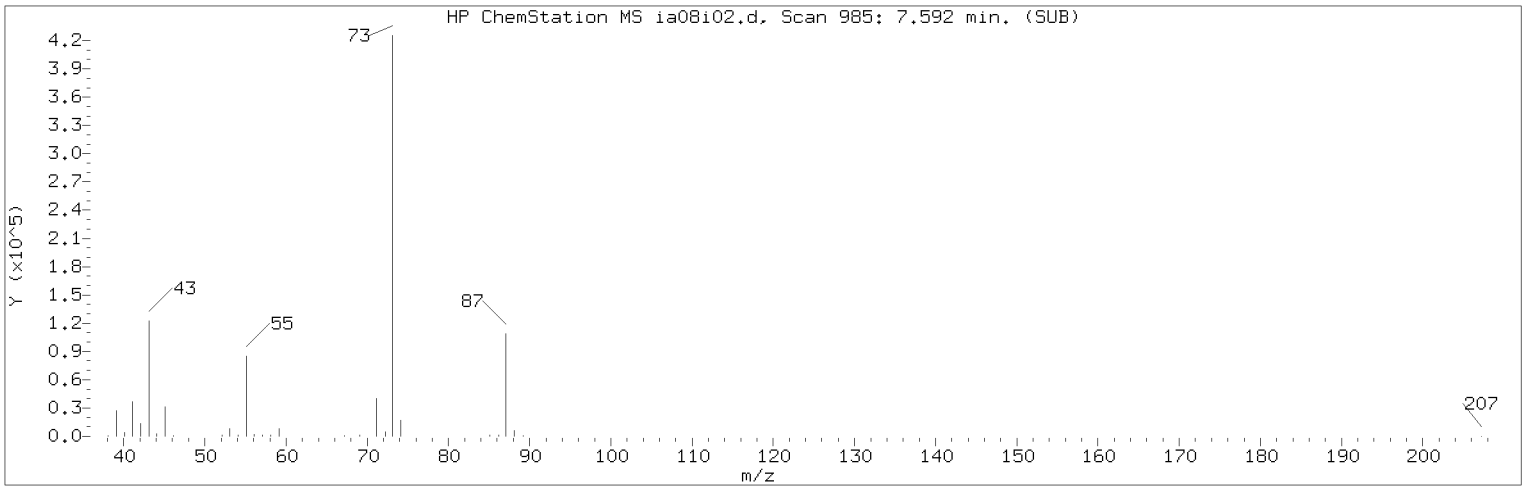
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

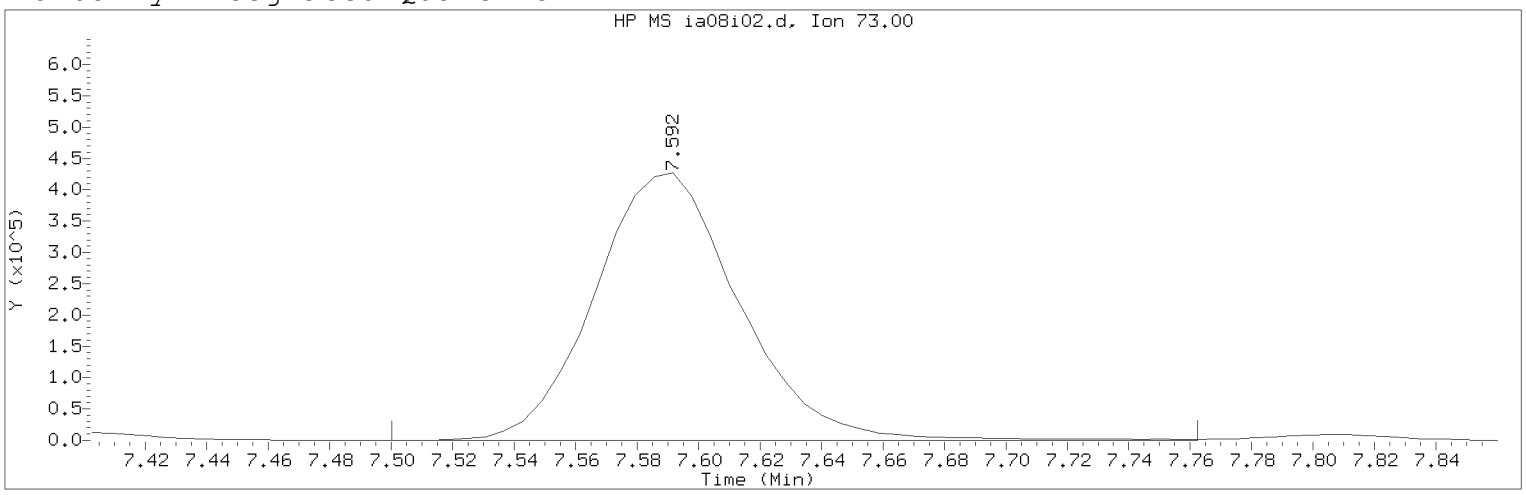
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 98.00
Area : 34086
On-column Amount (ng) : 69.1020
Integration start scan : 864 Integration stop scan: 904
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user id: jhowe230

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

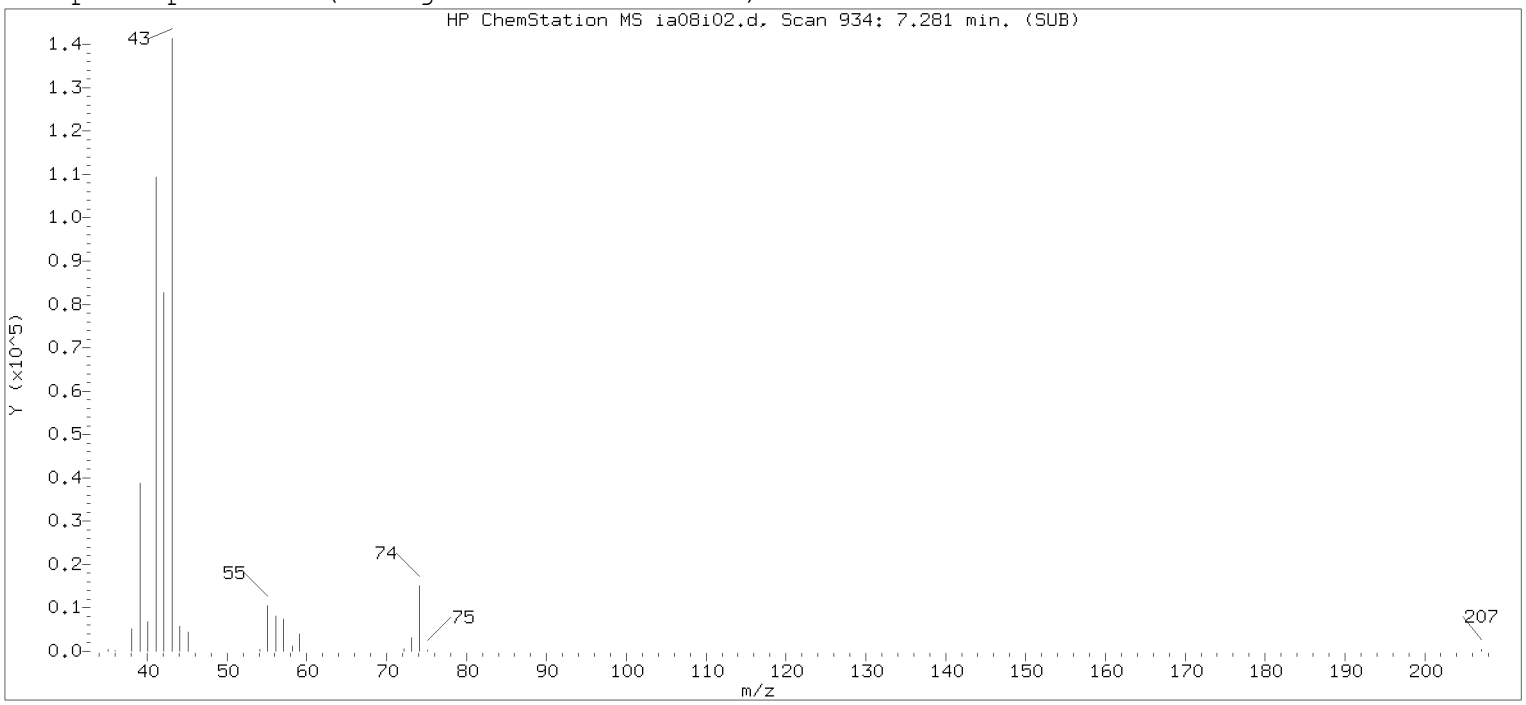
Compound Number : 60
Compound Name : t-Amyl methyl ether
Scan Number : 985
Retention Time (minutes): 7.592
Quant Ion : 73.00
Area (flag) : 1394137M
On-Column Amount (ng) : 10.2153
Integration start scan : 969 Integration stop scan: 1012
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

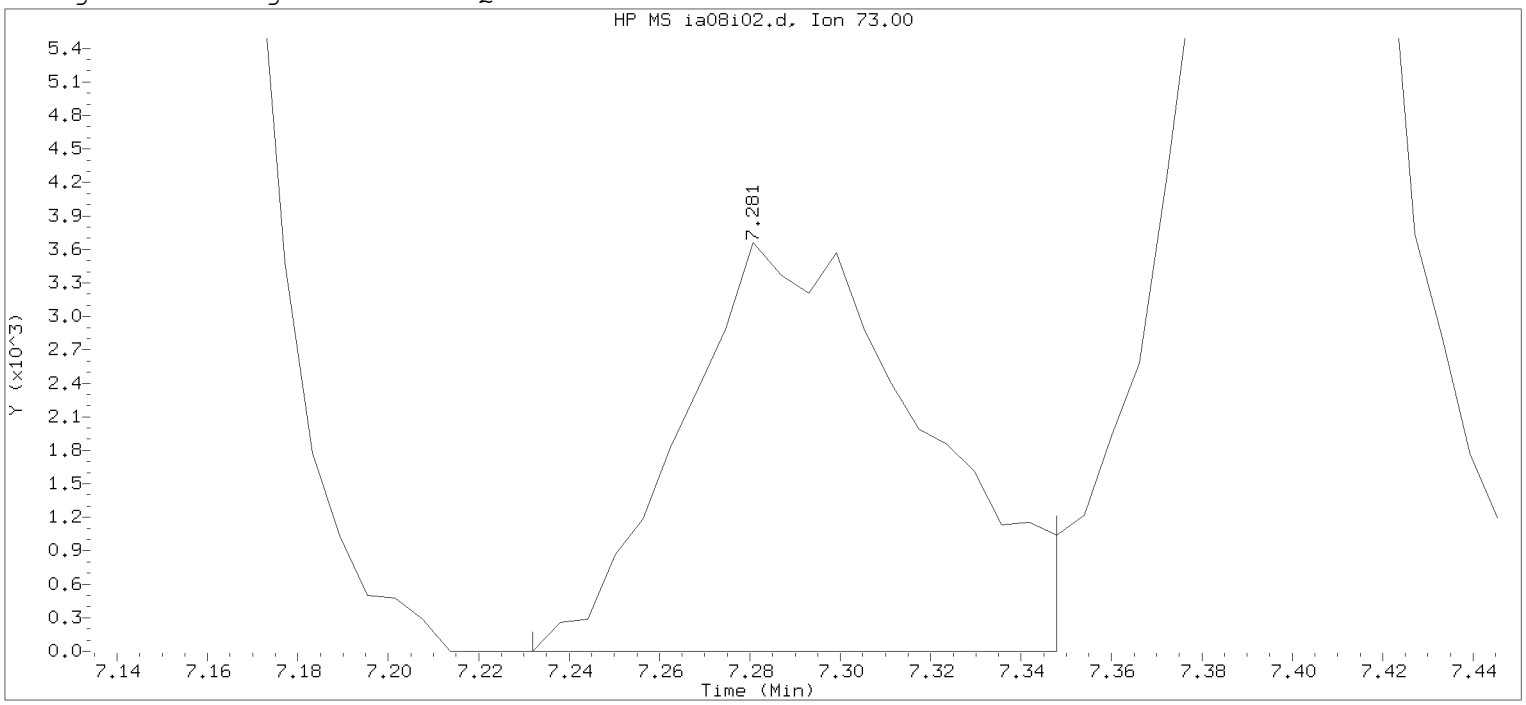
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

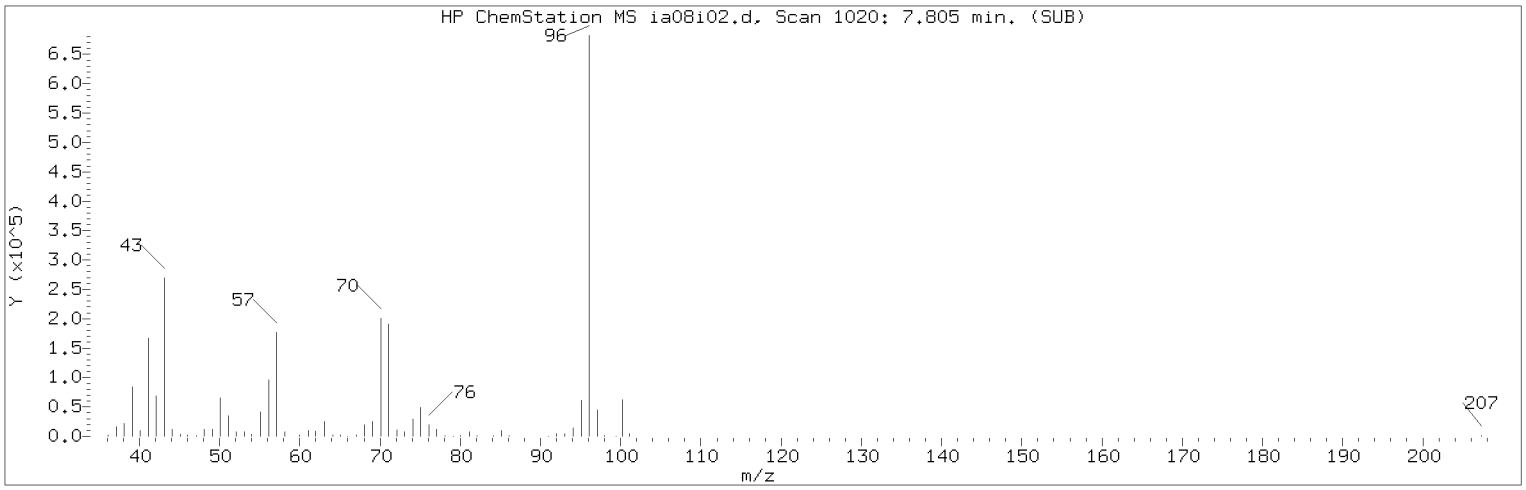
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Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

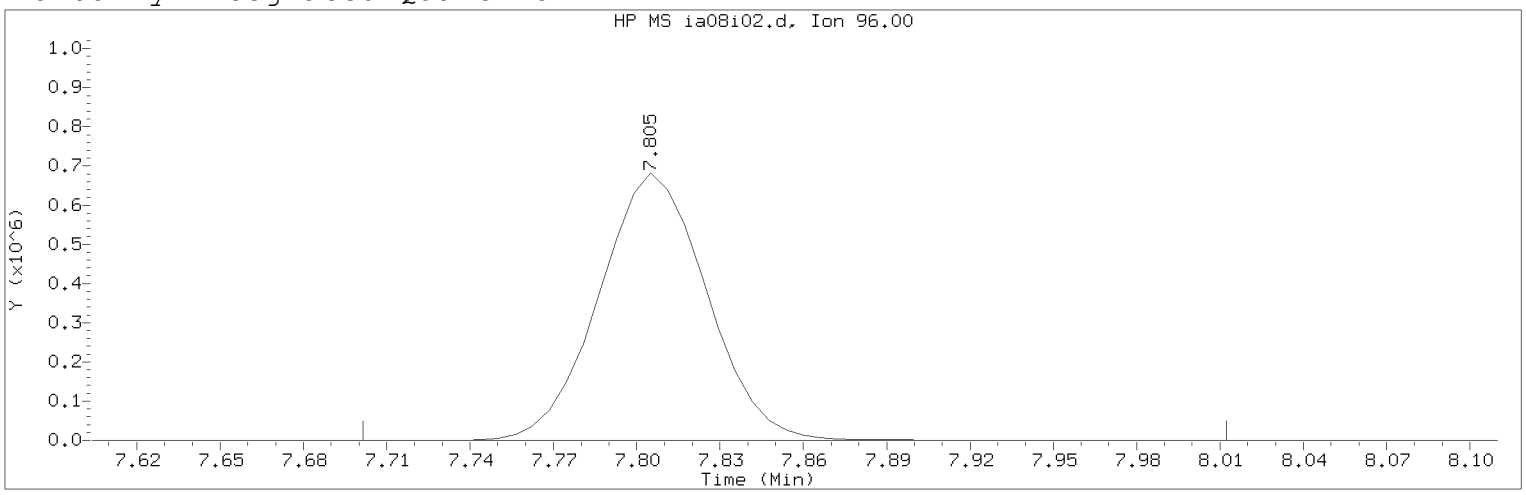
Compound Number : 60
Compound Name : t-Amyl methyl ether
Scan Number : 934
Retention Time (minutes): 7.281
Quant Ion : 73.00
Area : 13553
On-column Amount (ng) : 37.2300
Integration start scan : 925 Integration stop scan: 944
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: JKHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

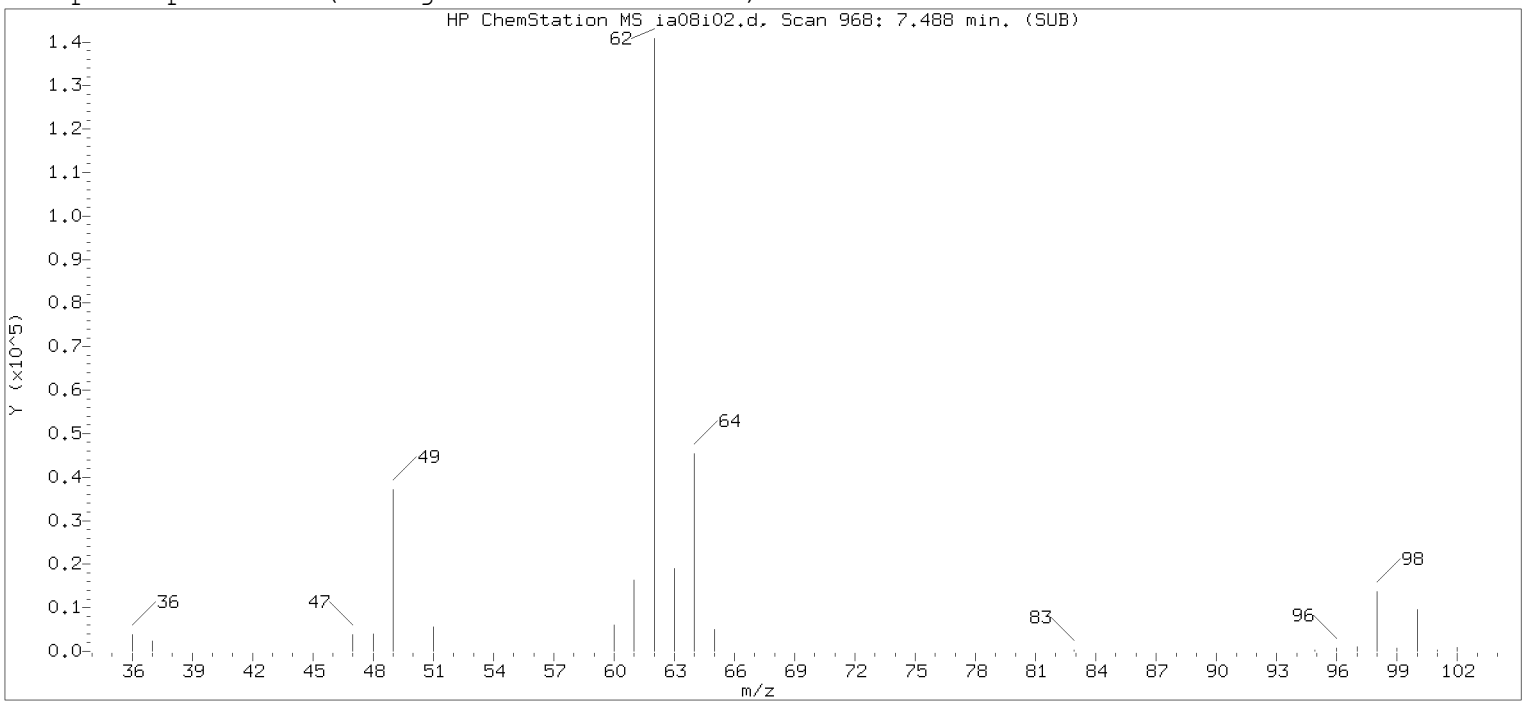
Compound Number : 63
Compound Name : Fluorobenzene
Scan Number : 1020
Retention Time (minutes): 7.805
Quant Ion : 96.00
Area (flag) : 1834755M
On-Column Amount (ng) : 10.0000
Integration start scan : 1002 Integration stop scan: 1053
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

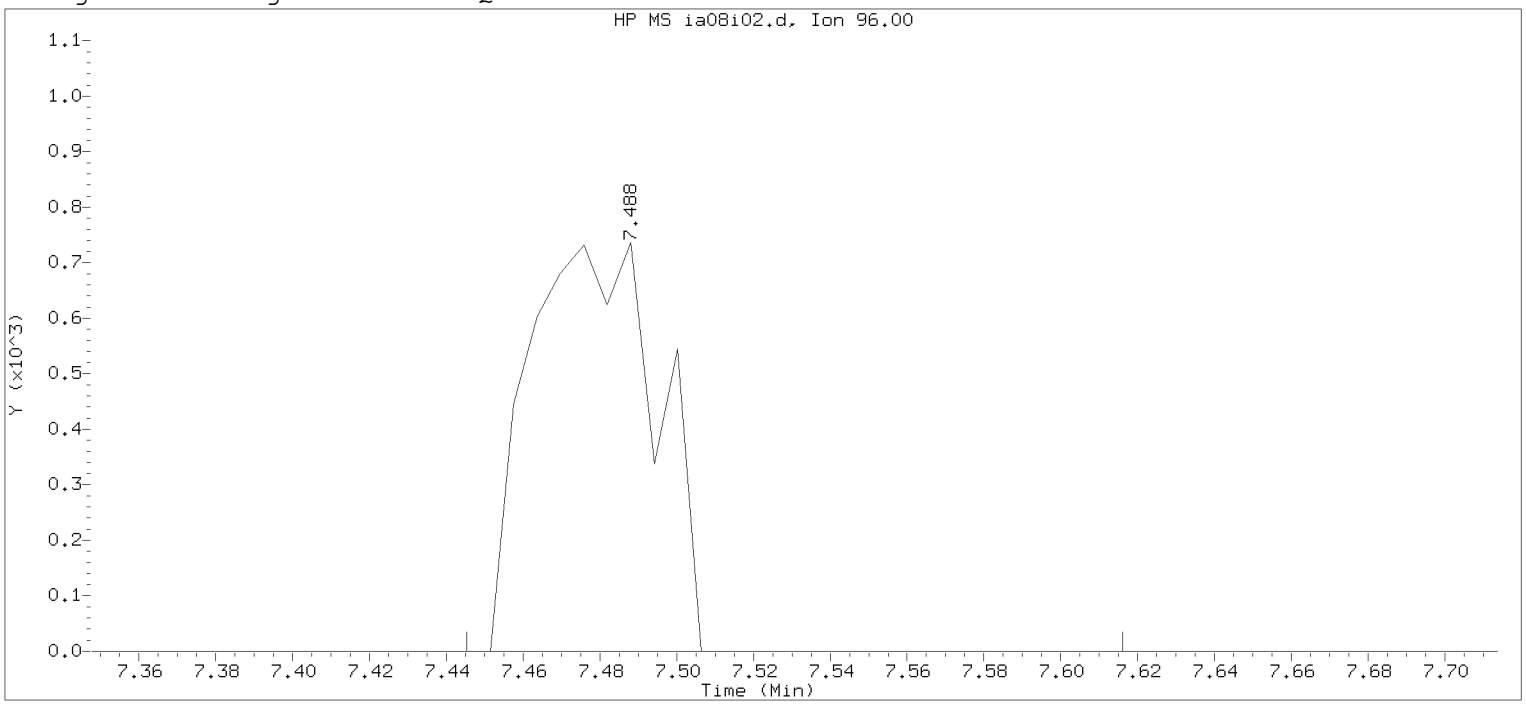
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

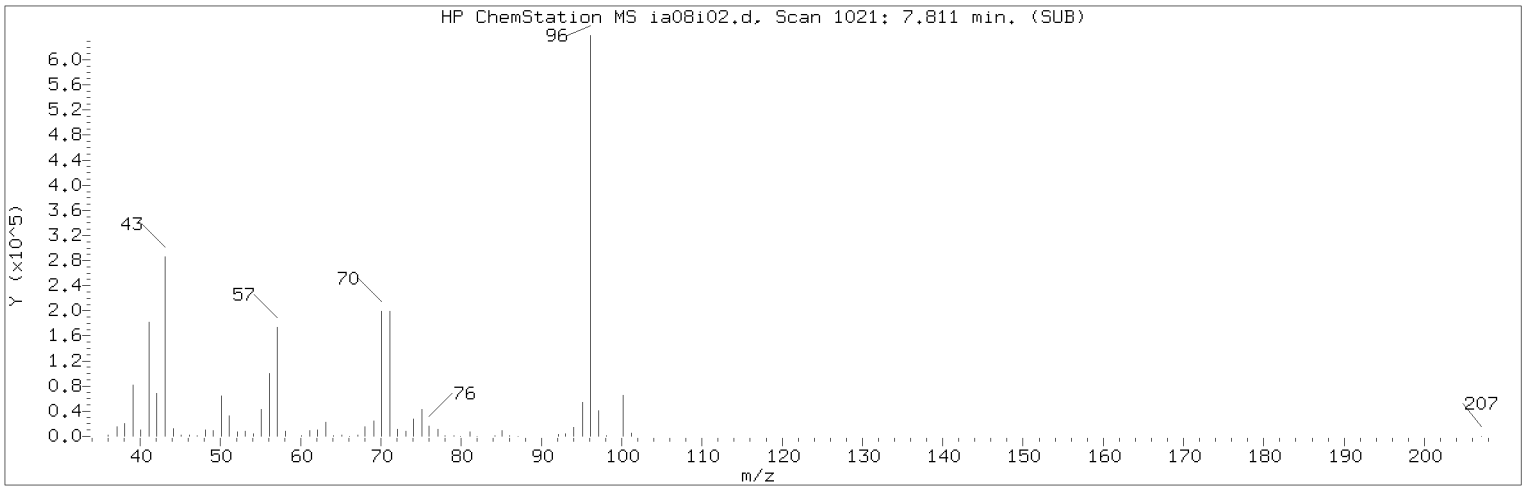
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

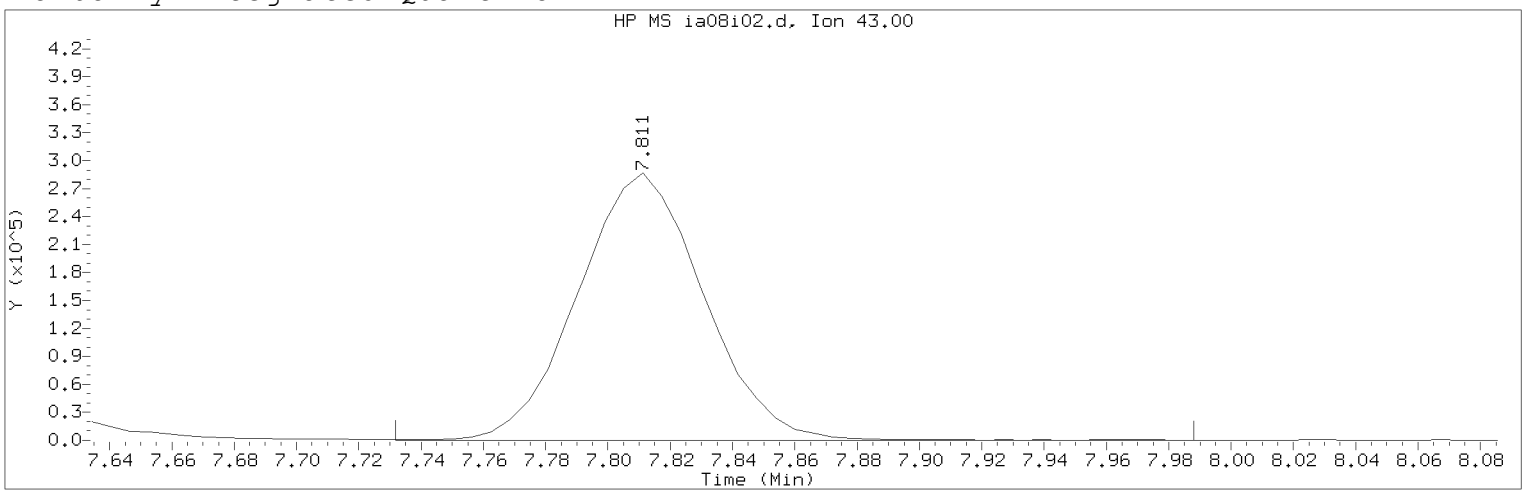
Compound Number : 63
Compound Name : Fluorobenzene
Scan Number : 968
Retention Time (minutes): 7.488
Quant Ion : 96.00
Area : 1720
On-column Amount (ng) : 10.0000
Integration start scan : 960 Integration stop scan: 988
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe0234

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

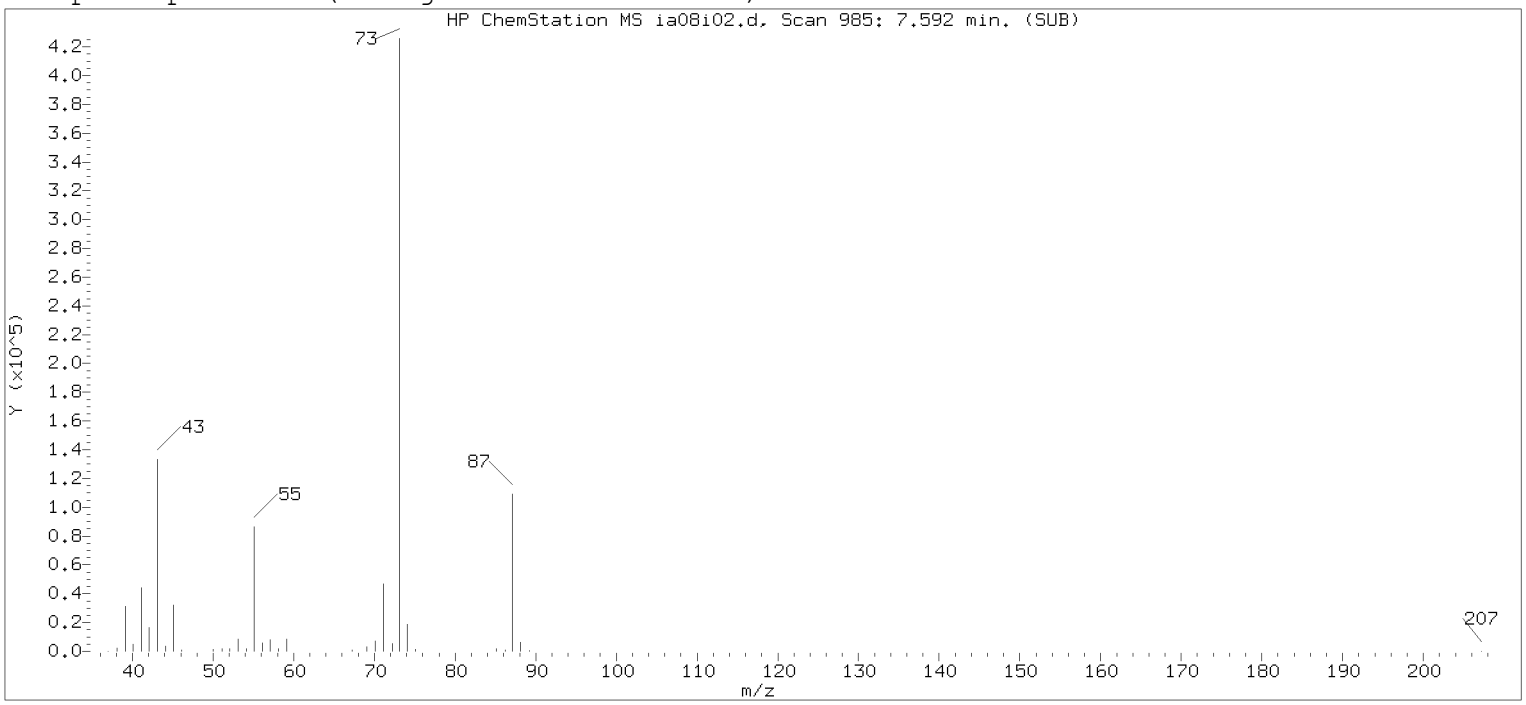
Compound Number : 62
Compound Name : n-Heptane
Scan Number : 1021
Retention Time (minutes): 7.811
Quant Ion : 43.00
Area (flag) : 803174M
On-Column Amount (ng) : 10.6433
Integration start scan : 1007 Integration stop scan: 1049
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

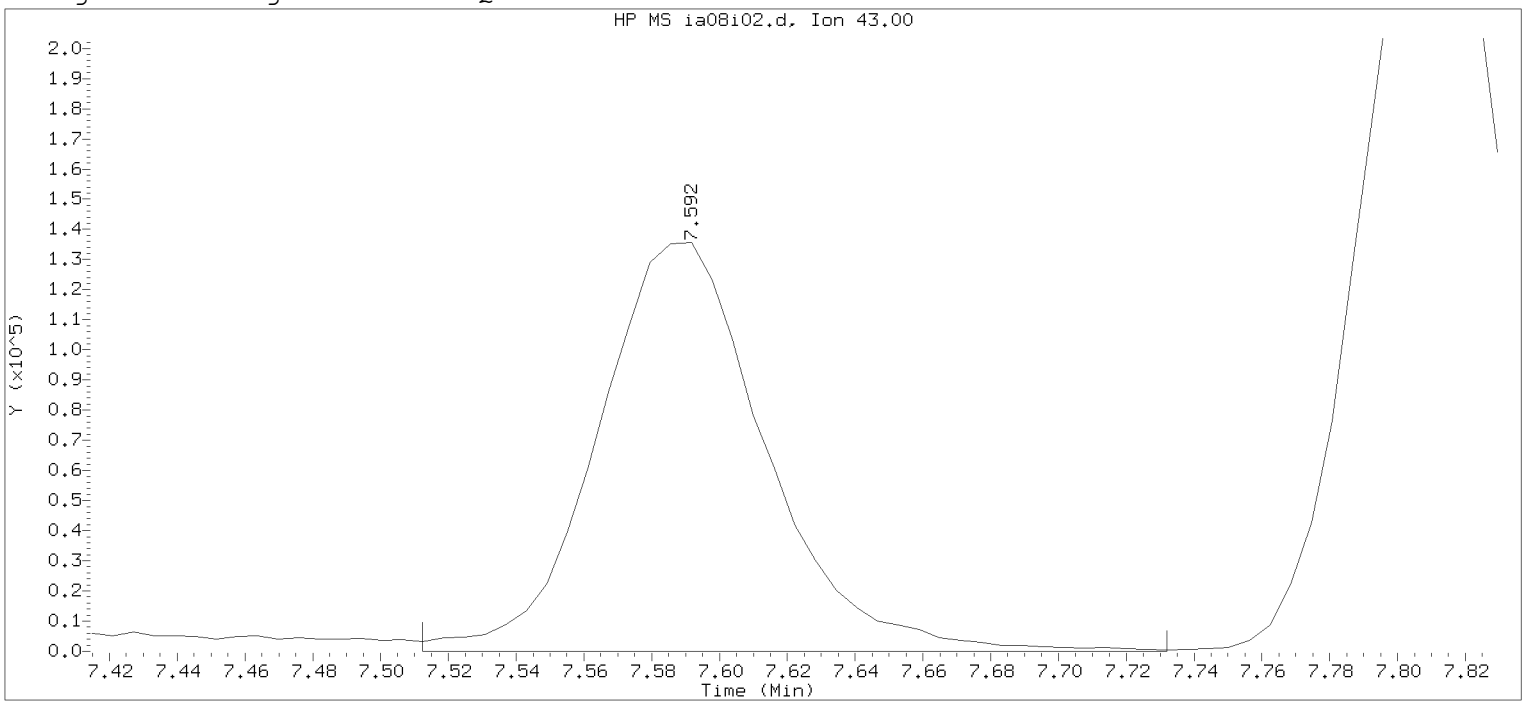
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

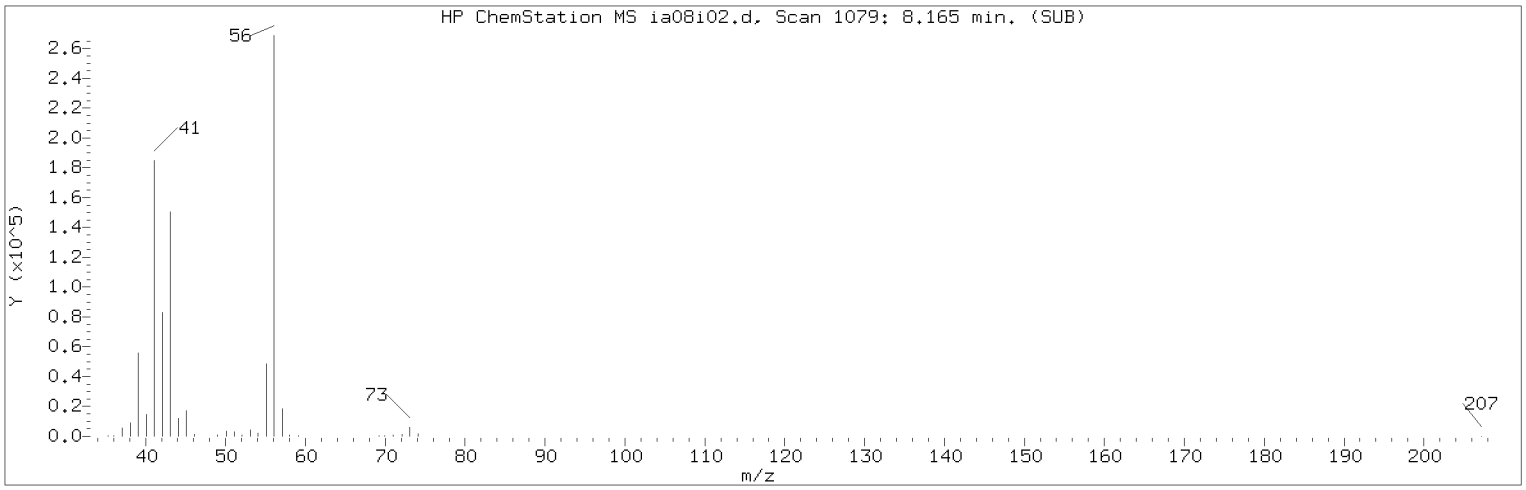
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

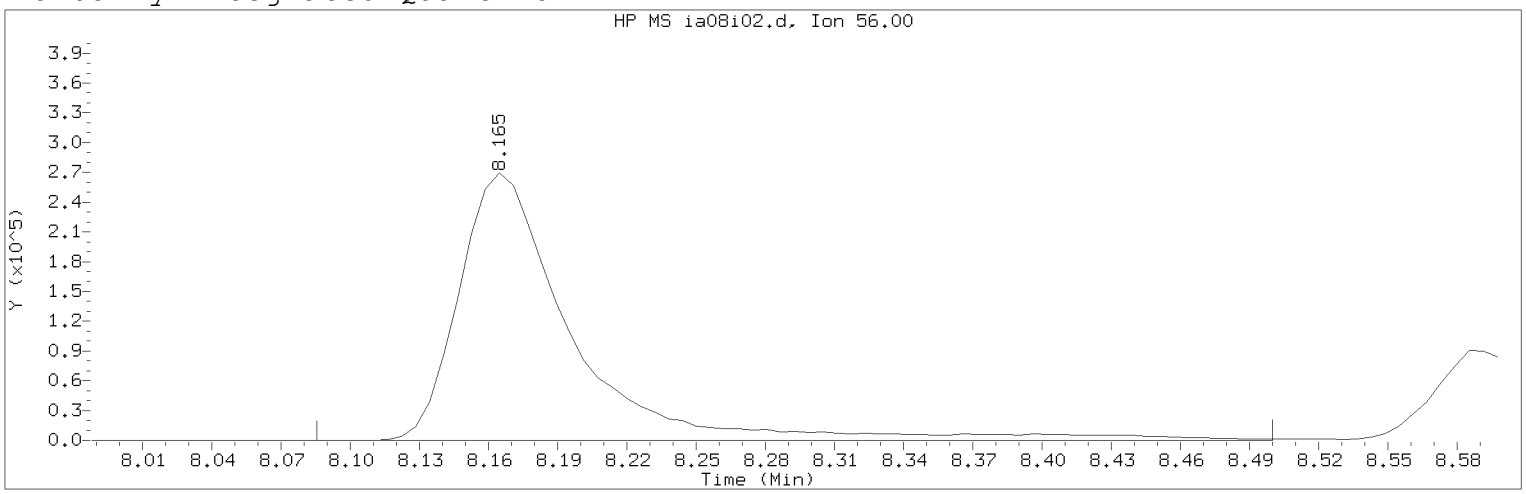
Compound Number : 62
Compound Name : n-Heptane
Scan Number : 985
Retention Time (minutes): 7.592
Quant Ion : 43.00
Area : 466723
On-column Amount (ng) : 48.3029
Integration start scan : 971 Integration stop scan: 1007
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

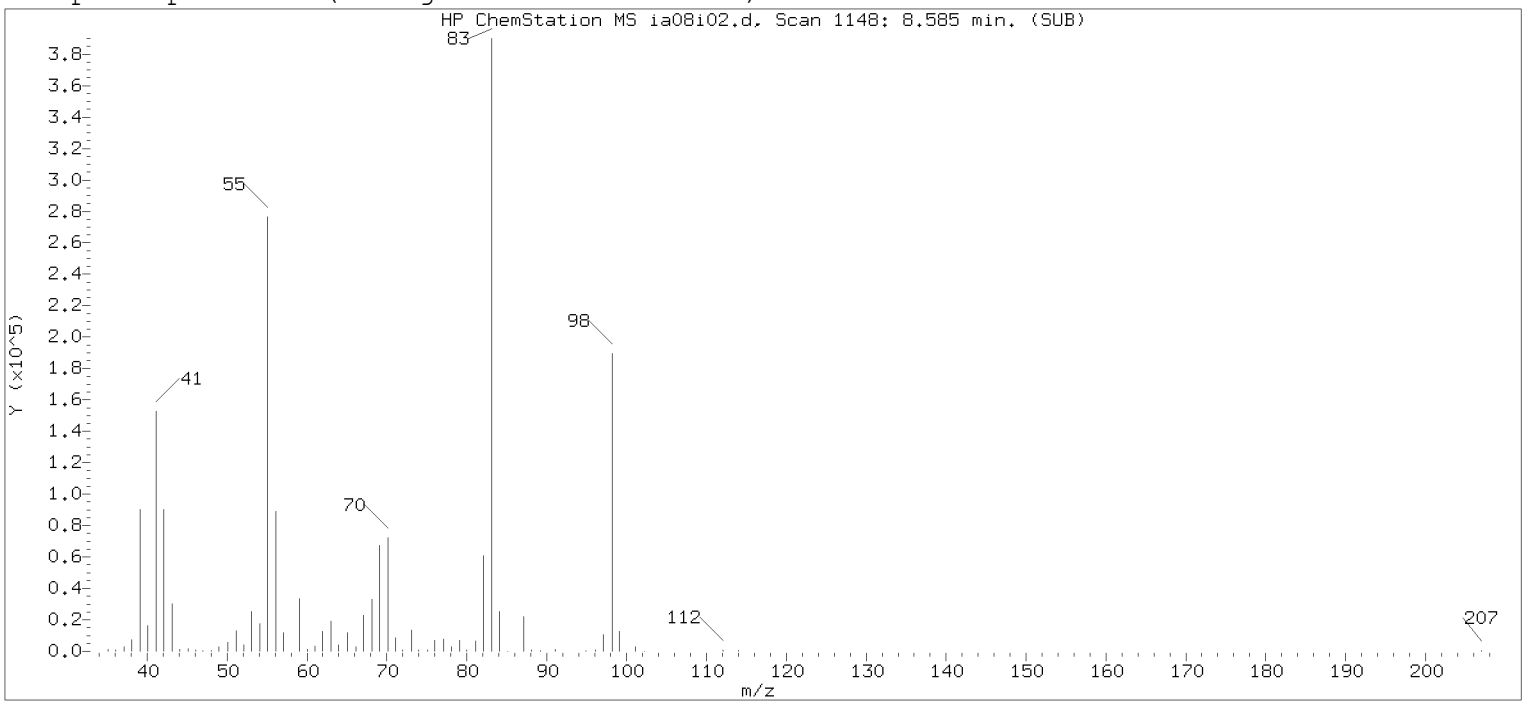
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1079
Retention Time (minutes): 8.165
Quant Ion : 56.00
Area (flag) : 919238M
On-Column Amount (ng) : 1085.9632
Integration start scan : 1065 Integration stop scan: 1133
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

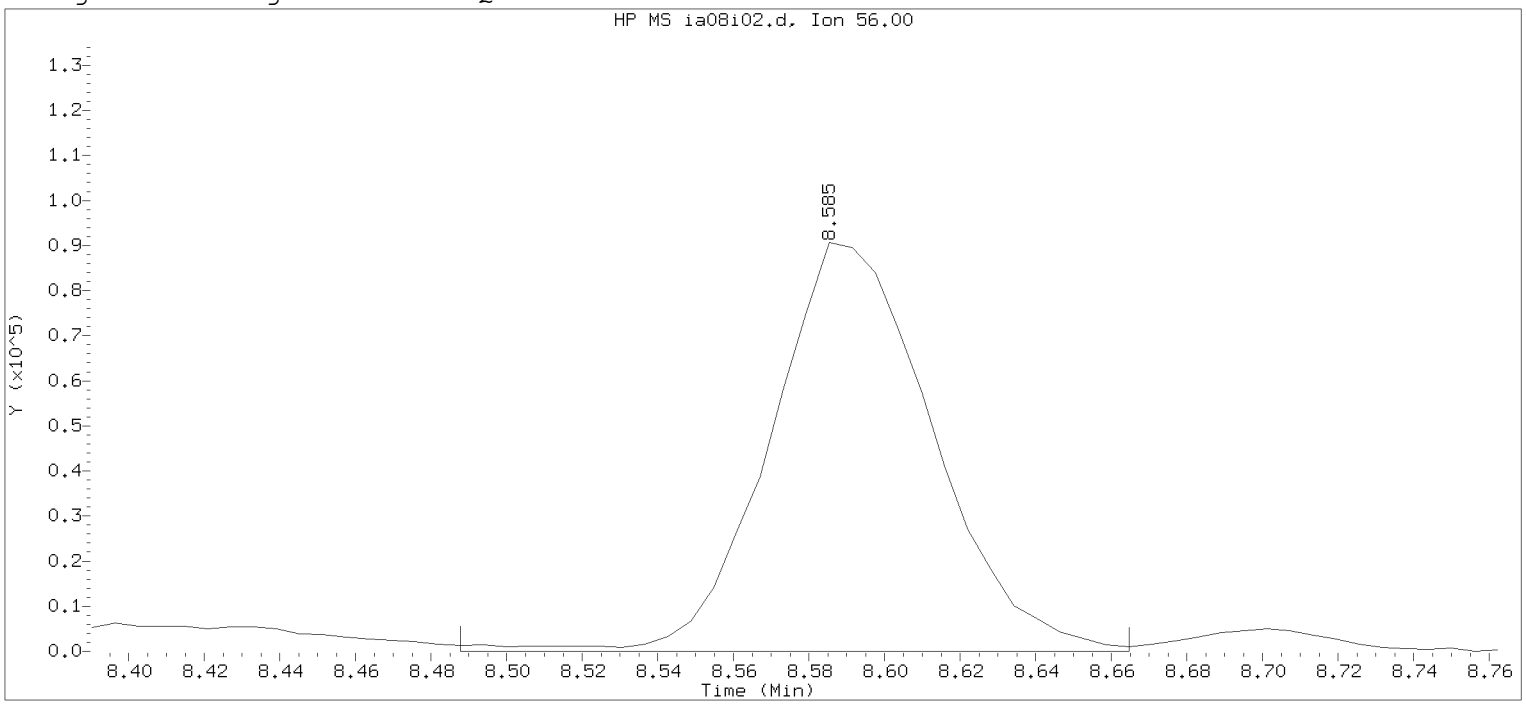
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

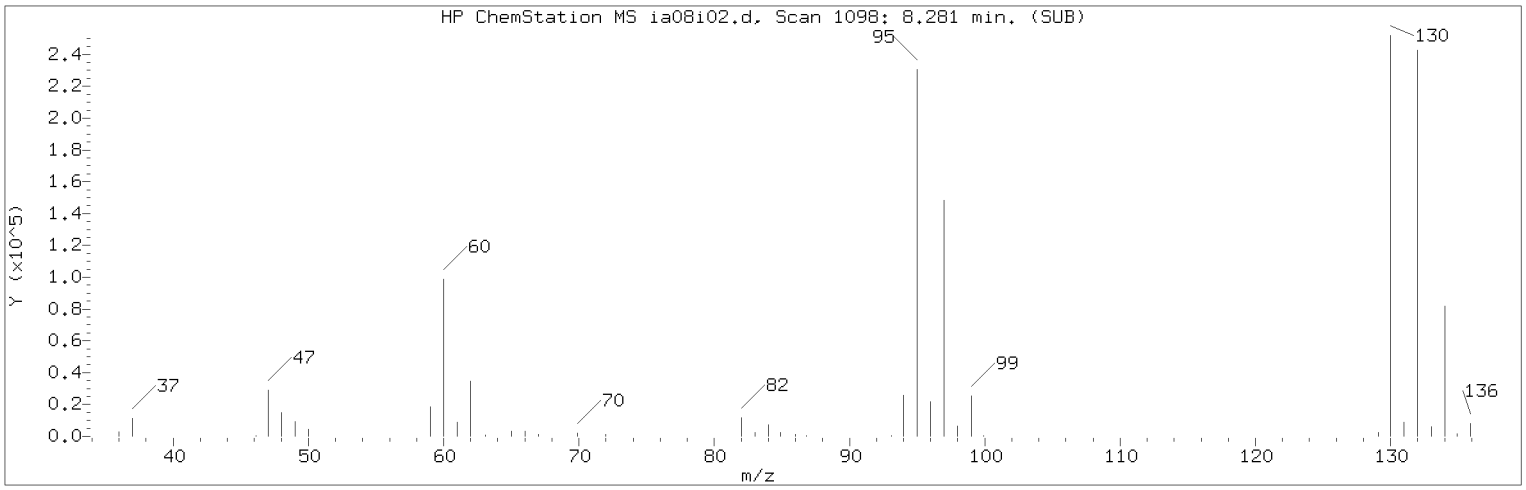
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

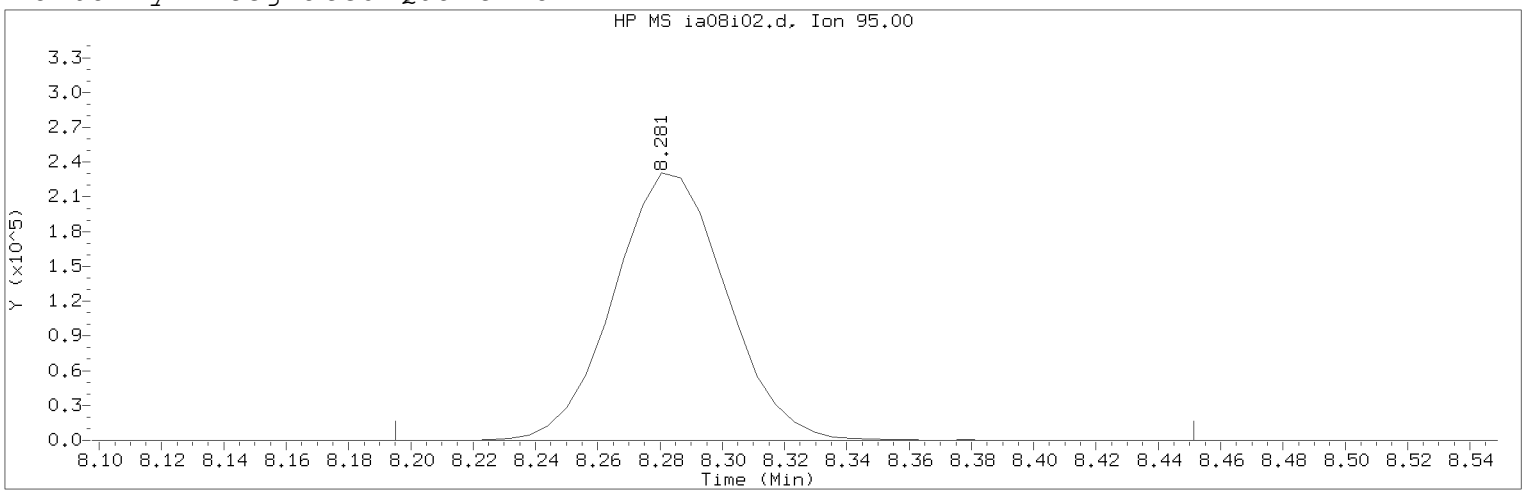
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1148
Retention Time (minutes): 8.585
Quant Ion : 56.00
Area : 270310
On-column Amount (ng) : 312.9859
Integration start scan : 1131 Integration stop scan: 1160
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user: JKHOWE

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

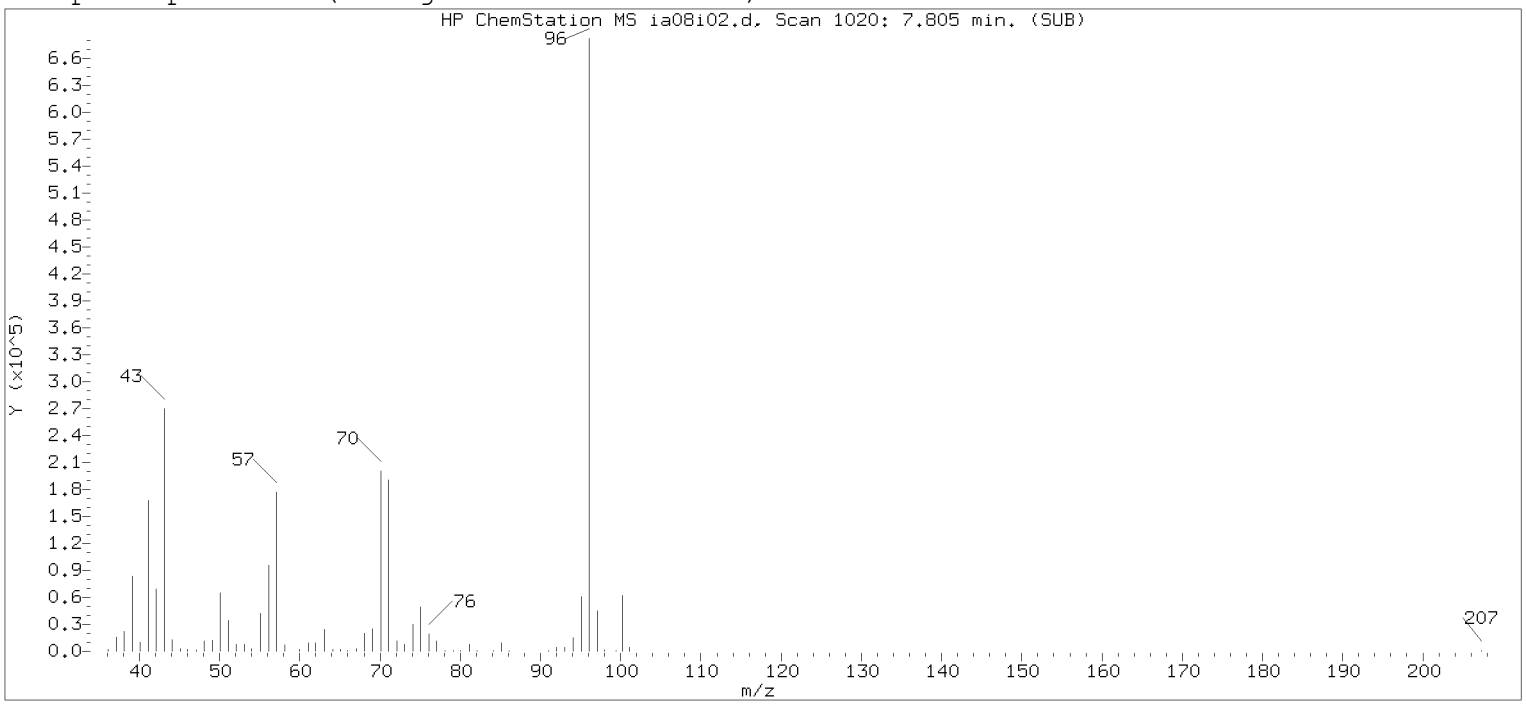
Compound Number : 67
Compound Name : Trichloroethene
Scan Number : 1098
Retention Time (minutes): 8.281
Quant Ion : 95.00
Area (flag) : 578338M
On-Column Amount (ng) : 10.1492
Integration start scan : 1083 Integration stop scan: 1125
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

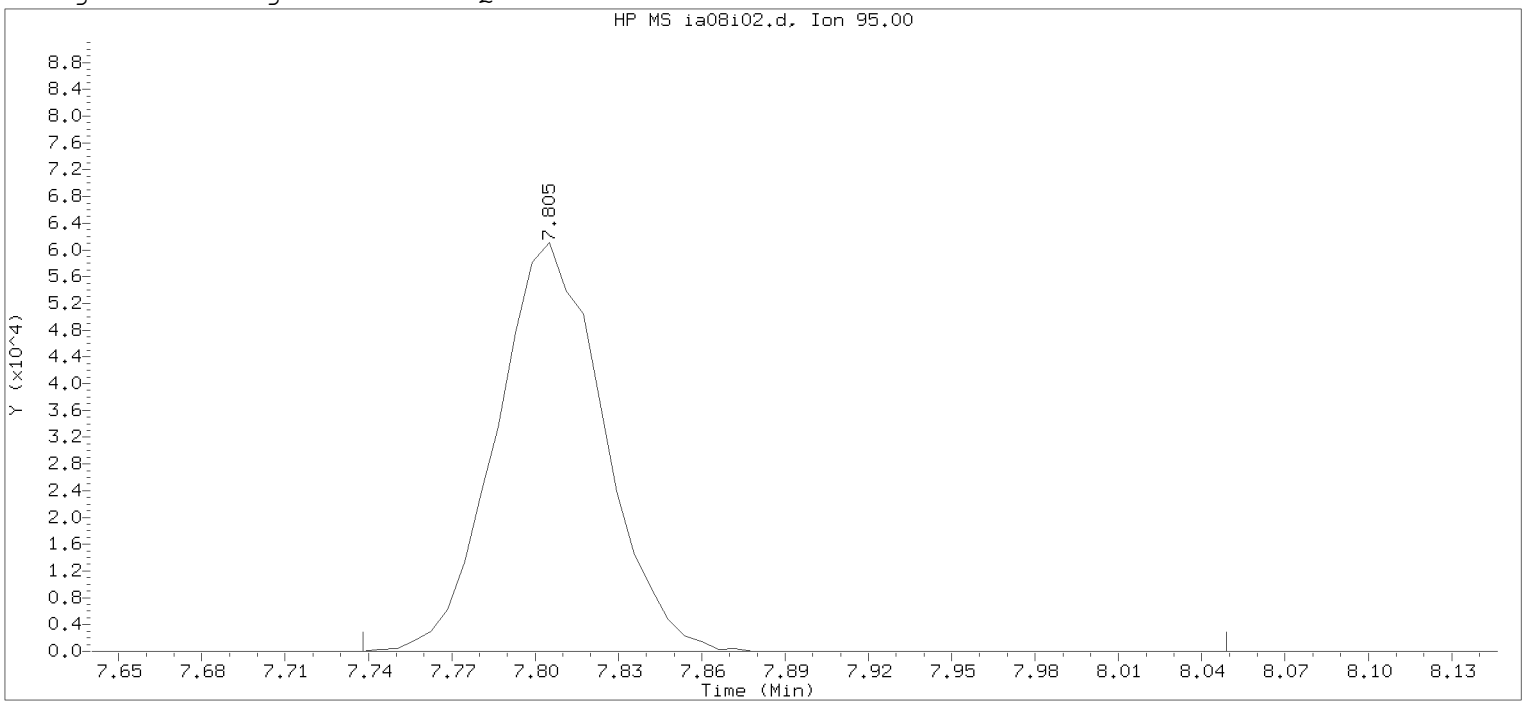
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

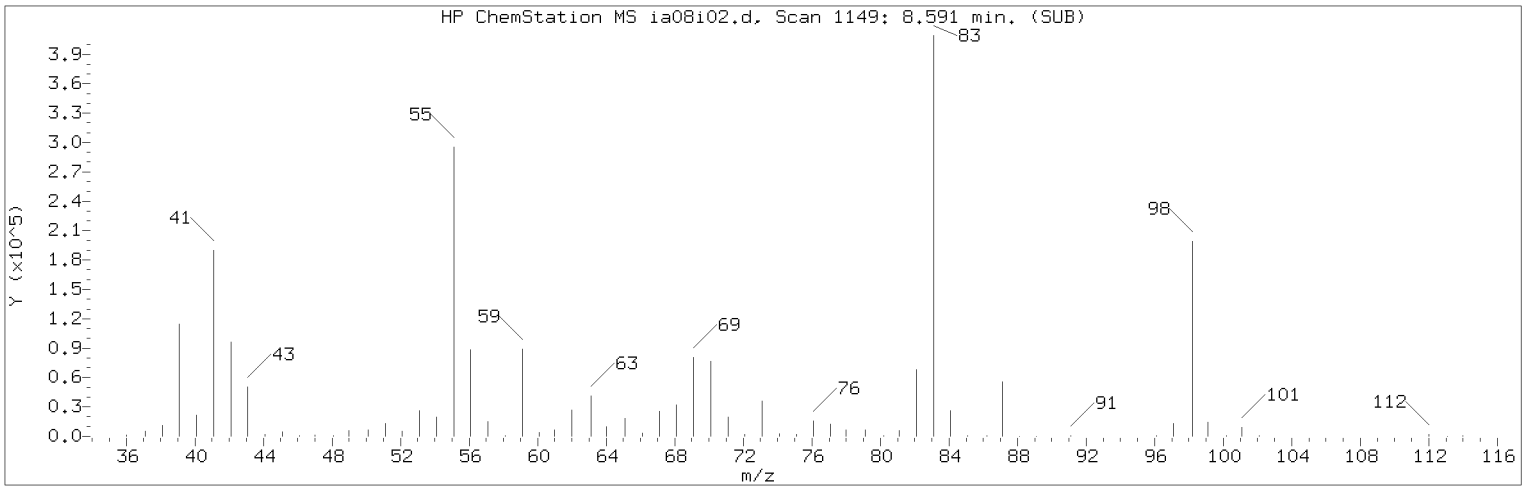
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

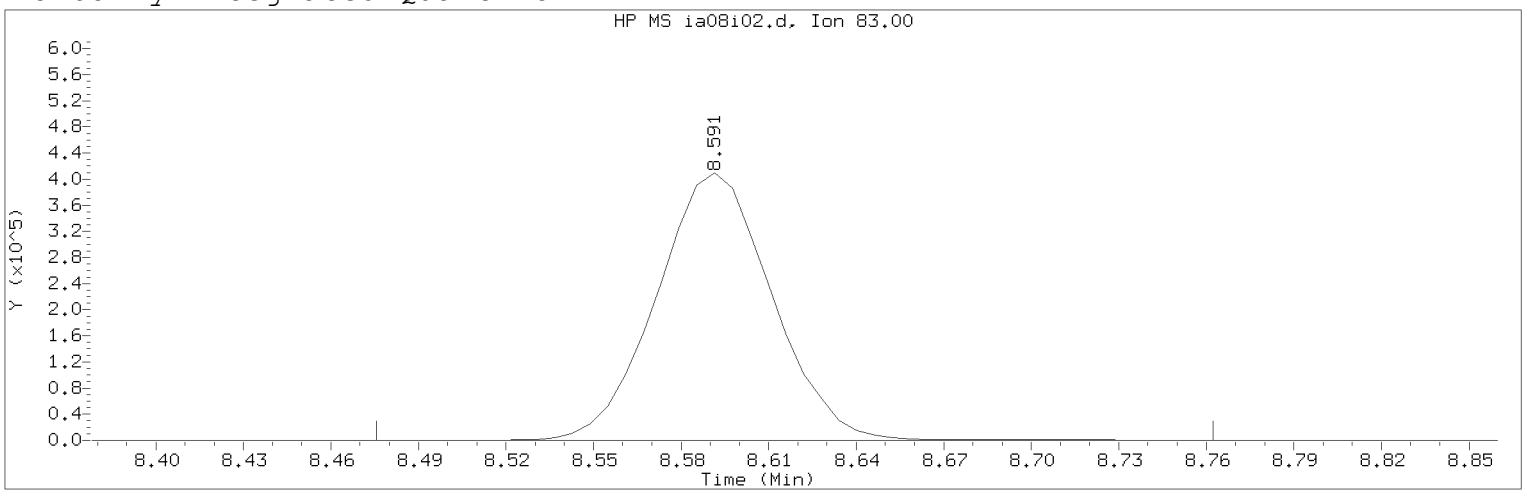
Compound Number : 67
Compound Name : Trichloroethene
Scan Number : 1020
Retention Time (minutes): 7.805
Quant Ion : 95.00
Area : 163885
On-column Amount (ng) : 58.2041
Integration start scan : 1008 Integration stop scan: 1059
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

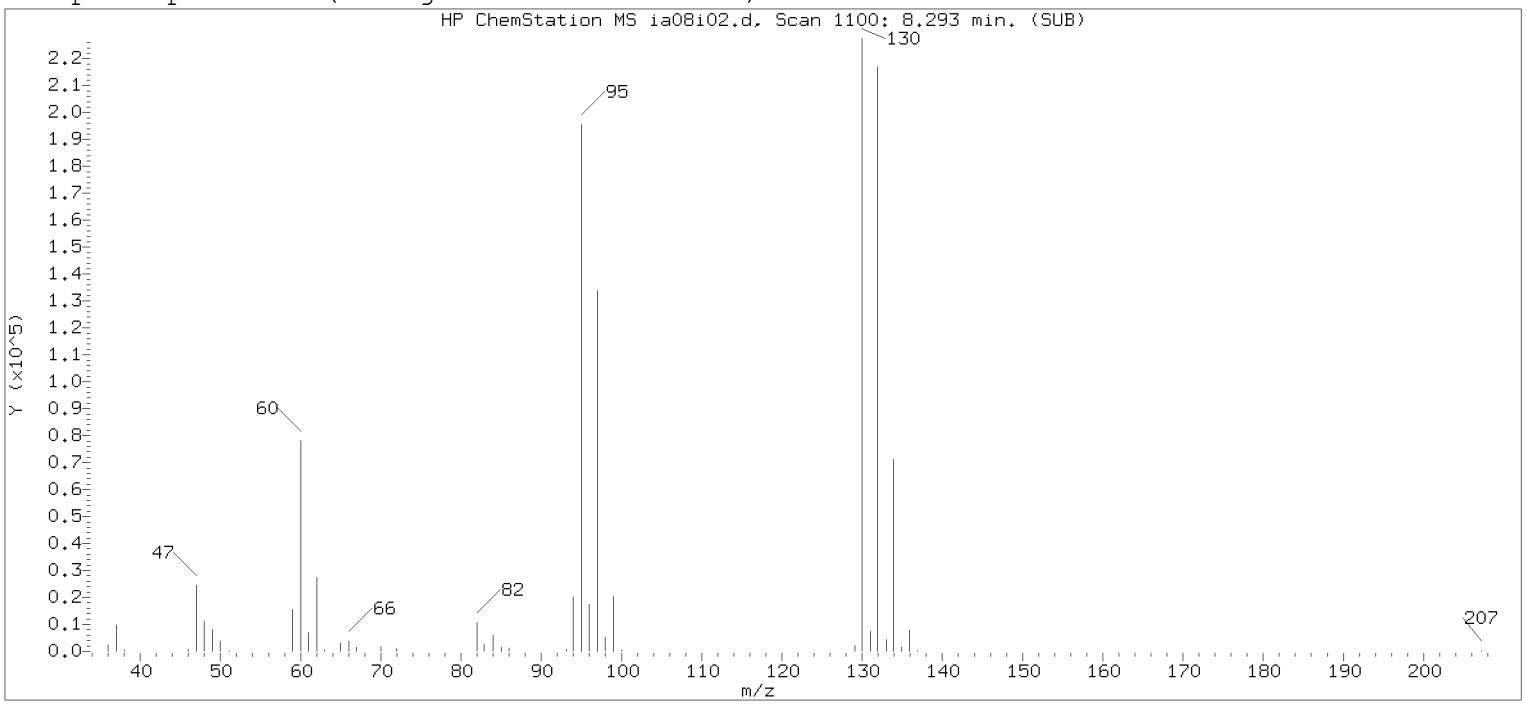
Compound Number : 69
Compound Name : Methylcyclohexane
Scan Number : 1149
Retention Time (minutes): 8.591
Quant Ion : 83.00
Area (flag) : 1122903M
On-Column Amount (ng) : 11.0359
Integration start scan : 1129 Integration stop scan: 1176
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

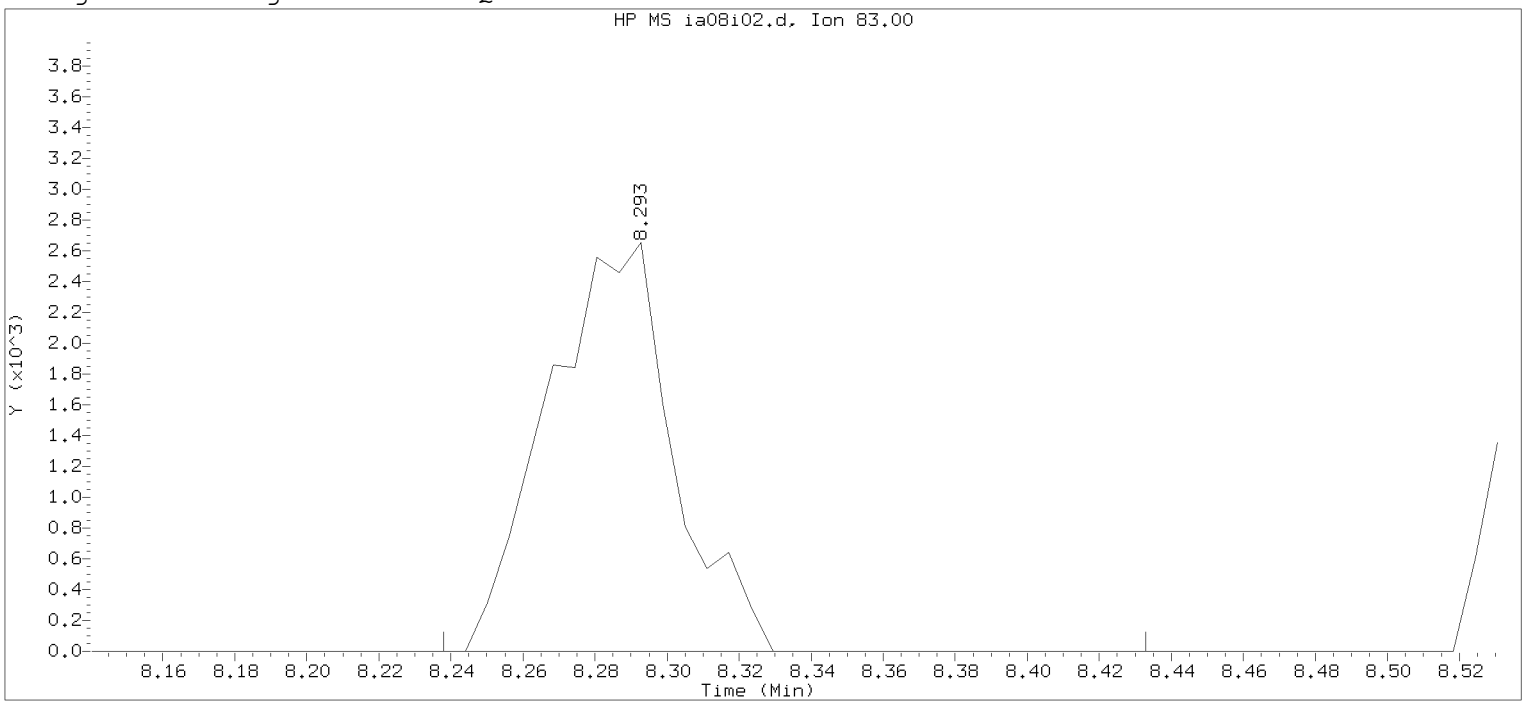
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

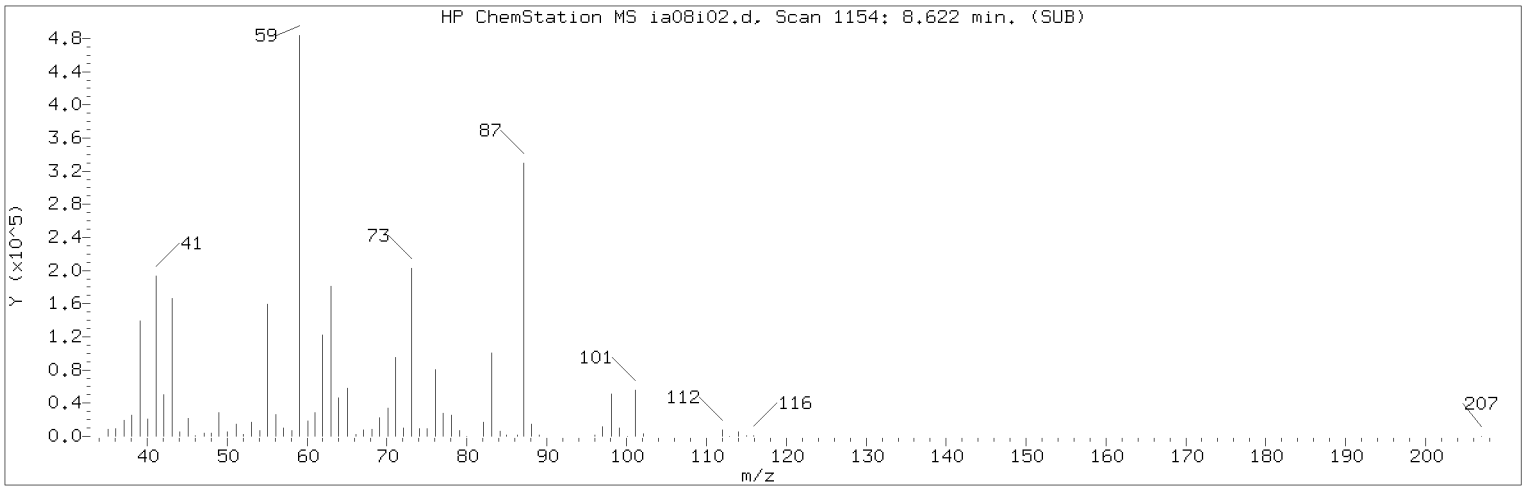
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

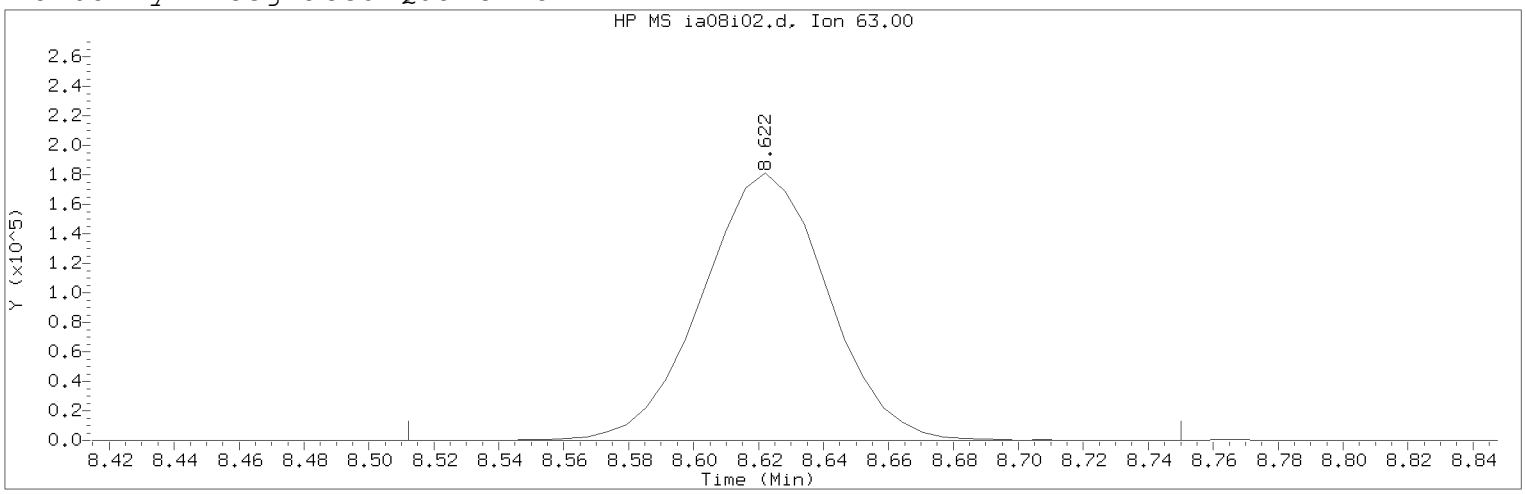
Compound Number : 69
Compound Name : Methylcyclohexane
Scan Number : 1100
Retention Time (minutes): 8.293
Quant Ion : 83.00
Area : 6447
On-column Amount (ng) : 31.3543
Integration start scan : 1090 Integration stop scan: 1122
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

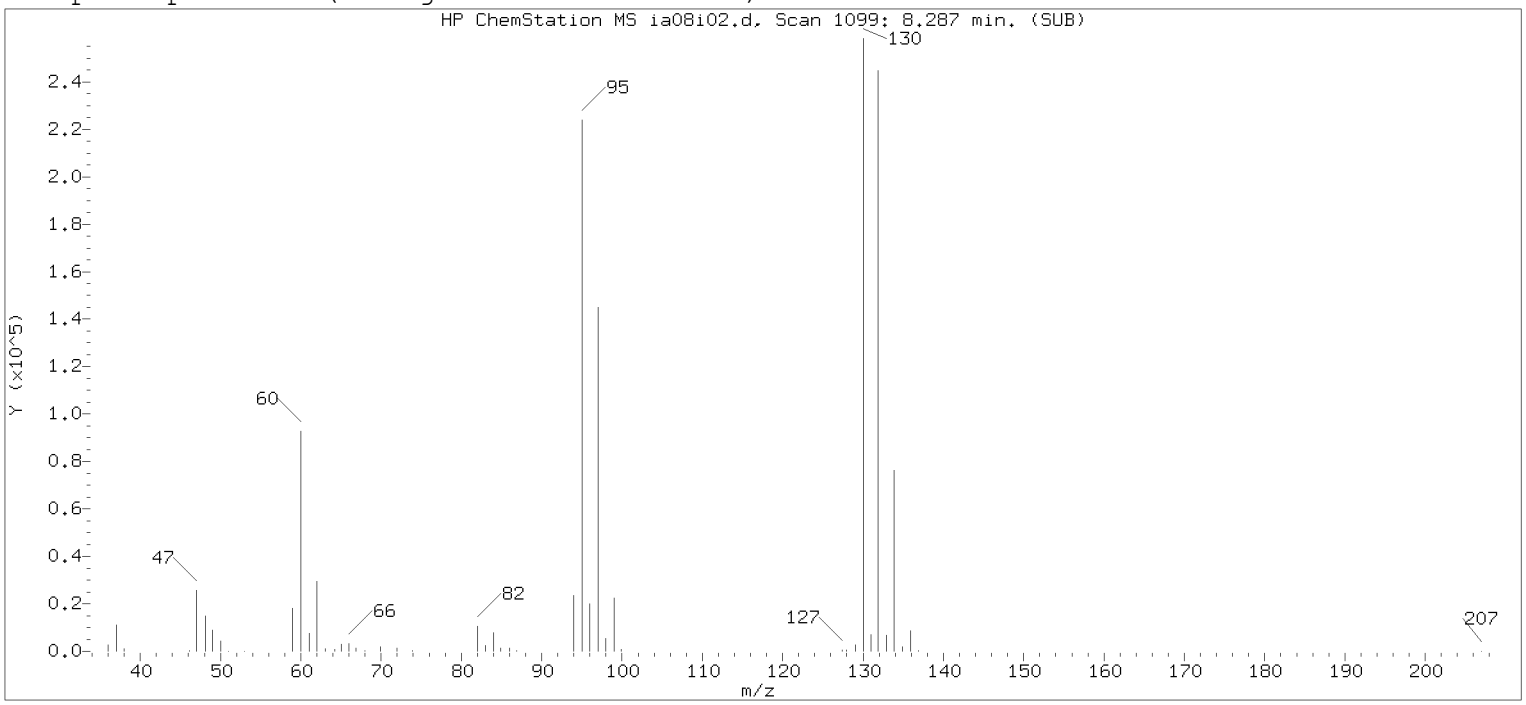
Compound Number : 70
Compound Name : 1,2-Dichloropropane
Scan Number : 1154
Retention Time (minutes): 8.622
Quant Ion : 63.00
Area (flag) : 486469M
On-Column Amount (ng) : 10.3163
Integration start scan : 1135 Integration stop scan: 1174
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

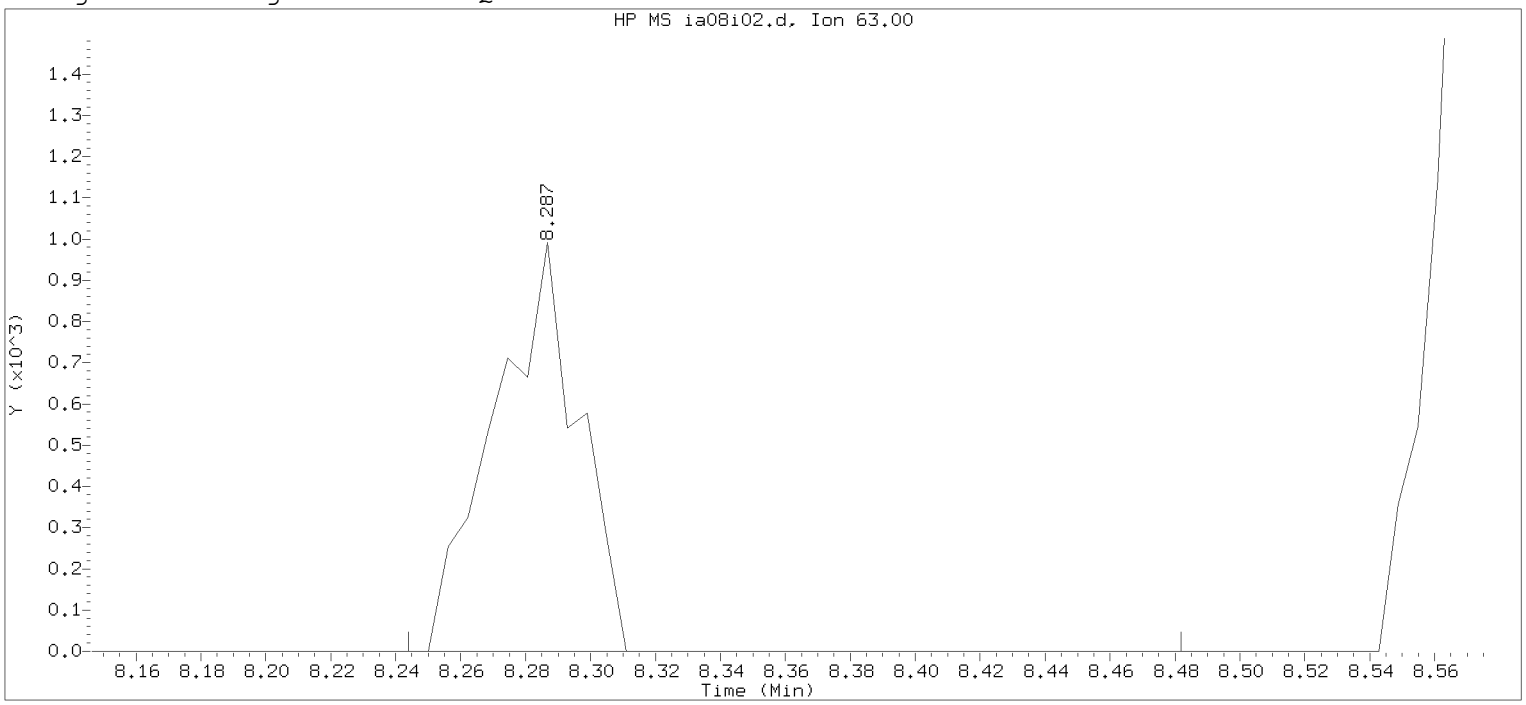
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

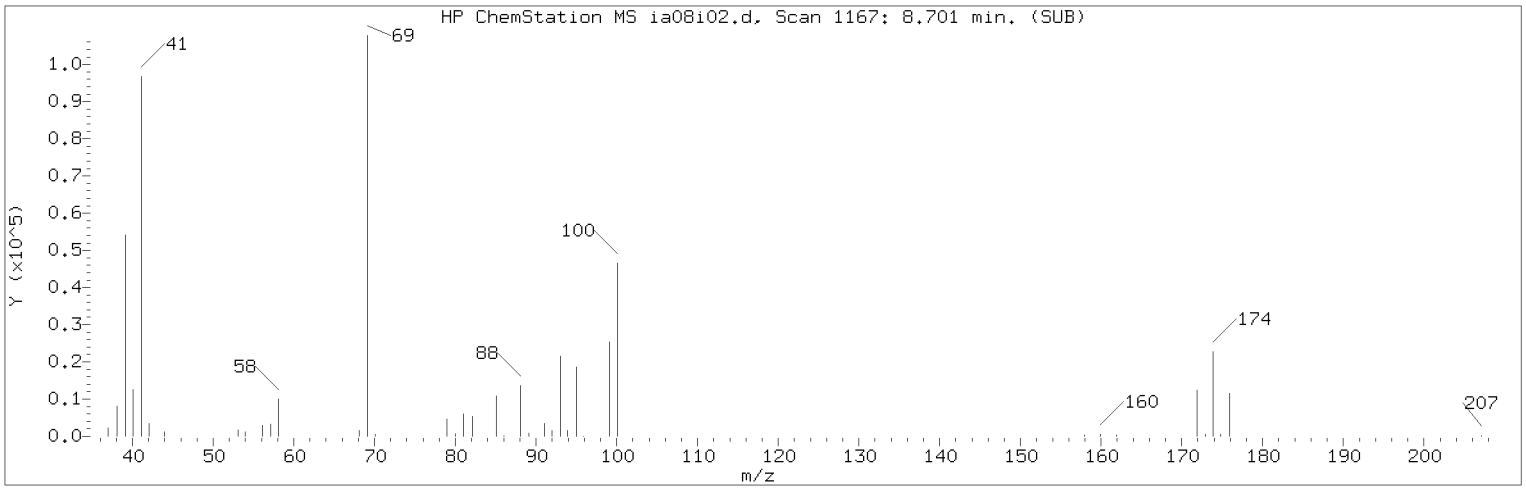
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

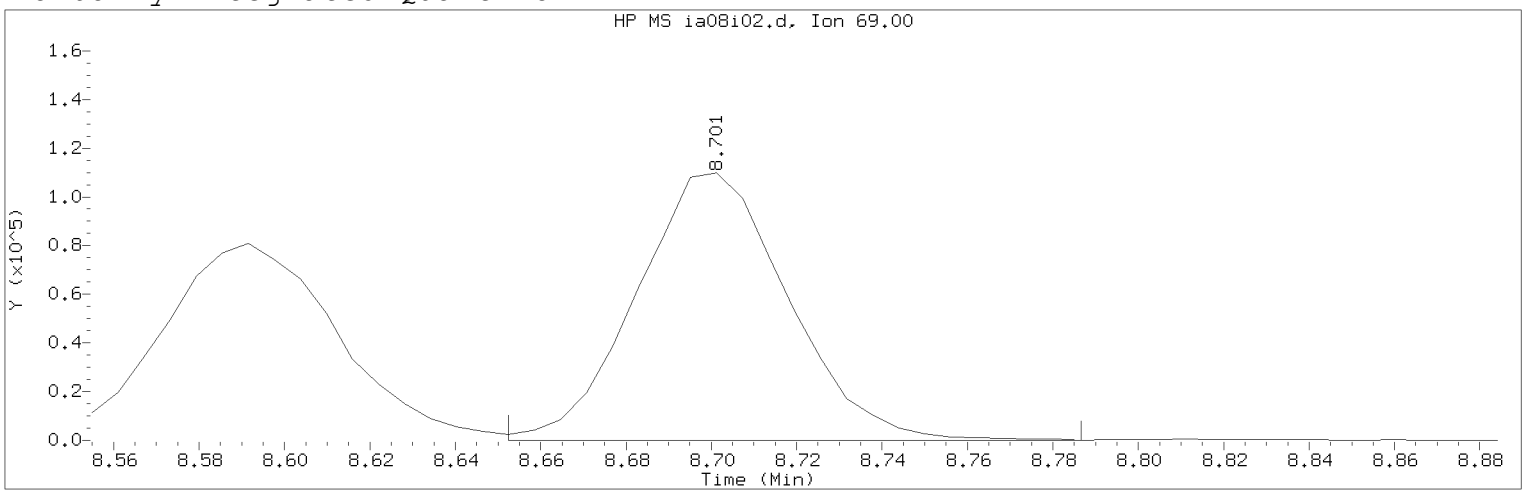
Compound Number : 70
Compound Name : 1,2-Dichloropropane
Scan Number : 1099
Retention Time (minutes): 8.287
Quant Ion : 63.00
Area : 1785
On-column Amount (ng) : 26.3325
Integration start scan : 1091 Integration stop scan: 1130
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe244

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

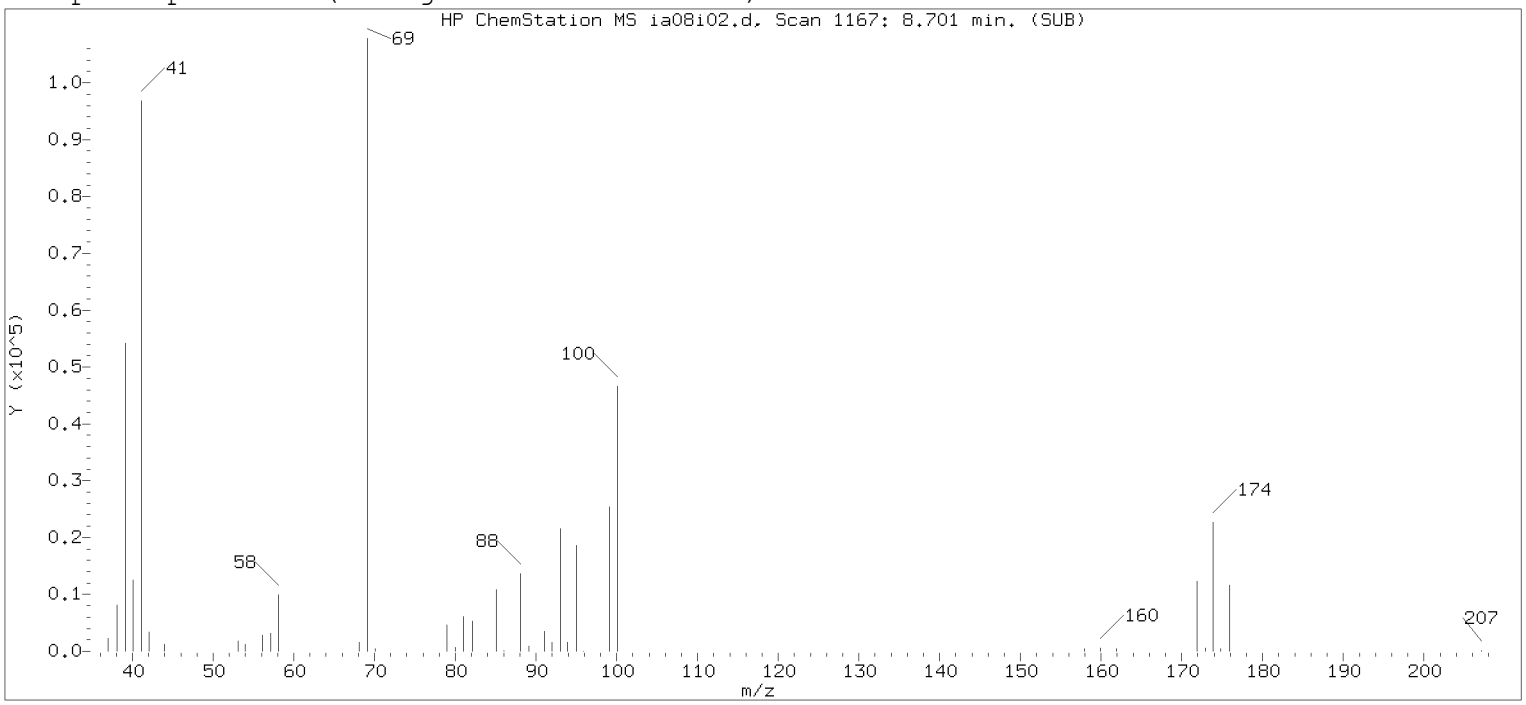
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1167
Retention Time (minutes): 8.701
Quant Ion : 69.00
Area (flag) : 270591M
On-Column Amount (ng) : 11.1167
Integration start scan : 1158 Integration stop scan: 1180
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

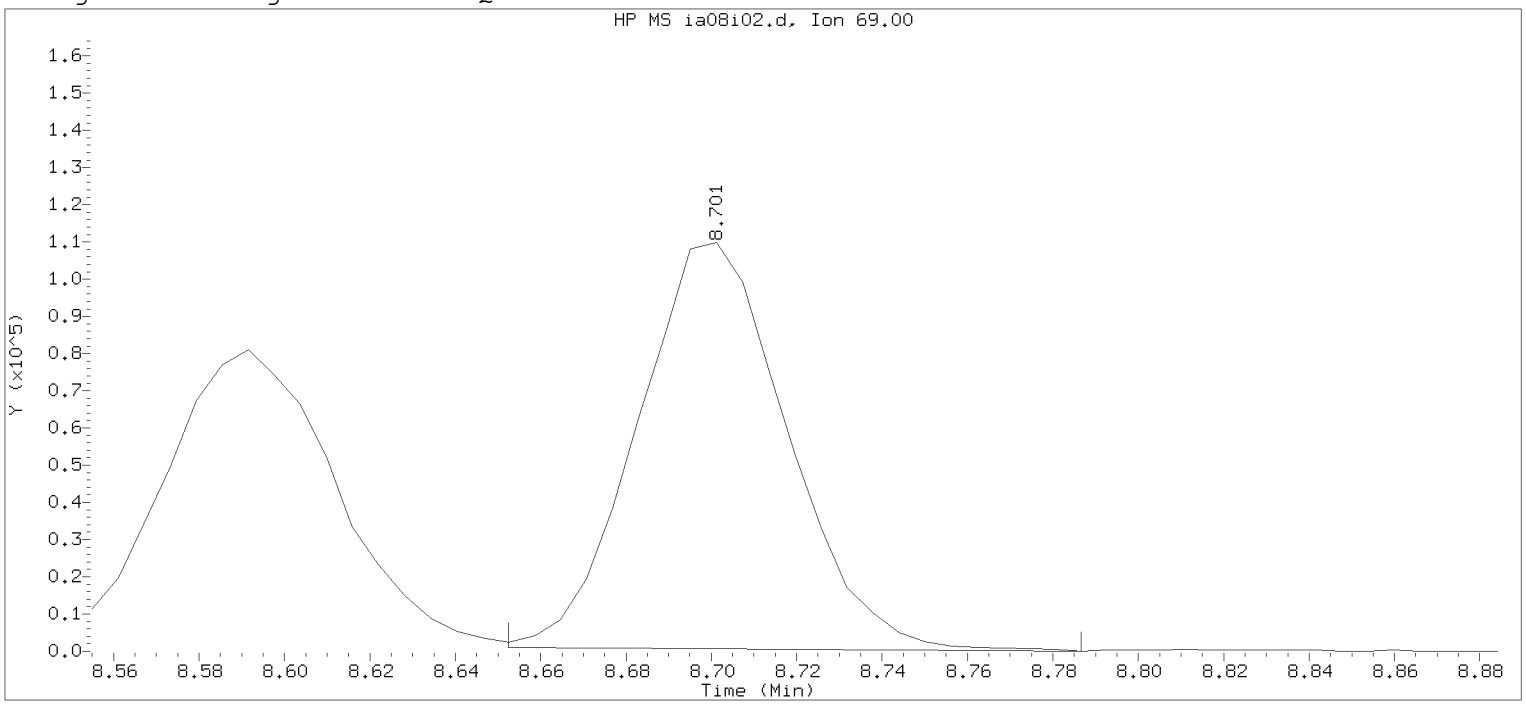
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

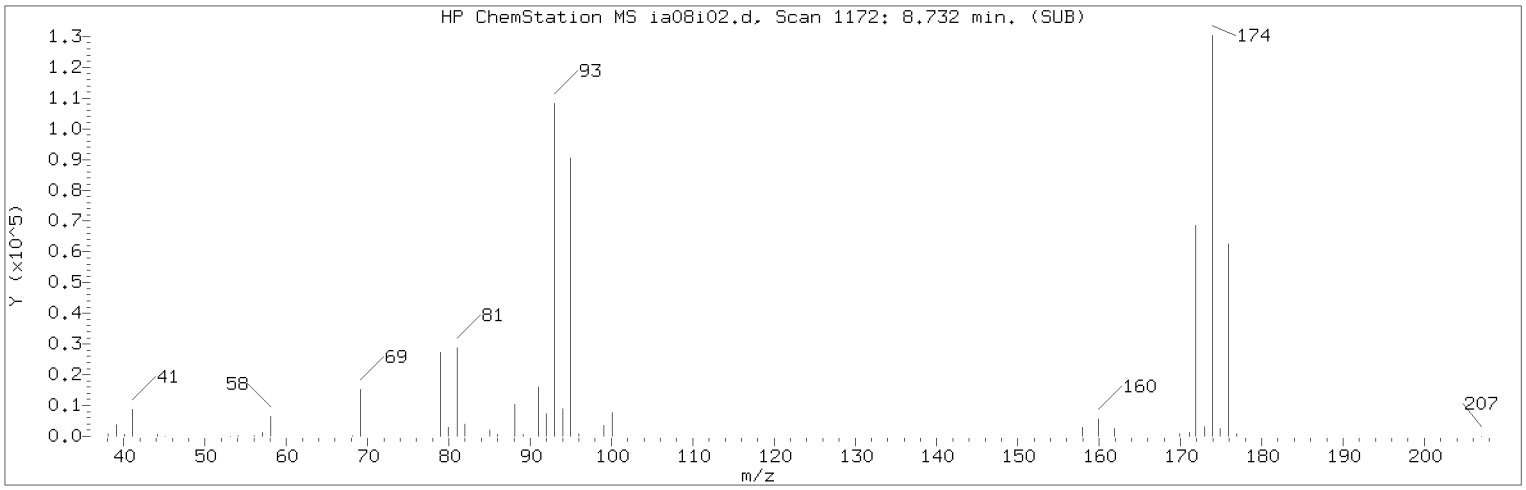
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

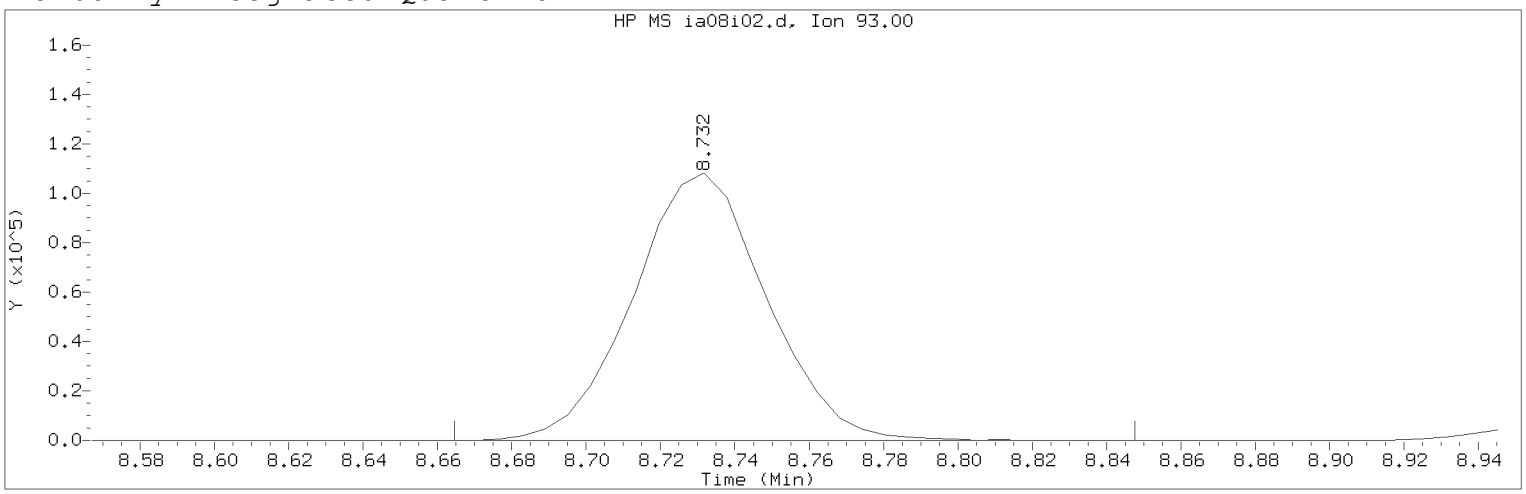
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1167
Retention Time (minutes): 8.701
Quant Ion : 69.00
Area : 266086
On-column Amount (ng) : 11.6240
Integration start scan : 1158 Integration stop scan: 1180
Y at integration start : 1009 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe246

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

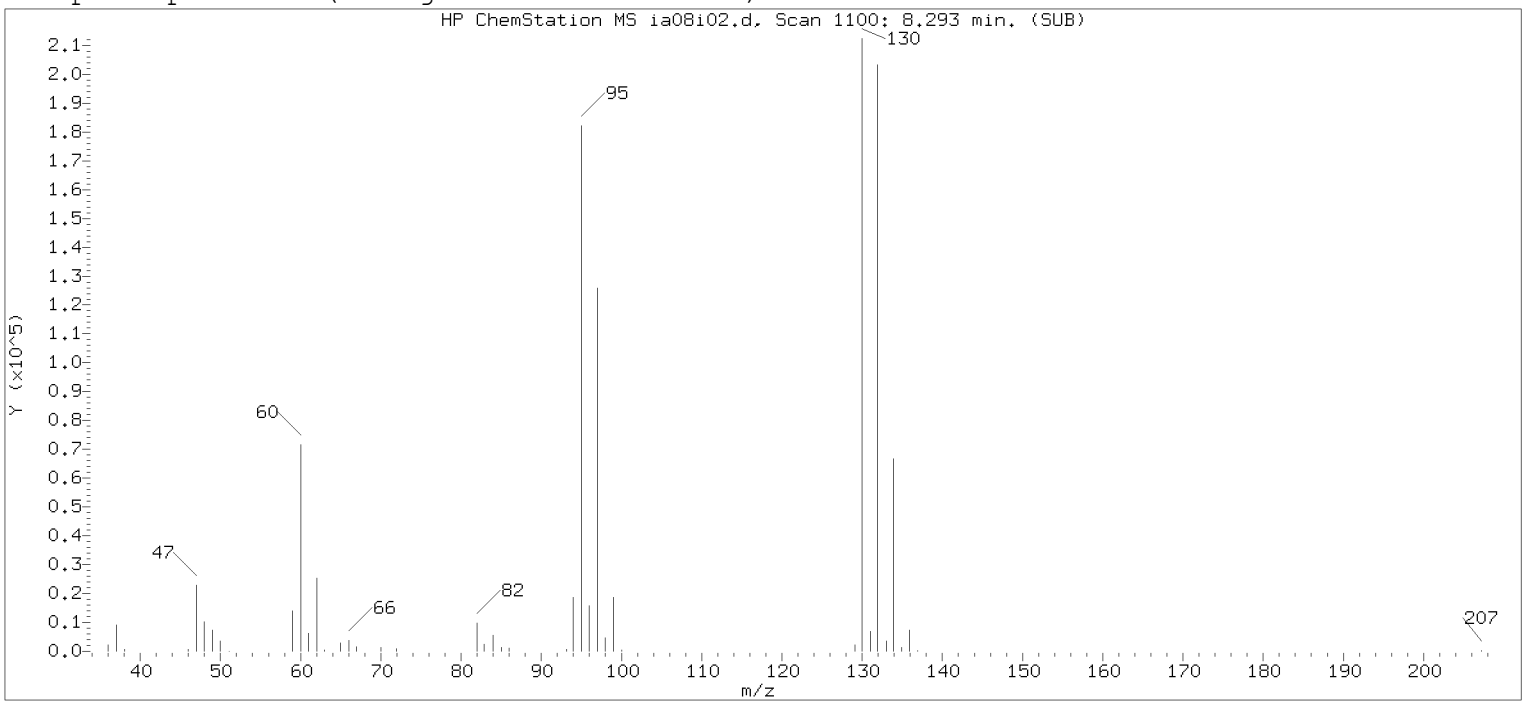
Compound Number : 73
Compound Name : Dibromomethane
Scan Number : 1172
Retention Time (minutes): 8.732
Quant Ion : 93.00
Area (flag) : 268687M
On-Column Amount (ng) : 10.1357
Integration start scan : 1160 Integration stop scan: 1190
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

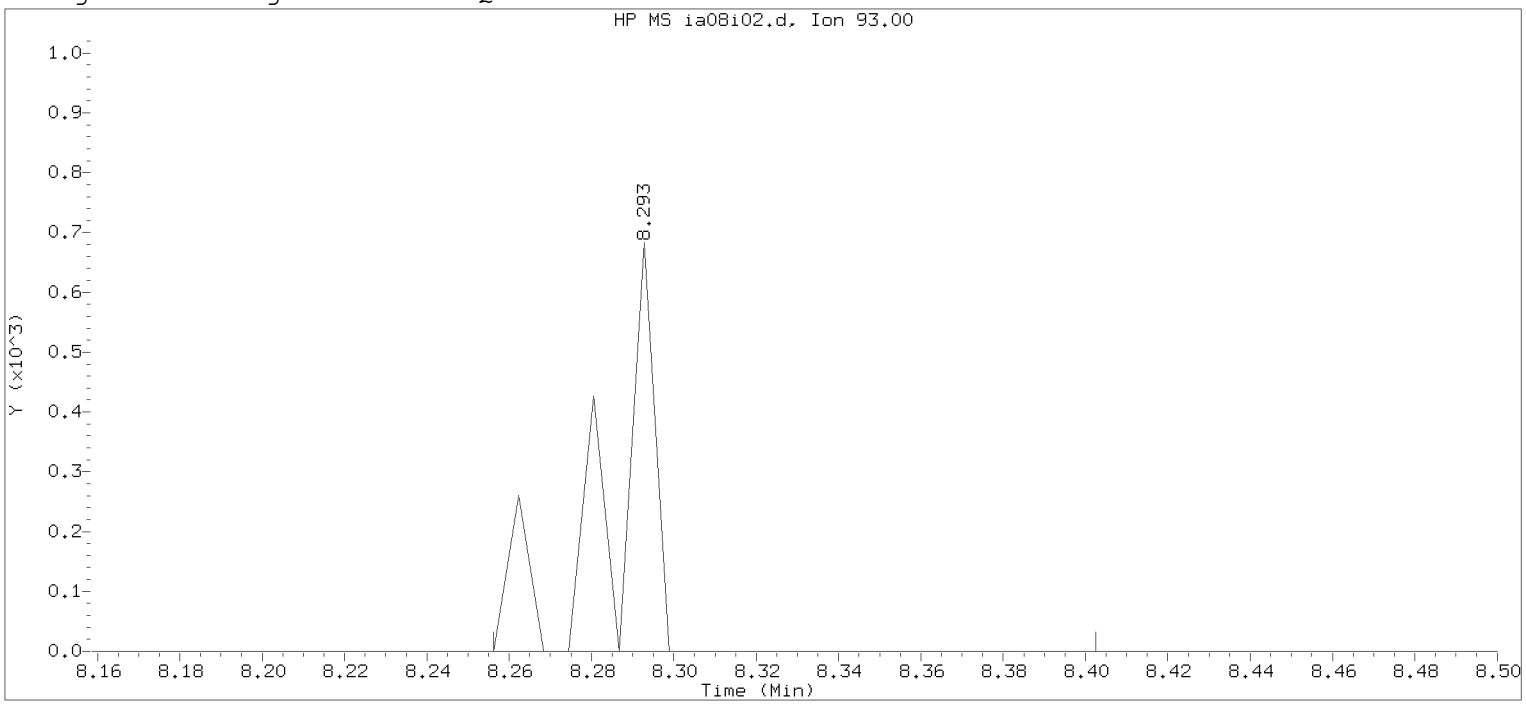
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

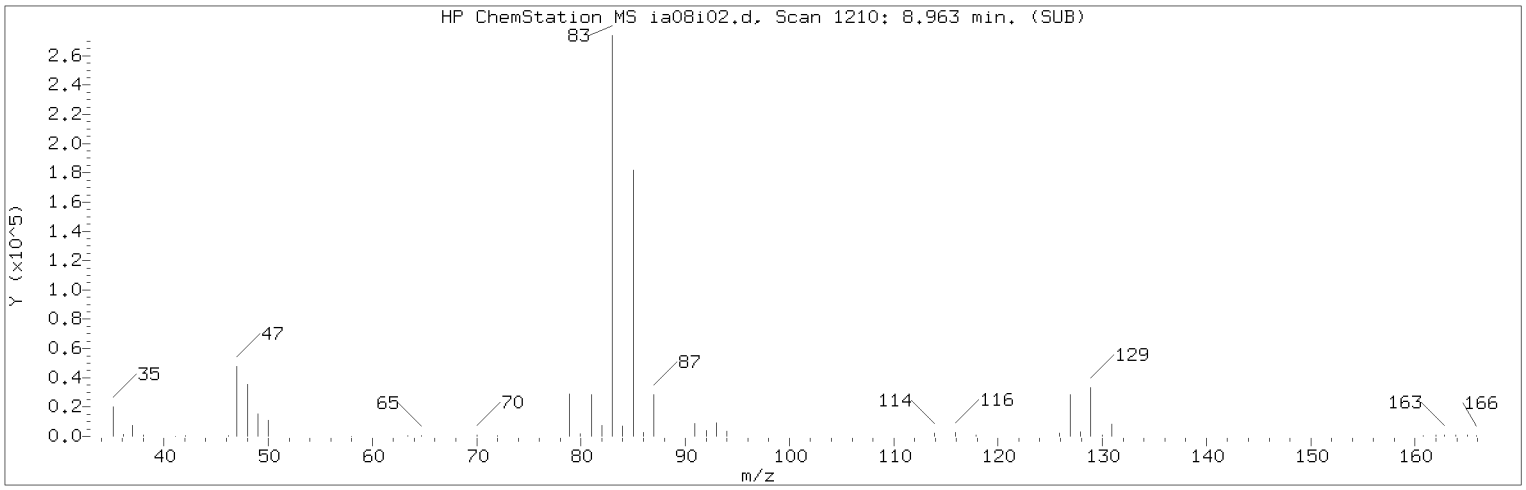
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

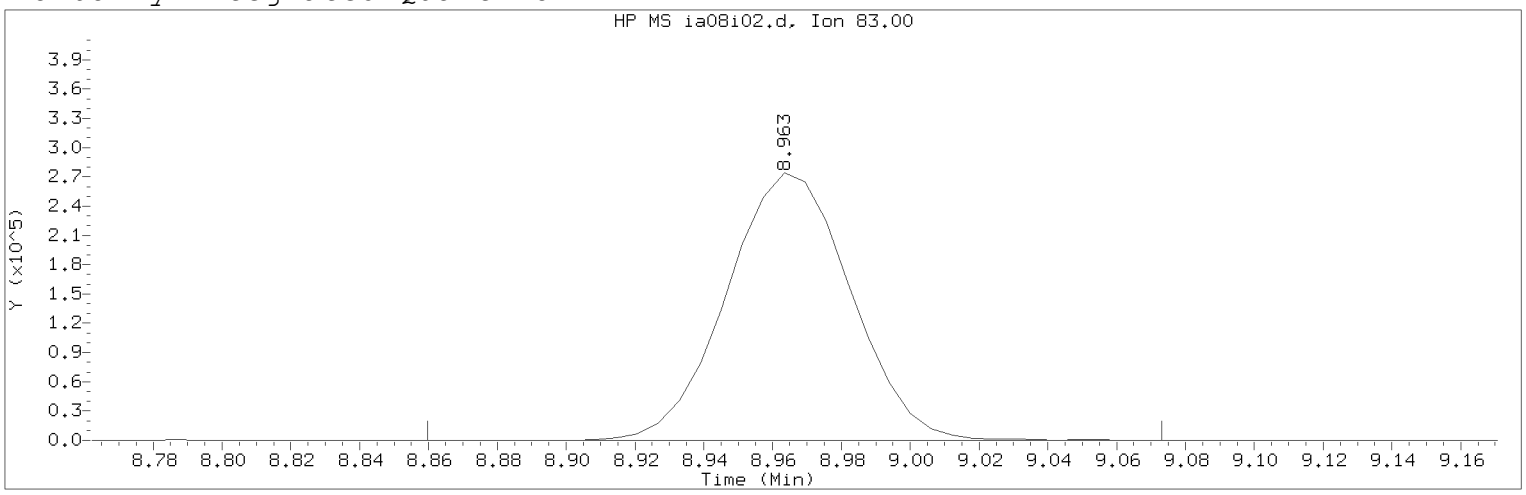
Compound Number	: 73		
Compound Name	: Dibromomethane		
Scan Number	: 1100		
Retention Time (minutes)	: 8.293		
Quant Ion	: 93.00		
Area	: 501		
On-column Amount (ng)	: 21.7377		
Integration start scan	: 1093	Integration stop scan:	1117
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

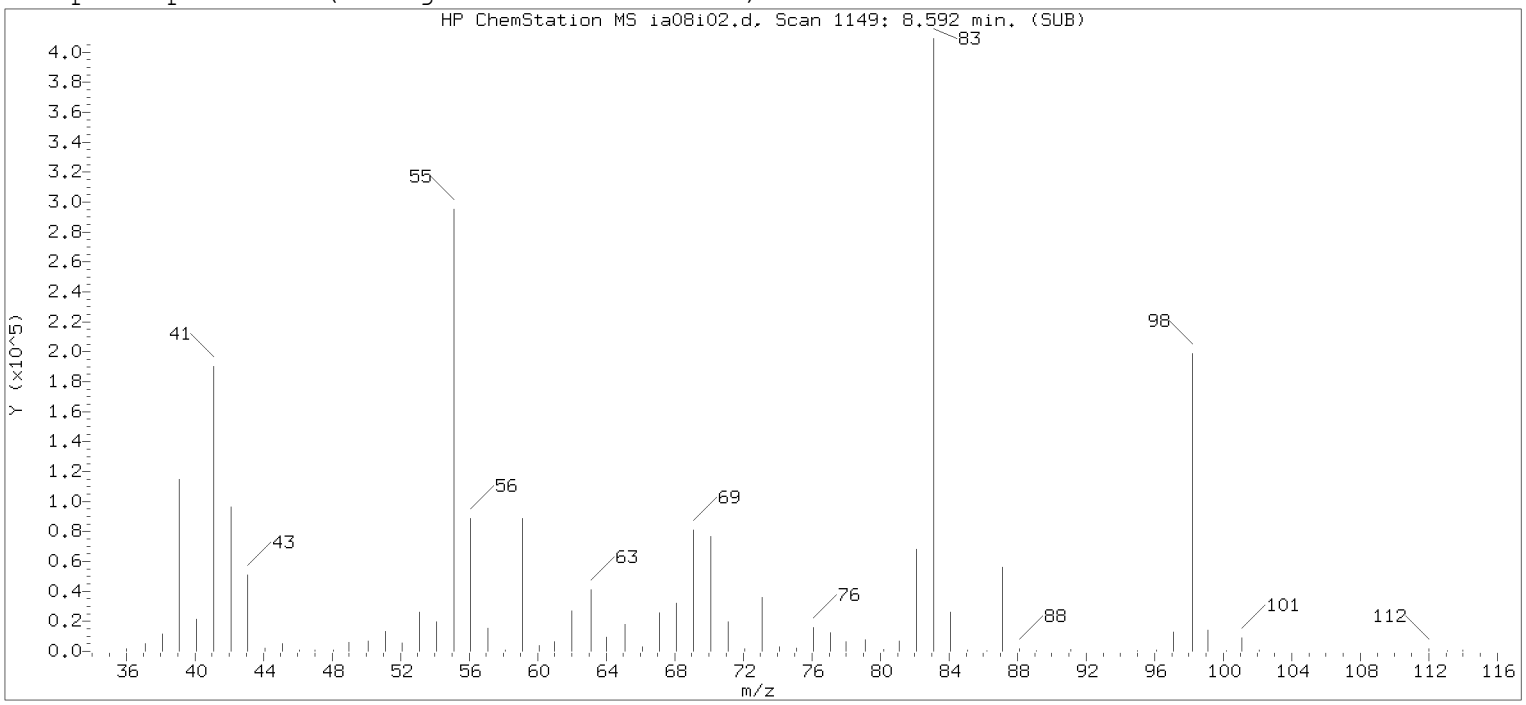
Compound Number : 74
Compound Name : Bromodichloromethane
Scan Number : 1210
Retention Time (minutes): 8.963
Quant Ion : 83.00
Area (flag) : 685081M
On-Column Amount (ng) : 10.4676
Integration start scan : 1192 Integration stop scan: 1227
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

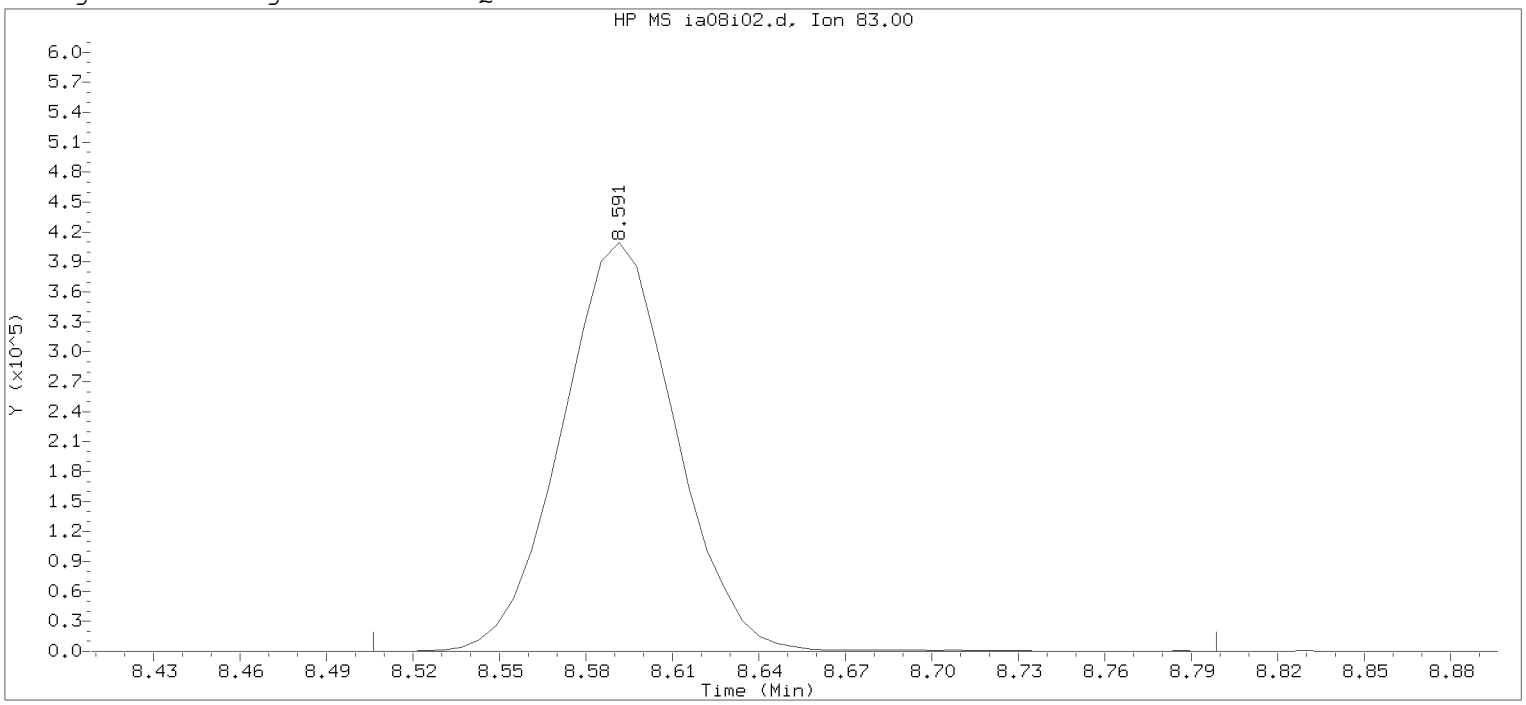
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

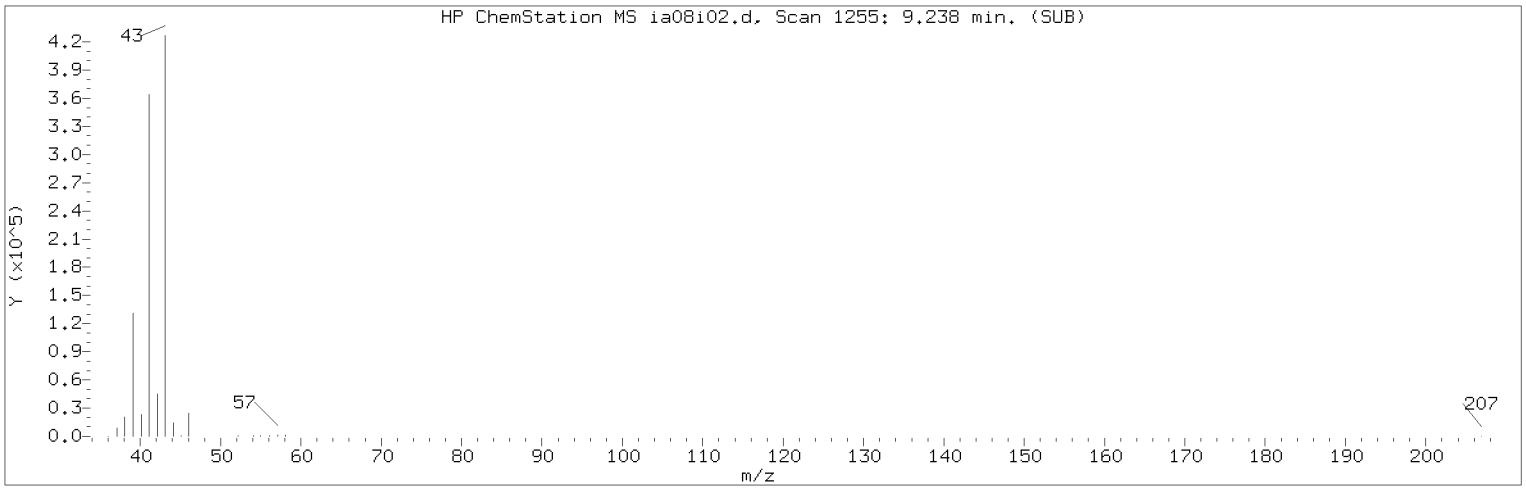
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

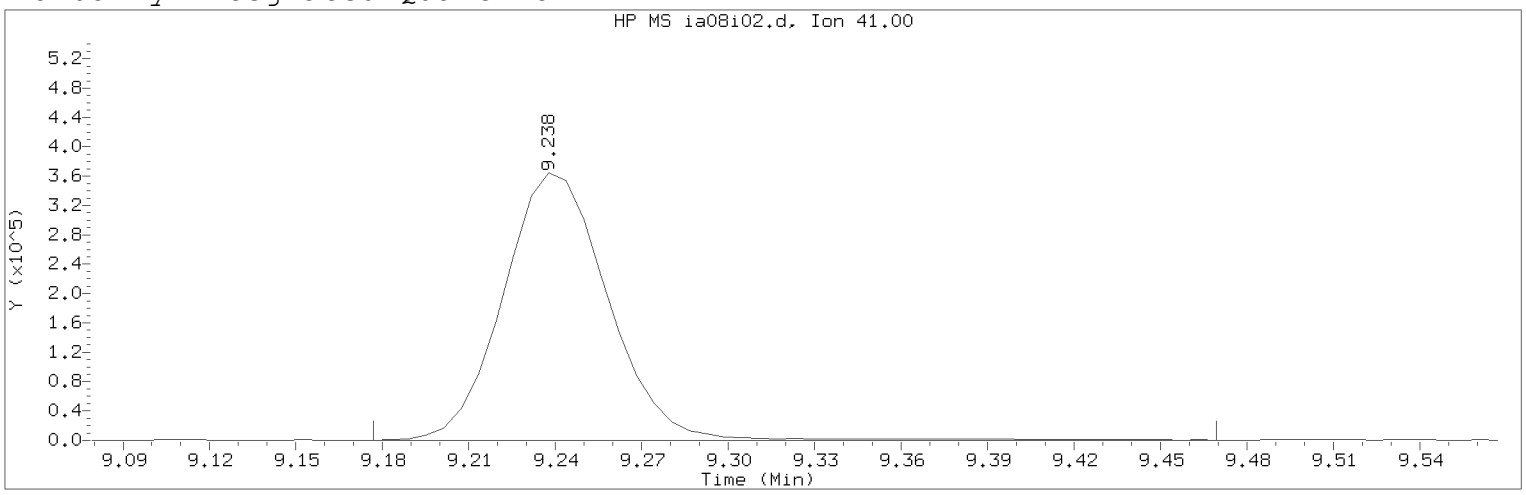
Compound Number : 74
Compound Name : Bromodichloromethane
Scan Number : 1149
Retention Time (minutes): 8.591
Quant Ion : 83.00
Area : 1123009
On-column Amount (ng) : 47.8571
Integration start scan : 1134 Integration stop scan: 1182
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe250

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

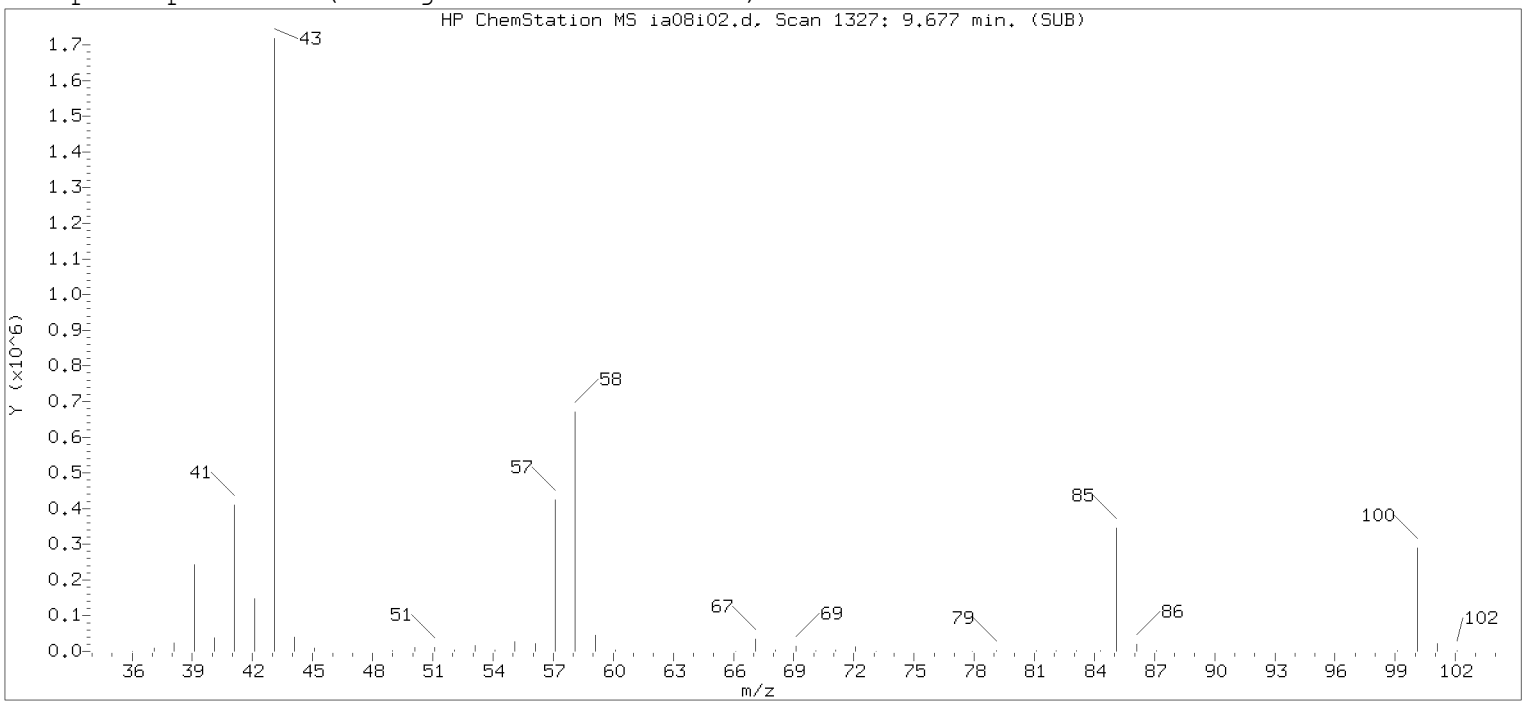
Compound Number : 76
Compound Name : 2-Nitropropane
Scan Number : 1255
Retention Time (minutes): 9.238
Quant Ion : 41.00
Area (flag) : 923046M
On-Column Amount (ng) : 113.9693
Integration start scan : 1244 Integration stop scan: 1292
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

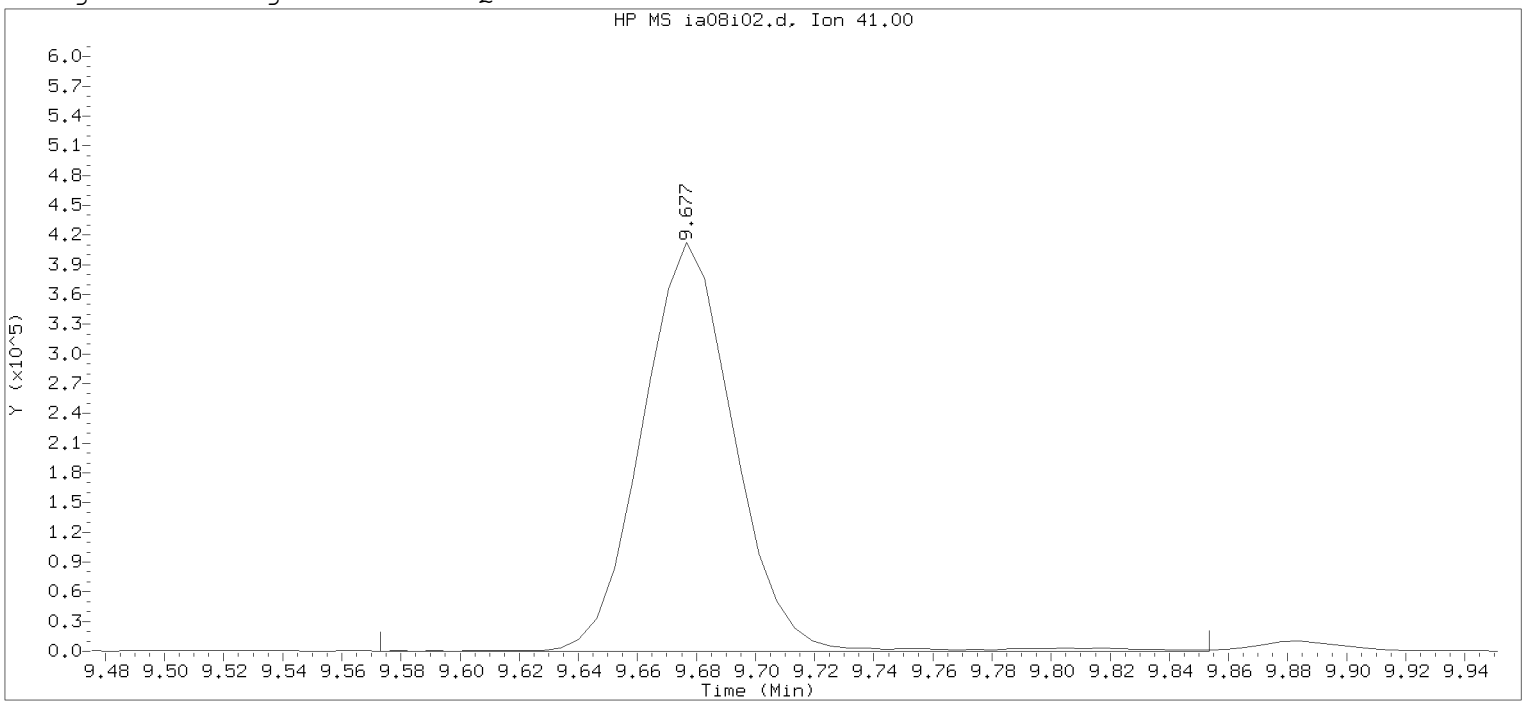
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

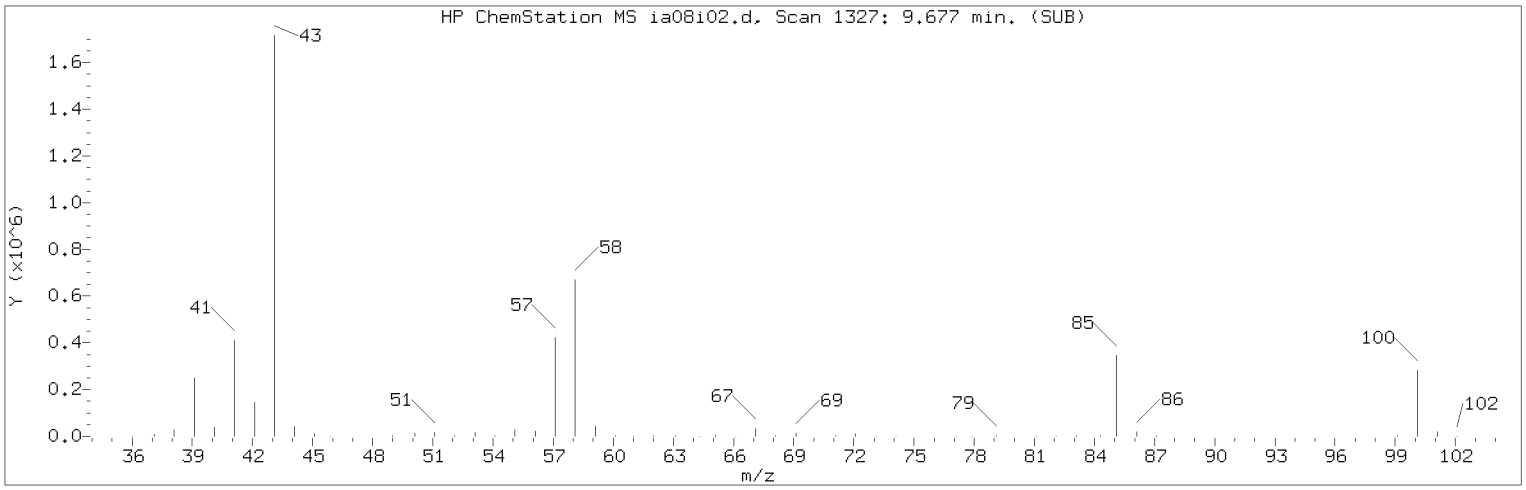
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

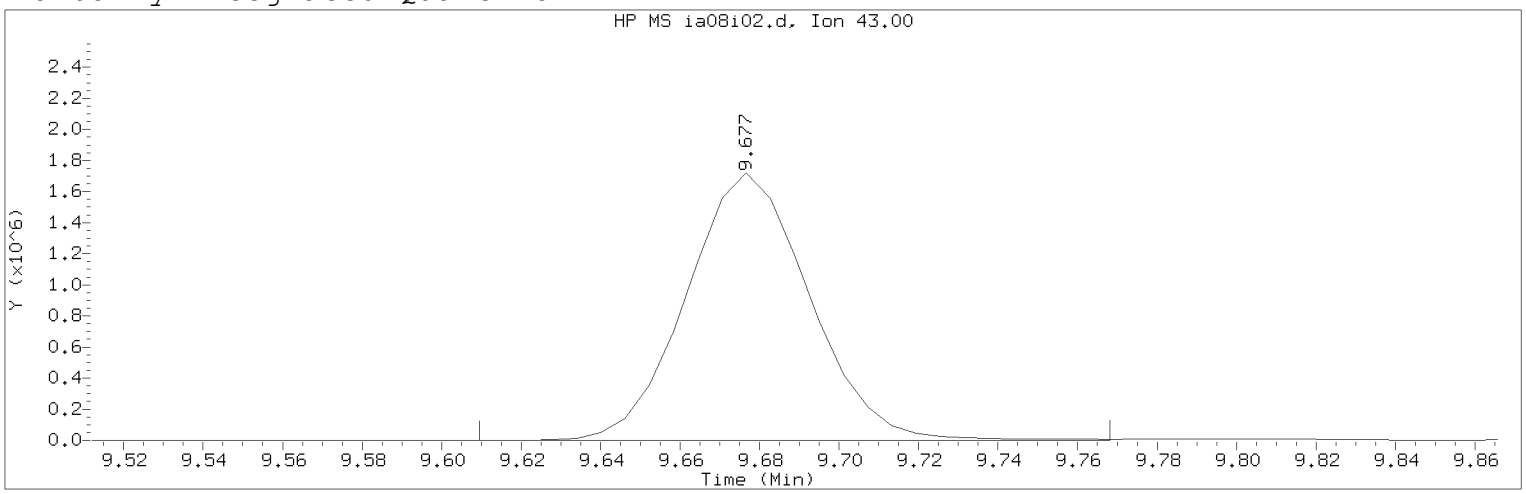
Compound Number : 76
Compound Name : 2-Nitropropane
Scan Number : 1327
Retention Time (minutes): 9.677
Quant Ion : 41.00
Area : 892740
On-column Amount (ng) : 7.3322
Integration start scan : 1309 Integration stop scan: 1355
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

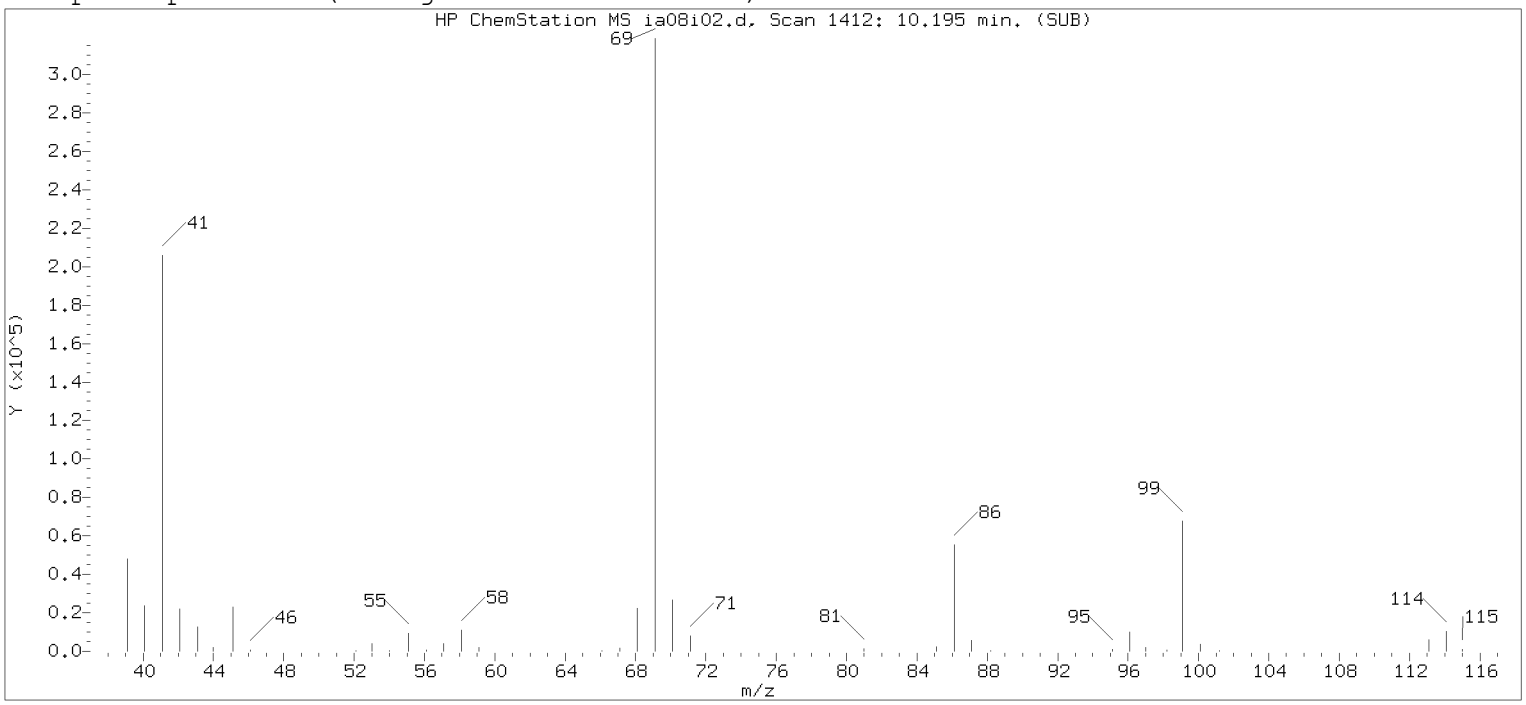
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1327
Retention Time (minutes): 9.677
Quant Ion : 43.00
Area (flag) : 3688164M
On-Column Amount (ng) : 113.1912
Integration start scan : 1315 Integration stop scan: 1341
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

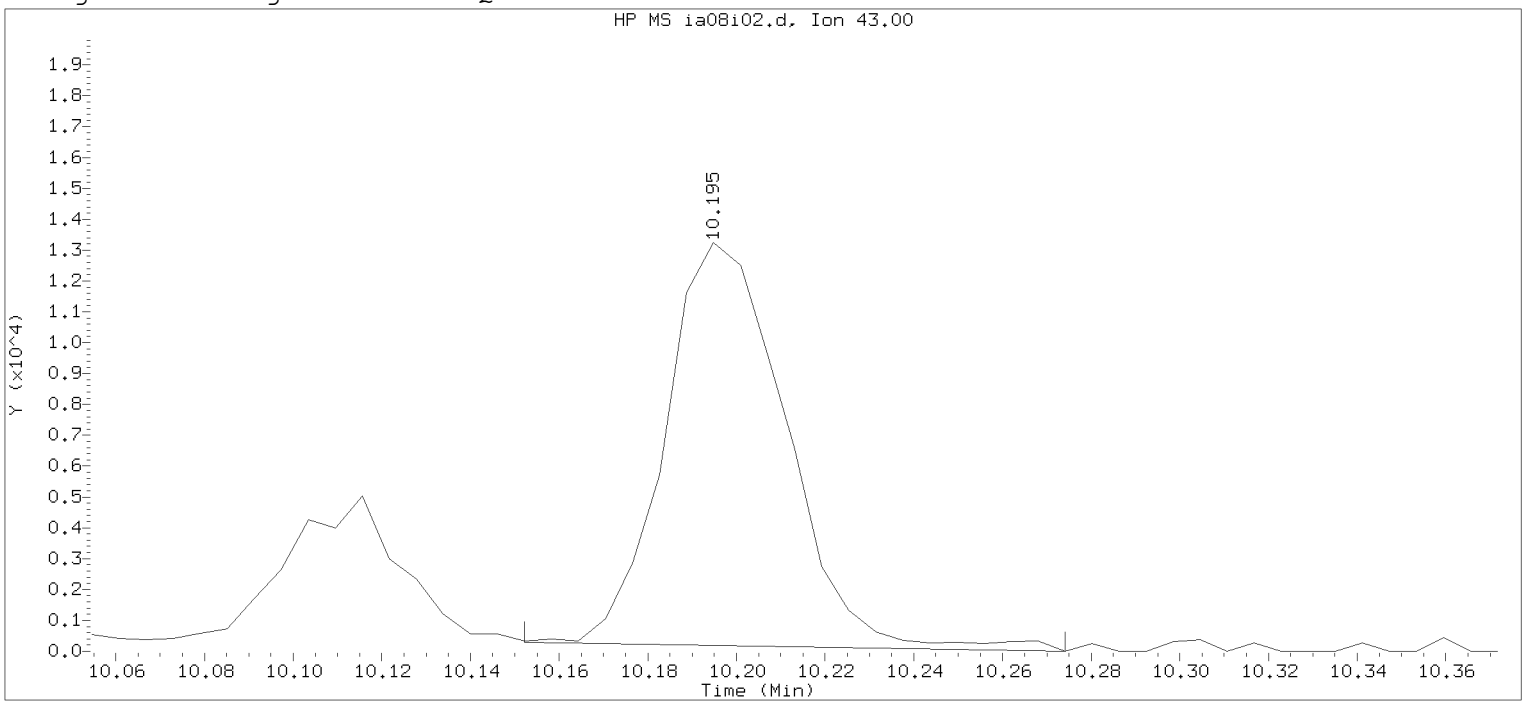
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

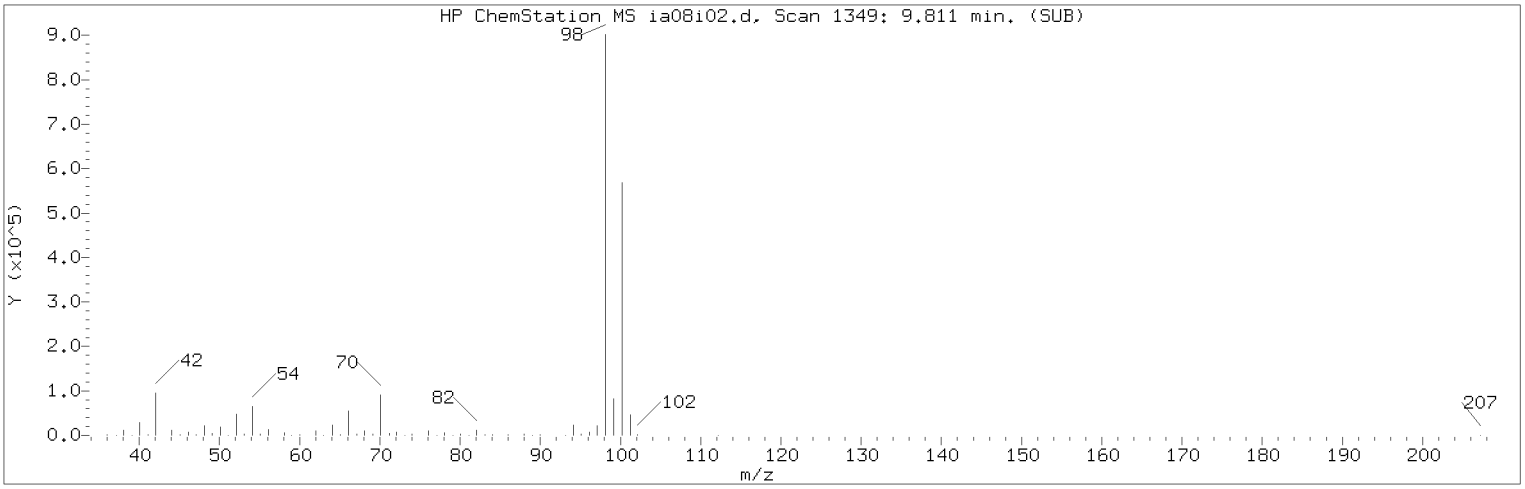
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

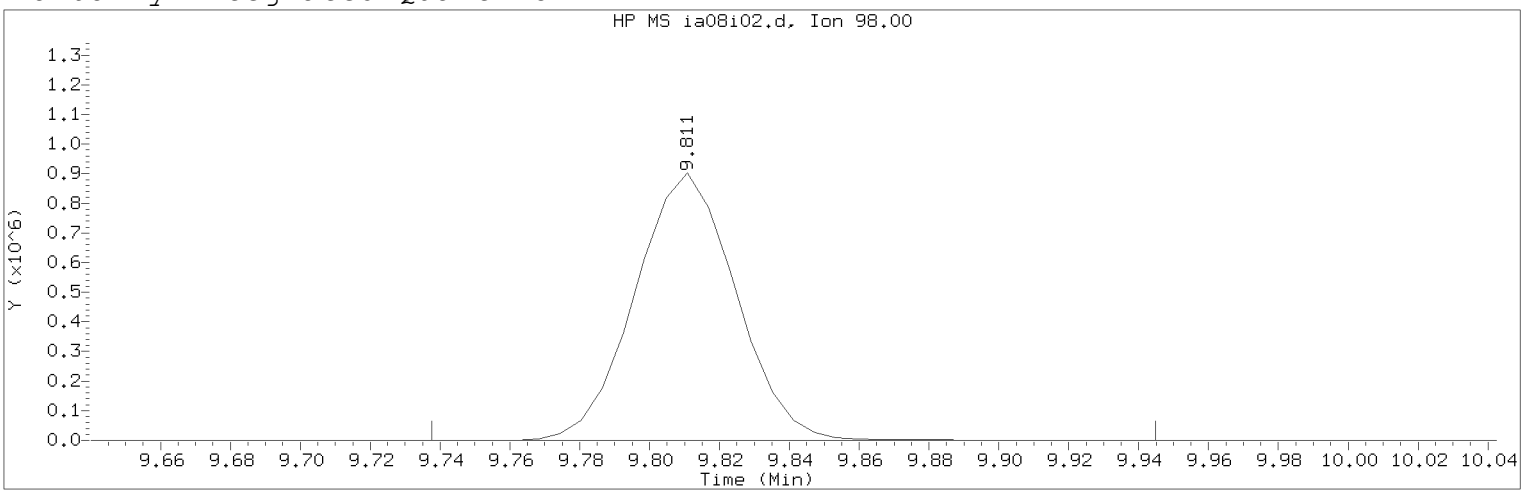
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1412
Retention Time (minutes): 10.195
Quant Ion : 43.00
Area : 24731
On-column Amount (ng) : 0.0603
Integration start scan : 1404 Integration stop scan: 1424
Y at integration start : 287 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

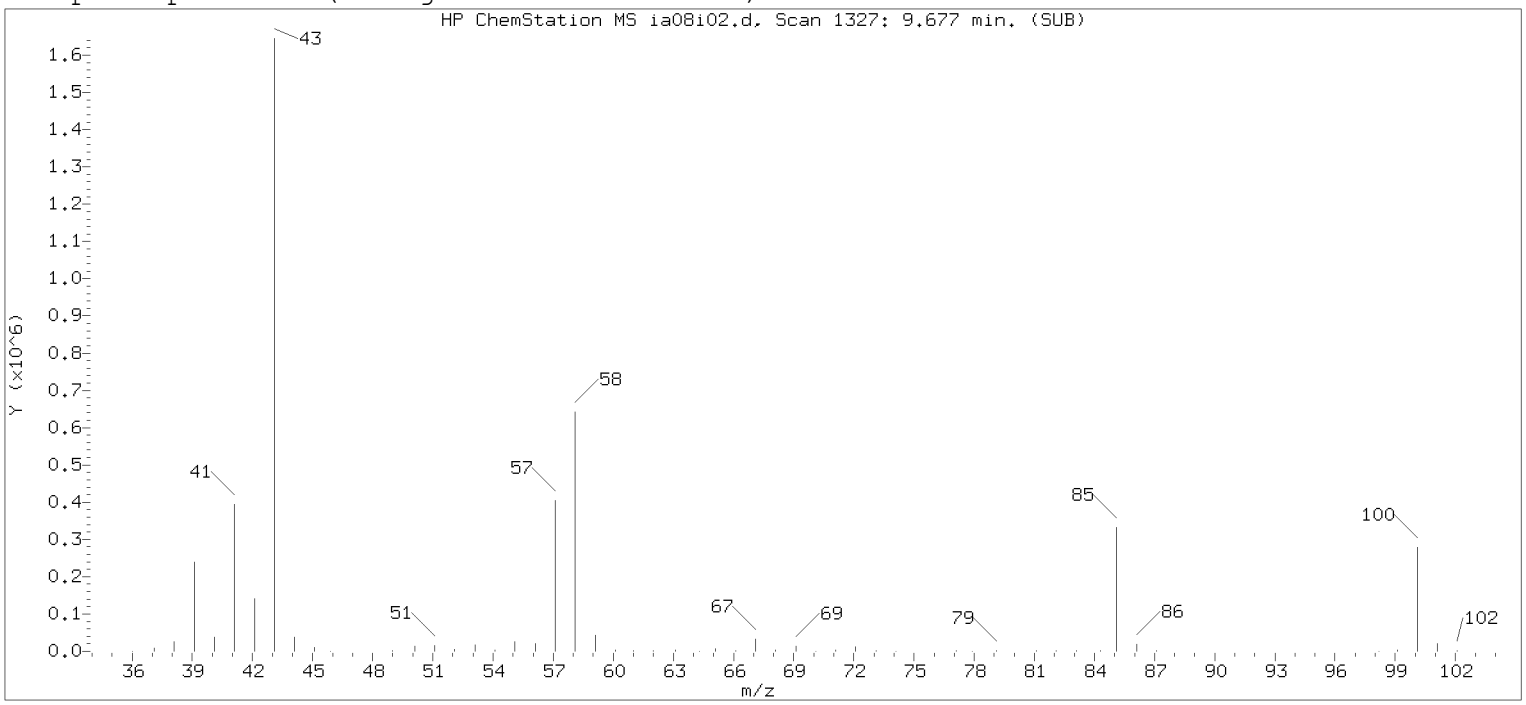
Compound Number : 82
Compound Name : Toluene-d8
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 98.00
Area (flag) : 1808851M
On-Column Amount (ng) : 10.0021
Integration start scan : 1336 Integration stop scan: 1370
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

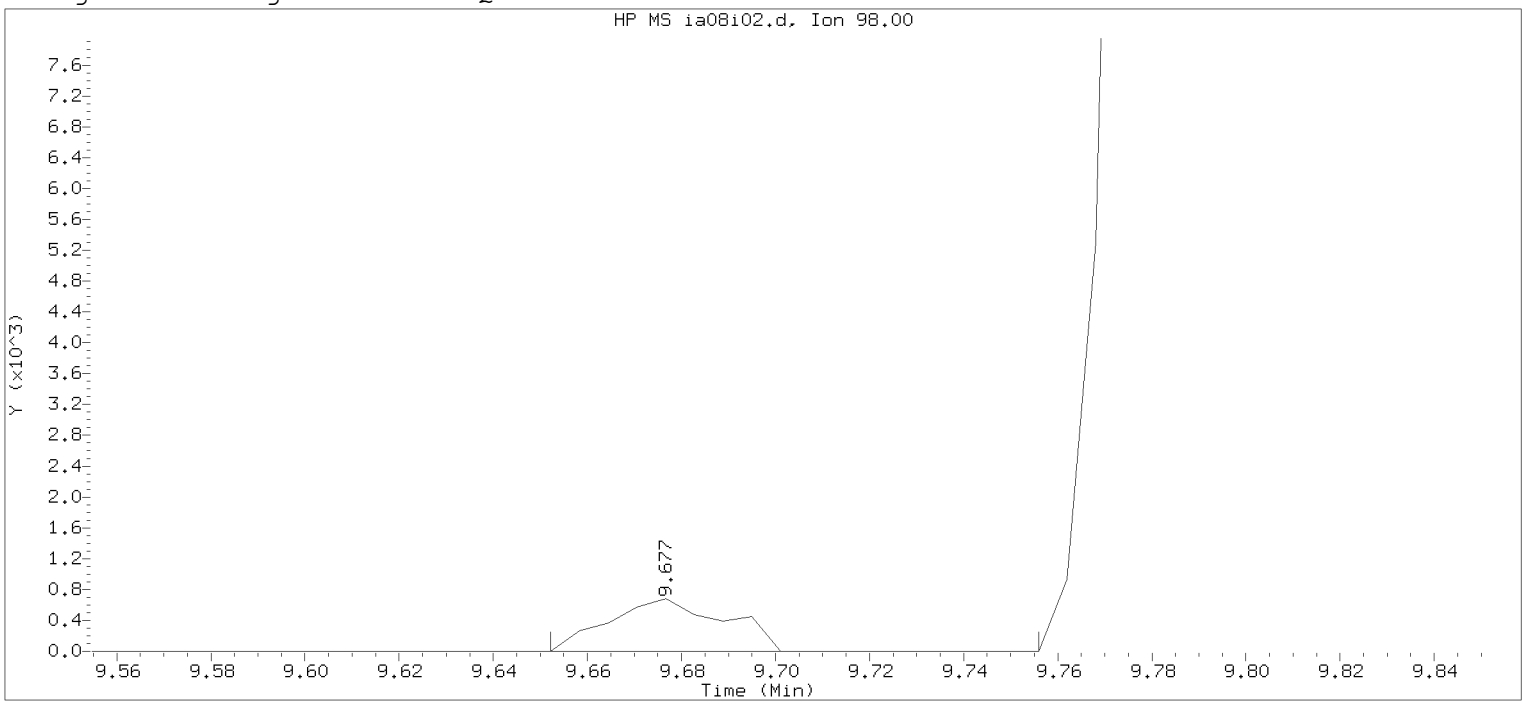
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

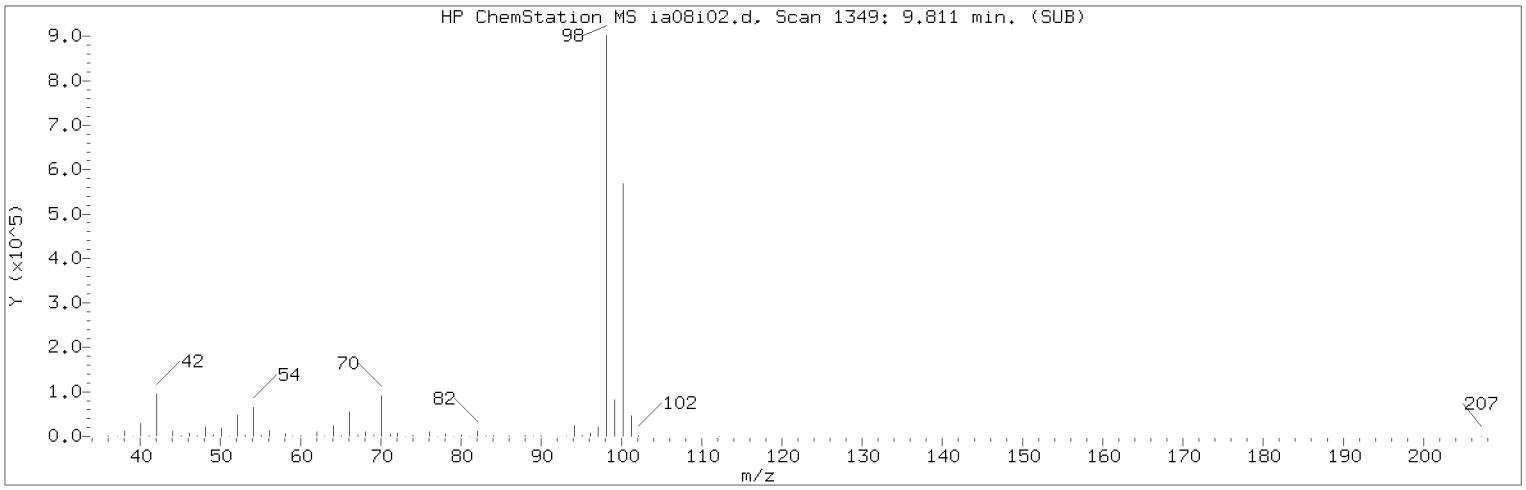
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

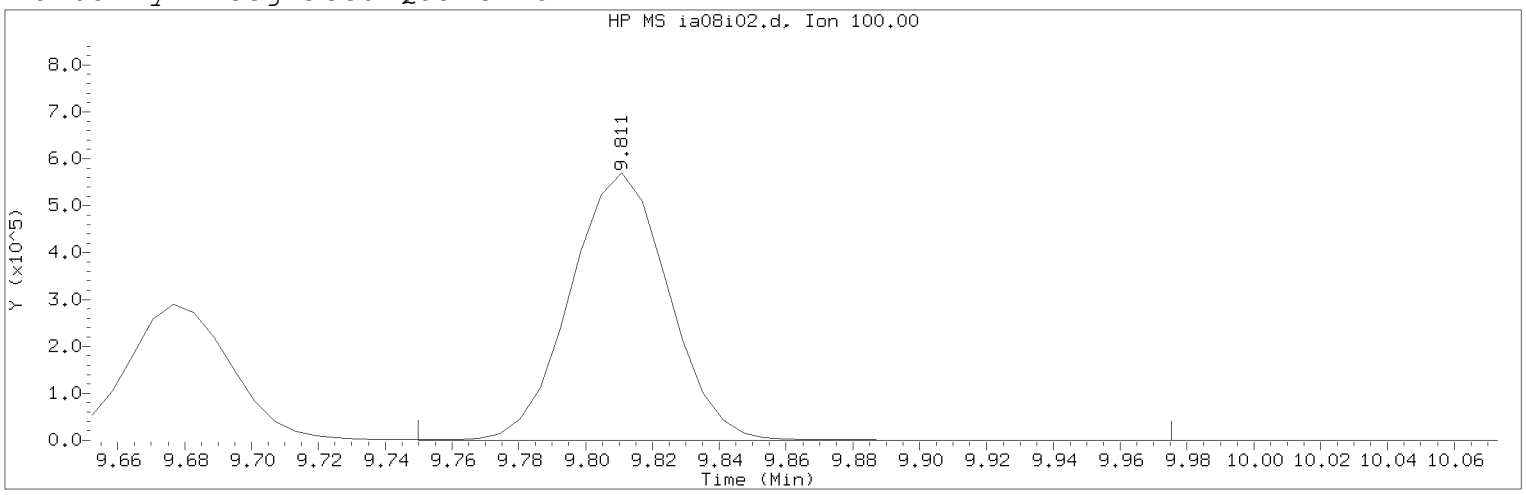
Compound Number : 82
Compound Name : Toluene-d8
Scan Number : 1327
Retention Time (minutes): 9.677
Quant Ion : 98.00
Area : 1173
On-column Amount (ng) : 0.0085
Integration start scan : 1322 Integration stop scan: 1339
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe0256

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

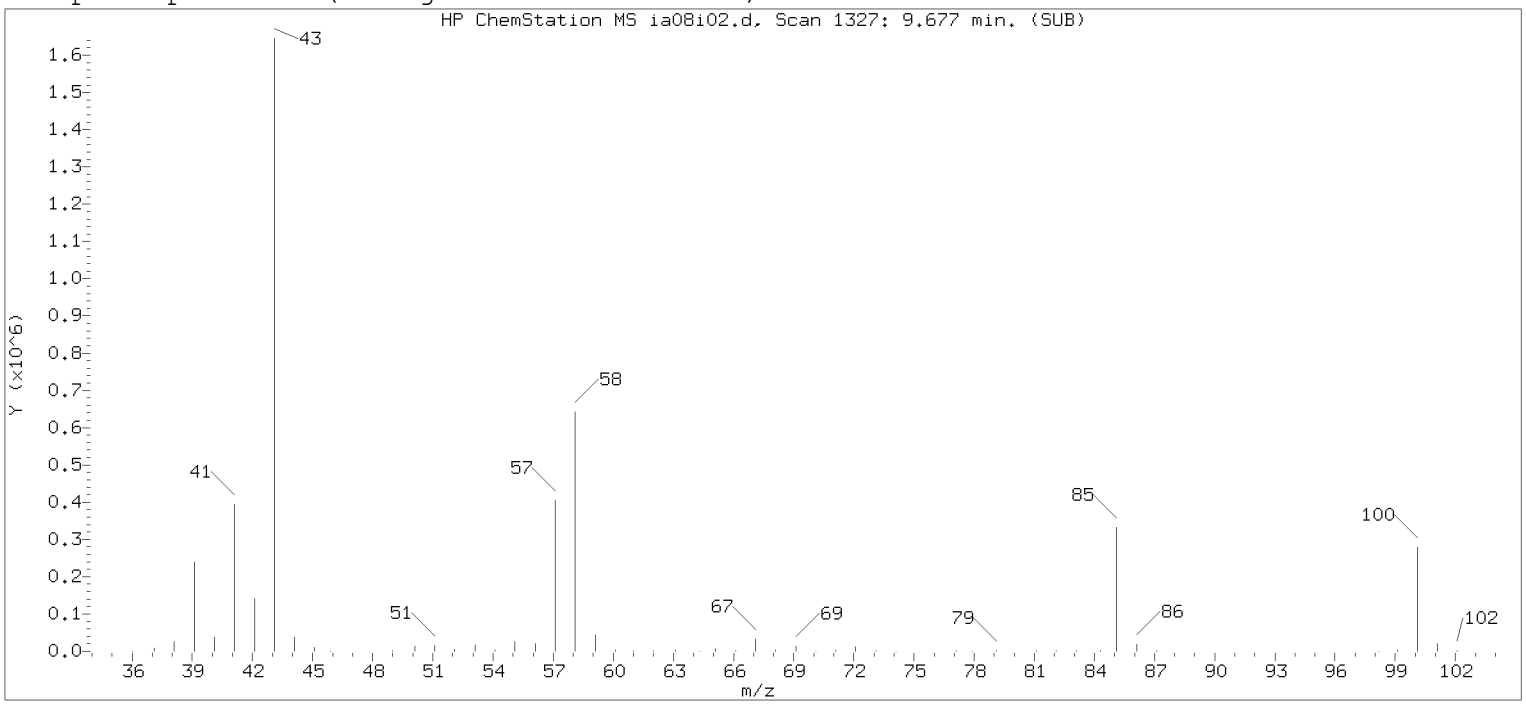
Compound Number : 82
Compound Name : Toluene-d8
Scan Number : 1349
Retention Time (minutes): 9.811
Quant Ion : 100.00
Area (flag) : 1162221M
On-Column Amount (ng) : 10.0206
Integration start scan : 1338 Integration stop scan: 1375
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

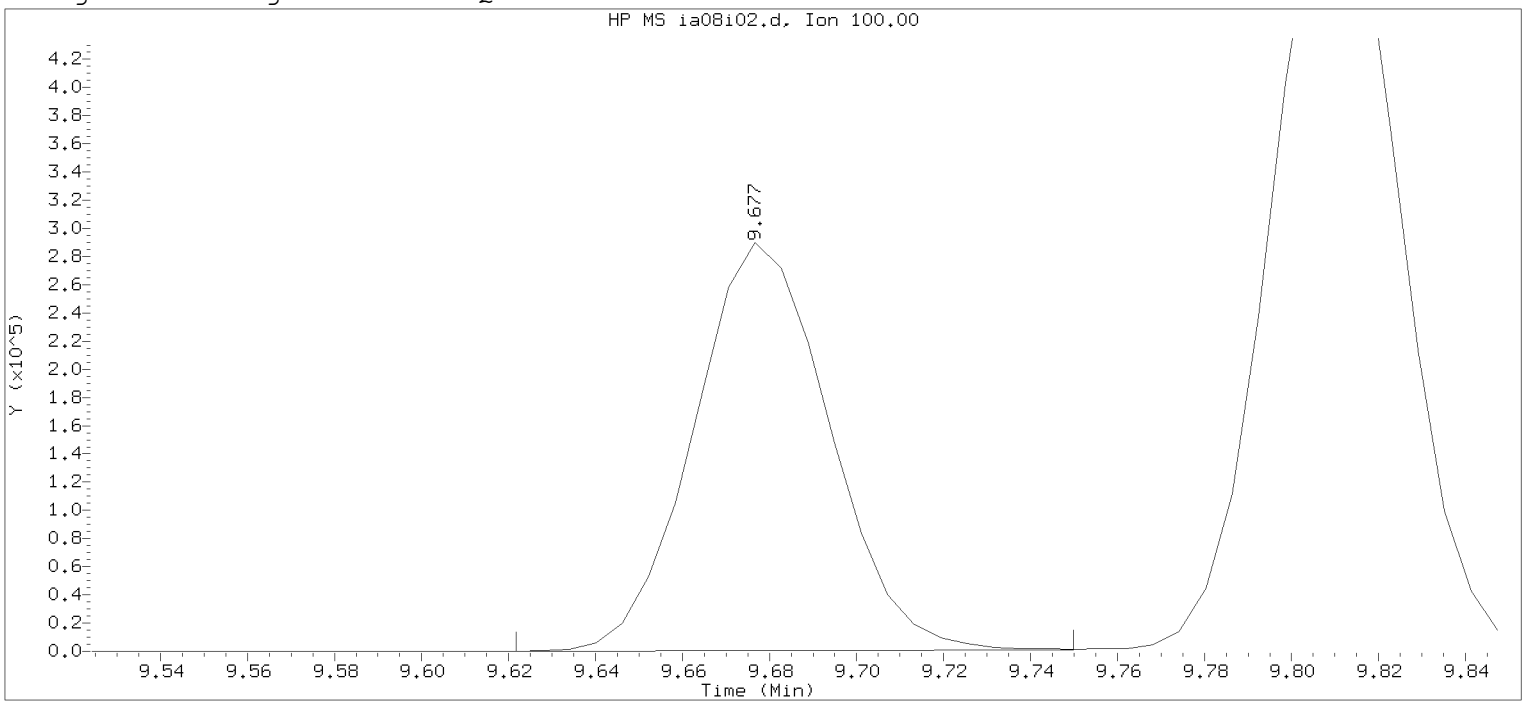
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

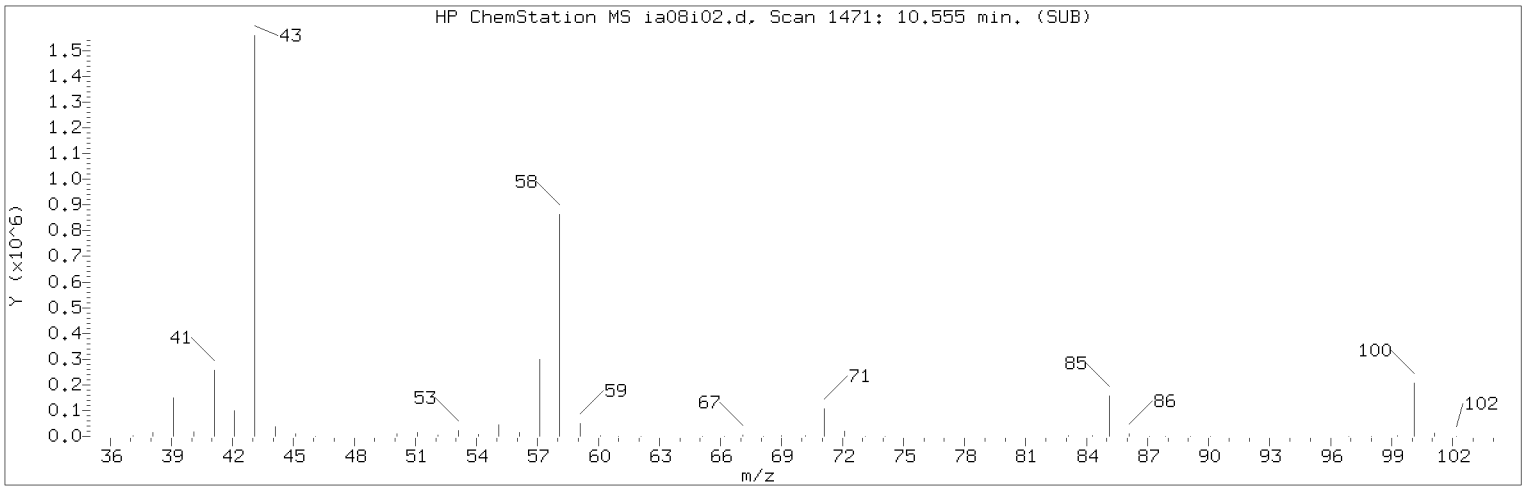
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

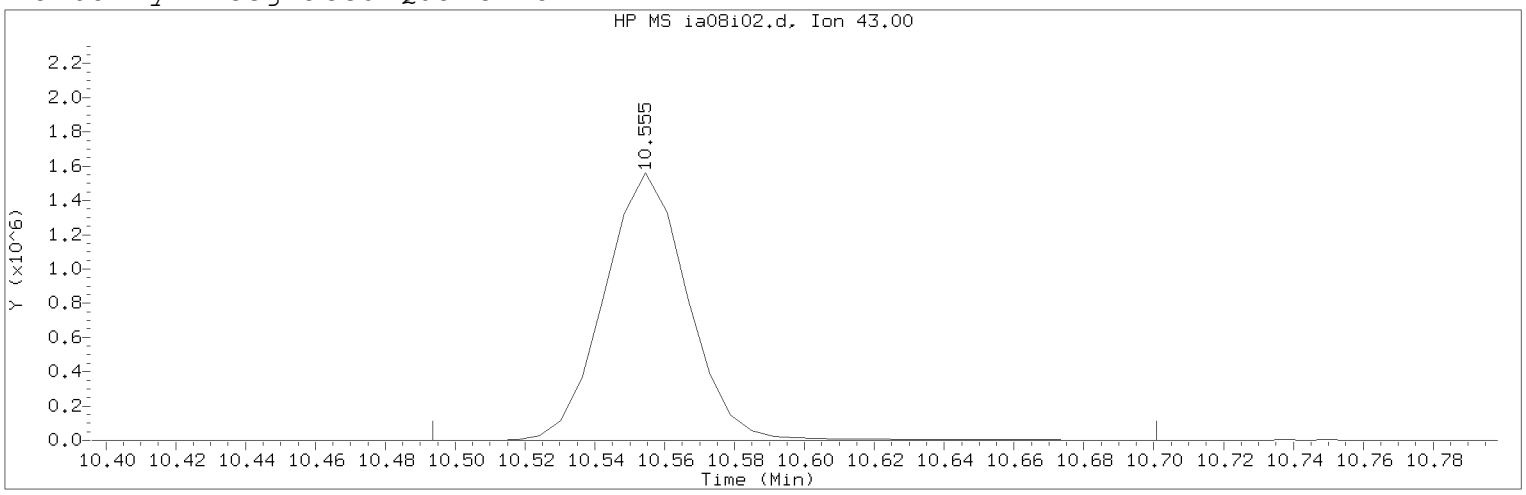
Compound Number : 82
Compound Name : Toluene-d8
Scan Number : 1327
Retention Time (minutes): 9.677
Quant Ion : 100.00
Area : 627041
On-column Amount (ng) : 5.1849
Integration start scan : 1317 Integration stop scan: 1338
Y at integration start : 0 Y at integration end: 699

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe0258

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

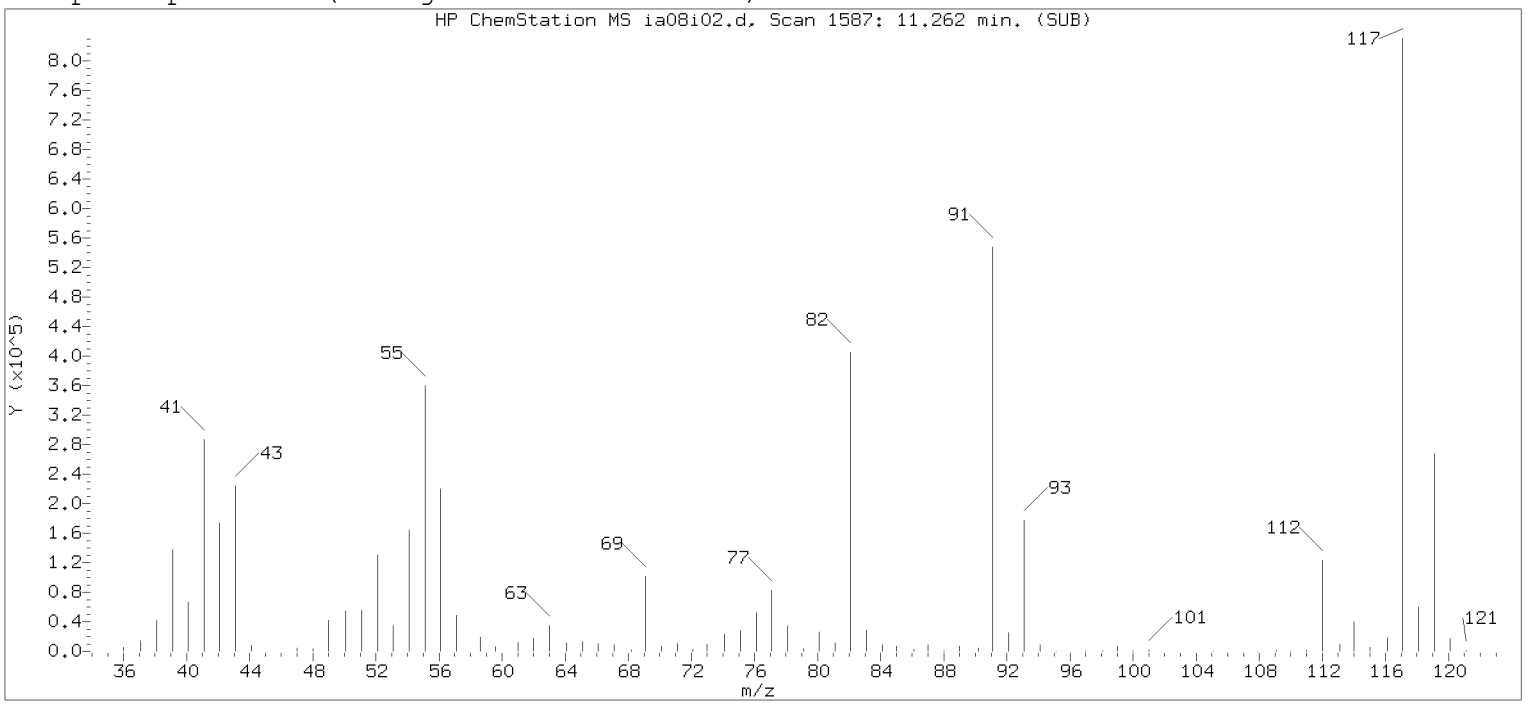
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1471
Retention Time (minutes): 10.555
Quant Ion : 43.00
Area (flag) : 2587116M
On-Column Amount (ng) : 111.9734
Integration start scan : 1460 Integration stop scan: 1494
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

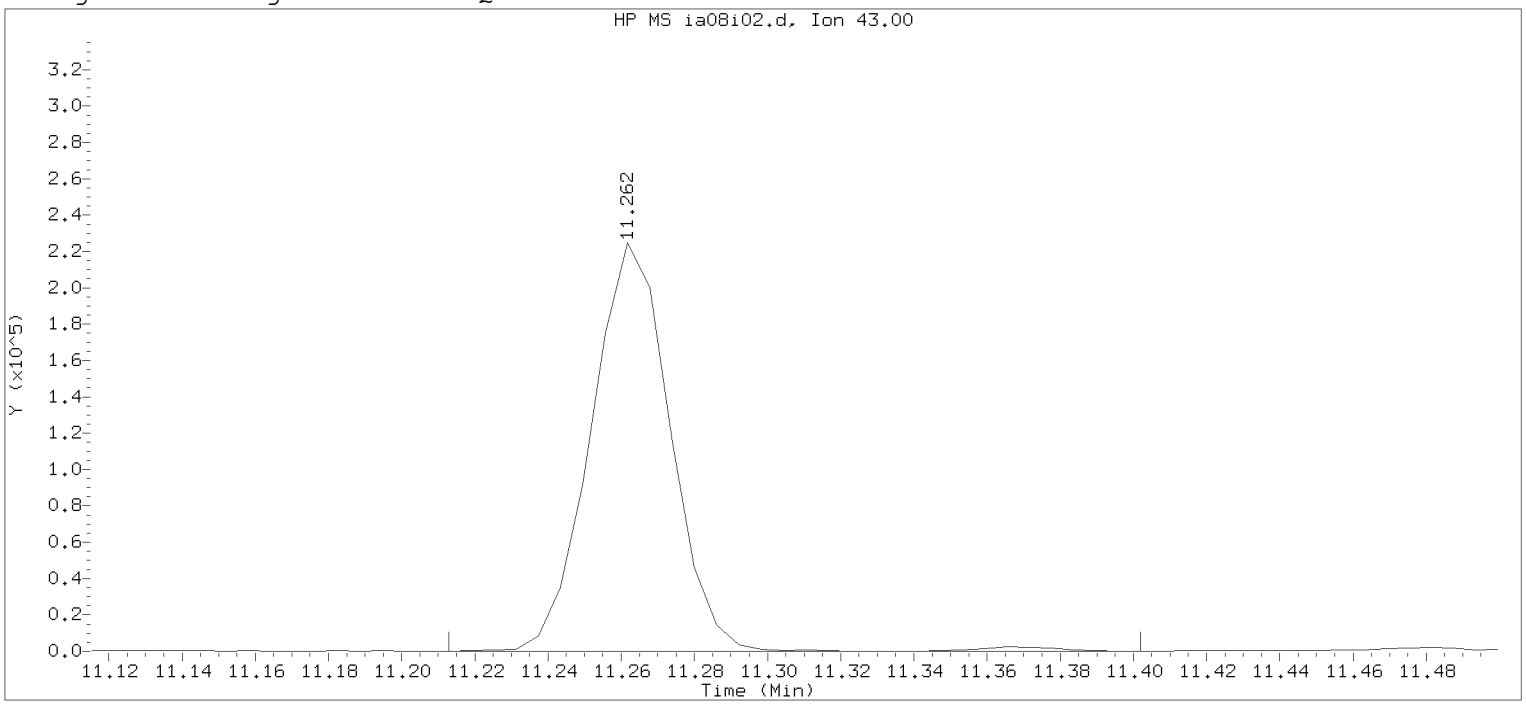
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

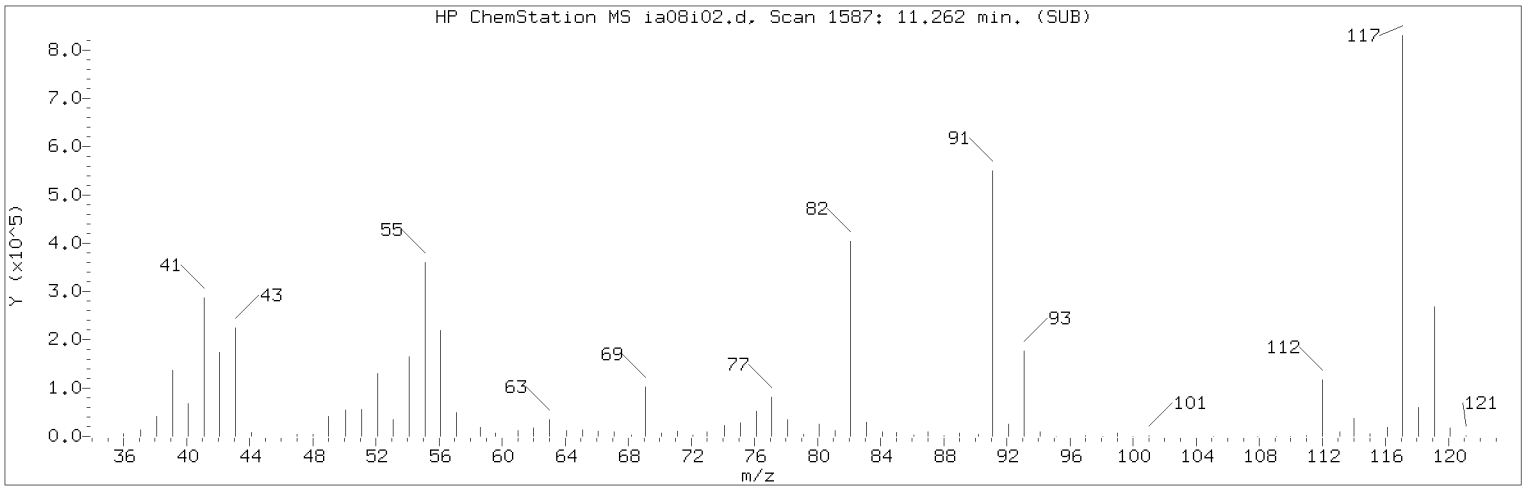
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

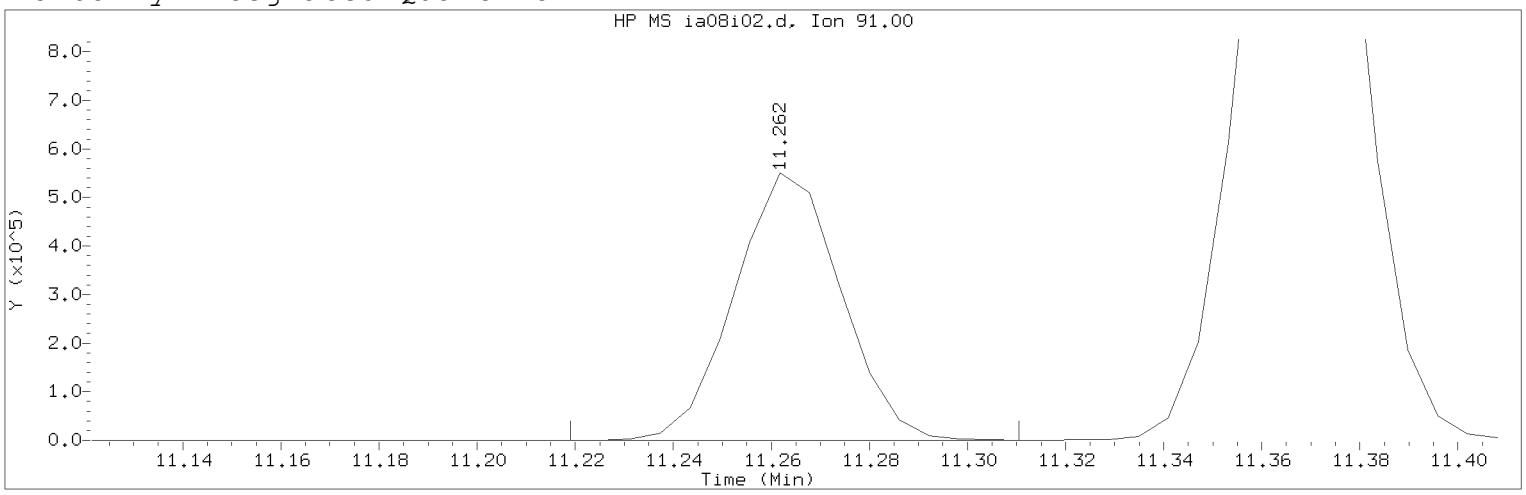
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1587
Retention Time (minutes): 11.262
Quant Ion : 43.00
Area : 339481
On-column Amount (ng) : 24.2510
Integration start scan : 1578 Integration stop scan: 1609
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe0250

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

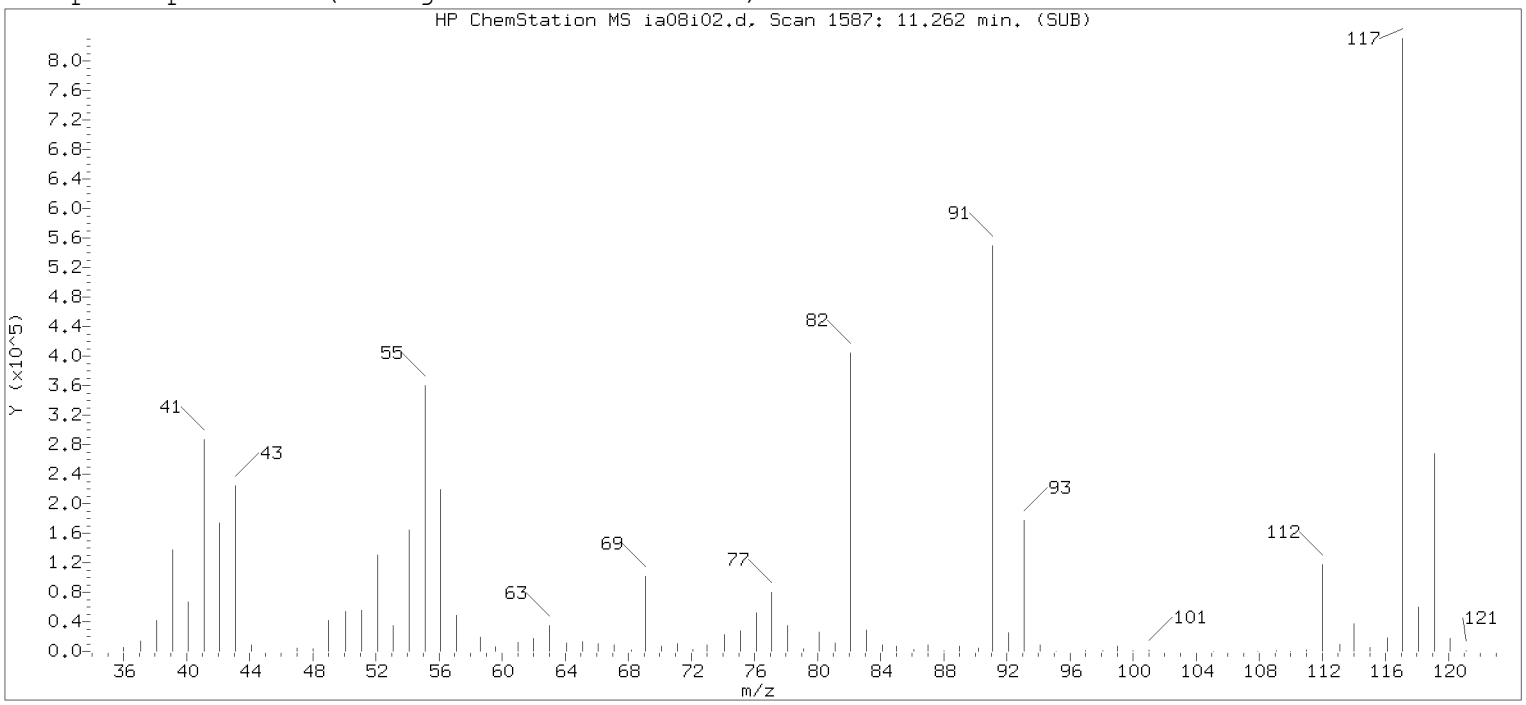
Compound Number : 96
Compound Name : 1-Chlorohexane
Scan Number : 1587
Retention Time (minutes): 11.262
Quant Ion : 91.00
Area (flag) : 831202M
On-Column Amount (ng) : 10.1533
Integration start scan : 1579 Integration stop scan: 1594
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

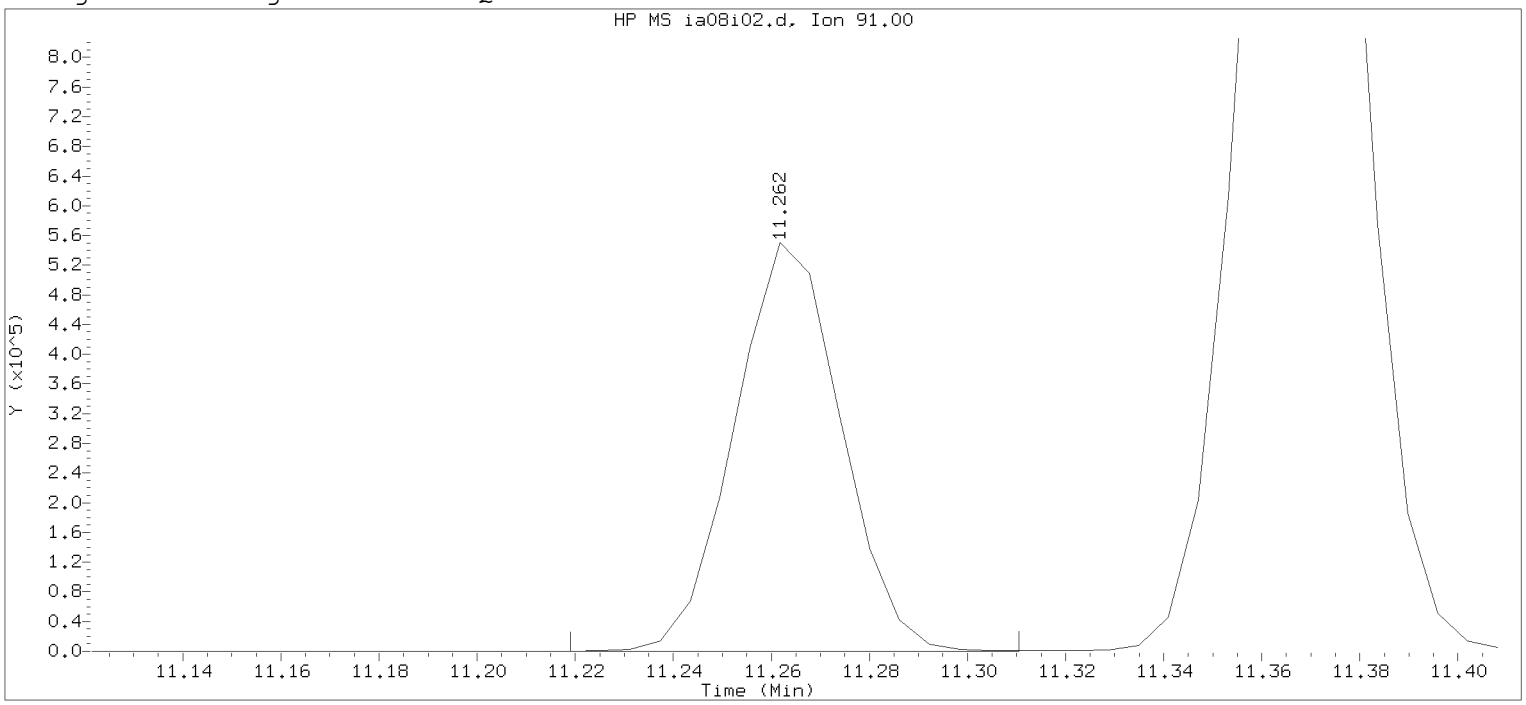
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

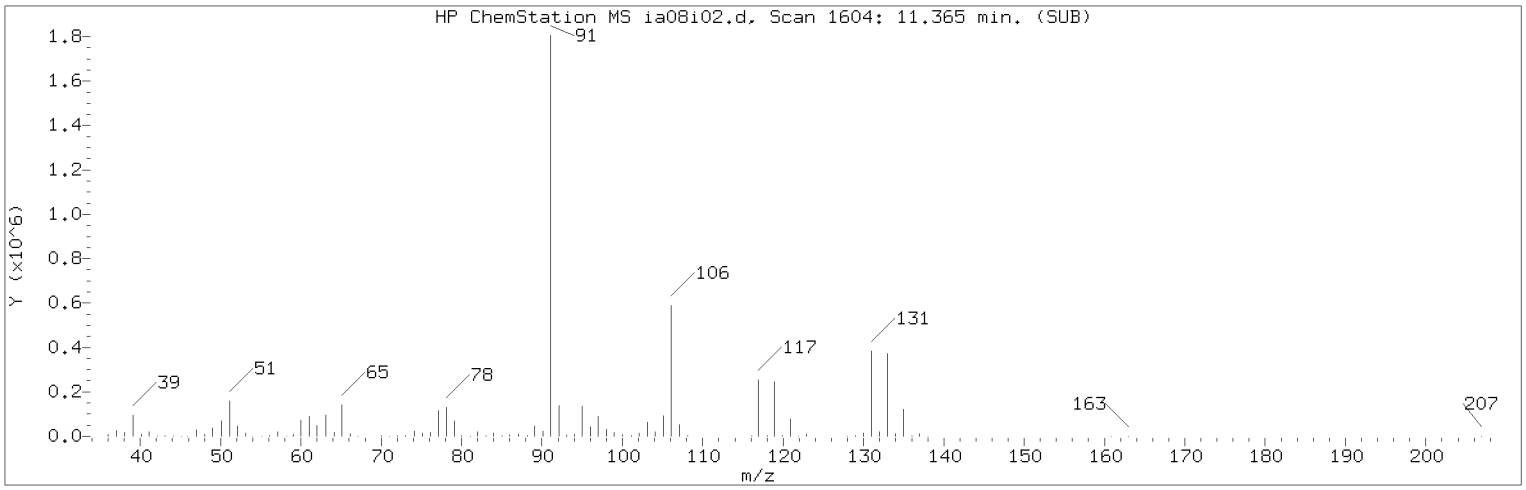
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

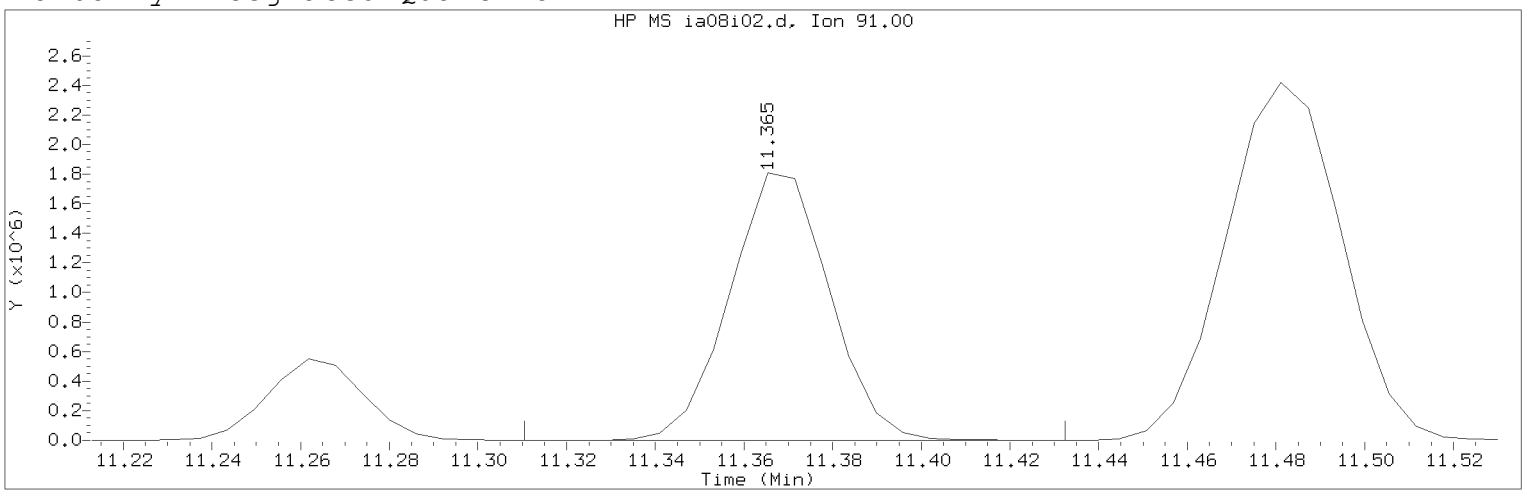
Compound Number : 96
Compound Name : 1-Chlorohexane
Scan Number : 1587
Retention Time (minutes): 11.262
Quant Ion : 91.00
Area : 830094
On-column Amount (ng) : 10.2666
Integration start scan : 1579 Integration stop scan: 1594
Y at integration start : 0 Y at integration end: 368

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

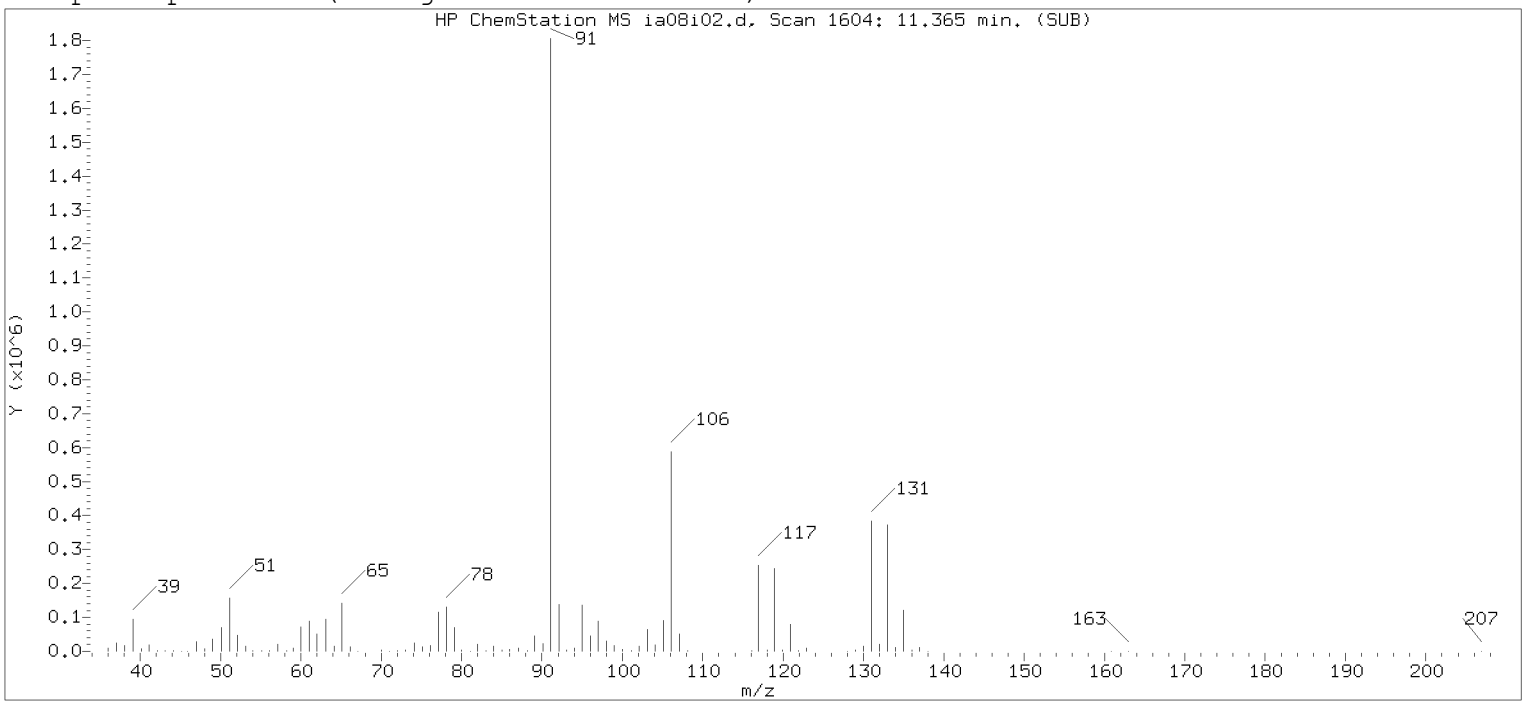
Compound Number : 100
Compound Name : Ethylbenzene
Scan Number : 1604
Retention Time (minutes): 11.365
Quant Ion : 91.00
Area (flag) : 2835582M
On-Column Amount (ng) : 10.3845
Integration start scan : 1594 Integration stop scan: 1614
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

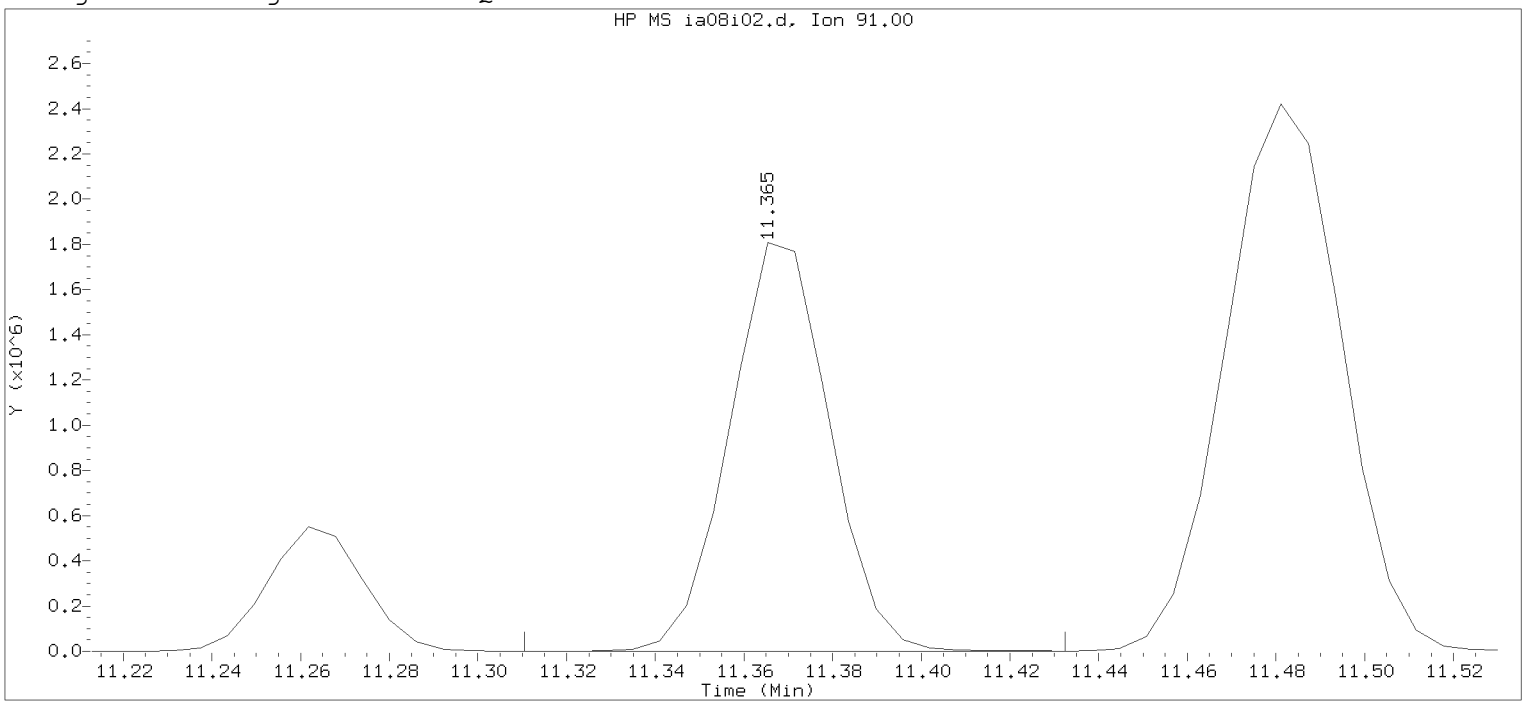
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

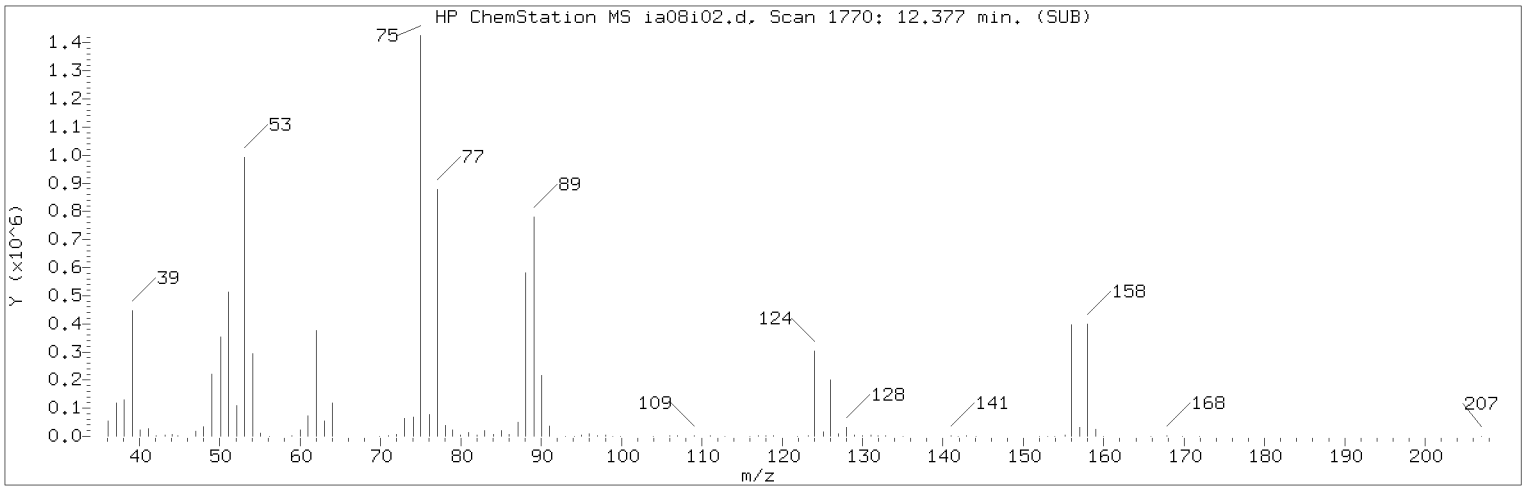
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

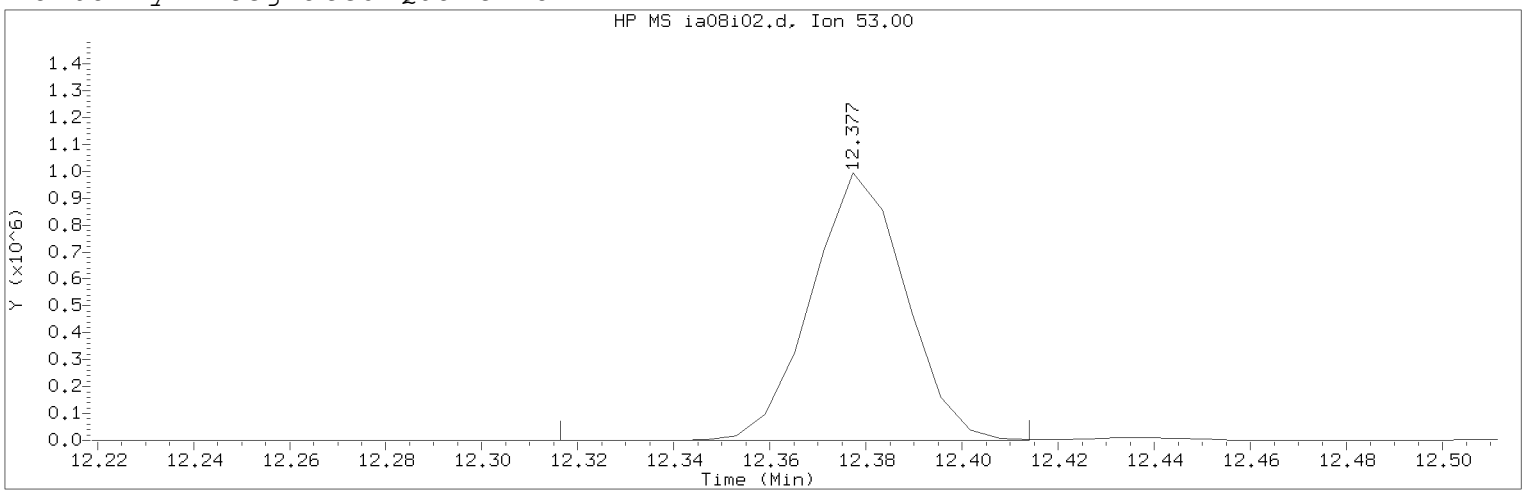
Compound Number : 100
Compound Name : Ethylbenzene
Scan Number : 1604
Retention Time (minutes): 11.365
Quant Ion : 91.00
Area : 2831157
On-column Amount (ng) : 10.0819
Integration start scan : 1594 Integration stop scan: 1614
Y at integration start : 368 Y at integration end: 736

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Target 3.5 esignature user ID: jhowe264

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

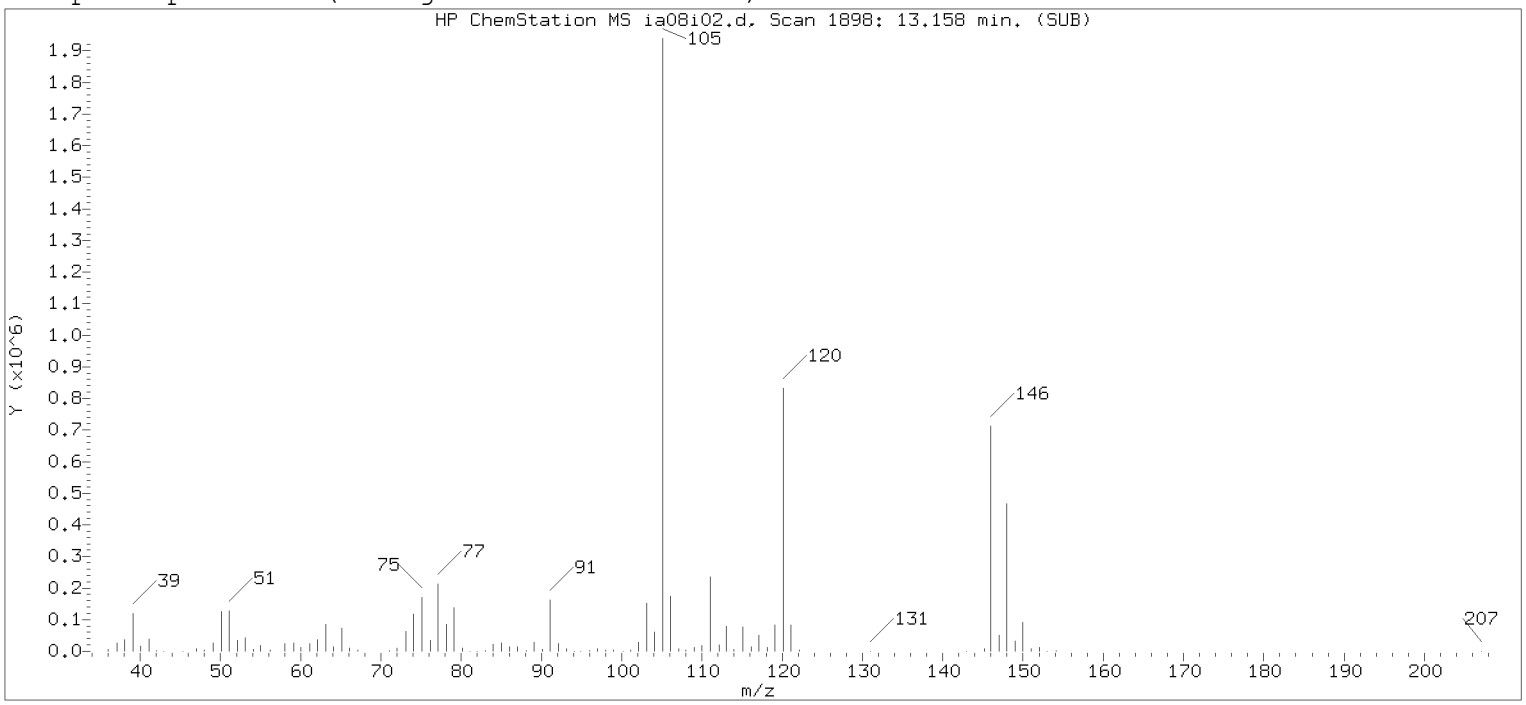
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1770
Retention Time (minutes): 12.377
Quant Ion : 53.00
Area (flag) : 1348519M
On-Column Amount (ng) : 118.0105
Integration start scan : 1759 Integration stop scan: 1775
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

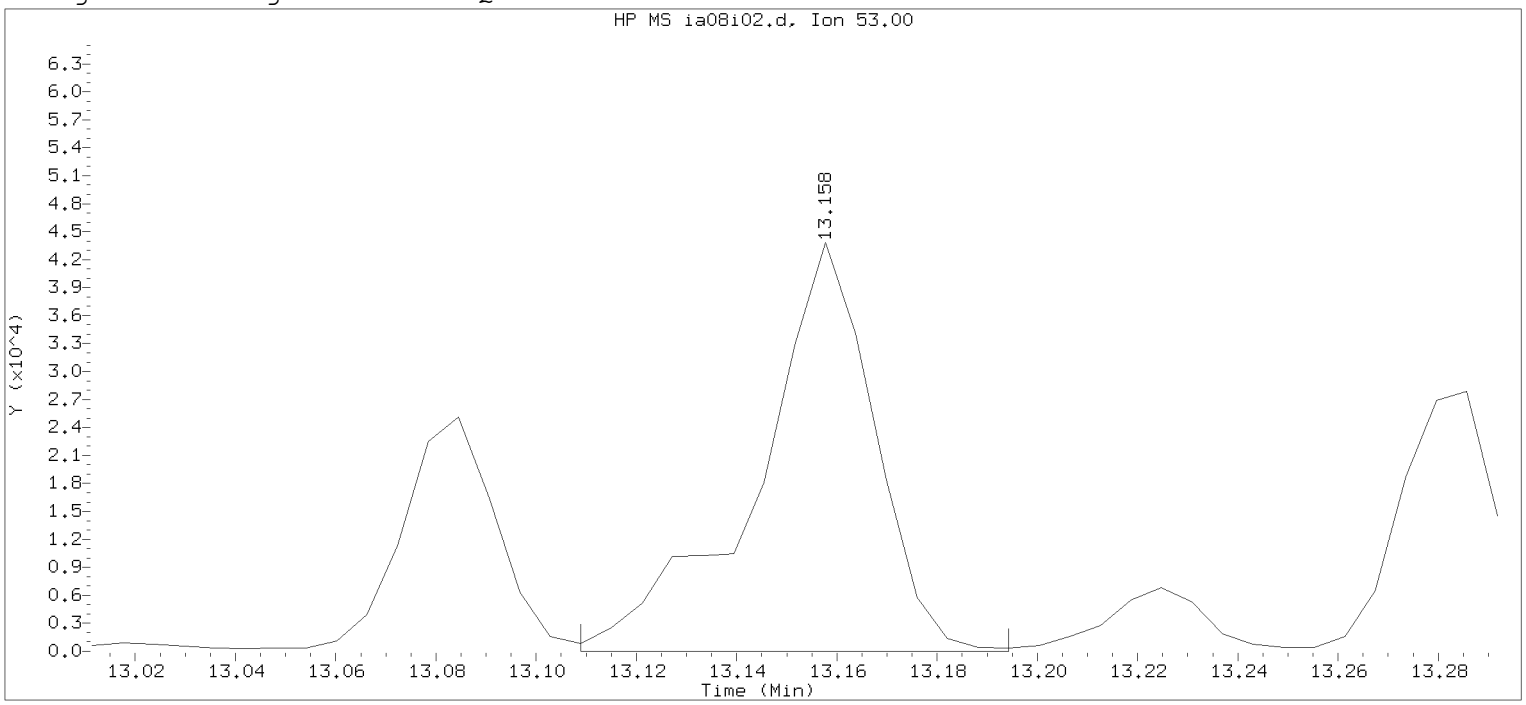
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

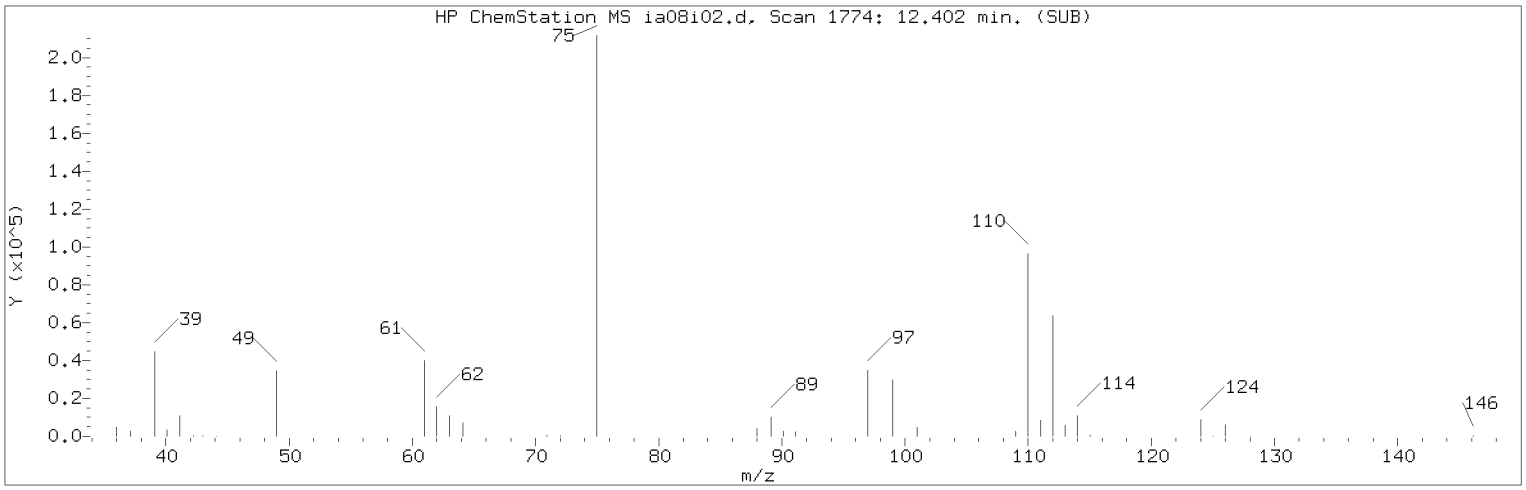
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

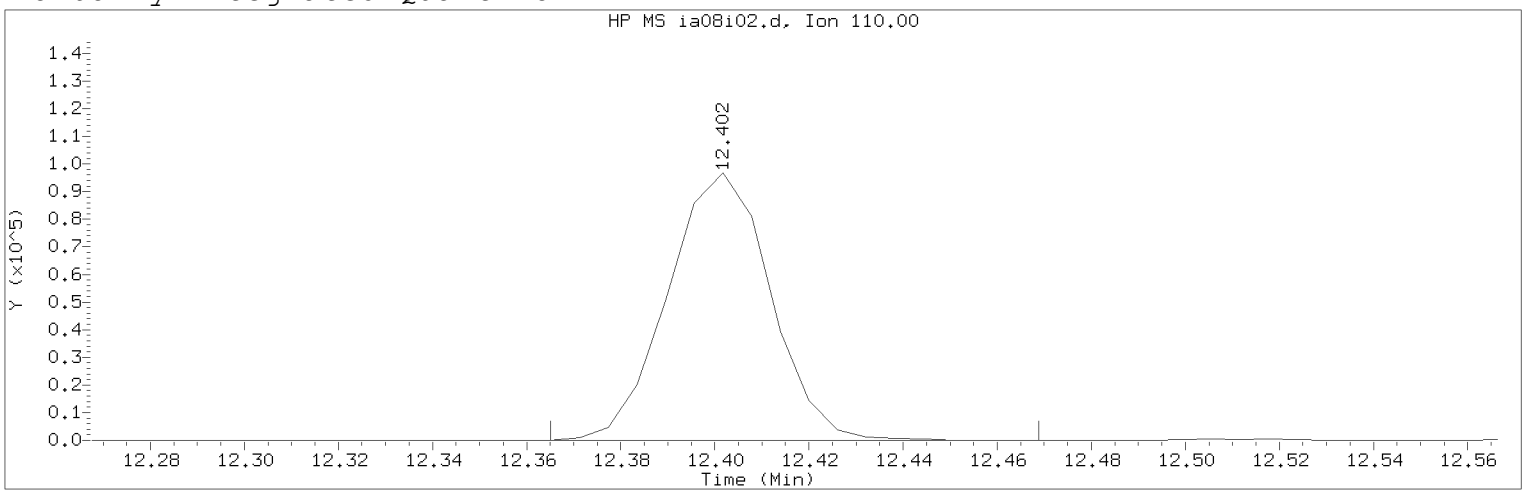
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1898
Retention Time (minutes): 13.158
Quant Ion : 53.00
Area : 70960
On-column Amount (ng) : 2.4690
Integration start scan : 1889 Integration stop scan: 1903
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

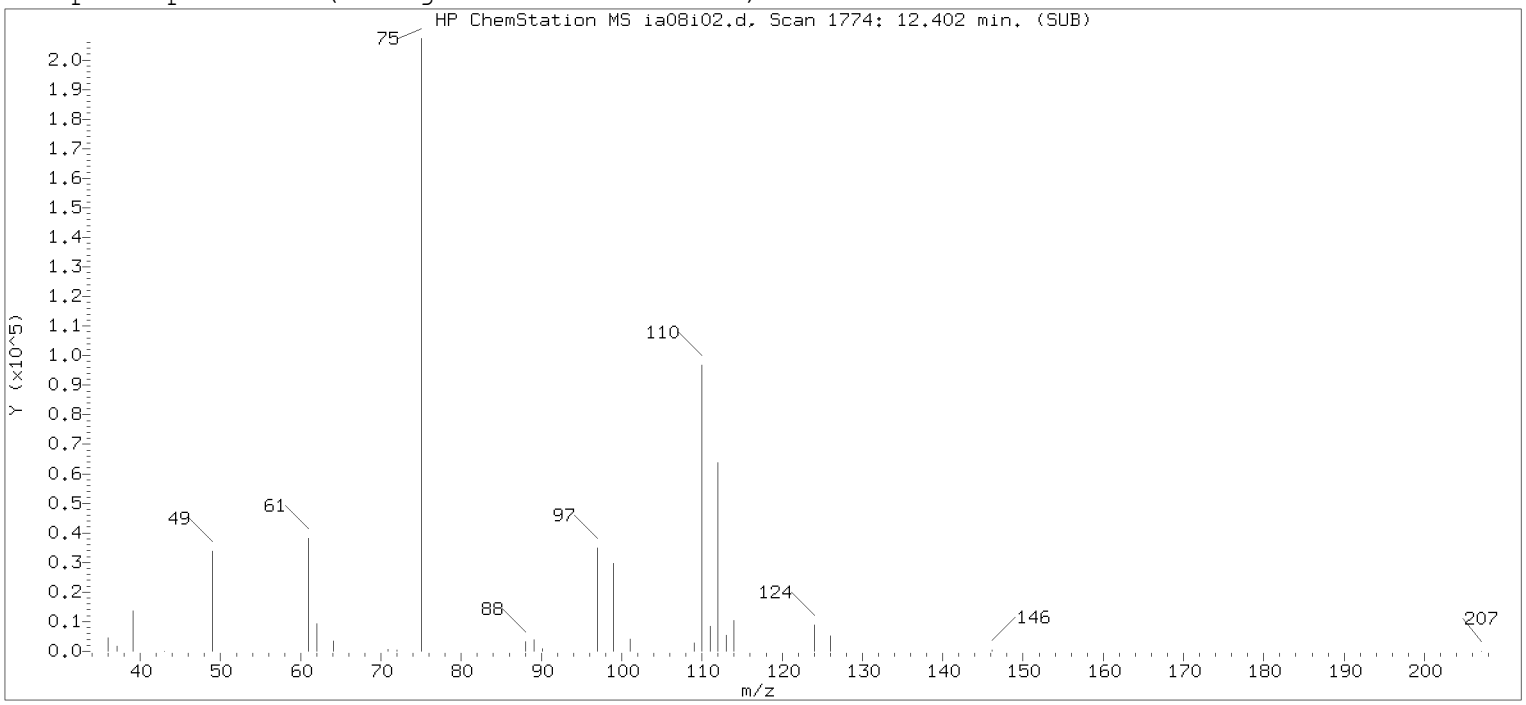
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1774
Retention Time (minutes): 12.402
Quant Ion : 110.00
Area (flag) : 146354M
On-Column Amount (ng) : 10.4723
Integration start scan : 1767 Integration stop scan: 1784
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

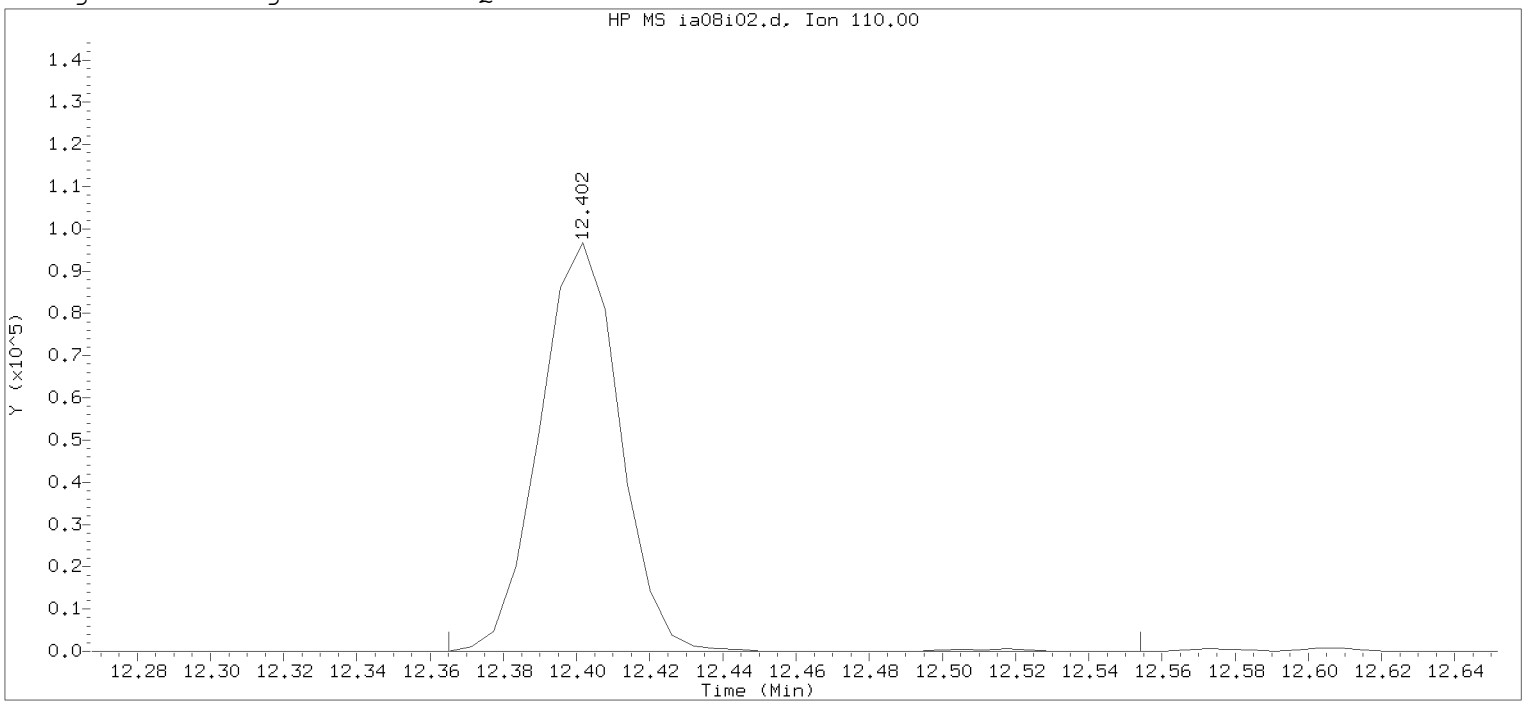
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

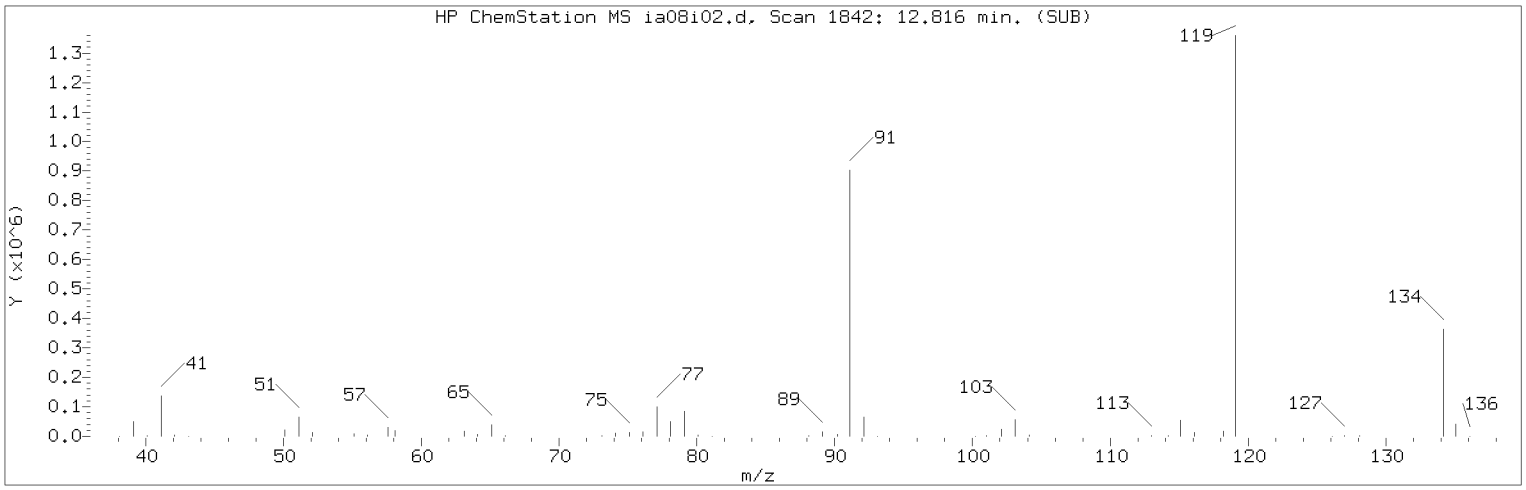
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

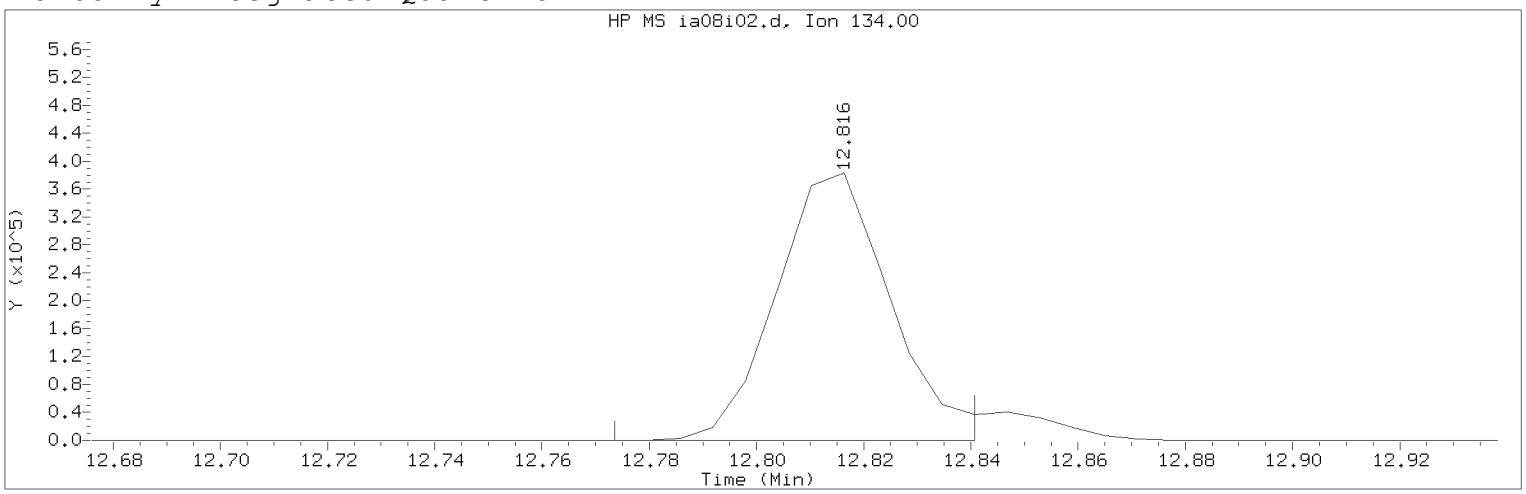
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1774
Retention Time (minutes): 12.402
Quant Ion : 110.00
Area : 147084
On-column Amount (ng) : 0.0476
Integration start scan : 1767 Integration stop scan: 1798
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

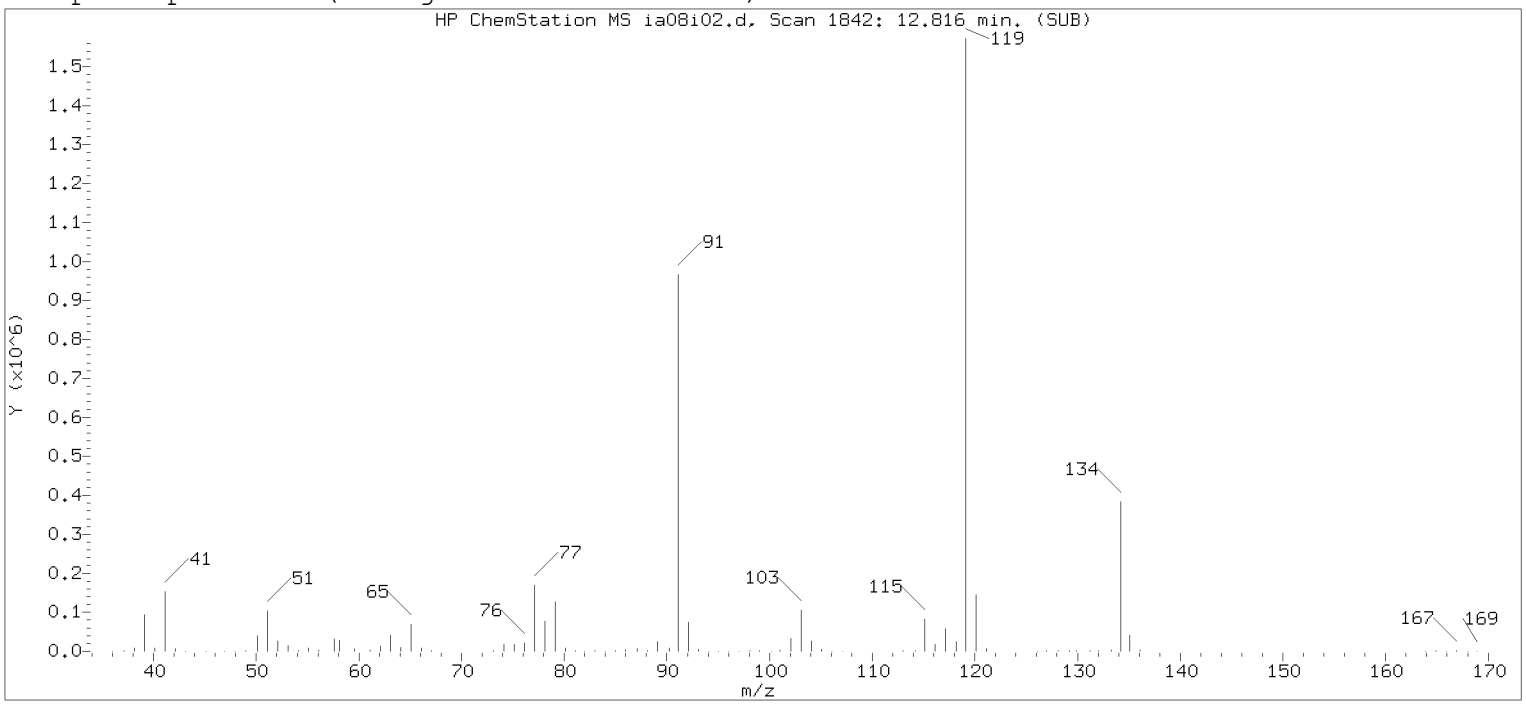
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 565781M
On-Column Amount (ng) : 10.4856
Integration start scan : 1834 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

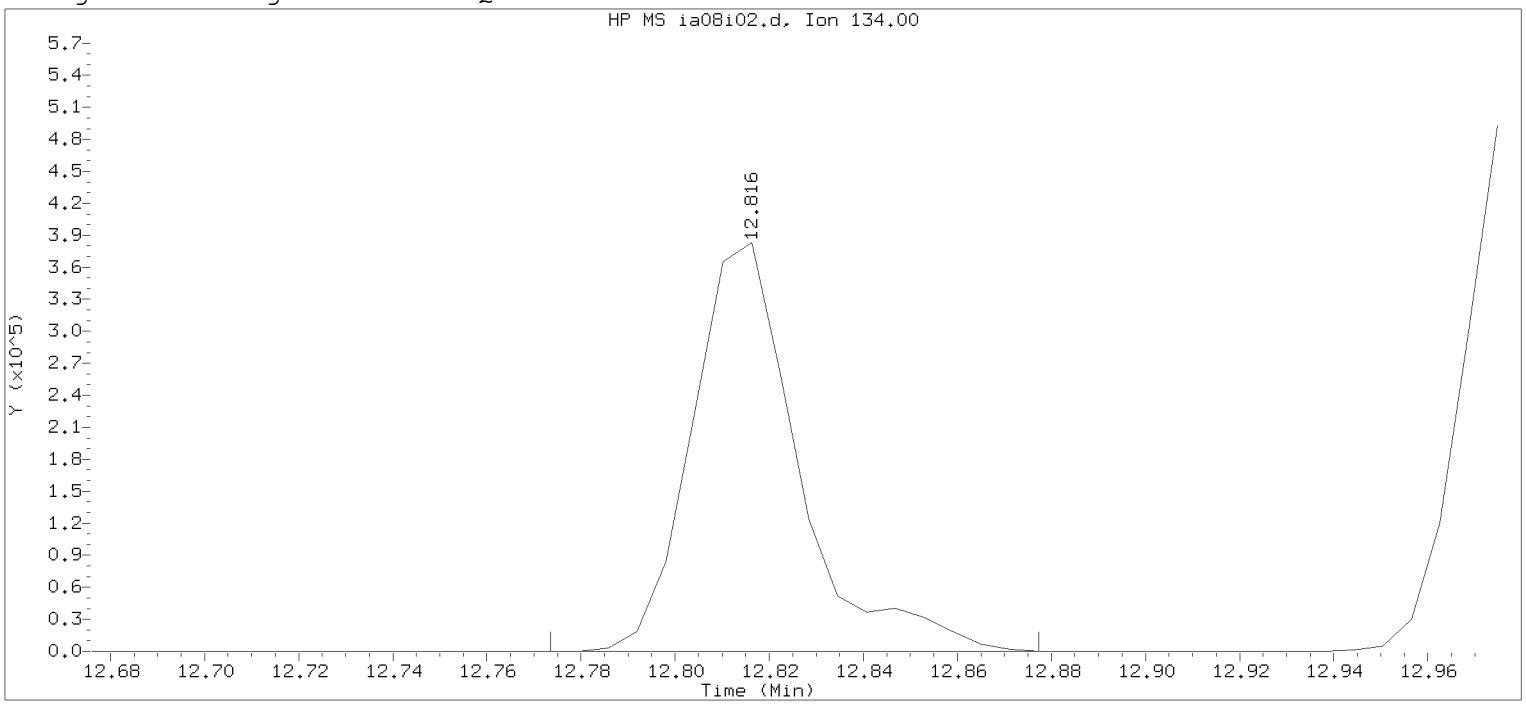
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

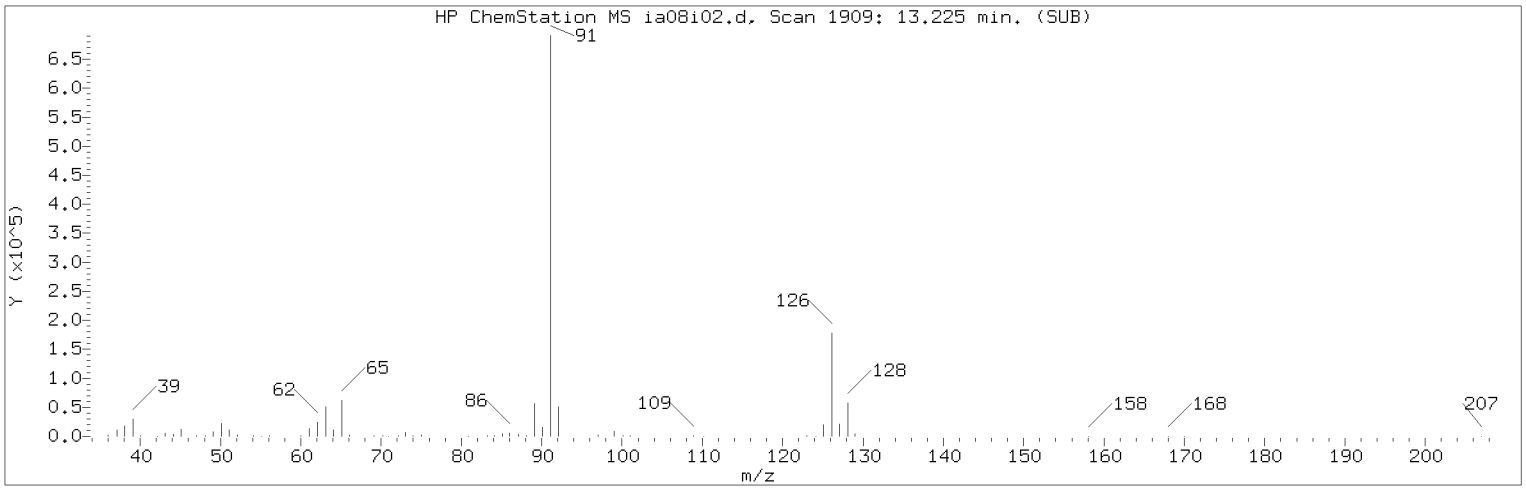
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

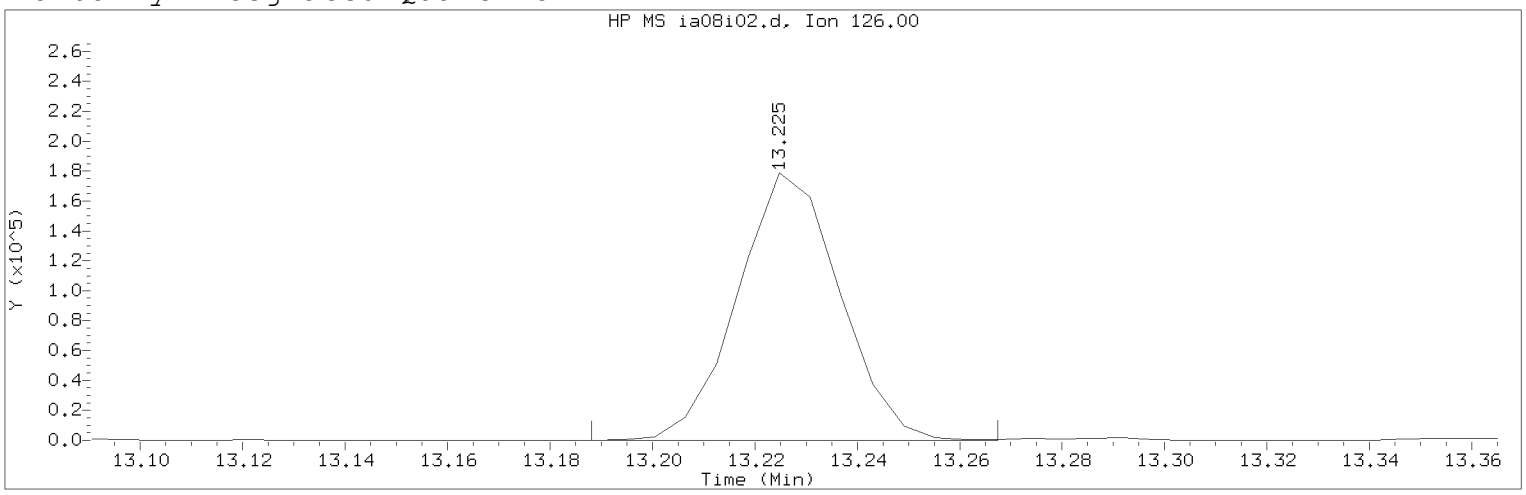
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 602038
On-column Amount (ng) : 0.0457
Integration start scan : 1834 Integration stop scan: 1851
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

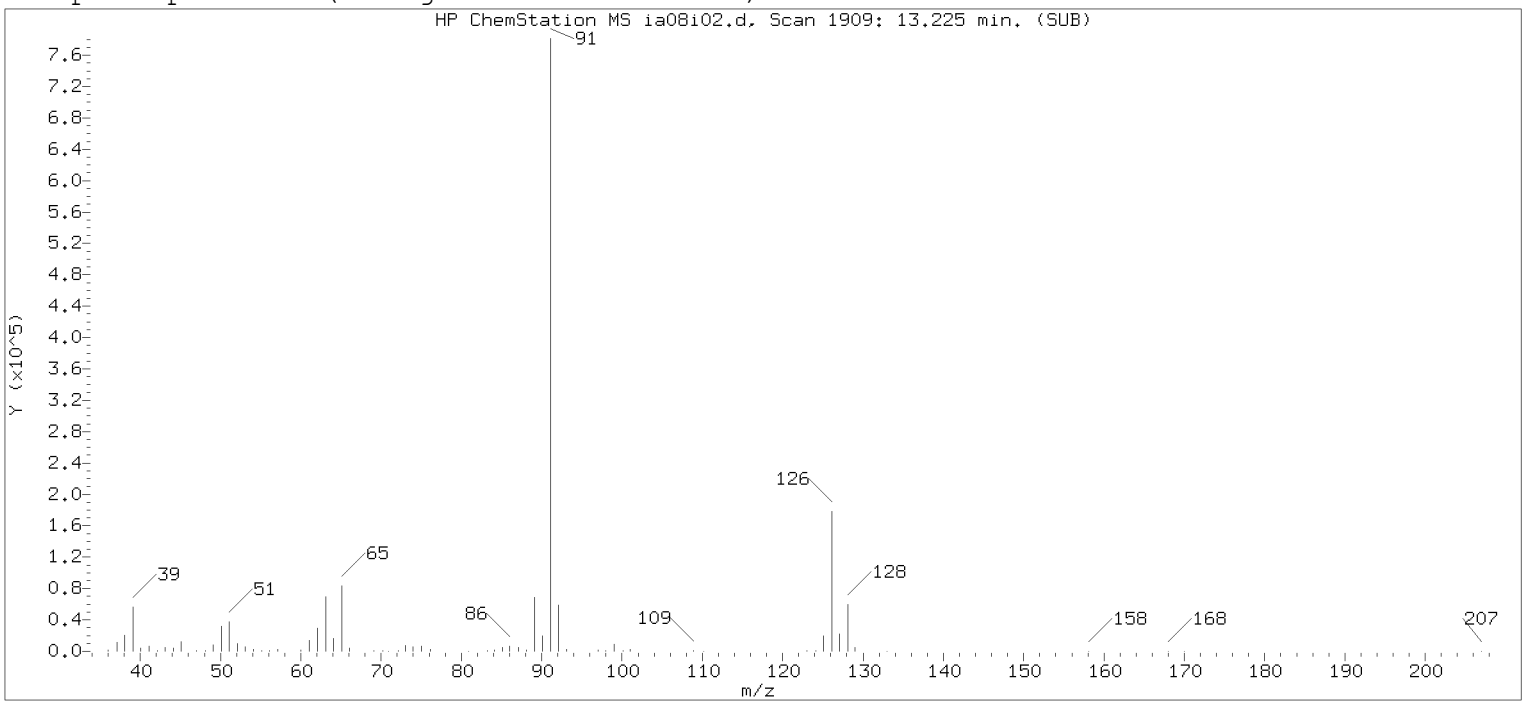
Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1909
Retention Time (minutes): 13.225
Quant Ion : 126.00
Area (flag) : 247776M
On-Column Amount (ng) : 11.1660
Integration start scan : 1902 Integration stop scan: 1915
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

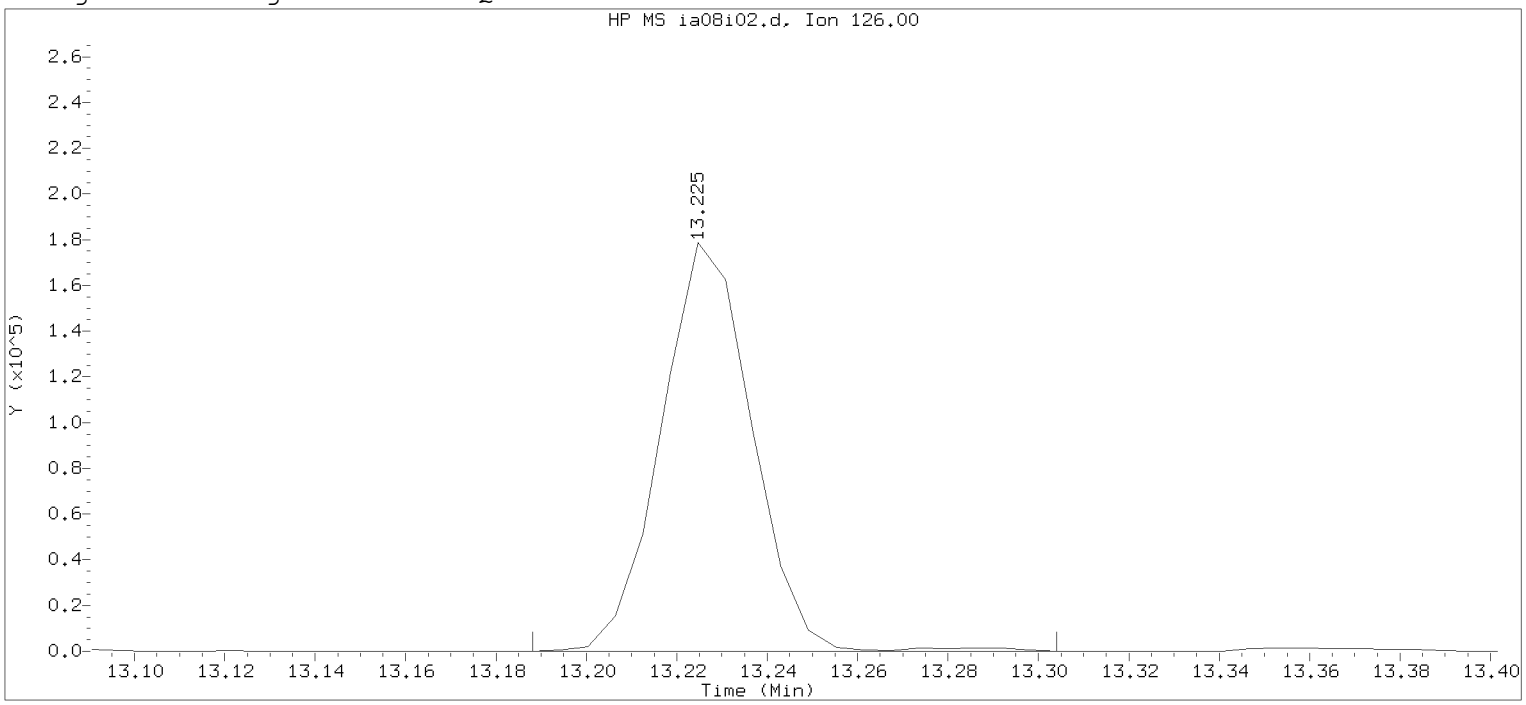
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

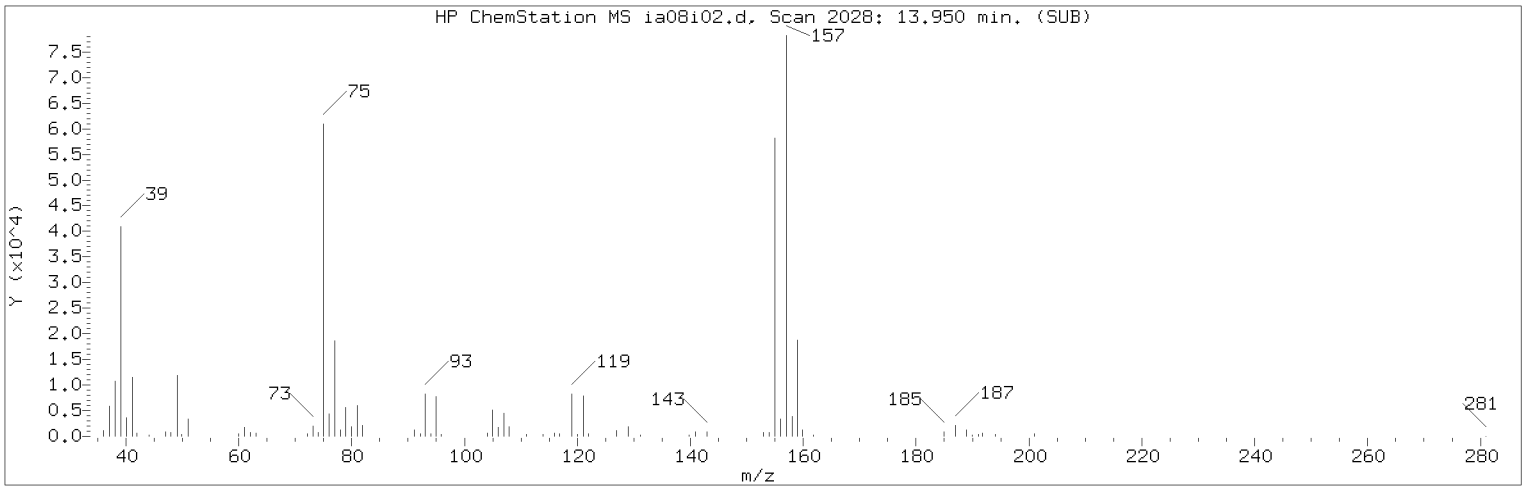
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

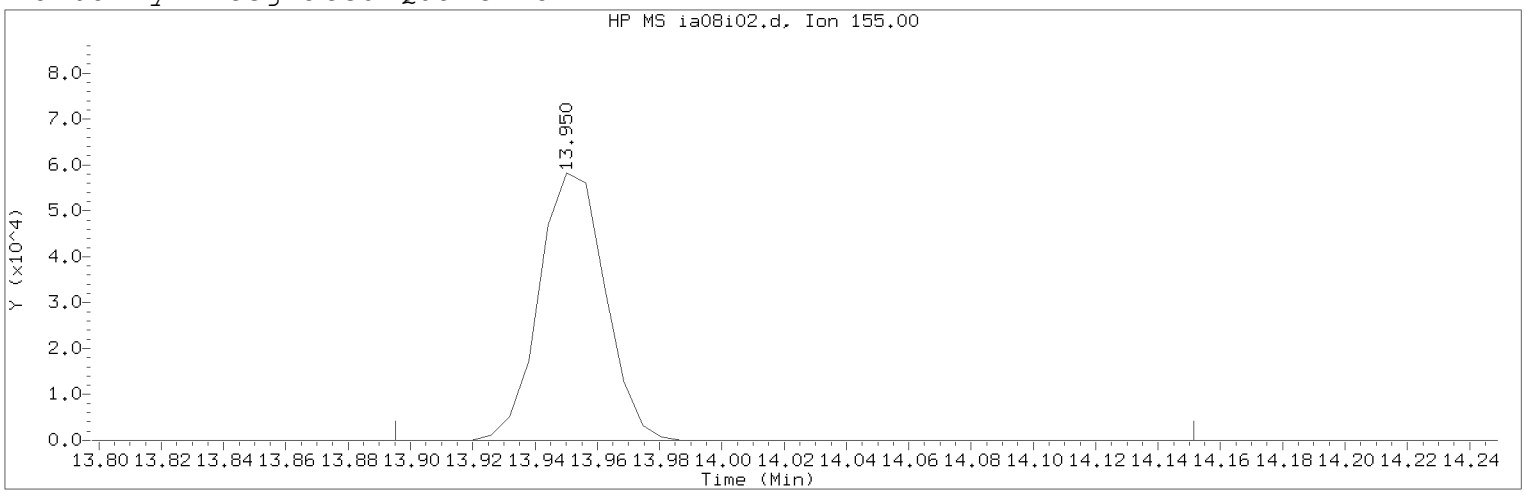
Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1909
Retention Time (minutes): 13.225
Quant Ion : 126.00
Area : 249938
On-column Amount (ng) : 0.0399
Integration start scan : 1902 Integration stop scan: 1921
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkhowe

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 10:07
Date, time and analyst ID of latest file update: 11-Apr-2019 10:07 jkh09052

Sample Name: VSTD010 Lab Sample ID: VSTD010

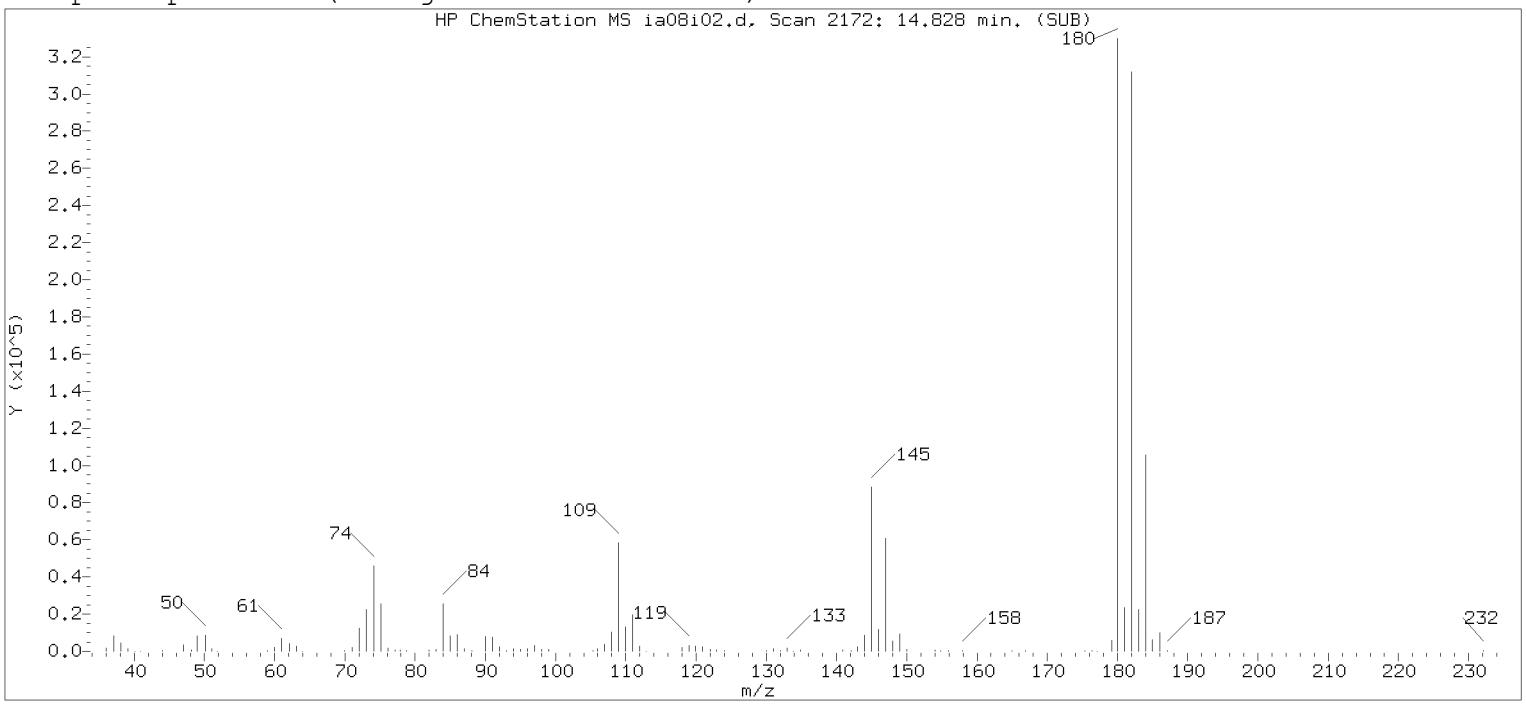
Compound Number : 143
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 2028
Retention Time (minutes): 13.950
Quant Ion : 155.00
Area (flag) : 85736M
On-Column Amount (ng) : 11.5734
Integration start scan : 2018 Integration stop scan: 2060
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

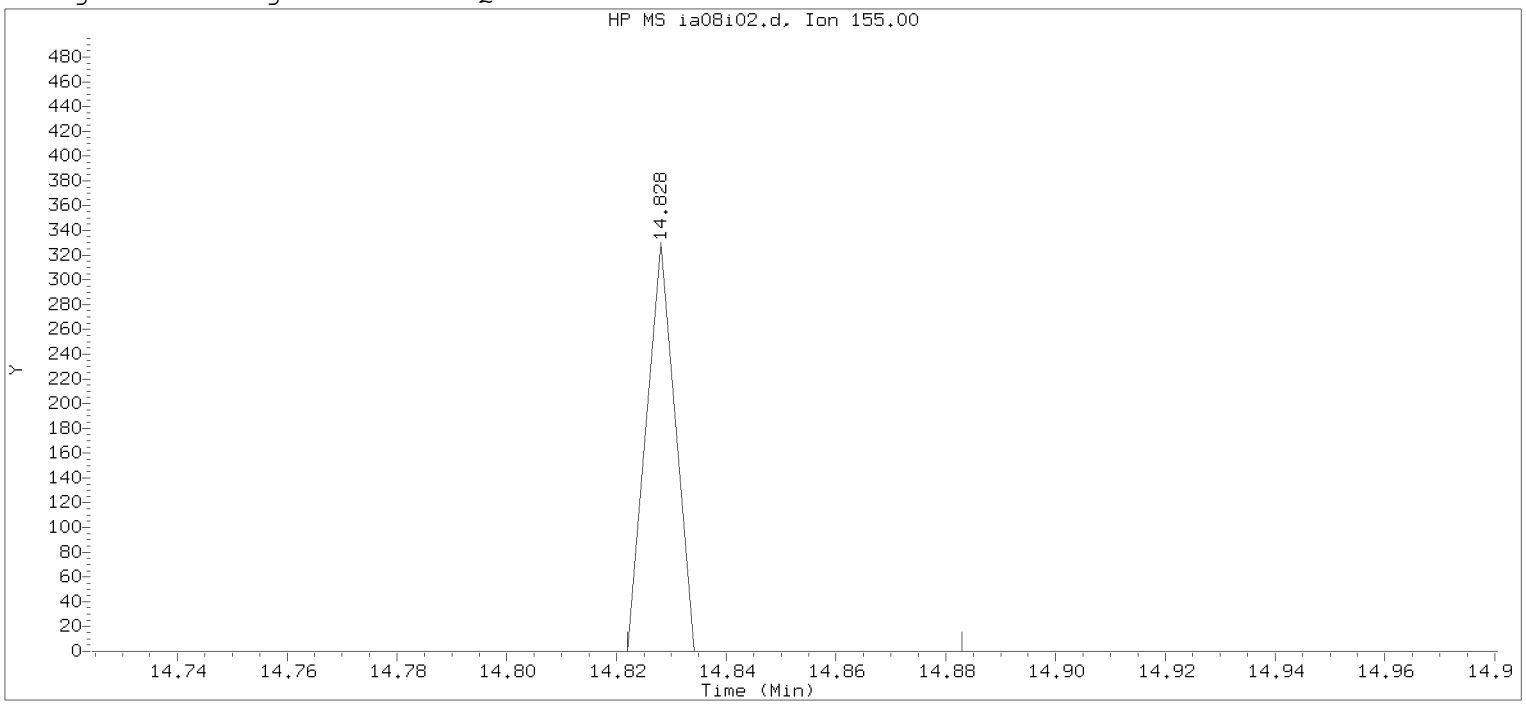
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



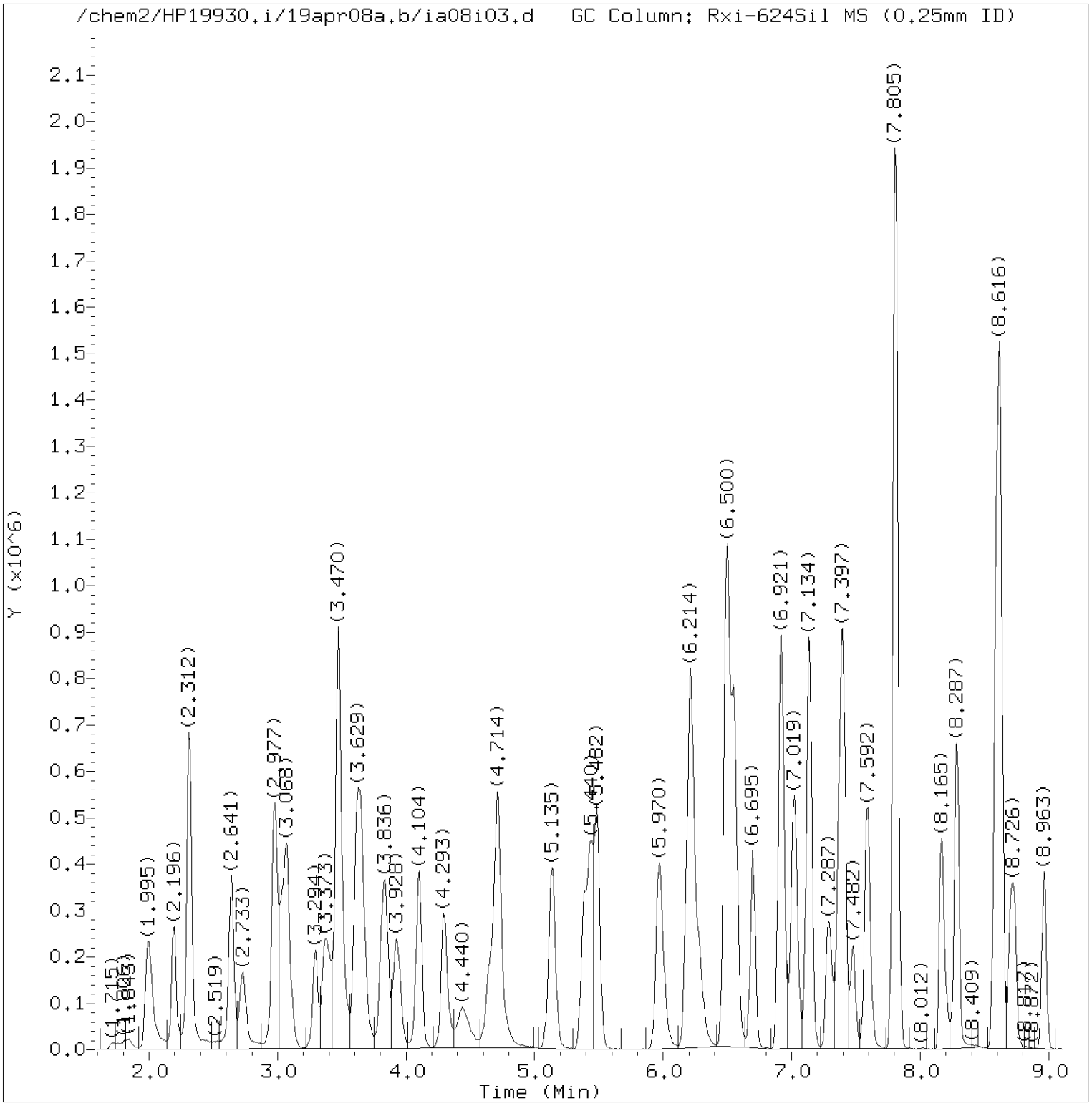
Data File: /chem2/HP19930.i/19apr08a.b/ia08i02.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 08-APR-2019 16:52
Date, time and analyst ID of latest file update: 08-Apr-2019 16:52 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 143
Compound Name : 1,2-Dibromo-3-chloropropane
Scan Number : 2172
Retention Time (minutes): 14.828
Quant Ion : 155.00
Area : 120
On-column Amount (ng) : 0.0220
Integration start scan : 2170 Integration stop scan: 2180
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 10:08.
Target 3.5 esignature user ID: jhowe274



Total Ion Chromatogram (TIC)

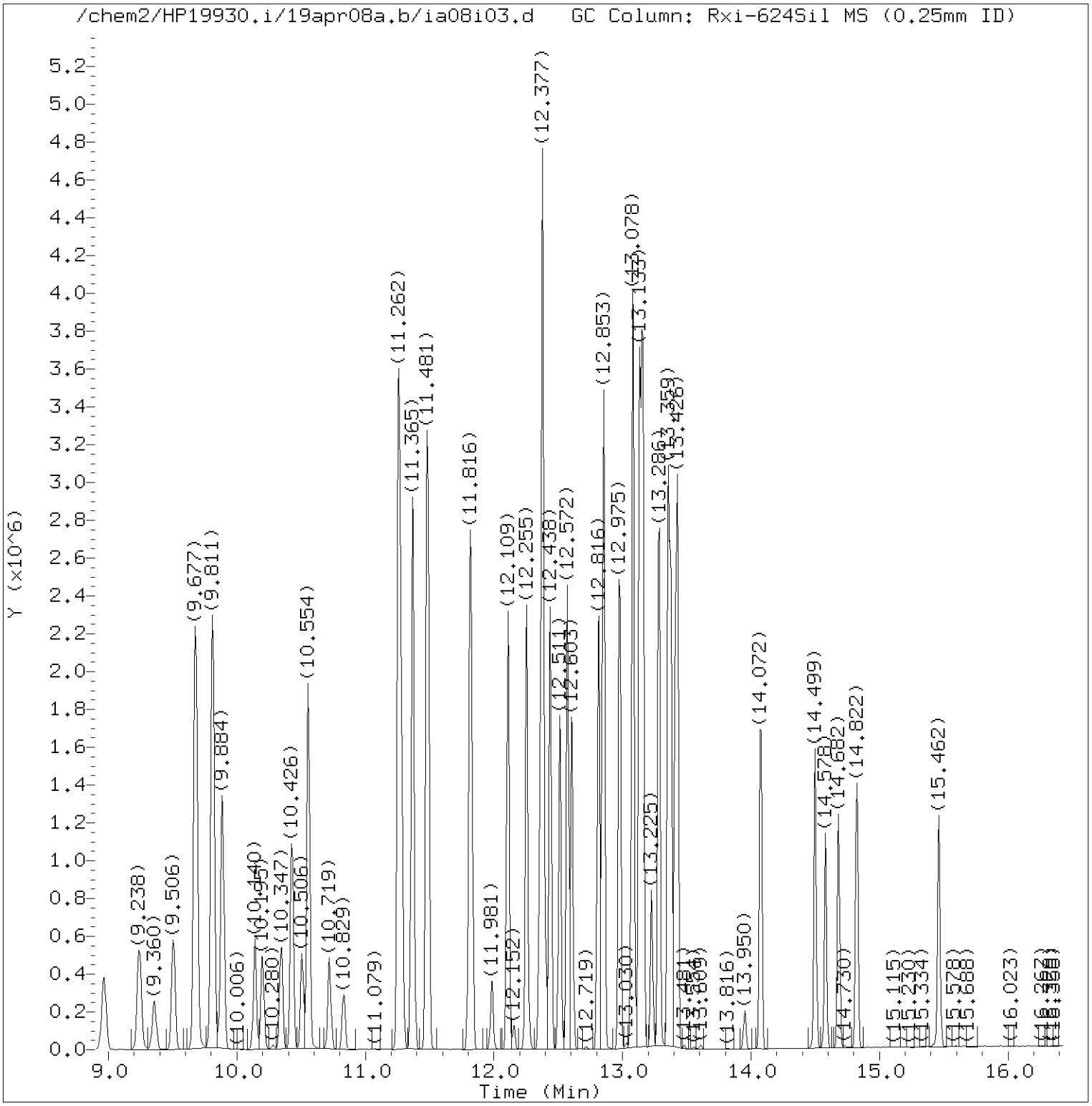
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.995	85	540464	5.108
2) Chloromethane	(2)	2.196	50	384331	4.904
5) Vinyl Chloride	(2)	2.312	62	399758	5.017
6) 1,3-Butadiene	(2)	2.312	39	295779	4.488
7) Bromomethane	(2)	2.641	94	351529	4.962
8) Chloroethane	(2)	2.733	64	228108	4.928
9) Dichlorofluoromethane	(2)	2.977	67	591450	4.945
10) Trichlorofluoromethane	(2)	3.038	101	683262M	5.132
11) Ethyl ether	(2)	3.294	59	182033	5.193
12) Freon 123a	(2)	3.373	67	294965MA	4.928
13) Acrolein	(1)	3.470	56	1515815	245.820
15) 1,1-Dichloroethene	(2)	3.611	96	227511	4.928
16) Freon 113	(2)	3.647	101	282539	5.064
14) Acetone	(1)	3.647	43	403041M	47.352
17) Methyl Iodide	(2)	3.812	142	503440	5.084
18) Carbon Disulfide	(2)	3.928	76	653903	4.837
21) Methyl Acetate	(1)	4.074	43	115161	5.120
22) Allyl Chloride	(2)	4.098	41	355248	5.002
23) Methylene Chloride	(2)	4.293	84	237082	5.020
26)*t-Butyl Alcohol-d10	(1)	4.306	65	145276M	50.000
28) t-Butyl Alcohol	(1)	4.440	59	347853	98.600
29) Acrylonitrile	(1)	4.641	53	252380	24.789
30) Methyl Tertiary Butyl Ether	(2)	4.702	73	610478	5.055
31) trans-1,2-Dichloroethene	(2)	4.708	96	250956	4.857
32) n-Hexane	(2)	5.135	57	373863	5.141
33) 1,1-Dichloroethane	(2)	5.385	63	418818M	4.983
34) di-Isopropyl Ether	(2)	5.440	45	719048	5.099
35) 2-Chloro-1,3-Butadiene	(2)	5.488	53	378777	5.019
37) Ethyl t-butyl ether	(2)	5.970	59	709087	5.065
40) 1,2-Dichloroethene (Total)	(2)		96	532670	9.751
38) 2-Butanone	(1)	6.189	43	692881	50.117
39) cis-1,2-Dichloroethene	(2)	6.214	96	281714	4.894
41) 2,2-Dichloropropane	(2)	6.226	77	385663	4.930
42) Propionitrile	(1)	6.287	54	376917	101.540
45) Methacrylonitrile	(1)	6.494	67	682699	49.975
47) Bromochloromethane	(2)	6.543	128	143080	5.051
48) Tetrahydrofuran	(1)	6.561	71	213488	49.383
49) Chloroform	(2)	6.695	83	453395	4.951

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	469354	10.018
50)$Dibromofluoromethane	(2)	6.915	111	479657	10.016
51) 1,1,1-Trichloroethane	(2)	6.921	97	444509M	5.021
52) Cyclohexane	(2)	7.019	56	444051	5.101
52) Cyclohexane	(2)	7.019	84	419574M	5.109
52) Cyclohexane	(2)	7.019	69	141722M	4.957
54) Carbon Tetrachloride	(2)	7.134	117	420924	5.035
55) 1,1-Dichloropropene	(2)	7.140	75	345863	5.047
56) Isobutyl Alcohol	(1)	7.287	41	269610	247.432
57)$1,2-Dichloroethane-d4	(2)	7.372	102	89460	9.908
57)$1,2-Dichloroethane-d4	(2)	7.372	65	406362	10.041
57)$1,2-Dichloroethane-d4	(2)	7.372	104	57946	10.165
58) Benzene	(2)	7.403	78	1014134	5.033
59) 1,2-Dichloroethane	(2)	7.476	62	259343M	4.798
59) 1,2-Dichloroethane	(2)	7.476	98	25743	5.105
60) t-Amyl methyl ether	(2)	7.592	73	679805	5.034
63)*Fluorobenzene	(2)	7.805	96	1815436	10.000
62) n-Heptane	(2)	7.811	43	379998	5.089
65) n-Butanol	(1)	8.165	56	473863M	521.163
67) Trichloroethene	(2)	8.280	95	280824	4.981
69) Methylcyclohexane	(2)	8.591	83	546272	5.426
70) 1,2-Dichloropropane	(2)	8.622	63	236033	5.059
71) Methyl Methacrylate	(1)	8.701	69	131803	5.041
72) 1,4-Dioxane	(1)	8.713	88	56008M	250.544
72) 1,4-Dioxane	(1)	8.713	58	35226M	264.434
73) Dibromomethane	(2)	8.732	93	132144	5.038
74) Bromodichloromethane	(2)	8.963	83	332561	5.135
76) 2-Nitropropane	(1)	9.238	41	447403	51.428
80) cis-1,3-Dichloropropene	(2)	9.506	75	372521	5.071
81) 4-Methyl-2-Pentanone	(1)	9.677	43	1785700	51.021
82)$Toluene-d8	(3)	9.811	98	1790443	10.005
82)$Toluene-d8	(3)	9.811	100	1154418	10.058
83) Toluene	(3)	9.884	92	672582	4.999
84) trans-1,3-Dichloropropene	(3)	10.140	75	323031	5.093
85) 1,3-Dichloropropene (total)	(3)		75	695552	10.164
86) Ethyl Methacrylate	(3)	10.201	69	279399	5.216
88) 1,1,2-Trichloroethane	(3)	10.347	97	188339	5.066
89) Tetrachloroethene	(3)	10.426	166	351388	4.935

M = Compound was manually integrated.
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$ = Compound is a surrogate standard.

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	301097	5.031
91) 2-Hexanone	(1)	10.554	43	1251330	50.420
93) Dibromochloromethane	(3)	10.719	129	260728	5.160
95) 1,2-Dibromoethane	(3)	10.829	107	189659	5.009
97)*Chlorobenzene-d5	(3)	11.256	117	1459007	10.000
96) 1-Chlorohexane	(3)	11.262	91	398527	4.919
98) Chlorobenzene	(3)	11.286	112	761950	4.933
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	297695	5.110
100) Ethylbenzene	(3)	11.371	91	1345811	4.981
101) m+p-Xylene	(3)	11.481	106	1082754	10.062
105) Xylene (Total)	(3)		106	1613567	15.173
104) o-Xylene	(3)	11.810	106	530813	5.111
106) Styrene	(3)	11.829	104	847454	5.147
107) Bromoform	(3)	11.987	173	165094	5.312
108) Isopropylbenzene	(3)	12.109	105	1417383	5.052
111)$4-Bromofluorobenzene	(3)	12.255	95	670110	9.993
111)$4-Bromofluorobenzene	(3)	12.255	174	657648	10.245
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	237508	5.036
114) Bromobenzene	(4)	12.371	156	354173	4.935
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	629156	51.257
116) 1,2,3-Trichloropropane	(4)	12.402	110	70516M	5.038
117) n-Propylbenzene	(4)	12.438	91	1618323	5.041
119) 2-Chlorotoluene	(4)	12.511	126	338263	4.900
121) 1,3,5-Trimethylbenzene	(4)	12.572	105	1195163	5.040
122) 4-Chlorotoluene	(4)	12.609	126	344757	4.970
125) tert-Butylbenzene	(4)	12.816	134	269926M	4.995
126) Pentachloroethane	(4)	12.847	167	245341	5.156
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	1201854	4.974
128) sec-Butylbenzene	(4)	12.975	105	1560364	5.083
131) 1,3-Dichlorobenzene	(4)	13.078	146	677553	4.932
132) p-Isopropyltoluene	(4)	13.084	119	1379475	5.121
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	826324	10.000
134) 1,4-Dichlorobenzene	(4)	13.151	146	673450	4.905
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	565664	5.010
136) Benzyl Chloride	(4)	13.225	126	116100	5.224
138) n-Butylbenzene	(4)	13.377	92	630862	5.149
139) 1,2-Dichlorobenzene	(4)	13.408	146	624725	4.982
143) 1,2-Dibromo-3-chloropropane	(1)	13.950	155	39759	4.997

M = Compound was manually integrated.
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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

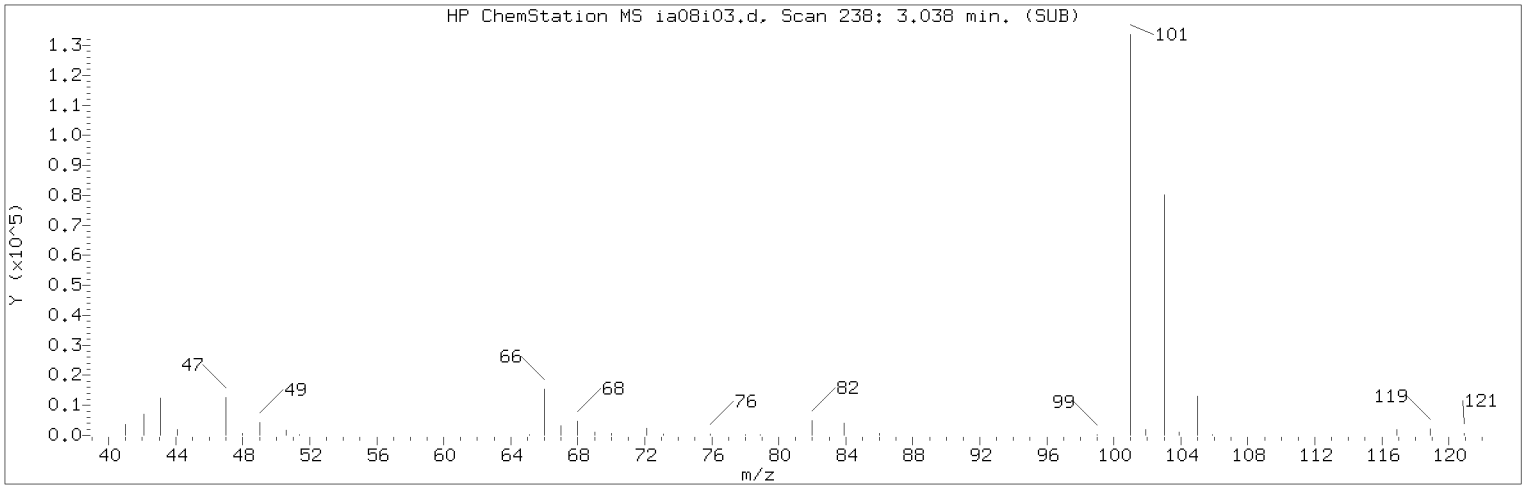
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

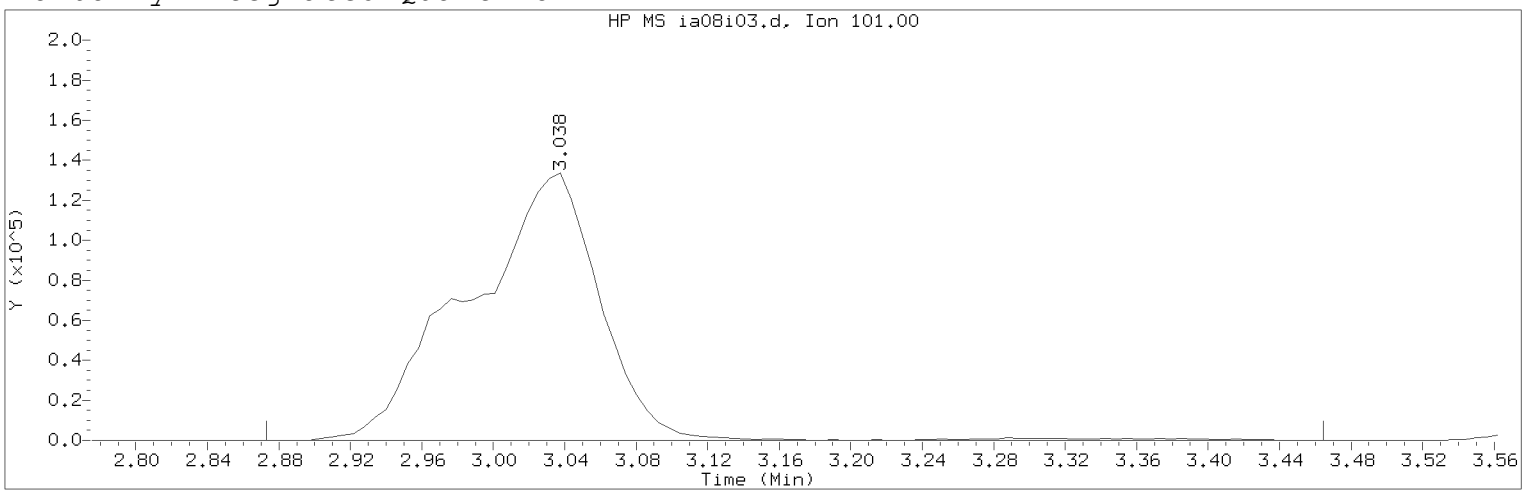
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	507014	5.061
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	444851	5.066
146) Hexachlorobutadiene	(4)	14.578	225	183178	5.105
147) Naphthalene	(4)	14.682	128	880542	5.007
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	401211	5.074

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

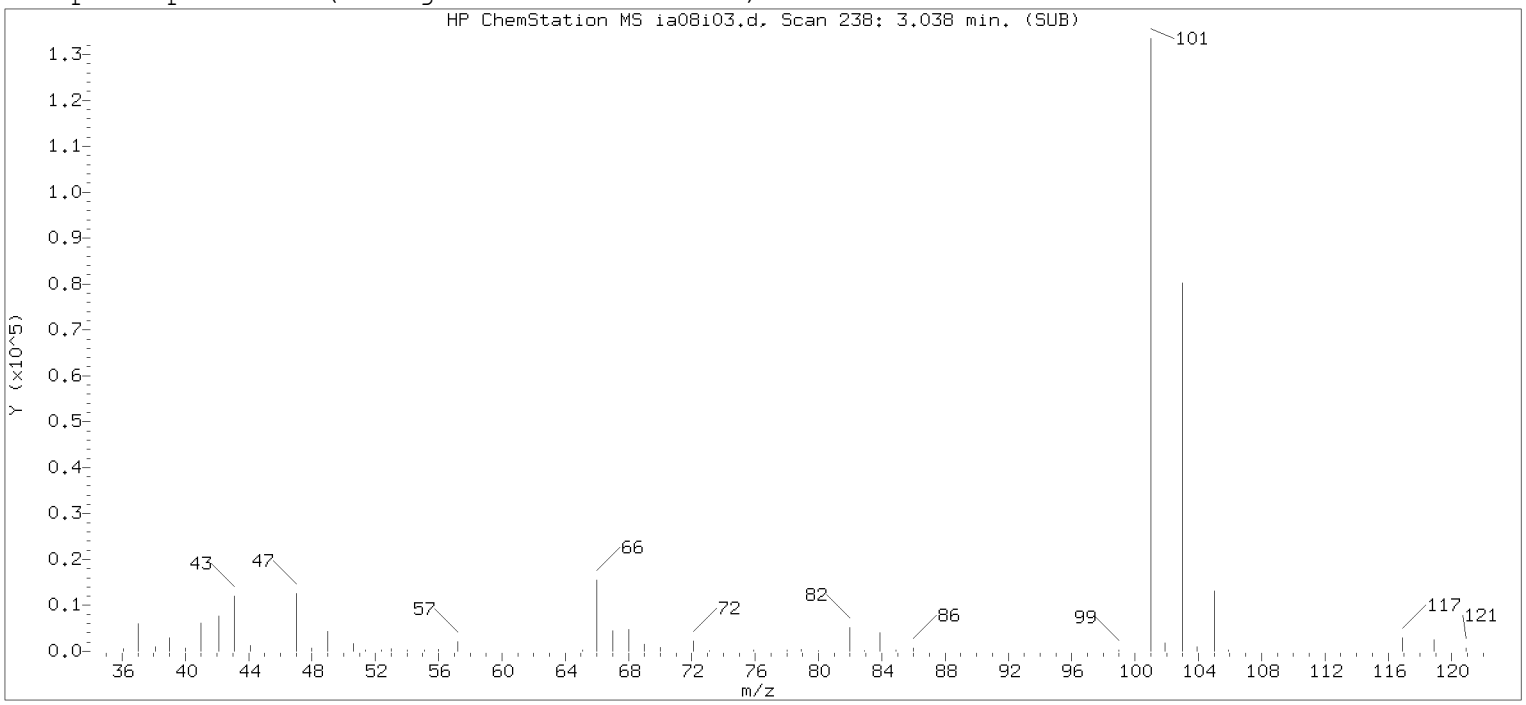
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 238
Retention Time (minutes): 3.038
Quant Ion : 101.00
Area (flag) : 683262M
On-Column Amount (ng) : 5.1324
Integration start scan : 210 Integration stop scan: 307
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

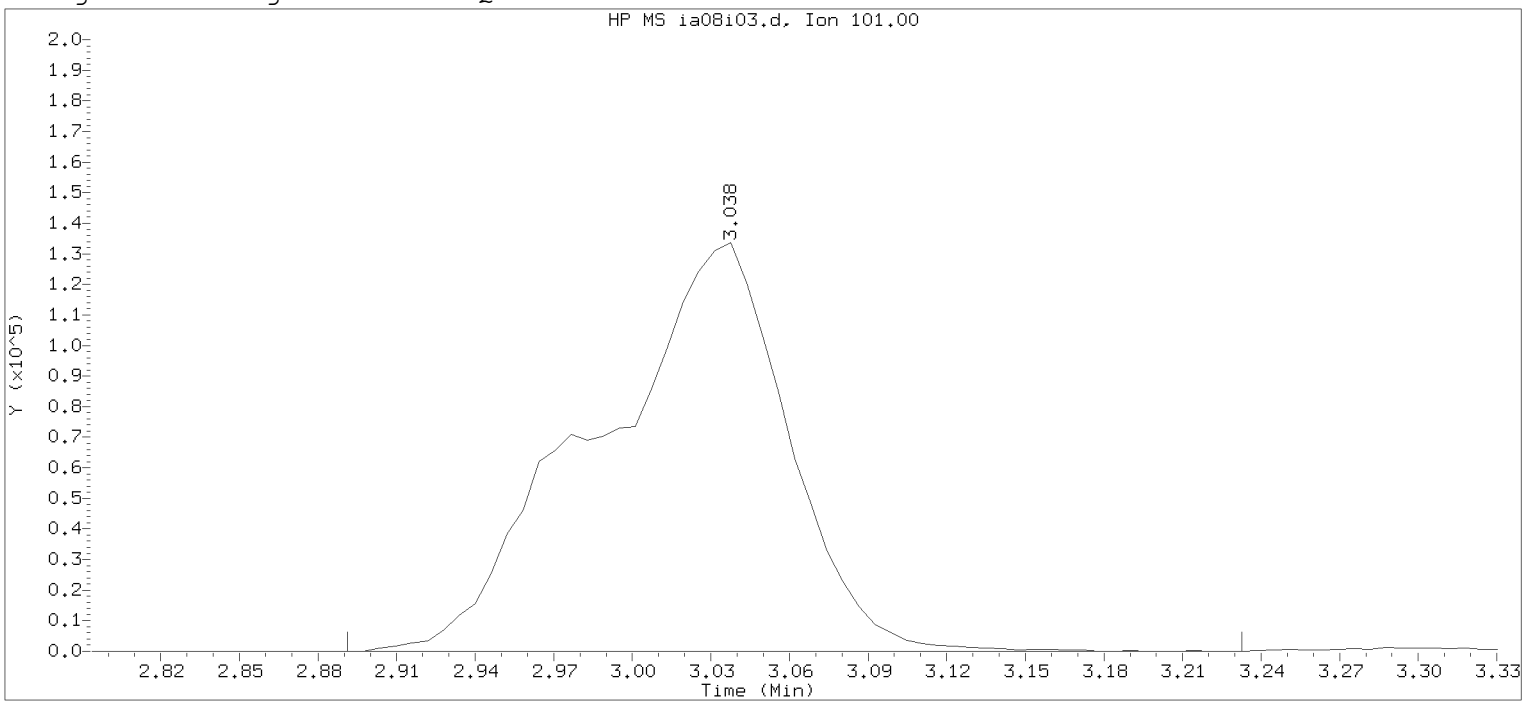
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

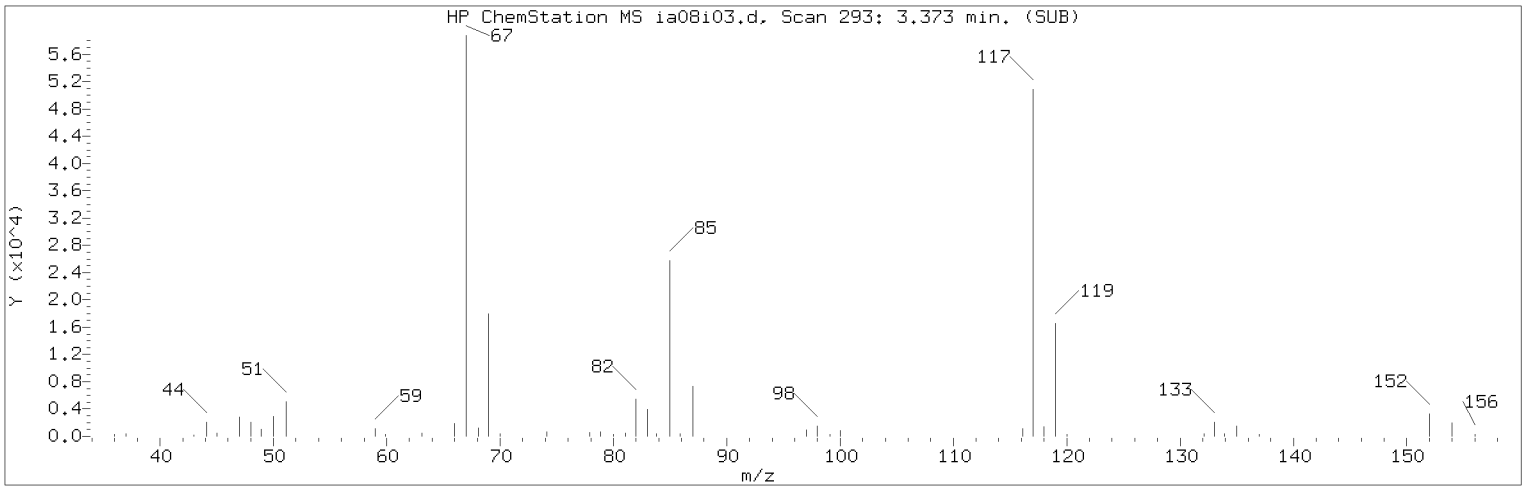
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

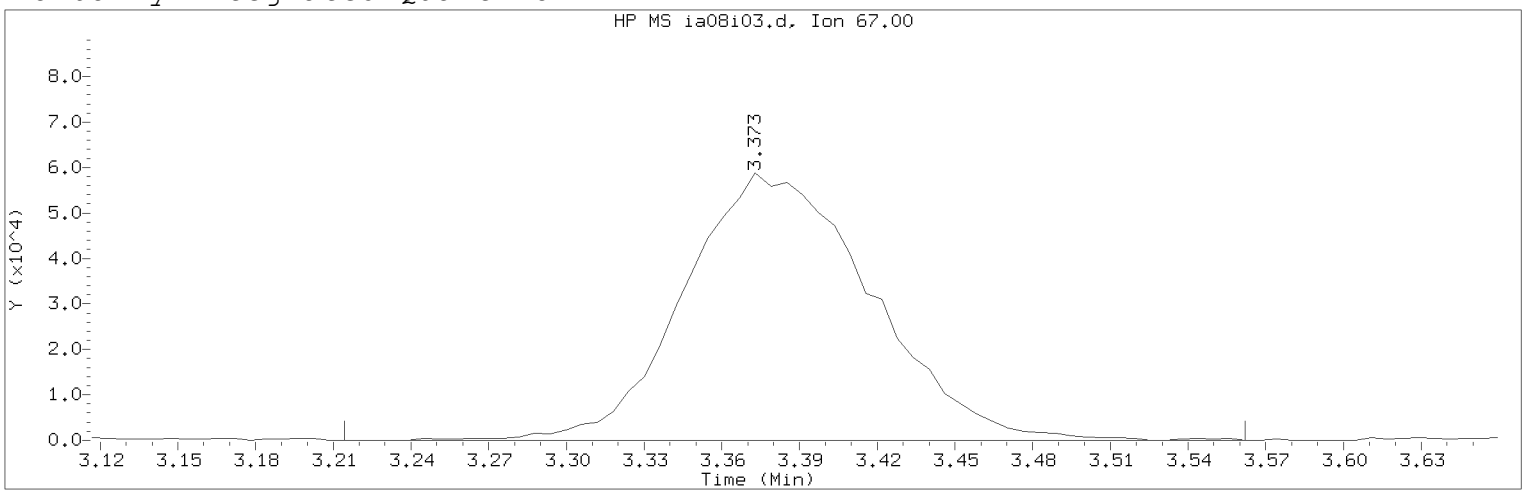
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 238
Retention Time (minutes): 3.038
Quant Ion : 101.00
Area : 675068
On-column Amount (ng) : 4.9751
Integration start scan : 213 Integration stop scan: 269
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

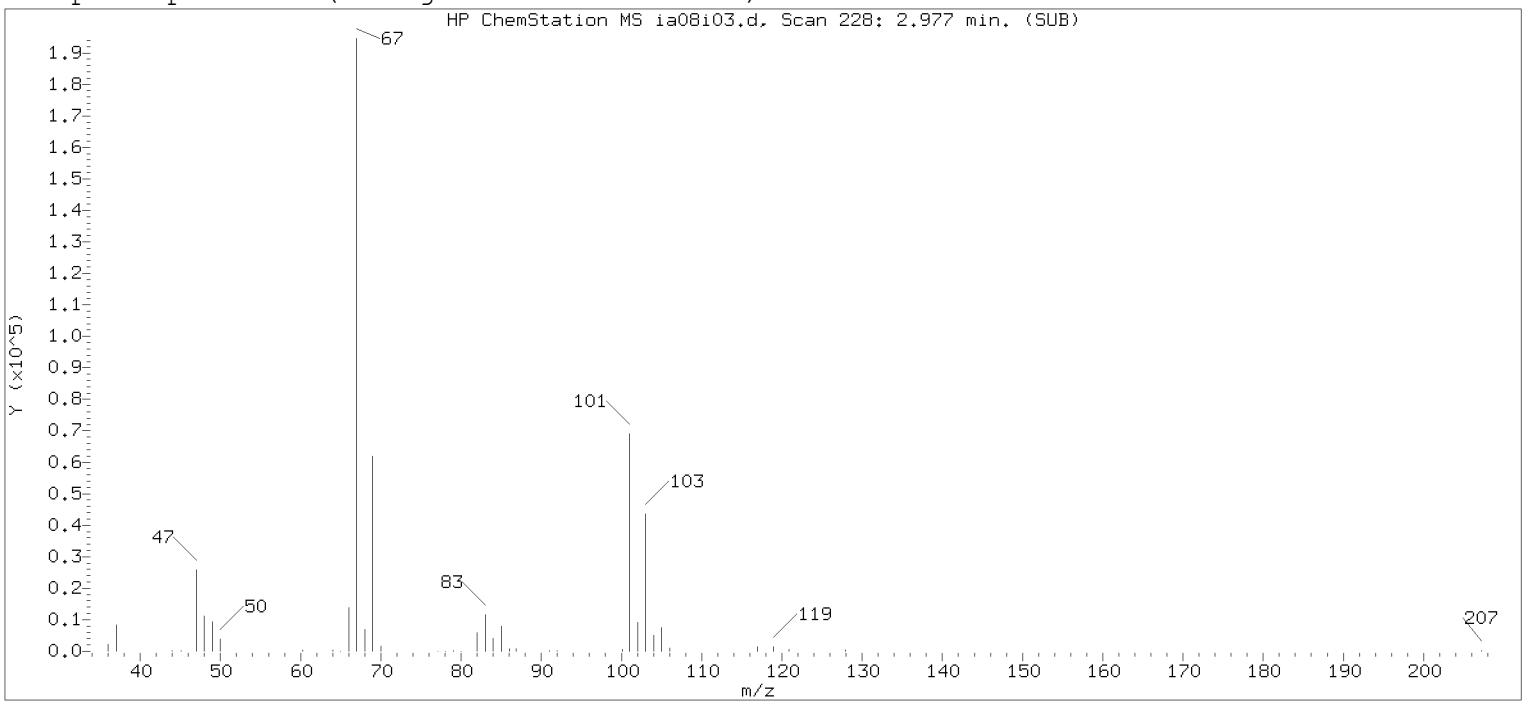
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 293
Retention Time (minutes): 3.373
Quant Ion : 67.00
Area (flag) : 294965MA
On-Column Amount (ng) : 4.9276
Integration start scan : 266 Integration stop scan: 323
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

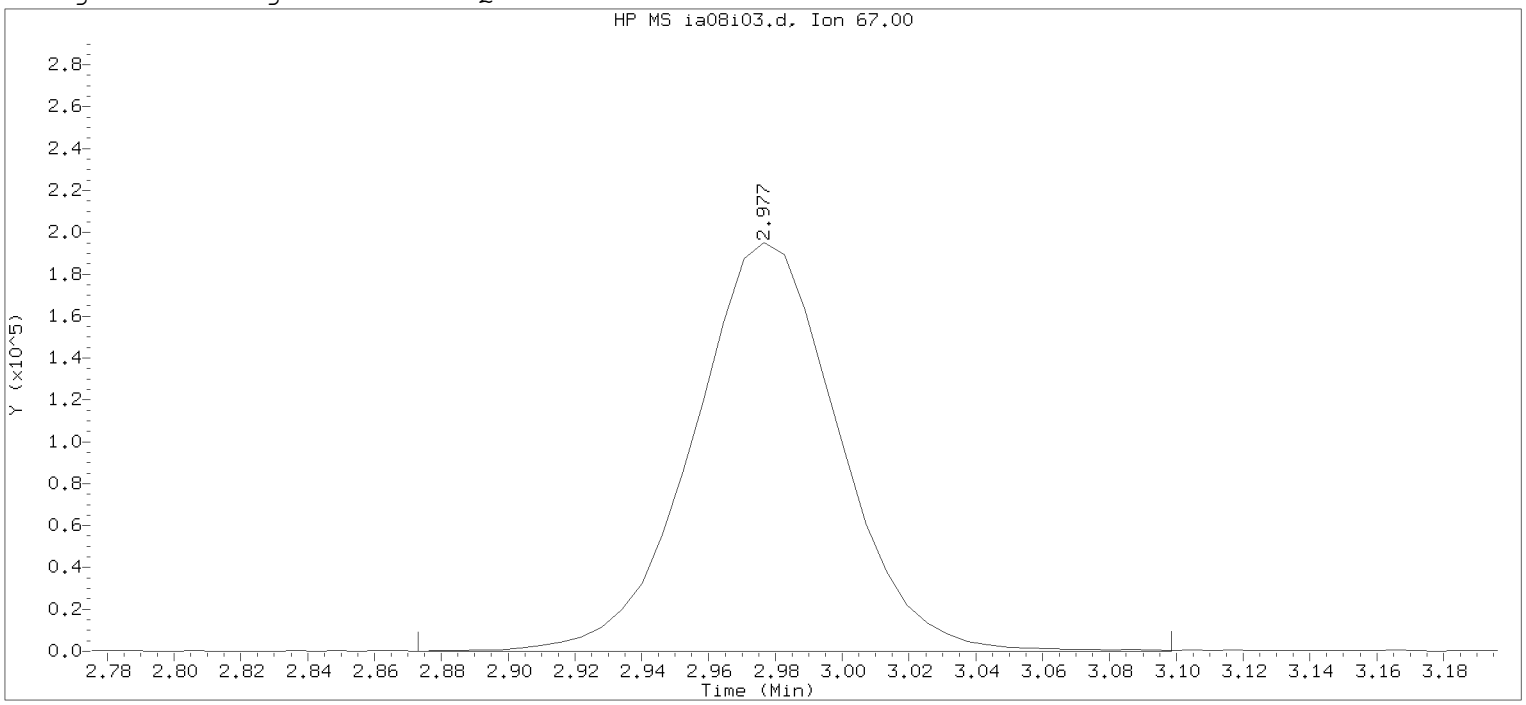
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

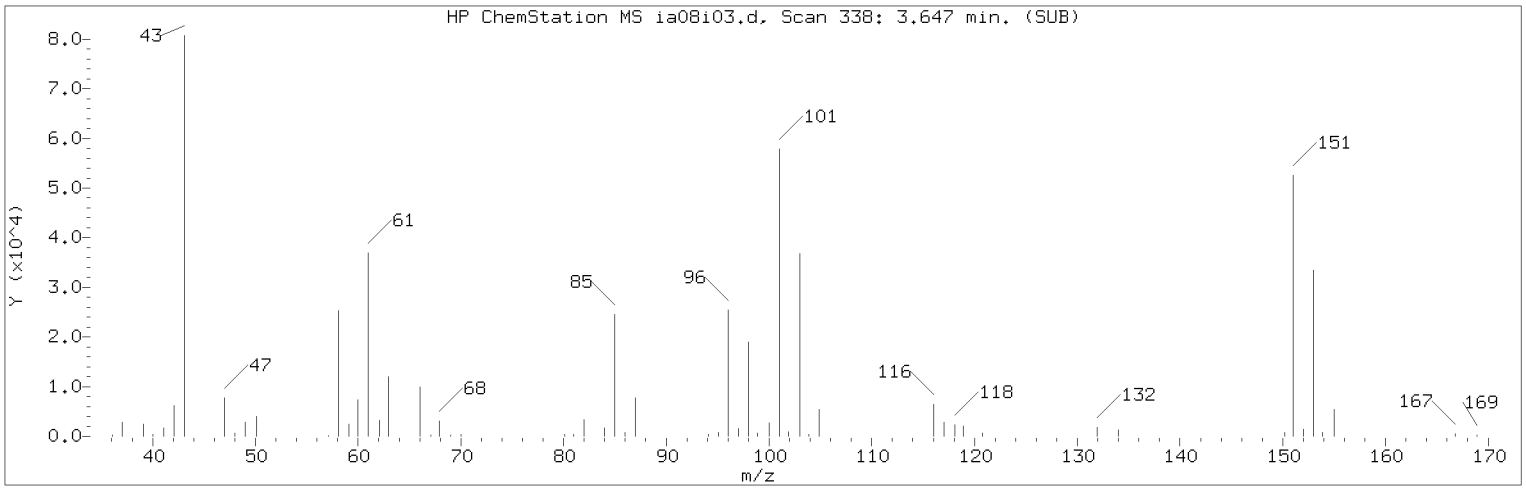
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

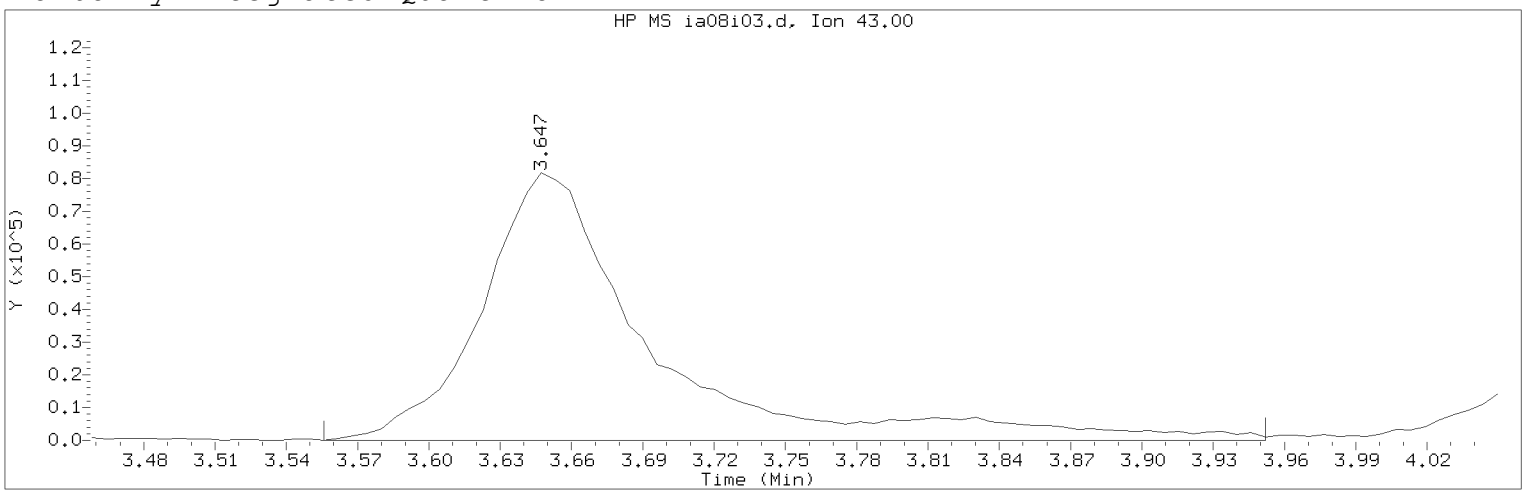
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area : 590340
On-column Amount (ng) : 4.9250
Integration start scan : 210 Integration stop scan: 247
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

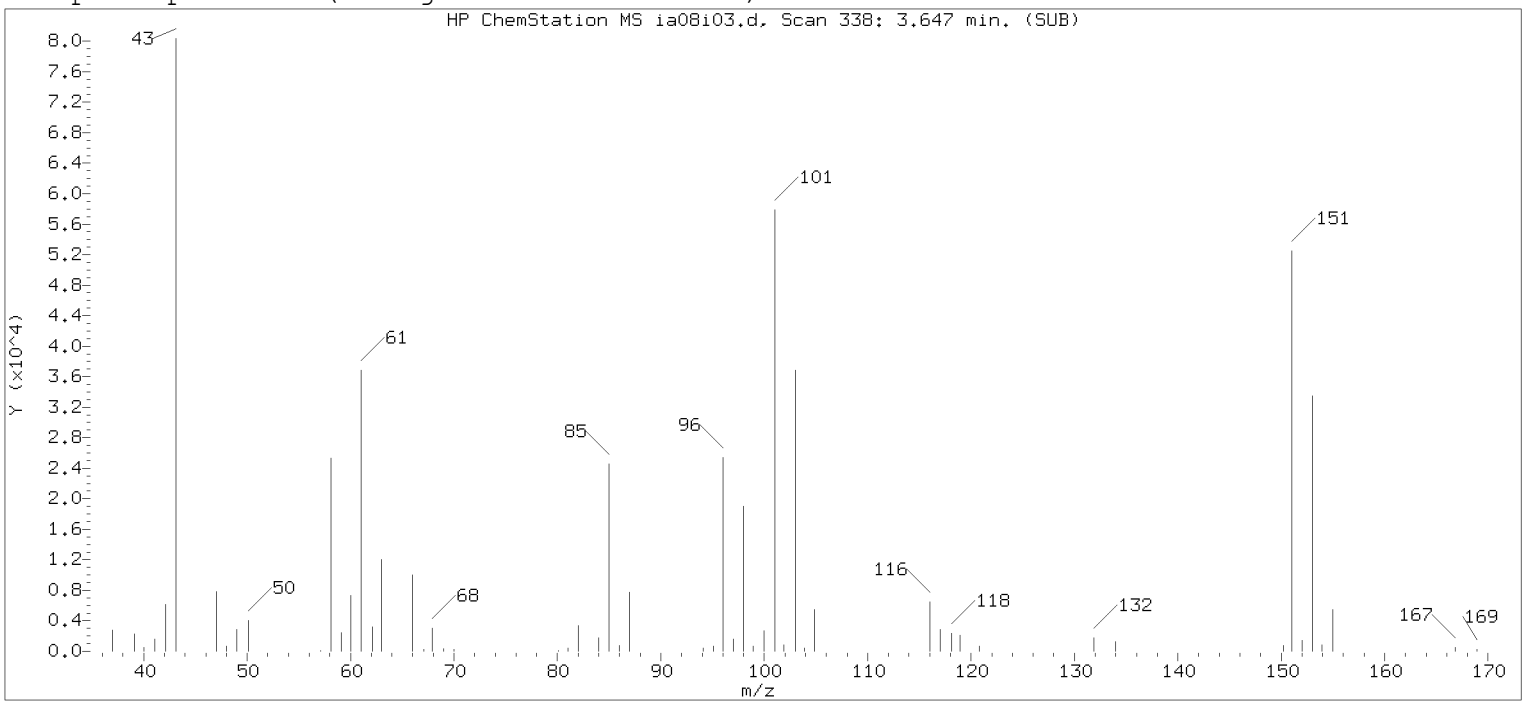
Compound Number : 14
Compound Name : Acetone
Scan Number : 338
Retention Time (minutes): 3.647
Quant Ion : 43.00
Area (flag) : 403041M
On-Column Amount (ng) : 47.3525
Integration start scan : 322 Integration stop scan: 387
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

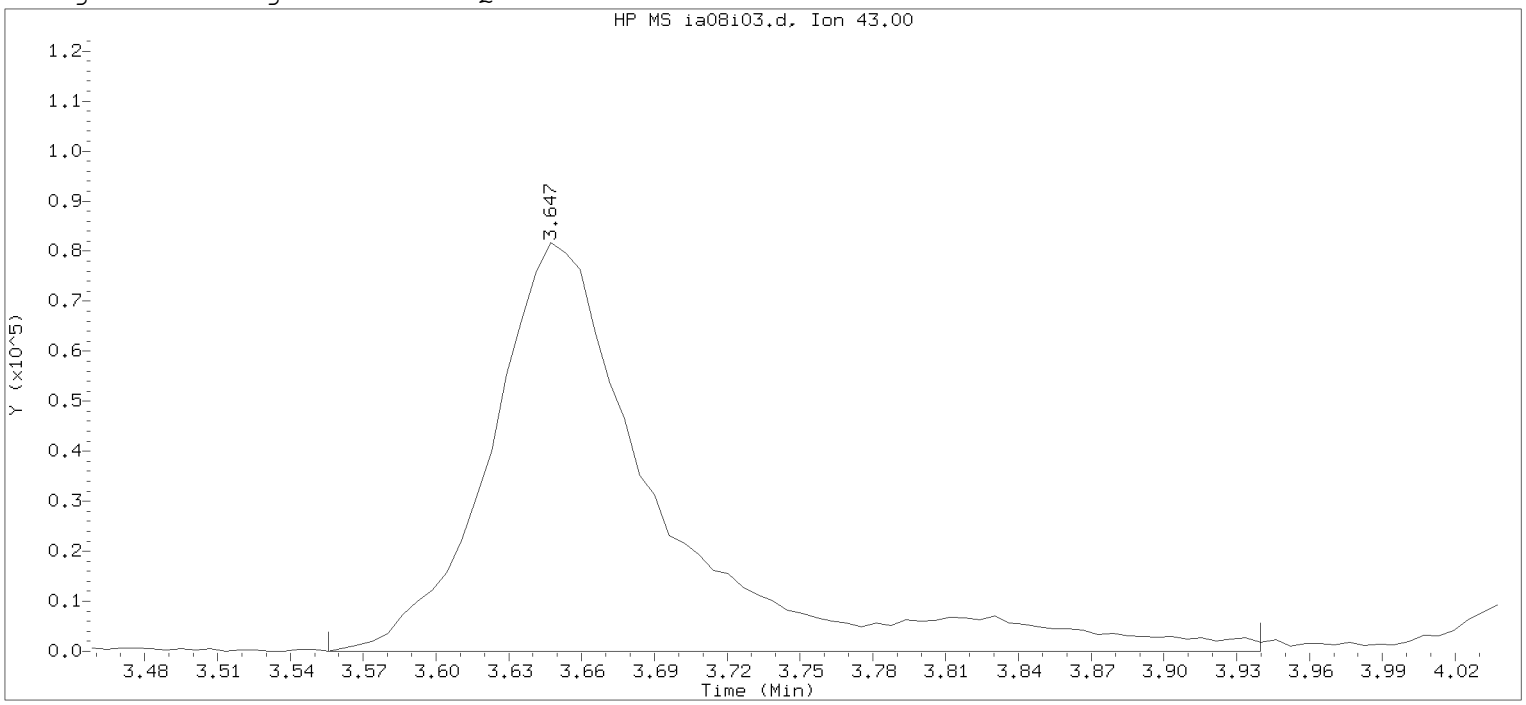
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

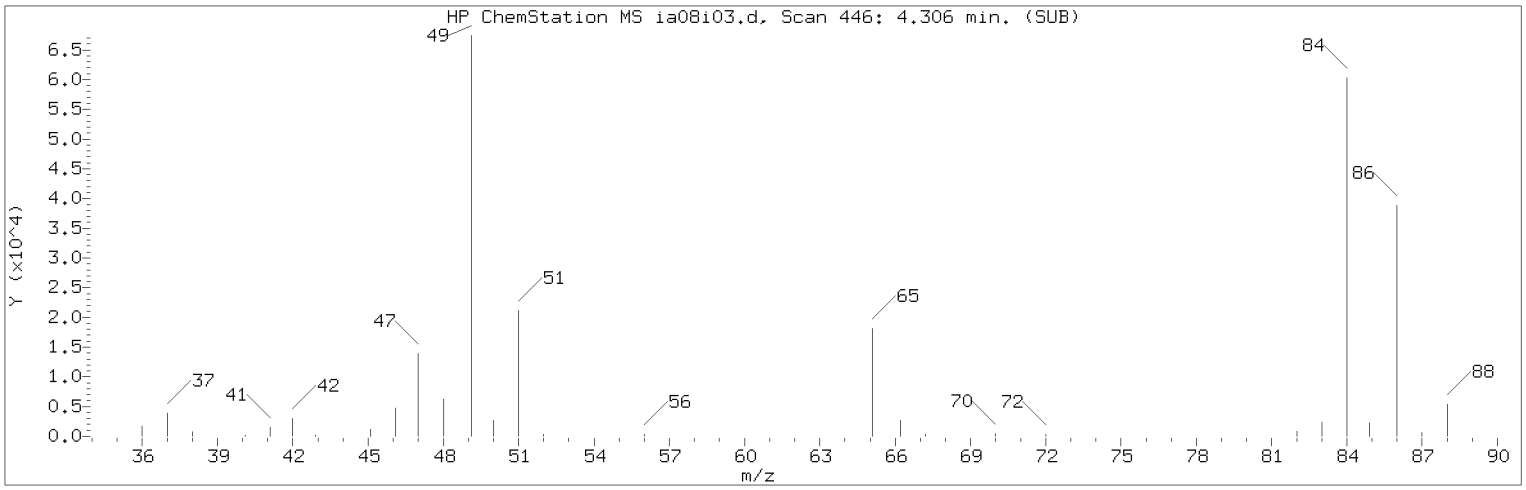
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

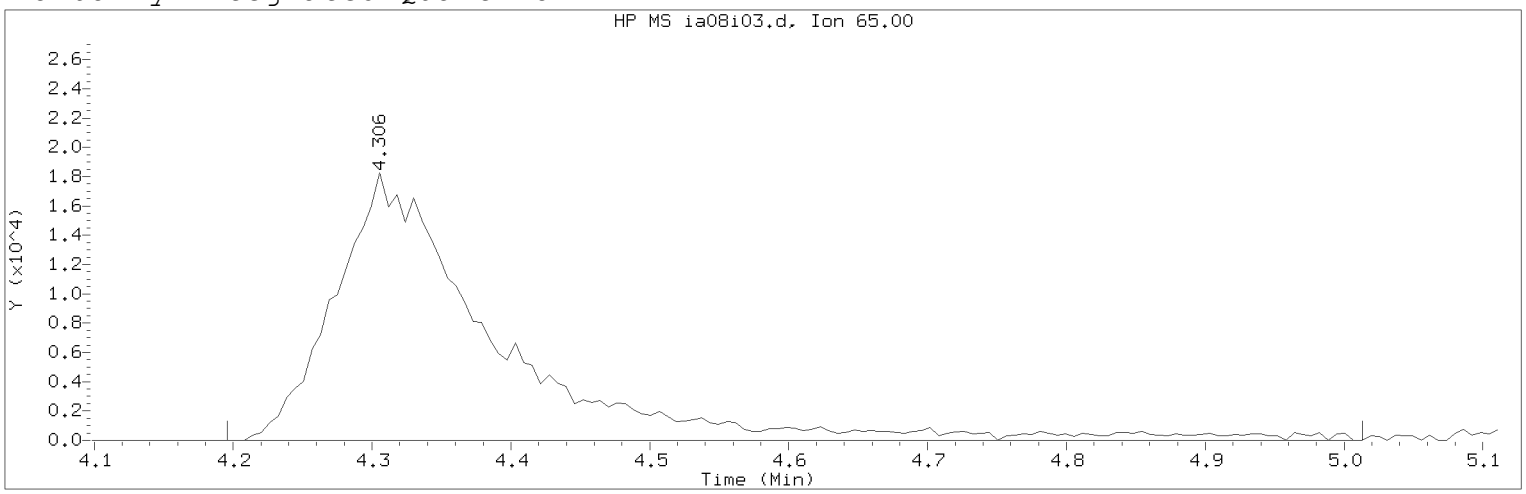
Compound Number : 14
Compound Name : Acetone
Scan Number : 338
Retention Time (minutes): 3.647
Quant Ion : 43.00
Area : 401497
On-column Amount (ng) : 49.5768
Integration start scan : 322 Integration stop scan: 385
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

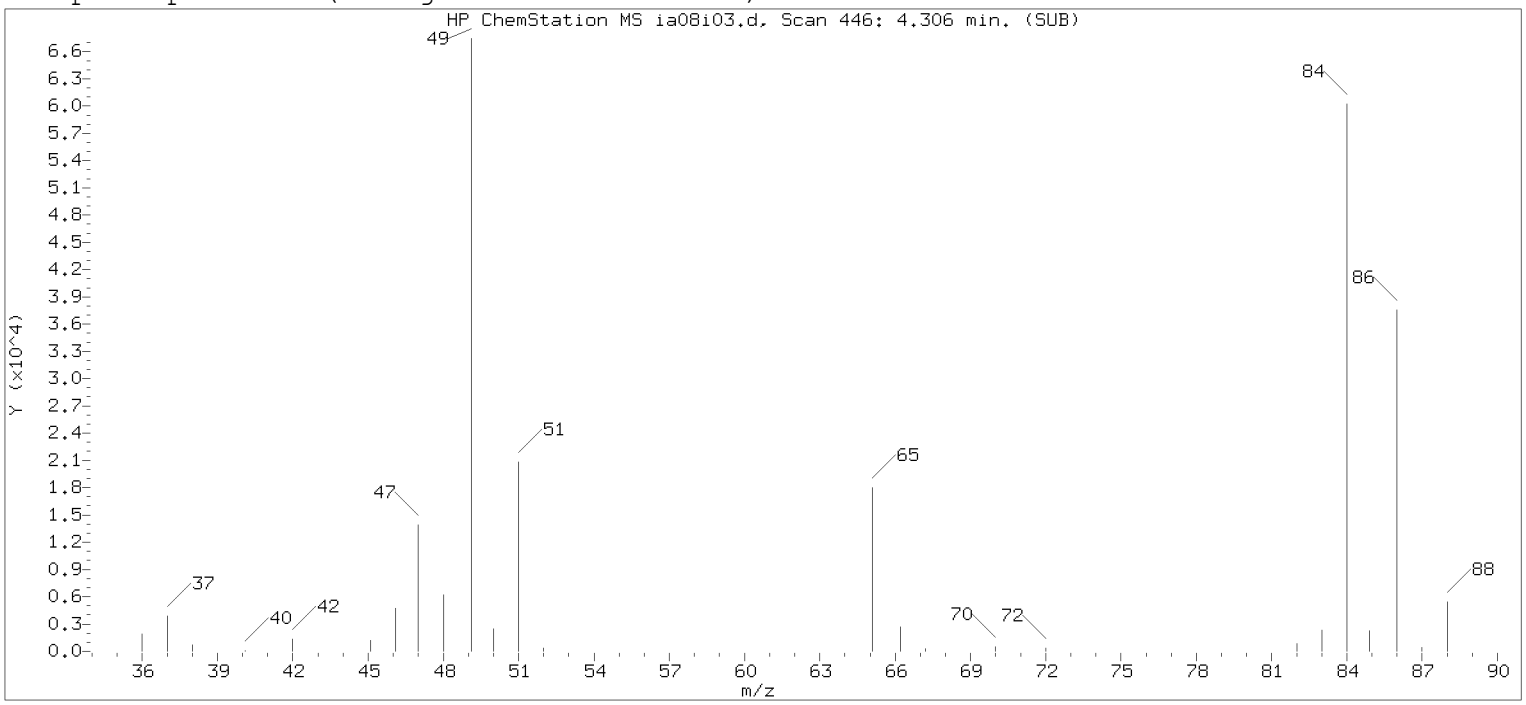
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 446
Retention Time (minutes): 4.306
Quant Ion : 65.00
Area (flag) : 145276M
On-Column Amount (ng) : 50.0000
Integration start scan : 427 Integration stop scan: 561
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

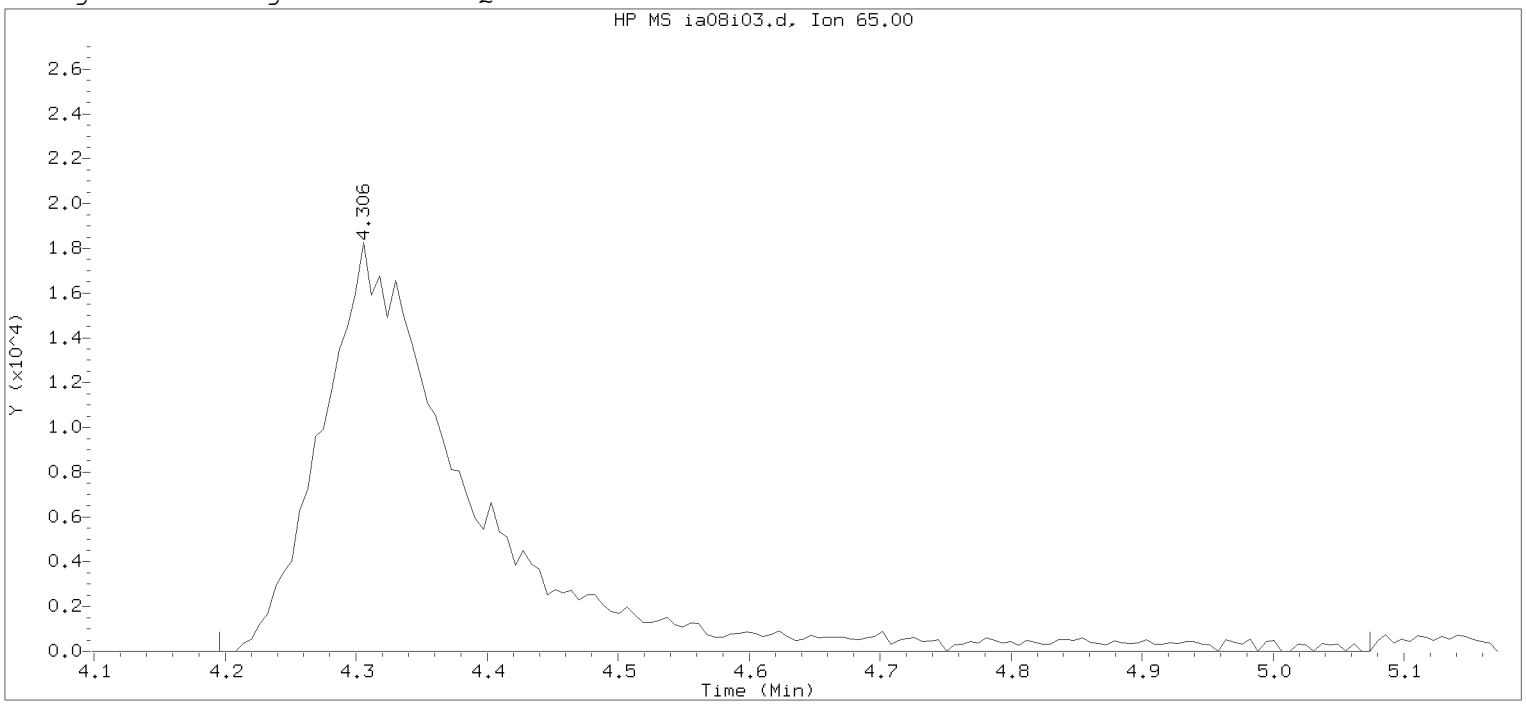
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

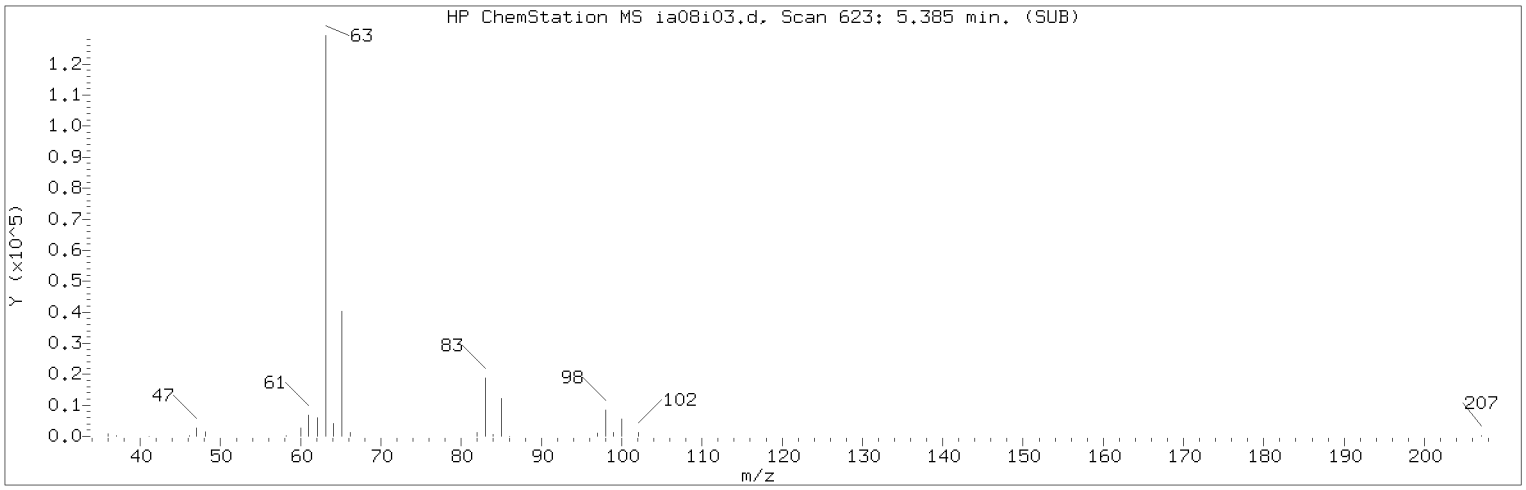
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

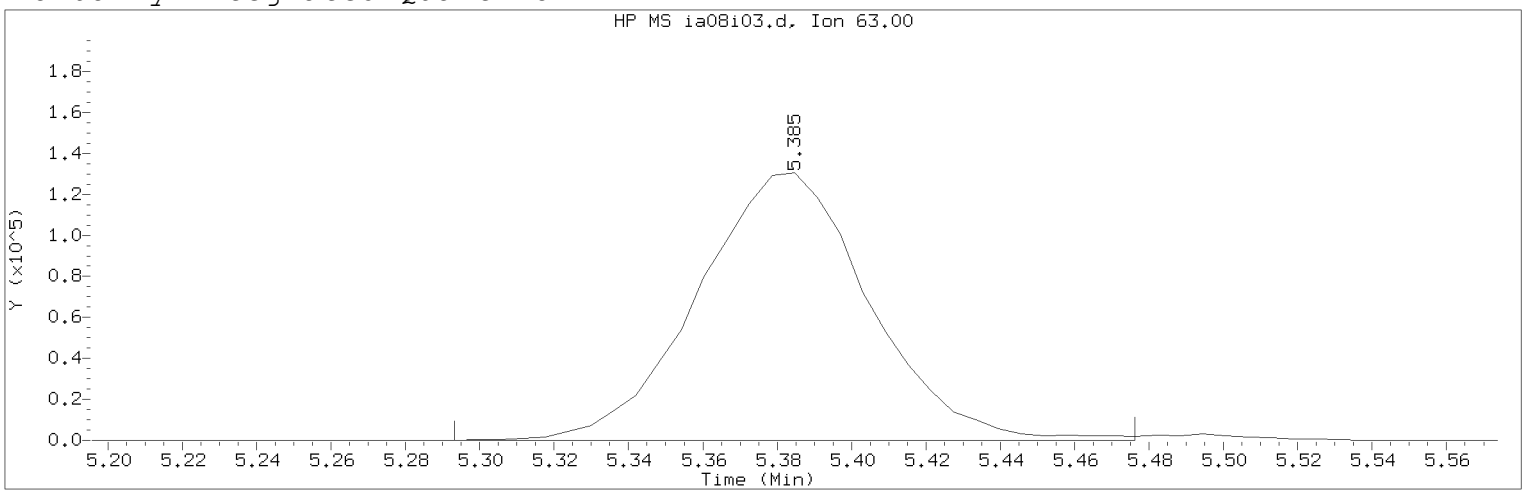
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 446
Retention Time (minutes): 4.306
Quant Ion : 65.00
Area : 145964
On-column Amount (ng) : 50.0000
Integration start scan : 427 Integration stop scan: 571
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

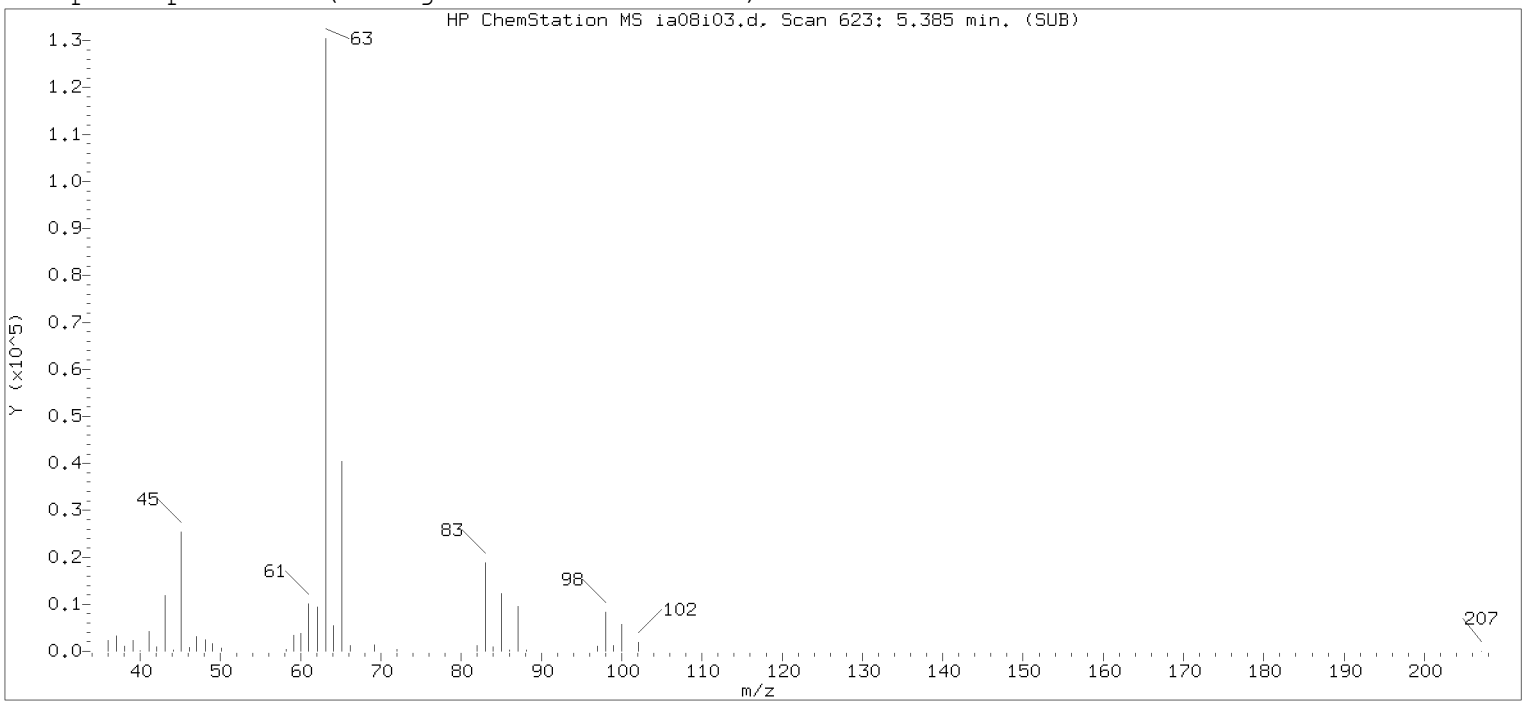
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 623
Retention Time (minutes): 5.385
Quant Ion : 63.00
Area (flag) : 418818M
On-Column Amount (ng) : 4.9832
Integration start scan : 607 Integration stop scan: 637
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

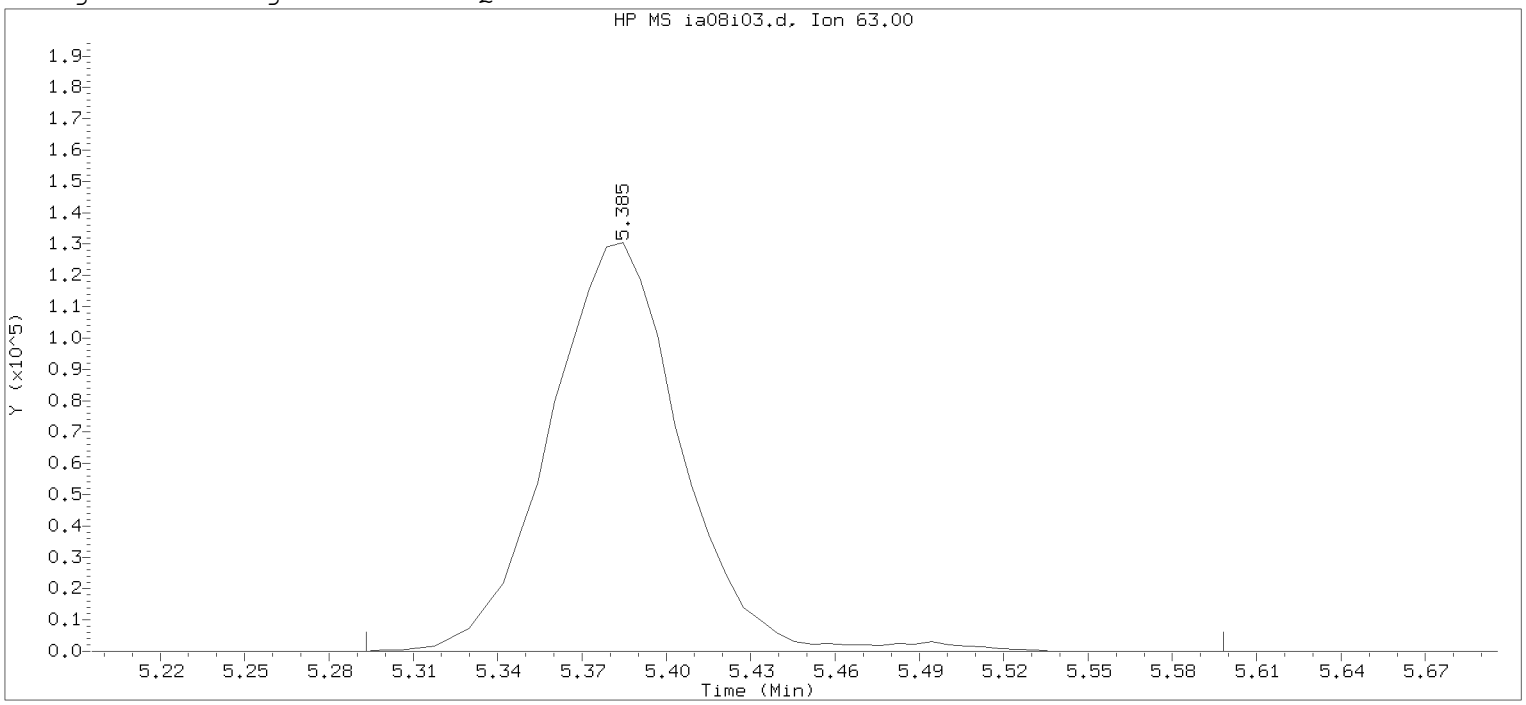
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

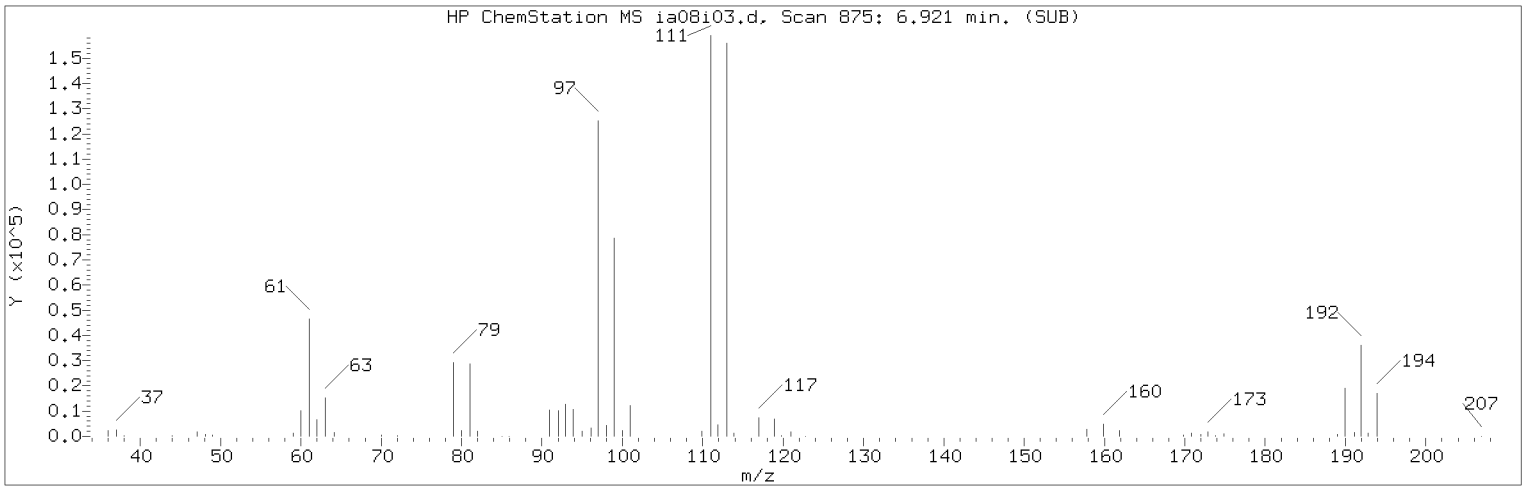
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

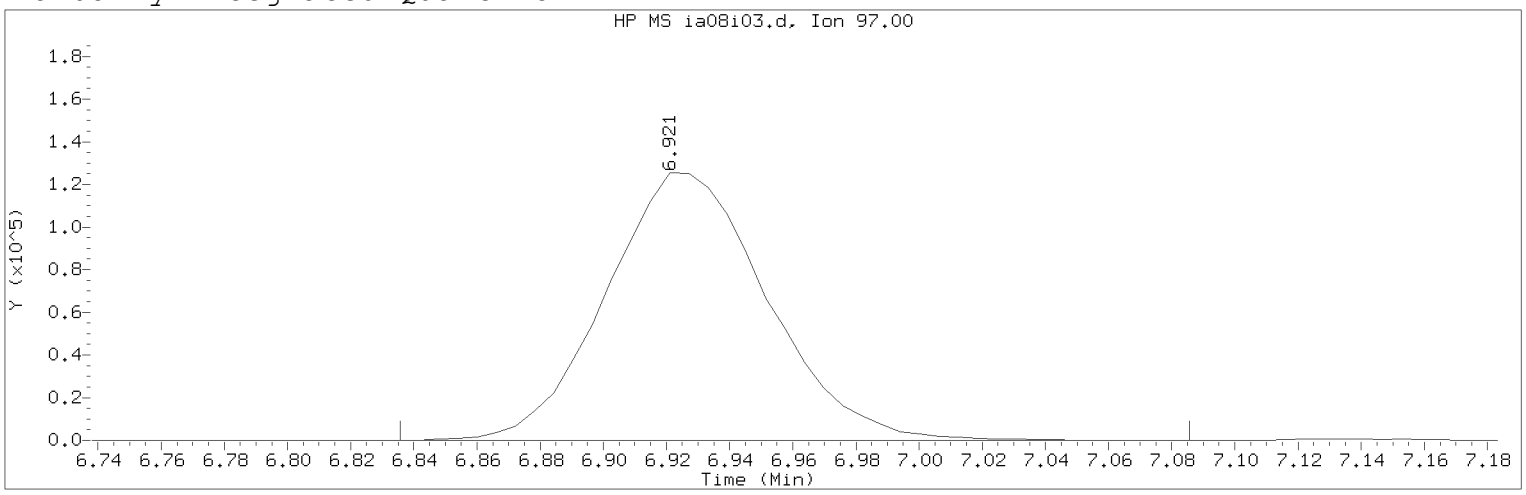
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 623
Retention Time (minutes): 5.385
Quant Ion : 63.00
Area : 424096
On-column Amount (ng) : 4.9910
Integration start scan : 607 Integration stop scan: 657
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

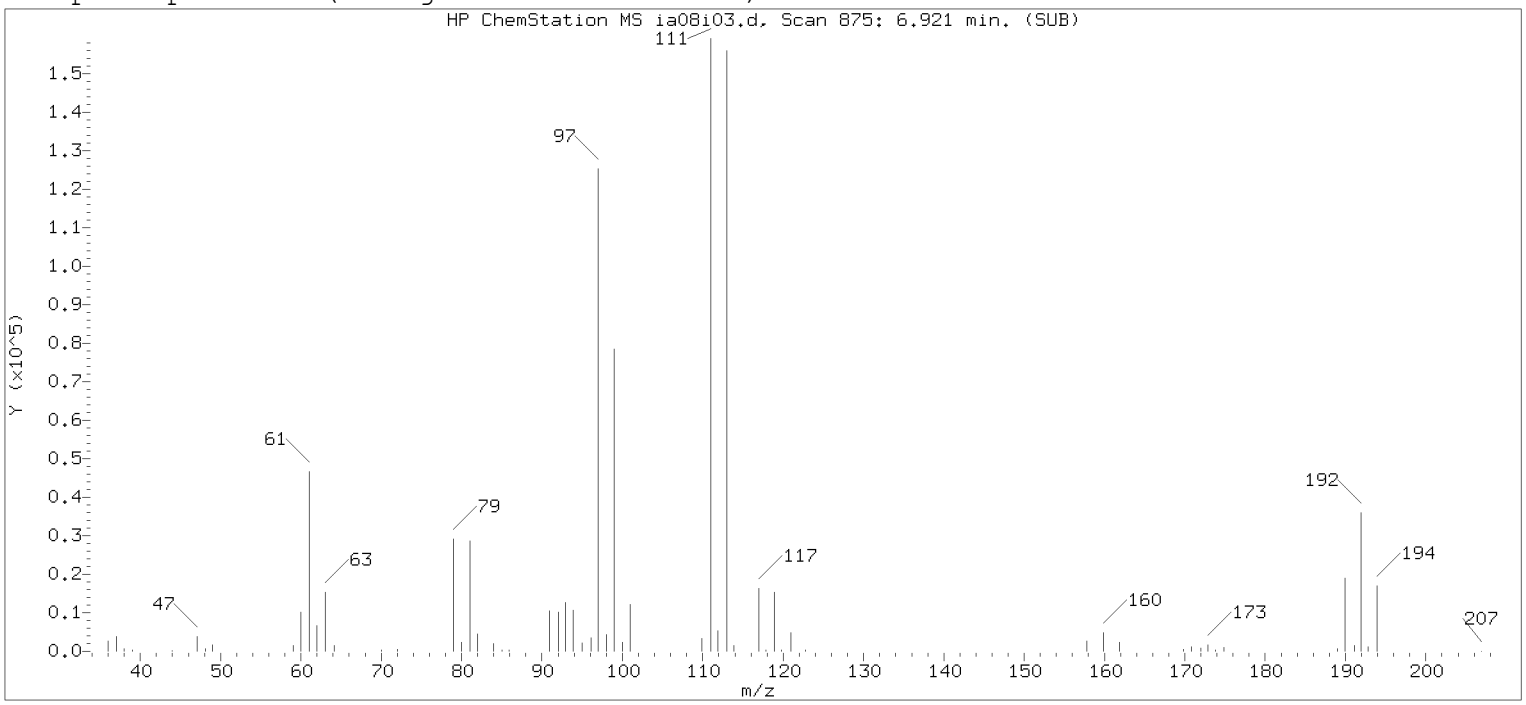
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 97.00
Area (flag) : 444509M
On-Column Amount (ng) : 5.0207
Integration start scan : 860 Integration stop scan: 901
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

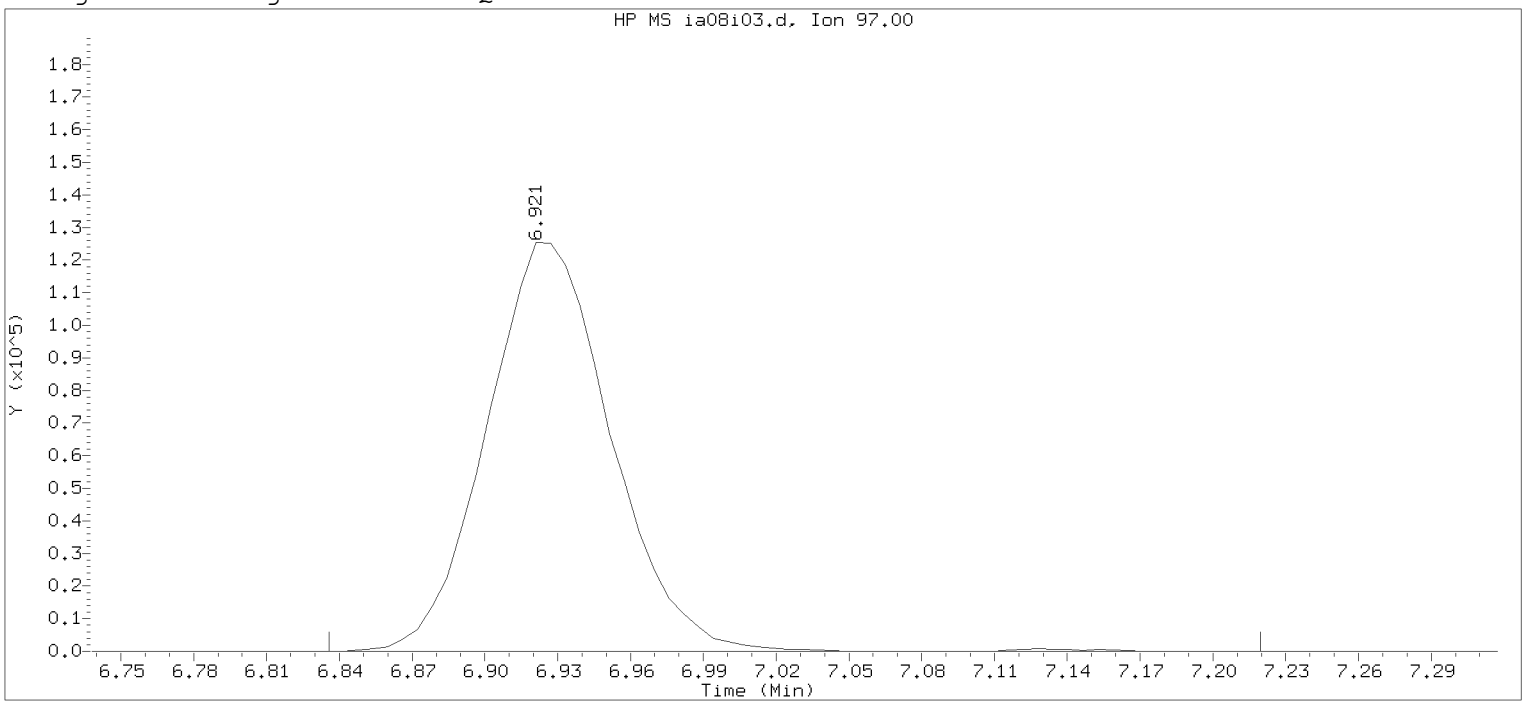
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

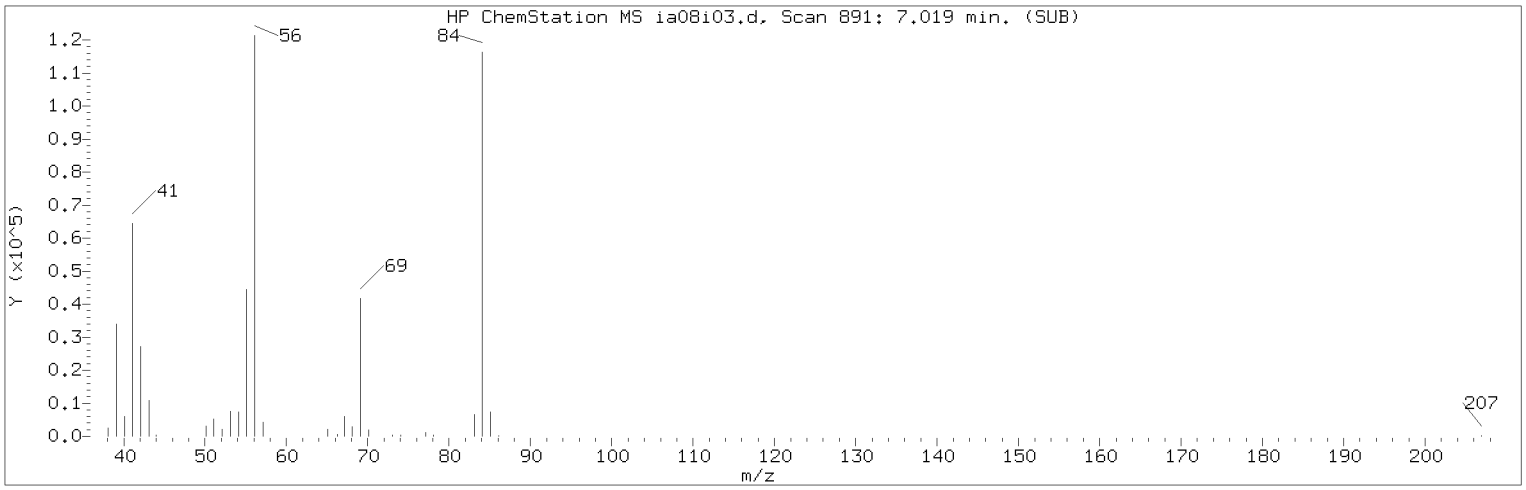
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

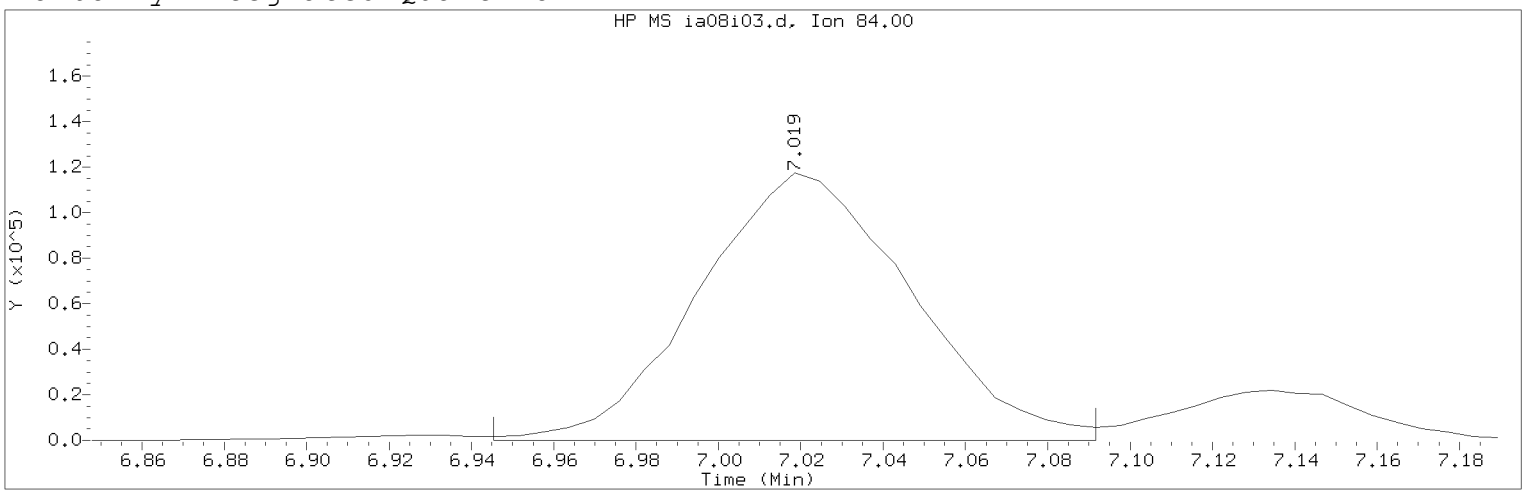
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 97.00
Area : 446045
On-column Amount (ng) : 4.9485
Integration start scan : 860 Integration stop scan: 923
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

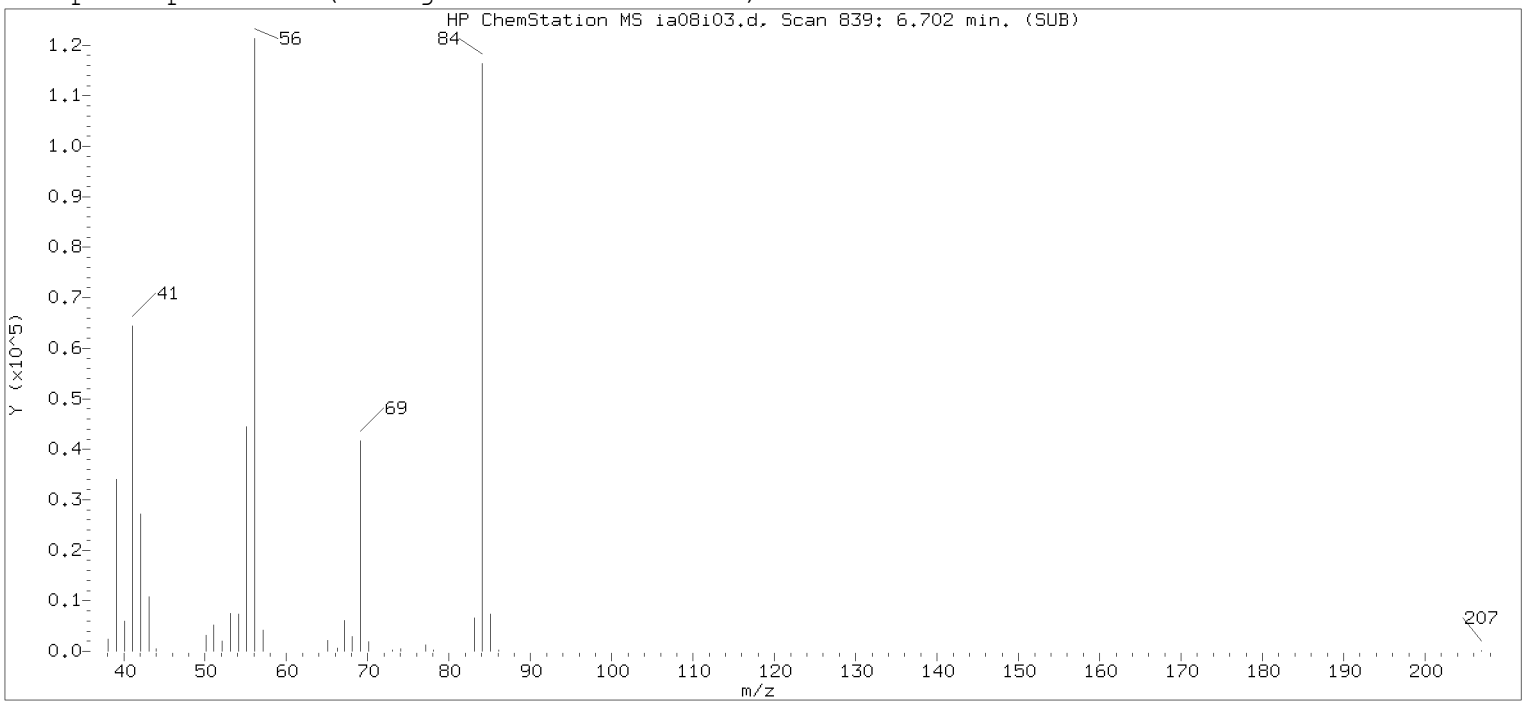
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 84.00
Area (flag) : 419574M
On-Column Amount (ng) : 5.1086
Integration start scan : 878 Integration stop scan: 902
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

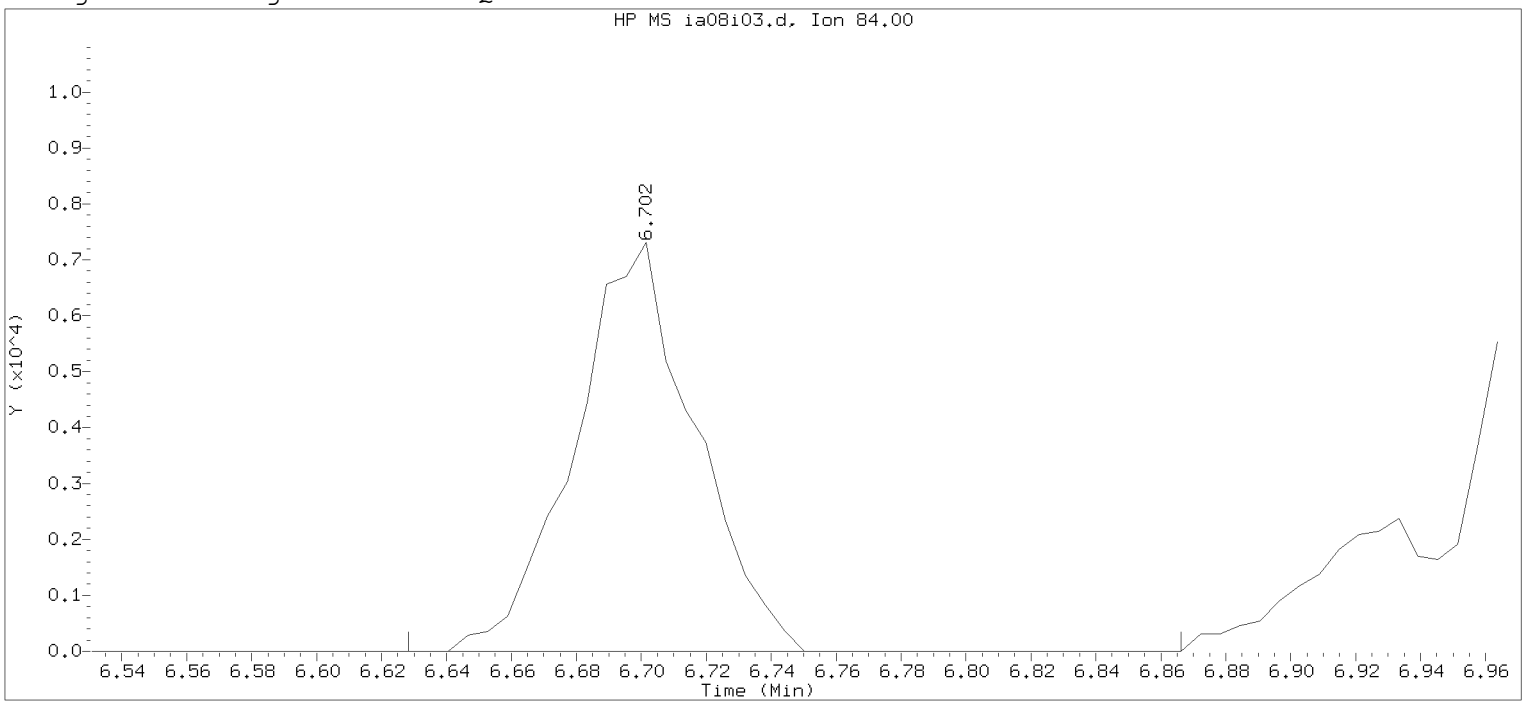
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

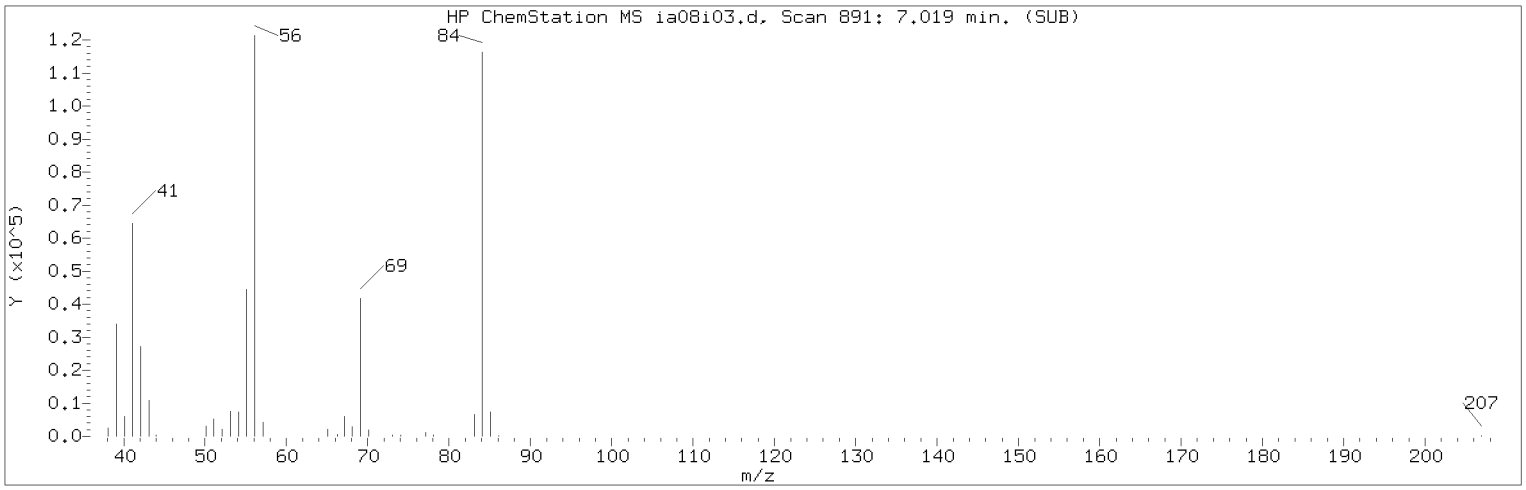
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

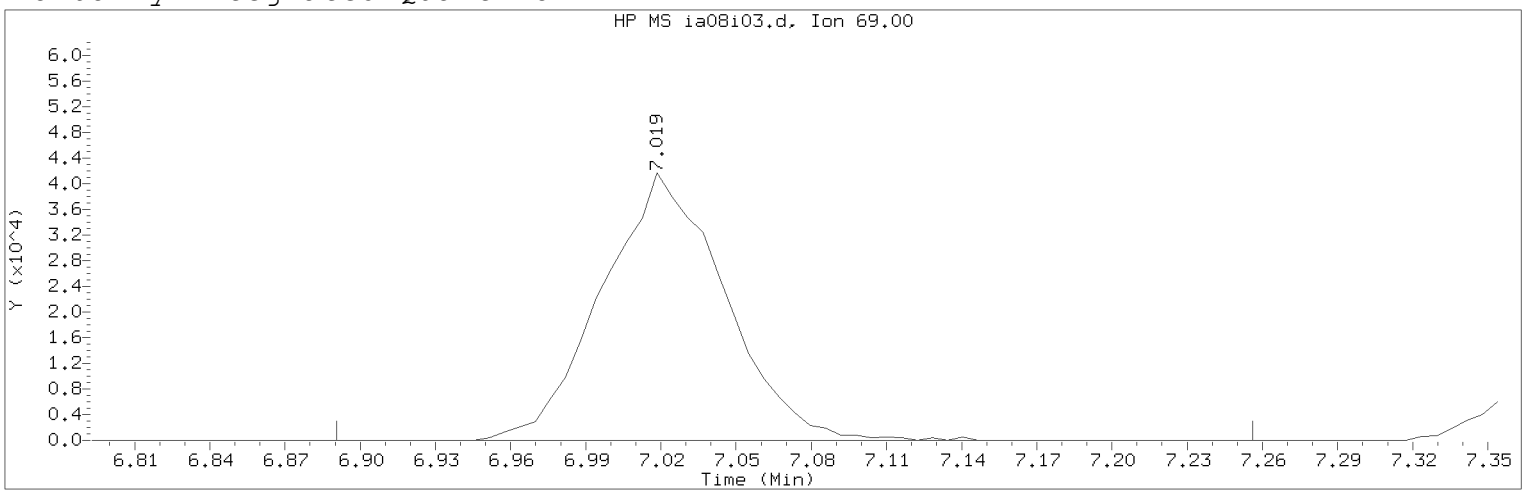
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 839
Retention Time (minutes): 6.702
Quant Ion : 84.00
Area : 18781
On-column Amount (ng) : 4.9961
Integration start scan : 826 Integration stop scan: 865
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

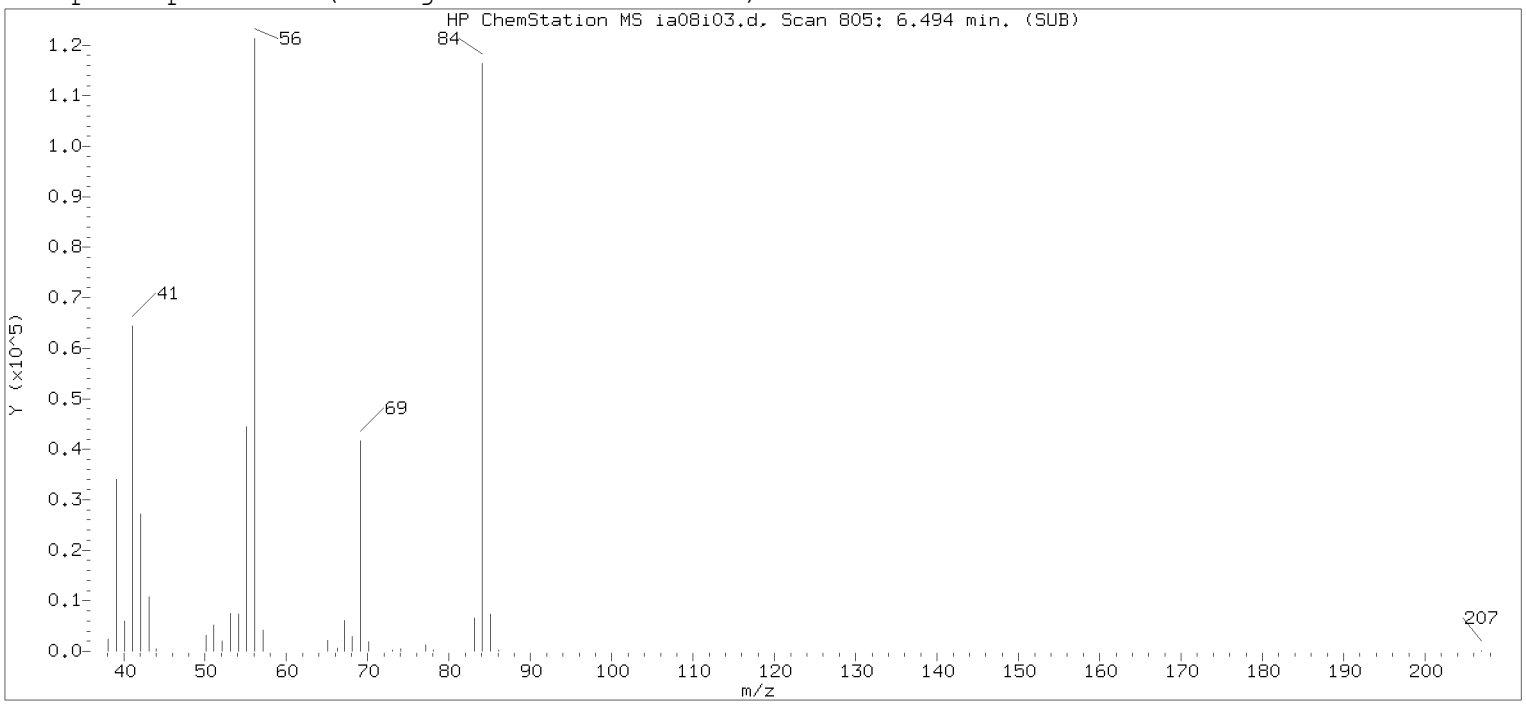
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 69.00
Area (flag) : 141722M
On-Column Amount (ng) : 4.9575
Integration start scan : 869 Integration stop scan: 929
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

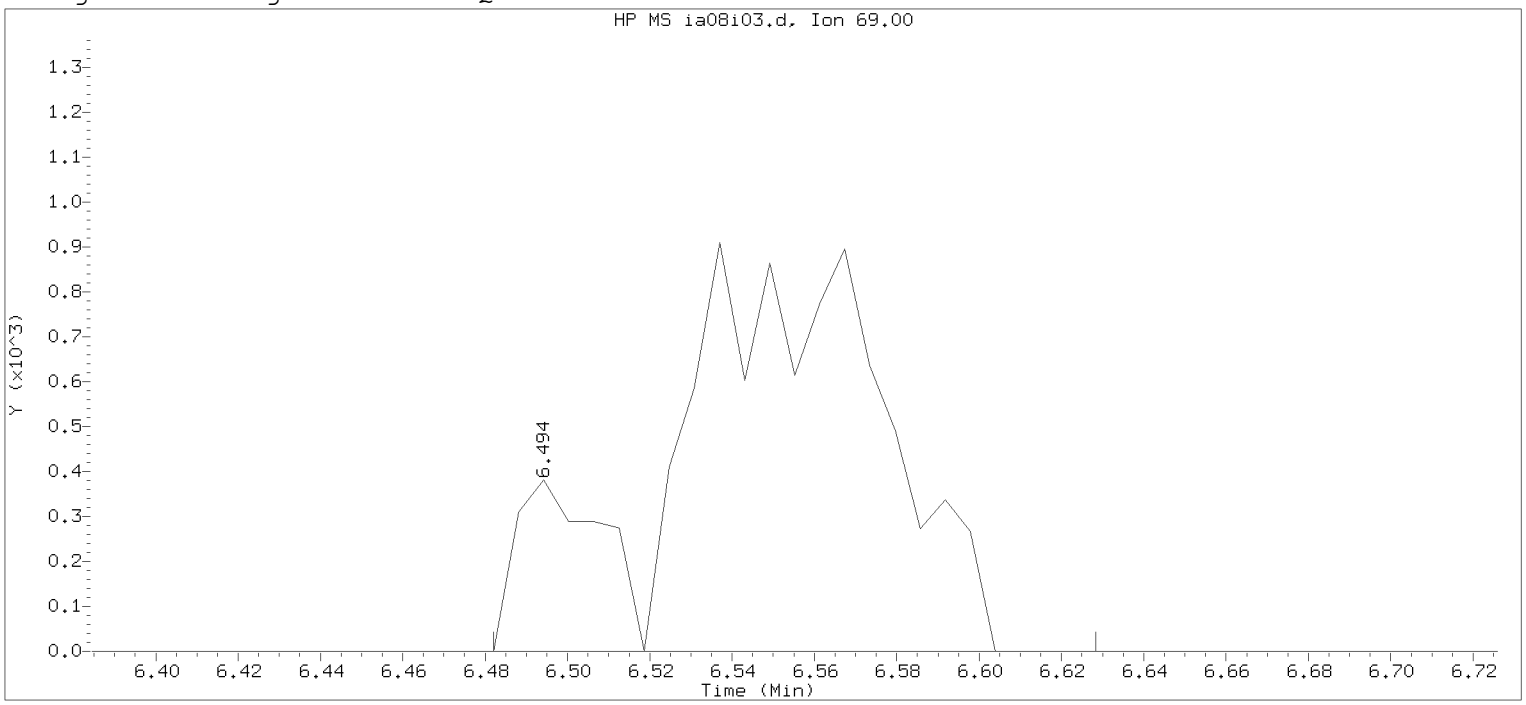
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

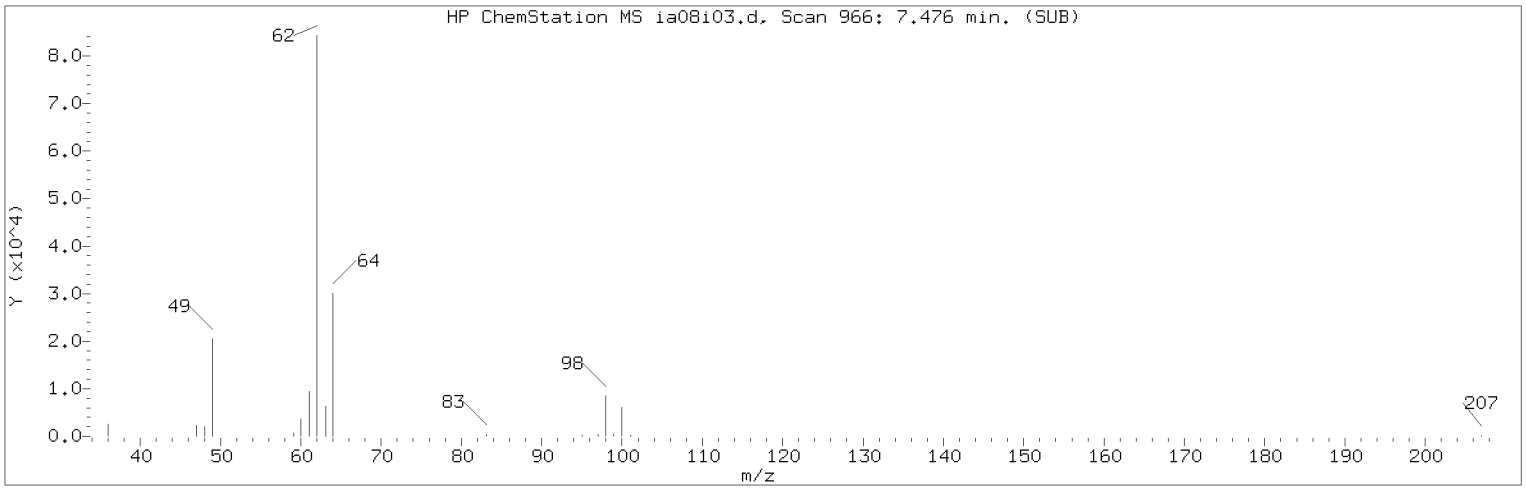
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

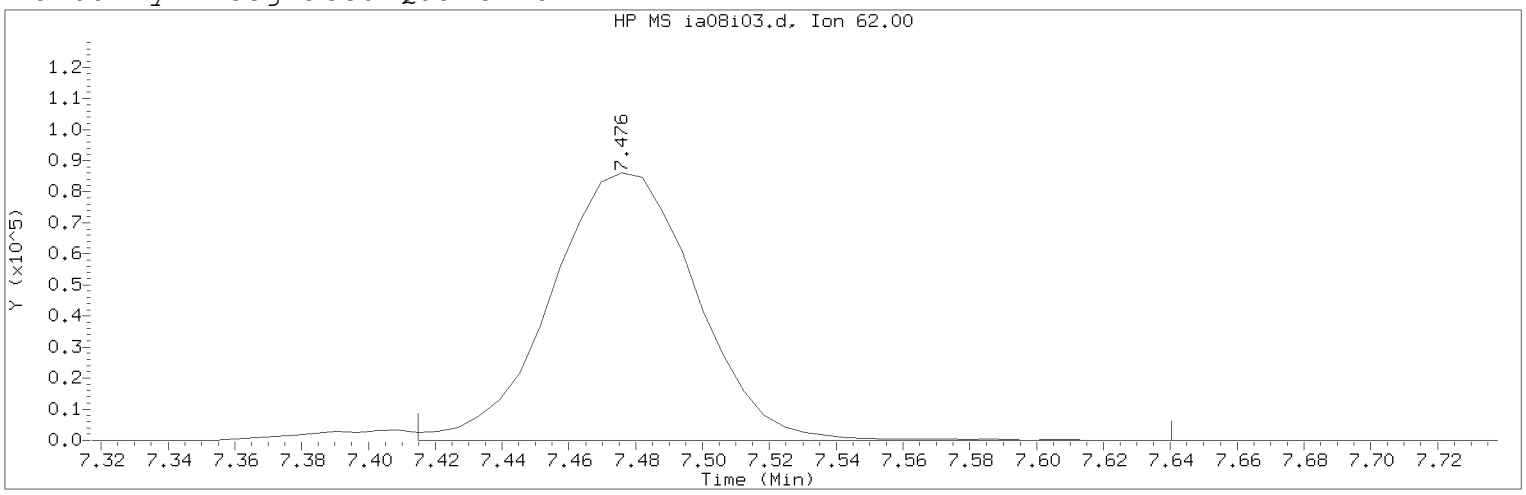
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 805
Retention Time (minutes): 6.494
Quant Ion : 69.00
Area : 3367
On-column Amount (ng) : 5.2133
Integration start scan : 802 Integration stop scan: 826
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

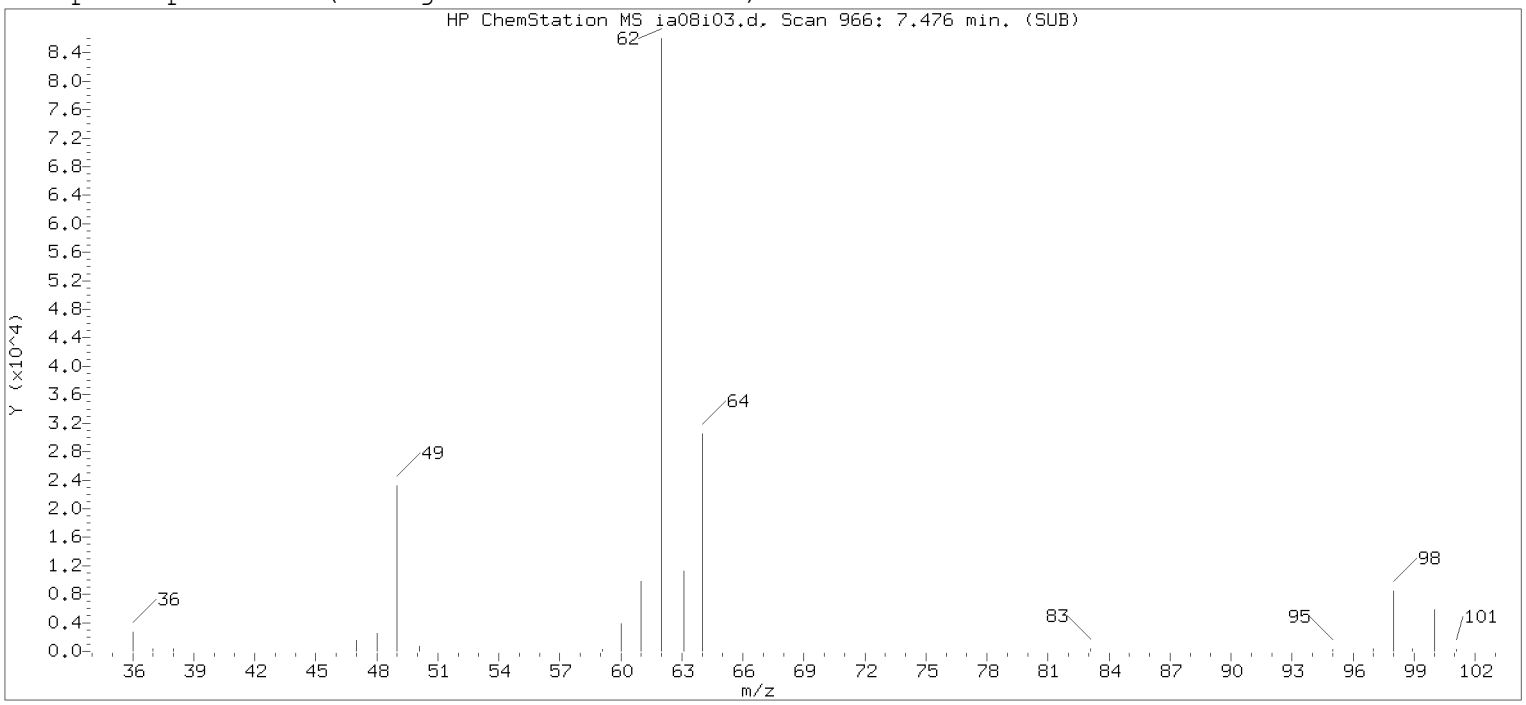
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 966
Retention Time (minutes): 7.476
Quant Ion : 62.00
Area (flag) : 259343M
On-Column Amount (ng) : 4.7976
Integration start scan : 955 Integration stop scan: 992
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

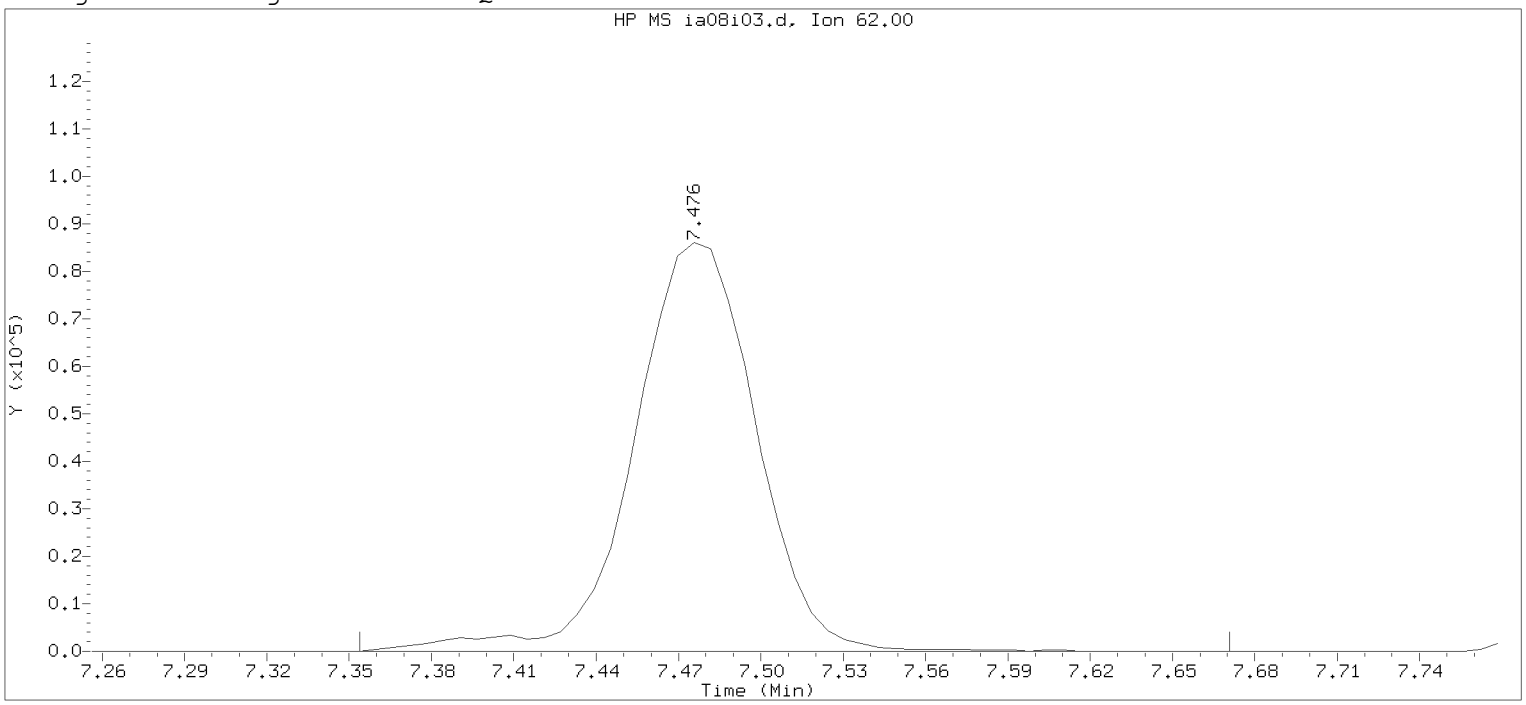
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

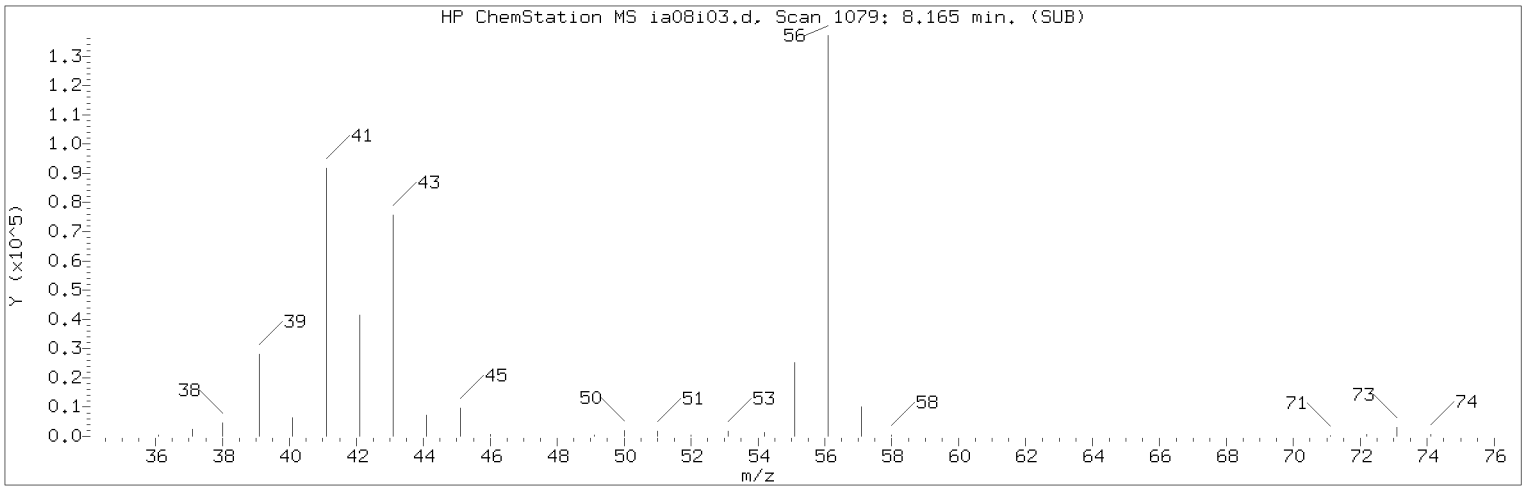
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

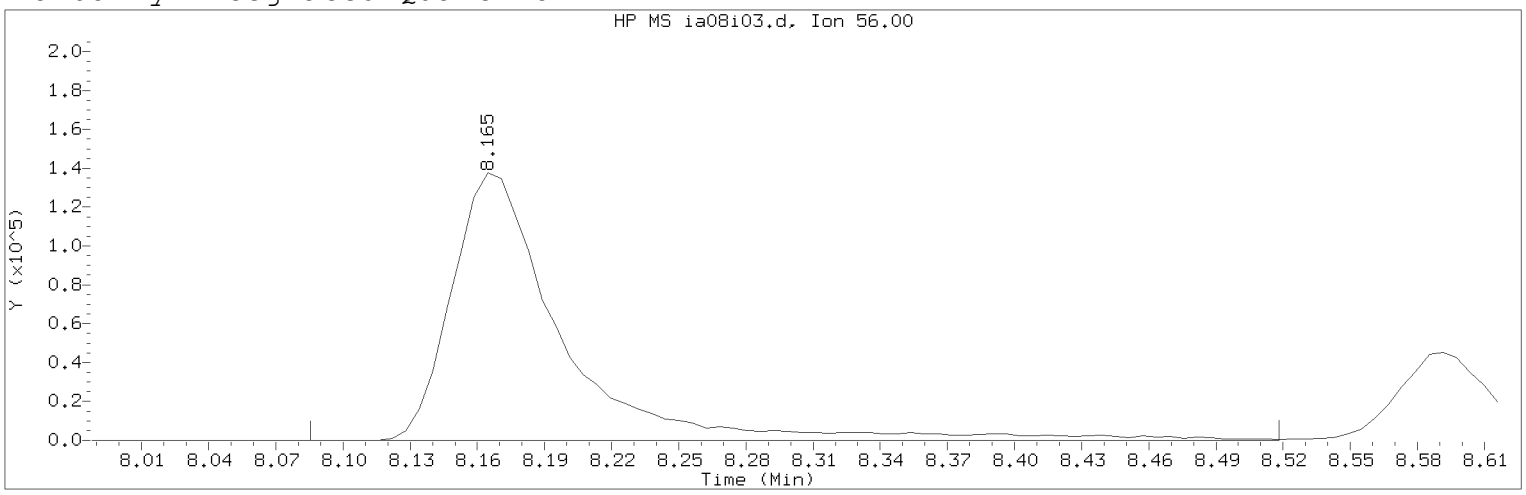
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 966
Retention Time (minutes): 7.476
Quant Ion : 62.00
Area : 265974
On-column Amount (ng) : 5.0277
Integration start scan : 945 Integration stop scan: 997
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

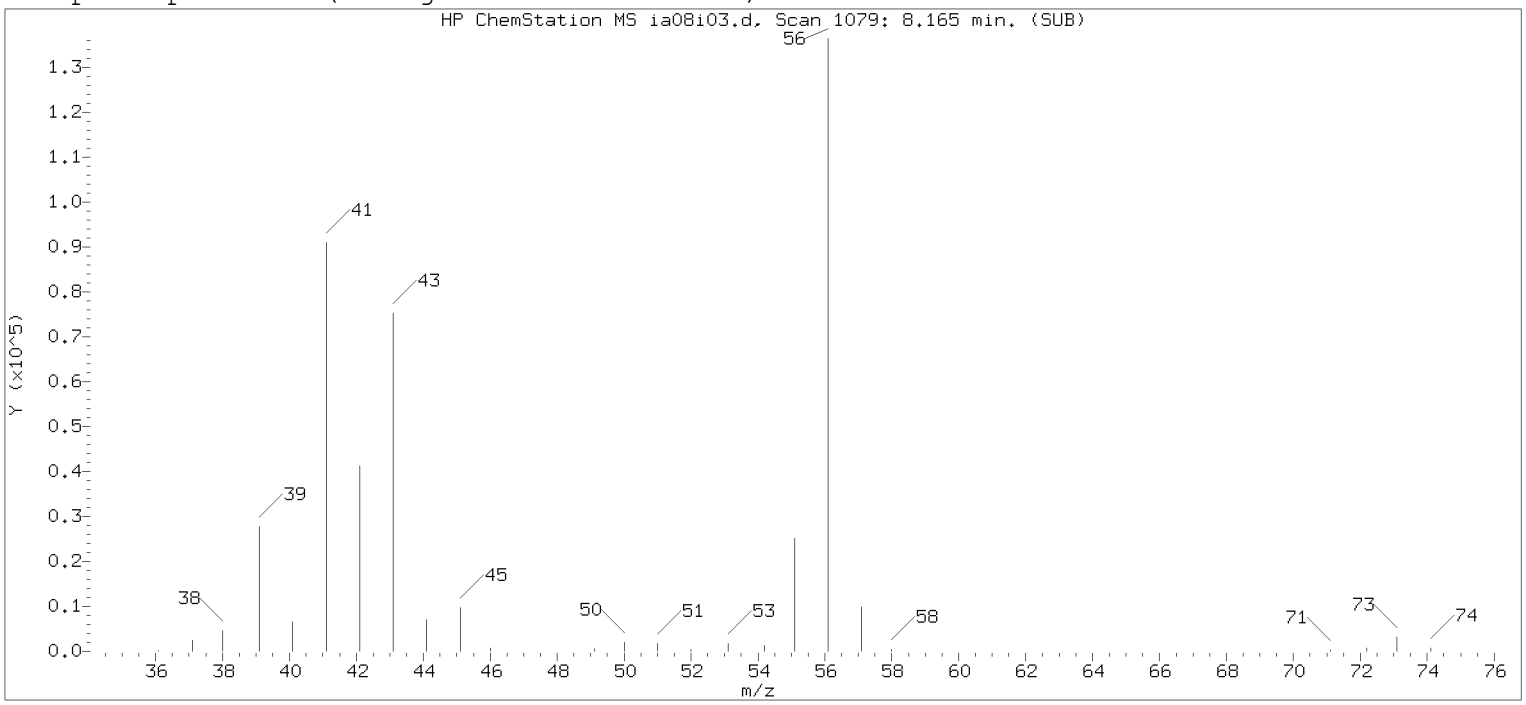
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1079
Retention Time (minutes): 8.165
Quant Ion : 56.00
Area (flag) : 473863M
On-Column Amount (ng) : 521.1632
Integration start scan : 1065 Integration stop scan: 1136
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

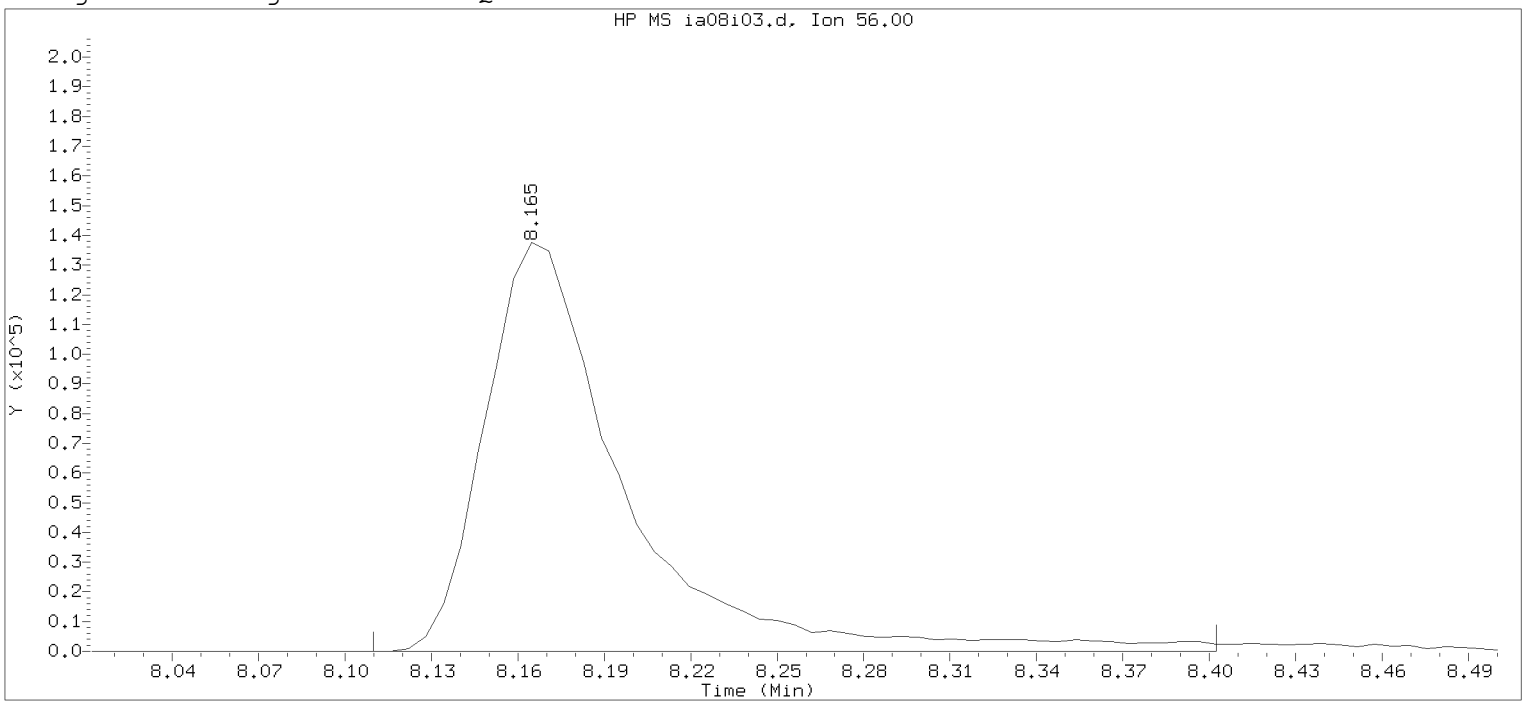
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

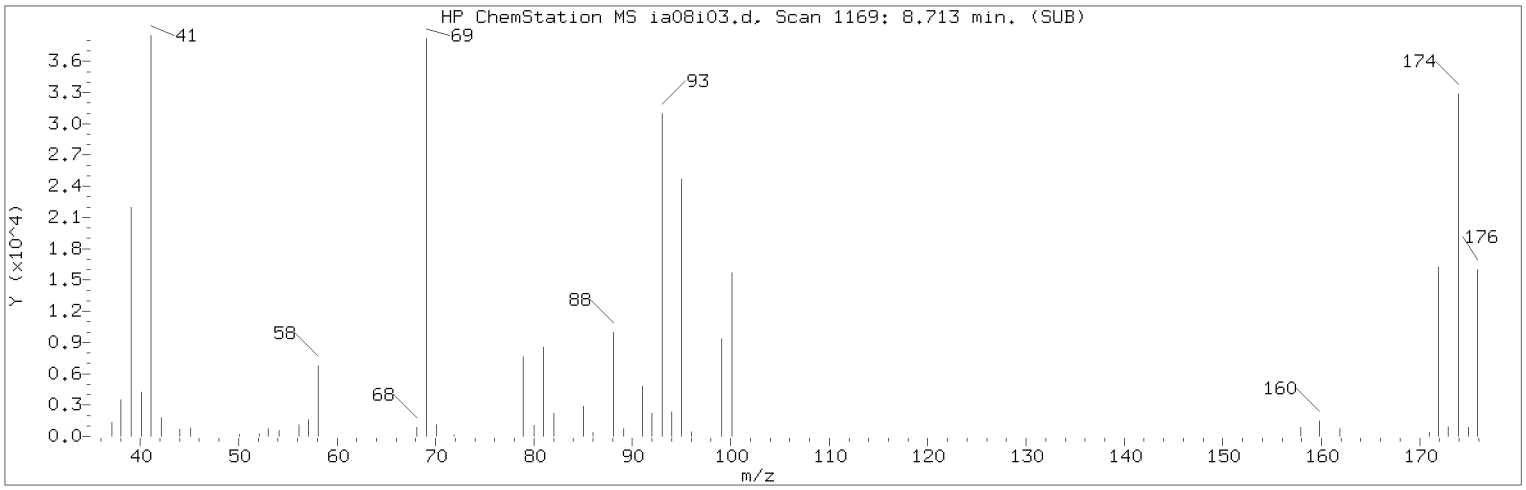
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

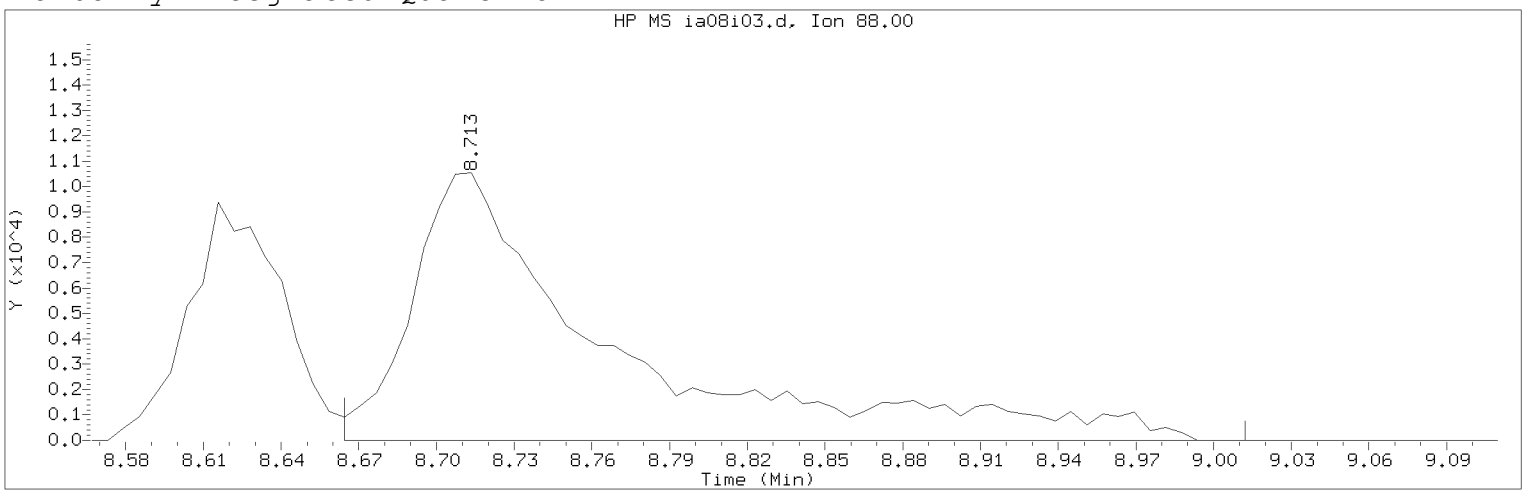
Compound Number : 65
Compound Name : n-Butanol
Scan Number : 1079
Retention Time (minutes): 8.165
Quant Ion : 56.00
Area : 462154
On-column Amount (ng) : 480.7169
Integration start scan : 1069 Integration stop scan: 1117
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

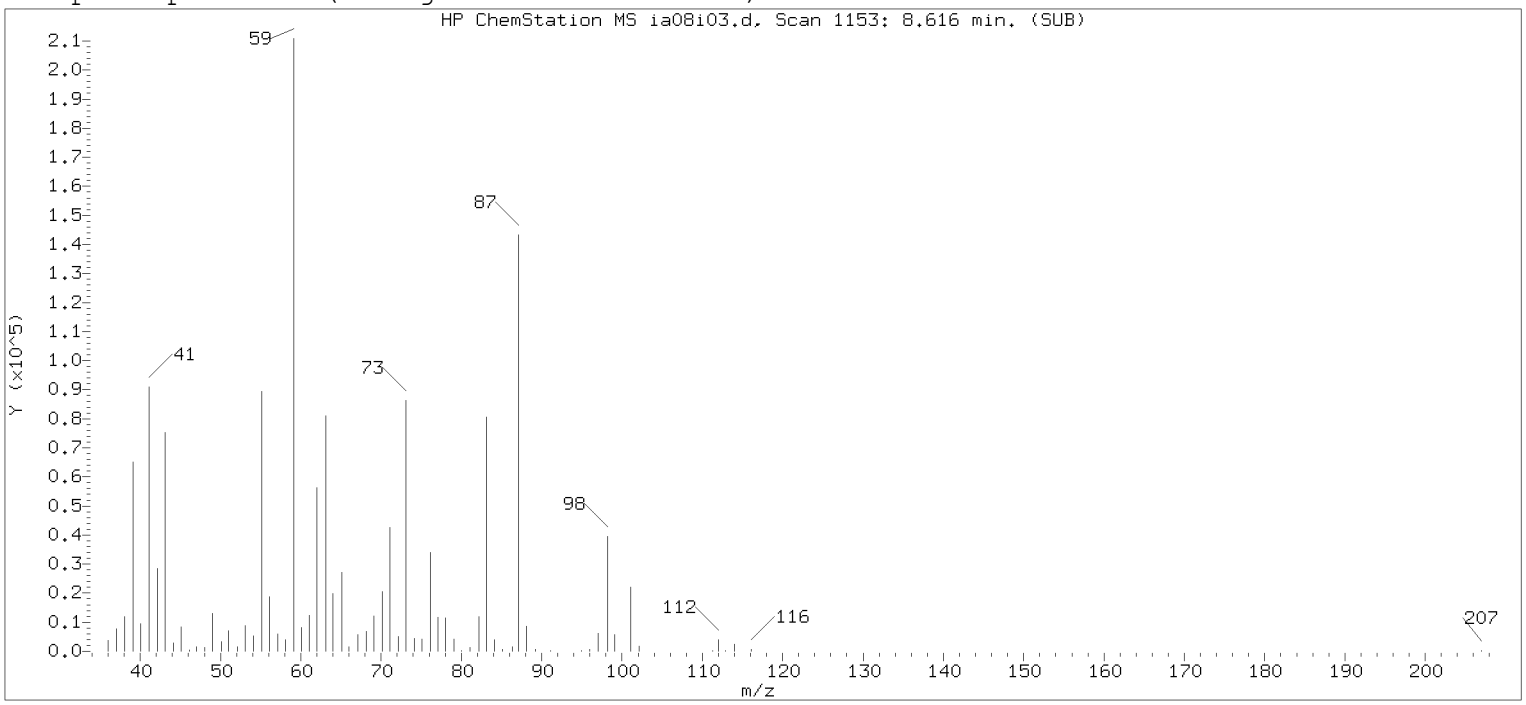
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.713
Quant Ion : 88.00
Area (flag) : 56008M
On-Column Amount (ng) : 250.5442
Integration start scan : 1160 Integration stop scan: 1217
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

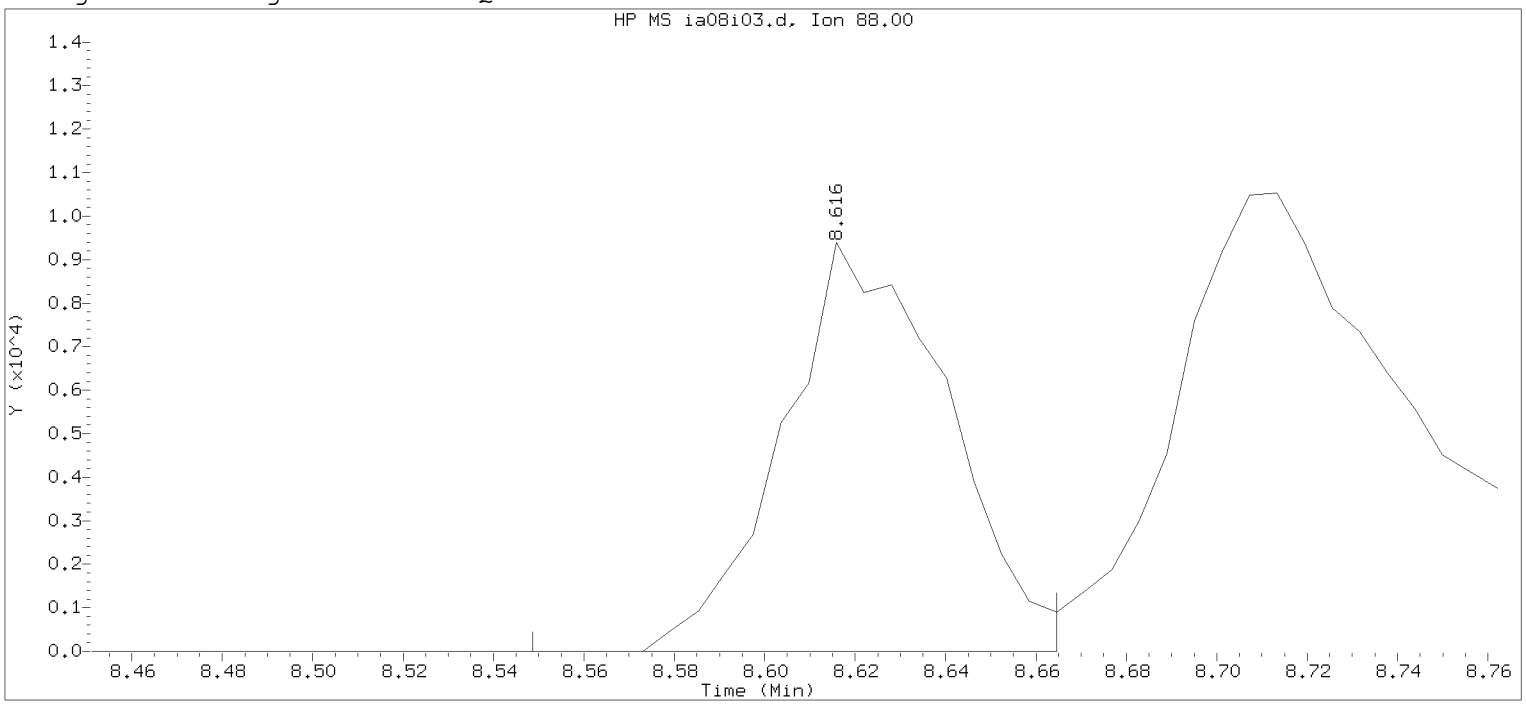
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

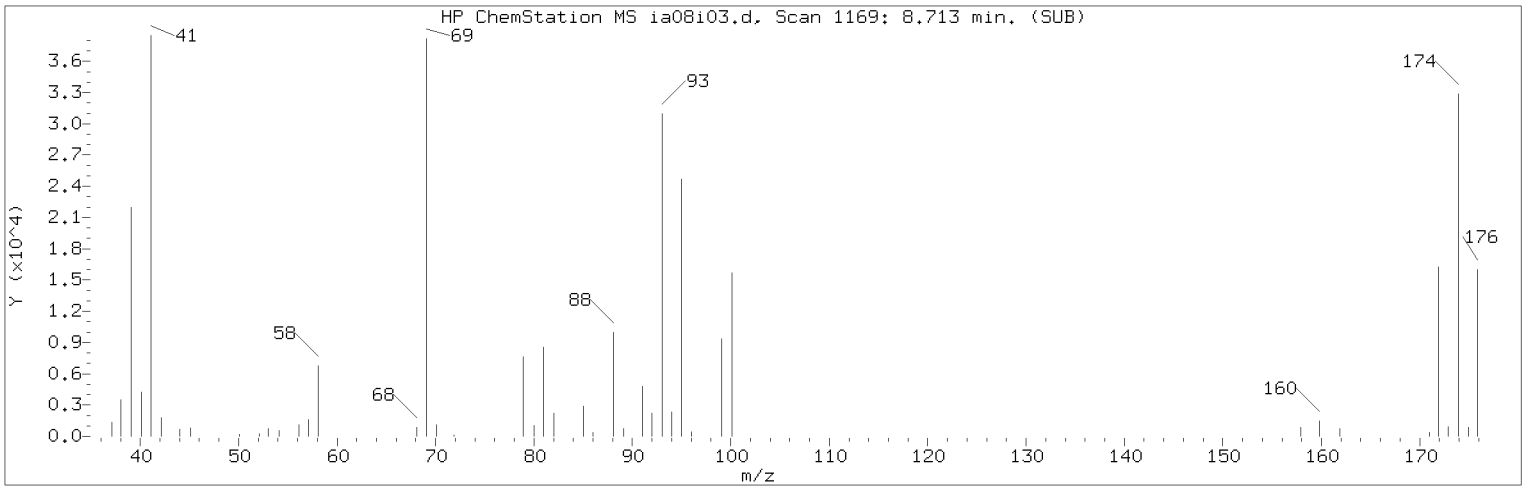
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

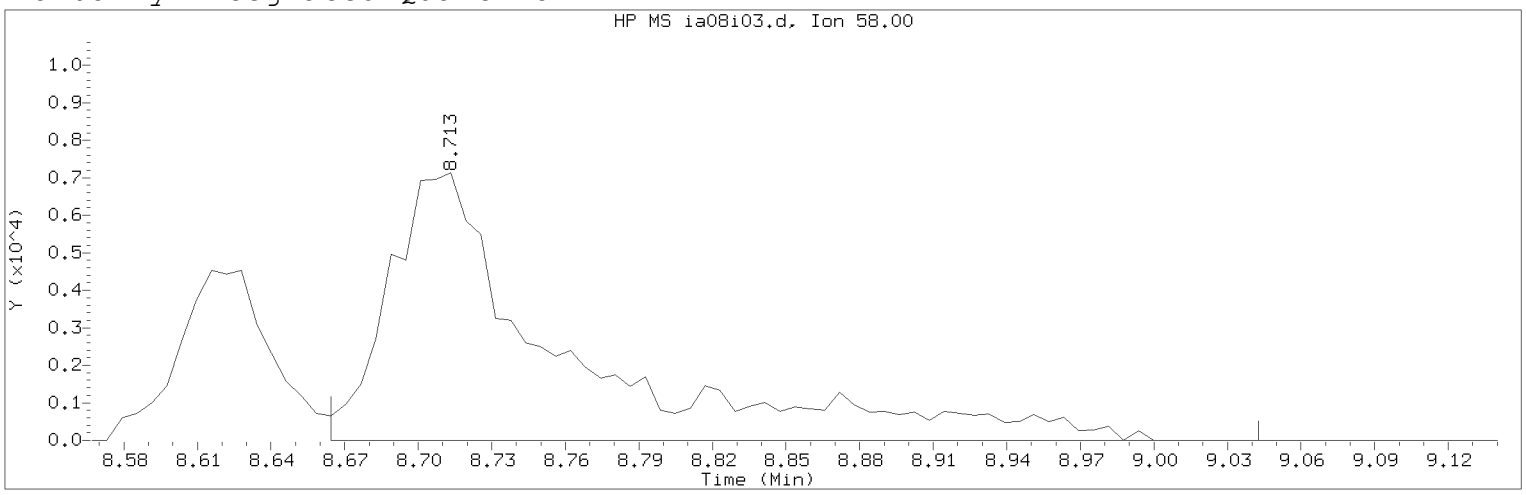
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1153		
Retention Time (minutes)	: 8.616		
Quant Ion	: 88.00		
Area	: 23630		
On-column Amount (ng)	: 111.6117		
Integration start scan	: 1141	Integration stop scan:	1160
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

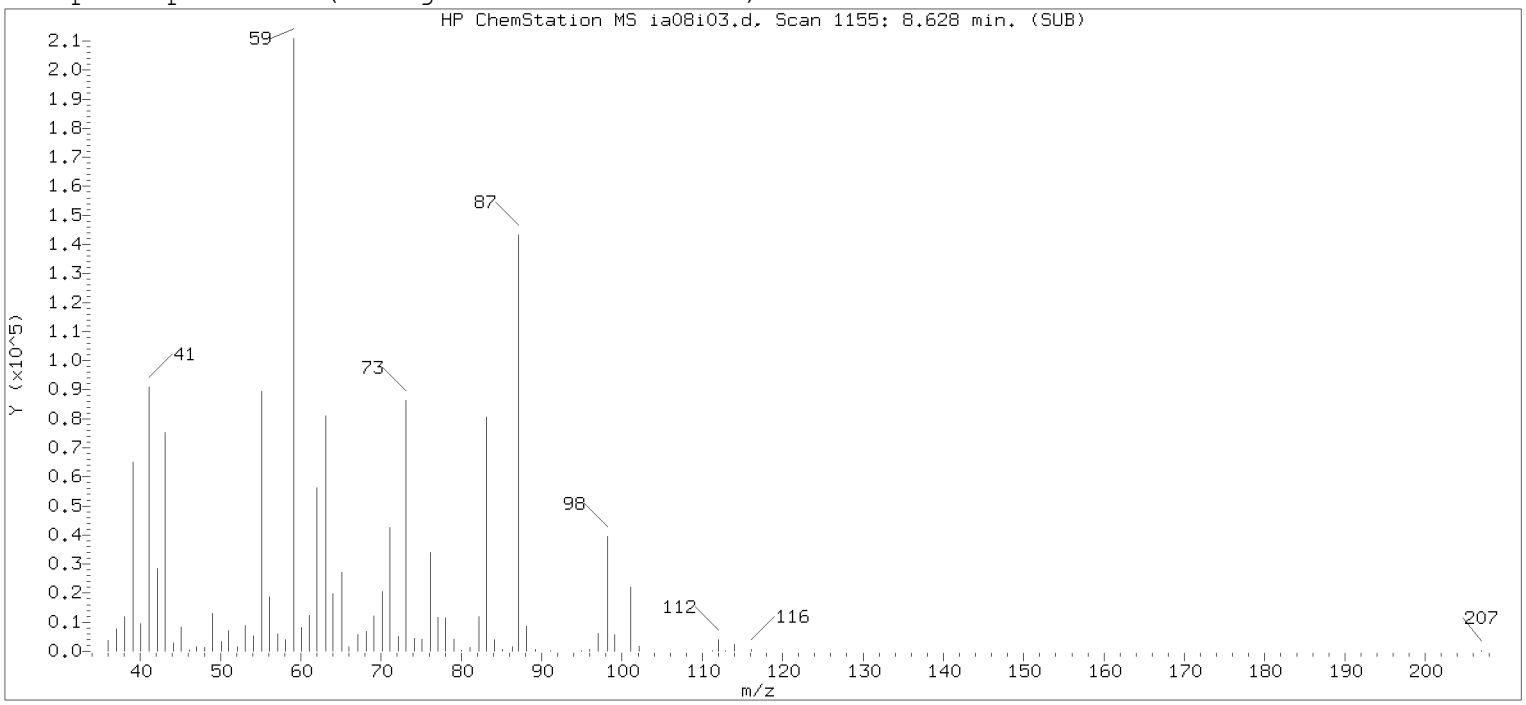
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.713
Quant Ion : 58.00
Area (flag) : 35226M
On-Column Amount (ng) : 264.4342
Integration start scan : 1160 Integration stop scan: 1222
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

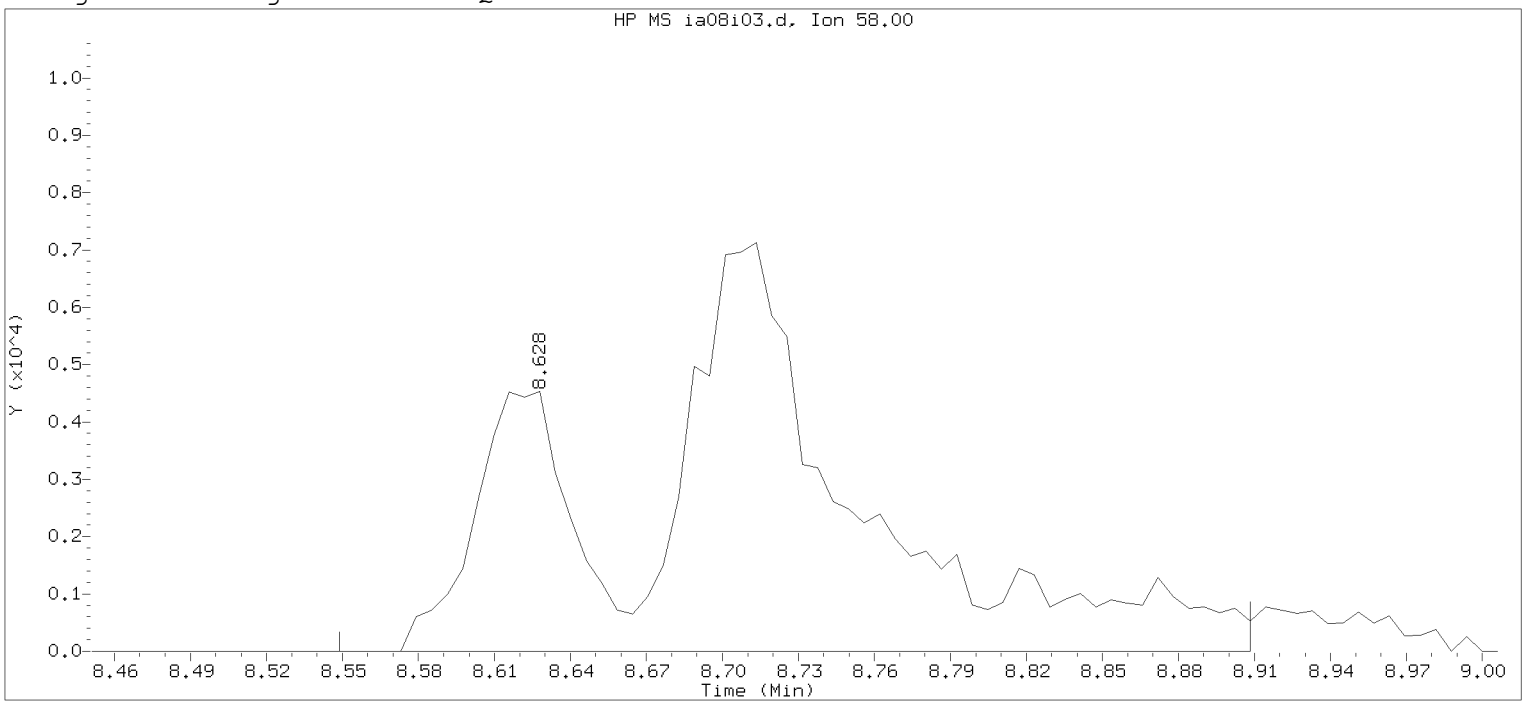
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

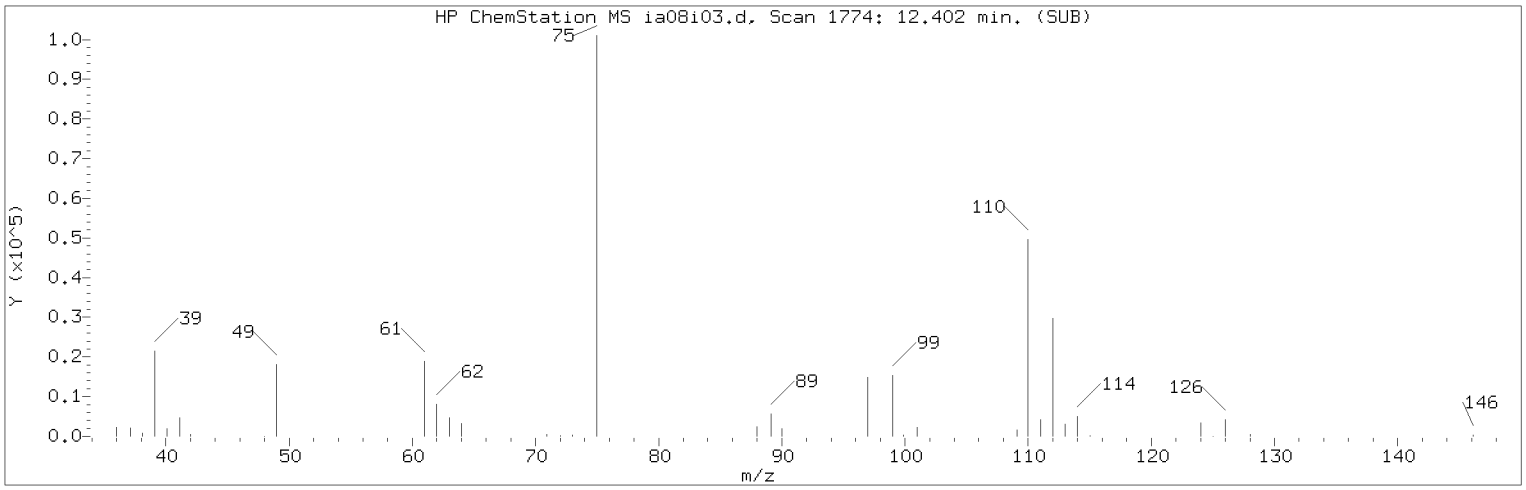
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

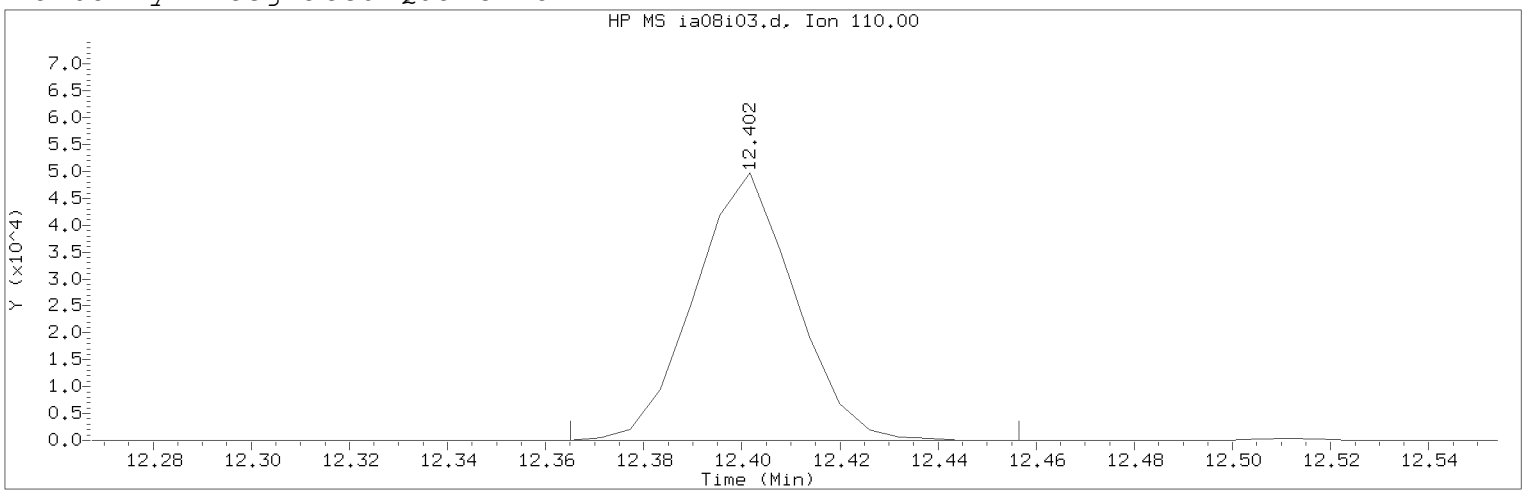
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1155		
Retention Time (minutes)	: 8.628		
Quant Ion	: 58.00		
Area	: 44557		
On-column Amount (ng)	: 267.0908		
Integration start scan	: 1141	Integration stop scan:	1200
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

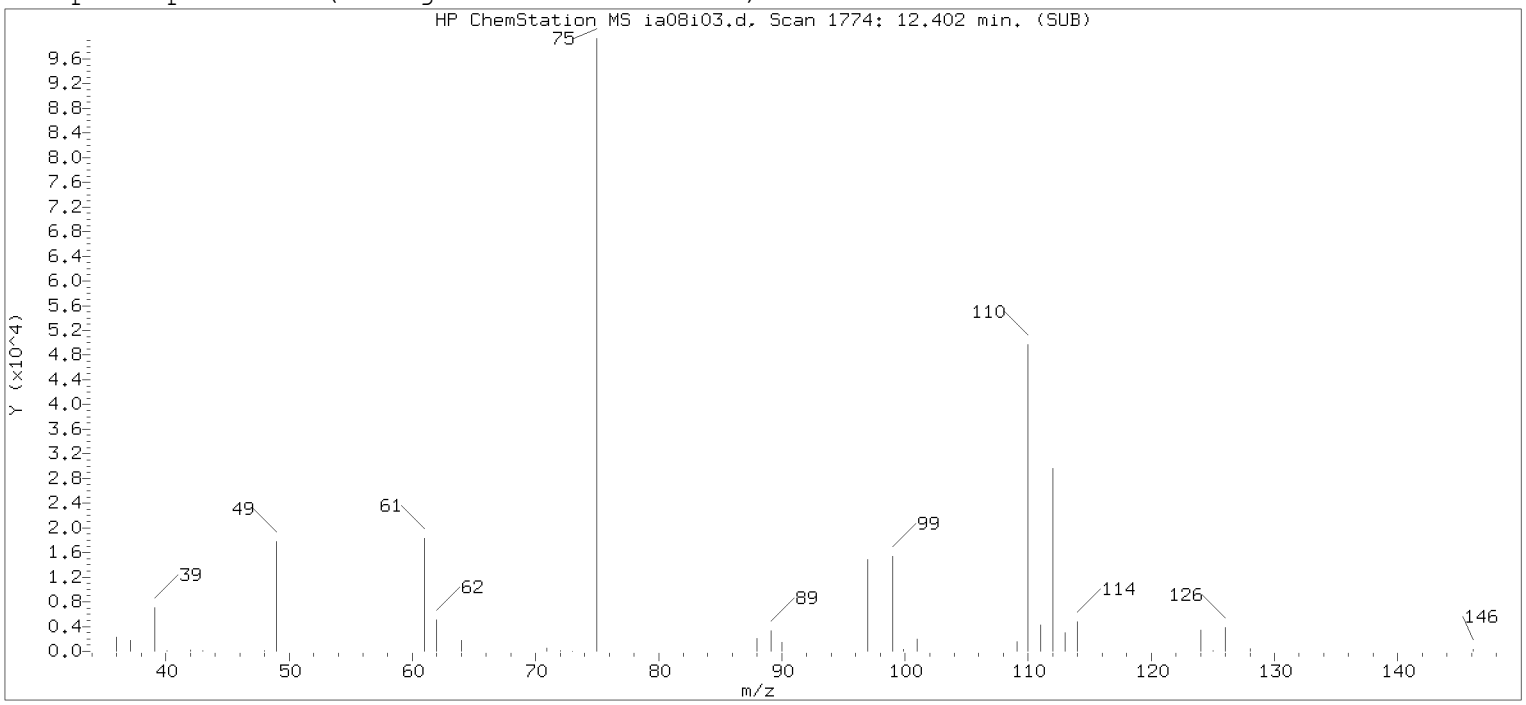
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1774
Retention Time (minutes): 12.402
Quant Ion : 110.00
Area (flag) : 70516M
On-Column Amount (ng) : 5.0384
Integration start scan : 1767 Integration stop scan: 1782
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

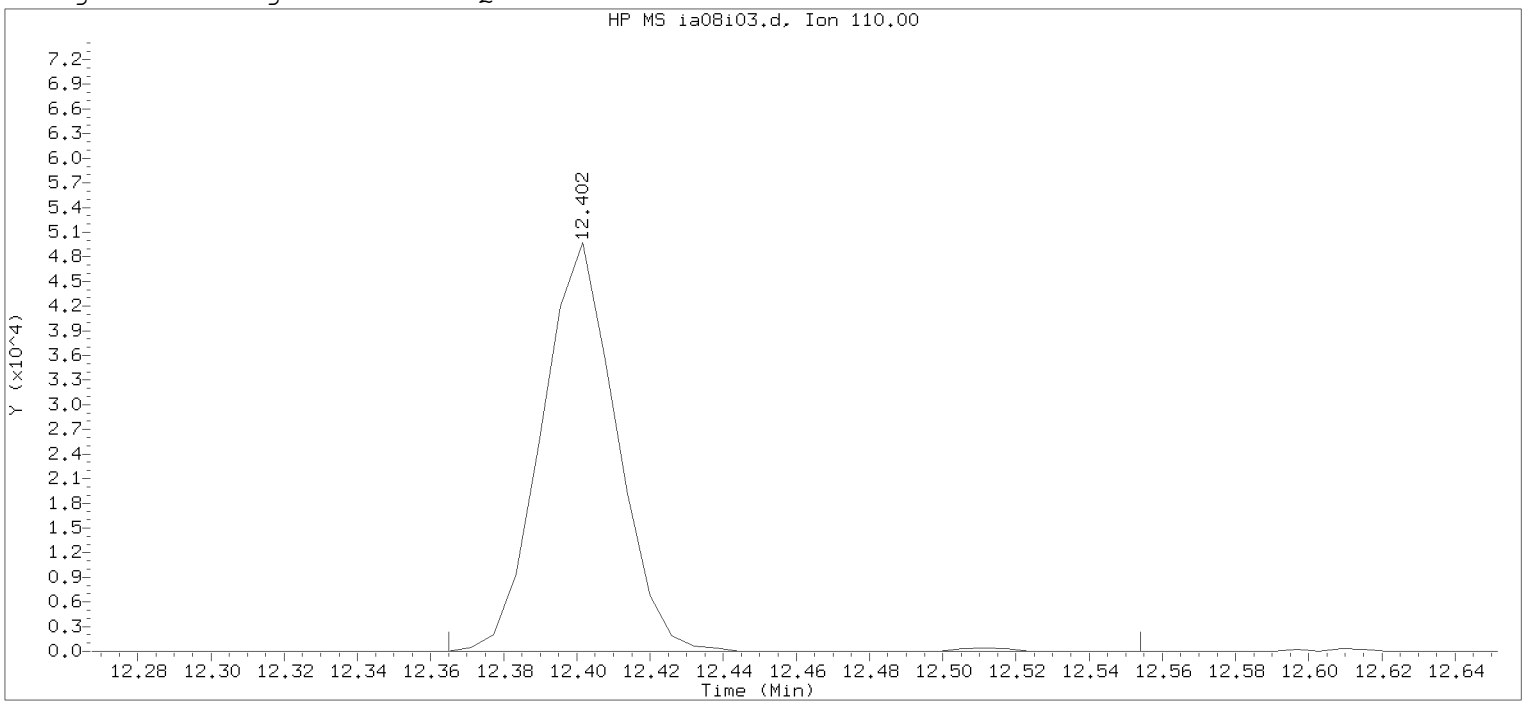
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

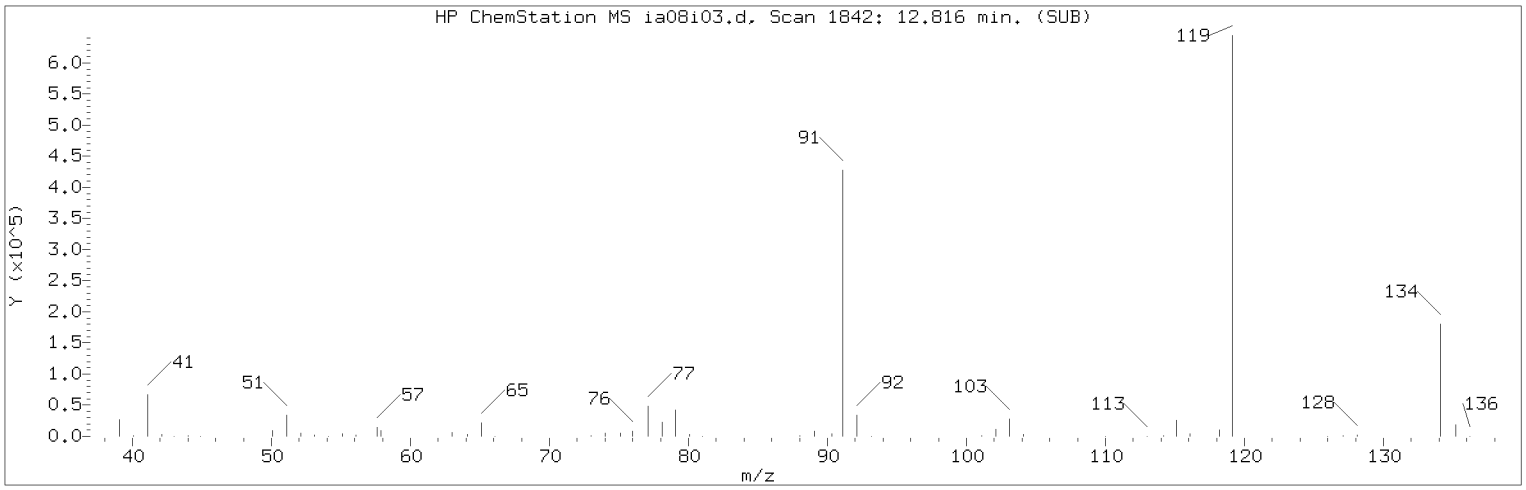
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

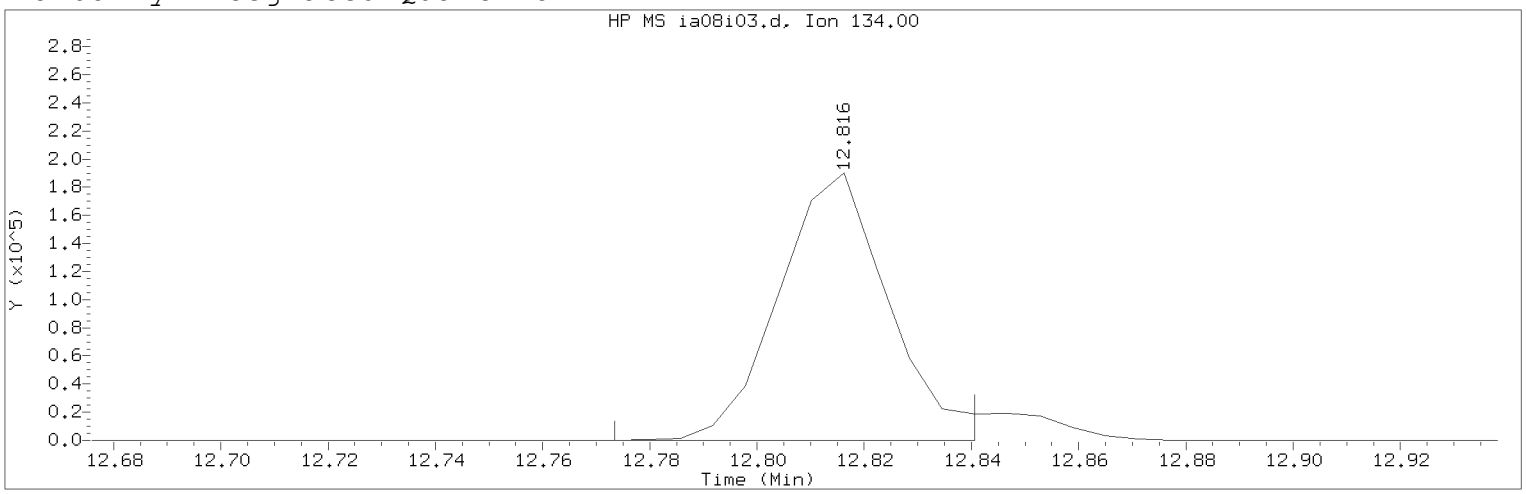
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1774
Retention Time (minutes): 12.402
Quant Ion : 110.00
Area : 70860
On-column Amount (ng) : 4.9123
Integration start scan : 1767 Integration stop scan: 1798
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

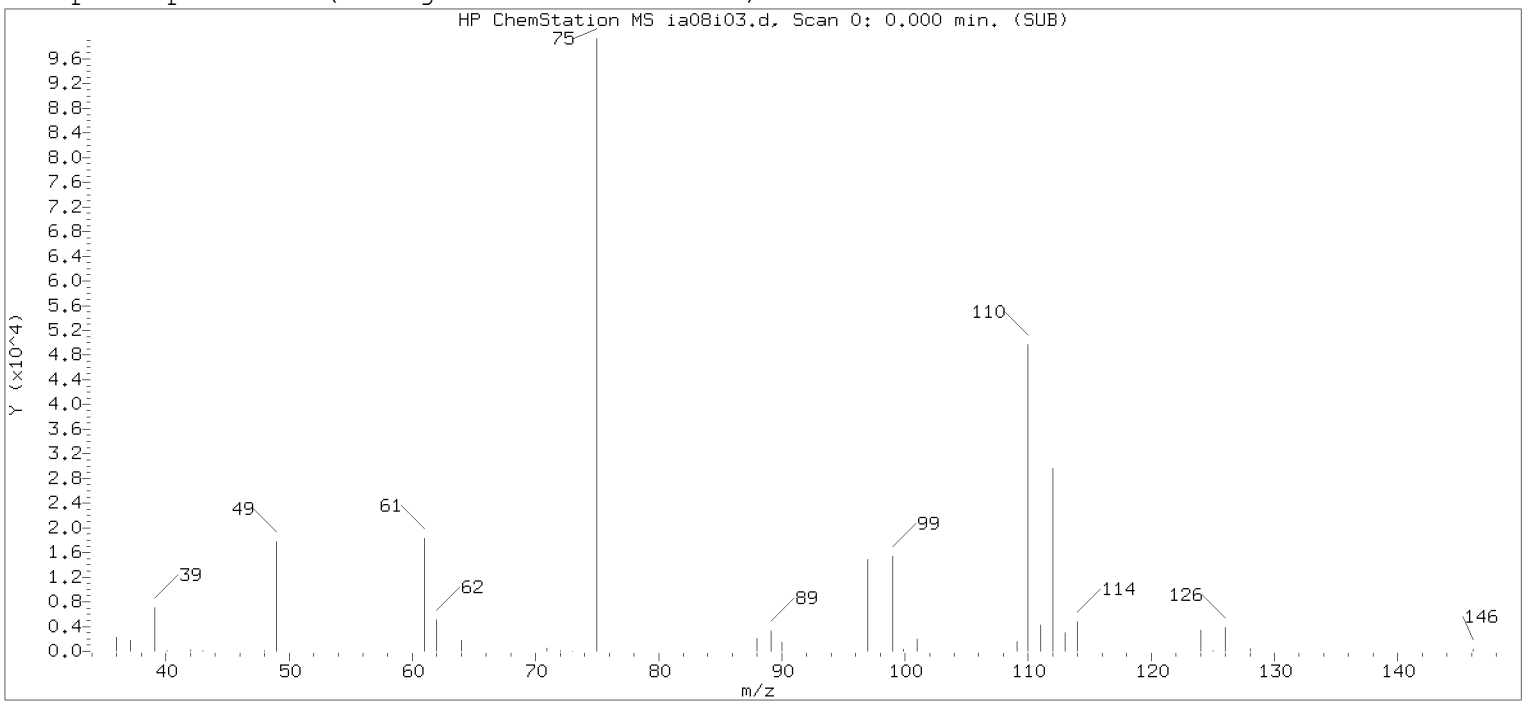
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 269926M
On-Column Amount (ng) : 4.9953
Integration start scan : 1834 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

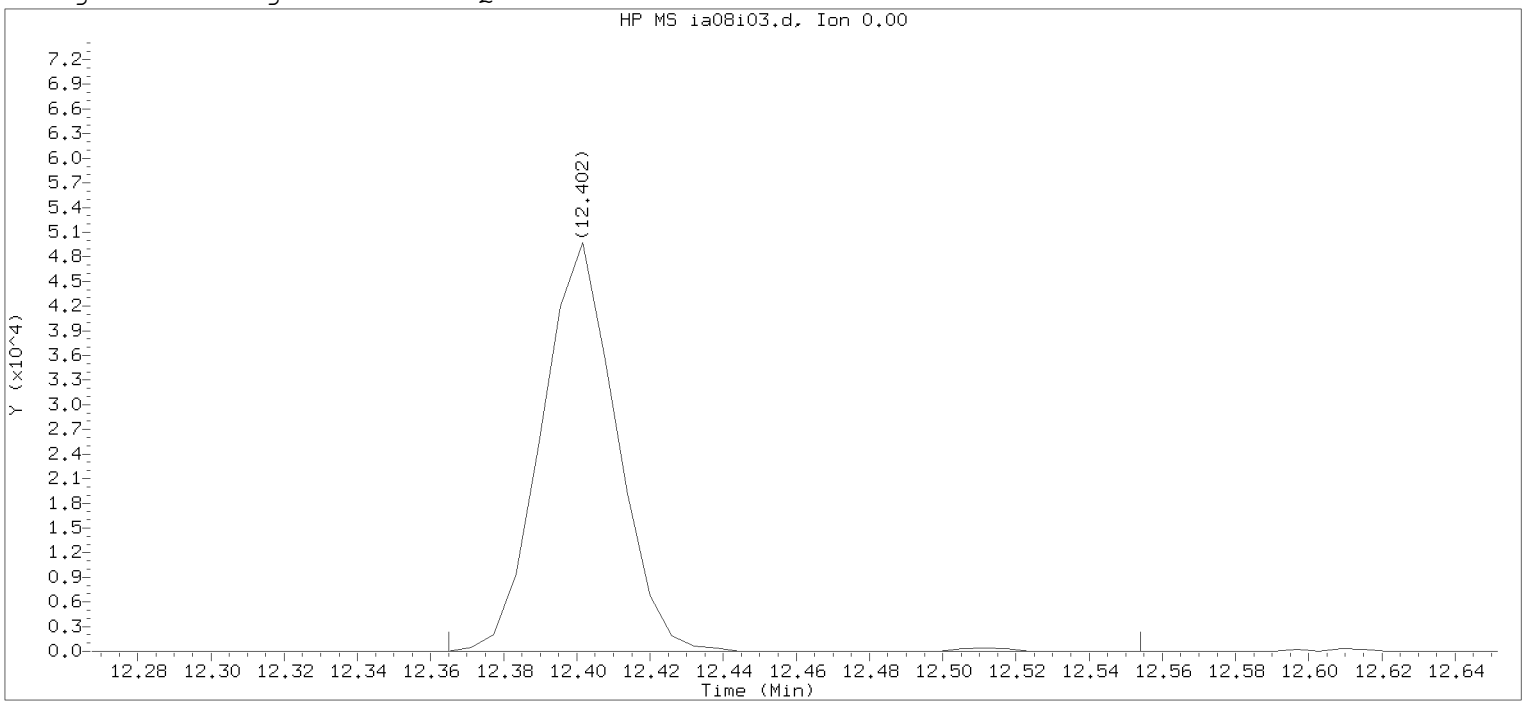
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



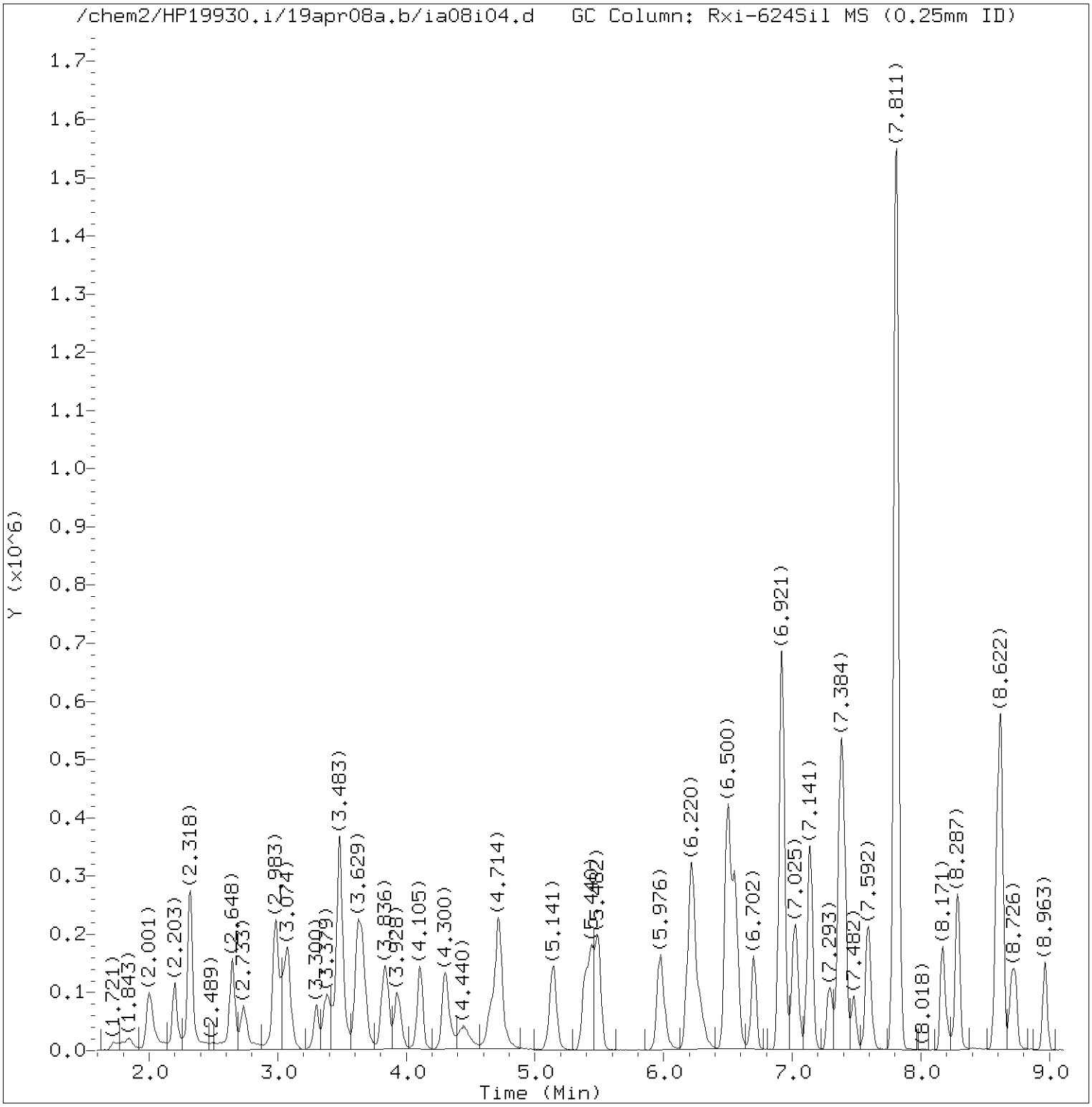
Data File: /chem2/HP19930.i/19apr08a.b/ia08i03.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 16:55 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 0
Compound Name : tert-Butylbenzene
Scan Number : 0
Retention Time (minutes): 0.000
Quant Ion : 0.00
Area : 0
On-column Amount (ng) : 0.0000
Integration start scan : 5691 Integration stop scan: 654656
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

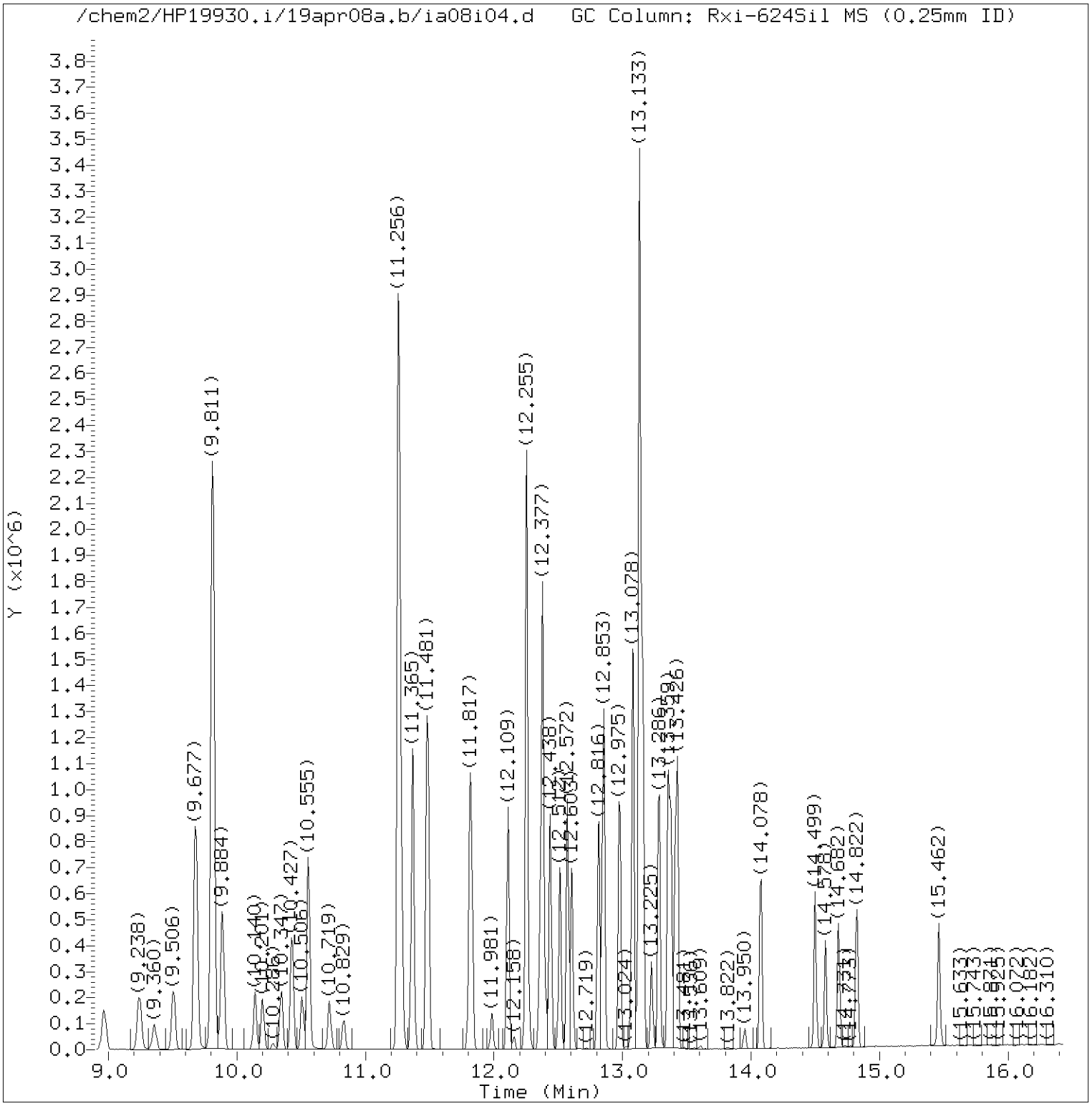
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.001	85	217469	2.030
2) Chloromethane	(2)	2.196	50	163362	2.058
6) 1,3-Butadiene	(2)	2.312	39	125860M	1.886
5) Vinyl Chloride	(2)	2.324	62	165144	2.047
7) Bromomethane	(2)	2.648	94	142370M	1.985
8) Chloroethane	(2)	2.733	64	95005	2.027
9) Dichlorofluoromethane	(2)	2.977	67	242955	2.006
10) Trichlorofluoromethane	(2)	3.038	101	271364M	2.013
11) Ethyl ether	(2)	3.300	59	66462	1.872
12) Freon 123a	(2)	3.379	67	117098MA	1.932
13) Acrolein	(1)	3.483	56	611794	99.875
15) 1,1-Dichloroethene	(2)	3.617	96	93231	1.994
16) Freon 113	(2)	3.654	101	110021	1.948
14) Acetone	(1)	3.660	43	161983M	19.158
17) Methyl Iodide	(2)	3.824	142	197932	1.974
18) Carbon Disulfide	(2)	3.928	76	262602	1.918
21) Methyl Acetate	(1)	4.086	43	43880	1.964
22) Allyl Chloride	(2)	4.105	41	134053	1.864
23) Methylene Chloride	(2)	4.300	84	93397	1.953
26)*t-Butyl Alcohol-d10	(1)	4.312	65	144315M	50.000
28) t-Butyl Alcohol	(1)	4.452	59	143621	40.981
29) Acrylonitrile	(1)	4.653	53	100255	9.913
30) Methyl Tertiary Butyl Ether	(2)	4.708	73	241023	1.971
31) trans-1,2-Dichloroethene	(2)	4.726	96	101574	1.941
32) n-Hexane	(2)	5.147	57	141460	1.921
33) 1,1-Dichloroethane	(2)	5.385	63	164907	1.938
34) di-Isopropyl Ether	(2)	5.440	45	287325	2.012
35) 2-Chloro-1,3-Butadiene	(2)	5.495	53	150166	1.965
37) Ethyl t-butyl ether	(2)	5.976	59	283780	2.002
40) 1,2-Dichloroethene (Total)	(2)		96	214959	3.887
38) 2-Butanone	(1)	6.190	43	271571	19.774
39) cis-1,2-Dichloroethene	(2)	6.214	96	113385	1.945
41) 2,2-Dichloropropane	(2)	6.238	77	153582	1.939
42) Propionitrile	(1)	6.281	54	147406	39.975
45) Methacrylonitrile	(1)	6.494	67	268259	19.768
47) Bromochloromethane	(2)	6.549	128	53093	1.851
48) Tetrahydrofuran	(1)	6.561	71	87414	20.355
49) Chloroform	(2)	6.702	83	179027	1.930

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	476853	10.051
50)$Dibromofluoromethane	(2)	6.921	111	484693	9.995
51) 1,1,1-Trichloroethane	(2)	6.921	97	176019M	1.963
52) Cyclohexane	(2)	7.025	56	176273	2.000
52) Cyclohexane	(2)	7.025	84	165104M	1.985
52) Cyclohexane	(2)	7.031	69	58888M	2.034
54) Carbon Tetrachloride	(2)	7.135	117	163720	1.934
55) 1,1-Dichloropropene	(2)	7.141	75	137462	1.981
56) Isobutyl Alcohol	(1)	7.299	41	104871	96.885
57)$1,2-Dichloroethane-d4	(2)	7.378	102	91455	10.003
57)$1,2-Dichloroethane-d4	(2)	7.378	65	406126	9.910
57)$1,2-Dichloroethane-d4	(2)	7.378	104	58382	10.114
58) Benzene	(2)	7.409	78	403820	1.979
59) 1,2-Dichloroethane	(2)	7.476	62	106676	1.949
59) 1,2-Dichloroethane	(2)	7.482	98	11112	2.176
60) t-Amyl methyl ether	(2)	7.592	73	274574	2.008
63)*Fluorobenzene	(2)	7.805	96	1838321	10.000
62) n-Heptane	(2)	7.811	43	148127	1.959
65) n-Butanol	(1)	8.171	56	183108	202.727
67) Trichloroethene	(2)	8.287	95	113412	1.986
69) Methylcyclohexane	(2)	8.592	83	183056	1.796
70) 1,2-Dichloropropane	(2)	8.628	63	92143	1.950
71) Methyl Methacrylate	(1)	8.707	69	50344	1.938
72) 1,4-Dioxane	(1)	8.726	88	23426M	105.491
72) 1,4-Dioxane	(1)	8.713	58	13042M	98.556
73) Dibromomethane	(2)	8.732	93	52235	1.967
74) Bromodichloromethane	(2)	8.963	83	129776	1.979
76) 2-Nitropropane	(1)	9.238	41	171901	19.891
80) cis-1,3-Dichloropropene	(2)	9.506	75	145320	1.954
81) 4-Methyl-2-Pentanone	(1)	9.677	43	685525M	19.717
82)$Toluene-d8	(3)	9.811	98	1812880	9.968
82)$Toluene-d8	(3)	9.811	100	1160389	9.948
83) Toluene	(3)	9.890	92	269936	1.974
84) trans-1,3-Dichloropropene	(3)	10.140	75	126794M	1.967
85) 1,3-Dichloropropene (total)	(3)		75	272114	3.921
86) Ethyl Methacrylate	(3)	10.201	69	104816	1.926
88) 1,1,2-Trichloroethane	(3)	10.347	97	75173	1.989
89) Tetrachloroethene	(3)	10.427	166	141096	1.950

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	120274	1.978
91) 2-Hexanone	(1)	10.555	43	487463	19.772
93) Dibromochloromethane	(3)	10.719	129	100458	1.956
95) 1,2-Dibromoethane	(3)	10.829	107	75573	1.964
97)*Chlorobenzene-d5	(3)	11.256	117	1482784	10.000
96) 1-Chlorohexane	(3)	11.262	91	158401	1.924
98) Chlorobenzene	(3)	11.286	112	307114	1.956
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	115944	1.958
100) Ethylbenzene	(3)	11.371	91	532999	1.941
101) m+p-Xylene	(3)	11.481	106	426787	3.903
105) Xylene (Total)	(3)		106	632961	5.856
104) o-Xylene	(3)	11.810	106	206174	1.953
106) Styrene	(3)	11.823	104	327041	1.954
107) Bromoform	(3)	11.981	173	62406	1.976
108) Isopropylbenzene	(3)	12.109	105	558084	1.957
111)$4-Bromofluorobenzene	(3)	12.255	95	678209	9.951
111)$4-Bromofluorobenzene	(3)	12.255	174	652684	10.005
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	92625	1.957
114) Bromobenzene	(4)	12.371	156	137036	1.902
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	237095	19.445
116) 1,2,3-Trichloropropane	(4)	12.402	110	27607	1.966
117) n-Propylbenzene	(4)	12.438	91	633735	1.967
119) 2-Chlorotoluene	(4)	12.512	126	135339	1.954
121) 1,3,5-Trimethylbenzene	(4)	12.572	105	465380	1.956
122) 4-Chlorotoluene	(4)	12.609	126	134180	1.928
125) tert-Butylbenzene	(4)	12.816	134	105634M	1.948
126) Pentachloroethane	(4)	12.847	167	88593	1.855
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	470749	1.941
128) sec-Butylbenzene	(4)	12.975	105	599967	1.948
131) 1,3-Dichlorobenzene	(4)	13.078	146	264381	1.918
132) p-Isopropyltoluene	(4)	13.085	119	524040	1.939
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	829269	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	266231	1.932
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	210174	1.855
136) Benzyl Chloride	(4)	13.225	126	46528M	2.086
138) n-Butylbenzene	(4)	13.377	92	234342	1.906
139) 1,2-Dichlorobenzene	(4)	13.408	146	246371	1.958
143) 1,2-Dibromo-3-chloropropane	(1)	13.950	155	15429	1.952

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on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

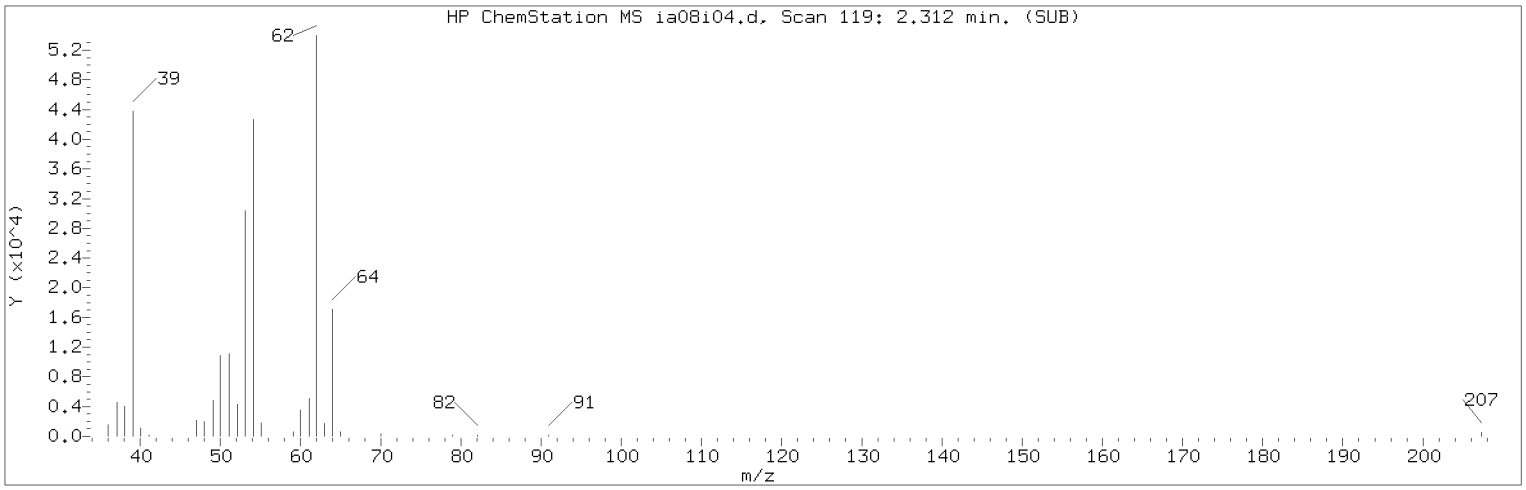
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

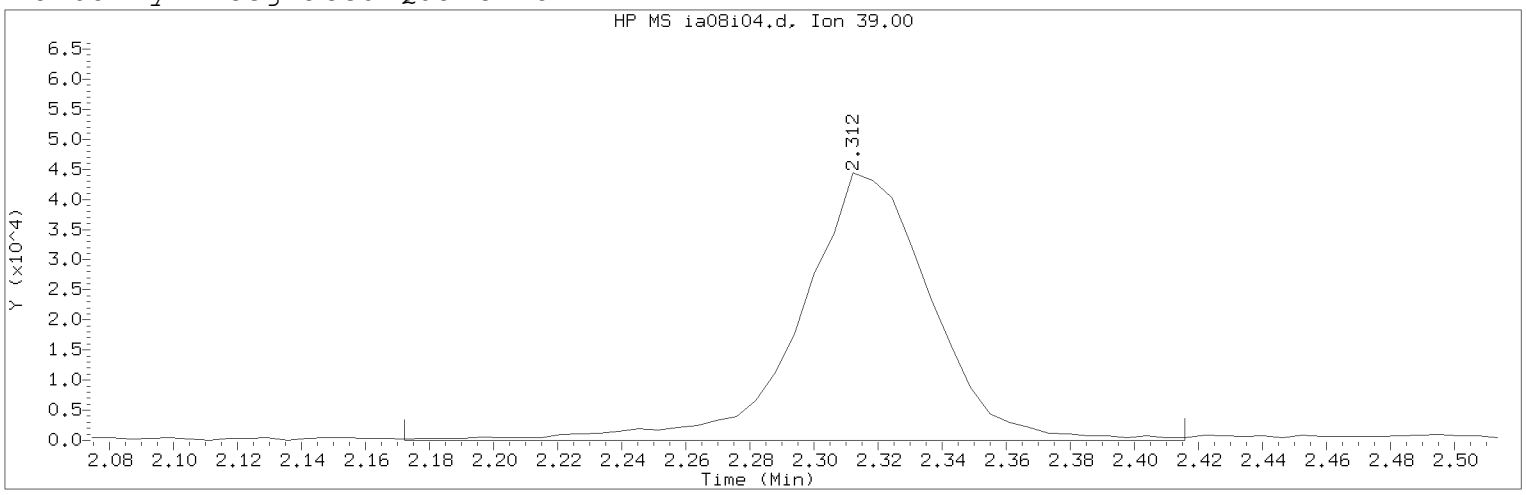
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	193433	1.924
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	168748	1.915
146) Hexachlorobutadiene	(4)	14.578	225	66199	1.838
147) Naphthalene	(4)	14.682	128	344494	1.952
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	152084	1.917

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

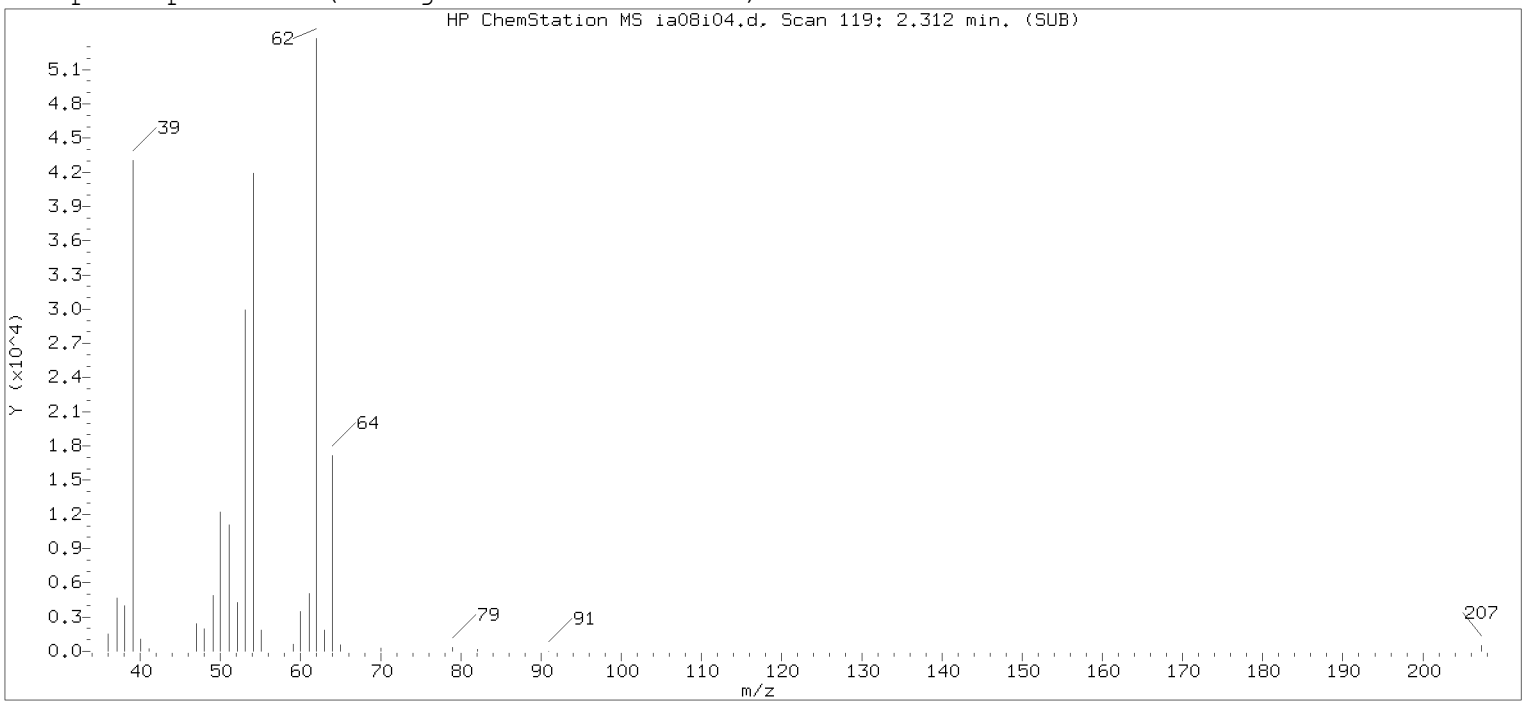
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area (flag) : 125860M
On-Column Amount (ng) : 1.8861
Integration start scan : 95 Integration stop scan: 135
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

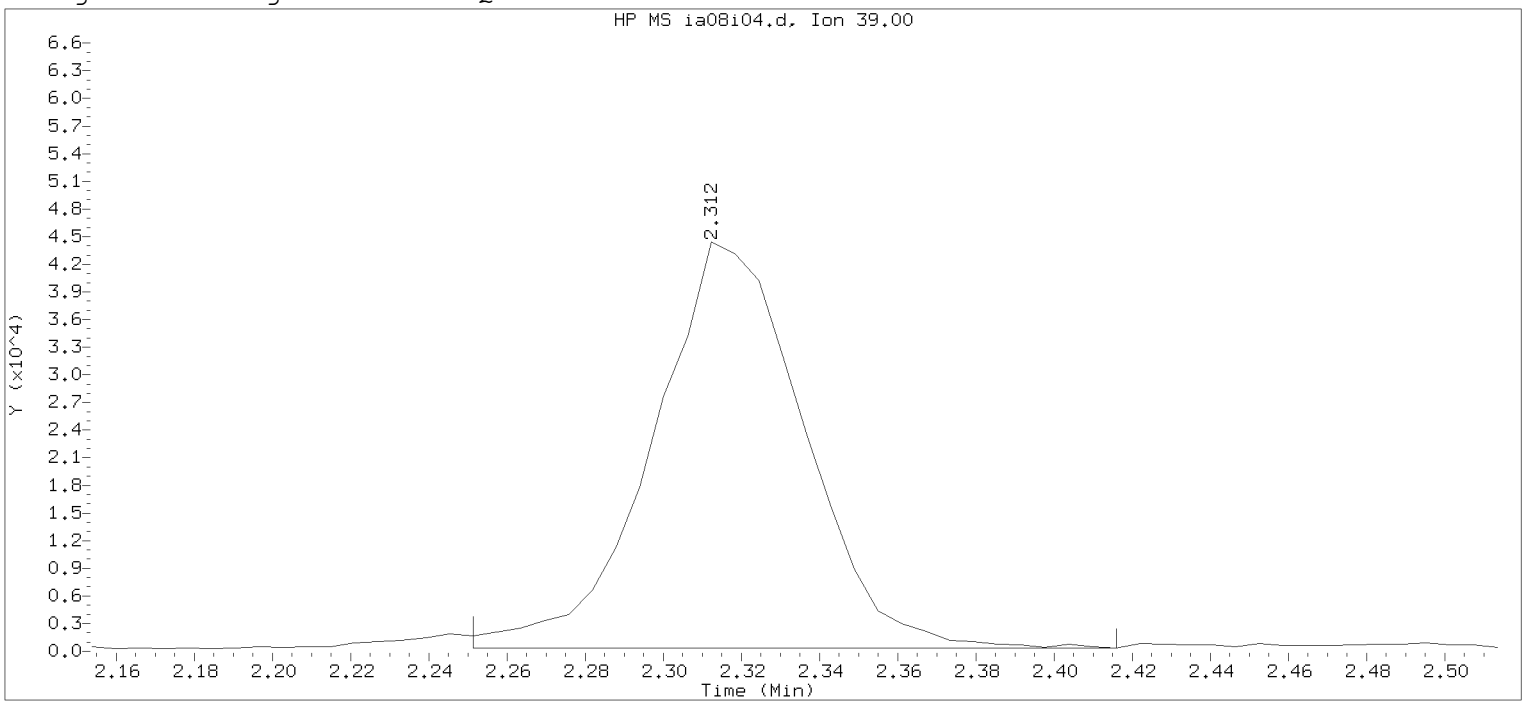
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

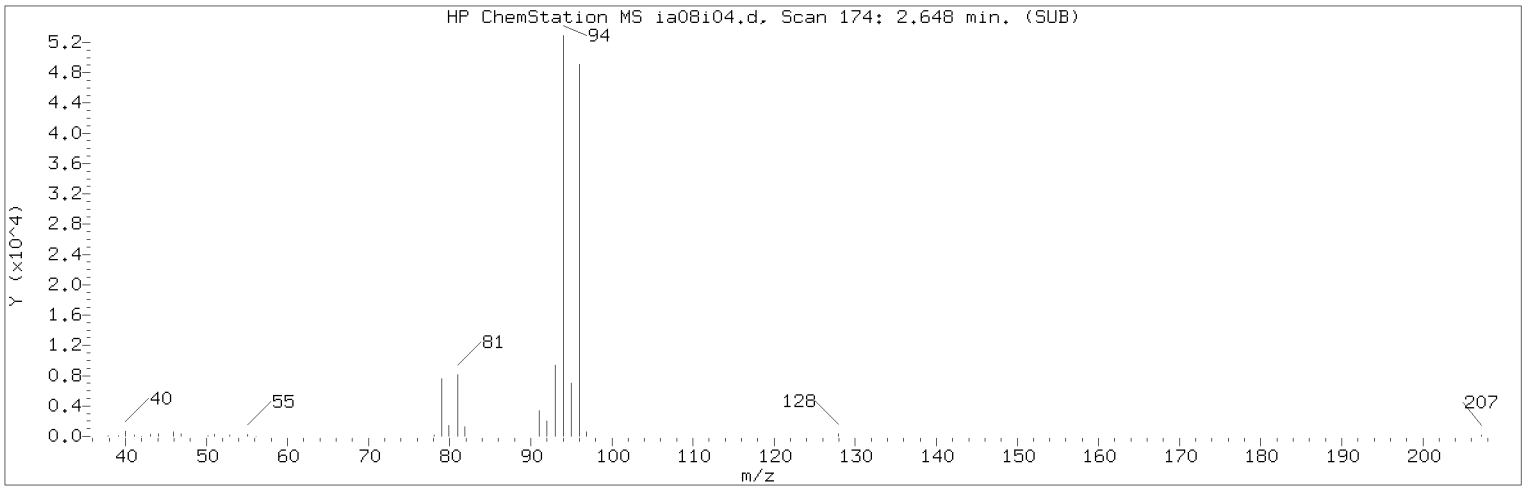
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

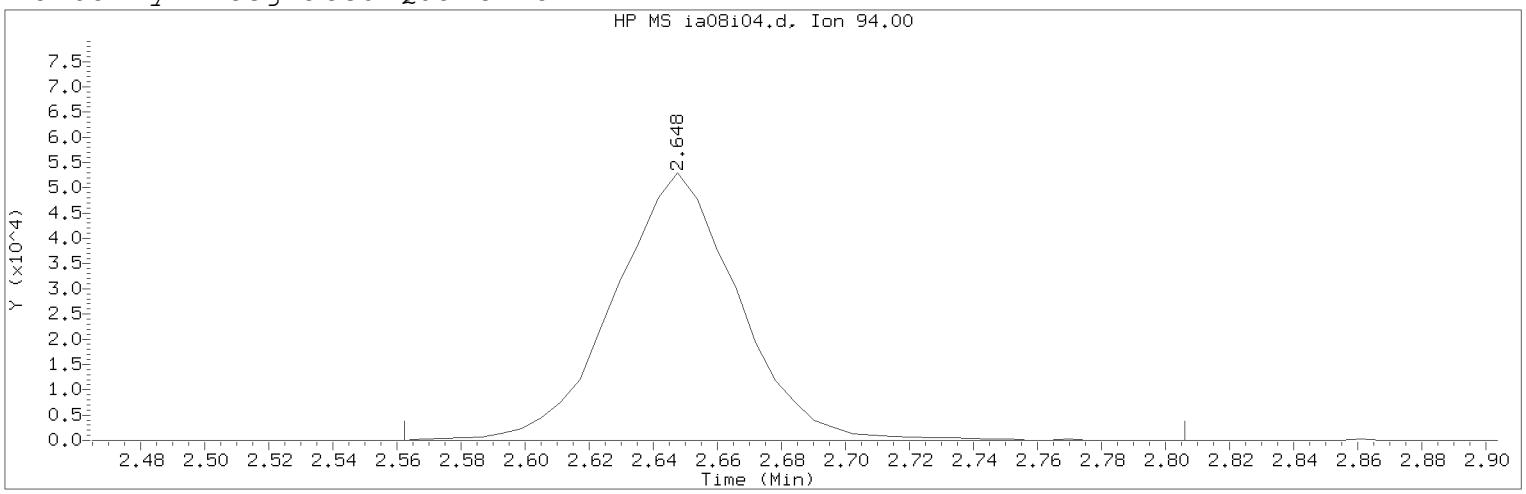
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area : 118337
On-column Amount (ng) : 1.9705
Integration start scan : 108 Integration stop scan: 135
Y at integration start : 357 Y at integration end: 376

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

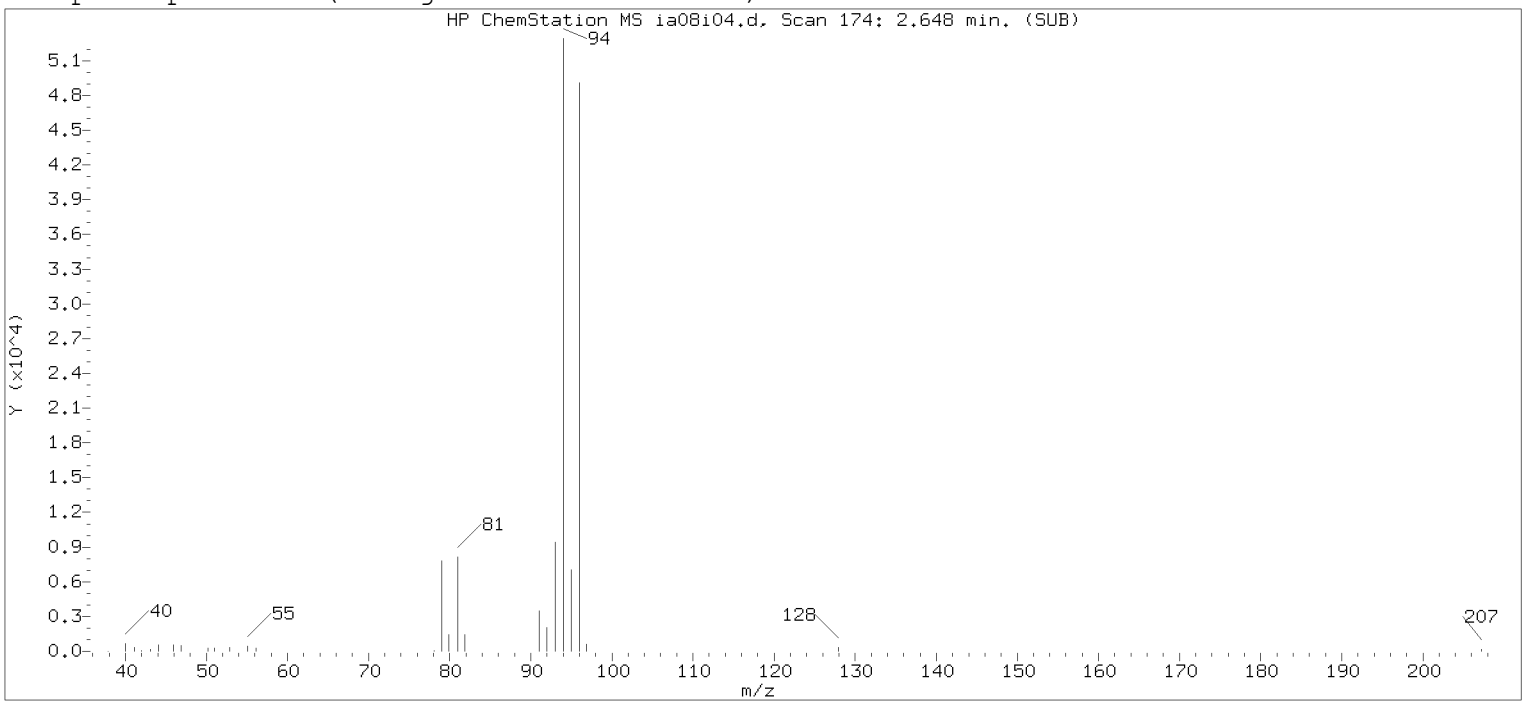
Compound Number : 7
Compound Name : Bromomethane
Scan Number : 174
Retention Time (minutes): 2.648
Quant Ion : 94.00
Area (flag) : 142370M
On-Column Amount (ng) : 1.9846
Integration start scan : 159 Integration stop scan: 199
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

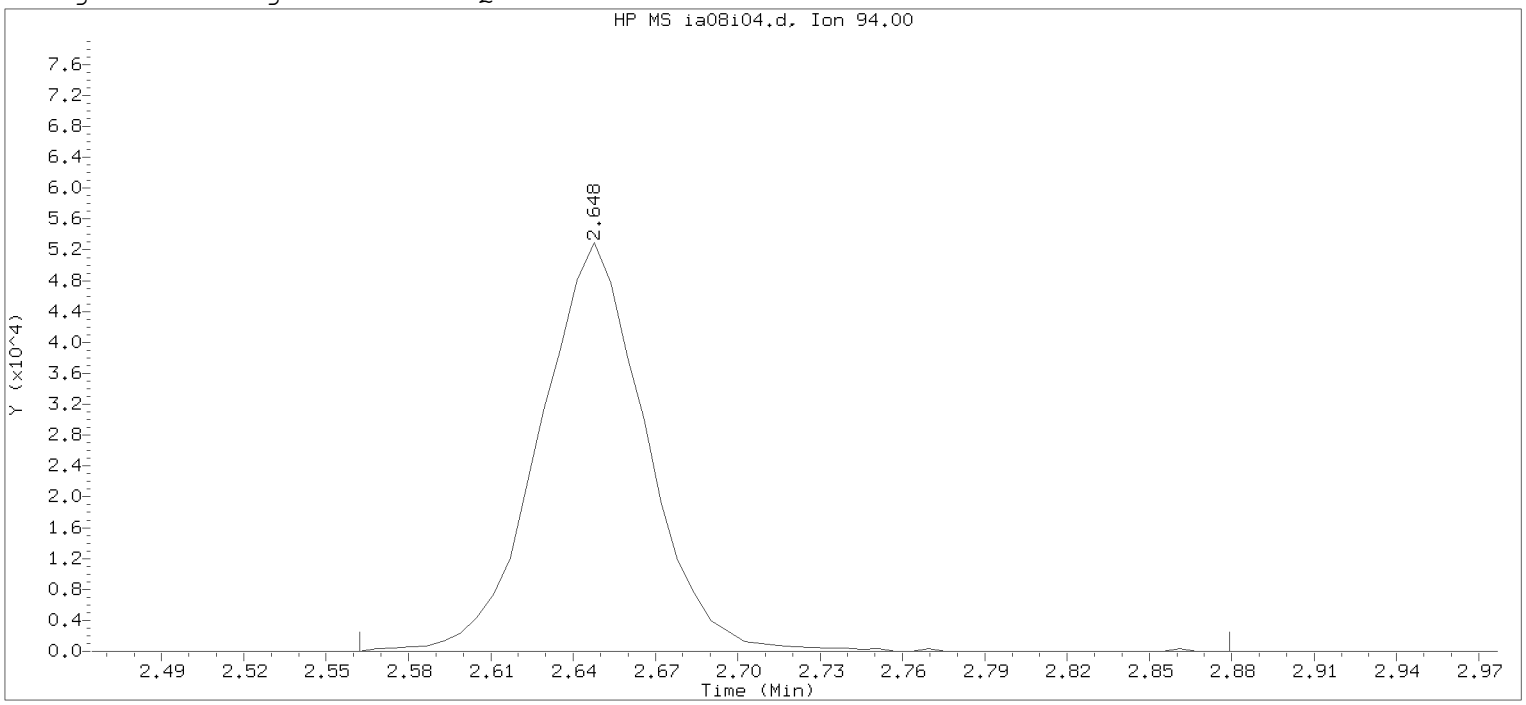
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

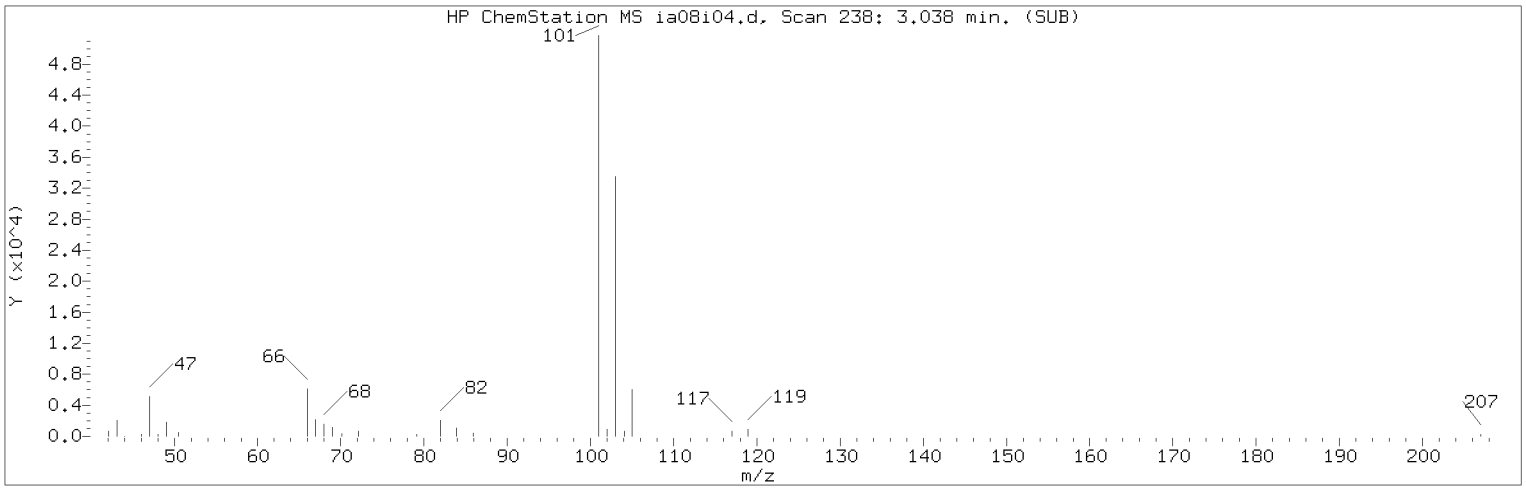
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

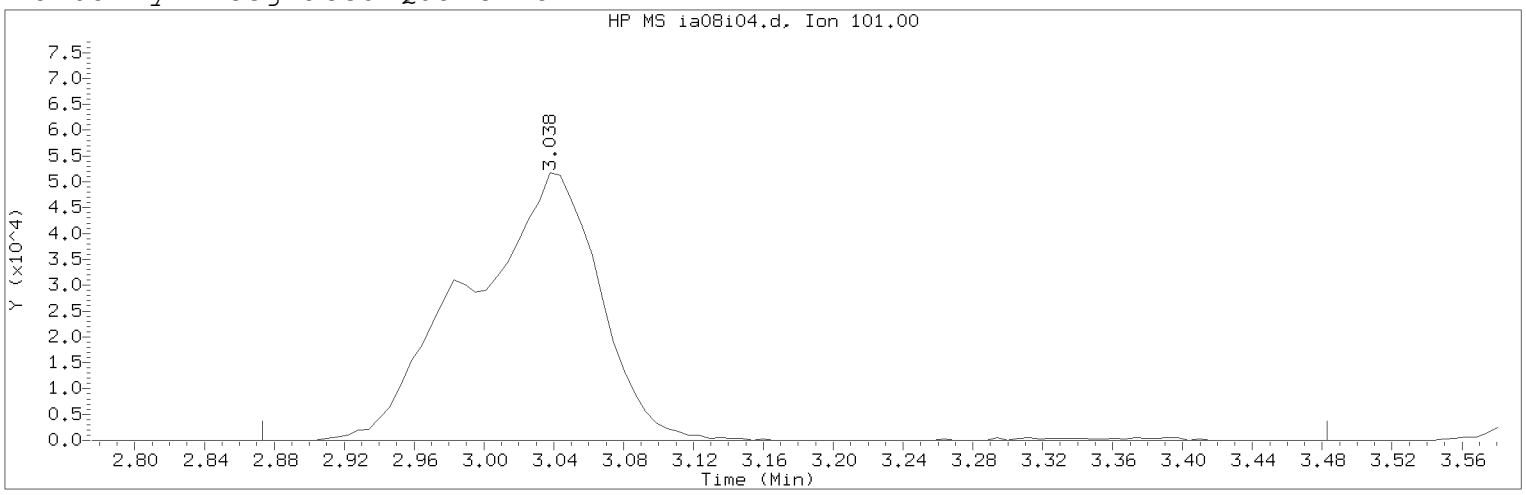
Compound Number : 7
Compound Name : Bromomethane
Scan Number : 174
Retention Time (minutes): 2.648
Quant Ion : 94.00
Area : 142482
On-column Amount (ng) : 1.9735
Integration start scan : 159 Integration stop scan: 211
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

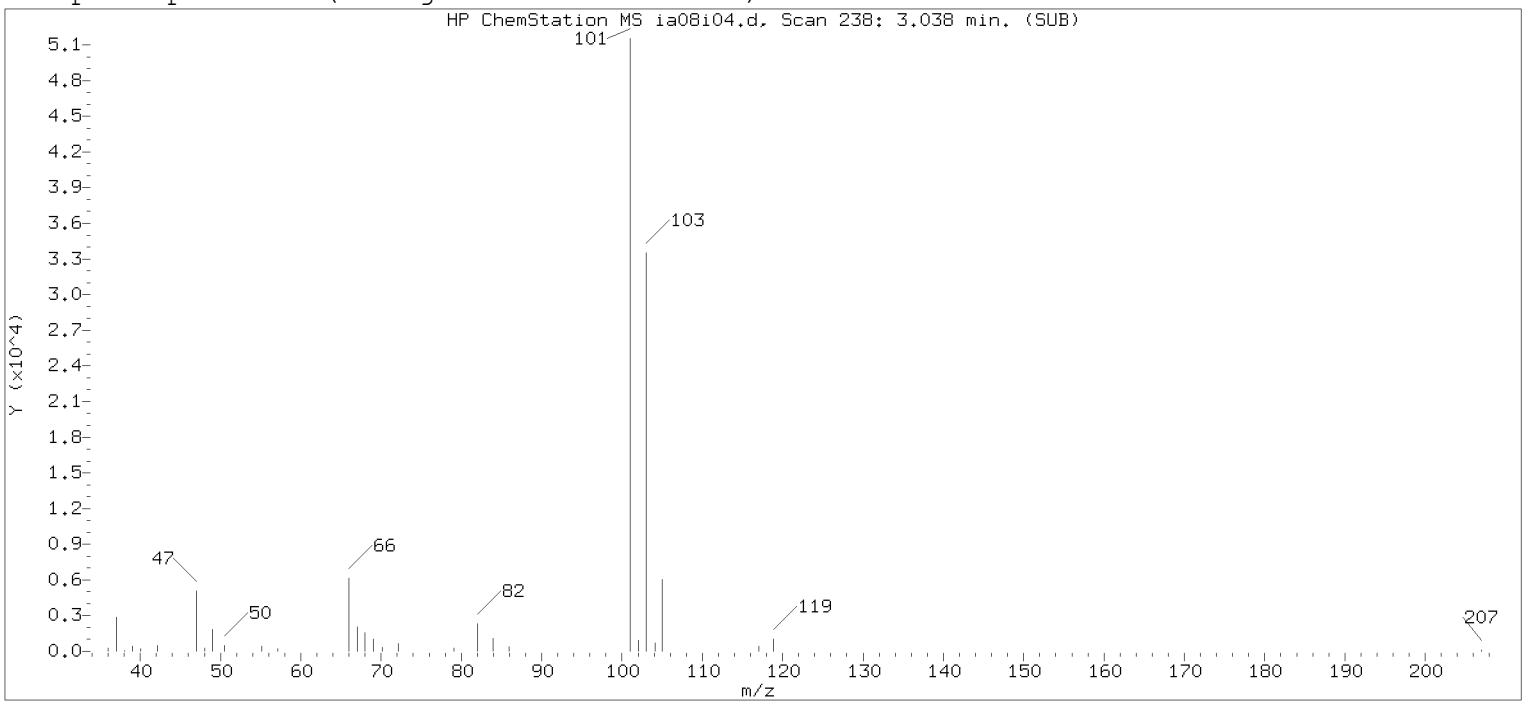
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 238
Retention Time (minutes): 3.038
Quant Ion : 101.00
Area (flag) : 271364M
On-Column Amount (ng) : 2.0130
Integration start scan : 210 Integration stop scan: 310
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

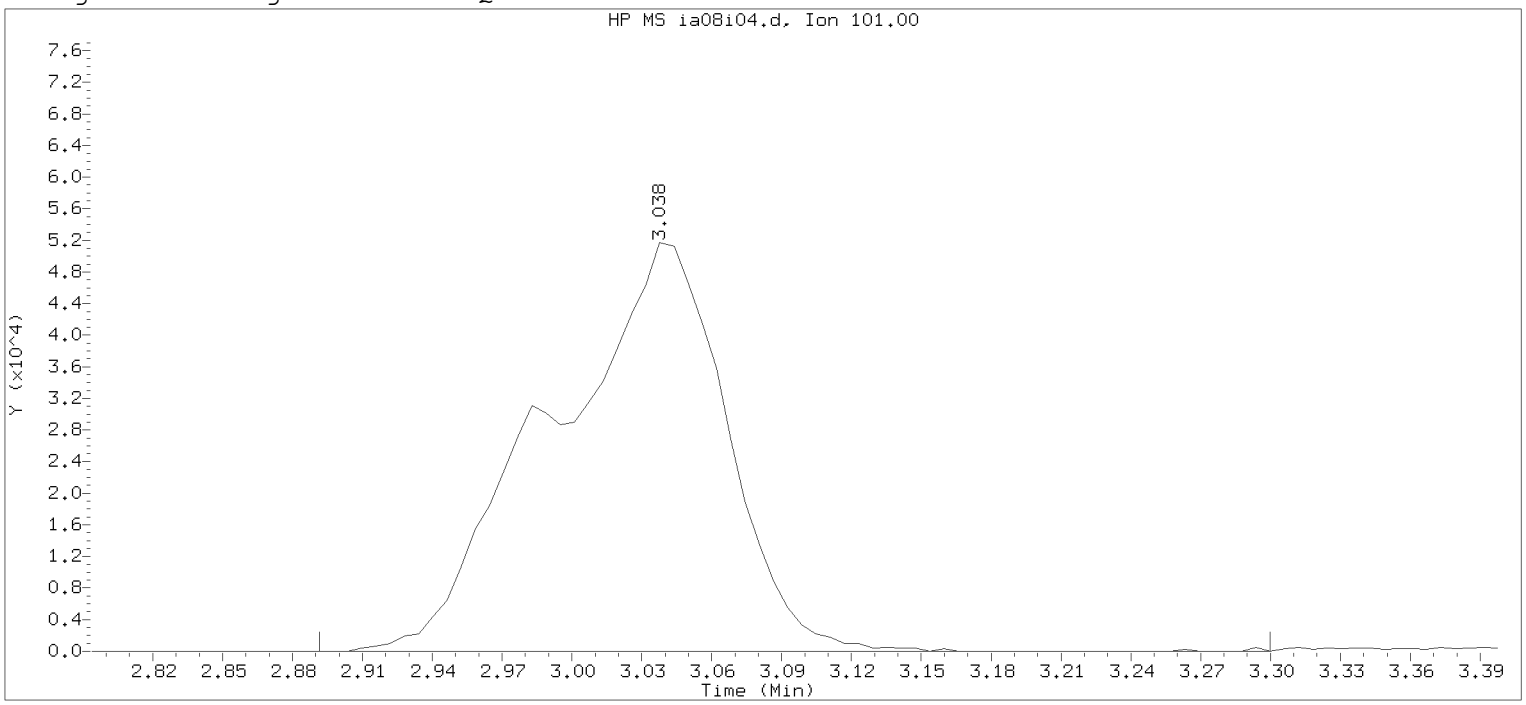
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

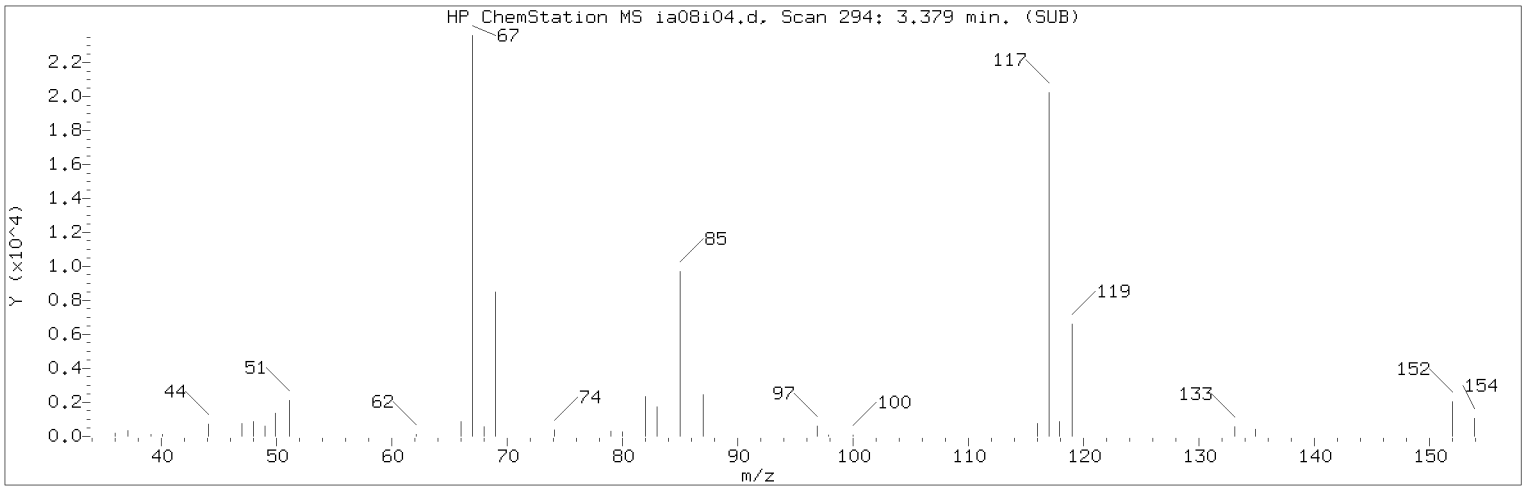
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

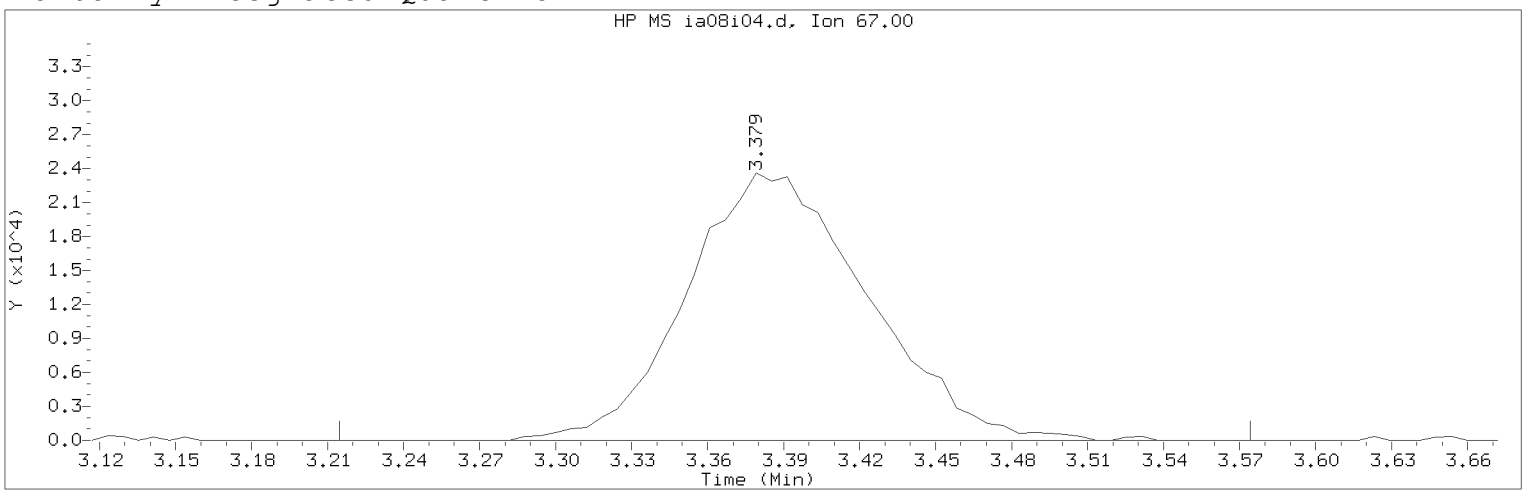
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 238
Retention Time (minutes): 3.038
Quant Ion : 101.00
Area : 269131
On-column Amount (ng) : 1.9689
Integration start scan : 213 Integration stop scan: 280
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

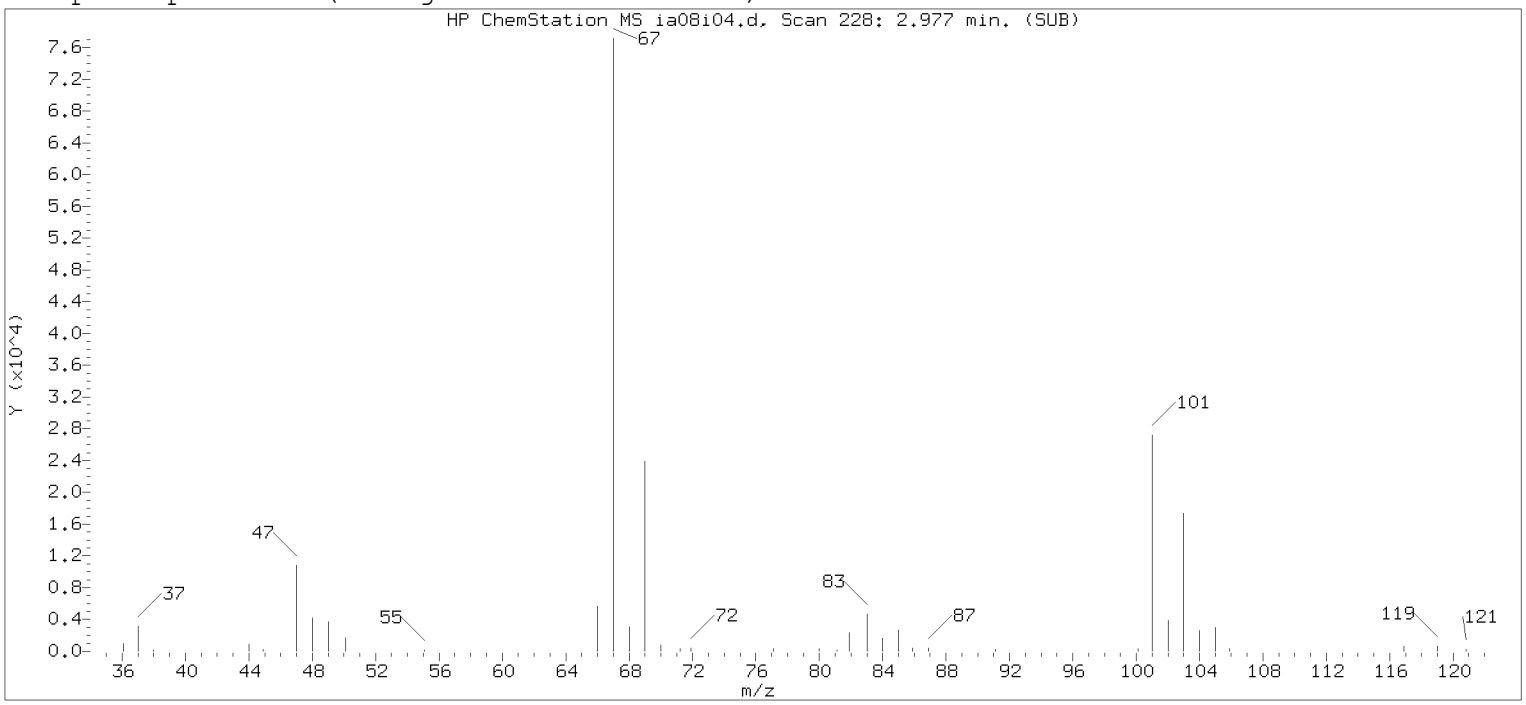
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 294
Retention Time (minutes): 3.379
Quant Ion : 67.00
Area (flag) : 117098MA
On-Column Amount (ng) : 1.9319
Integration start scan : 266 Integration stop scan: 325
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

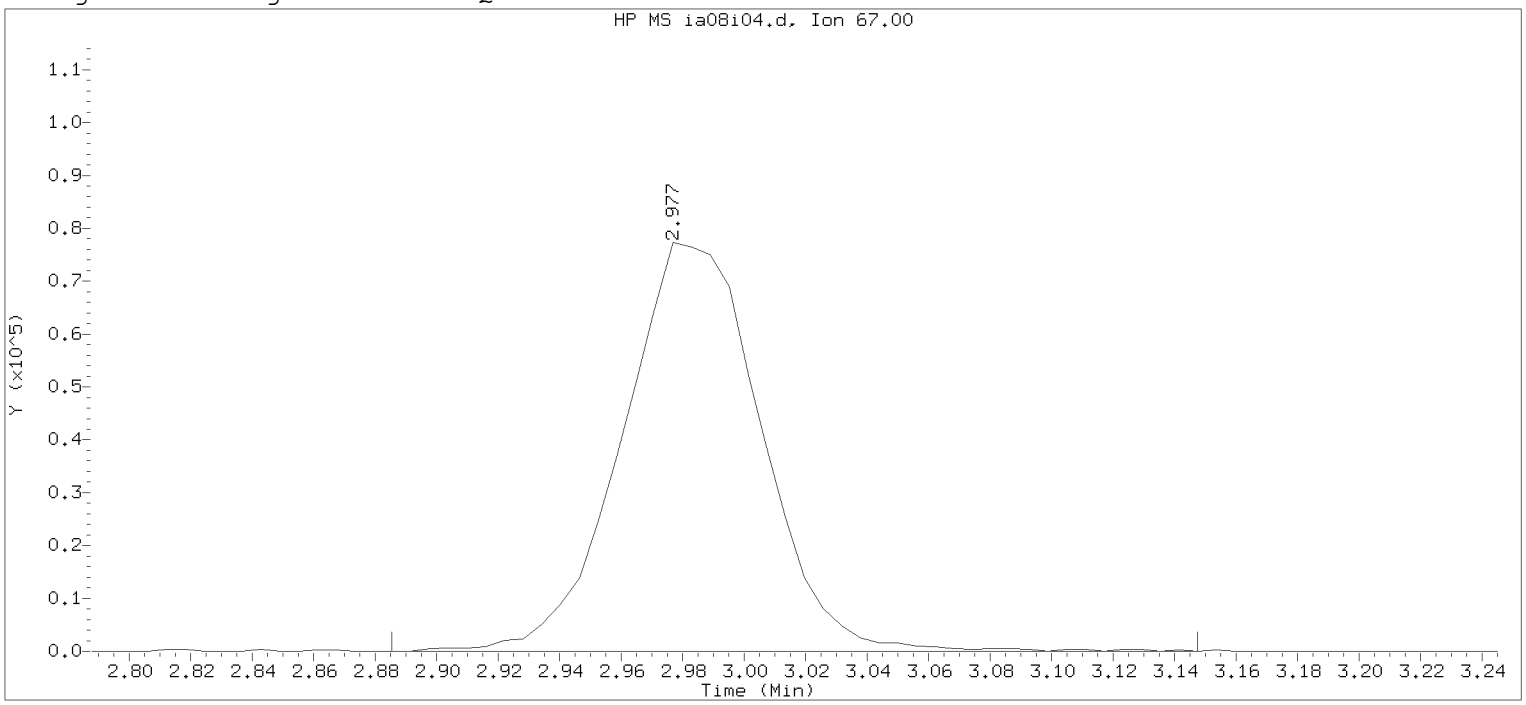
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

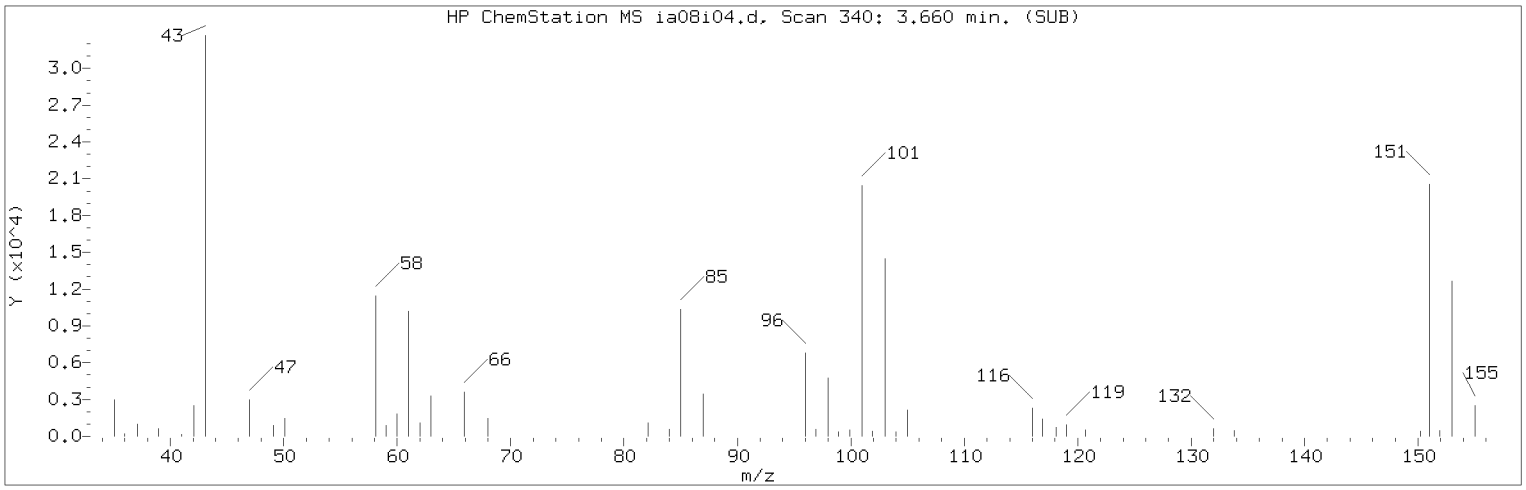
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

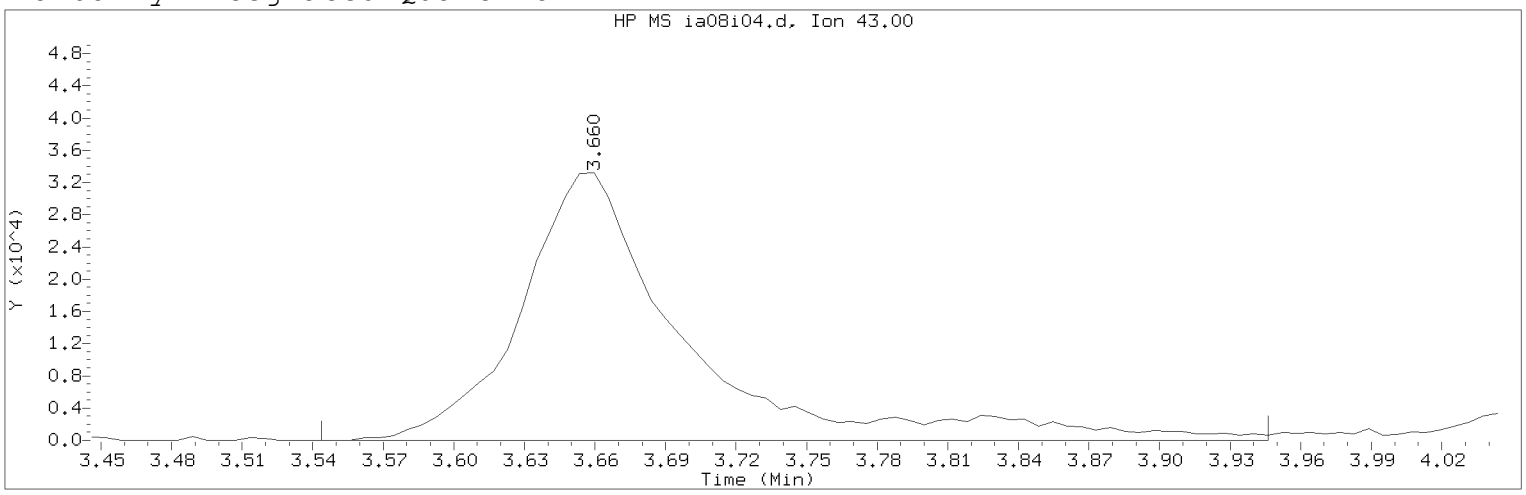
Compound Number	: 12		
Compound Name	: Freon 123a		
Scan Number	: 228		
Retention Time (minutes)	: 2.977		
Quant Ion	: 67.00		
Area	: 242857		
On-column Amount (ng)	: 2.0006		
Integration start scan	: 212	Integration stop scan:	255
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

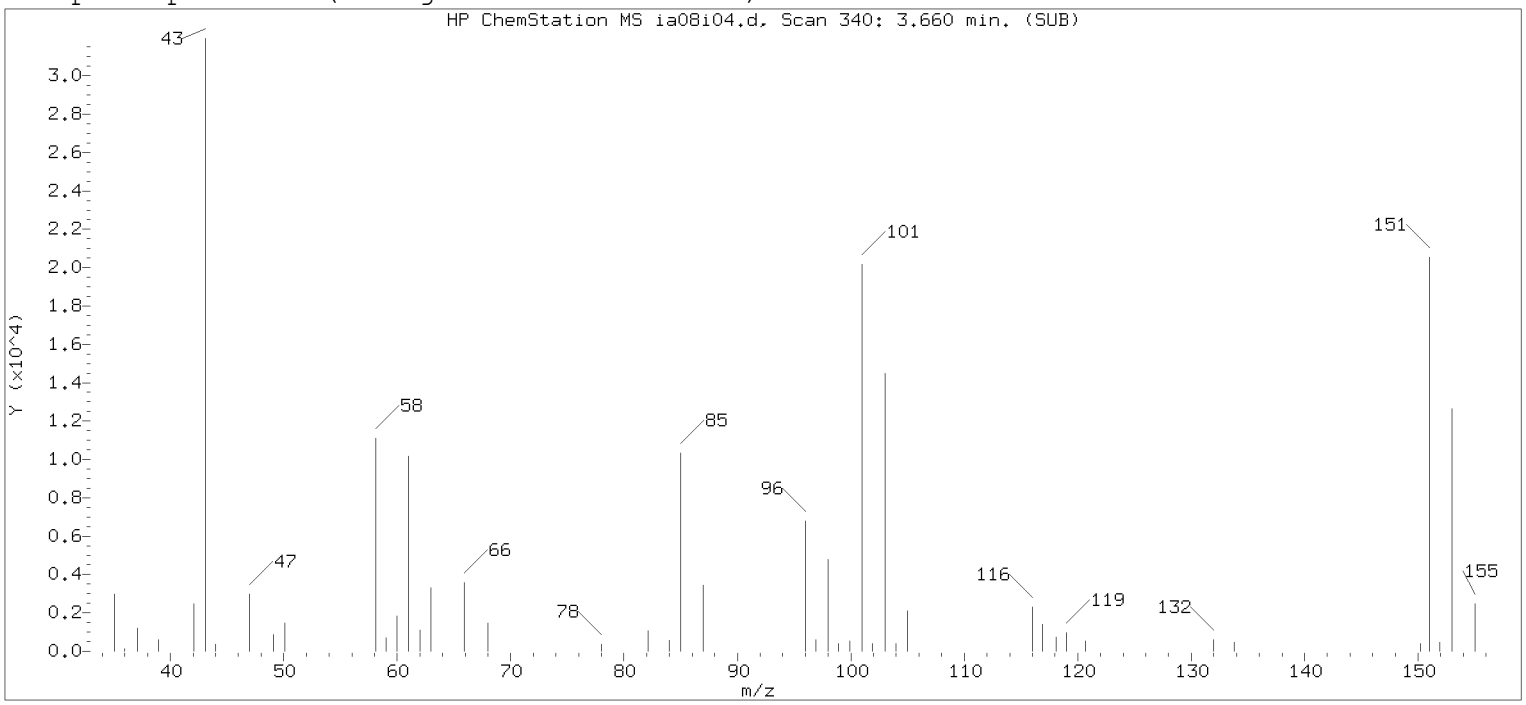
Compound Number : 14
Compound Name : Acetone
Scan Number : 340
Retention Time (minutes): 3.660
Quant Ion : 43.00
Area (flag) : 161983M
On-Column Amount (ng) : 19.1578
Integration start scan : 320 Integration stop scan: 386
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

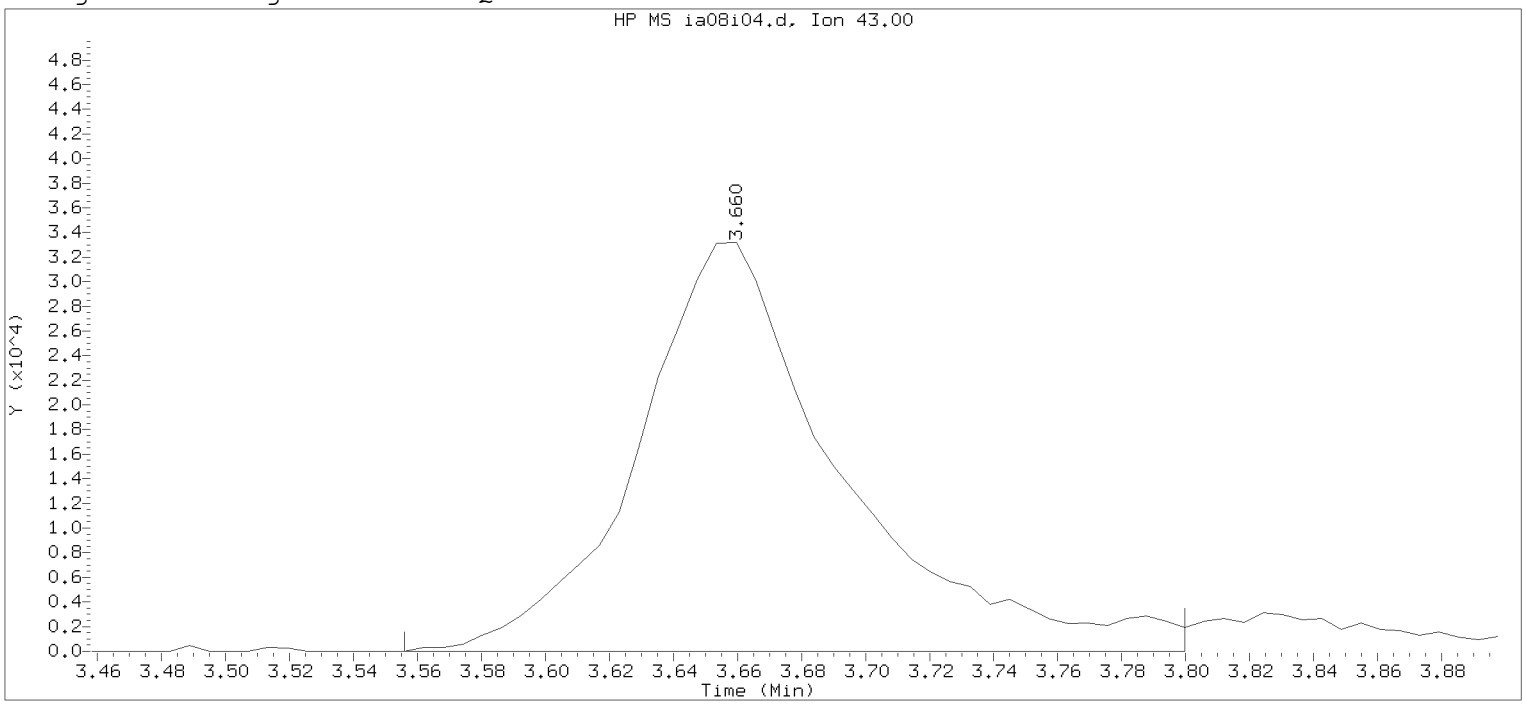
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

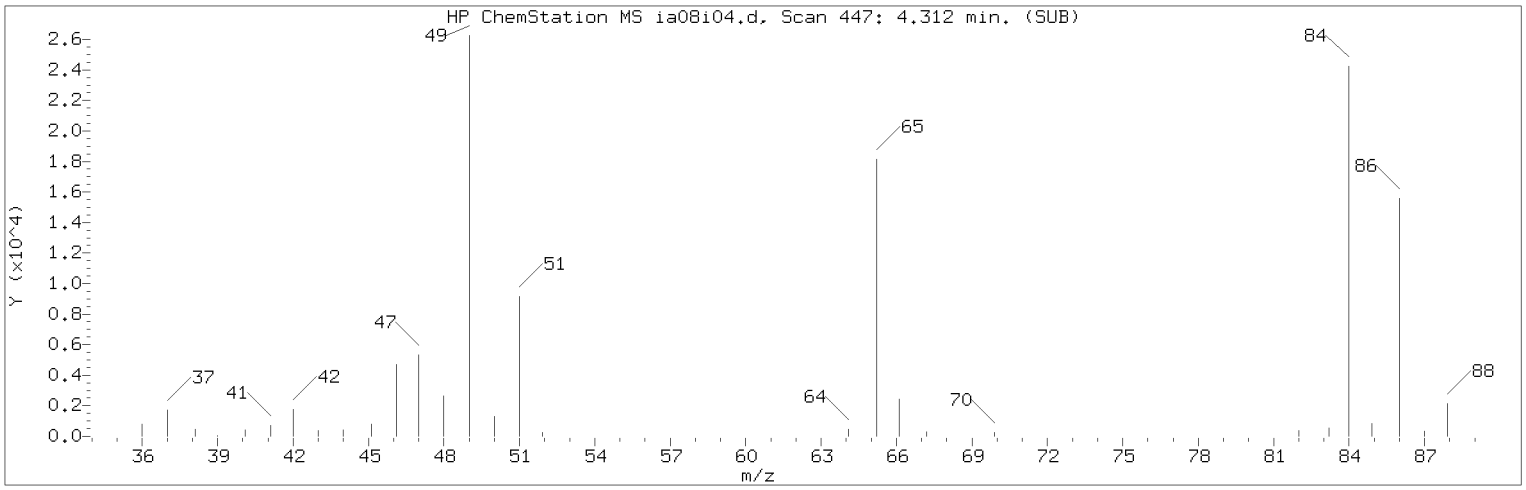
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

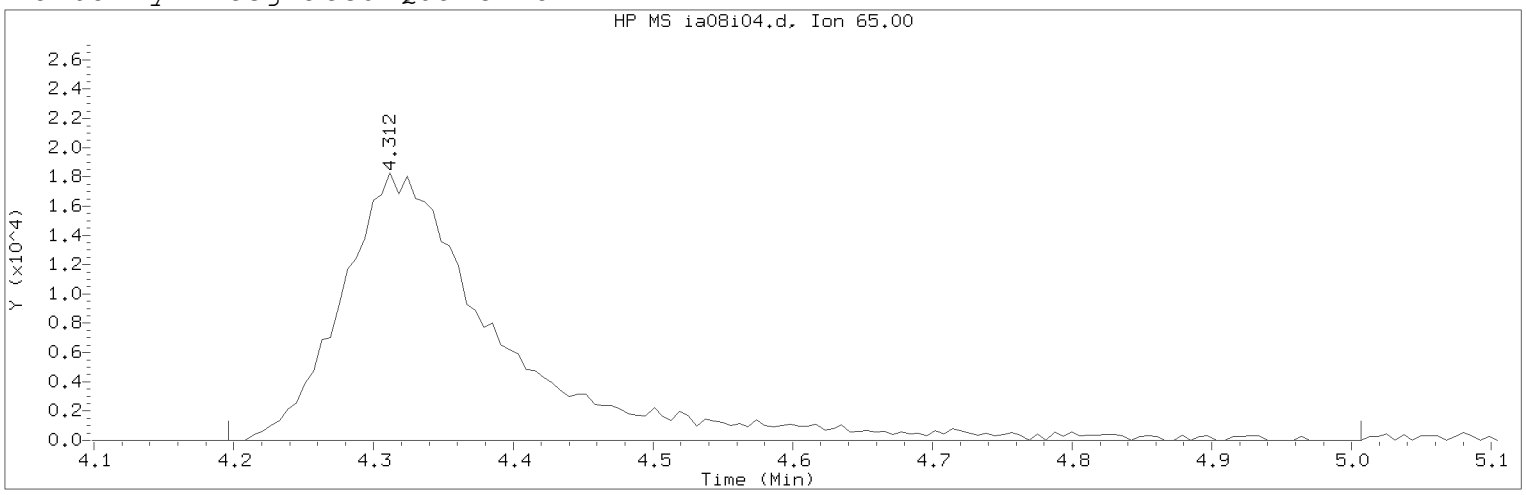
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 340		
Retention Time (minutes)	: 3.660		
Quant Ion	: 43.00		
Area	: 147292		
On-column Amount (ng)	: 18.6900		
Integration start scan	: 322	Integration stop scan:	362
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

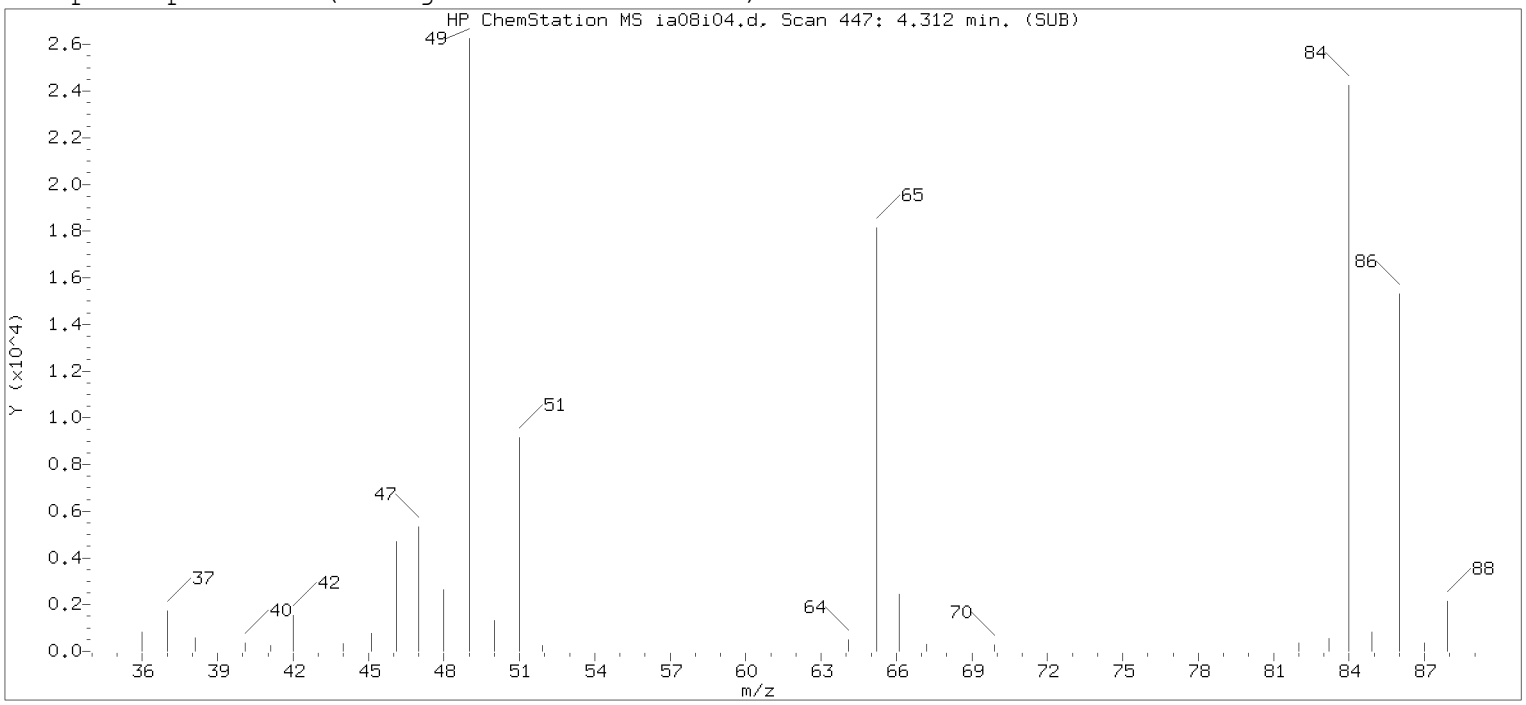
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 447
Retention Time (minutes): 4.312
Quant Ion : 65.00
Area (flag) : 144315M
On-Column Amount (ng) : 50.0000
Integration start scan : 427 Integration stop scan: 560
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

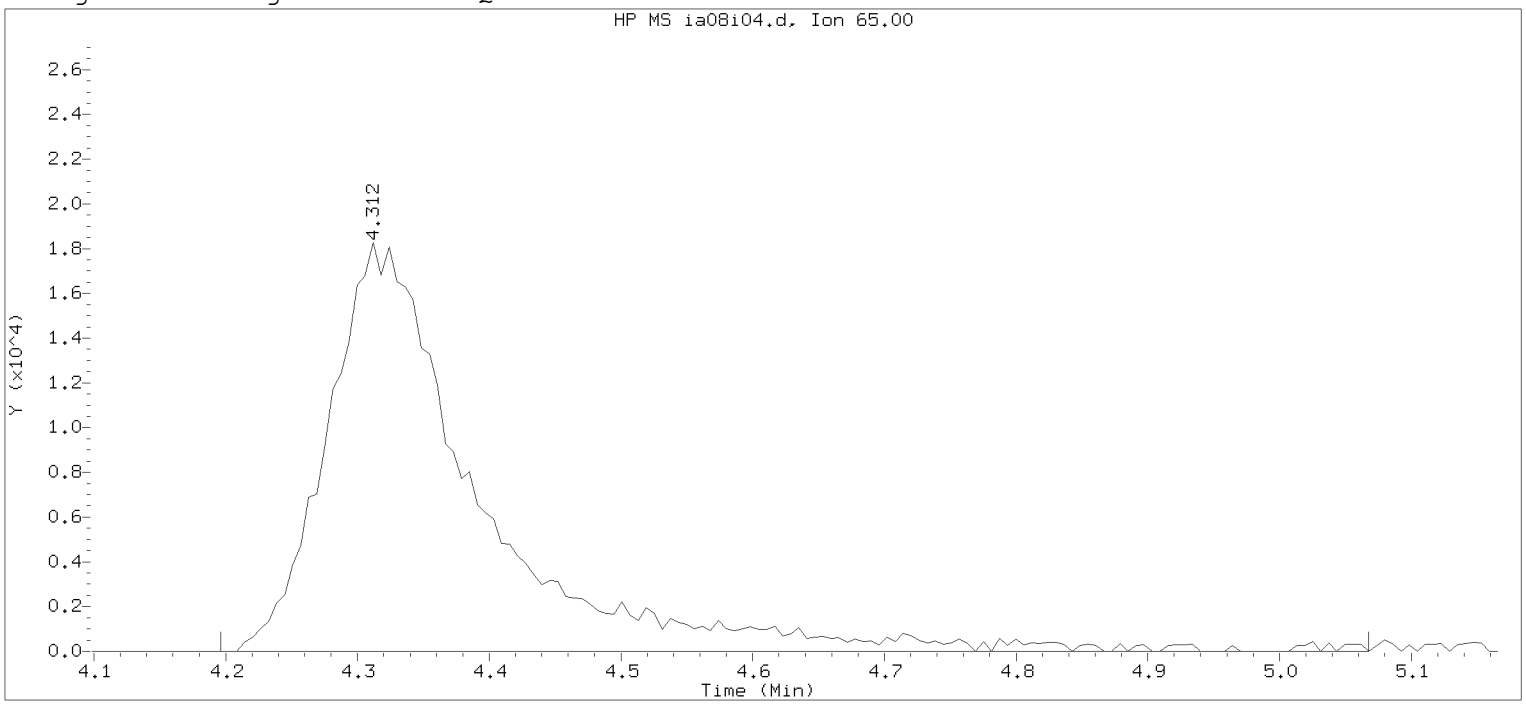
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

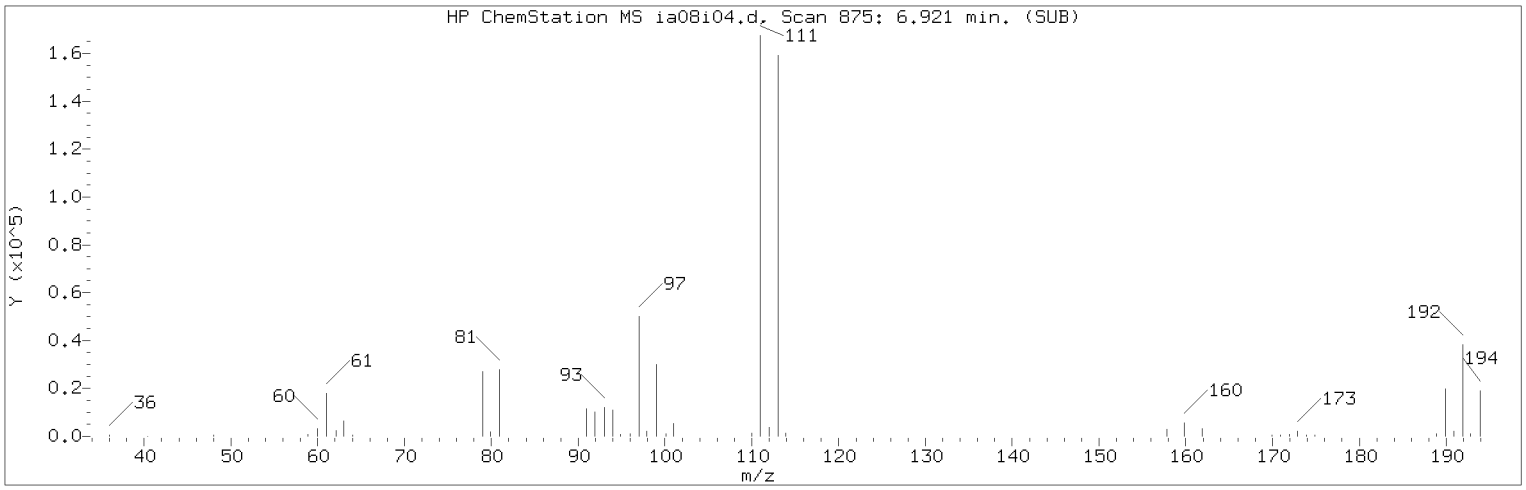
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

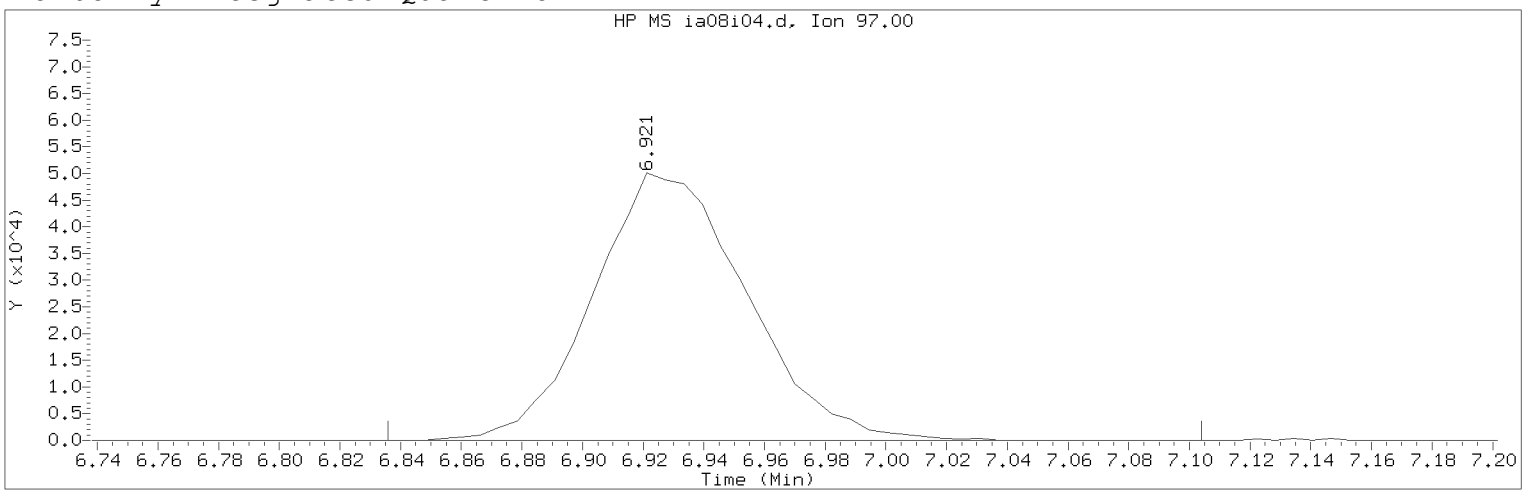
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 447
Retention Time (minutes): 4.312
Quant Ion : 65.00
Area : 145143
On-column Amount (ng) : 50.0000
Integration start scan : 427 Integration stop scan: 570
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

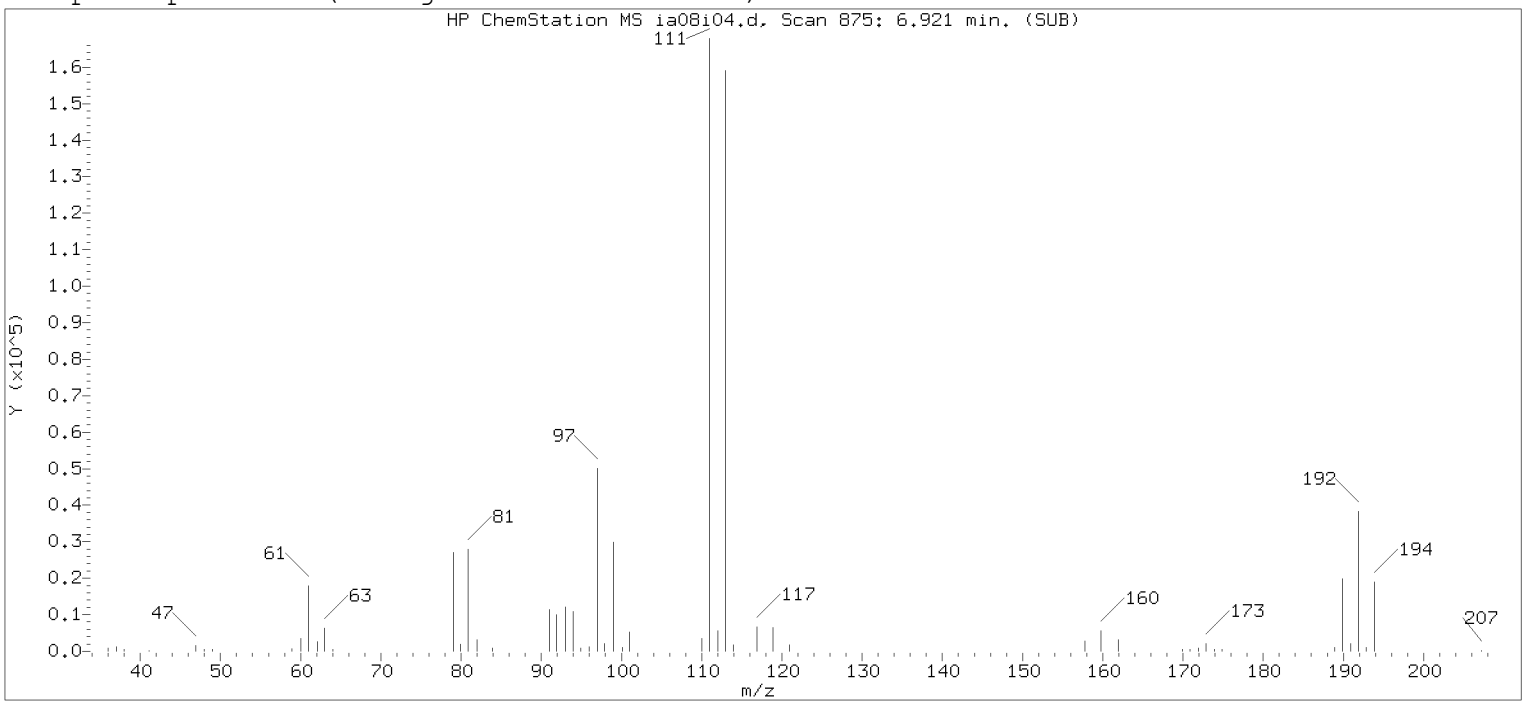
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 97.00
Area (flag) : 176019M
On-Column Amount (ng) : 1.9634
Integration start scan : 860 Integration stop scan: 904
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

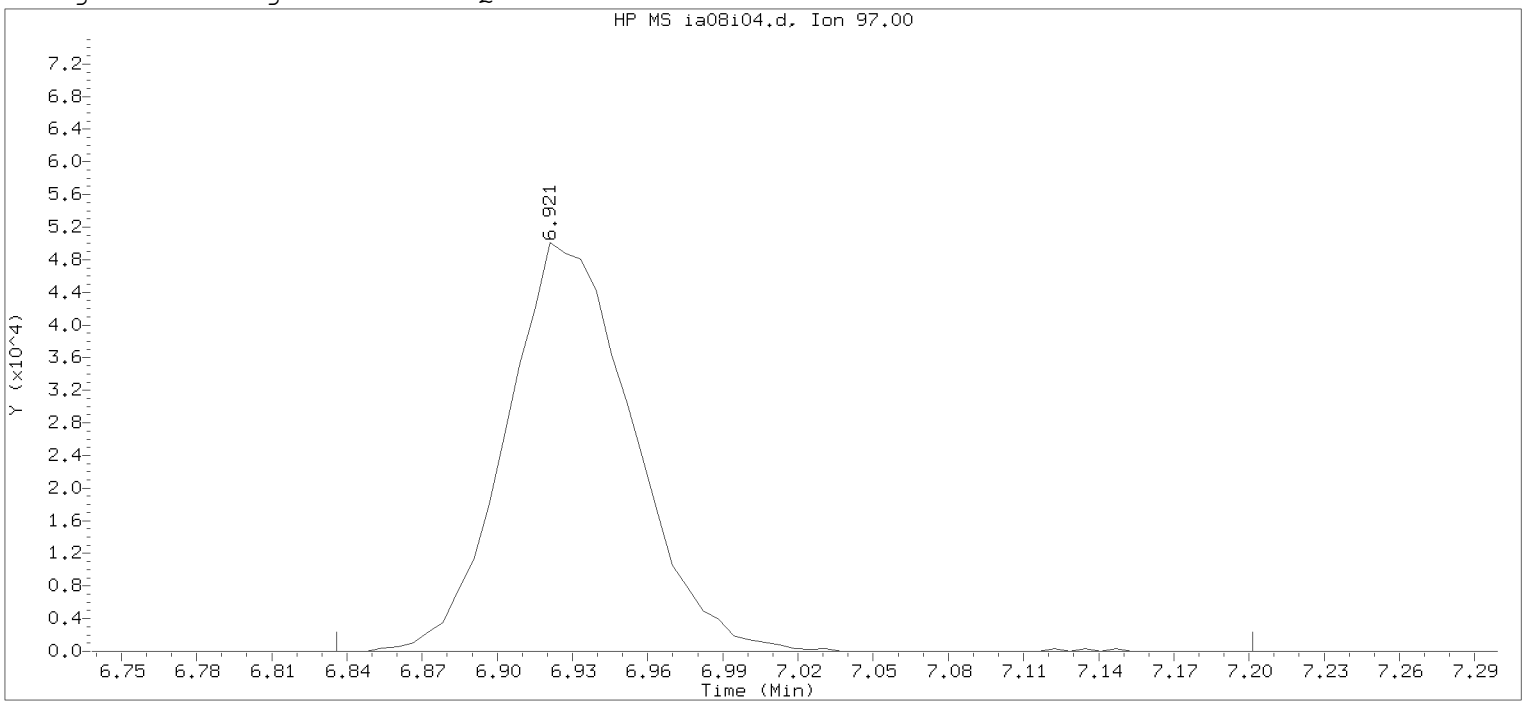
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

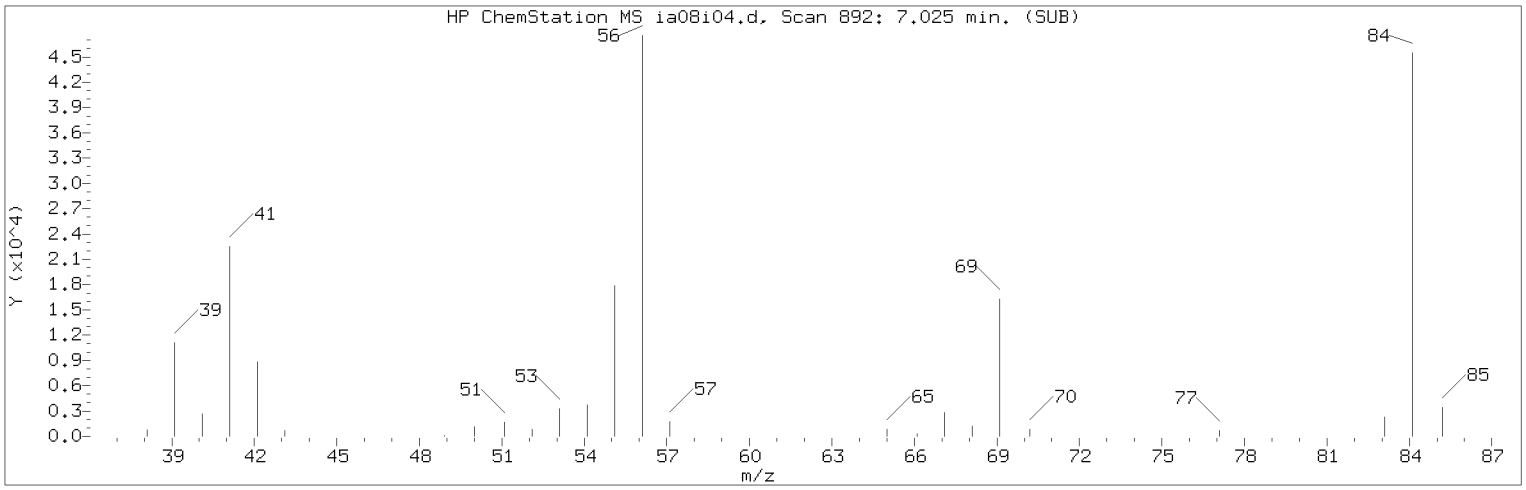
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

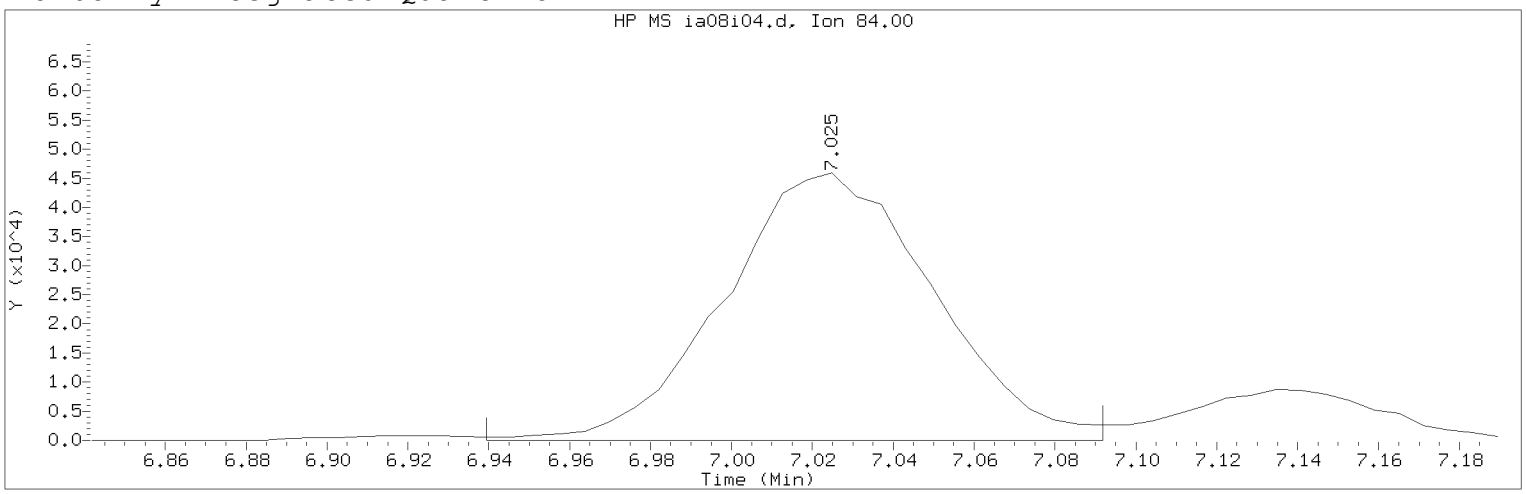
Compound Number : 51
Compound Name : 1,1,1-Trichloroethane
Scan Number : 875
Retention Time (minutes): 6.921
Quant Ion : 97.00
Area : 176351
On-column Amount (ng) : 1.9487
Integration start scan : 860 Integration stop scan: 920
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user id: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

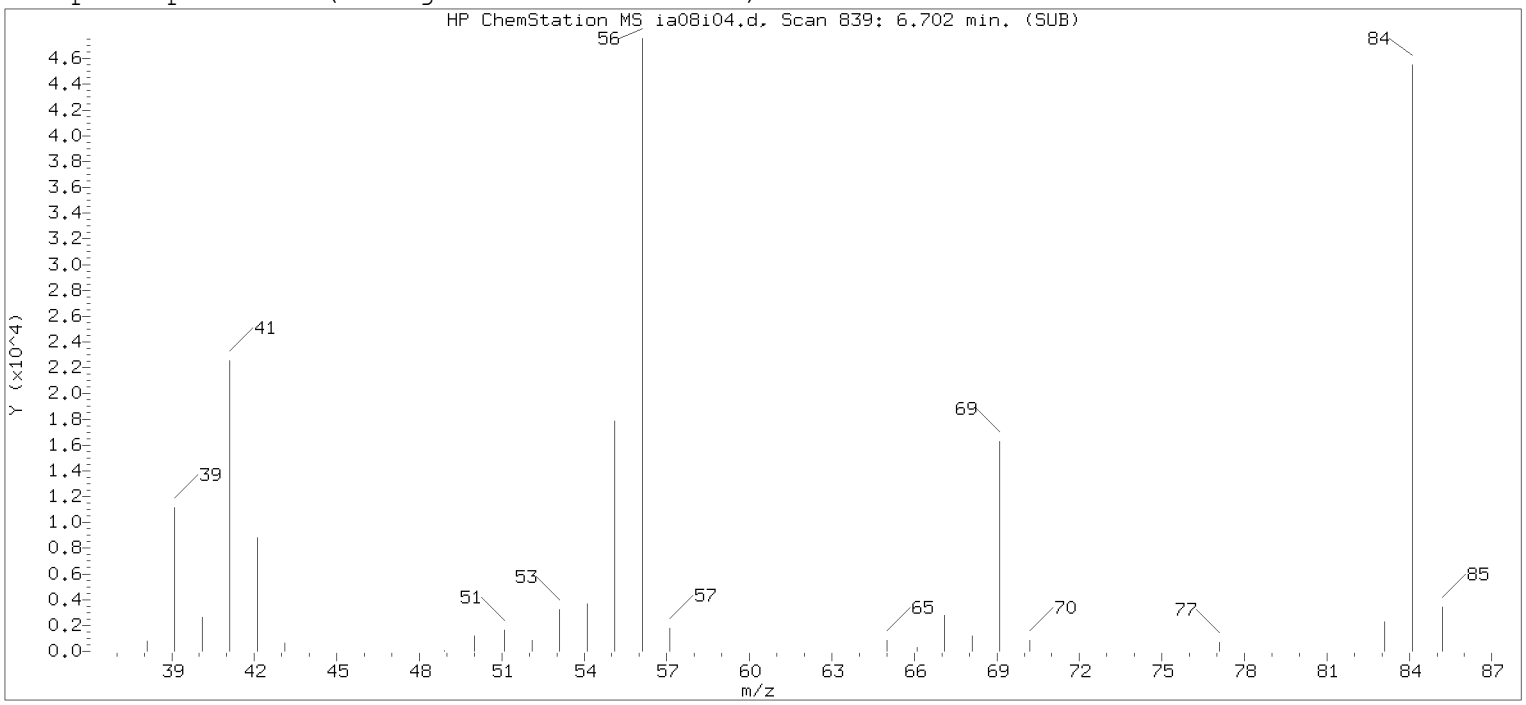
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 84.00
Area (flag) : 165104M
On-Column Amount (ng) : 1.9852
Integration start scan : 877 Integration stop scan: 902
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

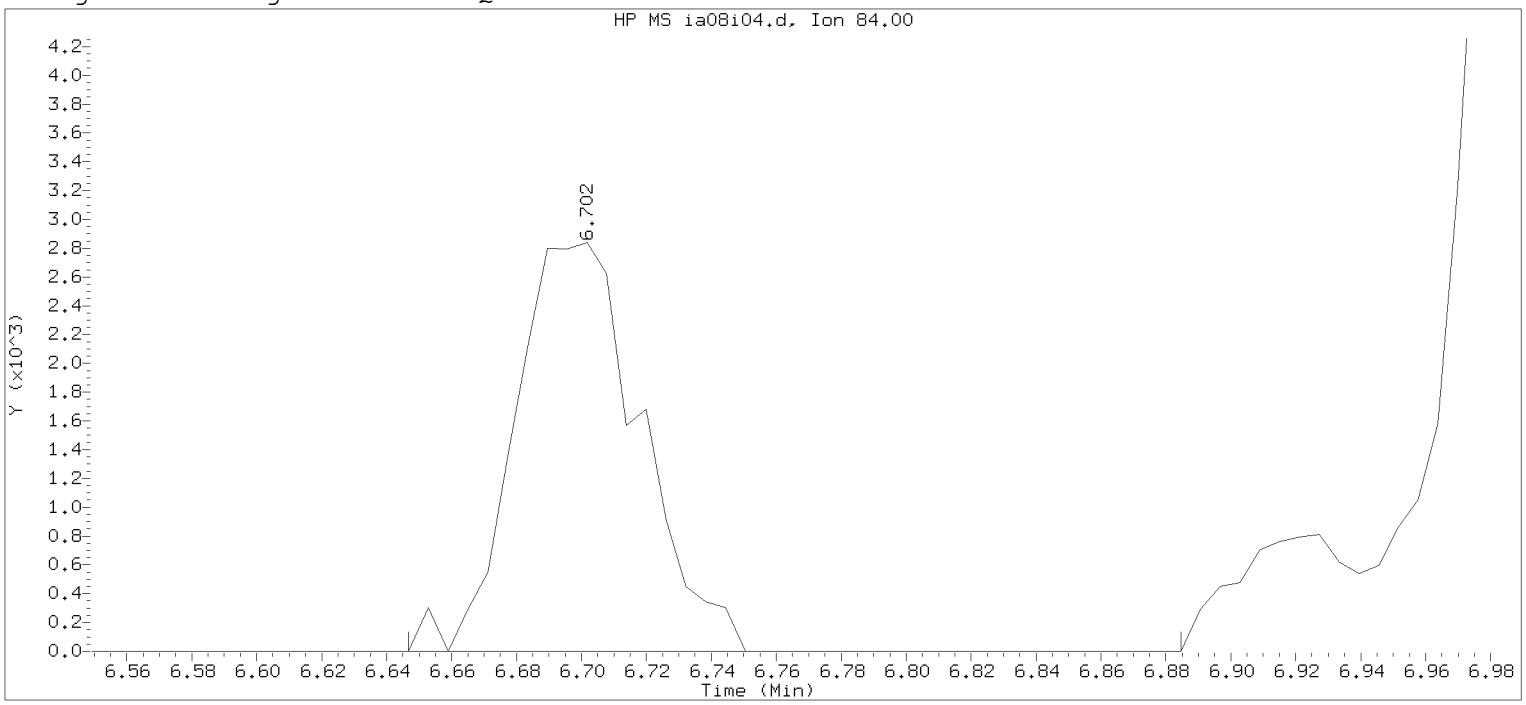
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

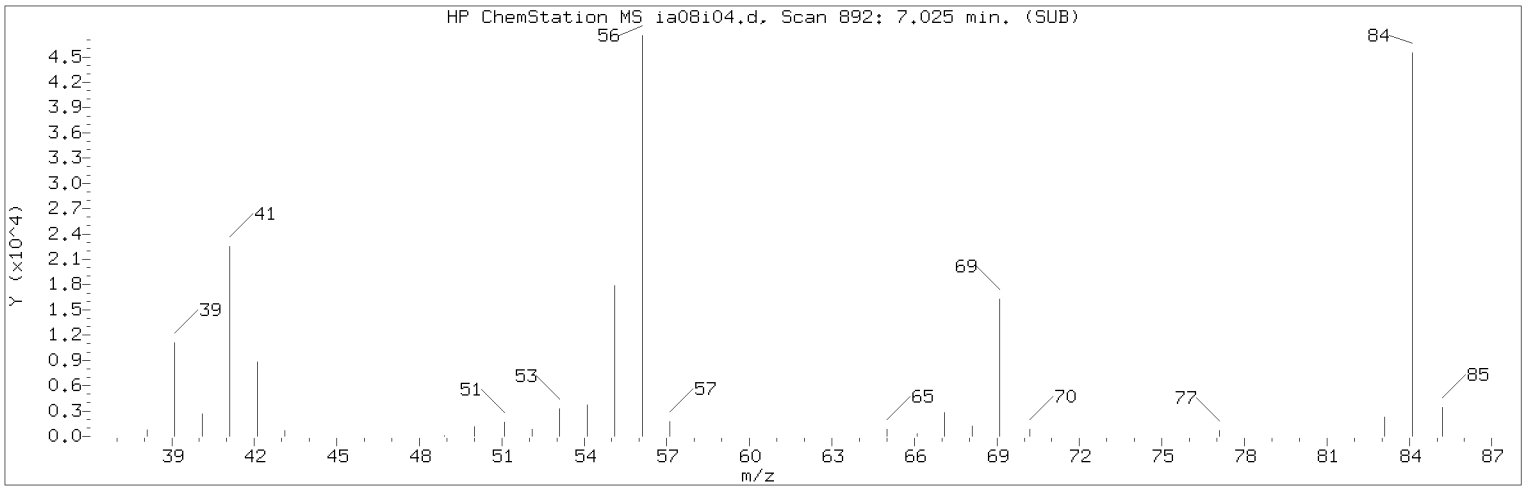
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

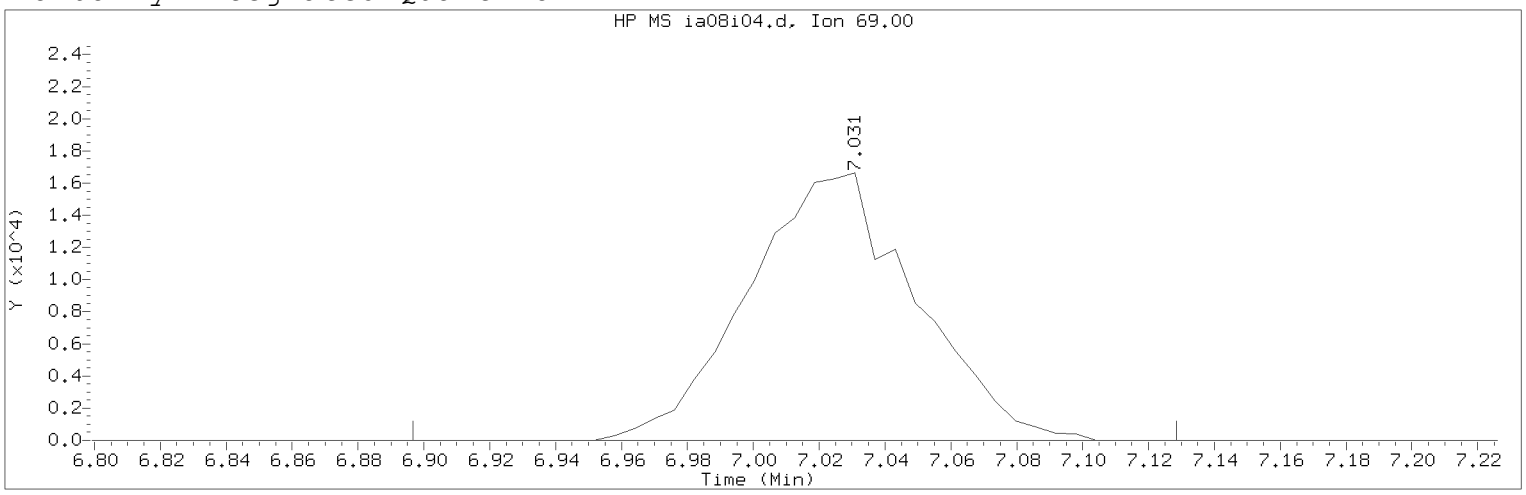
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 839
Retention Time (minutes): 6.702
Quant Ion : 84.00
Area : 7655
On-column Amount (ng) : 2.0084
Integration start scan : 829 Integration stop scan: 868
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

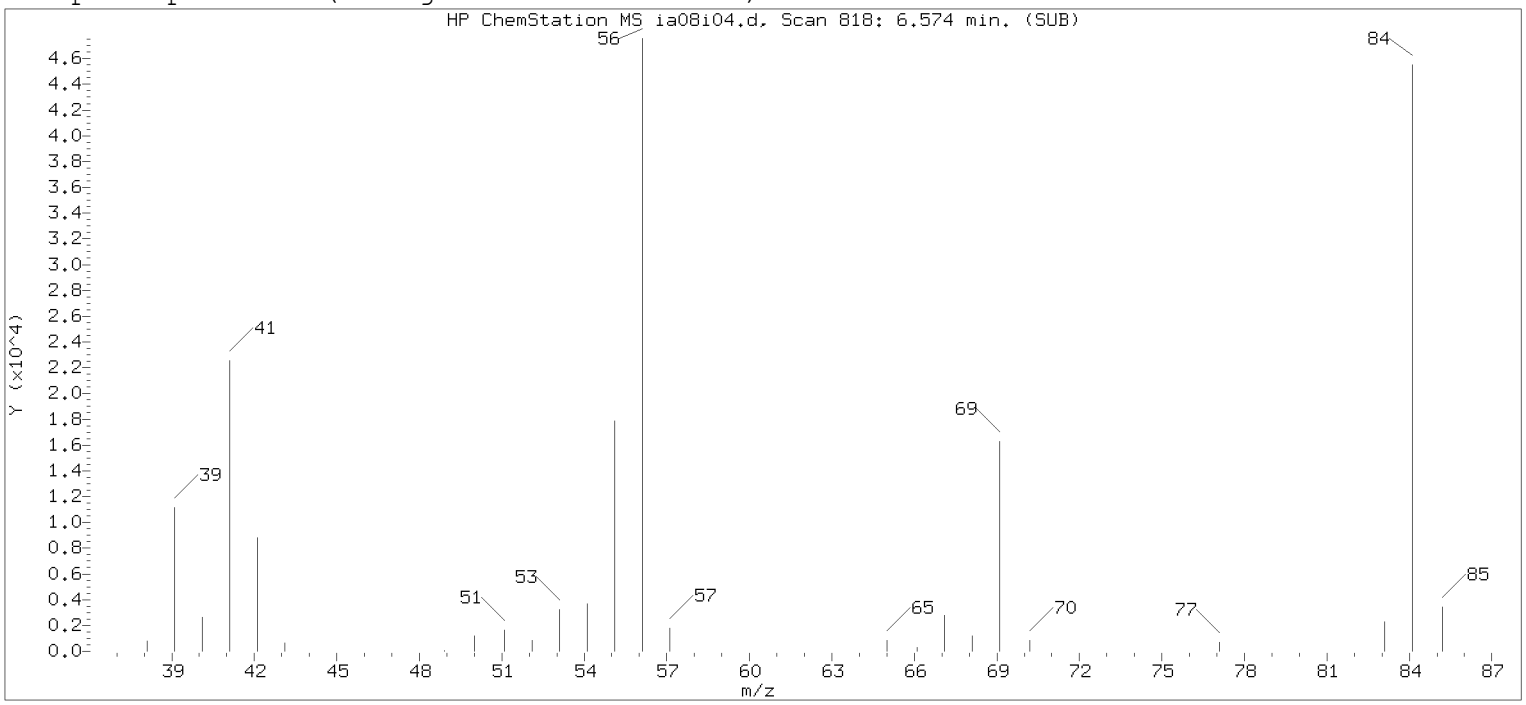
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 893
Retention Time (minutes): 7.031
Quant Ion : 69.00
Area (flag) : 58888M
On-Column Amount (ng) : 2.0343
Integration start scan : 870 Integration stop scan: 908
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

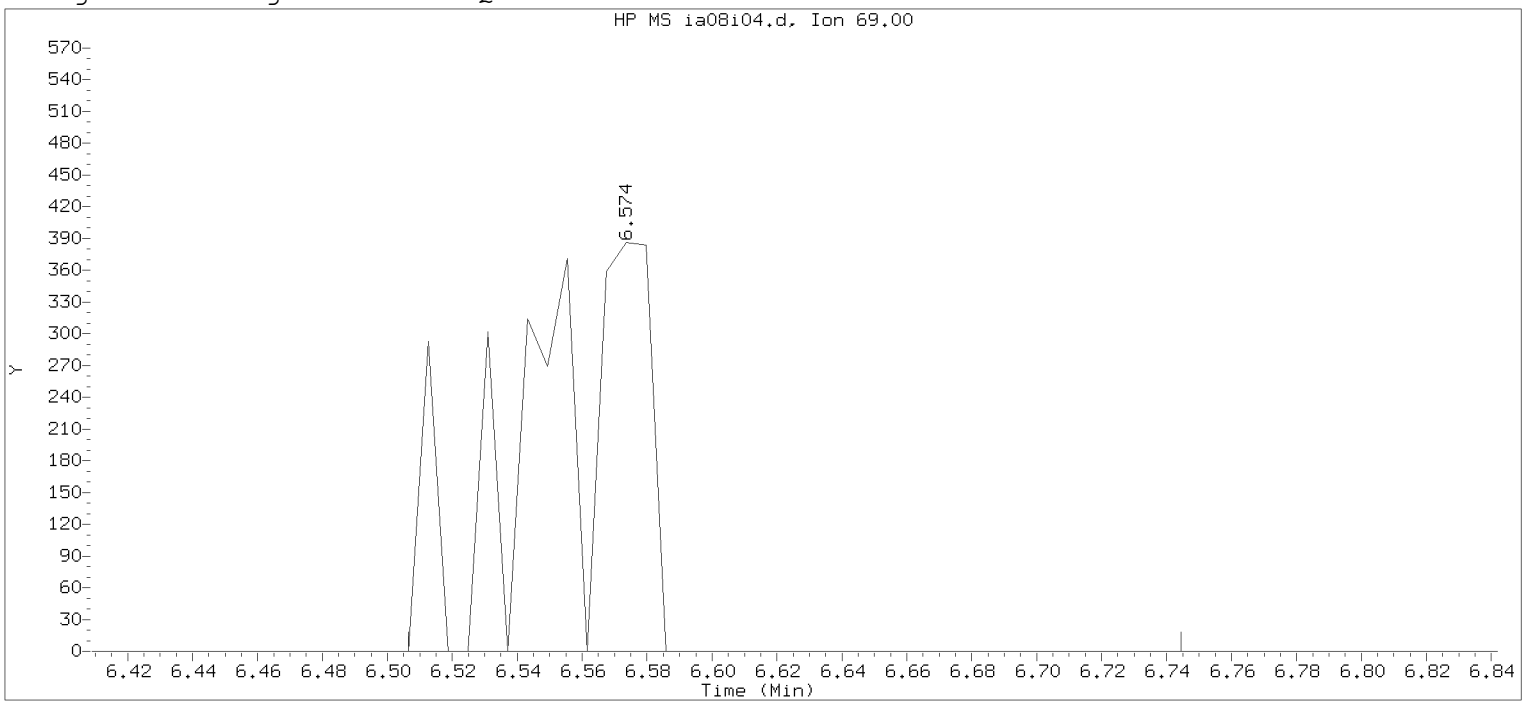
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

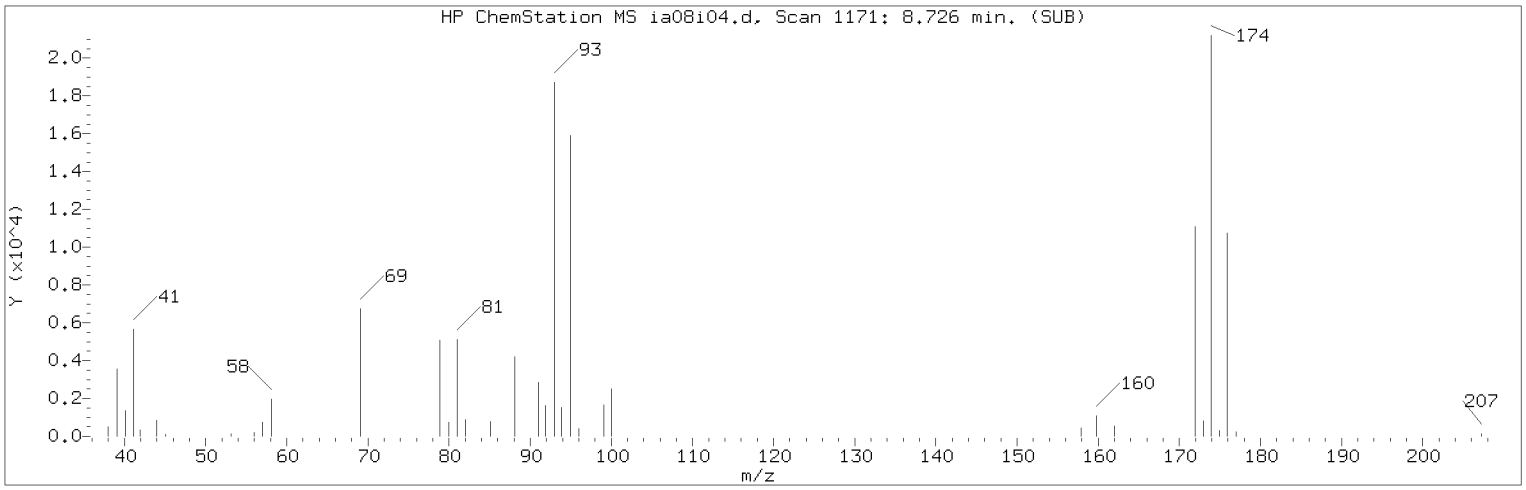
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

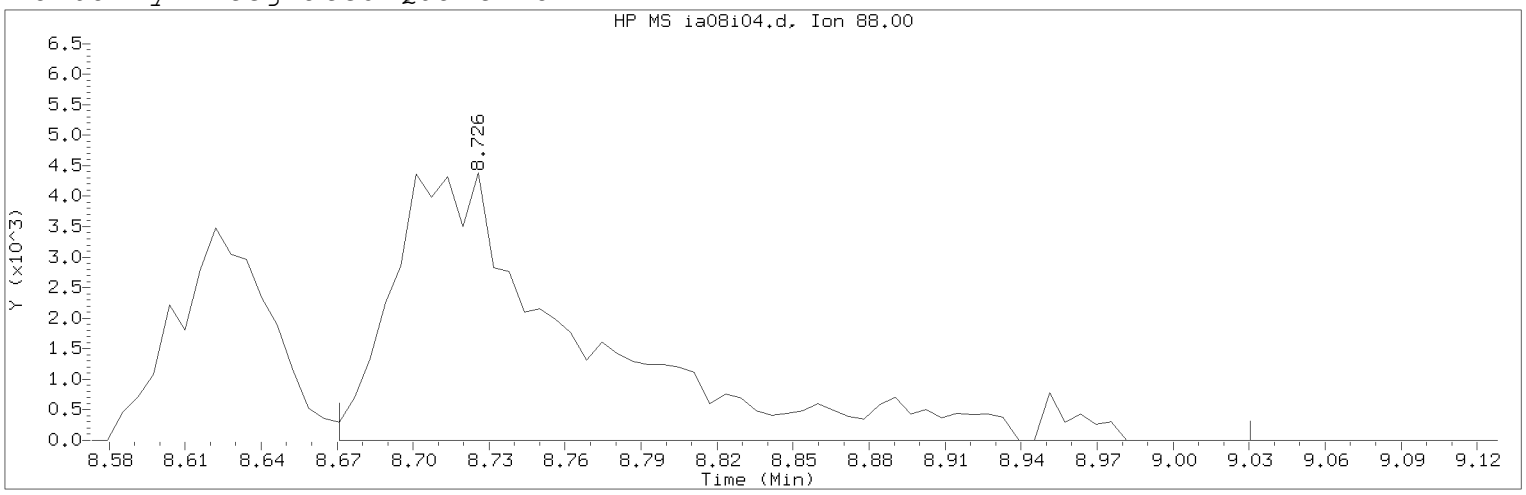
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 818
Retention Time (minutes): 6.574
Quant Ion : 69.00
Area : 979
On-column Amount (ng) : 1.5980
Integration start scan : 806 Integration stop scan: 845
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

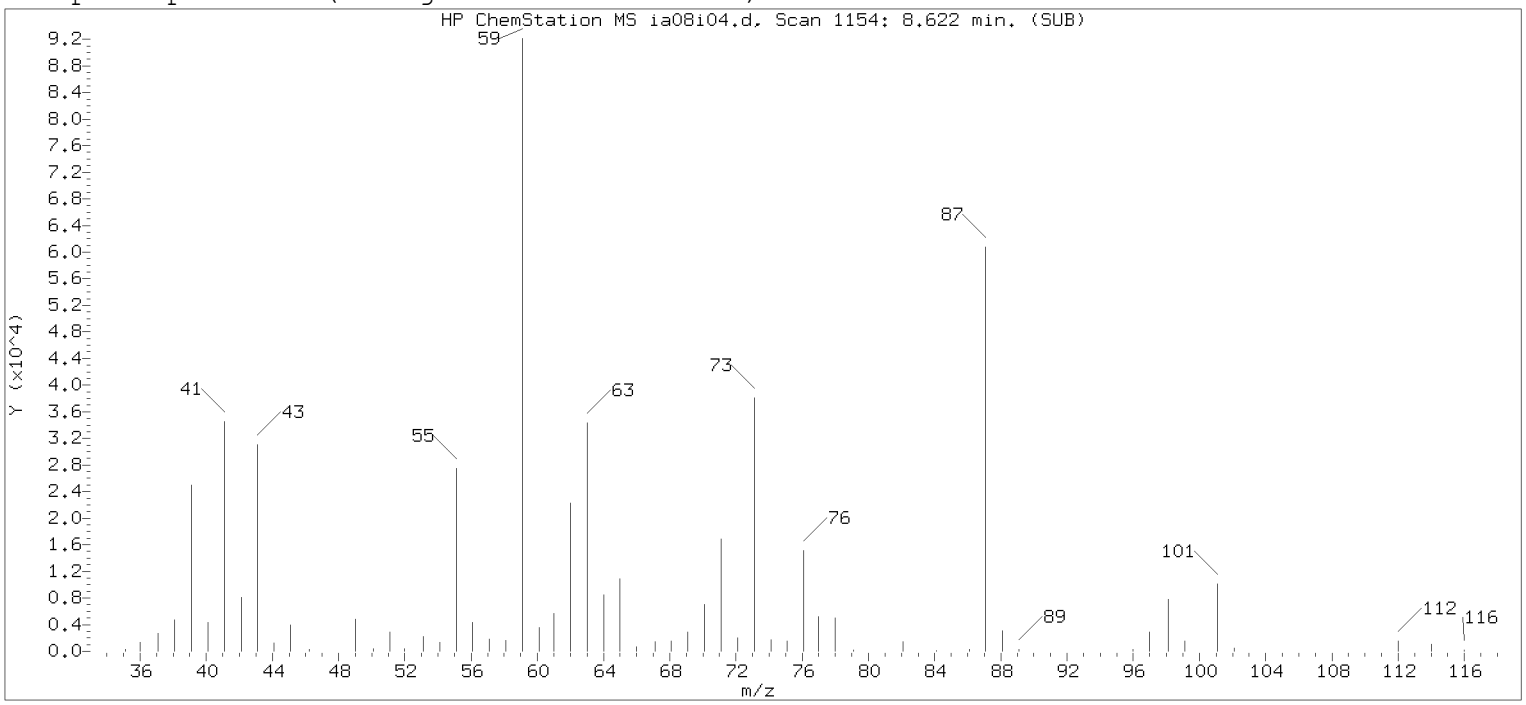
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1171
Retention Time (minutes): 8.726
Quant Ion : 88.00
Area (flag) : 23426M
On-Column Amount (ng) : 105.4908
Integration start scan : 1161 Integration stop scan: 1220
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

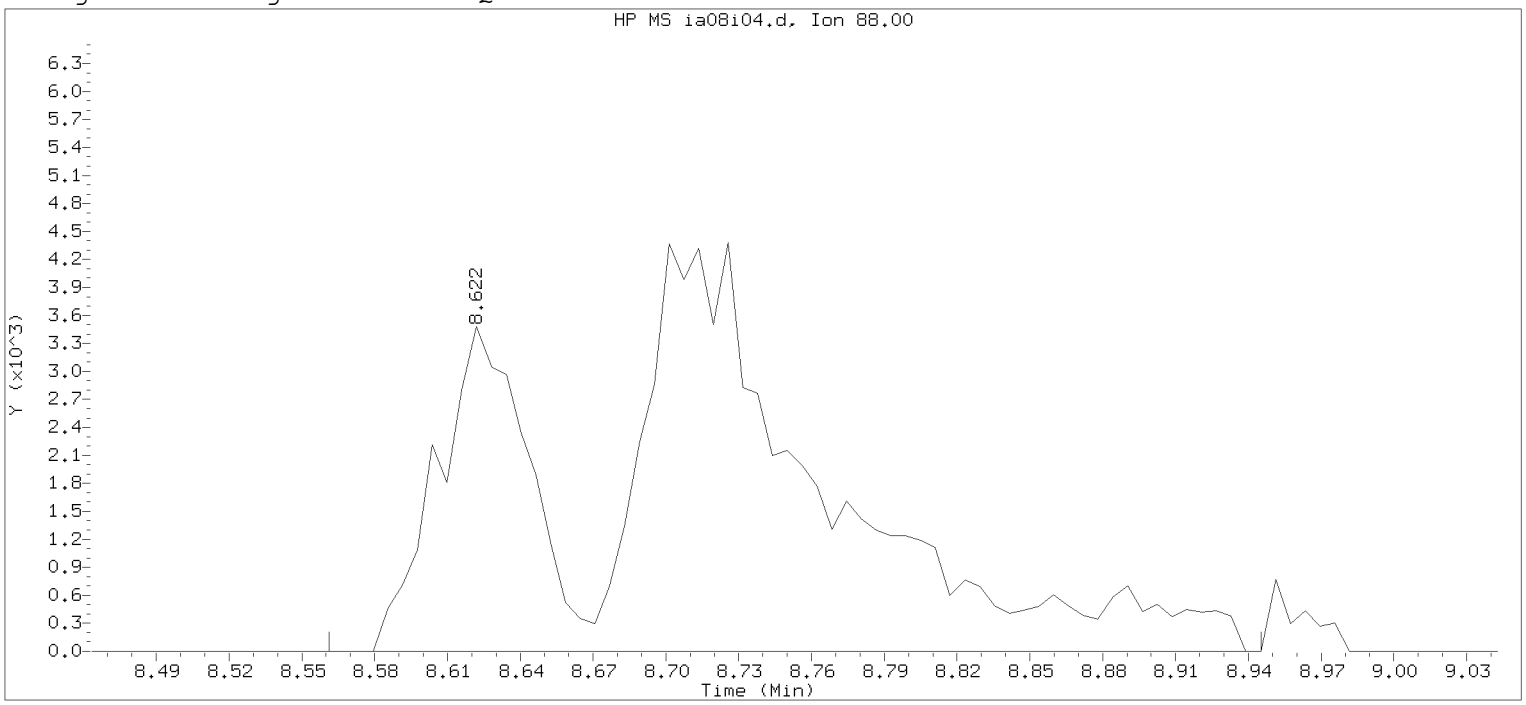
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

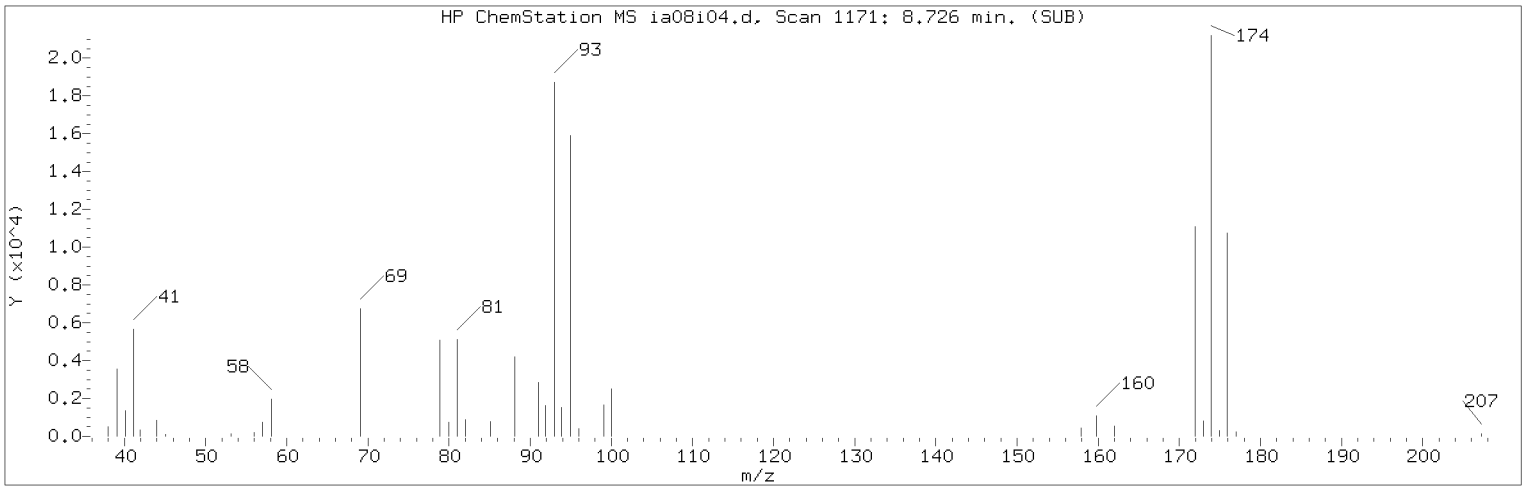
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

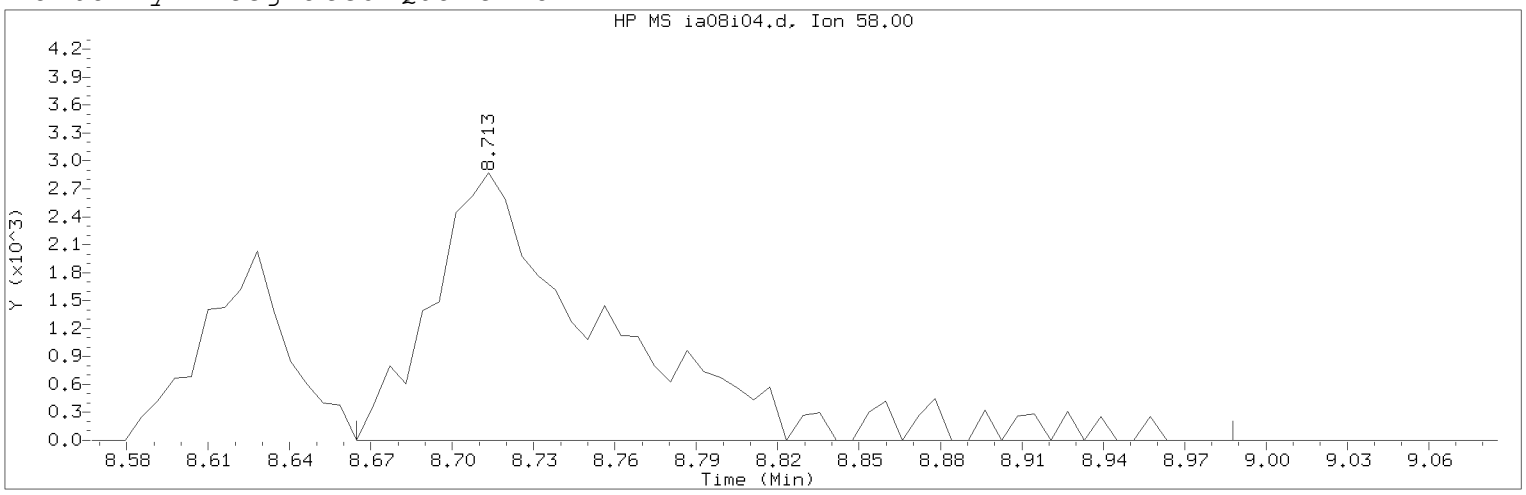
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1154		
Retention Time (minutes)	: 8.622		
Quant Ion	: 88.00		
Area	: 31752		
On-column Amount (ng)	: 133.8192		
Integration start scan	: 1143	Integration stop scan:	1206
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

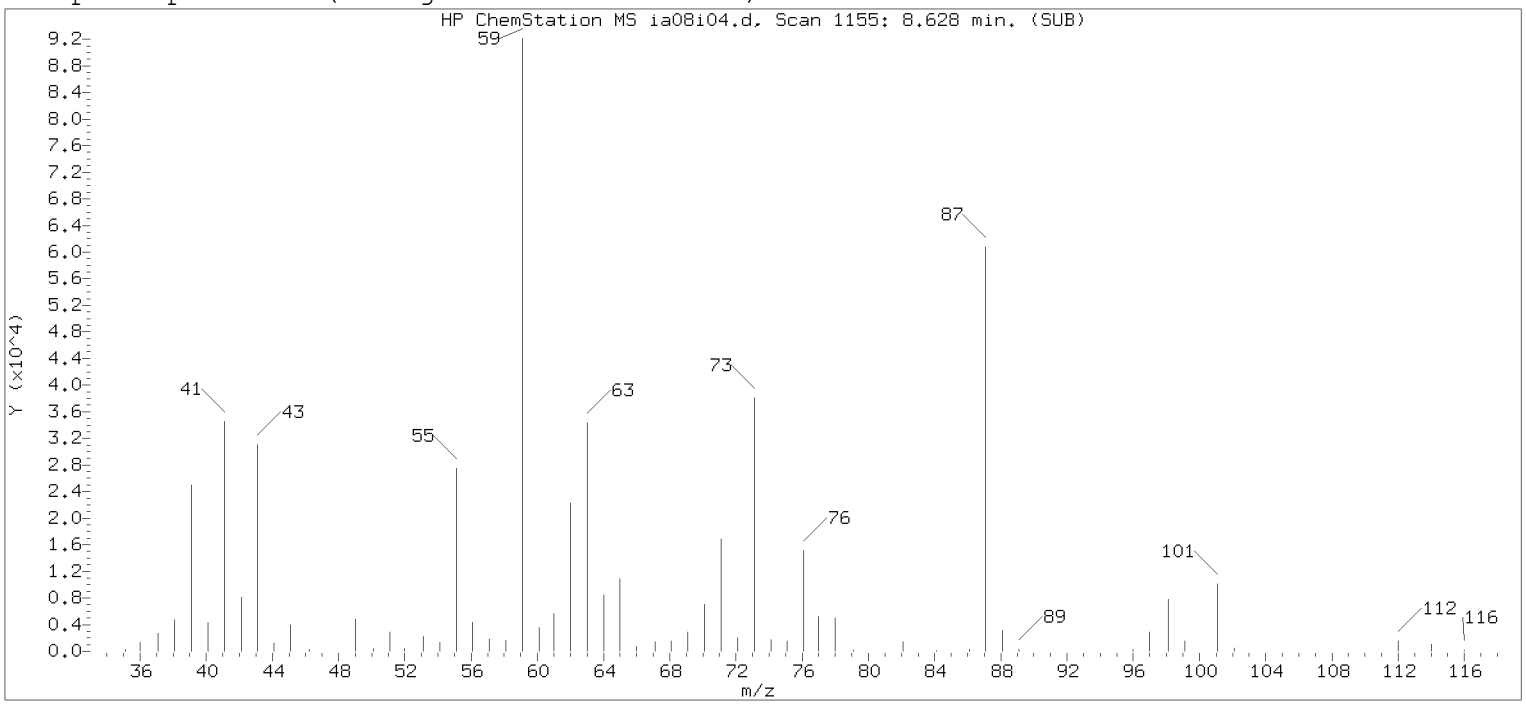
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.713
Quant Ion : 58.00
Area (flag) : 13042M
On-Column Amount (ng) : 98.5555
Integration start scan : 1160 Integration stop scan: 1213
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

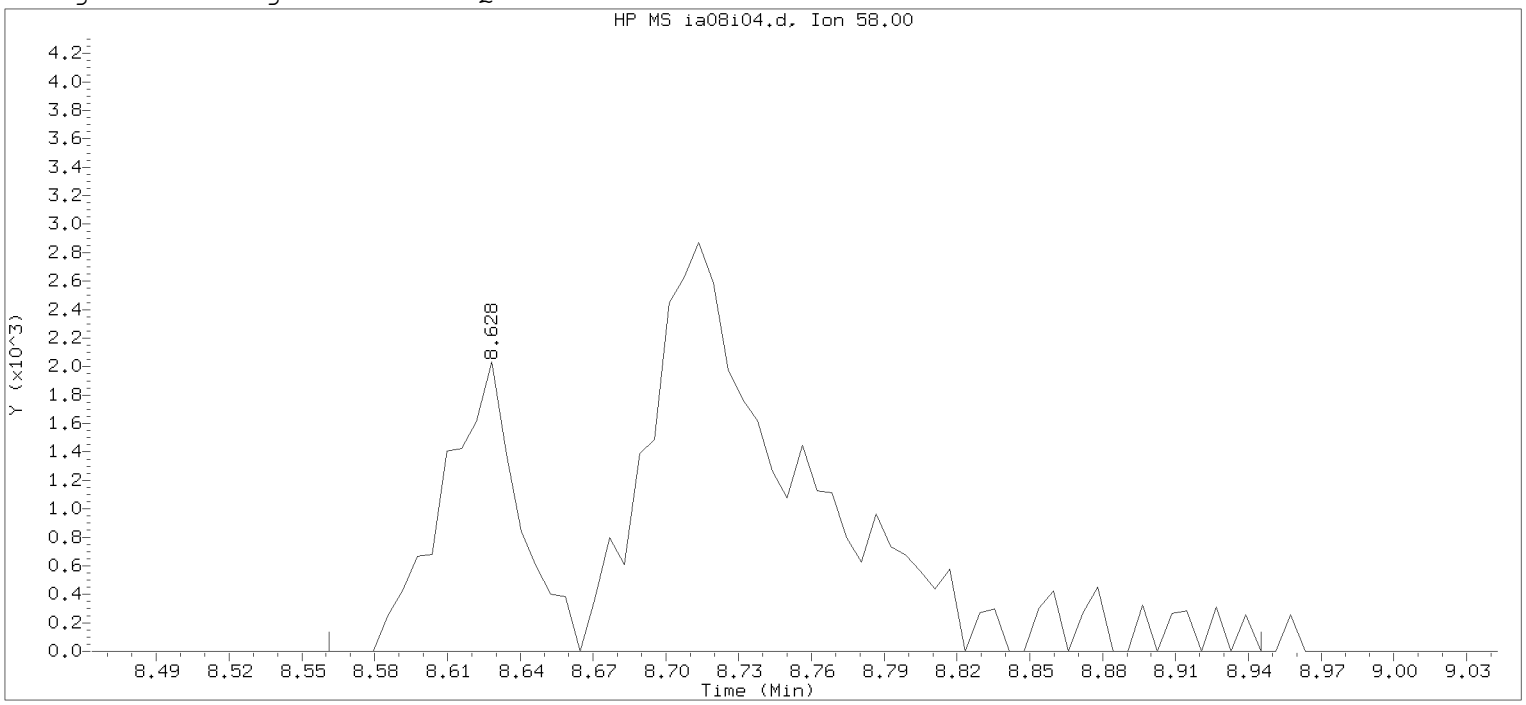
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

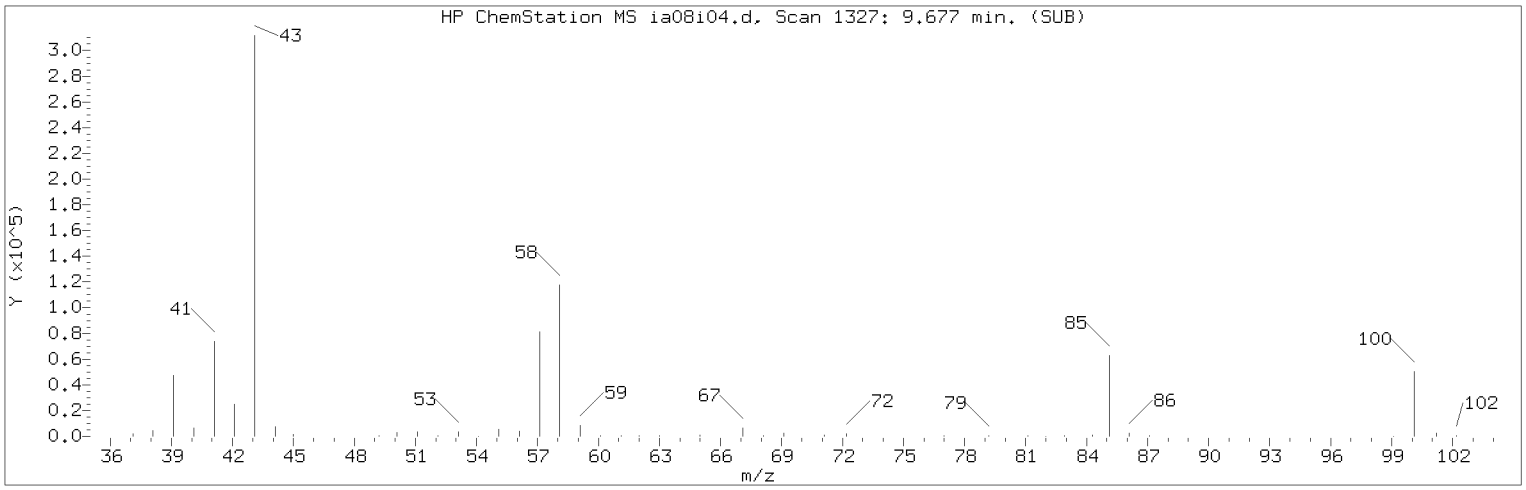
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

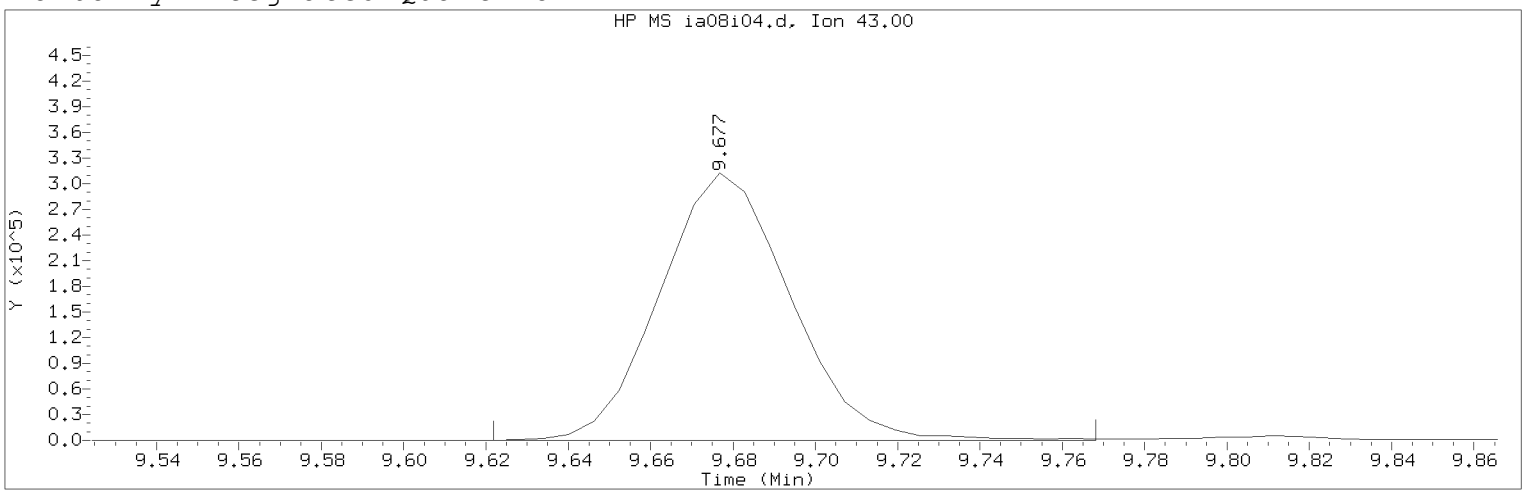
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1155		
Retention Time (minutes)	: 8.628		
Quant Ion	: 58.00		
Area	: 17381		
On-column Amount (ng)	: 103.5444		
Integration start scan	: 1143	Integration stop scan:	1206
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

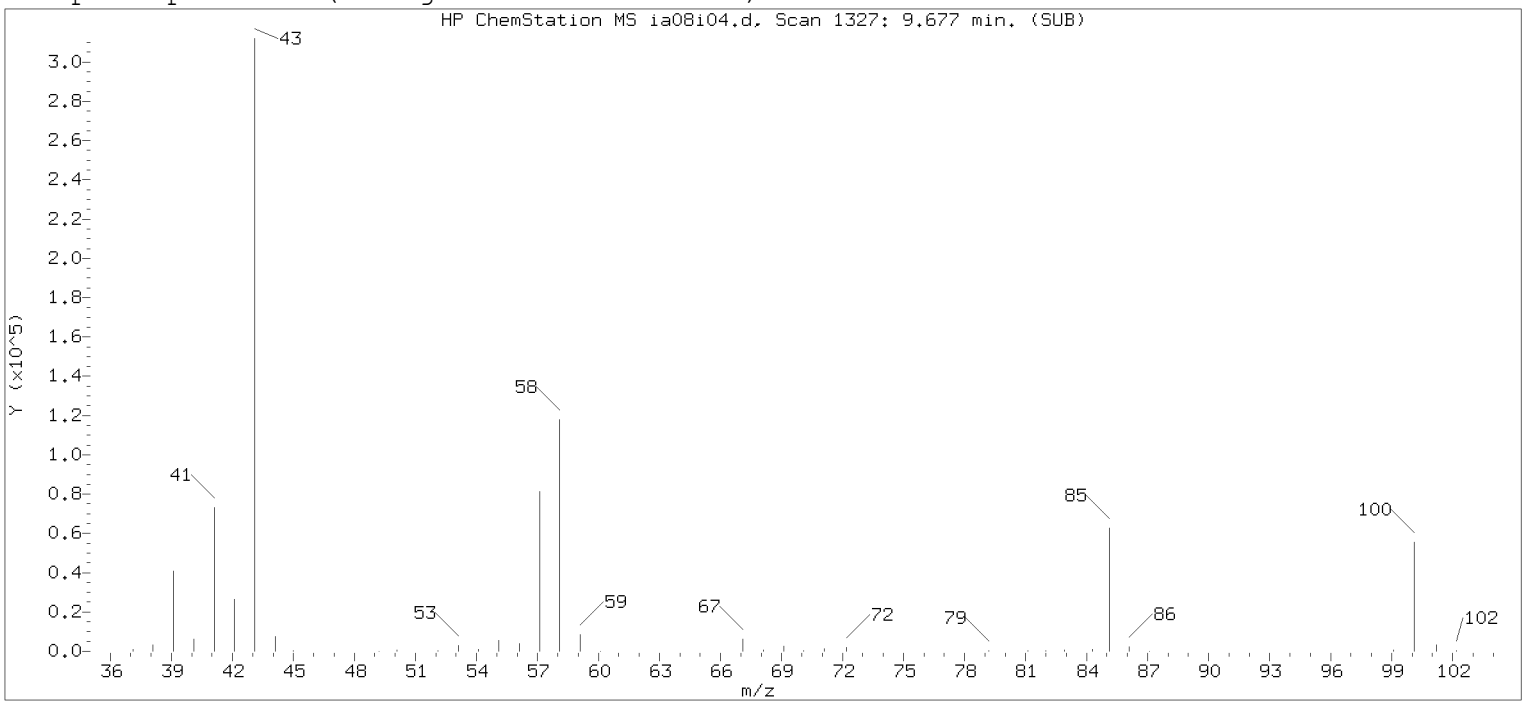
Compound Number : 81
Compound Name : 4-Methyl-2-Pentanone
Scan Number : 1327
Retention Time (minutes): 9.677
Quant Ion : 43.00
Area (flag) : 685525M
On-Column Amount (ng) : 19.7170
Integration start scan : 1317 Integration stop scan: 1341
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

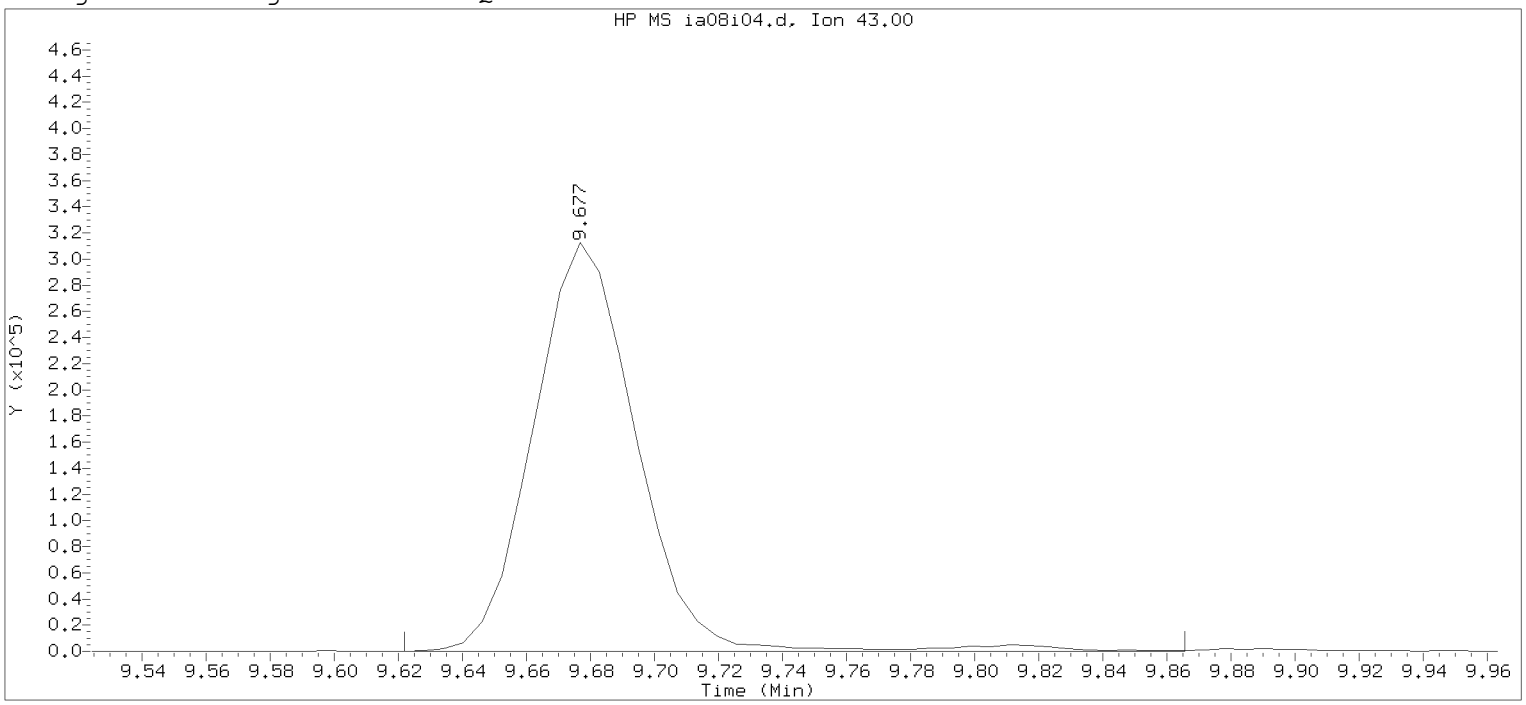
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

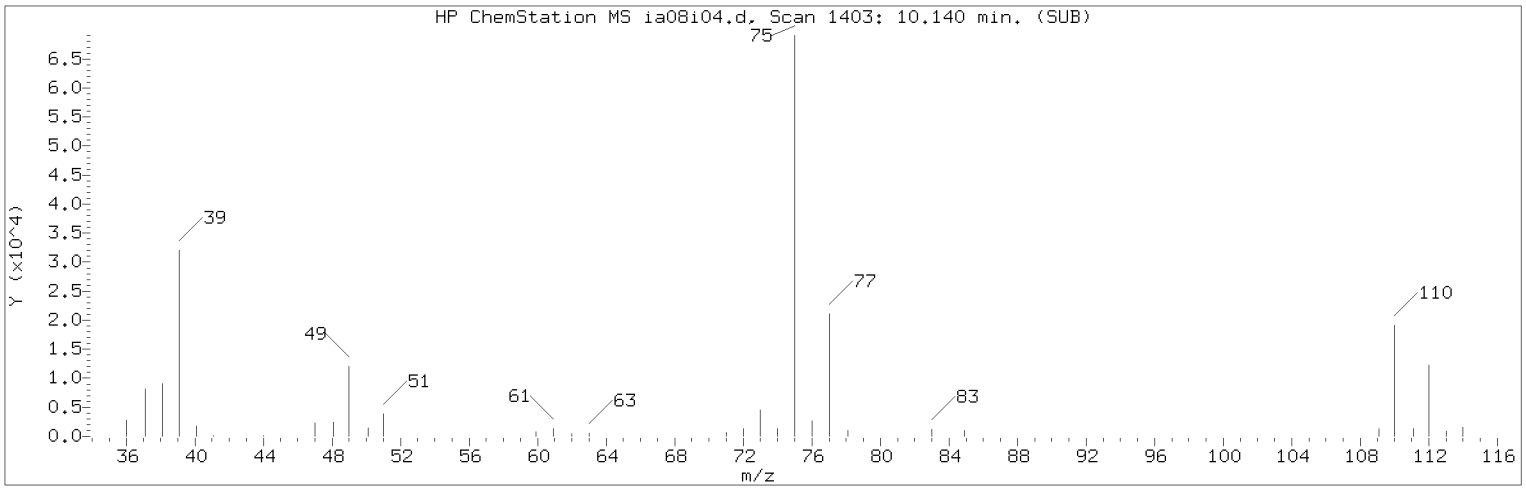
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

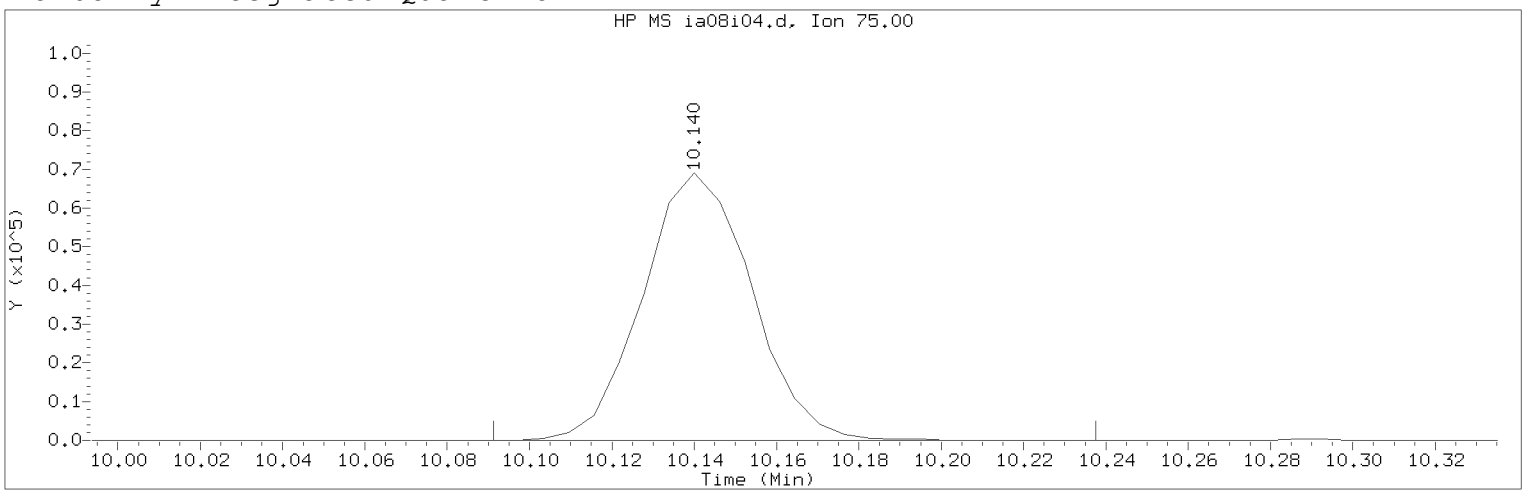
Compound Number	: 81		
Compound Name	: 4-Methyl-2-Pentanone		
Scan Number	: 1327		
Retention Time (minutes)	: 9.677		
Quant Ion	: 43.00		
Area	: 698112		
On-column Amount (ng)	: 18.5636		
Integration start scan	: 1317	Integration stop scan:	1357
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

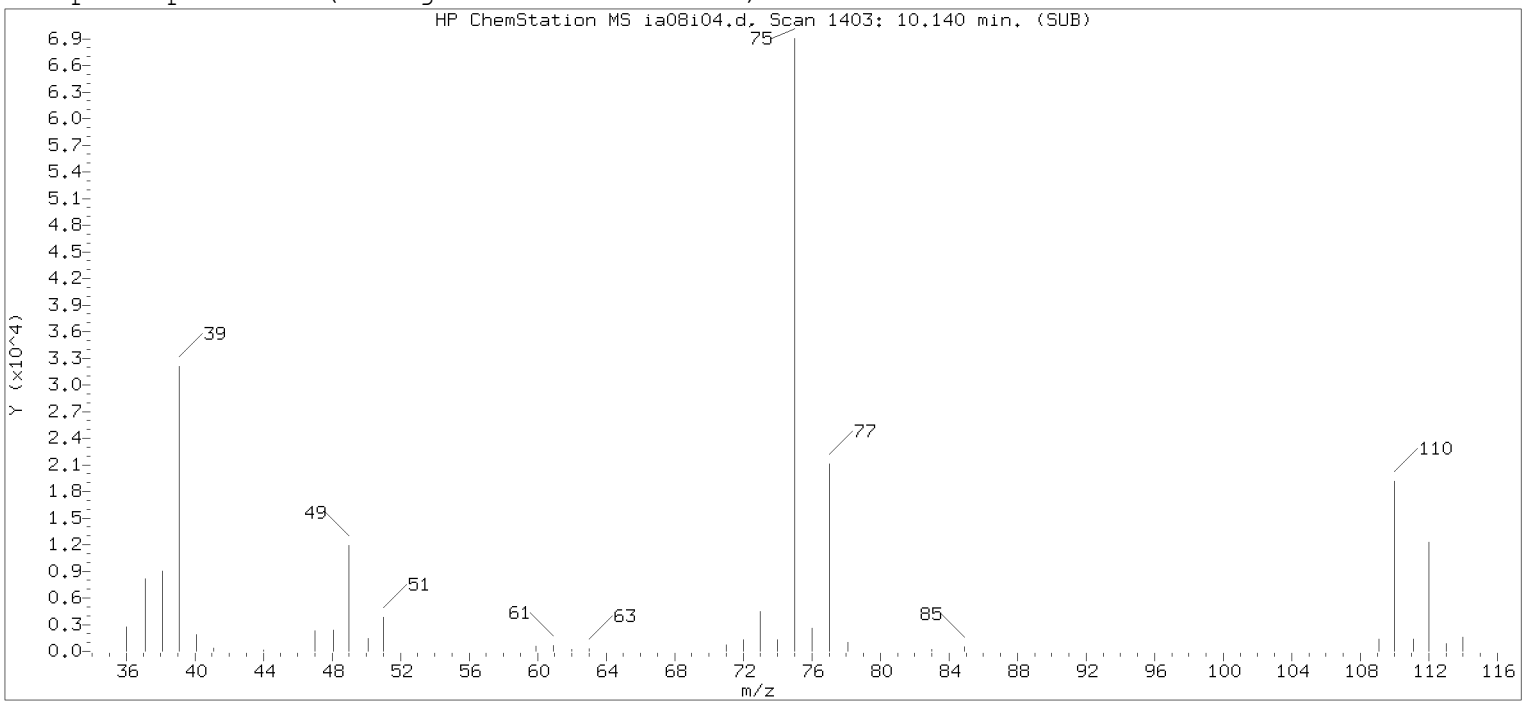
Compound Number : 84
Compound Name : trans-1,3-Dichloropropene
Scan Number : 1403
Retention Time (minutes): 10.140
Quant Ion : 75.00
Area (flag) : 126794M
On-Column Amount (ng) : 1.9672
Integration start scan : 1394 Integration stop scan: 1418
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

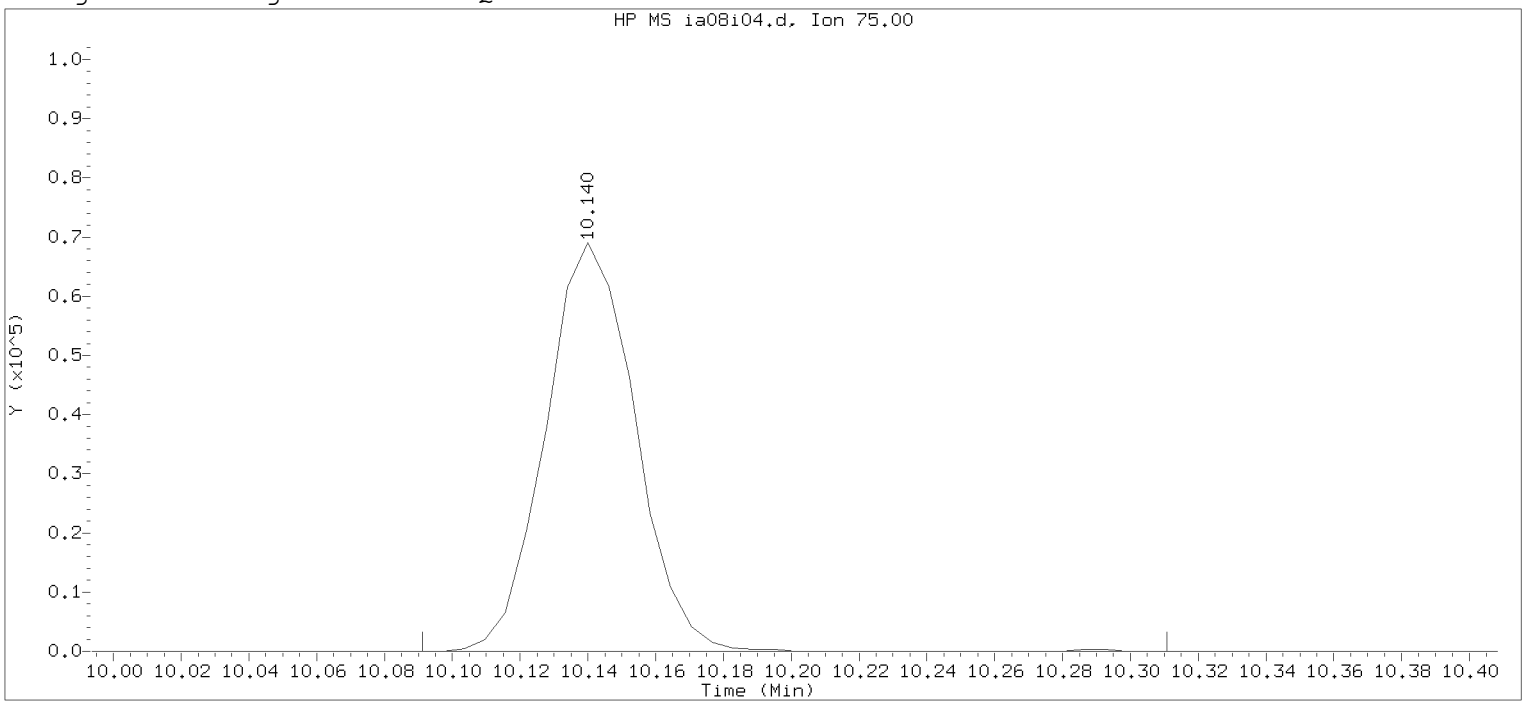
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

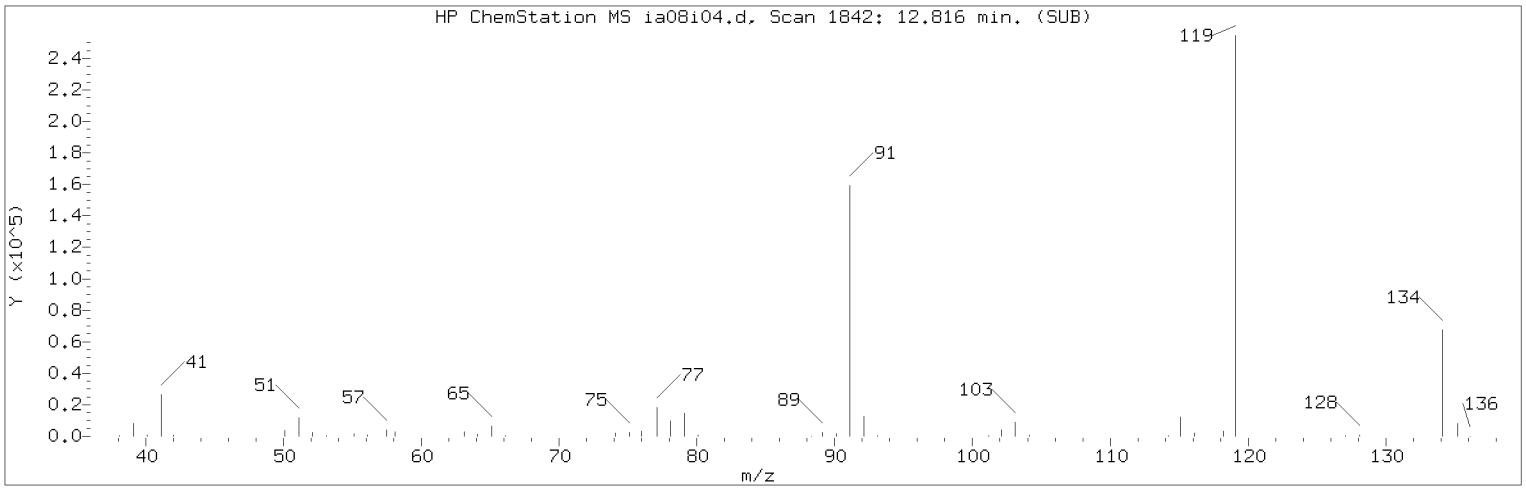
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

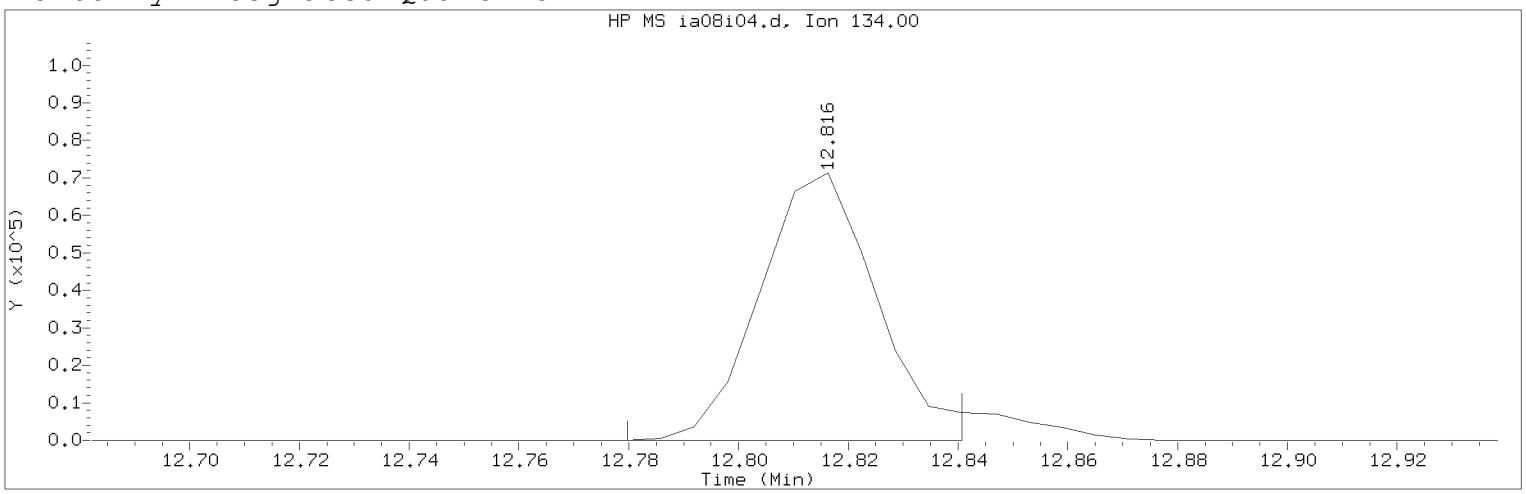
Compound Number : 84
Compound Name : trans-1,3-Dichloropropene
Scan Number : 1403
Retention Time (minutes): 10.140
Quant Ion : 75.00
Area : 127022
On-column Amount (ng) : 1.9221
Integration start scan : 1394 Integration stop scan: 1430
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

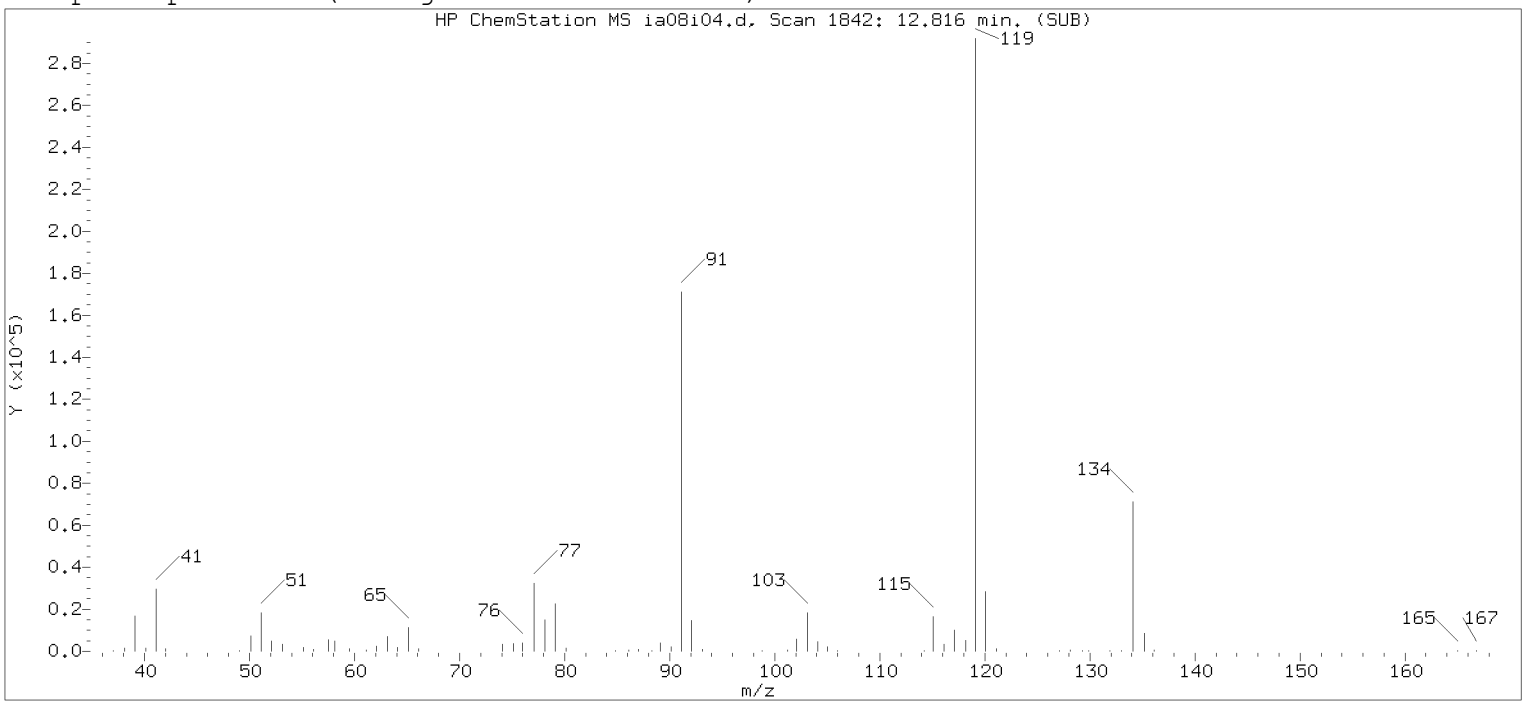
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 105634M
On-Column Amount (ng) : 1.9479
Integration start scan : 1835 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

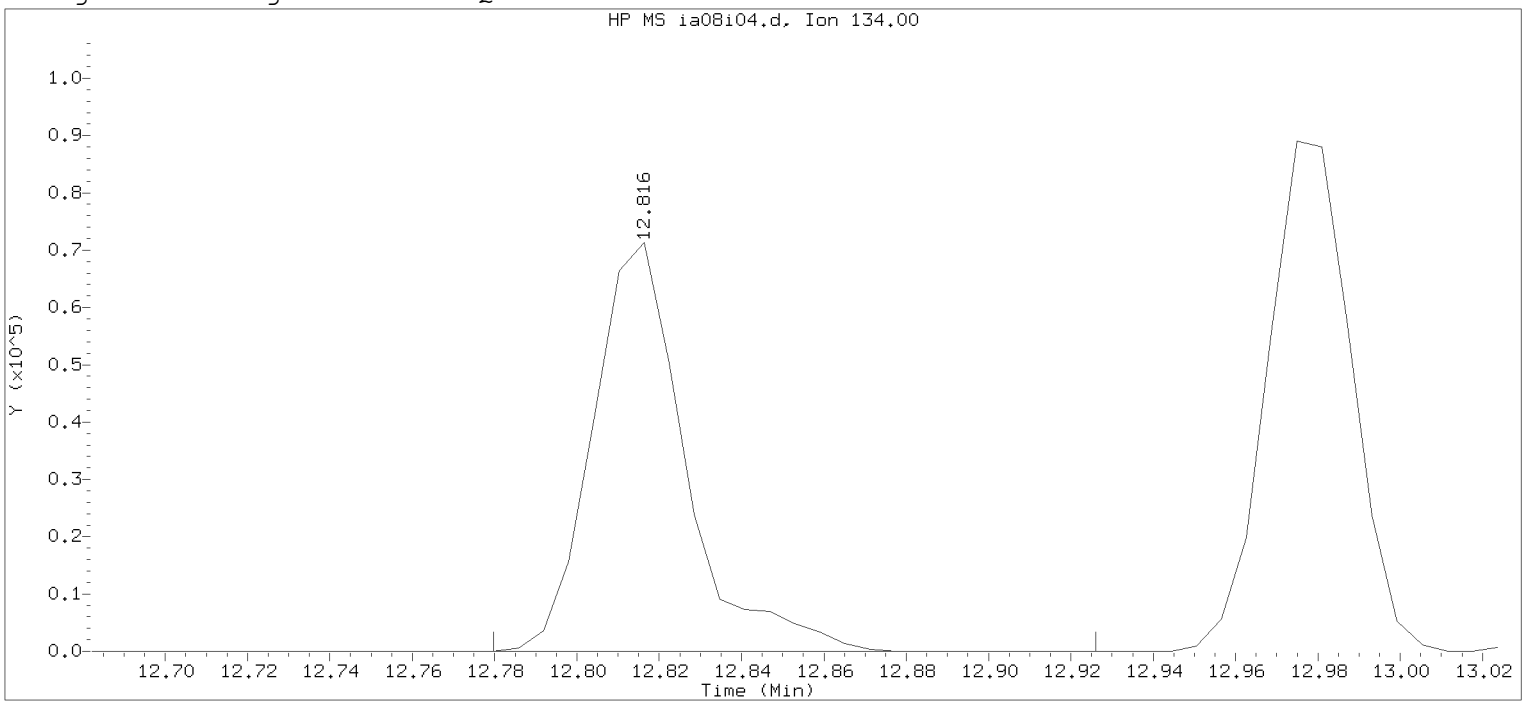
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

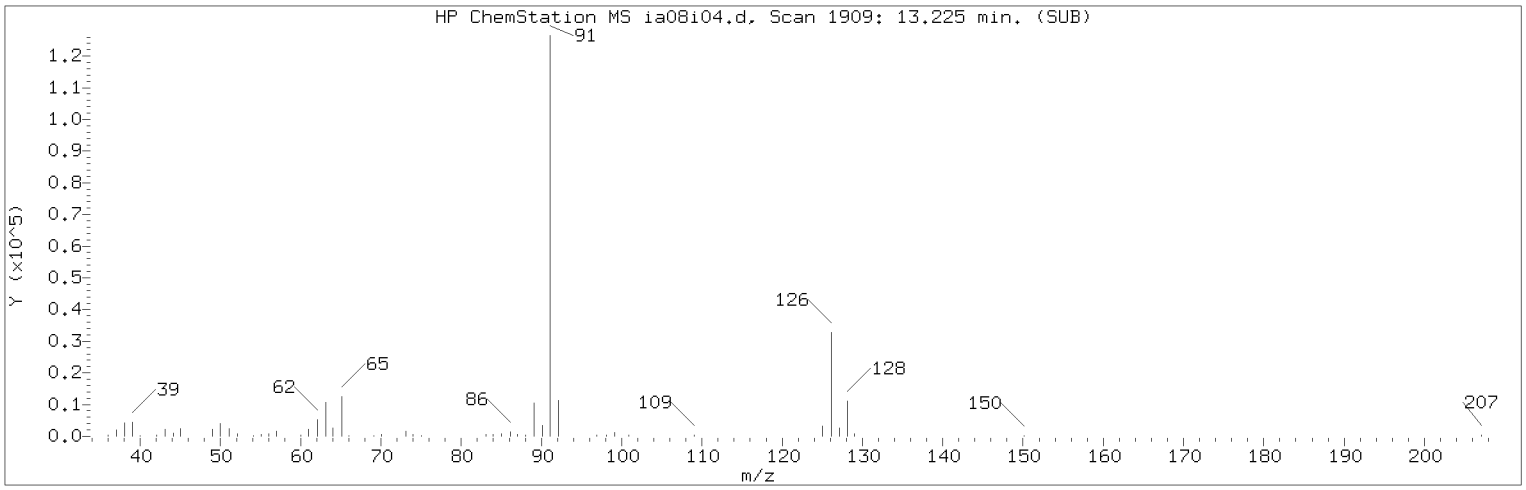
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

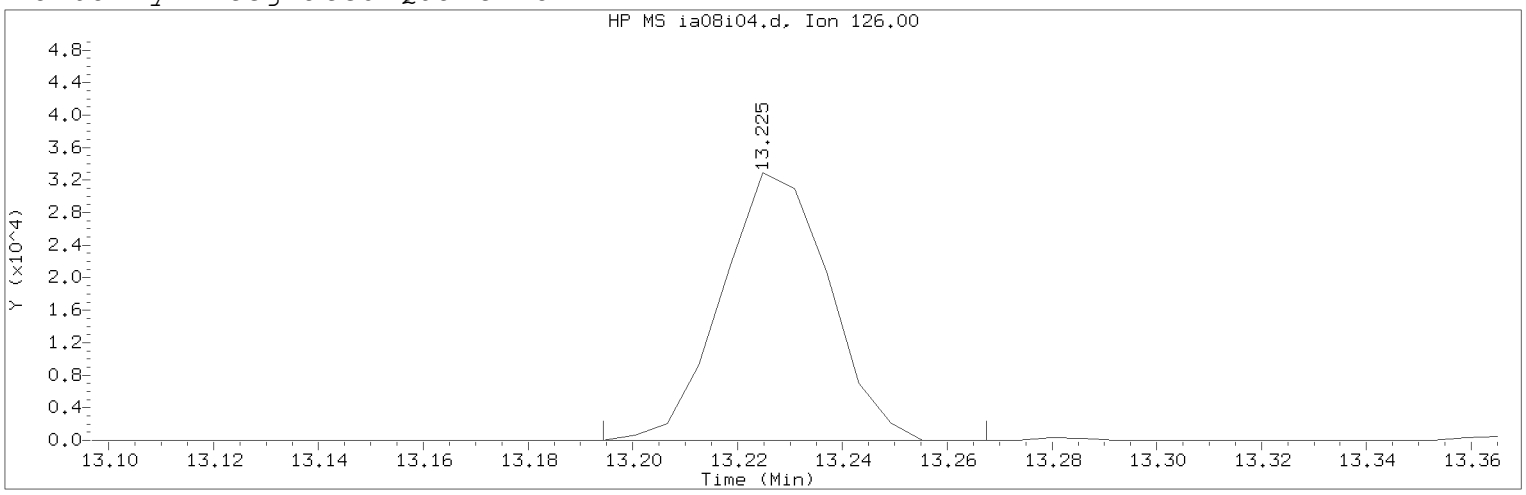
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 111803
On-column Amount (ng) : 1.9234
Integration start scan : 1835 Integration stop scan: 1859
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:04
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

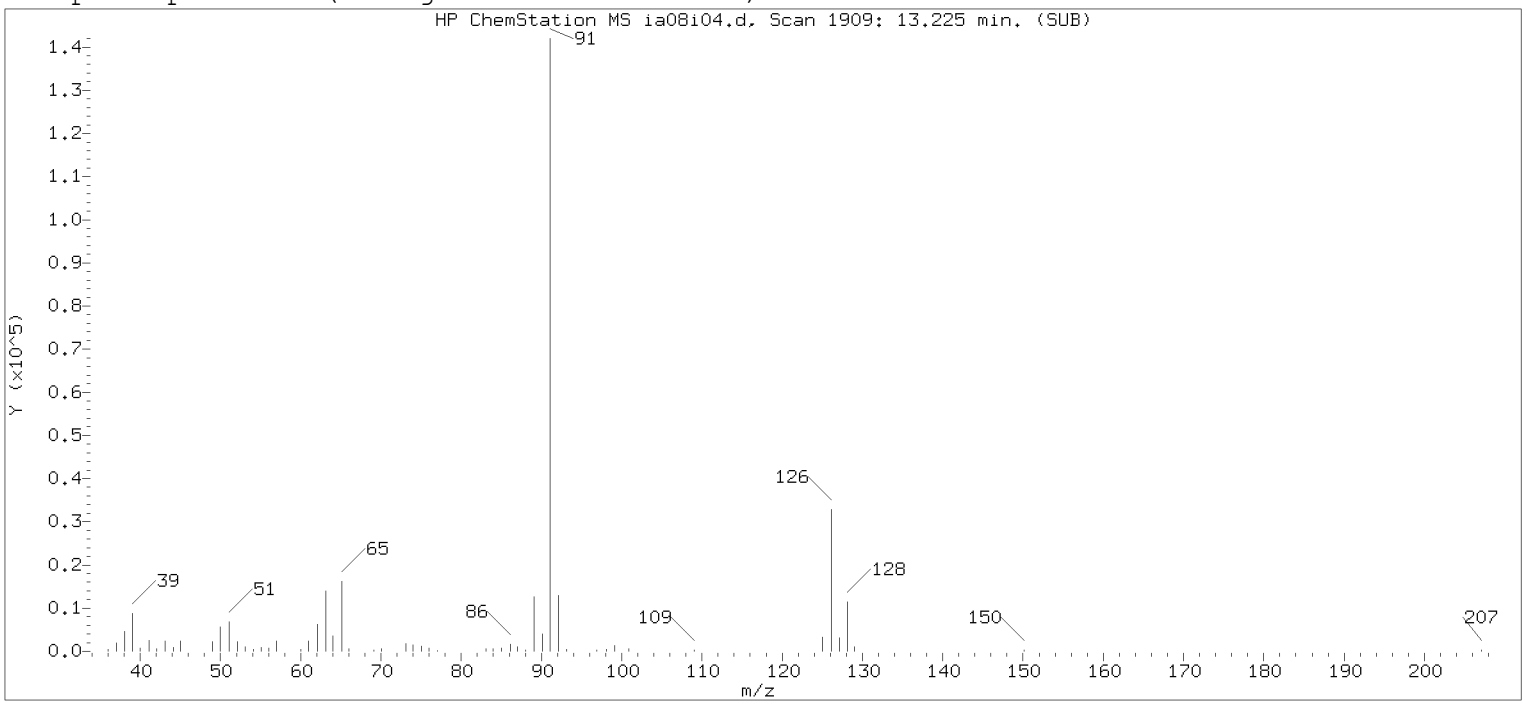
Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1909
Retention Time (minutes): 13.225
Quant Ion : 126.00
Area (flag) : 46528M
On-Column Amount (ng) : 2.0863
Integration start scan : 1903 Integration stop scan: 1915
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

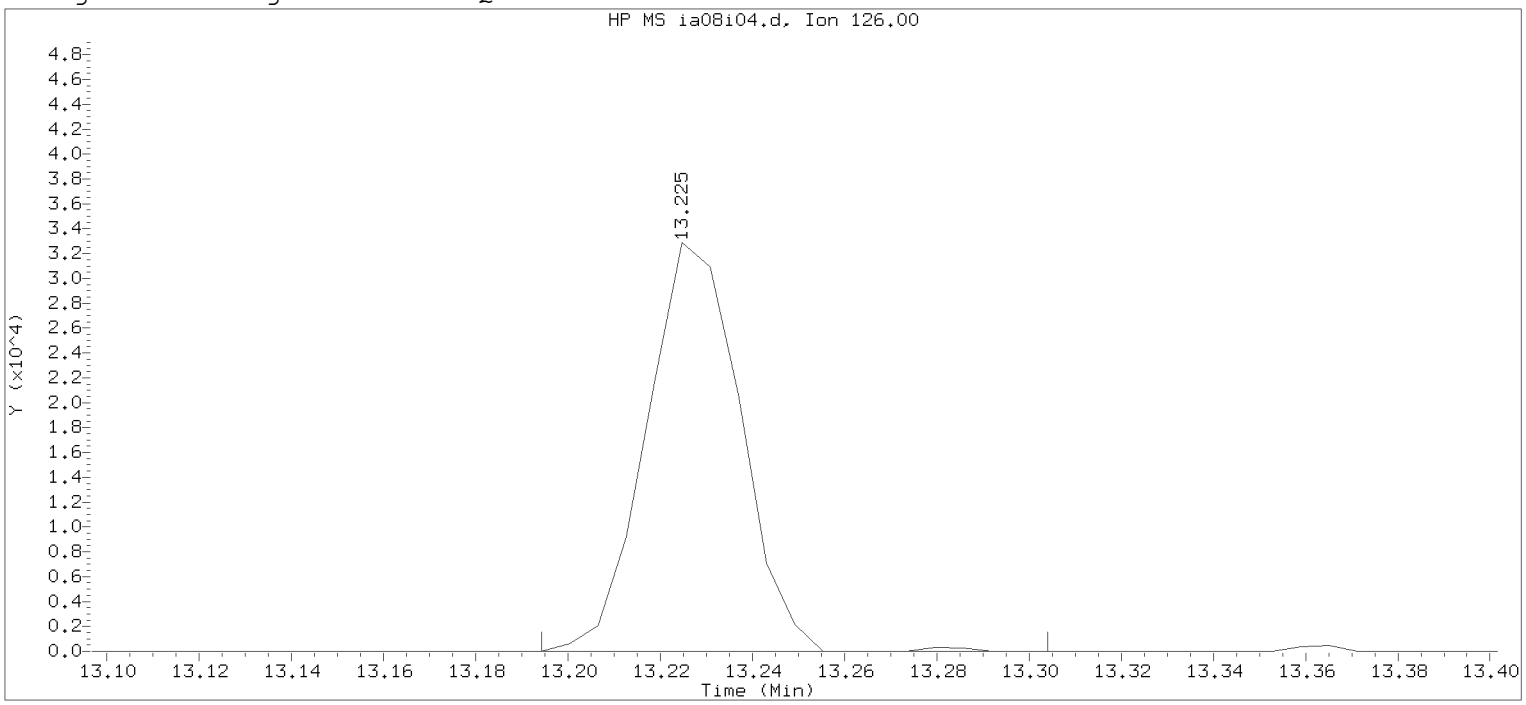
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



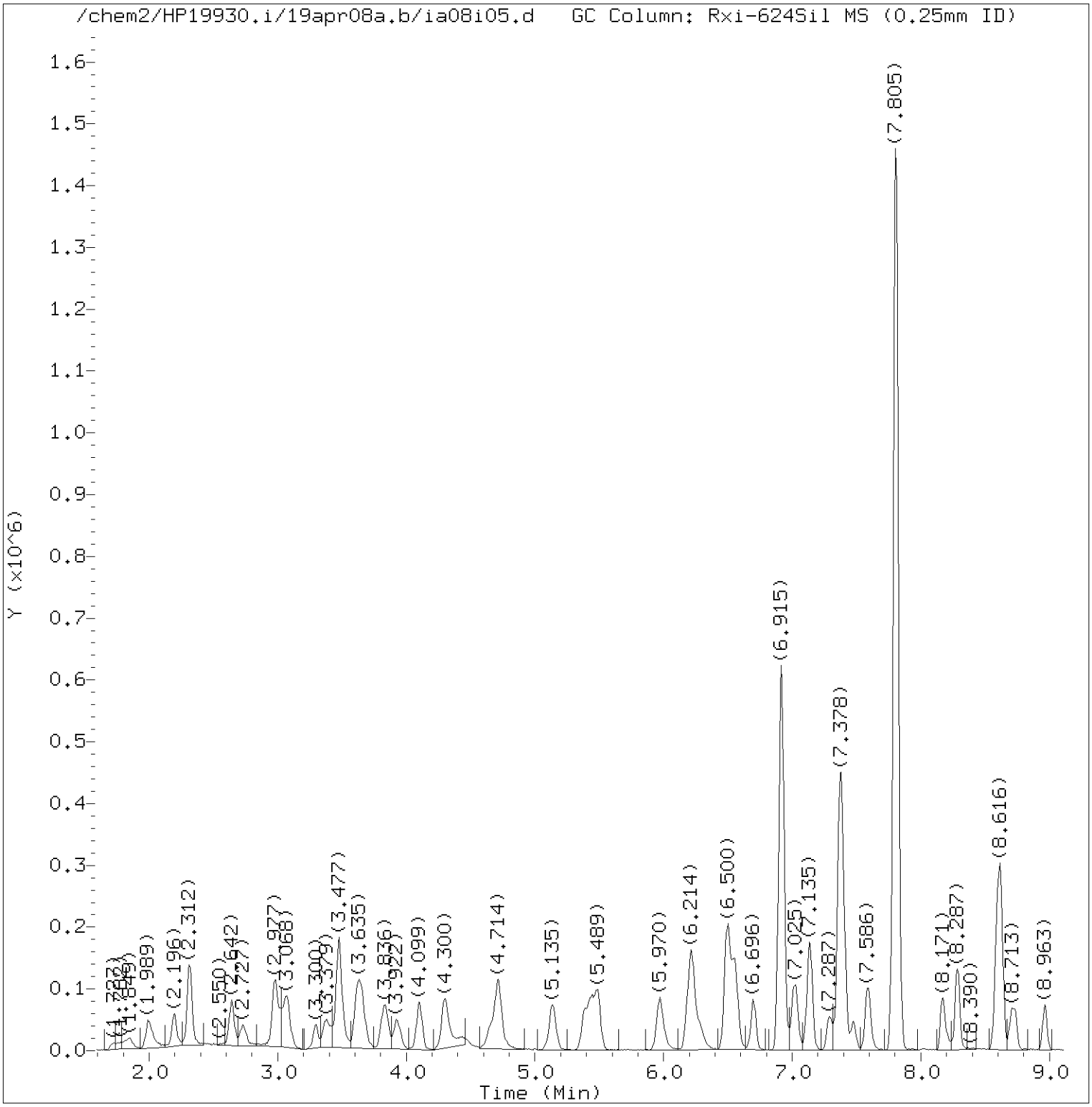
Data File: /chem2/HP19930.i/19apr08a.b/ia08i04.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:16 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 136
Compound Name : Benzyl Chloride
Scan Number : 1909
Retention Time (minutes): 13.225
Quant Ion : 126.00
Area : 46738
On-column Amount (ng) : 1.9308
Integration start scan : 1903 Integration stop scan: 1921
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:05.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

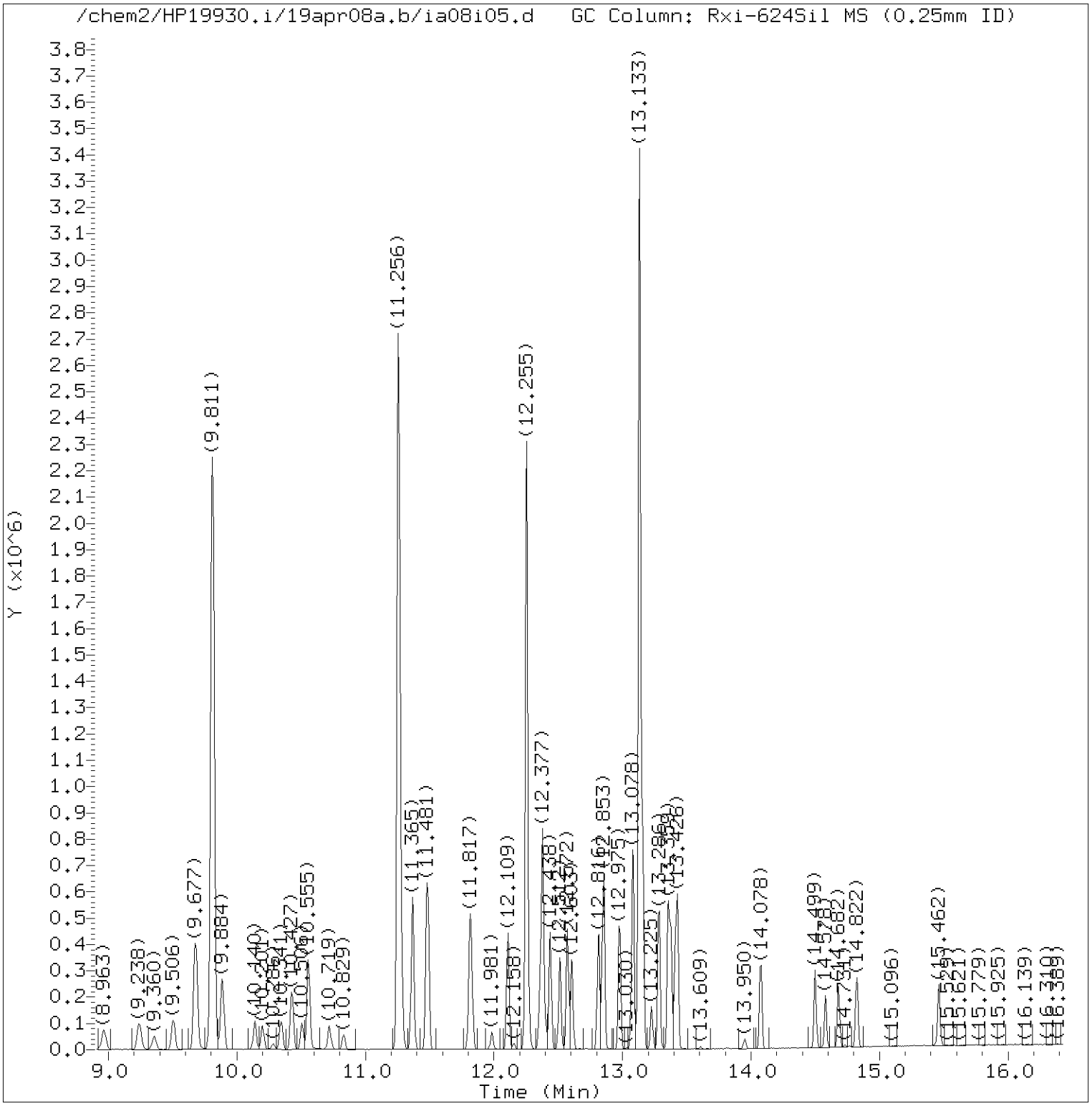
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.989	85	105481	0.980
2) Chloromethane	(2)	2.196	50	78007	0.978
5) Vinyl Chloride	(2)	2.312	62	79923	0.986
6) 1,3-Butadiene	(2)	2.318	39	66446M	0.991
7) Bromomethane	(2)	2.642	94	69055	0.958
8) Chloroethane	(2)	2.727	64	46015	0.977
9) Dichlorofluoromethane	(2)	2.983	67	117635	0.966
10) Trichlorofluoromethane	(2)	3.038	101	131337	0.969
11) Ethyl ether	(2)	3.294	59	35099	0.984
12) Freon 123a	(2)	3.367	67	60393MA	0.991
13) Acrolein	(1)	3.477	56	295518	47.787
15) 1,1-Dichloroethene	(2)	3.617	96	45957	0.978
16) Freon 113	(2)	3.647	101	57095	1.006
14) Acetone	(1)	3.660	43	81908	9.596
17) Methyl Iodide	(2)	3.812	142	97815	0.971
18) Carbon Disulfide	(2)	3.934	76	131366	0.955
21) Methyl Acetate	(1)	4.080	43	22698	1.006
22) Allyl Chloride	(2)	4.099	41	72903	1.009
23) Methylene Chloride	(2)	4.294	84	47651	0.991
26)*t-Butyl Alcohol-d10	(1)	4.306	65	145694	50.000
28) t-Butyl Alcohol	(1)	4.434	59	69150M	19.544
29) Acrylonitrile	(1)	4.647	53	49508	4.849
30) Methyl Tertiary Butyl Ether	(2)	4.702	73	121987	0.993
31) trans-1,2-Dichloroethene	(2)	4.714	96	50822	0.967
32) n-Hexane	(2)	5.141	57	71476	0.966
33) 1,1-Dichloroethane	(2)	5.385	63	84778	0.991
34) di-Isopropyl Ether	(2)	5.440	45	137792	0.960
35) 2-Chloro-1,3-Butadiene	(2)	5.489	53	74445	0.969
37) Ethyl t-butyl ether	(2)	5.970	59	139486	0.979
40) 1,2-Dichloroethene (Total)	(2)		96	107571	1.935
38) 2-Butanone	(1)	6.183	43	131108	9.456
39) cis-1,2-Dichloroethene	(2)	6.214	96	56749	0.969
41) 2,2-Dichloropropane	(2)	6.220	77	77206	0.970
42) Propionitrile	(1)	6.293	54	72382	19.443
45) Methacrylonitrile	(1)	6.494	67	129916	9.483
47) Bromochloromethane	(2)	6.555	128	30141	1.045
48) Tetrahydrofuran	(1)	6.561	71	40853	9.423
49) Chloroform	(2)	6.702	83	92484	0.992

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	476944	10.003
50)$Dibromofluoromethane	(2)	6.915	111	487012	9.993
51) 1,1,1-Trichloroethane	(2)	6.921	97	88192	0.979
52) Cyclohexane	(2)	7.013	56	84789	0.957
52) Cyclohexane	(2)	7.025	84	82713M	0.990
52) Cyclohexane	(2)	7.019	69	29090M	1.000
54) Carbon Tetrachloride	(2)	7.135	117	82170	0.966
55) 1,1-Dichloropropene	(2)	7.135	75	67730	0.971
56) Isobutyl Alcohol	(1)	7.287	41	52826	48.341
57)$1,2-Dichloroethane-d4	(2)	7.372	102	92066	10.019
57)$1,2-Dichloroethane-d4	(2)	7.372	65	406119	9.861
57)$1,2-Dichloroethane-d4	(2)	7.378	104	57696	9.946
58) Benzene	(2)	7.403	78	198011	0.966
59) 1,2-Dichloroethane	(2)	7.476	62	53590	0.974
59) 1,2-Dichloroethane	(2)	7.476	98	5182	1.010
60) t-Amyl methyl ether	(2)	7.592	73	132802	0.966
62) n-Heptane	(2)	7.805	43	72730	0.957
63)*Fluorobenzene	(2)	7.805	96	1847494	10.000
65) n-Butanol	(1)	8.171	56	89444	98.090
67) Trichloroethene	(2)	8.281	95	54435	0.949
69) Methylcyclohexane	(2)	8.592	83	106280	1.037
70) 1,2-Dichloropropane	(2)	8.628	63	45676	0.962
71) Methyl Methacrylate	(1)	8.701	69	25052	0.955
72) 1,4-Dioxane	(1)	8.707	88	11737M	52.353
72) 1,4-Dioxane	(1)	8.713	58	6977M	52.225
73) Dibromomethane	(2)	8.738	93	25925	0.971
74) Bromodichloromethane	(2)	8.963	83	62864	0.954
76) 2-Nitropropane	(1)	9.244	41	81161	9.302
80) cis-1,3-Dichloropropene	(2)	9.506	75	71032	0.950
81) 4-Methyl-2-Pentanone	(1)	9.677	43	325711	9.279
82)$Toluene-d8	(3)	9.811	98	1812736	10.031
82)$Toluene-d8	(3)	9.811	100	1167000	10.069
83) Toluene	(3)	9.890	92	130574	0.961
84) trans-1,3-Dichloropropene	(3)	10.140	75	59917	0.936
85) 1,3-Dichloropropene (total)	(3)		75	130949	1.886
86) Ethyl Methacrylate	(3)	10.201	69	50400	0.932
88) 1,1,2-Trichloroethane	(3)	10.341	97	36175	0.964
89) Tetrachloroethene	(3)	10.427	166	71017	0.988

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	58056	0.961
91) 2-Hexanone	(1)	10.555	43	230891	9.277
93) Dibromochloromethane	(3)	10.719	129	47961	0.940
95) 1,2-Dibromoethane	(3)	10.829	107	36700	0.960
97)*Chlorobenzene-d5	(3)	11.256	117	1473334	10.000
96) 1-Chlorohexane	(3)	11.262	91	79384	0.970
98) Chlorobenzene	(3)	11.286	112	151831	0.973
100) Ethylbenzene	(3)	11.365	91	260656	0.955
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	56486	0.960
101) m+p-Xylene	(3)	11.481	106	208258	1.917
105) Xylene (Total)	(3)		106	310716	2.893
104) o-Xylene	(3)	11.810	106	102458	0.977
106) Styrene	(3)	11.829	104	158859	0.955
107) Bromoform	(3)	11.981	173	28575	0.910
108) Isopropylbenzene	(3)	12.109	105	276125	0.975
111)$4-Bromofluorobenzene	(3)	12.255	95	678569	10.020
111)$4-Bromofluorobenzene	(3)	12.255	174	648778	10.008
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	45166	0.957
114) Bromobenzene	(4)	12.371	156	68222	0.950
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	111006	9.018
116) 1,2,3-Trichloropropane	(4)	12.402	110	13304	0.950
117) n-Propylbenzene	(4)	12.438	91	306477	0.954
119) 2-Chlorotoluene	(4)	12.512	126	66629	0.964
121) 1,3,5-Trimethylbenzene	(4)	12.572	105	227524	0.959
122) 4-Chlorotoluene	(4)	12.603	126	67843	0.977
125) tert-Butylbenzene	(4)	12.816	134	52604M	0.973
126) Pentachloroethane	(4)	12.847	167	48426	1.017
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	230949	0.955
128) sec-Butylbenzene	(4)	12.975	105	291306M	0.948
131) 1,3-Dichlorobenzene	(4)	13.078	146	132180	0.961
132) p-Isopropyltoluene	(4)	13.085	119	251672	0.934
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	826954	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	132031	0.961
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	112760	0.998
136) Benzyl Chloride	(4)	13.225	126	20584	0.926
138) n-Butylbenzene	(4)	13.377	92	115249	0.940
139) 1,2-Dichlorobenzene	(4)	13.408	146	119384	0.951
143) 1,2-Dibromo-3-chloropropane	(1)	13.956	155	7672	0.961

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

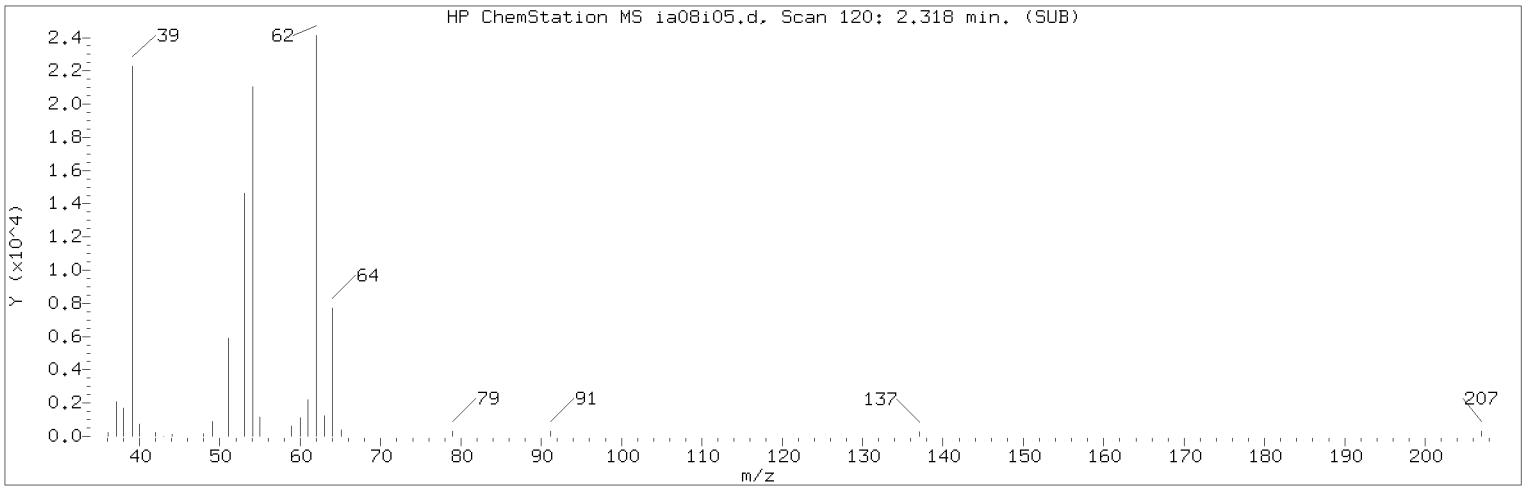
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

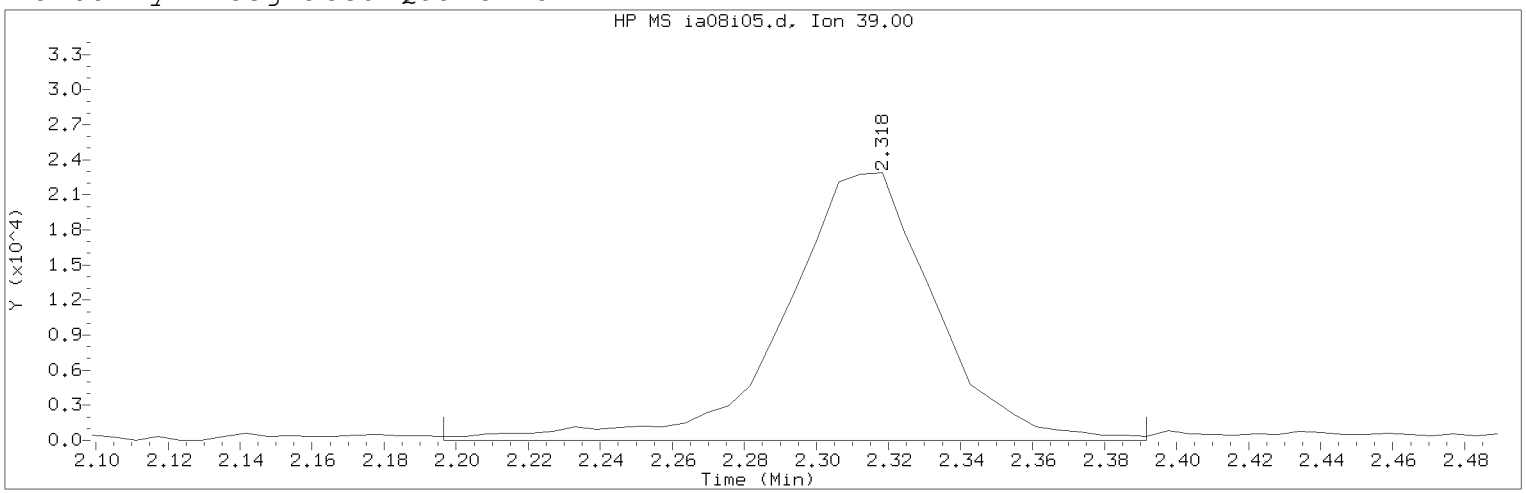
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	93002	0.928
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	81037	0.922
146) Hexachlorobutadiene	(4)	14.584	225	31939	0.889
147) Naphthalene	(4)	14.682	128	164279	0.933
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	75517	0.954

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on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

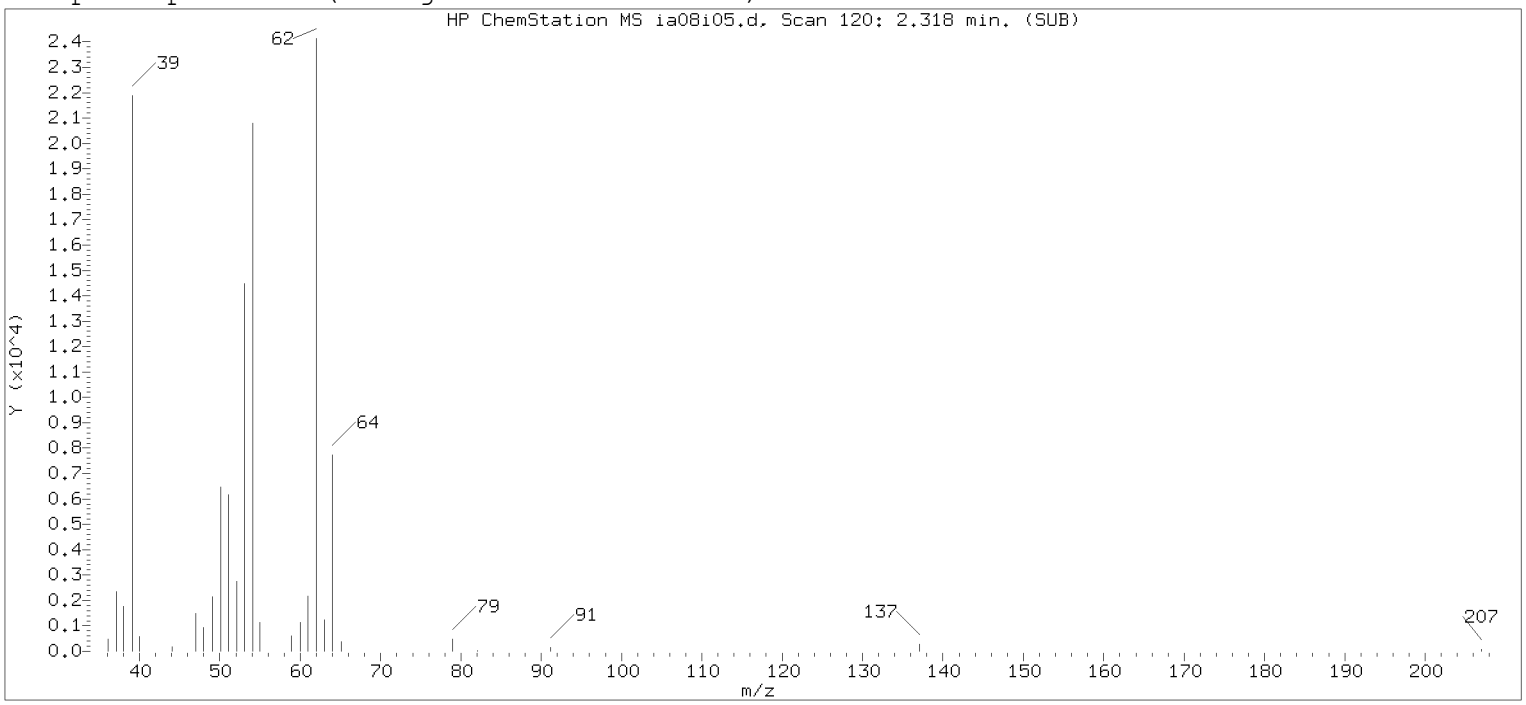
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 120
Retention Time (minutes): 2.318
Quant Ion : 39.00
Area (flag) : 66446M
On-Column Amount (ng) : 0.9908
Integration start scan : 99 Integration stop scan: 131
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

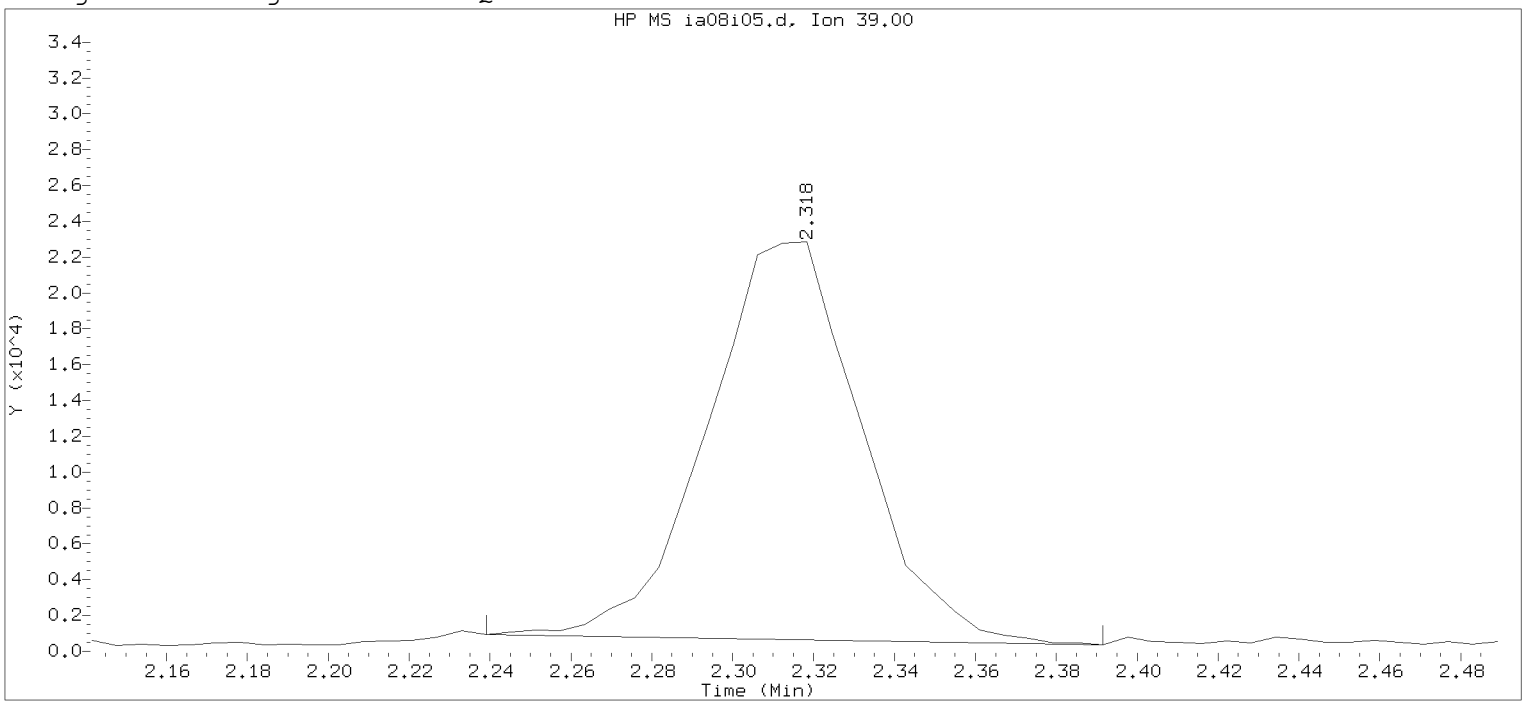
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

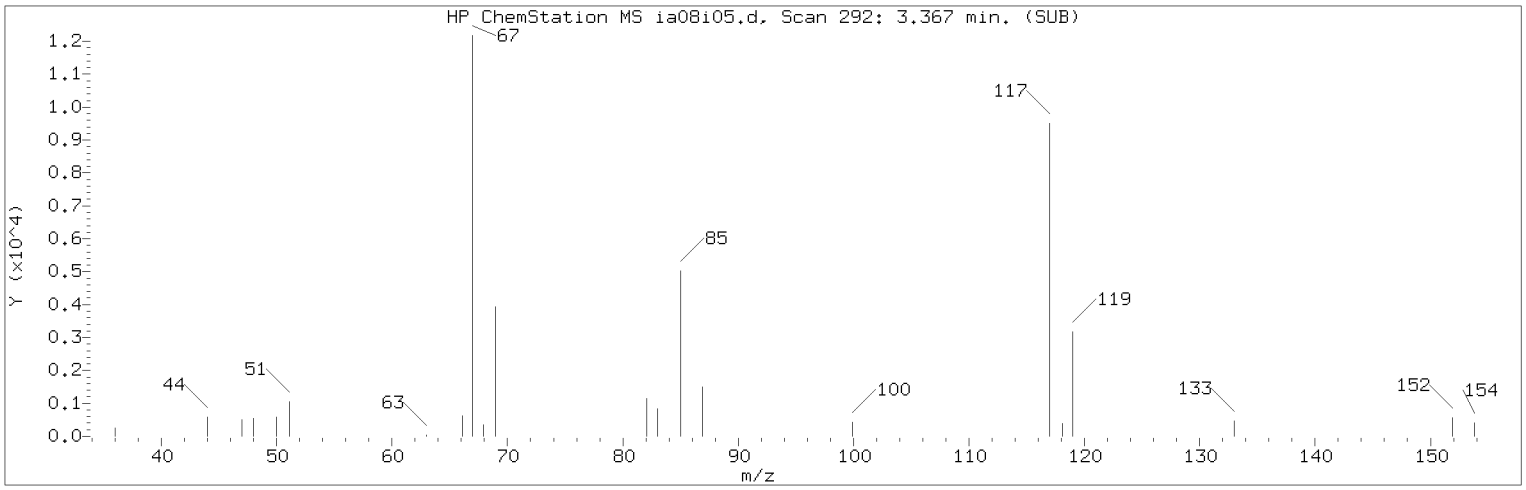
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

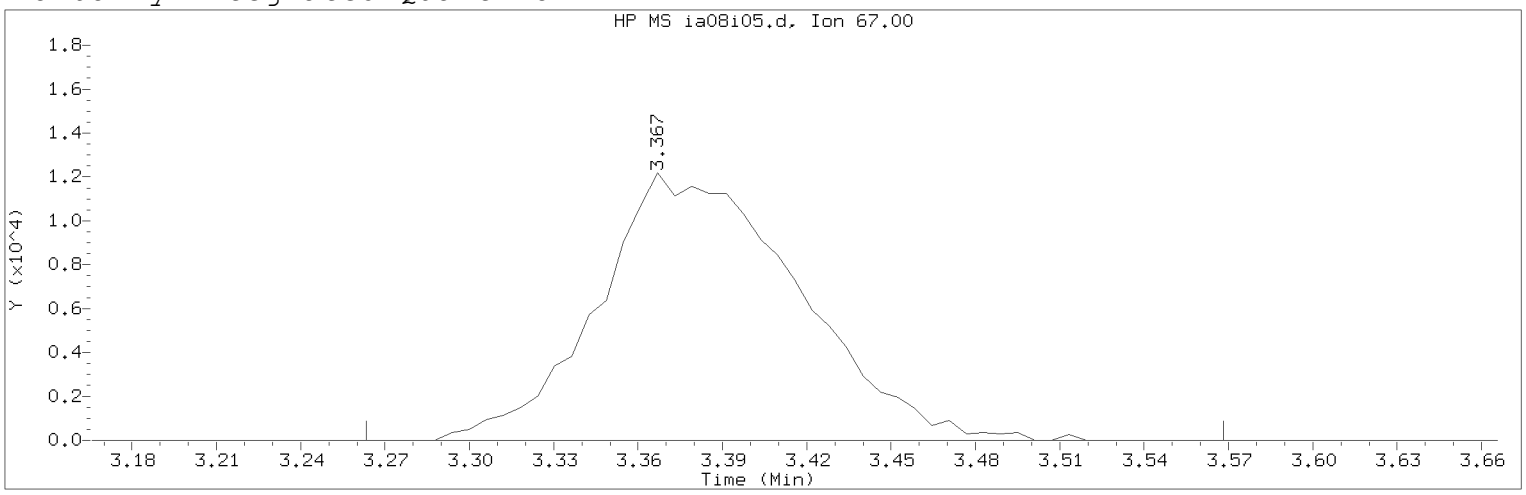
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 120
Retention Time (minutes): 2.318
Quant Ion : 39.00
Area : 58738
On-column Amount (ng) : 0.9784
Integration start scan : 106 Integration stop scan: 131
Y at integration start : 927 Y at integration end: 356

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

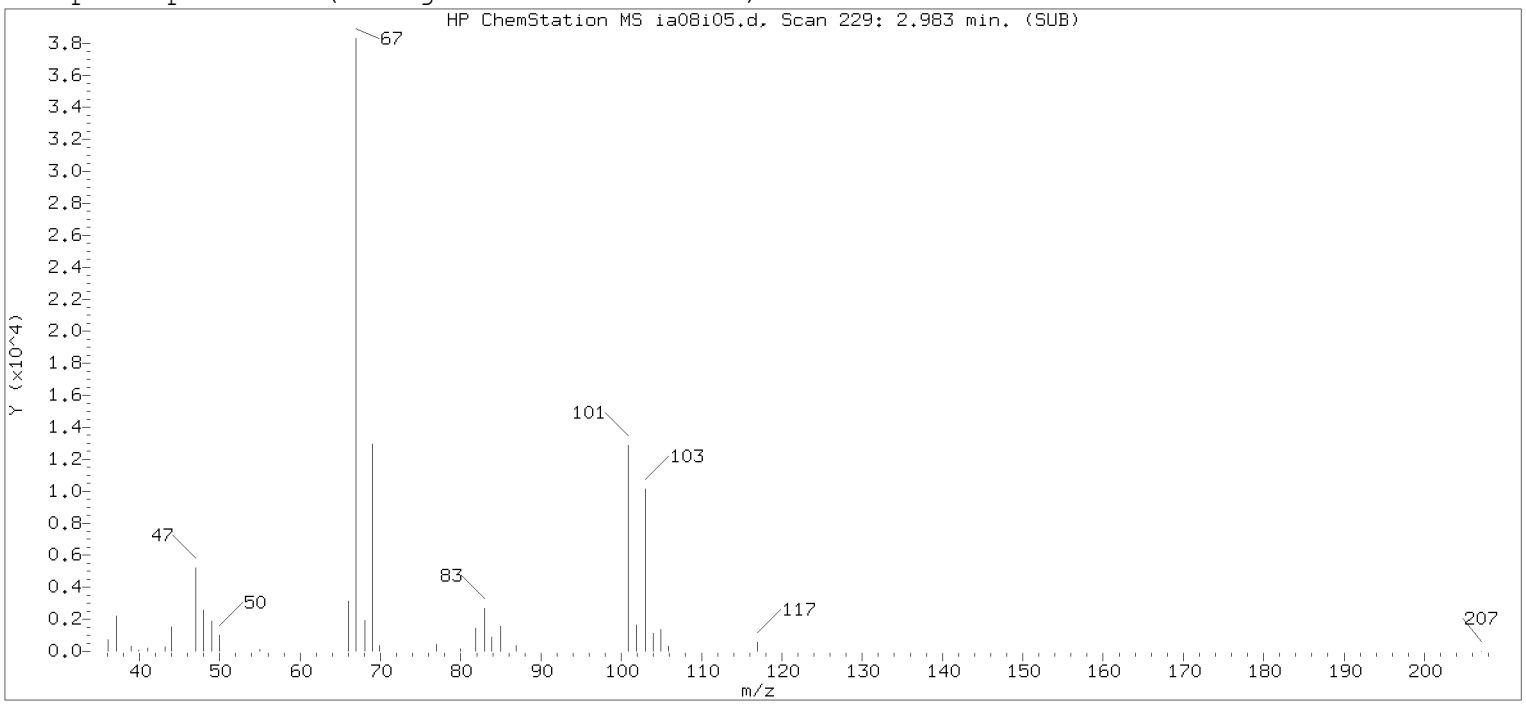
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 292
Retention Time (minutes): 3.367
Quant Ion : 67.00
Area (flag) : 60393MA
On-Column Amount (ng) : 0.9914
Integration start scan : 274 Integration stop scan: 324
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

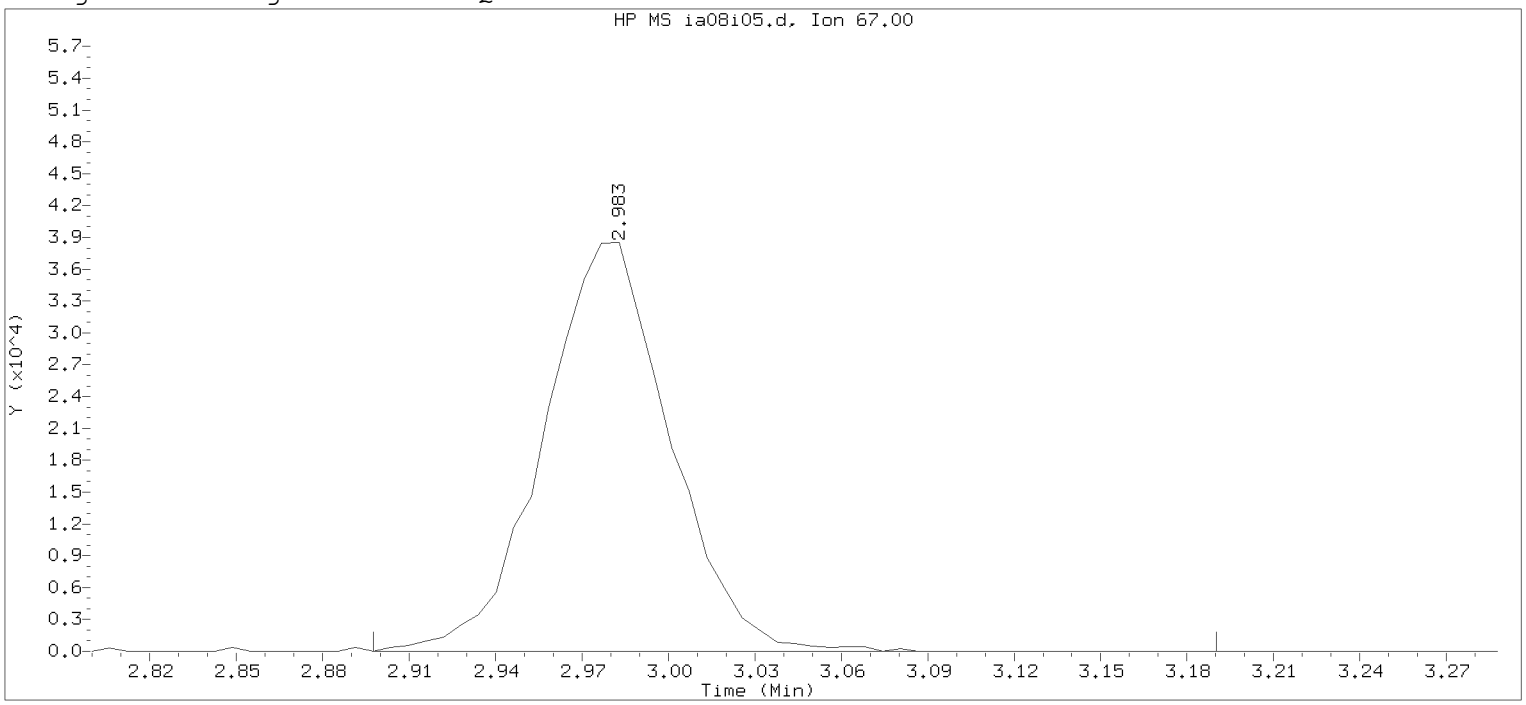
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

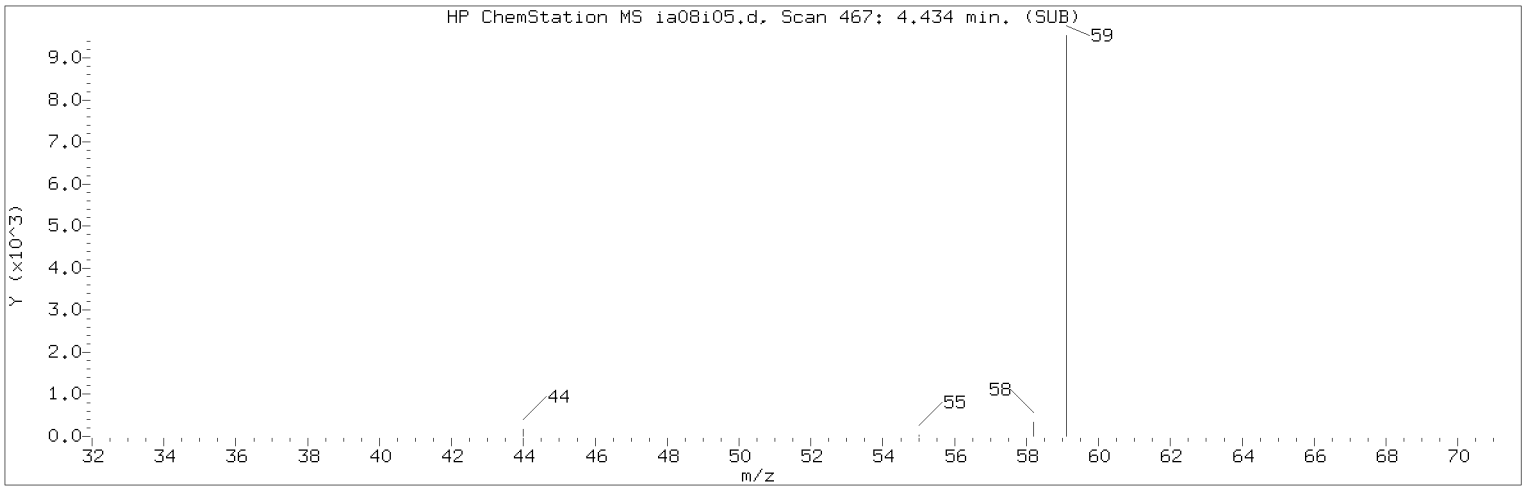
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

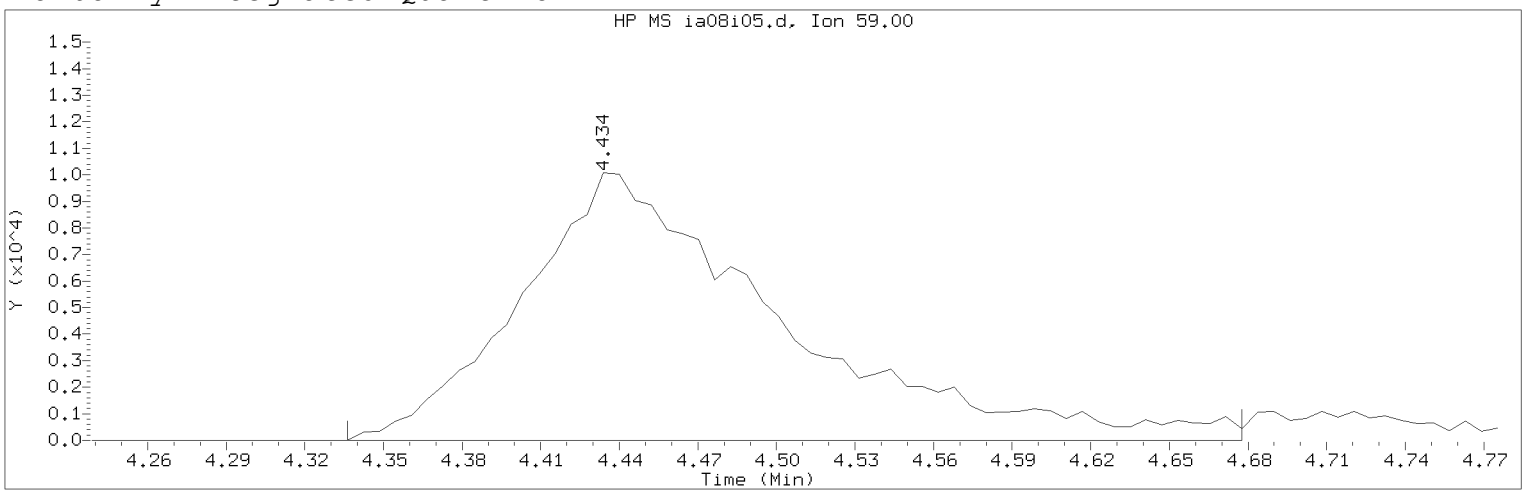
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 229
Retention Time (minutes): 2.983
Quant Ion : 67.00
Area : 117498
On-column Amount (ng) : 0.9703
Integration start scan : 214 Integration stop scan: 262
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

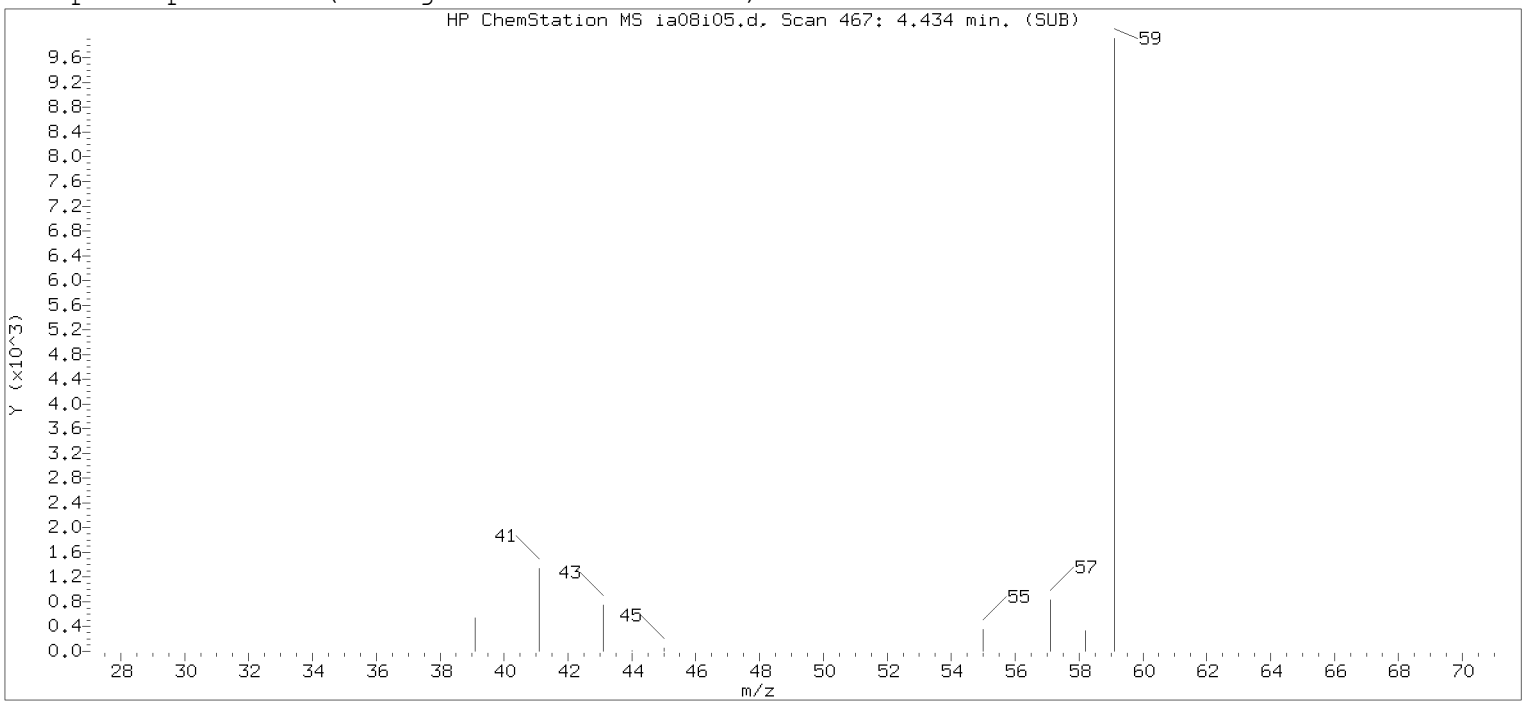
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 467
Retention Time (minutes): 4.434
Quant Ion : 59.00
Area (flag) : 69150M
On-Column Amount (ng) : 19.5445
Integration start scan : 450 Integration stop scan: 506
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

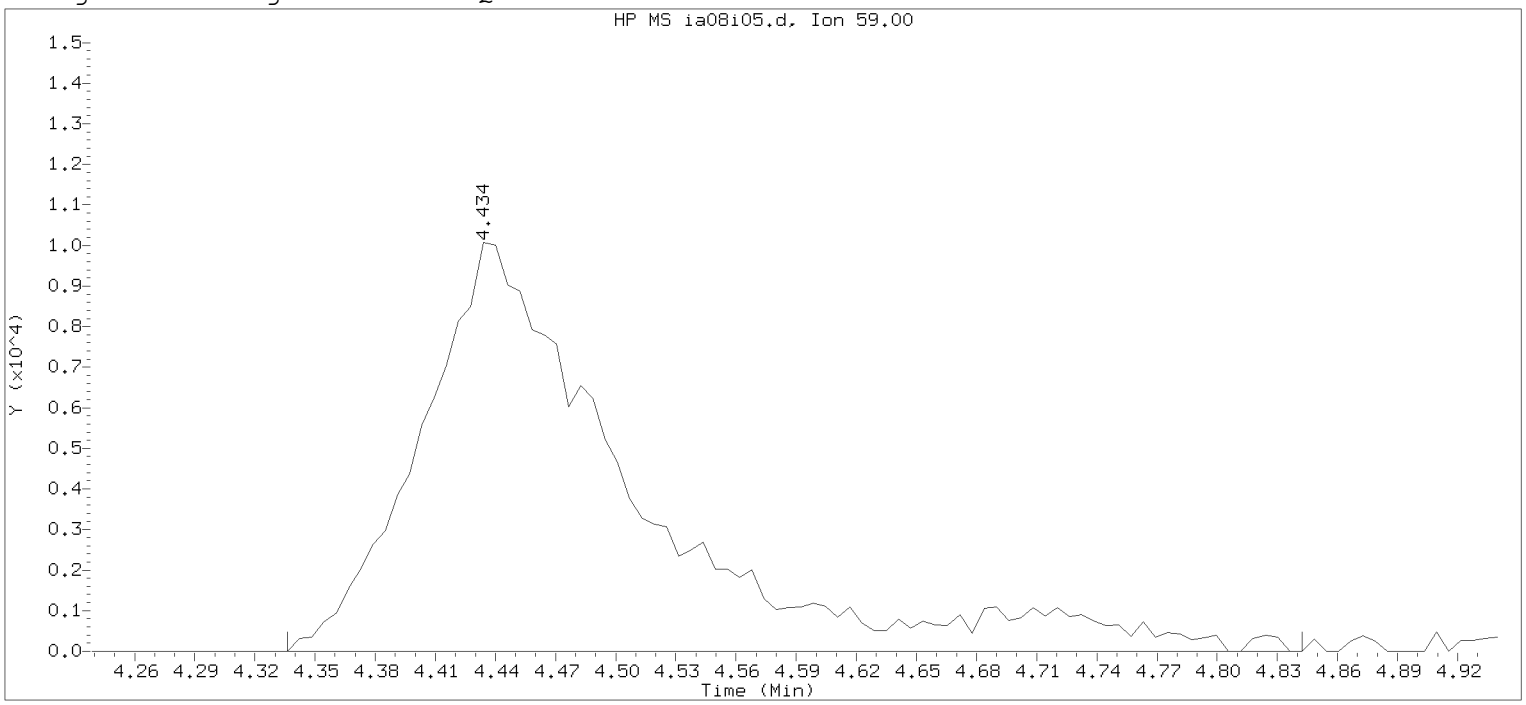
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

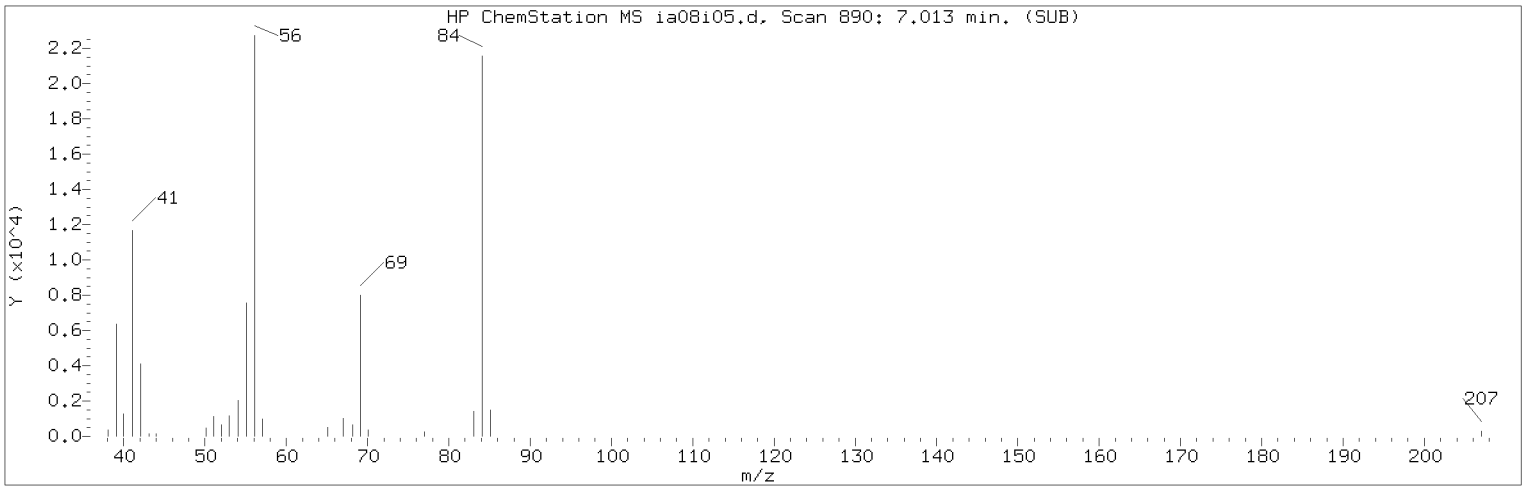
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

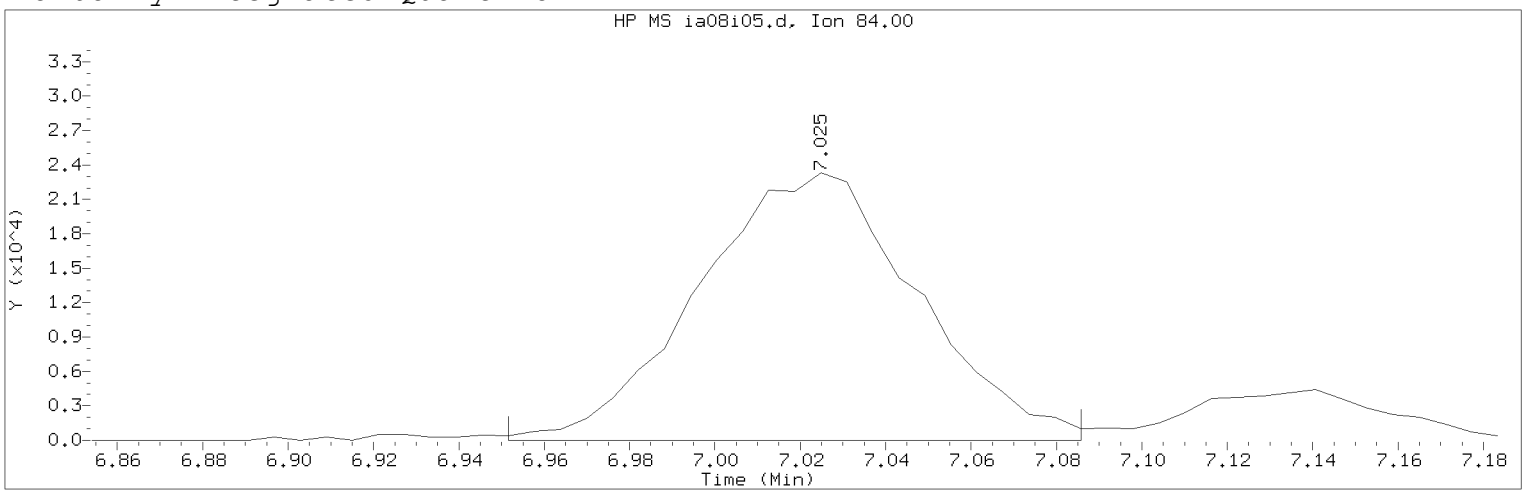
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 467
Retention Time (minutes): 4.434
Quant Ion : 59.00
Area : 74624
On-column Amount (ng) : 20.7721
Integration start scan : 450 Integration stop scan: 533
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

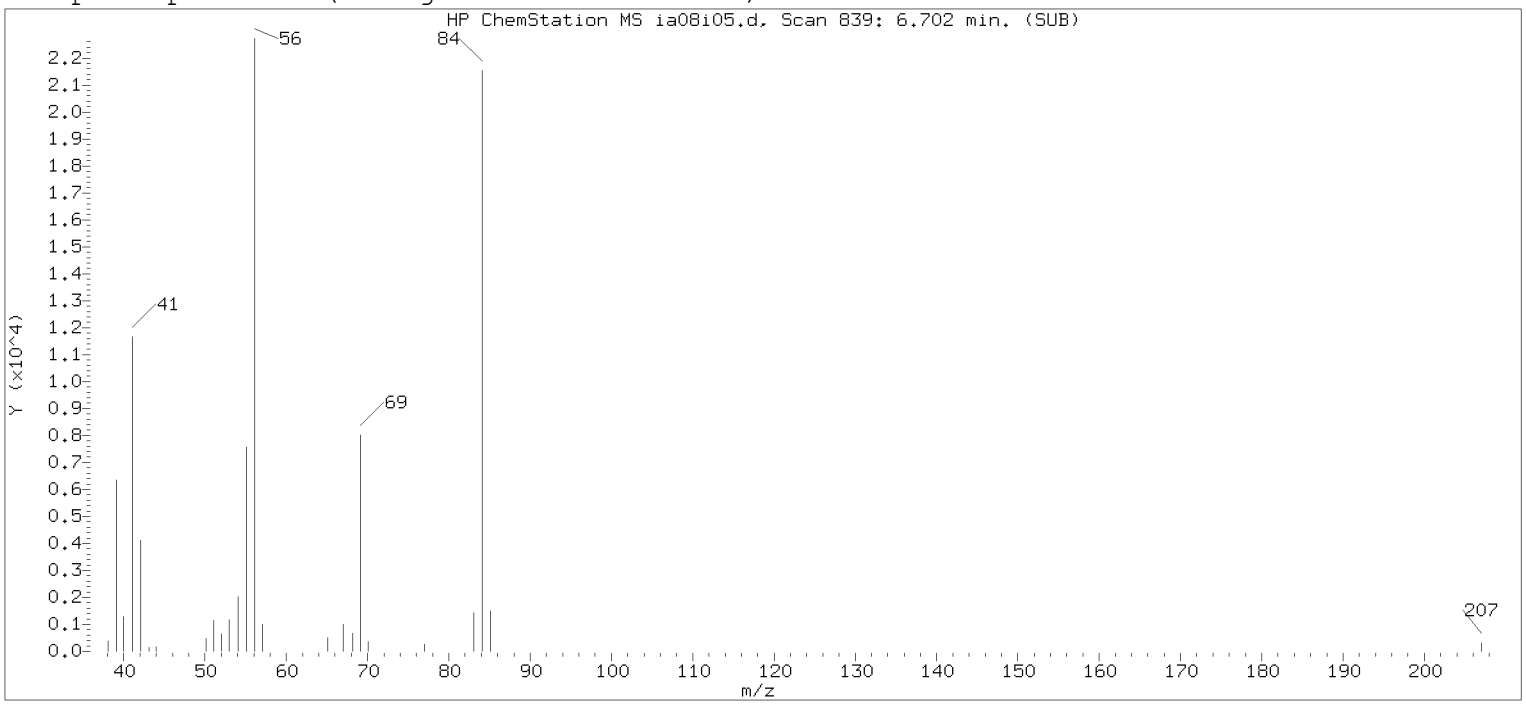
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 84.00
Area (flag) : 82713M
On-Column Amount (ng) : 0.9896
Integration start scan : 879 Integration stop scan: 901
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

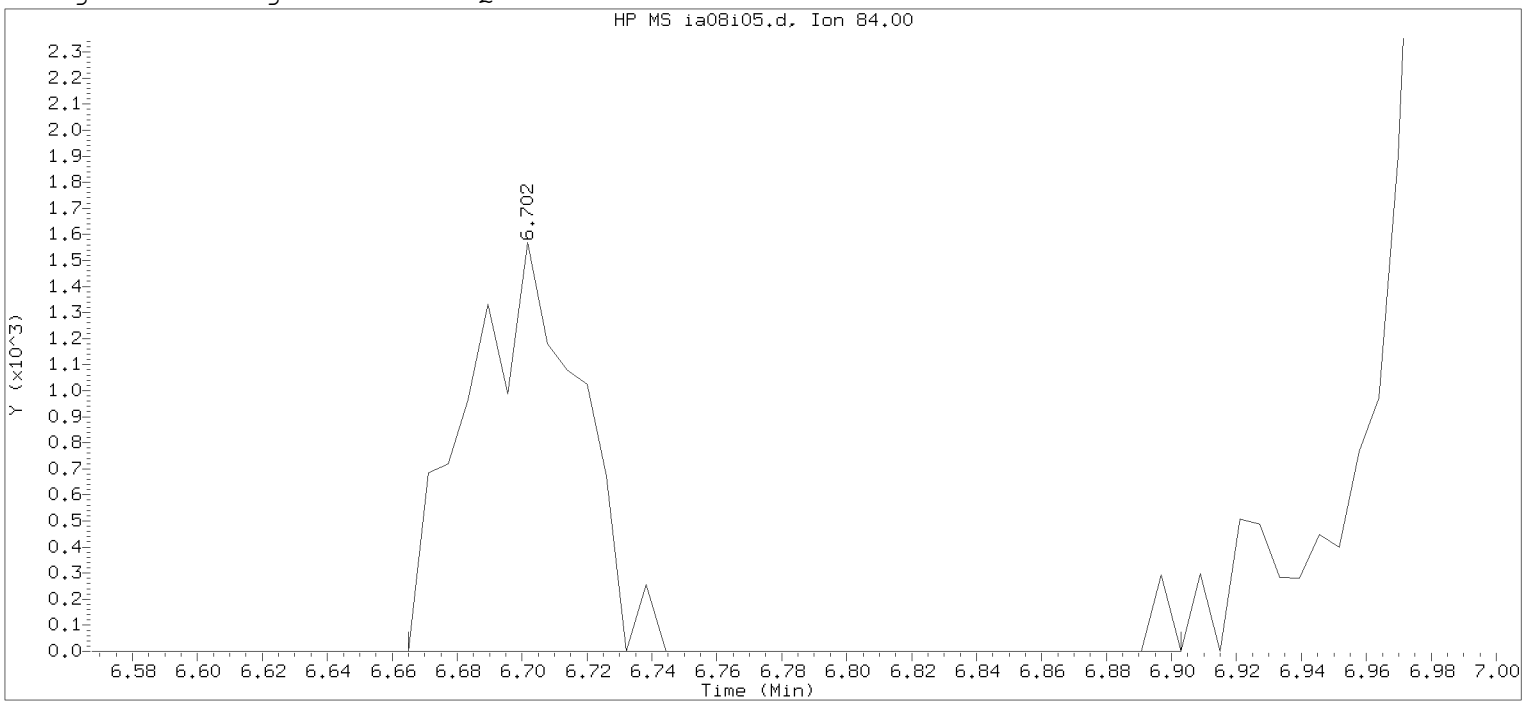
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

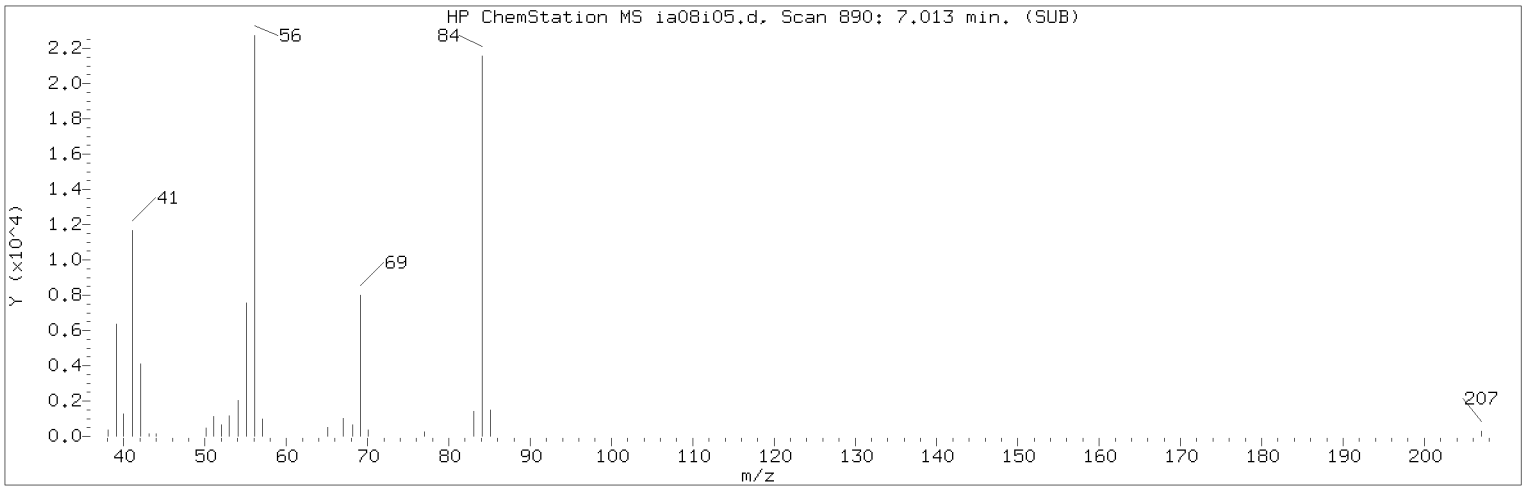
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

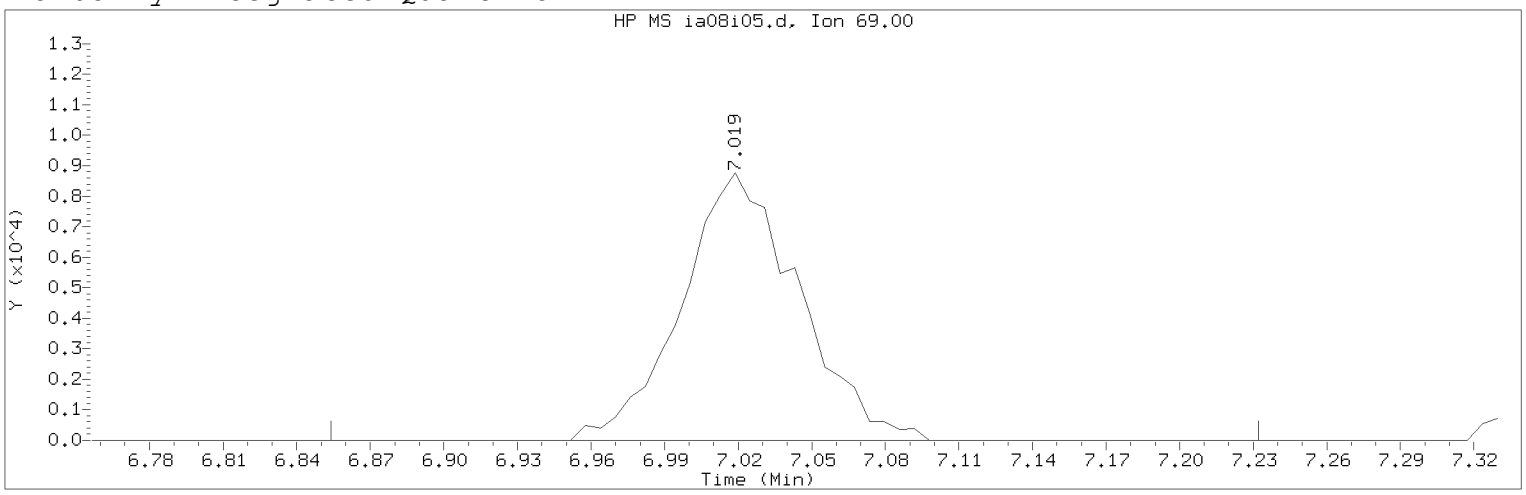
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 839
Retention Time (minutes): 6.702
Quant Ion : 84.00
Area : 3936
On-column Amount (ng) : 1.0219
Integration start scan : 832 Integration stop scan: 871
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

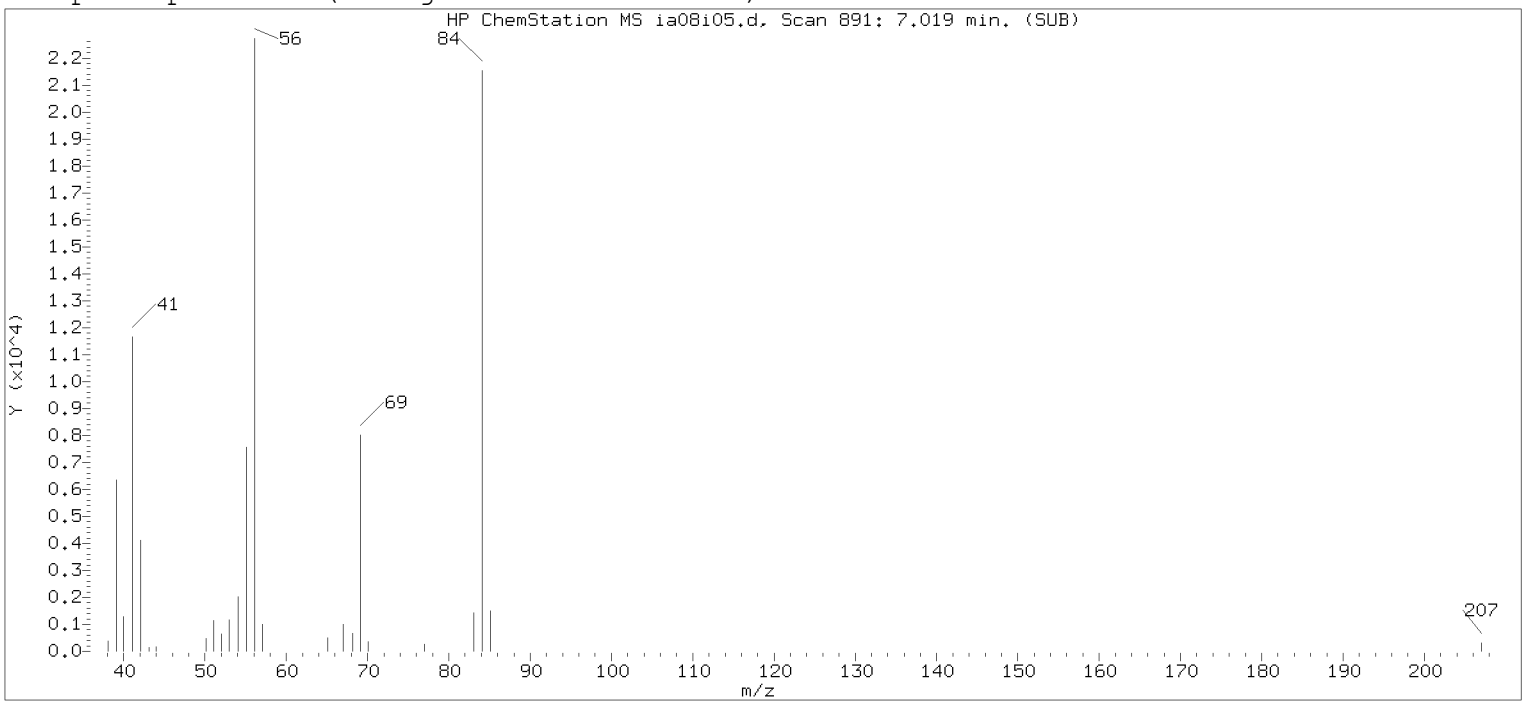
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 69.00
Area (flag) : 29090M
On-Column Amount (ng) : 0.9999
Integration start scan : 863 Integration stop scan: 925
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

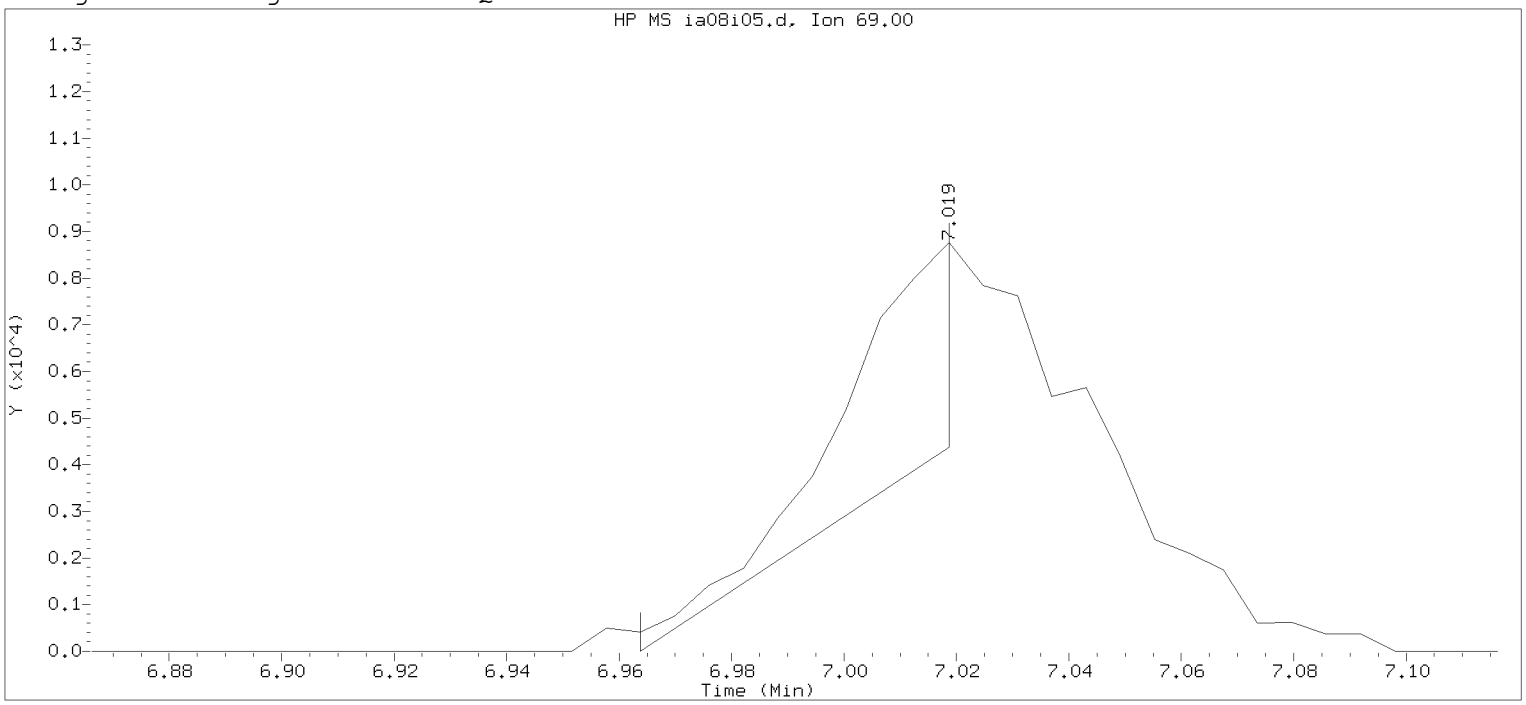
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

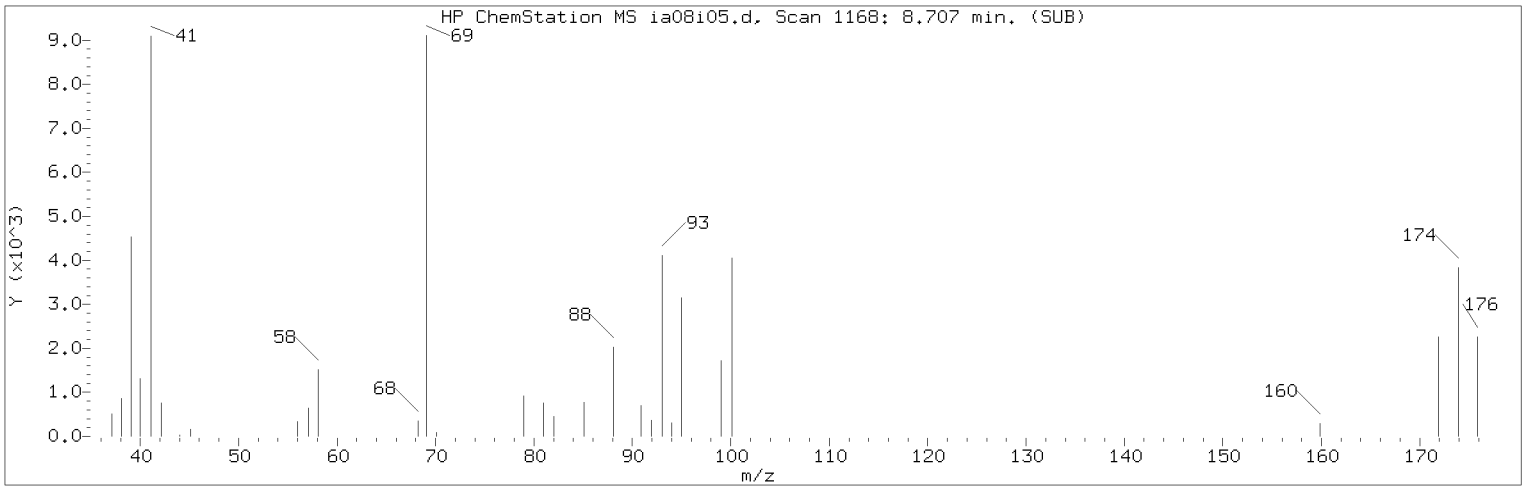
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

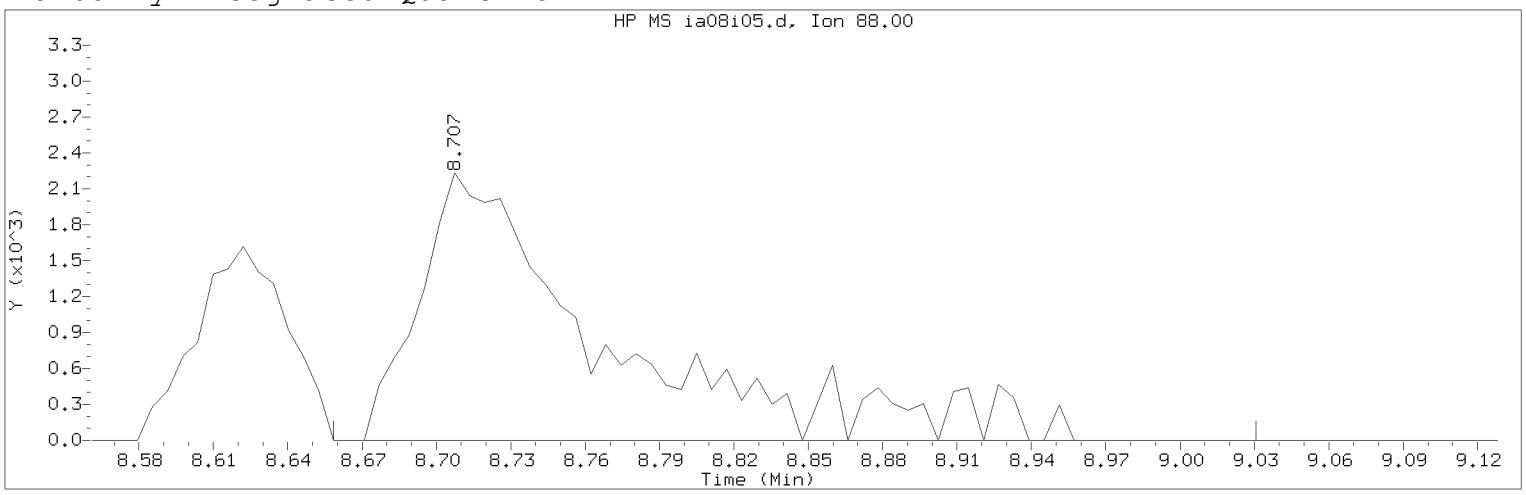
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 69.00
Area : 5759
On-column Amount (ng) : 3.5019
Integration start scan : 881 Integration stop scan: 890
Y at integration start : 0 Y at integration end: 4380

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

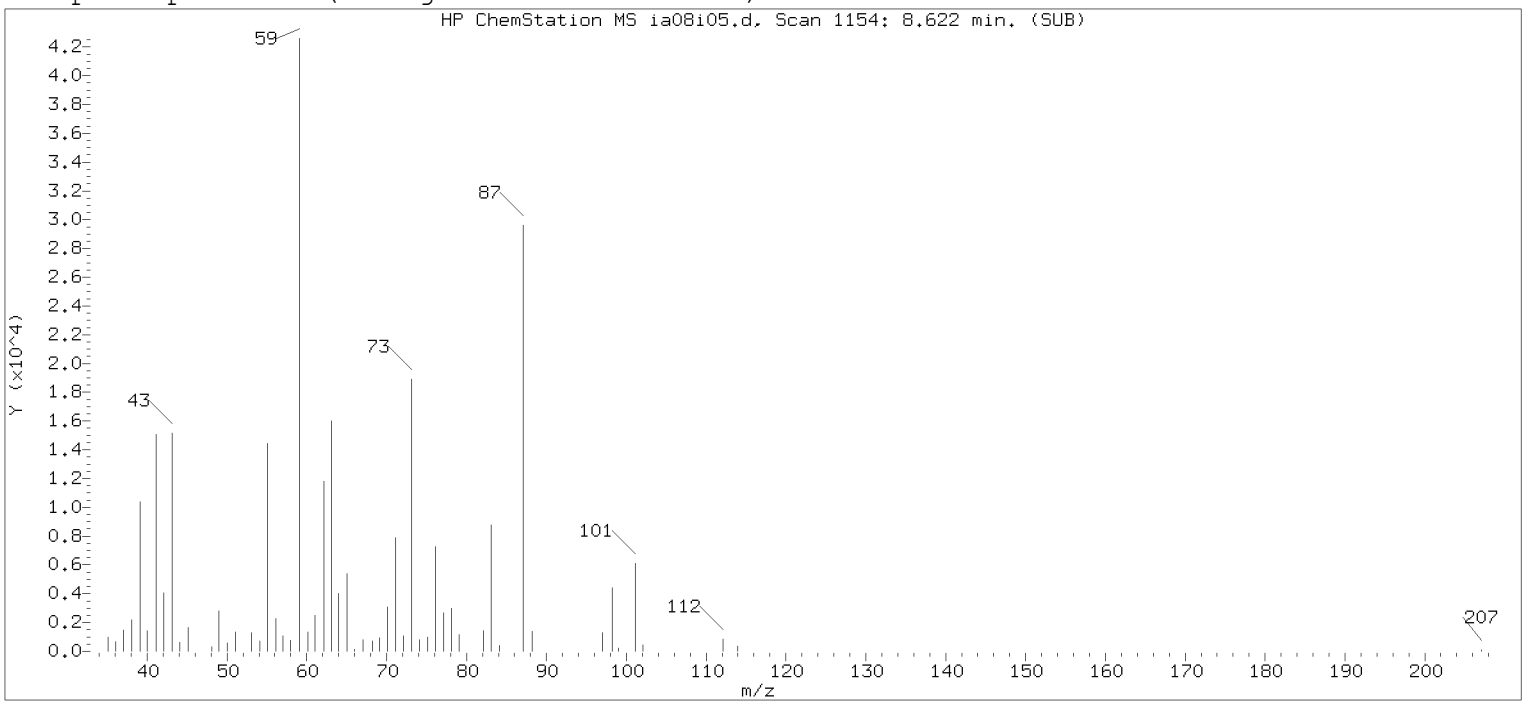
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1168
Retention Time (minutes): 8.707
Quant Ion : 88.00
Area (flag) : 11737M
On-Column Amount (ng) : 52.3532
Integration start scan : 1159 Integration stop scan: 1220
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

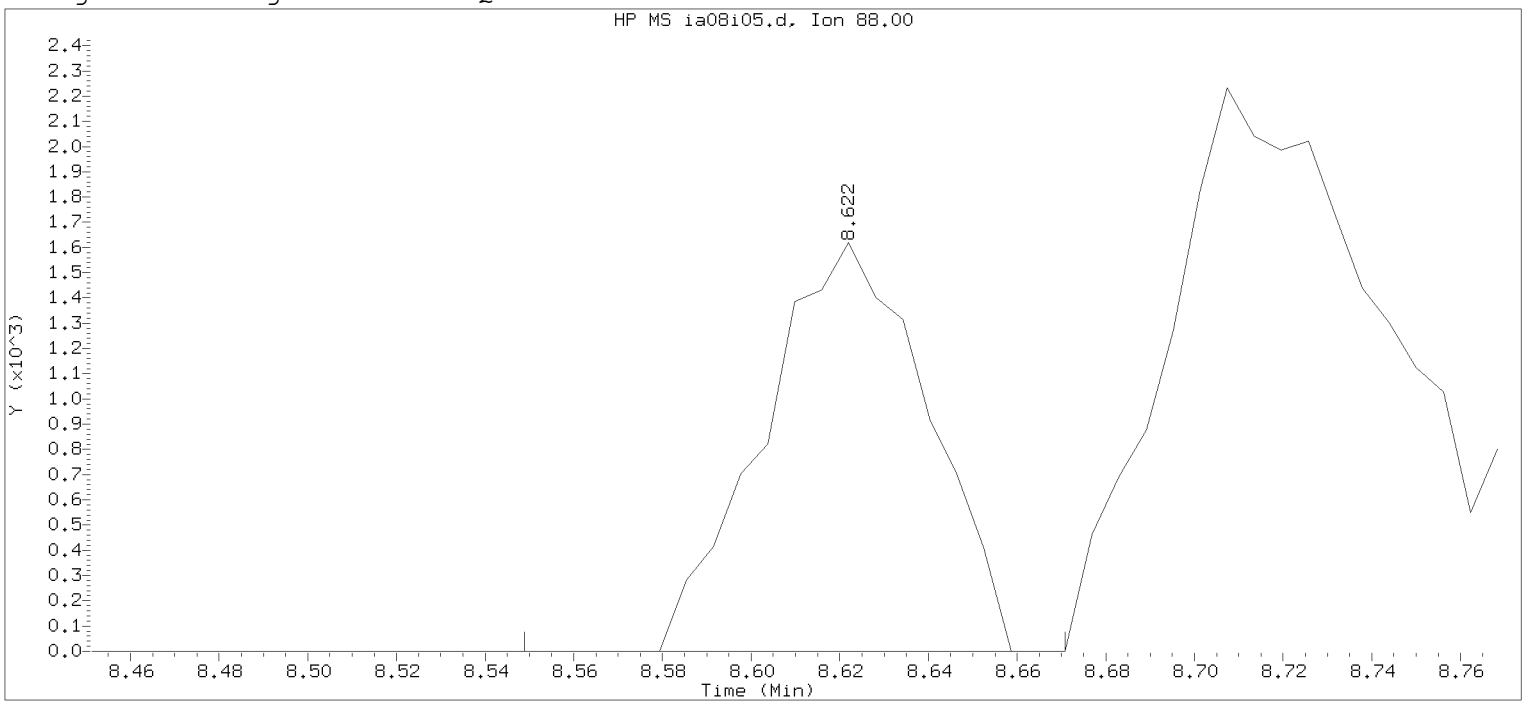
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

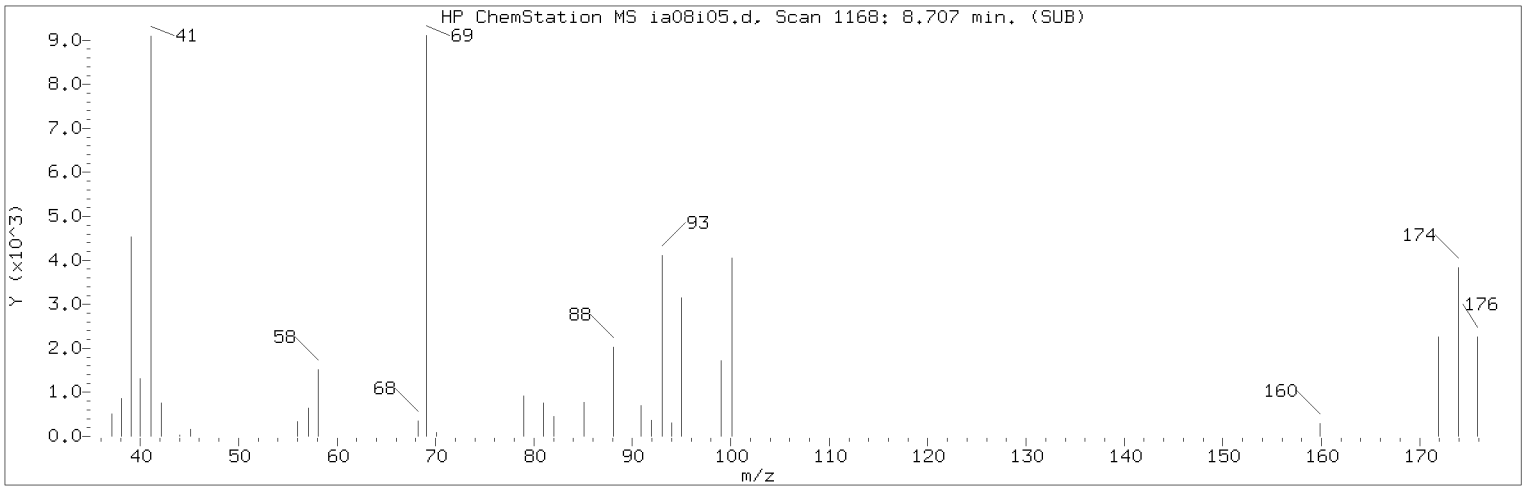
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

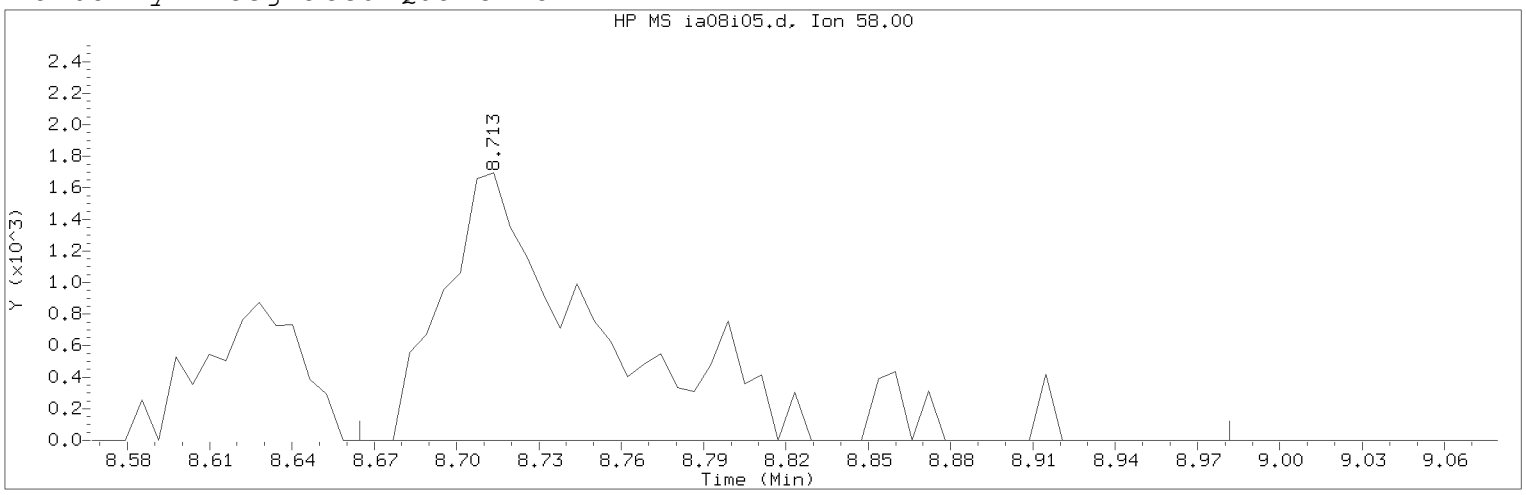
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1154
Retention Time (minutes): 8.622
Quant Ion : 88.00
Area : 4171
On-column Amount (ng) : 20.1296
Integration start scan : 1141 Integration stop scan: 1161
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

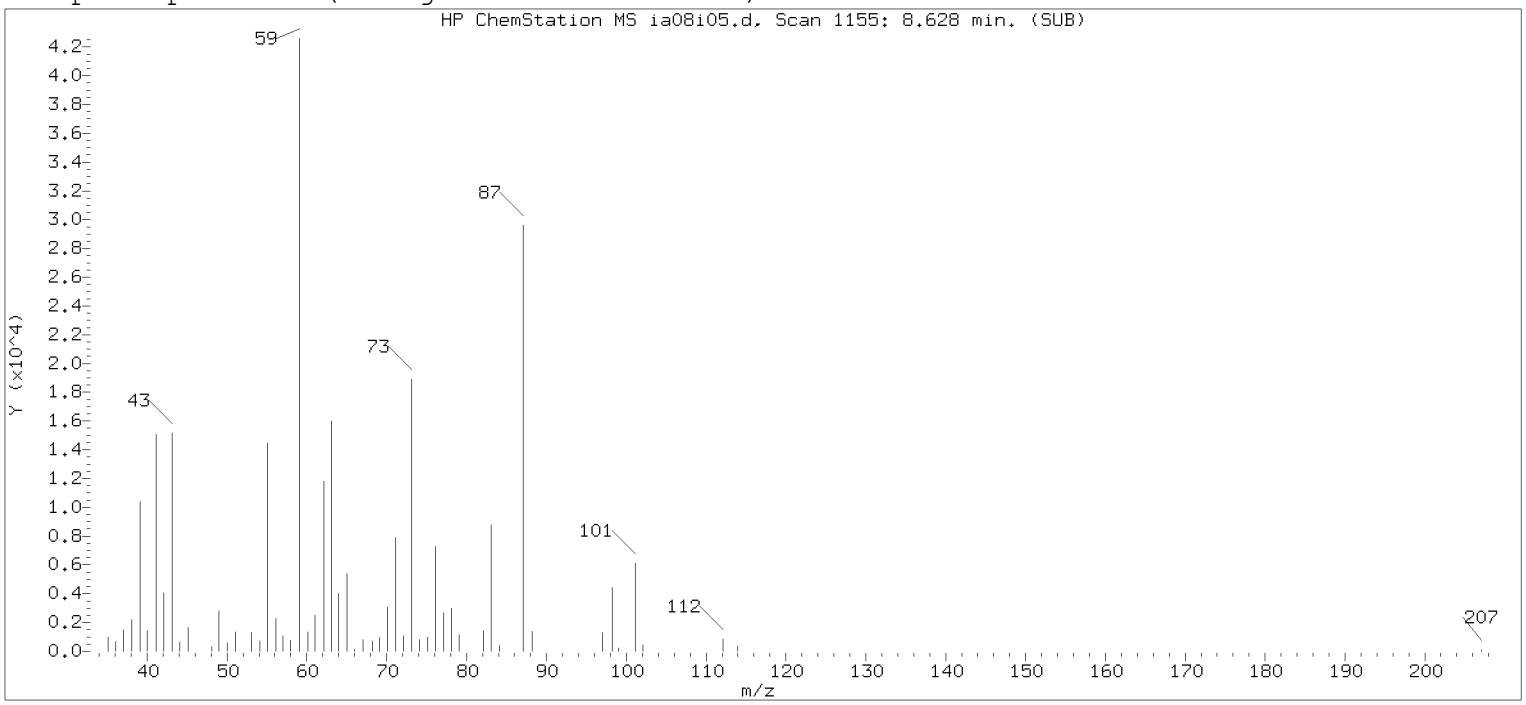
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.713
Quant Ion : 58.00
Area (flag) : 6977M
On-Column Amount (ng) : 52.2246
Integration start scan : 1160 Integration stop scan: 1212
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

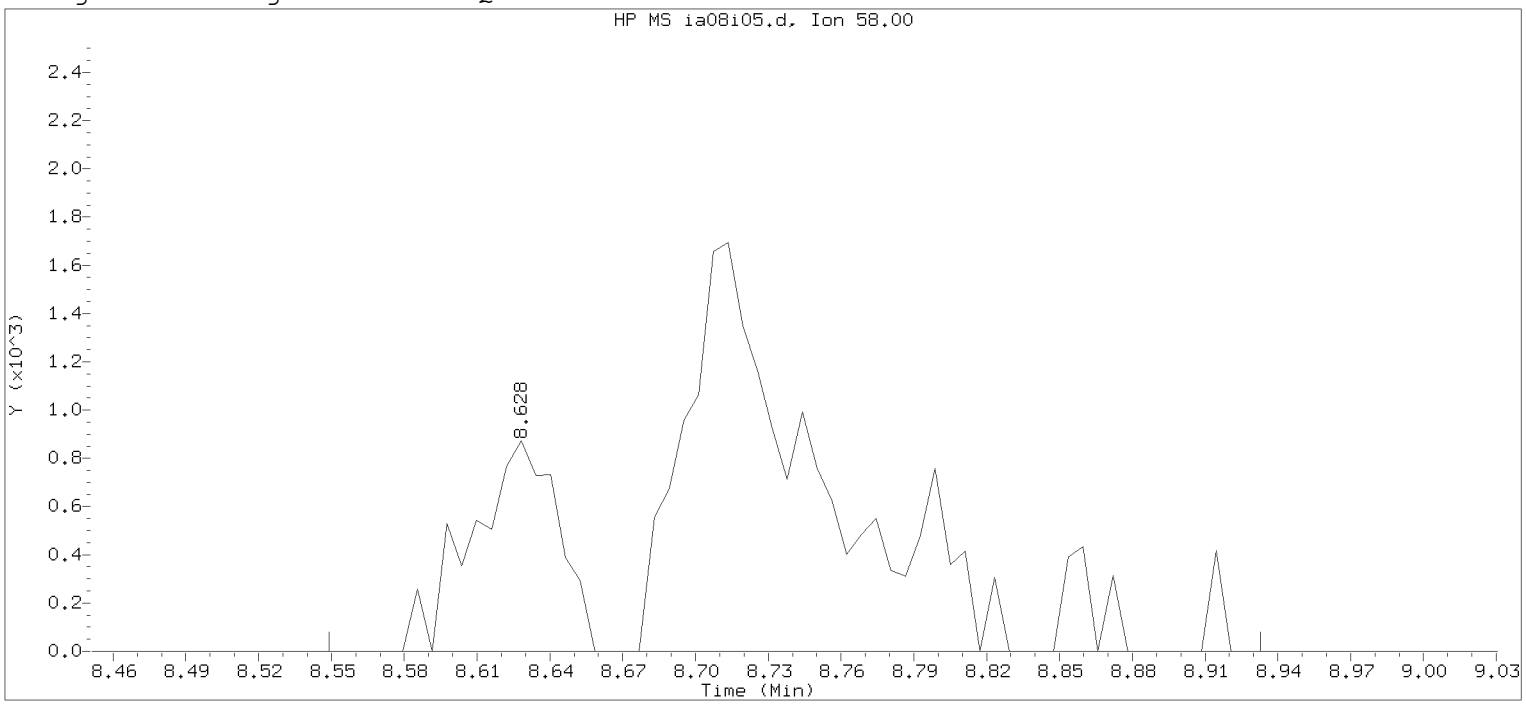
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

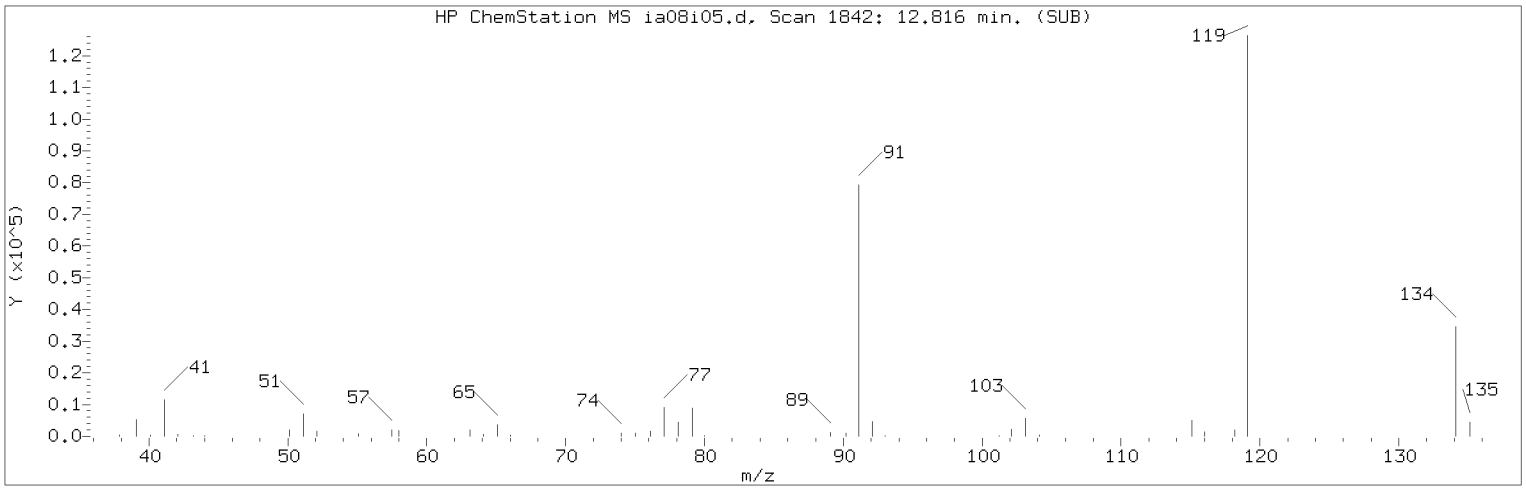
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

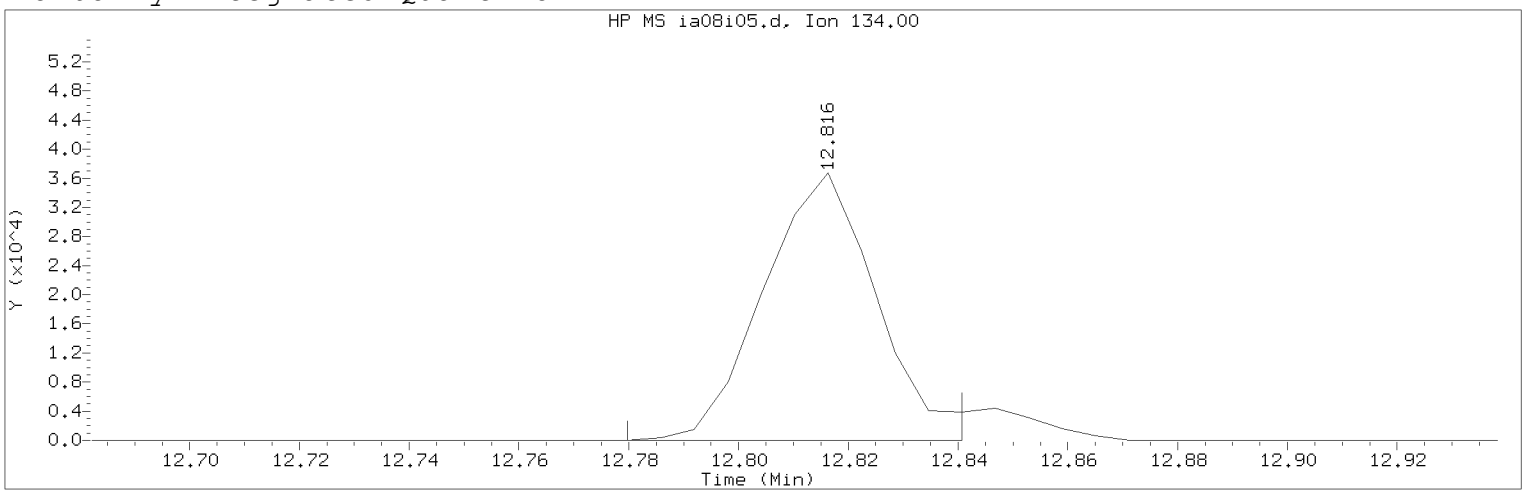
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1155		
Retention Time (minutes)	: 8.628		
Quant Ion	: 58.00		
Area	: 9161		
On-column Amount (ng)	: 53.4372		
Integration start scan	: 1141	Integration stop scan:	1204
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

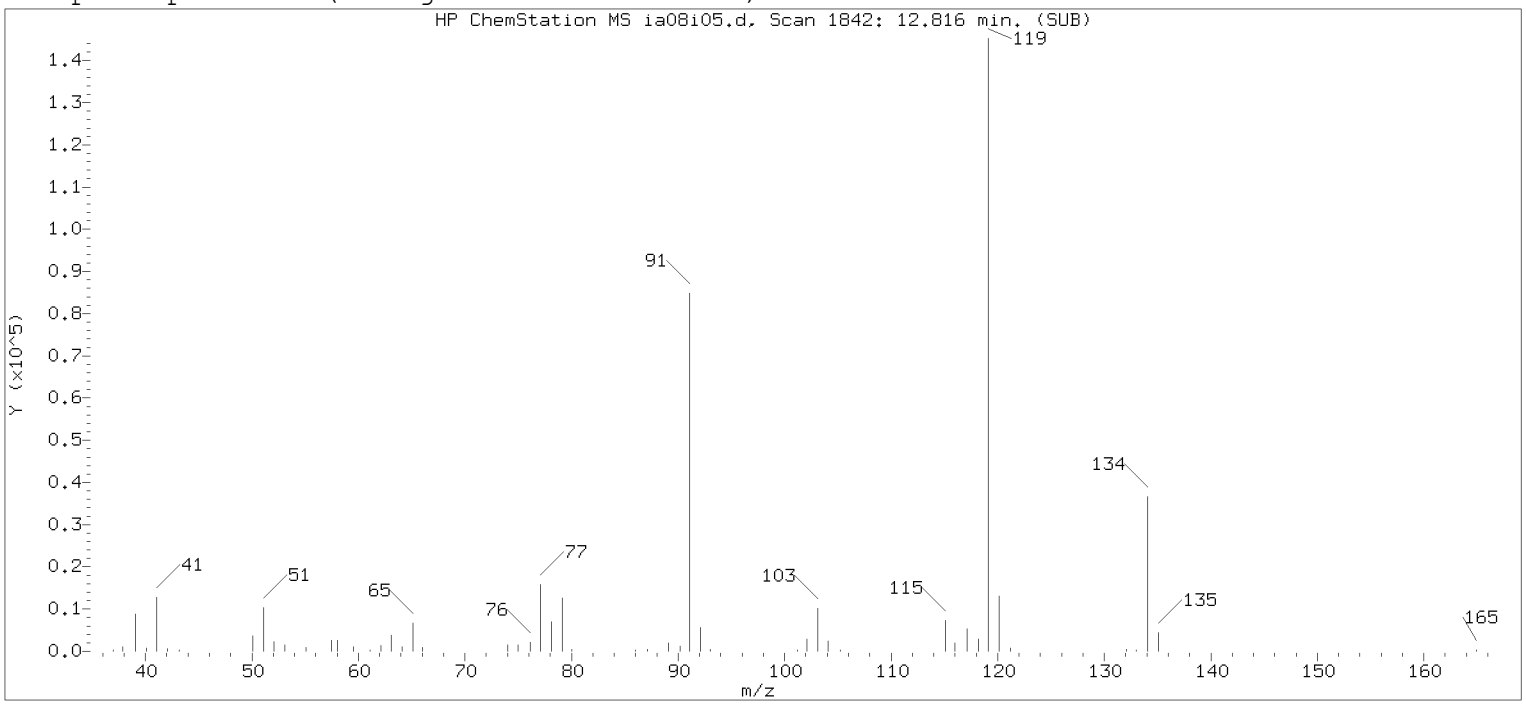
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 52604M
On-Column Amount (ng) : 0.9728
Integration start scan : 1835 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

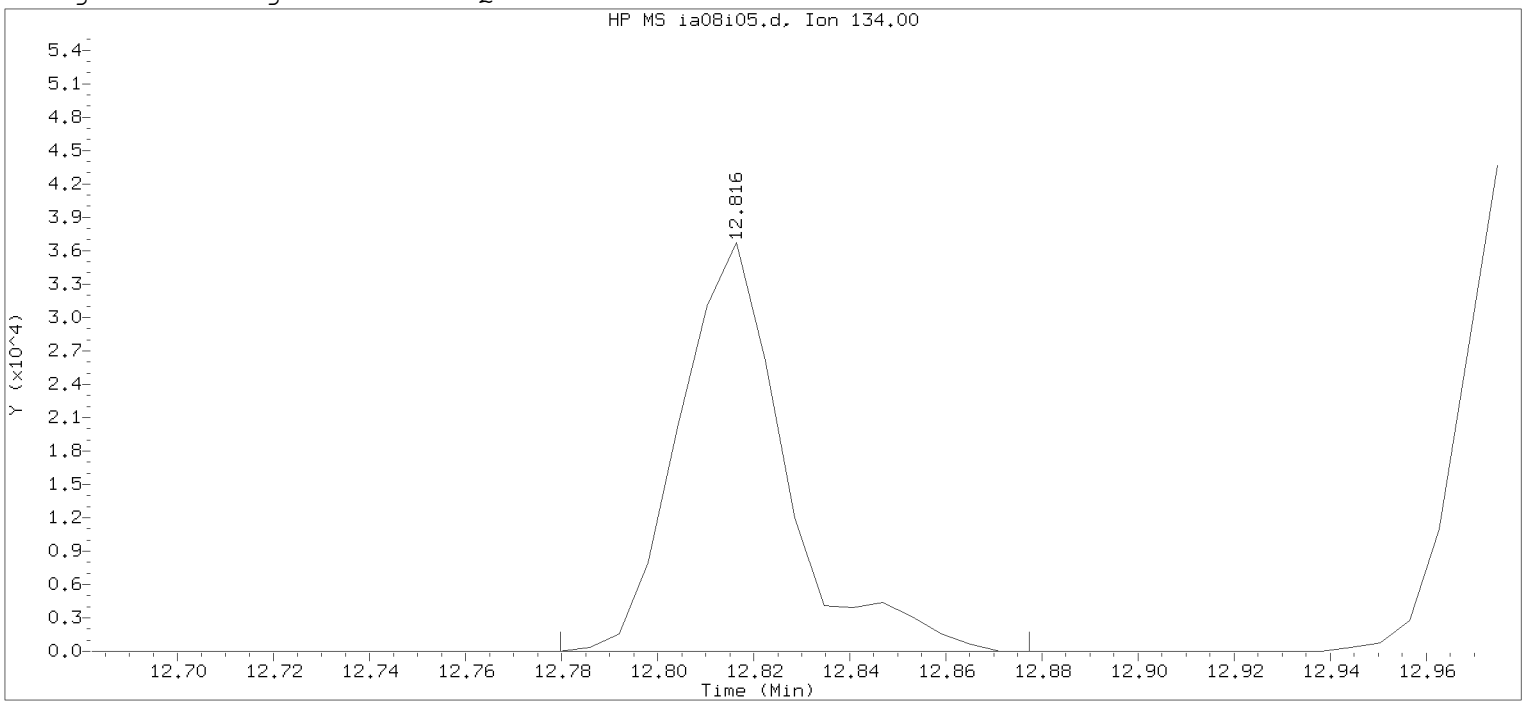
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

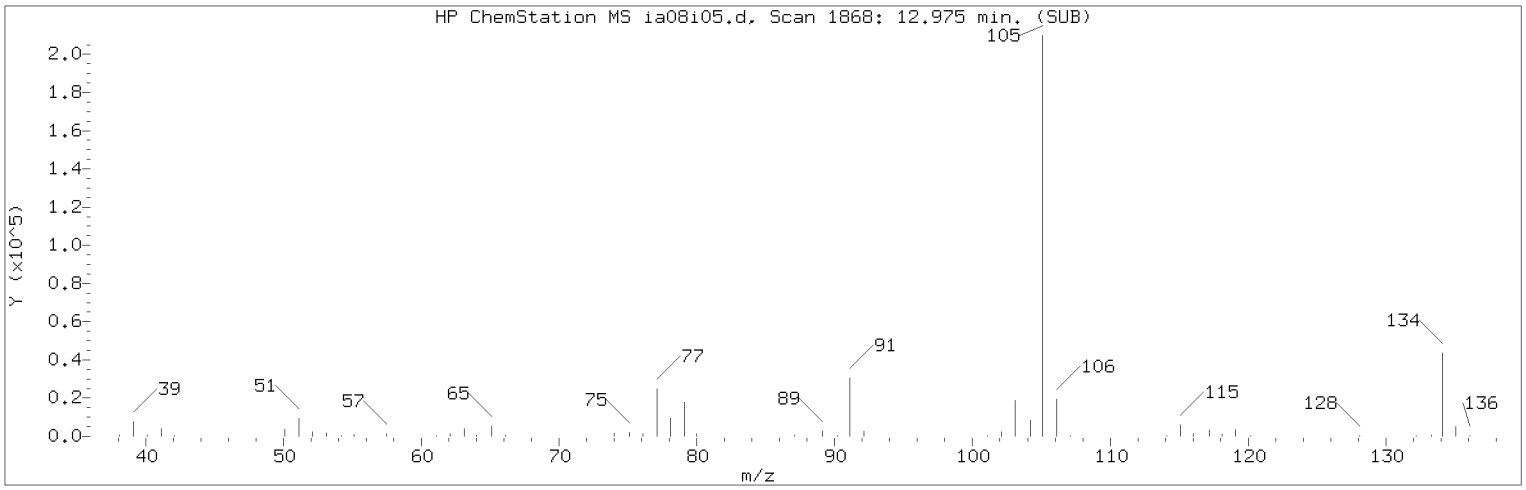
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

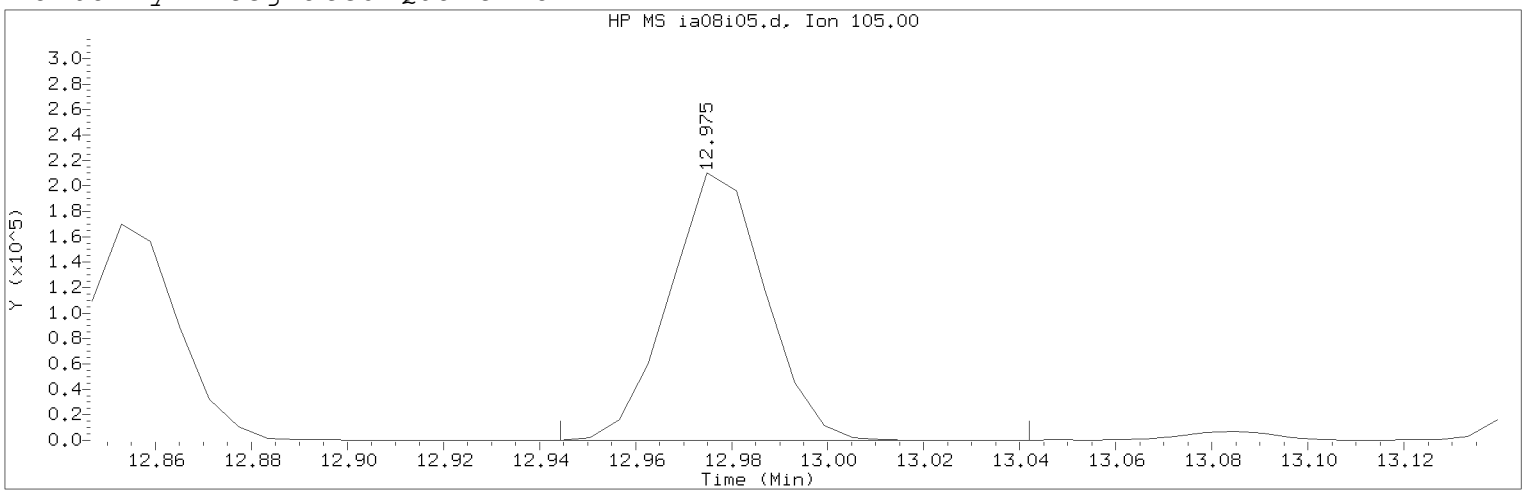
Compound Number	: 125		
Compound Name	: tert-Butylbenzene		
Scan Number	: 1842		
Retention Time (minutes)	: 12.816		
Quant Ion	: 134.00		
Area	: 56151		
On-column Amount (ng)	: 0.9748		
Integration start scan	: 1835	Integration stop scan:	1851
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

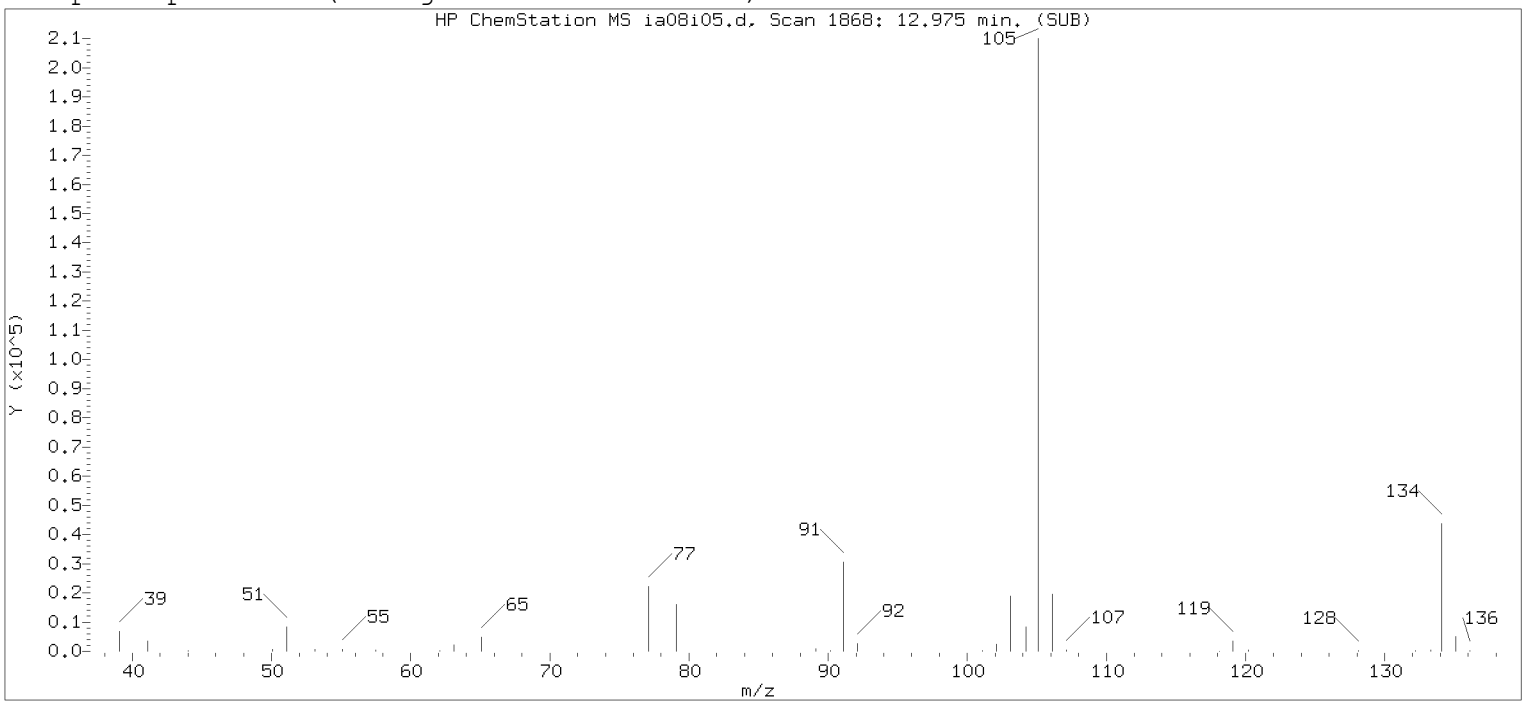
Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1868
Retention Time (minutes): 12.975
Quant Ion : 105.00
Area (flag) : 291306M
On-Column Amount (ng) : 0.9483
Integration start scan : 1862 Integration stop scan: 1878
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

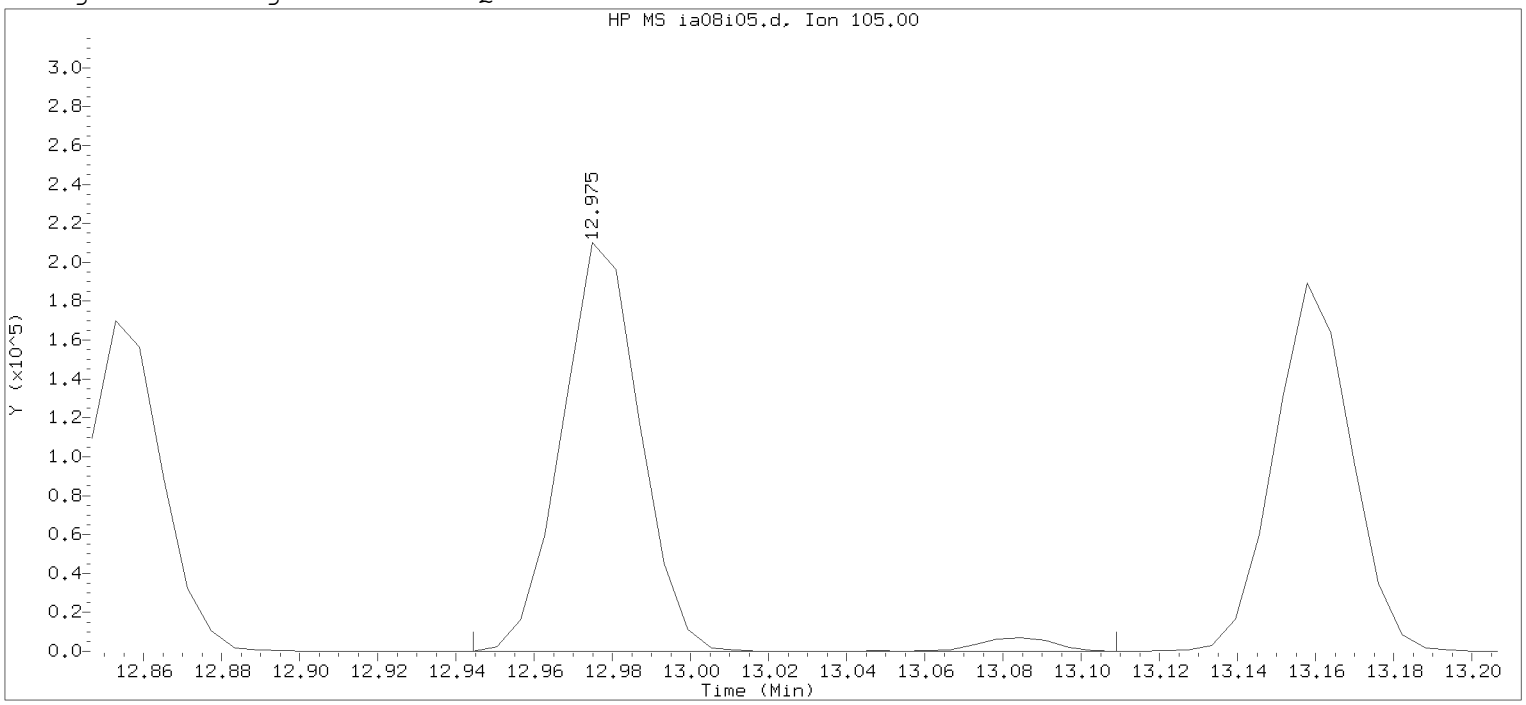
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



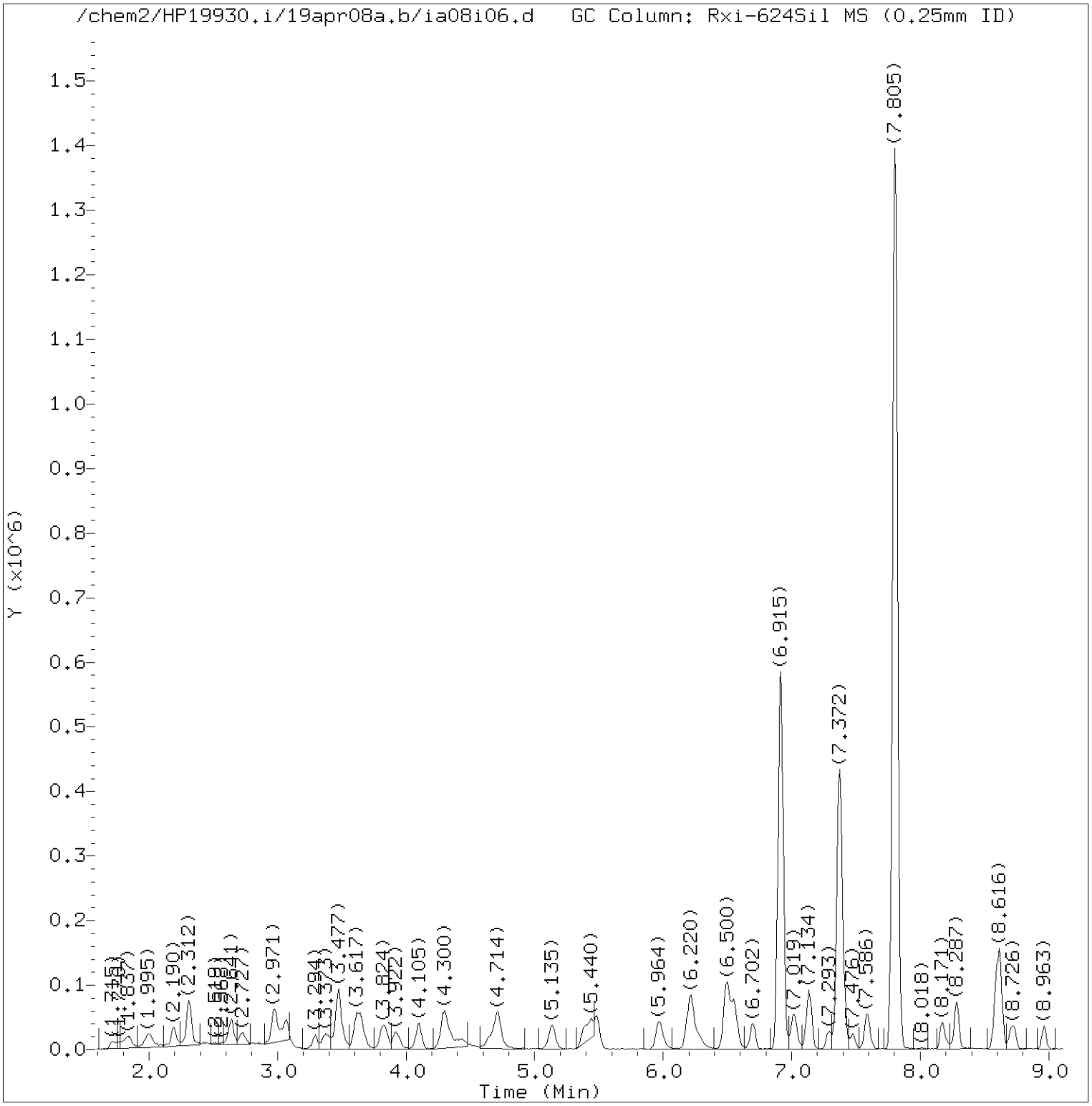
Data File: /chem2/HP19930.i/19apr08a.b/ia08i05.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:37 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1868
Retention Time (minutes): 12.975
Quant Ion : 105.00
Area : 300712
On-column Amount (ng) : 0.9538
Integration start scan : 1862 Integration stop scan: 1889
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

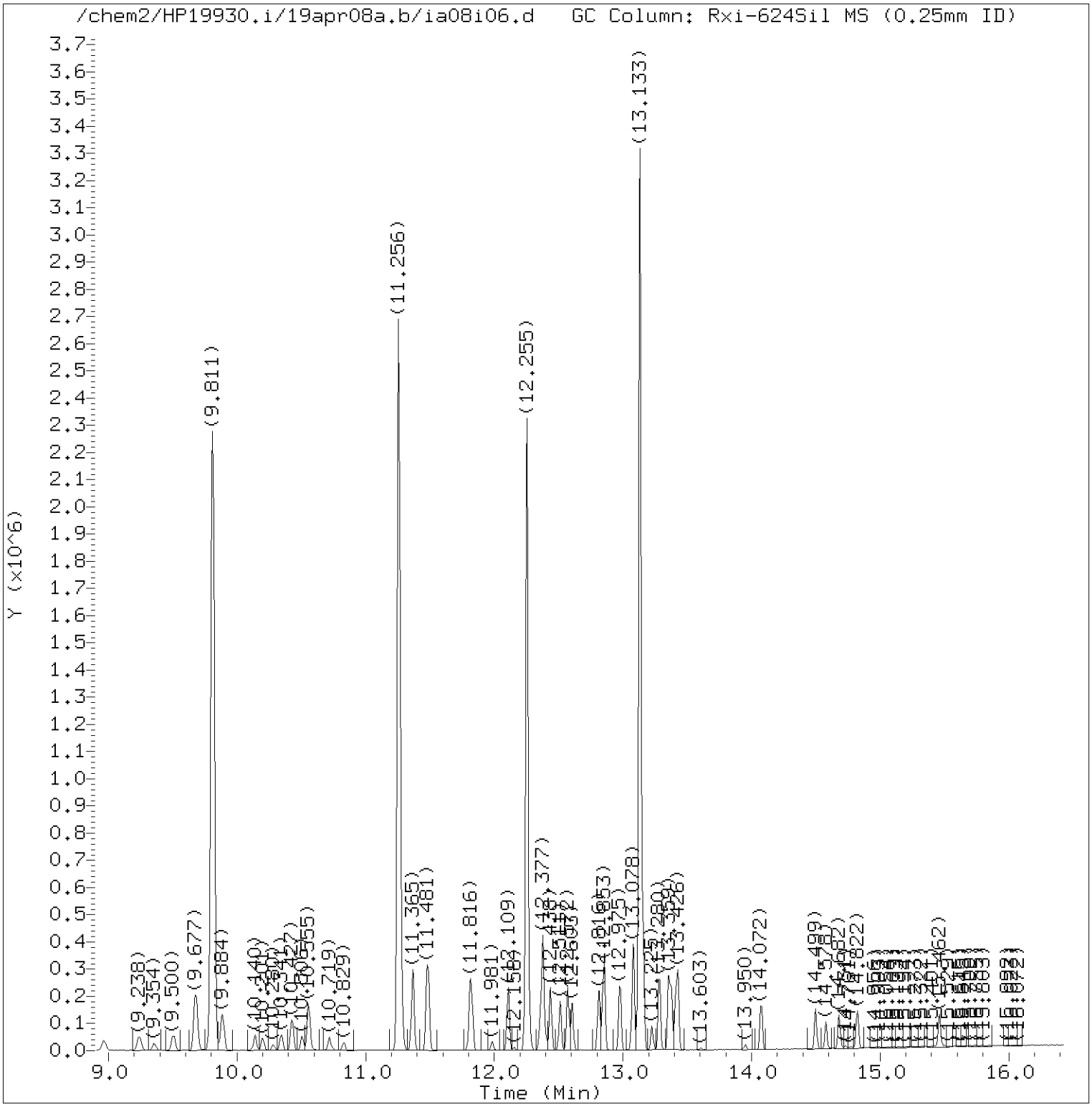
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.989	85	52262	0.486
2) Chloromethane	(2)	2.196	50	39846	0.500
5) Vinyl Chloride	(2)	2.312	62	41024	0.506
6) 1,3-Butadiene	(2)	2.312	39	35934M	0.536
7) Bromomethane	(2)	2.648	94	35637	0.495
8) Chloroethane	(2)	2.727	64	23497	0.499
9) Dichlorofluoromethane	(2)	2.977	67	60644	0.499
10) Trichlorofluoromethane	(2)	3.032	101	63541	0.470
11) Ethyl ether	(2)	3.294	59	18271	0.513
12) Freon 123a	(2)	3.373	67	30133A	0.495
13) Acrolein	(1)	3.477	56	150683	23.714
15) 1,1-Dichloroethene	(2)	3.617	96	23766	0.506
14) Acetone	(1)	3.641	43	45203M	5.154
16) Freon 113	(2)	3.647	101	26944	0.475
17) Methyl Iodide	(2)	3.812	142	50704	0.504
18) Carbon Disulfide	(2)	3.922	76	70954	0.516
21) Methyl Acetate	(1)	4.074	43	12372	0.534
22) Allyl Chloride	(2)	4.098	41	37366	0.518
23) Methylene Chloride	(2)	4.300	84	24291	0.506
26)*t-Butyl Alcohol-d10	(1)	4.312	65	149699	50.000
28) t-Butyl Alcohol	(1)	4.434	59	37410	10.291
29) Acrylonitrile	(1)	4.653	53	24996	2.383
30) Methyl Tertiary Butyl Ether	(2)	4.702	73	62011	0.505
31) trans-1,2-Dichloroethene	(2)	4.714	96	26355	0.502
32) n-Hexane	(2)	5.129	57	35818	0.485
33) 1,1-Dichloroethane	(2)	5.379	63	45308	0.530
34) di-Isopropyl Ether	(2)	5.434	45	71008	0.495
35) 2-Chloro-1,3-Butadiene	(2)	5.482	53	37891	0.494
37) Ethyl t-butyl ether	(2)	5.976	59	71107M	0.500
40) 1,2-Dichloroethene (Total)	(2)		96	56166	1.011
38) 2-Butanone	(1)	6.183	43	67398	4.731
39) cis-1,2-Dichloroethene	(2)	6.214	96	29811	0.509
41) 2,2-Dichloropropane	(2)	6.232	77	40675	0.511
42) Propionitrile	(1)	6.287	54	37994	9.933
45) Methacrylonitrile	(1)	6.494	67	66057	4.693
47) Bromochloromethane	(2)	6.543	128	15002	0.521
48) Tetrahydrofuran	(1)	6.567	71	21667	4.864
49) Chloroform	(2)	6.696	83	47356	0.509

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	476547	10.005
50)$Dibromofluoromethane	(2)	6.915	111	488371	10.031
51) 1,1,1-Trichloroethane	(2)	6.921	97	45384	0.504
52) Cyclohexane	(2)	7.019	56	42012	0.475
52) Cyclohexane	(2)	7.013	84	40666M	0.487
52) Cyclohexane	(2)	7.025	69	14413M	0.496
55) 1,1-Dichloropropene	(2)	7.128	75	35683	0.512
54) Carbon Tetrachloride	(2)	7.134	117	42137	0.496
56) Isobutyl Alcohol	(1)	7.287	41	27336	24.346
57)$1,2-Dichloroethane-d4	(2)	7.372	102	93860	10.225
57)$1,2-Dichloroethane-d4	(2)	7.372	65	415026	10.088
57)$1,2-Dichloroethane-d4	(2)	7.366	104	57867	9.986
58) Benzene	(2)	7.403	78	103880	0.507
59) 1,2-Dichloroethane	(2)	7.476	62	28210	0.513
59) 1,2-Dichloroethane	(2)	7.476	98	2490	0.486
60) t-Amyl methyl ether	(2)	7.586	73	69143	0.504
62) n-Heptane	(2)	7.805	43	35437	0.467
63)*Fluorobenzene	(2)	7.805	96	1845545	10.000
65) n-Butanol	(1)	8.171	56	44259	47.239
67) Trichloroethene	(2)	8.274	95	29337	0.512
69) Methylcyclohexane	(2)	8.591	83	52653	0.514
70) 1,2-Dichloropropane	(2)	8.622	63	24059	0.507
71) Methyl Methacrylate	(1)	8.701	69	12871	0.478
72) 1,4-Dioxane	(1)	8.713	88	5239M	22.744
72) 1,4-Dioxane	(1)	8.707	58	2770M	20.179
73) Dibromomethane	(2)	8.726	93	13333	0.500
74) Bromodichloromethane	(2)	8.963	83	31733	0.482
76) 2-Nitropropane	(1)	9.238	41	41021	4.576
80) cis-1,3-Dichloropropene	(2)	9.506	75	36183	0.485
81) 4-Methyl-2-Pentanone	(1)	9.677	43	166871	4.627
82)$Toluene-d8	(3)	9.811	98	1818356	10.069
82)$Toluene-d8	(3)	9.811	100	1164634	10.056
83) Toluene	(3)	9.884	92	69522	0.512
84) trans-1,3-Dichloropropene	(3)	10.140	75	31413	0.491
85) 1,3-Dichloropropene (total)	(3)		75	67596	0.975
86) Ethyl Methacrylate	(3)	10.201	69	26746	0.495
88) 1,1,2-Trichloroethane	(3)	10.341	97	18090	0.482
89) Tetrachloroethene	(3)	10.427	166	36242	0.504

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	30216	0.500
91) 2-Hexanone	(1)	10.555	43	119869	4.687
93) Dibromochloromethane	(3)	10.719	129	25941	0.509
95) 1,2-Dibromoethane	(3)	10.829	107	19221	0.503
97)*Chlorobenzene-d5	(3)	11.256	117	1472238	10.000
96) 1-Chlorohexane	(3)	11.262	91	40541	0.496
98) Chlorobenzene	(3)	11.286	112	78117	0.501
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	28917	0.492
100) Ethylbenzene	(3)	11.371	91	137364	0.504
101) m+p-Xylene	(3)	11.481	106	107167	0.987
105) Xylene (Total)	(3)		106	158761	1.479
104) o-Xylene	(3)	11.810	106	51594	0.492
106) Styrene	(3)	11.829	104	79425	0.478
107) Bromoform	(3)	11.981	173	14198	0.453
108) Isopropylbenzene	(3)	12.109	105	140884	0.498
111)$4-Bromofluorobenzene	(3)	12.255	95	690711	10.207
111)$4-Bromofluorobenzene	(3)	12.255	174	647816	10.001
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	23184	0.494
114) Bromobenzene	(4)	12.371	156	36200	0.507
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	55889M	4.419
116) 1,2,3-Trichloropropane	(4)	12.402	110	7043	0.506
117) n-Propylbenzene	(4)	12.438	91	158730	0.497
119) 2-Chlorotoluene	(4)	12.511	126	35763	0.521
121) 1,3,5-Trimethylbenzene	(4)	12.572	105	114795	0.486
122) 4-Chlorotoluene	(4)	12.609	126	33645	0.487
125) tert-Butylbenzene	(4)	12.816	134	26873M	0.500
126) Pentachloroethane	(4)	12.847	167	23145	0.489
127) 1,2,4-Trimethylbenzene	(4)	12.859	105	117615	0.489
128) sec-Butylbenzene	(4)	12.975	105	146808M	0.481
131) 1,3-Dichlorobenzene	(4)	13.078	146	67382	0.493
132) p-Isopropyltoluene	(4)	13.085	119	128603	0.480
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	822319	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	67258	0.492
135) 1,2,3-Trimethylbenzene	(4)	13.164	120	57607	0.513
136) Benzyl Chloride	(4)	13.225	126	10171	0.460
138) n-Butylbenzene	(4)	13.377	92	56536	0.464
139) 1,2-Dichlorobenzene	(4)	13.408	146	60471	0.485
143) 1,2-Dibromo-3-chloropropane	(1)	13.950	155	3739	0.456

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

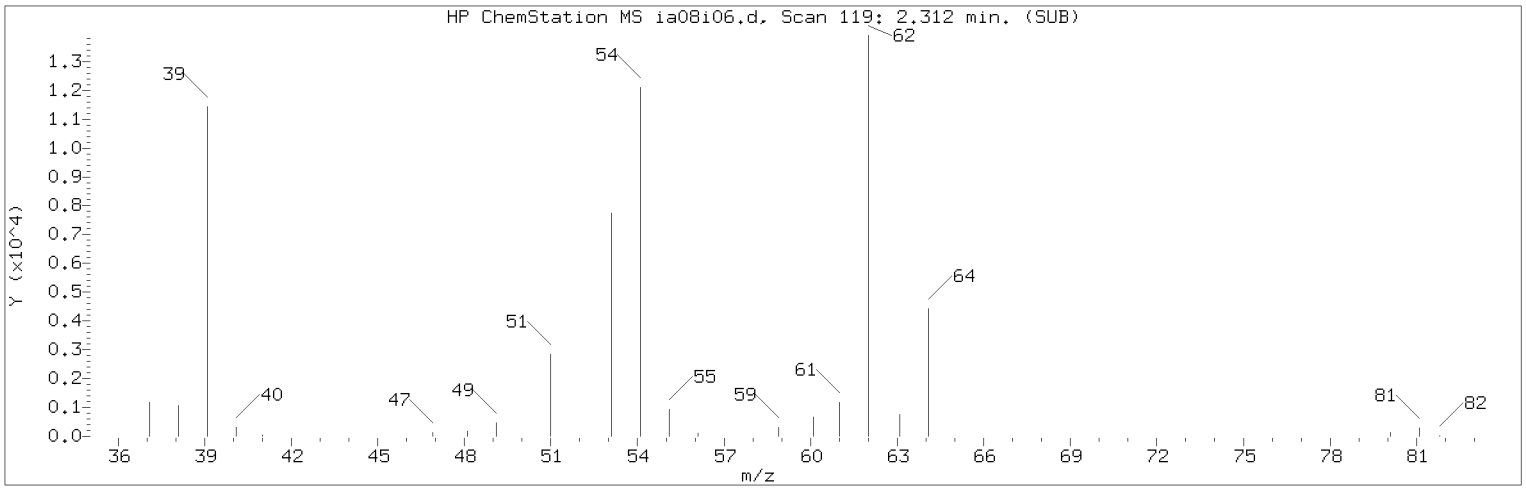
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

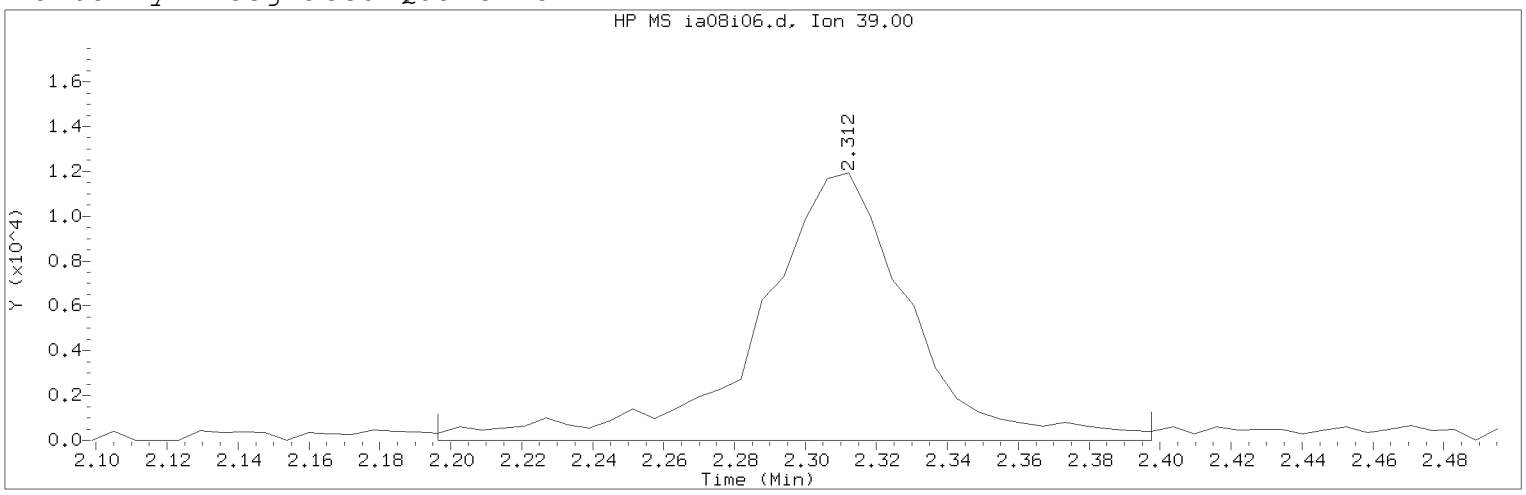
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	46795	0.469
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	40779	0.467
146) Hexachlorobutadiene	(4)	14.578	225	16397	0.459
147) Naphthalene	(4)	14.682	128	86443	0.494
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	37205	0.473

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on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

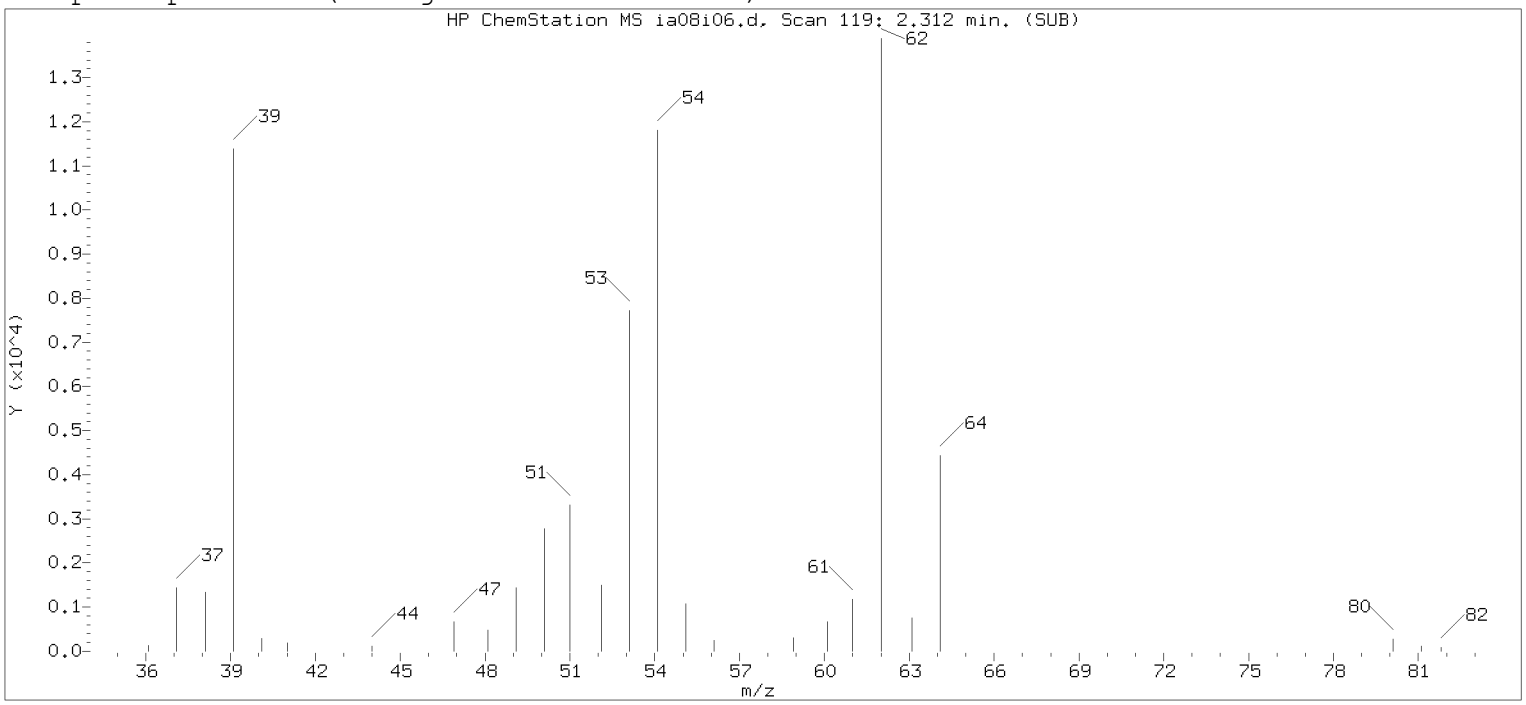
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area (flag) : 35934M
On-Column Amount (ng) : 0.5364
Integration start scan : 99 Integration stop scan: 132
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

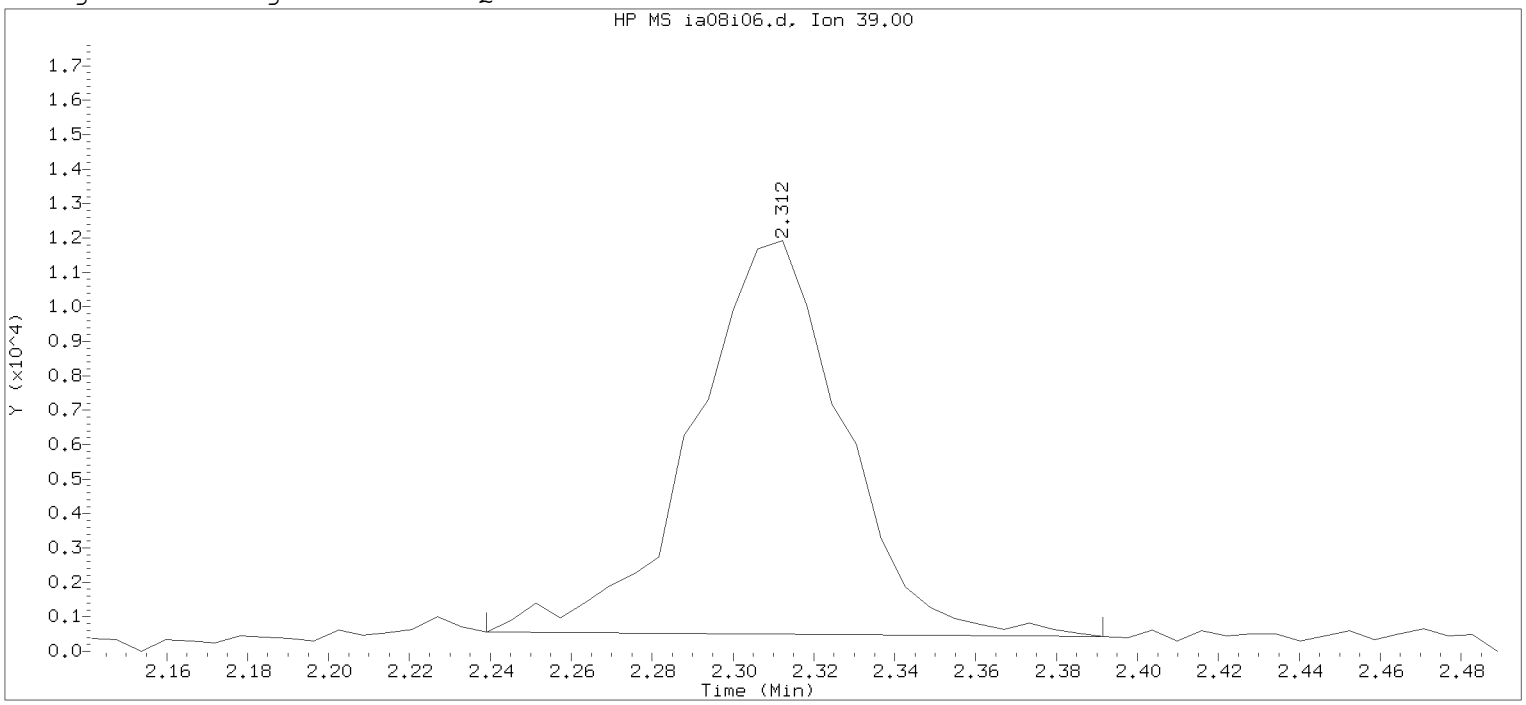
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

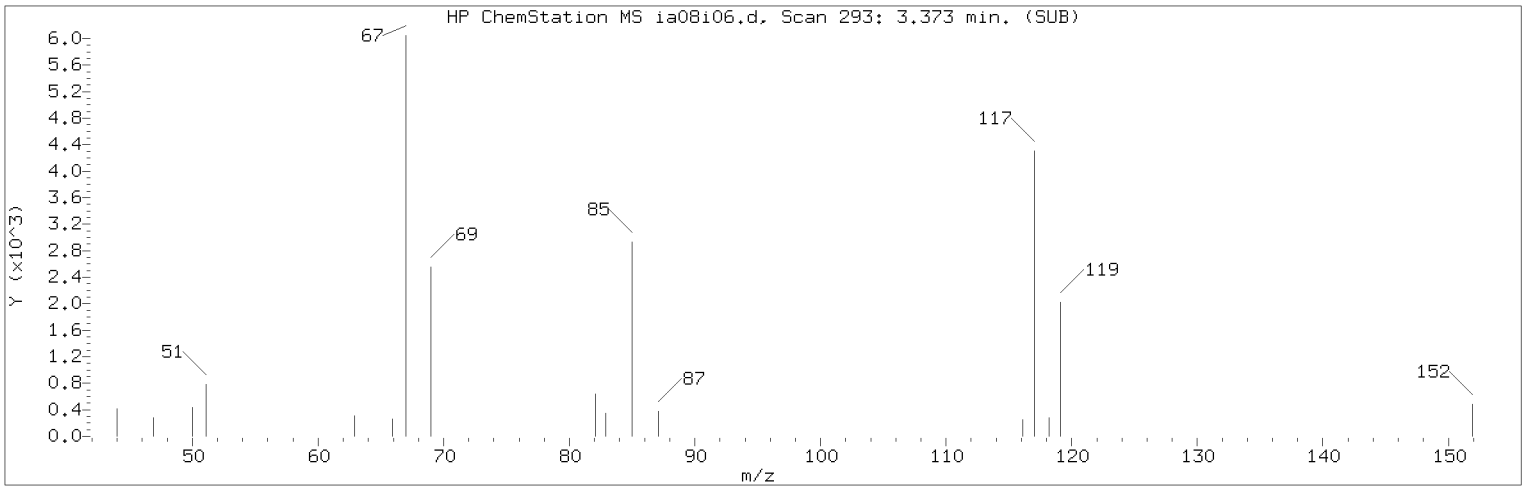
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

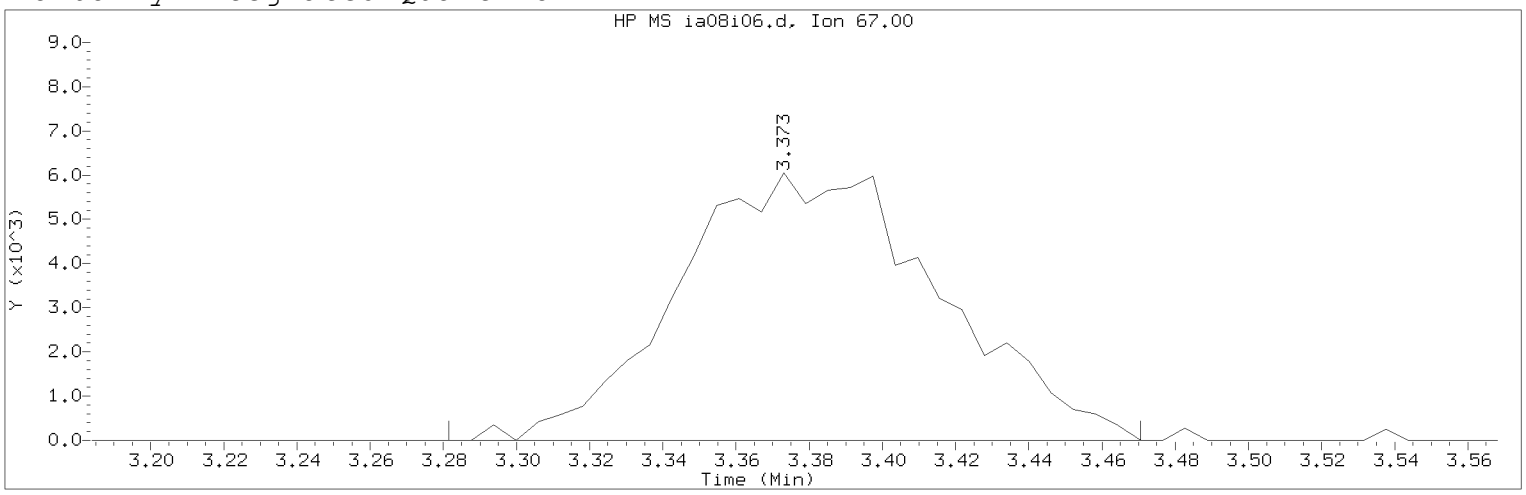
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area : 29521
On-column Amount (ng) : 0.4935
Integration start scan : 106 Integration stop scan: 131
Y at integration start : 554 Y at integration end: 437

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

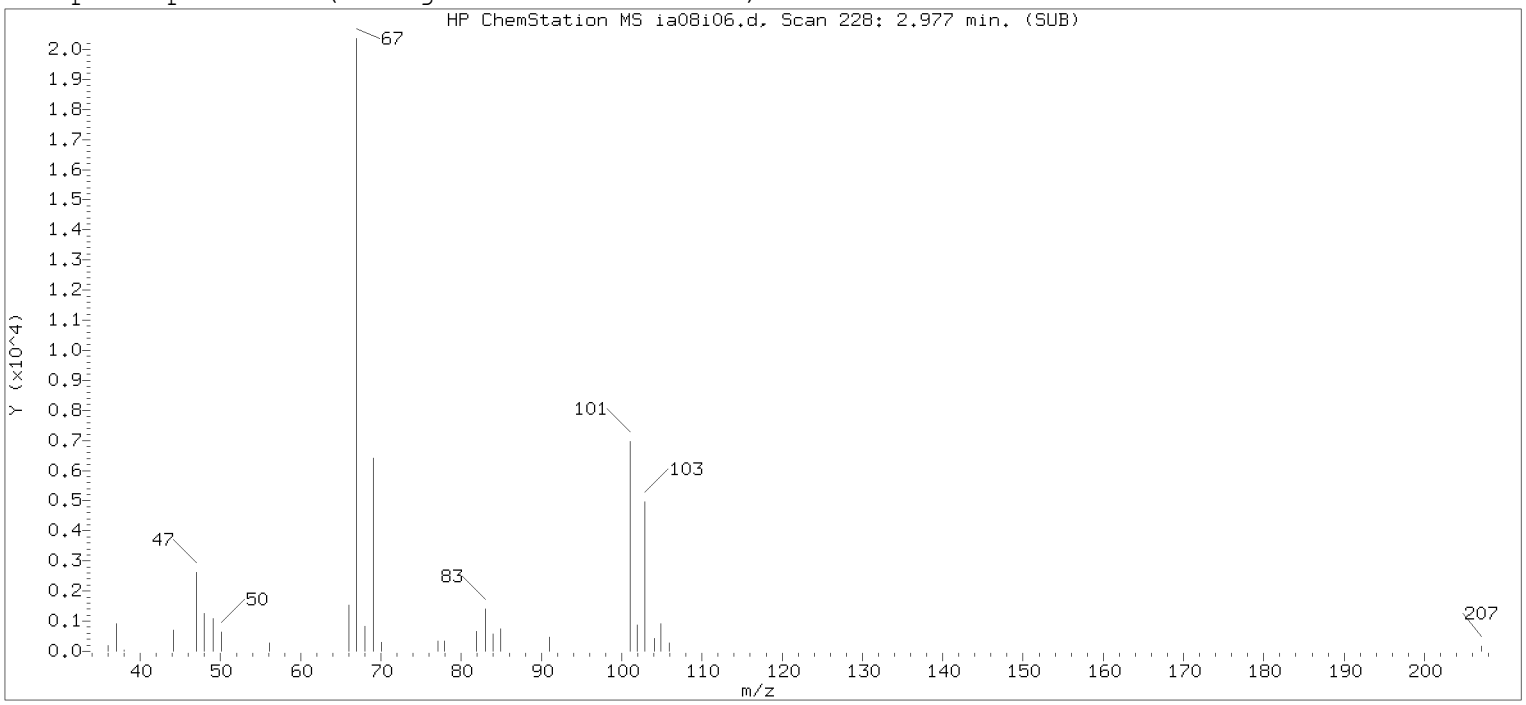
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 293
Retention Time (minutes): 3.373
Quant Ion : 67.00
Area (flag) : 30133A
On-Column Amount (ng) : 0.4952
Integration start scan : 277 Integration stop scan: 308
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

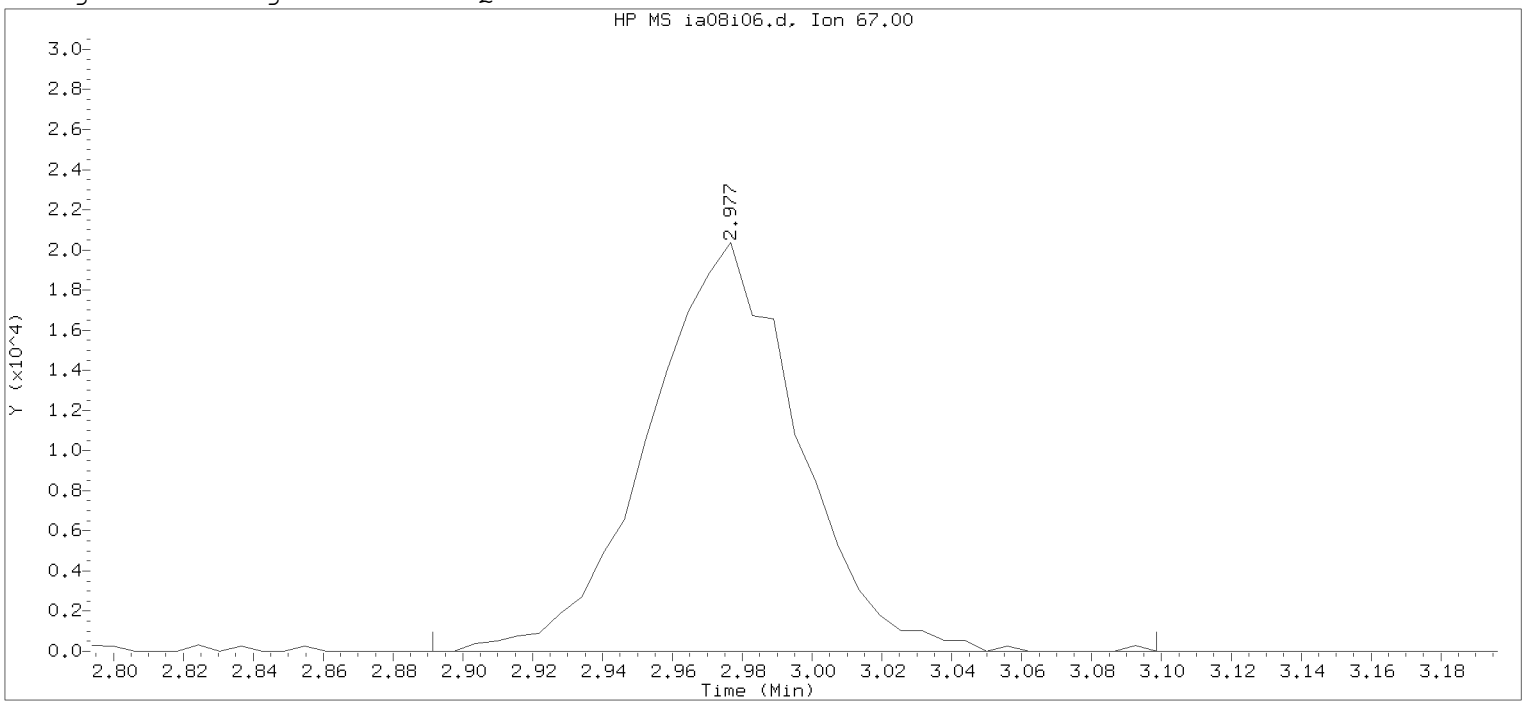
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

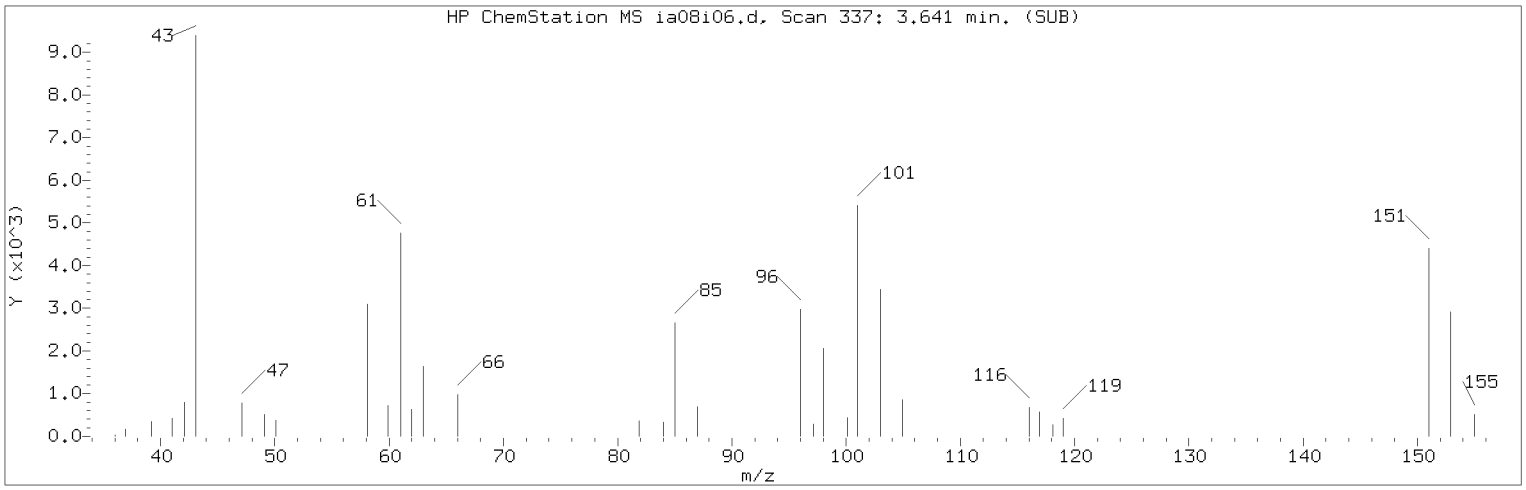
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

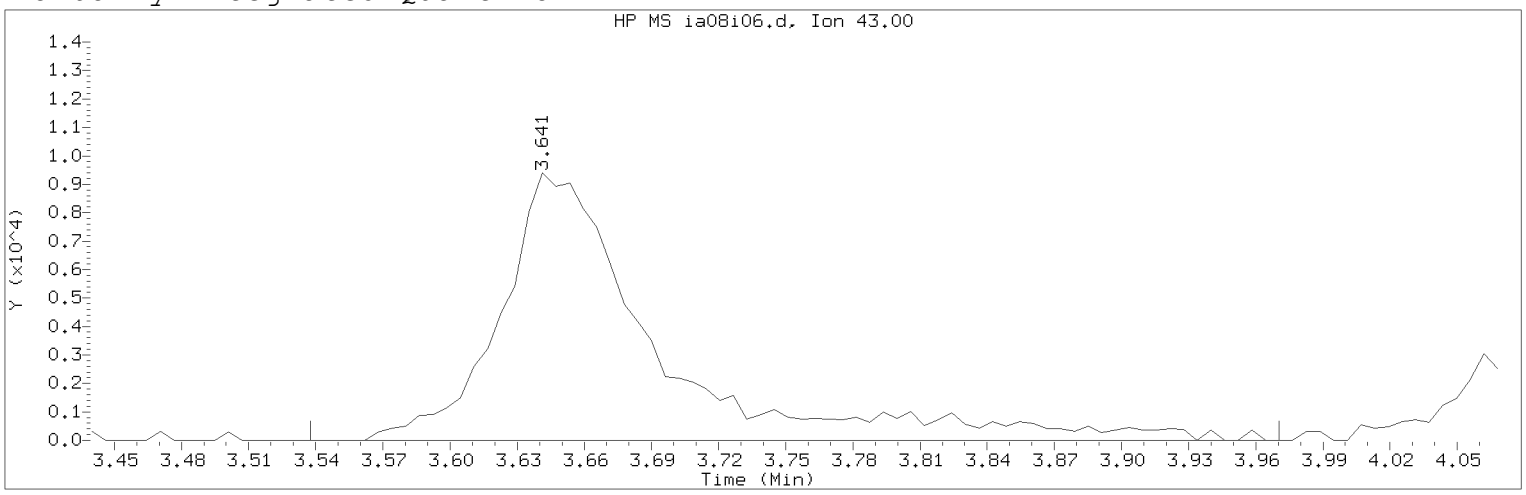
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area : 60644
On-column Amount (ng) : 0.5011
Integration start scan : 213 Integration stop scan: 247
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

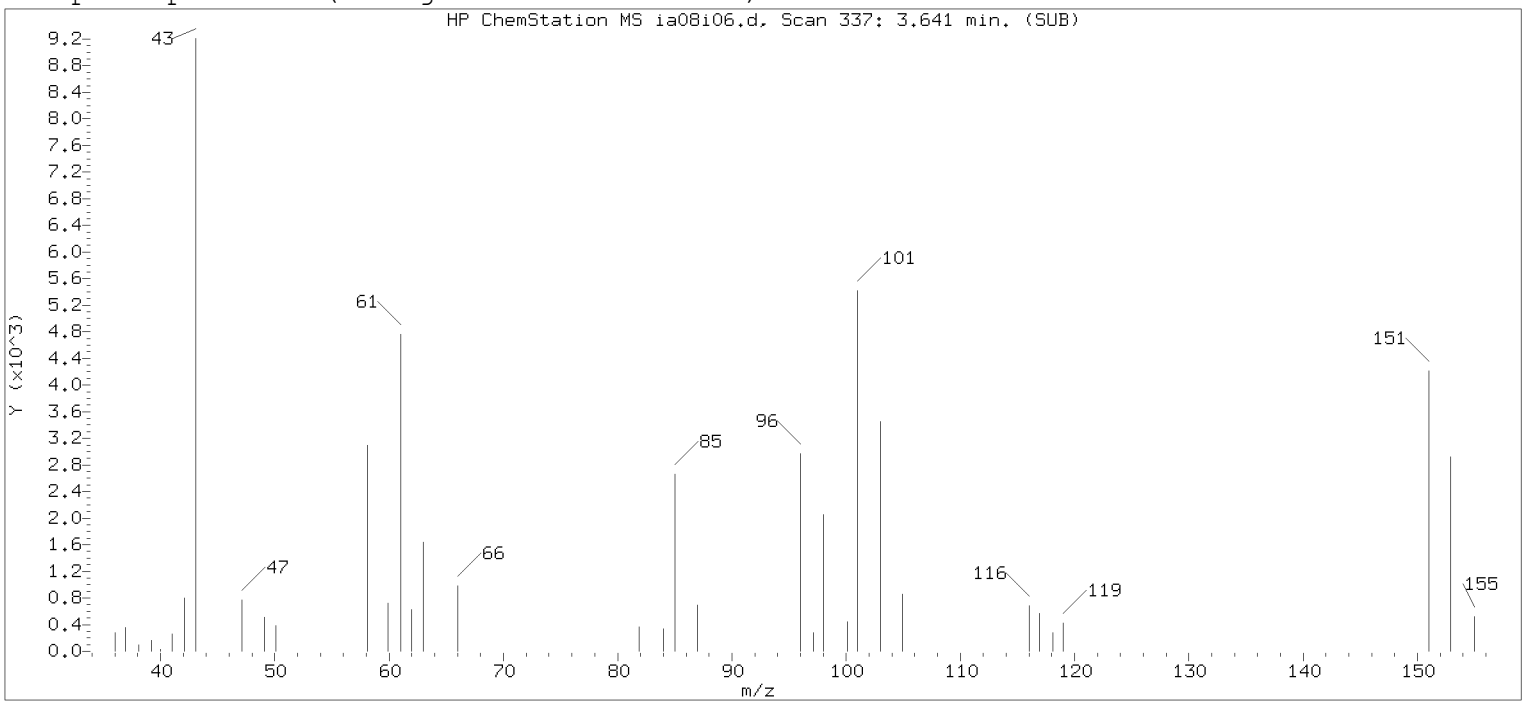
Compound Number : 14
Compound Name : Acetone
Scan Number : 337
Retention Time (minutes): 3.641
Quant Ion : 43.00
Area (flag) : 45203M
On-Column Amount (ng) : 5.1539
Integration start scan : 319 Integration stop scan: 390
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

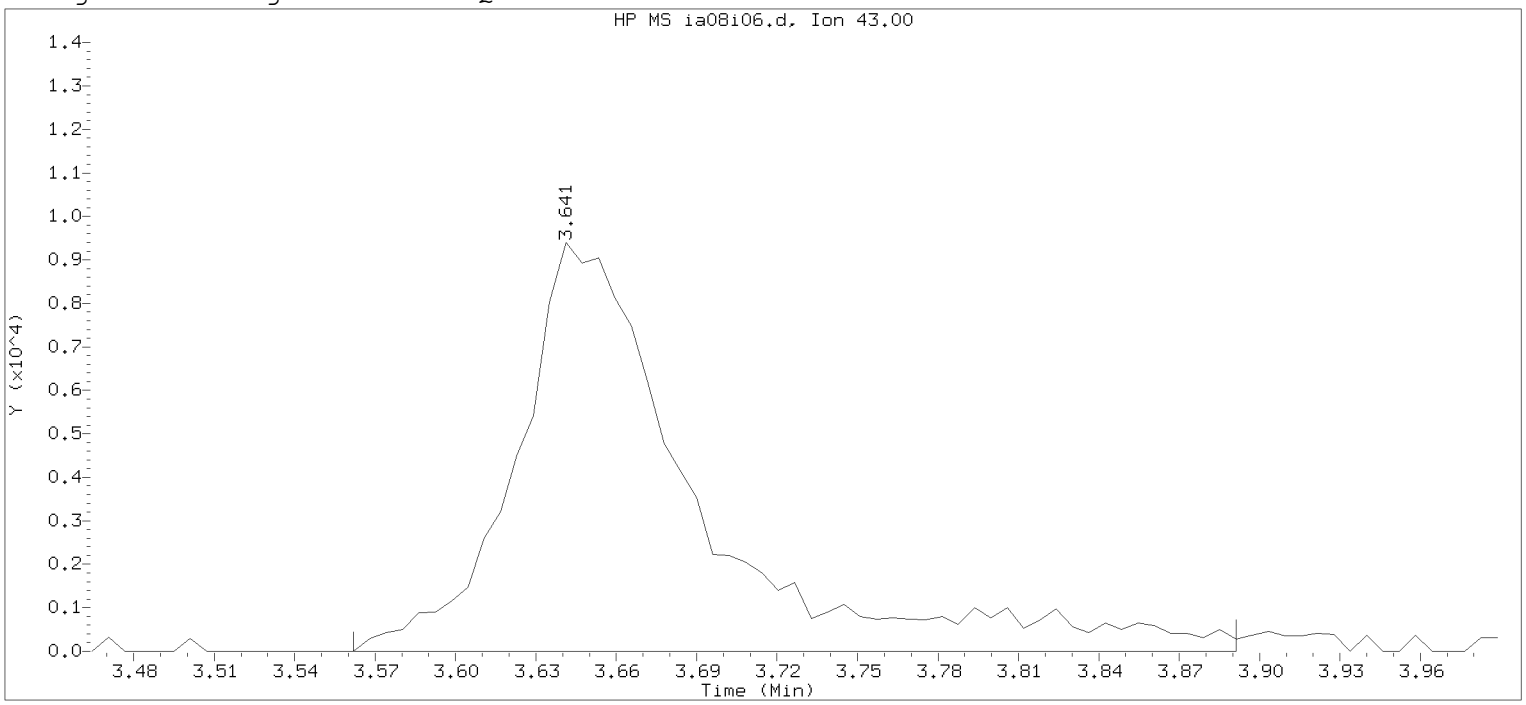
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

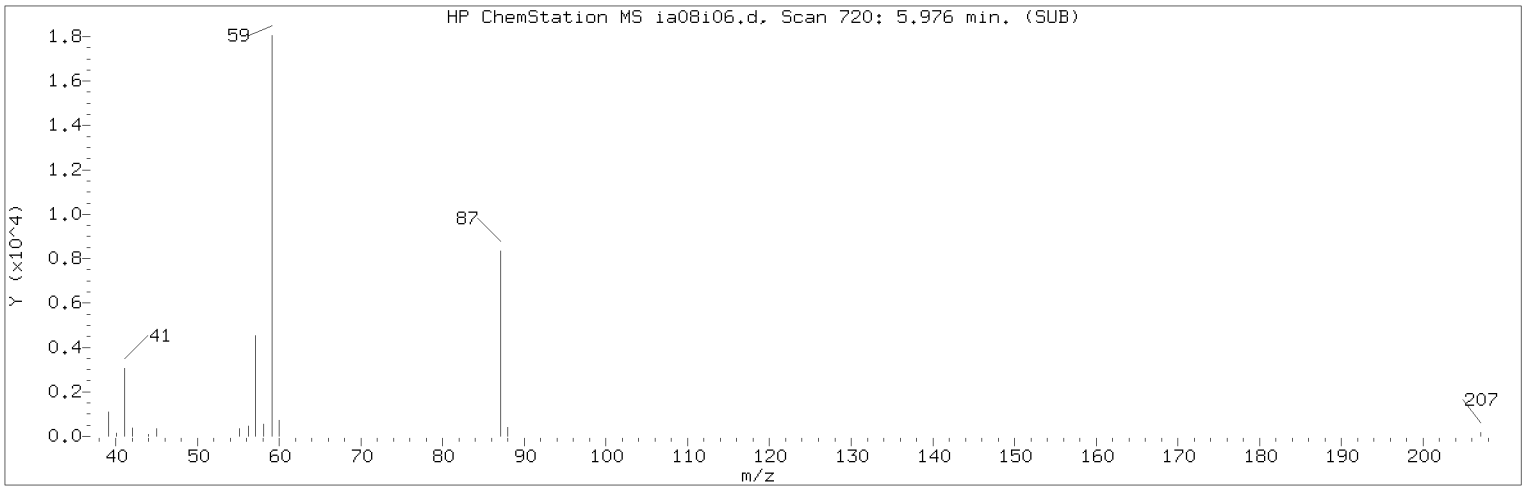
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

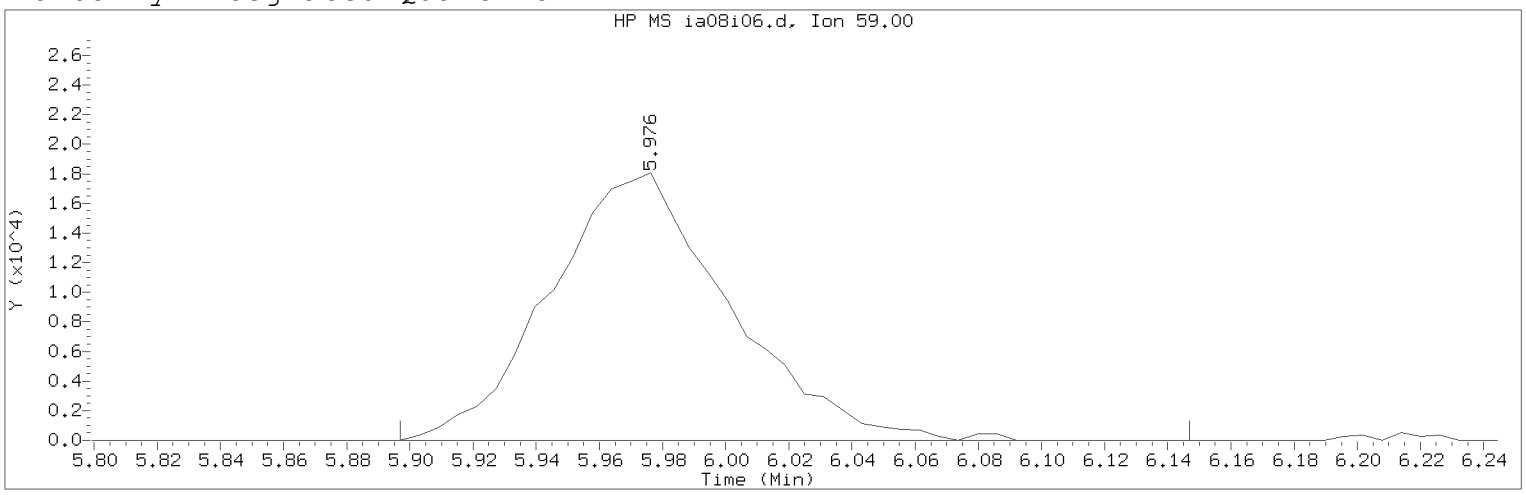
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 337		
Retention Time (minutes)	: 3.641		
Quant Ion	: 43.00		
Area	: 44028		
On-column Amount (ng)	: 5.3116		
Integration start scan	: 323	Integration stop scan:	377
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

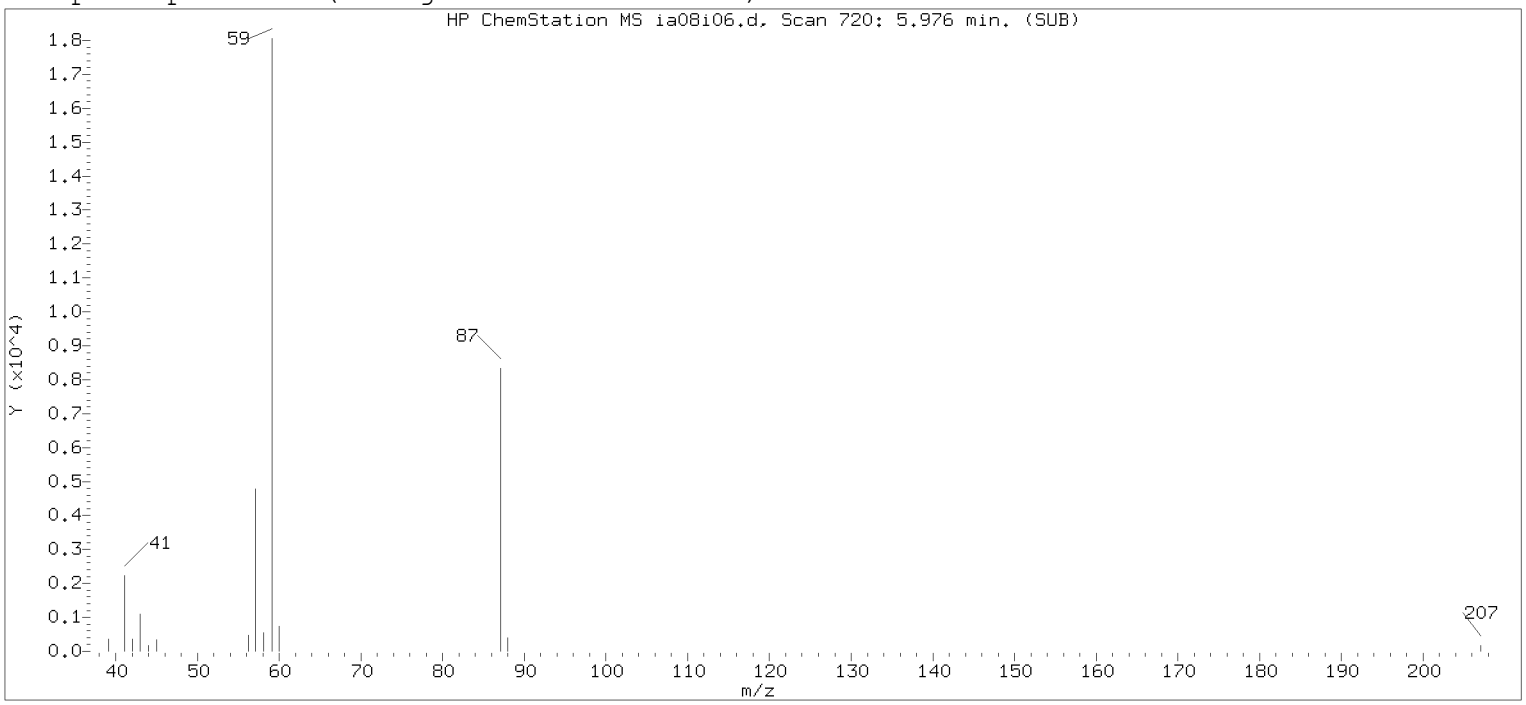
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 720
Retention Time (minutes): 5.976
Quant Ion : 59.00
Area (flag) : 71107M
On-Column Amount (ng) : 0.4996
Integration start scan : 706 Integration stop scan: 747
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

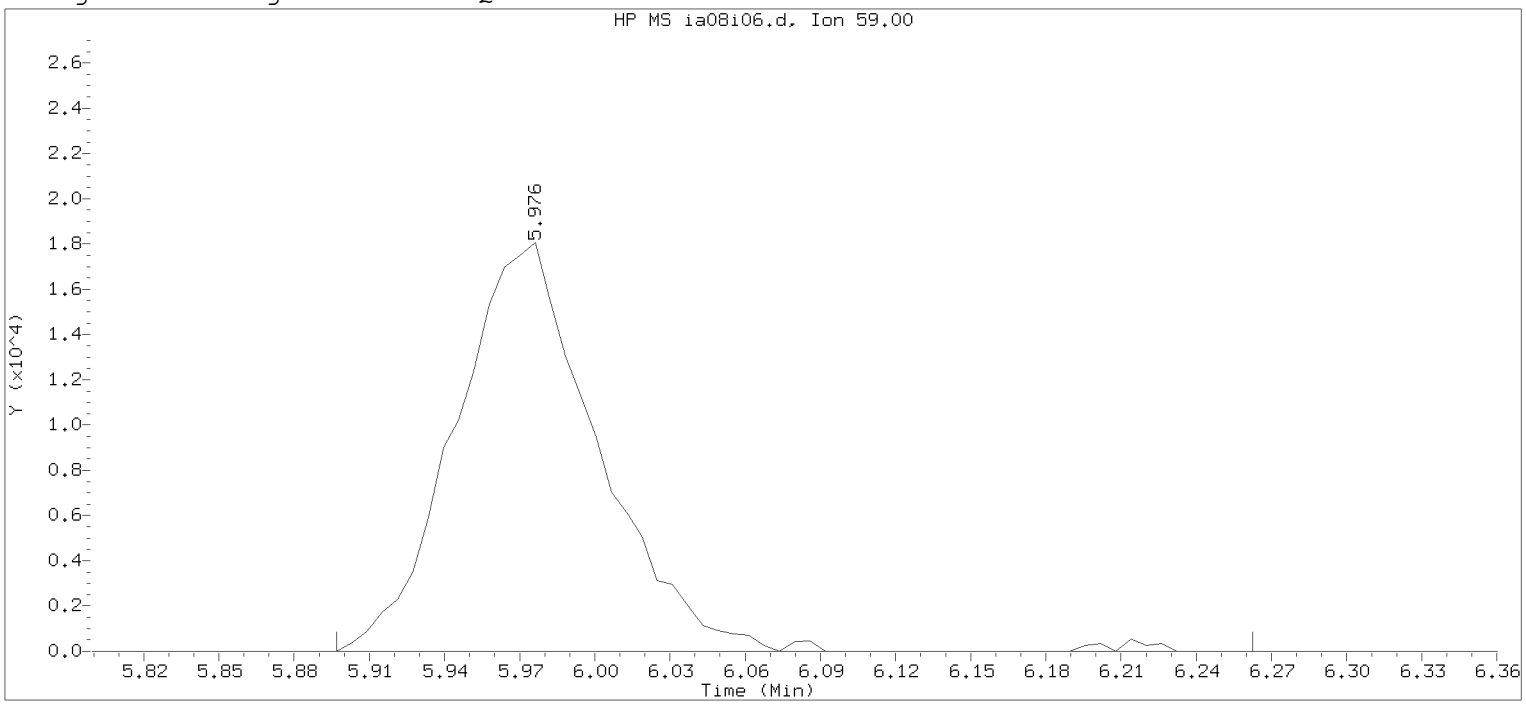
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

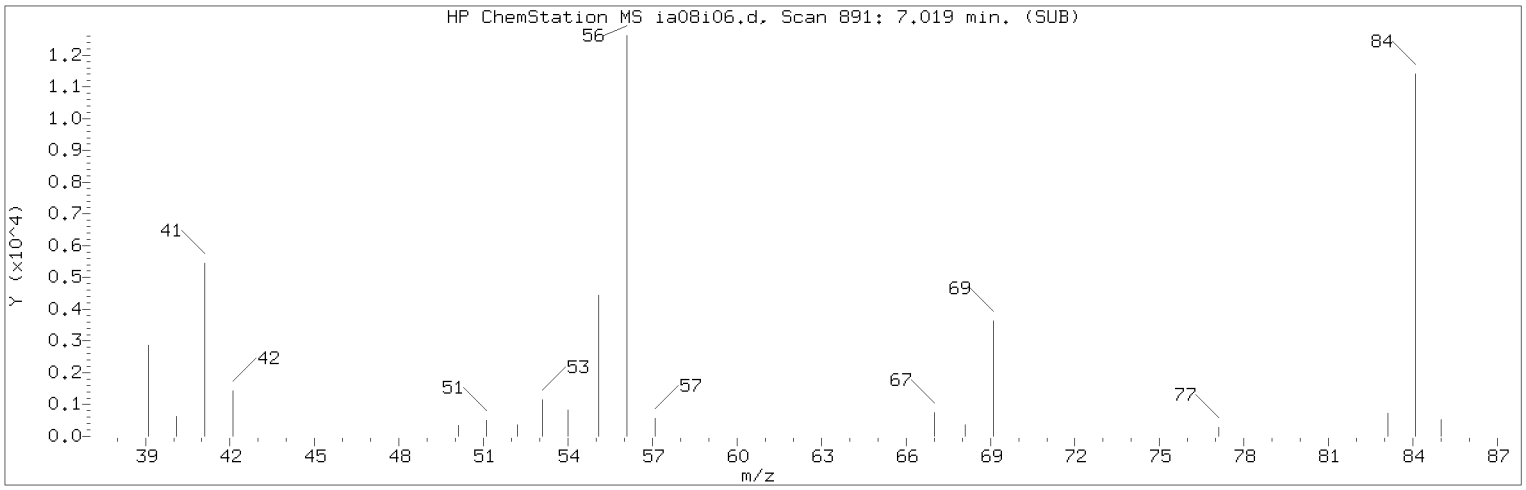
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

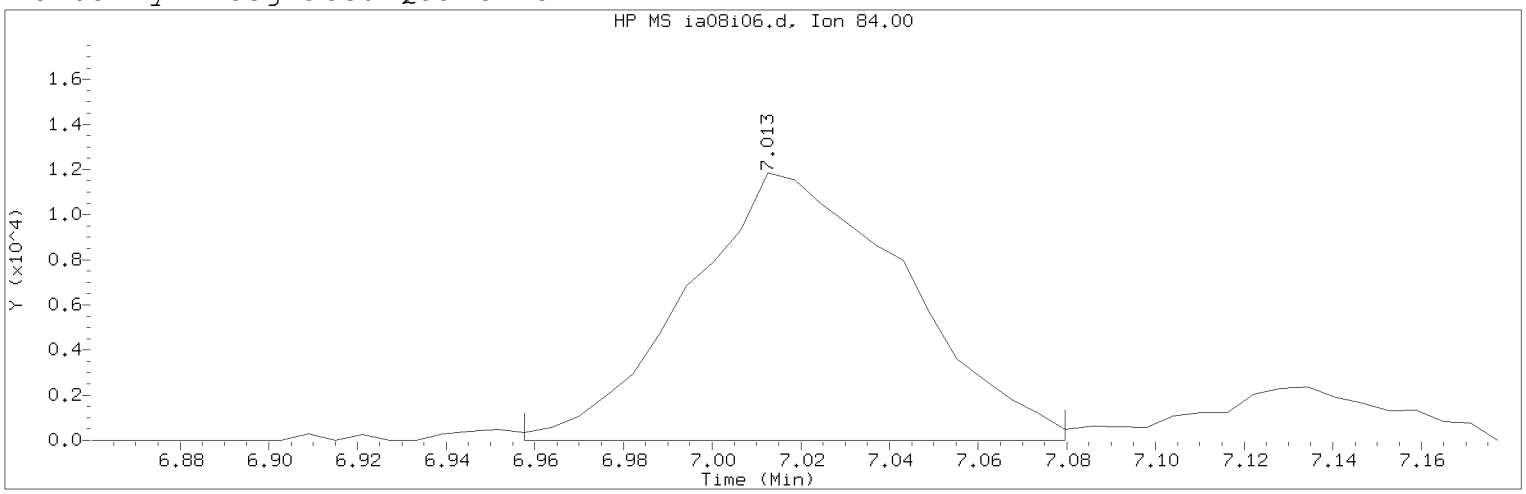
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 720
Retention Time (minutes): 5.976
Quant Ion : 59.00
Area : 71740
On-column Amount (ng) : 0.5058
Integration start scan : 706 Integration stop scan: 766
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

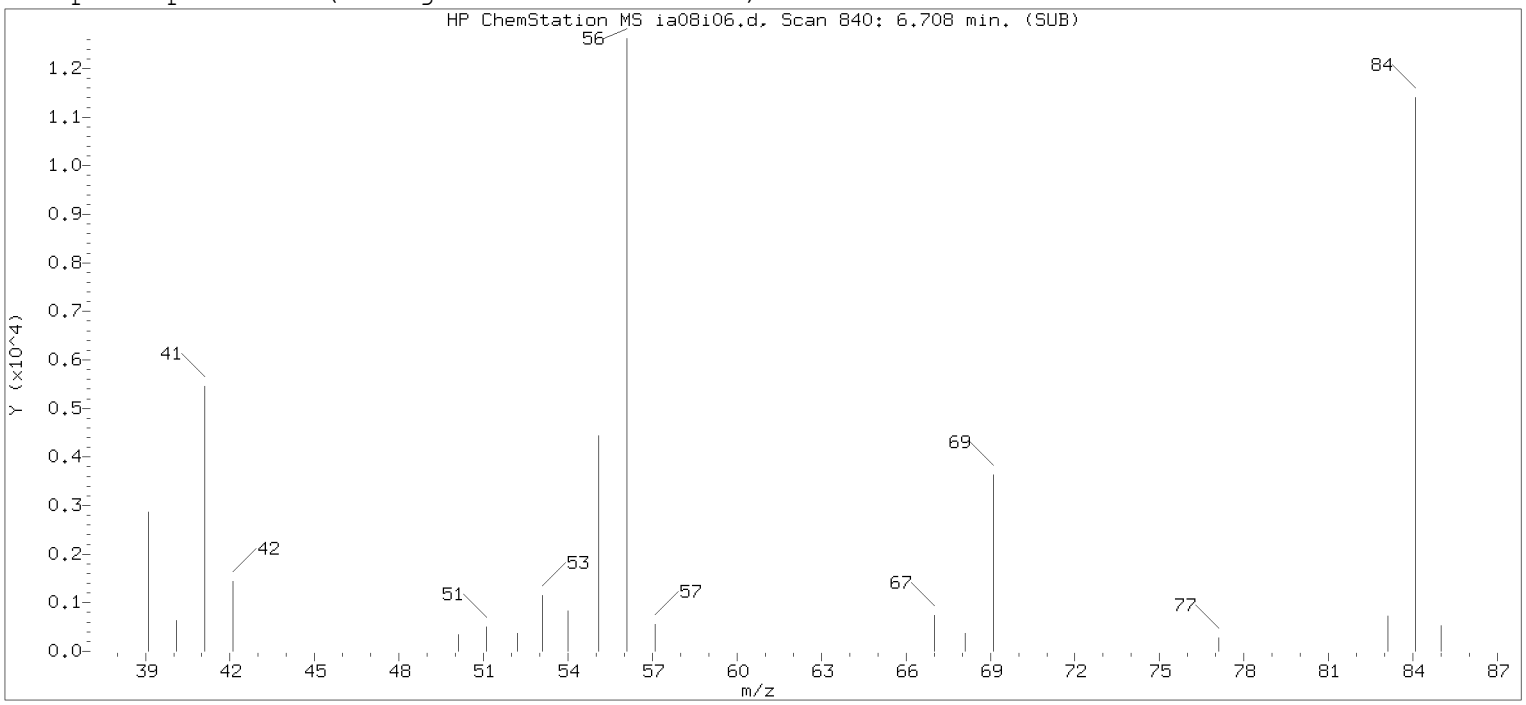
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 890
Retention Time (minutes): 7.013
Quant Ion : 84.00
Area (flag) : 40666M
On-Column Amount (ng) : 0.4871
Integration start scan : 880 Integration stop scan: 900
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

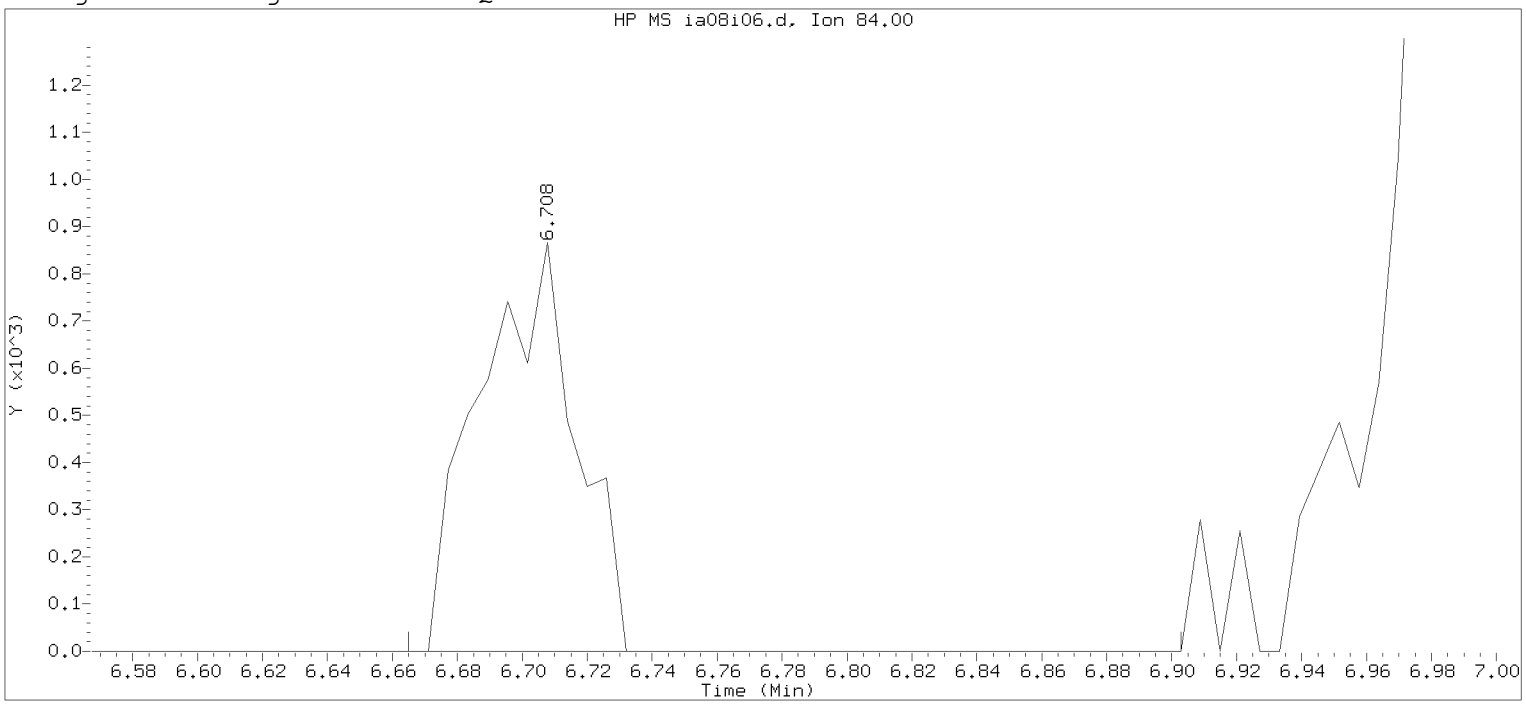
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

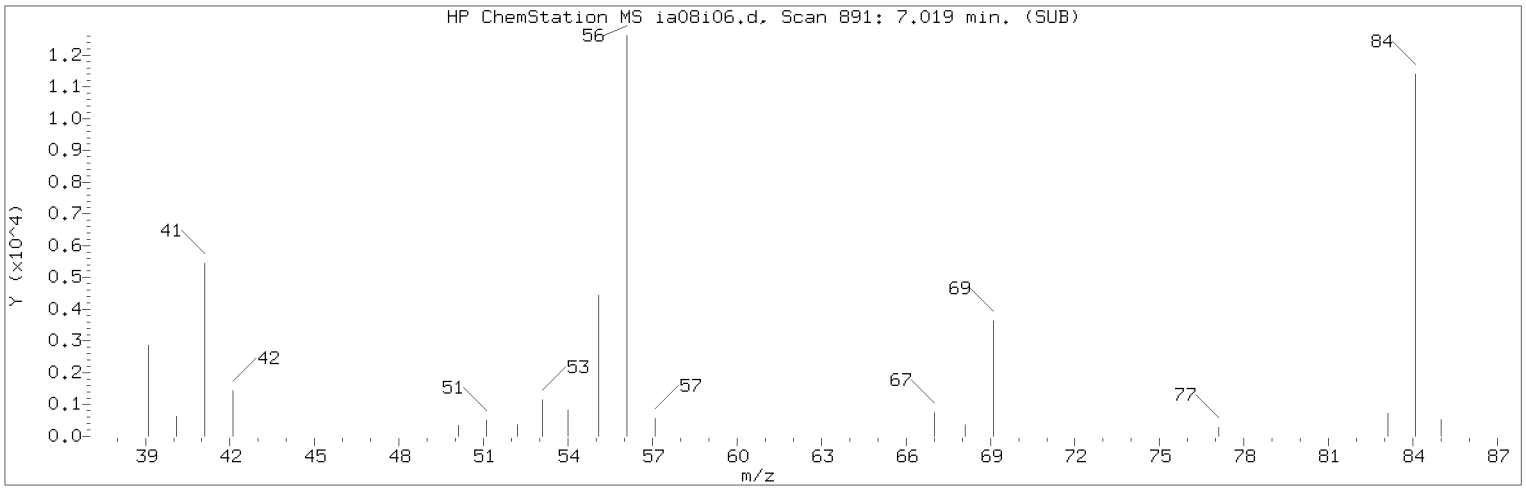
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

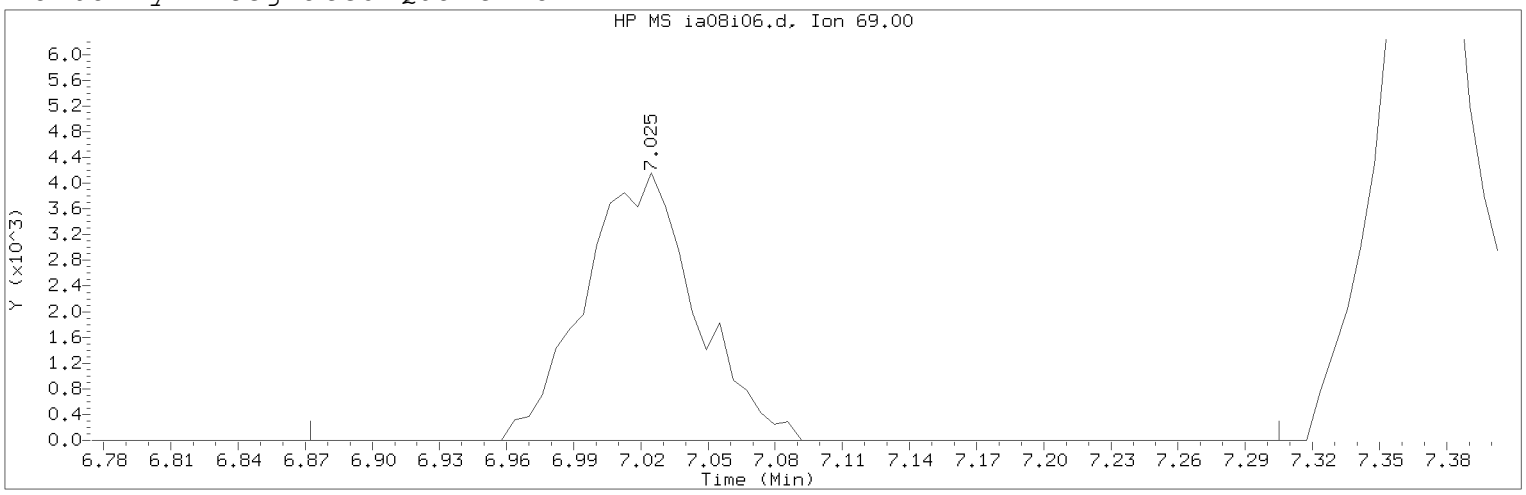
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 840
Retention Time (minutes): 6.708
Quant Ion : 84.00
Area : 1786
On-column Amount (ng) : 0.4699
Integration start scan : 832 Integration stop scan: 871
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

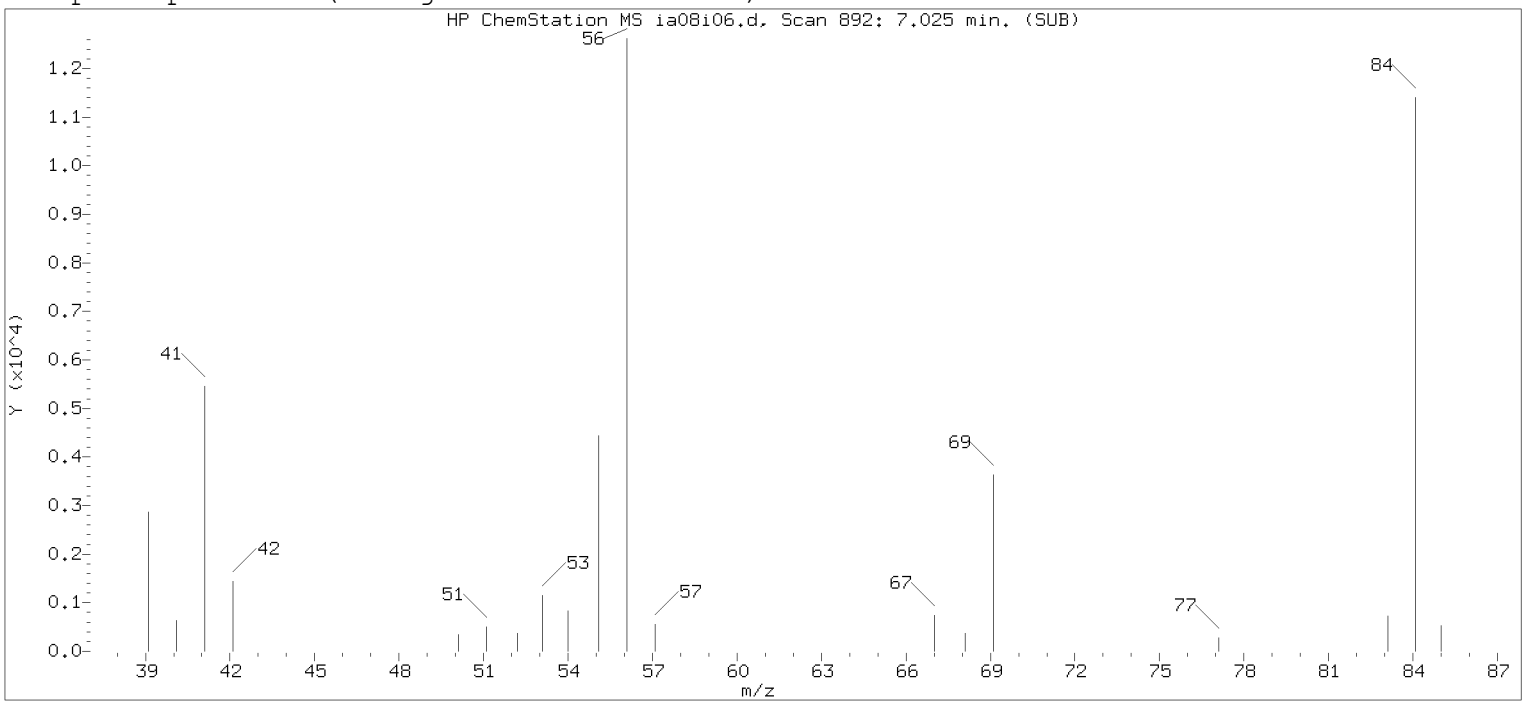
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 69.00
Area (flag) : 14413M
On-Column Amount (ng) : 0.4959
Integration start scan : 866 Integration stop scan: 937
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

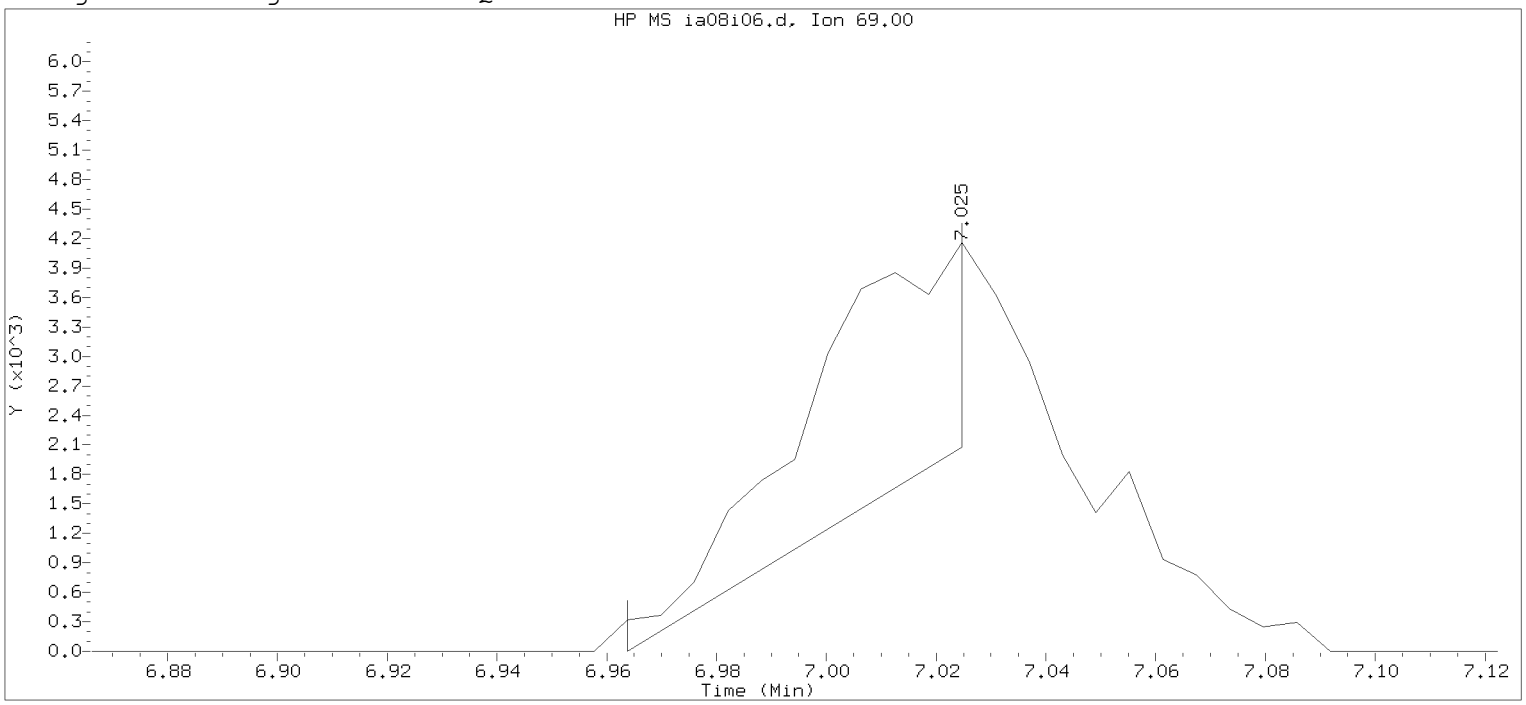
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

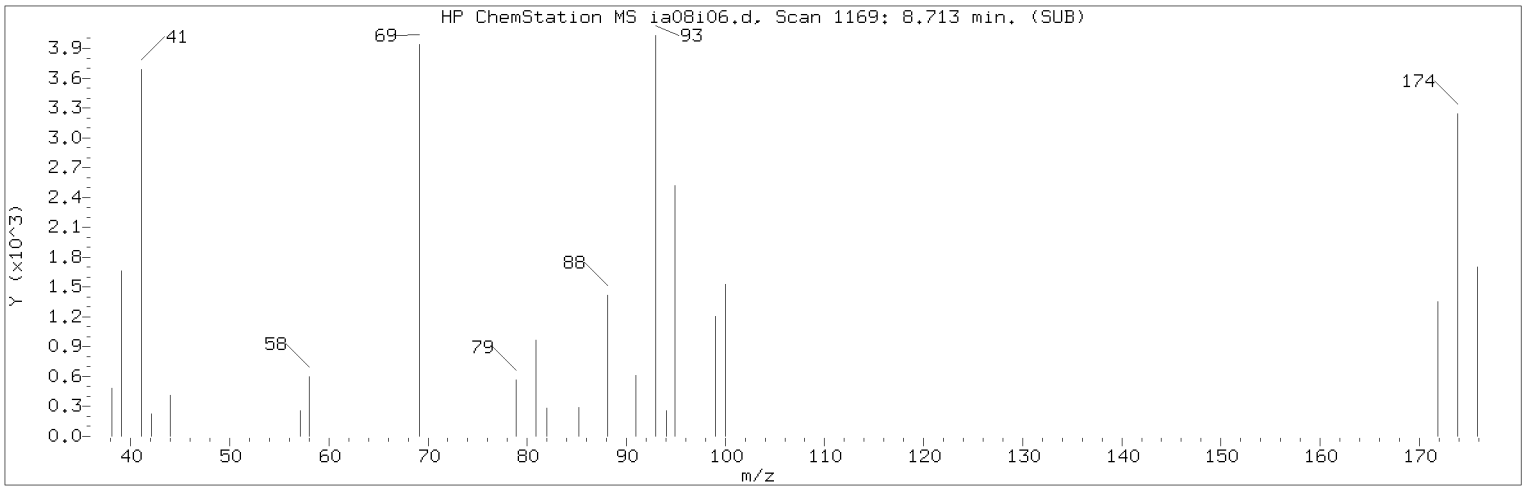
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

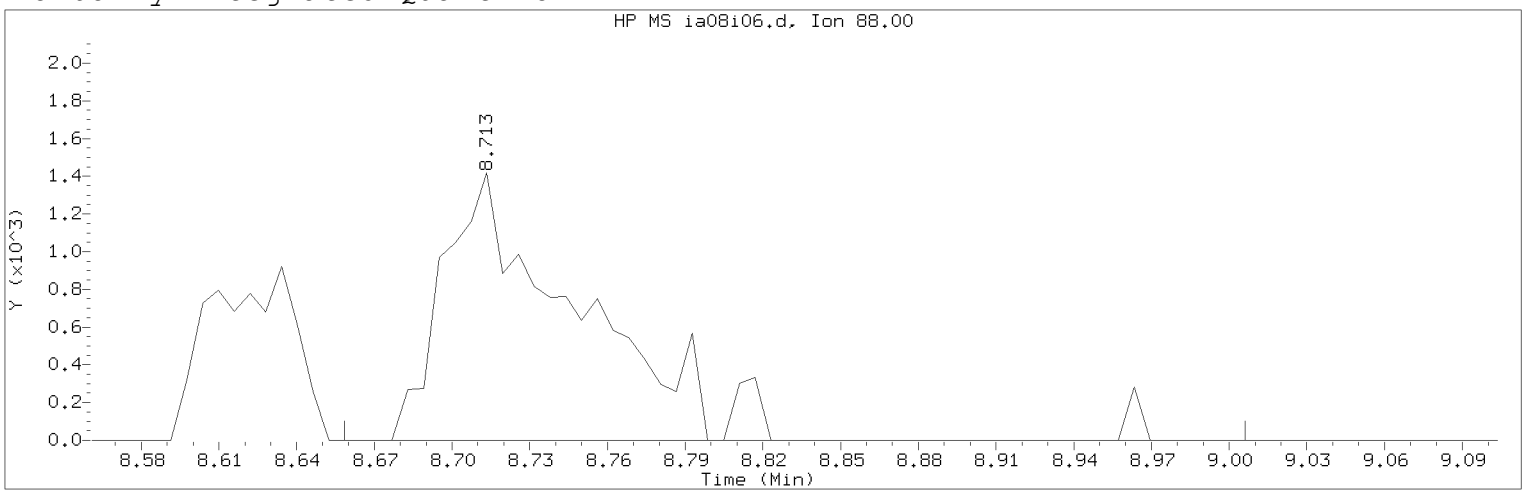
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 69.00
Area : 4481
On-column Amount (ng) : 1.5654
Integration start scan : 881 Integration stop scan: 891
Y at integration start : 0 Y at integration end: 2079

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

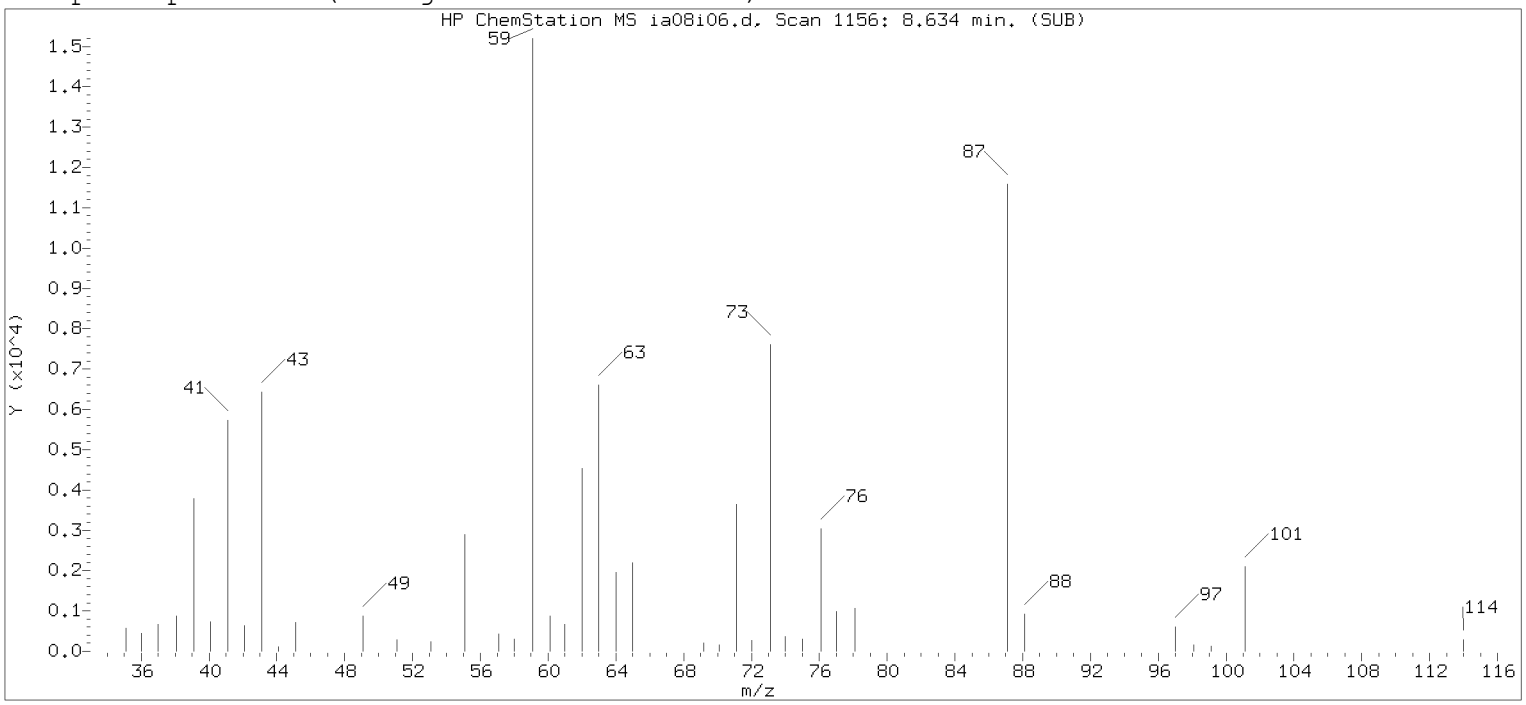
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.713
Quant Ion : 88.00
Area (flag) : 5239M
On-Column Amount (ng) : 22.7435
Integration start scan : 1159 Integration stop scan: 1216
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

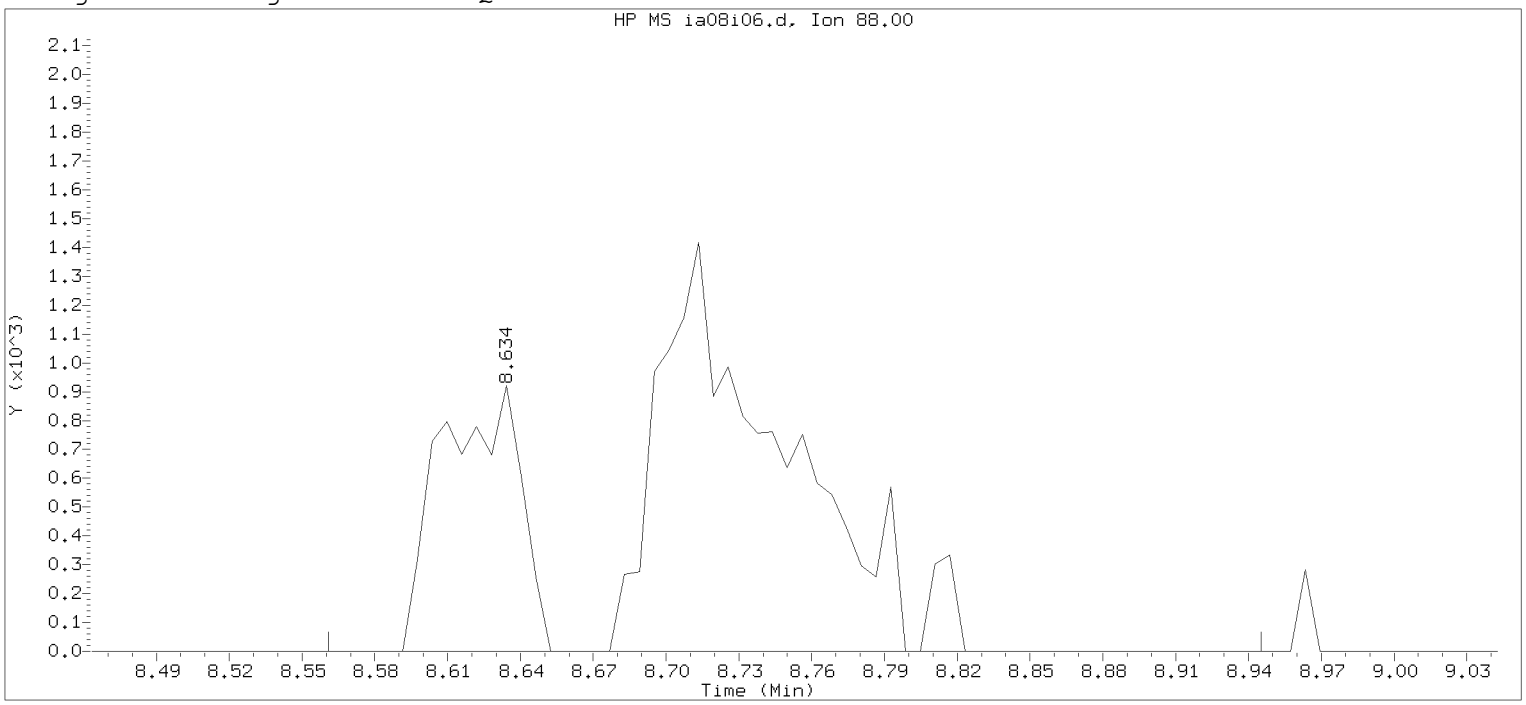
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

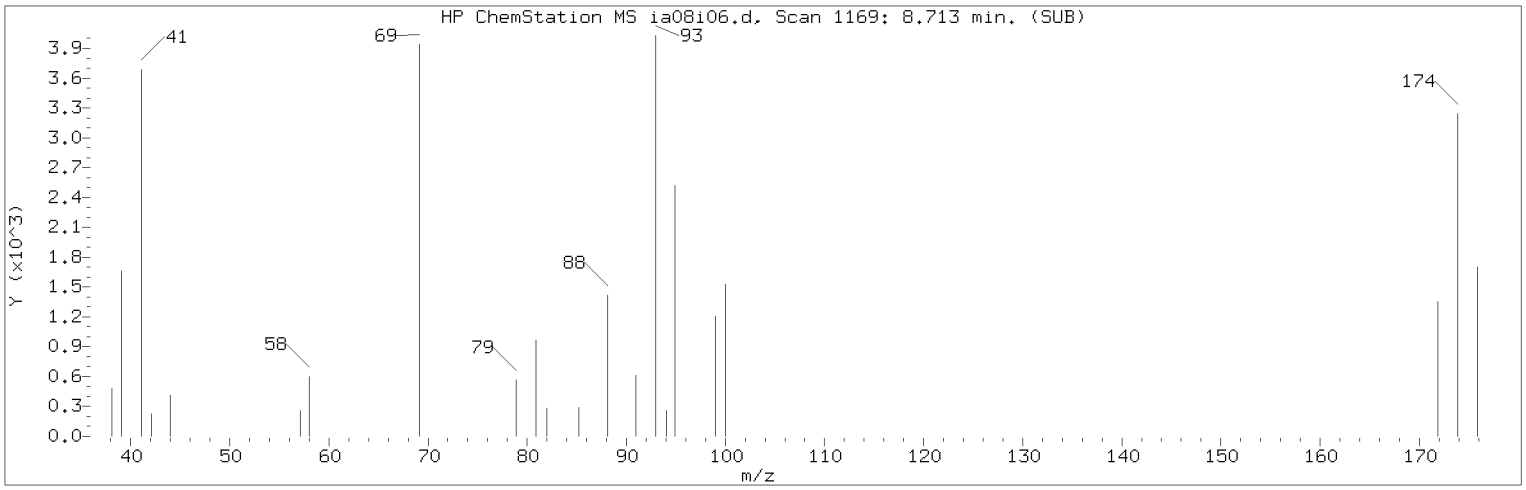
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

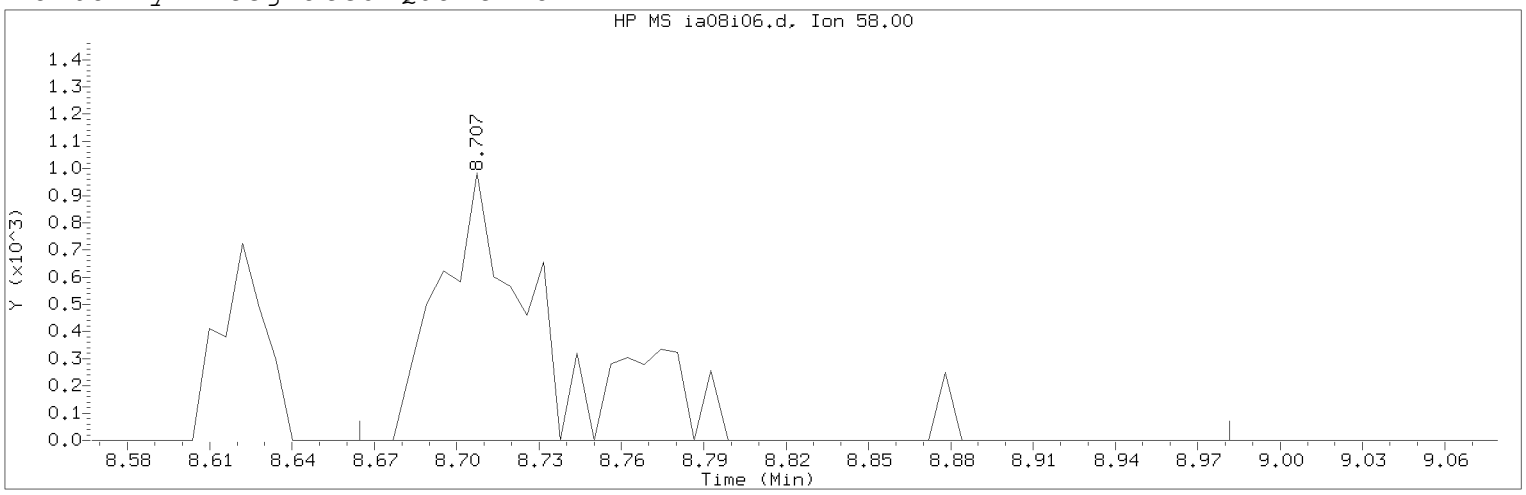
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1156
Retention Time (minutes): 8.634
Quant Ion : 88.00
Area : 7247
On-column Amount (ng) : 32.1041
Integration start scan : 1143 Integration stop scan: 1206
Y at integration start : 0 Y at integration end: 0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

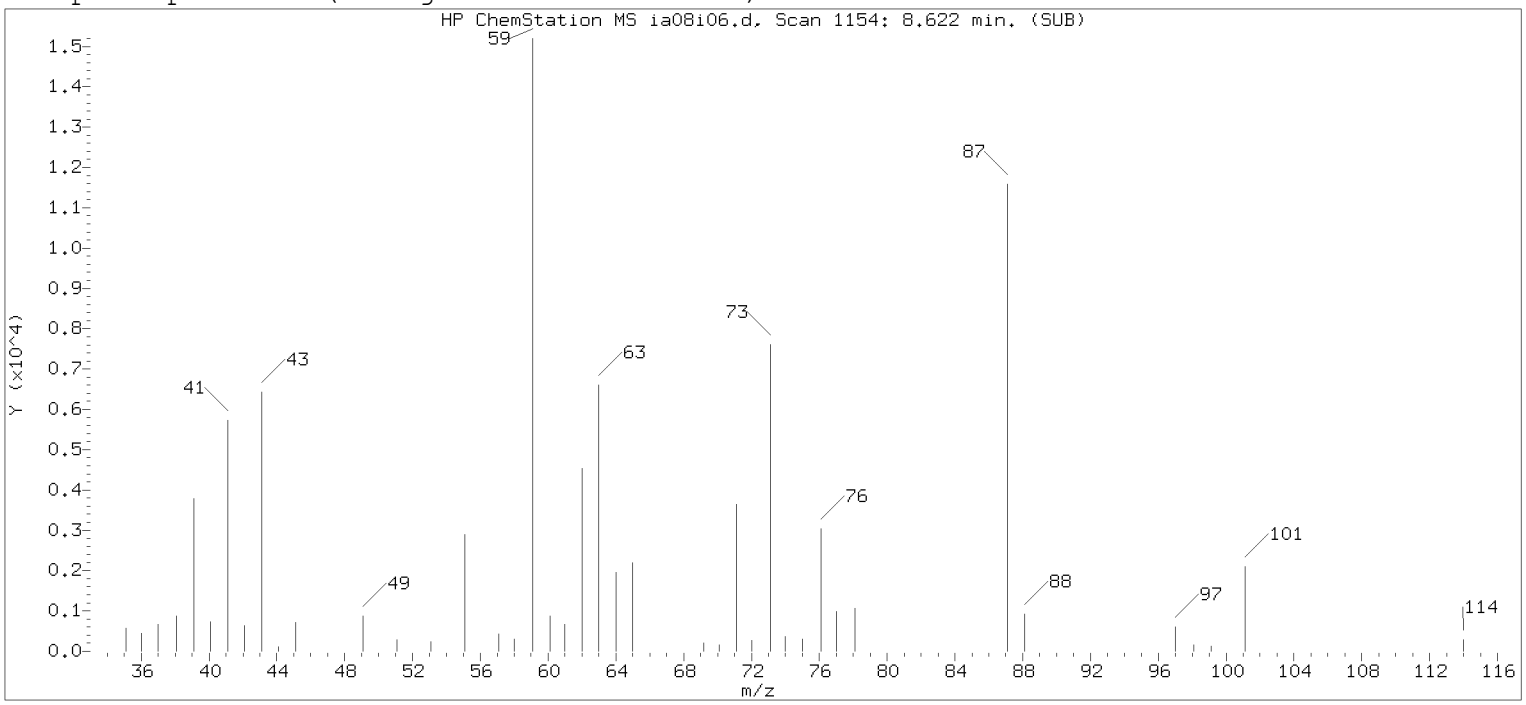
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1168
Retention Time (minutes): 8.707
Quant Ion : 58.00
Area (flag) : 2770M
On-Column Amount (ng) : 20.1794
Integration start scan : 1160 Integration stop scan: 1212
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

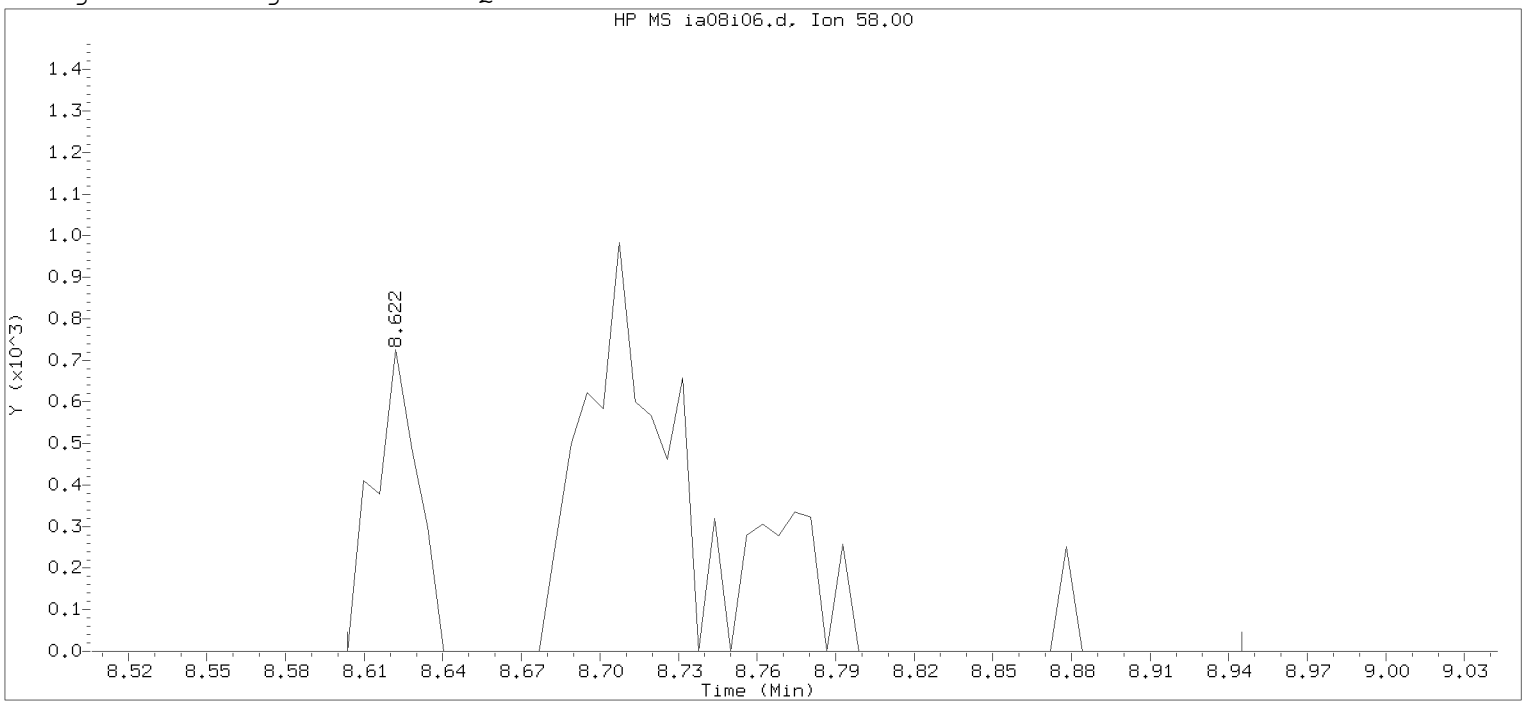
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

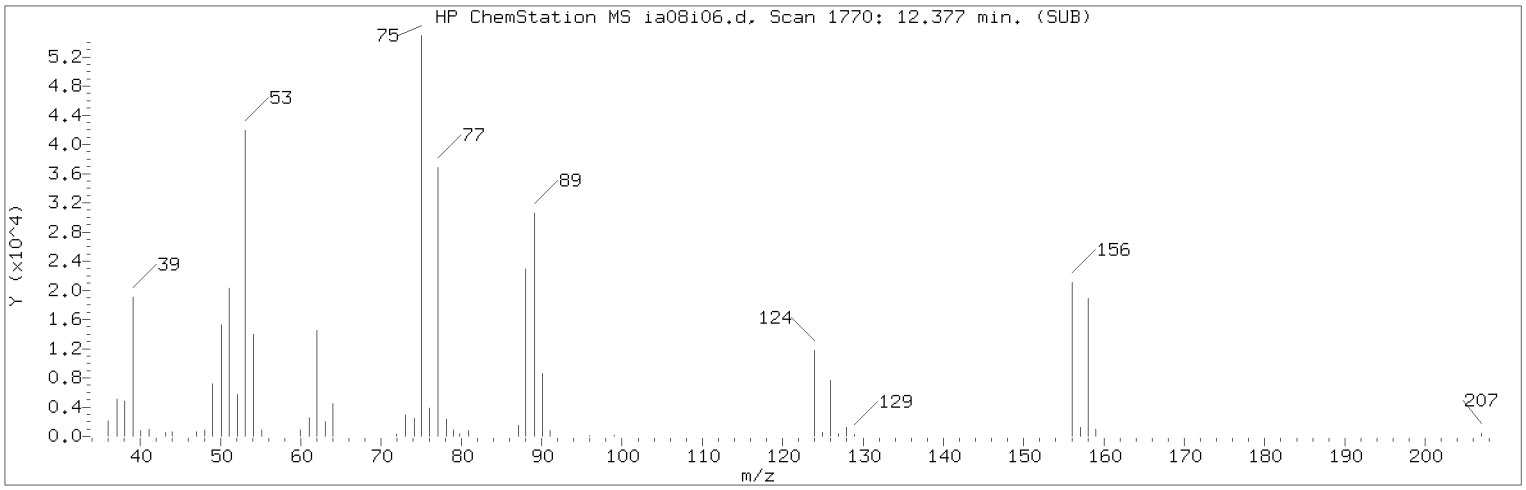
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

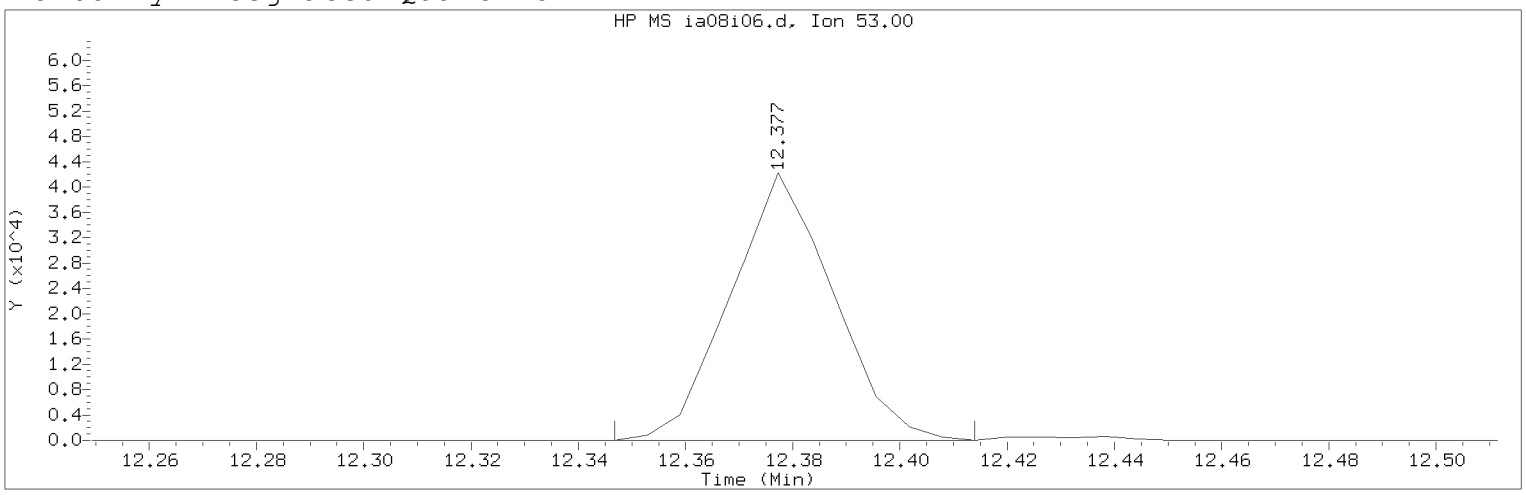
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1154
Retention Time (minutes): 8.622
Quant Ion : 58.00
Area : 3612
On-column Amount (ng) : 21.1399
Integration start scan : 1150 Integration stop scan: 1206
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

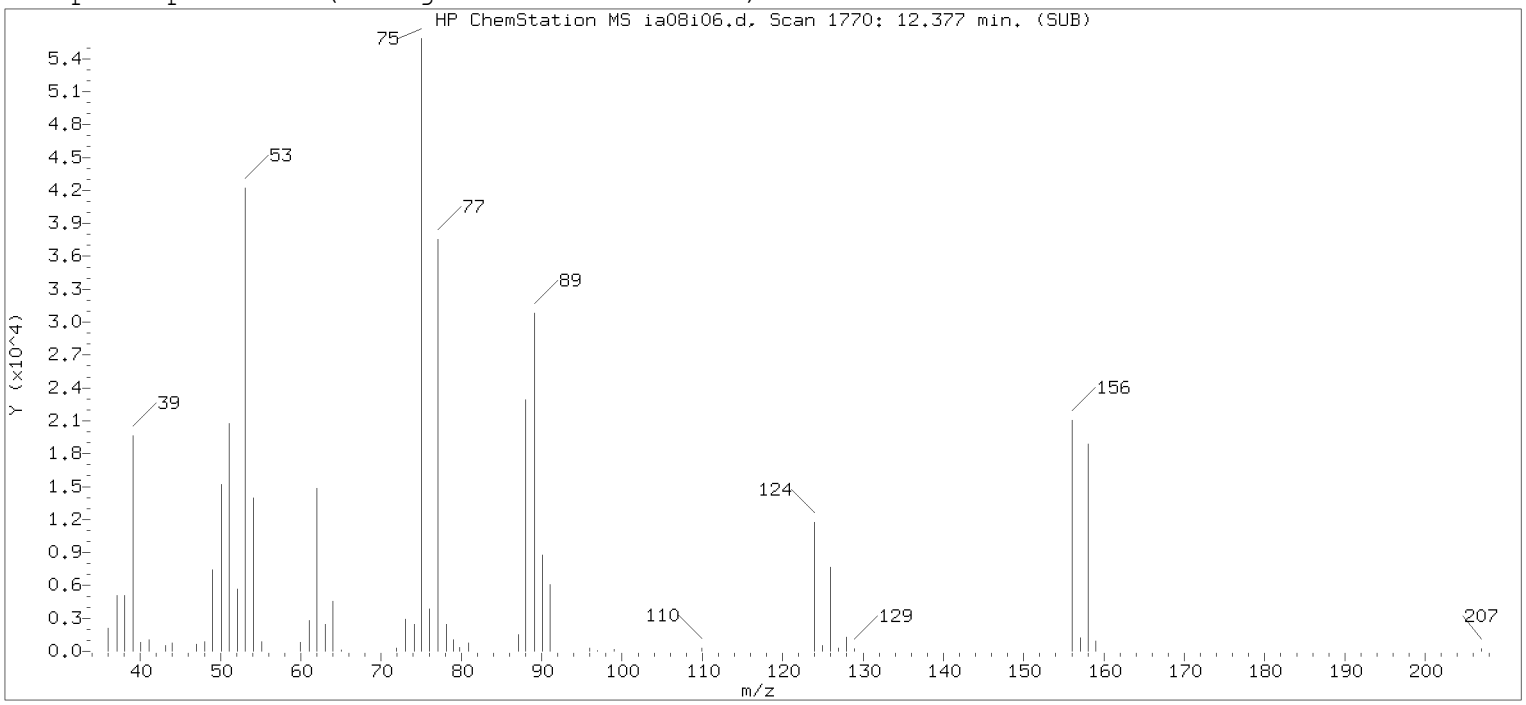
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1770
Retention Time (minutes): 12.377
Quant Ion : 53.00
Area (flag) : 55889M
On-Column Amount (ng) : 4.4187
Integration start scan : 1764 Integration stop scan: 1775
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

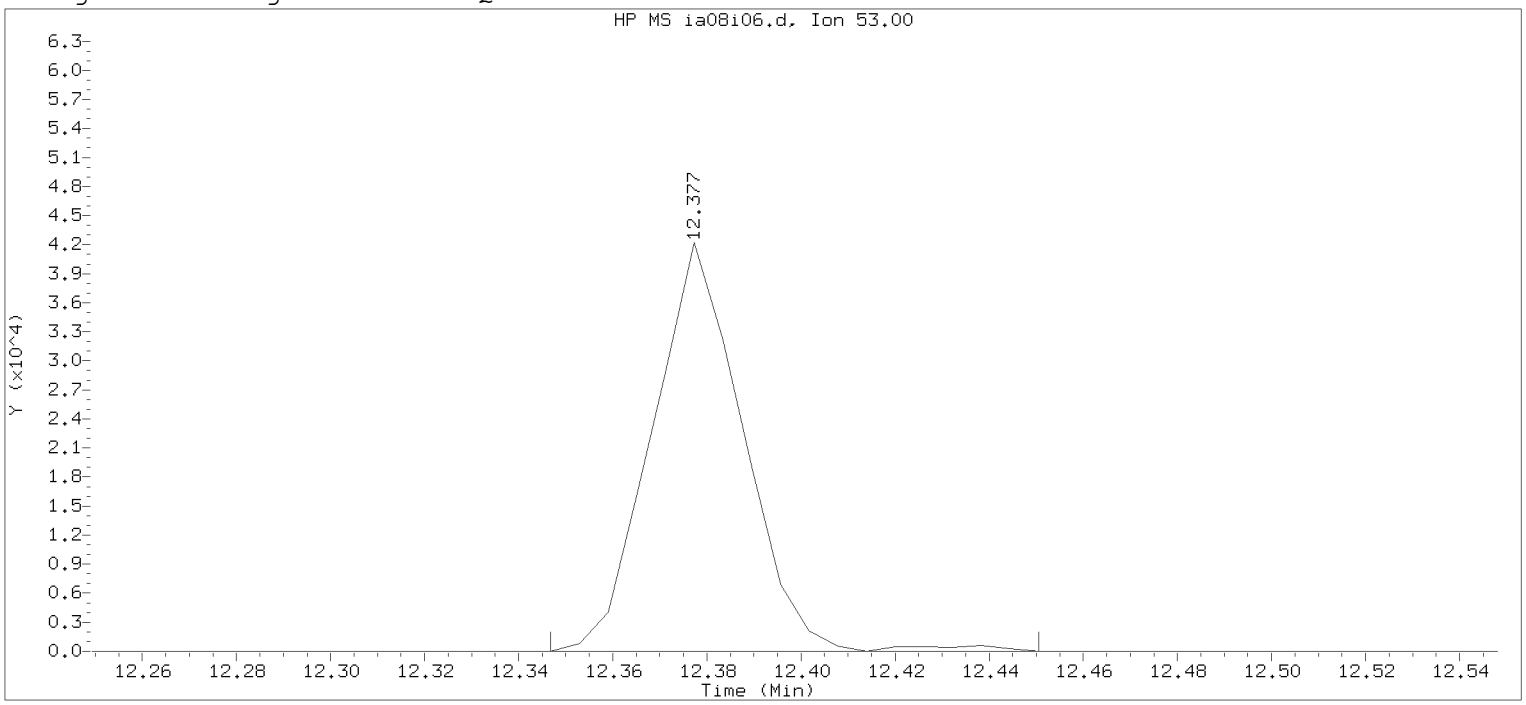
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

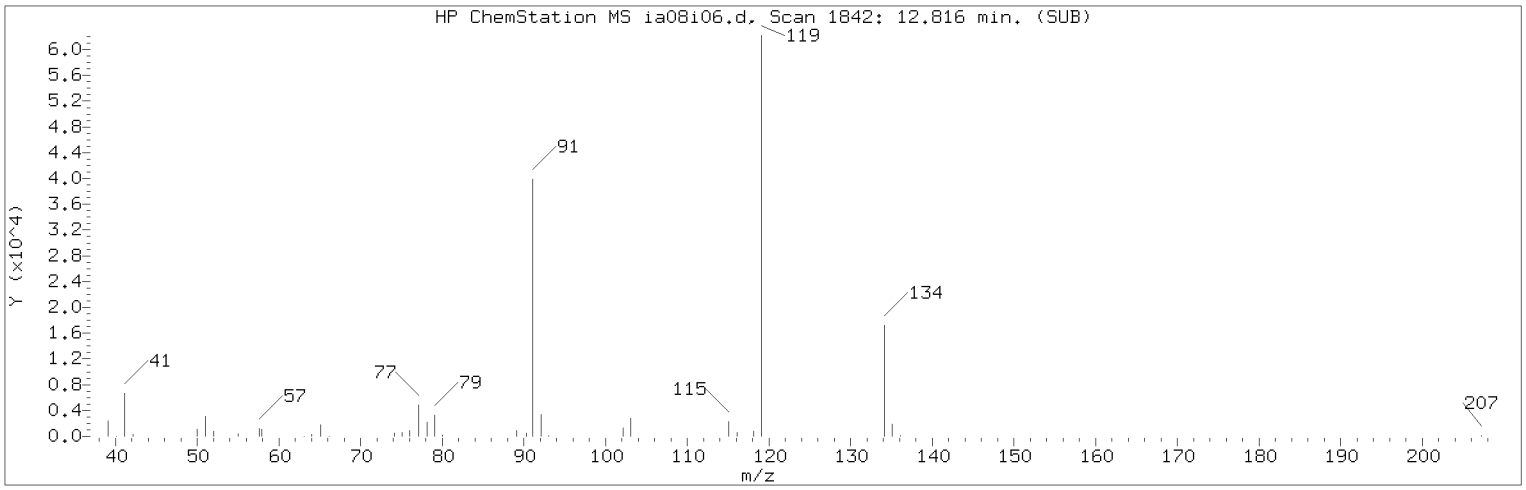
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

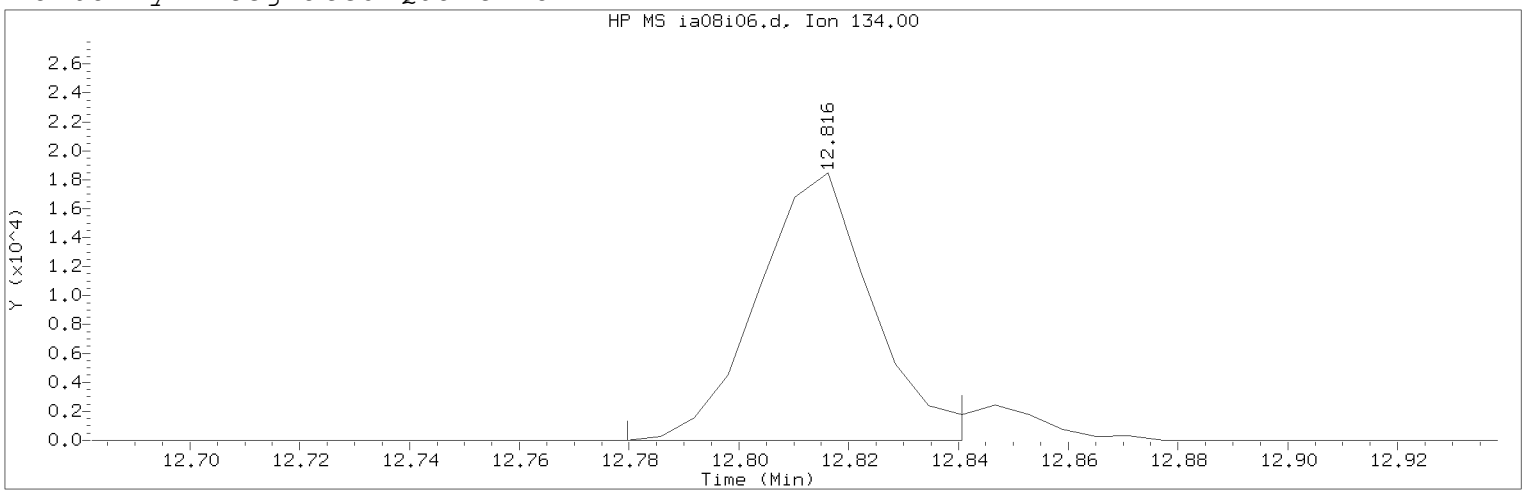
Compound Number : 115
Compound Name : trans-1,4-Dichloro-2-butene
Scan Number : 1770
Retention Time (minutes): 12.377
Quant Ion : 53.00
Area : 56688
On-column Amount (ng) : 4.3112
Integration start scan : 1764 Integration stop scan: 1781
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

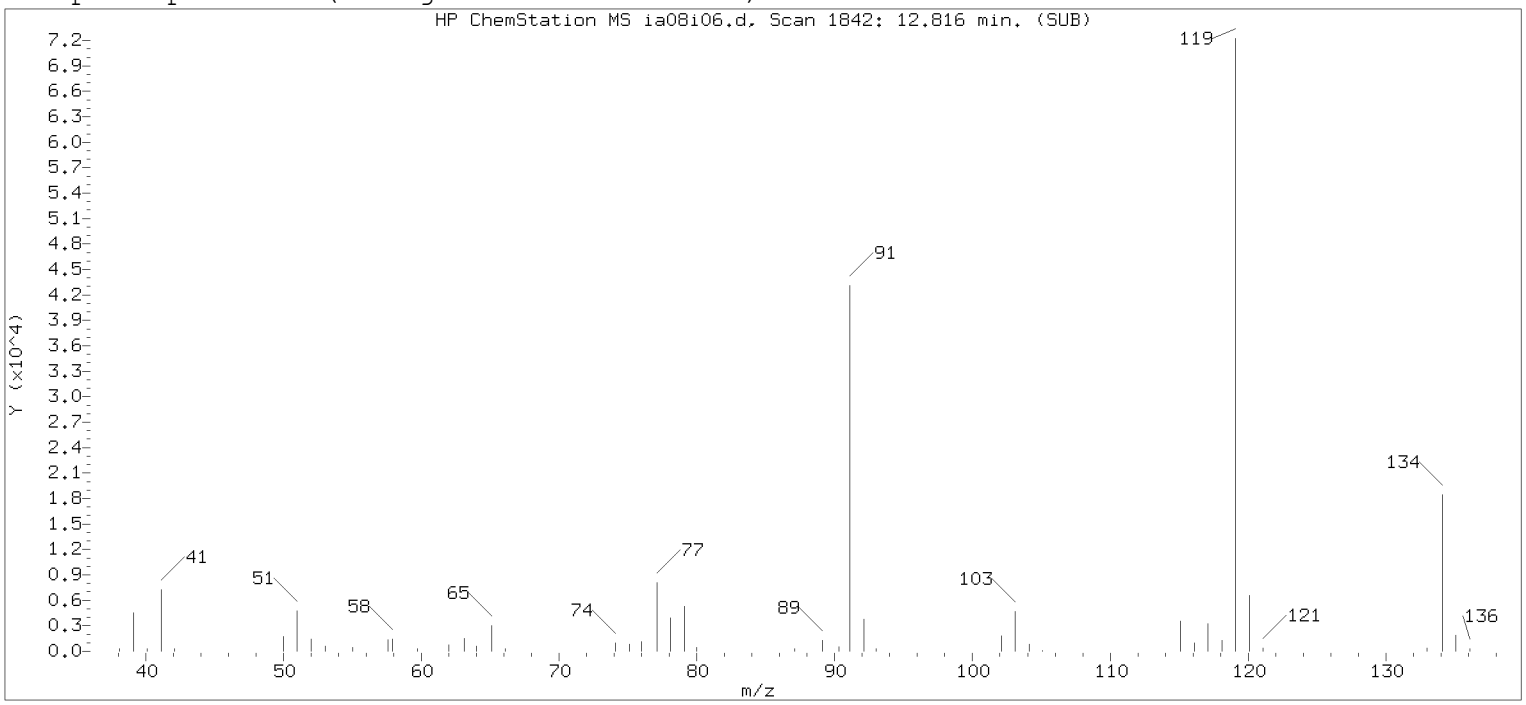
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 26873M
On-Column Amount (ng) : 0.4997
Integration start scan : 1835 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

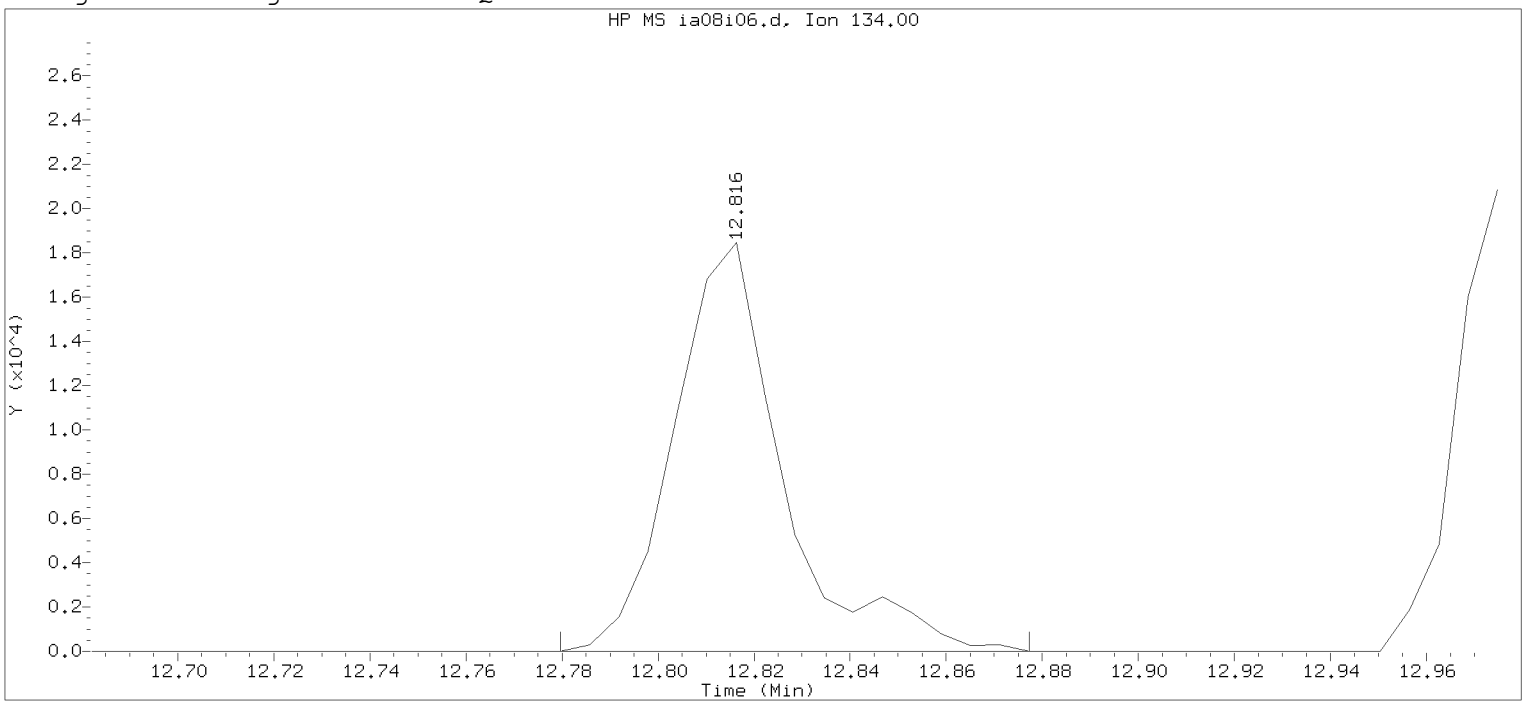
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

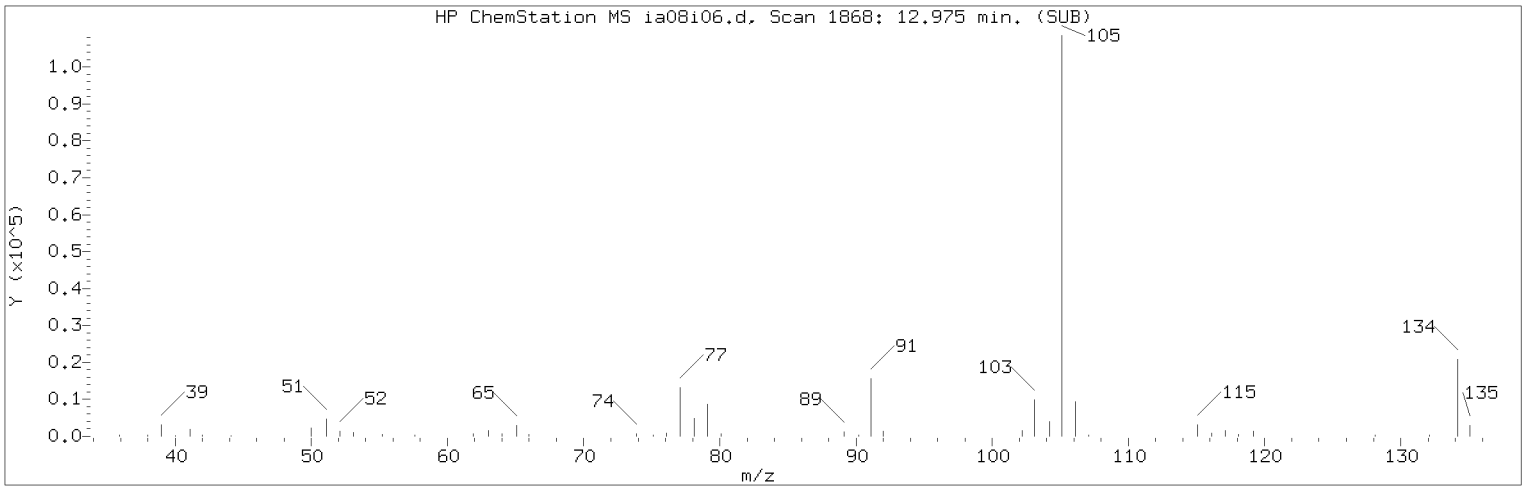
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

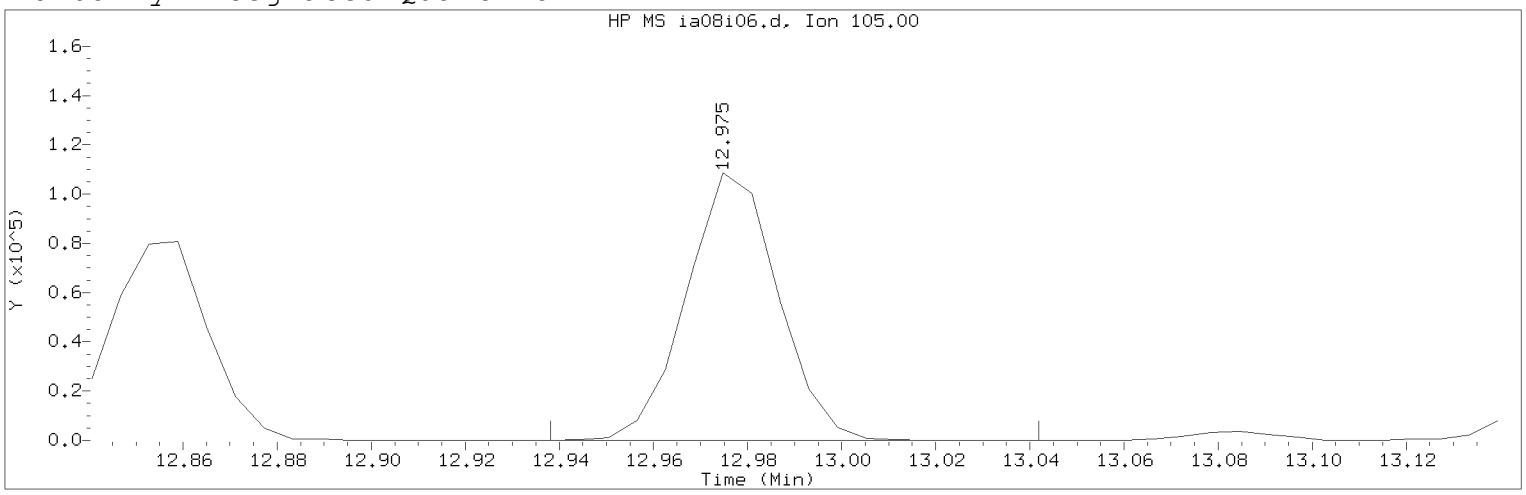
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 28898
On-column Amount (ng) : 0.5038
Integration start scan : 1835 Integration stop scan: 1851
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

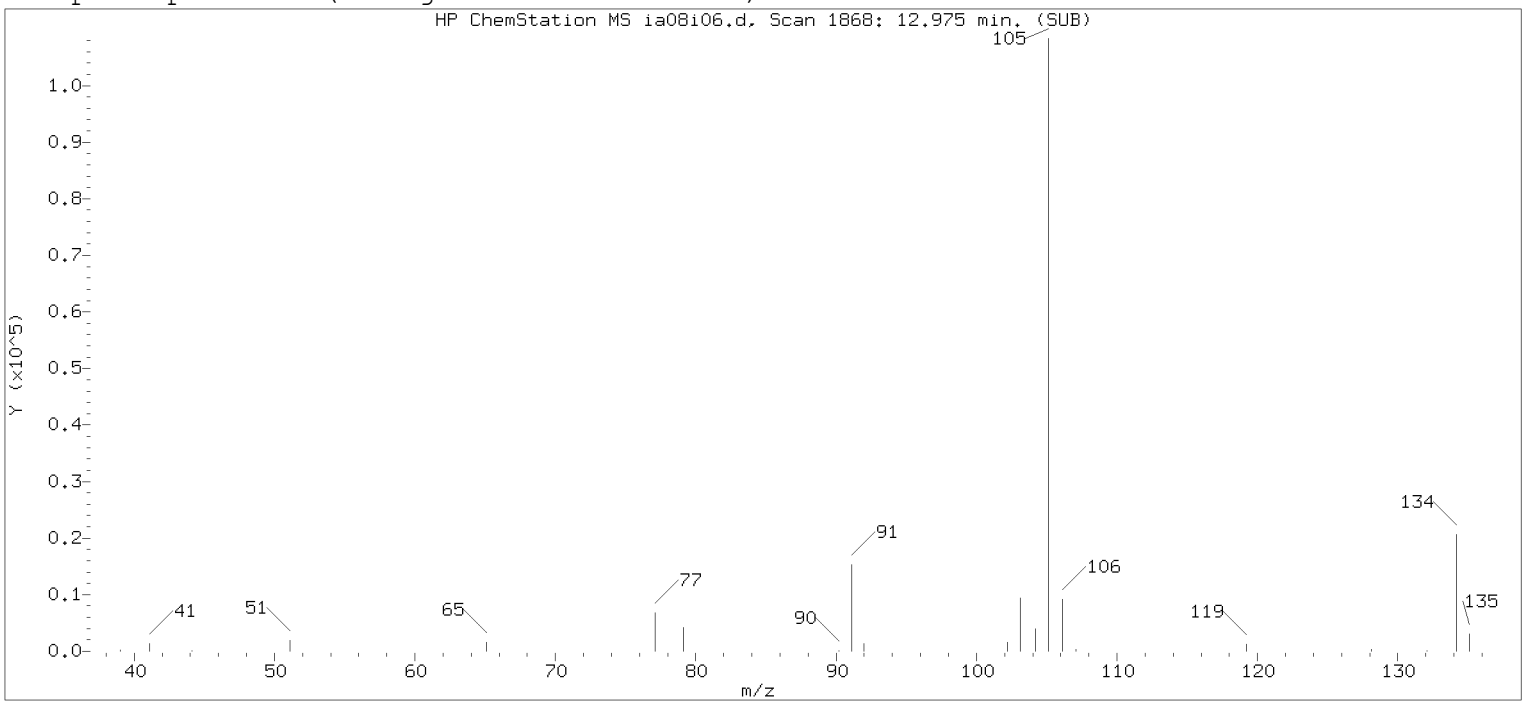
Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1868
Retention Time (minutes): 12.975
Quant Ion : 105.00
Area (flag) : 146808M
On-Column Amount (ng) : 0.4806
Integration start scan : 1861 Integration stop scan: 1878
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

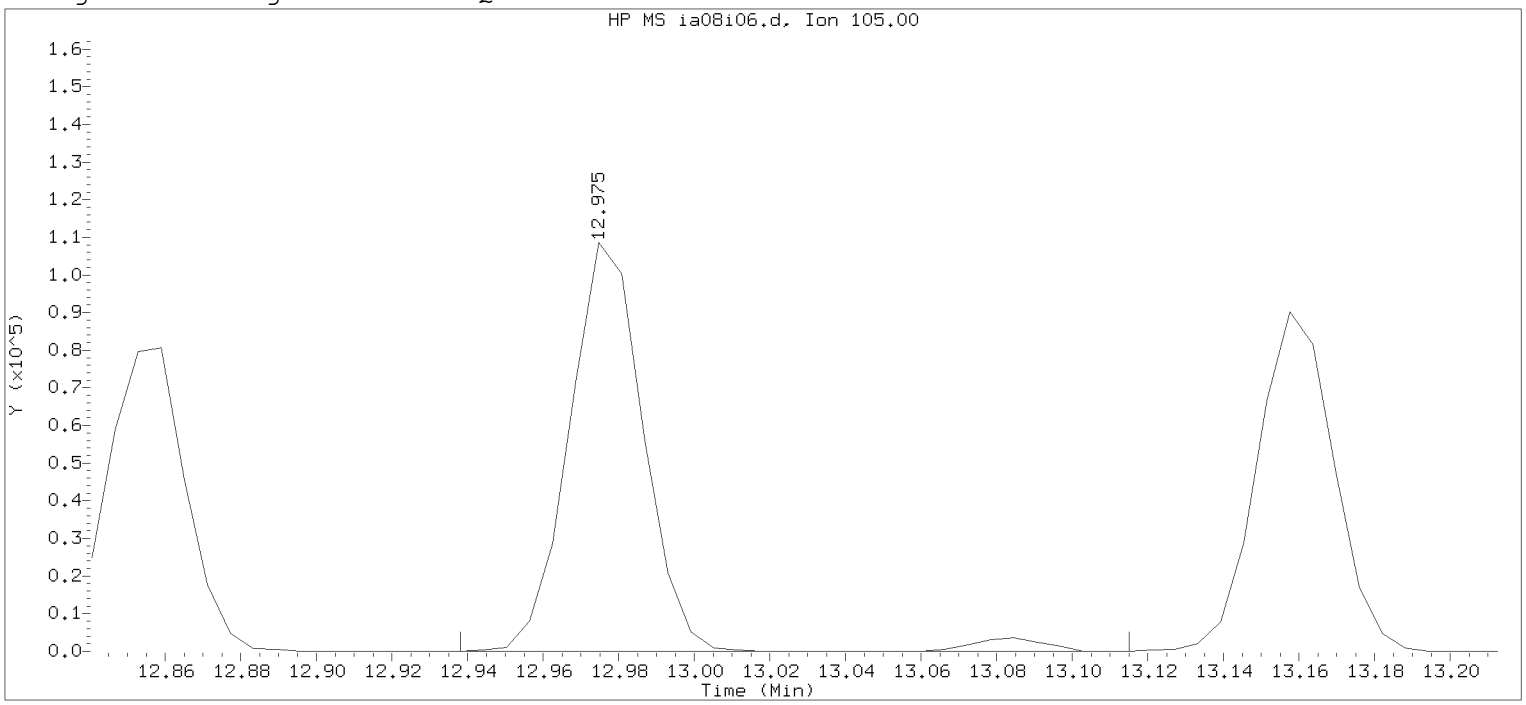
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



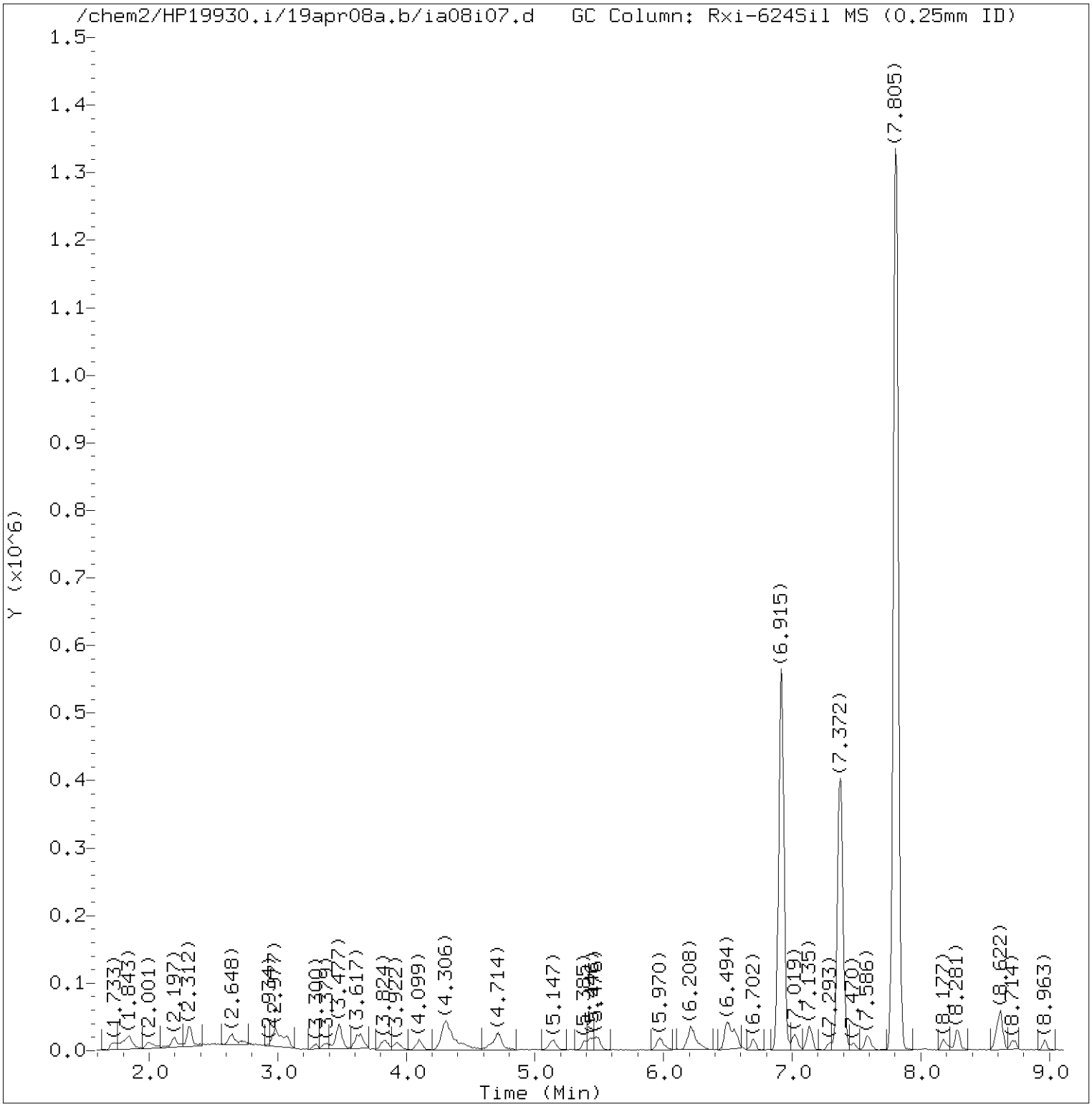
Data File: /chem2/HP19930.i/19apr08a.b/ia08i06.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 17:59 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1868
Retention Time (minutes): 12.975
Quant Ion : 105.00
Area : 151377
On-column Amount (ng) : 0.4856
Integration start scan : 1861 Integration stop scan: 1890
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

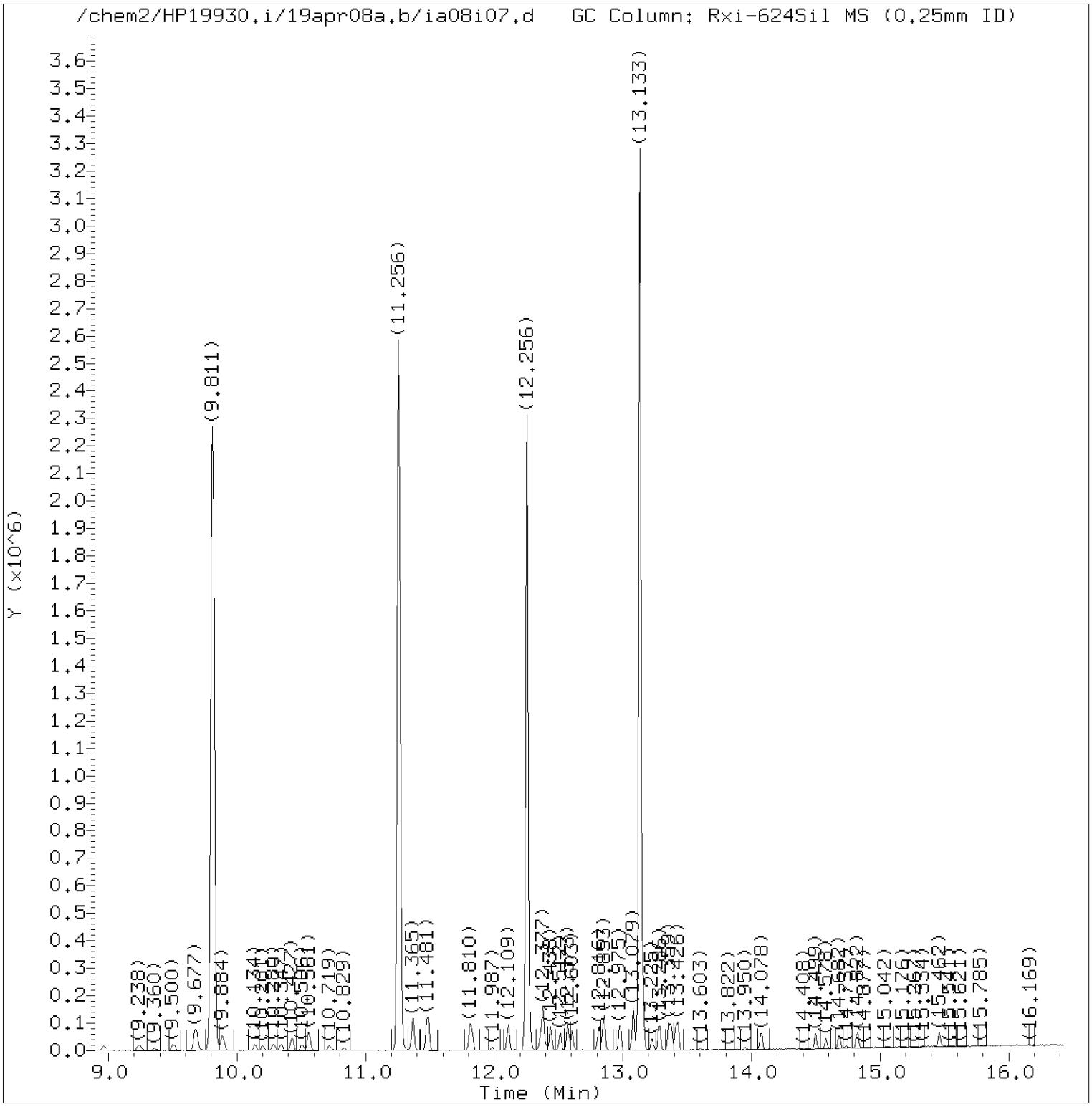
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.995	85	21339	0.199
2) Chloromethane	(2)	2.197	50	17001	0.214
5) Vinyl Chloride	(2)	2.312	62	15939	0.198
6) 1,3-Butadiene	(2)	2.312	39	16802M	0.252
7) Bromomethane	(2)	2.642	94	14746	0.206
8) Chloroethane	(2)	2.733	64	9261	0.198
9) Dichlorofluoromethane	(2)	2.983	67	24805	0.205
10) Trichlorofluoromethane	(2)	3.044	101	27030	0.201
11) Ethyl ether	(2)	3.294	59	6678	0.188
12) Freon 123a	(2)	3.385	67	12698MA	0.209
13) Acrolein	(1)	3.477	56	61784	9.280
15) 1,1-Dichloroethene	(2)	3.611	96	9274	0.198
14) Acetone	(1)	3.641	43	20496	2.230
16) Freon 113	(2)	3.654	101	11102	0.197
17) Methyl Iodide	(2)	3.824	142	19304	0.192
18) Carbon Disulfide	(2)	3.922	76	30585	0.223
21) Methyl Acetate	(1)	4.092	43	4600	0.189
22) Allyl Chloride	(2)	4.099	41	14315	0.199
23) Methylene Chloride	(2)	4.300	84	9441	0.197
26)*t-Butyl Alcohol-d10	(1)	4.306	65	156860	50.000
28) t-Butyl Alcohol	(1)	4.464	59	14761M	3.875
29) Acrylonitrile	(1)	4.653	53	10225	0.930
31) trans-1,2-Dichloroethene	(2)	4.708	96	11739	0.224
30) Methyl Tertiary Butyl Ether	(2)	4.714	73	23776	0.194
32) n-Hexane	(2)	5.153	57	14117	0.192
33) 1,1-Dichloroethane	(2)	5.385	63	16626	0.195
34) di-Isopropyl Ether	(2)	5.434	45	27208	0.191
35) 2-Chloro-1,3-Butadiene	(2)	5.495	53	14795	0.194
37) Ethyl t-butyl ether	(2)	5.970	59	29200	0.206
40) 1,2-Dichloroethene (Total)	(2)		96	23851	0.432
38) 2-Butanone	(1)	6.190	43	28169	1.887
39) cis-1,2-Dichloroethene	(2)	6.220	96	12112	0.208
41) 2,2-Dichloropropane	(2)	6.232	77	16286	0.206
42) Propionitrile	(1)	6.281	54	14610	3.645
45) Methacrylonitrile	(1)	6.501	67	27398	1.857
47) Bromochloromethane	(2)	6.549	128	5614	0.196
48) Tetrahydrofuran	(1)	6.574	71	8739	1.872
49) Chloroform	(2)	6.702	83	18944	0.204

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	475626	10.025
50)$Dibromofluoromethane	(2)	6.915	111	482350	9.946
51) 1,1,1-Trichloroethane	(2)	6.927	97	17575	0.196
52) Cyclohexane	(2)	7.019	56	17493	0.198
52) Cyclohexane	(2)	7.019	84	15871M	0.191
52) Cyclohexane	(2)	7.025	69	5624M	0.194
54) Carbon Tetrachloride	(2)	7.128	117	16905	0.200
55) 1,1-Dichloropropene	(2)	7.141	75	13186	0.190
56) Isobutyl Alcohol	(1)	7.293	41	12558	10.674
57)$1,2-Dichloroethane-d4	(2)	7.372	102	91328	9.988
57)$1,2-Dichloroethane-d4	(2)	7.372	65	412508	10.066
57)$1,2-Dichloroethane-d4	(2)	7.366	104	57923	10.034
58) Benzene	(2)	7.403	78	39990	0.196
59) 1,2-Dichloroethane	(2)	7.470	62	12189	0.223
59) 1,2-Dichloroethane	(2)	7.476	98	868	0.170
60) t-Amyl methyl ether	(2)	7.586	73	27831	0.204
63)*Fluorobenzene	(2)	7.805	96	1838389	10.000
62) n-Heptane	(2)	7.811	43	14777	0.195
65) n-Butanol	(1)	8.177	56	17309	17.631
67) Trichloroethene	(2)	8.281	95	11368	0.199
69) Methylcyclohexane	(2)	8.592	83	15203	0.149
70) 1,2-Dichloropropane	(2)	8.622	63	9098	0.193
71) Methyl Methacrylate	(1)	8.701	69	4944	0.175
73) Dibromomethane	(2)	8.732	93	5328	0.201
72) 1,4-Dioxane	(1)	8.732	88	1352M	5.601
72) 1,4-Dioxane	(1)	8.707	58	604	4.199
74) Bromodichloromethane	(2)	8.963	83	12517	0.191
76) 2-Nitropropane	(1)	9.238	41	15843	1.687
80) cis-1,3-Dichloropropene	(2)	9.512	75	14481	0.195
81) 4-Methyl-2-Pentanone	(1)	9.683	43	65123	1.723
82)$Toluene-d8	(3)	9.811	98	1814381	10.149
82)$Toluene-d8	(3)	9.811	100	1161037	10.126
83) Toluene	(3)	9.890	92	26485	0.197
84) trans-1,3-Dichloropropene	(3)	10.140	75	12459M	0.197
85) 1,3-Dichloropropene (total)	(3)		75	26940	0.391
86) Ethyl Methacrylate	(3)	10.201	69	9800	0.183
88) 1,1,2-Trichloroethane	(3)	10.347	97	7575	0.204
89) Tetrachloroethene	(3)	10.427	166	14182	0.199

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	11930	0.200
91) 2-Hexanone	(1)	10.561	43	47121	1.758
93) Dibromochloromethane	(3)	10.719	129	8877	0.176
95) 1,2-Dibromoethane	(3)	10.829	107	7468	0.197
97)*Chlorobenzene-d5	(3)	11.256	117	1457542	10.000
96) 1-Chlorohexane	(3)	11.262	91	17157	0.212
98) Chlorobenzene	(3)	11.286	112	31463	0.204
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	10695	0.184
100) Ethylbenzene	(3)	11.372	91	53108	0.197
101) m+p-Xylene	(3)	11.481	106	41888	0.390
105) Xylene (Total)	(3)		106	61193	0.576
104) o-Xylene	(3)	11.810	106	19305	0.186
106) Styrene	(3)	11.823	104	29811	0.181
107) Bromoform	(3)	11.981	173	5421	0.175
108) Isopropylbenzene	(3)	12.109	105	52921	0.189
111)$4-Bromofluorobenzene	(3)	12.256	95	681663	10.175
111)$4-Bromofluorobenzene	(3)	12.256	174	631671	9.850
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	8950	0.194
114) Bromobenzene	(4)	12.371	156	14122	0.201
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	20539	1.550
116) 1,2,3-Trichloropropane	(4)	12.402	110	2655	0.194
117) n-Propylbenzene	(4)	12.438	91	60602	0.193
119) 2-Chlorotoluene	(4)	12.518	126	13191	0.195
121) 1,3,5-Trimethylbenzene	(4)	12.573	105	44313	0.191
122) 4-Chlorotoluene	(4)	12.603	126	13906	0.205
125) tert-Butylbenzene	(4)	12.816	134	9881M	0.187
126) Pentachloroethane	(4)	12.847	167	8084	0.174
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	45152	0.191
128) sec-Butylbenzene	(4)	12.975	105	56352M	0.188
131) 1,3-Dichlorobenzene	(4)	13.079	146	26356	0.196
132) p-Isopropyltoluene	(4)	13.085	119	47175	0.179
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	808996	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	27268	0.203
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	20811	0.188
136) Benzyl Chloride	(4)	13.225	126	3558	0.164
138) n-Butylbenzene	(4)	13.371	92	20732	0.173
139) 1,2-Dichlorobenzene	(4)	13.408	146	24439	0.199
143) 1,2-Dibromo-3-chloropropane	(1)	13.944	155	1415	0.165

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on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

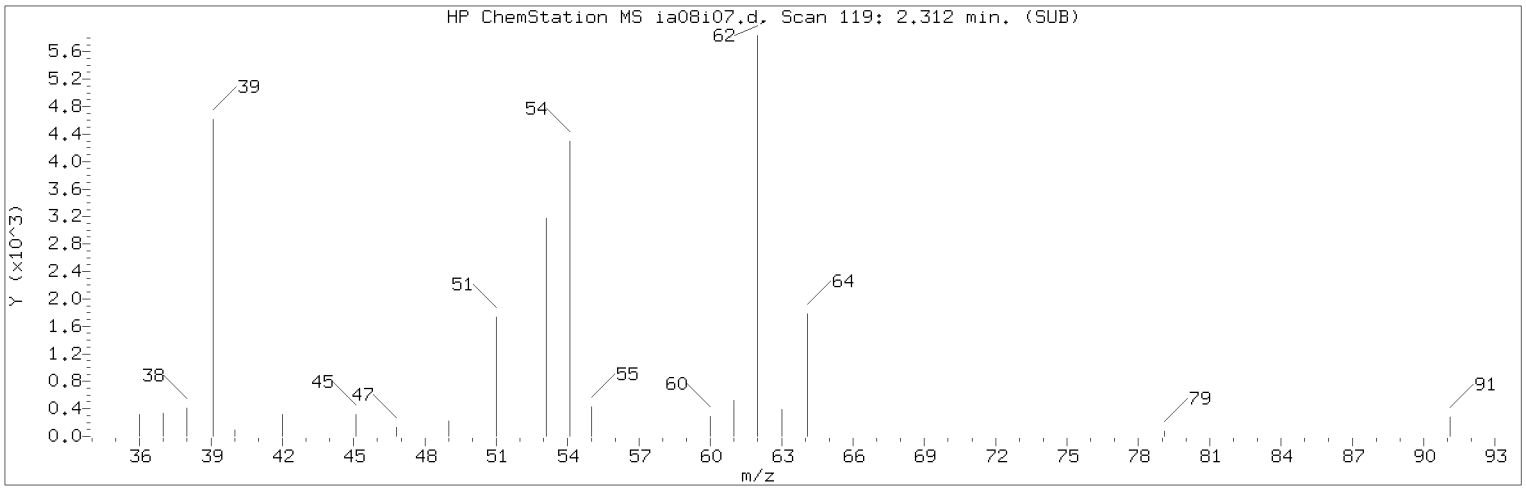
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

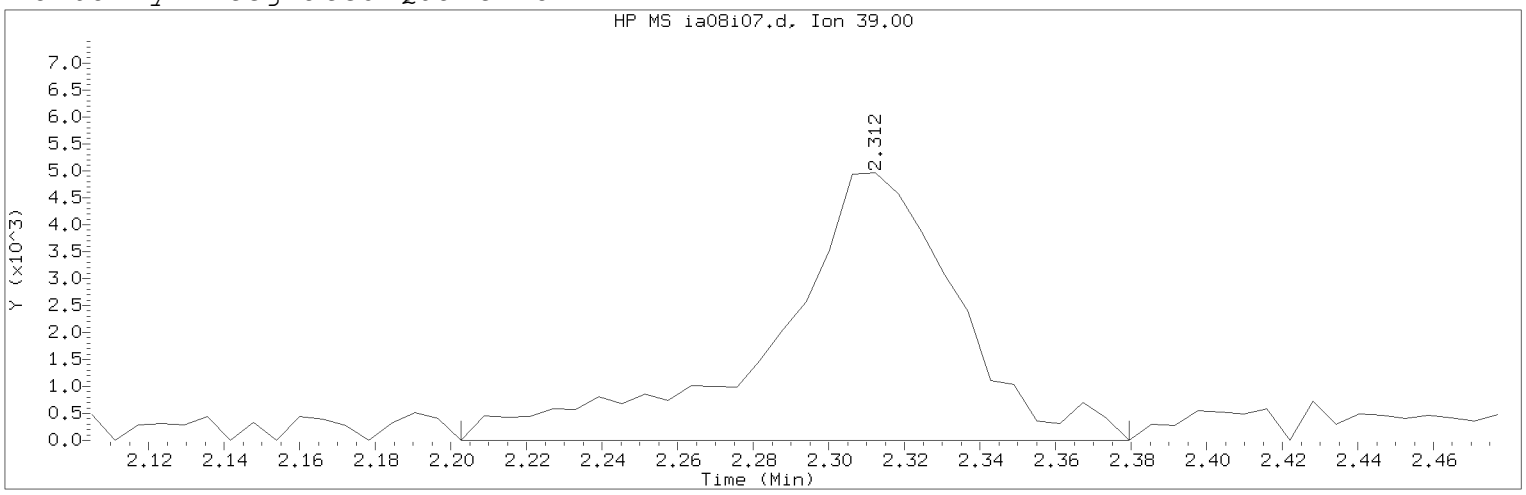
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	18253	0.186
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	16610	0.193
146) Hexachlorobutadiene	(4)	14.578	225	6221	0.177
147) Naphthalene	(4)	14.682	128	35857	0.208
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	14997	0.194

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

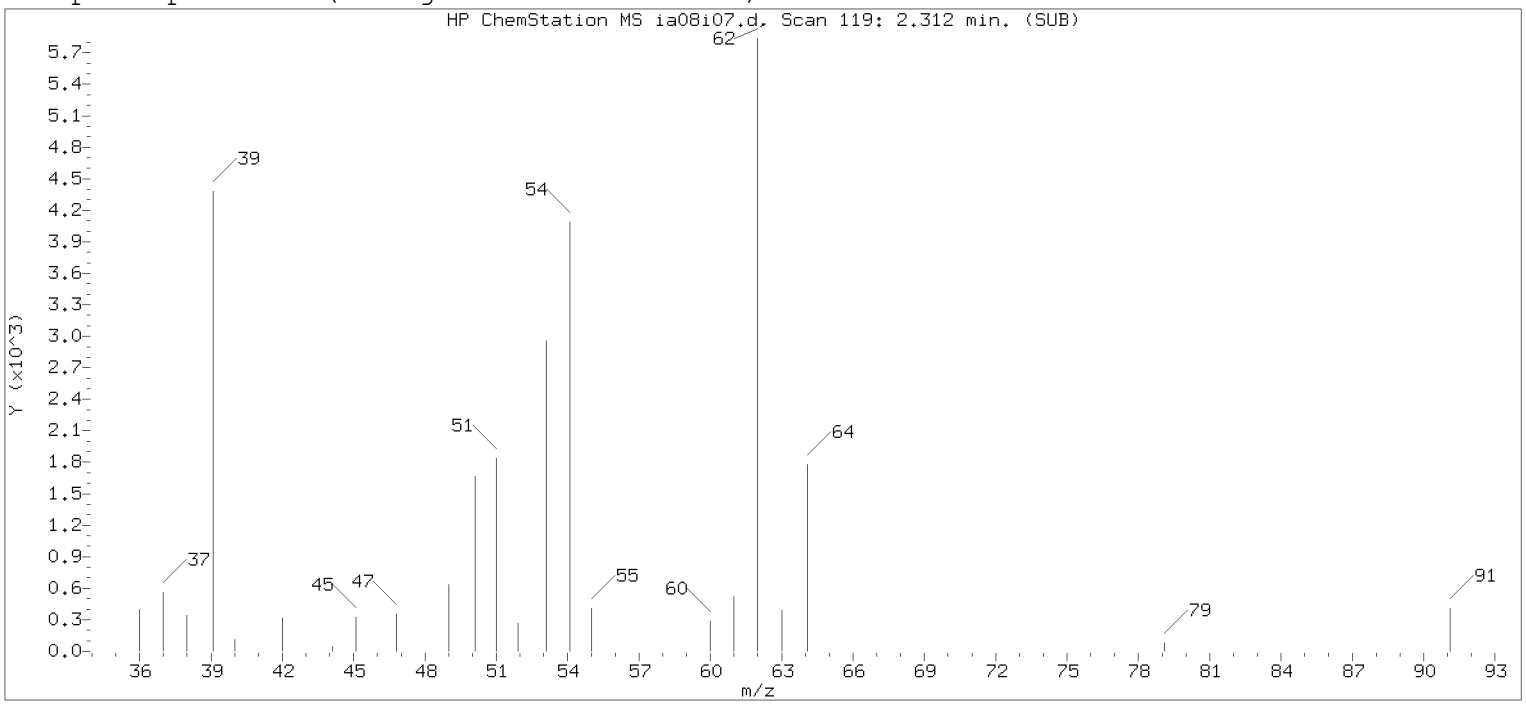
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area (flag) : 16802M
On-Column Amount (ng) : 0.2518
Integration start scan : 100 Integration stop scan: 129
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

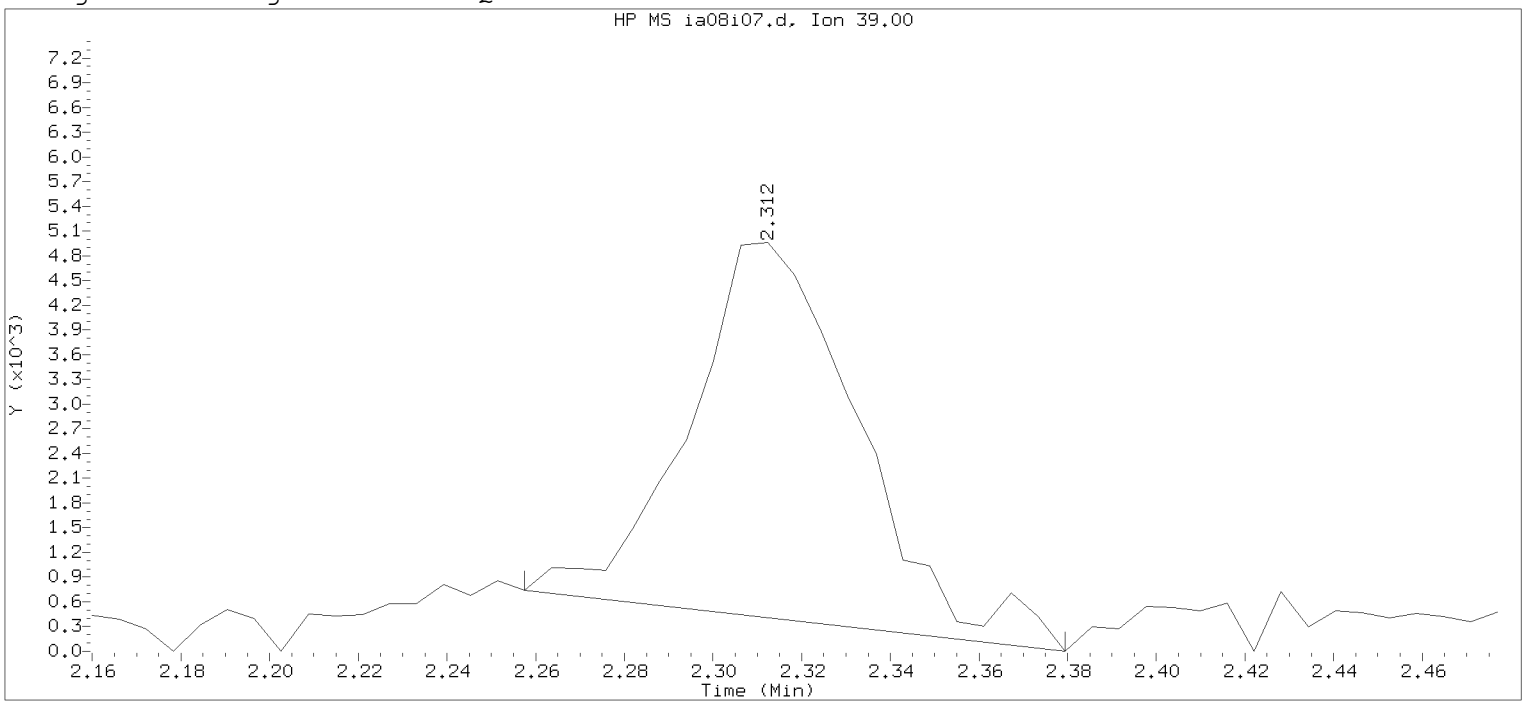
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

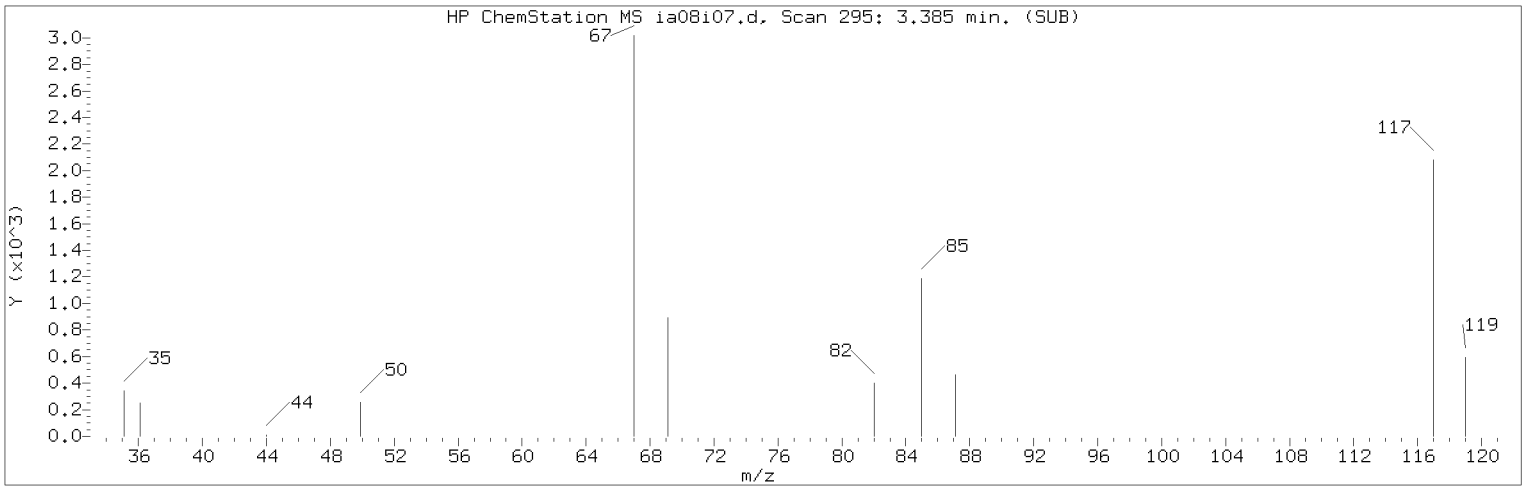
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

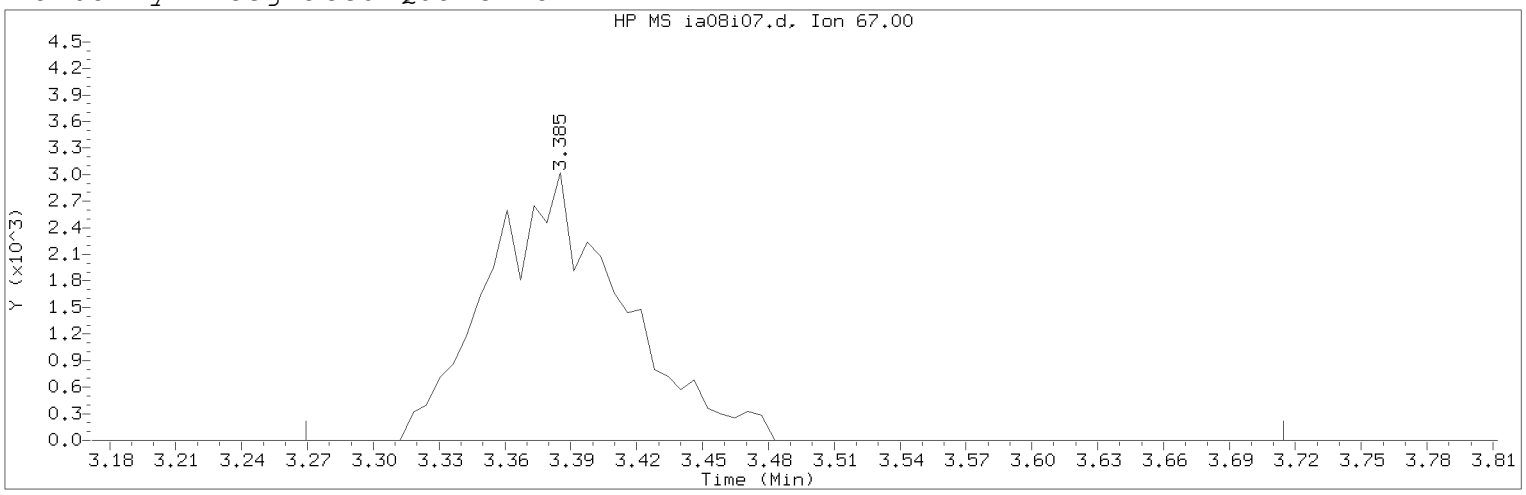
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area : 12197
On-column Amount (ng) : 0.2040
Integration start scan : 109 Integration stop scan: 129
Y at integration start : 740 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

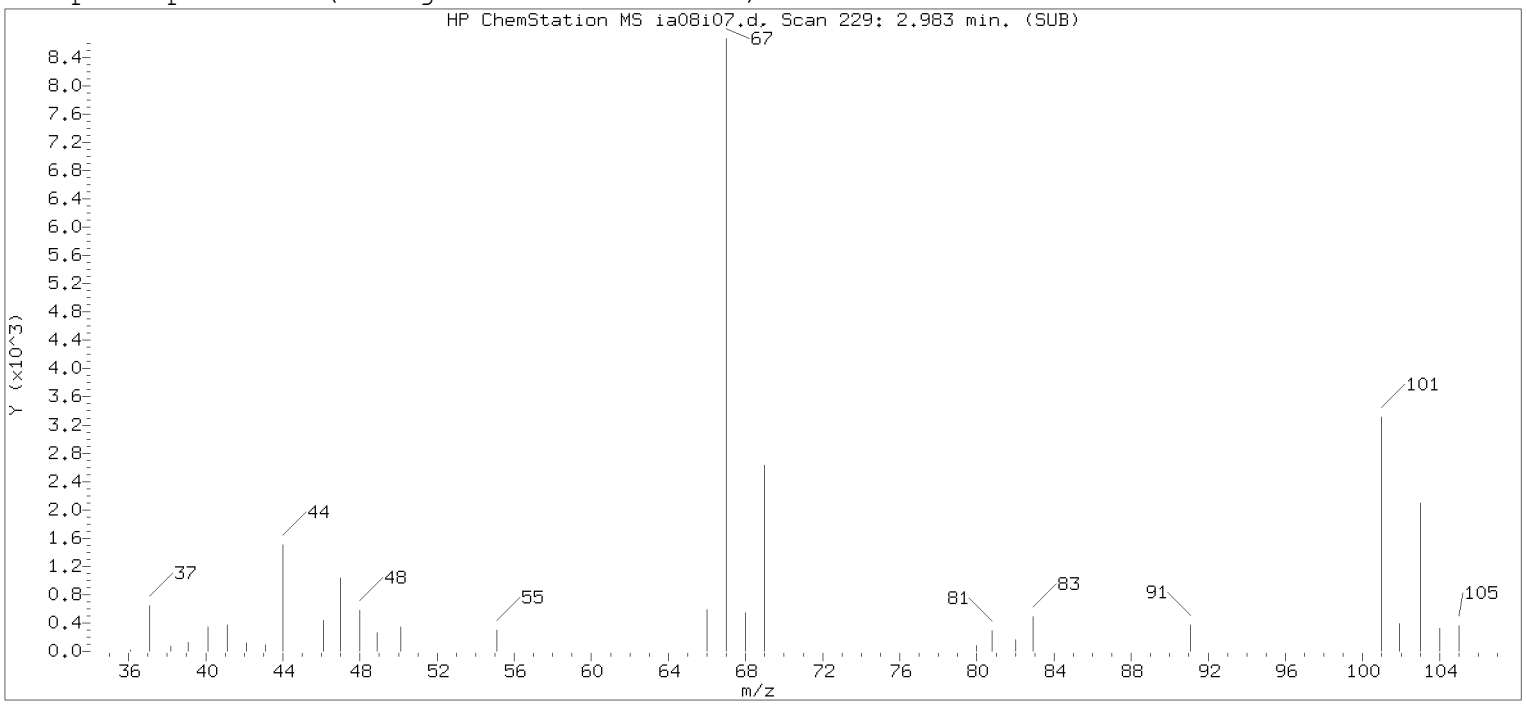
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 295
Retention Time (minutes): 3.385
Quant Ion : 67.00
Area (flag) : 12698MA
On-Column Amount (ng) : 0.2095
Integration start scan : 275 Integration stop scan: 348
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

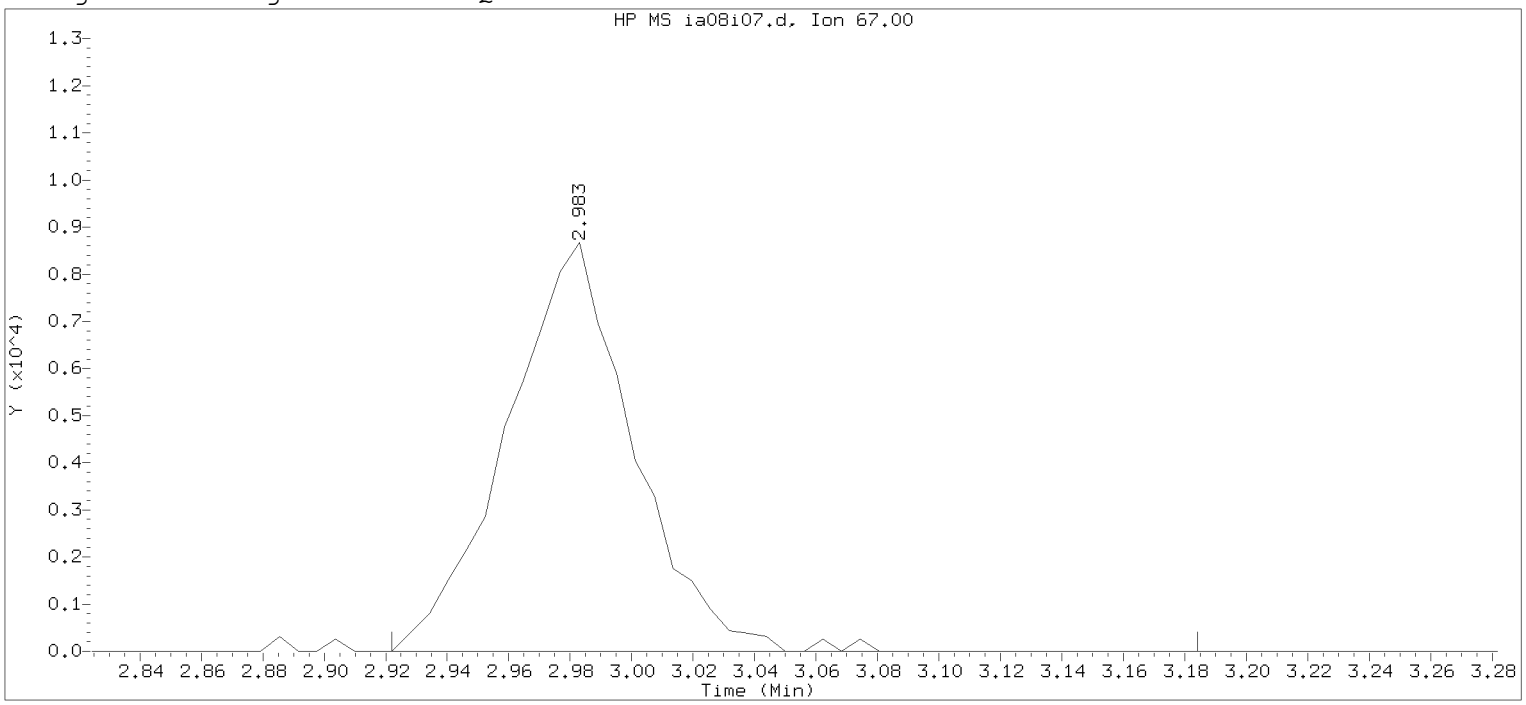
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

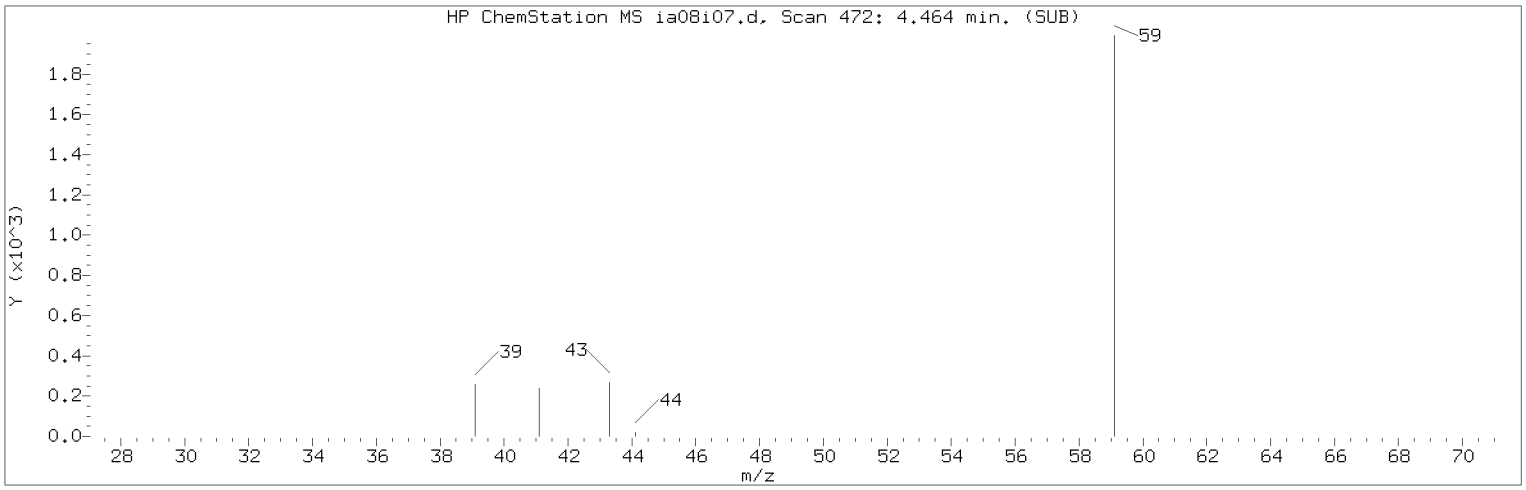
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

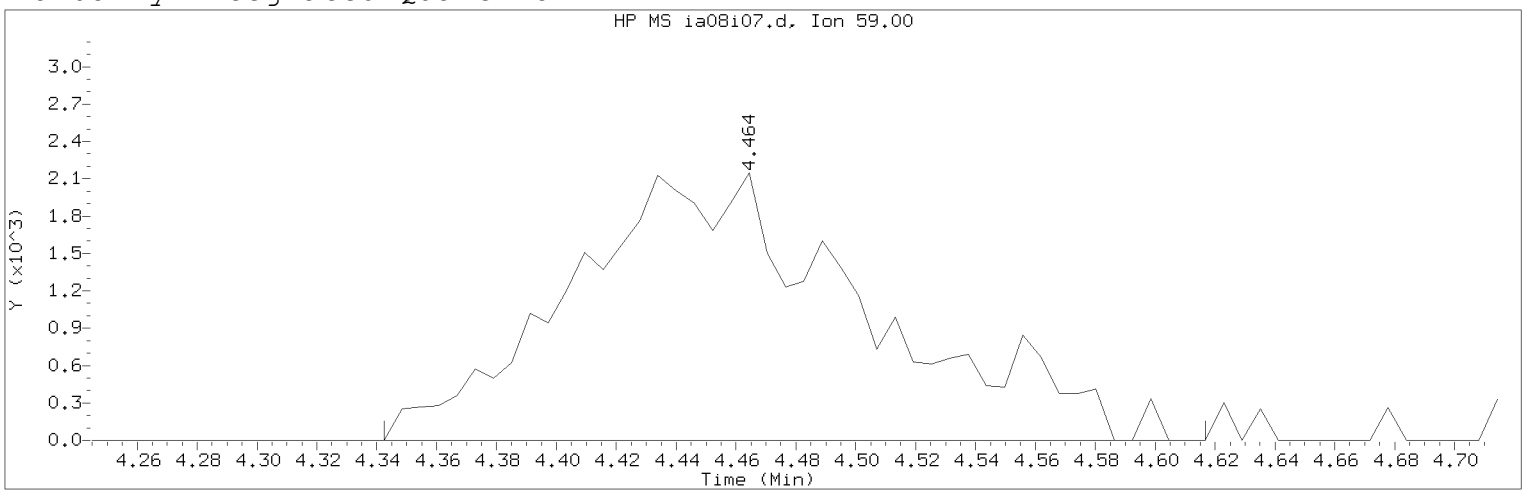
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 229
Retention Time (minutes): 2.983
Quant Ion : 67.00
Area : 24805
On-column Amount (ng) : 0.2049
Integration start scan : 218 Integration stop scan: 261
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

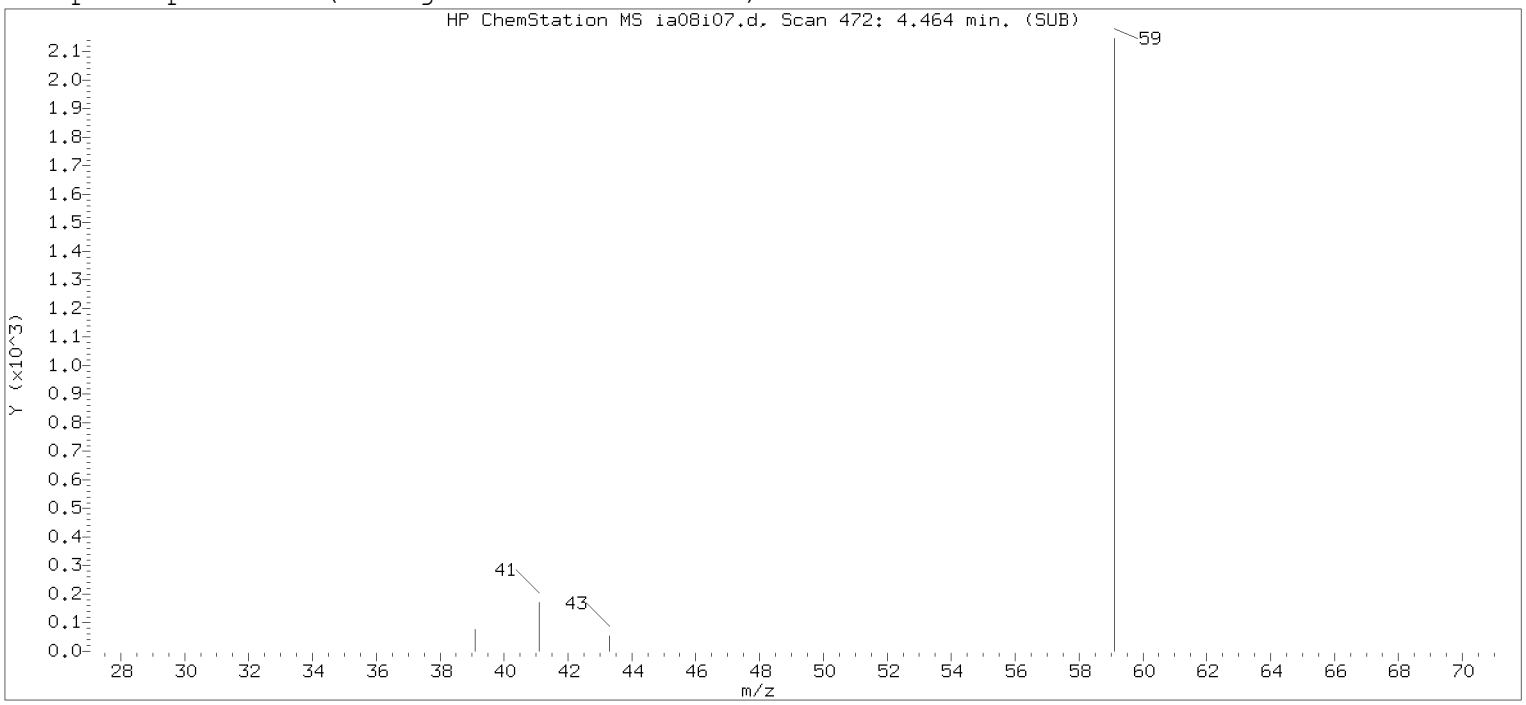
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 472
Retention Time (minutes): 4.464
Quant Ion : 59.00
Area (flag) : 14761M
On-Column Amount (ng) : 3.8750
Integration start scan : 451 Integration stop scan: 496
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

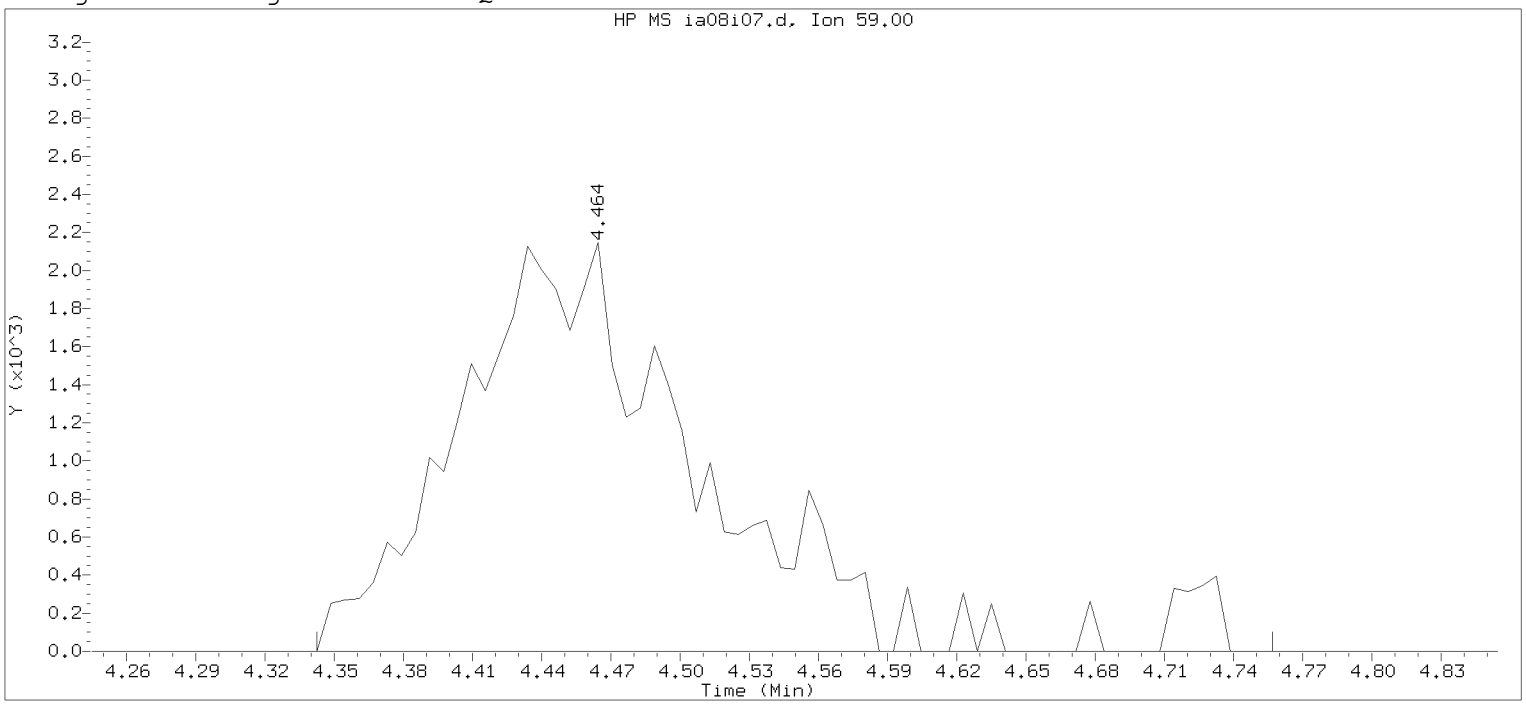
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

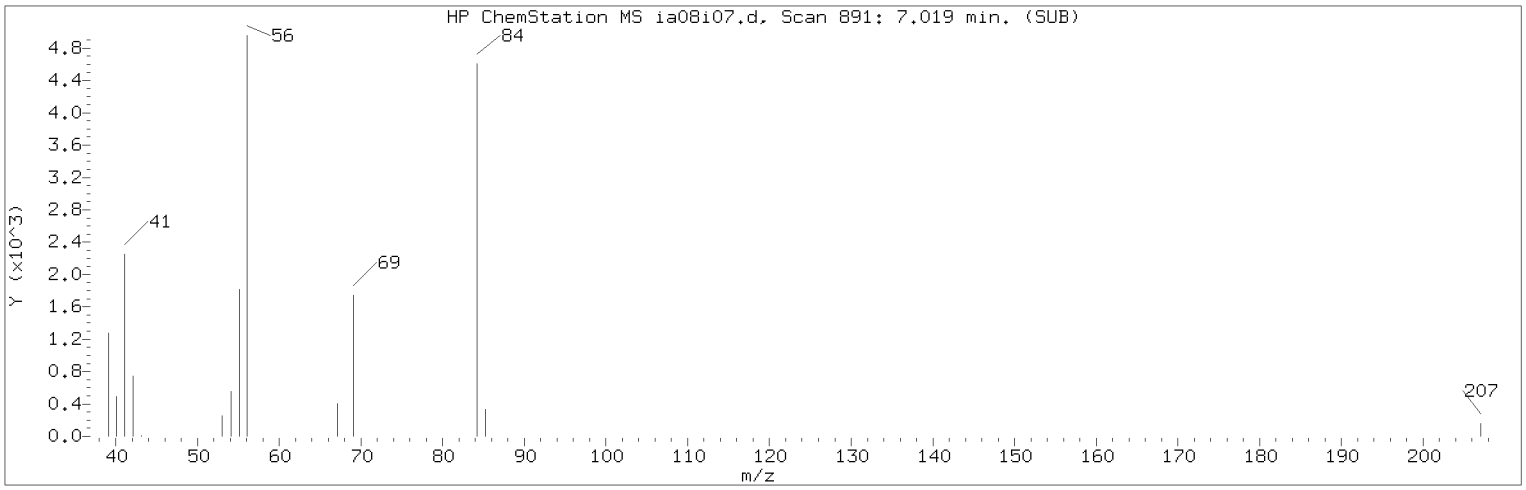
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Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

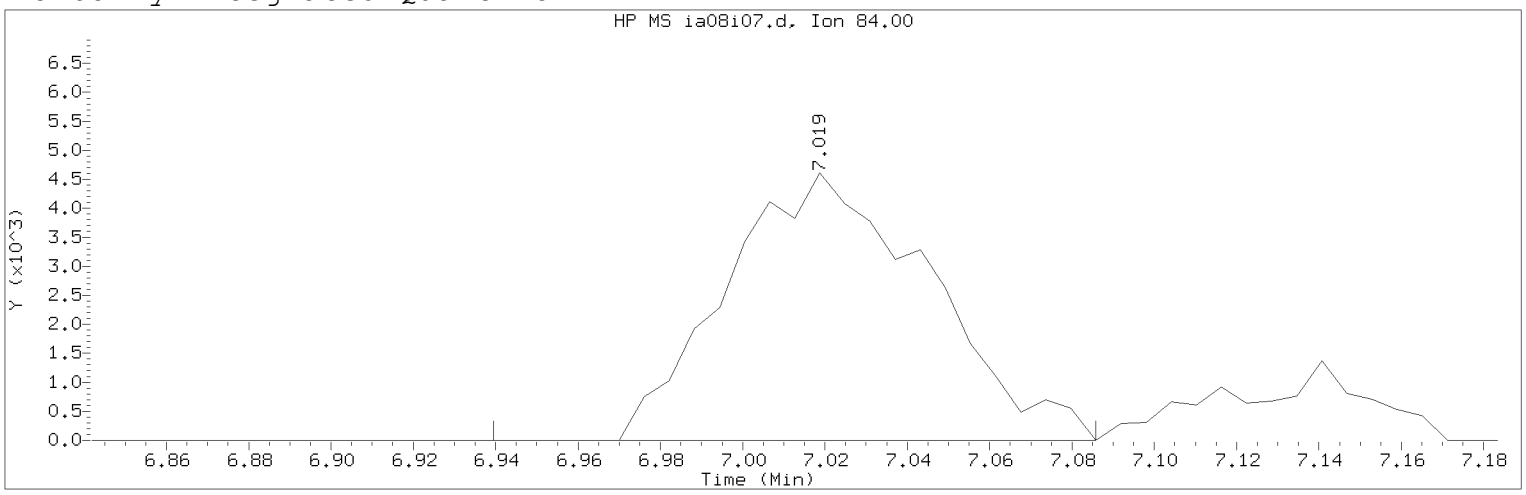
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 472
Retention Time (minutes): 4.464
Quant Ion : 59.00
Area : 15567
On-column Amount (ng) : 4.0136
Integration start scan : 451 Integration stop scan: 519
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

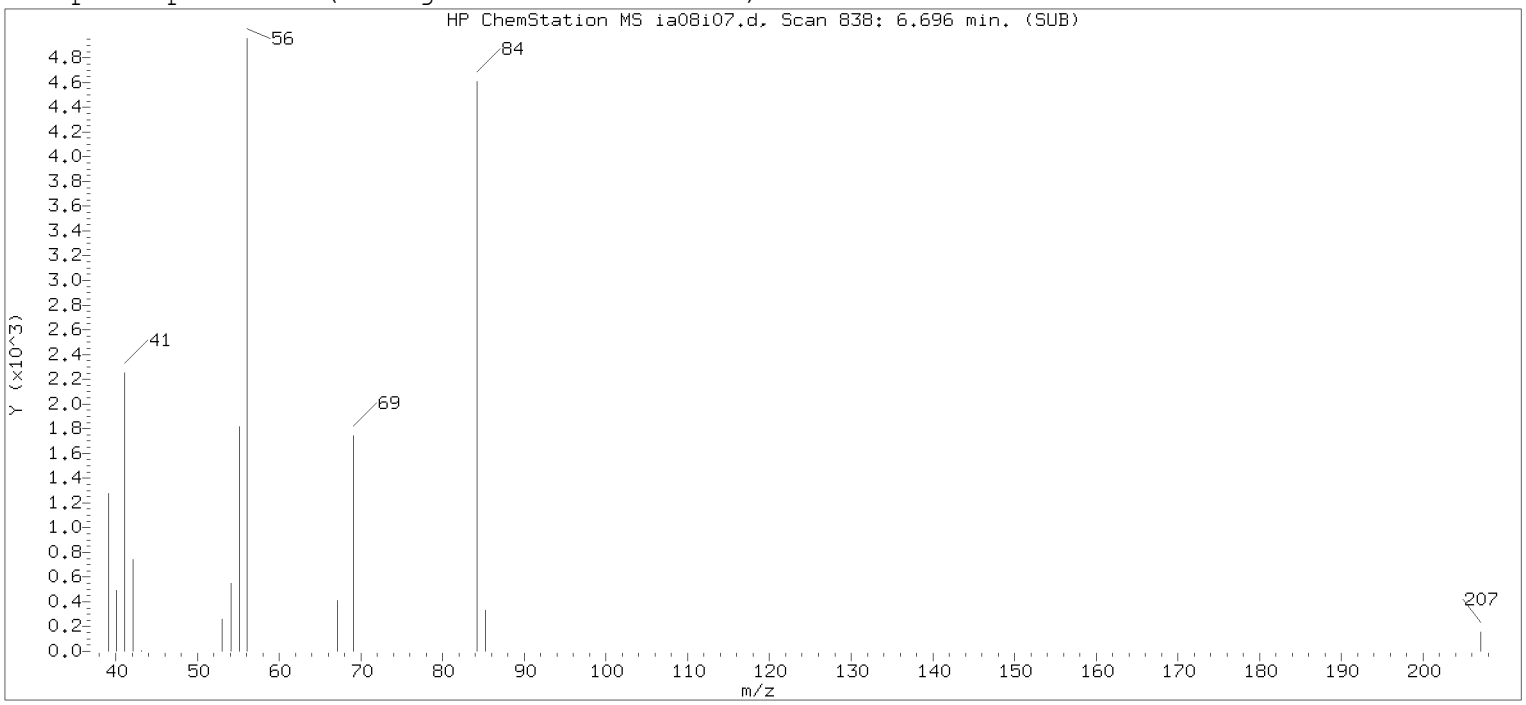
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 84.00
Area (flag) : 15871M
On-Column Amount (ng) : 0.1908
Integration start scan : 877 Integration stop scan: 901
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

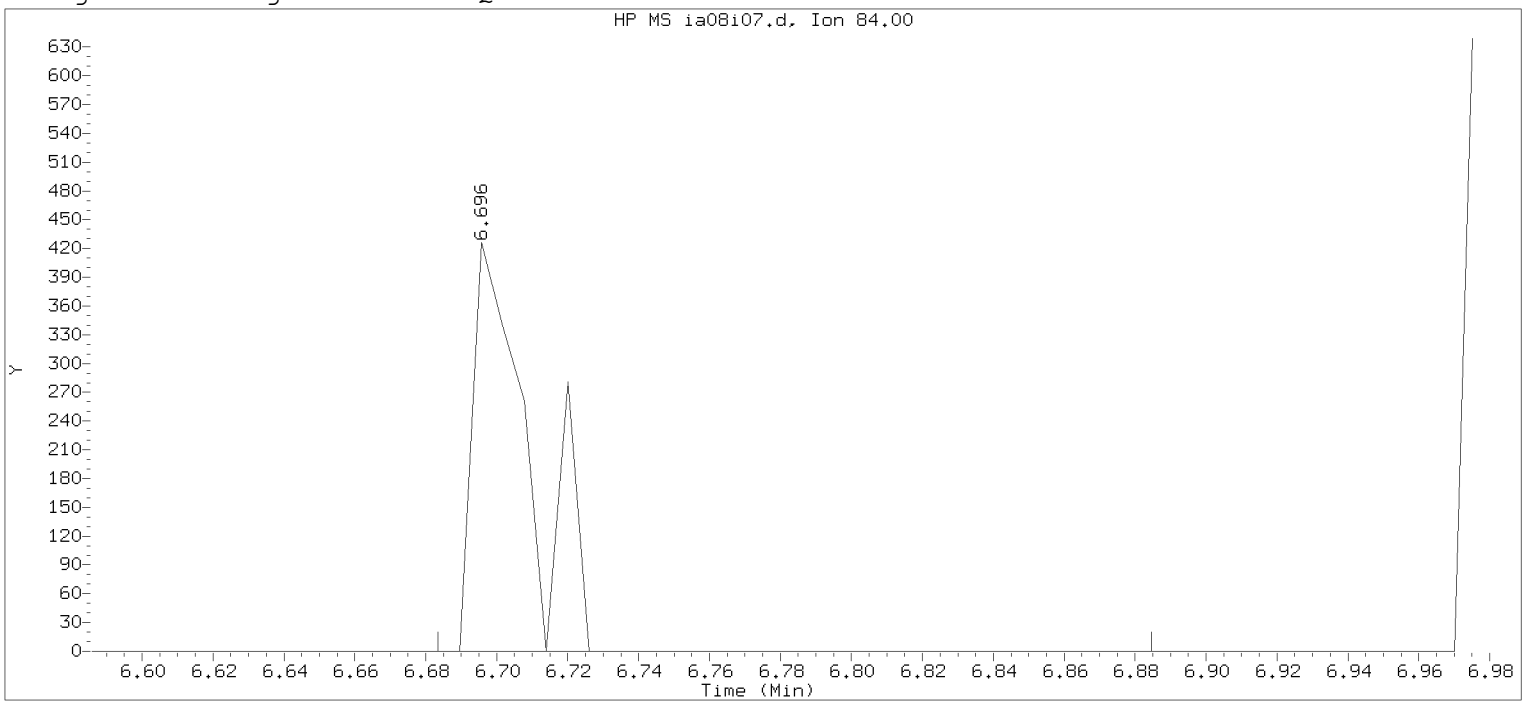
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

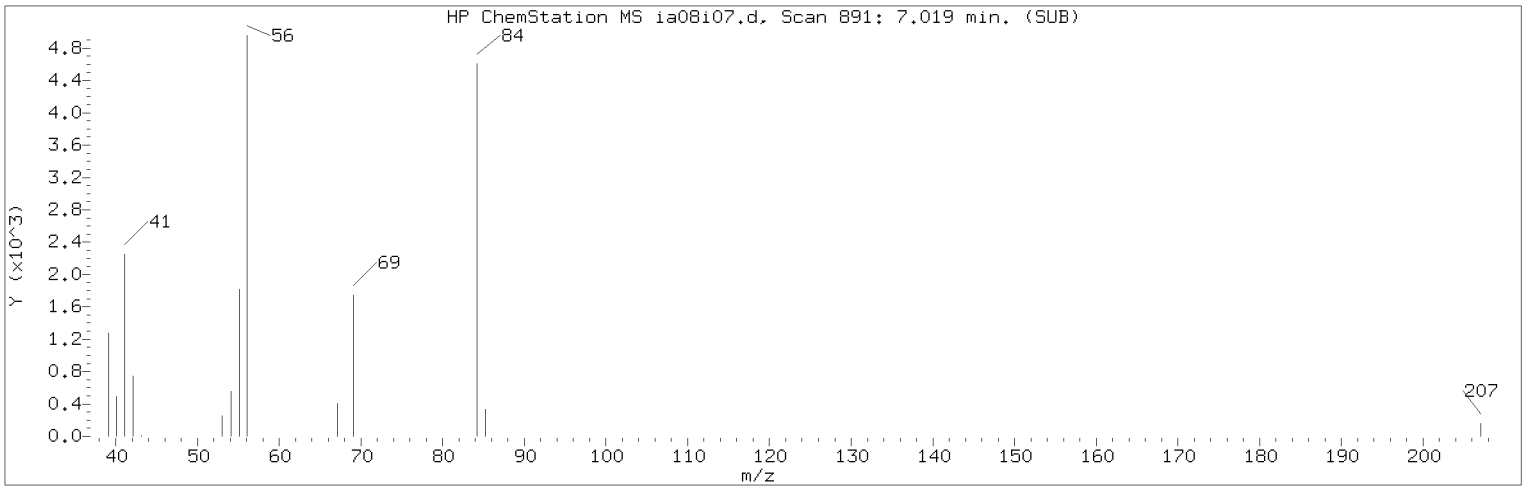
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

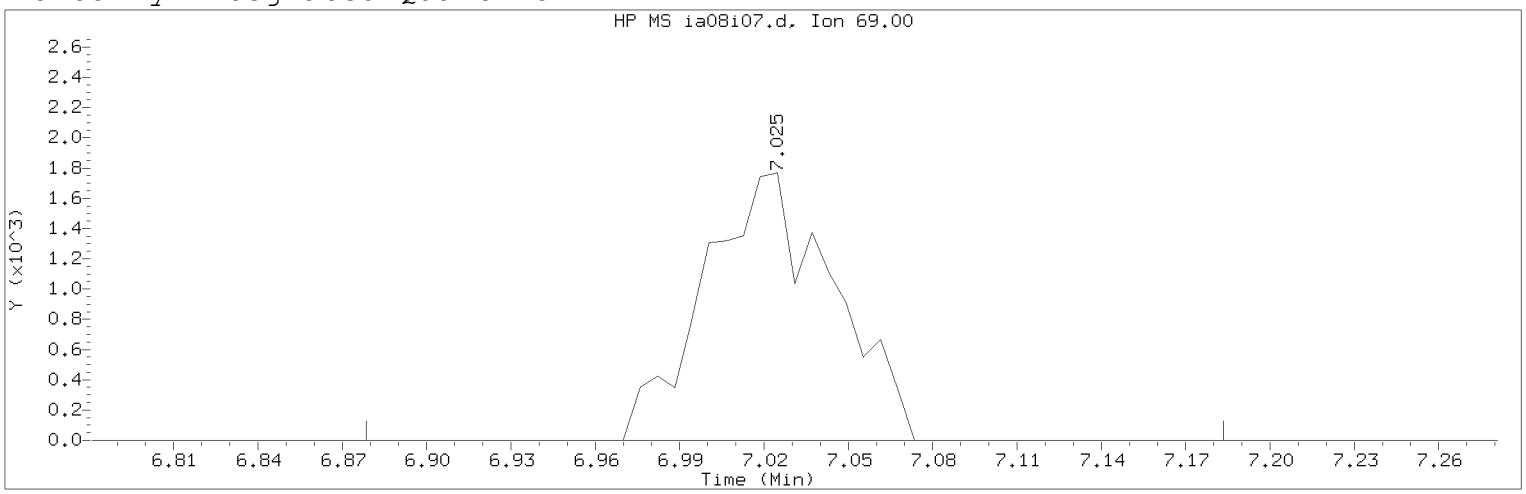
Compound Number	: 52		
Compound Name	: Cyclohexane		
Scan Number	: 838		
Retention Time (minutes)	: 6.696		
Quant Ion	: 84.00		
Area	: 478		
On-column Amount (ng)	: 0.1333		
Integration start scan	: 835	Integration stop scan:	868
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

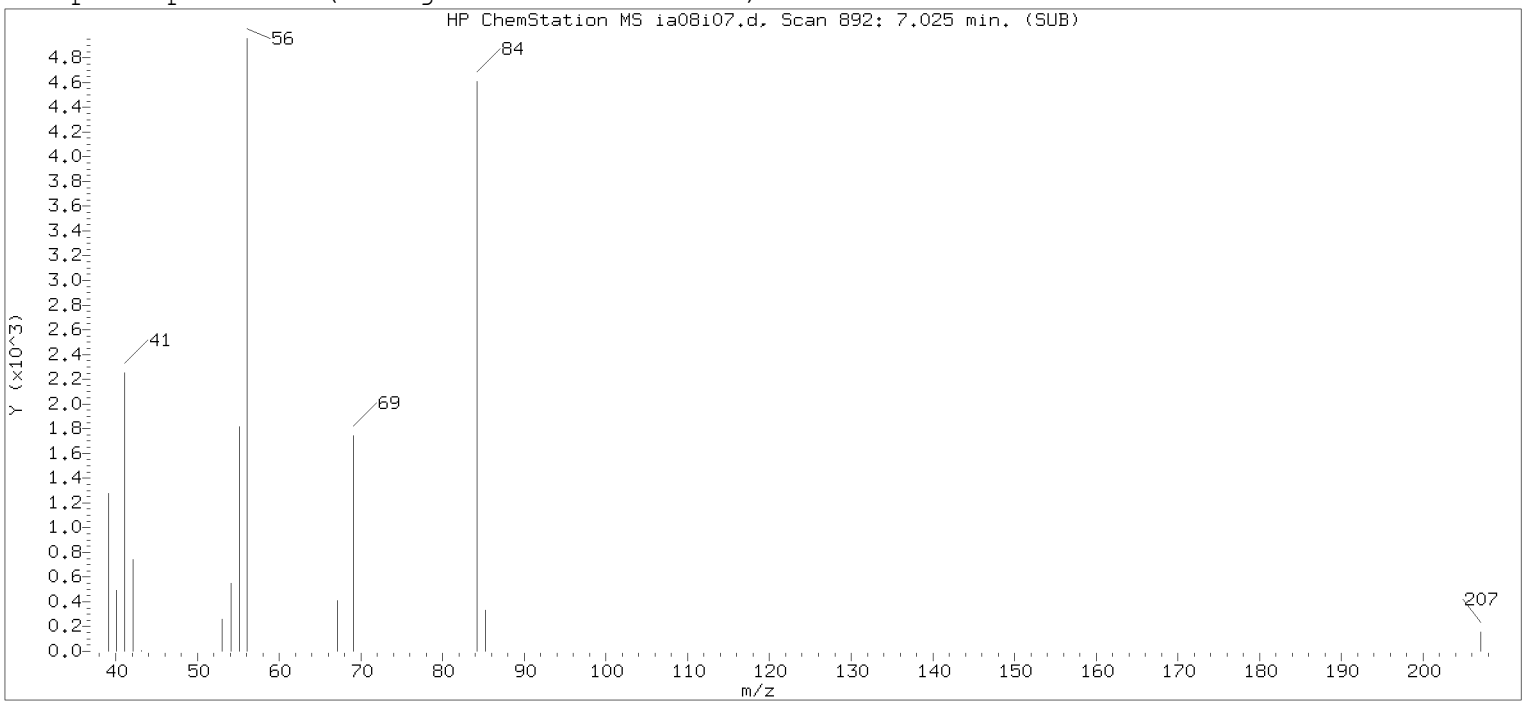
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 69.00
Area (flag) : 5624M
On-Column Amount (ng) : 0.1943
Integration start scan : 867 Integration stop scan: 917
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

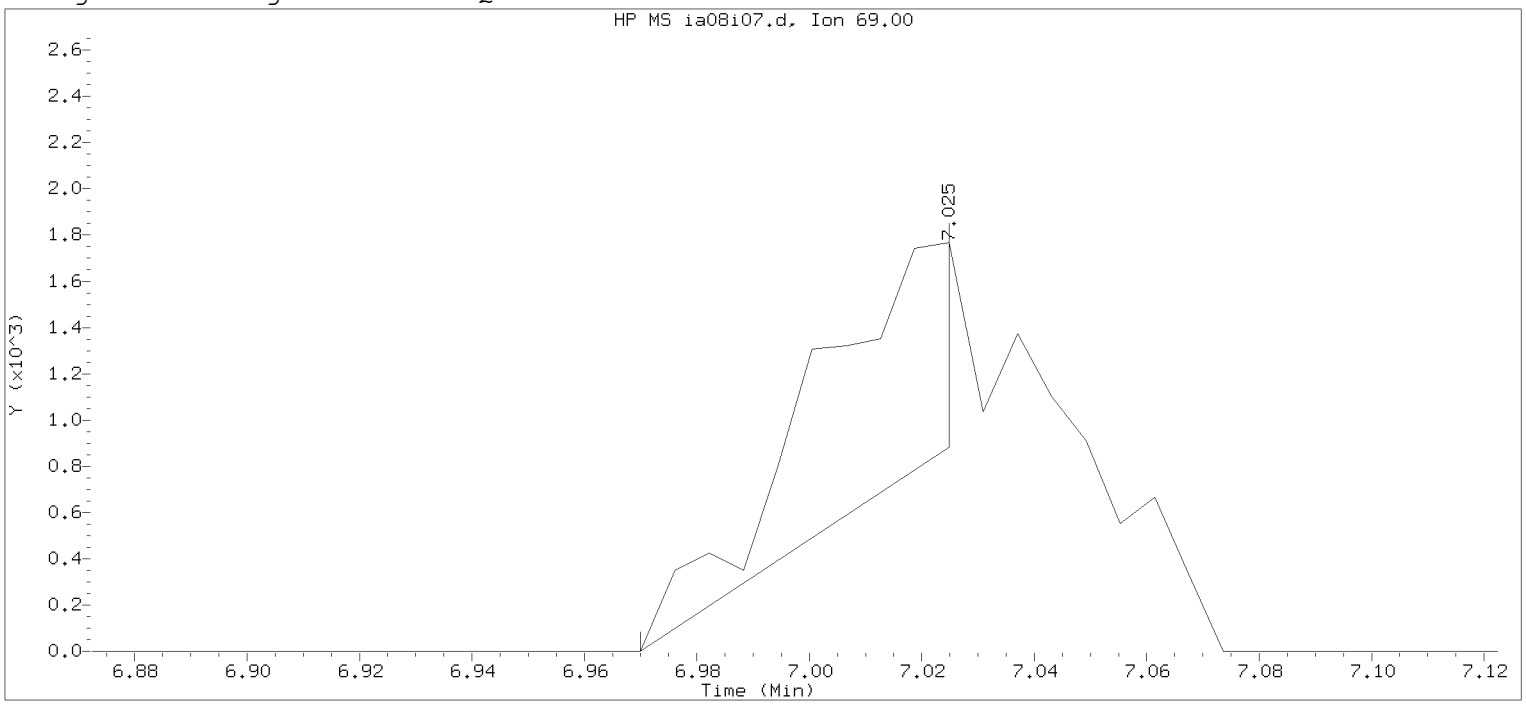
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

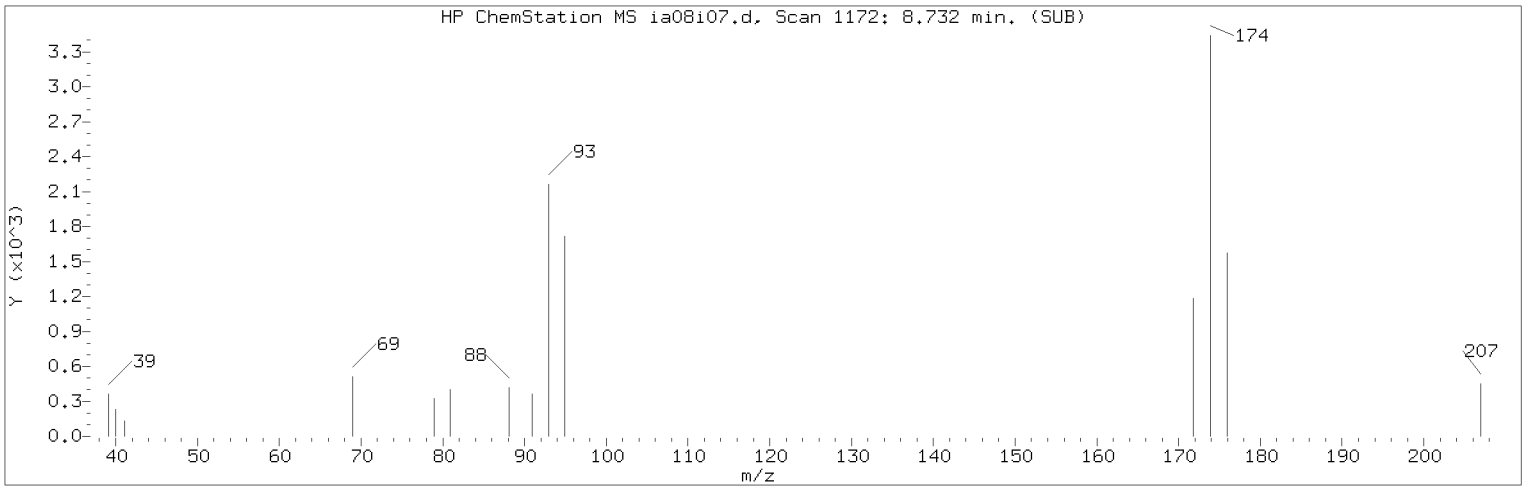
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

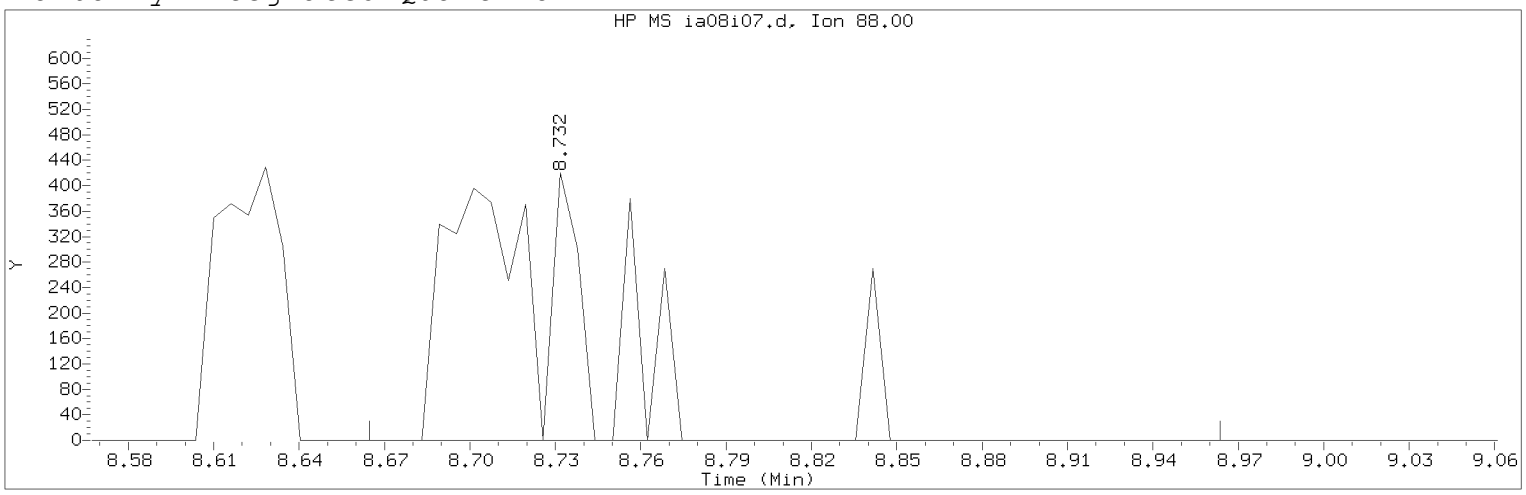
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 892
Retention Time (minutes): 7.025
Quant Ion : 69.00
Area : 1664
On-column Amount (ng) : 0.4582
Integration start scan : 882 Integration stop scan: 891
Y at integration start : 0 Y at integration end: 883

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

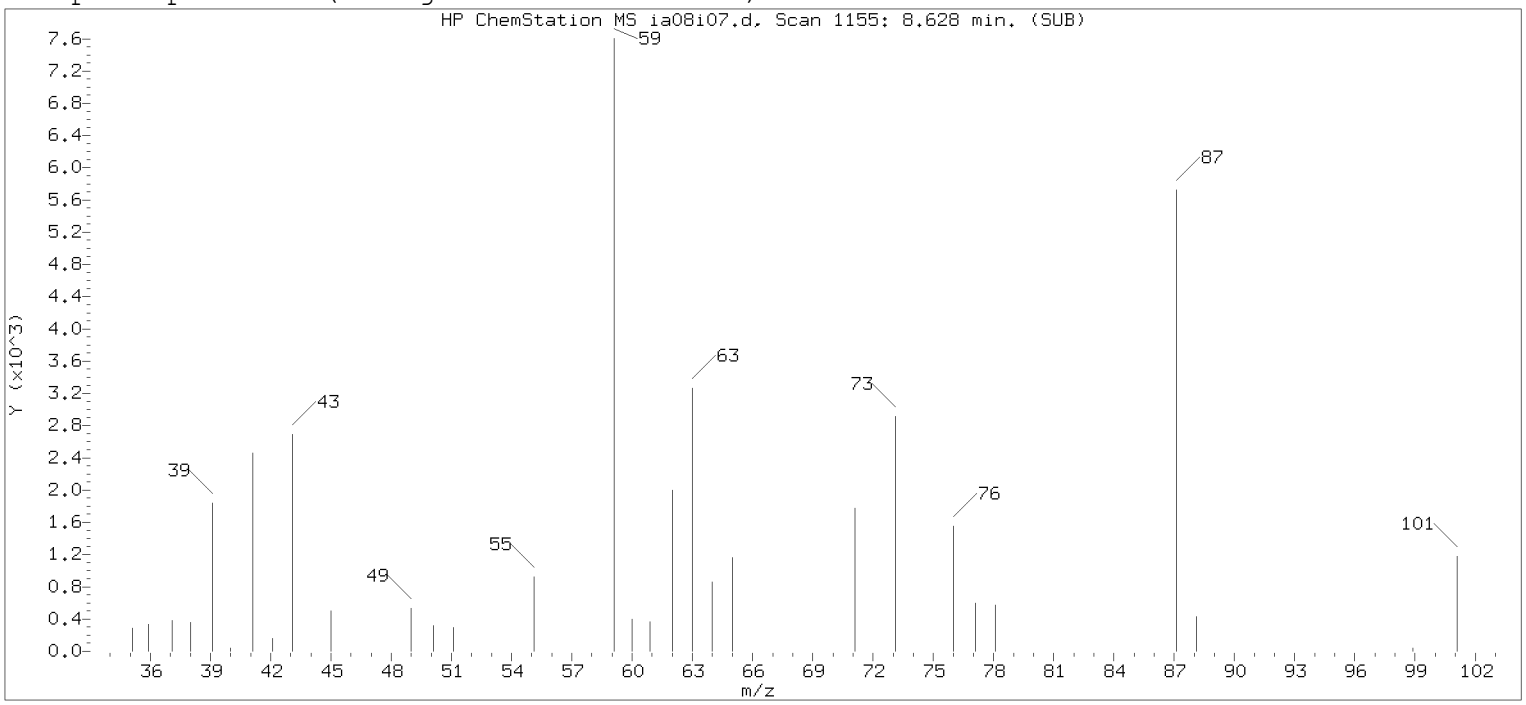
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1172
Retention Time (minutes): 8.732
Quant Ion : 88.00
Area (flag) : 1352M
On-Column Amount (ng) : 5.6013
Integration start scan : 1160 Integration stop scan: 1209
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

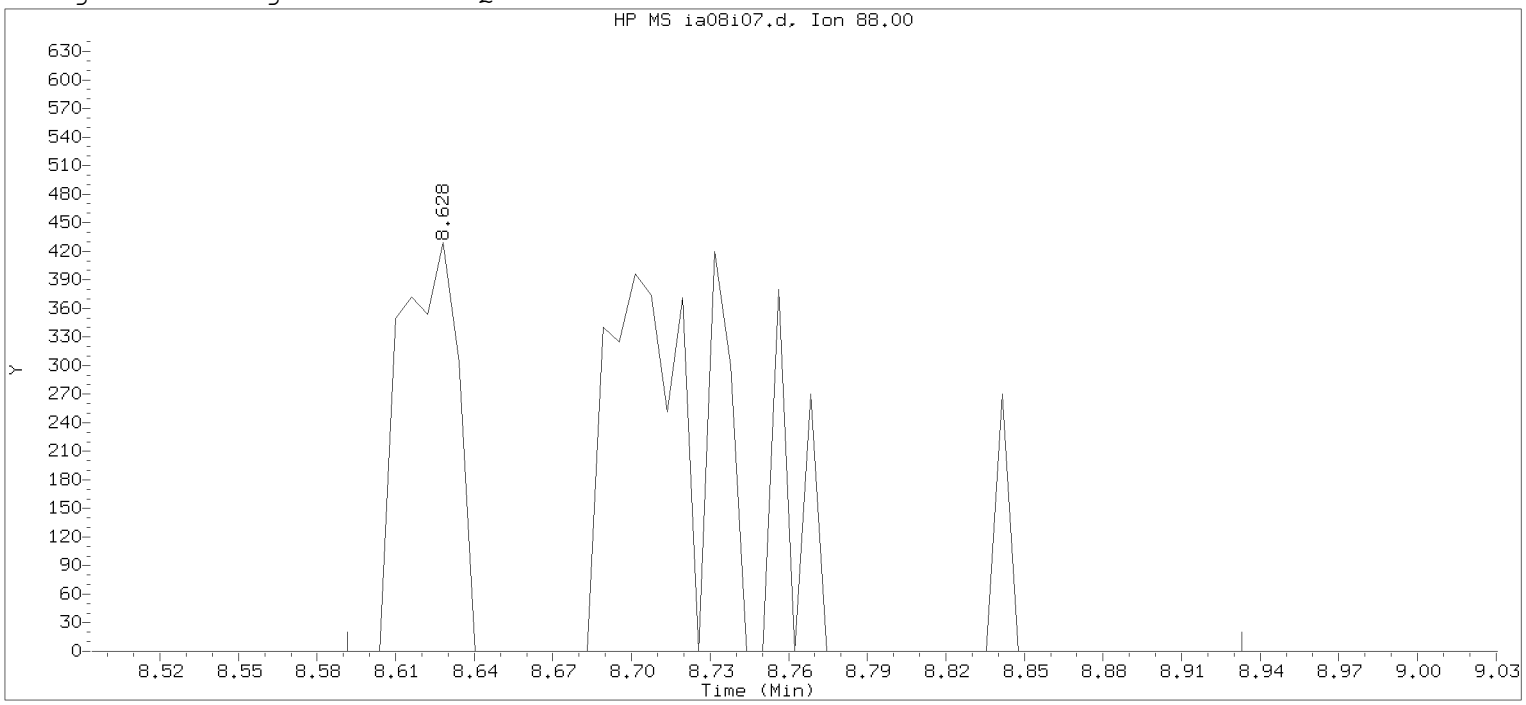
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

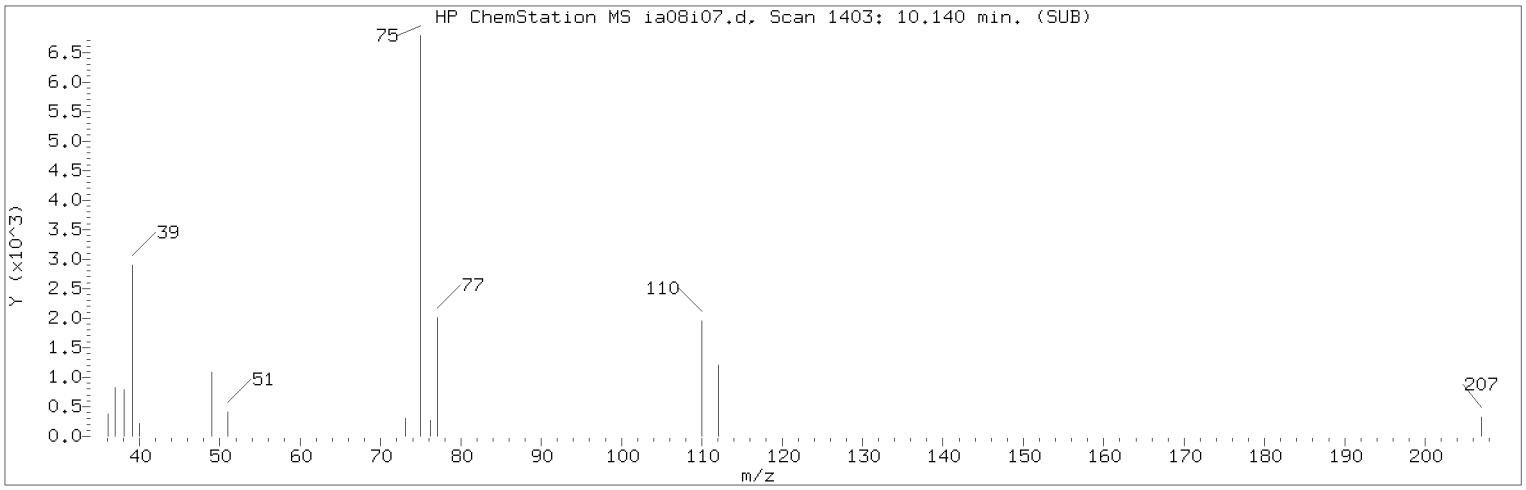
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

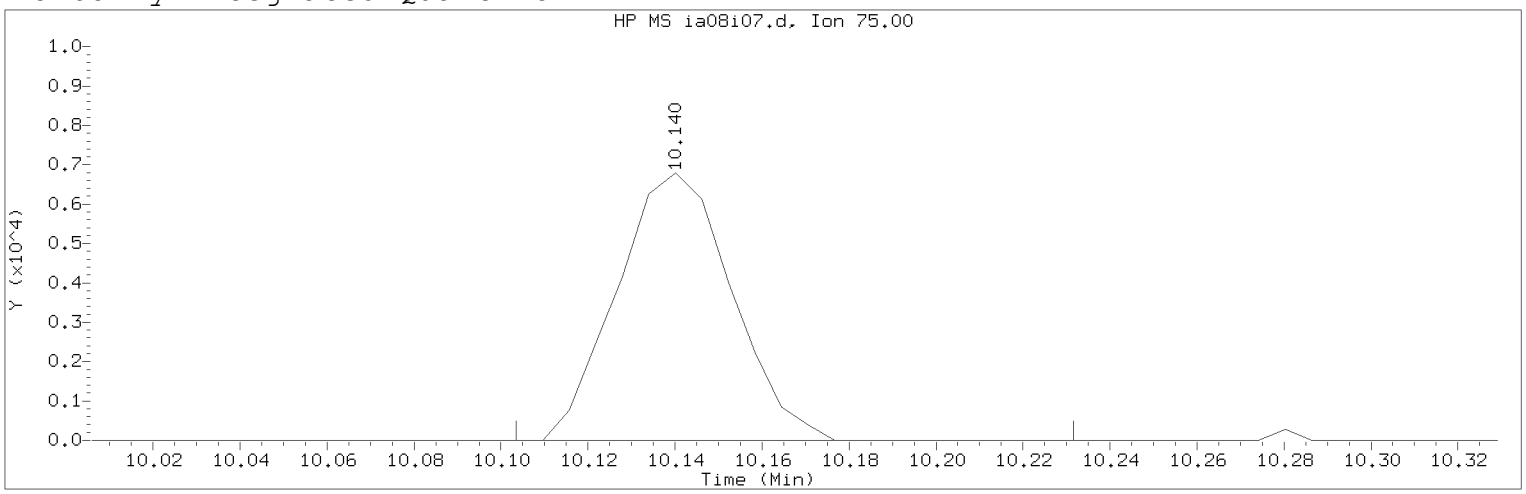
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1155		
Retention Time (minutes)	: 8.628		
Quant Ion	: 88.00		
Area	: 2013		
On-column Amount (ng)	: 8.6987		
Integration start scan	: 1148	Integration stop scan:	1204
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

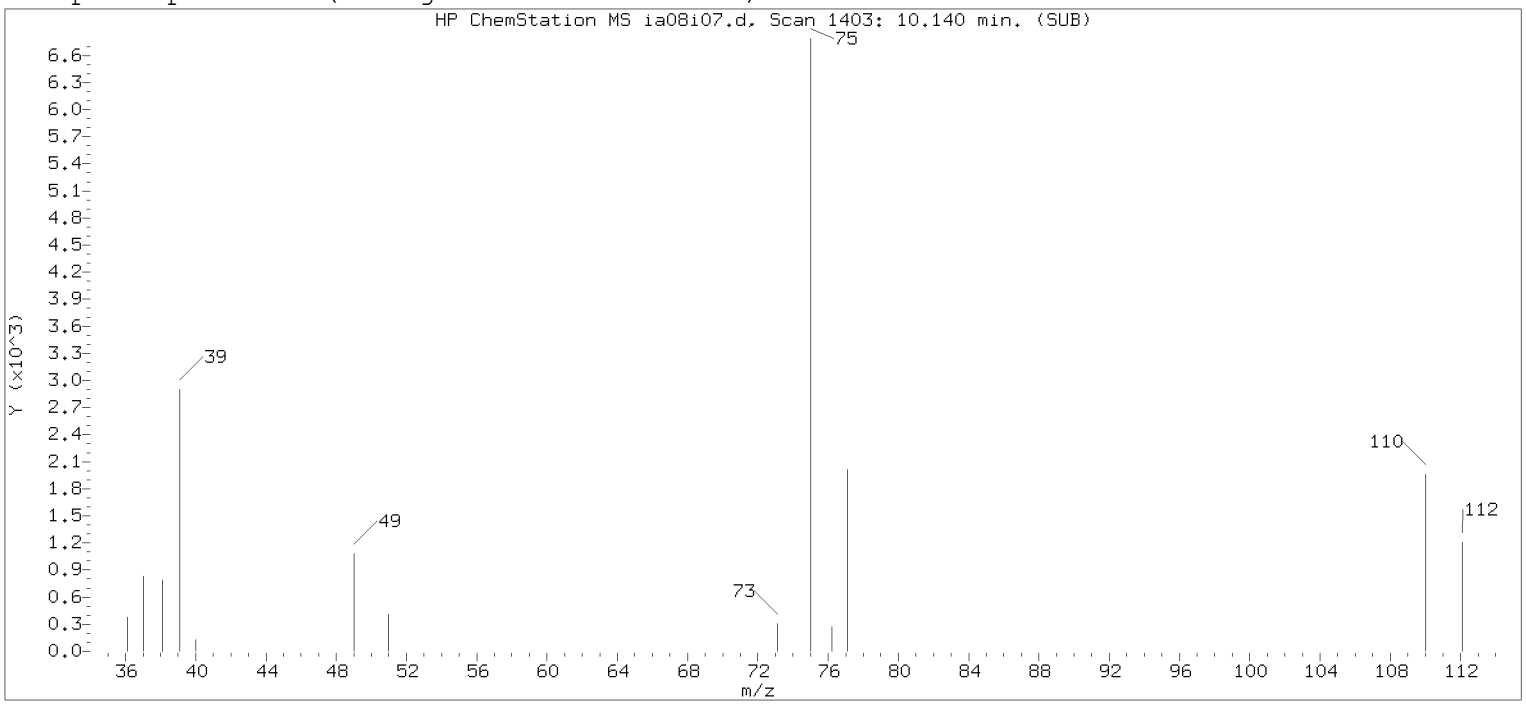
Compound Number : 84
Compound Name : trans-1,3-Dichloropropene
Scan Number : 1403
Retention Time (minutes): 10.140
Quant Ion : 75.00
Area (flag) : 12459M
On-Column Amount (ng) : 0.1966
Integration start scan : 1396 Integration stop scan: 1417
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

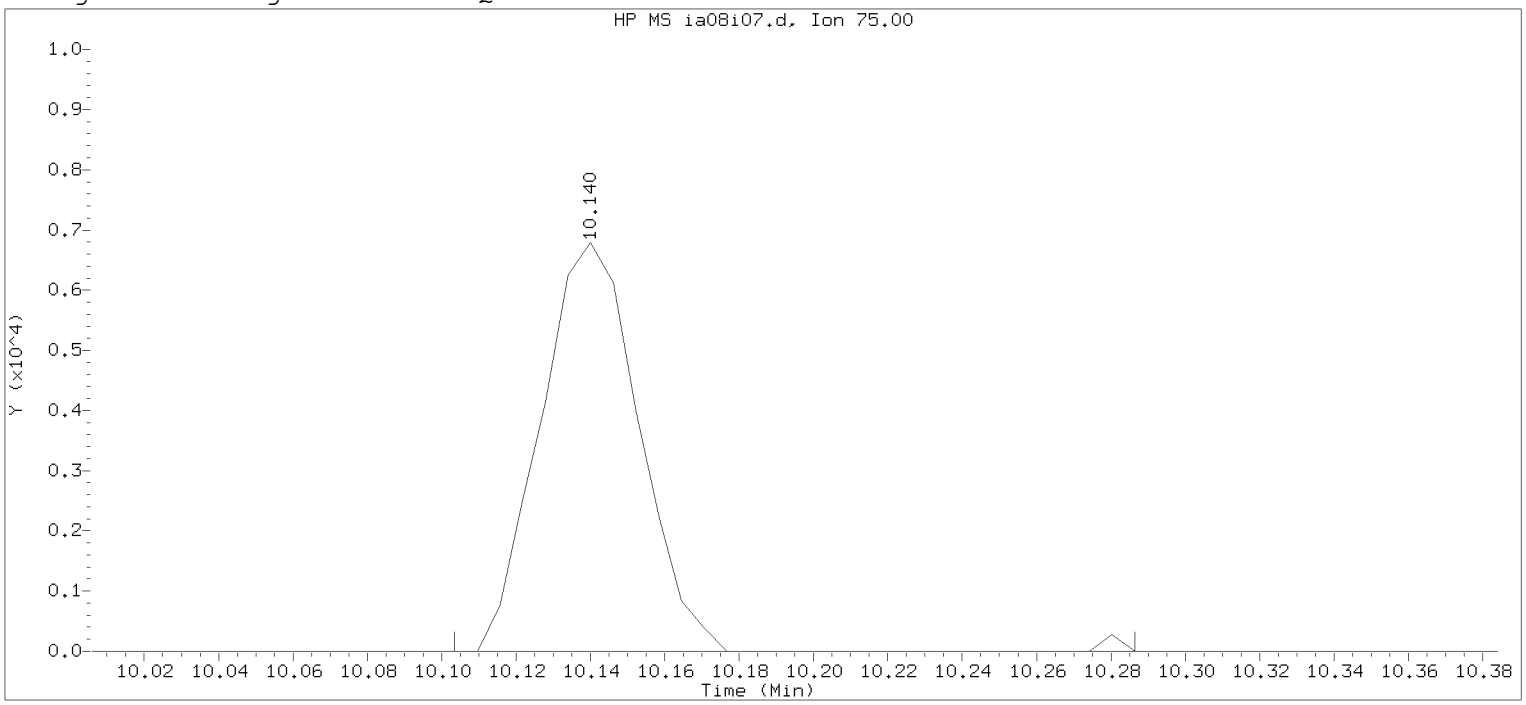
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

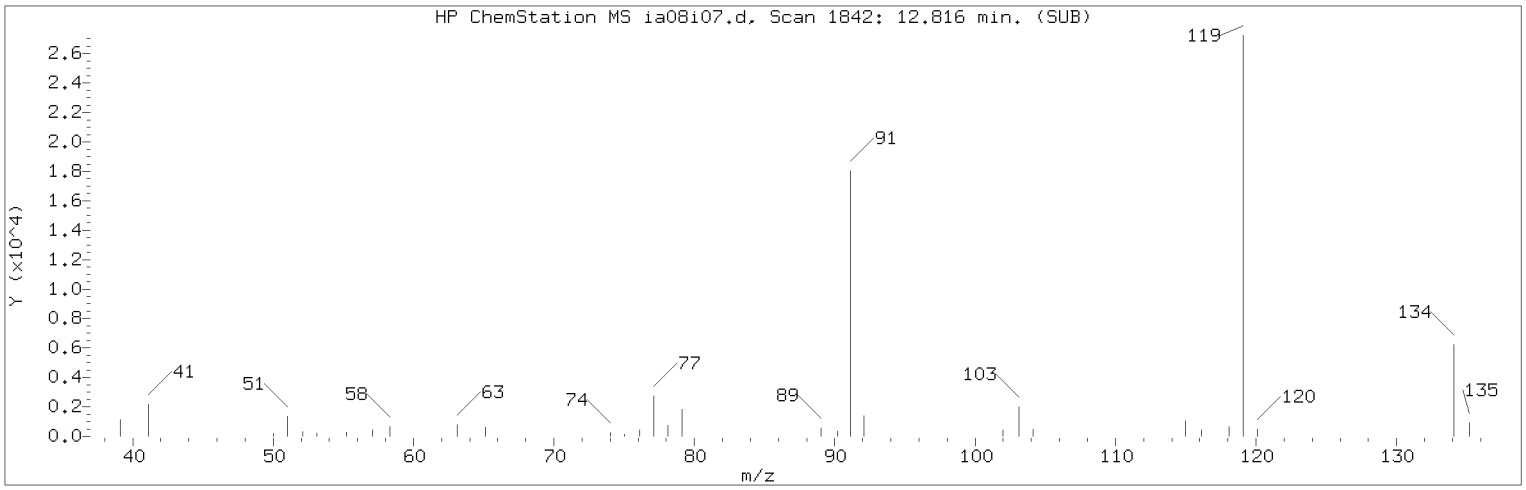
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

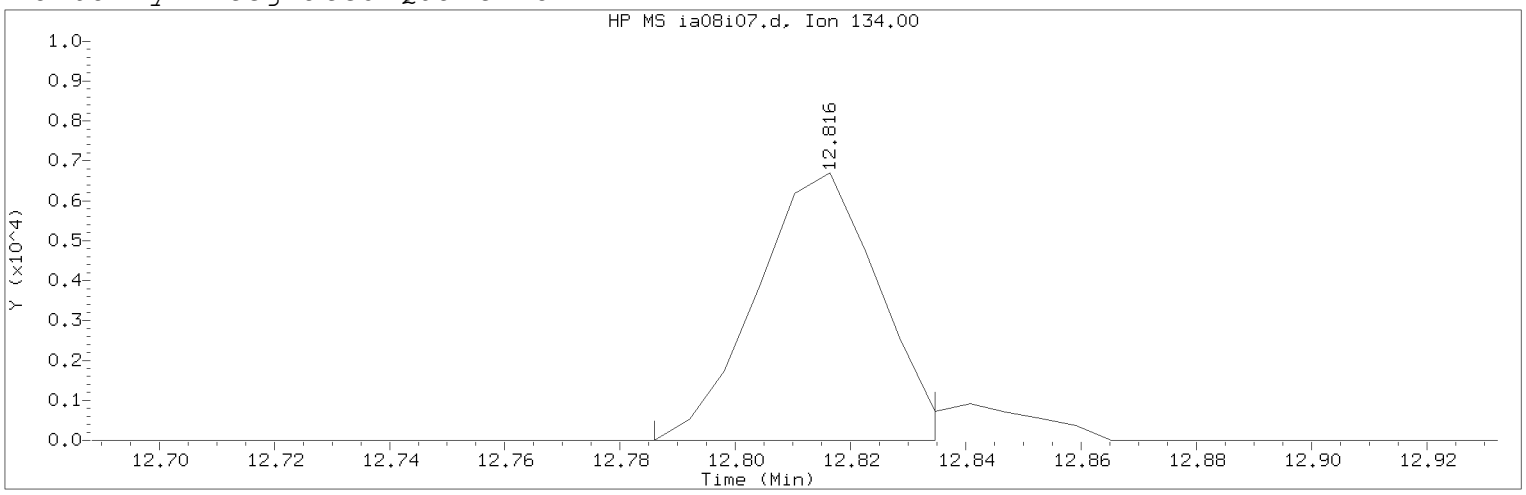
Compound Number : 84
Compound Name : trans-1,3-Dichloropropene
Scan Number : 1403
Retention Time (minutes): 10.140
Quant Ion : 75.00
Area : 12558
On-column Amount (ng) : 0.1980
Integration start scan : 1396 Integration stop scan: 1426
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

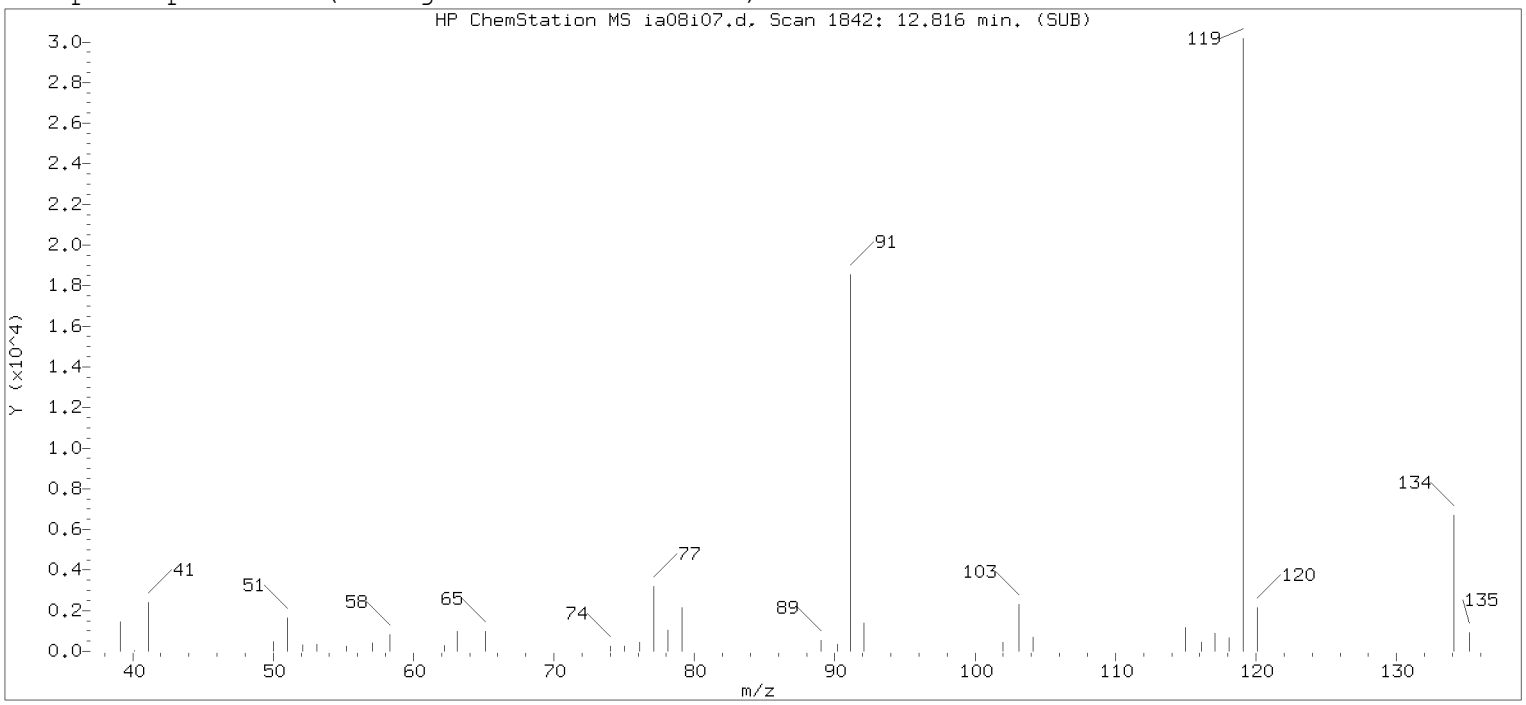
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 9881M
On-Column Amount (ng) : 0.1868
Integration start scan : 1836 Integration stop scan: 1844
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

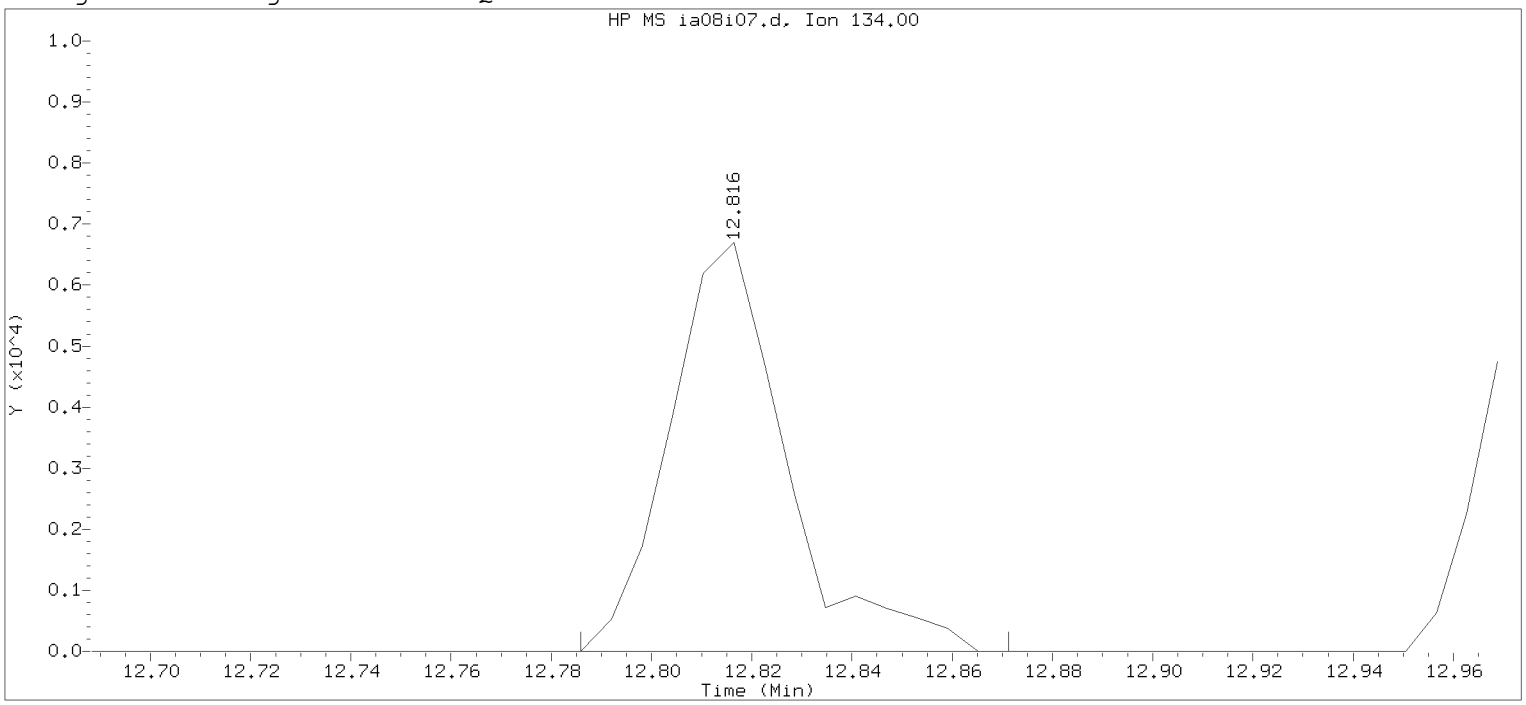
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

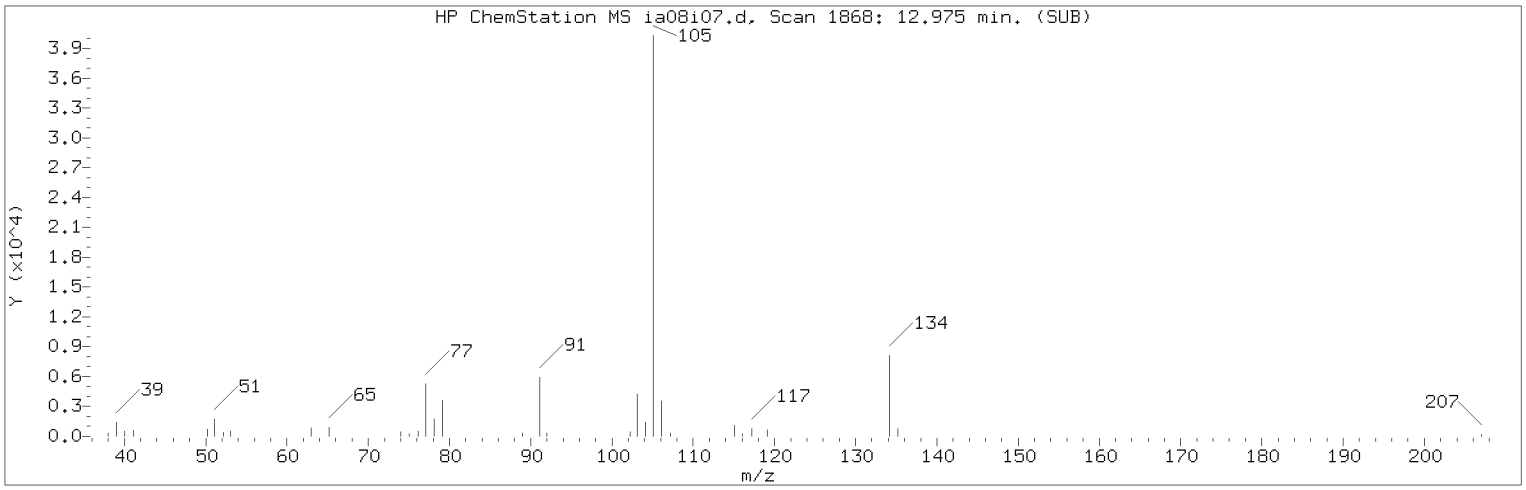
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

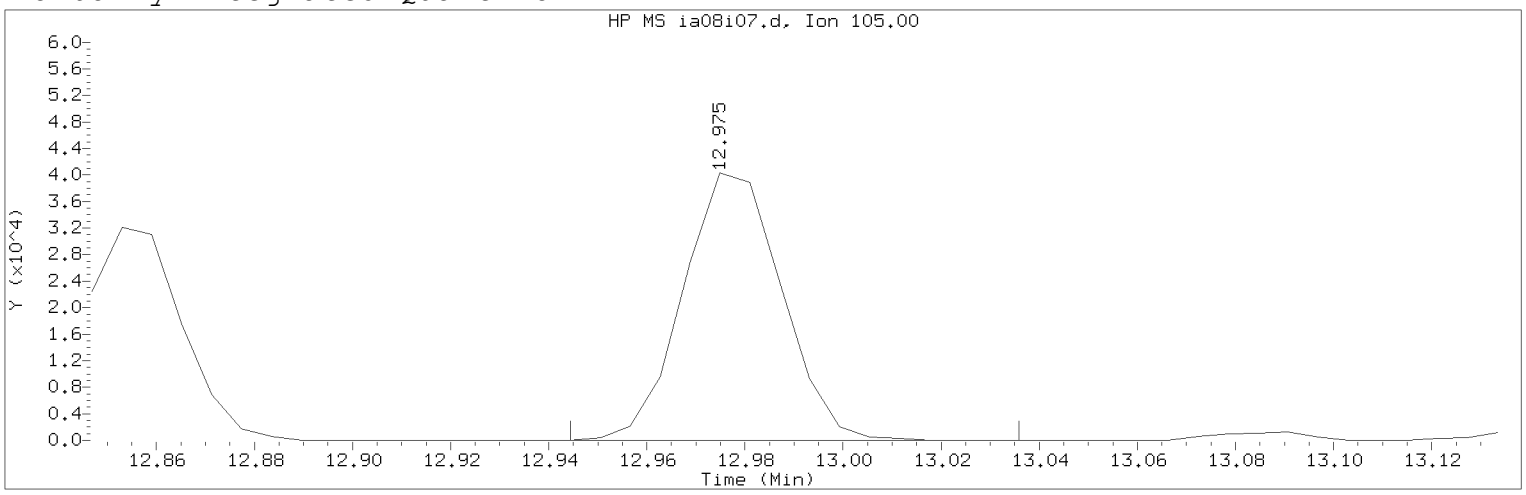
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 10808
On-column Amount (ng) : 0.1927
Integration start scan : 1836 Integration stop scan: 1850
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:05 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

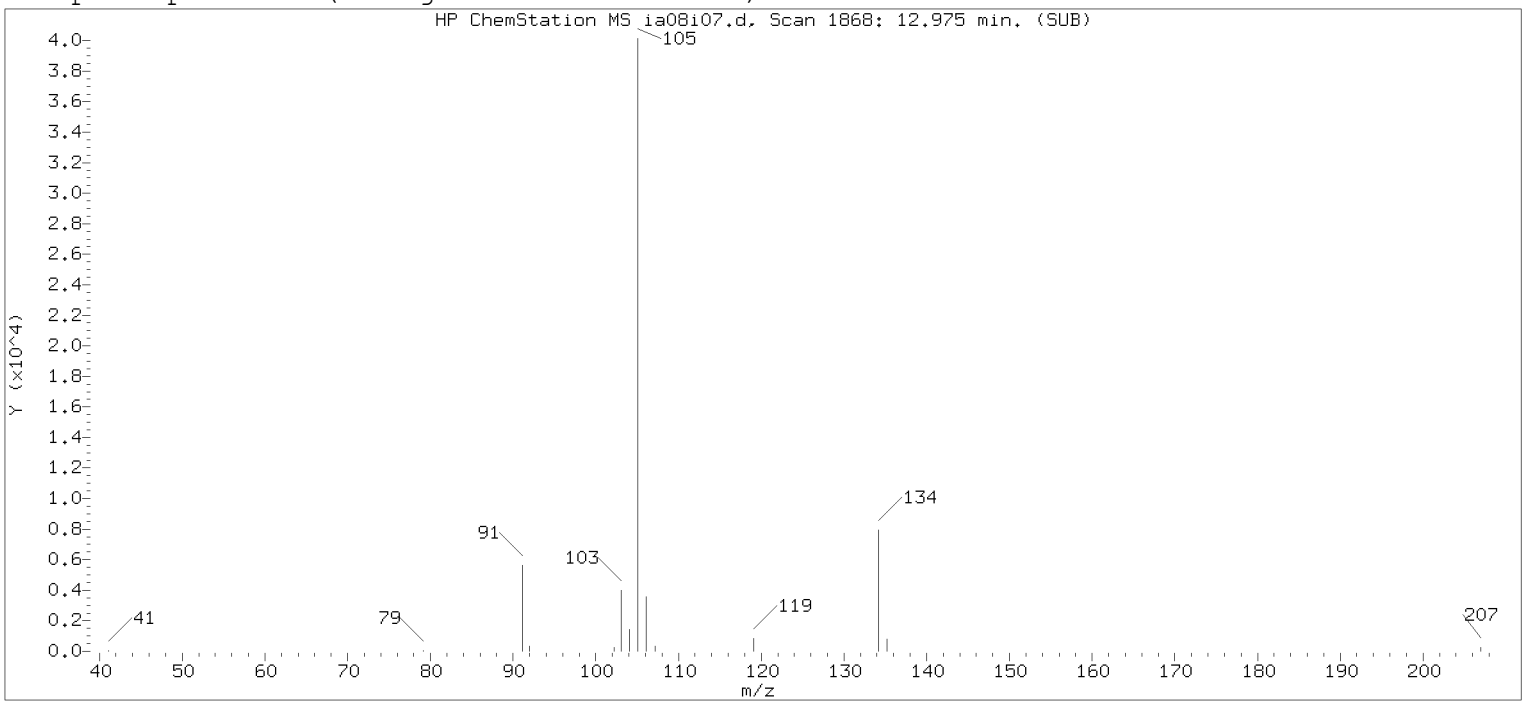
Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1868
Retention Time (minutes): 12.975
Quant Ion : 105.00
Area (flag) : 56352M
On-Column Amount (ng) : 0.1875
Integration start scan : 1862 Integration stop scan: 1877
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

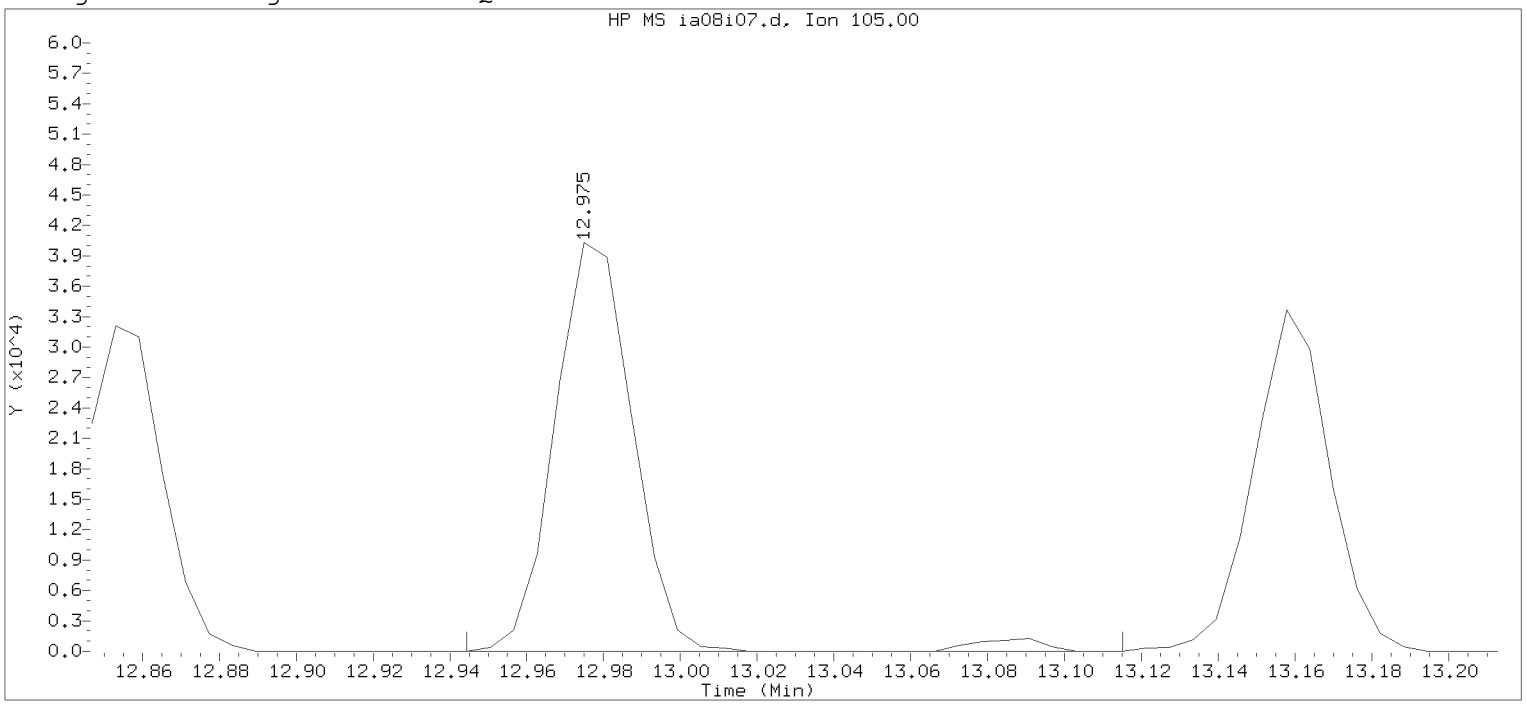
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



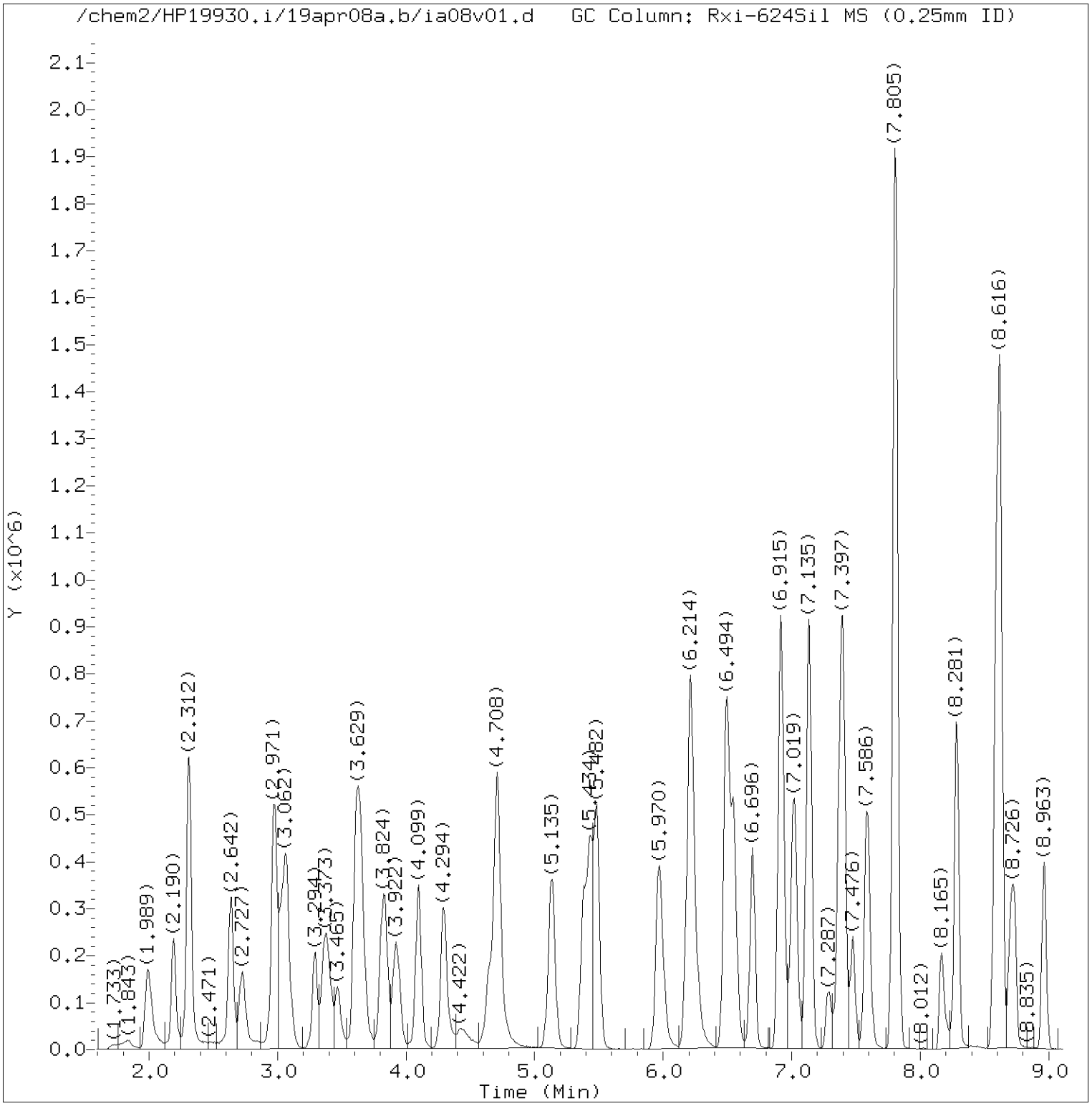
Data File: /chem2/HP19930.i/19apr08a.b/ia08i07.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:20 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:04
Date, time and analyst ID of latest file update: 09-Apr-2019 10:04 jkh09052

Sample Name: VSTD0.2 Lab Sample ID: VSTD0.2

Compound Number : 128
Compound Name : sec-Butylbenzene
Scan Number : 1868
Retention Time (minutes): 12.975
Quant Ion : 105.00
Area : 57952
On-column Amount (ng) : 0.1905
Integration start scan : 1862 Integration stop scan: 1890
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

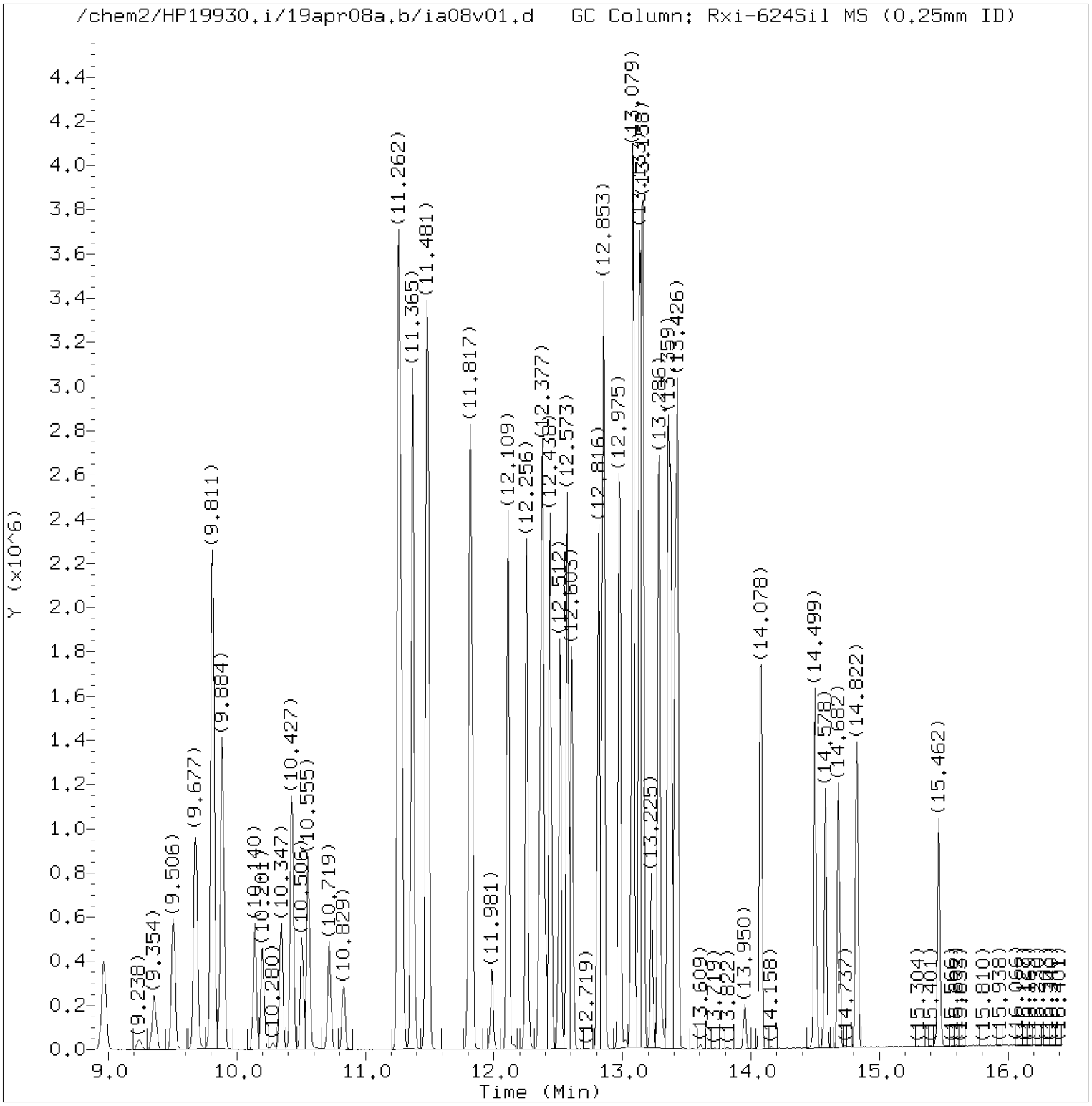
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	1.989	85	391134	3.664
2) Chloromethane	(2)	2.190	50	344440	4.356
5) Vinyl Chloride	(2)	2.306	62	366902	4.564
6) 1,3-Butadiene	(2)	2.306	39	288606M	4.341
7) Bromomethane	(2)	2.642	94	310555	4.345
8) Chloroethane	(2)	2.727	64	223888	4.795
9) Dichlorofluoromethane	(2)	2.971	67	598889	4.964
10) Trichlorofluoromethane	(2)	3.032	101	611977M	4.557
11) Ethyl ether	(2)	3.288	59	174047	4.922
12) Freon 123a	(2)	3.373	67	297982MA	4.935
13) Acrolein	(1)	3.471	56	209344	33.508
15) 1,1-Dichloroethene	(2)	3.611	96	255375	5.483
16) Freon 113	(2)	3.641	101	289708	5.148
14) Acetone	(1)	3.641	43	267216M	30.986
17) Methyl Iodide	(2)	3.806	142	491619	4.921
18) Carbon Disulfide	(2)	3.922	76	645340	4.732
21) Methyl Acetate	(1)	4.074	43	96606	4.239
22) Allyl Chloride	(2)	4.099	41	324555	4.530
23) Methylene Chloride	(2)	4.288	84	250438	5.256
26)*t-Butyl Alcohol-d10	(1)	4.300	65	147191M	50.000
28) t-Butyl Alcohol	(1)	4.428	59	163948	45.867
29) Acrylonitrile	(1)	4.641	53	233601	22.646
30) Methyl Tertiary Butyl Ether	(2)	4.702	73	593383	4.871
31) trans-1,2-Dichloroethene	(2)	4.708	96	272633	5.230
32) n-Hexane	(2)	5.135	57	353545	4.819
33) 1,1-Dichloroethane	(2)	5.379	63	439011	5.178
34) di-Isopropyl Ether	(2)	5.434	45	727106	5.111
35) 2-Chloro-1,3-Butadiene	(2)	5.482	53	379182	4.980
37) Ethyl t-butyl ether	(2)	5.970	59	689852	4.884
40) 1,2-Dichloroethene (Total)	(2)		96	583050	10.576
38) 2-Butanone	(1)	6.190	43	473145	33.778
39) cis-1,2-Dichloroethene	(2)	6.214	96	310417	5.346
41) 2,2-Dichloropropane	(2)	6.226	77	410950	5.207
42) Propionitrile	(1)	6.281	54	132309	35.180
45) Methacrylonitrile	(1)	6.494	67	488218	35.273
47) Bromochloromethane	(2)	6.543	128	131297	4.594
48) Tetrahydrofuran	(1)	6.561	71	96304	21.987
49) Chloroform	(2)	6.696	83	484270	5.241

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

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on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	470225	9.949
51) 1,1,1-Trichloroethane	(2)	6.921	97	468999	5.251
52) Cyclohexane	(2)	7.019	56	433882	4.940
54) Carbon Tetrachloride	(2)	7.135	117	442368	5.245
55) 1,1-Dichloropropene	(2)	7.135	75	357231	5.167
56) Isobutyl Alcohol	(1)	7.281	41	129971	117.728
57)$1,2-Dichloroethane-d4	(2)	7.372	102	88731	9.741
58) Benzene	(2)	7.397	78	1052838	5.179
59) 1,2-Dichloroethane	(2)	7.476	62	274123	5.027
60) t-Amyl methyl ether	(2)	7.586	73	676308	4.964
63)*Fluorobenzene	(2)	7.805	96	1831440	10.000
62) n-Heptane	(2)	7.811	43	353311	4.690
65) n-Butanol	(1)	8.165	56	228951	248.528
67) Trichloroethene	(2)	8.287	95	295600	5.197
69) Methylcyclohexane	(2)	8.592	83	488084	4.806
70) 1,2-Dichloropropane	(2)	8.622	63	247286	5.254
71) Methyl Methacrylate	(1)	8.701	69	125639	4.743
72) 1,4-Dioxane	(1)	8.714	88	32080M	141.638
73) Dibromomethane	(2)	8.732	93	135294	5.113
74) Bromodichloromethane	(2)	8.963	83	342222	5.238
76) 2-Nitropropane	(1)	9.244	41	38114	4.324
80) cis-1,3-Dichloropropene	(2)	9.506	75	382035	5.155
81) 4-Methyl-2-Pentanone	(1)	9.677	43	790036	22.279
82)$Toluene-d8	(3)	9.811	98	1822737	10.088
83) Toluene	(3)	9.884	92	706171	5.198
84) trans-1,3-Dichloropropene	(3)	10.140	75	319477	4.989
85) 1,3-Dichloropropene (total)	(3)		75	701512	10.144
86) Ethyl Methacrylate	(3)	10.195	69	258348	4.777
88) 1,1,2-Trichloroethane	(3)	10.347	97	199681	5.319
89) Tetrachloroethene	(3)	10.427	166	372416	5.180
90) 1,3-Dichloropropane	(3)	10.506	76	302784	5.011
91) 2-Hexanone	(1)	10.555	43	563781MA	22.421
93) Dibromochloromethane	(3)	10.719	129	271461	5.320
95) 1,2-Dibromoethane	(3)	10.829	107	194705	5.093
97)*Chlorobenzene-d5	(3)	11.256	117	1473136	10.000
96) 1-Chlorohexane	(3)	11.262	91	414117	5.063
98) Chlorobenzene	(3)	11.286	112	803400	5.152
100) Ethylbenzene	(3)	11.365	91	1394283	5.111

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

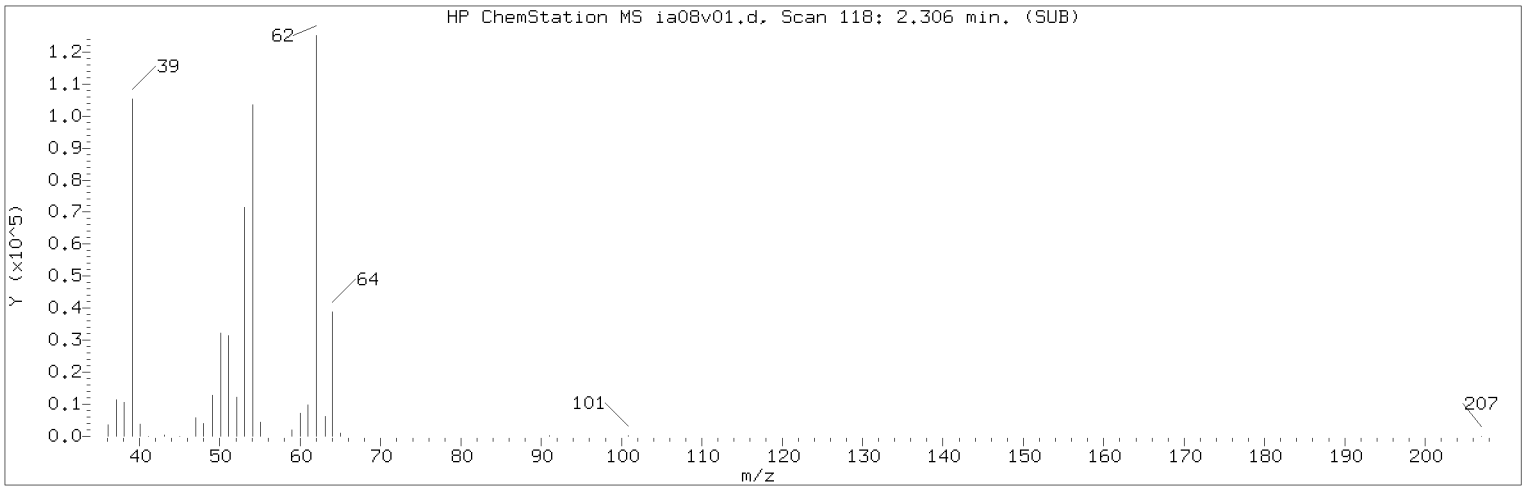
Sample Name: LCSILG Lab Sample ID: LCSILG

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
99) 1,1,1,2-Tetrachloroethane	(3)	11.365	131	309383	5.260
101) m+p-Xylene	(3)	11.481	106	1131673	10.416
105) Xylene (Total)	(3)		106	1678084	15.626
104) o-Xylene	(3)	11.810	106	546411	5.210
106) Styrene	(3)	11.829	104	875490	5.266
107) Bromoform	(3)	11.981	173	163168	5.200
108) Isopropylbenzene	(3)	12.109	105	1503268	5.307
111)$4-Bromofluorobenzene	(3)	12.256	95	669568	9.889
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	237158	5.079
114) Bromobenzene	(4)	12.371	156	362054	5.095
115) trans-1,4-Dichloro-2-butene	(1)	12.377	53	293728	23.619
116) 1,2,3-Trichloropropane	(4)	12.402	110	70396	5.080
117) n-Propylbenzene	(4)	12.438	91	1695252	5.334
119) 2-Chlorotoluene	(4)	12.512	126	355322	5.199
121) 1,3,5-Trimethylbenzene	(4)	12.573	105	1228907	5.234
122) 4-Chlorotoluene	(4)	12.603	126	354678	5.165
125) tert-Butylbenzene	(4)	12.816	134	283372M	5.297
126) Pentachloroethane	(4)	12.847	167	233708	4.960
127) 1,2,4-Trimethylbenzene	(4)	12.853	105	1250127	5.226
128) sec-Butylbenzene	(4)	12.975	105	1637145	5.387
131) 1,3-Dichlorobenzene	(4)	13.079	146	695115	5.110
132) p-Isopropyltoluene	(4)	13.085	119	1428398	5.356
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	818147	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	703063	5.172
135) 1,2,3-Trimethylbenzene	(4)	13.158	120	572642	5.122
136) Benzyl Chloride	(4)	13.225	126	109515	4.977
138) n-Butylbenzene	(4)	13.377	92	637821	5.258
139) 1,2-Dichlorobenzene	(4)	13.408	146	647035	5.211
143) 1,2-Dibromo-3-chloropropane	(1)	13.950	155	39800	4.937
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	520750	5.250
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	448264	5.156
146) Hexachlorobutadiene	(4)	14.578	225	191397	5.387
147) Naphthalene	(4)	14.682	128	846809	4.863
148) 1,2,3-Trichlorobenzene	(4)	14.822	180	393122	5.022

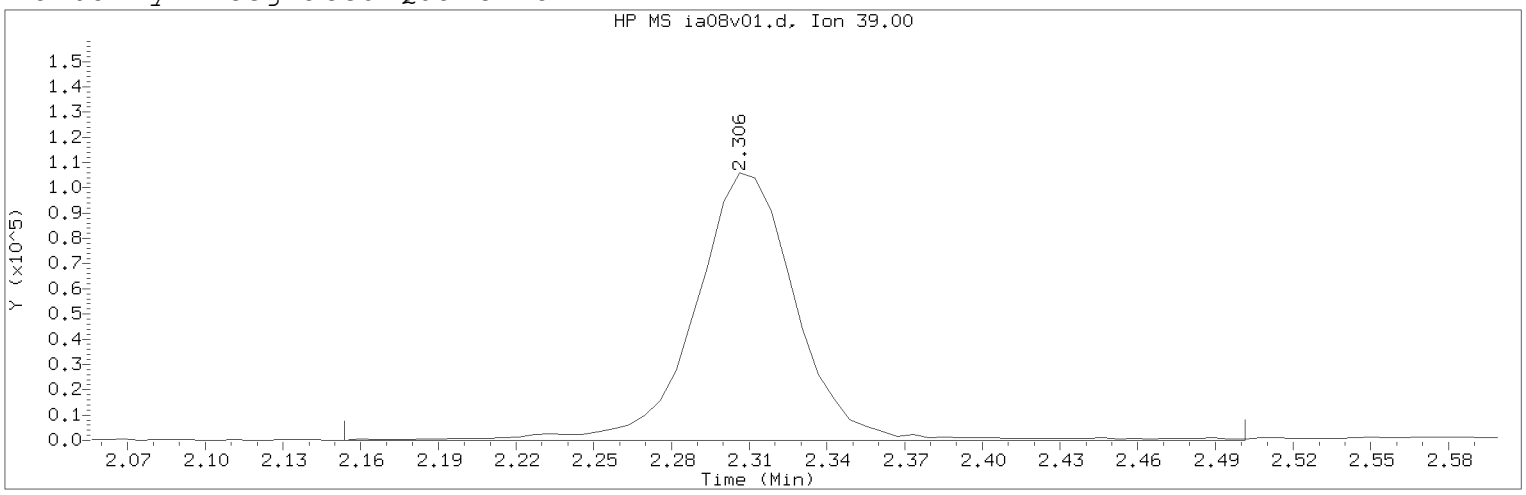
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

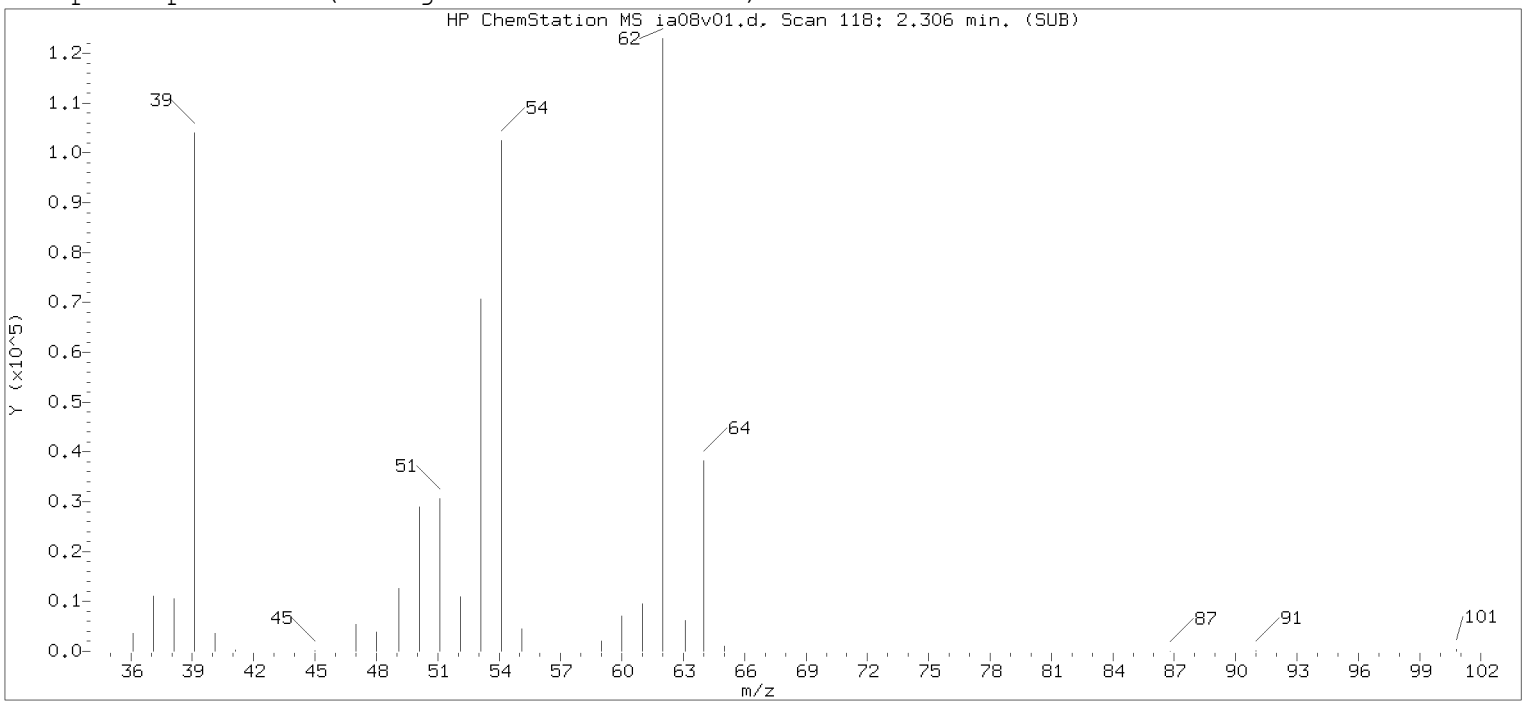
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 118
Retention Time (minutes): 2.306
Quant Ion : 39.00
Area (flag) : 288606M
On-Column Amount (ng) : 4.3411
Integration start scan : 92 Integration stop scan: 149
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

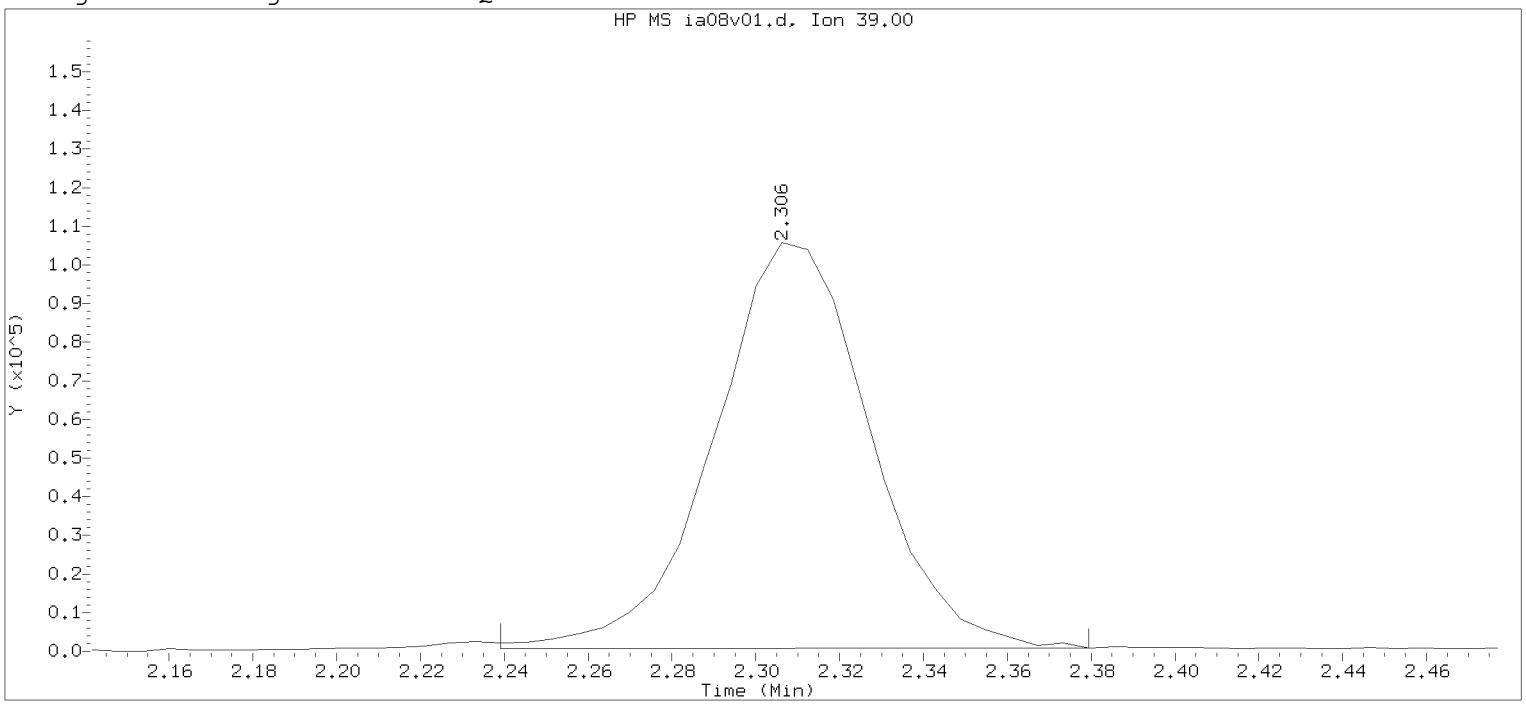
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

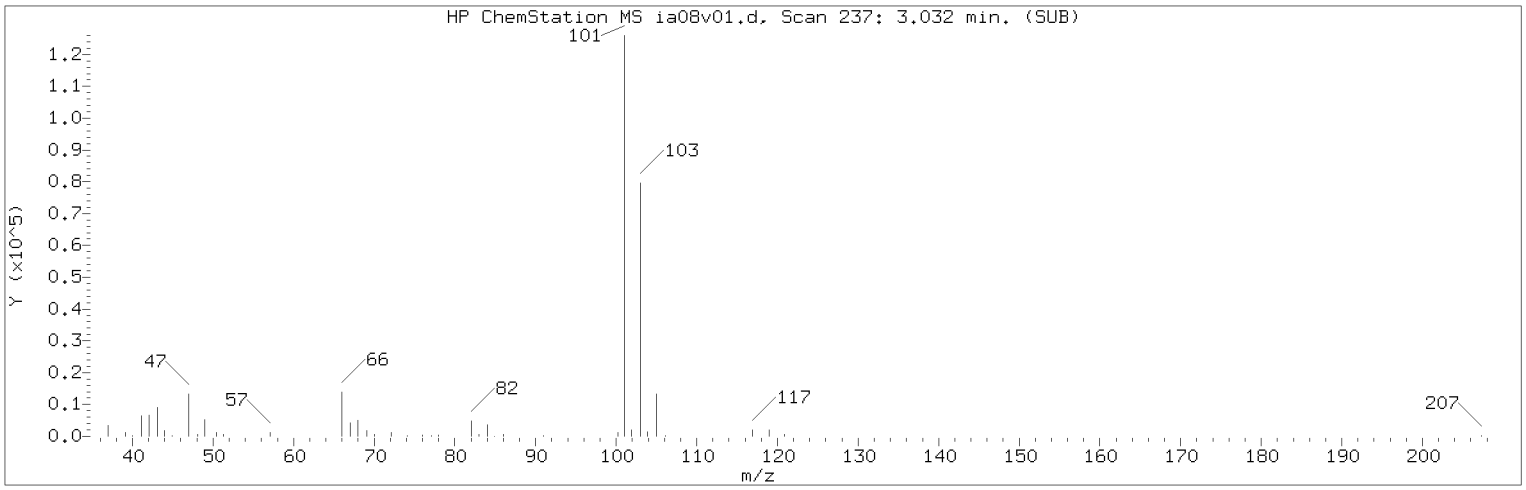
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

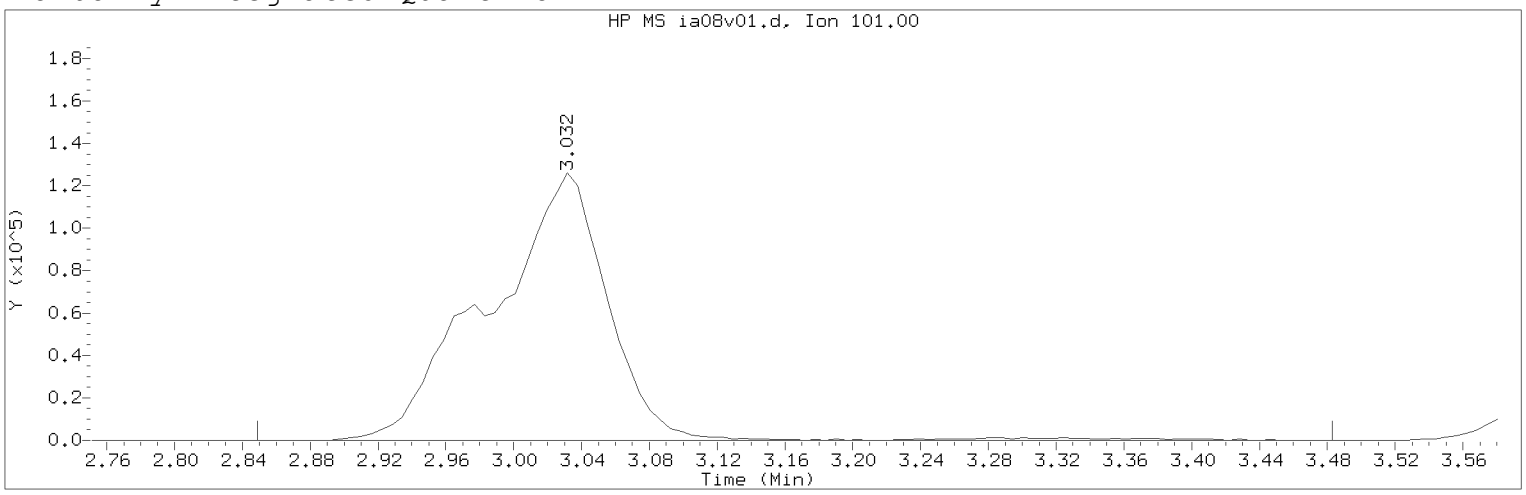
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 118
Retention Time (minutes): 2.306
Quant Ion : 39.00
Area : 271034
On-column Amount (ng) : 4.0768
Integration start scan : 106 Integration stop scan: 129
Y at integration start : 717 Y at integration end: 911

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Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

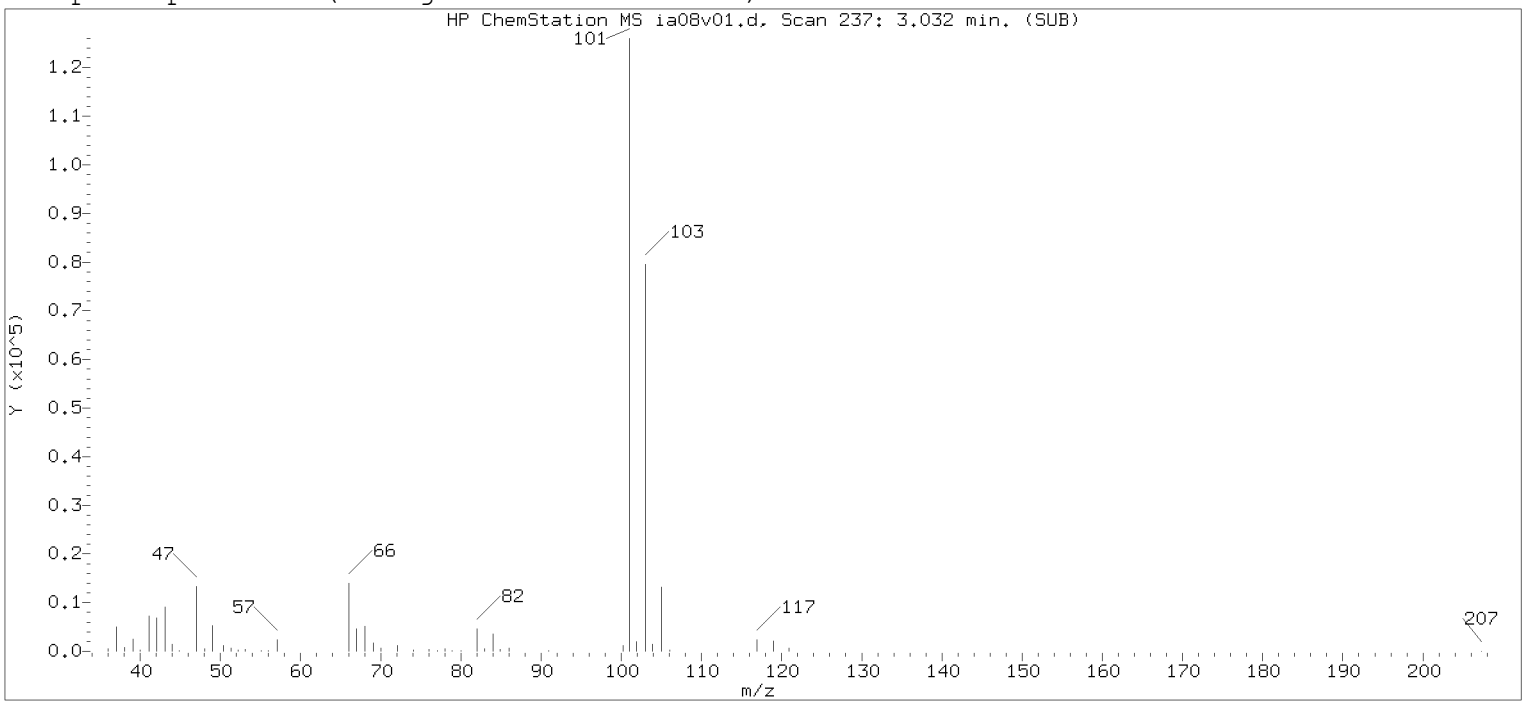
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 237
Retention Time (minutes): 3.032
Quant Ion : 101.00
Area (flag) : 611977M
On-Column Amount (ng) : 4.5568
Integration start scan : 206 Integration stop scan: 310
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

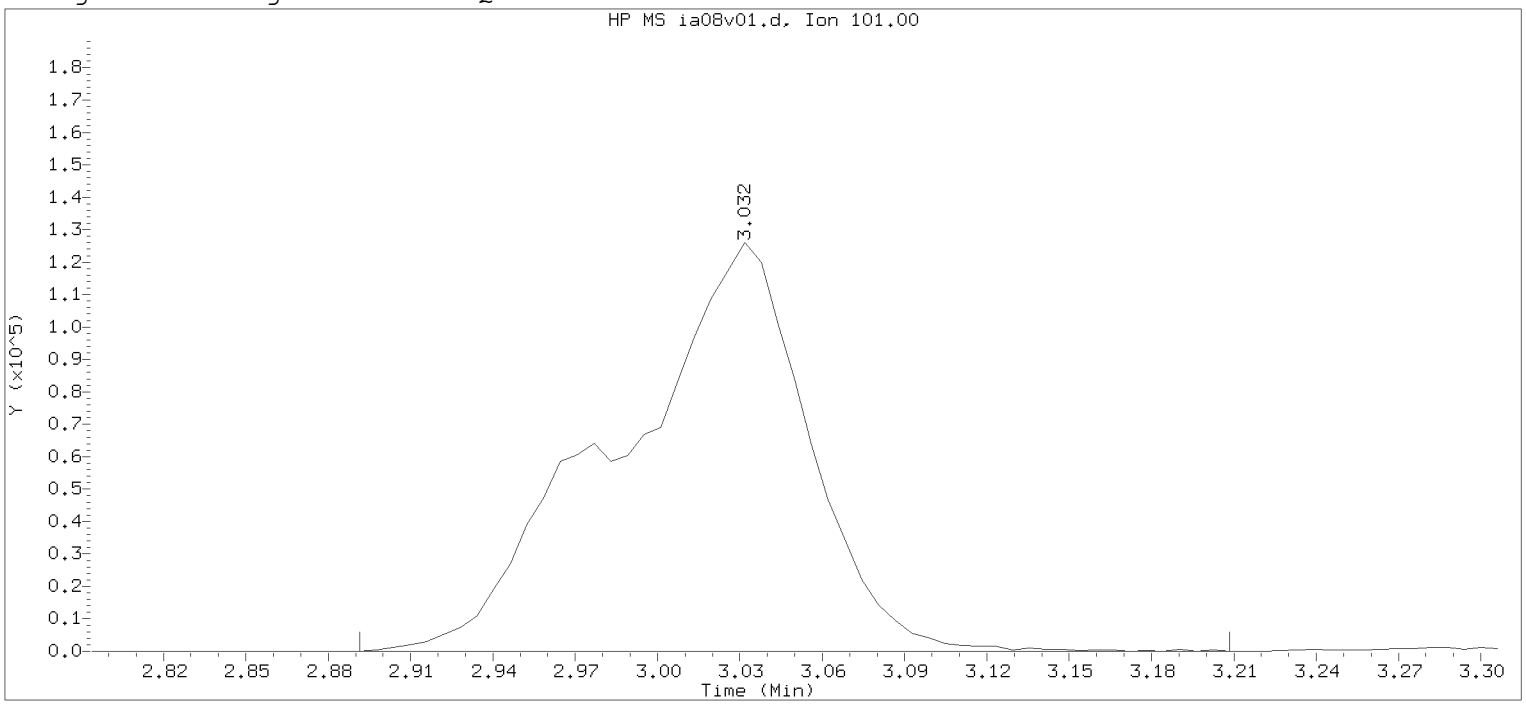
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

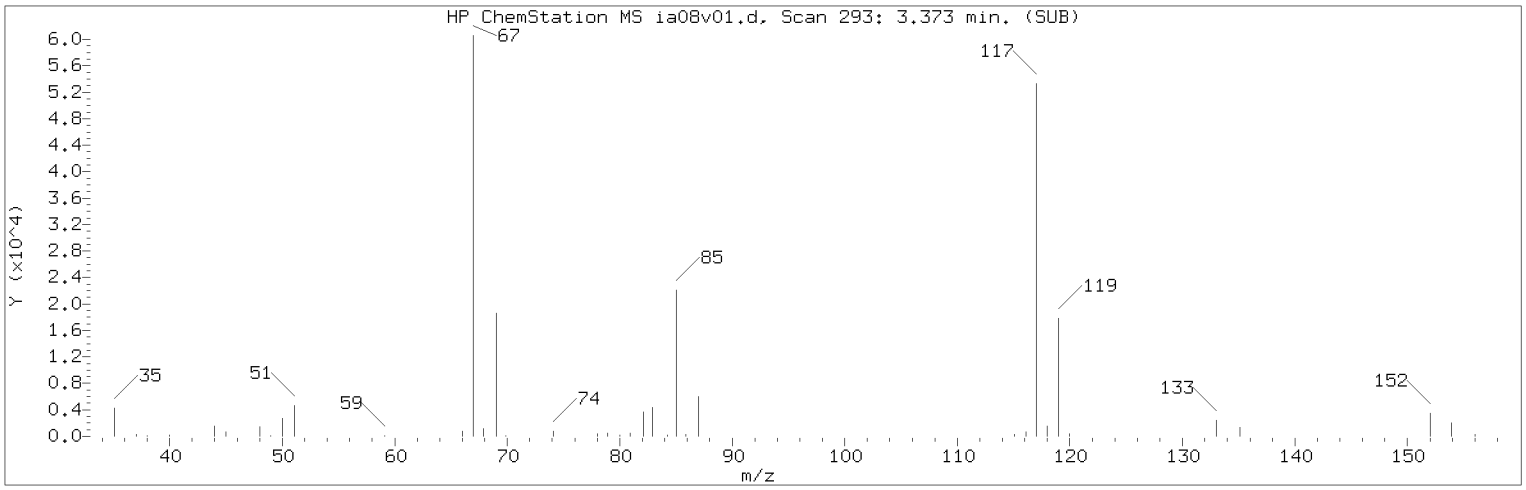
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

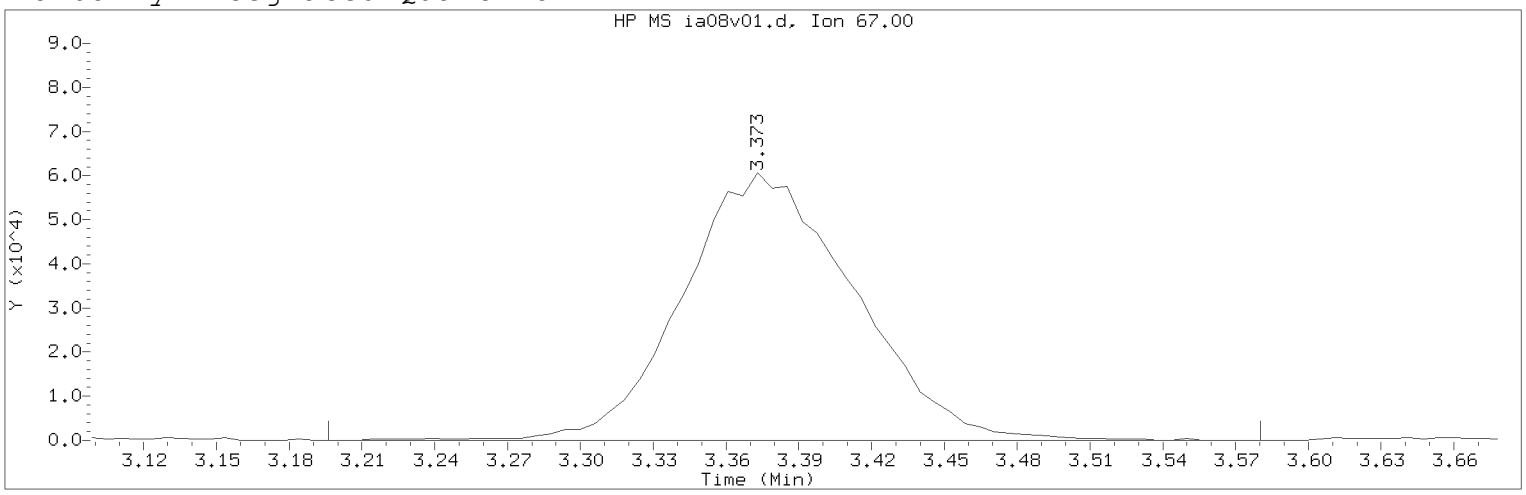
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 237
Retention Time (minutes): 3.032
Quant Ion : 101.00
Area : 603316
On-column Amount (ng) : 4.4923
Integration start scan : 213 Integration stop scan: 265
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

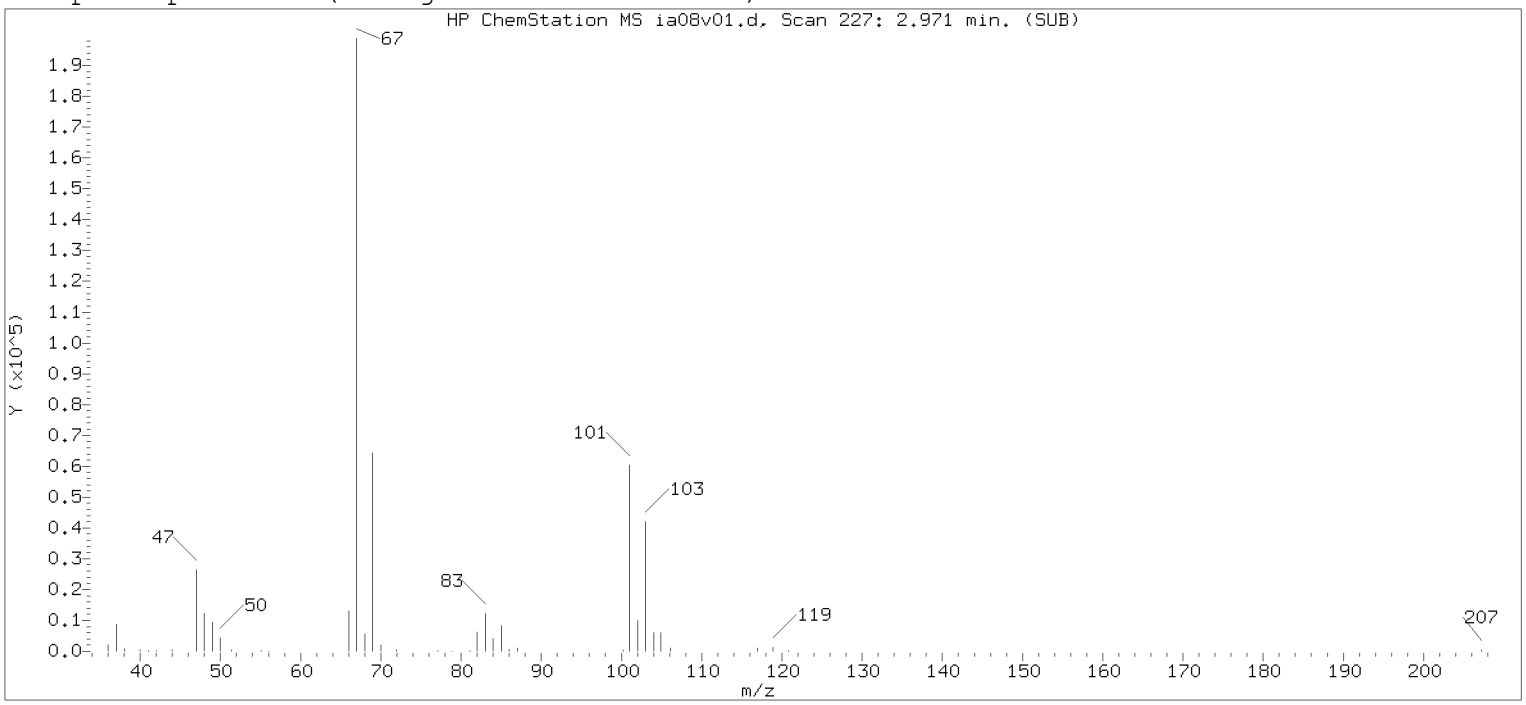
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 293
Retention Time (minutes): 3.373
Quant Ion : 67.00
Area (flag) : 297982MA
On-Column Amount (ng) : 4.9345
Integration start scan : 263 Integration stop scan: 326
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

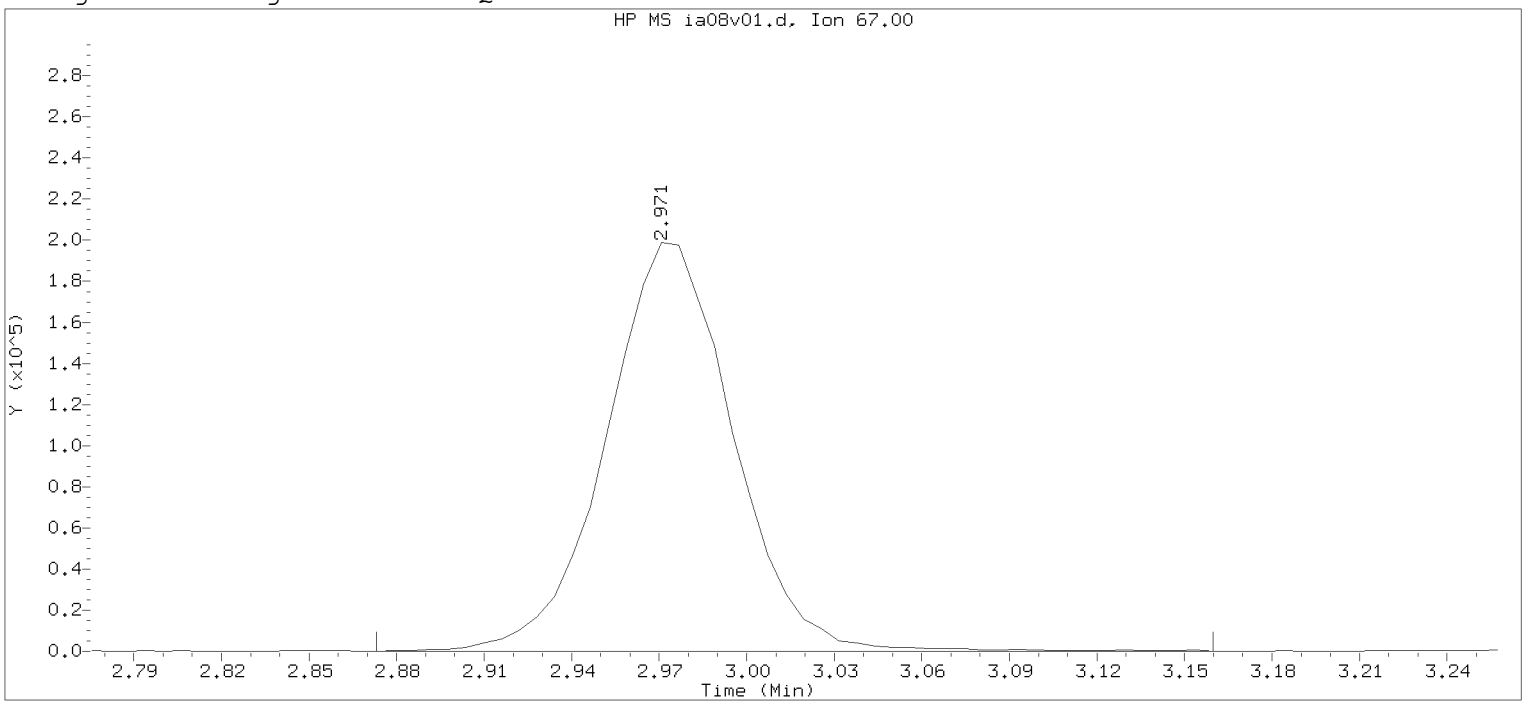
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

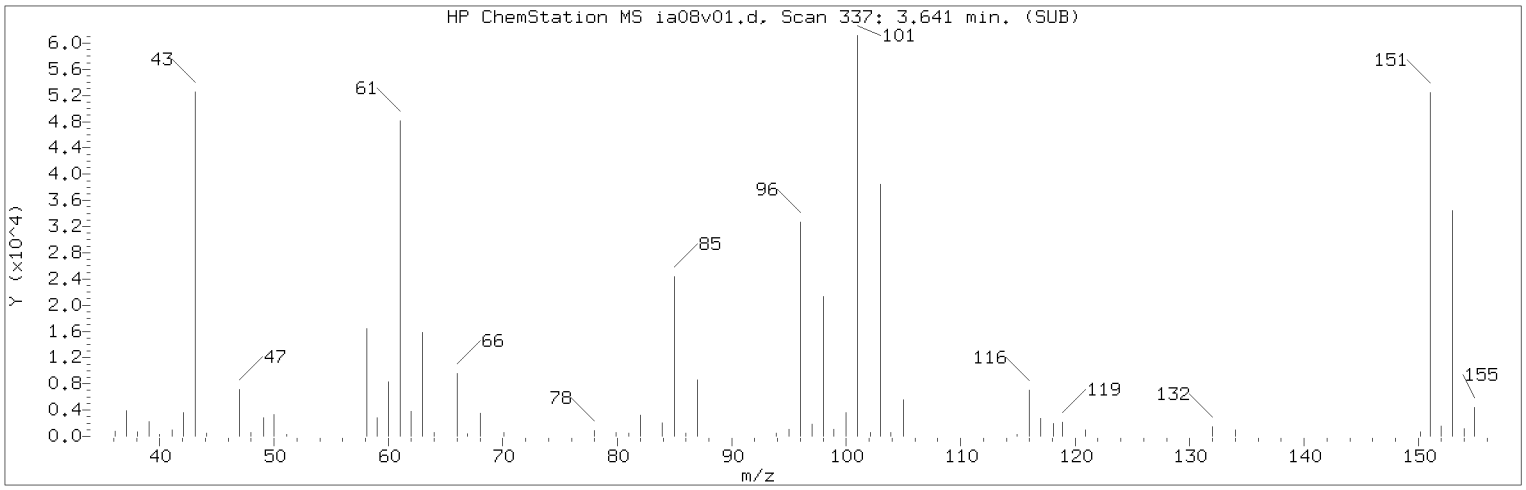
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

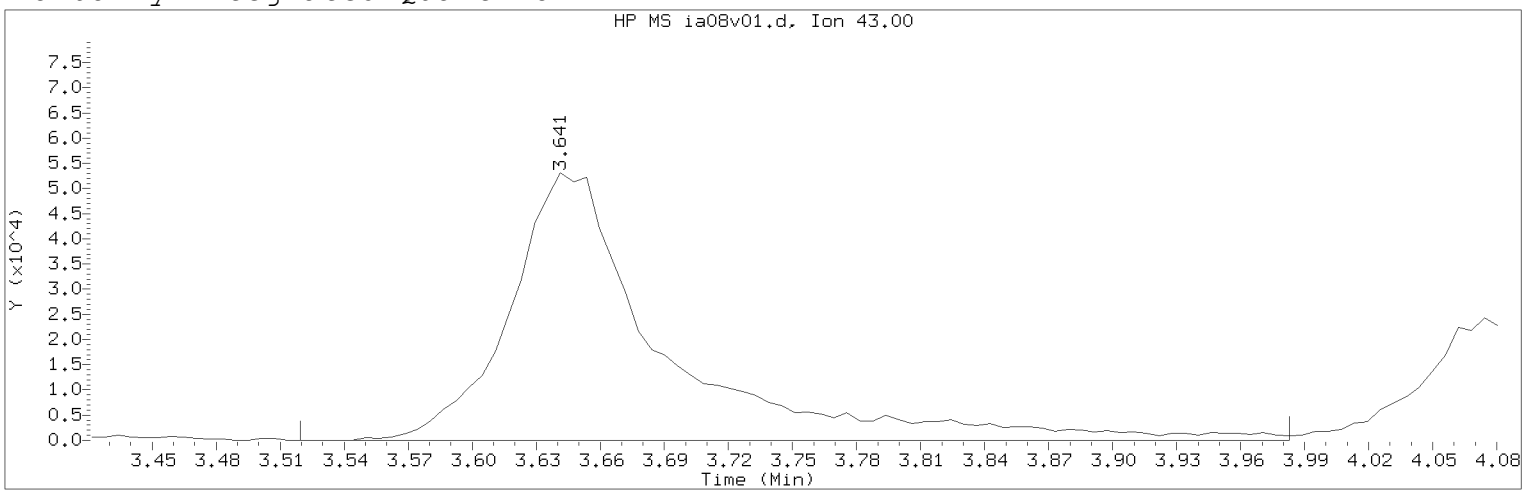
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 227
Retention Time (minutes): 2.971
Quant Ion : 67.00
Area : 600303
On-column Amount (ng) : 4.9780
Integration start scan : 210 Integration stop scan: 257
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

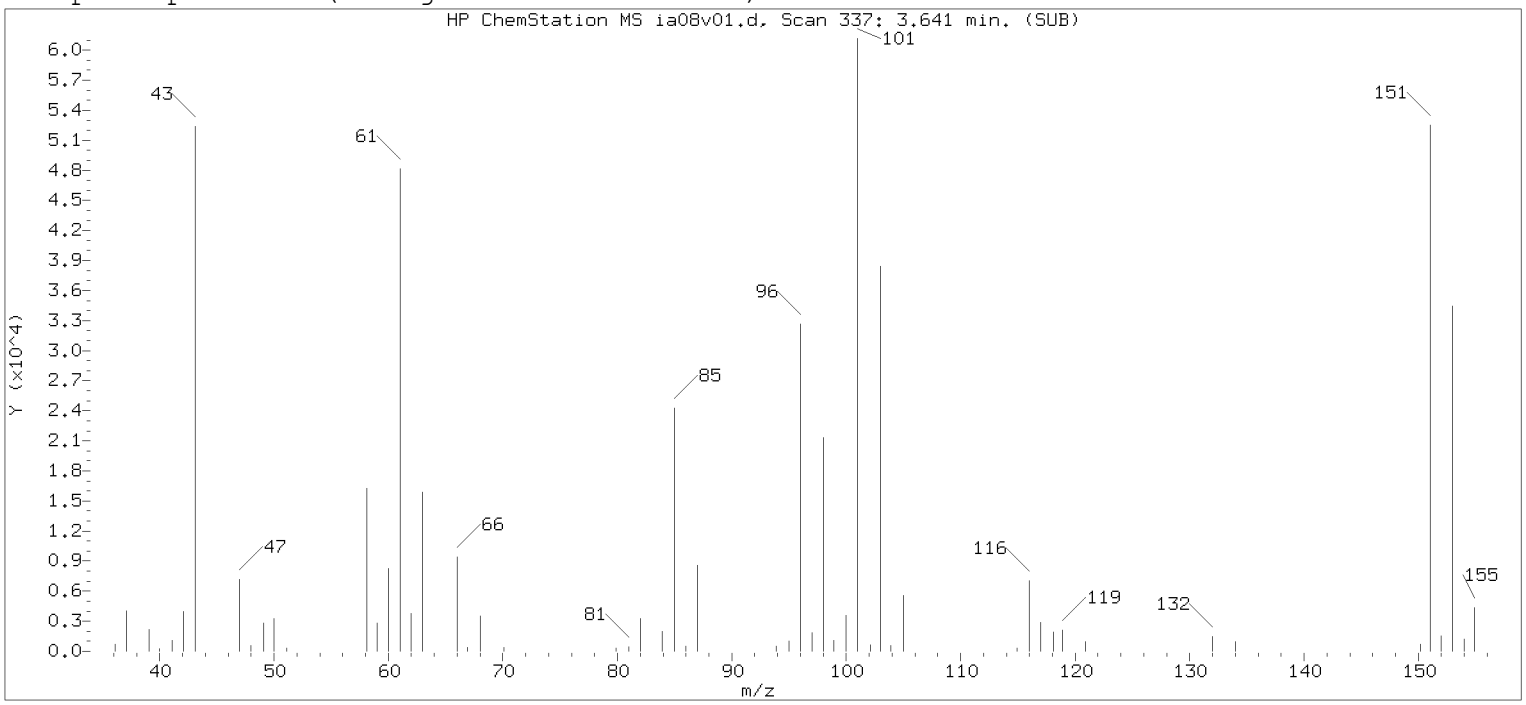
Compound Number : 14
Compound Name : Acetone
Scan Number : 337
Retention Time (minutes): 3.641
Quant Ion : 43.00
Area (flag) : 267216M
On-Column Amount (ng) : 30.9862
Integration start scan : 316 Integration stop scan: 392
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

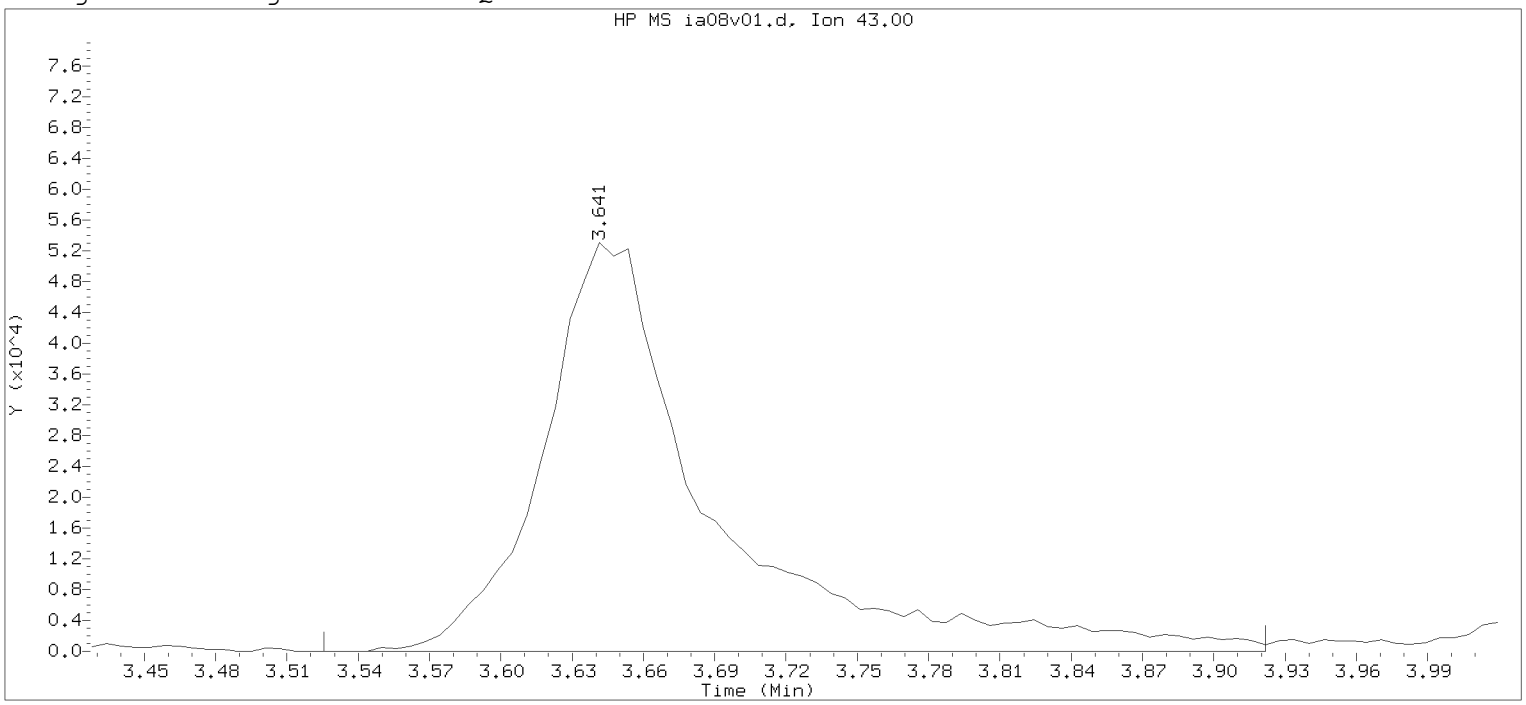
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

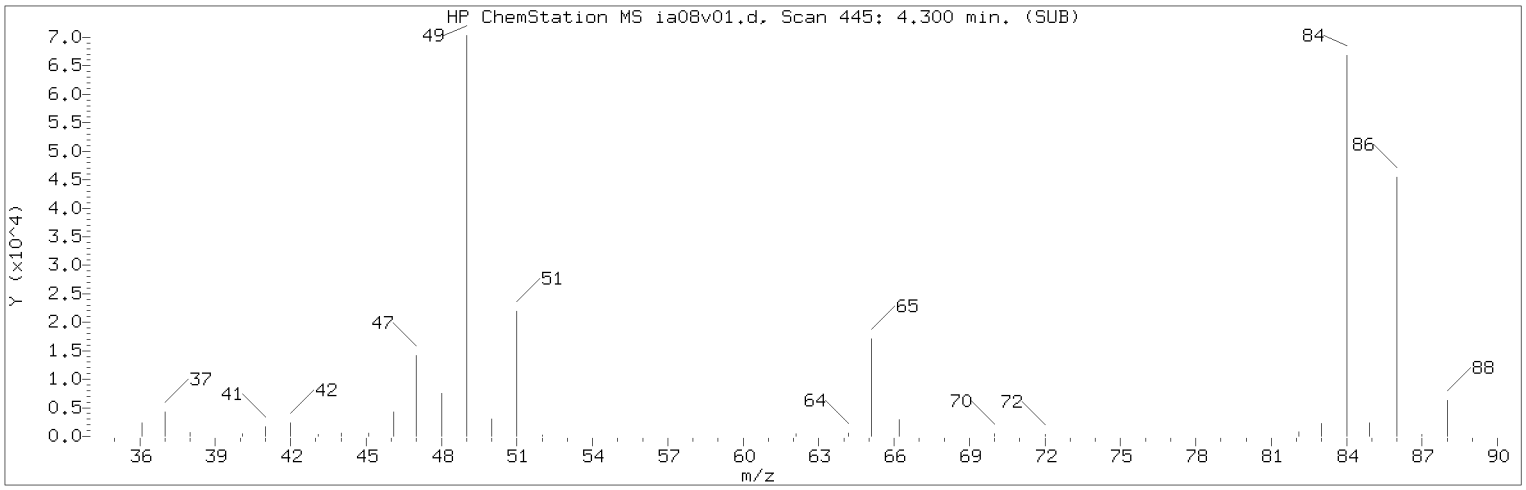
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

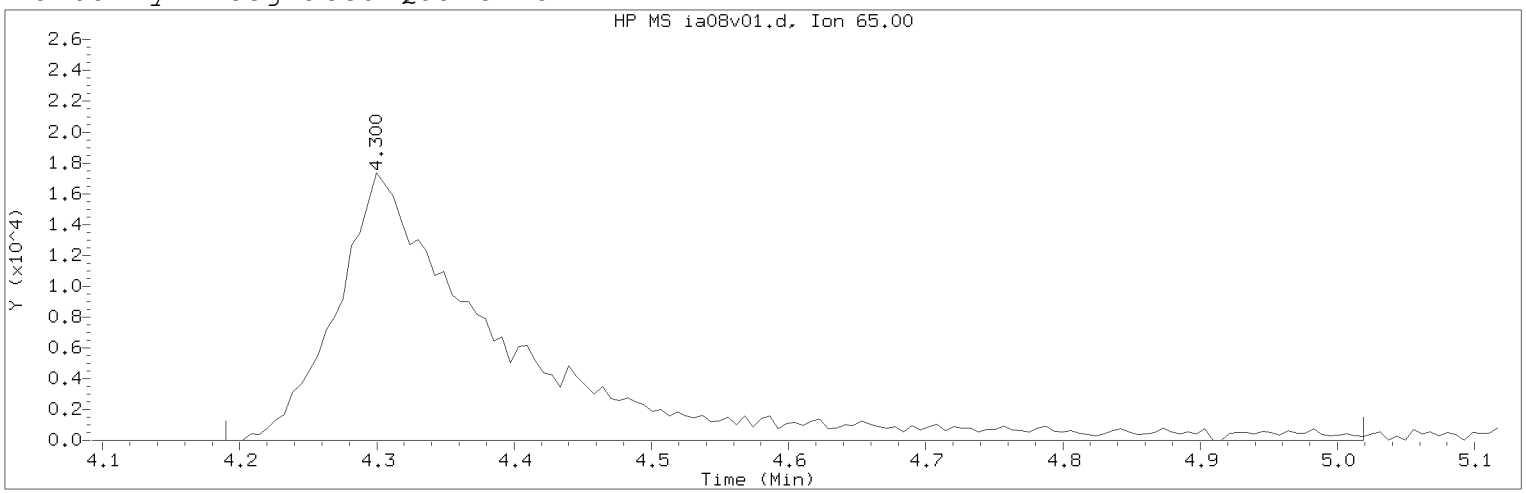
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 337		
Retention Time (minutes)	: 3.641		
Quant Ion	: 43.00		
Area	: 262417		
On-column Amount (ng)	: 29.6455		
Integration start scan	: 317	Integration stop scan:	382
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

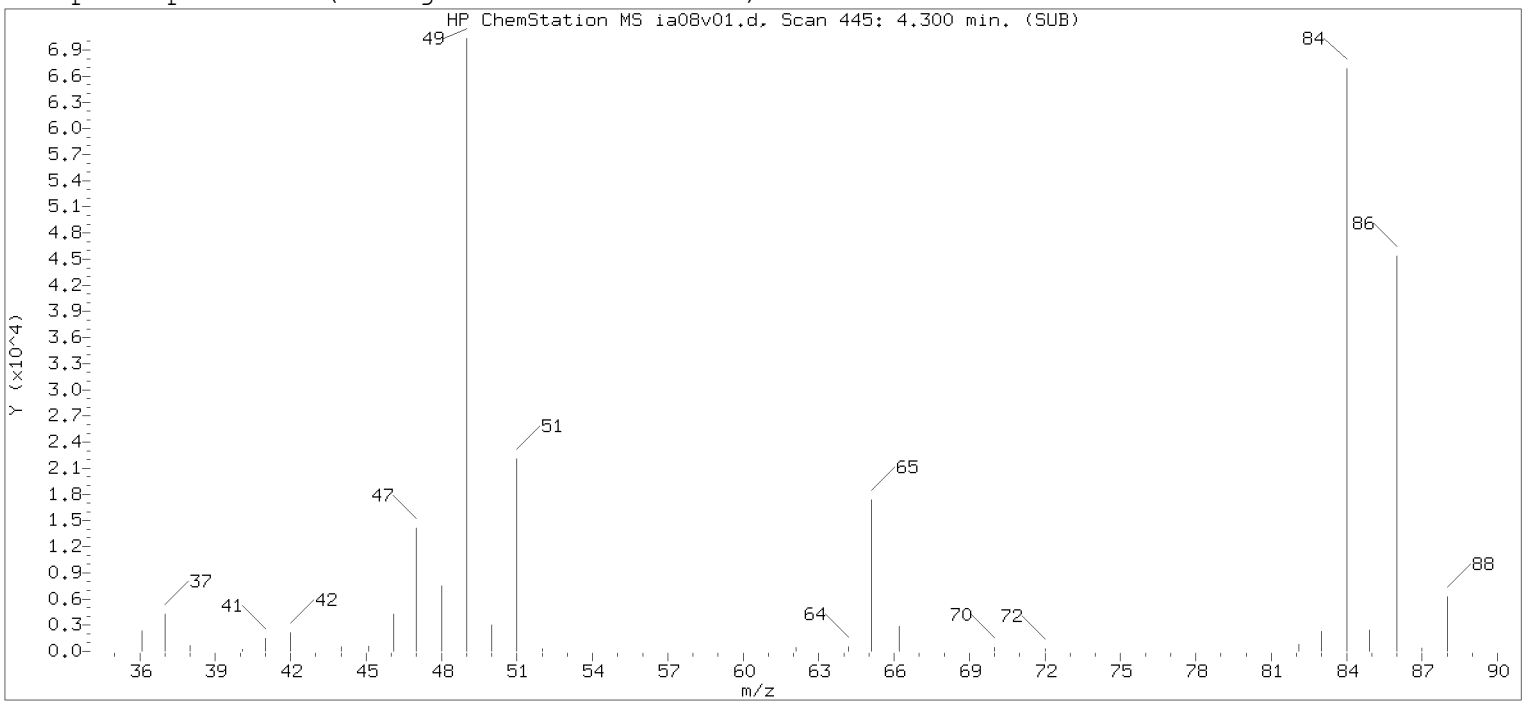
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 445
Retention Time (minutes): 4.300
Quant Ion : 65.00
Area (flag) : 147191M
On-Column Amount (ng) : 50.0000
Integration start scan : 426 Integration stop scan: 562
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

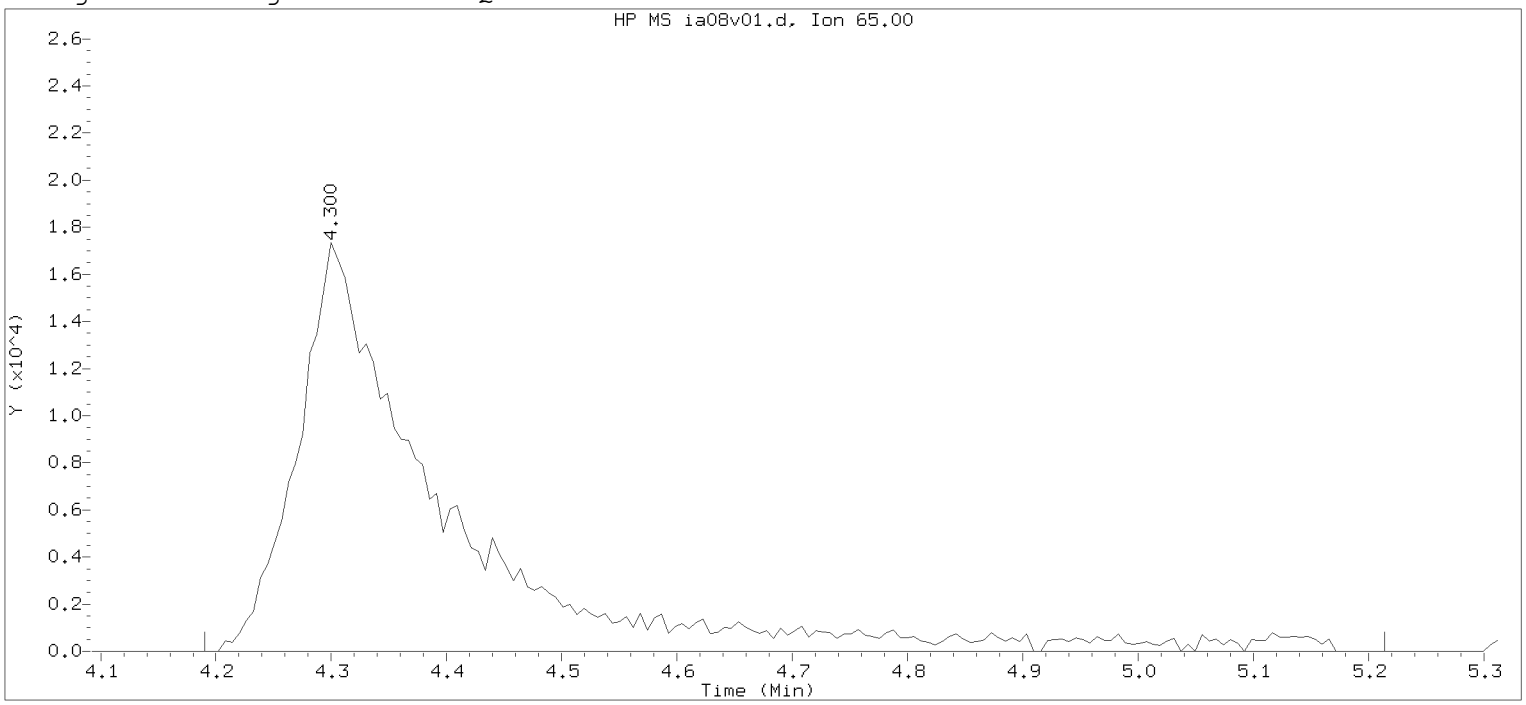
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

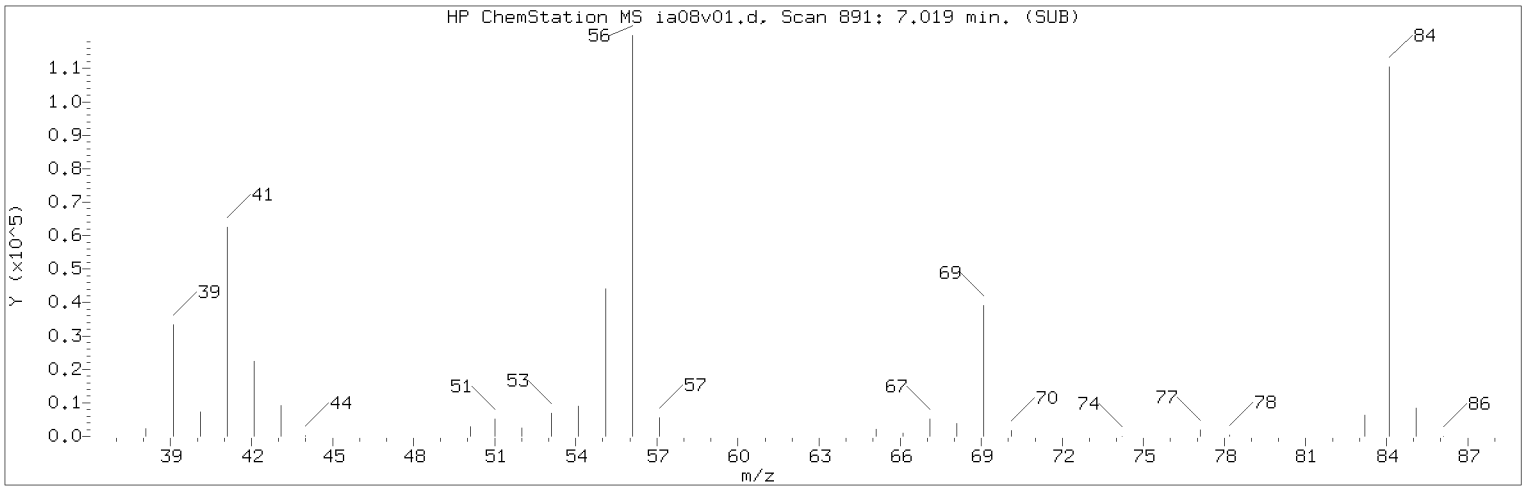
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

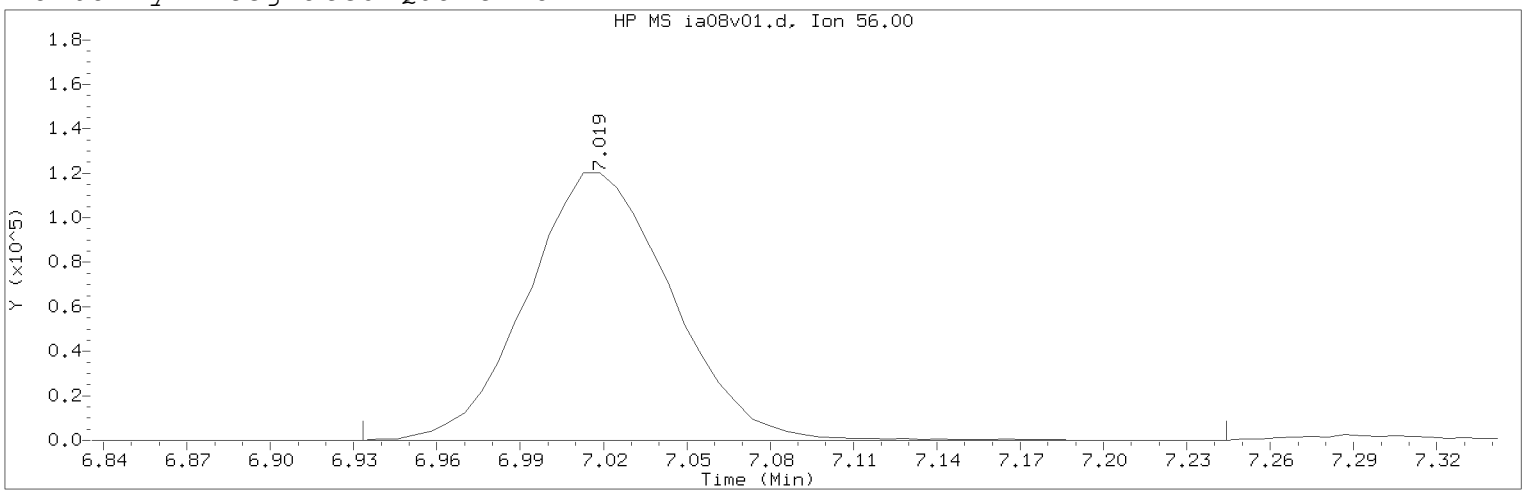
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 445
Retention Time (minutes): 4.300
Quant Ion : 65.00
Area : 151084
On-column Amount (ng) : 50.0000
Integration start scan : 426 Integration stop scan: 594
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

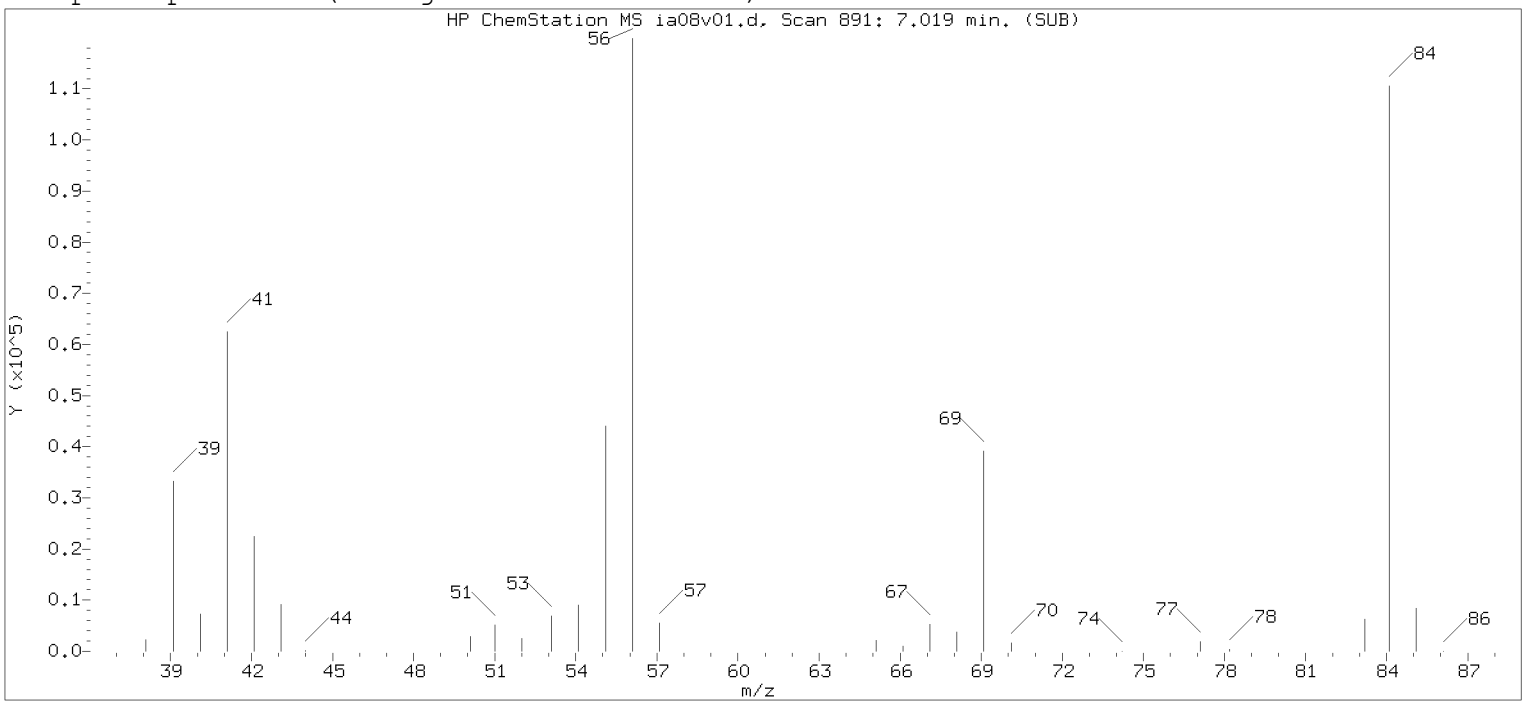
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 56.00
Area (flag) : 433882M
On-Column Amount (ng) : 4.9403
Integration start scan : 876 Integration stop scan: 927
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

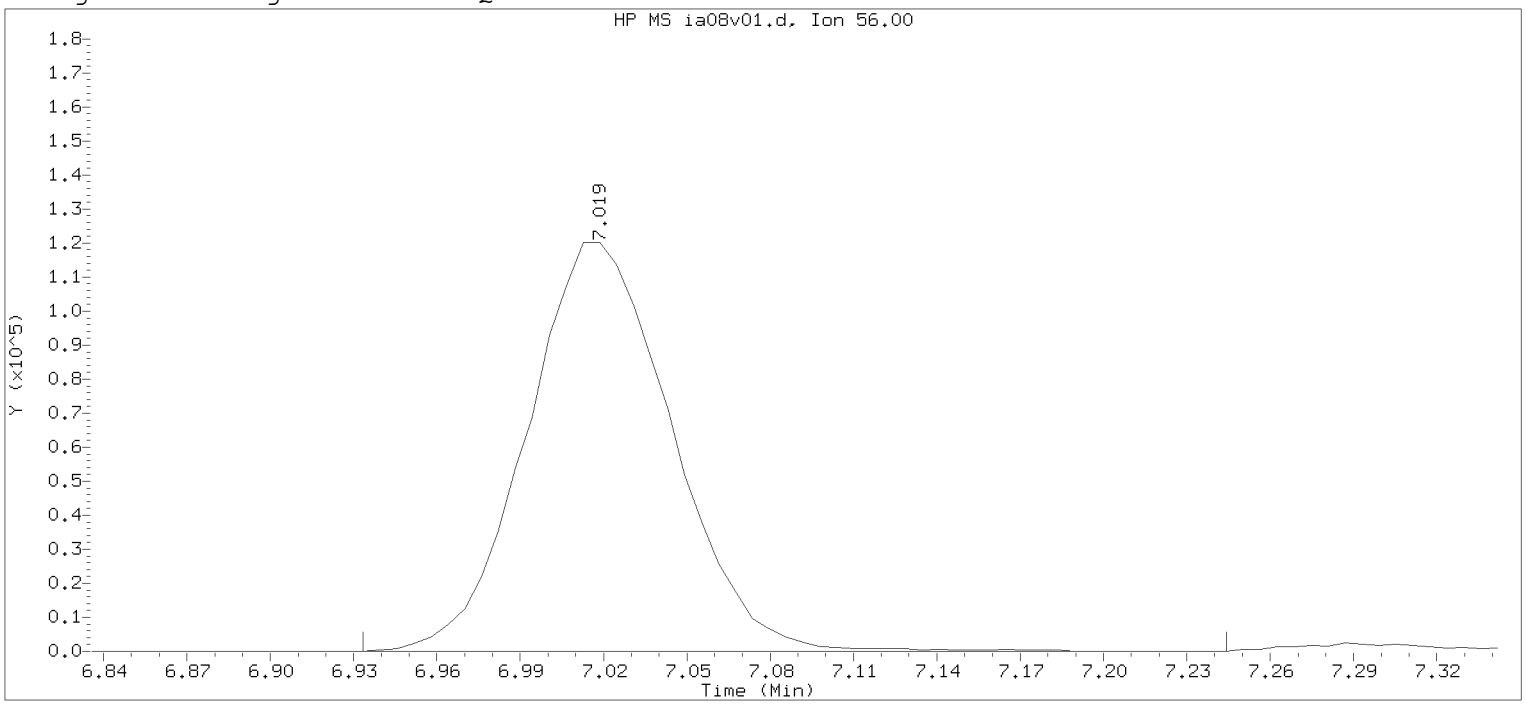
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

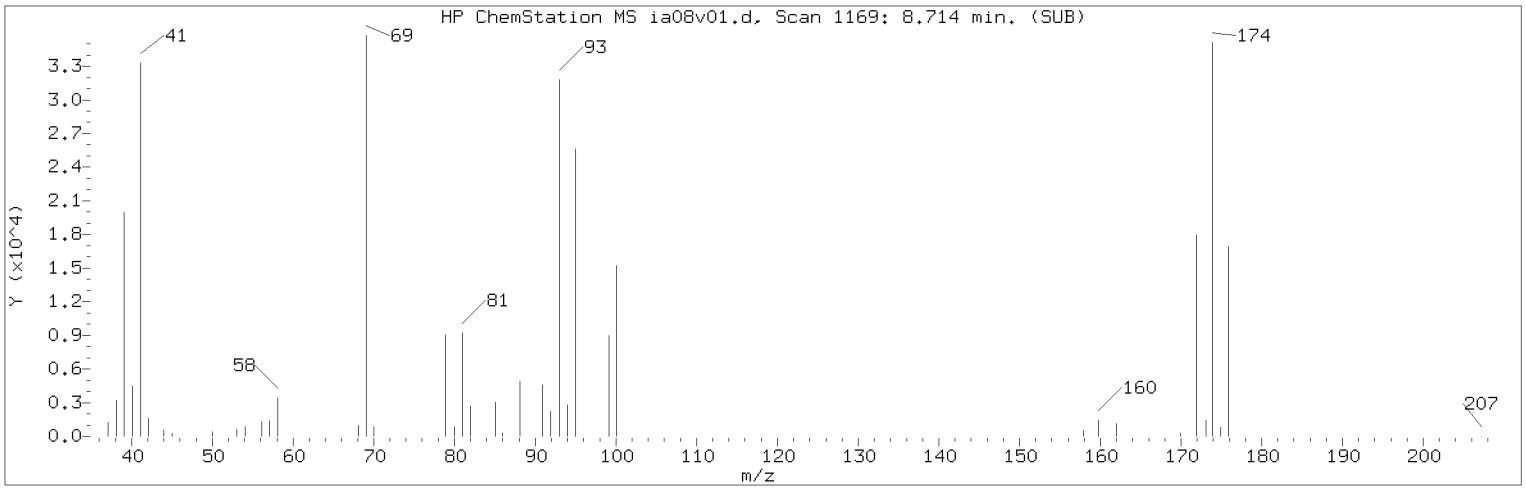
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

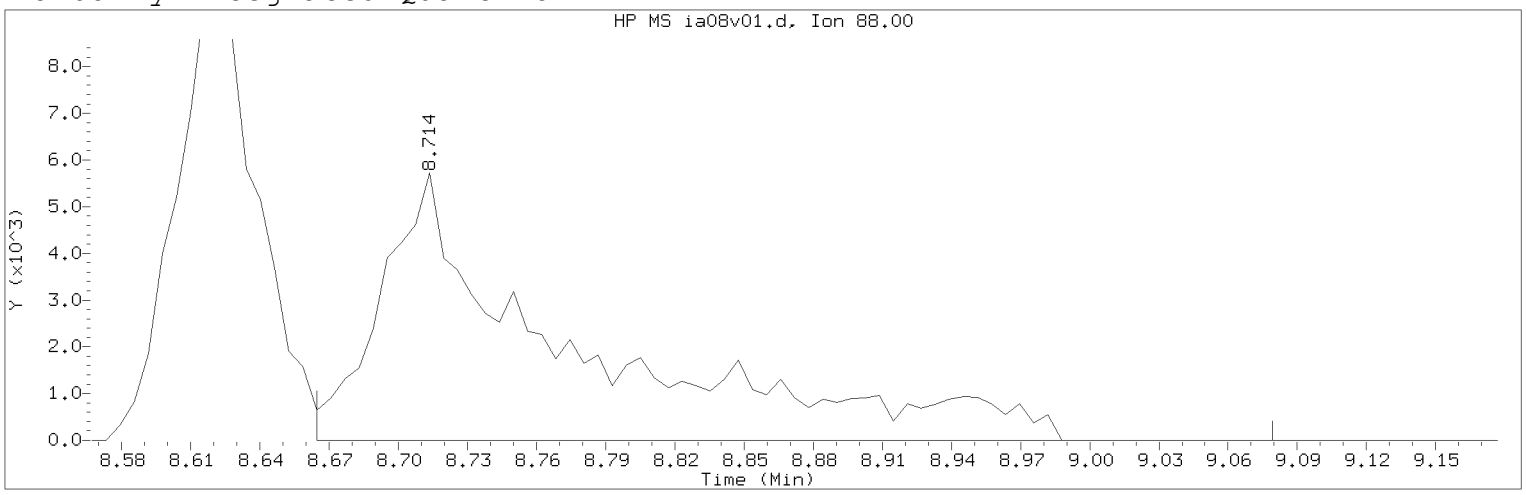
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 56.00
Area : 433882
On-column Amount (ng) : 4.9403
Integration start scan : 876 Integration stop scan: 927
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

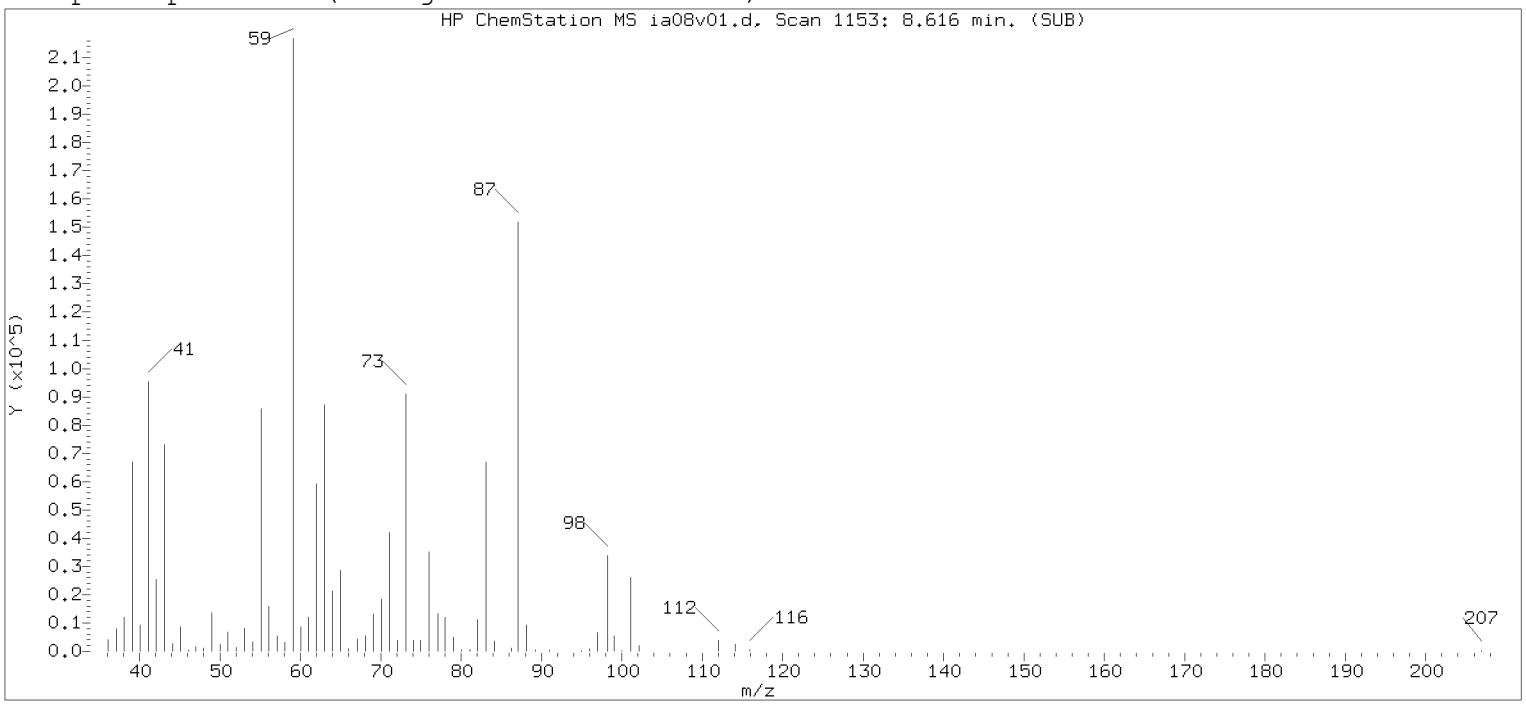
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.714
Quant Ion : 88.00
Area (flag) : 32080M
On-Column Amount (ng) : 141.6385
Integration start scan : 1160 Integration stop scan: 1228
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

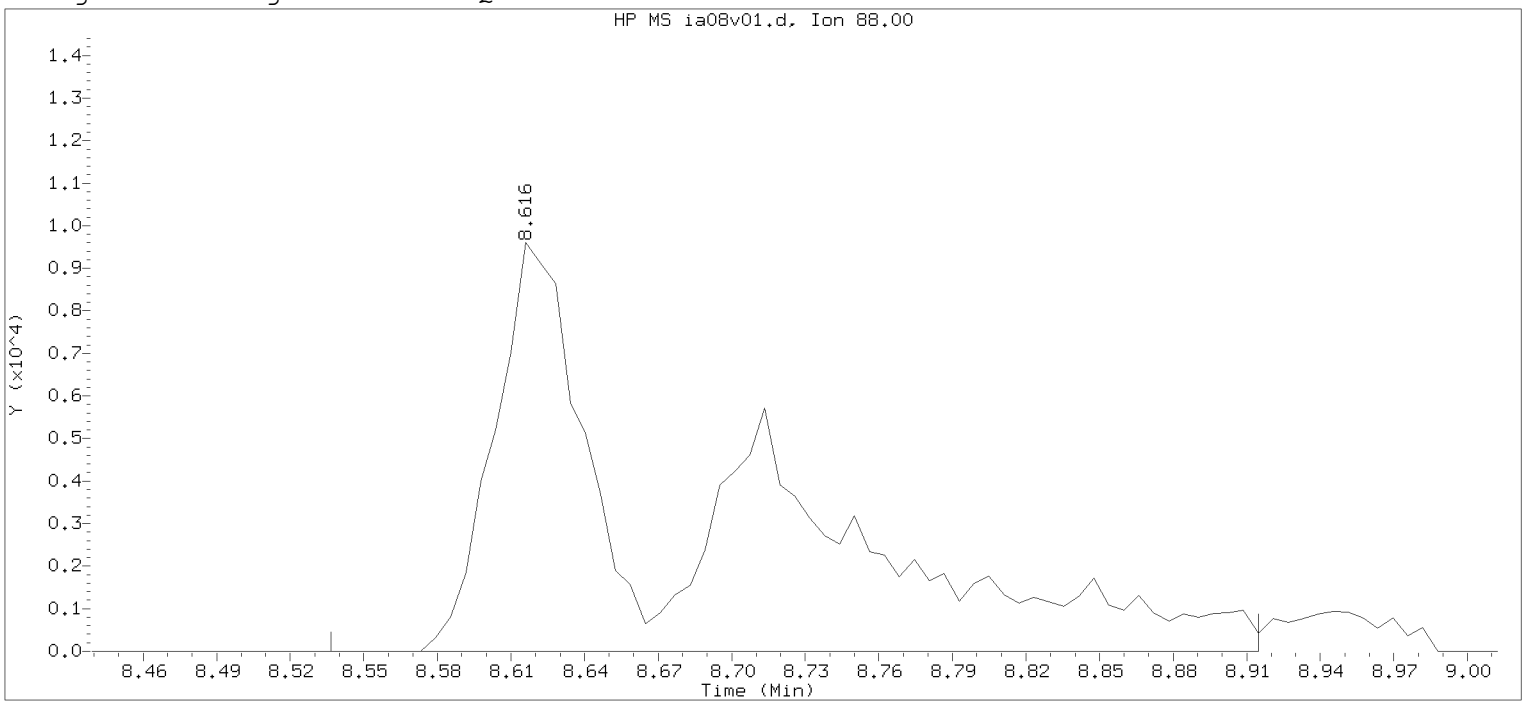
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

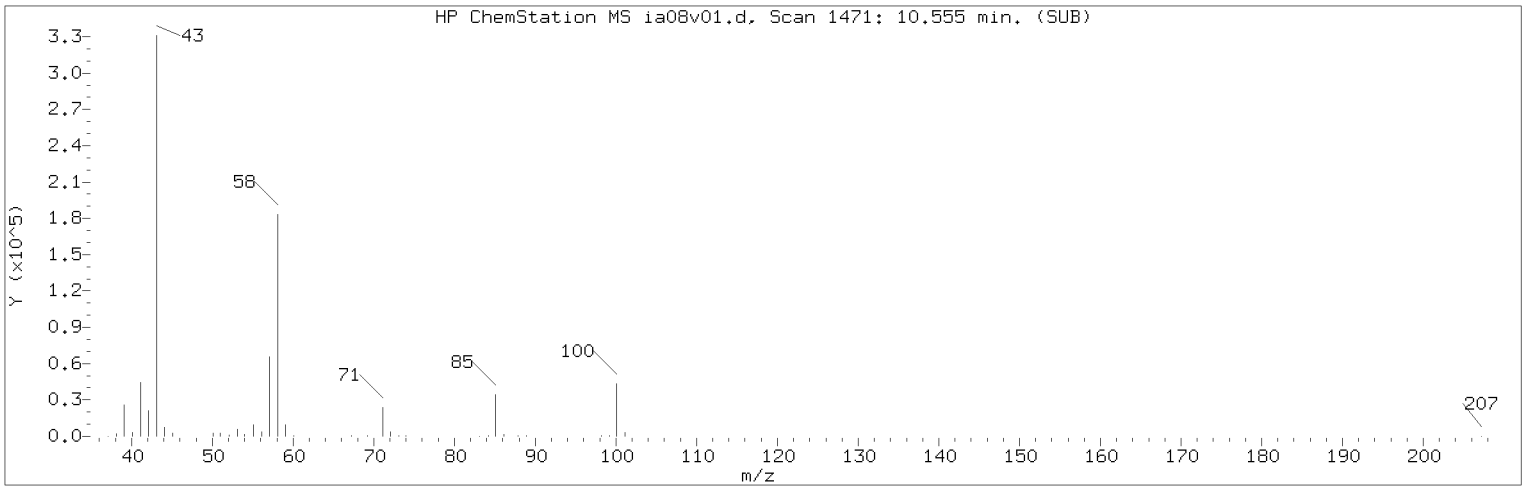
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

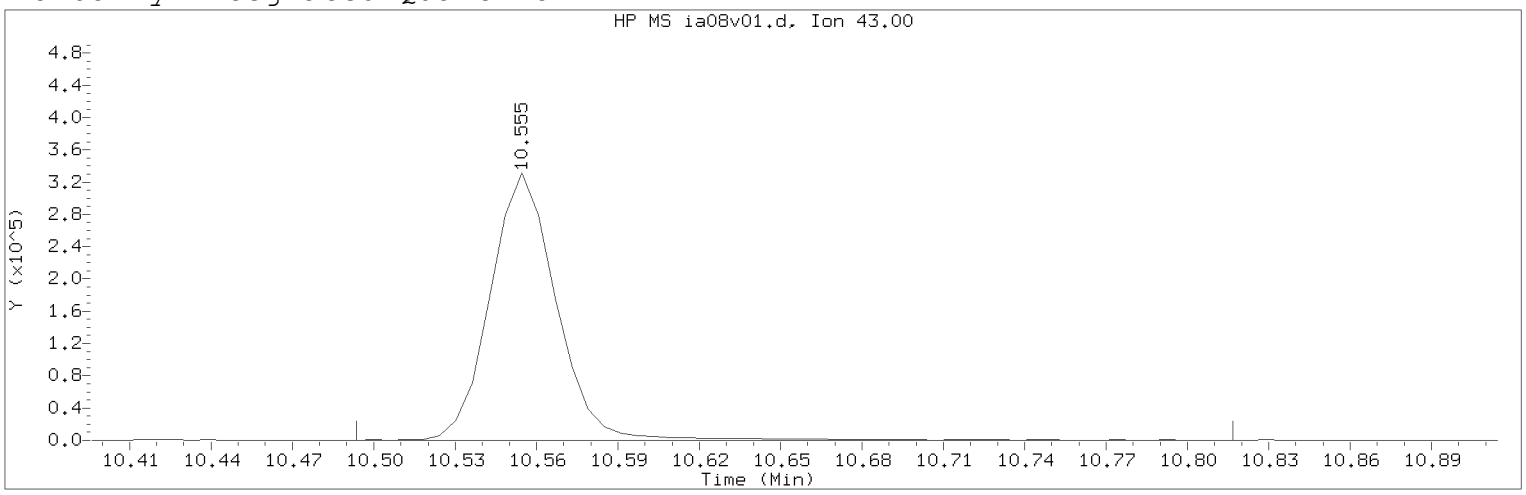
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1153
Retention Time (minutes): 8.616
Quant Ion : 88.00
Area : 52748
On-column Amount (ng) : 226.8900
Integration start scan : 1139 Integration stop scan: 1201
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

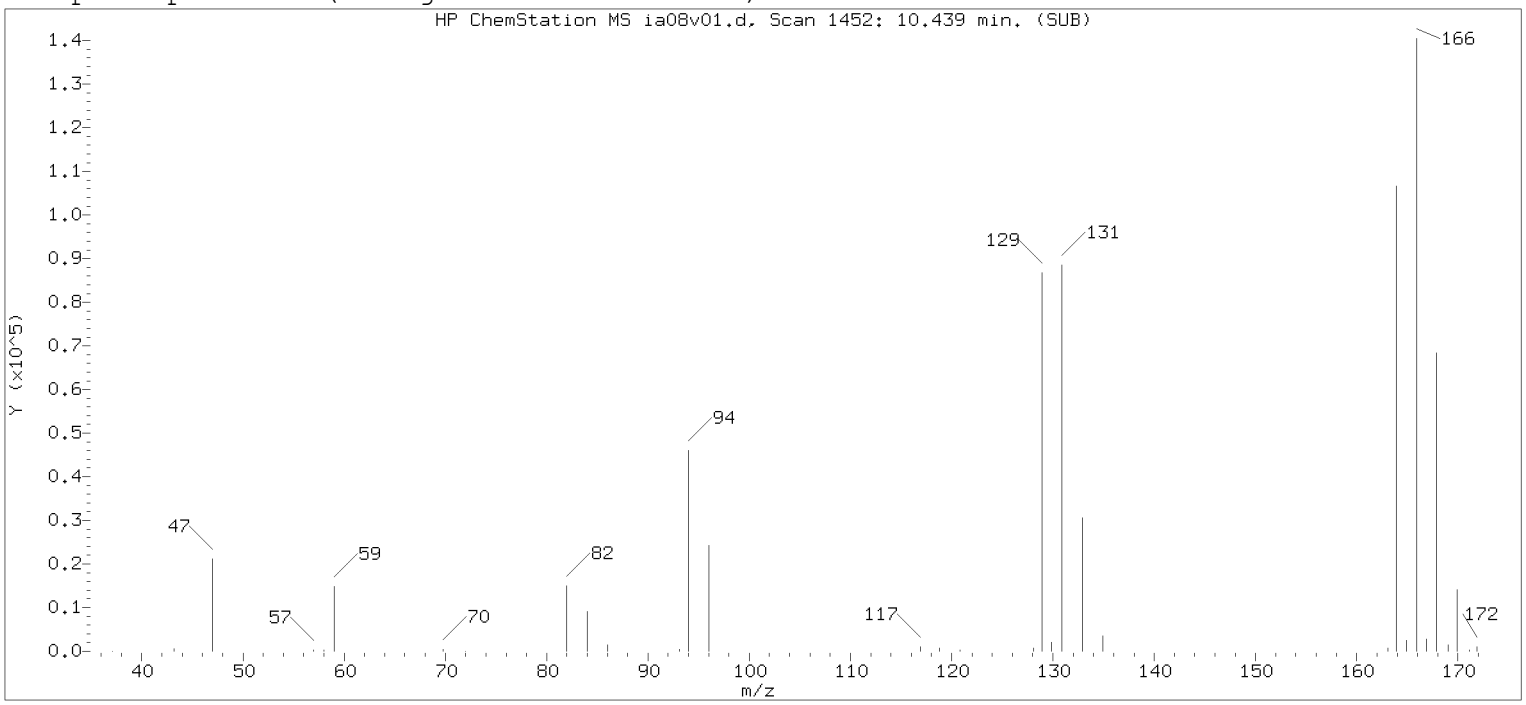
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1471
Retention Time (minutes): 10.555
Quant Ion : 43.00
Area (flag) : 563781MA
On-Column Amount (ng) : 22.4210
Integration start scan : 1460 Integration stop scan: 1513
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

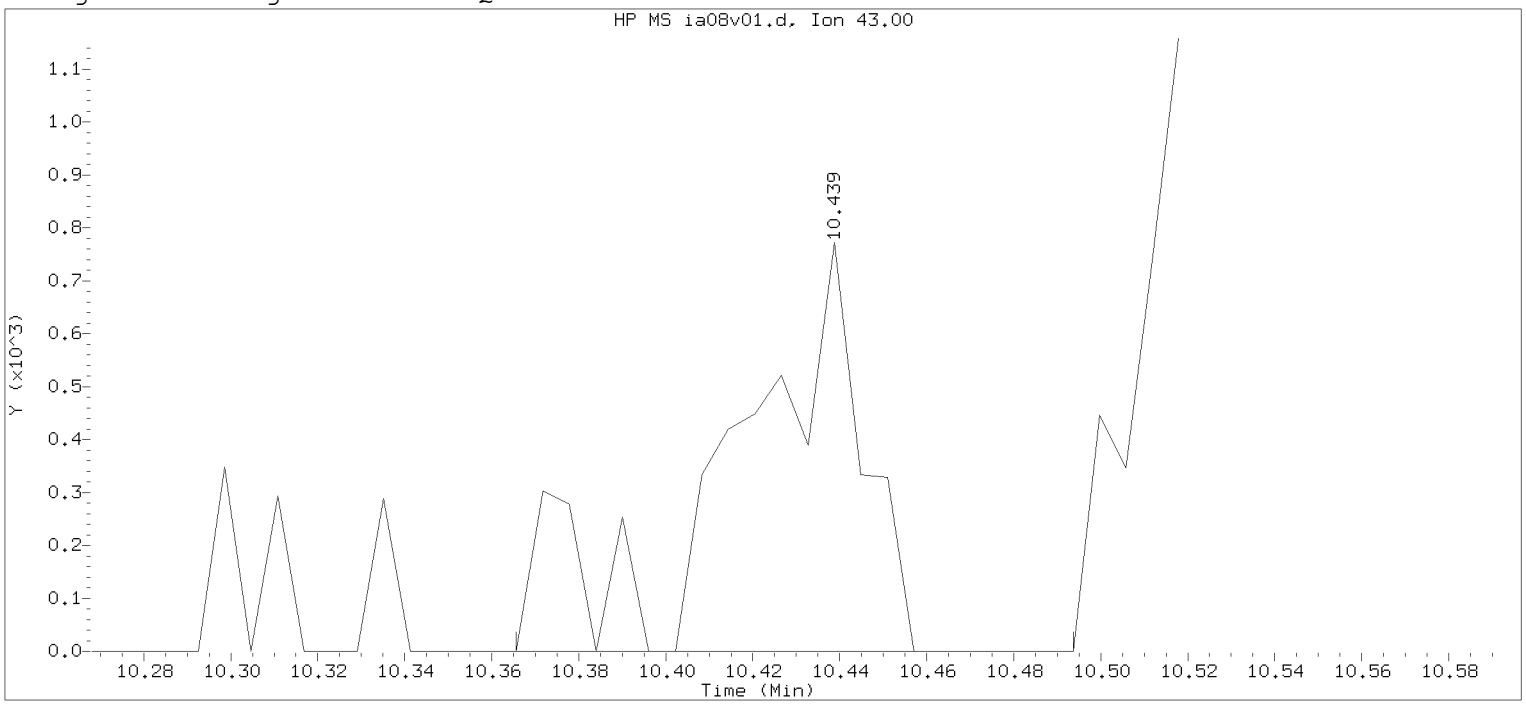
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

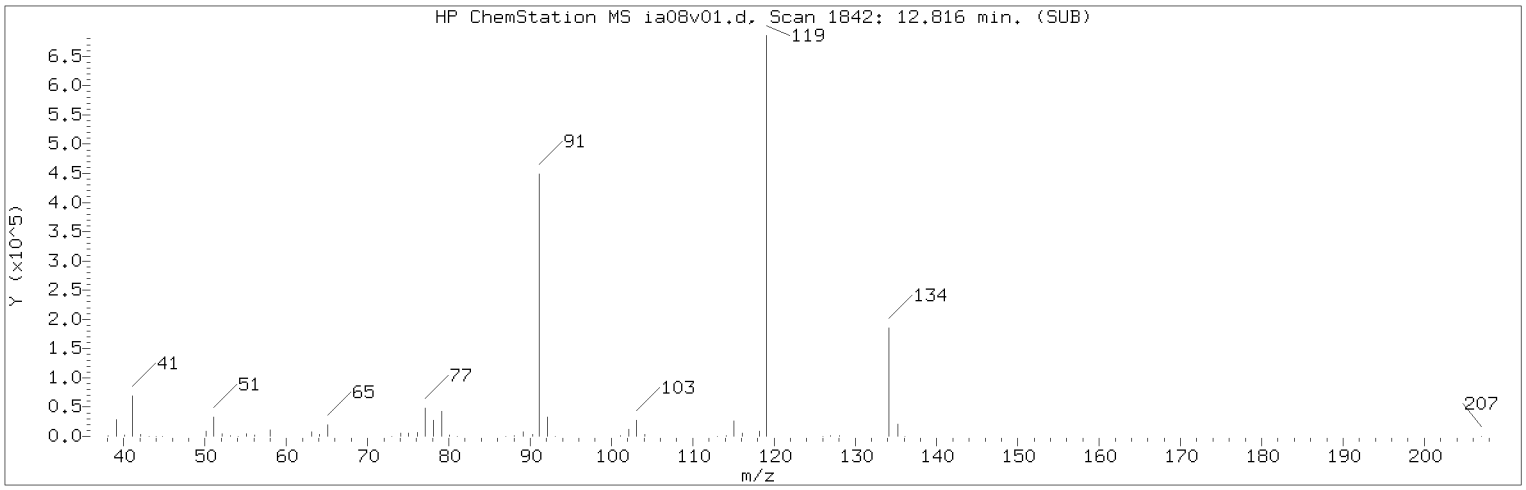
Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

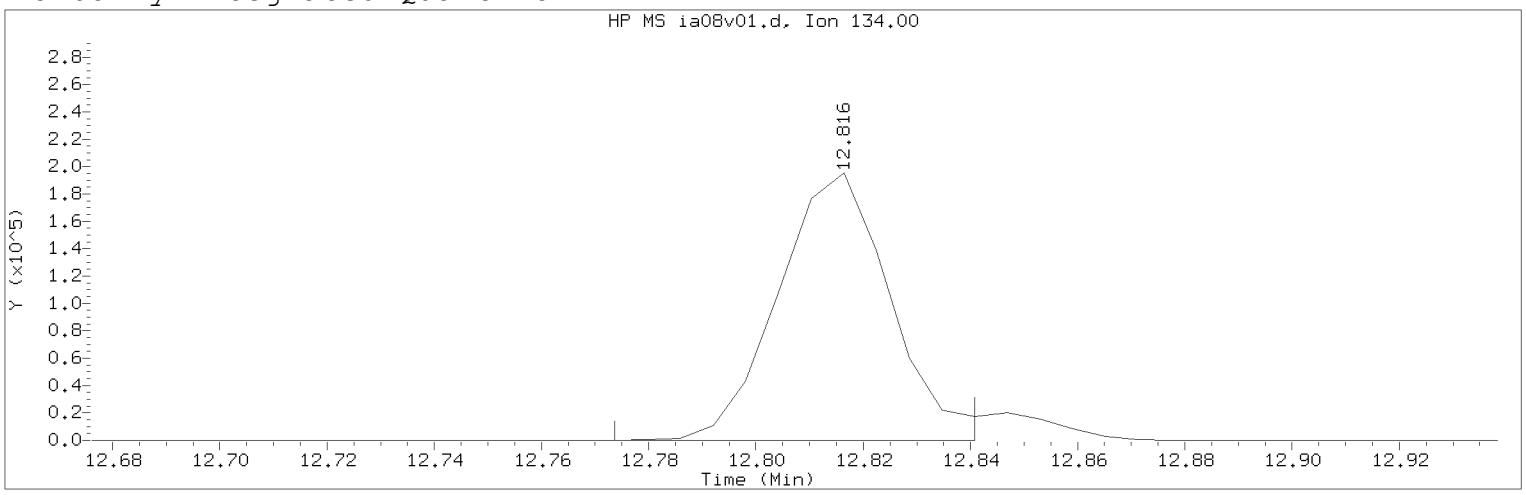
Compound Number : 91
Compound Name : 2-Hexanone
Scan Number : 1452
Retention Time (minutes): 10.439
Quant Ion : 43.00
Area : 1602
On-column Amount (ng) : 0.0621
Integration start scan : 1439 Integration stop scan: 1460
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 11-APR-2019 06:05
Date, time and analyst ID of latest file update: 11-Apr-2019 06:06 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

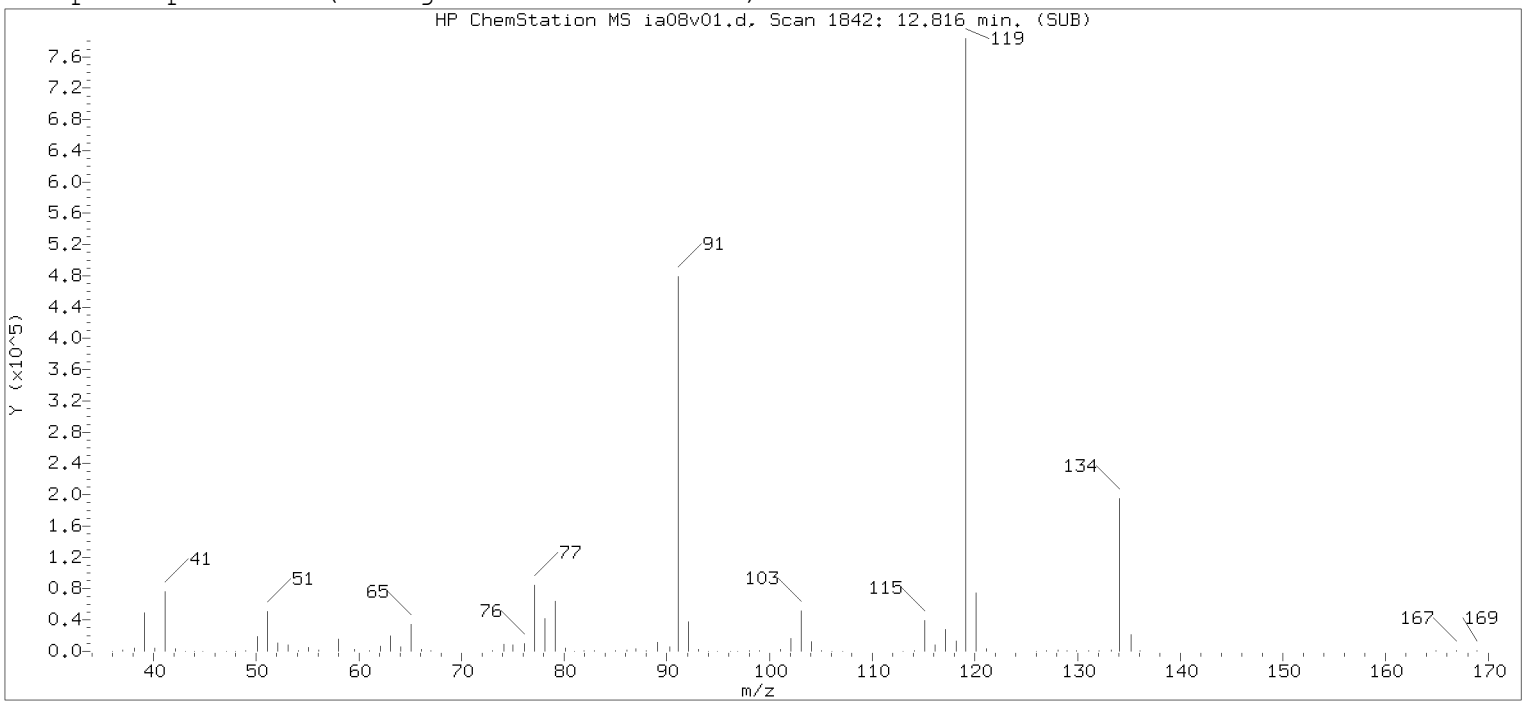
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 283372M
On-Column Amount (ng) : 5.2965
Integration start scan : 1834 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

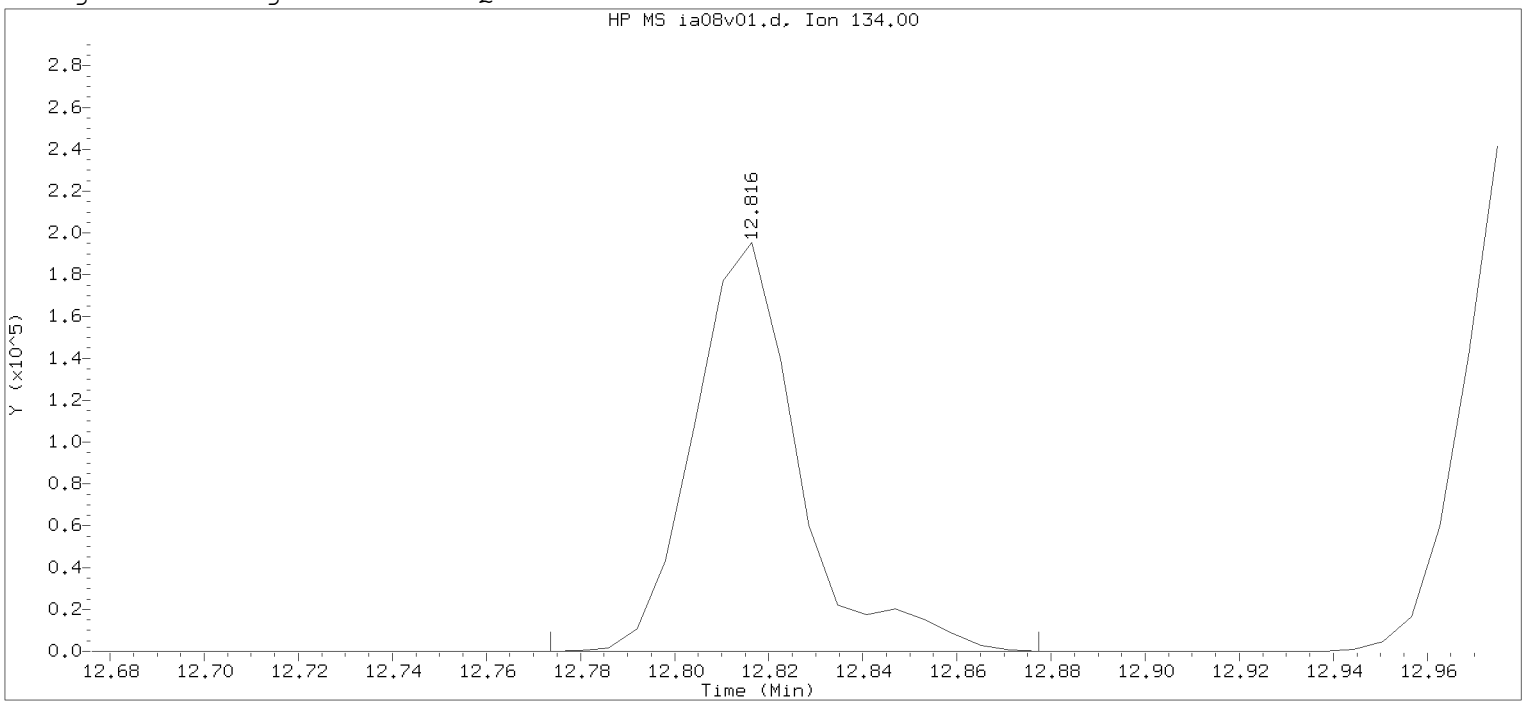
Analyst responsible for change: Digitally signed by Jennifer K. Howe
on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Secondary review performed and digitally signed by Chelsea B. Riehl on 04/11/2019 at 11:04.
PARALLAX ID: cbs01947

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr08a.b/ia08v01.d Instrument ID: HP19930.i
Injection date and time: 08-APR-2019 18:41 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr08a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 09-APR-2019 10:35
Date, time and analyst ID of latest file update: 09-Apr-2019 10:36 jkh09052

Sample Name: LCSILG Lab Sample ID: LCSILG

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 300713
On-column Amount (ng) : 5.6207
Integration start scan : 1834 Integration stop scan: 1851
Y at integration start : 0 Y at integration end: 0

Digitally signed by Jennifer K. Howe on 04/11/2019 at 06:06.
Target 3.5 esignature user ID: jkh09052

Data File: /chem2/HP19930.i/19apr16a.b/ia16t05.d

Date : 16-APR-2019 10:49

Client ID: BFB FEB05-19

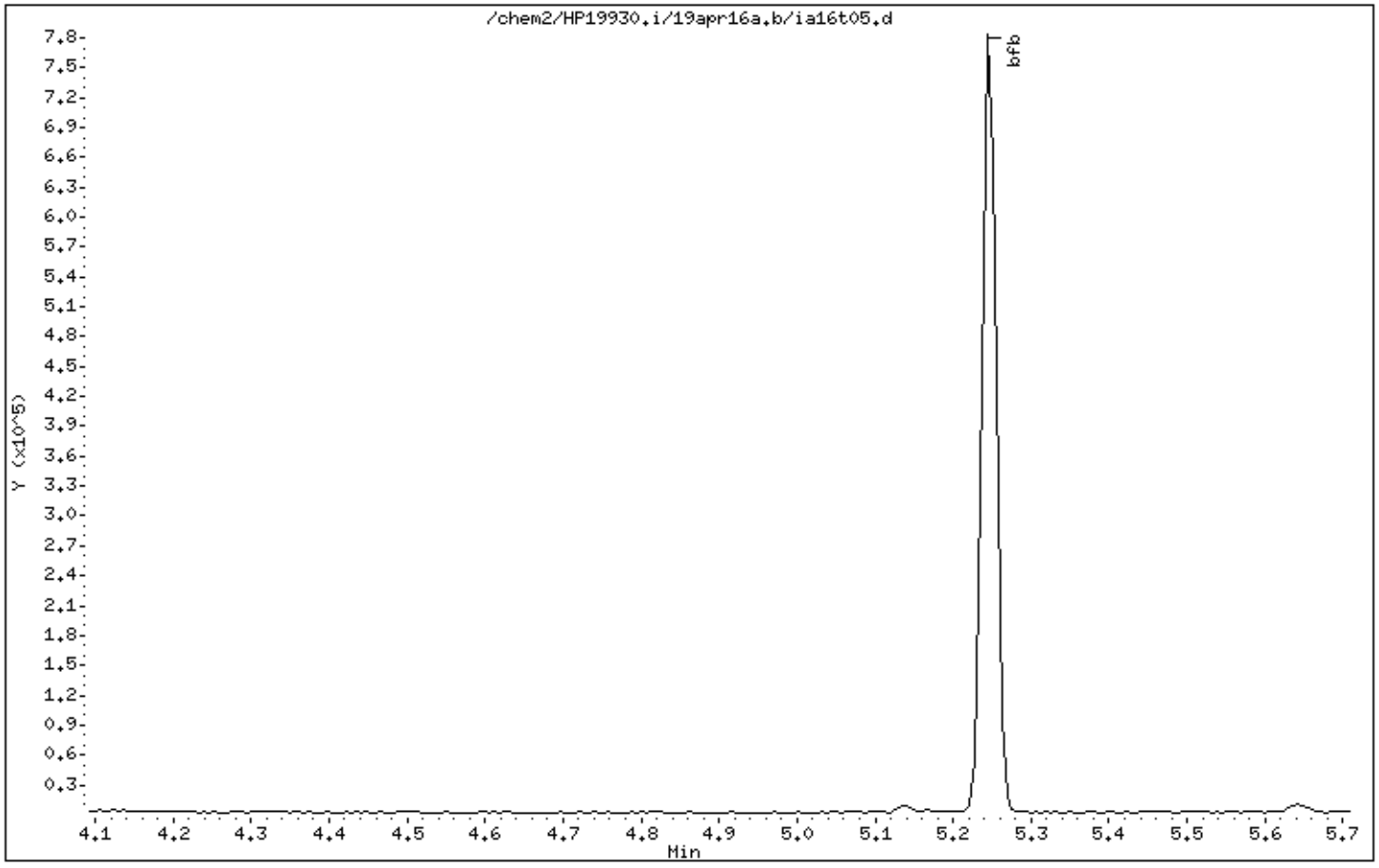
Instrument: HP19930.i

Sample Info: BFB FEB05-19;50NGBFB;1;3;;;;;;

Operator: MEC29284

Column phase: Rxi-624Sil MS

Column diameter: 0.25



Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Data File: /chem2/HP19930.i/19apr16a.b/ia16t05.d

Date : 16-APR-2019 10:49

Client ID: BFB FEB05-19

Instrument: HP19930.i

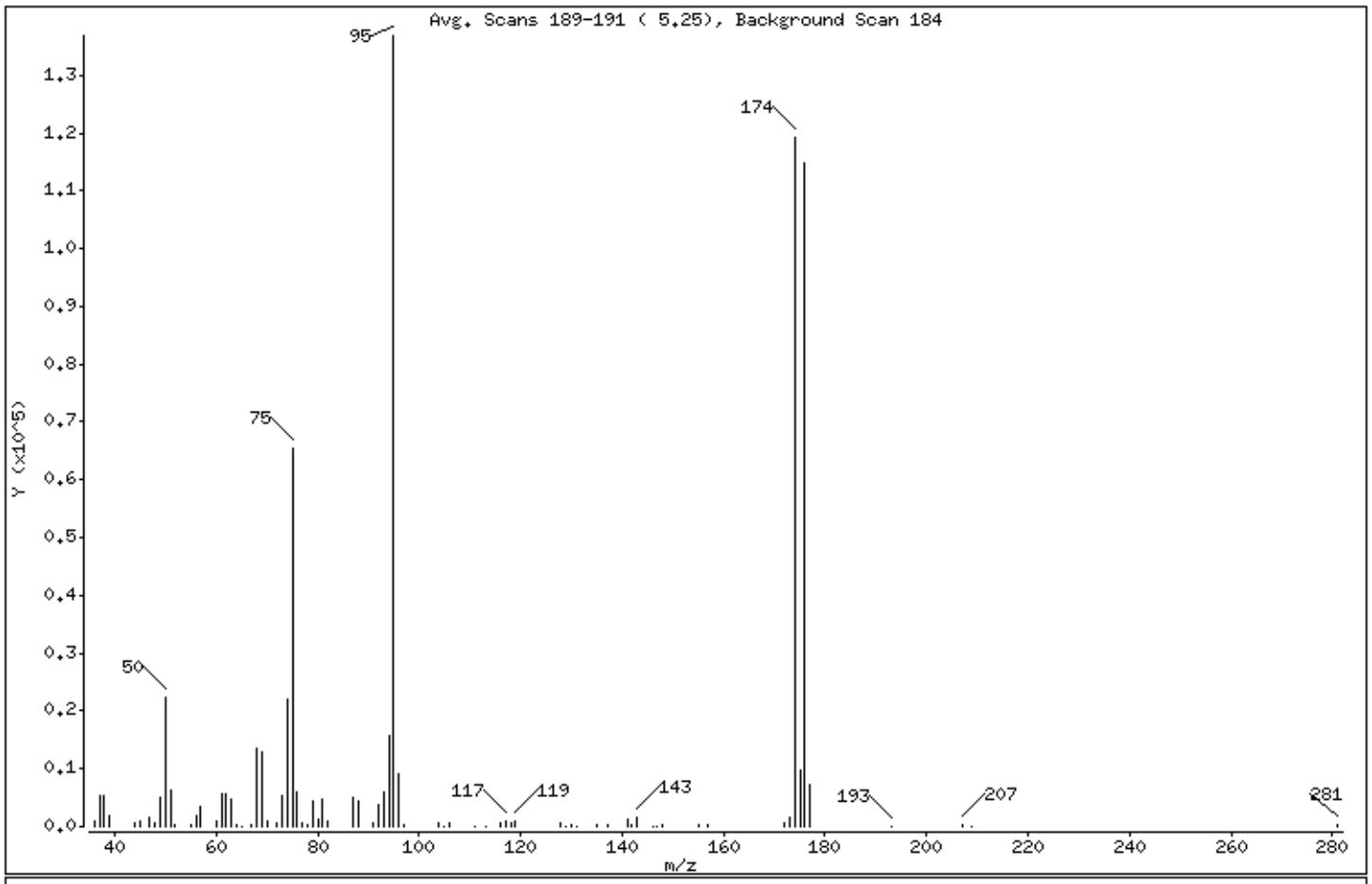
Sample Info: BFB FEB05-19;50NGBFB;1;3;;;;;;

Operator: MEC29284

Column phase: Rxi-624Sil MS

Column diameter: 0.25

1 bfb



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
95	Base Peak, 100% relative abundance	100.00
50	15.00 - 40.00% of mass 95	16.23
75	30.00 - 60.00% of mass 95	47.87
96	5.00 - 9.00% of mass 95	6.58
173	Less than 2.00% of mass 174	1.05 (1.20)
174	50.00 - 100.00% of mass 95	87.08
175	5.00 - 9.00% of mass 174	7.15 (8.21)
176	95.00 - 101.00% of mass 174	83.78 (96.21)
177	5.00 - 9.00% of mass 176	5.39 (6.44)

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Data File: /chem2/HP19930.i/19apr16a.b/ia16t05.d

Date : 16-APR-2019 10:49

Client ID: BFB FEB05-19 Instrument: HP19930.i

Sample Info: BFB FEB05-19;50NGBFB;1;3;;;;;;

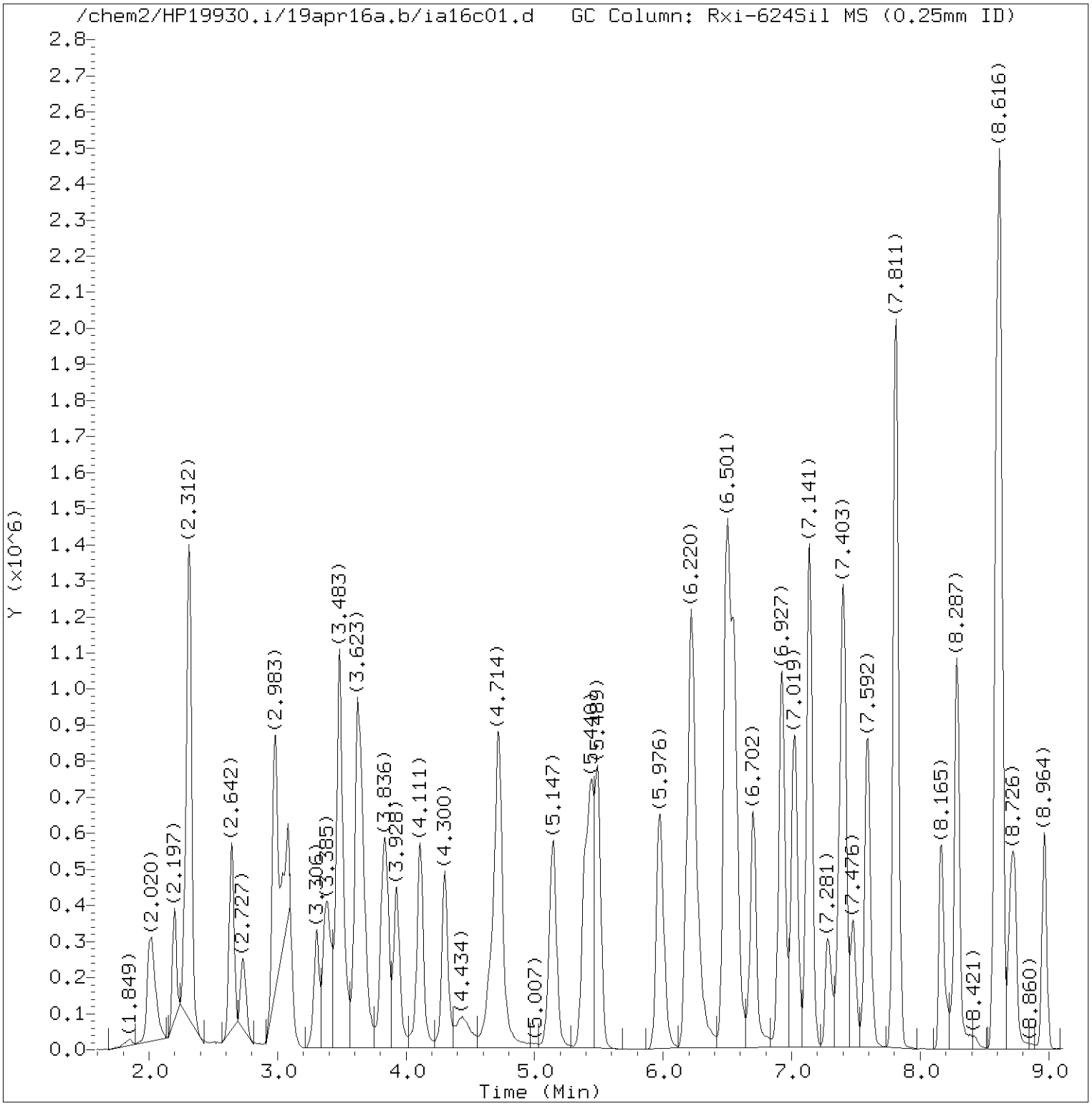
Operator: MEC29284

Column phase: Rxi-624Sil MS Column diameter: 0.25

Data File: ia16t05.d
Spectrum: Avg. Scans 189-191 (5,25), Background Scan 184
Location of Maximum: 95.00
Number of points: 78

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	939	65.00	92	93.00	5839	141.00	1368
37.00	5390	67.00	369	94.00	15768	142.00	214
38.00	5494	68.00	13449	95.00	136832	143.00	1659
39.00	1935	69.00	12881	96.00	9007	146.00	101
44.00	656	70.00	1044	97.00	383	147.00	90
45.00	966	72.00	757	104.00	657	148.00	345
47.00	1423	73.00	5469	105.00	102	155.00	335
48.00	717	74.00	21936	106.00	714	157.00	261
49.00	5143	75.00	65512	111.00	85	172.00	672
50.00	22216	76.00	5851	113.00	94	173.00	1433
51.00	6426	77.00	719	116.00	511	174.00	119184
52.00	404	78.00	382	117.00	890	175.00	9784
55.00	335	79.00	4248	118.00	530	176.00	114664
56.00	1951	80.00	1298	119.00	799	177.00	7381
57.00	3467	81.00	4606	128.00	553	193.00	90
60.00	1061	82.00	1037	129.00	93	207.00	193
61.00	5796	87.00	5063	130.00	465	209.00	119
62.00	5767	88.00	4351	131.00	98	281.00	429
63.00	4630	91.00	582	135.00	236		
64.00	373	92.00	3731	137.00	180		

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Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

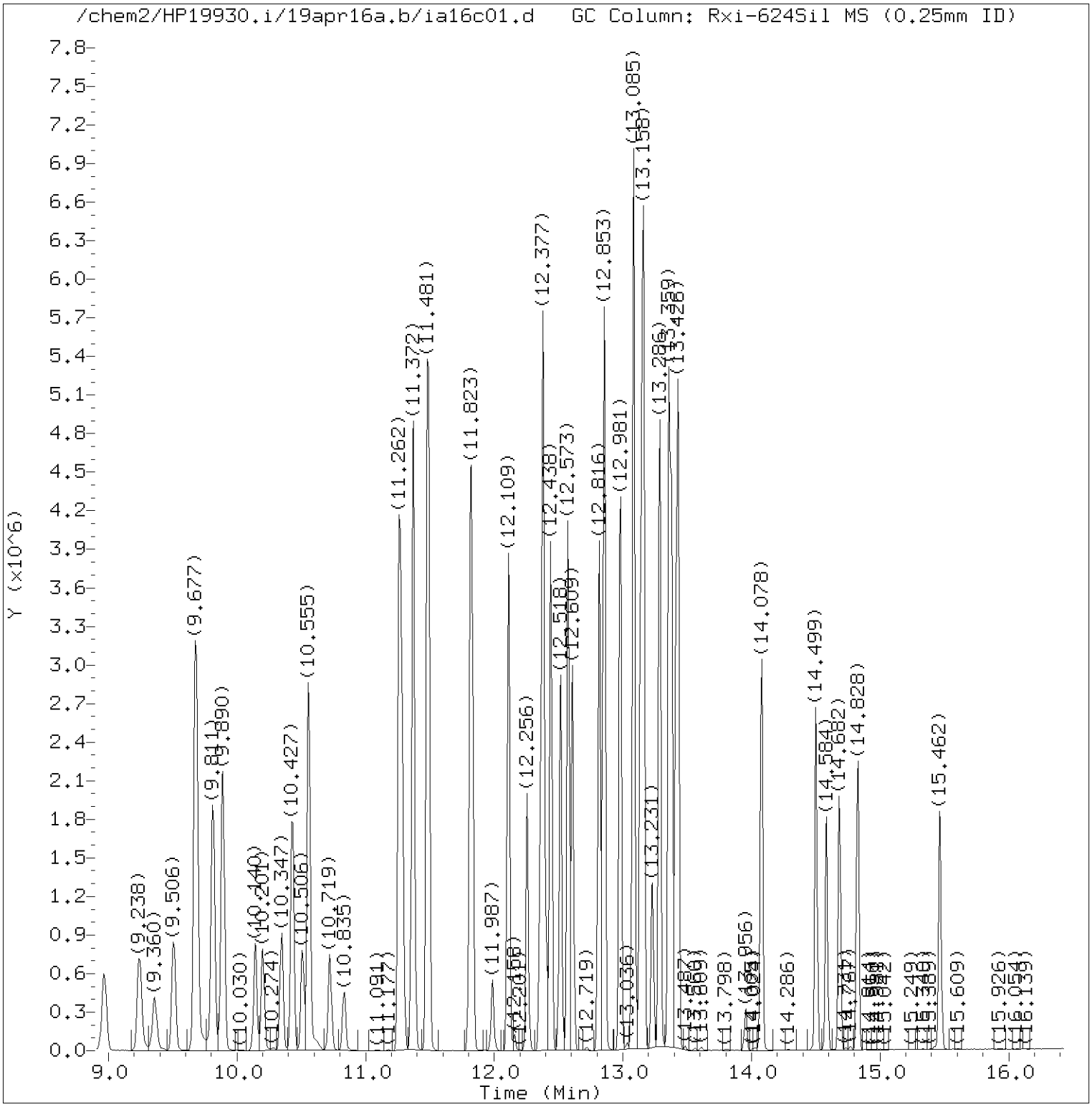
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.008	85	848482	9.403
2) Chloromethane	(2)	2.197	50	595769	8.914
6) 1,3-Butadiene	(2)	2.312	39	900321M	16.021
5) Vinyl Chloride	(2)	2.318	62	618776	9.107
7) Bromomethane	(2)	2.642	94	577301	9.556
8) Chloroethane	(2)	2.727	64	370570	9.388
9) Dichlorofluoromethane	(2)	2.977	67	1014958M	9.951
10) Trichlorofluoromethane	(2)	3.038	101	1064601M	9.378
11) Ethyl ether	(2)	3.306	59	304781	10.196
12) Freon 123a	(2)	3.385	67	479953M	9.403
13) Acrolein	(1)	3.483	56	2048767	442.364
15) 1,1-Dichloroethene	(2)	3.617	96	375374	9.535
16) Freon 113	(2)	3.654	101	468765M	9.853
14) Acetone	(1)	3.654	43	510294	79.824
17) Methyl Iodide	(2)	3.818	142	798025	9.450
18) Carbon Disulfide	(2)	3.928	76	1005592	8.722
21) Methyl Acetate	(1)	4.086	43	188478	11.158
22) Allyl Chloride	(2)	4.111	41	546919	9.031
23) Methylene Chloride	(2)	4.300	84	389934	9.682
26)*t-Butyl Alcohol-d10	(1)	4.306	65	109113M	50.000
28) t-Butyl Alcohol	(1)	4.434	59	395437M	149.236
29) Acrylonitrile	(1)	4.653	53	358333	46.860
30) Methyl Tertiary Butyl Ether	(2)	4.708	73	946449	9.191
31) trans-1,2-Dichloroethene	(2)	4.727	96	418403	9.496
32) n-Hexane	(2)	5.141	57	590149	9.517
33) 1,1-Dichloroethane	(2)	5.385	63	682486M	9.523
34) di-Isopropyl Ether	(2)	5.440	45	1162146	9.663
35) 2-Chloro-1,3-Butadiene	(2)	5.495	53	627767	9.755
37) Ethyl t-butyl ether	(2)	5.976	59	1132469M	9.485
40) 1,2-Dichloroethene (Total)	(2)		96	898000	19.266
38) 2-Butanone	(1)	6.190	43	1005484	96.832
39) cis-1,2-Dichloroethene	(2)	6.220	96	479597	9.771
41) 2,2-Dichloropropane	(2)	6.232	77	651670	9.769
42) Propionitrile	(1)	6.281	54	576019M	206.607
45) Methacrylonitrile	(1)	6.501	67	1108853M	108.071
47) Bromochloromethane	(2)	6.549	128	238275	9.863
48) Tetrahydrofuran	(1)	6.562	71	326225	100.470
49) Chloroform	(2)	6.702	83	757367	9.698

M = Compound was manually integrated.
* = Compound is an internal standard.

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on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
50)$Dibromofluoromethane	(2)	6.915	113	401211	10.042
50)$Dibromofluoromethane	(2)	6.915	111	410968	10.063
51) 1,1,1-Trichloroethane	(2)	6.927	97	751042	9.948
52) Cyclohexane	(2)	7.019	56	715248	9.634
52) Cyclohexane	(2)	7.025	84	667224	9.527
52) Cyclohexane	(2)	7.019	69	224999M	9.230
54) Carbon Tetrachloride	(2)	7.141	117	694414	9.741
55) 1,1-Dichloropropene	(2)	7.141	75	575968	9.855
56) Isobutyl Alcohol	(1)	7.287	41	354876	433.624
57)$1,2-Dichloroethane-d4	(2)	7.378	102	75404	9.793
57)$1,2-Dichloroethane-d4	(2)	7.372	65	336446	9.749
57)$1,2-Dichloroethane-d4	(2)	7.378	104	48069	9.889
58) Benzene	(2)	7.403	78	1686878	9.816
59) 1,2-Dichloroethane	(2)	7.476	62	430227	9.333
59) 1,2-Dichloroethane	(2)	7.476	98	41035	9.543
60) t-Amyl methyl ether	(2)	7.592	73	1114182M	9.676
63)*Fluorobenzene	(2)	7.811	96	1548113	10.000
62) n-Heptane	(2)	7.817	43	604769	9.498
65) n-Butanol	(1)	8.165	56	713373	1044.612
67) Trichloroethene	(2)	8.287	95	481001	10.004
69) Methylcyclohexane	(2)	8.592	83	897542M	10.454
70) 1,2-Dichloropropane	(2)	8.622	63	390445	9.813
71) Methyl Methacrylate	(1)	8.701	69	217650M	11.083
72) 1,4-Dioxane	(1)	8.714	88	87509M	556.147
72) 1,4-Dioxane	(1)	8.701	58	52491M	572.038
73) Dibromomethane	(2)	8.732	93	221074	9.884
74) Bromodichloromethane	(2)	8.964	83	543788	9.847
76) 2-Nitropropane	(1)	9.238	41	694504	106.290
80) cis-1,3-Dichloropropene	(2)	9.506	75	603560	9.635
81) 4-Methyl-2-Pentanone	(1)	9.677	43	2843007	108.151
82)$Toluene-d8	(3)	9.811	98	1540756	9.873
82)$Toluene-d8	(3)	9.811	100	997293	9.964
83) Toluene	(3)	9.890	92	1127532	9.610
84) trans-1,3-Dichloropropene	(3)	10.140	75	508425	9.193
85) 1,3-Dichloropropene (total)	(3)		75	1111985	18.828
86) Ethyl Methacrylate	(3)	10.201	69	461874	9.888
88) 1,1,2-Trichloroethane	(3)	10.347	97	314561	9.702
89) Tetrachloroethene	(3)	10.433	166	587915	9.469

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on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
90) 1,3-Dichloropropane	(3)	10.506	76	507781	9.730
91) 2-Hexanone	(1)	10.555	43	2012474	107.964
93) Dibromochloromethane	(3)	10.719	129	427766	9.707
95) 1,2-Dibromoethane	(3)	10.835	107	321243	9.729
97)*Chlorobenzene-d5	(3)	11.262	117	1272342	10.000
96) 1-Chlorohexane	(3)	11.268	91	667539	9.449
98) Chlorobenzene	(3)	11.286	112	1299582	9.648
99) 1,1,1,2-Tetrachloroethane	(3)	11.366	131	508659	10.012
100) Ethylbenzene	(3)	11.372	91	2313812	9.819
101) m+p-Xylene	(3)	11.481	106	1859478	19.815
105) Xylene (Total)	(3)		106	2755796	29.711
104) o-Xylene	(3)	11.811	106	896318	9.896
106) Styrene	(3)	11.829	104	1429270	9.953
107) Bromoform	(3)	11.987	173	254893	9.404
108) Isopropylbenzene	(3)	12.109	105	2407900	9.842
111)$4-Bromofluorobenzene	(3)	12.256	95	572771	9.794
111)$4-Bromofluorobenzene	(3)	12.256	174	548461	9.797
113) 1,1,2,2-Tetrachloroethane	(4)	12.353	83	403792	9.975
114) Bromobenzene	(4)	12.371	156	595551	9.667
115) trans-1,4-Dichloro-2-butene	(1)	12.384	53	685734	74.382
116) 1,2,3-Trichloropropane	(4)	12.402	110	118191M	9.839
117) n-Propylbenzene	(4)	12.438	91	2748894	9.976
119) 2-Chlorotoluene	(4)	12.518	126	578209	9.759
121) 1,3,5-Trimethylbenzene	(4)	12.573	105	2022581	9.937
122) 4-Chlorotoluene	(4)	12.609	126	578845	9.723
125) tert-Butylbenzene	(4)	12.816	134	455698M	9.825
126) Pentachloroethane	(4)	12.847	167	419841	10.279
127) 1,2,4-Trimethylbenzene	(4)	12.859	105	2082397	10.041
128) sec-Butylbenzene	(4)	12.981	105	2683371	10.185
131) 1,3-Dichlorobenzene	(4)	13.079	146	1163943	9.871
132) p-Isopropyltoluene	(4)	13.085	119	2371407	10.257
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	709243	10.000
134) 1,4-Dichlorobenzene	(4)	13.152	146	1160647	9.849
135) 1,2,3-Trimethylbenzene	(4)	13.164	120	987255	10.187
136) Benzyl Chloride	(4)	13.231	126	202575	10.621
138) n-Butylbenzene	(4)	13.377	92	1075673	10.229
139) 1,2-Dichlorobenzene	(4)	13.414	146	1069020	9.931
143) 1,2-Dibromo-3-chloropropane	(1)	13.956	155	66812	11.179

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on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

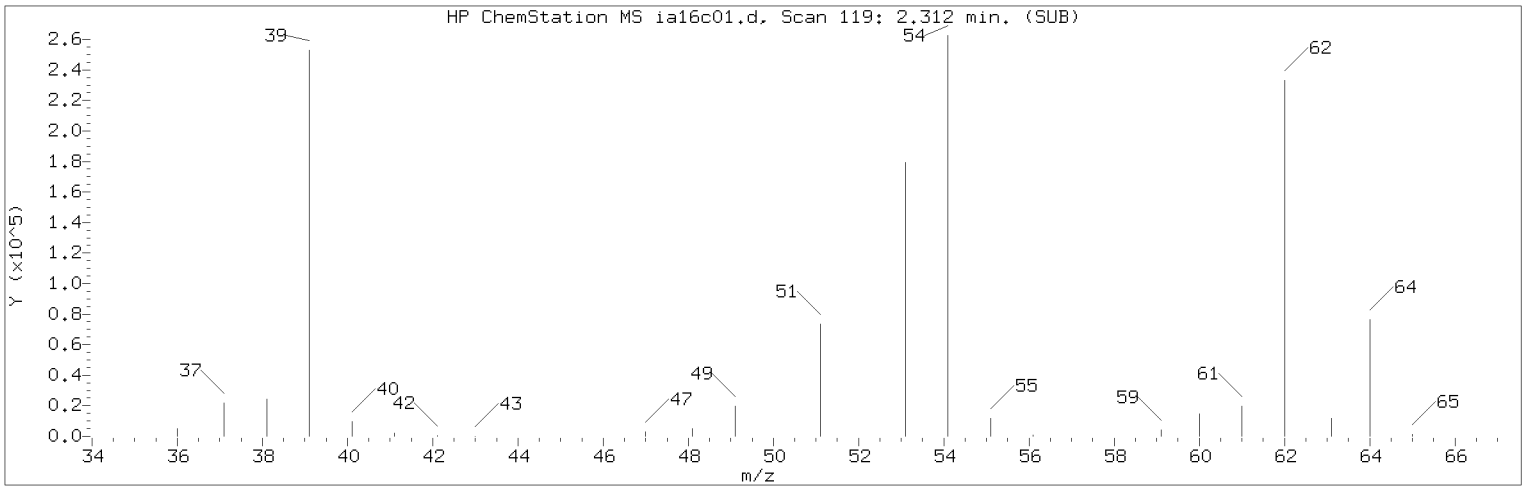
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

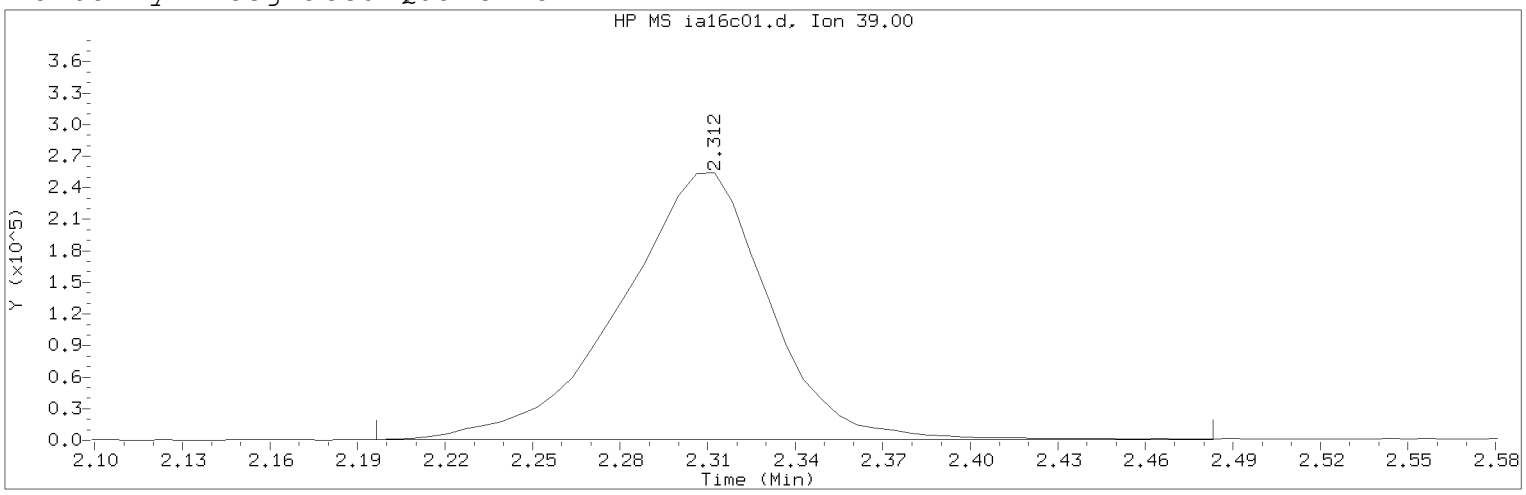
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
144) 1,3,5-Trichlorobenzene	(4)	14.078	180	866439	10.077
145) 1,2,4-Trichlorobenzene	(4)	14.499	180	737561	9.786
146) Hexachlorobutadiene	(4)	14.584	225	299328	9.719
147) Naphthalene	(4)	14.682	128	1439753	9.539
148) 1,2,3-Trichlorobenzene	(4)	14.828	180	657701	9.692

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

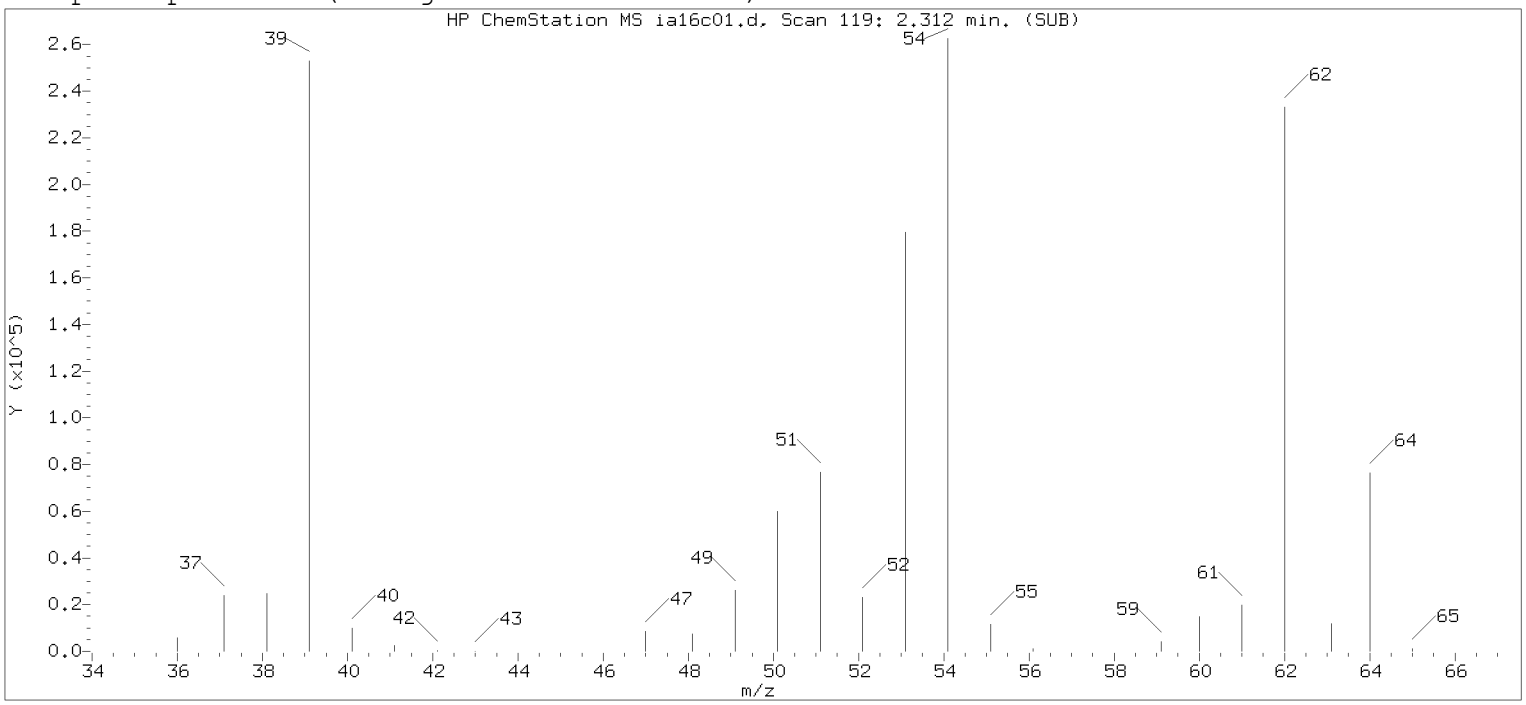
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area (flag) : 900321M
On-Column Amount (ng) : 16.0209
Integration start scan : 99 Integration stop scan: 146
Y at integration start : 557 Y at integration end: 557

Reason for manual integration: improper integration

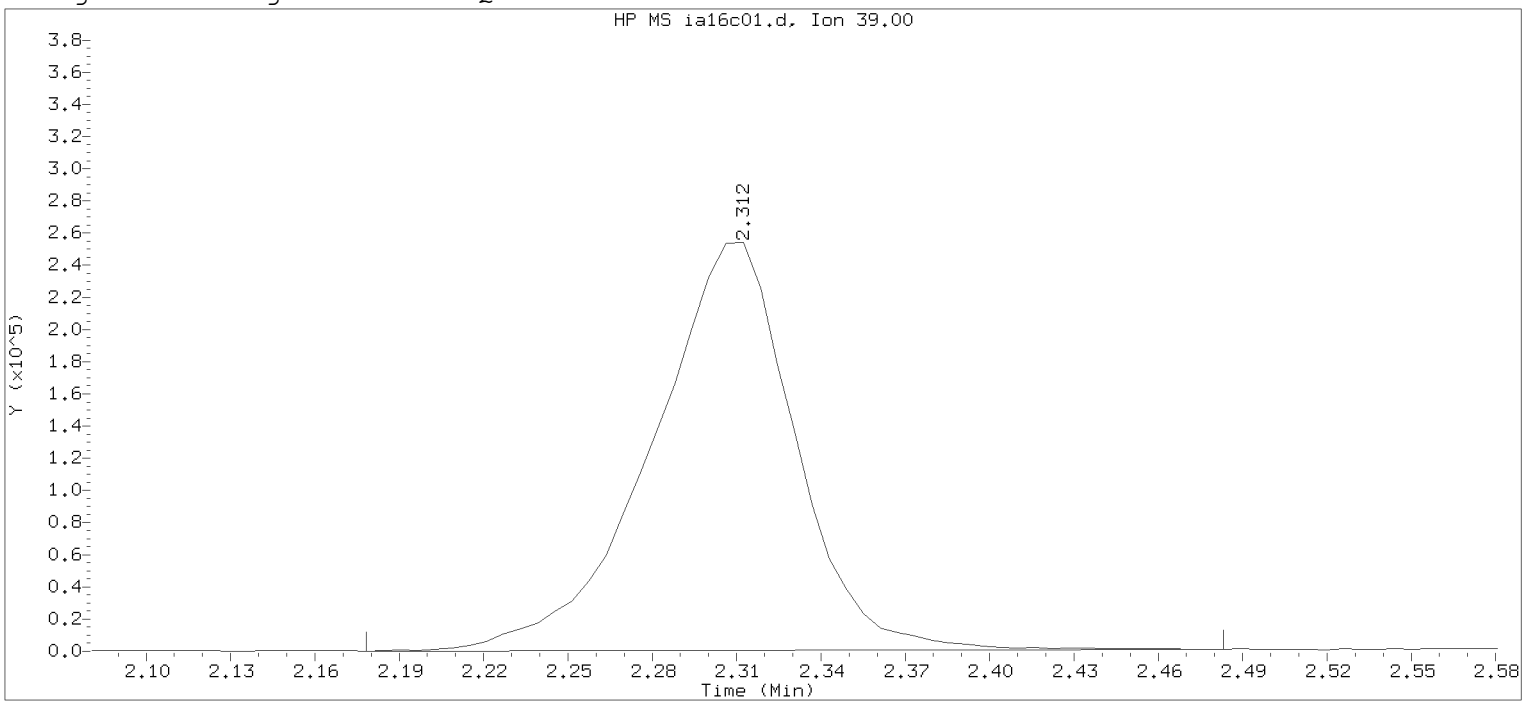
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

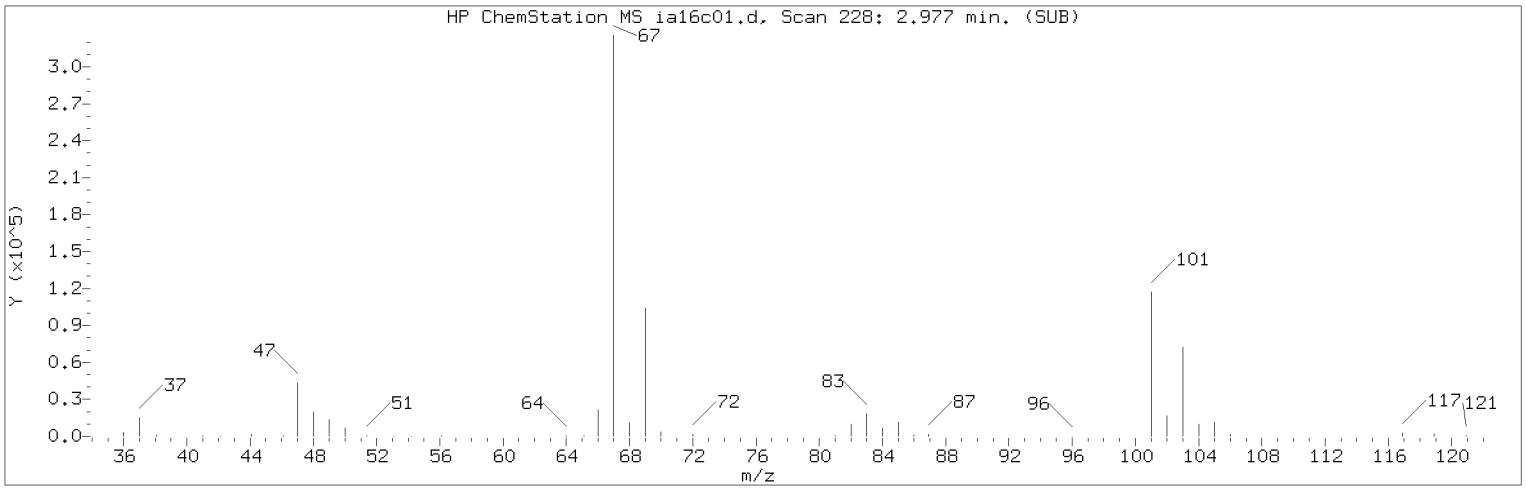
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

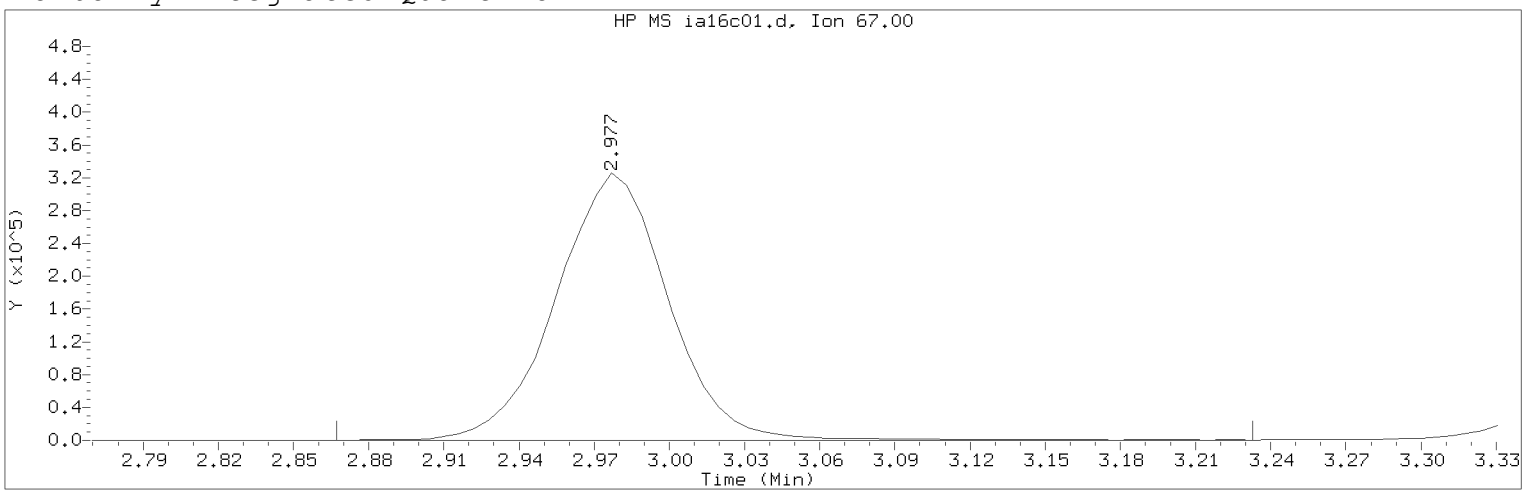
Compound Number : 6
Compound Name : 1,3-Butadiene
Scan Number : 119
Retention Time (minutes): 2.312
Quant Ion : 39.00
Area : 900967
On-column Amount (ng) : 16.0323
Integration start scan : 96 Integration stop scan: 146
Y at integration start : 0 Y at integration end: 1020

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MEC29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

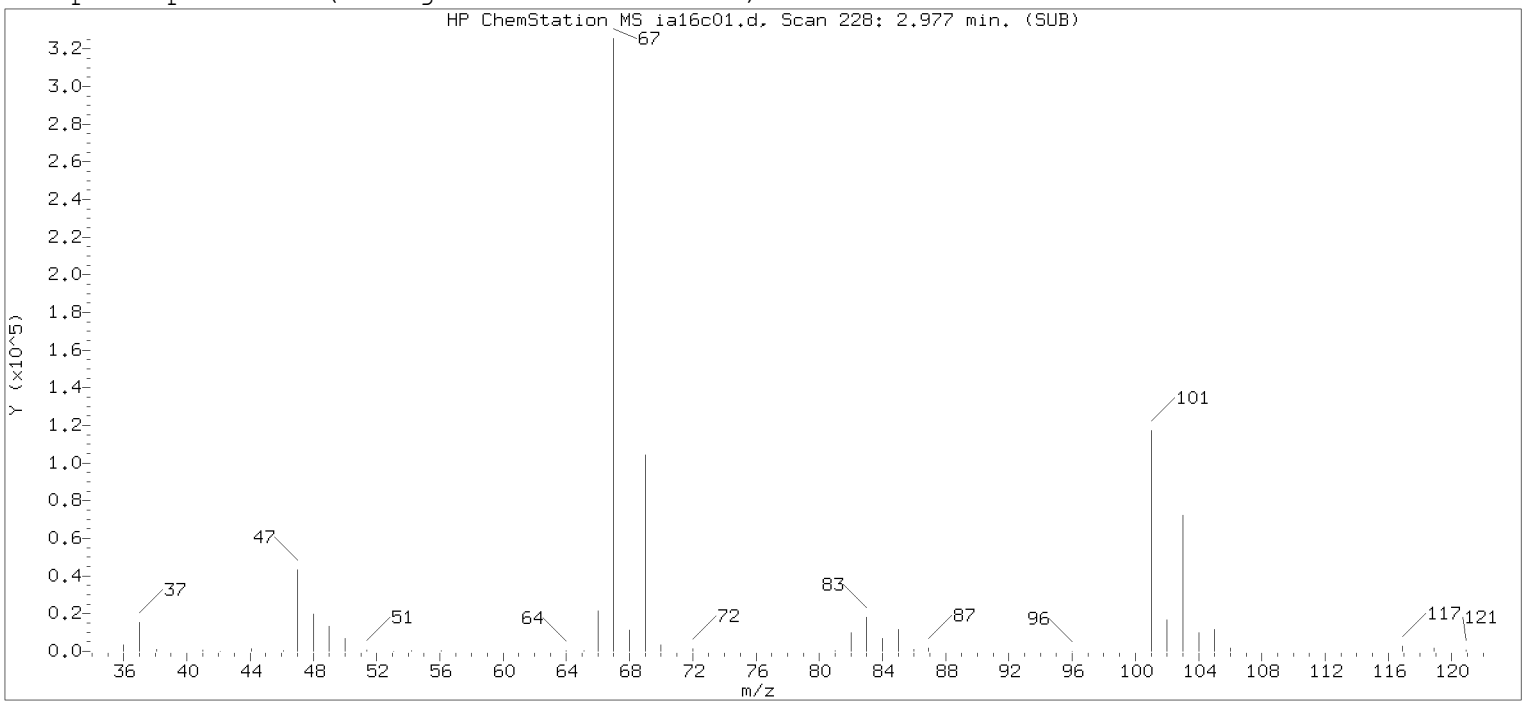
Compound Number : 9
Compound Name : Dichlorofluoromethane
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area (flag) : 1014958M
On-Column Amount (ng) : 9.9514
Integration start scan : 209 Integration stop scan: 269
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

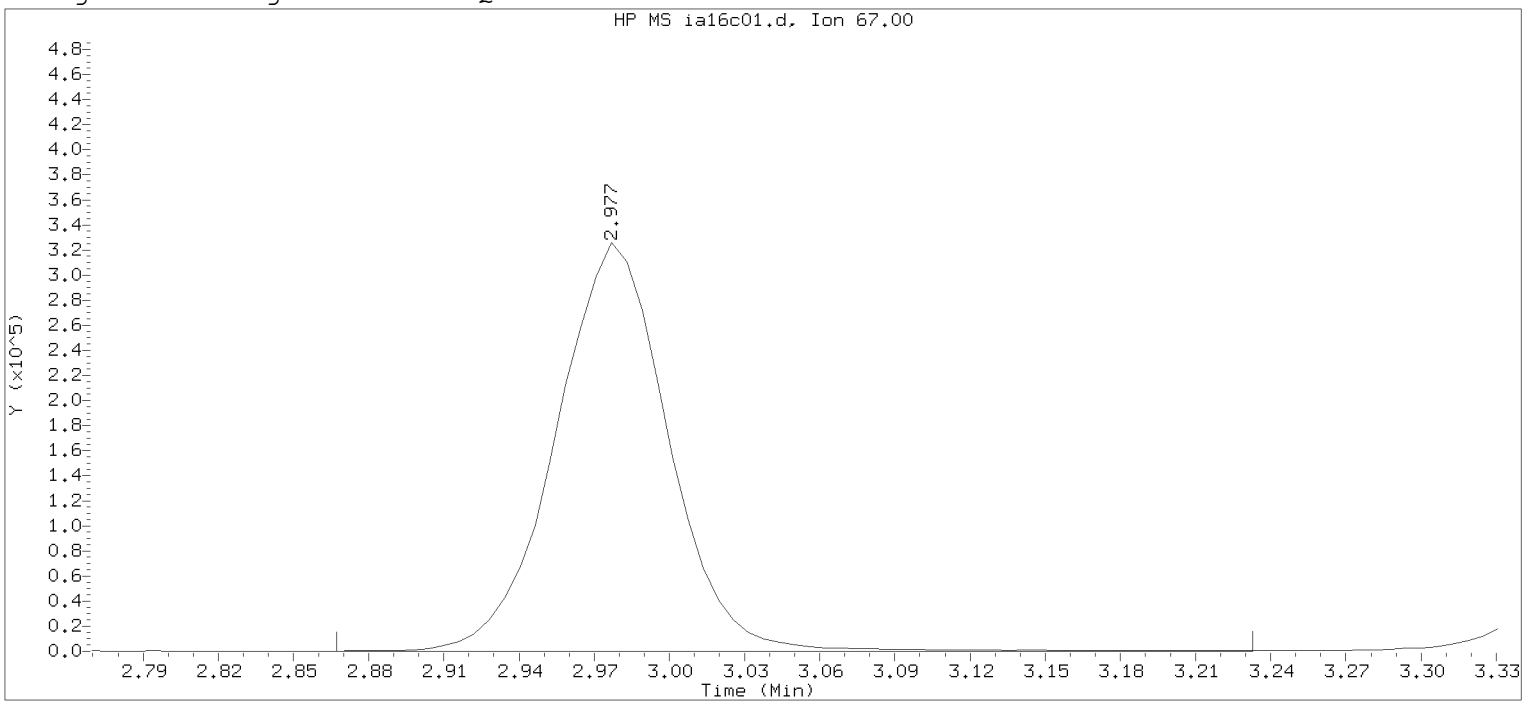
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

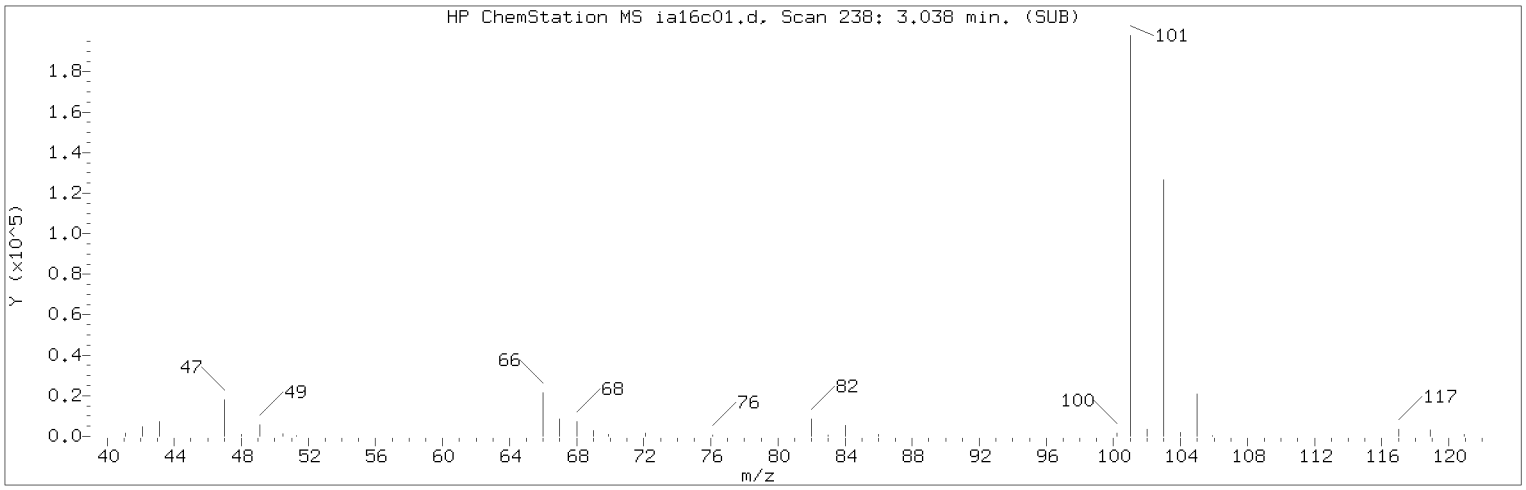
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

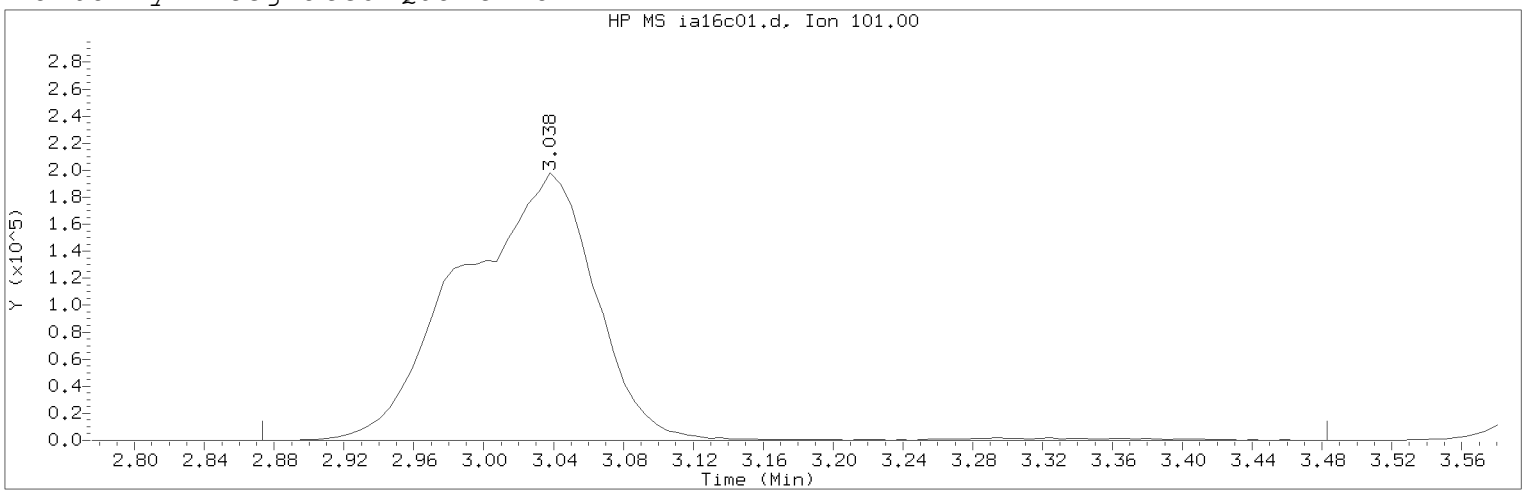
Compound Number : 9
Compound Name : Dichlorofluoromethane
Scan Number : 228
Retention Time (minutes): 2.977
Quant Ion : 67.00
Area : 1013192
On-column Amount (ng) : 9.9341
Integration start scan : 209 Integration stop scan: 269
Y at integration start : 0 Y at integration end: 156

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

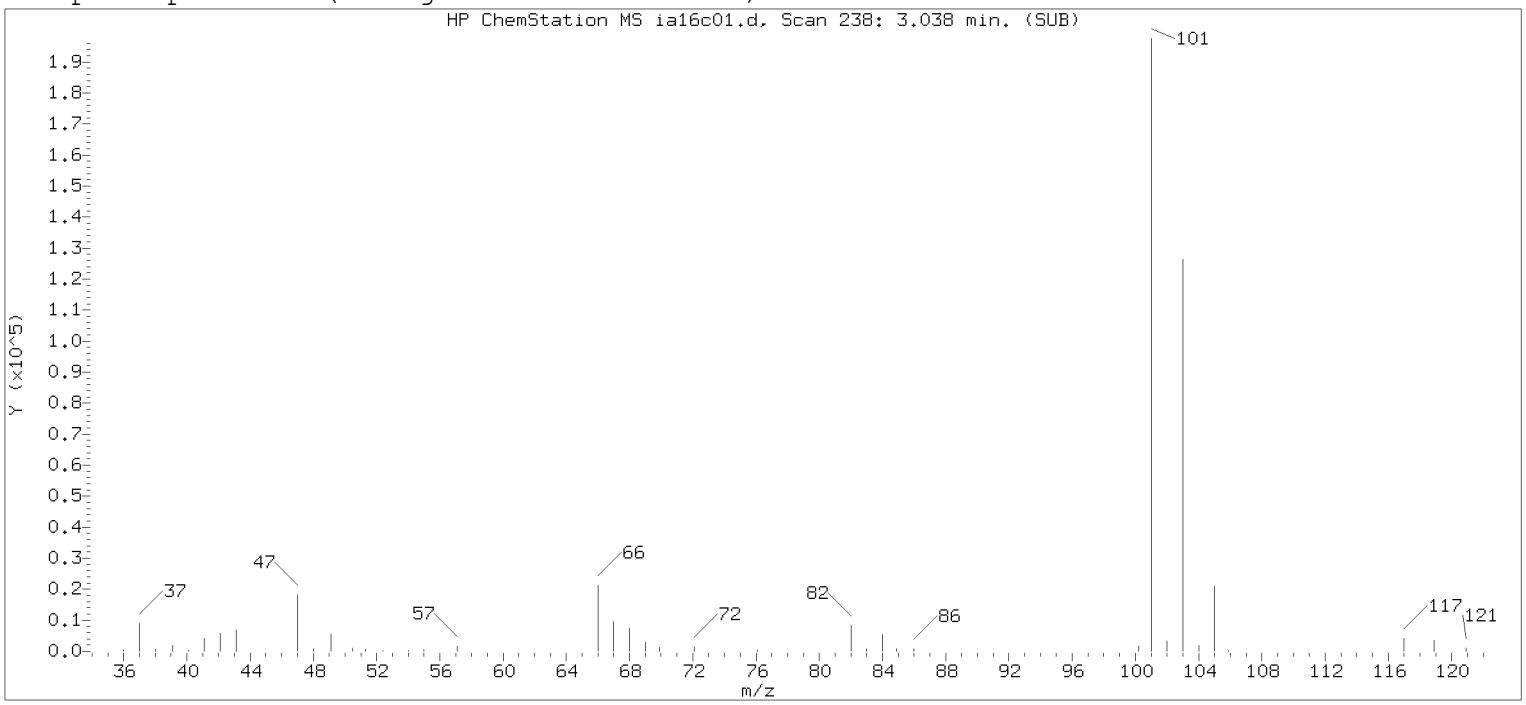
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 238
Retention Time (minutes): 3.038
Quant Ion : 101.00
Area (flag) : 1064601M
On-Column Amount (ng) : 9.3778
Integration start scan : 210 Integration stop scan: 310
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

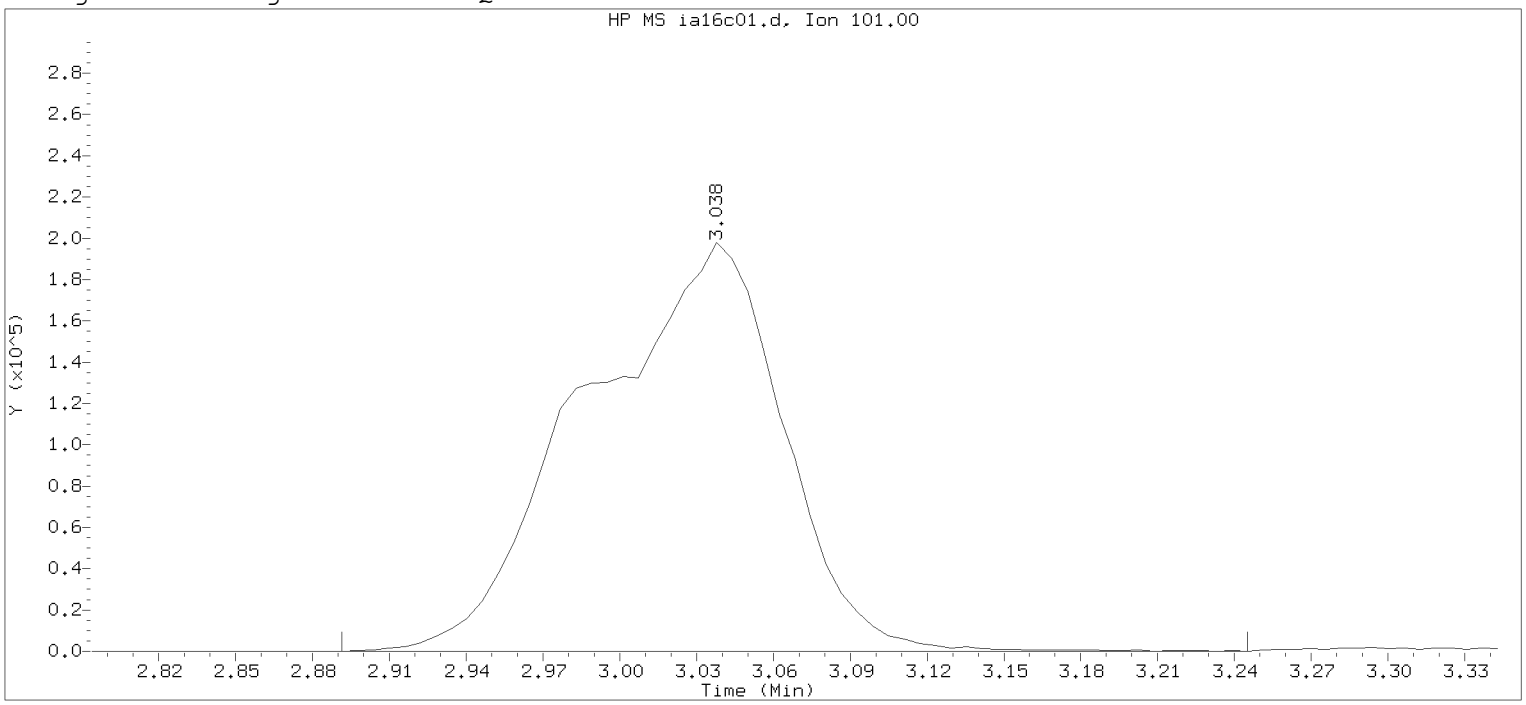
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

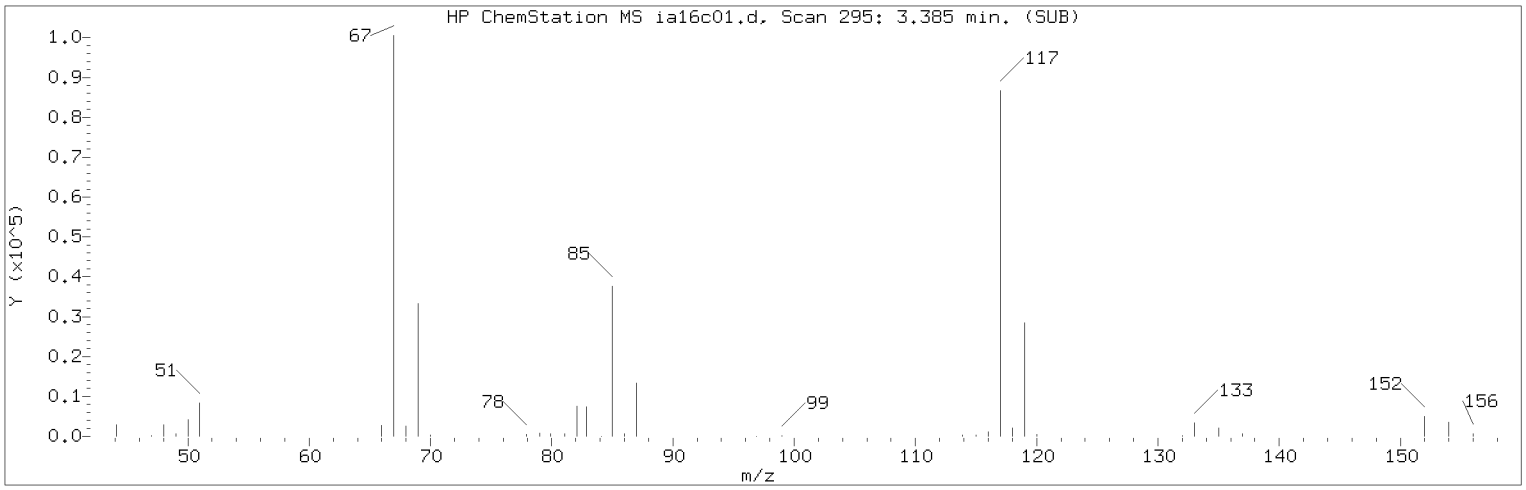
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

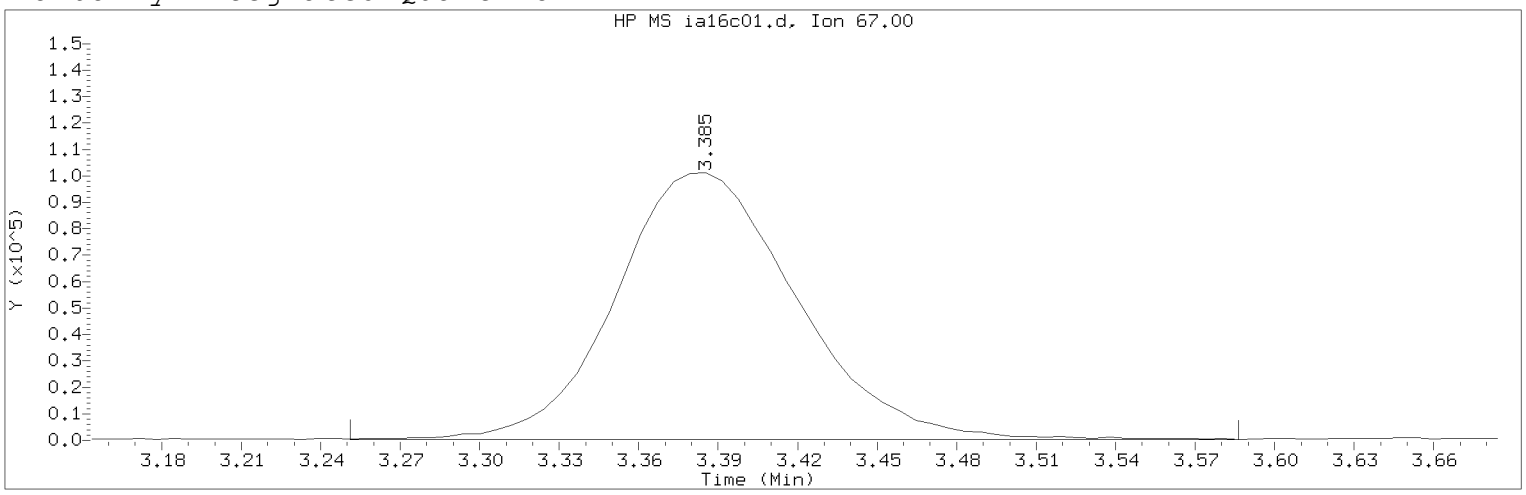
Compound Number : 10
Compound Name : Trichlorofluoromethane
Scan Number : 238
Retention Time (minutes): 3.038
Quant Ion : 101.00
Area : 1052329
On-column Amount (ng) : 9.2697
Integration start scan : 213 Integration stop scan: 271
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

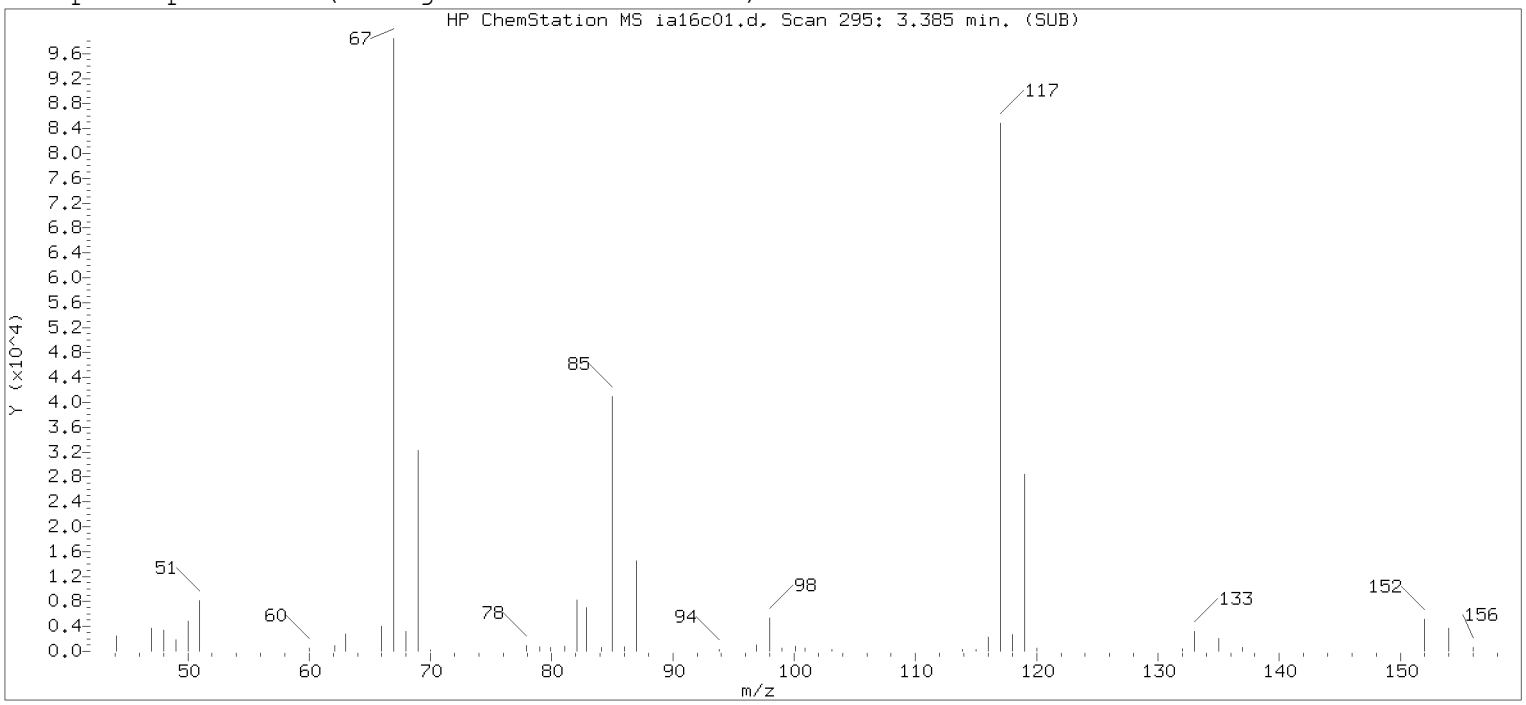
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 295
Retention Time (minutes): 3.385
Quant Ion : 67.00
Area (flag) : 479953M
On-Column Amount (ng) : 9.4025
Integration start scan : 272 Integration stop scan: 327
Y at integration start : 318 Y at integration end: 318

Reason for manual integration: improper integration

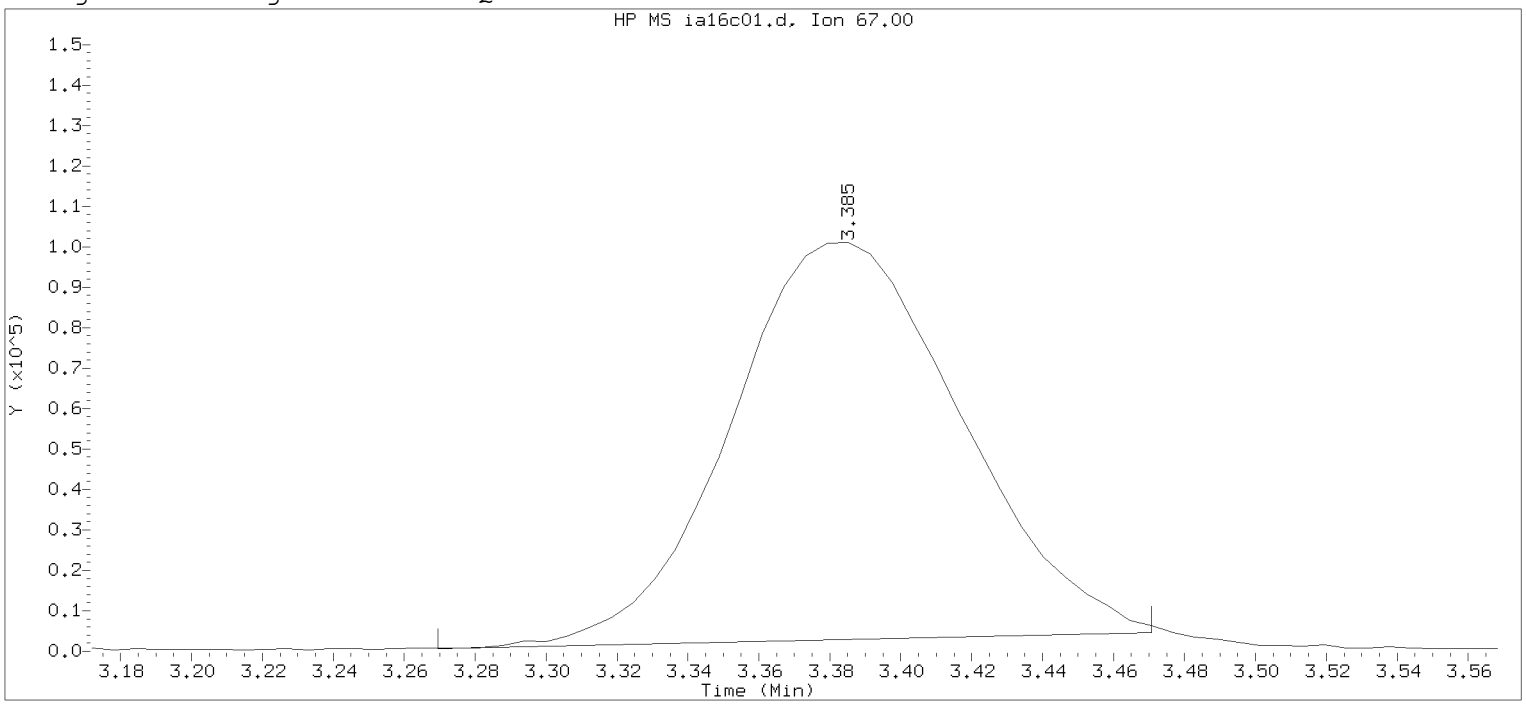
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

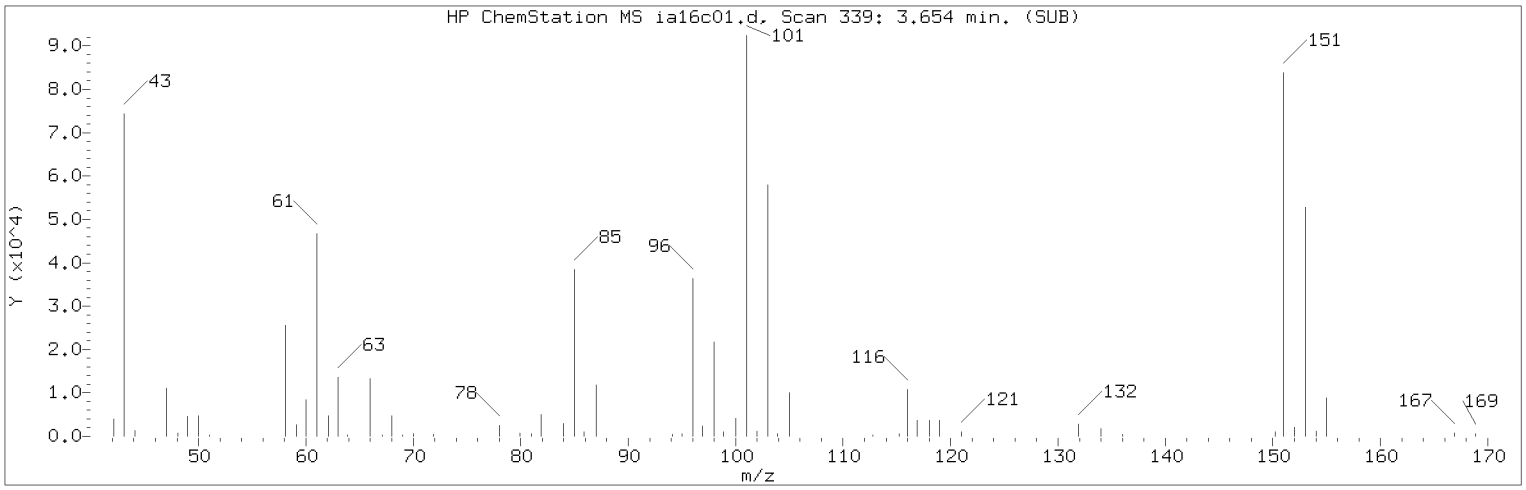
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

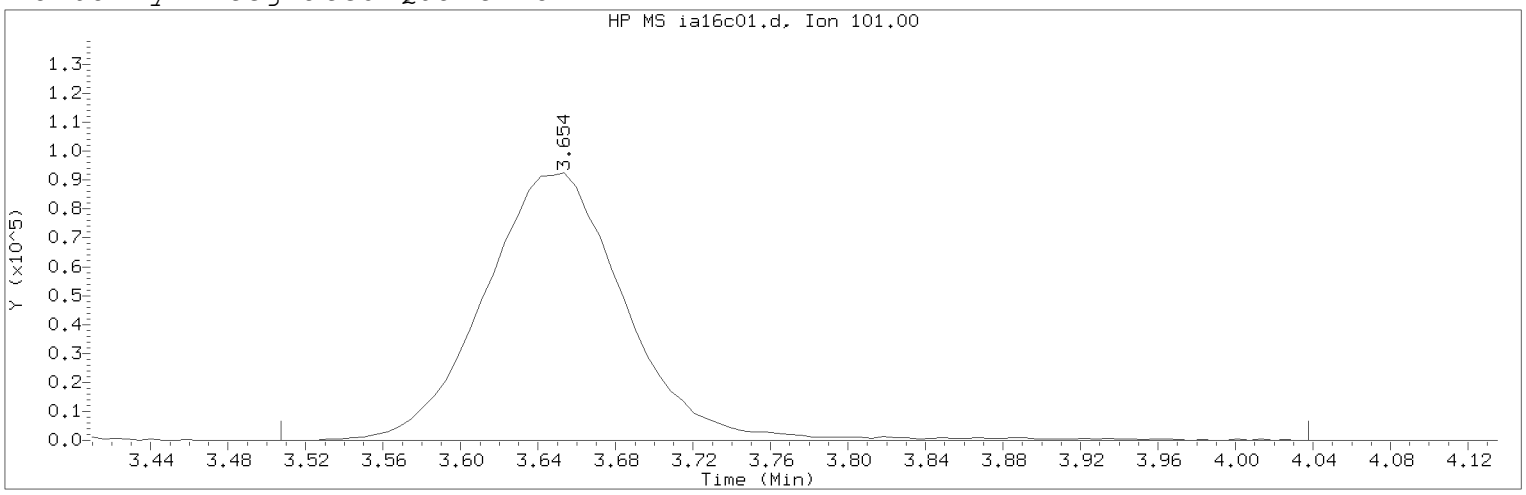
Compound Number : 12
Compound Name : Freon 123a
Scan Number : 295
Retention Time (minutes): 3.385
Quant Ion : 67.00
Area : 443211
On-column Amount (ng) : 8.6827
Integration start scan : 275 Integration stop scan: 308
Y at integration start : 677 Y at integration end: 4552

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

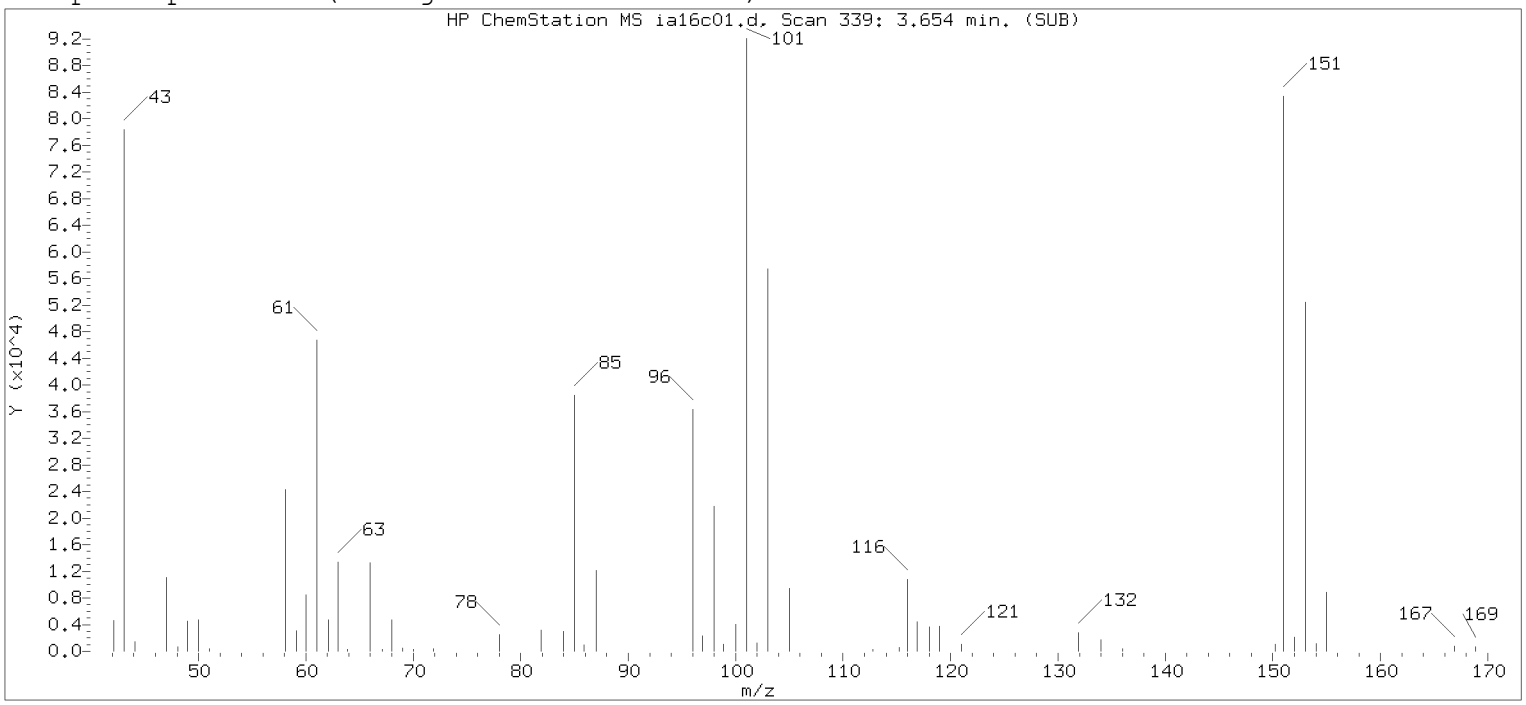
Compound Number : 16
Compound Name : Freon 113
Scan Number : 339
Retention Time (minutes): 3.654
Quant Ion : 101.00
Area (flag) : 468765M
On-Column Amount (ng) : 9.8535
Integration start scan : 314 Integration stop scan: 401
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

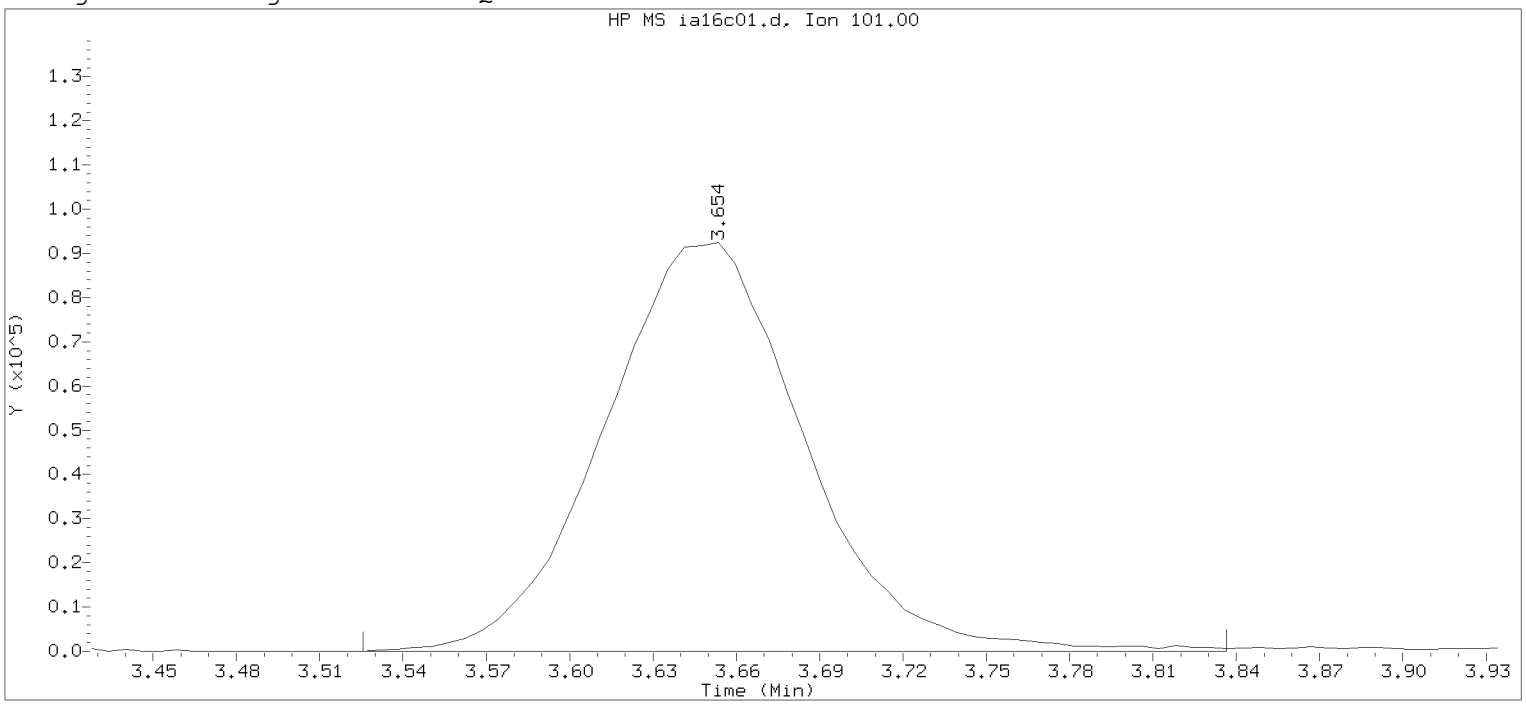
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

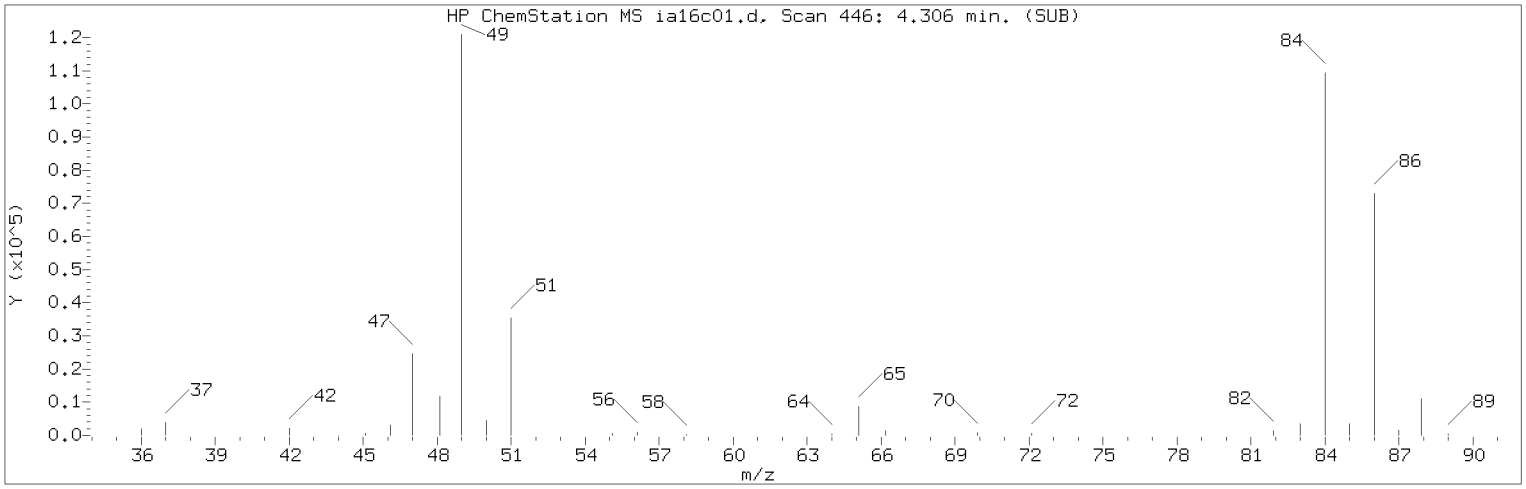
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

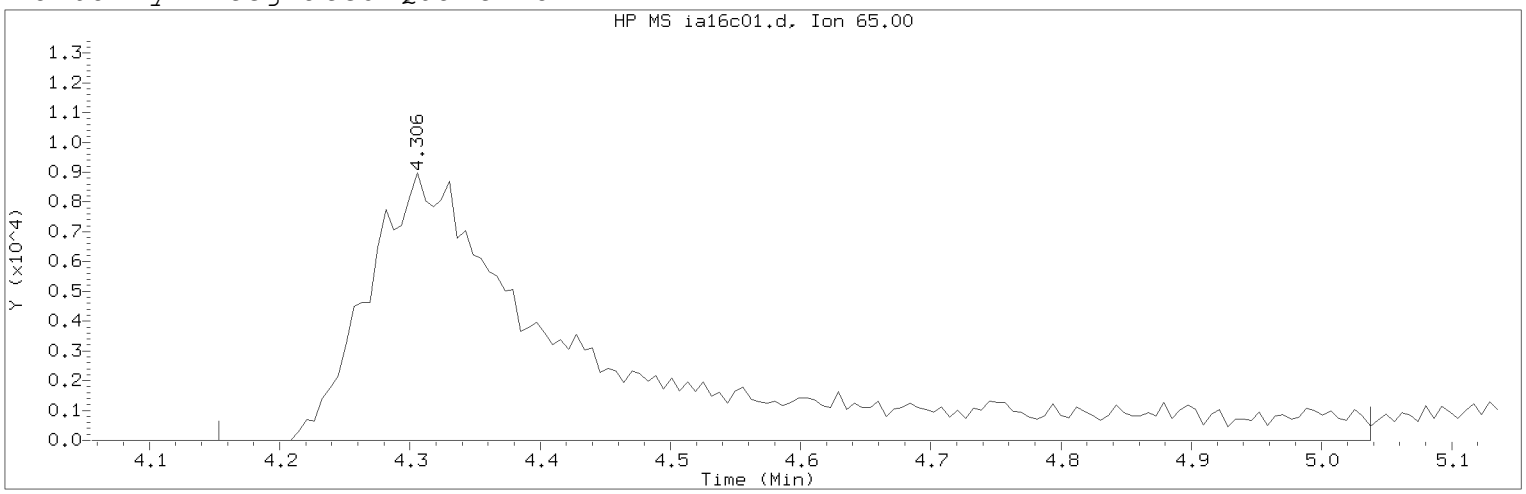
Compound Number	: 16		
Compound Name	: Freon 113		
Scan Number	: 339		
Retention Time (minutes)	: 3.654		
Quant Ion	: 101.00		
Area	: 463410		
On-column Amount (ng)	: 9.7409		
Integration start scan	: 317	Integration stop scan:	368
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

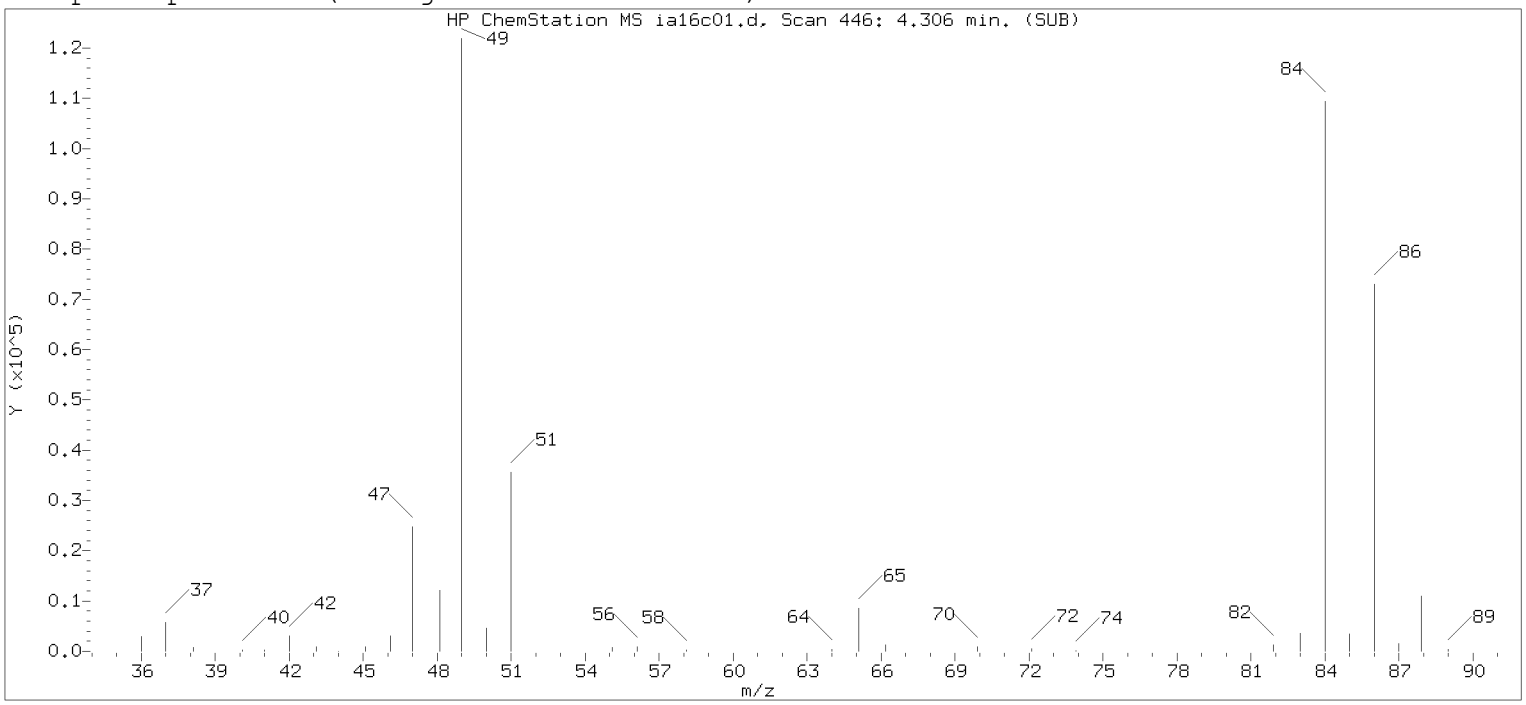
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 446
Retention Time (minutes): 4.306
Quant Ion : 65.00
Area (flag) : 109113M
On-Column Amount (ng) : 50.0000
Integration start scan : 420 Integration stop scan: 565
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

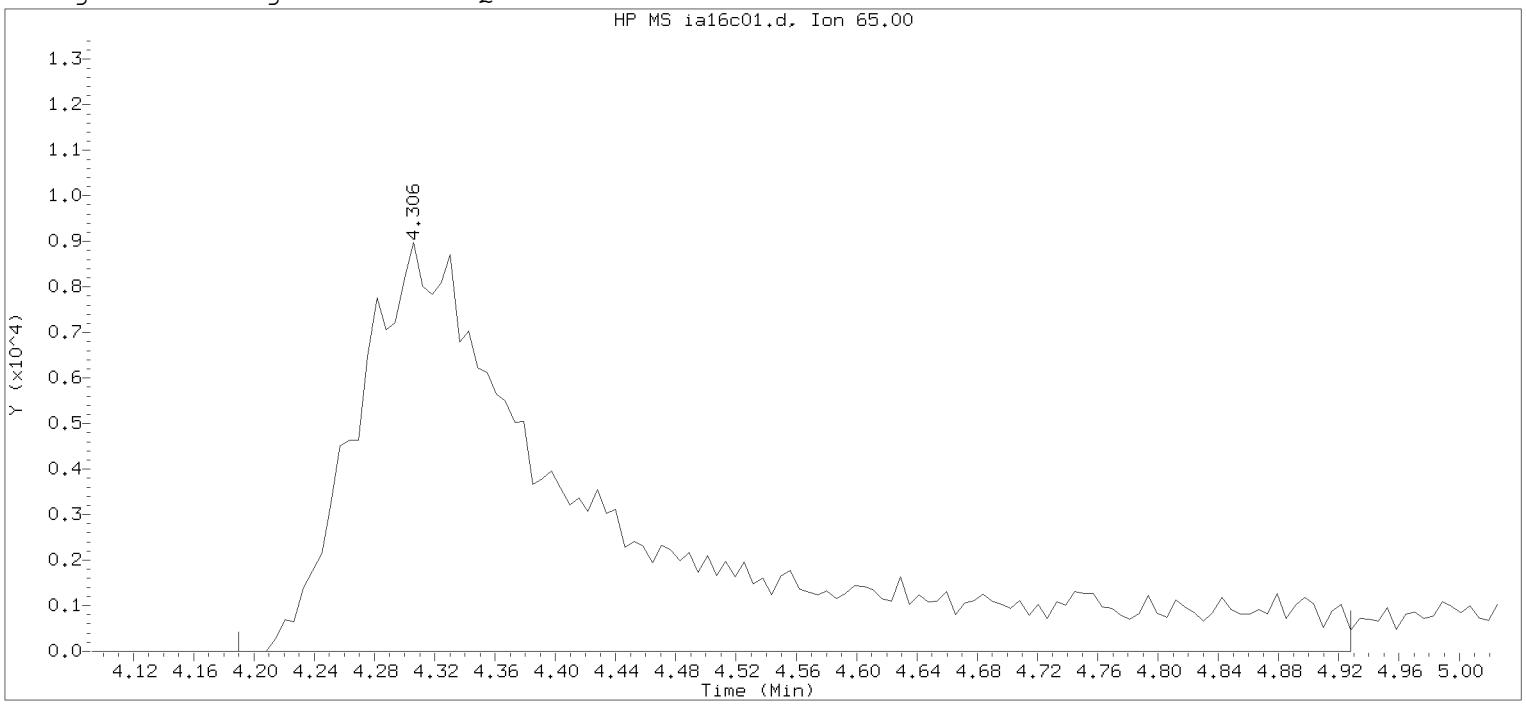
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

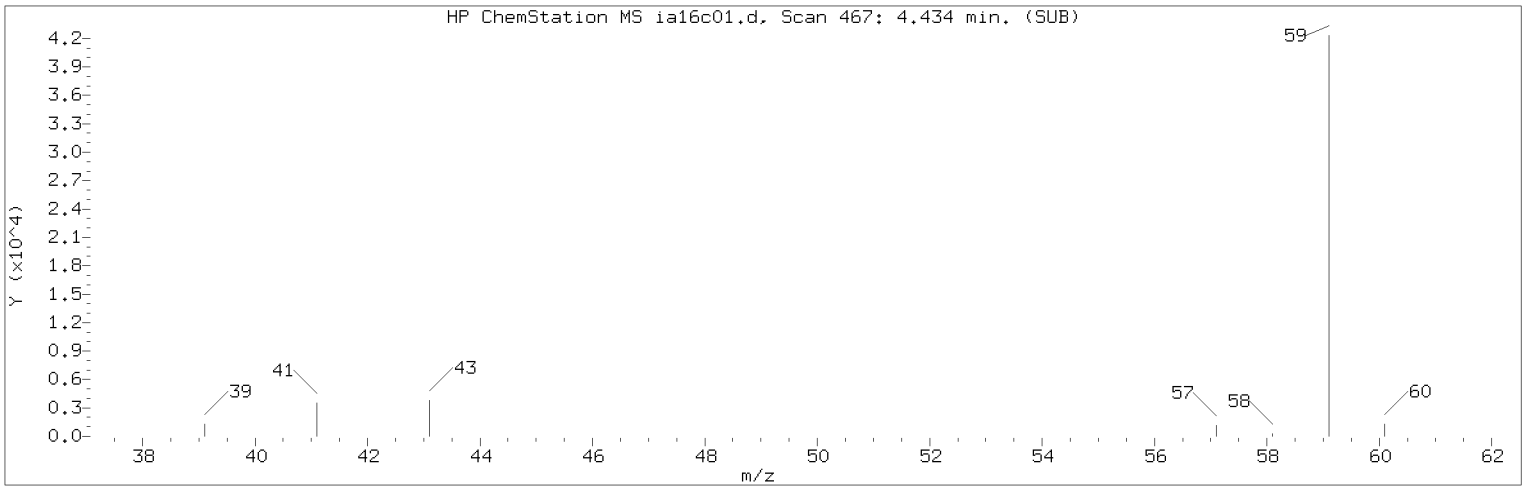
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

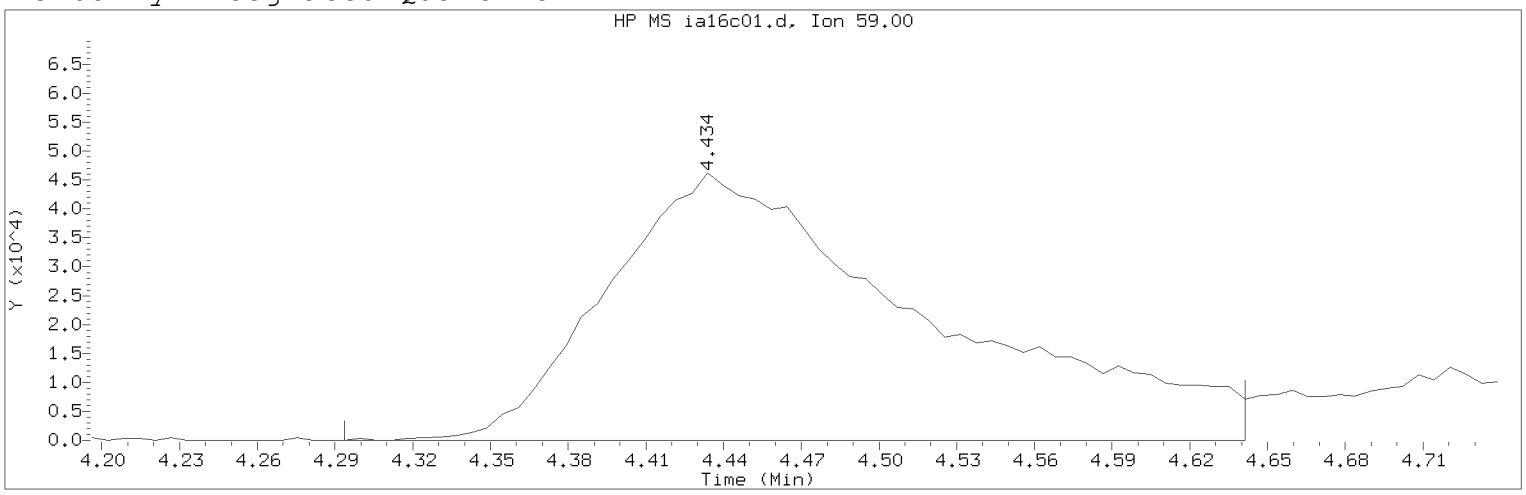
Compound Number	: 26		
Compound Name	: t-Butyl Alcohol-d10		
Scan Number	: 446		
Retention Time (minutes)	: 4.306		
Quant Ion	: 65.00		
Area	: 103790		
On-column Amount (ng)	: 50.0000		
Integration start scan	: 426	Integration stop scan:	547
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user AF34 meaning

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

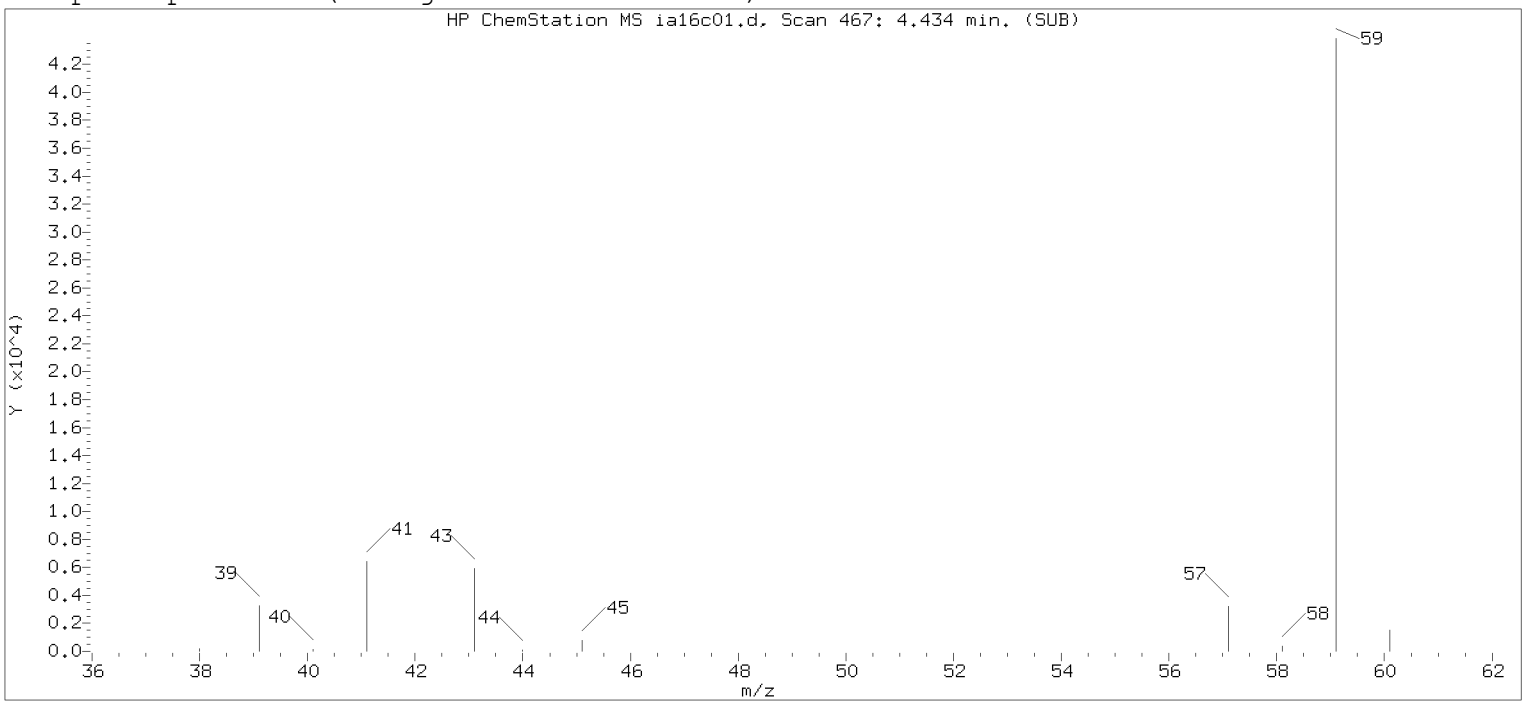
Compound Number : 28
Compound Name : t-Butyl Alcohol
Scan Number : 467
Retention Time (minutes): 4.434
Quant Ion : 59.00
Area (flag) : 395437M
On-Column Amount (ng) : 149.2363
Integration start scan : 443 Integration stop scan: 500
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

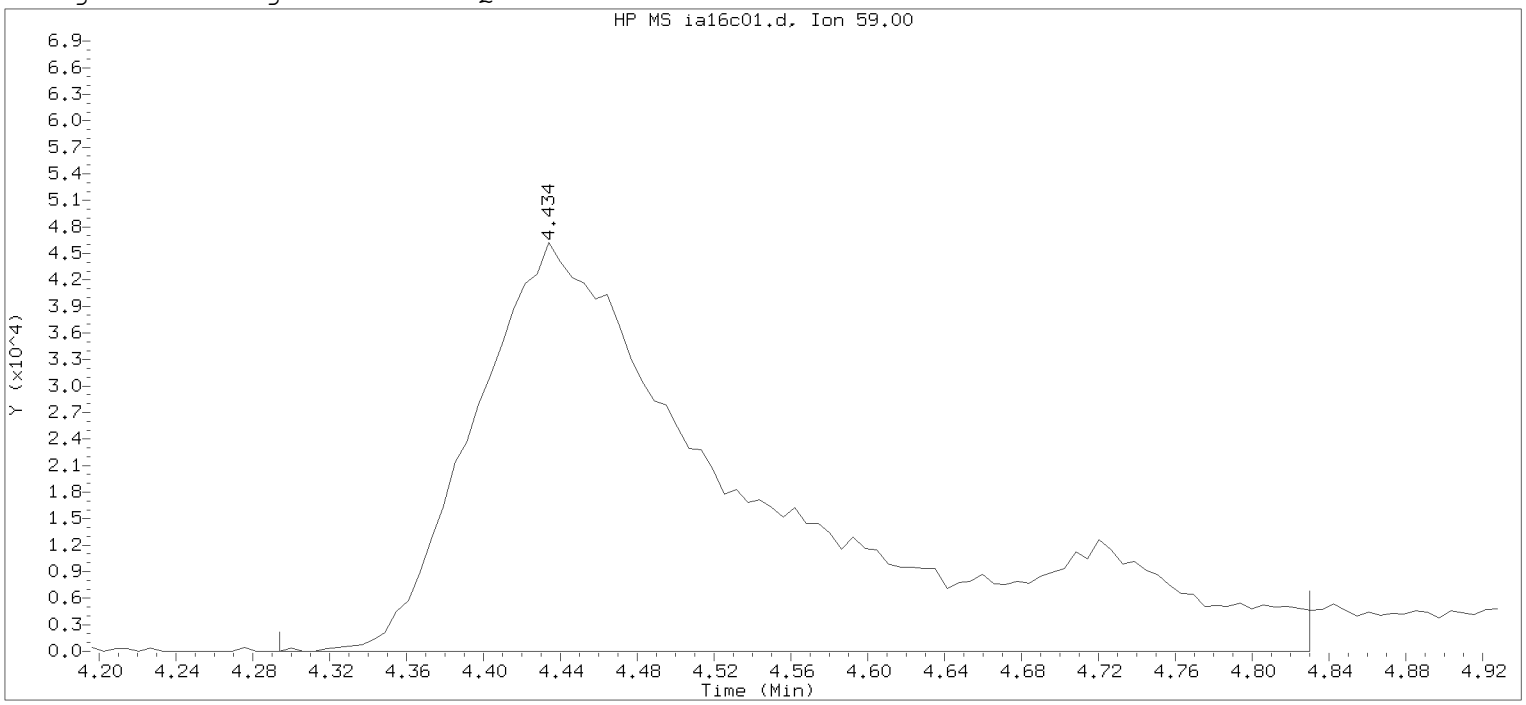
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

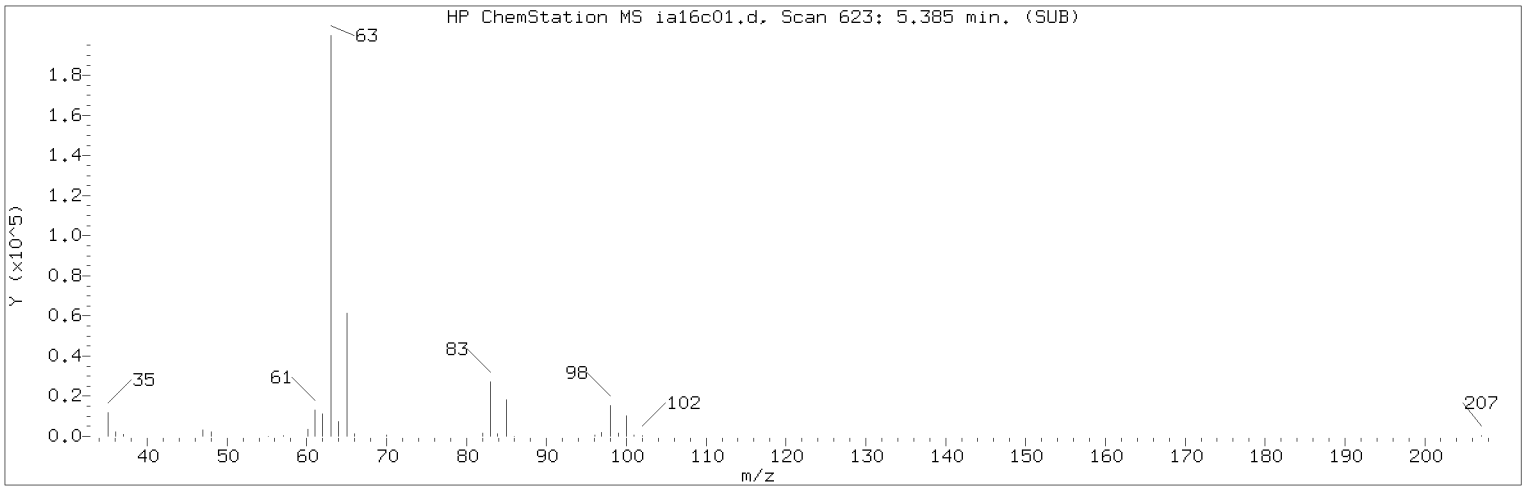
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

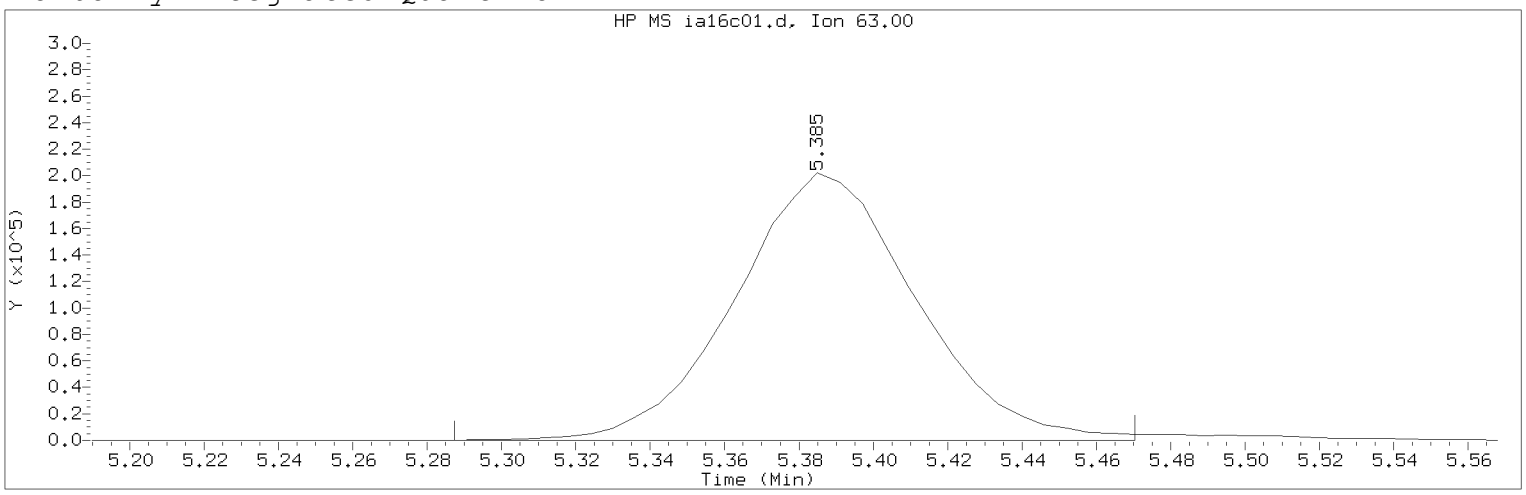
Compound Number	: 28		
Compound Name	: t-Butyl Alcohol		
Scan Number	: 467		
Retention Time (minutes)	: 4.434		
Quant Ion	: 59.00		
Area	: 481050		
On-column Amount (ng)	: 190.8564		
Integration start scan	: 443	Integration stop scan:	531
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user AF34 meaning 0466

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

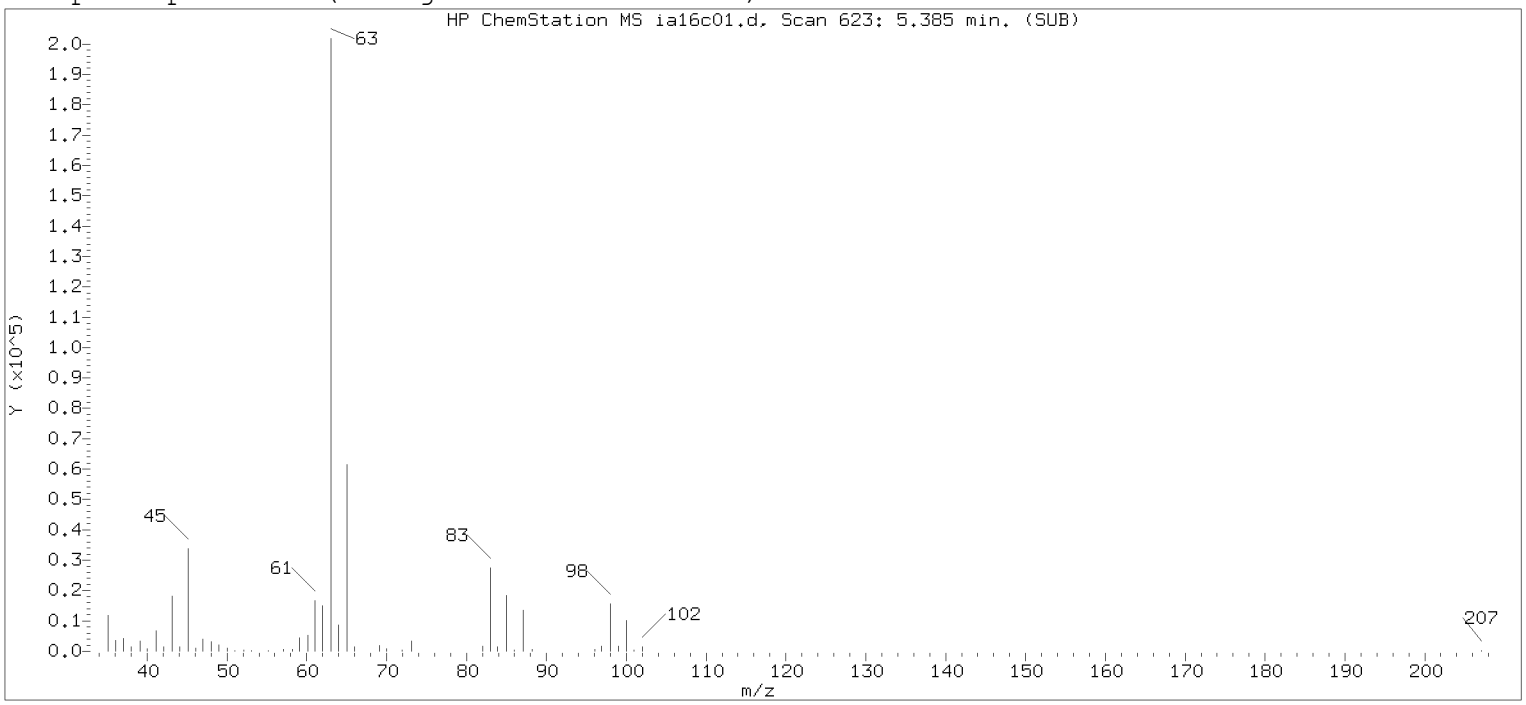
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 623
Retention Time (minutes): 5.385
Quant Ion : 63.00
Area (flag) : 682486M
On-Column Amount (ng) : 9.5227
Integration start scan : 606 Integration stop scan: 636
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

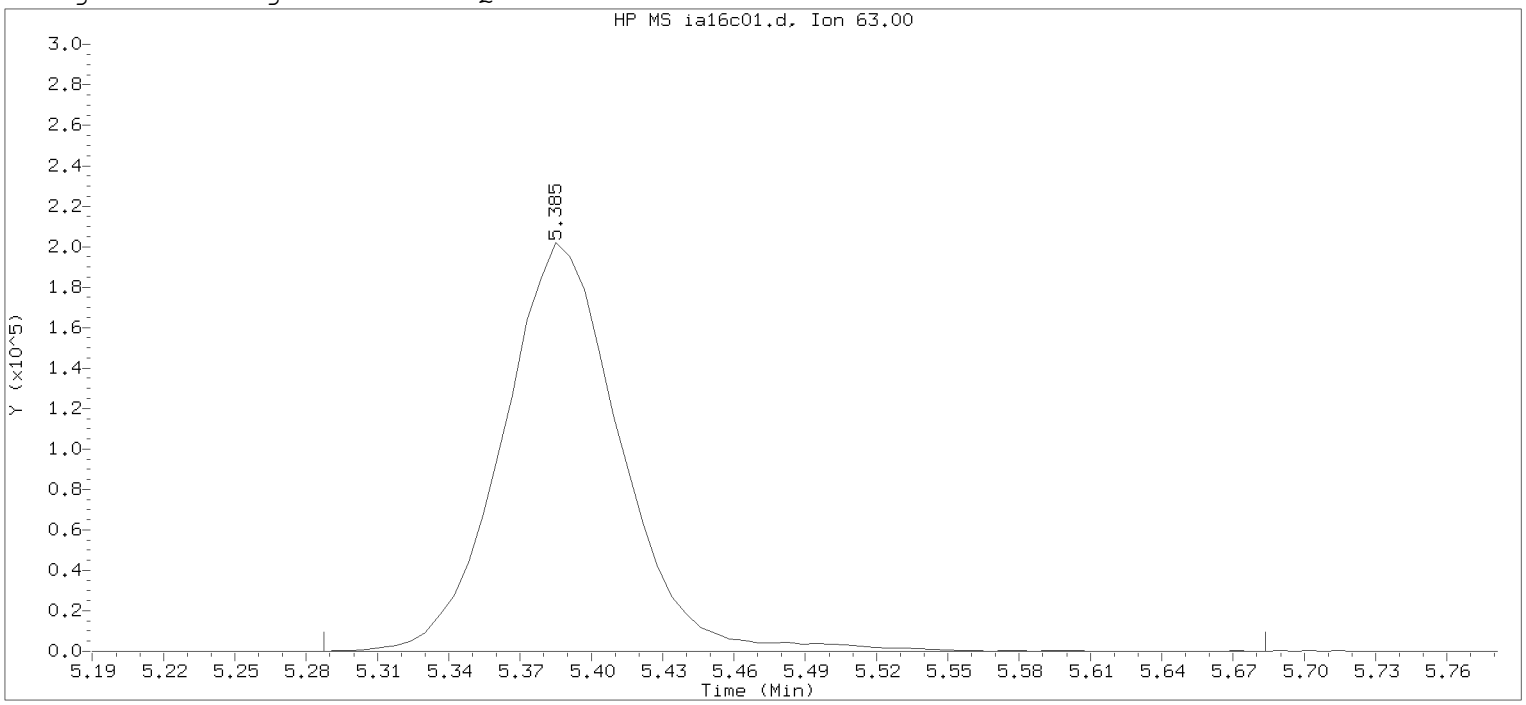
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

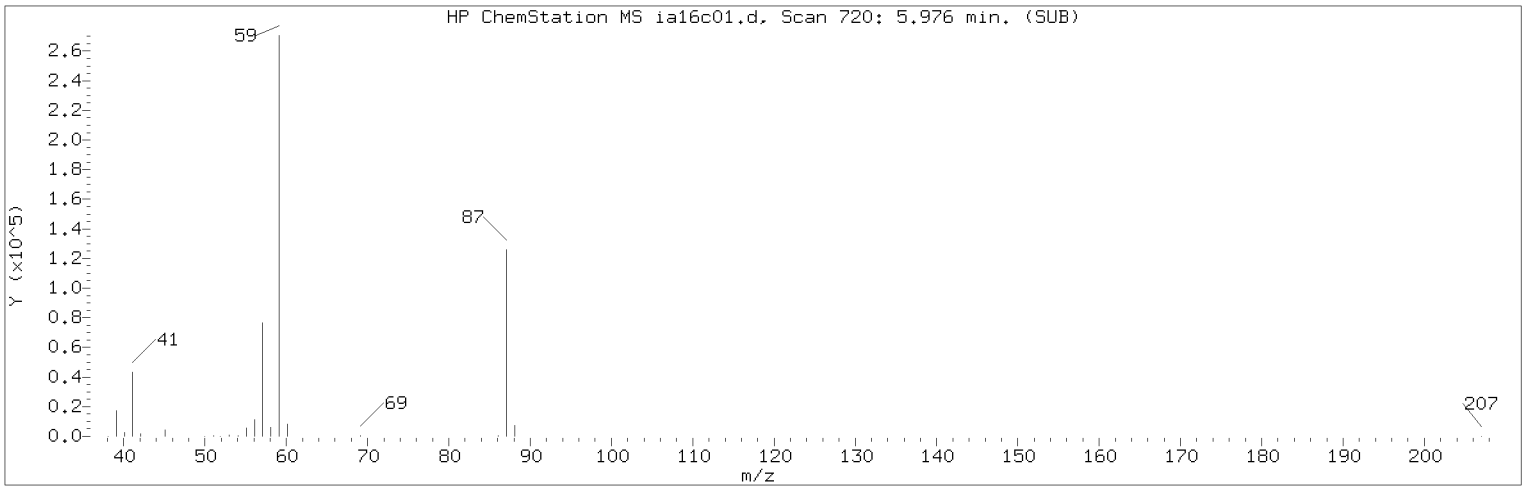
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

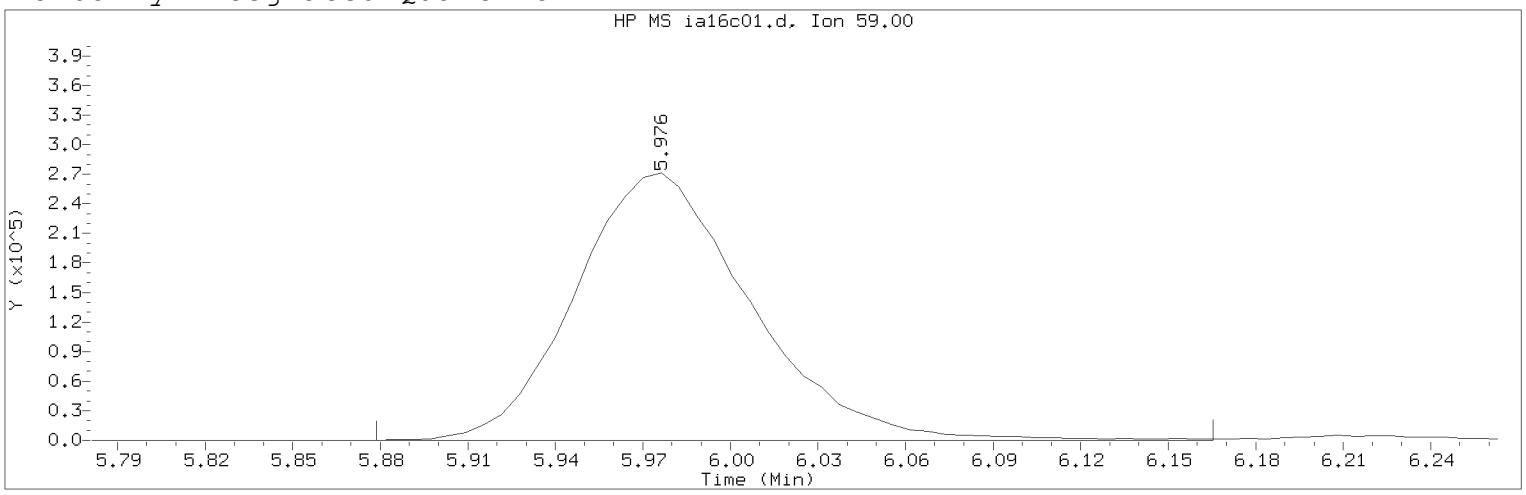
Compound Number : 33
Compound Name : 1,1-Dichloroethane
Scan Number : 623
Retention Time (minutes): 5.385
Quant Ion : 63.00
Area : 695788
On-column Amount (ng) : 9.7083
Integration start scan : 606 Integration stop scan: 671
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

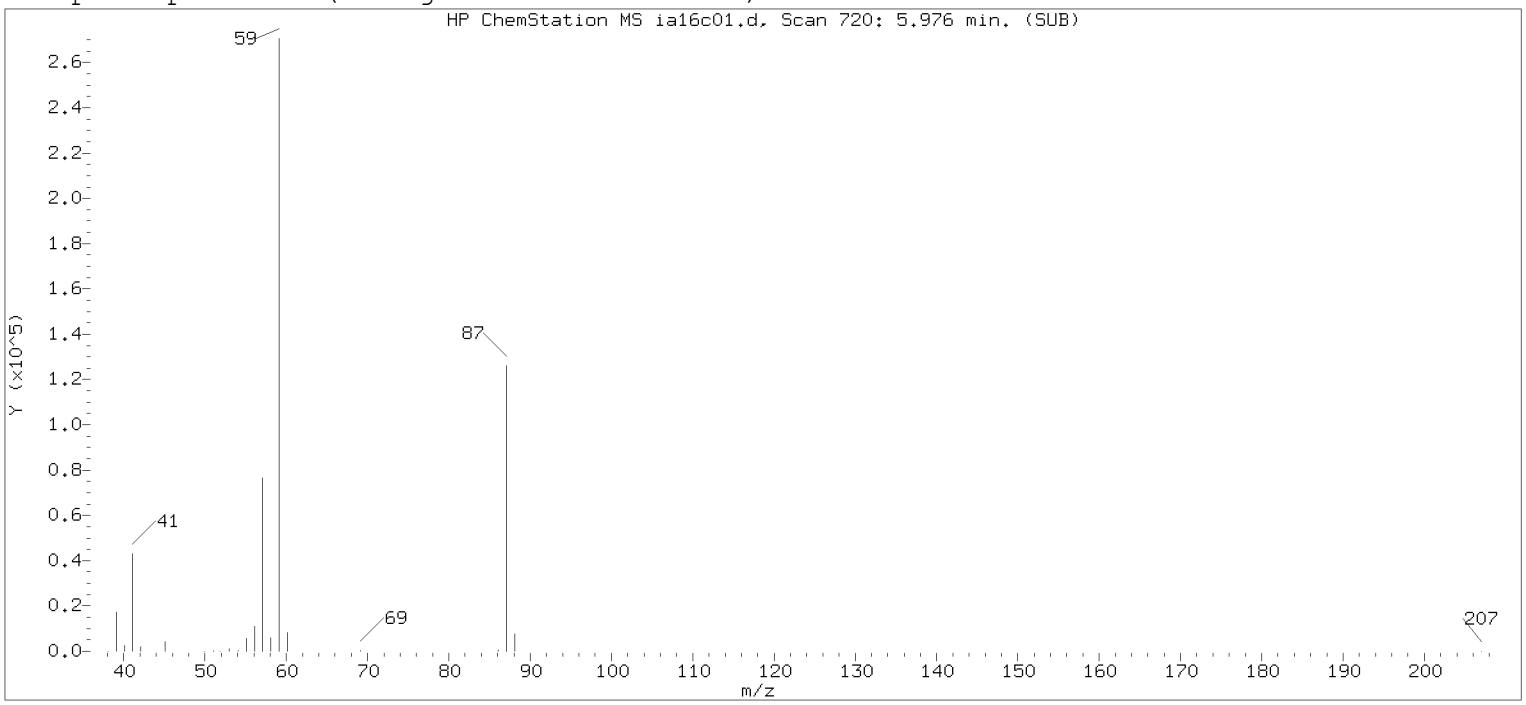
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 720
Retention Time (minutes): 5.976
Quant Ion : 59.00
Area (flag) : 1132469M
On-Column Amount (ng) : 9.4852
Integration start scan : 703 Integration stop scan: 750
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

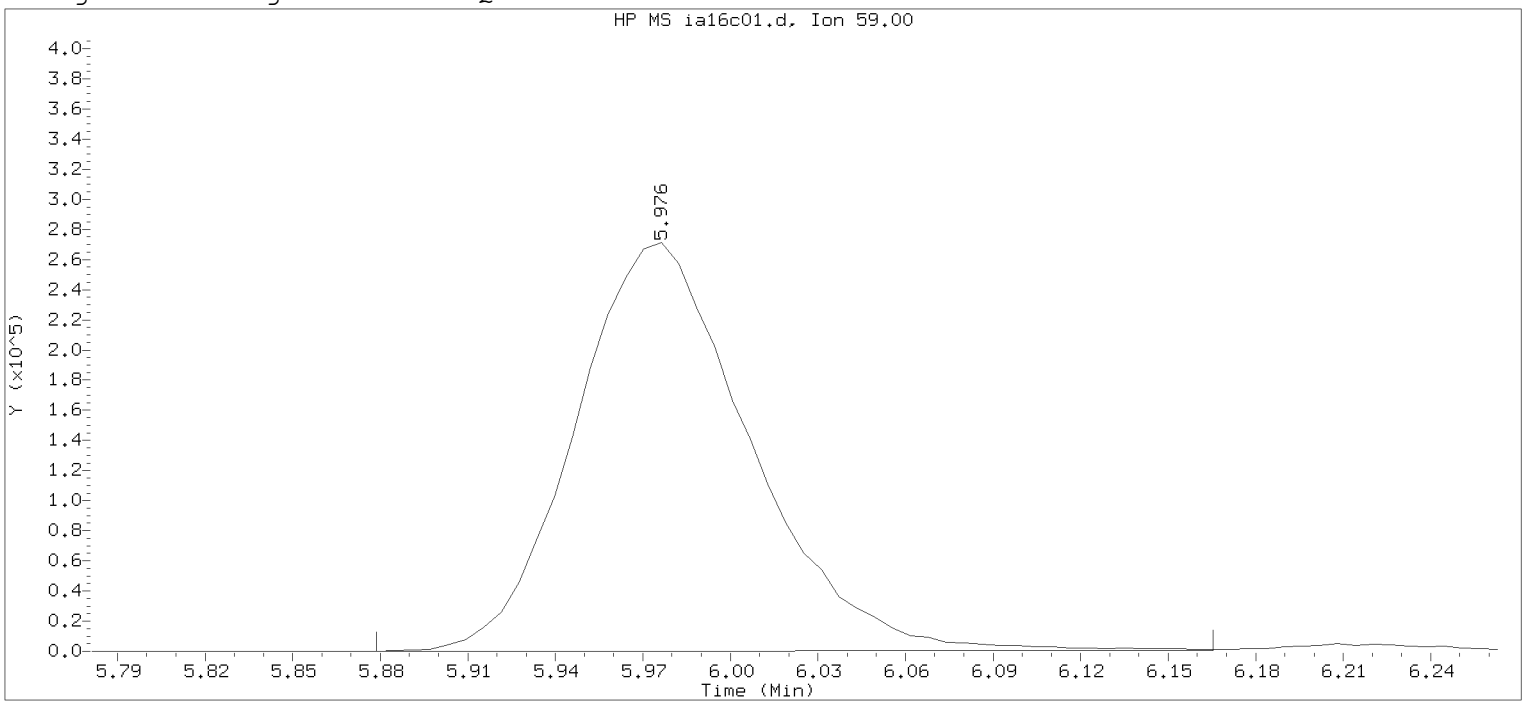
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

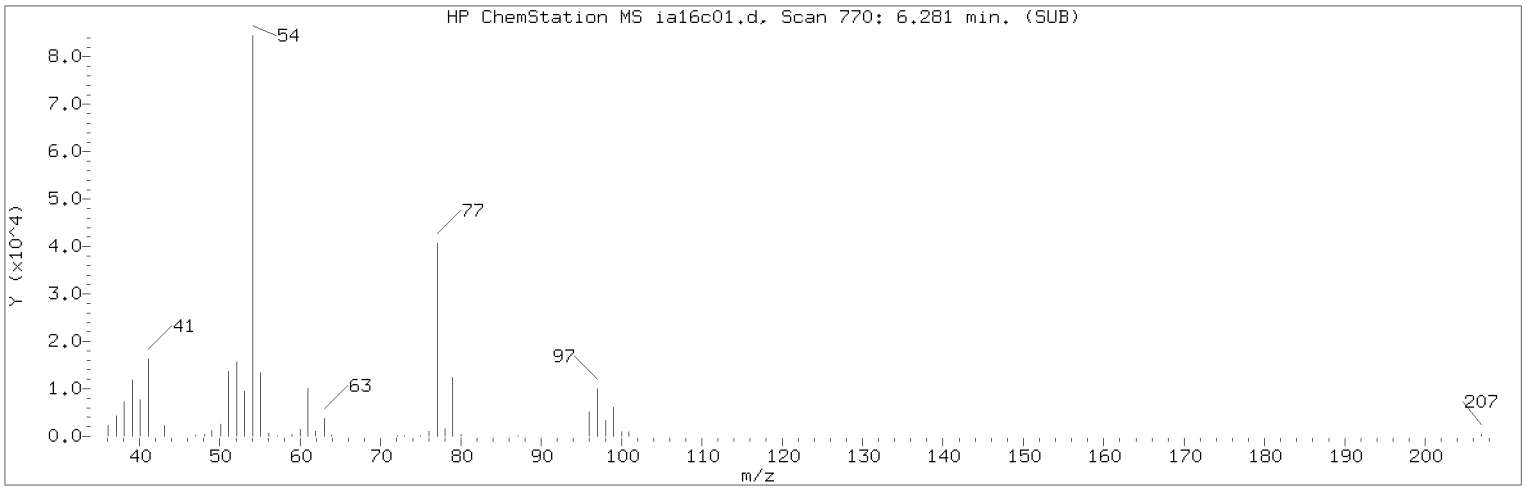
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

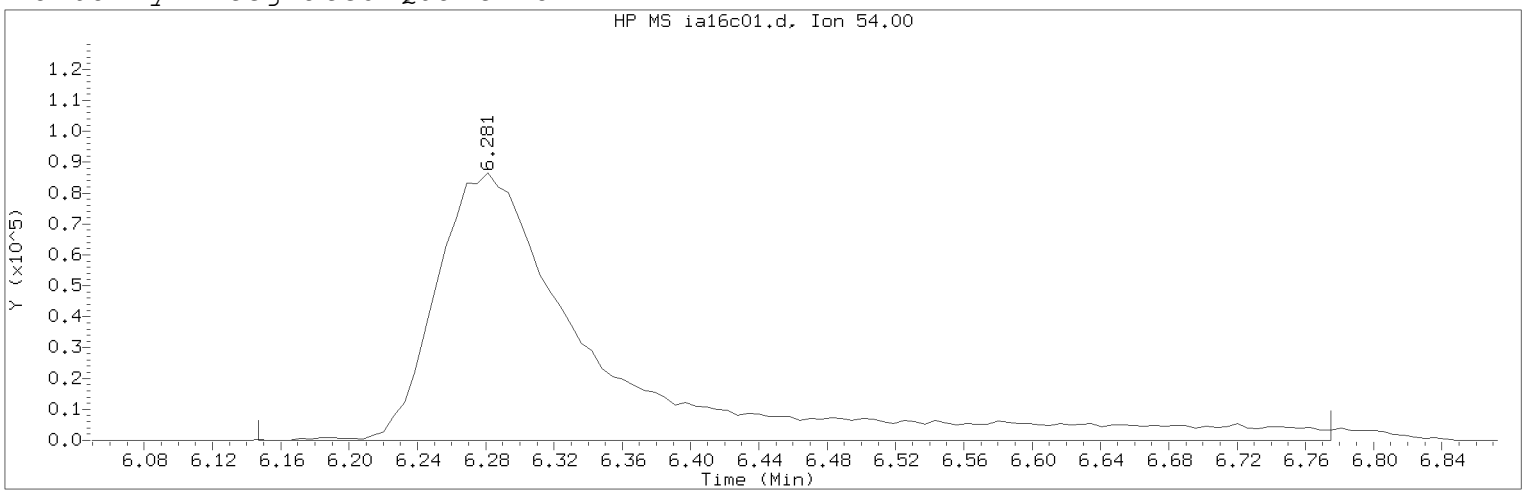
Compound Number : 37
Compound Name : Ethyl t-butyl ether
Scan Number : 720
Retention Time (minutes): 5.976
Quant Ion : 59.00
Area : 1129099
On-column Amount (ng) : 9.4570
Integration start scan : 703 Integration stop scan: 750
Y at integration start : 0 Y at integration end: 366

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Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

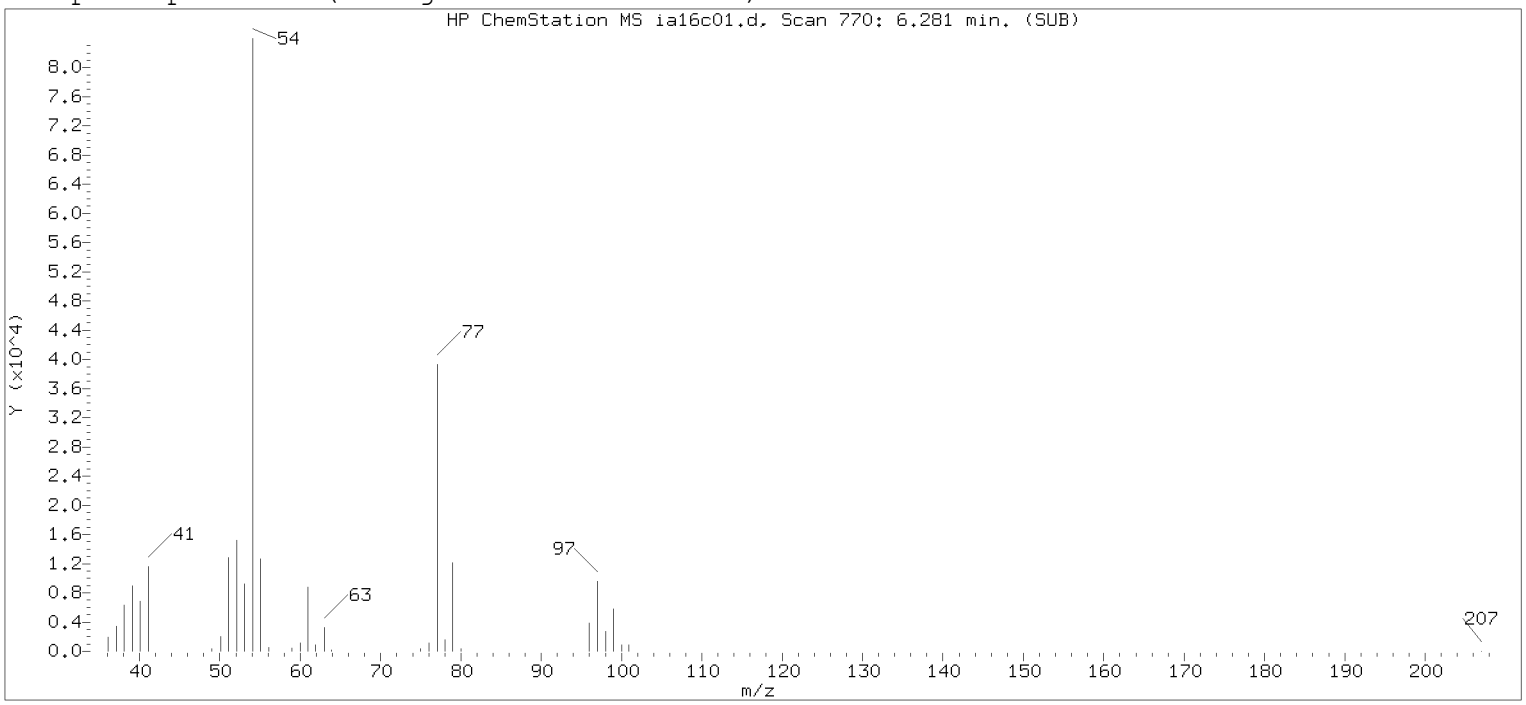
Compound Number : 42
Compound Name : Propionitrile
Scan Number : 770
Retention Time (minutes): 6.281
Quant Ion : 54.00
Area (flag) : 576019M
On-Column Amount (ng) : 206.6071
Integration start scan : 747 Integration stop scan: 850
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

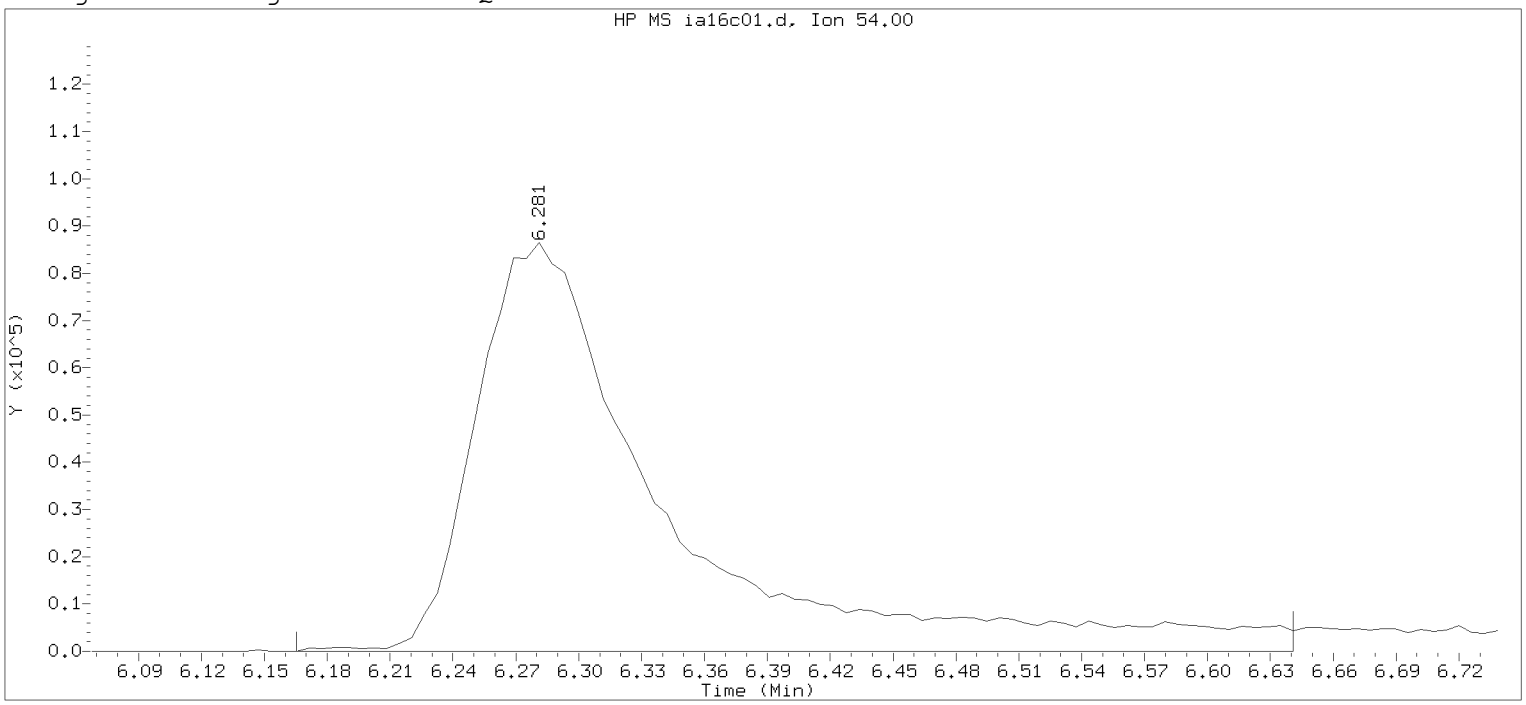
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

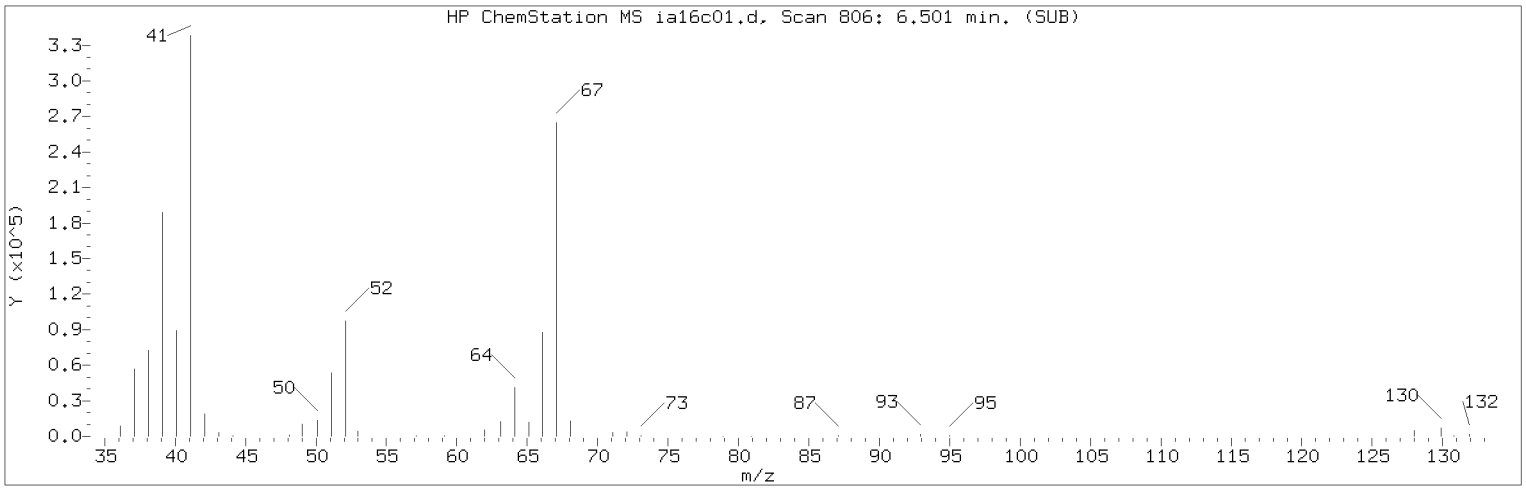
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

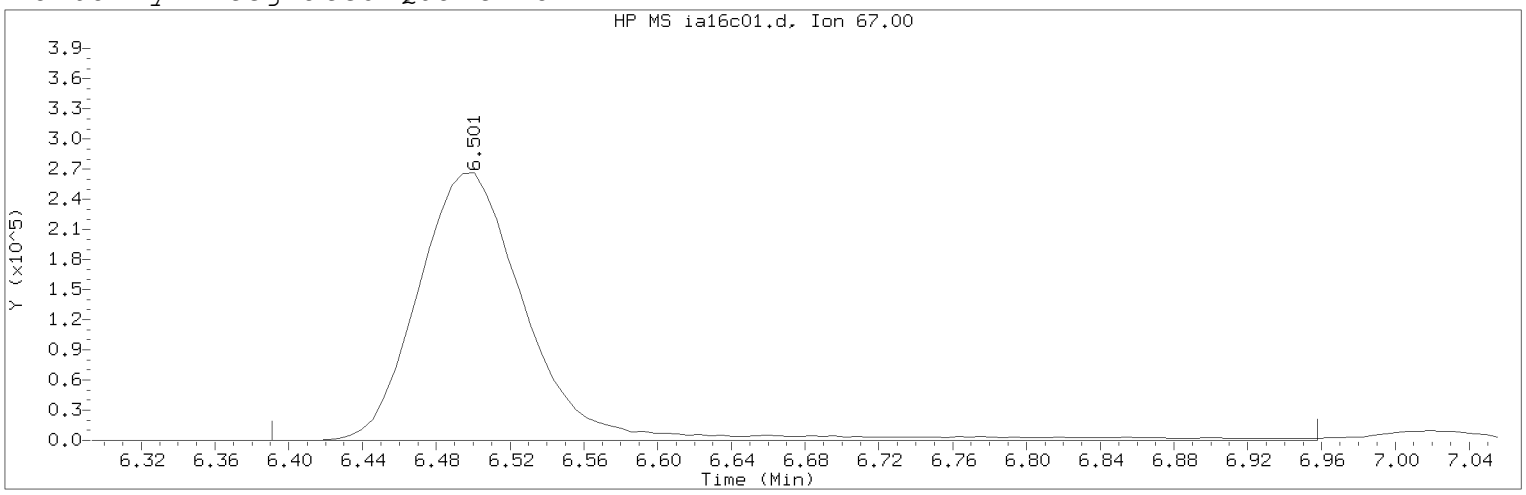
Compound Number : 42
Compound Name : Propionitrile
Scan Number : 770
Retention Time (minutes): 6.281
Quant Ion : 54.00
Area : 540007
On-column Amount (ng) : 203.6230
Integration start scan : 750 Integration stop scan: 828
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

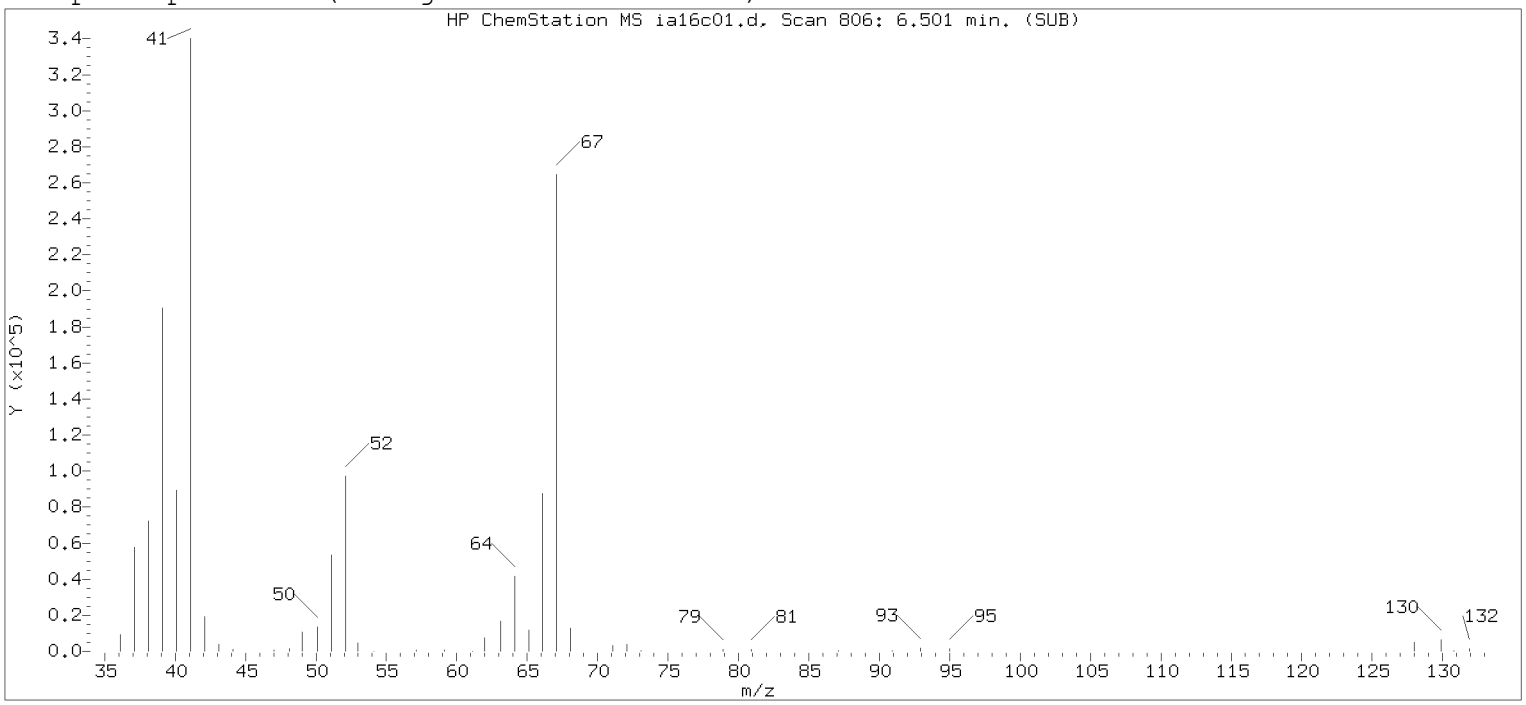
Compound Number : 45
Compound Name : Methacrylonitrile
Scan Number : 806
Retention Time (minutes): 6.501
Quant Ion : 67.00
Area (flag) : 1108853M
On-Column Amount (ng) : 108.0715
Integration start scan : 787 Integration stop scan: 880
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

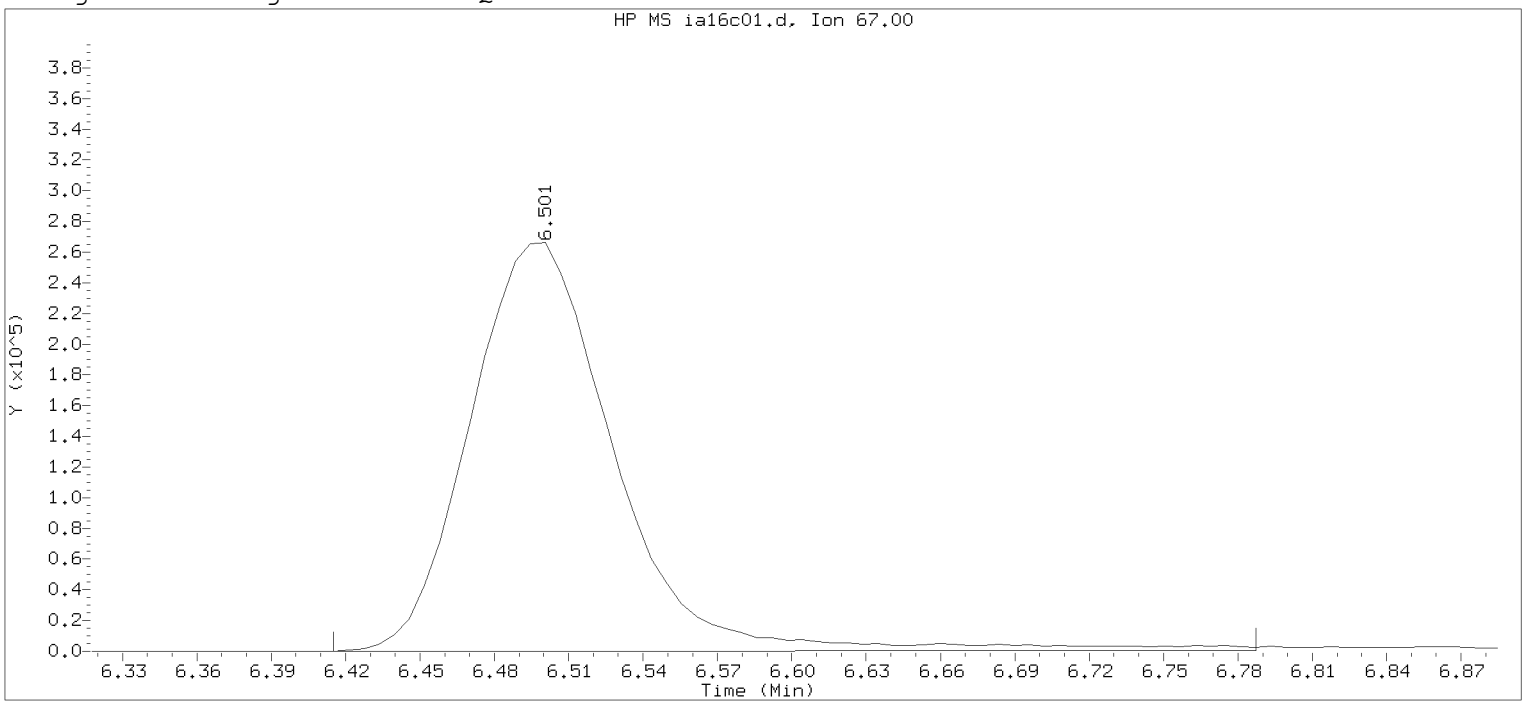
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

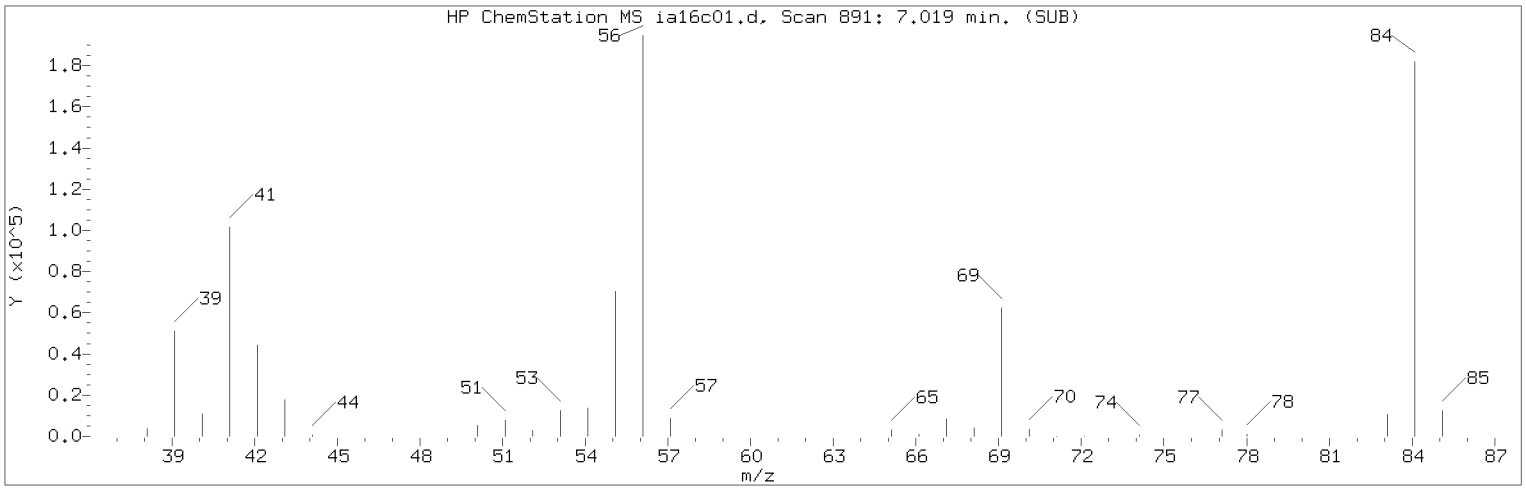
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

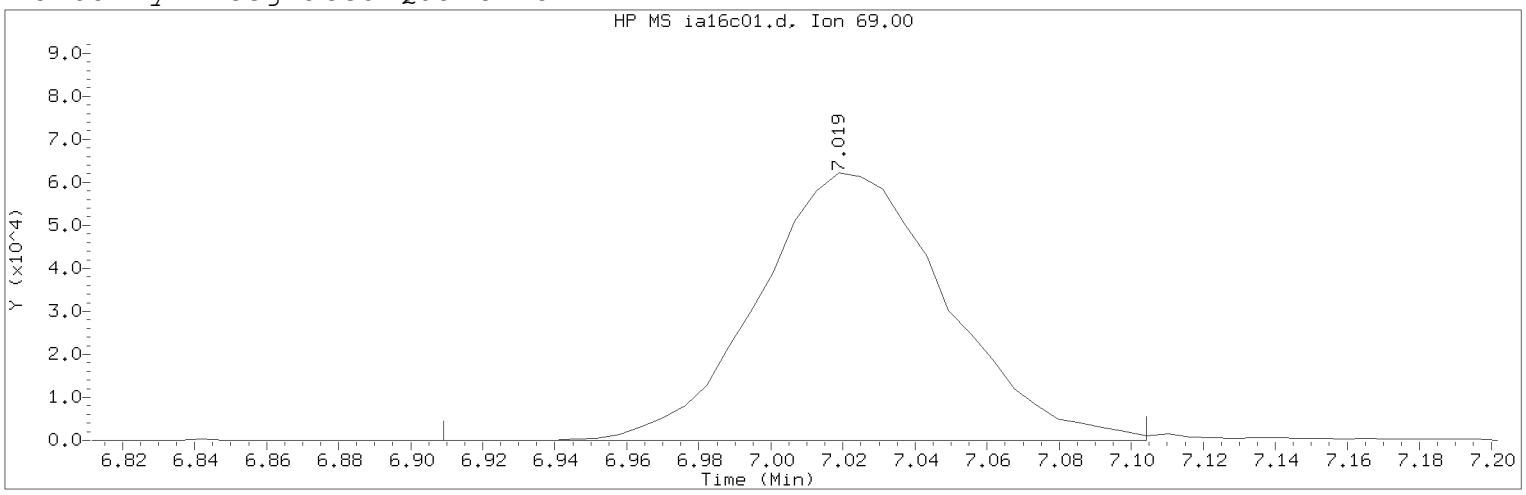
Compound Number : 45
Compound Name : Methacrylonitrile
Scan Number : 806
Retention Time (minutes): 6.501
Quant Ion : 67.00
Area : 1077600
On-column Amount (ng) : 110.4113
Integration start scan : 791 Integration stop scan: 852
Y at integration start : 0 Y at integration end: 578

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Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

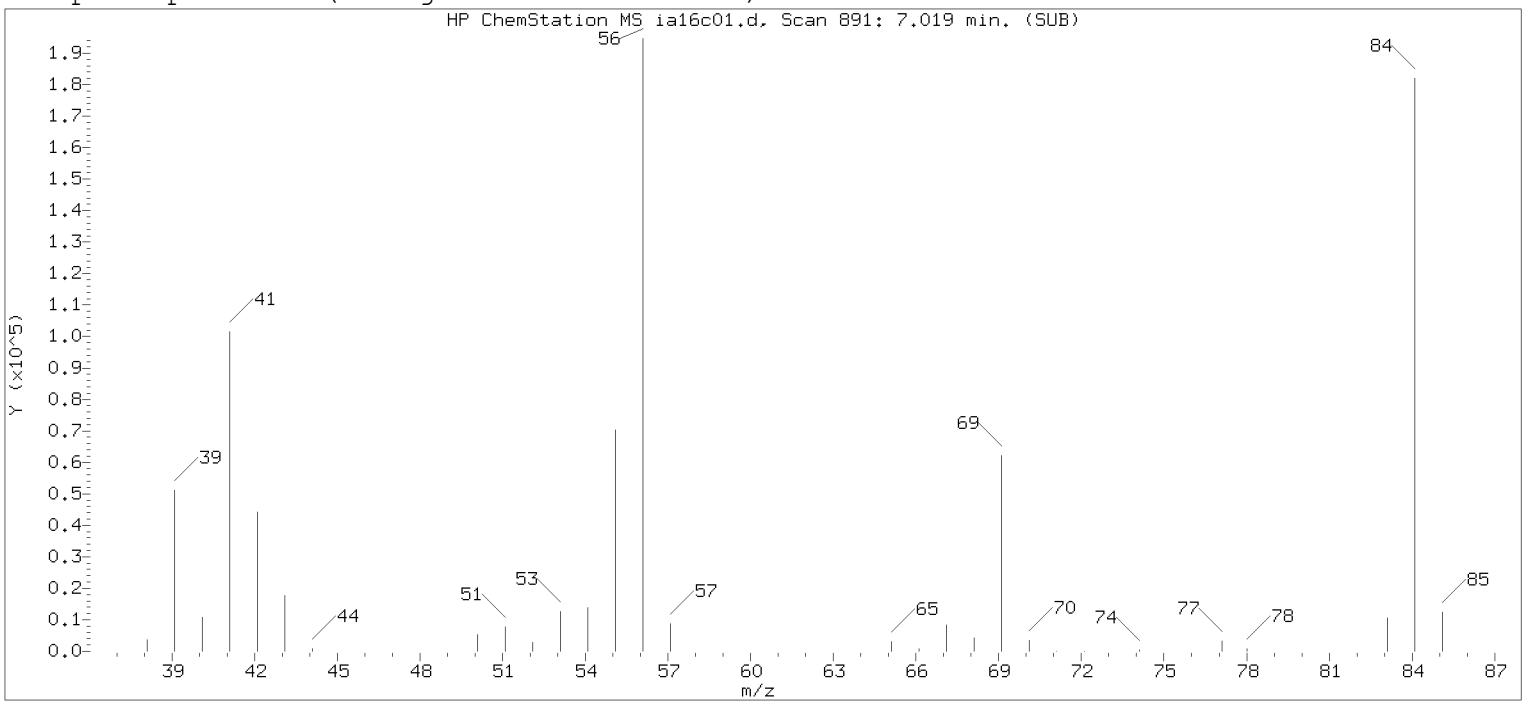
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 69.00
Area (flag) : 224999M
On-Column Amount (ng) : 9.2296
Integration start scan : 872 Integration stop scan: 904
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

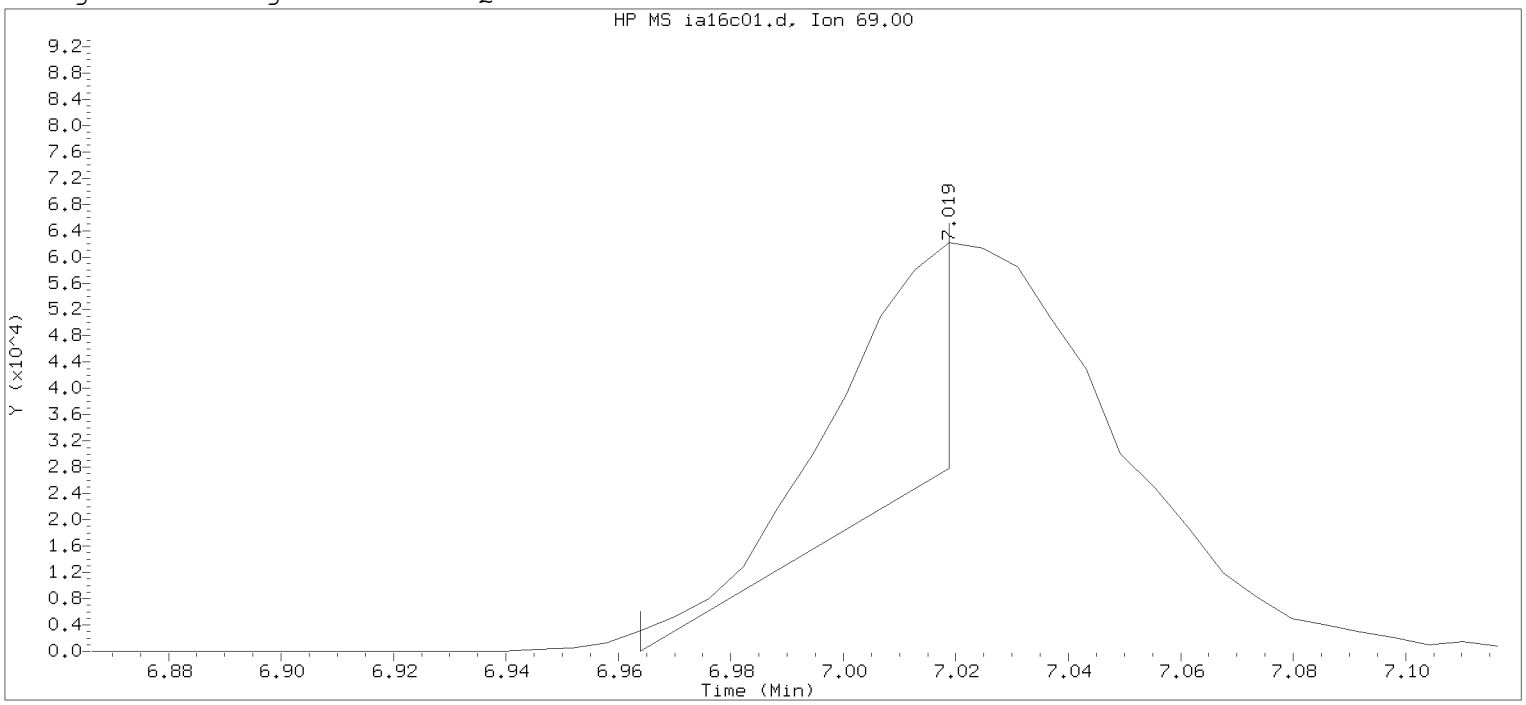
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

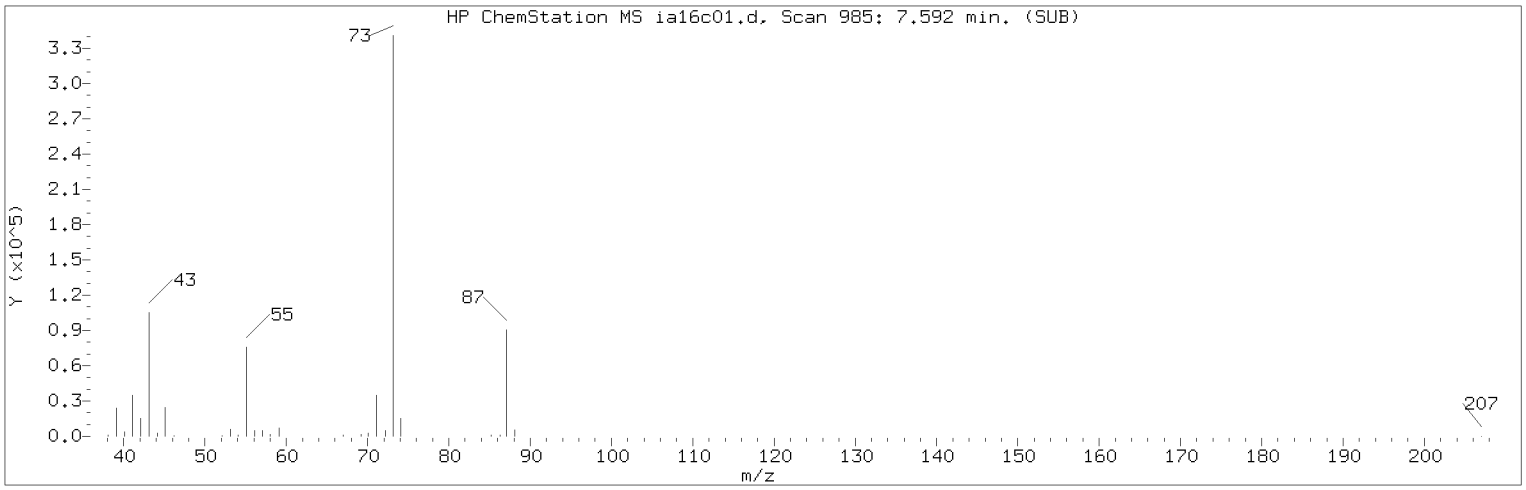
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

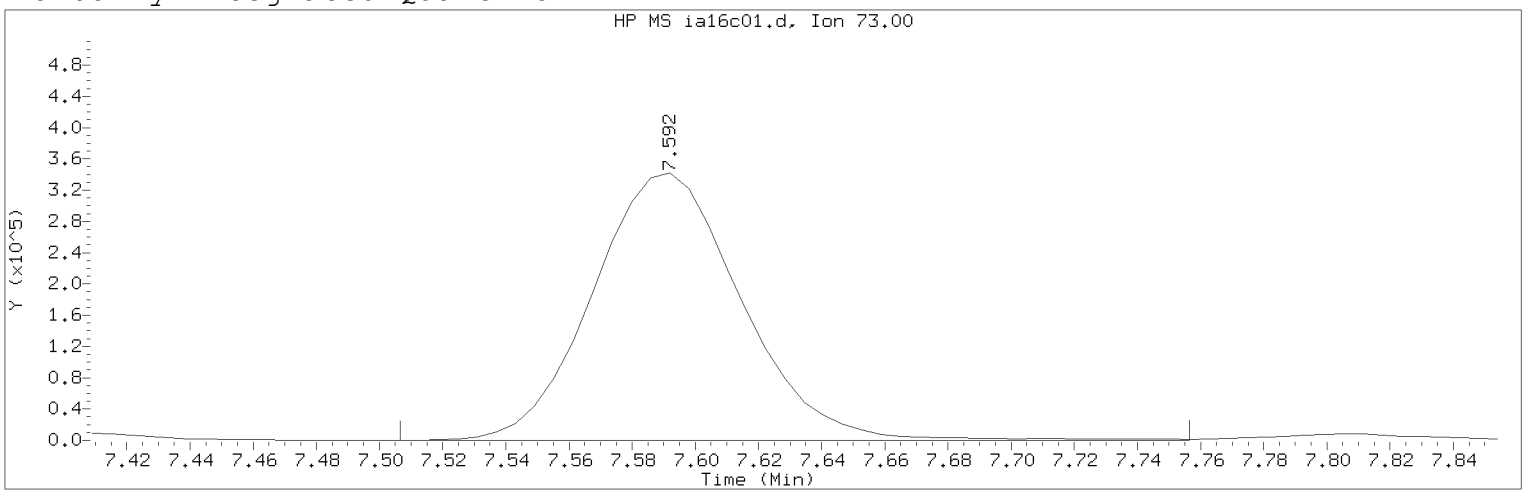
Compound Number : 52
Compound Name : Cyclohexane
Scan Number : 891
Retention Time (minutes): 7.019
Quant Ion : 69.00
Area : 48618
On-column Amount (ng) : 1.9943
Integration start scan : 881 Integration stop scan: 890
Y at integration start : 0 Y at integration end: 27853

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Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

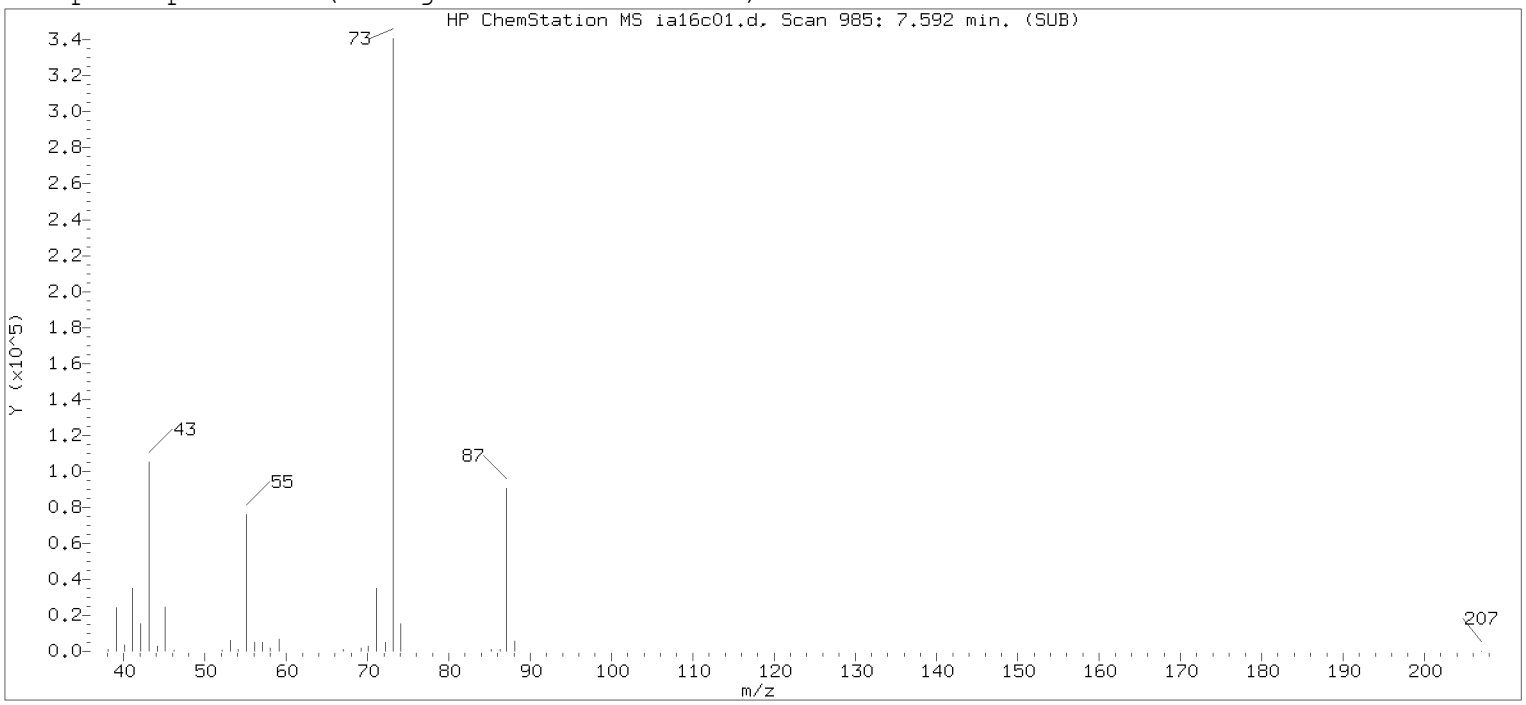
Compound Number : 60
Compound Name : t-Amyl methyl ether
Scan Number : 985
Retention Time (minutes): 7.592
Quant Ion : 73.00
Area (flag) : 1114182M
On-Column Amount (ng) : 9.6755
Integration start scan : 970 Integration stop scan: 1011
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

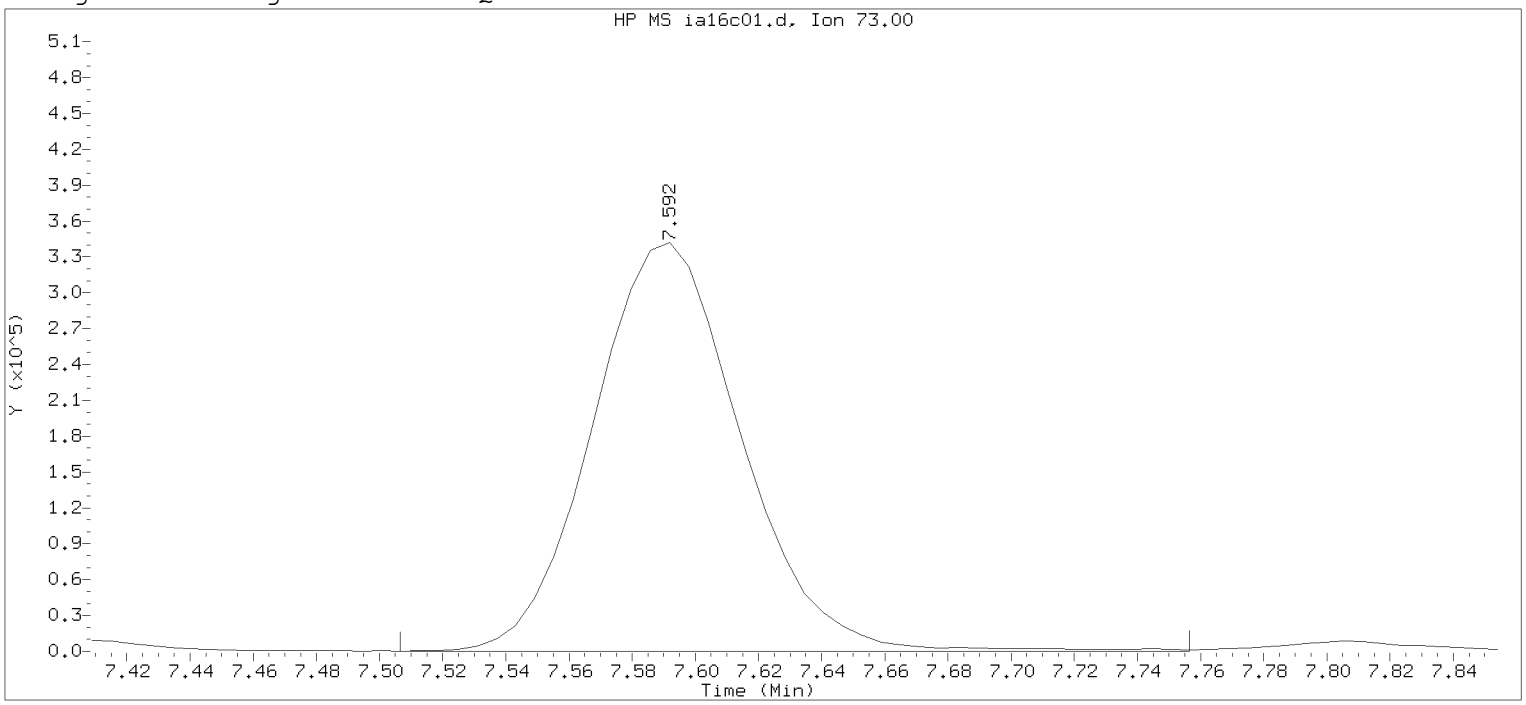
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

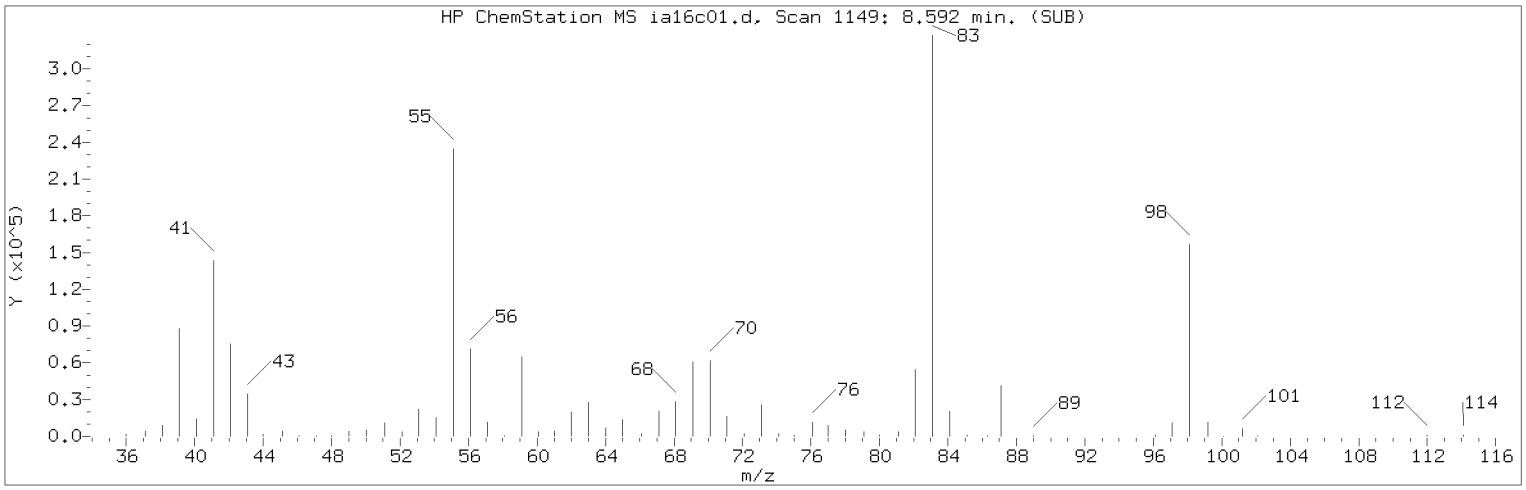
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

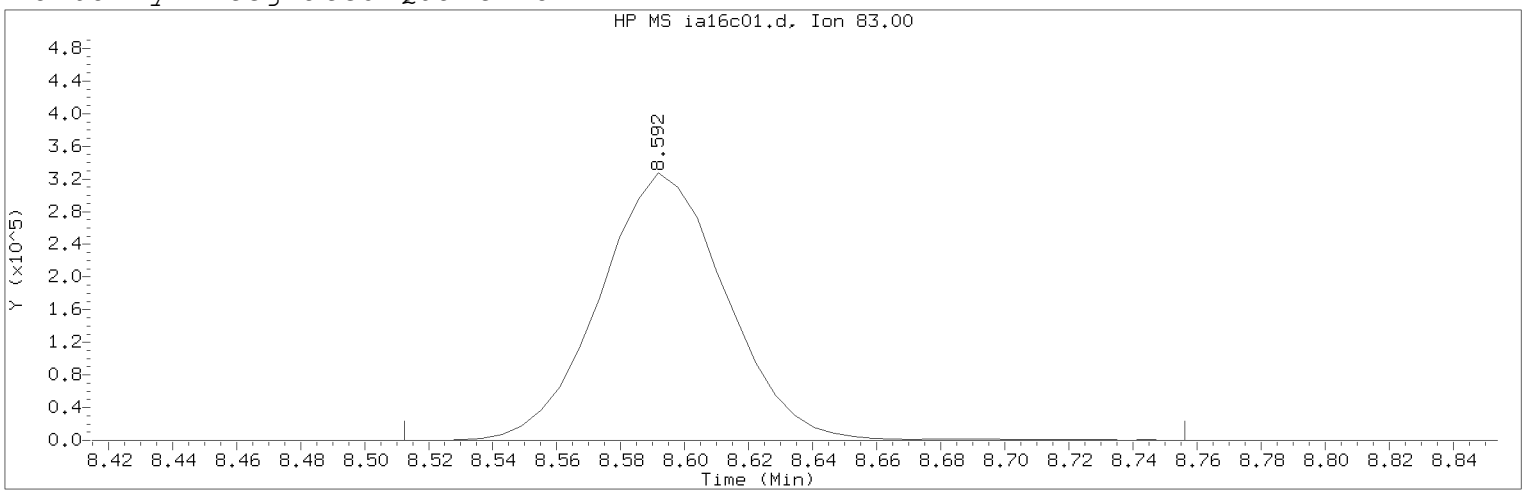
Compound Number : 60
Compound Name : t-Amyl methyl ether
Scan Number : 985
Retention Time (minutes): 7.592
Quant Ion : 73.00
Area : 1114182
On-column Amount (ng) : 9.6756
Integration start scan : 970 Integration stop scan: 1011
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

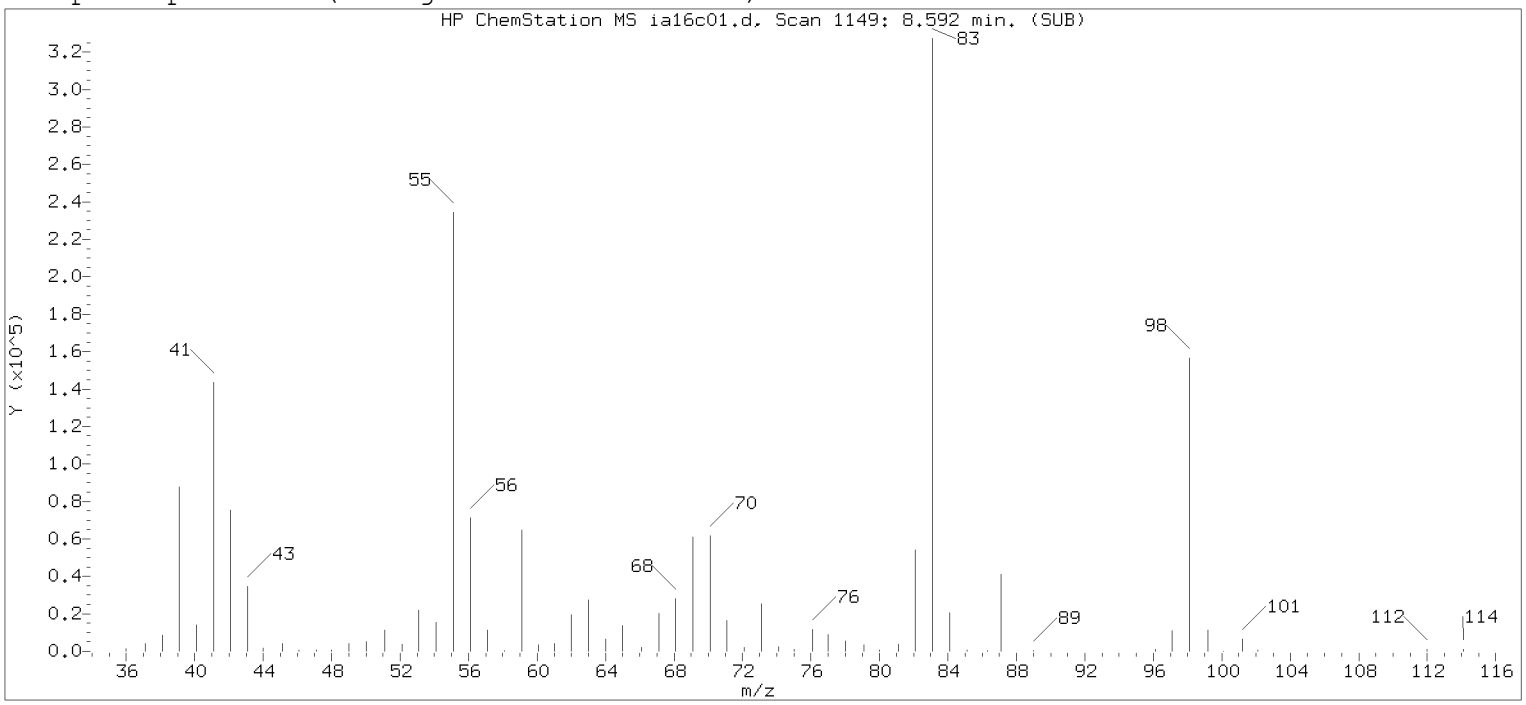
Compound Number : 69
Compound Name : Methylcyclohexane
Scan Number : 1149
Retention Time (minutes): 8.592
Quant Ion : 83.00
Area (flag) : 897542M
On-Column Amount (ng) : 10.4543
Integration start scan : 1135 Integration stop scan: 1175
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

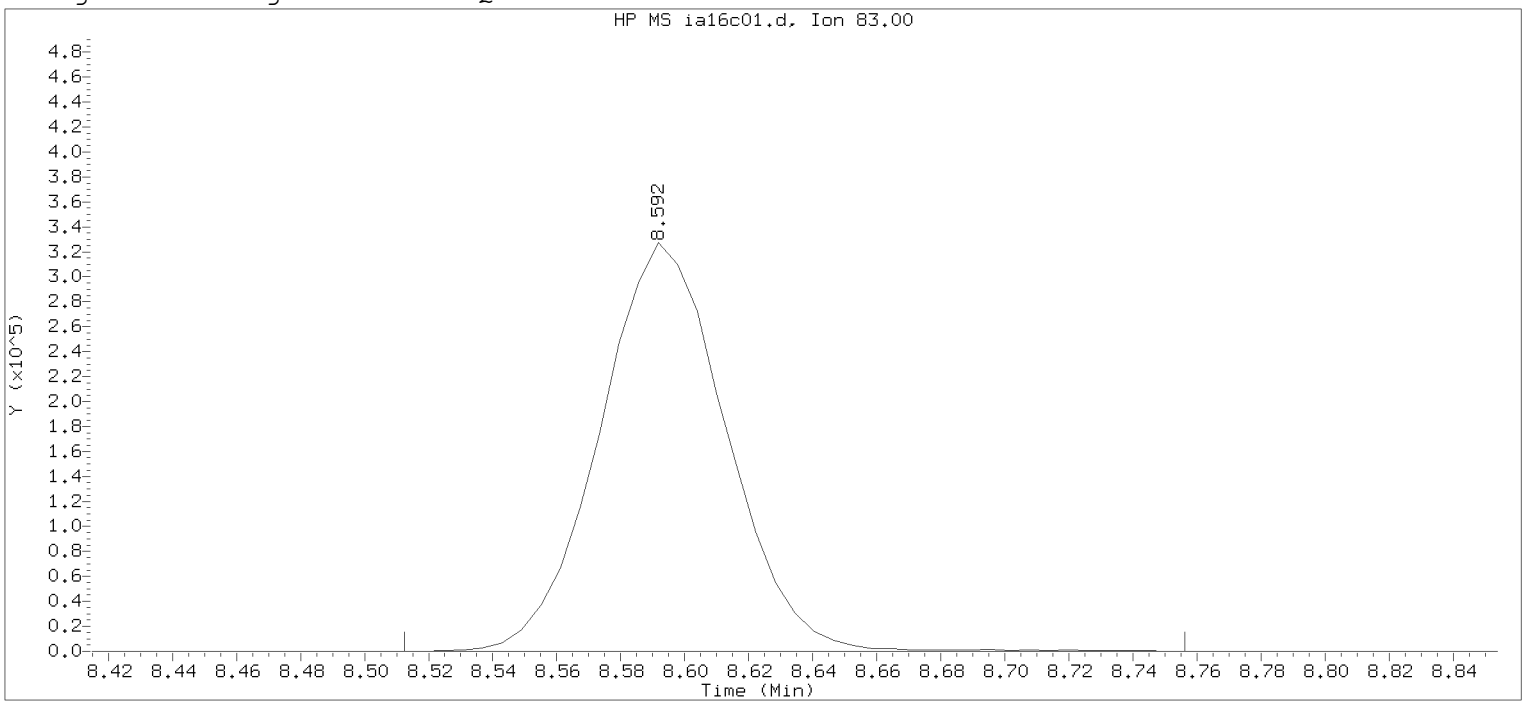
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

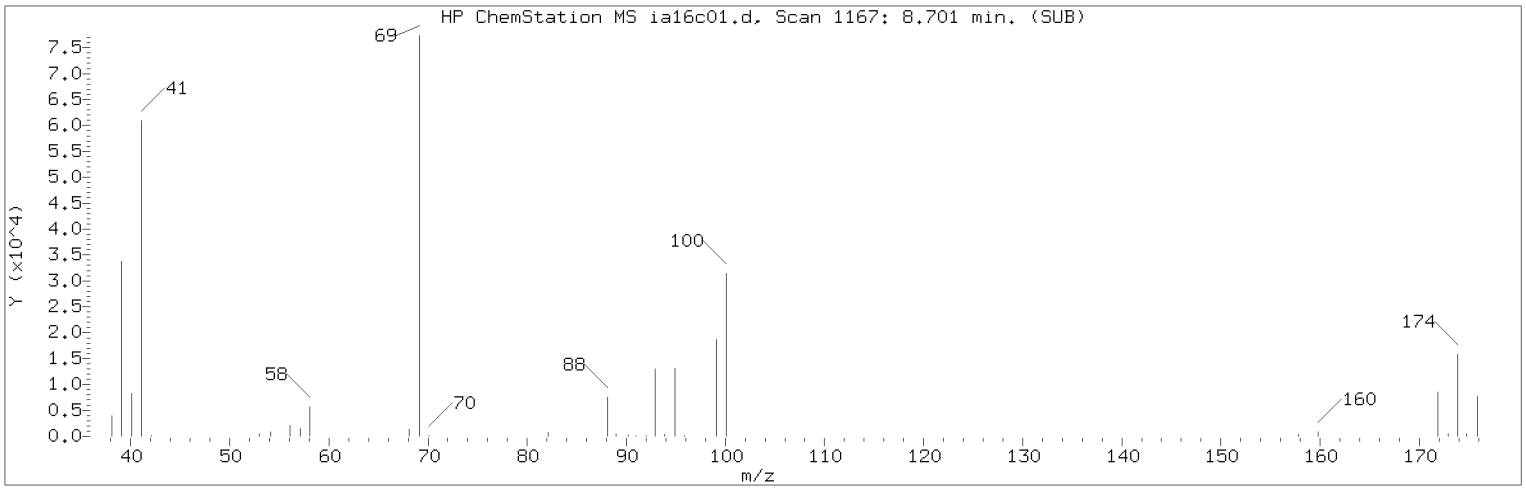
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

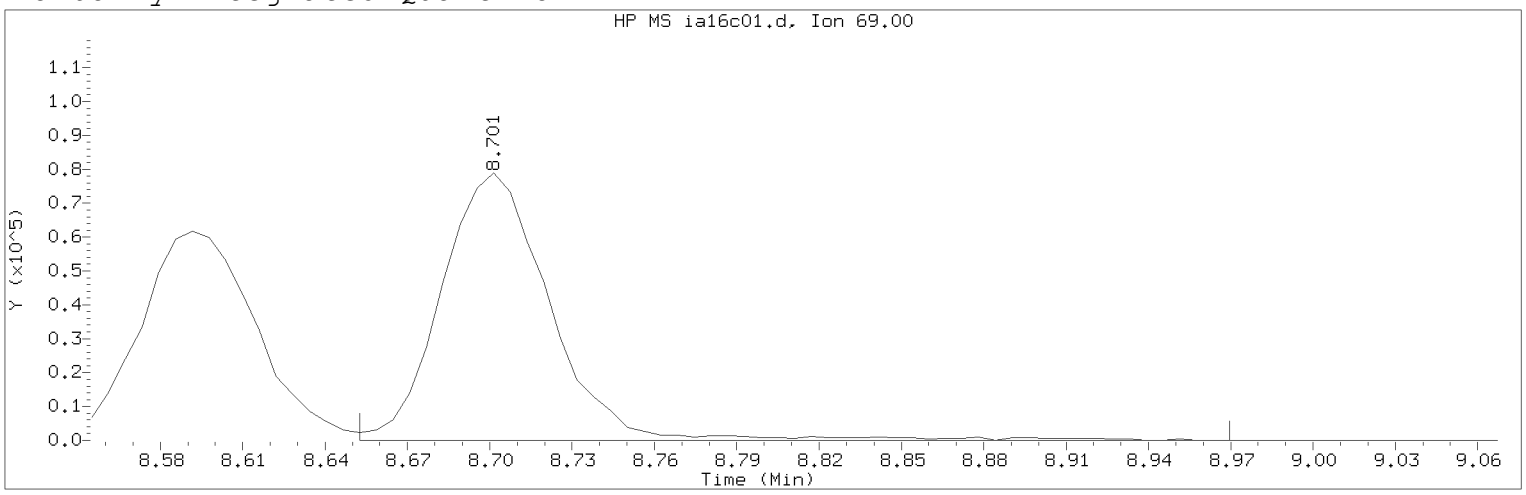
Compound Number : 69
Compound Name : Methylcyclohexane
Scan Number : 1149
Retention Time (minutes): 8.592
Quant Ion : 83.00
Area : 897542
On-column Amount (ng) : 10.4543
Integration start scan : 1135 Integration stop scan: 1175
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

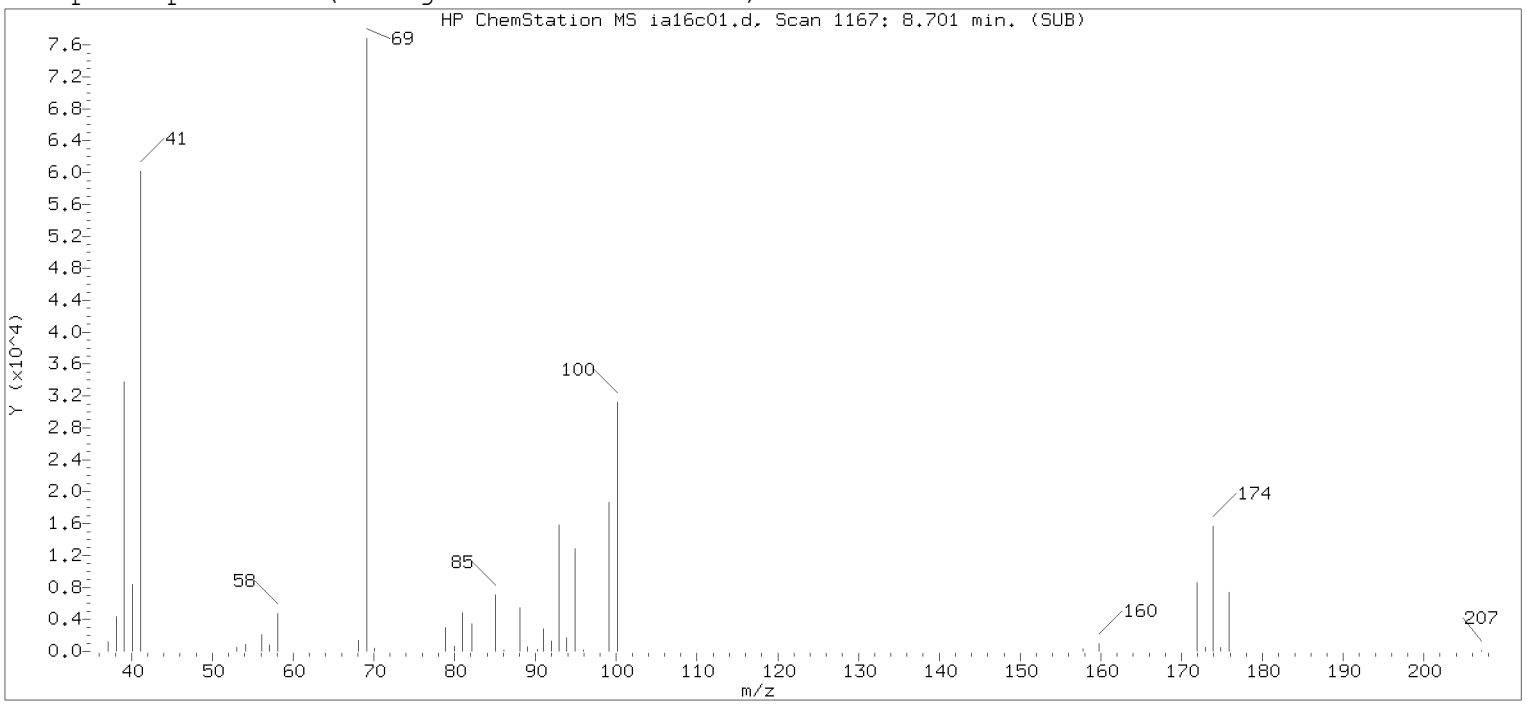
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1167
Retention Time (minutes): 8.701
Quant Ion : 69.00
Area (flag) : 217650M
On-Column Amount (ng) : 11.0834
Integration start scan : 1158 Integration stop scan: 1210
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

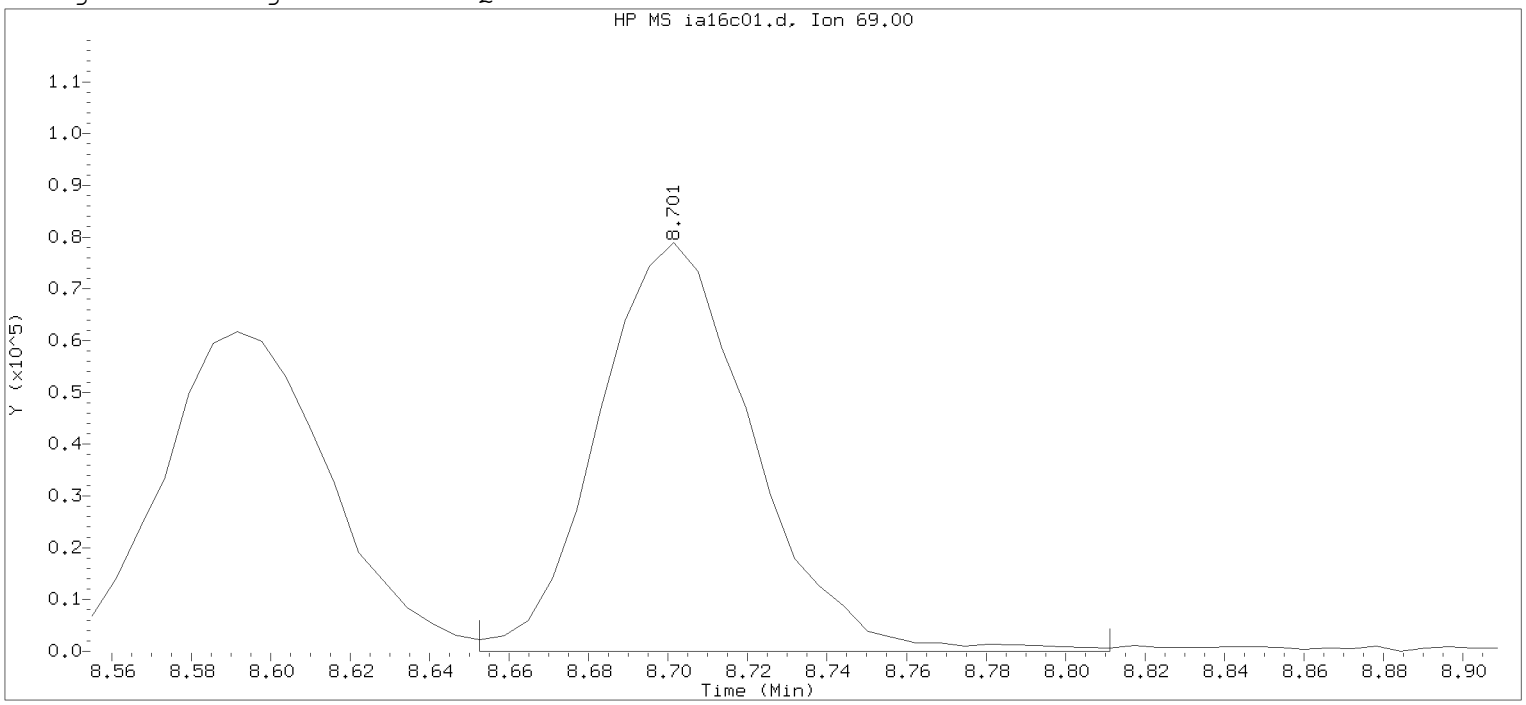
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

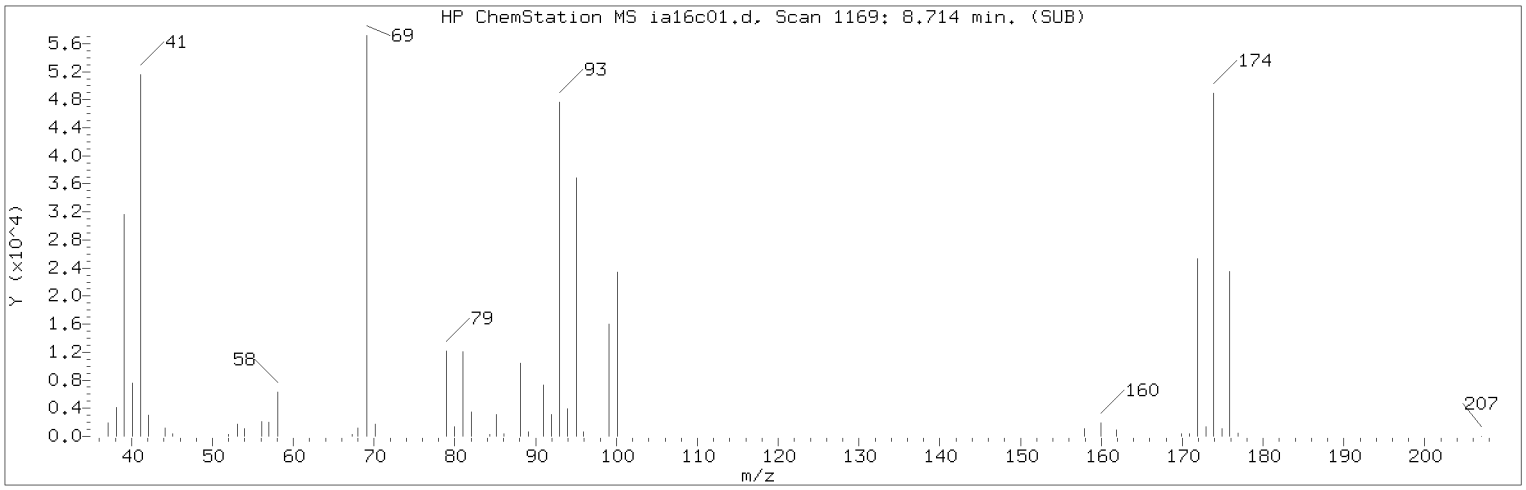
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

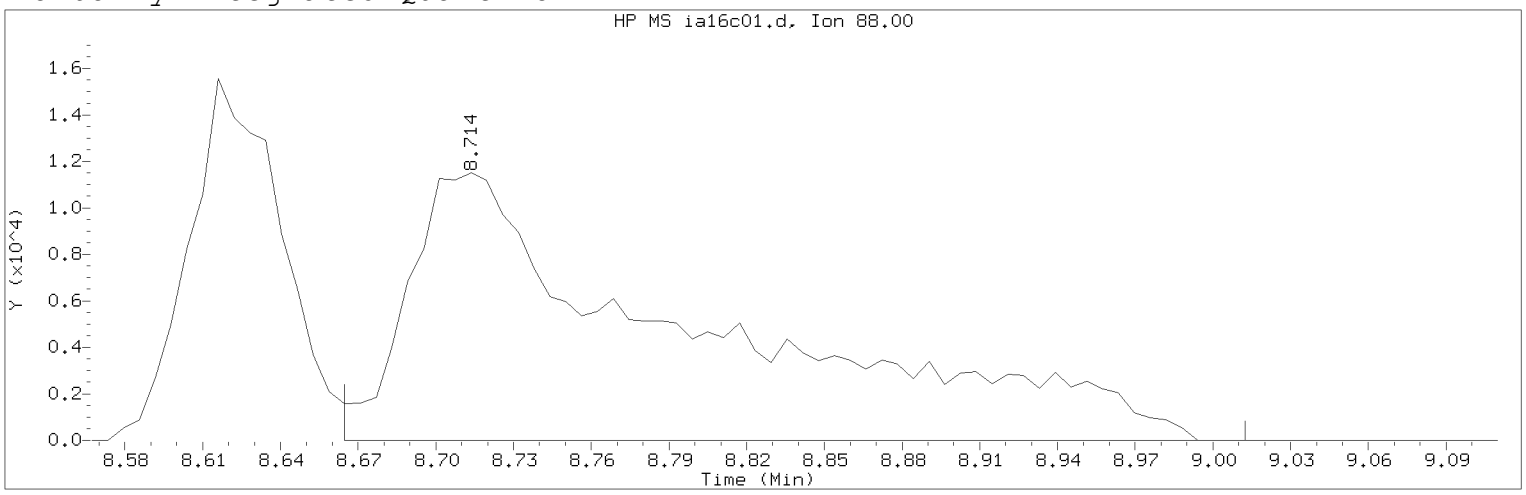
Compound Number : 71
Compound Name : Methyl Methacrylate
Scan Number : 1167
Retention Time (minutes): 8.701
Quant Ion : 69.00
Area : 212245
On-column Amount (ng) : 11.3624
Integration start scan : 1158 Integration stop scan: 1184
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

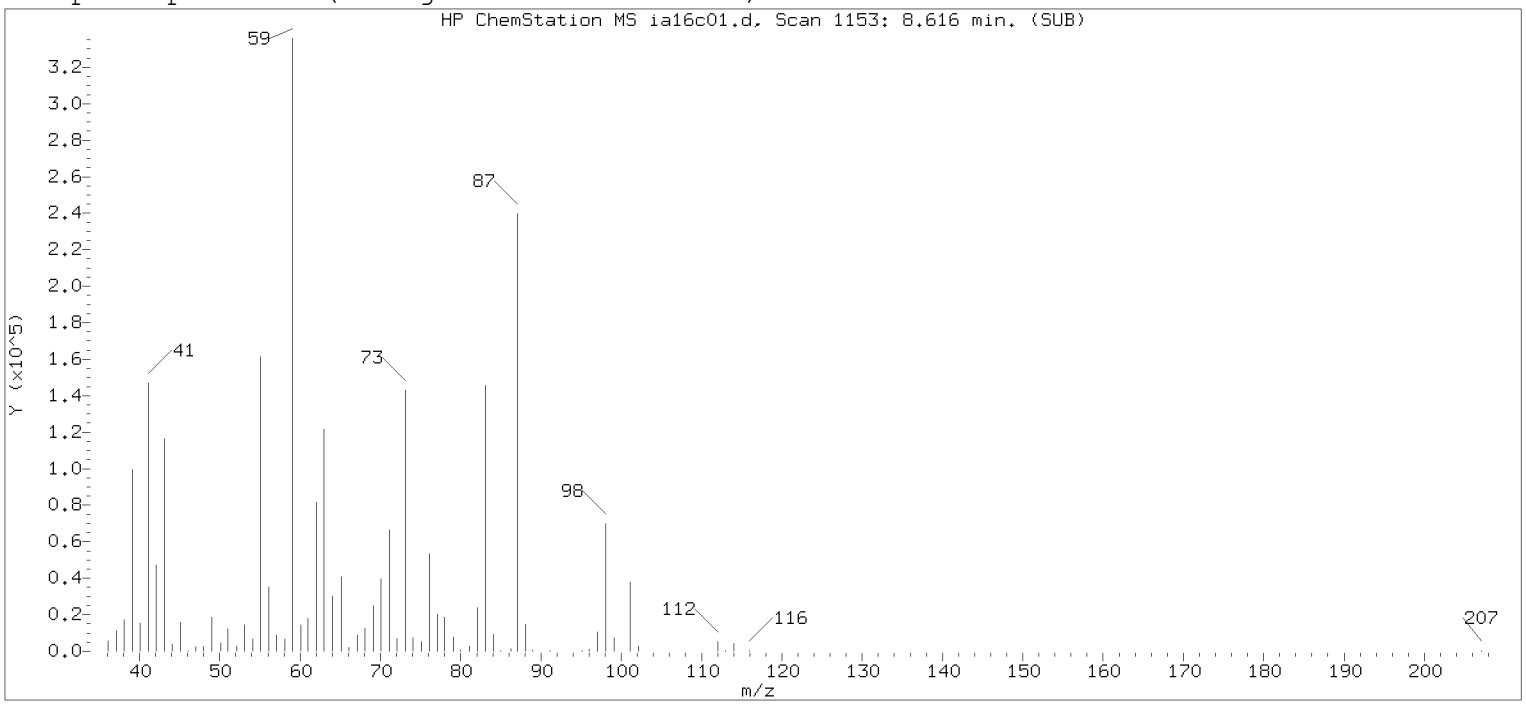
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1169
Retention Time (minutes): 8.714
Quant Ion : 88.00
Area (flag) : 87509M
On-Column Amount (ng) : 556.1470
Integration start scan : 1160 Integration stop scan: 1217
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

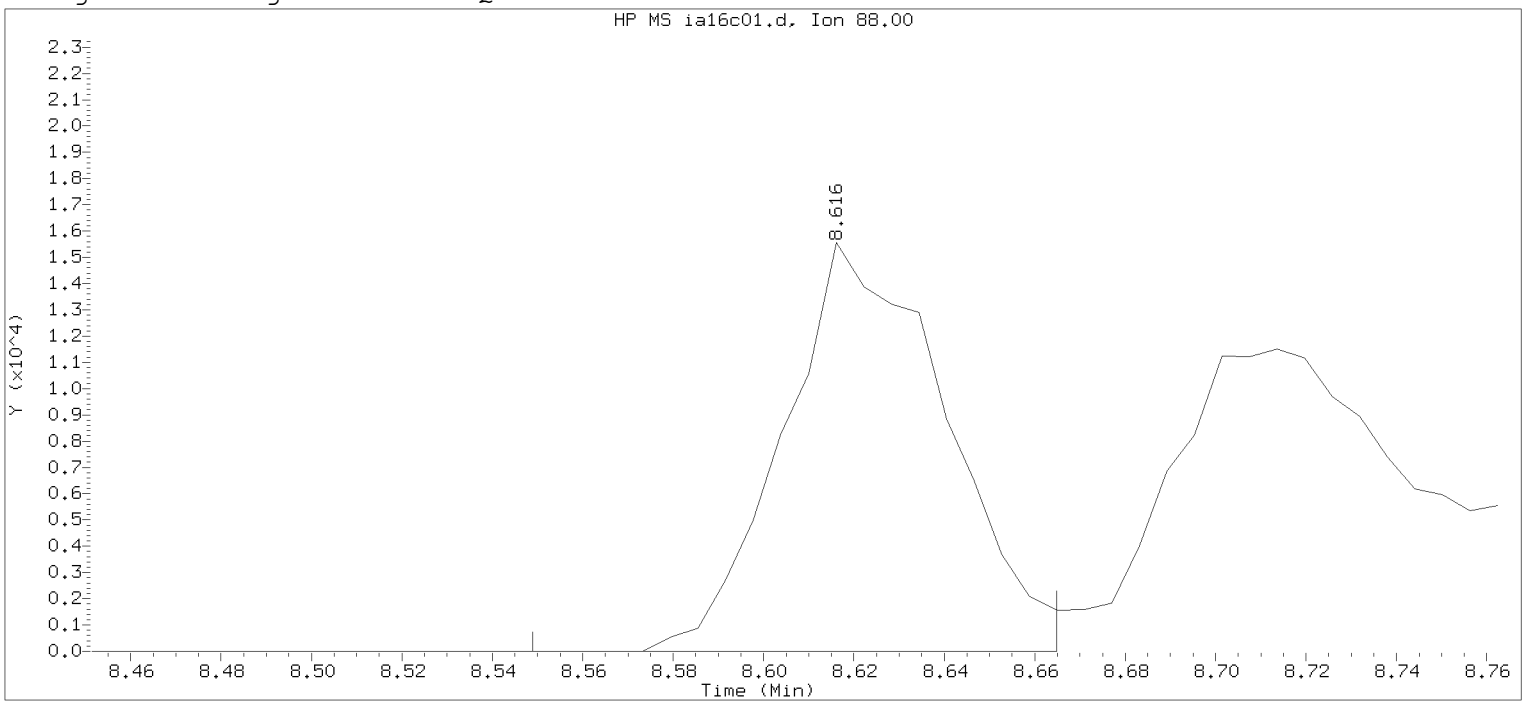
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

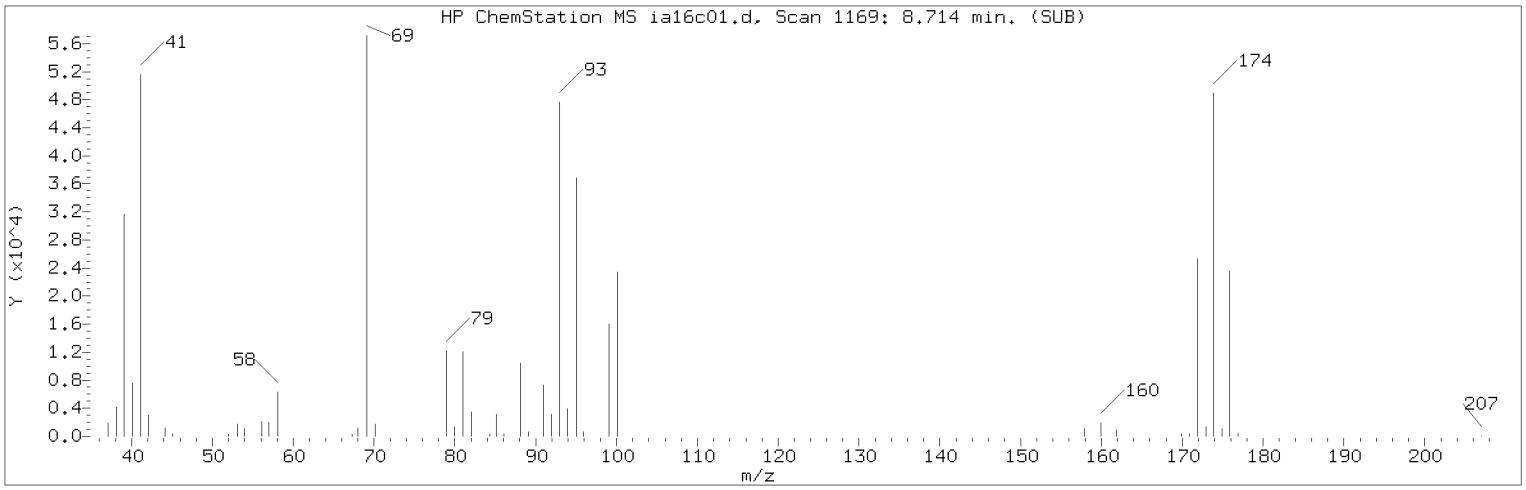
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

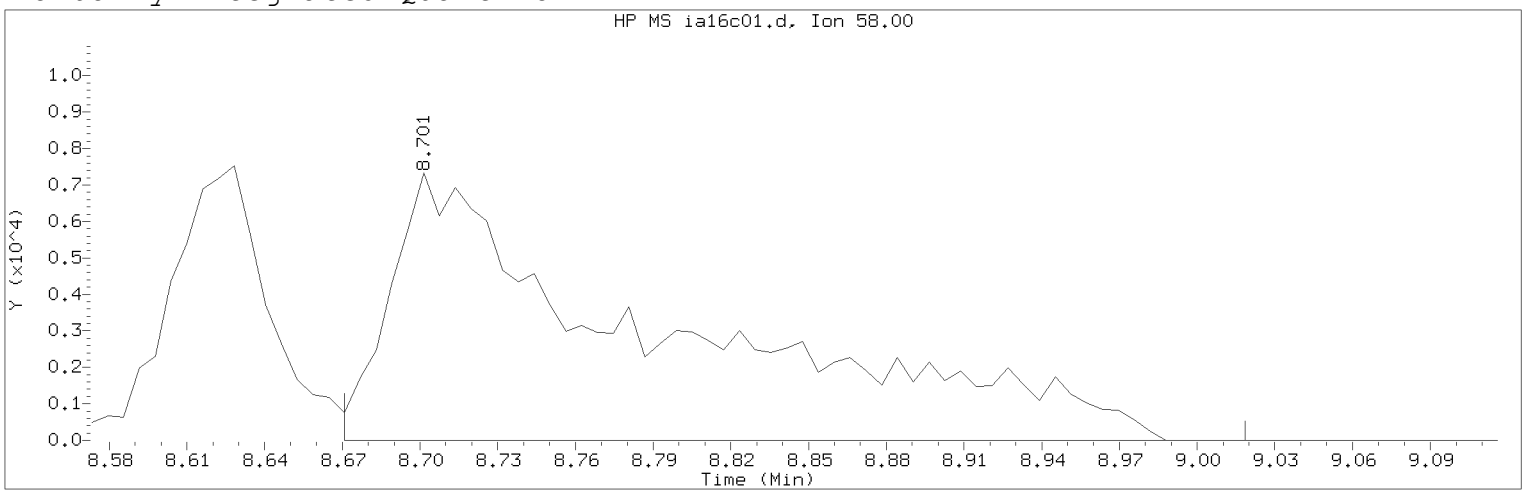
Compound Number	: 72		
Compound Name	: 1,4-Dioxane		
Scan Number	: 1153		
Retention Time (minutes)	: 8.616		
Quant Ion	: 88.00		
Area	: 38570		
On-column Amount (ng)	: 257.6963		
Integration start scan	: 1141	Integration stop scan:	1160
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

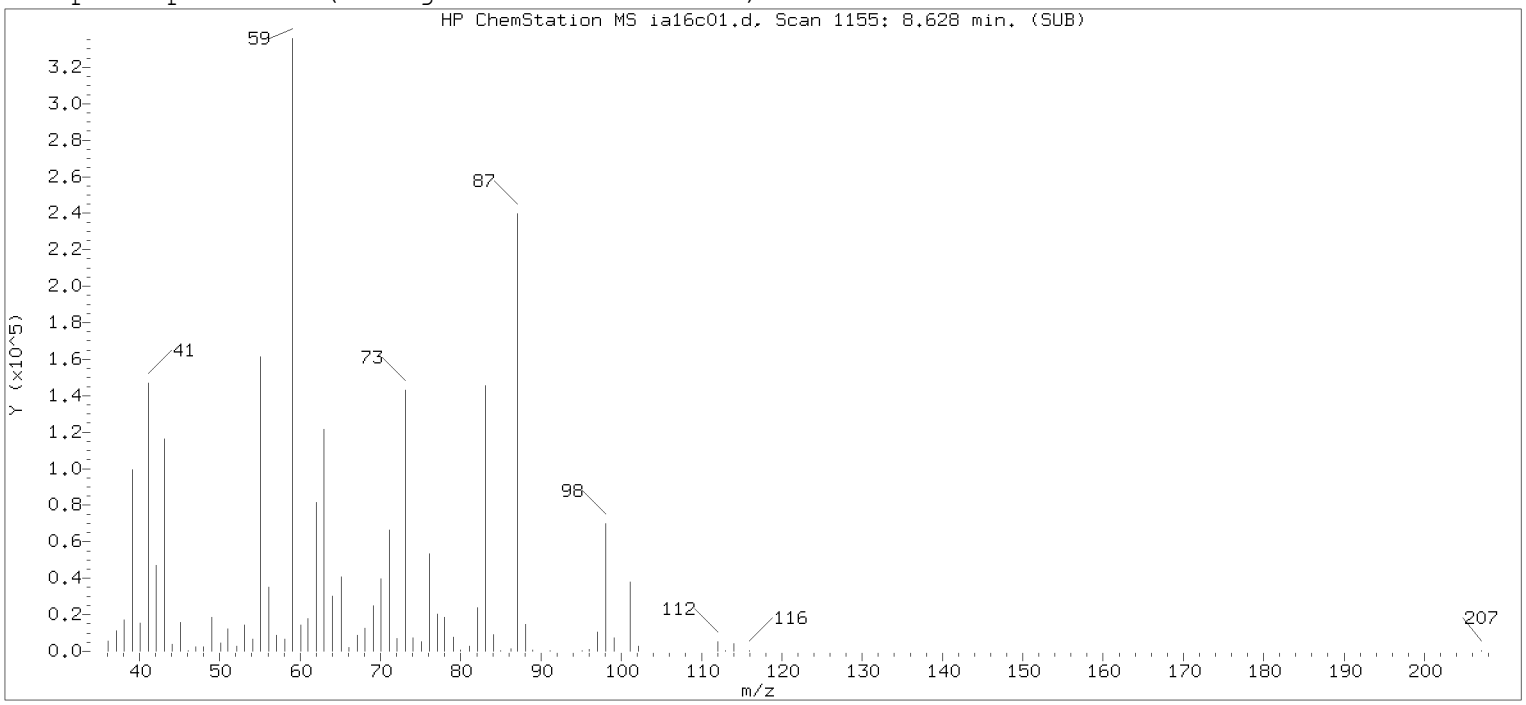
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1167
Retention Time (minutes): 8.701
Quant Ion : 58.00
Area (flag) : 52491M
On-Column Amount (ng) : 572.0375
Integration start scan : 1161 Integration stop scan: 1218
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

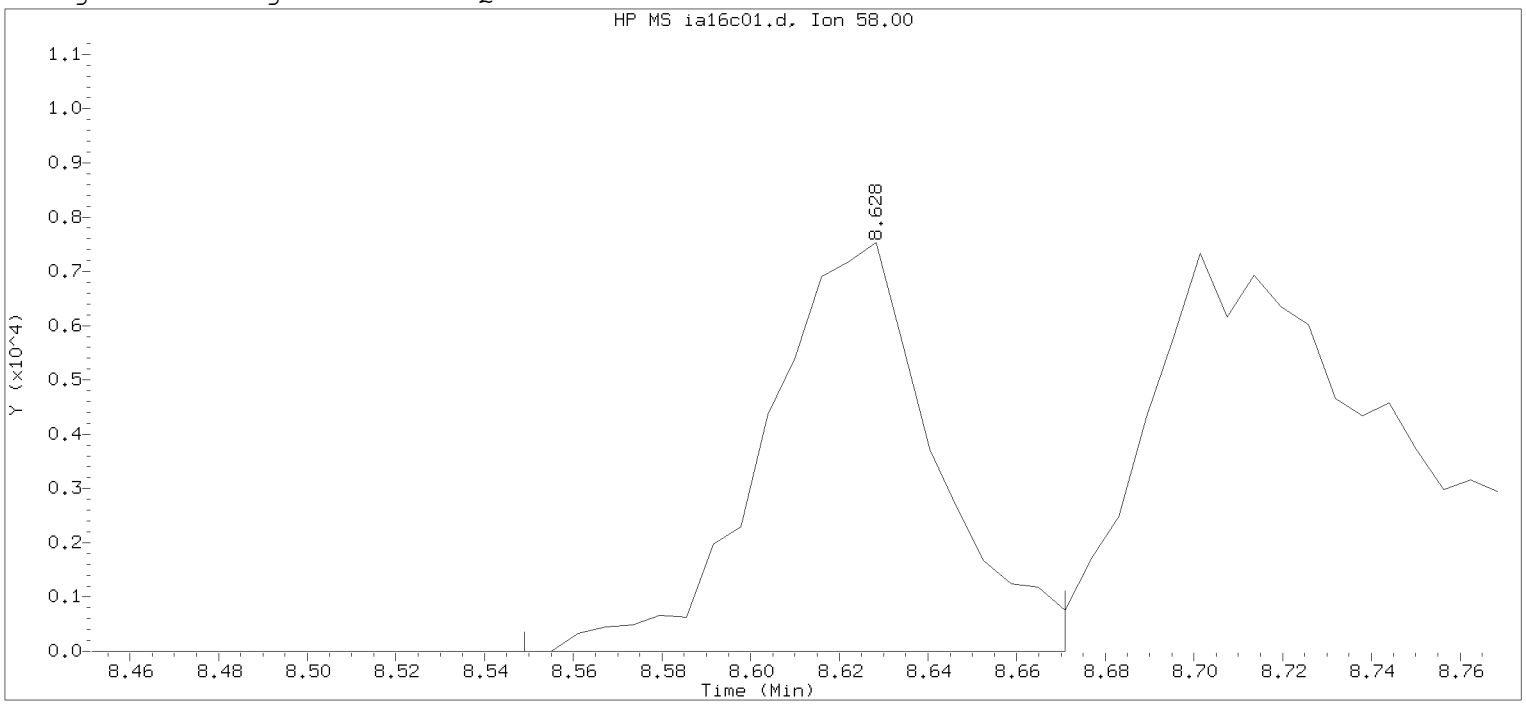
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

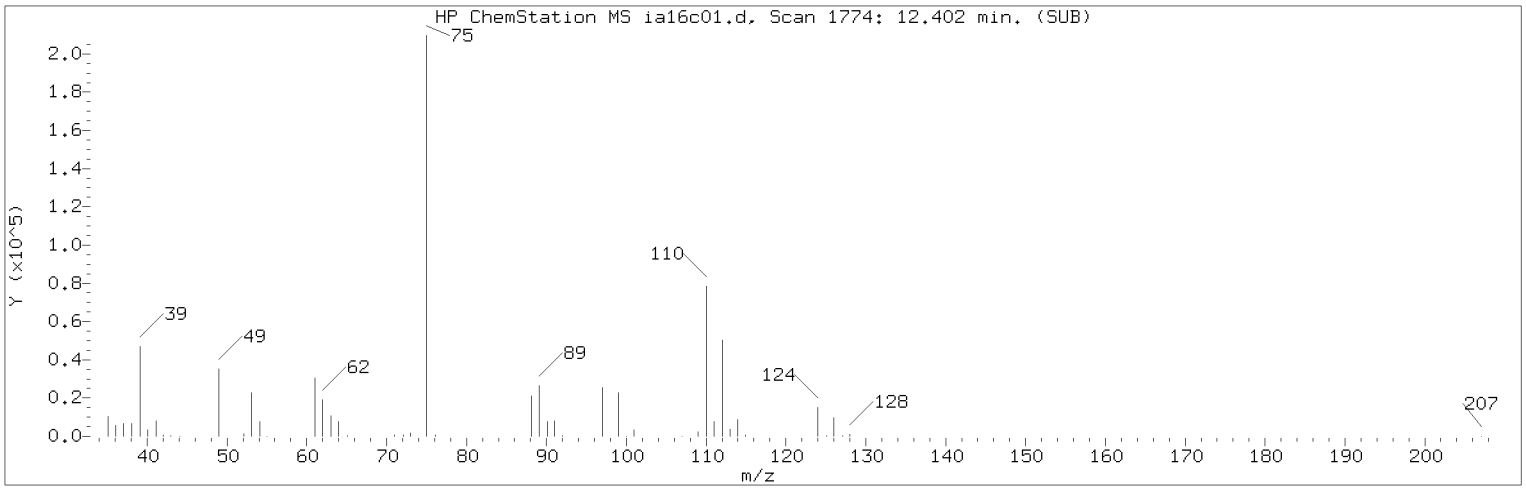
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

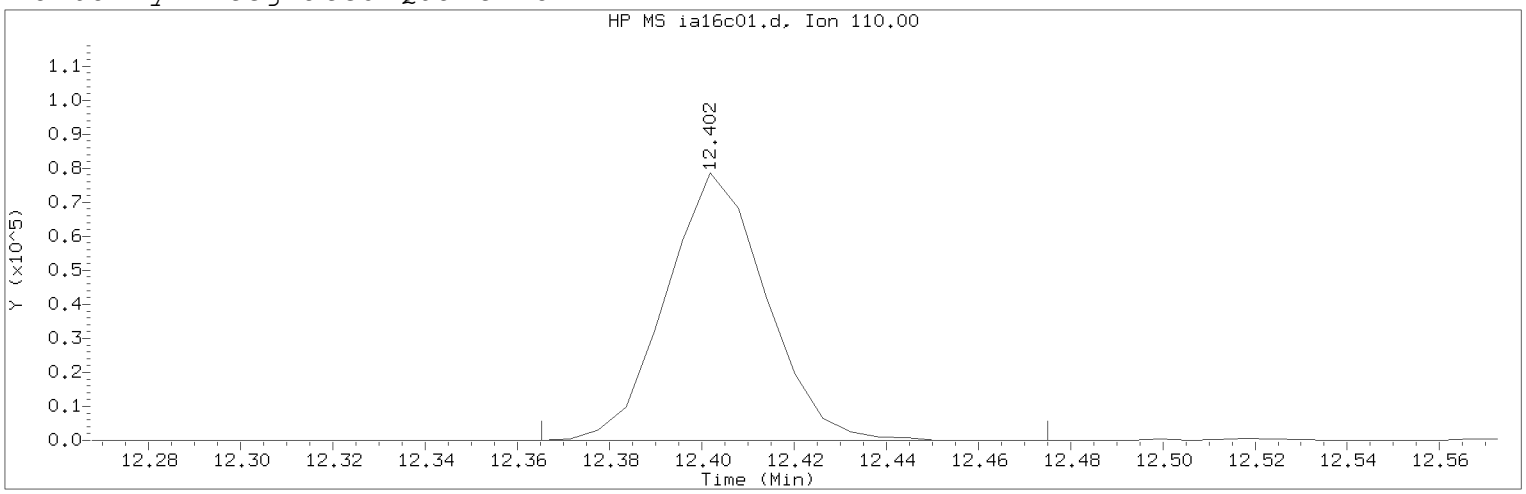
Compound Number : 72
Compound Name : 1,4-Dioxane
Scan Number : 1155
Retention Time (minutes): 8.628
Quant Ion : 58.00
Area : 20006
On-column Amount (ng) : 229.2104
Integration start scan : 1141 Integration stop scan: 1161
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user AF34 meaning 0486

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

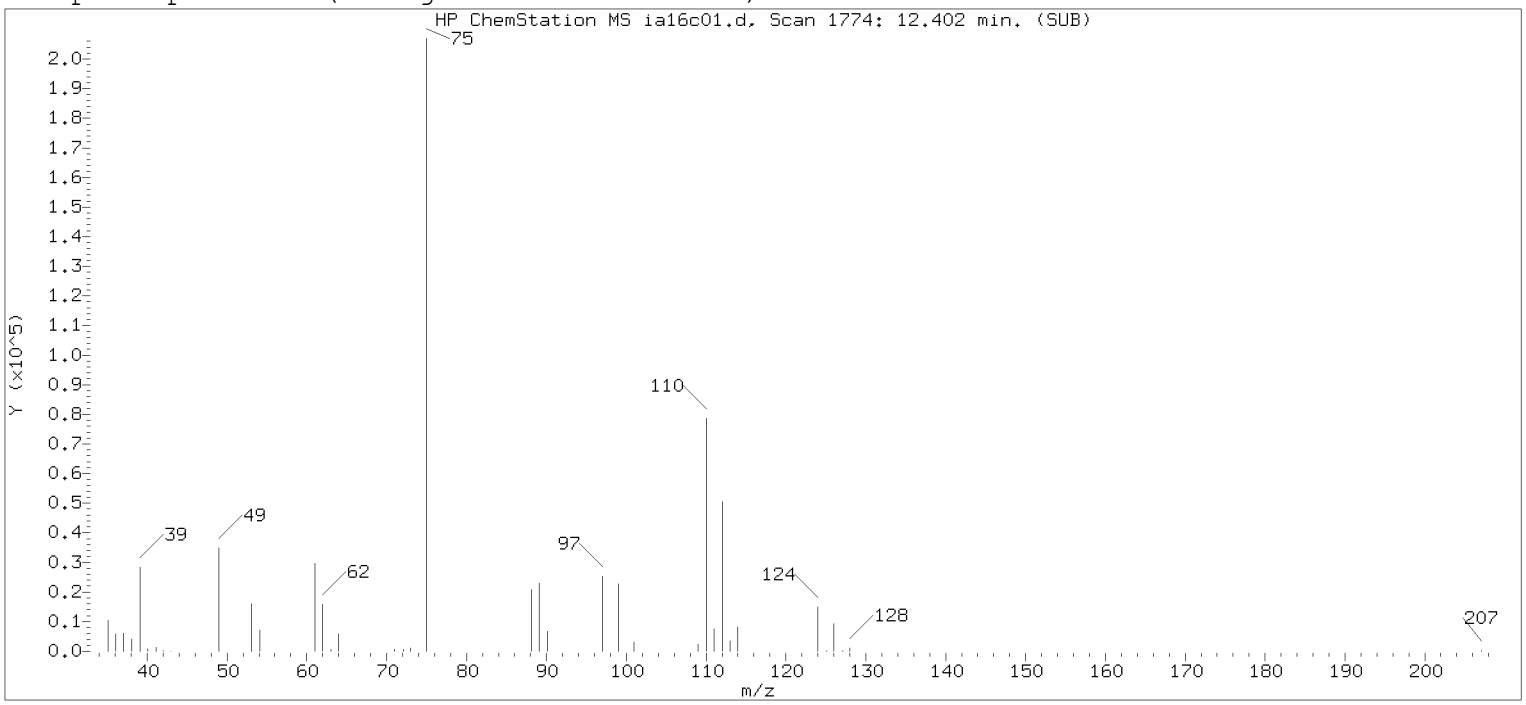
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1774
Retention Time (minutes): 12.402
Quant Ion : 110.00
Area (flag) : 118191M
On-Column Amount (ng) : 9.8389
Integration start scan : 1767 Integration stop scan: 1785
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

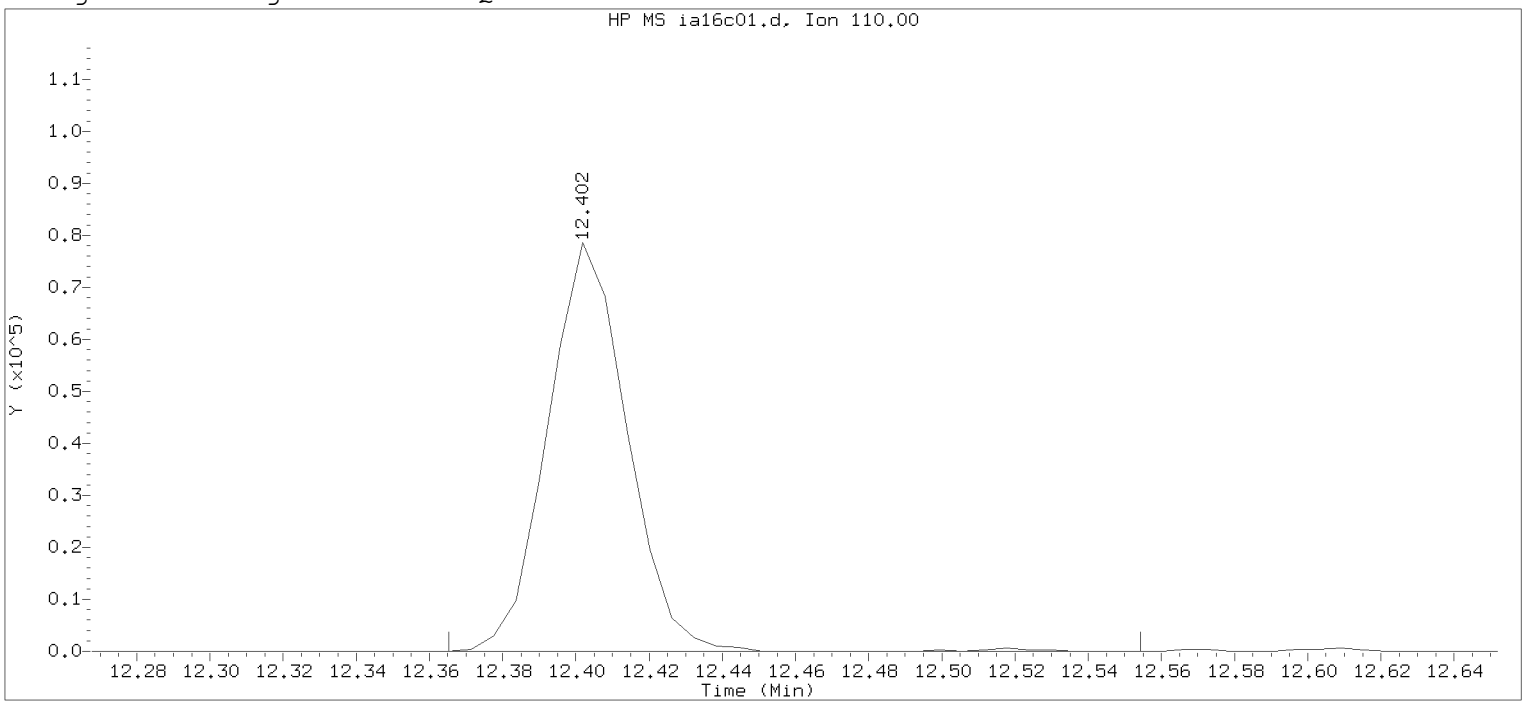
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

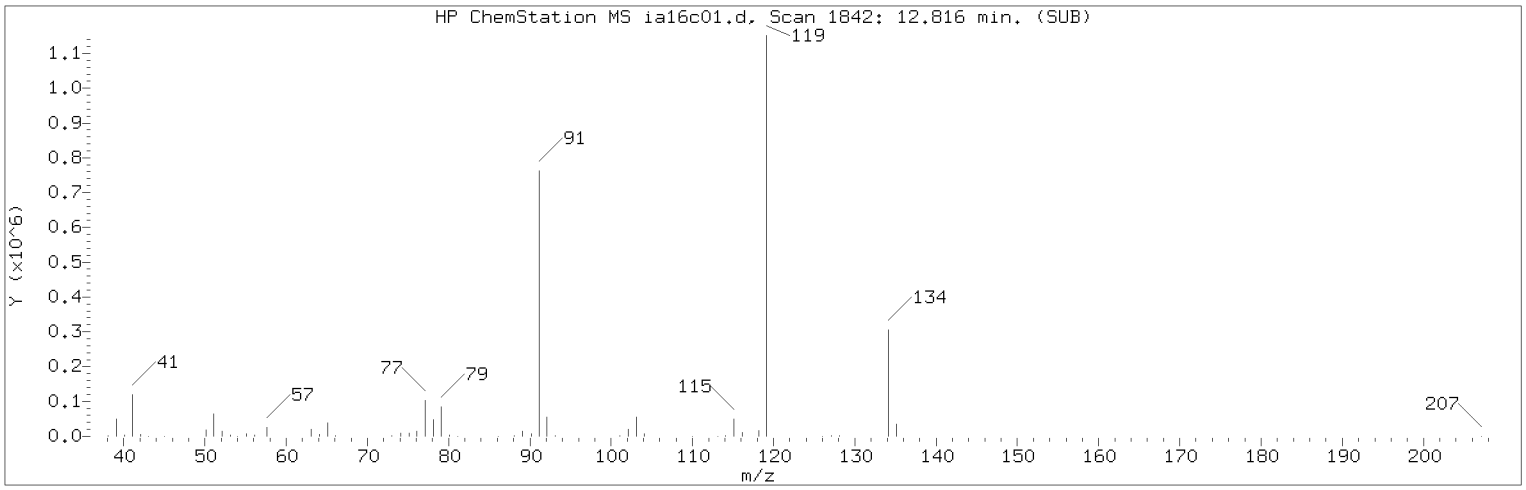
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

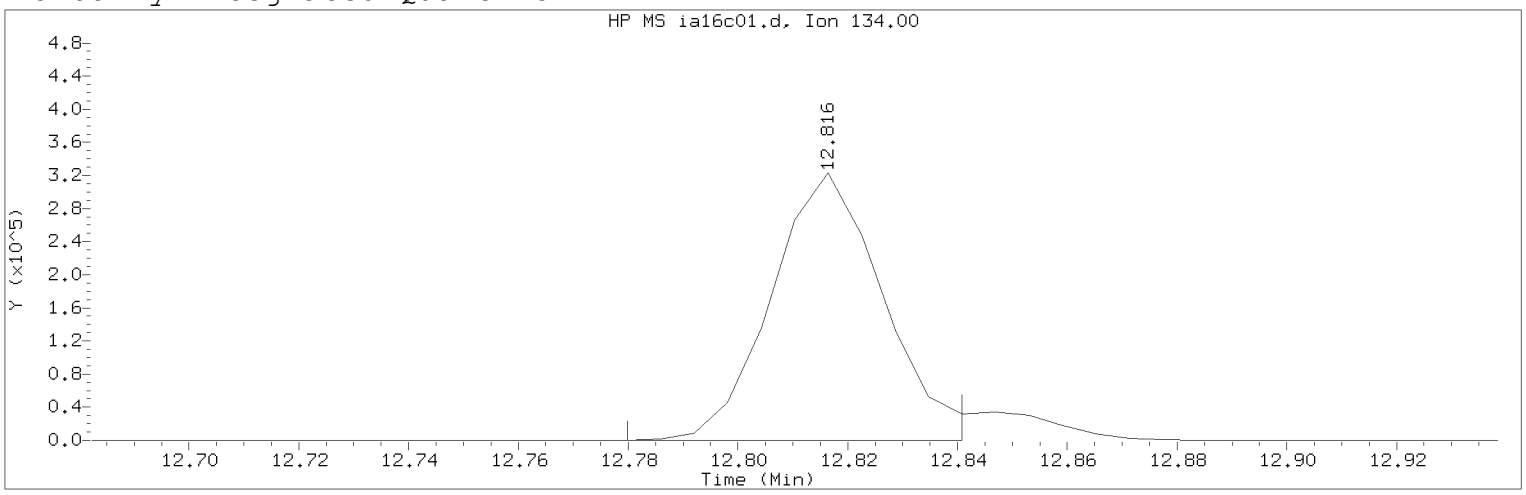
Compound Number : 116
Compound Name : 1,2,3-Trichloropropane
Scan Number : 1774
Retention Time (minutes): 12.402
Quant Ion : 110.00
Area : 118827
On-column Amount (ng) : 9.8920
Integration start scan : 1767 Integration stop scan: 1798
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:57 mec29284

Sample Name: VSTD010 Lab Sample ID: VSTD010

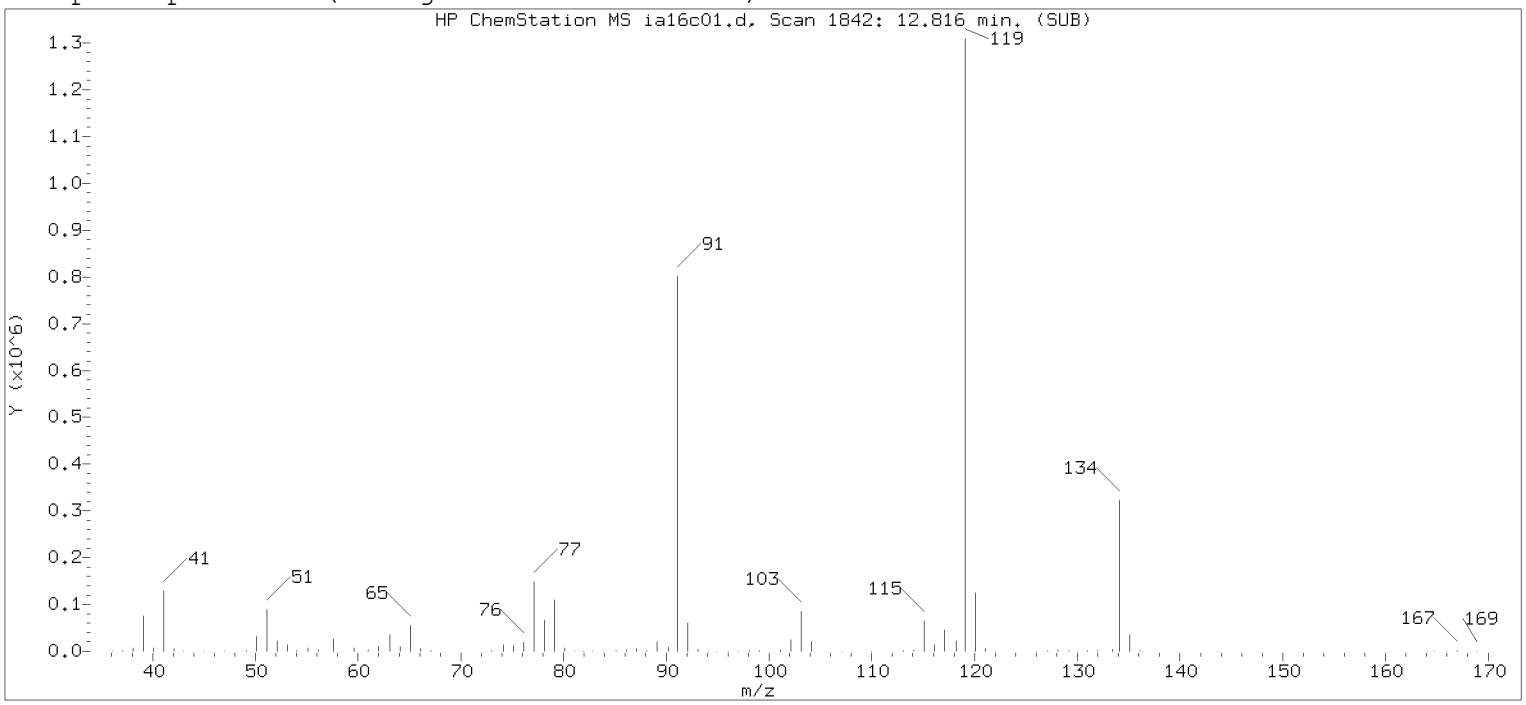
Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area (flag) : 455698M
On-Column Amount (ng) : 9.8253
Integration start scan : 1835 Integration stop scan: 1845
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

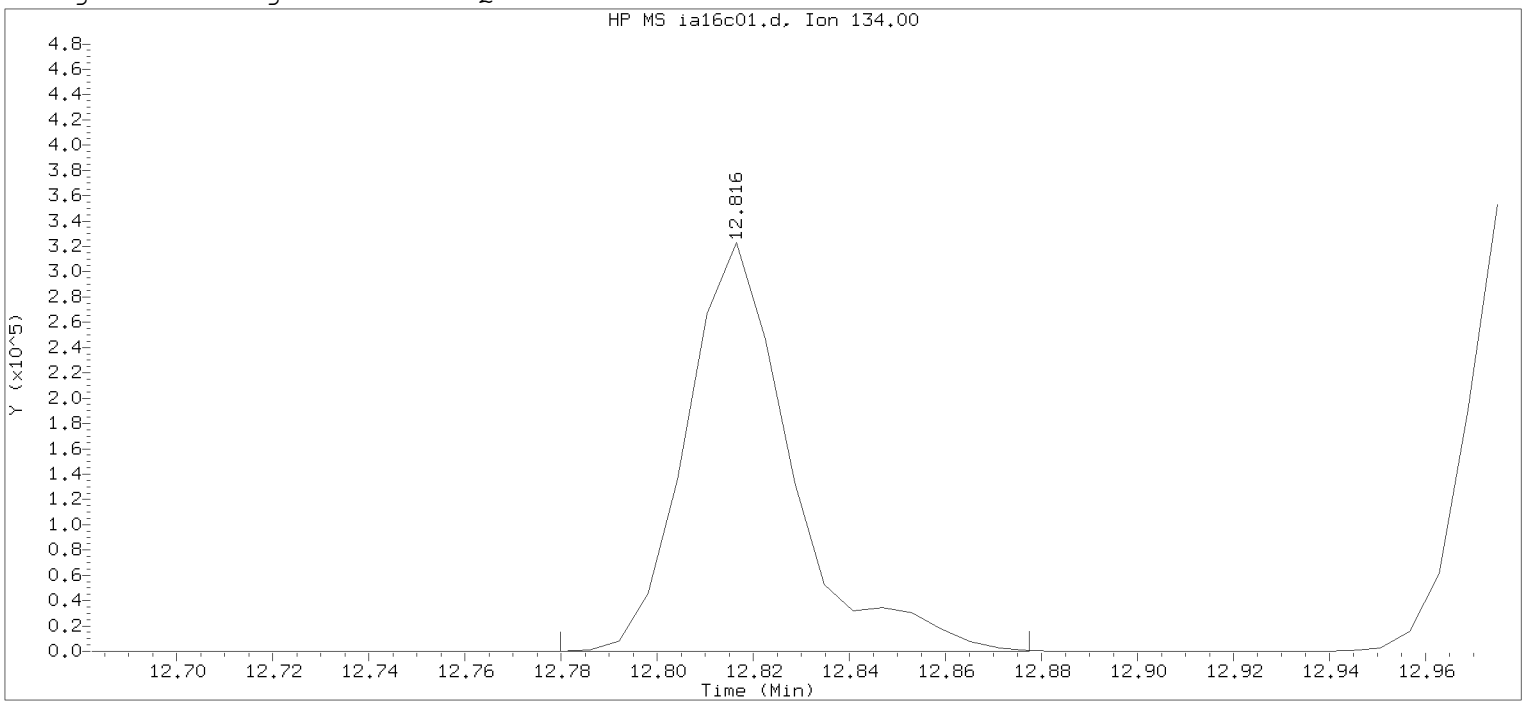
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 15:34.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16c01.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 11:21 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 8260W25
Calibration date and time: 16-APR-2019 11:39
Date, time and analyst ID of latest file update: 16-Apr-2019 11:39 Automation

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 125
Compound Name : tert-Butylbenzene
Scan Number : 1842
Retention Time (minutes): 12.816
Quant Ion : 134.00
Area : 489570
On-column Amount (ng) : 10.5557
Integration start scan : 1835 Integration stop scan: 1851
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: MECampbell

Raw QC Data

Volatiles by GC/MS

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19930.i/19apr16a.b/ia16b30.d Injection date and time: **16-APR-2019 12:46**
Data file Sample Info. Line: VBLKI23;VBLKI23;1;3;;;DA5J;;; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 13:06 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.318	(-0.012)	448	65	106222	(-3)	50.00	
63) Fluorobenzene	7.805	(0.006)	1020	96	1546310	(0)	10.00	
97) Chlorobenzene-d5	11.262	(0.000)	1587	117	1257891	(-1)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	708369	(0)	10.00	

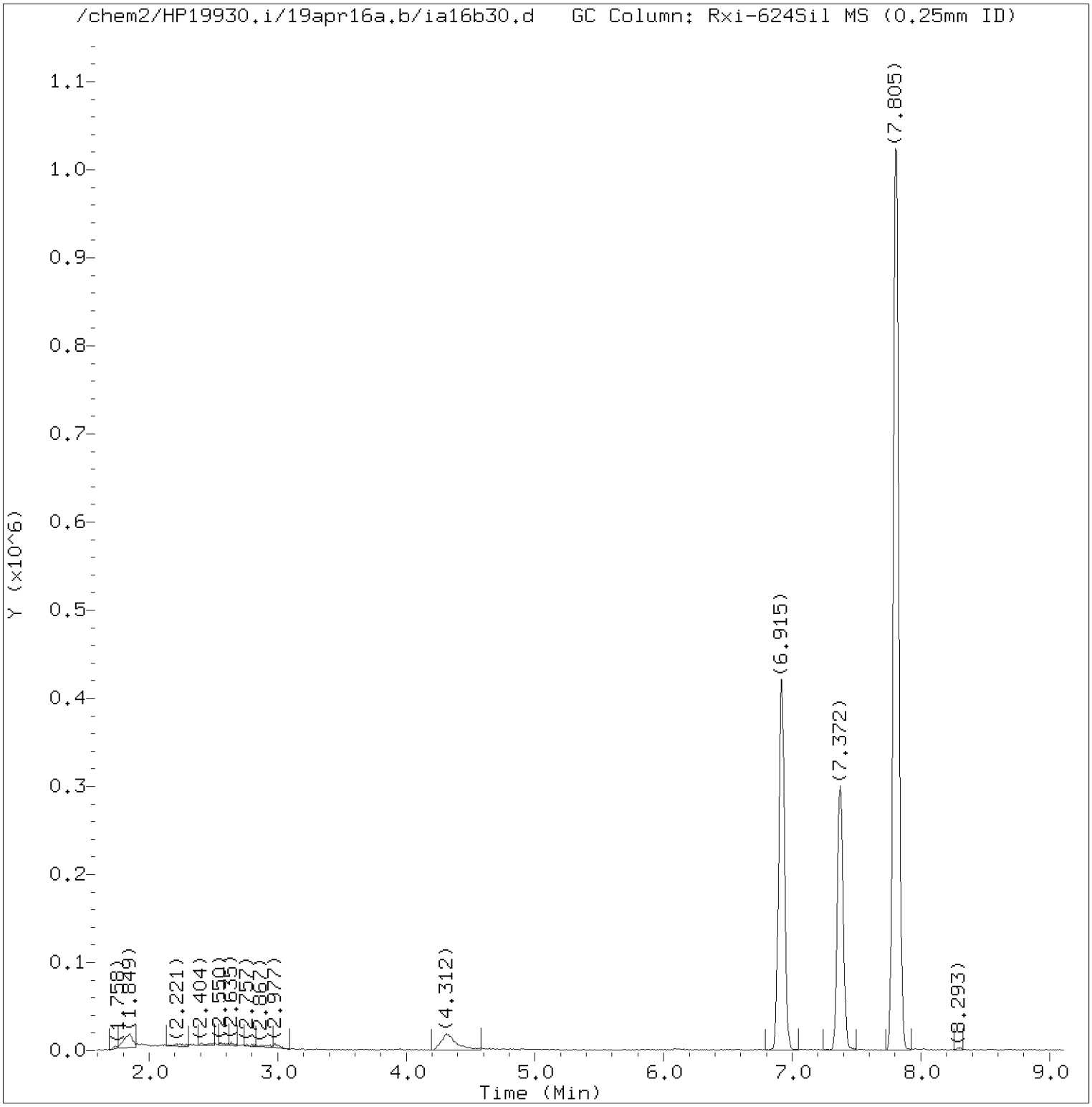
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.921	(-0.001)	113	396852	9.944	99%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.378	(-0.001)	102	74707	9.714	97%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1557661	10.096	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.256	(0.000)	95	591205	10.226	102%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
1) Dichlorodifluoromethane	(2)				Not Detected					0.3	1
5) Vinyl Chloride	(2)				Not Detected					0.1	1
11) Ethyl ether	(2)				Not Detected					0.4	12
15) 1,1-Dichloroethene	(2)				Not Detected					0.4	1
14) Acetone	(1)				Not Detected					3	10
23) Methylene Chloride	(2)				Not Detected					0.2	1
31) trans-1,2-Dichloroethene	(2)				Not Detected					0.8	1
39) cis-1,2-Dichloroethene	(2)				Not Detected					0.1	1
38) 2-Butanone	(1)				Not Detected					1	10
49) Chloroform	(2)				Not Detected					0.1	1
59) 1,2-Dichloroethane	(2)				Not Detected					0.1	1
67) Trichloroethene	(2)				Not Detected					0.2	1
83) Toluene	(3)				Not Detected					0.1	1
101) m+p-Xylene	(3)				Not Detected					0.1	0.5
104) o-Xylene	(3)				Not Detected					0.05	0.5
105) Xylene (Total)	(3)				Not Detected					0.2	3

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:44. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

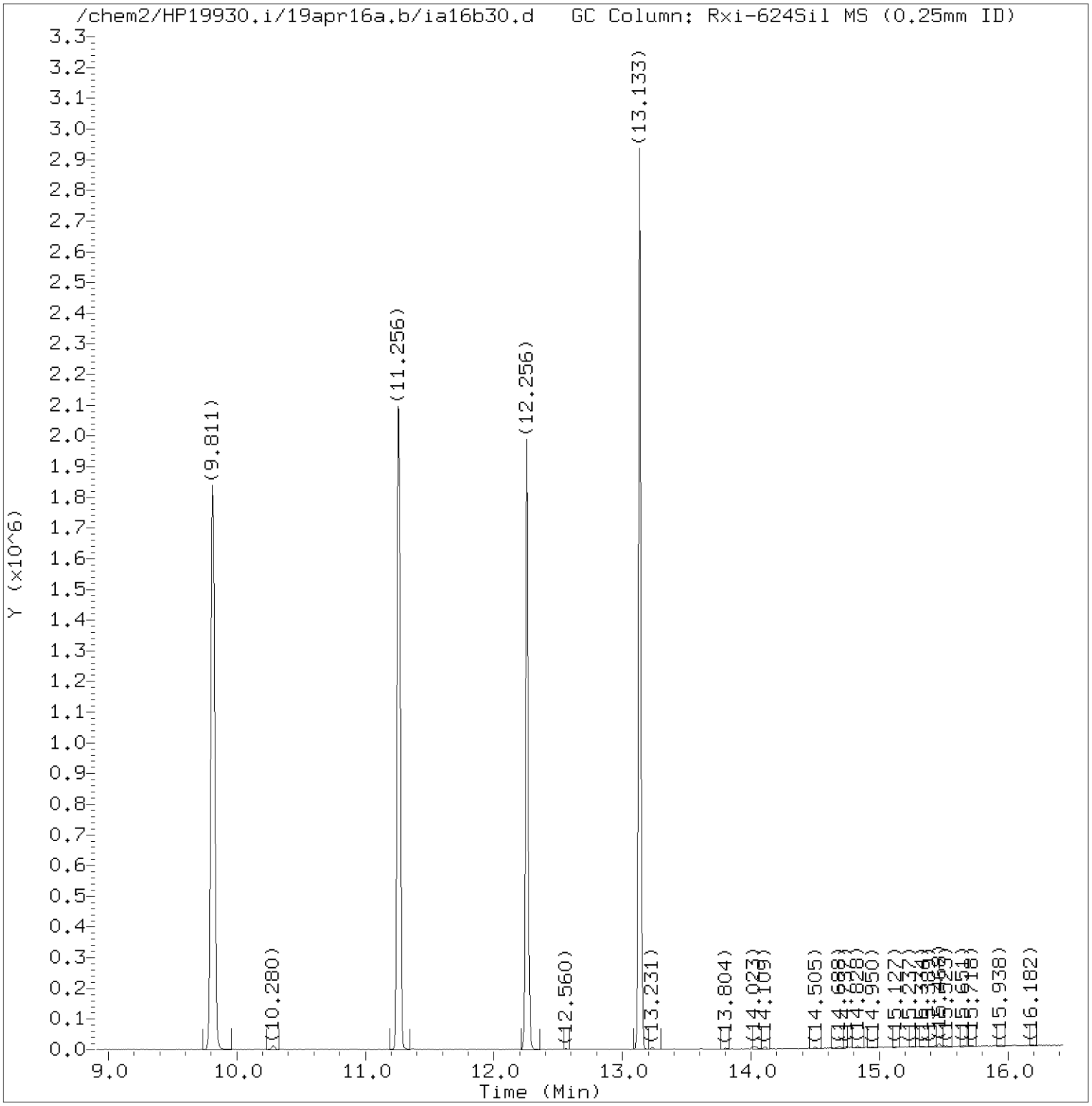
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16b30.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:46 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:06 mec29284

Sample Name: VBLKI23 Lab Sample ID: VBLKI23

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:44.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16b30.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:46 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:06 mec29284

Sample Name: VBLKI23 Lab Sample ID: VBLKI23

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:44.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16b30.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:46 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:06 mec29284

Sample Name: VBLKI23 Lab Sample ID: VBLKI23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
26)*t-Butyl Alcohol-d10	(1)	4.318	65	106222	50.000
50)$Dibromofluoromethane	(2)	6.921	113	396852	9.944
57)$1,2-Dichloroethane-d4	(2)	7.378	102	74707	9.714
63)*Fluorobenzene	(2)	7.805	96	1546310	10.000
82)$Toluene-d8	(3)	9.811	98	1557661	10.096
97)*Chlorobenzene-d5	(3)	11.262	117	1257891	10.000
111)$4-Bromofluorobenzene	(3)	12.256	95	591205	10.226
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	708369	10.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:44.
Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s38.d Injection date and time: **16-APR-2019 19:13**
Data file Sample Info. Line: 34R03MS;1030979MS;1;3;MS;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.342	(-0.036)	452	65	94297	(-14)	50.00	
63) Fluorobenzene	7.811	(0.000)	1021	96	1553274	(0)	10.00	
97) Chlorobenzene-d5	11.262	(0.000)	1587	117	1272437	(0)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	705048	(-1)	10.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(0.000)	113	404047	10.079	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.001)	102	74523	9.647	96%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1566272	10.035	100%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(0.000)	95	572137	9.783	98%		80 - 120

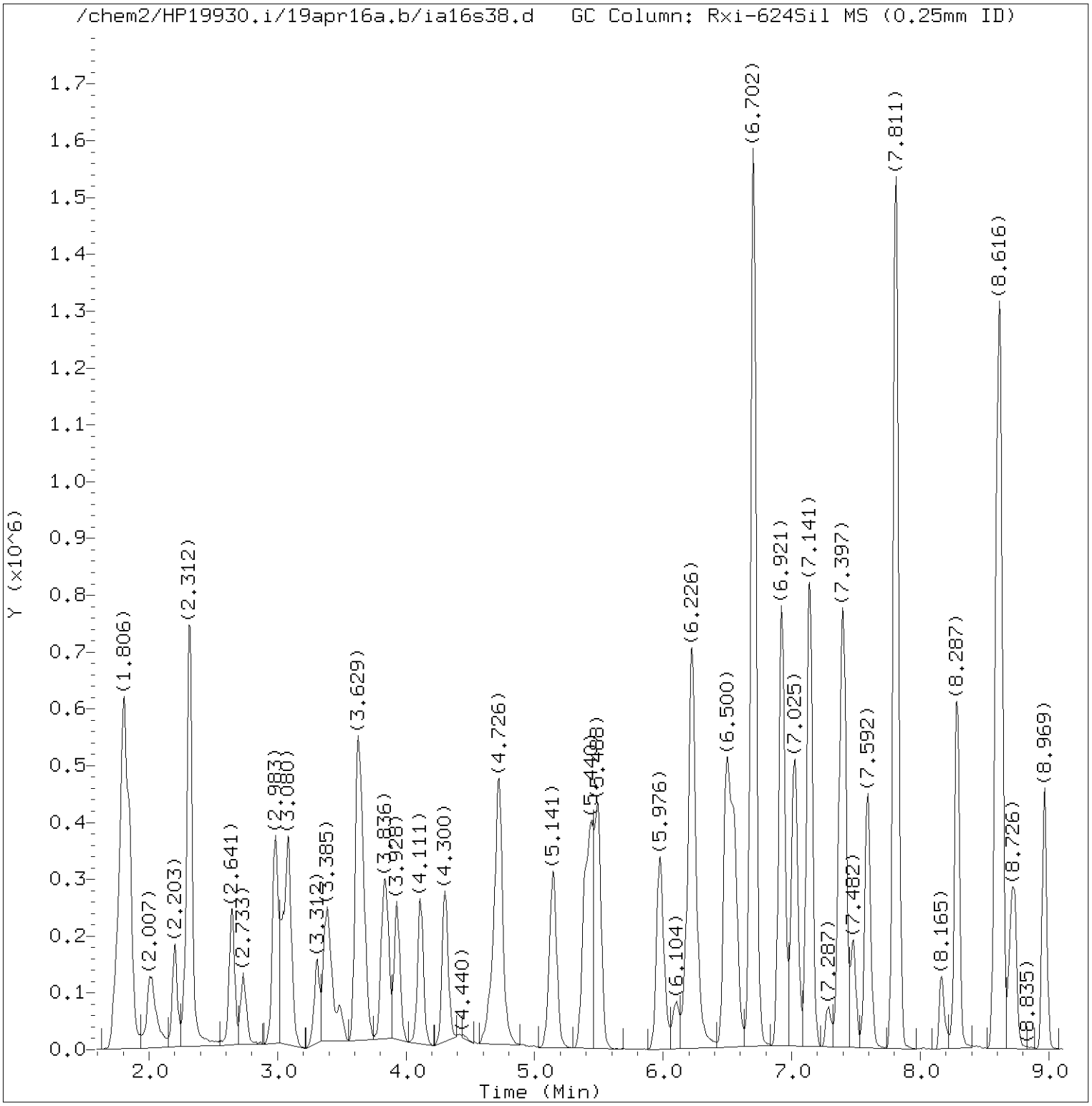
Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ (in sample)
1) Dichlorodifluoromethane	(2)	2.020	(-0.001)	85	321901	3.556	3.56			0.3	1
5) Vinyl Chloride	(2)	2.318	(0.000)	62	307294	4.508	4.51			0.1	1
11) Ethyl ether	(2)	3.306	(0.000)	59	148131	4.939	4.94		J	0.4	12
15) 1,1-Dichloroethene	(2)	3.617	(0.000)	96	240990	6.101	6.10			0.4	1
14) Acetone	(1)	3.660	(0.005)	43	198420M	35.915	35.92			3	10
23) Methylene Chloride	(2)	4.300	(0.000)	84	243040	6.015	6.01			0.2	1
31) trans-1,2-Dichloroethene	(2)	4.726	(0.000)	96	235526	5.328	5.33			0.8	1
39) cis-1,2-Dichloroethene	(2)	6.220	(0.000)	96	305494	6.203	6.20			0.1	1
38) 2-Butanone	(1)	6.183	(0.013)	43	360028M	40.120	40.12			1	10
49) Chloroform	(2)	6.702	(0.000)	83	1971644	25.162	25.16		E	0.1	1
59) 1,2-Dichloroethane	(2)	7.482	(-0.000)	62	250493M	5.416	5.42			0.1	1
67) Trichloroethene	(2)	8.287	(-0.000)	95	289108	5.993	5.99			0.2	1
83) Toluene	(3)	9.890	(0.000)	92	665445	5.671	5.67			0.1	1
101) m+p-Xylene	(3)	11.481	(-0.000)	106	1053706	11.228	11.23			0.1	0.5
104) o-Xylene	(3)	11.810	(-0.000)	106	508298	5.611	5.61			0.05	0.5
105) Xylene (Total)	(3)			106	1562004	16.839	16.84			0.2	3

M = Compound was manually integrated. E = Compound concentration above calibration range.

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

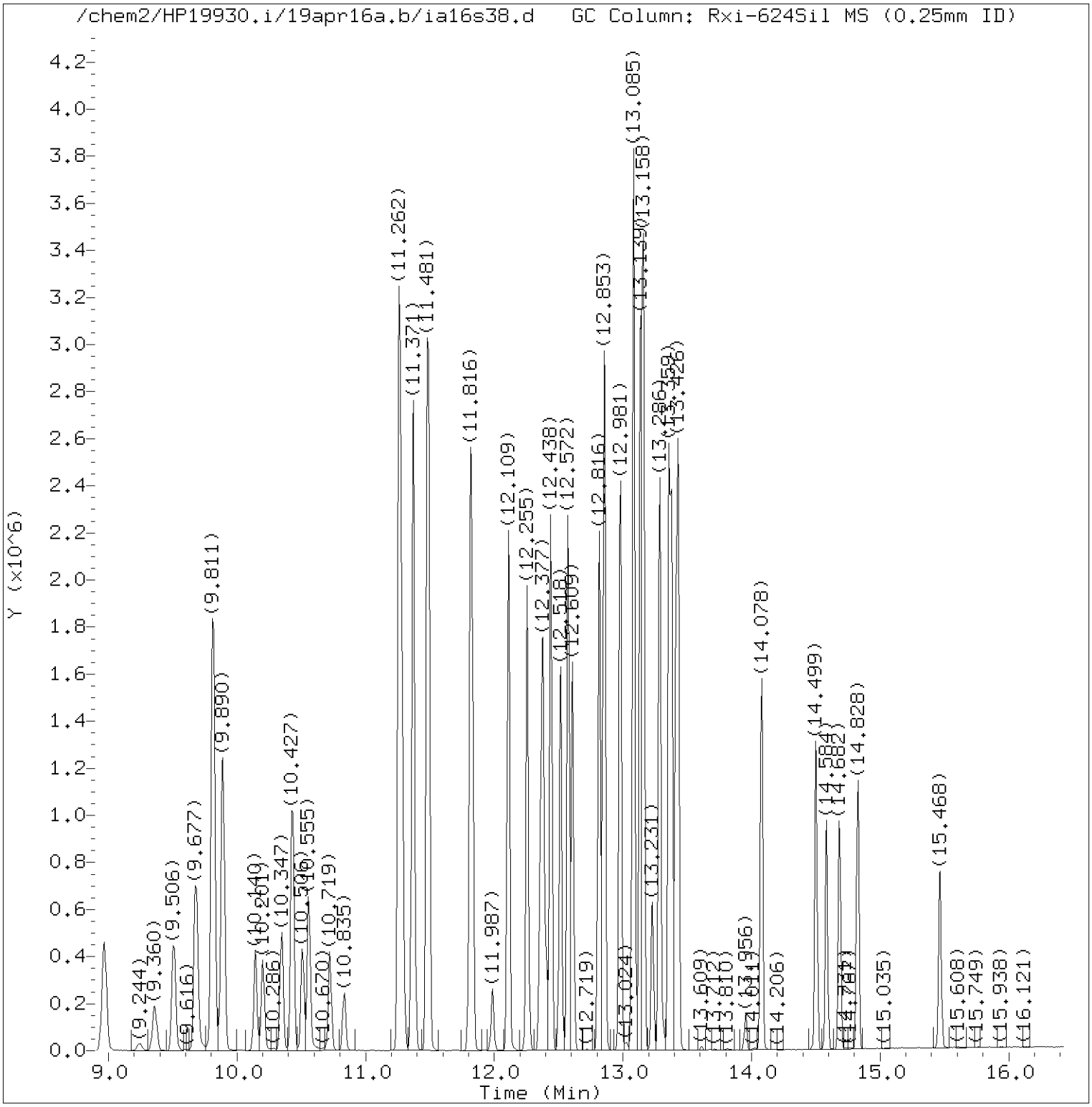
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

Sample Name: 34R03MS Lab Sample ID: 1030979MS

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

Sample Name: 34R03MS Lab Sample ID: 1030979MS

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

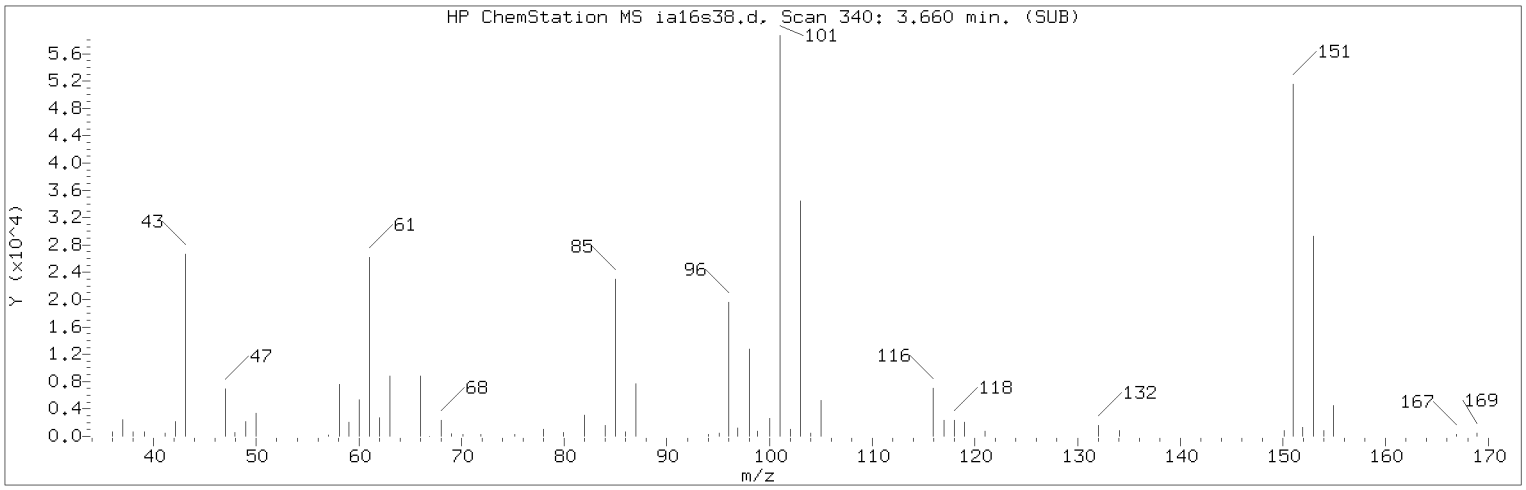
Sample Name: 34R03MS Lab Sample ID: 1030979MS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.020	85	321901	3.556
5) Vinyl Chloride	(2)	2.318	62	307294	4.508
11) Ethyl ether	(2)	3.306	59	148131	4.939
15) 1,1-Dichloroethene	(2)	3.617	96	240990	6.101
14) Acetone	(1)	3.660	43	198420M	35.915
23) Methylene Chloride	(2)	4.300	84	243040	6.015
26)*t-Butyl Alcohol-d10	(1)	4.342	65	94297	50.000
31) trans-1,2-Dichloroethene	(2)	4.726	96	235526	5.328
38) 2-Butanone	(1)	6.183	43	360028M	40.120
39) cis-1,2-Dichloroethene	(2)	6.220	96	305494	6.203
49) Chloroform	(2)	6.702	83	1971644	25.162
50)$Dibromofluoromethane	(2)	6.915	113	404047	10.079
57)$1,2-Dichloroethane-d4	(2)	7.372	102	74523	9.647
59) 1,2-Dichloroethane	(2)	7.482	62	250493M	5.416
63)*Fluorobenzene	(2)	7.811	96	1553274	10.000
67) Trichloroethene	(2)	8.287	95	289108	5.993
82)$Toluene-d8	(3)	9.811	98	1566272	10.035
83) Toluene	(3)	9.890	92	665445	5.671
97)*Chlorobenzene-d5	(3)	11.262	117	1272437	10.000
101) m+p-Xylene	(3)	11.481	106	1053706	11.228
105) Xylene (Total)	(3)		106	1562004	16.839
104) o-Xylene	(3)	11.810	106	508298	5.611
111)$4-Bromofluorobenzene	(3)	12.255	95	572137	9.783
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	705048	10.000

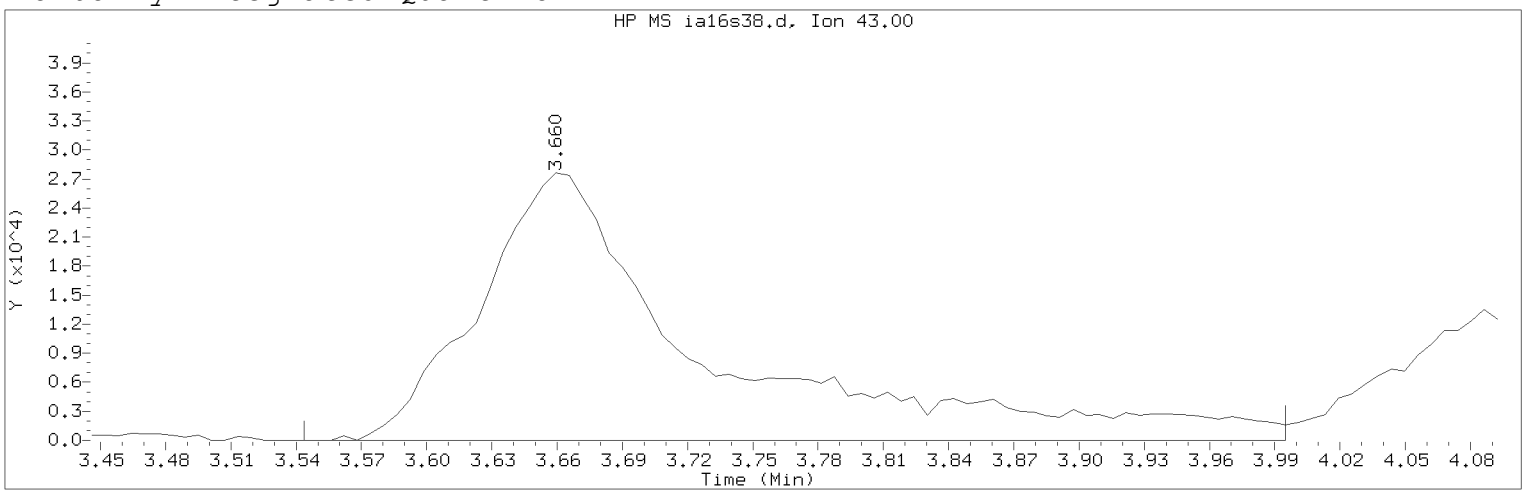
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

Sample Name: 34R03MS Lab Sample ID: 1030979MS

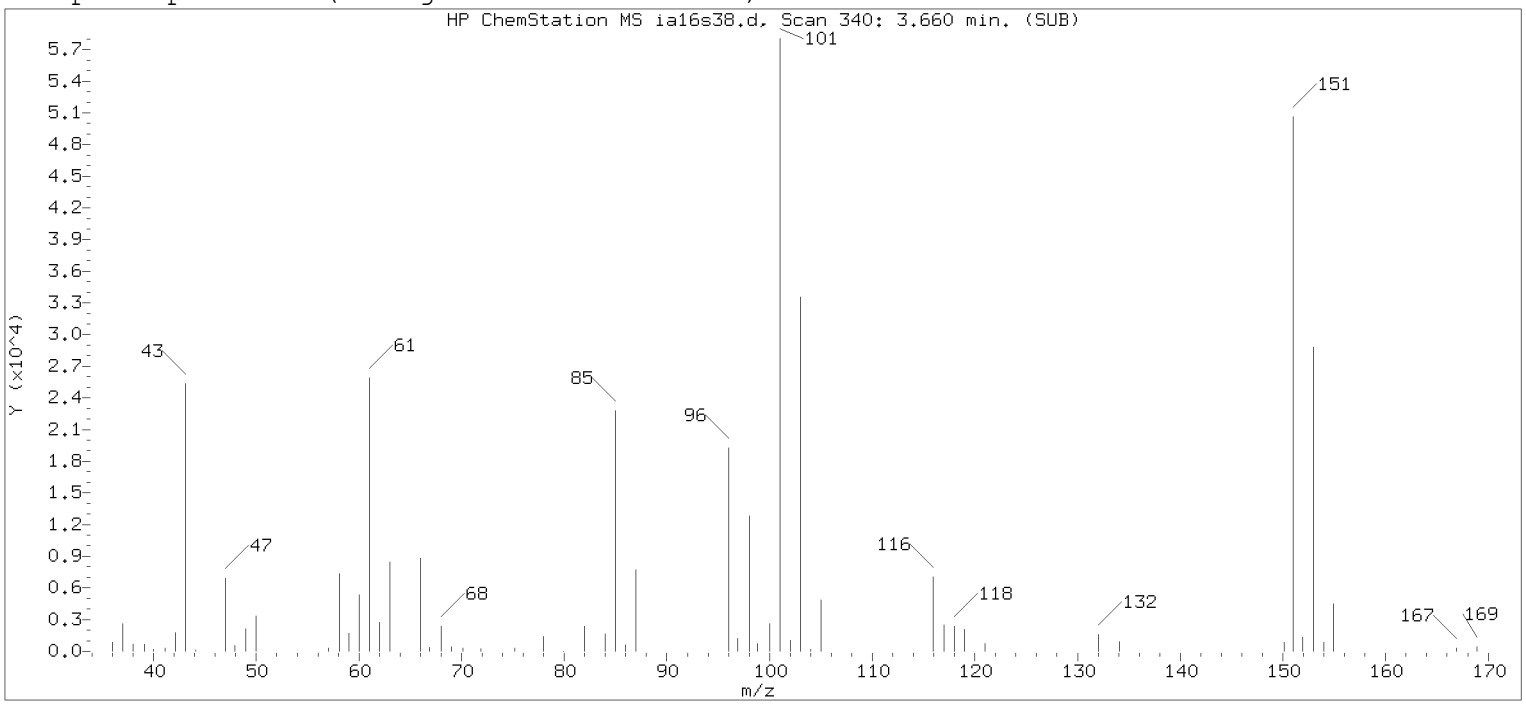
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 340		
Retention Time (minutes)	: 3.660		
Quant Ion	: 43.00		
Area (flag)	: 198420M		
On-Column Amount (ng)	: 35.9150		
Integration start scan	: 320	Integration stop scan:	394
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

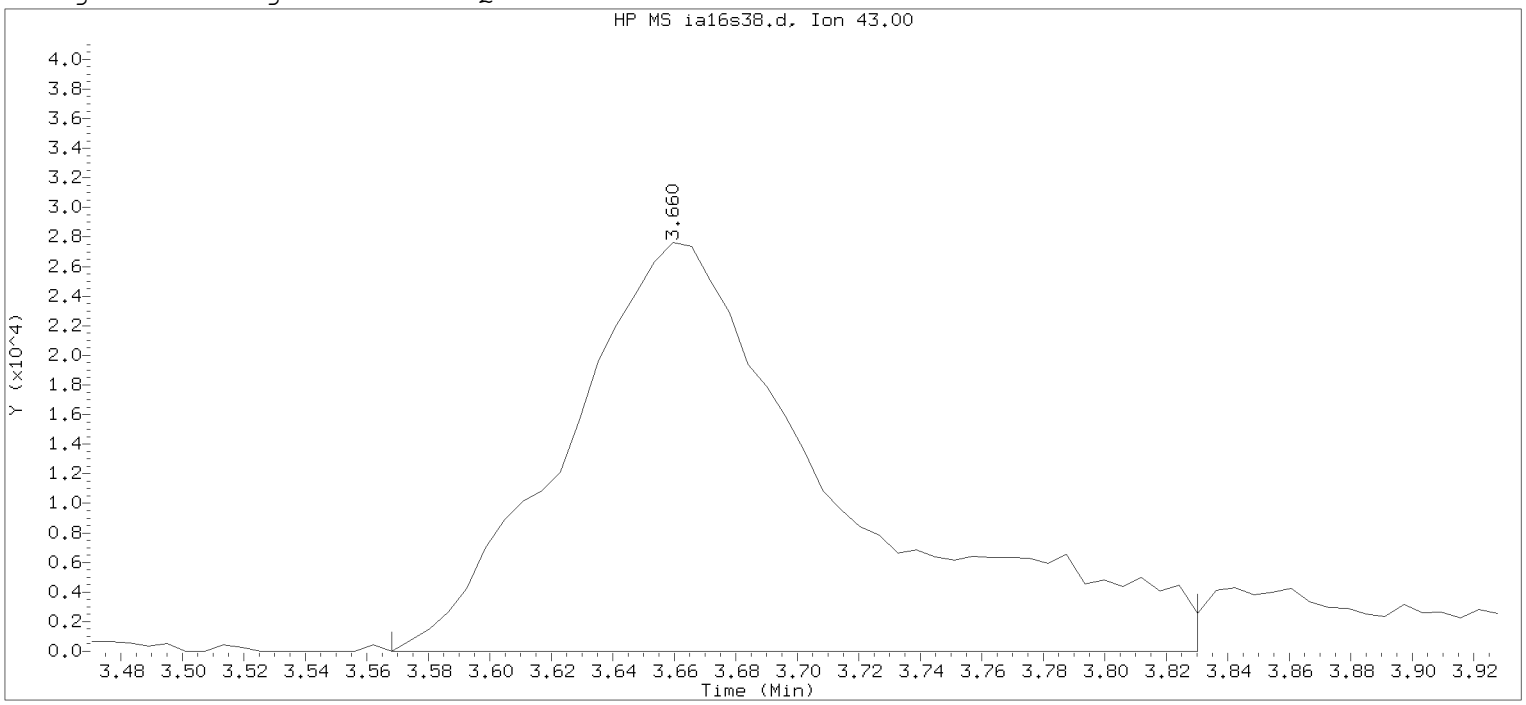
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

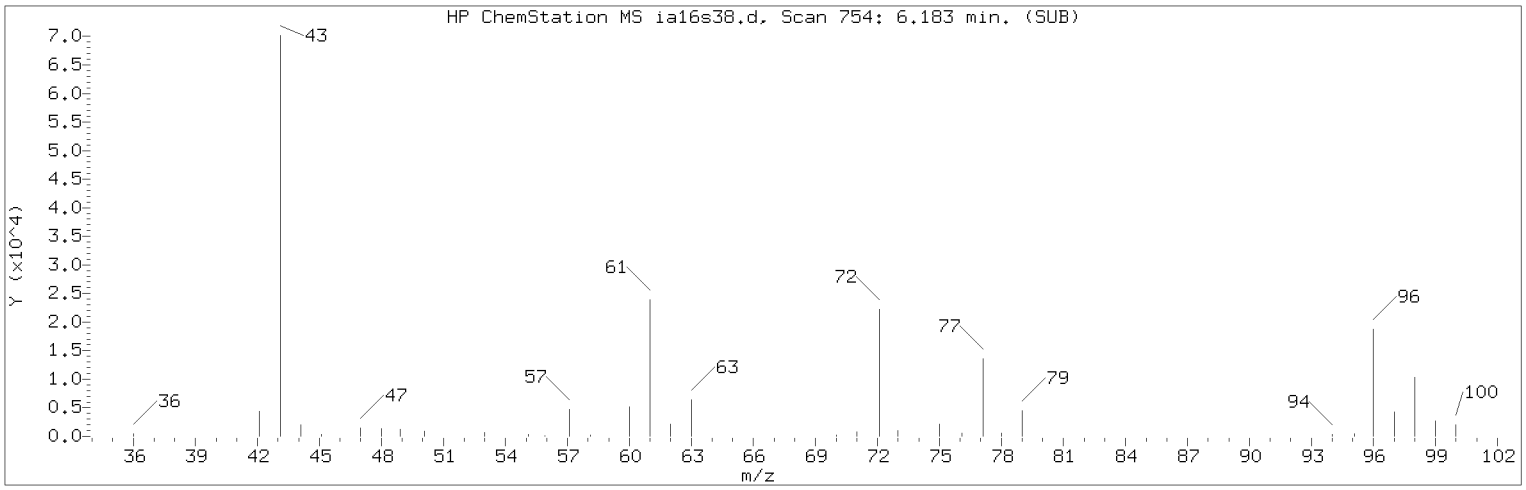
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:31 Automation

Sample Name: 34R03MS Lab Sample ID: 1030979MS

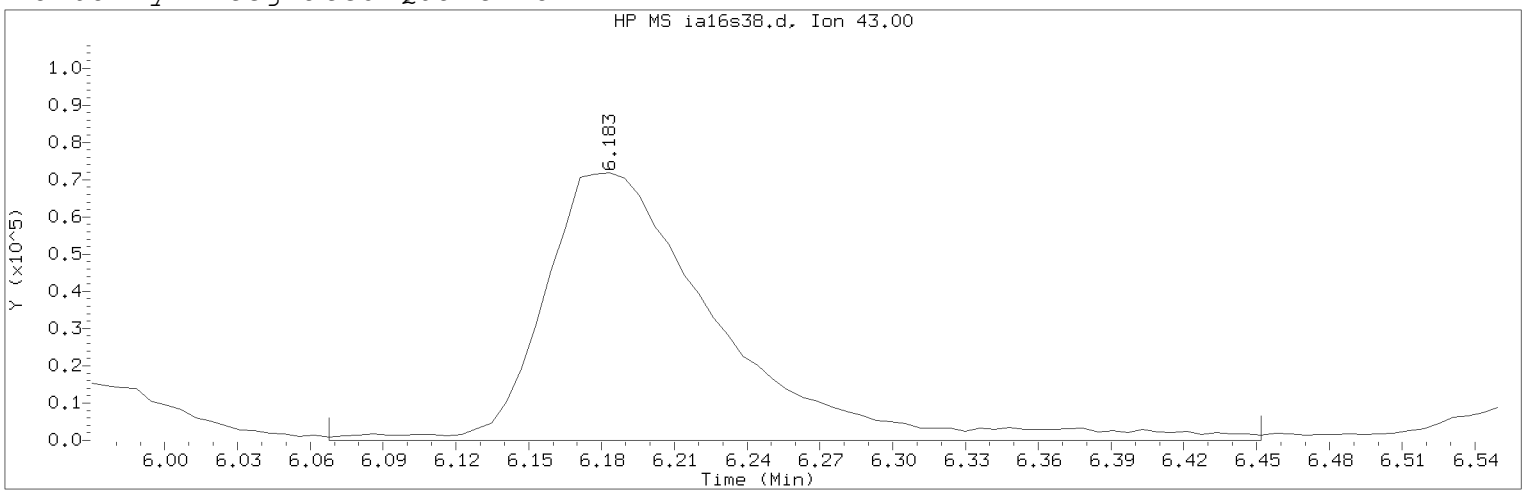
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 340		
Retention Time (minutes)	: 3.660		
Quant Ion	: 43.00		
Area	: 169995		
On-column Amount (ng)	: 30.7698		
Integration start scan	: 324	Integration stop scan:	367
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

Sample Name: 34R03MS Lab Sample ID: 1030979MS

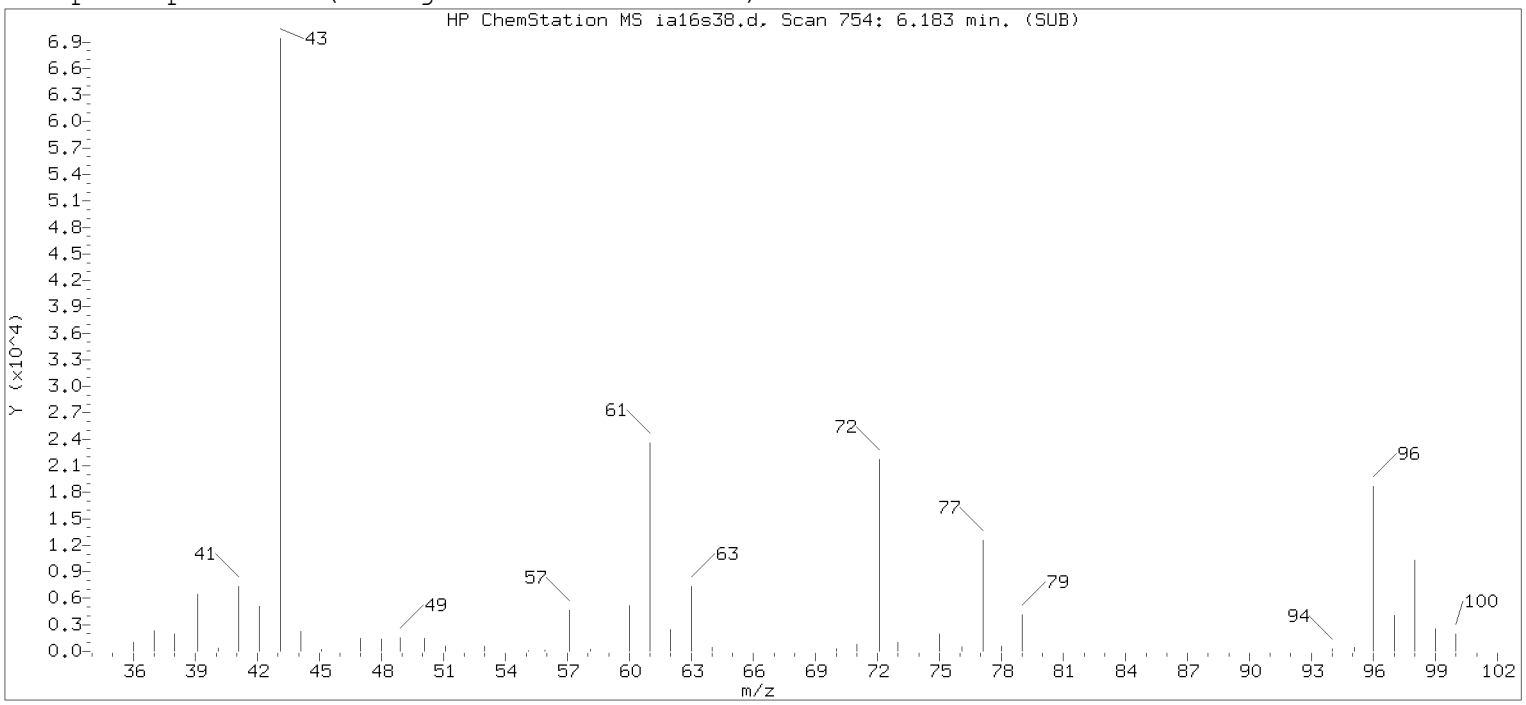
Compound Number : 38
Compound Name : 2-Butanone
Scan Number : 754
Retention Time (minutes): 6.183
Quant Ion : 43.00
Area (flag) : 360028M
On-Column Amount (ng) : 40.1198
Integration start scan : 734 Integration stop scan: 797
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

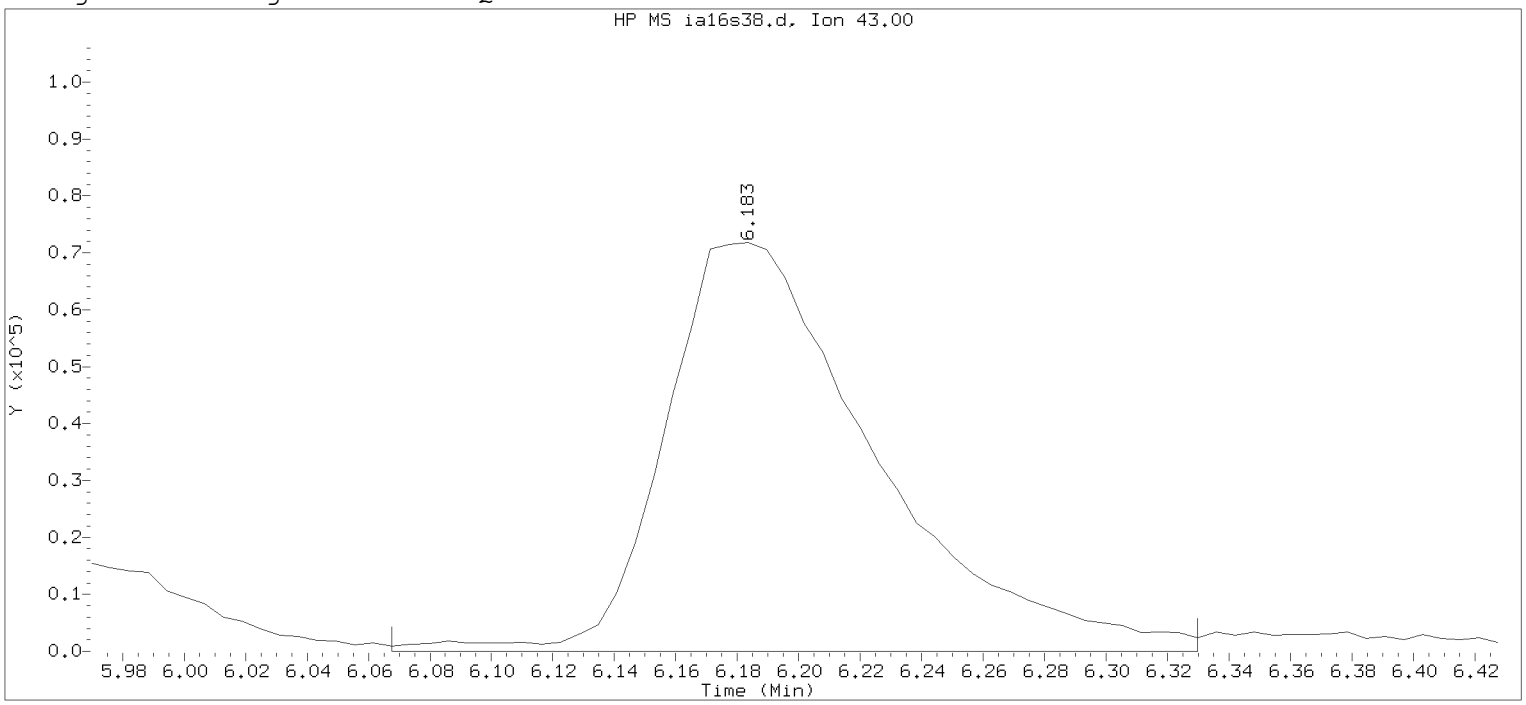
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

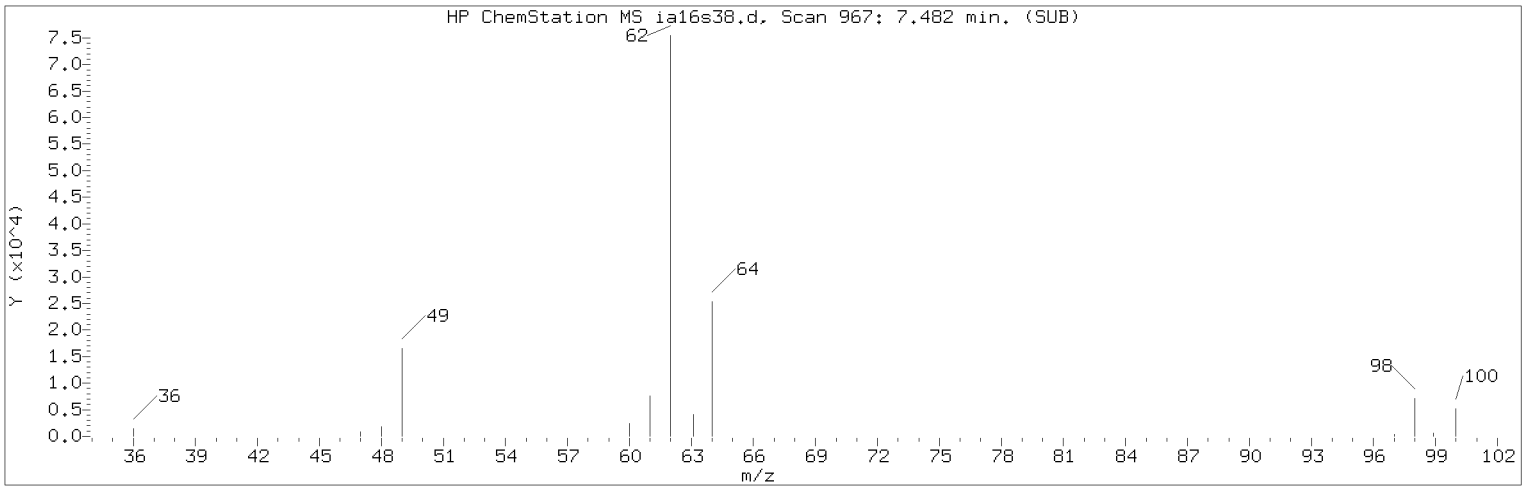
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:31 Automation

Sample Name: 34R03MS Lab Sample ID: 1030979MS

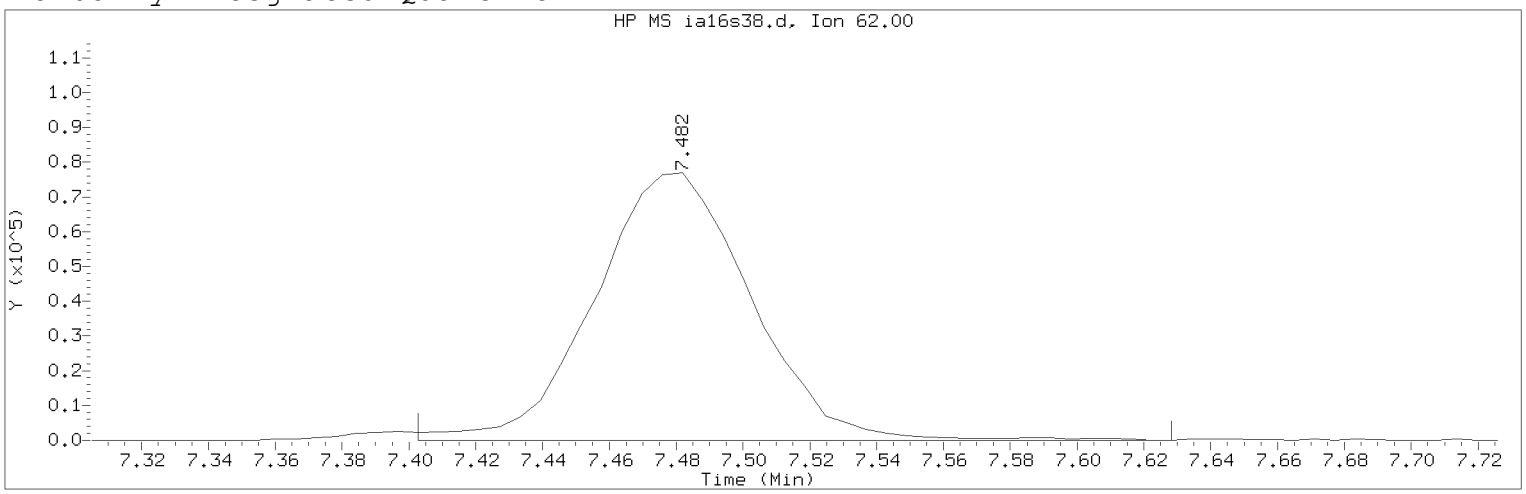
Compound Number	: 38		
Compound Name	: 2-Butanone		
Scan Number	: 754		
Retention Time (minutes)	: 6.183		
Quant Ion	: 43.00		
Area	: 341338		
On-column Amount (ng)	: 38.0368		
Integration start scan	: 734	Integration stop scan:	777
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:32 mec29284

Sample Name: 34R03MS Lab Sample ID: 1030979MS

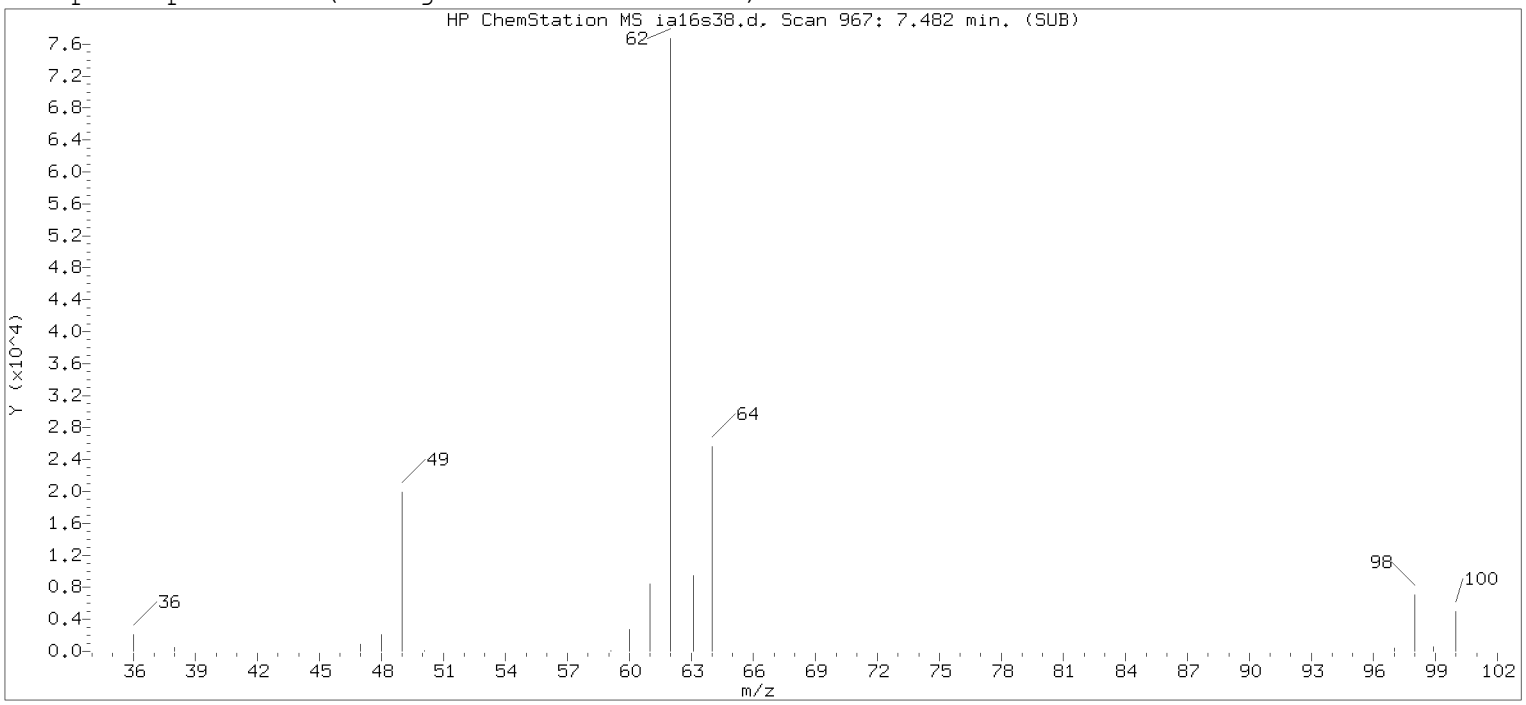
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 967
Retention Time (minutes): 7.482
Quant Ion : 62.00
Area (flag) : 250493M
On-Column Amount (ng) : 5.4160
Integration start scan : 953 Integration stop scan: 990
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

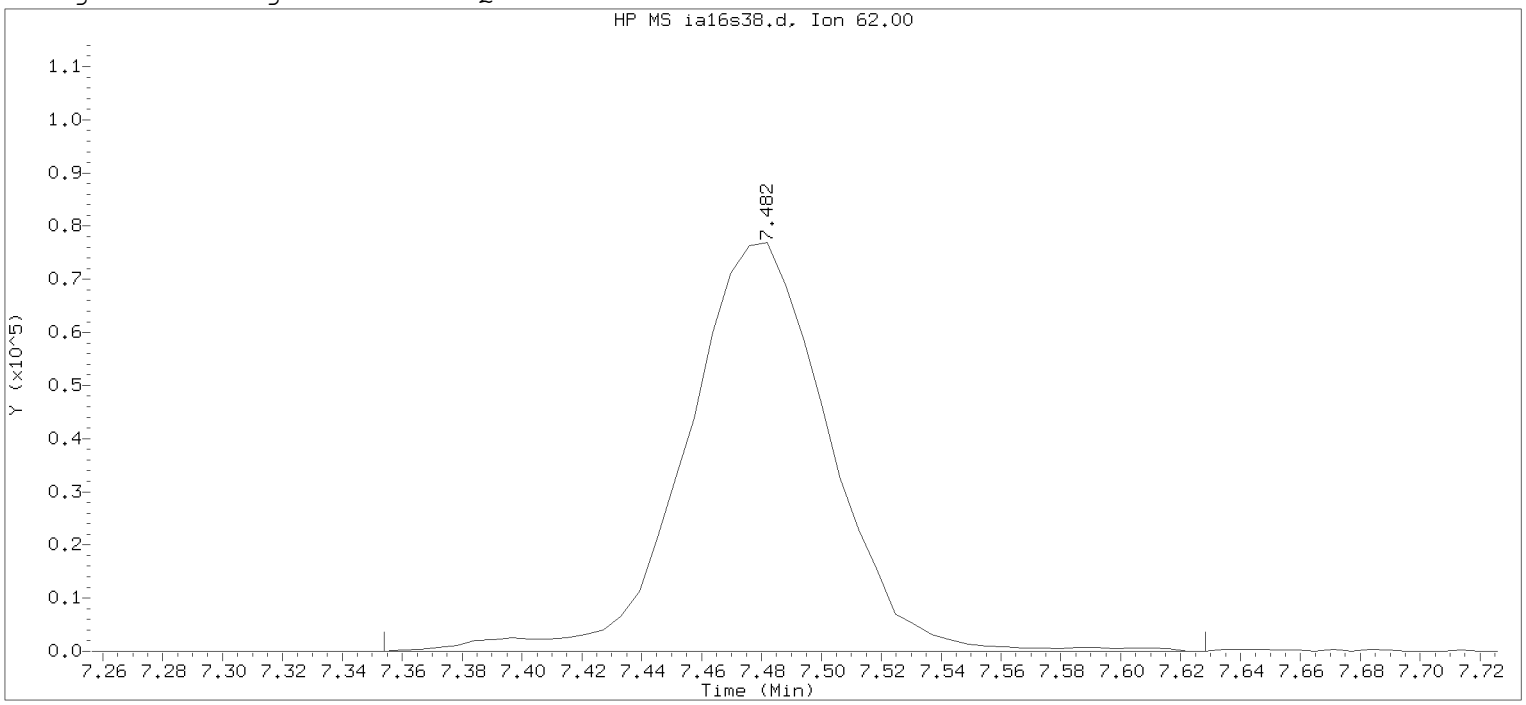
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s38.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:13 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:31 Automation

Sample Name: 34R03MS Lab Sample ID: 1030979MS

Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 967
Retention Time (minutes): 7.482
Quant Ion : 62.00
Area : 253852
On-column Amount (ng) : 5.4887
Integration start scan : 945 Integration stop scan: 990
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MEC29284

Analysis Summary for GC/MS Volatiles

Data file: /chem2/HP19930.i/19apr16a.b/ia16s39.d Injection date and time: **16-APR-2019 19:34**
Data file Sample Info. Line: 34R03MSD;1030980MSD;1;3;MSD;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.318	(-0.012)	448	65	99063M	(-9)	50.00	
63) Fluorobenzene	7.811	(0.000)	1021	96	1559697	(1)	10.00	
97) Chlorobenzene-d5	11.256	(0.006)	1586	117	1266205	(0)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133	(0.000)	1894	152	711103	(0)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.915	(0.000)	113	409258	10.167	102%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.372	(0.001)	102	74460	9.599	96%		80 - 120
82) Toluene-d8	(3)	9.811	(0.000)	98	1563524	10.067	101%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255	(-0.001)	95	583679	10.029	100%		80 - 120

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)	2.007	(0.000)	85	334493	3.680	3.68			0.3	1
5) Vinyl Chloride	(2)	2.318	(0.000)	62	317580	4.639	4.64			0.1	1
11) Ethyl ether	(2)	3.300	(0.000)	59	151231	5.021	5.02		J	0.4	12
15) 1,1-Dichloroethene	(2)	3.617	(0.000)	96	245674	6.194	6.19			0.4	1
14) Acetone	(1)	3.653	(0.002)	43	203292M	35.026	35.03			3	10
23) Methylene Chloride	(2)	4.300	(0.000)	84	247256	6.094	6.09			0.2	1
31) trans-1,2-Dichloroethene	(2)	4.720	(0.000)	96	241621	5.443	5.44			0.8	1
39) cis-1,2-Dichloroethene	(2)	6.220	(0.000)	96	314199	6.353	6.35			0.1	1
38) 2-Butanone	(1)	6.177	(0.006)	43	376541M	39.941	39.94			1	10
49) Chloroform	(2)	6.702	(0.000)	83	2004350	25.474	25.47		E	0.1	1
59) 1,2-Dichloroethane	(2)	7.476	(0.000)	62	247253M	5.324	5.32			0.1	1
67) Trichloroethene	(2)	8.287	(-0.000)	95	284060	5.864	5.86			0.2	1
83) Toluene	(3)	9.884	(0.000)	92	660749	5.659	5.66			0.1	1
101) m+p-Xylene	(3)	11.481	(-0.000)	106	1067533	11.431	11.43			0.1	0.5
104) o-Xylene	(3)	11.810	(-0.000)	106	506779	5.622	5.62			0.05	0.5
105) Xylene (Total)	(3)			106	1574312	17.053	17.05			0.2	3

M = Compound was manually integrated. E = Compound concentration above calibration range.

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16s39.d Injection date and time: **16-APR-2019 19:34**
Data file Sample Info. Line: 34R03MSD;1030980MSD;1;3;MSD;RAF34;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: **038A** Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

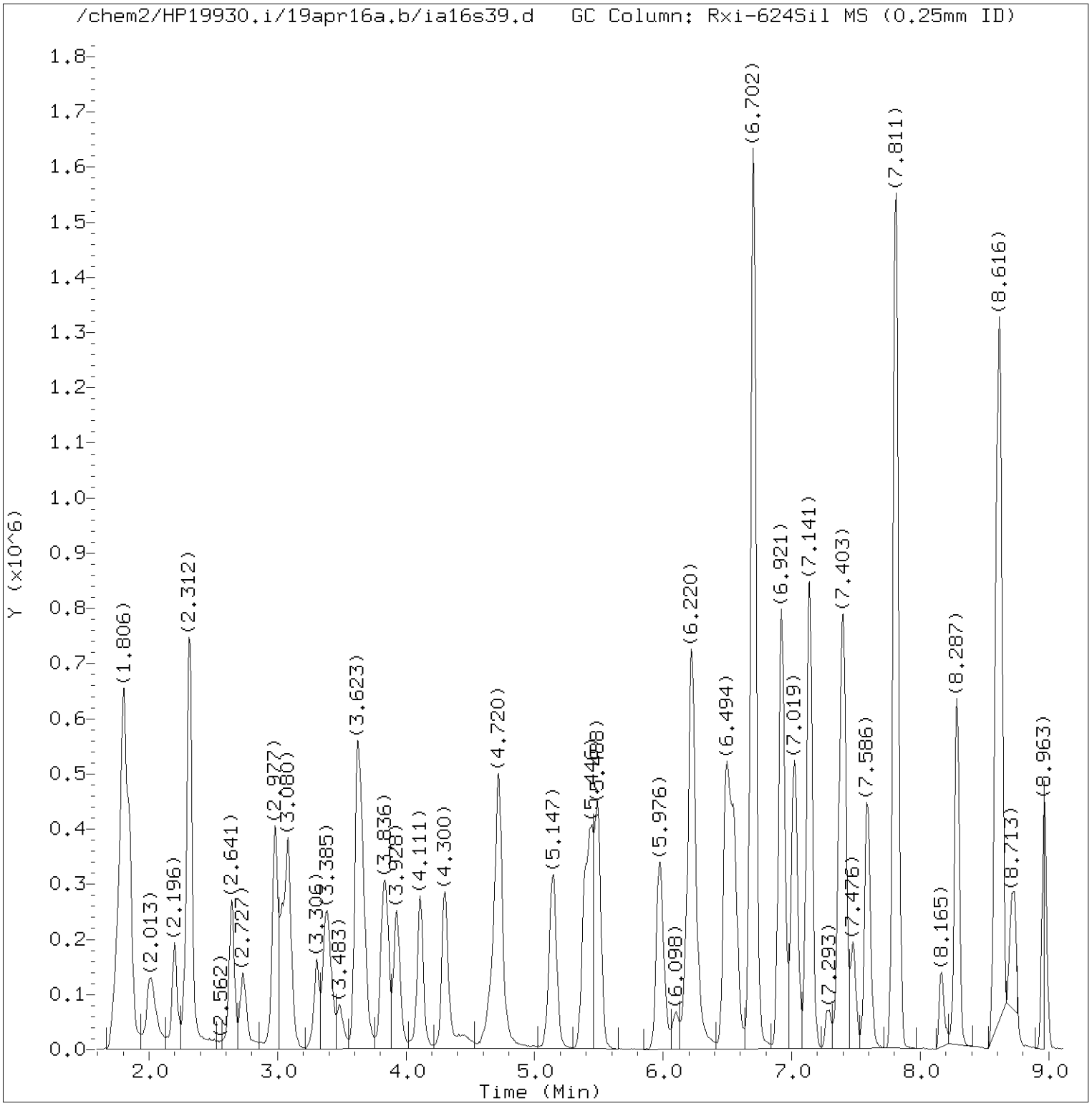
Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

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Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

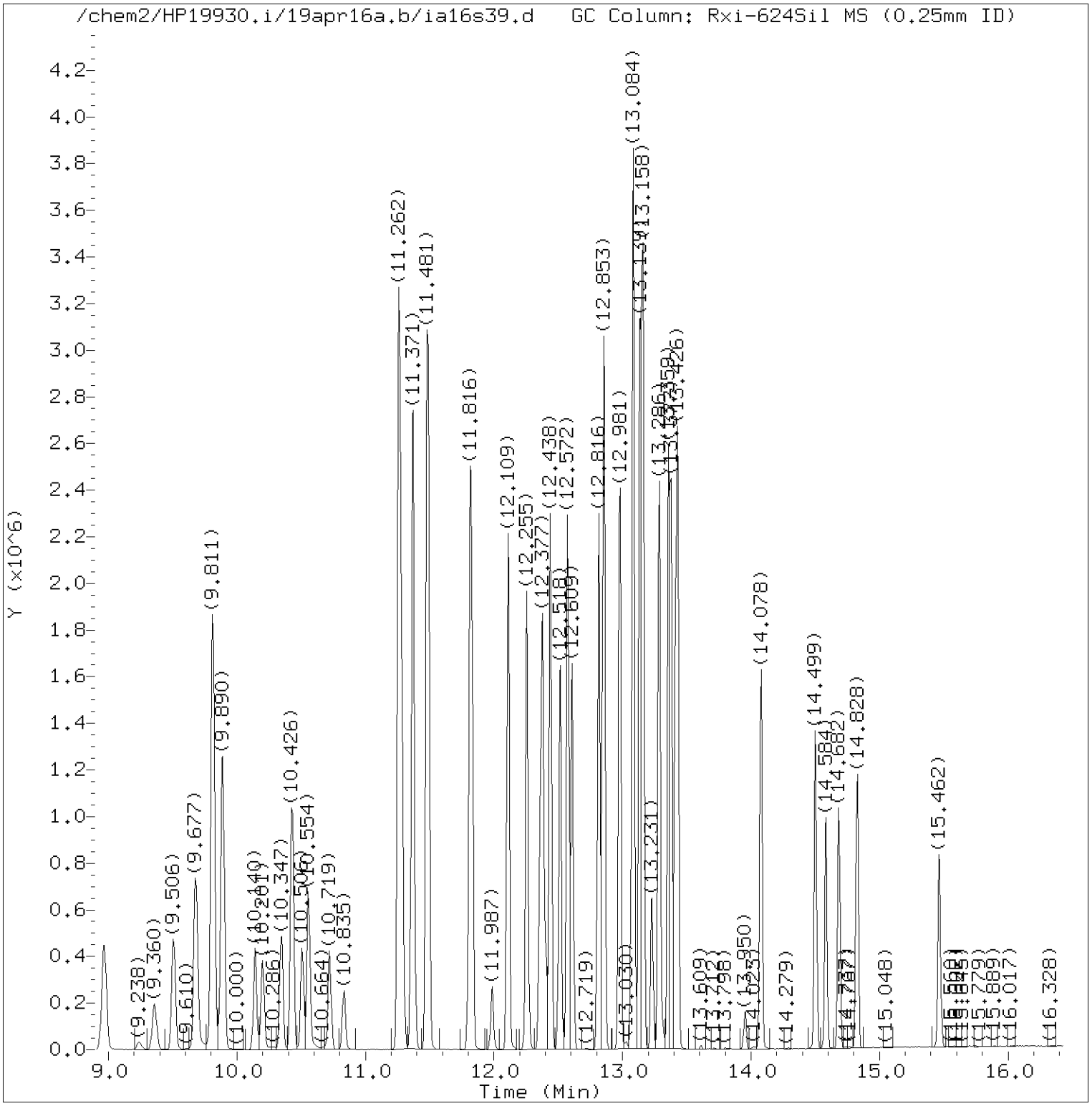
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

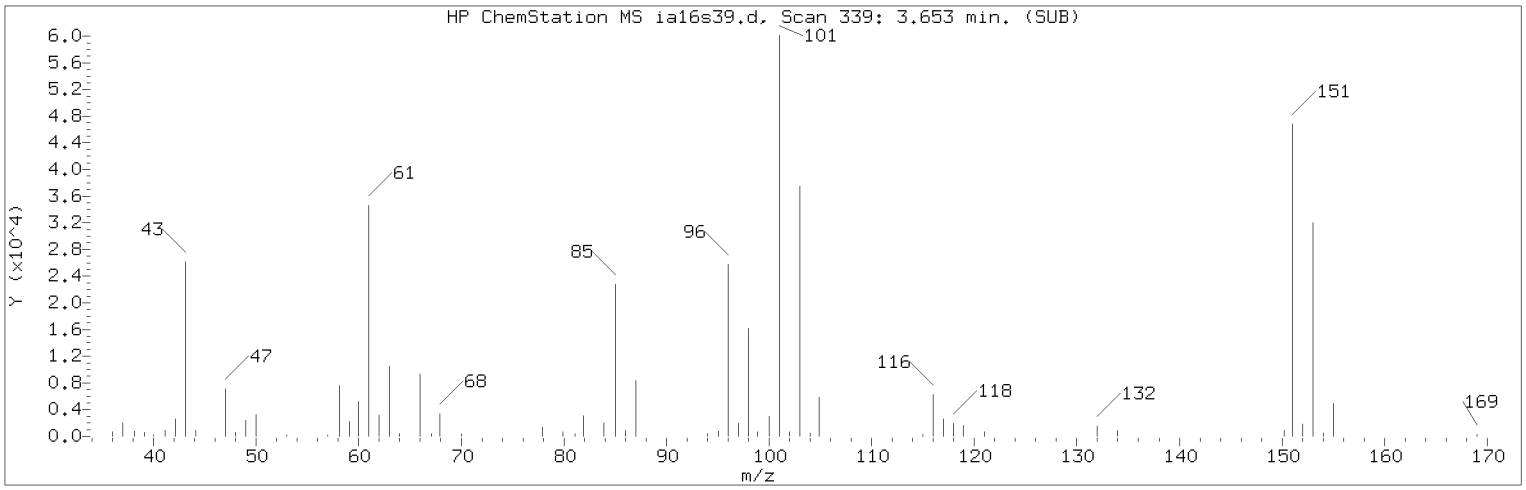
Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.007	85	334493	3.680
5) Vinyl Chloride	(2)	2.318	62	317580	4.639
11) Ethyl ether	(2)	3.300	59	151231	5.021
15) 1,1-Dichloroethene	(2)	3.617	96	245674	6.194
14) Acetone	(1)	3.653	43	203292M	35.026
23) Methylene Chloride	(2)	4.300	84	247256	6.094
26)*t-Butyl Alcohol-d10	(1)	4.318	65	99063M	50.000
31) trans-1,2-Dichloroethene	(2)	4.720	96	241621	5.443
38) 2-Butanone	(1)	6.177	43	376541M	39.941
39) cis-1,2-Dichloroethene	(2)	6.220	96	314199	6.353
49) Chloroform	(2)	6.702	83	2004350	25.474
50)$Dibromofluoromethane	(2)	6.915	113	409258	10.167
57)$1,2-Dichloroethane-d4	(2)	7.372	102	74460	9.599
59) 1,2-Dichloroethane	(2)	7.476	62	247253M	5.324
63)*Fluorobenzene	(2)	7.811	96	1559697	10.000
67) Trichloroethene	(2)	8.287	95	284060	5.864
82)$Toluene-d8	(3)	9.811	98	1563524	10.067
83) Toluene	(3)	9.884	92	660749	5.659
97)*Chlorobenzene-d5	(3)	11.256	117	1266205	10.000
101) m+p-Xylene	(3)	11.481	106	1067533	11.431
105) Xylene (Total)	(3)		106	1574312	17.053
104) o-Xylene	(3)	11.810	106	506779	5.622
111)$4-Bromofluorobenzene	(3)	12.255	95	583679	10.029
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	711103	10.000

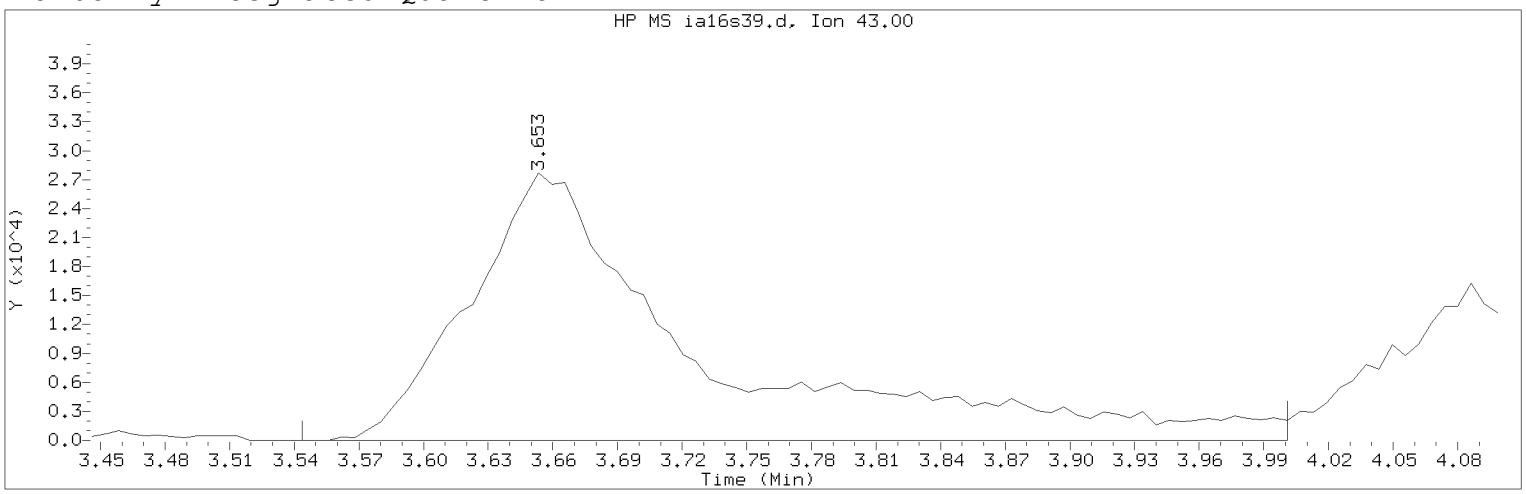
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

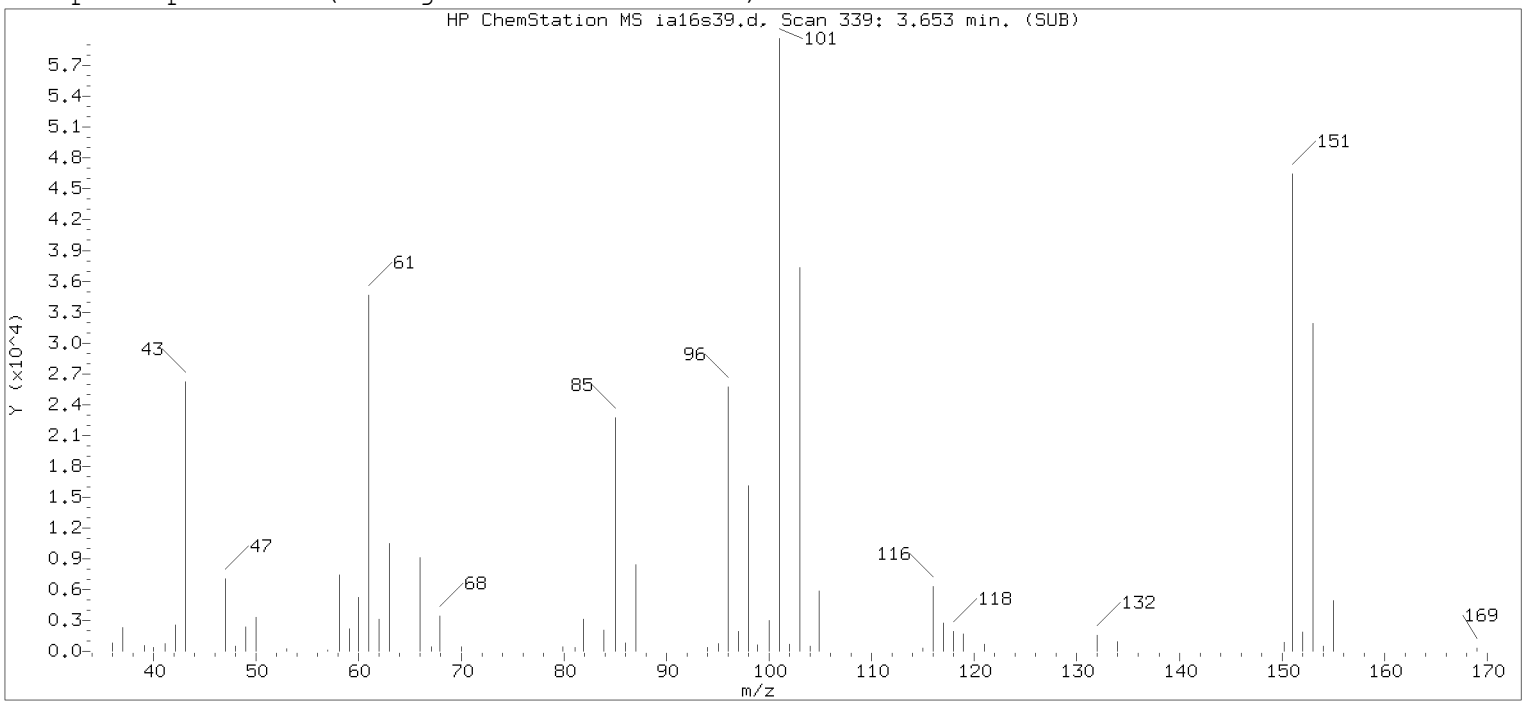
Compound Number : 14
Compound Name : Acetone
Scan Number : 339
Retention Time (minutes): 3.653
Quant Ion : 43.00
Area (flag) : 203292M
On-Column Amount (ng) : 35.0264
Integration start scan : 320 Integration stop scan: 395
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

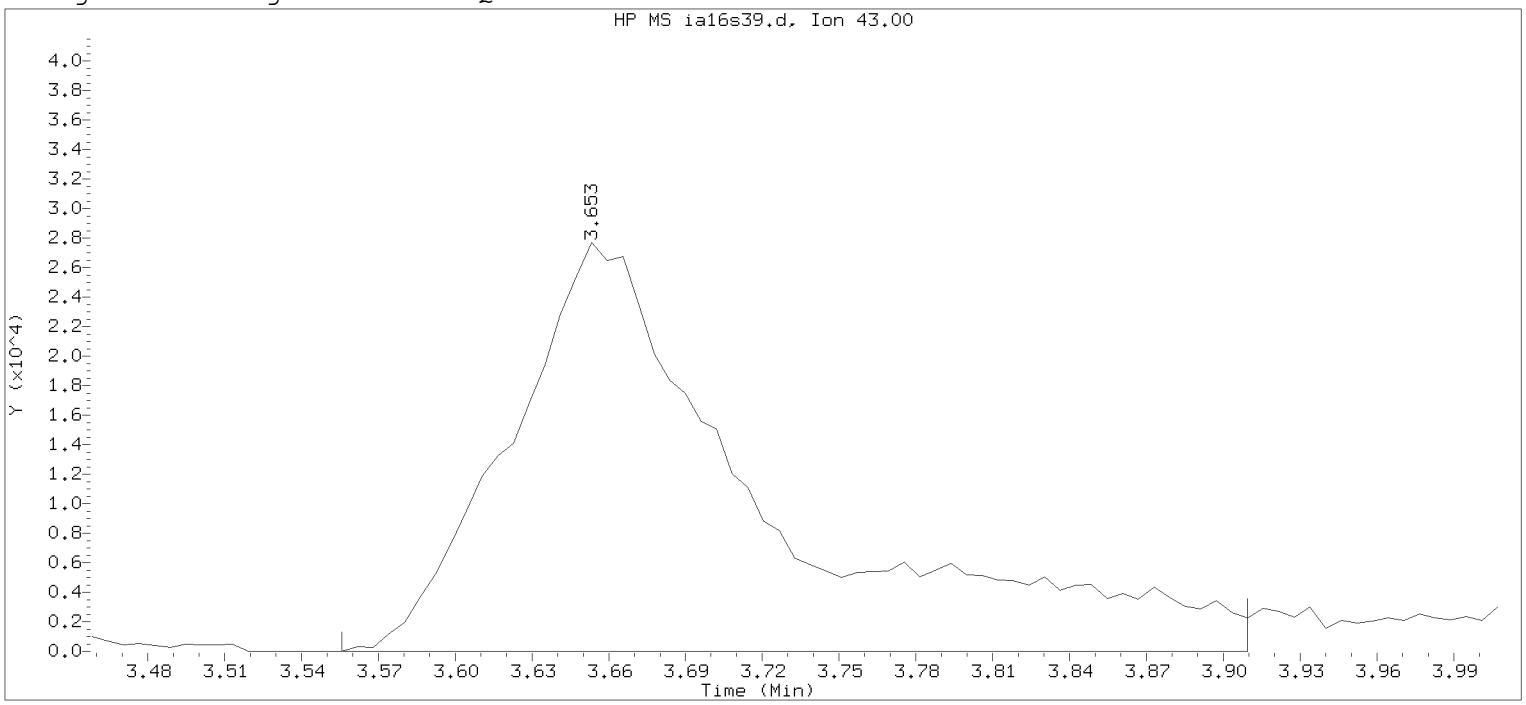
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

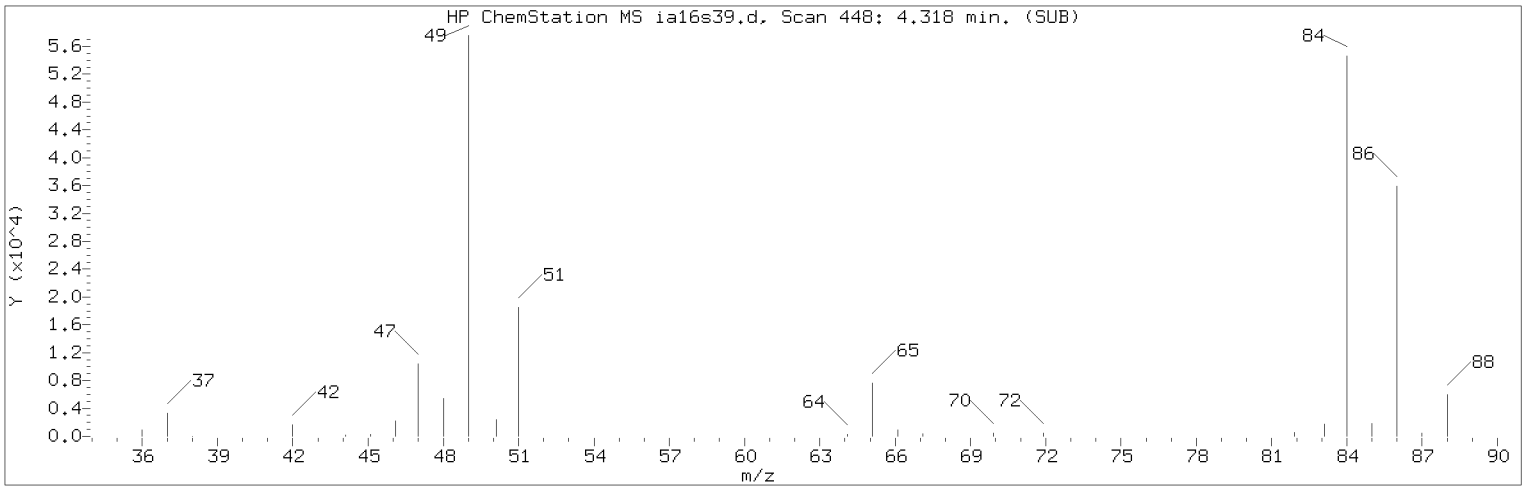
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:52 Automation

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

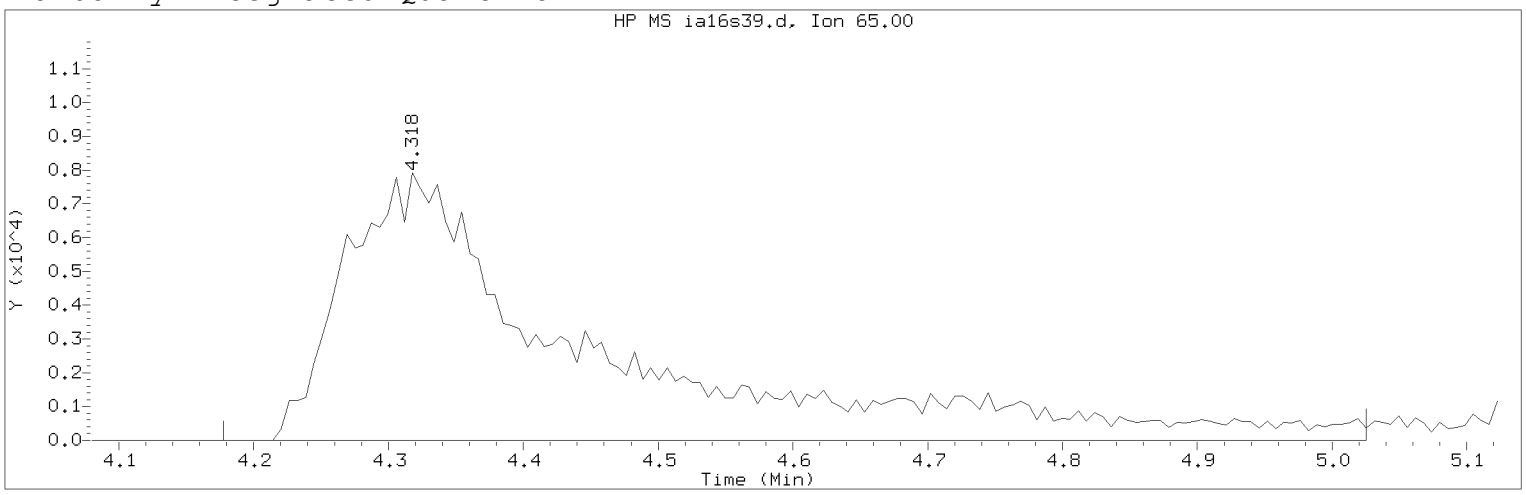
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 339		
Retention Time (minutes)	: 3.653		
Quant Ion	: 43.00		
Area	: 190357		
On-column Amount (ng)	: 38.0975		
Integration start scan	: 322	Integration stop scan:	380
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

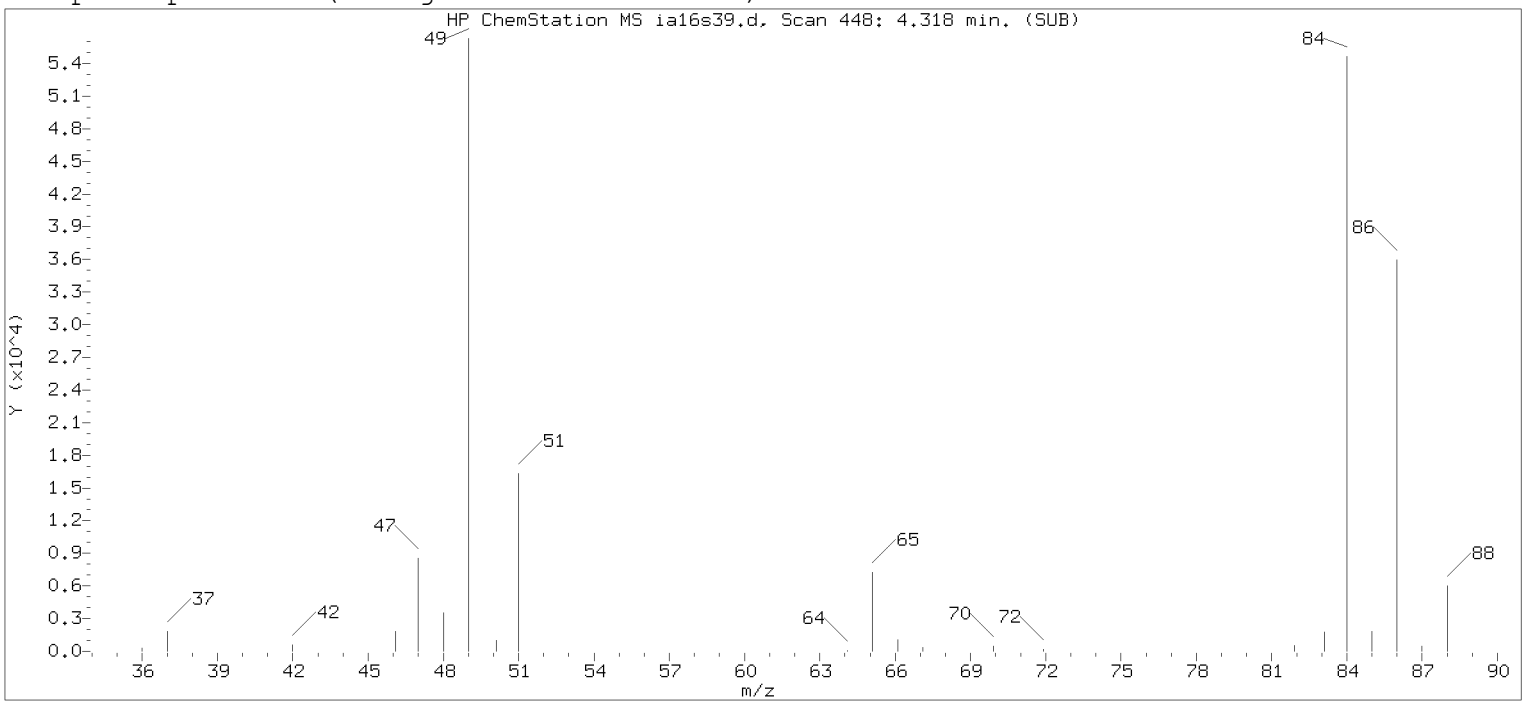
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 448
Retention Time (minutes): 4.318
Quant Ion : 65.00
Area (flag) : 99063M
On-Column Amount (ng) : 50.0000
Integration start scan : 424 Integration stop scan: 563
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

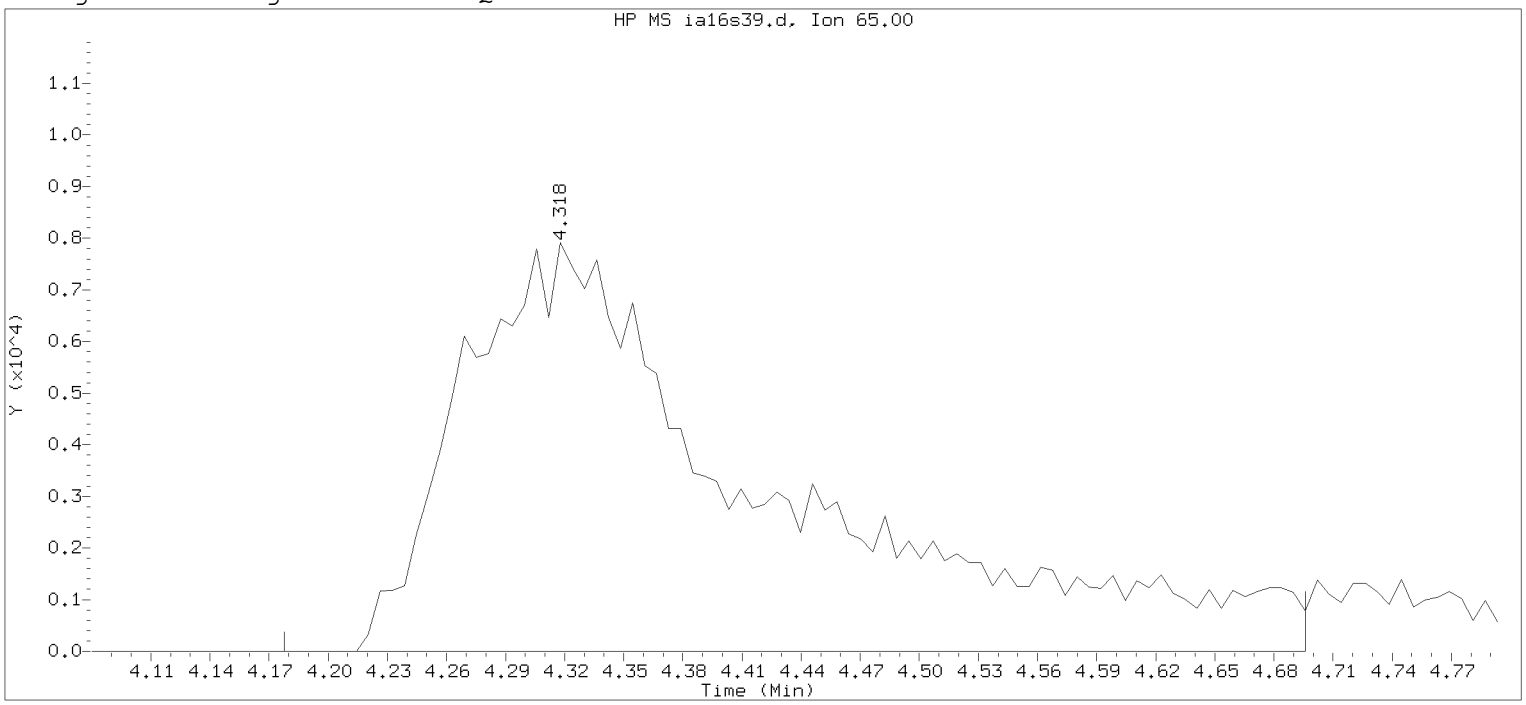
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

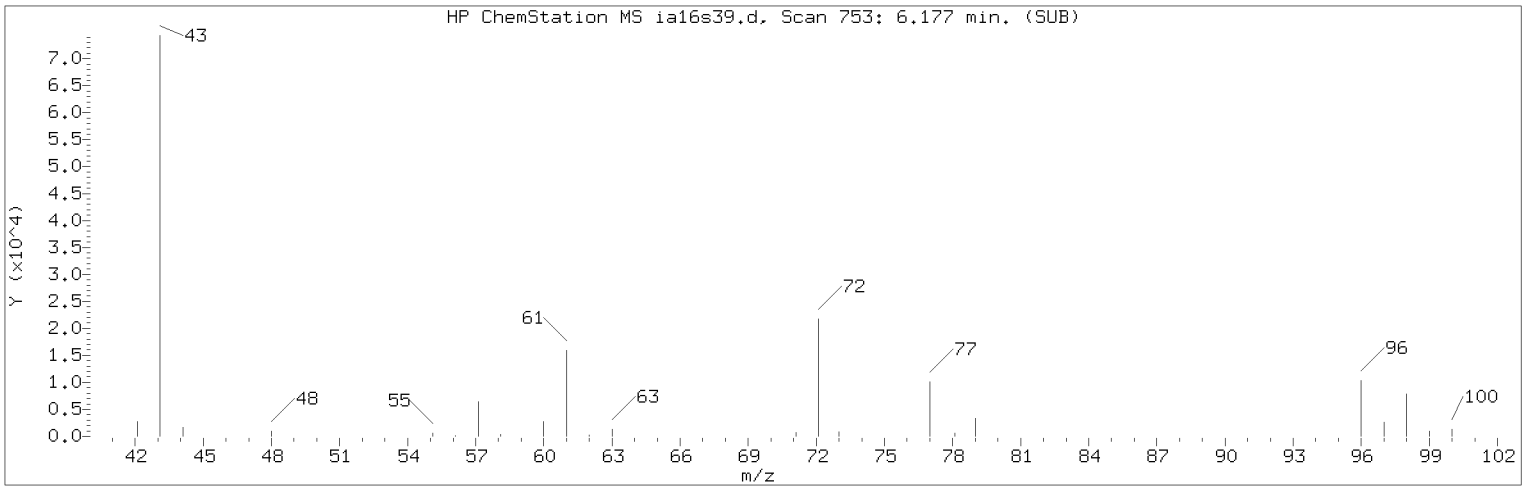
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:52 Automation

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

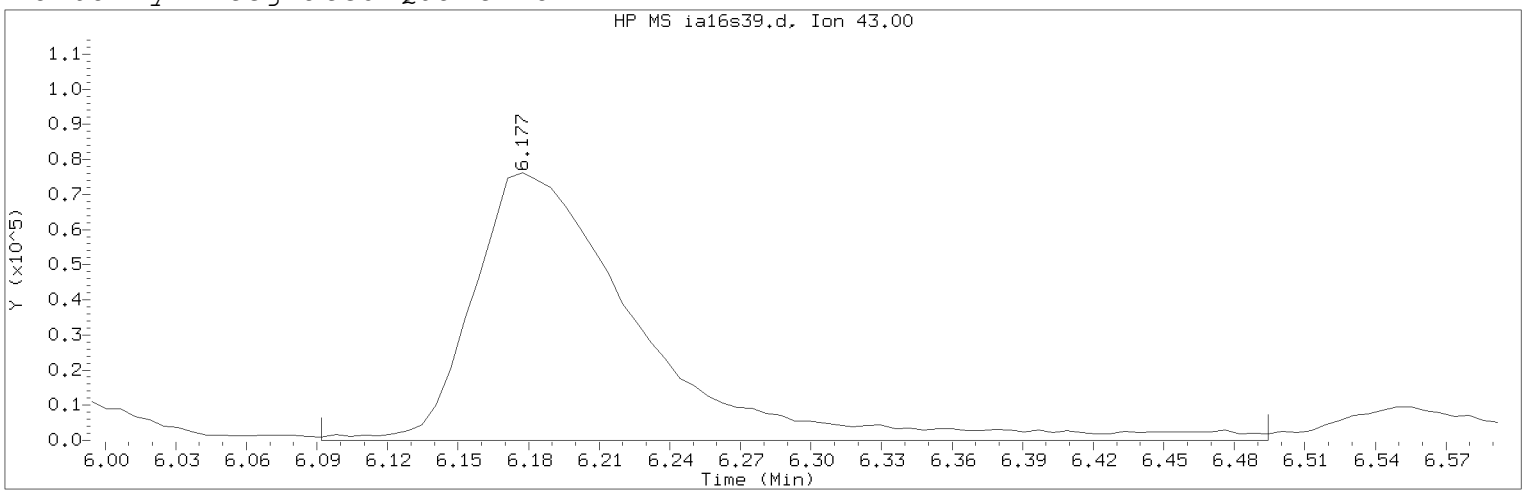
Compound Number	: 26		
Compound Name	: t-Butyl Alcohol-d10		
Scan Number	: 448		
Retention Time (minutes)	: 4.318		
Quant Ion	: 65.00		
Area	: 85282		
On-column Amount (ng)	: 50.0000		
Integration start scan	: 424	Integration stop scan:	509
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MEC29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

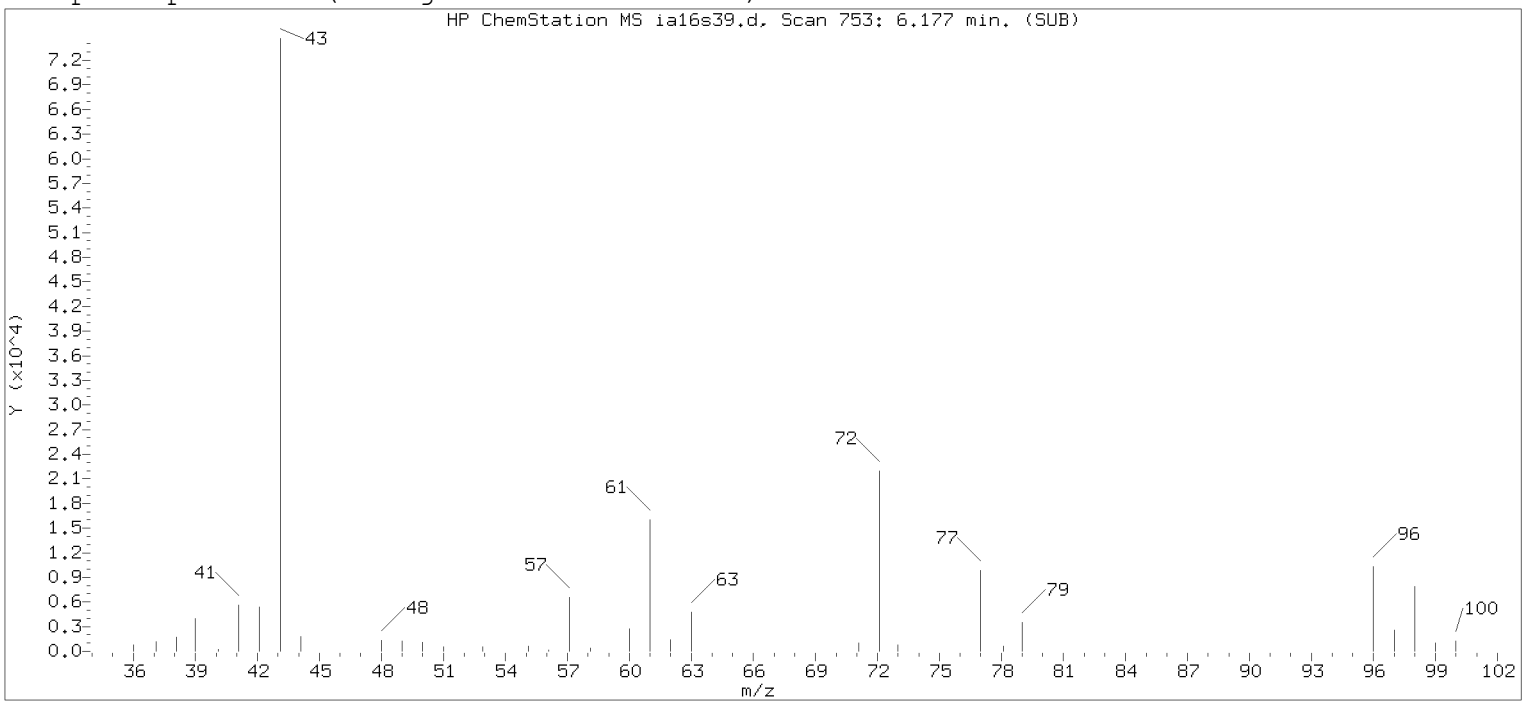
Compound Number : 38
Compound Name : 2-Butanone
Scan Number : 753
Retention Time (minutes): 6.177
Quant Ion : 43.00
Area (flag) : 376541M
On-Column Amount (ng) : 39.9410
Integration start scan : 738 Integration stop scan: 804
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

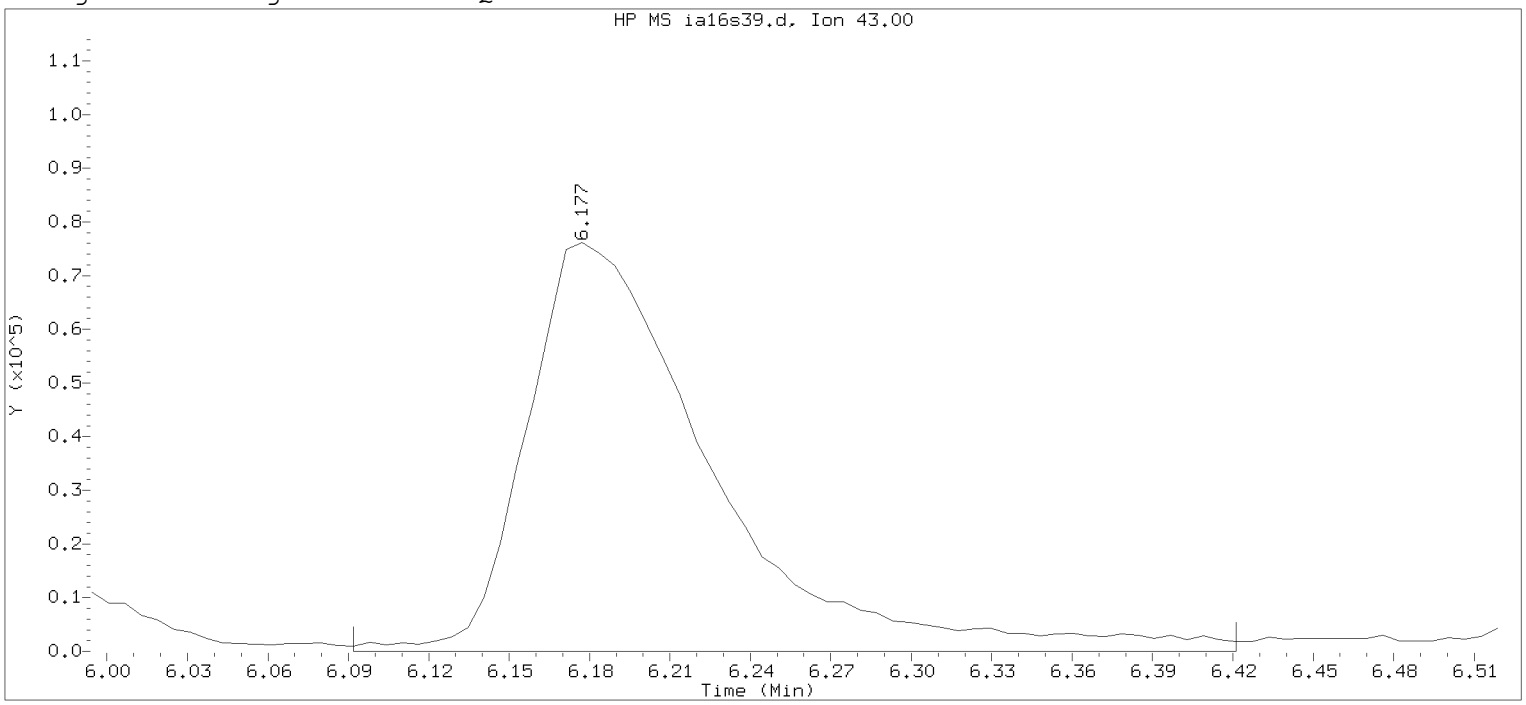
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

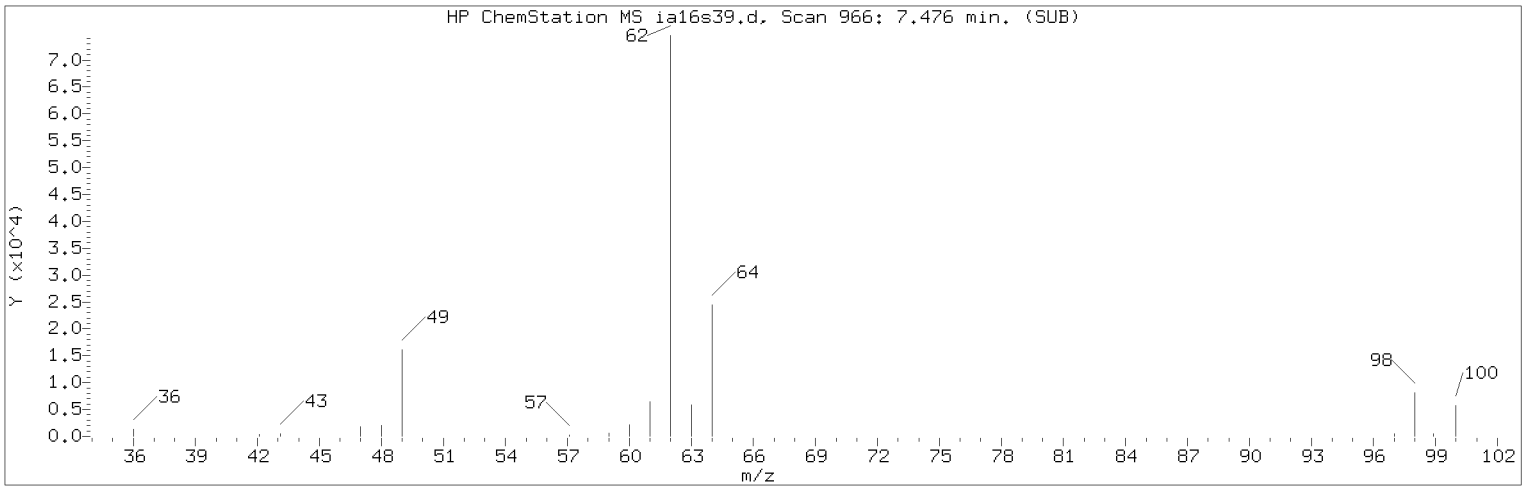
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:52 Automation

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

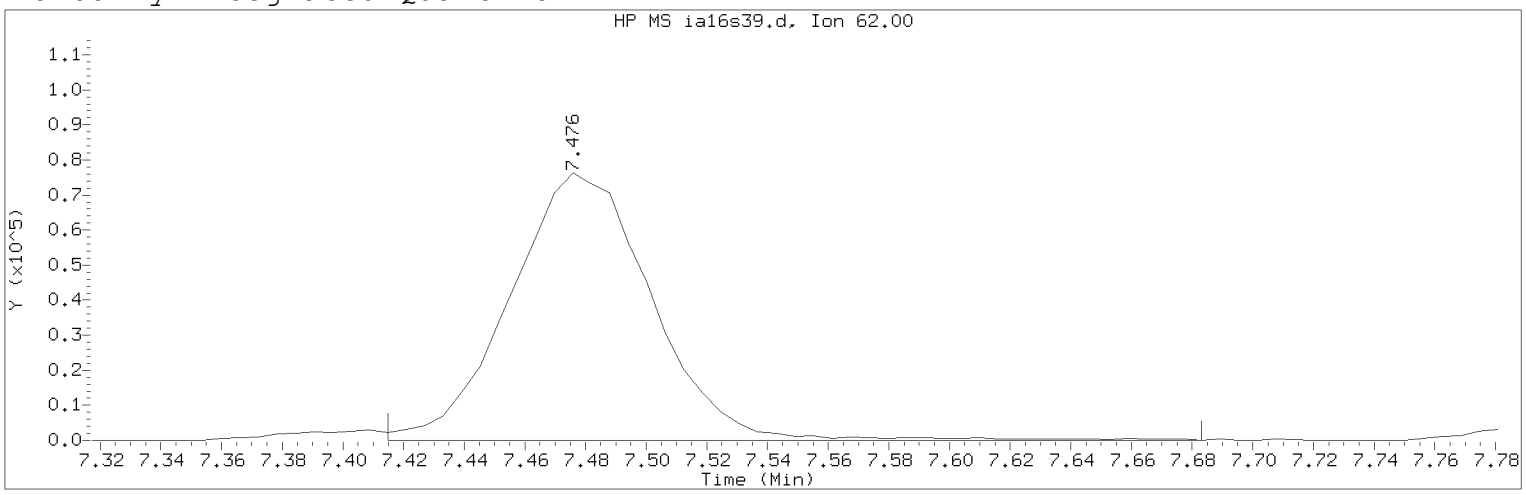
Compound Number	: 38		
Compound Name	: 2-Butanone		
Scan Number	: 753		
Retention Time (minutes)	: 6.177		
Quant Ion	: 43.00		
Area	: 365961		
On-column Amount (ng)	: 45.0914		
Integration start scan	: 738	Integration stop scan:	792
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MECampbell

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 17-Apr-2019 12:33 mec29284

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

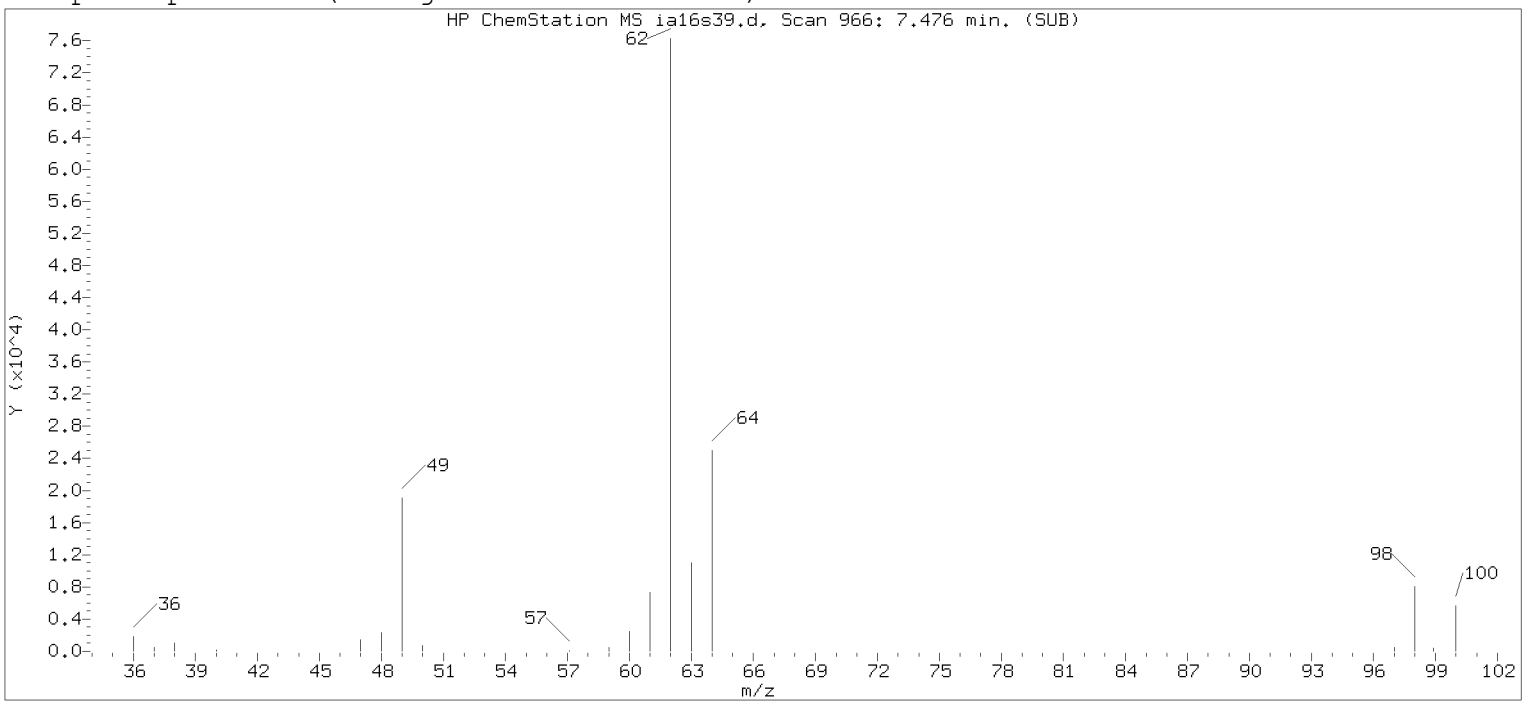
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 966
Retention Time (minutes): 7.476
Quant Ion : 62.00
Area (flag) : 247253M
On-Column Amount (ng) : 5.3240
Integration start scan : 955 Integration stop scan: 999
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

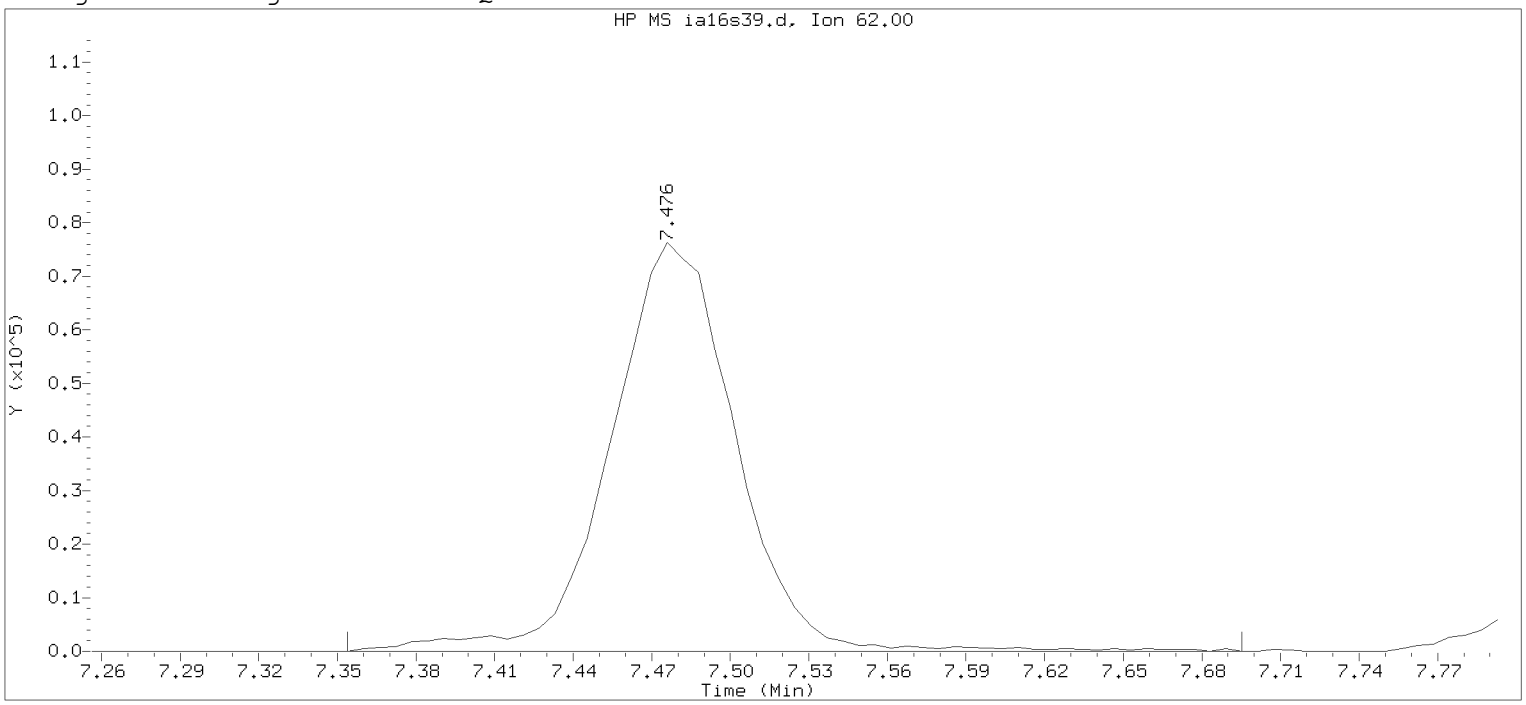
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16s39.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 19:34 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 19:52 Automation

Sample Name: 34R03MSD Lab Sample ID: 1030980MSD

Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 966
Retention Time (minutes): 7.476
Quant Ion : 62.00
Area : 253158
On-column Amount (ng) : 5.4511
Integration start scan : 945 Integration stop scan: 1001
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/17/2019 at 12:34.
Target 3.5 esignature user name: MECampbell

Lancaster Laboratories
Analysis Summary for GC/MS Volatiles

LCSI23

Data file: /chem2/HP19930.i/19apr16a.b/ia16132.d Injection date and time: **16-APR-2019 12:04**
Data file Sample Info. Line: LCSI23;LCSI23;1;3;LCS;;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) t-Butyl Alcohol-d10	4.312(-0.006)	447	65	96480M (-12)	50.00	
63) Fluorobenzene	7.811(0.000)	1021	96	1724708 (11)	10.00	
97) Chlorobenzene-d5	11.262(0.000)	1587	117	1405602 (10)	10.00	
133) 1,4-Dichlorobenzene-d4	13.133(0.000)	1894	152	775505 (9)	10.00	

M = Internal Standard was manually integrated

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
50) Dibromofluoromethane	(2)	6.921(-0.001)	113	448203	10.070	101%		80 - 120
57) 1,2-Dichloroethane-d4	(2)	7.384(-0.001)	102	82168M	9.579	96%		80 - 120
82) Toluene-d8	(3)	9.811(0.000)	98	1715928	9.953	100%		80 - 120
111) 4-Bromofluorobenzene	(3)	12.255(0.000)	95	635617	9.838	98%		80 - 120

M = Surrogate Standard was manually integrated.

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (in sample)	LOQ
1) Dichlorodifluoromethane	(2)	2.020(-0.001)	85	332057	3.303	3.30			0.3	1
5) Vinyl Chloride	(2)	2.324(-0.000)	62	318458	4.207	4.21			0.1	1
11) Ethyl ether	(2)	3.312(-0.000)	59	161109	4.838	4.84		J	0.4	12
15) 1,1-Dichloroethene	(2)	3.623(-0.000)	96	249836	5.696	5.70			0.4	1
14) Acetone	(1)	3.666(-0.001)	43	182054M	32.207	32.21			3	10
23) Methylene Chloride	(2)	4.306(-0.000)	84	245644	5.475	5.47			0.2	1
31) trans-1,2-Dichloroethene	(2)	4.732(-0.000)	96	245627	5.004	5.00			0.8	1
39) cis-1,2-Dichloroethene	(2)	6.226(-0.000)	96	325788	5.958	5.96			0.1	1
38) 2-Butanone	(1)	6.190(0.002)	43	398469M	43.399	43.40			1	10
49) Chloroform	(2)	6.702(0.000)	83	462373	5.314	5.31			0.1	1
59) 1,2-Dichloroethane	(2)	7.482(-0.000)	62	266156M	5.183	5.18			0.1	1
67) Trichloroethene	(2)	8.287(-0.000)	95	291058	5.434	5.43			0.2	1
83) Toluene	(3)	9.890(0.000)	92	688943	5.315	5.32			0.1	1
101) m+p-Xylene	(3)	11.487(-0.000)	106	1114050	10.746	10.75			0.1	0.5
104) o-Xylene	(3)	11.810(0.000)	106	531554	5.312	5.31			0.05	0.5
105) Xylene (Total)	(3)		106	1645604	16.058	16.06			0.2	3

M = Compound was manually integrated.

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41. Target 3.5 esignature user ID: mec29284

Data file: /chem2/HP19930.i/19apr16a.b/ia16l32.d Injection date and time: **16-APR-2019 12:04**
Data file Sample Info. Line: LCSI23;LCSI23;1;3;LCS;;DA5J;;ia16b30; Instrument ID: **HP19930.i** Batch: **I191062AA**
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Blank Data file reference: **/chem2/HP19930.i/19apr16a.b/ia16b30.d**

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: **12026**
Calibration date and time (Last Method Edit): 16-APR-2019 11:51
Mid Level Daily Calibration Standard Reference: **/chem2/HP19930.i/19apr16a.b/ia16c01.d**

Bottle Code: Matrix: WATER Level: Low

On-Column Amount units: ng In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * (Vt/Vo) VOA Prep Factor: **1.00**

Volume Purged (Vt): 25 ml Sample Volume (Vo): 25 ml

THIS SPACE

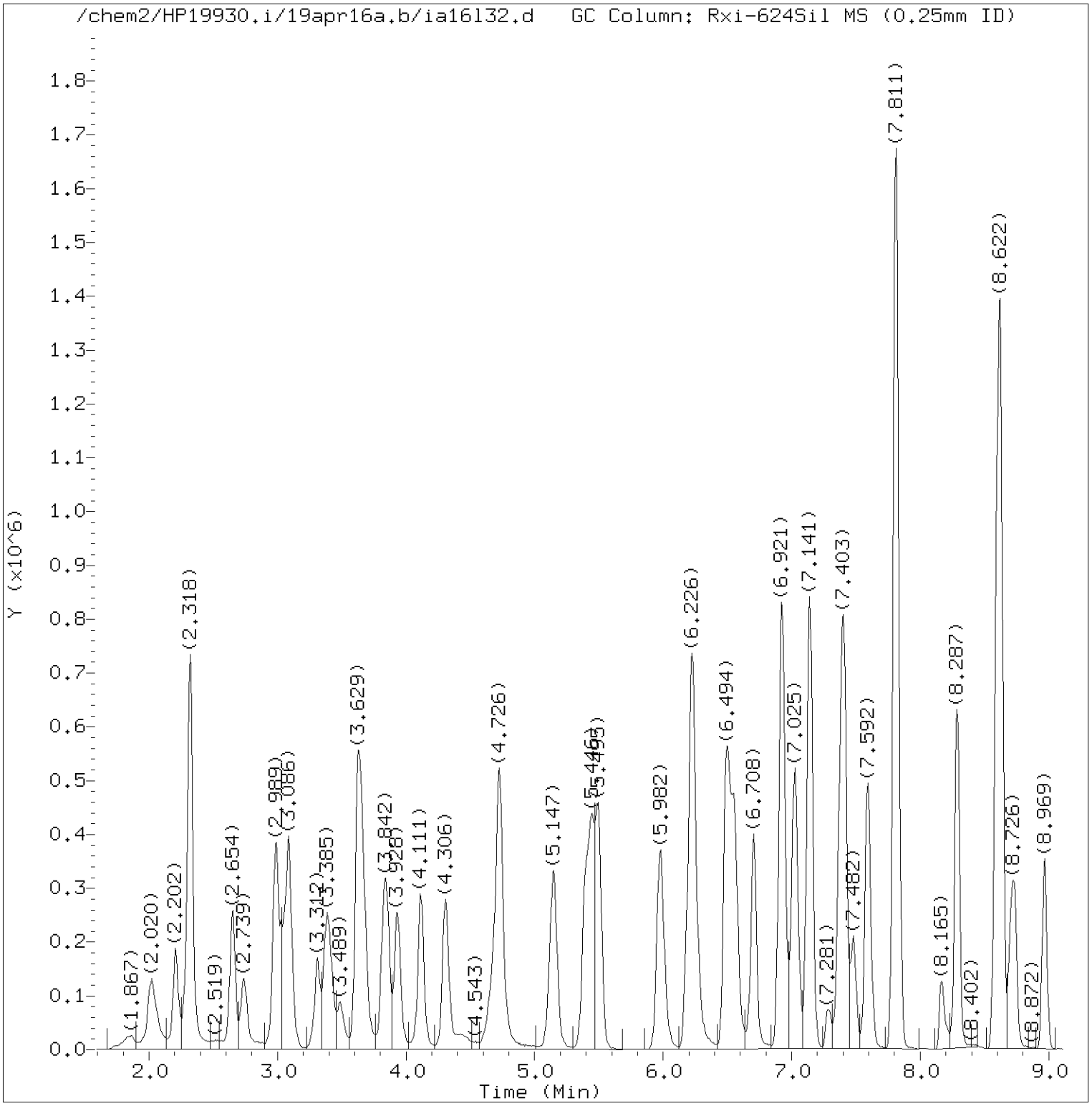
WAS LEFT

BLANK INTENTIONALLY

Total number of targets = 16

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41. Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12. PARALLAX ID: kmb29664



Total Ion Chromatogram (TIC)

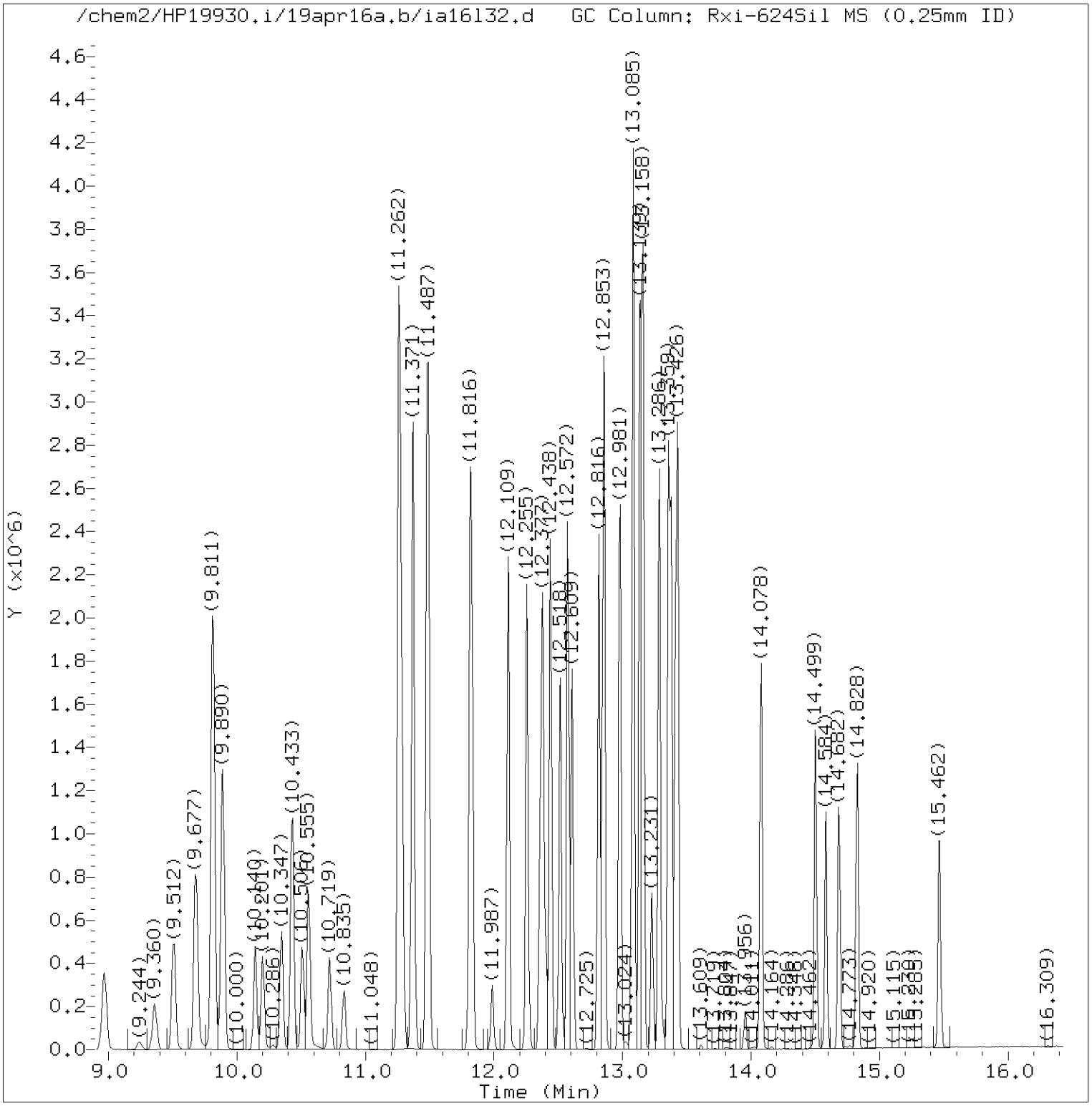
Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Quant Report

Target Revision 3.5

Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

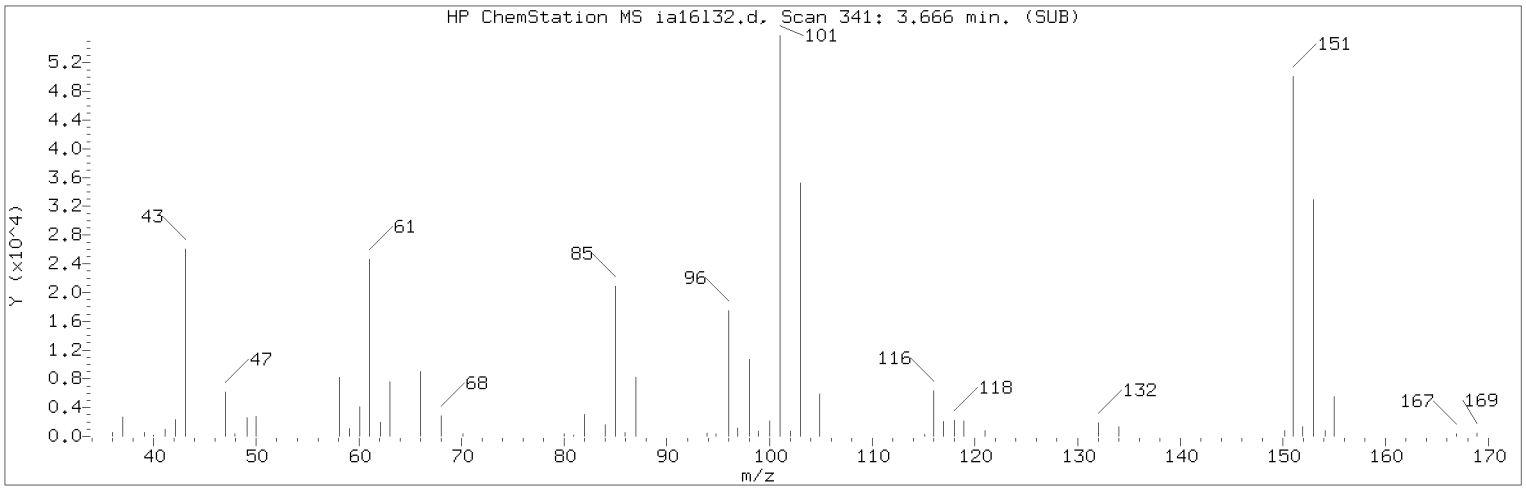
Sample Name: LCSI23 Lab Sample ID: LCSI23

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng)
1) Dichlorodifluoromethane	(2)	2.020	85	332057	3.303
5) Vinyl Chloride	(2)	2.324	62	318458	4.207
11) Ethyl ether	(2)	3.312	59	161109	4.838
15) 1,1-Dichloroethene	(2)	3.623	96	249836	5.696
14) Acetone	(1)	3.666	43	182054M	32.207
23) Methylene Chloride	(2)	4.306	84	245644	5.475
26)*t-Butyl Alcohol-d10	(1)	4.312	65	96480M	50.000
31) trans-1,2-Dichloroethene	(2)	4.732	96	245627	5.004
38) 2-Butanone	(1)	6.190	43	398469M	43.399
39) cis-1,2-Dichloroethene	(2)	6.226	96	325788	5.958
49) Chloroform	(2)	6.702	83	462373	5.314
50)$Dibromofluoromethane	(2)	6.921	113	448203	10.070
57)$1,2-Dichloroethane-d4	(2)	7.384	102	82168M	9.579
59) 1,2-Dichloroethane	(2)	7.482	62	266156M	5.183
63)*Fluorobenzene	(2)	7.811	96	1724708	10.000
67) Trichloroethene	(2)	8.287	95	291058	5.434
82)$Toluene-d8	(3)	9.811	98	1715928	9.953
83) Toluene	(3)	9.890	92	688943	5.315
97)*Chlorobenzene-d5	(3)	11.262	117	1405602	10.000
101) m+p-Xylene	(3)	11.487	106	1114050	10.746
105) Xylene (Total)	(3)		106	1645604	16.058
104) o-Xylene	(3)	11.810	106	531554	5.312
111)$4-Bromofluorobenzene	(3)	12.255	95	635617	9.838
133)*1,4-Dichlorobenzene-d4	(4)	13.133	152	775505	10.000

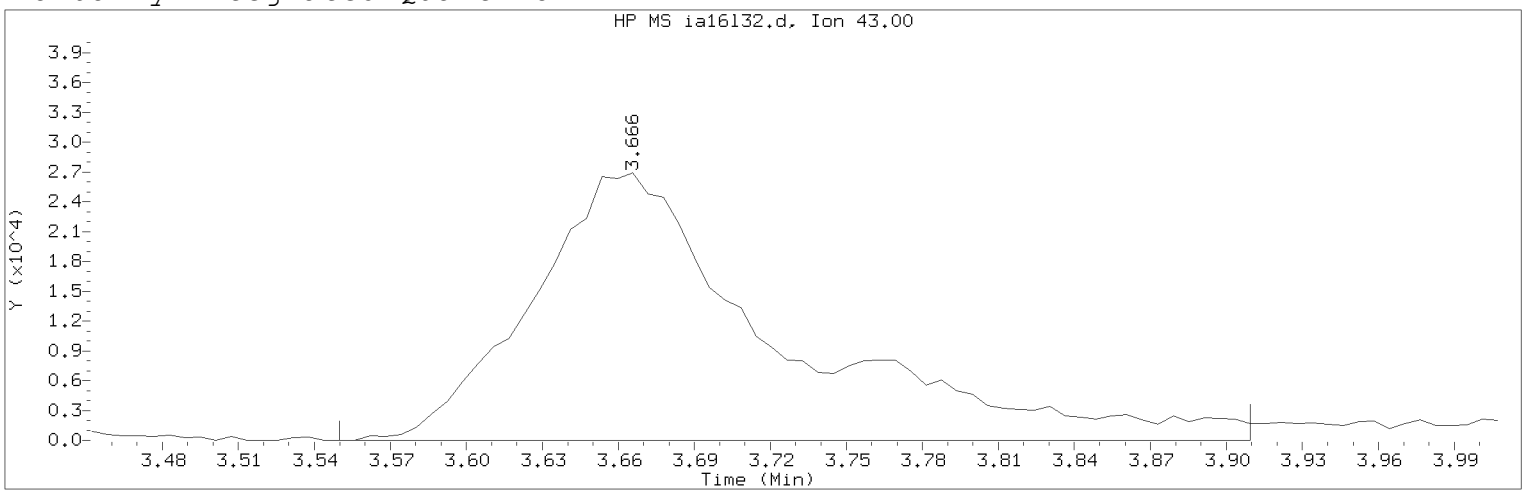
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Miranda E. Campbell
on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

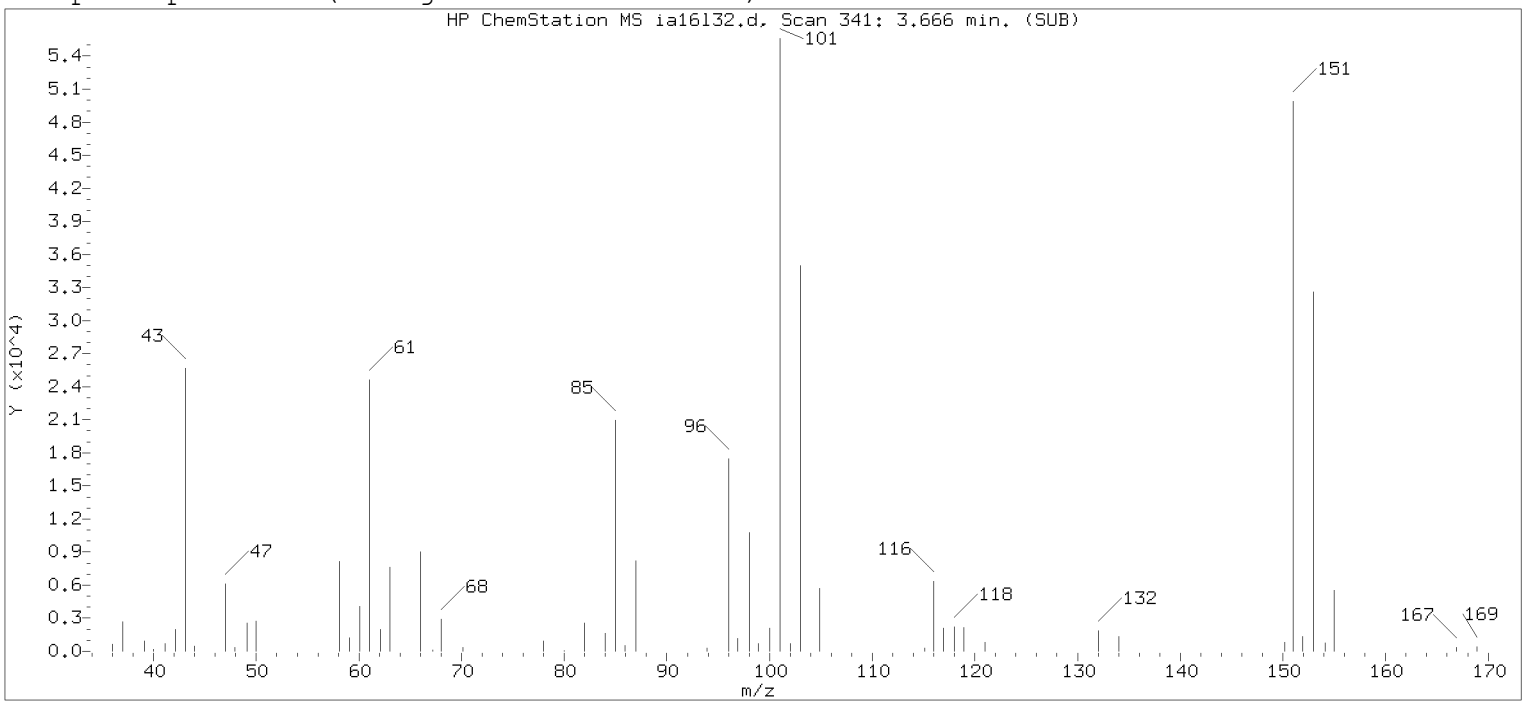
Compound Number : 14
Compound Name : Acetone
Scan Number : 341
Retention Time (minutes): 3.666
Quant Ion : 43.00
Area (flag) : 182054M
On-Column Amount (ng) : 32.2070
Integration start scan : 321 Integration stop scan: 380
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

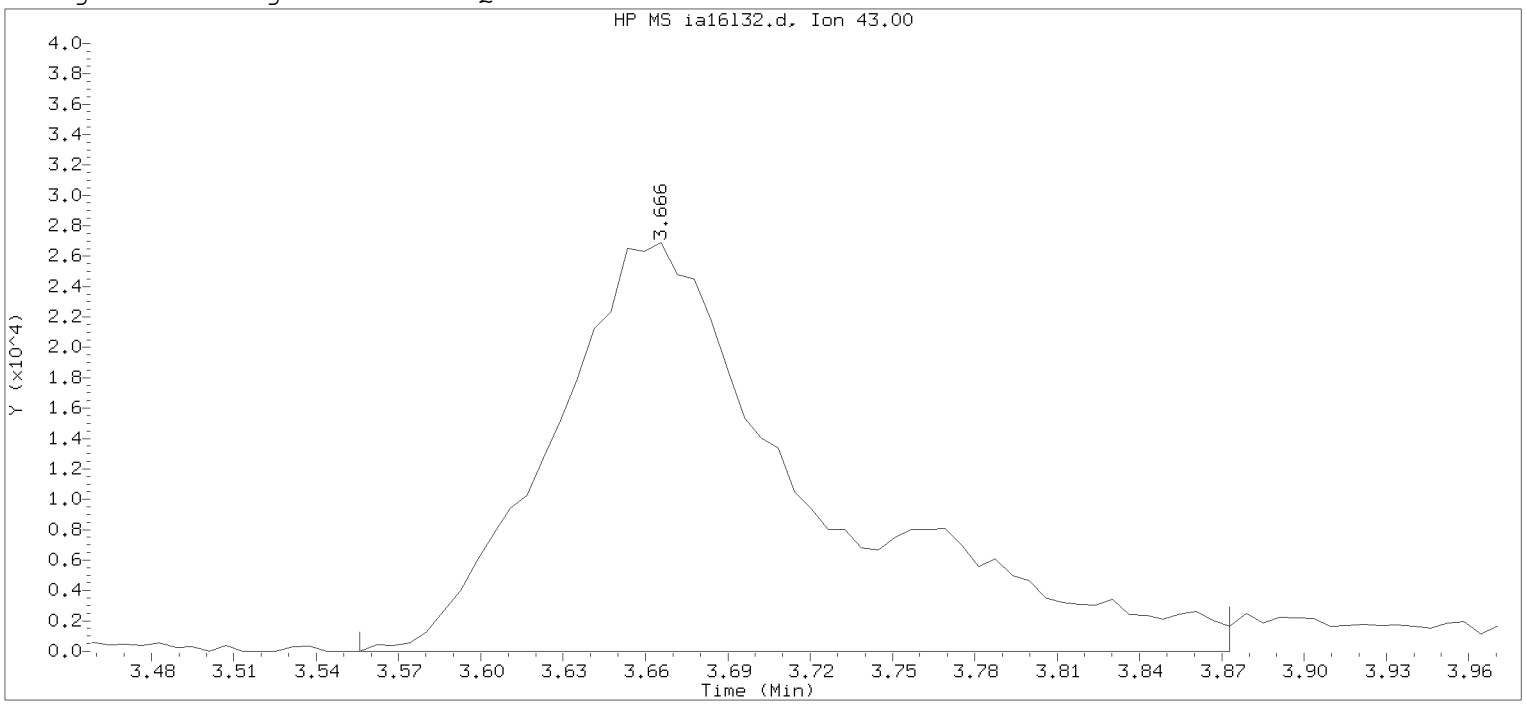
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

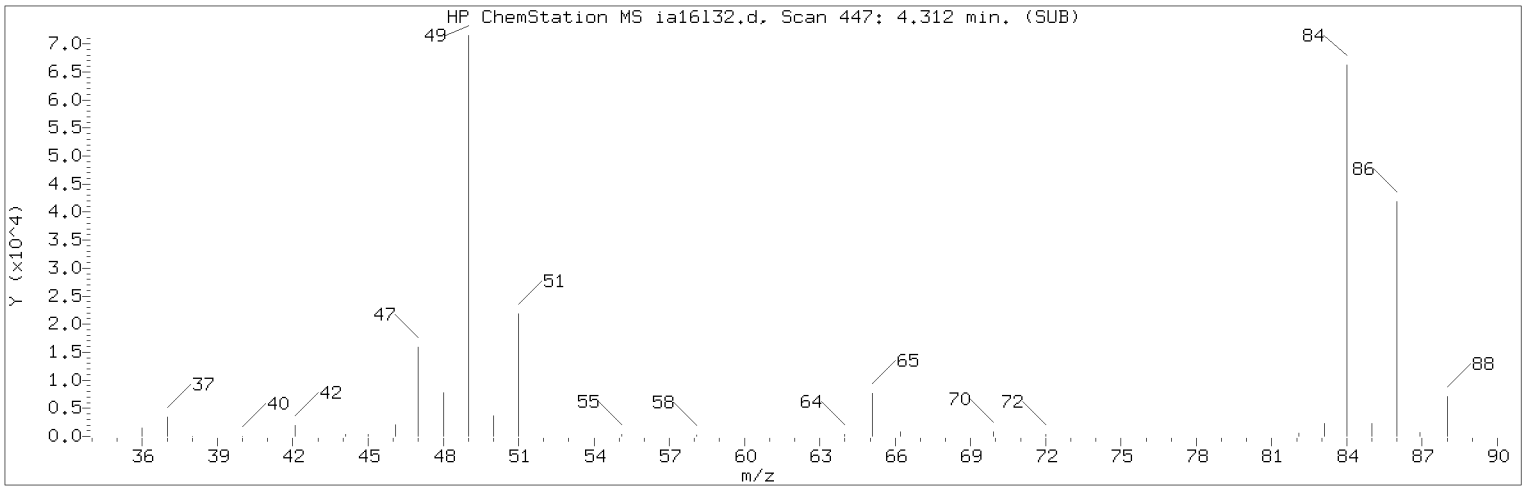
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 12:33 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

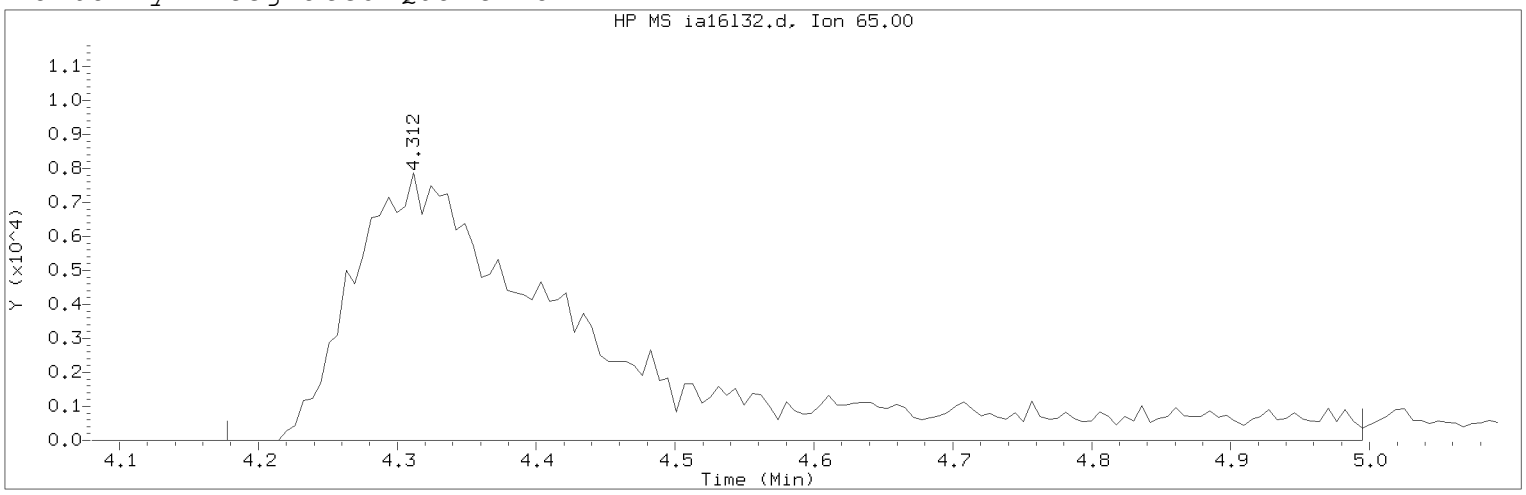
Compound Number	: 14		
Compound Name	: Acetone		
Scan Number	: 341		
Retention Time (minutes)	: 3.666		
Quant Ion	: 43.00		
Area	: 177161		
On-column Amount (ng)	: 32.5210		
Integration start scan	: 322	Integration stop scan:	374
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

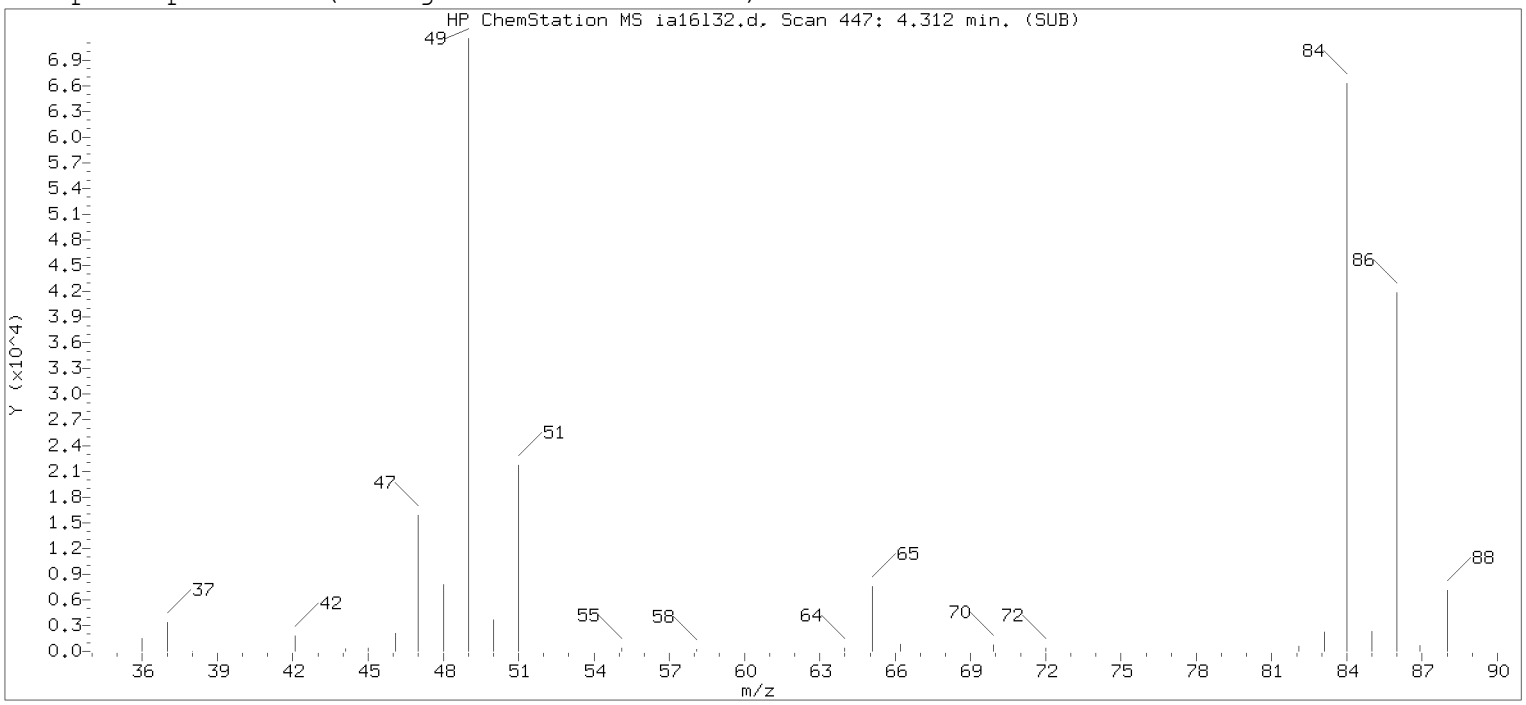
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 447
Retention Time (minutes): 4.312
Quant Ion : 65.00
Area (flag) : 96480M
On-Column Amount (ng) : 50.0000
Integration start scan : 424 Integration stop scan: 558
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

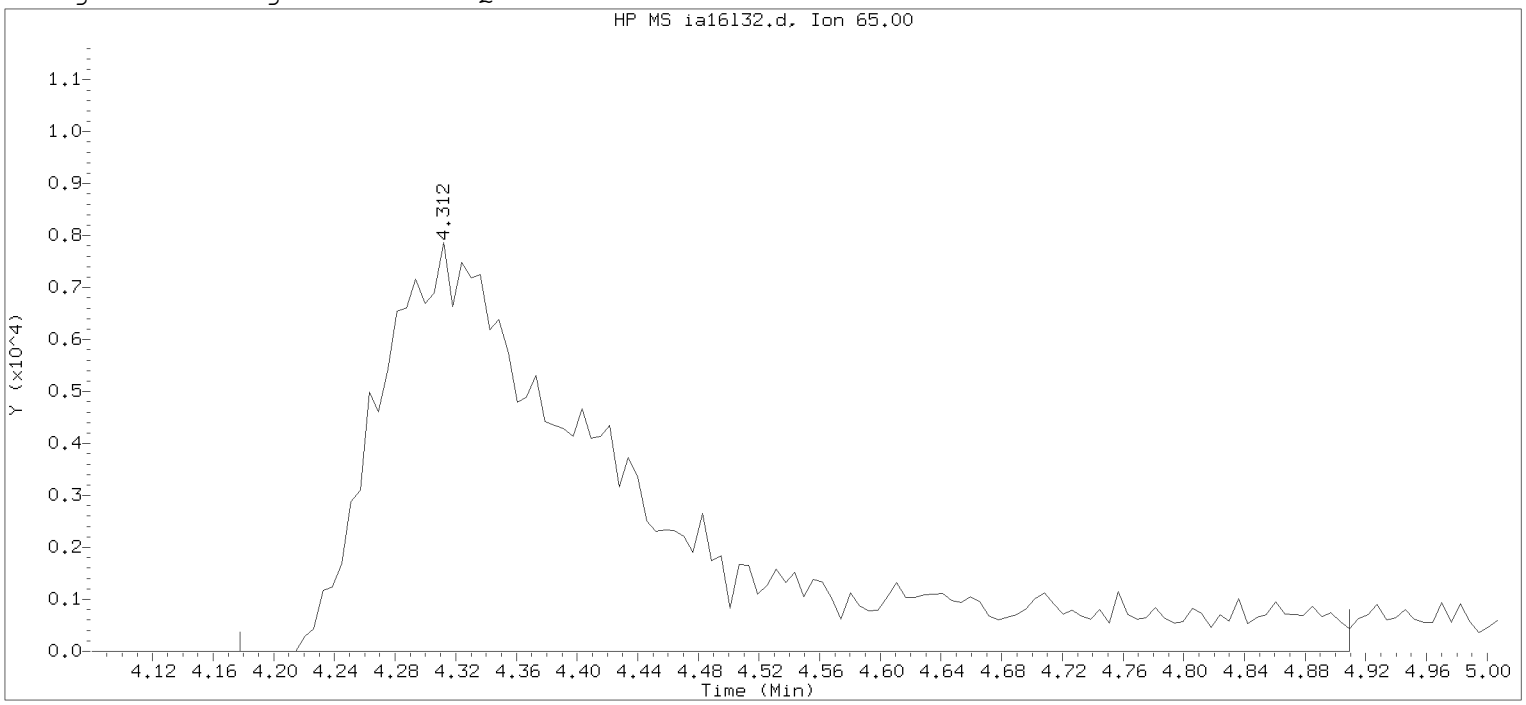
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

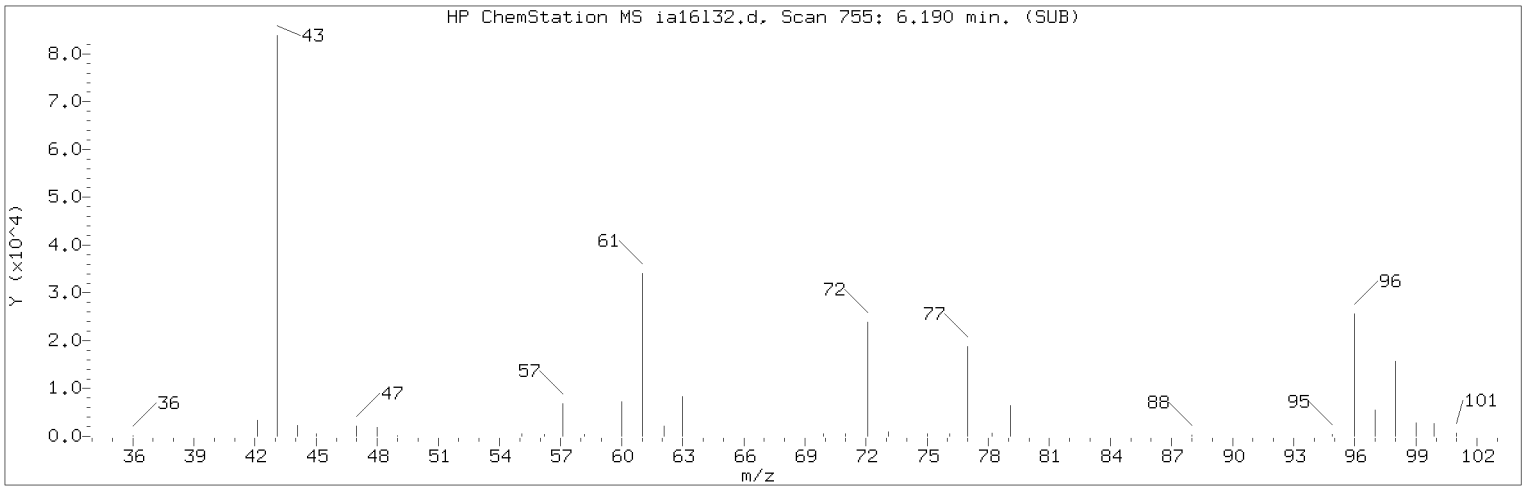
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 12:33 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

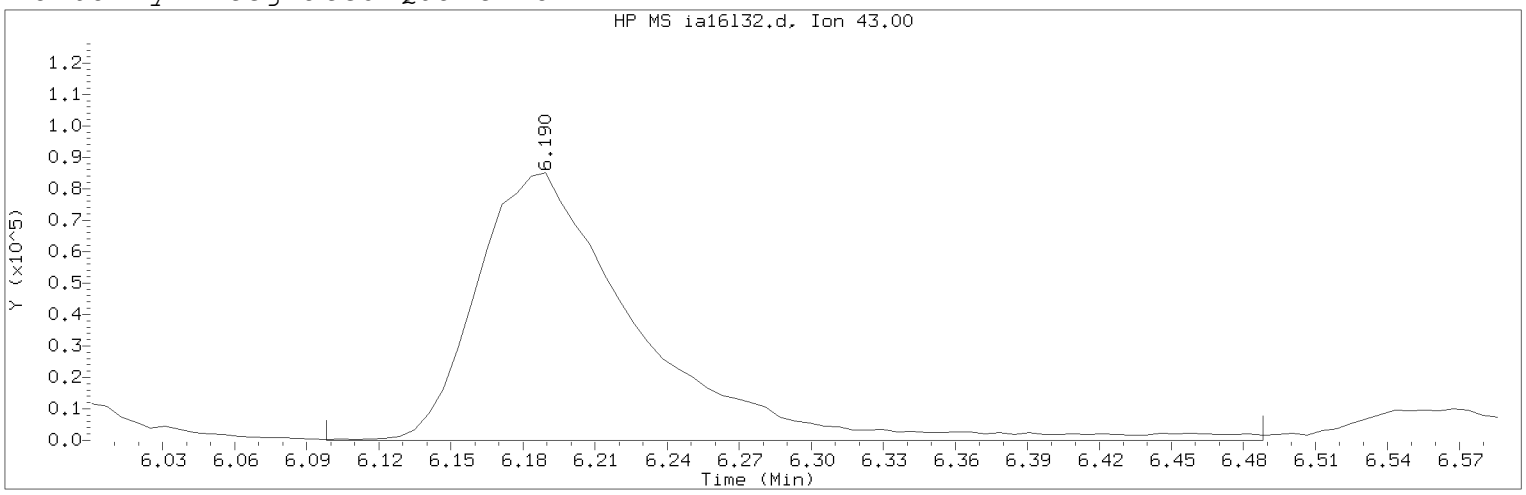
Compound Number : 26
Compound Name : t-Butyl Alcohol-d10
Scan Number : 447
Retention Time (minutes): 4.312
Quant Ion : 65.00
Area : 92980
On-column Amount (ng) : 50.0000
Integration start scan : 424 Integration stop scan: 544
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

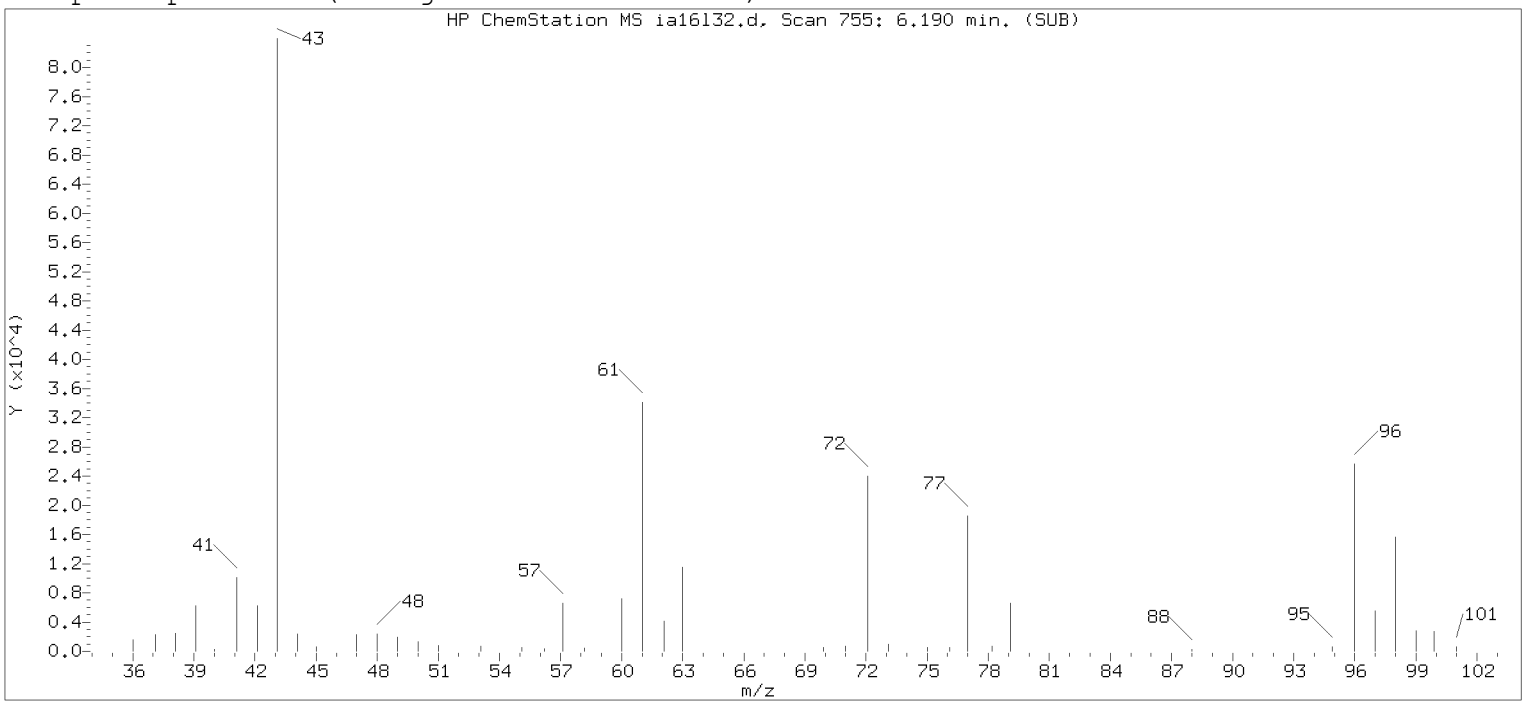
Compound Number : 38
Compound Name : 2-Butanone
Scan Number : 755
Retention Time (minutes): 6.190
Quant Ion : 43.00
Area (flag) : 398469M
On-Column Amount (ng) : 43.3988
Integration start scan : 739 Integration stop scan: 803
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

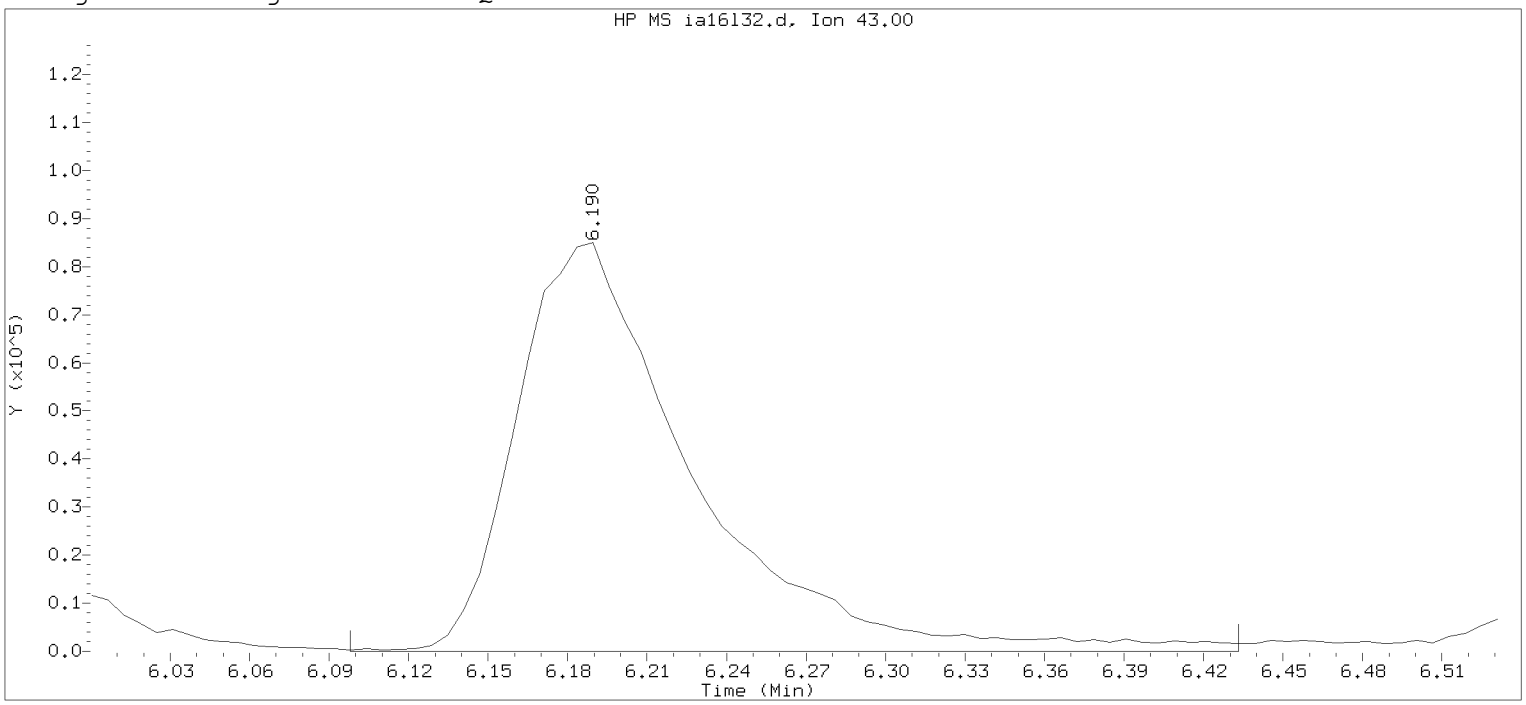
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

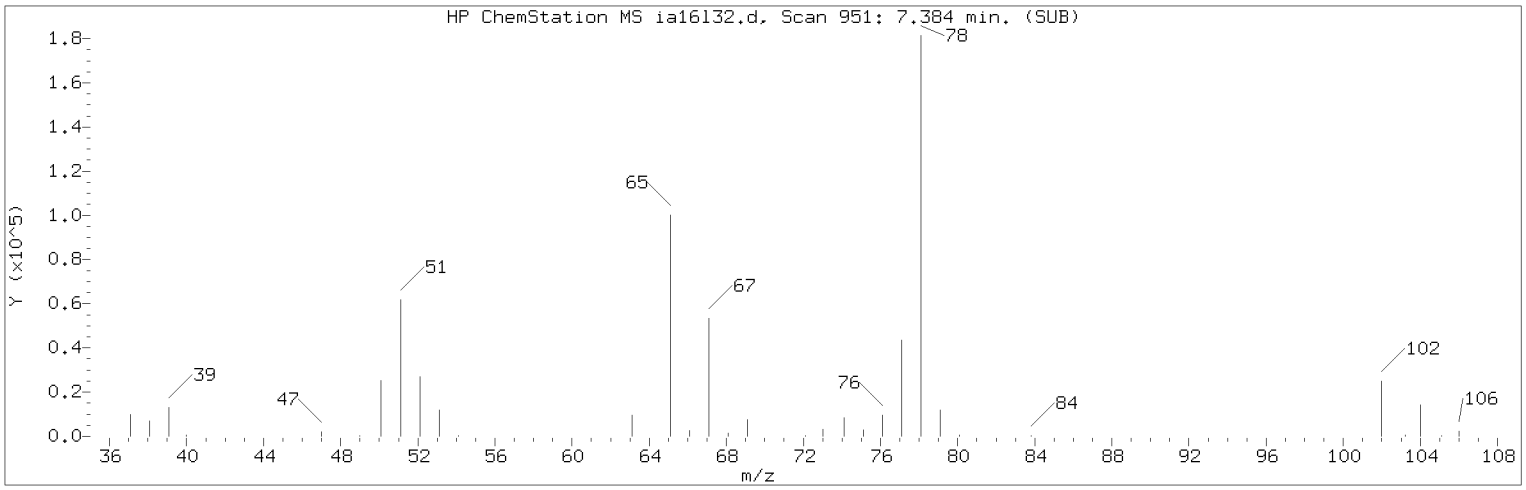
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Date, time and analyst ID of latest file update: 16-Apr-2019 12:33 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

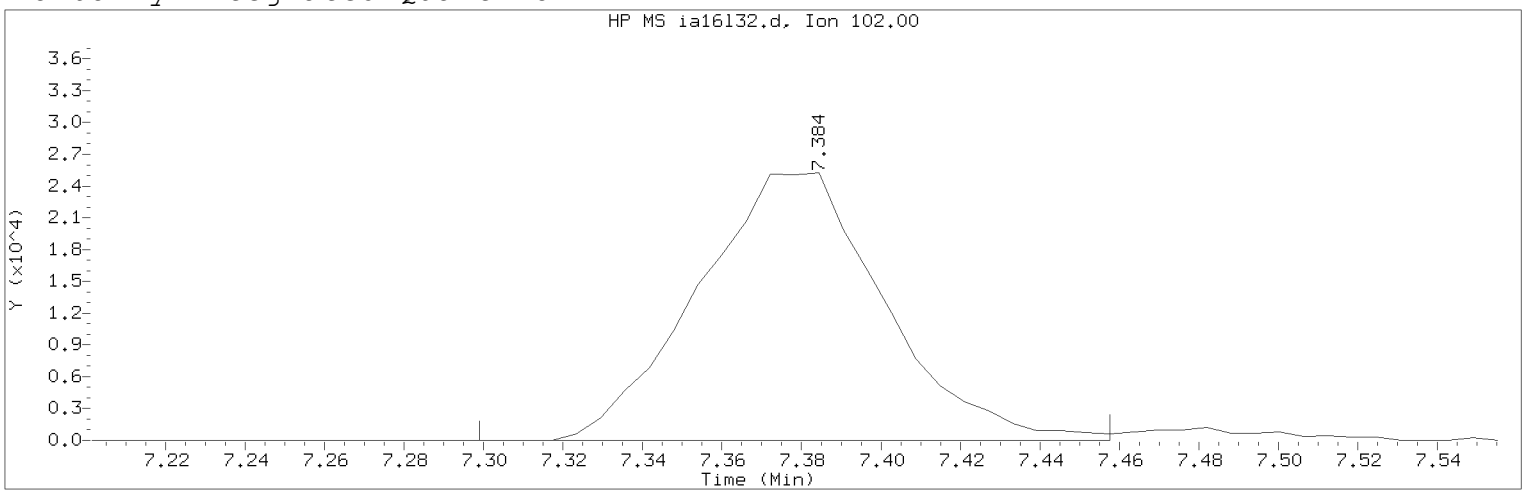
Compound Number : 38
Compound Name : 2-Butanone
Scan Number : 755
Retention Time (minutes): 6.190
Quant Ion : 43.00
Area : 391742
On-column Amount (ng) : 44.2718
Integration start scan : 739 Integration stop scan: 794
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user AF34 meaning 529

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

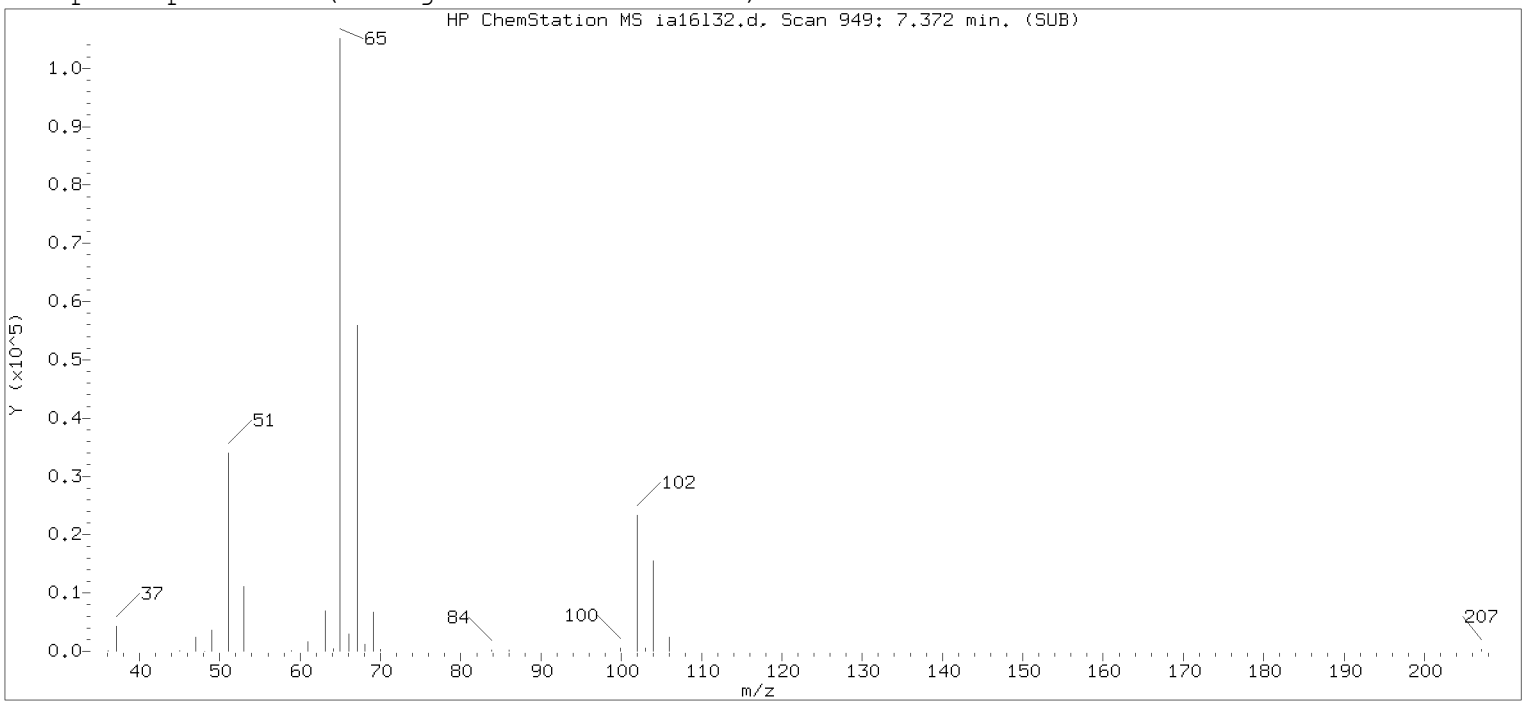
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 951
Retention Time (minutes): 7.384
Quant Ion : 102.00
Area (flag) : 82168M
On-Column Amount (ng) : 9.5789
Integration start scan : 936 Integration stop scan: 962
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

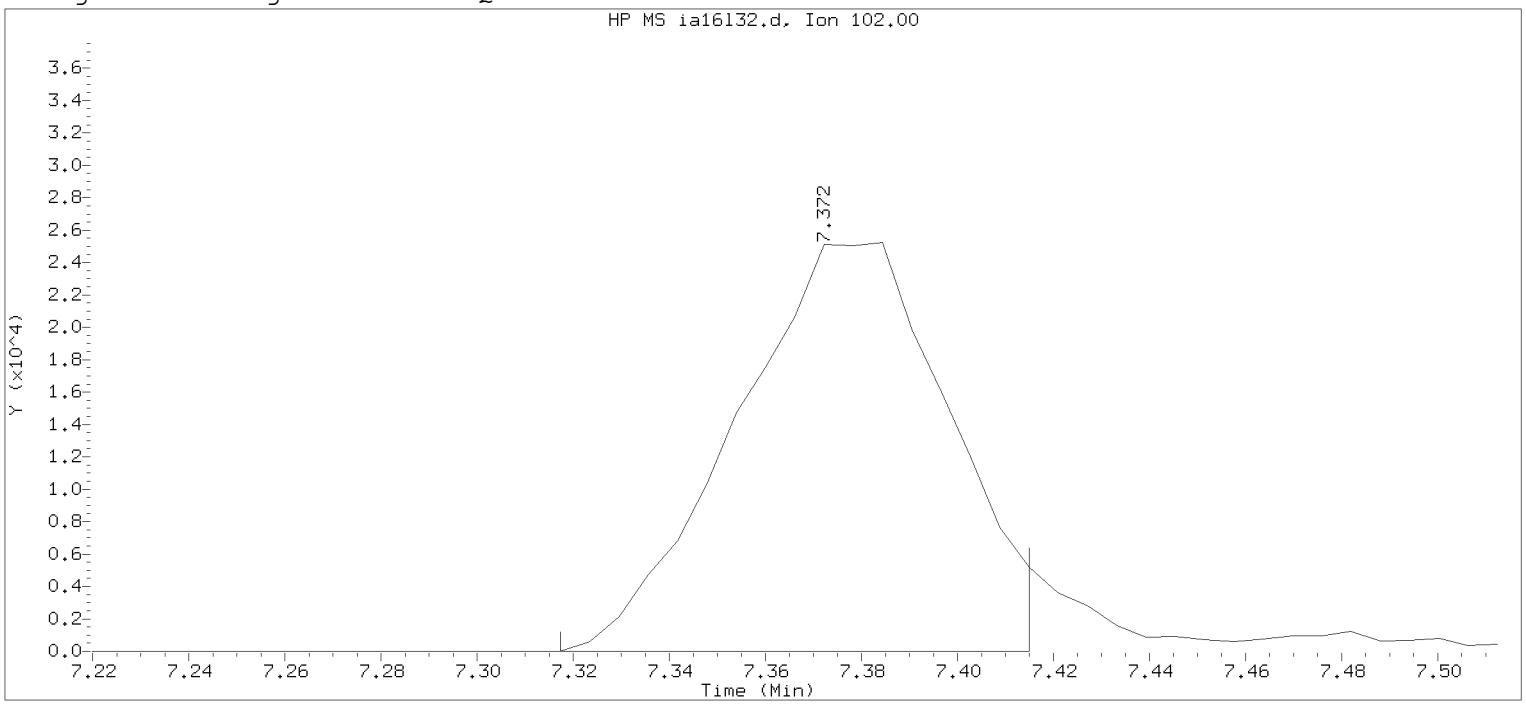
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

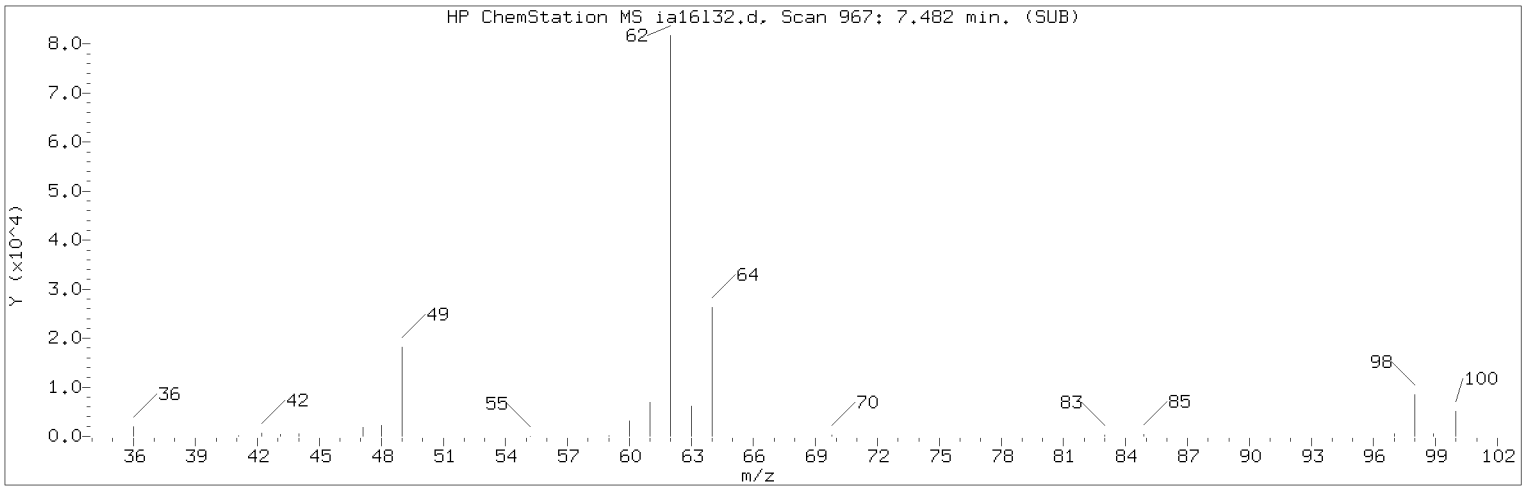
Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 12:33 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

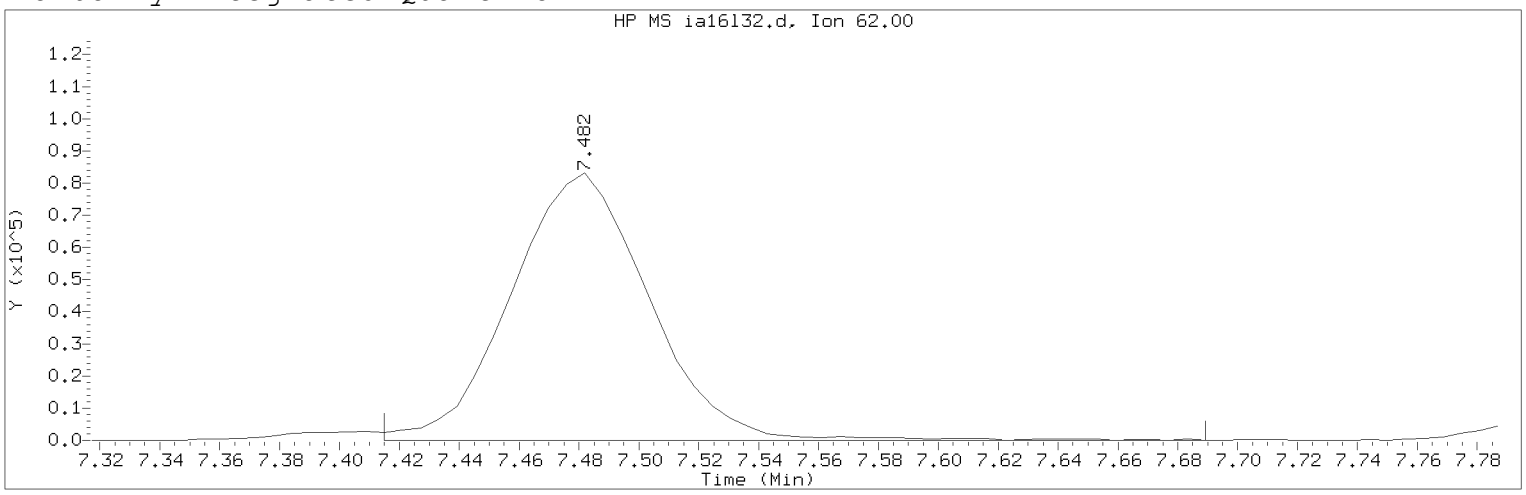
Compound Number : 57
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 949
Retention Time (minutes): 7.372
Quant Ion : 102.00
Area : 77165
On-column Amount (ng) : 8.9958
Integration start scan : 939 Integration stop scan: 955
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: mec29284

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 13:40 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

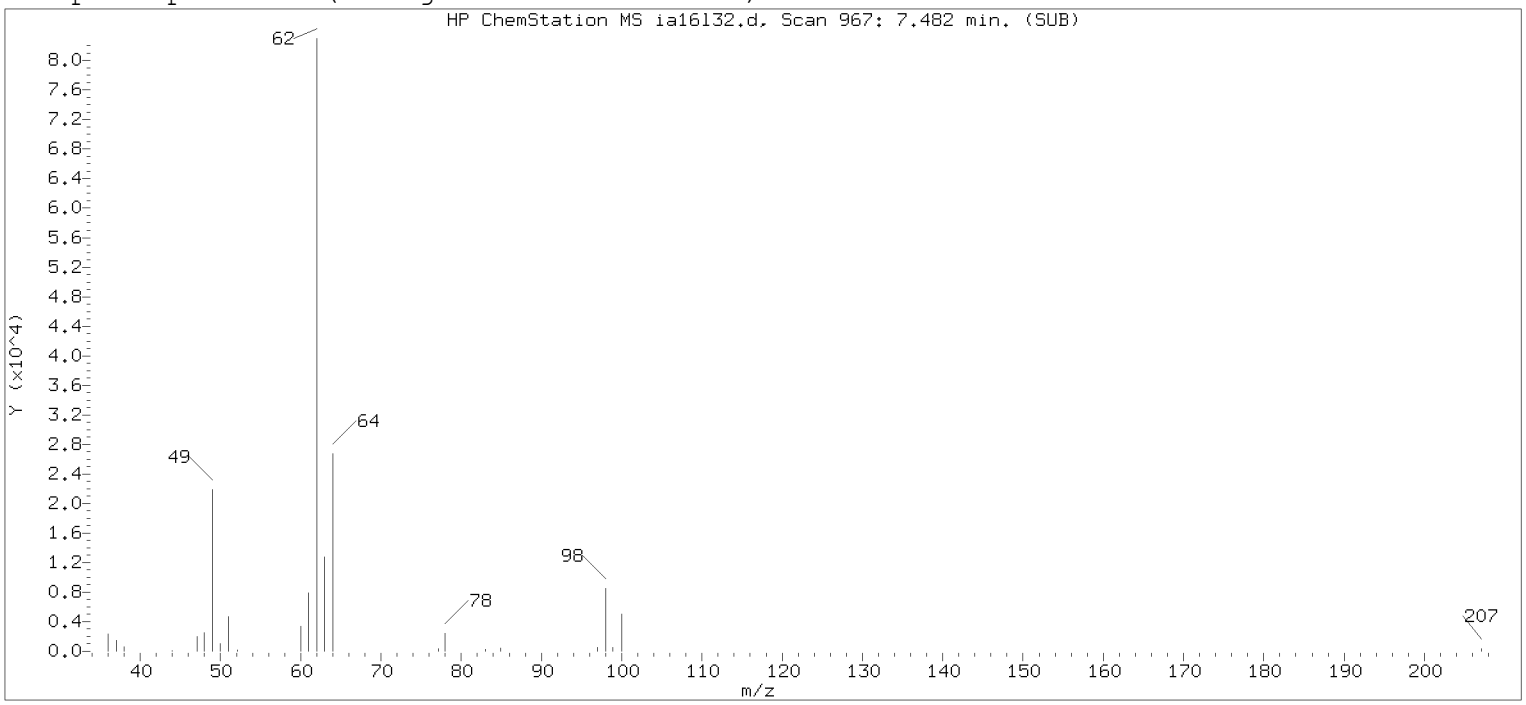
Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 967
Retention Time (minutes): 7.482
Quant Ion : 62.00
Area (flag) : 266156M
On-Column Amount (ng) : 5.1827
Integration start scan : 955 Integration stop scan: 1000
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

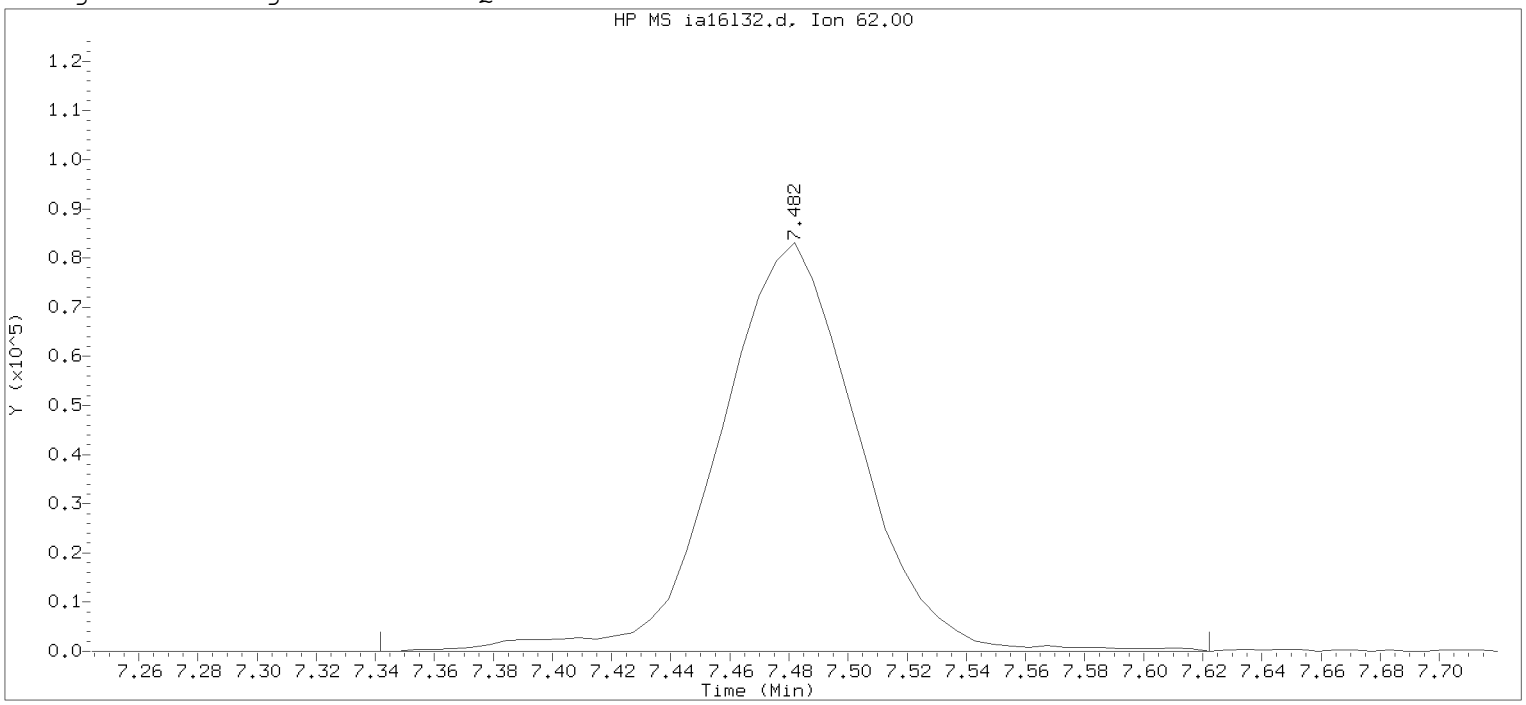
Analyst responsible for change: Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user ID: mec29284

Secondary review performed and digitally signed by Kari Becker on 04/17/2019 at 16:12.
PARALLAX ID: kmb29664

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP19930.i/19apr16a.b/ia16l32.d Instrument ID: HP19930.i
Injection date and time: 16-APR-2019 12:04 Analyst ID: MEC29284

Method used: /chem2/HP19930.i/19apr16a.b/m8260c25.m Sublist used: 12026
Calibration date and time: 16-APR-2019 11:51
Date, time and analyst ID of latest file update: 16-Apr-2019 12:33 mec29284

Sample Name: LCSI23 Lab Sample ID: LCSI23

Compound Number : 59
Compound Name : 1,2-Dichloroethane
Scan Number : 967
Retention Time (minutes): 7.482
Quant Ion : 62.00
Area : 270921
On-column Amount (ng) : 5.2755
Integration start scan : 943 Integration stop scan: 989
Y at integration start : 0 Y at integration end: 0

Digitally signed by Miranda E. Campbell on 04/16/2019 at 13:41.
Target 3.5 esignature user name: mec29284

Semivolatiles by GC/MS Data

Case Narrative/Conformance Summary

Semivolatiles by GC/MS

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Case Narrative/Conformance Summary

CLIENT: Draper Aden Associates, Inc.
SDG: RAF34

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Sample #	Client ID	Matrix Liquid	Matrix Solid	DF	Comments
1030977	5W5B	X		1	
1030978	5W7B	X		1	Unspiked
1030979	5W7B Matrix Spike	X		1	Matrix Spike
1030980	5W7B Matrix Spike Dup	X		1	Matrix Spike Duplicate
1030981	5WC21	X		1	
1030982	5WDUP	X		1	Field Duplicate Sample
1030983	5WC22	X		1	
1030984	5WC23	X		1	

See QC Reference List for Associated Batch QC Samples

SAMPLE RECEIPT:

Samples were received in good condition and within temperature requirements.

HOLDING TIME:

All holding times were met.

PREPARATION/EXTRACTION/DIGESTION:

No problems were encountered.

CALIBRATION/STANDARDIZATION:

All criteria were met.

QUALITY CONTROL AND NONCONFORMANCE SUMMARY:

All QC is within specification.

SAMPLE ANALYSIS:

No problems were encountered with the analysis of the samples.

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Case Narrative/Conformance Summary

CLIENT: Draper Aden Associates, Inc.
SDG: RAF34

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

Abbreviation Key

UNSPK = Unspiked (for MS/MSD)	LOQ = Limit of Quantitation
+MS = Matrix Spike	MDL = Method Detection Limit
MSD = Matrix Spike Duplicate	ND = Not Detected
BKG = Background (for Duplicate)	J = Estimated Value
D = Duplicate (DUP)	E= out of calibration range
LCS = Lab Control Sample	RE = Repreparation/Reanalysis
LCSD = Lab Control Sample Duplicate	* = Out of Specification

Quality Control and Calibration Summary Forms

Semivolatiles by GC/MS

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Quality Control Reference List
GC/MS Semivolatiles

CLIENT: Draper Aden Associates, Inc.
SDG: RAF34

Fraction: Semivolatiles by GC/MS

Analysis	Batch Number	Sample Number	Analysis Date
SVOAs 8270D/E MINI	19102WAP026	SBLKWP102	04/15/2019 22:00
		102WPLCS	04/15/2019 22:29
		1030977	04/15/2019 22:57
		1030978 UNSPK	04/15/2019 23:26
		1030979 MS	04/15/2019 23:55
		1030980 MSD	04/16/2019 00:23
		1030981	04/16/2019 00:52
		1030982	04/16/2019 01:21
		1030983	04/16/2019 01:50
		1030984	04/16/2019 02:18

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Quality Control Summary
Method Blank
GC/MS Semivolatiles
SDG: RAF34
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

19102WAP026 / SBLKWP102 Analyte	Analysis Date	Blank Results	Units	MDL	LOQ
Nitrobenzene	04/15/19	N.D.	ug/l	0.8	10
2-Nitroaniline	04/15/19	N.D.	ug/l	2	10
2,6-Dinitrotoluene	04/15/19	N.D.	ug/l	0.7	10
2,4-Dinitrotoluene	04/15/19	N.D.	ug/l	1	10
Diethylphthalate	04/15/19	N.D.	ug/l	2	10
4-Nitroaniline	04/15/19	N.D.	ug/l	1	20
bis(2-Ethylhexyl)phthalate	04/15/19	N.D.	ug/l	5	6

Quality Control Summary
Surrogates
GC/MS Semivolatiles
SDG: RAF34
Matrix: LIQUID

Fraction: Semivolatiles by GC/MS

19102WAP026	2-Fluorobiphenyl		Nitrobenzene-d5		Terphenyl-d14	
	Spike Added	100 ug/l	Spike Added	100 ug/l	Spike Added	100 ug/l
Sample	% Recovery	Limits	% Recovery	Limits	% Recovery	Limits
SBLKWP102	82	44 - 102	98	35 - 107	86	33 - 126
102WPLCS	78	44 - 102	91	35 - 107	81	33 - 126
1030977	80	44 - 102	92	35 - 107	82	33 - 126
1030978 UNSPK	81	44 - 102	98	35 - 107	87	33 - 126
1030979 MS	76	44 - 102	88	35 - 107	44	33 - 126
1030980 MSD	85	44 - 102	96	35 - 107	65	33 - 126
1030981	82	44 - 102	99	35 - 107	68	33 - 126
1030982	65	44 - 102	78	35 - 107	58	33 - 126
1030983	80	44 - 102	96	35 - 107	69	33 - 126
1030984	85	44 - 102	97	35 - 107	78	33 - 126

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

UNSPK: 1030978 MS: 1030979 MSD: 1030980 **Analyte**	Batch: **19102WAP026** (Sample number(s): 1030977-1030984)								
	Spike Added ug/l MS/MSD	**Unspiked Conc ug/l**	**MS Conc ug/l**	**MSD Conc ug/l**	**MS %Rec**	**MSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Nitrobenzene	50.4 / 50.2	N.D.	45.91	50.71	91	101	59-117	10	30
2-Nitroaniline	50.4 / 50.2	N.D.	46.02	50.11	91	100	66-126	9	30
2,6-Dinitrotoluene	50.4 / 50.2	N.D.	44.59	46.95	88	94	71-113	5	30
2,4-Dinitrotoluene	50.4 / 50.2	N.D.	39.39	45.59	78	91	69-117	15	30
Diethylphthalate	50.4 / 50.2	N.D.	37.81	42.42	75	85	51-108	11	30
4-Nitroaniline	50.4 / 50.2	N.D.	41.41	46.29	82	92	47-102	11	30
bis(2-Ethylhexyl)phthalate	50.4 / 50.2	N.D.	36.14	43.49	72	87	68-120	18	30

Comments:
(2) The unspiked sample result is greater than four times the spike added.
* = Out of Specification

Results are being reported on an as received basis.

Quality Control Summary
Laboratory Control Standard (LCS)
Laboratory Control Standard Duplicate(LCSD)

SDG: RAF34
Matrix: LIQUID

GC/MS Semivolatiles

Fraction: Semivolatiles by GC/MS

LCS: 102WPLCS	Batch: **19102WAP026** (Sample number(s): 1030977-1030984)							
Analyte	**Spike Added ug/l**	**LCS Conc ug/l**	**LCSD Conc ug/l**	**LCS %Rec**	**LCSD %Rec**	**%Rec Limits**	**%RPD**	**%RPD Limits**
Nitrobenzene	50	46.22	NA	92	NA	59-117	NA	NA
2-Nitroaniline	50	45.96	NA	92	NA	66-126	NA	NA
2,6-Dinitrotoluene	50	43.42	NA	87	NA	71-113	NA	NA
2,4-Dinitrotoluene	50	40.56	NA	81	NA	69-117	NA	NA
Diethylphthalate	50	41.53	NA	83	NA	51-108	NA	NA
4-Nitroaniline	50	40.26	NA	81	NA	47-102	NA	NA
bis(2-Ethylhexyl)phthalate	50	45.37	NA	91	NA	68-120	NA	NA

Fraction: Semivolatiles by GC/MS

14241: SVOAs 8270D/E MINI Analyte Name	Default MDL	Default LOQ	Units
Nitrobenzene	0.8	10	ug/l
2-Nitroaniline	2	10	ug/l
2,6-Dinitrotoluene	0.7	10	ug/l
2,4-Dinitrotoluene	1	10	ug/l
Diethylphthalate	2	10	ug/l
4-Nitroaniline	1	20	ug/l
bis(2-Ethylhexyl)phthalate	5	6	ug/l

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: lc0210.d DFTPP Injection Date: 03/05/19

Instrument ID: HP20296 DFTPP Injection Time: 01:36

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	39.3
68	Less than 2.0% of mass 69	0.78 (1.45)1
69	Mass 69 relative abundance	54.2
70	Less than 2.0% of mass 69	0.22 (0.4)1
127	10.0 - 80.00% of mass 198	53.2
197	Less than 2.0% of mass 198	0.0
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	7.0
275	10.0 - 60.0% of mass 198	24.6
365	Greater than 1.00% of mass 198	3.27
441	Present, and less than mass 443	12.4
442	Greater than 50.00% of mass 198	74.7
443	15.00 - 24.00% of mass 442	14.6 (19.5)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	rvSTD0449 - SSTD7.5	lc0211.d	03/05/19	01:52
02	rvSTD0439 - SSTD.125	lc0212.d	03/05/19	02:40
03	rvSTD0439 - SSTD30	lc0213.d	03/05/19	03:08
04	rvSTD0439 - SSTD20	lc0214.d	03/05/19	03:37
05	rvSTD0439 - SSTD12.5	lc0215.d	03/05/19	04:06
06	rvSTD0439 - SSTD3.75	lc0216.d	03/05/19	04:35
07	rvSTD0439 - SSTD1.25	lc0217.d	03/05/19	05:04
08	rvSTD0439 - SSTD.25	lc0218.d	03/05/19	05:33
09	rvSTD0439 - SSTD0.125	lc0219.d	03/05/19	06:01
10	rvSTD0439 - SSTD0.025	lc0220.d	03/05/19	06:30
11	rvICV0479 - SSTD12.5	lc0221.d	03/05/19	06:59
12	BASICV3248 - SSTD12.5	lc0222.d	03/05/19	07:28
13	rvICV3208b - SSTD12.5	lc0223.d	03/05/19	07:56

5B

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID: ld0910.d DFTPP Injection Date: 04/15/19

Instrument ID: HP20296 DFTPP Injection Time: 20:57

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	10.0 - 80.00% of mass 198	59.1
68	Less than 2.0% of mass 69	1.17 (1.68)1
69	Mass 69 relative abundance	69.5
70	Less than 2.0% of mass 69	0.31 (0.45)1
127	10.0 - 80.00% of mass 198	59.0
197	Less than 2.0% of mass 198	0.83
198	Base peak, 100% relative abundance	100.0
199	5.00 to 9.00% of mass 198	6.28
275	10.0 - 60.0% of mass 198	20.9
365	Greater than 1.00% of mass 198	2.76
441	Present, and less than mass 443	11.9
442	Greater than 50.00% of mass 198	73.2
443	15.00 - 24.00% of mass 442	14.7 (20.1)2

1-Value is % mass 69 2-Value is % mass of 442

THIS TUNE APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	rvSTD0929 - SSTD7.5	ld0911.d	04/15/19	21:10
02	SBLKWP102	ld0912.d	04/15/19	22:00
03	102WPLCS	ld0913.d	04/15/19	22:29
04	1030977	ld0914.d	04/15/19	22:57
05	1030978	ld0915.d	04/15/19	23:26
06	1030979MS	ld0916.d	04/15/19	23:55
07	1030980MSD	ld0917.d	04/16/19	00:23
08	1030981	ld0918.d	04/16/19	00:52
09	1030982	ld0919.d	04/16/19	01:21
10	1030983	ld0920.d	04/16/19	01:50
11	1030984	ld0921.d	04/16/19	02:18

FORM V SV

6B

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date(s): 03/05/19 03/05/19

Calibration Times: 01:52 05:33

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = lc0212.d RRF0.25 = lc0218.d RRF1.25 = lc0217.d RRF3.75 = lc0216.d
RRF7.5 = lc0211.d RRF12.5 = lc0215.d RRF20 = lc0214.d RRF30 = lc0213.d

COMPOUND	RRF0.125	RF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
1,4-Dioxane			0.725	0.674	0.616	0.696	0.742	0.799	0.709	9	AVG
N-Nitrosodimethylamine			1.044	1.016	0.995	1.104	1.126	1.236	1.087	8	AVG
Pyridine			1.916	1.866	1.692	1.881	1.958	2.078	1.898	7	AVG
2-Picoline			1.931	1.907	1.812	2.005	2.065	2.210	1.988	7	AVG
N-Nitrosomethylethylamine			0.786	0.770	0.747	0.792	0.842	0.899	0.806	7	AVG
Methyl methanesulfonate			0.953	0.966	0.904	1.021	1.034	1.106	0.997	7	AVG
N-Nitrosodiethylamine		0.774	0.759	0.748	0.711	0.799	0.816	0.903	0.787	8	AVG
Ethyl methanesulfonate		0.861	0.814	0.802	0.741	0.834	0.859	0.939	0.836	7	AVG
Benzaldehyde			1.410	1.412	1.380	1.460	1.398	1.250	1.385	5	AVG
Phenol		2.412	2.299	2.306	2.170	2.398	2.449	2.574	2.373	5	AVG
Aniline		2.862	2.684	2.708	2.520	2.797	2.872	3.047	2.784	6	AVG
a-methylstyrene			0.274	0.307	0.292	0.313	0.331	0.325	0.307	7	AVG
bis(2-Chloroethyl)ether		1.842	1.757	1.708	1.612	1.766	1.841	1.955	1.783	6	AVG
2-Chlorophenol		1.457	1.424	1.472	1.388	1.528	1.593	1.695	1.508	7	AVG
1,3-Dichlorobenzene		1.674	1.611	1.590	1.463	1.678	1.685	1.810	1.644	6	AVG
1,4-Dichlorobenzene		1.953	1.634	1.591	1.449	1.671	1.690	1.793	1.683	9	AVG
Benzyl alcohol			0.895	0.986	0.961	1.056	1.065	1.075	1.006	7	AVG
1,2-Dichlorobenzene		1.656	1.568	1.516	1.409	1.574	1.608	1.720	1.579	6	AVG
Indene			1.790	2.010	1.962	2.192	2.224	2.218	2.066	8	AVG
2-Methylphenol		1.594	1.431	1.465	1.387	1.546	1.592	1.661	1.525	7	AVG
2,2'-oxybis(1-Chloropropane)		1.765	1.771	1.656	1.594	1.757	1.778	1.892	1.745	5	AVG
bis(2-Chloroisopropyl)ether		1.765	1.771	1.656	1.594	1.757	1.778	1.892	1.745	5	AVG
N-Nitrosopyrrolidine		0.843	0.797	0.809	0.762	0.864	0.888	0.936	0.843	7	AVG
Acetophenone		1.925	2.175	2.238	2.144	2.400	2.405	2.483	2.253	9	AVG
4-Methylphenol		1.834	1.634	1.672	1.540	1.734	1.762	1.859	1.719	7	AVG
Total Cresols		1.714	1.533	1.568	1.464	1.640	1.677	1.760	1.622	7	AVG
N-Nitroso-di-n-propylamine		1.189	1.318	1.281	1.159	1.300	1.316	1.400	1.280	6	AVG
N-Nitrosomorpholine			0.907	0.861	0.776	0.894	0.879	0.927	0.874	6	AVG
o-Toluidine		2.916	2.660	2.602	2.407	2.706	2.757	2.884	2.705	6	AVG
Hexachloroethane			0.712	0.675	0.658	0.742	0.743	0.802	0.722	7	AVG
Nitrobenzene		0.522	0.493	0.508	0.462	0.512	0.517	0.566	0.512	6	AVG
N-Nitrosopiperidine		0.194	0.192	0.199	0.184	0.208	0.208	0.230	0.202	8	AVG
Isophorone		0.847	0.830	0.879	0.805	0.898	0.907	0.996	0.880	7	AVG
2-Nitrophenol			0.186	0.192	0.183	0.202	0.205	0.228	0.199	8	AVG
2,4-Dimethylphenol		0.423	0.439	0.441	0.403	0.446	0.458	0.494	0.443	6	AVG
O,O,O-Triethylphosphorothioat			0.166	0.177	0.154	0.180	0.180	0.194	0.175	8	AVG
bis(2-Chloroethoxy)methane		0.597	0.576	0.571	0.539	0.604	0.562	0.589	0.577	4	AVG
Benzoic acid			0.249	0.290	0.268	0.312	0.322	0.345	0.298	12	AVG
2,4-Dichlorophenol		0.325	0.309	0.320	0.287	0.336	0.330	0.361	0.324	7	AVG
1,2,4-Trichlorobenzene		0.328	0.347	0.343	0.309	0.356	0.350	0.379	0.345	6	AVG
Naphthalene	1.233	1.161	1.115	1.113	1.021	1.158	1.166	1.259	1.153	6	AVG
4-Chloroaniline		0.457	0.430	0.449	0.418	0.470	0.471	0.513	0.458	7	AVG
2,6-Dichlorophenol		0.309	0.301	0.309	0.279	0.321	0.315	0.342	0.311	6	AVG
Hexachloropropene			0.209	0.228	0.208	0.242	0.246	0.263	0.233	9	AVG
Hexachlorobutadiene		0.209	0.199	0.191	0.176	0.194	0.201	0.216	0.198	7	AVG
Quinoline			0.637	0.668	0.603	0.669	0.692	0.744	0.669	7	AVG
Caprolactam			0.105	0.110	0.102	0.103	0.097	0.106	0.104	4	AVG
N-Nitrosodi-n-butylamine			0.305	0.321	0.294	0.331	0.413	0.442	0.351	17	AVG
4-Chloro-3-methylphenol		0.373	0.363	0.369	0.353	0.383	0.393	0.425	0.380	6	AVG
Safrole			0.269	0.280	0.248	0.281	0.287	0.311	0.279	7	AVG
2-Methylnaphthalene	0.800	0.755	0.719	0.722	0.659	0.743	0.746	0.813	0.745	6	AVG
1-Methylnaphthalene	0.753	0.688	0.654	0.683	0.622	0.697	0.708	0.770	0.697	7	AVG

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date(s): 03/05/19 03/05/19

Calibration Times: 01:52 05:33

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = lc0212.d RRF0.25 = lc0218.d RRF1.25 = lc0217.d RRF3.75 = lc0216.d
RRF7.5 = lc0211.d RRF12.5 = lc0215.d RRF20 = lc0214.d RRF30 = lc0213.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	$\overline{RRF}$	% RSD	CAL. METHOD
Hexachlorocyclopentadiene			0.446	0.456	0.428	0.500	0.497	0.512	0.473	7	AVG
1,2,4,5-Tetrachlorobenzene		0.665	0.651	0.702	0.641	0.715	0.738	0.778	0.699	7	AVG
cis-Isosafrole			0.578	0.618	0.574	0.680	0.685	0.723	0.643	10	AVG
2,4,6-Trichlorophenol		0.483	0.416	0.458	0.443	0.480	0.500	0.533	0.473	8	AVG
2,4,5-Trichlorophenol		0.452	0.457	0.487	0.454	0.516	0.517	0.524	0.487	7	AVG
trans-Isosafrole			0.674	0.705	0.650	0.749	0.765	0.799	0.724	8	AVG
Isosafrole			0.658	0.690	0.637	0.737	0.751	0.786	0.710	8	AVG
1,1'-Biphenyl		1.596	1.696	1.727	1.654	1.857	1.839	1.884	1.750	6	AVG
2-Chloronaphthalene		1.599	1.384	1.417	1.350	1.510	1.670	1.799	1.533	11	AVG
1-Chloronaphthalene		1.409	1.255	1.325	1.176	1.307	1.216	1.216	1.272	6	AVG
Diphenyl ether		1.057	0.907	0.949	0.856	0.971	0.980	1.035	0.965	7	AVG
2-Nitroaniline			0.426	0.436	0.427	0.473	0.485	0.514	0.460	8	AVG
1,4-Naphthoquinone			0.527	0.581	0.551	0.597	0.606	0.635	0.583	7	AVG
1,4-Dinitrobenzene			0.204	0.221	0.212	0.236	0.249	0.264	0.231	10	AVG
Dimethylphthalate			1.517	1.615	1.465	1.616	1.477	1.562	1.542	4	AVG
1,3-Dinitrobenzene			0.229	0.253	0.232	0.257	0.268	0.271	0.252	7	AVG
2,6-Dinitrotoluene		0.311	0.345	0.352	0.335	0.368	0.376	0.397	0.355	8	AVG
Acenaphthylene	2.266	2.009	1.928	2.003	1.868	2.103	2.161	2.243	2.073	7	AVG
3-Nitroaniline			0.345	0.395	0.371	0.407	0.414	0.447	0.396	9	AVG
Acenaphthene	1.435	1.629	1.491	1.488	1.378	1.566	1.592	1.653	1.529	6	AVG
2,4-Dinitrophenol				0.212	0.206	0.245	0.254	0.261	0.236	11	AVG
4-Nitrophenol				0.275	0.249	0.321	0.319	0.336	0.300	12	AVG
Pentachlorobenzene		0.624	0.614	0.605	0.538	0.618	0.632	0.645	0.611	6	AVG
2,4-Dinitrotoluene			0.434	0.485	0.452	0.501	0.488	0.497	0.476	6	AVG
2,4_2,6-Dinitrotoluenes		0.407	0.389	0.419	0.394	0.434	0.432	0.447	0.417	5	AVG
Dibenzofuran		2.090	1.850	2.012	1.784	2.018	2.040	2.128	1.989	6	AVG
1-Naphthylamine				1.434	1.333	1.505	1.550	1.658	1.496	8	AVG
2,3,4,6-Tetrachlorophenol		0.422	0.365	0.387	0.349	0.400	0.415	0.436	0.396	8	AVG
2-Naphthylamine				1.353	1.269	1.483	1.540	1.639	1.457	10	AVG
Diethylphthalate			1.483	1.573	1.425	1.538	1.429	1.590	1.506	5	AVG
Thionazin			0.307	0.311	0.308	0.322	0.300	0.335	0.314	4	AVG
Fluorene	1.771	1.713	1.523	1.585	1.450	1.608	1.612	1.714	1.622	7	AVG
4-Chlorophenyl-phenylether		0.741	0.721	0.717	0.671	0.756	0.744	0.782	0.733	5	AVG
5-Nitro-o-toluidine		0.396	0.423	0.450	0.421	0.469	0.449	0.495	0.443	7	AVG
4-Nitroaniline		0.448	0.409	0.429	0.365	0.394	0.377	0.419	0.406	7	AVG
4,6-Dinitro-2-methylphenol				0.141	0.133	0.149	0.151	0.167	0.148	9	AVG
N-Nitrosodiphenylamine (1)		0.674	0.671	0.688	0.615	0.692	0.740	0.775	0.693	7	AVG
NDPA as diphenylamine		0.674	0.671	0.688	0.615	0.692	0.740	0.775	0.693	7	AVG
1,2-Diphenylhydrazine		0.998	1.026	1.038	0.944	1.057	1.088	1.109	1.037	5	AVG
Tetraethyldithiopyrophosphate			0.171	0.172	0.154	0.167	0.171	0.182	0.170	5	AVG
1,3,5-Trinitrobenzene				0.086	0.076	0.090	0.094	0.103	0.090	11	AVG
Diallate (peak 1)			0.434	0.445	0.416	0.432	0.426	0.446	0.433	3	AVG
Phorate	0.706	0.593	0.629	0.653	0.583	0.643	0.611	0.656	0.634	6	AVG
Phenacetin		0.441	0.465	0.495	0.446	0.494	0.511	0.562	0.488	9	AVG
4-Bromophenyl-phenylether		0.244	0.220	0.220	0.198	0.227	0.244	0.242	0.228	7	AVG
Diallate (peak 2)			0.390	0.362	0.321	0.355	0.342	0.393	0.361	8	AVG
Diallate trans/cis			0.426	0.431	0.400	0.419	0.412	0.437	0.421	3	AVG
Hexachlorobenzene	0.292	0.260	0.239	0.249	0.216	0.252	0.268	0.281	0.257	9	AVG
Dimethoate			0.385	0.422	0.378	0.406	0.426	0.462	0.413	7	AVG
Atrazine			0.228	0.219	0.192	0.209	0.203	0.202	0.209	6	AVG
Pentachlorophenol			0.143	0.165	0.156	0.179	0.185	0.191	0.170	11	AVG
4-Aminobiphenyl		0.715	0.797	0.800	0.724	0.813	0.836	0.881	0.795	7	AVG

(1) Cannot be separated from Diphenylamine
4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.

6C

SEMIVOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date(s): 03/05/19 03/05/19

Calibration Times: 01:52 05:33

Min $\overline{RRF}$ for SPCC(#) = 0.050 Max %RSD for CCC(*) = 30%

LAB FILE ID:RRF0.125 = lc0212.d RRF0.25 = lc0218.d RRF1.25 = lc0217.d RRF3.75 = lc0216.d
RRF7.5 = lc0211.d RRF12.5 = lc0215.d RRF20 = lc0214.d RRF30 = lc0213.d

COMPOUND	RRF0.125	RRF0.25	RRF1.25	RRF3.75	RRF7.5	RRF12.5	RRF20	RRF30	RRF	% RSD	CAL. METHOD
Pentachloronitrobenzene			0.105	0.105	0.101	0.114	0.119	0.128	0.112	9	AVG
Pronamide		0.353	0.370	0.388	0.337	0.391	0.398	0.435	0.382	8	AVG
Dinoseb				0.213	0.200	0.227	0.237	0.257	0.227	10	AVG
Phenanthrene	1.390	1.249	1.204	1.195	1.083	1.266	1.318	1.409	1.264	9	AVG
Anthracene	1.307	1.165	1.228	1.214	1.082	1.271	1.283	1.354	1.238	7	AVG
Carbazole		1.097	1.063	1.099	0.979	1.120	1.142	1.243	1.106	7	AVG
Methyl parathion			0.288	0.334	0.305	0.341	0.350	0.374	0.332	9	AVG
Di-n-butylphthalate			1.411	1.435	1.337	1.468	1.520	1.618	1.465	7	AVG
Parathion			0.187	0.211	0.191	0.225	0.229	0.243	0.214	10	AVG
4-Nitroquinoline-1-oxide				0.130	0.134	0.155	0.172	0.182	0.154	15	AVG
Octachlorostyrene			0.090	0.097	0.090	0.100	0.105	0.102	0.097	6	AVG
Isodrin		0.146	0.144	0.141	0.125	0.139	0.144	0.150	0.141	6	AVG
Fluoranthene	1.446	1.315	1.310	1.325	1.202	1.368	1.423	1.502	1.361	7	AVG
Benzidine			0.831	0.892	0.847	0.955	0.965	0.994	0.914	7	AVG
Pyrene	1.525	1.419	1.336	1.319	1.231	1.396	1.408	1.504	1.392	7	AVG
p-Dimethylaminoazobenzene			0.212	0.217	0.213	0.238	0.252	0.259	0.232	9	AVG
Chlorobenzilate			0.412	0.452	0.434	0.488	0.497	0.526	0.468	9	AVG
3,3'-Dimethylbenzidine			0.806	0.889	0.882	0.974	1.019	1.057	0.938	10	AVG
Butylbenzylphthalate			0.618	0.668	0.649	0.721	0.731	0.786	0.696	9	AVG
2-Acetylaminofluorene				0.568	0.572	0.638	0.653	0.697	0.626	9	AVG
3,3'-Dichlorobenzidine			0.426	0.461	0.463	0.523	0.536	0.553	0.494	10	AVG
4,4'-Methylenebis(2-chloroani			0.220	0.262	0.257	0.295	0.301	0.305	0.273	12	AVG
Benzo(a)anthracene	1.471	1.214	1.248	1.299	1.218	1.383	1.409	1.461	1.338	8	AVG
Chrysene	1.172	1.197	1.181	1.218	1.146	1.288	1.330	1.390	1.240	7	AVG
bis(2-Ethylhexyl)phthalate			0.892	0.968	0.973	1.066	1.090	1.185	1.029	10	AVG
6-Methylchrysene			0.816	0.832	0.825	0.927	0.956	1.022	0.896	9	AVG
Di-n-octylphthalate			1.455	1.631	1.642	1.799	1.826	2.015	1.728	11	AVG
Benzo(b)fluoranthene	1.445	1.236	1.241	1.266	1.169	1.348	1.339	1.440	1.311	8	AVG
7,12-Dimethylbenz[a]anthracen		0.518	0.494	0.538	0.488	0.585	0.581	0.621	0.546	9	AVG
Benzo(k)fluoranthene	1.219	1.250	1.143	1.241	1.138	1.282	1.299	1.357	1.241	6	AVG
Benzo(a)pyrene	1.291	1.184	1.128	1.164	1.103	1.253	1.275	1.355	1.219	7	AVG
3-Methylcholanthrene		0.610	0.559	0.606	0.567	0.645	0.667	0.703	0.623	8	AVG
Dibenz(a,h)acridine			0.925	0.985	0.953	1.081	1.112	1.165	1.037	9	AVG
Dibenz(a,j)acridine			0.933	0.983	0.937	1.055	1.072	1.123	1.017	8	AVG
Indeno(1,2,3-cd)pyrene	1.269	1.115	1.118	1.116	1.103	1.269	1.314	1.394	1.212	9	AVG
Dibenz(a,h)anthracene	1.357	1.196	1.144	1.178	1.117	1.258	1.281	1.344	1.234	7	AVG
Benzo(g,h,i)perylene	1.332	1.222	1.177	1.204	1.128	1.280	1.287	1.365	1.249	6	AVG
Total PAHs	1.209	1.126	1.072	1.095	1.007	1.158	1.149	1.220	1.129	6	AVG
2-Fluorophenol		1.496	1.526	1.519	1.436	1.571	1.597	1.726	1.553	6	AVG
Phenol-d6		2.215	2.003	2.019	1.913	2.102	2.161	2.308	2.103	6	AVG
Nitrobenzene-d5		0.495	0.494	0.493	0.452	0.505	0.512	0.559	0.502	6	AVG
2-Fluorobiphenyl		1.653	1.625	1.658	1.502	1.681	1.740	1.807	1.667	6	AVG
2,4,6-Tribromophenol		0.241	0.218	0.230	0.207	0.238	0.245	0.262	0.234	8	AVG
Terphenyl-d14		0.900	0.858	0.854	0.786	0.875	0.884	0.942	0.871	5	AVG

Average %RSD 7

4,6-Dinitro-2-methylphenol and 4-Nitrophenol are at 10 ng/ul in the 5 standard.
Benzidine Levels in the 5,15,30,50,80,120 standards are 15,45,90,150,240,360 ng/ul, respectively.
Benzoic acid and 2,4-Dinitrophenol are at 15 ng/ul, 30 ng/ul,40 ng/ul in the 5,15,30 standards.

Internal Standard
Area and Retention Time Summary

Initial Calibration Standards:

/chem/HP20296.i/19mar04a.b/lc0211.d SSTD7.5
/chem/HP20296.i/19mar04a.b/lc0212.d SSTD0.125
/chem/HP20296.i/19mar04a.b/lc0213.d SSTD30
/chem/HP20296.i/19mar04a.b/lc0214.d SSTD20
/chem/HP20296.i/19mar04a.b/lc0215.d SSTD12.5
/chem/HP20296.i/19mar04a.b/lc0216.d SSTD3.75
/chem/HP20296.i/19mar04a.b/lc0217.d SSTD1.25
/chem/HP20296.i/19mar04a.b/lc0218.d SSTD0.25

Area Summary

	File ID:										
Internal Standard Name	lc0211.d	lc0212.d	lc0213.d	lc0214.d	lc0215.d	lc0216.d	lc0217.d	lc0218.d	Avg. Area	%RSD	In Spec
1,4-Dichlorobenzene-d4	183308	155907	138547	141374	142864	146728	142906	144397	149504	10	Yes
Naphthalene-d8	704176	601452	520056	541367	546756	548029	554843	555885	571570	10	Yes
Acenaphthene-d10	334468	282332	247791	252128	255386	264105	269162	261728	270888	10	Yes
Phenanthrene-d10	656092	529922	469417	465701	490141	505806	497119	495347	513693	12	Yes
Pyrene-d10	638422	534034	472757	478582	483630	508414	501659	494684	514023	10	Yes
Perylene-d12	677101	551885	505887	514509	505815	523278	523297	504712	538310	11	Yes

%RSD of internal standard area is flagged out of spec if greater than 30.

RT Summary

	File ID:								
Internal Standard Name	lc0211.d	lc0212.d	lc0213.d	lc0214.d	lc0215.d	lc0216.d	lc0217.d	lc0218.d	Avg. RT
1,4-Dichlorobenzene-d4	6.931	6.931	6.936	6.931	6.931	6.926	6.931	6.926	6.930
Naphthalene-d8	8.910	8.910	8.915	8.910	8.910	8.910	8.910	8.905	8.910
Acenaphthene-d10	11.739	11.734	11.739	11.739	11.739	11.734	11.734	11.734	11.737
Phenanthrene-d10	13.660	13.660	13.665	13.665	13.665	13.660	13.660	13.660	13.662
Pyrene-d10	15.692	15.692	15.697	15.697	15.692	15.692	15.692	15.692	15.693
Perylene-d12	20.249	20.249	20.255	20.254	20.254	20.249	20.249	20.249	20.251

Comments:_____

_____

Report generated on 03/05/2019 at 17:00

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS | LAB CODE: LANCAS | INSTRUMENT: HP20296

Method: SW-846 8270D MINI | File ID: lc0221.d

ICV SAMPLE ID: rvICV0479 | BATCH: 19MAR04A026 | Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
1,4-Dioxane	12.50	12.38	-1	30	YES
N-Nitrosodimethylamine	12.50	12.52	0	30	YES
Pyridine	12.50	11.38	-9	30	YES
2-Picoline	12.50	12.04	-4	30	YES
N-Nitrosomethylethylamine	12.50	11.69	-6	30	YES
Methyl methanesulfonate	12.50	12.45	0	30	YES
N-Nitrosodiethylamine	12.50	12.13	-3	30	YES
Ethyl methanesulfonate	12.50	11.87	-5	30	YES
Phenol	12.50	12.06	-4	30	YES
Aniline	12.50	10.47	-16	30	YES
bis(2-Chloroethyl)ether	12.50	12.08	-3	30	YES
2-Chlorophenol	12.50	12.22	-2	30	YES
1,3-Dichlorobenzene	12.50	12.35	-1	30	YES
1,4-Dichlorobenzene	12.50	12.26	-2	30	YES
Benzyl alcohol	12.50	13.31	7	30	YES
1,2-Dichlorobenzene	12.50	12.37	-1	30	YES
Indene	12.50	17.03	36	30	NO*
2-Methylphenol	12.50	11.74	-6	30	YES
2,2'-oxybis(1-Chloropropane	12.50	11.60	-7	30	YES
bis(2-Chloroisopropyl)ether	12.50	11.60	-7	30	YES
N-Nitrosopyrrolidine	12.50	11.90	-5	30	YES
Acetophenone	12.50	13.27	6	30	YES
4-Methylphenol	12.50	12.26	-2	30	YES
N-Nitroso-di-n-propylamine	12.50	12.45	0	30	YES
N-Nitrosomorpholine	12.50	11.90	-5	30	YES
o-Toluidine	12.50	11.57	-7	30	YES
Total Cresols	25.00	24.00	-4	30	YES
Hexachloroethane	12.50	12.05	-4	30	YES
Nitrobenzene	12.50	12.02	-4	30	YES
N-Nitrosopiperidine	12.50	11.69	-6	30	YES
Isophorone	12.50	11.96	-4	30	YES
2-Nitrophenol	12.50	12.23	-2	30	YES
bis(2-Chloroethoxy)methane	12.50	12.24	-2	30	YES
Benzoic acid	25.00	28.60	14	30	YES
O,O,O-Triethylphosphorothio	12.50	12.96	4	30	YES
2,4-Dichlorophenol	12.50	12.24	-2	30	YES
1,2,4-Trichlorobenzene	12.50	12.32	-1	30	YES

NC = Could not calculate

Comments: __*Compound fails, run any hits under valid ICV

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lc0221.d

ICV SAMPLE ID: rvICV0479 BATCH: 19MAR04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Naphthalene	12.50	11.95	-4	30	YES
4-Chloroaniline	12.50	12.03	-4	30	YES
2,6-Dichlorophenol	12.50	11.96	-4	30	YES
Hexachloropropene	12.50	12.96	4	30	YES
Hexachlorobutadiene	12.50	12.72	2	30	YES
Quinoline	12.50	12.51	0	30	YES
N-Nitrosodi-n-butylamine	12.50	11.00	-12	30	YES
4-Chloro-3-methylphenol	12.50	12.30	-2	30	YES
Safrole	12.50	11.84	-5	30	YES
2-Methylnaphthalene	12.50	12.12	-3	30	YES
1-Methylnaphthalene	12.50	12.20	-2	30	YES
1,2,4,5-Tetrachlorobenzene	12.50	12.57	1	30	YES
cis-Isosafrole	1.50	1.46	-2	30	YES
2,4,6-Trichlorophenol	12.50	12.45	0	30	YES
2,4,5-Trichlorophenol	12.50	12.72	2	30	YES
trans-Isosafrole	11.00	10.45	-5	30	YES
1,1'-Biphenyl	12.50	13.00	4	30	YES
2-Chloronaphthalene	12.50	12.12	-3	30	YES
Isosafrole	12.50	11.91	-5	30	YES
1-Chloronaphthalene	12.50	12.63	1	30	YES
Diphenyl ether	12.50	12.35	-1	30	YES
2-Nitroaniline	12.50	12.36	-1	30	YES
1,4-Naphthoquinone	15.63	15.25	-2	30	YES
1,4-Dinitrobenzene	12.50	12.75	2	30	YES
Dimethylphthalate	12.50	12.62	1	30	YES
1,3-Dinitrobenzene	12.50	12.32	-1	30	YES
2,6-Dinitrotoluene	12.50	12.53	0	30	YES
Acenaphthylene	12.50	12.49	0	30	YES
3-Nitroaniline	12.50	12.12	-3	30	YES
Acenaphthene	12.50	12.66	1	30	YES
2,4-Dinitrophenol	25.00	24.64	-1	30	YES
4-Nitrophenol	12.50	12.92	3	30	YES
Pentachlorobenzene	12.50	12.15	-3	30	YES
2,4-Dinitrotoluene	12.50	12.91	3	30	YES
Dibenzofuran	12.50	12.53	0	30	YES
2,4_2,6-Dinitrotoluenes	25.00	25.43	2	30	YES
1-Naphthylamine	25.00	21.01	-16	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lc0221.d

ICV SAMPLE ID: rvICV0479 BATCH: 19MAR04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,3,4,6-Tetrachlorophenol	12.50	13.14	5	30	YES
Diethylphthalate	12.50	13.51	8	30	YES
Thionazin	12.50	13.05	4	30	YES
Fluorene	12.50	11.97	-4	30	YES
4-Chlorophenyl-phenylether	12.50	12.18	-3	30	YES
5-Nitro-o-toluidine	12.50	12.68	1	30	YES
4-Nitroaniline	12.50	11.38	-9	30	YES
4,6-Dinitro-2-methylphenol	12.50	12.51	0	30	YES
N-Nitrosodiphenylamine	12.50	12.14	-3	30	YES
NDPA as diphenylamine	12.50	12.14	-3	30	YES
1,2-Diphenylhydrazine	12.50	12.54	0	30	YES
Tetraethyldithiopyrophospha	12.50	12.24	-2	30	YES
1,3,5-Trinitrobenzene	12.50	11.56	-7	30	YES
Diallate (peak 1)	9.38	8.92	-5	30	YES
Phorate	12.50	12.19	-3	30	YES
Phenacetin	12.50	11.81	-5	30	YES
4-Bromophenyl-phenylether	12.50	11.94	-4	30	YES
Diallate (peak 2)	3.13	3.42	10	30	YES
Hexachlorobenzene	12.50	11.70	-6	30	YES
Diallate trans/cis	12.50	12.34	-1	30	YES
Dimethoate	12.50	12.04	-4	30	YES
Pentachlorophenol	12.50	12.62	1	30	YES
4-Aminobiphenyl	12.50	13.22	6	30	YES
Pentachloronitrobenzene	12.50	12.19	-2	30	YES
Pronamide	12.50	12.65	1	30	YES
Dinoseb	12.50	11.71	-6	30	YES
Phenanthrene	12.50	12.18	-3	30	YES
Anthracene	12.50	12.11	-3	30	YES
Carbazole	12.50	12.55	0	30	YES
Methyl parathion	12.50	12.75	2	30	YES
Di-n-butylphthalate	12.50	12.07	-3	30	YES
Parathion	12.50	13.40	7	30	YES
4-Nitroquinoline-1-oxide	150.00	158.77	6	30	YES
Isodrin	12.50	12.49	0	30	YES
Fluoranthene	12.50	12.05	-4	30	YES
Benzidine	62.50	54.86	-12	30	YES
Pyrene	12.50	12.20	-2	30	YES

NC = Could not calculate

Comments: _____

Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lc0221.d

ICV SAMPLE ID: rvICV0479 BATCH: 19MAR04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
p-Dimethylaminoazobenzene	12.50	13.32	7	30	YES
Chlorobenzilate	12.50	12.66	1	30	YES
3,3'-Dimethylbenzidine	25.00	23.66	-5	30	YES
Butylbenzylphthalate	12.50	12.66	1	30	YES
2-Acetylaminofluorene	12.50	11.86	-5	30	YES
3,3'-Dichlorobenzidine	12.50	13.12	5	30	YES
Benzo(a)anthracene	12.50	12.38	-1	30	YES
Chrysene	12.50	12.57	1	30	YES
4,4'-Methylenebis(2-chloroa	12.50	12.86	3	30	YES
bis(2-Ethylhexyl)phthalate	12.50	12.53	0	30	YES
6-Methylchrysene	12.50	11.97	-4	30	YES
Di-n-octylphthalate	12.50	12.20	-2	30	YES
Benzo(b)fluoranthene	12.50	12.08	-3	30	YES
7,12-Dimethylbenz[a]anthrac	12.50	12.97	4	30	YES
Benzo(k)fluoranthene	12.50	12.11	-3	30	YES
Benzo(a)pyrene	12.50	11.86	-5	30	YES
3-Methylcholanthrene	12.50	12.56	1	30	YES
Dibenz(a,h)acridine	12.50	11.83	-5	30	YES
Dibenz(a,j)acridine	12.50	11.11	-11	30	YES
Indeno(1,2,3-cd)pyrene	12.50	12.15	-3	30	YES
Dibenz(a,h)anthracene	12.50	12.25	-2	30	YES
Benzo(g,h,i)perylene	12.50	11.72	-6	30	YES
Total PAHs	225.00	219.03	-3	30	YES

NC = Could not calculate

Comments: _____

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Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lc0222.d

ICV SAMPLE ID: BASICV3248 BATCH: 19MAR04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
Benzaldehyde	12.50	13.63	9	30	YES
Caprolactam	12.50	12.95	4	30	YES
Atrazine	12.50	13.51	8	30	YES

NC = Could not calculate

Comments: _____

_____

_____

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Lancaster Laboratories, Inc.
Semi Volatile Initial Calibration Verification

LAB NAME: LANCASTER LABS LAB CODE: LANCAS INSTRUMENT: HP20296

Method: SW-846 8270D MINI File ID: lc0223.d

ICV SAMPLE ID: rvICV3208b BATCH: 19MAR04A026 Sample Name: SSTD12.5

COMPOUND NAME	TRUE CONC.	ACTUAL CONC.	% DRIFT	%D window	INSPEC
2,4-Dimethylphenol	12.50	11.30	-10	30	YES
Hexachlorocyclopentadiene	25.00	22.68	-9	30	YES
2-Naphthylamine	25.00	24.95	0	30	YES

NC = Could not calculate

Comments: _____

_____

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7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 04/15/19 Time: 21:10

Lab File ID: ld0911.d Init. Calib. Date(s): 03/05/19 03/05/19

Init. Calib. Times(s): 01:52 05:33

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
1,4-Dioxane	0.709	0.771	8.160	7.5	9
N-Nitrosodimethylamine	1.087	1.158	7.990	7.5	7
Pyridine	1.898	2.043	8.070	7.5	8
2-Picoline	1.988	2.030	7.660	7.5	2
N-Nitrosomethylethylamine	0.806	0.862	8.020	7.5	7
Methyl methanesulfonate	0.997	1.180	8.870	7.5	18
N-Nitrosodiethylamine	0.787	0.804	7.670	7.5	2
Ethyl methanesulfonate	0.836	0.886	7.950	7.5	6
Benzaldehyde	1.385	1.678	9.090	7.5	21
Phenol	2.373	2.555	8.080	7.5	8
Aniline	2.784	2.985	8.040	7.5	7
a-methylstyrene	0.307	0.279	6.820	7.5	-9
bis(2-Chloroethyl)ether	1.783	2.052	8.630	7.5	15
2-Chlorophenol	1.508	1.509	7.500	7.5	0
1,3-Dichlorobenzene	1.644	1.585	7.230	7.5	-4
1,4-Dichlorobenzene	1.683	1.616	7.200	7.5	-4
Benzyl alcohol	1.006	0.993	7.400	7.5	-1
1,2-Dichlorobenzene	1.579	1.537	7.300	7.5	-3
Indene	2.066	1.973	7.160	7.5	-5
2-Methylphenol	1.525	1.608	7.910	7.5	5
2,2'-oxybis(1-Chloropropane)	1.745	2.629	11.300	7.5	51
bis(2-Chloroisopropyl)ether	1.745	2.629	11.300	7.5	51
N-Nitrosopyrrolidine	0.843	0.886	7.880	7.5	5
Acetophenone	2.253	2.472	8.230	7.5	10
4-Methylphenol	1.719	1.843	8.040	7.5	7
Total Cresols	1.622	1.725	15.950	15.0	6
N-Nitroso-di-n-propylamine	1.280	1.540	9.020	7.5	20
N-Nitrosomorpholine	0.874	1.102	9.460	7.5	26
o-Toluidine	2.704	2.841	7.880	7.5	5
Hexachloroethane	0.722	0.787	8.180	7.5	9
Nitrobenzene	0.512	0.606	8.890	7.5	19
N-Nitrosopiperidine	0.202	0.209	7.770	7.5	4
Isophorone	0.880	1.019	8.680	7.5	16
2-Nitrophenol	0.199	0.194	7.290	7.5	-3
2,4-Dimethylphenol	0.443	0.463	7.830	7.5	4
O,O,O-Triethylphosphorothioate	0.175	0.169	7.240	7.5	-4

FORM VII SV-1

7C

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 04/15/19 Time: 21:10

Lab File ID: ld0911.d Init. Calib. Date(s): 03/05/19 03/05/19

Init. Calib. Times(s): 01:52 05:33

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
bis(2-Chloroethoxy)methane	0.577	0.659	8.570	7.5	14
Benzoic acid	0.298	0.108	3.620	10.0	-64
2,4-Dichlorophenol	0.324	0.316	7.310	7.5	-3
1,2,4-Trichlorobenzene	0.345	0.330	7.190	7.5	-4
Naphthalene	1.153	1.148	7.460	7.5	0
4-Chloroaniline	0.458	0.476	7.780	7.5	4
2,6-Dichlorophenol	0.311	0.309	7.450	7.5	-1
Hexachloropropene	0.233	0.218	7.010	7.5	-6
Hexachlorobutadiene	0.198	0.183	6.930	7.5	-8
Quinoline	0.669	0.681	7.640	7.5	2
Caprolactam	0.104	0.109	7.870	7.5	5
N-Nitrosodi-n-butylamine	0.351	0.367	7.840	7.5	5
4-Chloro-3-methylphenol	0.380	0.394	7.790	7.5	4
Safrole	0.279	0.265	7.100	7.5	-5
2-Methylnaphthalene	0.745	0.723	7.280	7.5	-3
1-Methylnaphthalene	0.697	0.687	7.390	7.5	-1
Hexachlorocyclopentadiene	0.473	0.411	6.510	7.5	-13
1,2,4,5-Tetrachlorobenzene	0.699	0.684	7.350	7.5	-2
cis-Isosafrole	0.643	0.623	1.240	1.3	-3
2,4,6-Trichlorophenol	0.473	0.460	7.290	7.5	-3
2,4,5-Trichlorophenol	0.487	0.473	7.280	7.5	-3
trans-Isosafrole	0.724	0.719	6.180	6.2	-1
Isosafrole	0.710	0.703	7.420	7.5	-1
1,1'-Biphenyl	1.750	1.833	7.860	7.5	5
2-Chloronaphthalene	1.533	1.415	6.930	7.5	-8
1-Chloronaphthalene	1.272	1.364	8.040	7.5	7
Diphenyl ether	0.965	0.932	7.240	7.5	-3
2-Nitroaniline	0.460	0.477	7.770	7.5	4
1,4-Naphthoquinone	0.583	0.538	6.930	7.5	-8
1,4-Dinitrobenzene	0.231	0.222	7.220	7.5	-4
Dimethylphthalate	1.542	1.632	7.940	7.5	6
1,3-Dinitrobenzene	0.252	0.247	7.360	7.5	-2
2,6-Dinitrotoluene	0.355	0.361	7.620	7.5	2
Acenaphthylene	2.073	2.063	7.470	7.5	0
3-Nitroaniline	0.396	0.392	7.410	7.5	-1
Acenaphthene	1.529	1.538	7.540	7.5	1

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 04/15/19 Time: 21:10

Lab File ID: ld0911.d Init. Calib. Date(s): 03/05/19 03/05/19

Init. Calib. Times(s): 01:52 05:33

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
2,4-Dinitrophenol	0.236	0.160	6.790	10.0	-32
4-Nitrophenol	0.300	0.314	7.860	7.5	5
Pentachlorobenzene	0.611	0.571	7.010	7.5	-6
2,4-Dinitrotoluene	0.476	0.453	7.140	7.5	-5
2,4_2,6-Dinitrotoluenes	0.417	0.407	14.770	15.0	-2
Dibenzofuran	1.989	1.998	7.530	7.5	0
1-Naphthylamine	1.496	1.489	7.460	7.5	0
2,3,4,6-Tetrachlorophenol	0.396	0.354	6.700	7.5	-11
2-Naphthylamine	1.457	1.430	7.360	7.5	-2
Diethylphthalate	1.506	1.655	8.240	7.5	10
Thionazin	0.314	0.370	8.840	7.5	18
Fluorene	1.622	1.587	7.340	7.5	-2
4-Chlorophenyl-phenylether	0.733	0.739	7.560	7.5	1
5-Nitro-o-toluidine	0.443	0.451	7.630	7.5	2
4-Nitroaniline	0.406	0.434	8.020	7.5	7
4,6-Dinitro-2-methylphenol	0.148	0.130	6.590	7.5	-12
N-Nitrosodiphenylamine (1)	0.693	0.684	7.390	7.5	-1
NDPA as diphenylamine	0.693	0.684	7.390	7.5	-1
1,2-Diphenylhydrazine	1.037	1.387	10.030	7.5	34
Tetraethyldithiopyrophosphate	0.170	0.222	9.790	7.5	31
1,3,5-Trinitrobenzene	0.090	0.078	6.540	7.5	-13
Diallate (peak 1)	0.433	0.569	8.180	6.2	31
Phorate	0.634	0.914	10.810	7.5	44
Phenacetin	0.488	0.566	8.700	7.5	16
4-Bromophenyl-phenylether	0.228	0.218	7.160	7.5	-5
Diallate (peak 2)	0.361	0.438	1.550	1.3	22
Diallate trans/cis	0.421	0.547	9.730	7.5	30
Hexachlorobenzene	0.257	0.233	6.790	7.5	-9
Dimethoate	0.413	0.512	9.280	7.5	24
Atrazine	0.209	0.203	7.300	7.5	-3
Pentachlorophenol	0.170	0.128	5.630	7.5	-25
4-Aminobiphenyl	0.795	0.804	7.580	7.5	1
Pentachloronitrobenzene	0.112	0.109	7.340	7.5	-2
Pronamide	0.382	0.409	8.030	7.5	7
Dinoseb	0.227	0.204	6.740	7.5	-10
Phenanthrene	1.264	1.240	7.350	7.5	-2

(1) Cannot be Separated from Diphenylamine

7C cont

SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 04/15/19 Time: 21:10

Lab File ID: ld0911.d Init. Calib. Date(s): 03/05/19 03/05/19

Init. Calib. Times(s): 01:52 05:33

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Anthracene	1.238	1.263	7.650	7.5	2
Carbazole	1.106	1.143	7.750	7.5	3
Methyl parathion	0.332	0.385	8.710	7.5	16
Di-n-butylphthalate	1.465	1.534	7.850	7.5	5
Parathion	0.214	0.252	8.820	7.5	18
4-Nitroquinoline-1-oxide	0.154	0.091	4.420	7.5	-41
Octachlorostyrene	0.097	0.088	6.770	7.5	-10
Isodrin	0.141	0.144	7.630	7.5	2
Fluoranthene	1.361	1.302	7.170	7.5	-4
Benzidine	0.914	0.865	21.290	22.5	-5
Pyrene	1.392	1.354	7.290	7.5	-3
p-Dimethylaminoazobenzene	0.232	0.206	6.650	7.5	-11
Chlorobenzilate	0.468	0.495	7.920	7.5	6
3,3'-Dimethylbenzidine	0.938	0.836	6.690	7.5	-11
Butylbenzylphthalate	0.696	0.700	7.550	7.5	1
2-Acetylaminofluorene	0.626	0.531	6.370	7.5	-15
3,3'-Dichlorobenzidine	0.494	0.470	7.140	7.5	-5
4,4'-Methylenebis(2-chloroanil	0.273	0.253	6.960	7.5	-7
Benzo(a)anthracene	1.338	1.243	6.970	7.5	-7
Chrysene	1.240	1.170	7.080	7.5	-6
bis(2-Ethylhexyl)phthalate	1.029	1.002	7.300	7.5	-3
6-Methylchrysene	0.896	0.792	6.630	7.5	-12
Di-n-octylphthalate	1.728	1.876	8.140	7.5	9
Benzo(b)fluoranthene	1.311	1.306	7.470	7.5	0
7,12-Dimethylbenz[a]anthracene	0.546	0.564	7.740	7.5	3
Benzo(k)fluoranthene	1.241	1.294	7.820	7.5	4
Benzo(a)pyrene	1.219	1.199	7.380	7.5	-2
3-Methylcholanthrene	0.623	0.604	7.270	7.5	-3
Dibenz(a,h)acridine	1.037	0.996	7.210	7.5	-4
Dibenz(a,j)acridine	1.017	0.984	7.260	7.5	-3
Indeno(1,2,3-cd)pyrene	1.212	1.189	7.350	7.5	-2
Dibenz(a,h)anthracene	1.234	1.225	7.440	7.5	-1
Benzo(g,h,i)perylene	1.249	1.214	7.290	7.5	-3
Total PAHs	1.129	1.211	132.740	135.0	-2
2-Fluorophenol	1.553	1.629	15.730	15.0	5

7C cont
SEMIVOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____ SDG No.:_____

Instrument ID: HP20296 Calibration Date: 04/15/19 Time: 21:10

Lab File ID: ld0911.d Init. Calib. Date(s): 03/05/19 03/05/19

Init. Calib. Times(s): 01:52 05:33

Min RRF for SPCC(#) = 0.050 Max %Drift for CCC(*) = 20%

COMPOUND	RRF	RRF7.5	ACTUAL CONC.	TRUE CONC.	% DRIFT
Phenol-d6	2.103	2.290	16.330	15.0	9
Nitrobenzene-d5	0.502	0.582	17.390	15.0	16
2-Fluorobiphenyl	1.666	1.637	14.740	15.0	-2
2,4,6-Tribromophenol	0.234	0.217	13.870	15.0	-8
Terphenyl-d14	0.871	0.825	14.210	15.0	-5
			Average %Drift:		9

Continuing Calibration
Internal Standard Area and Retention Time
Summary

Initial Calibration Standards:

/chem/HP20296.i/19mar04a.b/lc0211.d **
/chem/HP20296.i/19mar04a.b/lc0212.d
/chem/HP20296.i/19mar04a.b/lc0213.d
/chem/HP20296.i/19mar04a.b/lc0214.d
/chem/HP20296.i/19mar04a.b/lc0215.d
/chem/HP20296.i/19mar04a.b/lc0216.d
/chem/HP20296.i/19mar04a.b/lc0217.d
/chem/HP20296.i/19mar04a.b/lc0218.d

** indicates the Mid Level Calibration Standard.

Mid Level Calibration Standard is used for comparison.

Current Continuing Calibration Standard:

/chem/HP20296.i/19apr15a.b/ld0911.d

Area Summary

File ID:

Internal Standard Name	ld0911.d	ICAL Area	Low Limit	High Limit	In Spec
1,4-Dichlorobenzene-d4	251061	183308	91654	366616	Yes
Naphthalene-d8	943810	704176	352088	1408352	Yes
Acenaphthene-d10	438492	334468	167234	668936	Yes
Phenanthrene-d10	814805	656092	328046	1312184	Yes
Pyrene-d10	816346	638422	319211	1276844	Yes
Perylene-d12	755402	677101	338550	1354202	Yes

A "No" indicates the internal standard area is outside acceptable QC limits.

RT Summary

File ID:

Internal Standard Name	ld0911.d	ICAL RT	In Spec
1,4-Dichlorobenzene-d4	6.301	6.931	No
Naphthalene-d8	8.280	8.910	No
Acenaphthene-d10	11.109	11.739	No
Phenanthrene-d10	13.088	13.660	No
Pyrene-d10	15.003	15.692	No
Perylene-d12	19.447	20.249	No

A "No" indicates the retention time is greater than 10 seconds from the RT of the referenced standard.

Comments: Unless otherwise documented, the shift in retention time is due to routine injection port maintenance, which involves the removal of a length of the analytical column.

8B

SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): ld0911.d Date Analyzed: 04/15/19

Instrument ID: HP20296 Time Analyzed: 21:10

	IS1(DCB)		IS2(NPT)		IS3(ANT)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	251061	6.301	943810	8.280	438492	11.109
UPPER LIMIT	502122	6.801	1887620	8.780	876984	11.609
LOWER LIMIT	125531	5.801	471905	7.780	219246	10.609
LLI SAMPLE NO.						
01 SBLKWP102	221161	6.301	833261	8.280	375346	11.109
02 102WPLCS	226871	6.306	880863	8.280	389139	11.109
03 1030977	226909	6.301	856771	8.274	374866	11.109
04 1030978	223007	6.301	852202	8.274	383328	11.104
05 1030979MS	214534	6.306	854002	8.274	375688	11.109
06 1030980MSD	224438	6.306	862448	8.280	379179	11.109
07 1030981	233438	6.301	877075	8.274	393859	11.104
08 1030982	221891	6.301	842419	8.274	370244	11.104
09 1030983	234942	6.300	890091	8.274	399701	11.104
10 1030984	227073	6.295	860700	8.274	368081	11.104

IS1 (DCB) = 1,4-Dichlorobenzene-d4
IS2 (NPT) = Naphthalene-d8
IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: LANCASTER LABS Contract:_____

Lab Code: LANCAS Case No.:_____ SAS No.:_____

Lab File ID (Standard): ld0911.d Date Analyzed: 04/15/19

Instrument ID: HP20296 Time Analyzed: 21:10

	IS4(PHN)		IS5(PYR)		IS6(PRY)	
	AREA #	RT #	AREA #	RT #	AREA #	RT #
12 HOUR STD	814805	13.088	816346	15.003	755402	19.447
UPPER LIMIT	1629610	13.588	1632692	15.503	1510804	19.947
LOWER LIMIT	407403	12.588	408173	14.503	377701	18.947
LLI SAMPLE NO.						
01 SBLKWP102	695943	13.088	678841	15.003	632151	19.442
02 102WPLCS	686452	13.088	710416	15.003	686064	19.448
03 1030977	722723	13.083	705613	14.998	660093	19.442
04 1030978	724504	13.083	689292	14.998	649444	19.442
05 1030979MS	714906	13.083	674921	15.003	653100	19.442
06 1030980MSD	706317	13.083	683880	15.003	652439	19.442
07 1030981	729301	13.083	708926	14.998	683449	19.442
08 1030982	700727	13.083	686379	14.998	658403	19.437
09 1030983	742817	13.083	724427	14.997	648764	19.437
10 1030984	708456	13.083	690021	14.997	618132	19.437

IS4 (PHN) = Phenanthrene-d10
IS5 (PYR) = Pyrene-d10
IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area
AREA LOWER LIMIT = -50% of internal standard area
RT UPPER LIMIT = +0.50 minutes of internal standard RT
RT LOWER LIMIT = -0.50 minutes of internal standard RT

Column used to flag internal standard are and RT values with an asterisk
* Values outside of QC limits.

Sample Data

Semivolatiles by GC/MS

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0914.d Injection date and time: **15-APR-2019 22:57**
Data file Sample Info. Line: 34R02;1030977;1;0;SAMPLE;;DRRAAP; Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.301	(0.000)	900	152	226909	(-10)	5.00	
68) Naphthalene-d8	8.274	(0.005)	1269	136	856771	(-9)	5.00	
118) Acenaphthene-d10	11.109	(0.000)	1799	164	374866	(-15)	5.00	
158) Phenanthrene-d10	13.083	(0.005)	2168	188	722723	(-11)	5.00	
180) Pyrene-d10	14.998	(0.005)	2526	212	705613	(-14)	5.00	
218) Perylene-d12	19.442	(0.005)	3357	264	660093	(-13)	5.00	

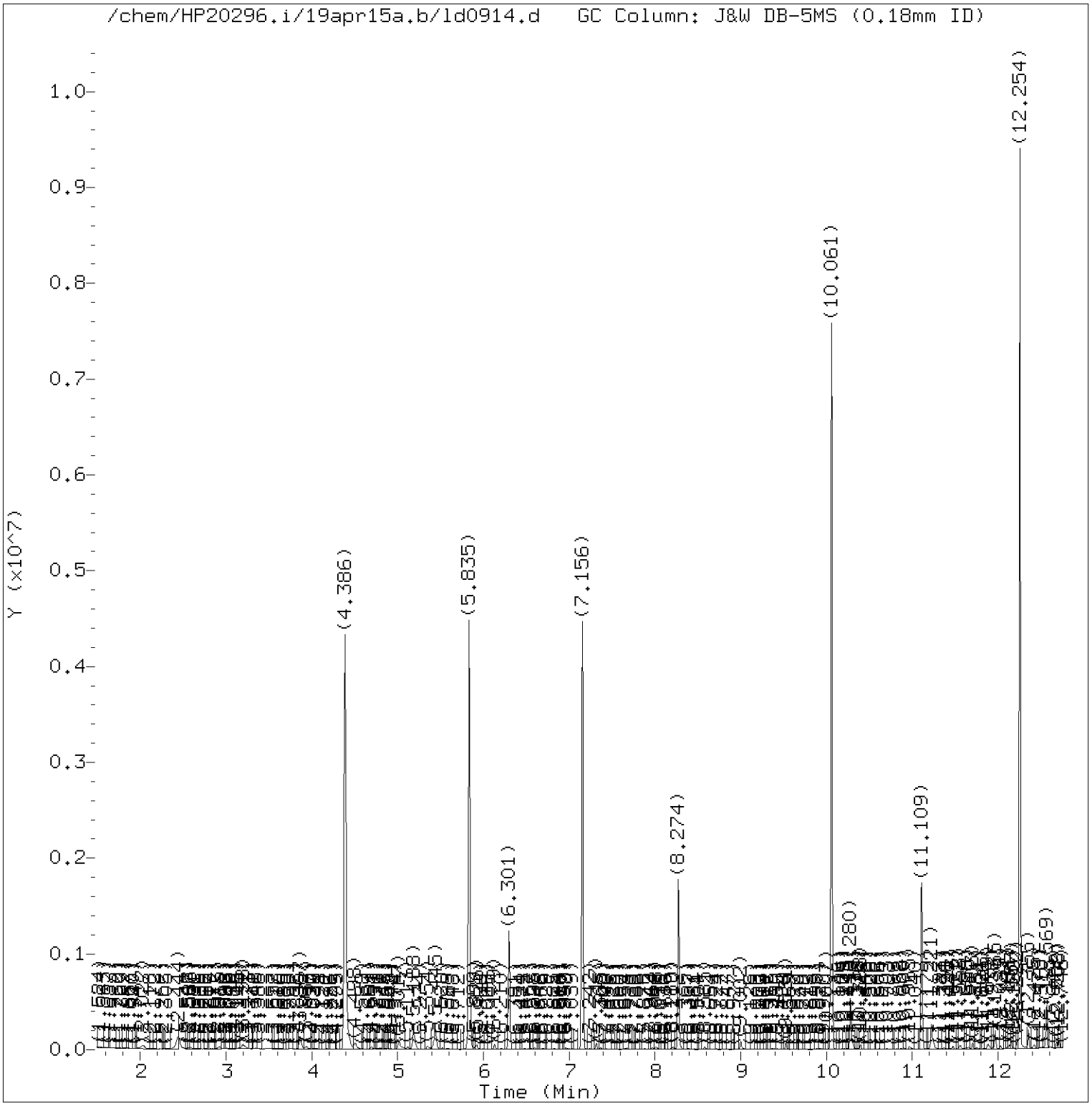
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.156	(0.000)	82	1979958	23.040	92%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061	(0.000)	172	2511180	20.098	80%		44 - 102
184) Terphenyl-d14	(5)	15.324	(0.000)	244	2519016	20.486	82%		33 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)				Not Detected					0.2
104) 2-Nitroaniline	(3)				Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)				Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)				Not Detected					0.2
129) Diethylphthalate	(3)				Not Detected					0.1
134) 4-Nitroaniline	(3)				Not Detected					0.3
204) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

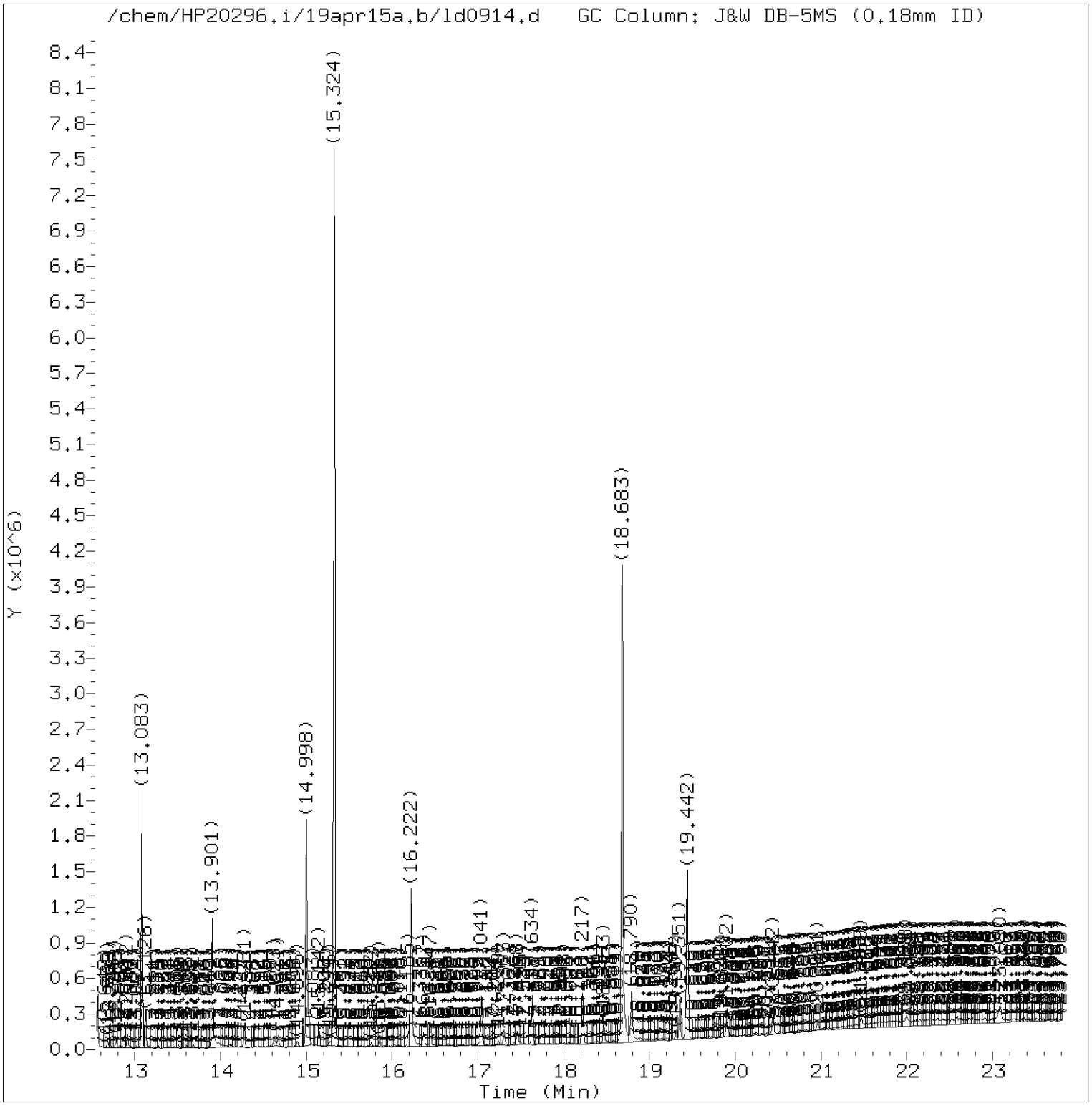
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0914.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:57 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R02 Lab Sample ID: 1030977

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0914.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:57 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R02 Lab Sample ID: 1030977

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0914.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:57 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R02 Lab Sample ID: 1030977

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.301	152	226909	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	1979958	23.040
68)*Naphthalene-d8	(2)	8.274	136	856771	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2511180	20.098
118)*Acenaphthene-d10	(3)	11.109	164	374866	5.000
158)*Phenanthrene-d10	(4)	13.083	188	722723	5.000
180)*Pyrene-d10	(5)	14.998	212	705613	5.000
184)$Terphenyl-d14	(5)	15.324	244	2519016	20.486
218)*Perylene-d12	(6)	19.442	264	660093	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0915.d
Data file Sample Info. Line: 34R03;1030978;1;0;SAMPLE;;DRRAAP;
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Injection date and time: **15-APR-2019 23:26**
Instrument ID: **HP20296.i** Batch: **19102WAP**

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.301(0.000)	900	152	223007 (-11)	5.00	
68) Naphthalene-d8	8.274(0.005)	1269	136	852202 (-10)	5.00	
118) Acenaphthene-d10	11.104(0.005)	1798	164	383328 (-13)	5.00	
158) Phenanthrene-d10	13.083(0.005)	2168	188	724504 (-11)	5.00	
180) Pyrene-d10	14.998(0.005)	2526	212	689292 (-16)	5.00	
218) Perylene-d12	19.442(0.005)	3357	264	649444 (-14)	5.00	

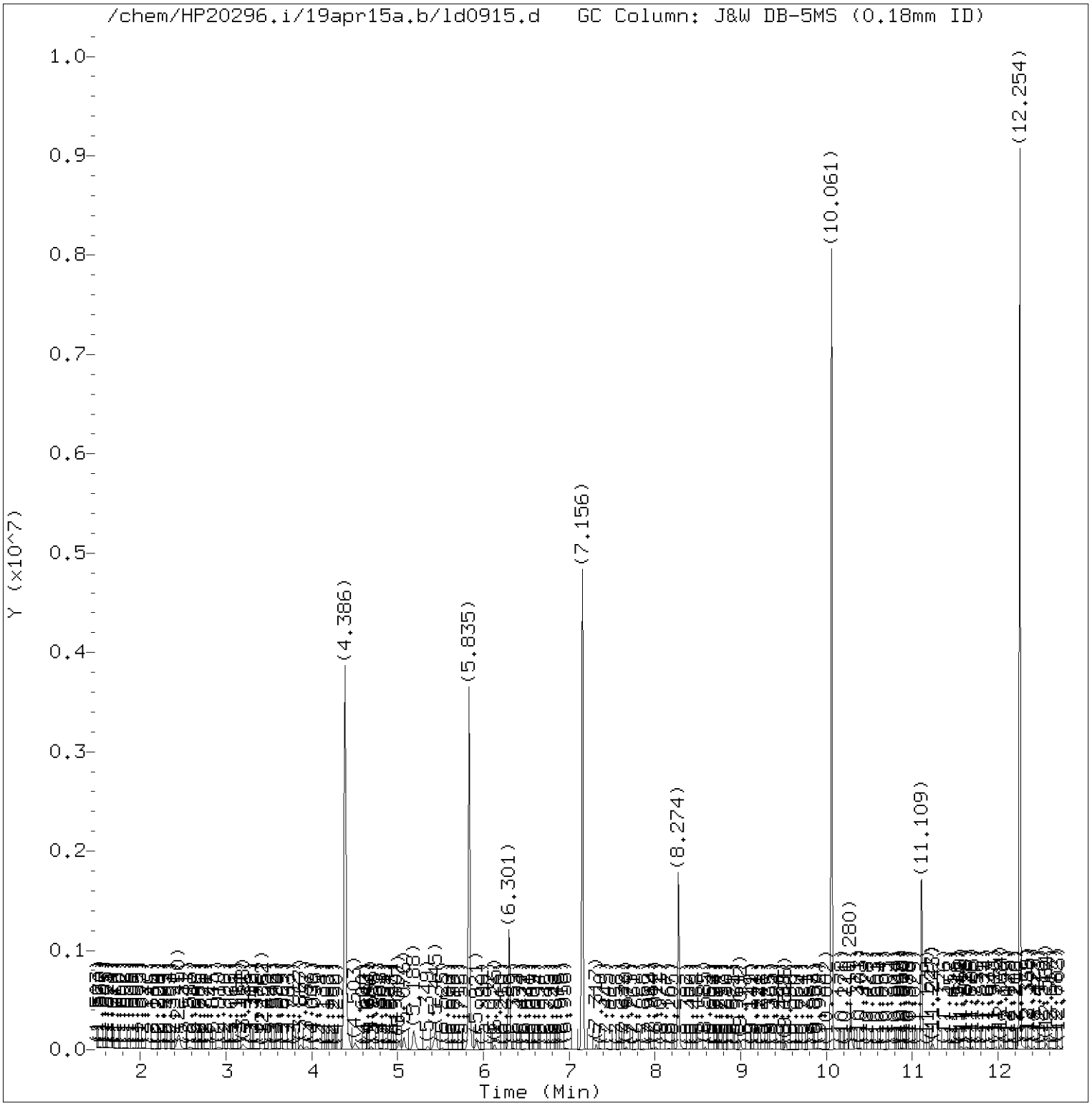
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.156(0.000)	82	2092842	24.484	98%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061(0.000)	172	2586981	20.248	81%		44 - 102
184) Terphenyl-d14	(5)	15.324(0.000)	244	2607923	21.711	87%		33 - 126

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)			Not Detected					0.2
104) 2-Nitroaniline	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.2
129) Diethylphthalate	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.3
204) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

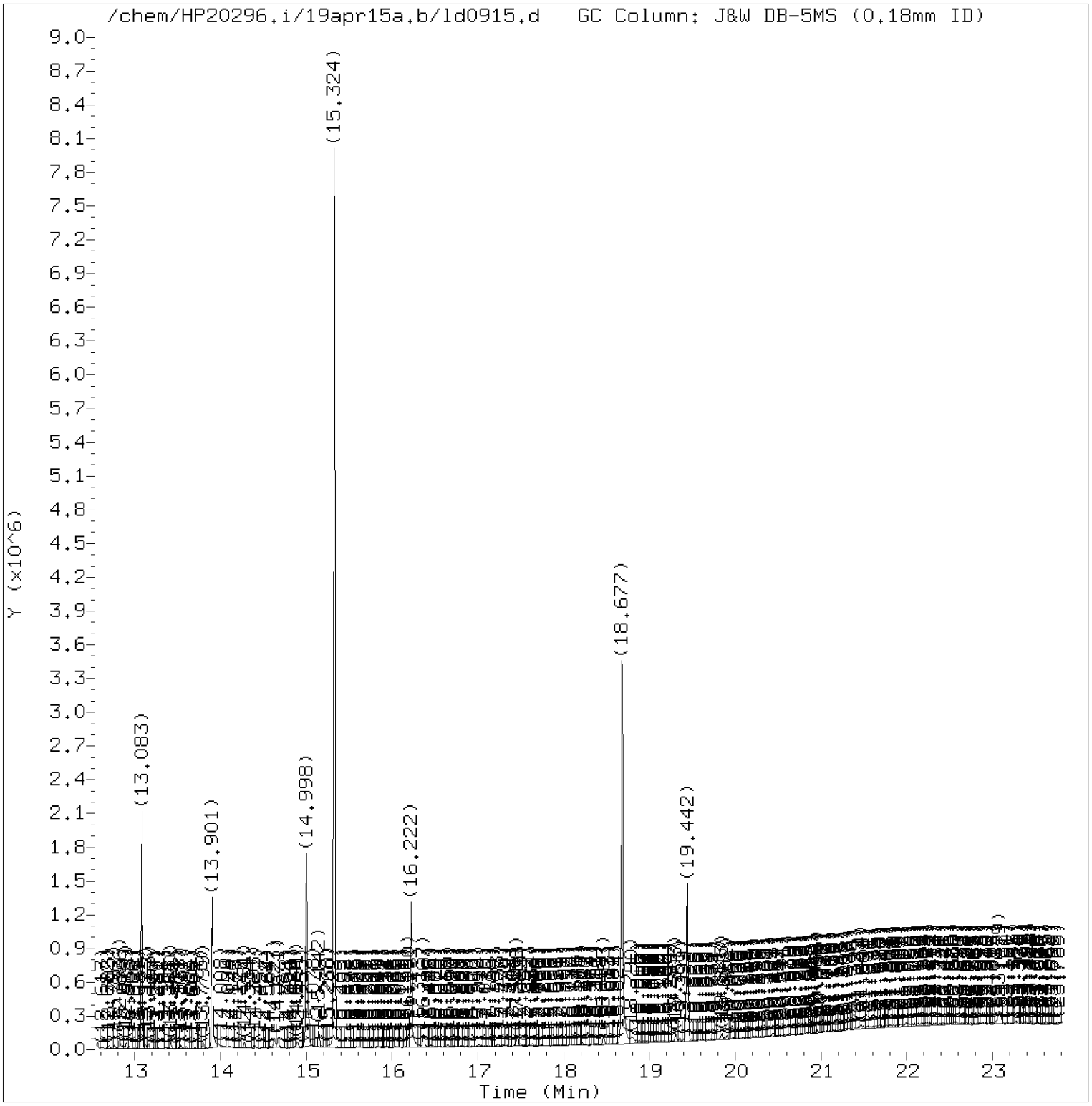
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0915.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 23:26 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R03 Lab Sample ID: 1030978

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0915.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 23:26 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R03 Lab Sample ID: 1030978

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0915.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 23:26 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R03 Lab Sample ID: 1030978

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.301	152	223007	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	2092842	24.484
68)*Naphthalene-d8	(2)	8.274	136	852202	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2586981	20.248
118)*Acenaphthene-d10	(3)	11.104	164	383328	5.000
158)*Phenanthrene-d10	(4)	13.083	188	724504	5.000
180)*Pyrene-d10	(5)	14.998	212	689292	5.000
184)$Terphenyl-d14	(5)	15.324	244	2607923	21.711
218)*Perylene-d12	(6)	19.442	264	649444	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0918.d
Injection date and time: **16-APR-2019 00:52**
Data file Sample Info. Line: 34R04;1030981;1;0;SAMPLE;;DRRAAP;
Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.301(0.000)	900	152	233438 (-7)	5.00	
68) Naphthalene-d8	8.274(0.005)	1269	136	877075 (-7)	5.00	
118) Acenaphthene-d10	11.104(0.005)	1798	164	393859 (-10)	5.00	
158) Phenanthrene-d10	13.083(0.005)	2168	188	729301 (-10)	5.00	
180) Pyrene-d10	14.998(0.005)	2526	212	708926 (-13)	5.00	
218) Perylene-d12	19.442(0.005)	3357	264	683449 (-10)	5.00	

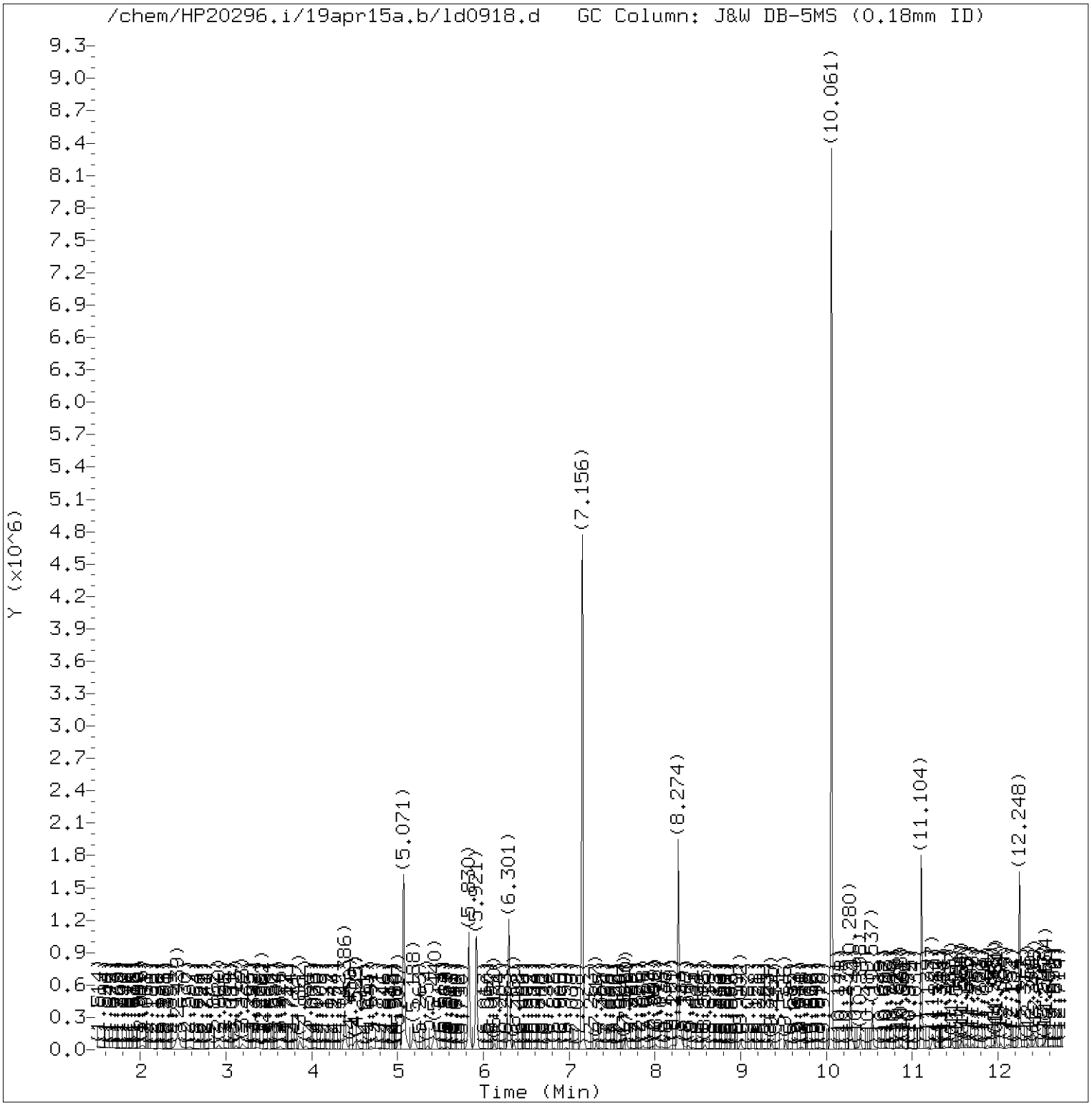
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.156(0.000)	82	2183305	24.818	99%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061(0.000)	172	2681335	20.425	82%		44 - 102
184) Terphenyl-d14	(5)	15.324(0.000)	244	2111818	17.094	68%		33 - 126

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.183(0.000)	77	25624	0.286	1.14		J	0.2
104) 2-Nitroaniline	(3)	10.398(0.000)	138	21334	0.588	2.35		J	0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)	11.462(0.000)	165	9223	0.246	0.98		J	0.2
129) Diethylphthalate	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.3
204) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

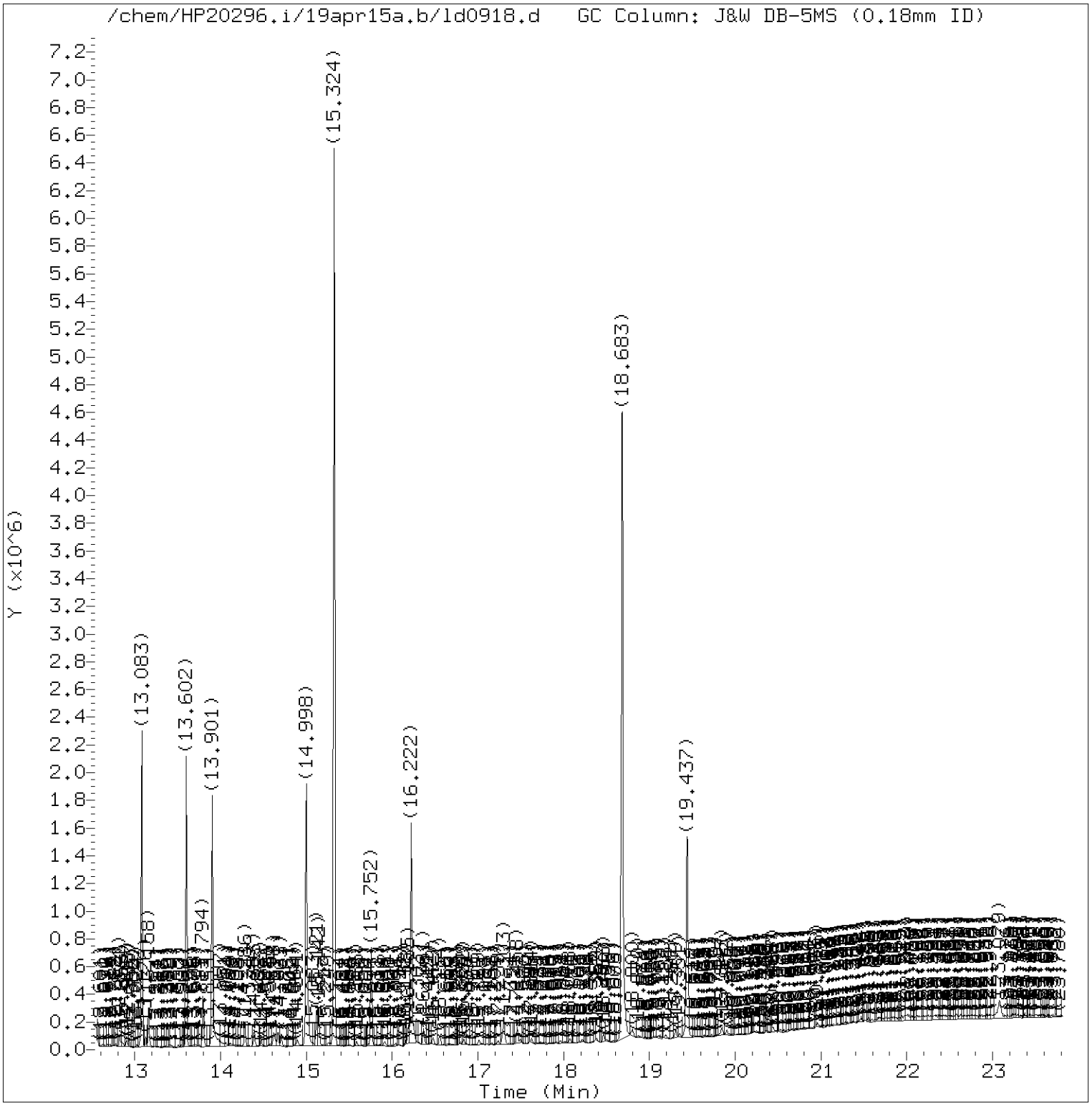
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0918.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R04 Lab Sample ID: 1030981

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0918.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R04 Lab Sample ID: 1030981

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0918.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

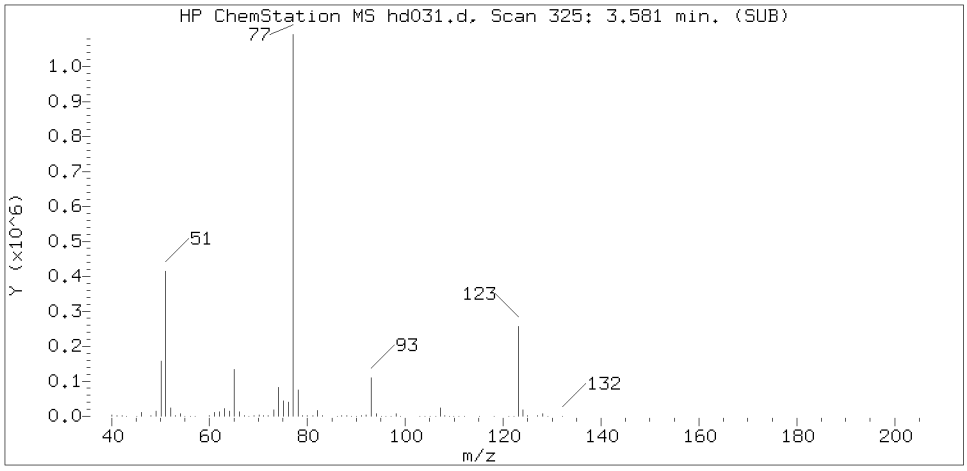
Sample Name: 34R04 Lab Sample ID: 1030981

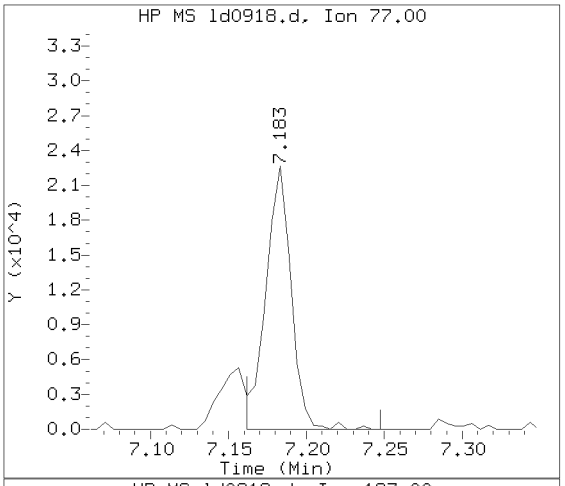
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.301	152	233438	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	2183305	24.818
46) Nitrobenzene	(2)	7.183	77	25624	0.286
68)*Naphthalene-d8	(2)	8.274	136	877075	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2681335	20.425
104) 2-Nitroaniline	(3)	10.398	138	21334	0.588
118)*Acenaphthene-d10	(3)	11.104	164	393859	5.000
123) 2,4-Dinitrotoluene	(3)	11.462	165	9223	0.246
158)*Phenanthrene-d10	(4)	13.083	188	729301	5.000
180)*Pyrene-d10	(5)	14.998	212	708926	5.000
184)$Terphenyl-d14	(5)	15.324	244	2111818	17.094
218)*Perylene-d12	(6)	19.442	264	683449	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

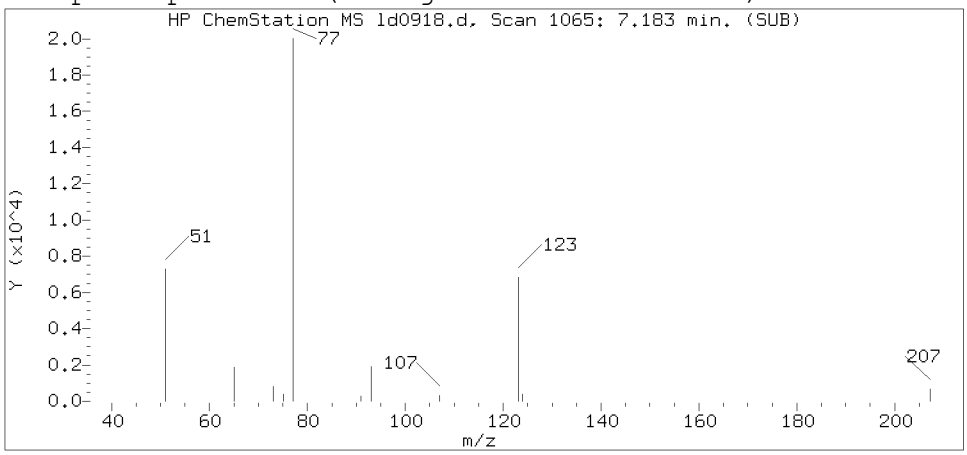
Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

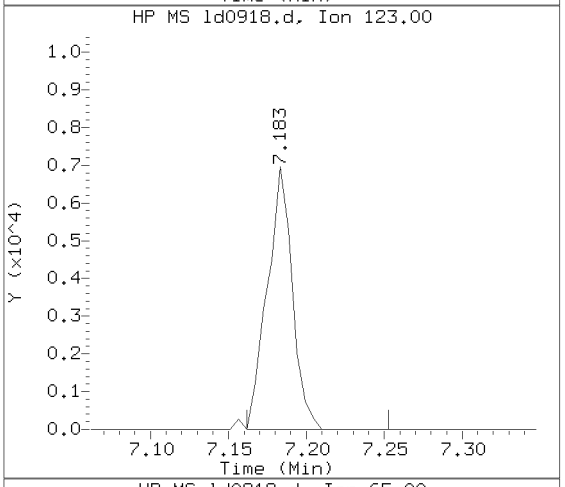
Reference Standard Spectrum for Nitrobenzene



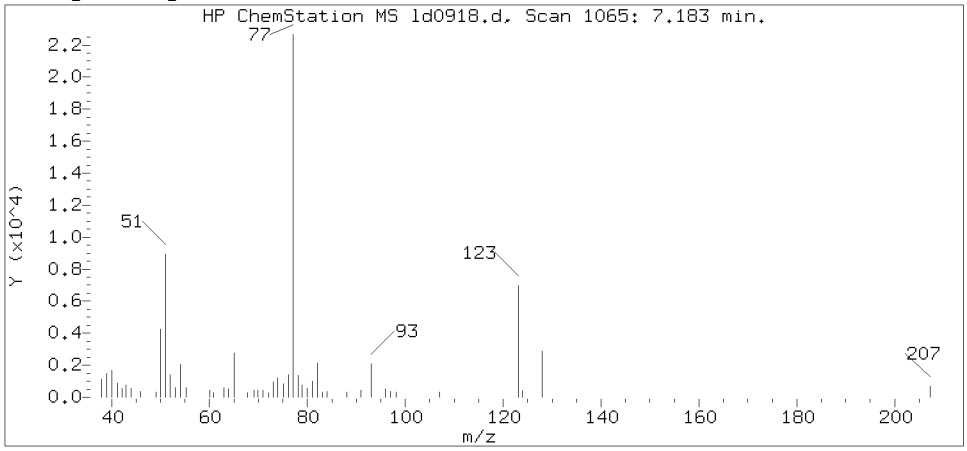


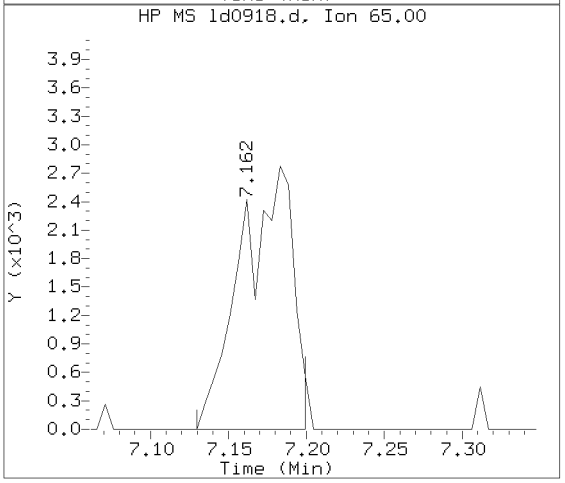
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0918.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:52 Analyst ID: art12405

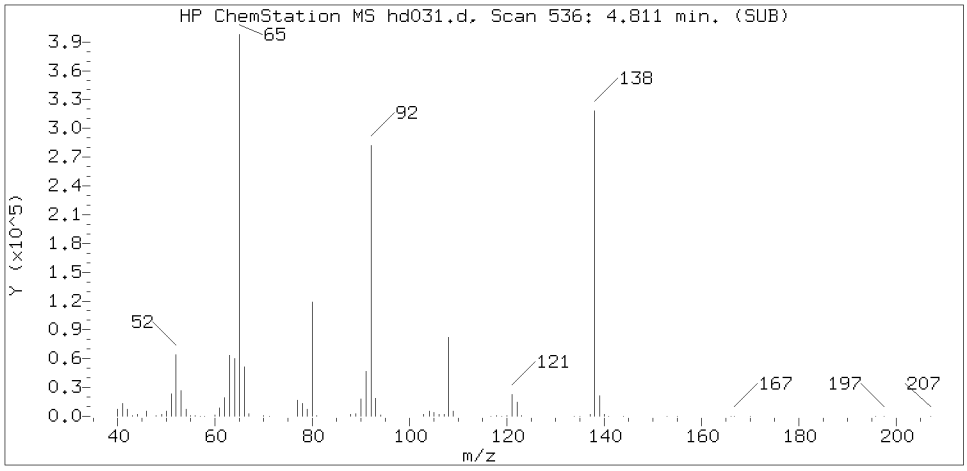
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

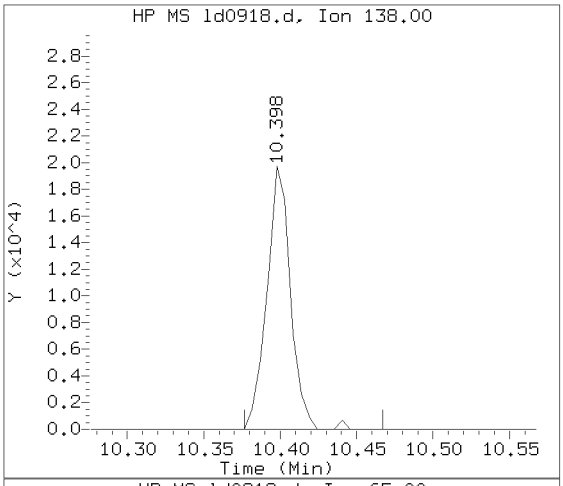
Sample Name: 34R04 Lab Sample ID: 1030981

Compound Number : 46
Compound Name : Nitrobenzene
Scan Number : 1065
Retention Time (minutes) : 7.183
Relative Retention Time : 0.00008
Quant Ion : 77.00
Area (flag) : 25624
On-column Amount (ng/ul) : 0.2855

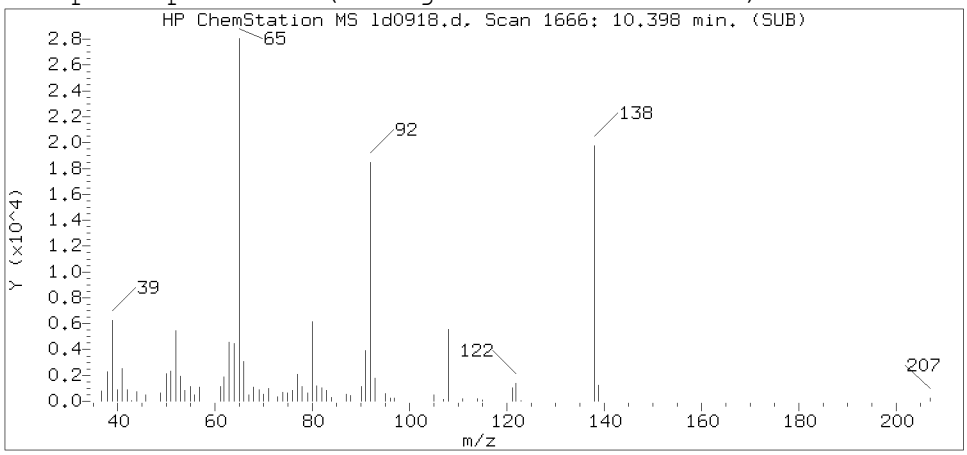
Digitally signed by Kira N. Beck on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

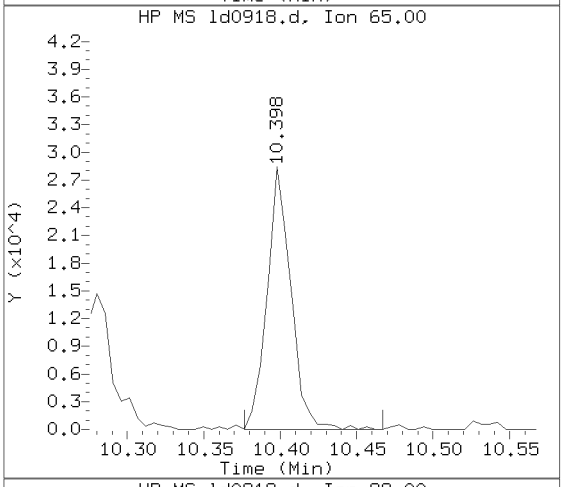
Reference Standard Spectrum for 2-Nitroaniline



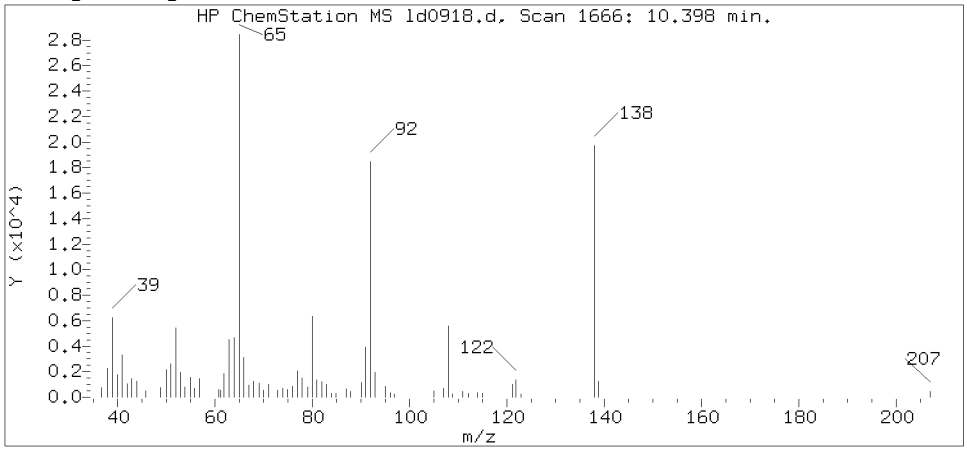


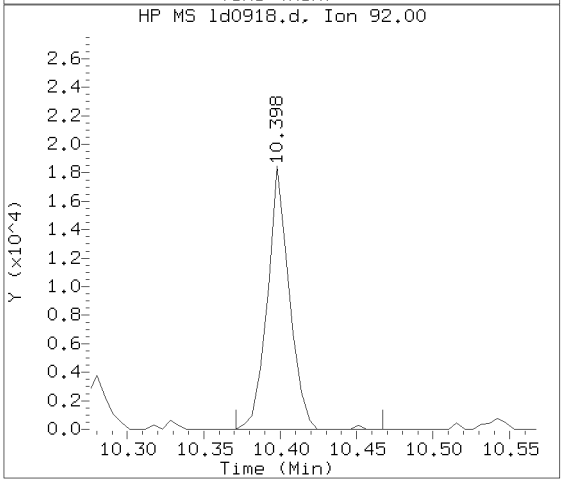
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0918.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:52 Analyst ID: art12405

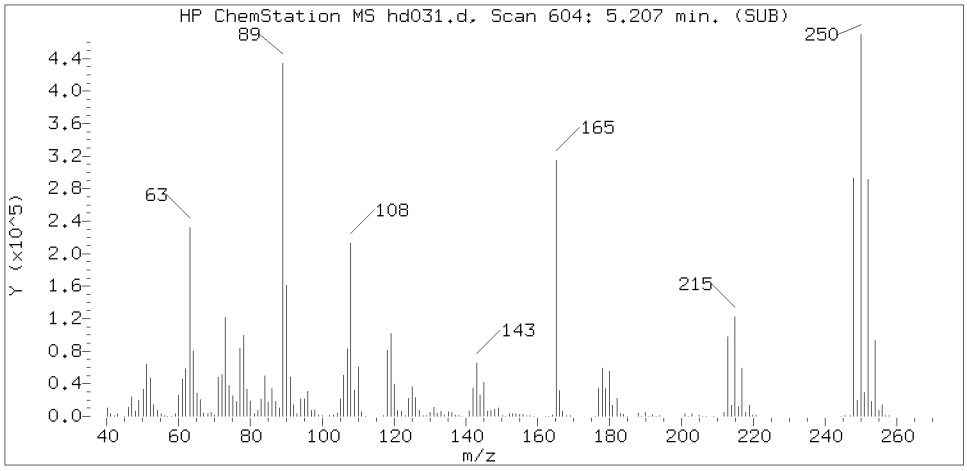
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R04 Lab Sample ID: 1030981

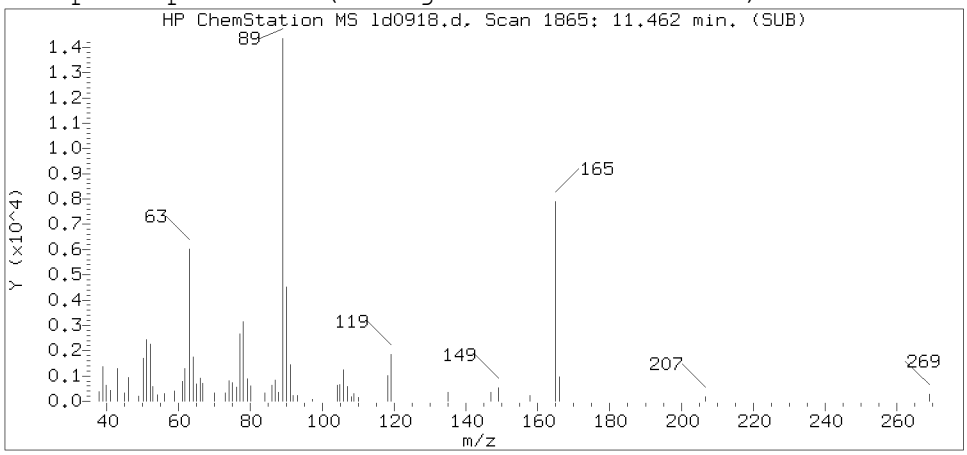
Compound Number	: 104
Compound Name	: 2-Nitroaniline
Scan Number	: 1666
Retention Time (minutes)	: 10.398
Relative Retention Time	: 0.00051
Quant Ion	: 138.00
Area (flag)	: 21334
On-column Amount (ng/ul)	: 0.5885

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

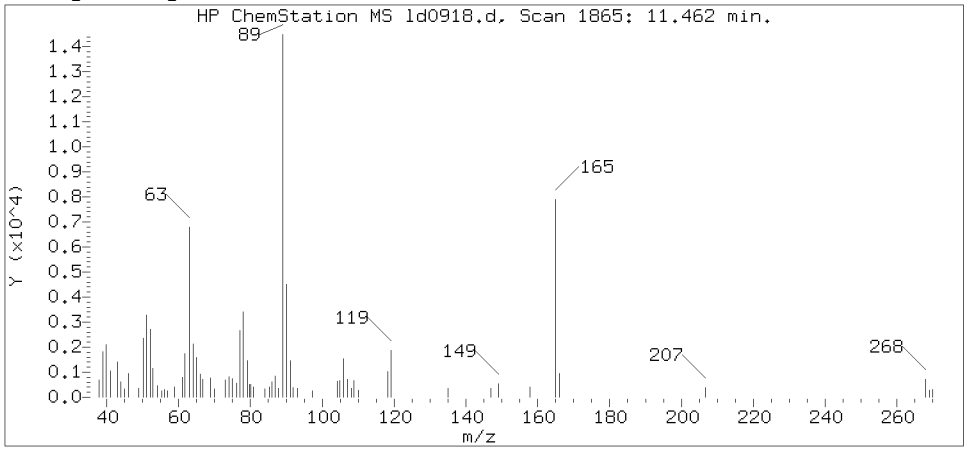
Reference Standard Spectrum for 2,4-Dinitrotoluene

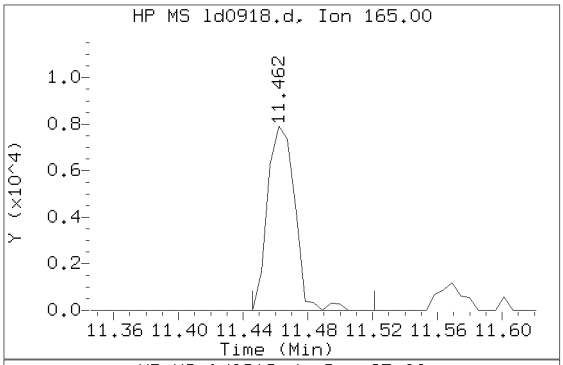


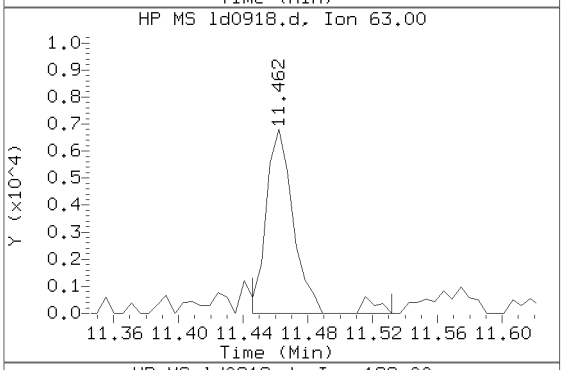
Sample Spectrum (Background Subtracted)

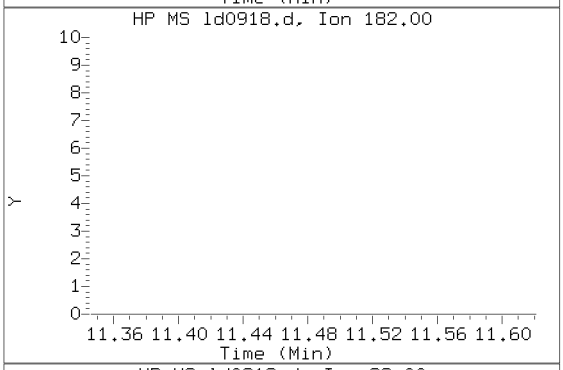


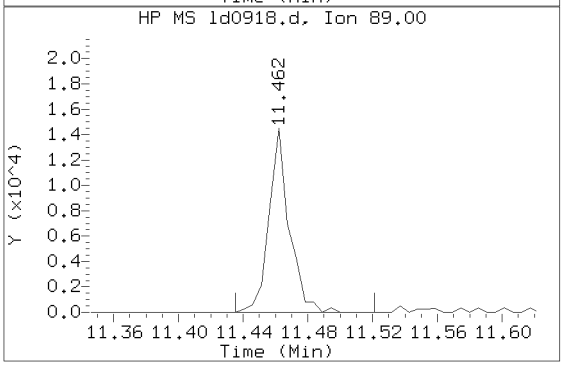
Sample Spectrum (Unaltered)











Data File: /chem/HP20296.i/19apr15a.b/ld0918.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R04 Lab Sample ID: 1030981

Compound Number	: 123
Compound Name	: 2,4-Dinitrotoluene
Scan Number	: 1865
Retention Time (minutes)	: 11.462
Relative Retention Time	: 0.00047
Quant Ion	: 165.00
Area (flag)	: 9223
On-column Amount (ng/ul)	: 0.2459

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0919.d
Injection date and time: **16-APR-2019 01:21**
Data file Sample Info. Line: 34R05;1030982;1;0;SAMPLE;;DRRAAP;
Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.301	(0.000)	900	152	221891	(-12)	5.00	
68) Naphthalene-d8	8.274	(0.005)	1269	136	842419	(-11)	5.00	
118) Acenaphthene-d10	11.104	(0.005)	1798	164	370244	(-16)	5.00	
158) Phenanthrene-d10	13.083	(0.005)	2168	188	700727	(-14)	5.00	
180) Pyrene-d10	14.998	(0.005)	2526	212	686379	(-16)	5.00	
218) Perylene-d12	19.437	(0.011)	3356	264	658403	(-13)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.151	(0.001)	82	1655739	19.595	78%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061	(0.000)	172	2018867	16.360	65%		44 - 102
184) Terphenyl-d14	(5)	15.324	(0.000)	244	1721449	14.392	58%		33 - 126

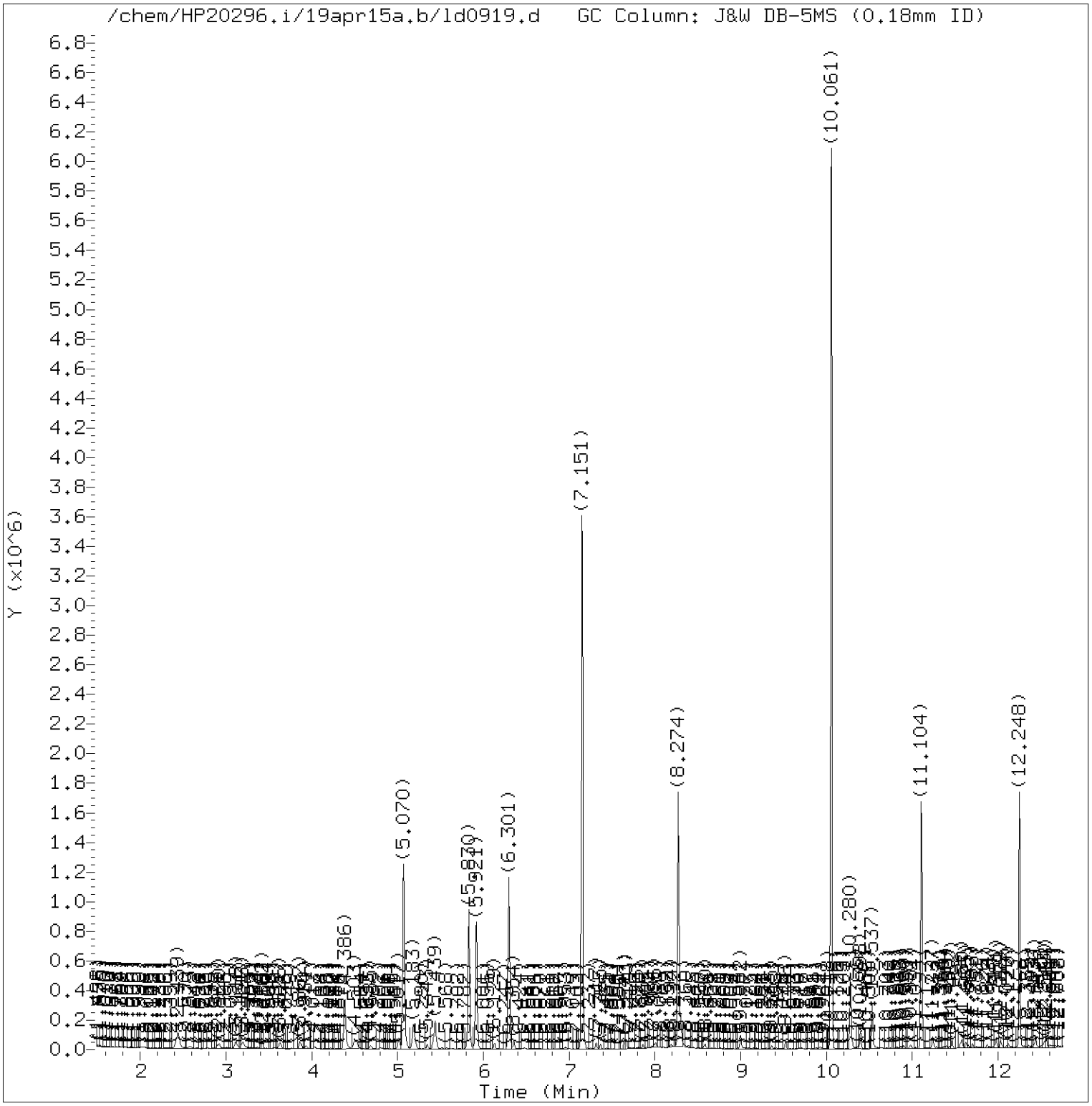
Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.178	(0.000)	77	19651	0.228	0.91		J	0.2
104) 2-Nitroaniline	(3)	10.398	(0.000)	138	17614A	0.517	2.07		J	0.5
113) 2,6-Dinitrotoluene	(3)				Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)	11.462	(0.000)	165	7923	0.225	0.90		J	0.2
129) Diethylphthalate	(3)				Not Detected					0.1
134) 4-Nitroaniline	(3)				Not Detected					0.3
204) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					0.4

A = User selected an alternate peak.

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

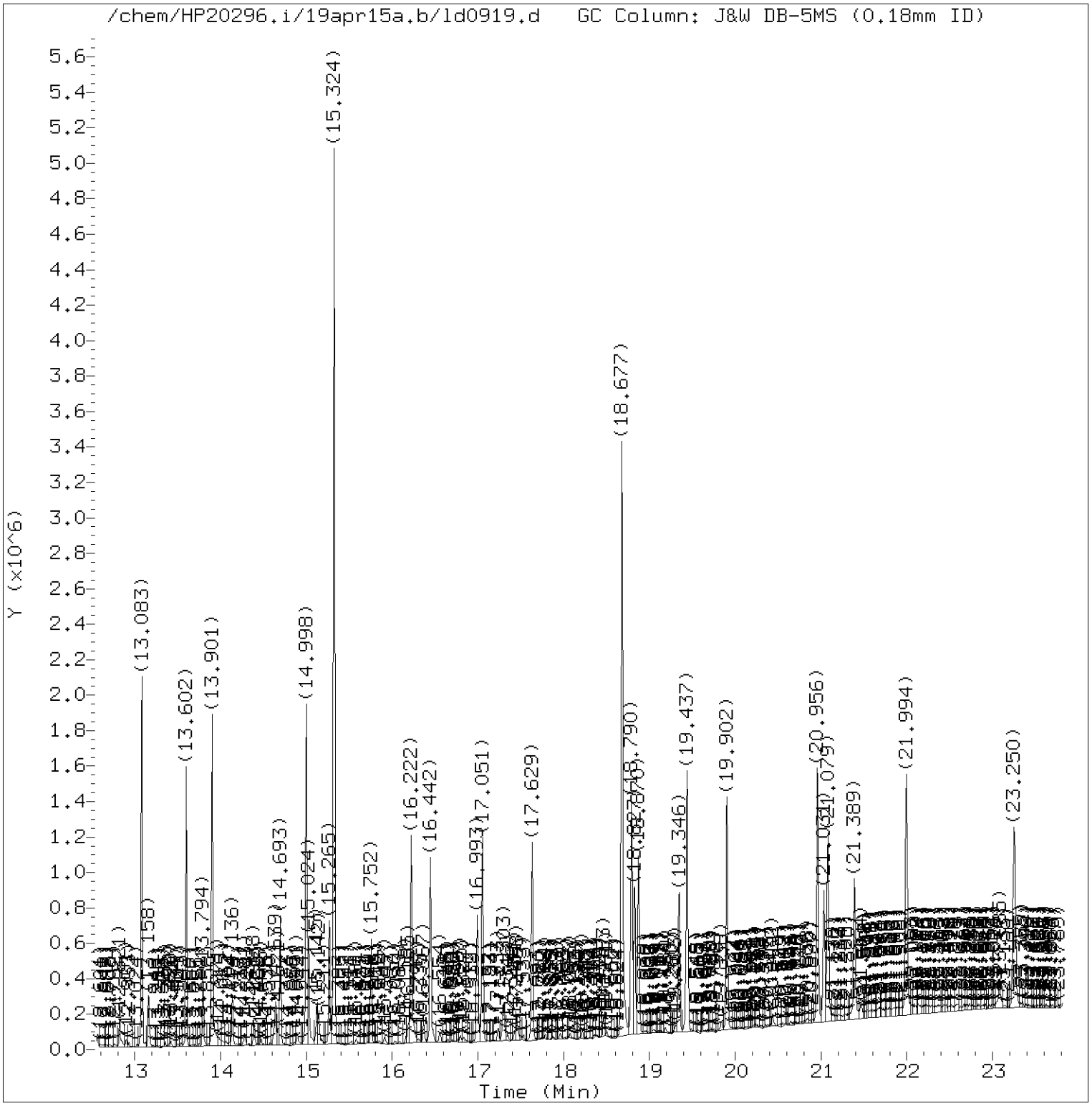
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R05 Lab Sample ID: 1030982

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R05 Lab Sample ID: 1030982

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

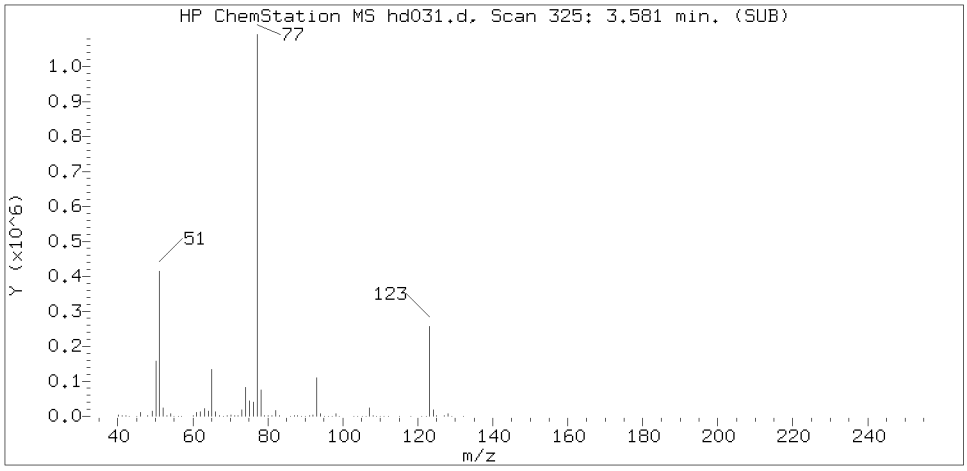
Sample Name: 34R05 Lab Sample ID: 1030982

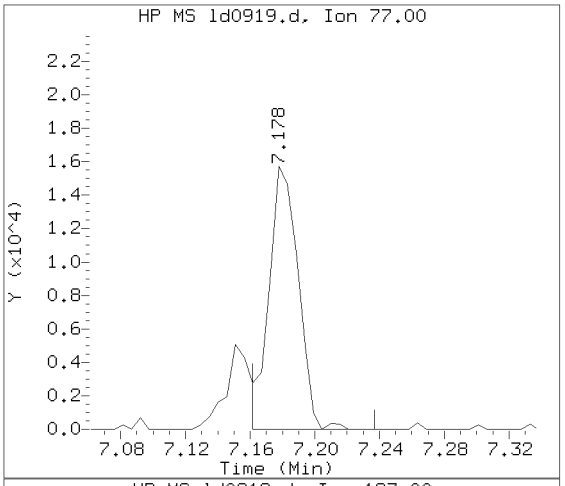
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.301	152	221891	5.000
45)$Nitrobenzene-d5	(2)	7.151	82	1655739	19.595
46) Nitrobenzene	(2)	7.178	77	19651	0.228
68)*Naphthalene-d8	(2)	8.274	136	842419	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2018867	16.360
104) 2-Nitroaniline	(3)	10.398	138	17614A	0.517
118)*Acenaphthene-d10	(3)	11.104	164	370244	5.000
123) 2,4-Dinitrotoluene	(3)	11.462	165	7923	0.225
158)*Phenanthrene-d10	(4)	13.083	188	700727	5.000
180)*Pyrene-d10	(5)	14.998	212	686379	5.000
184)$Terphenyl-d14	(5)	15.324	244	1721449	14.392
218)*Perylene-d12	(6)	19.437	264	658403	5.000

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

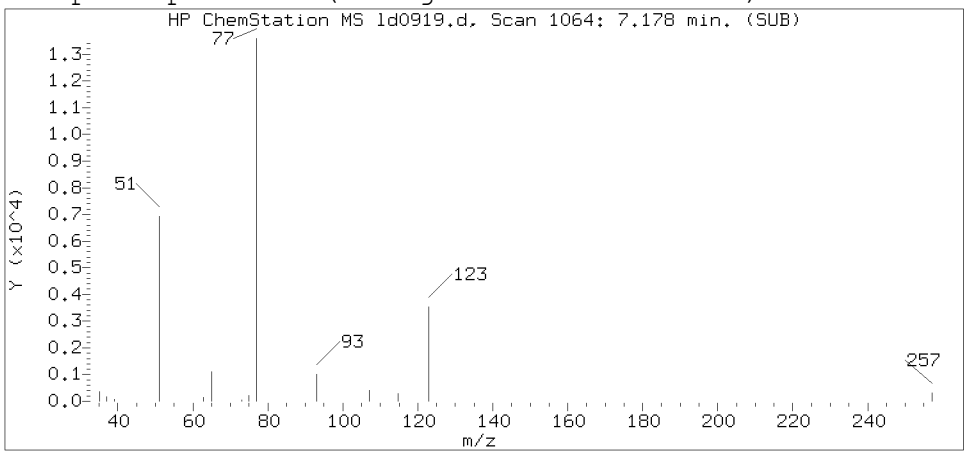
Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

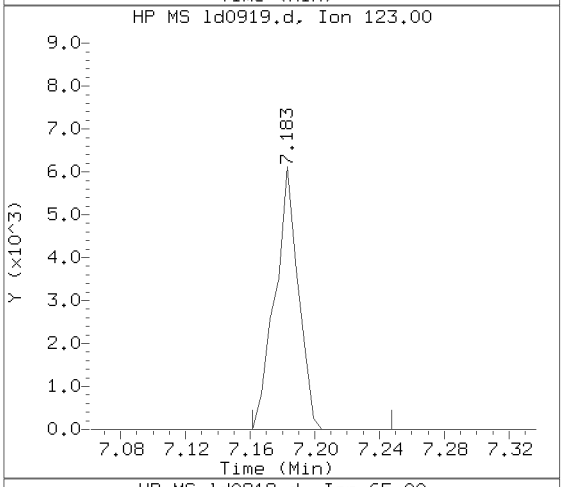
Reference Standard Spectrum for Nitrobenzene



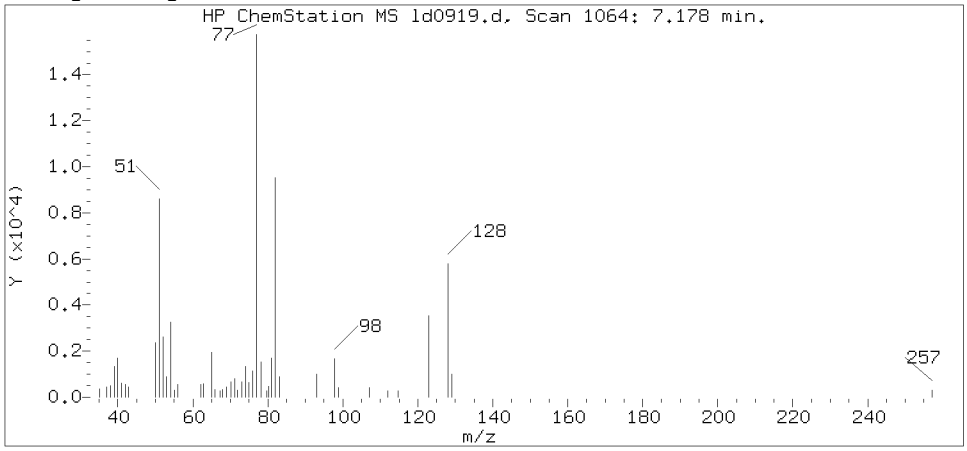


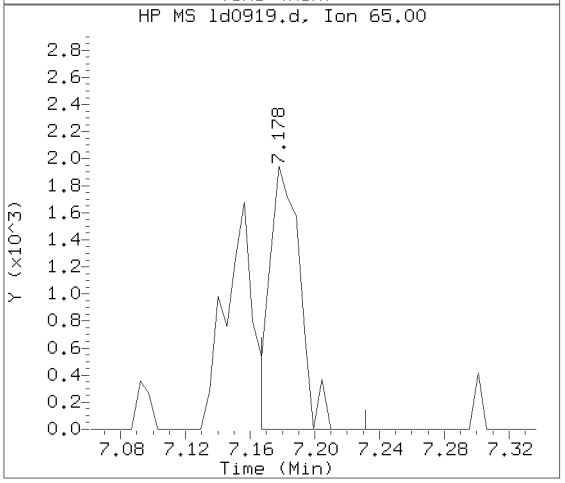
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

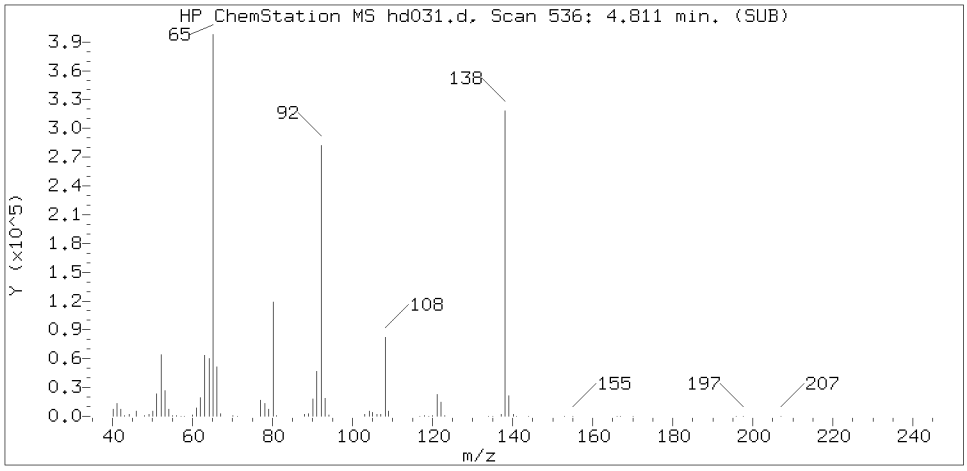
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

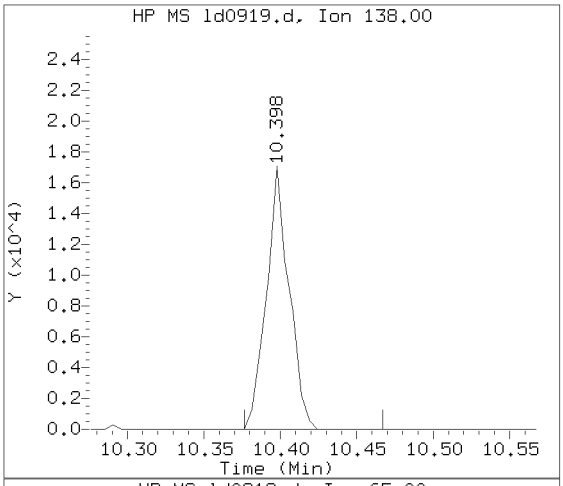
Sample Name: 34R05 Lab Sample ID: 1030982

Compound Number	: 46
Compound Name	: Nitrobenzene
Scan Number	: 1064
Retention Time (minutes)	: 7.178
Relative Retention Time	: 0.00073
Quant Ion	: 77.00
Area (flag)	: 19651
On-column Amount (ng/ul)	: 0.2280

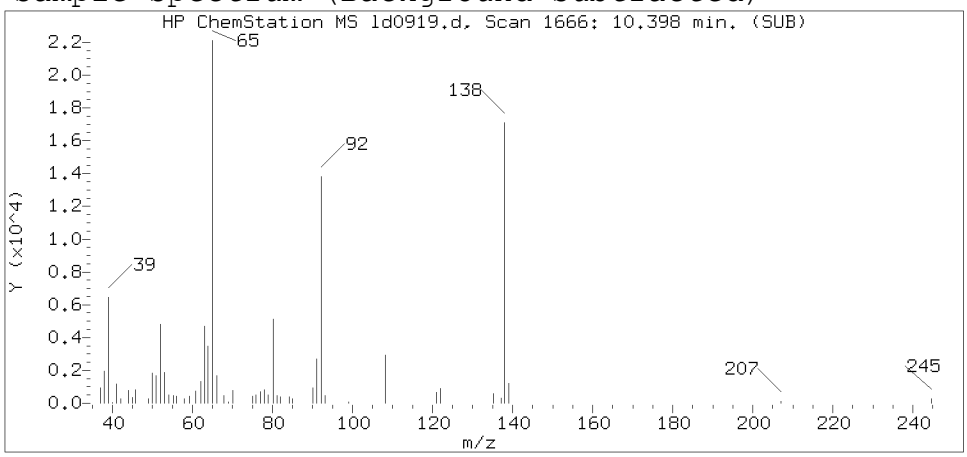
Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

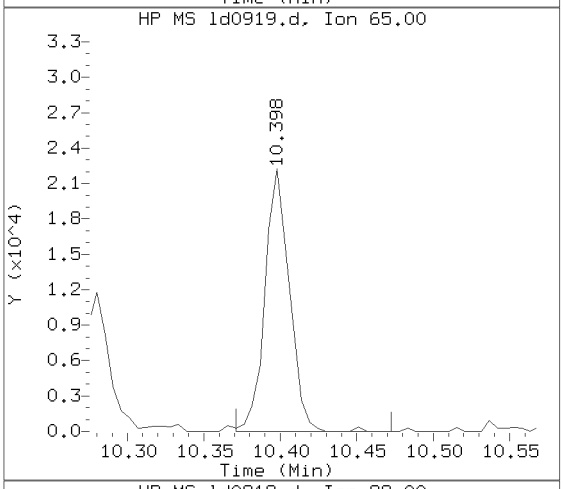
Reference Standard Spectrum for 2-Nitroaniline



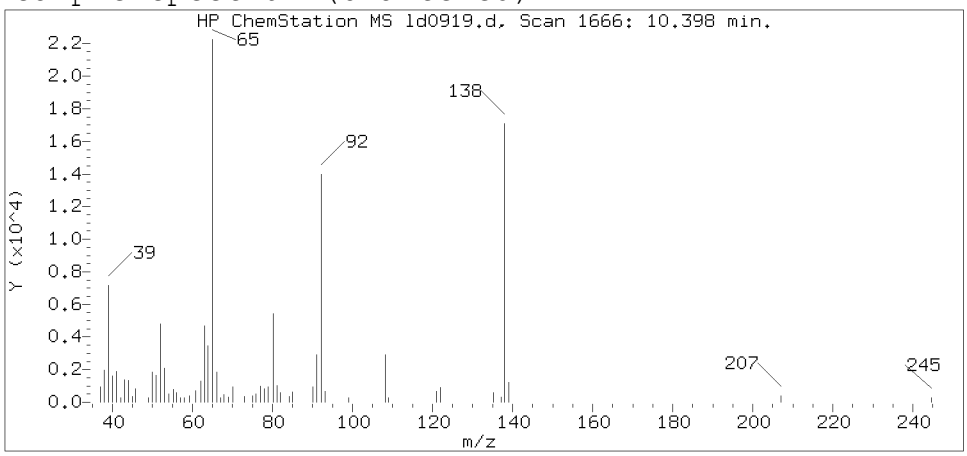


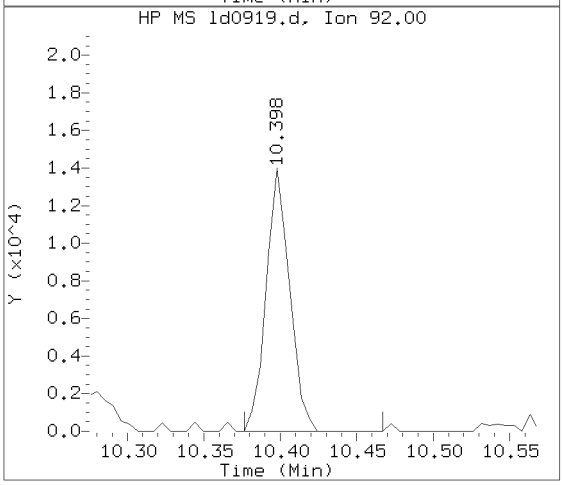
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

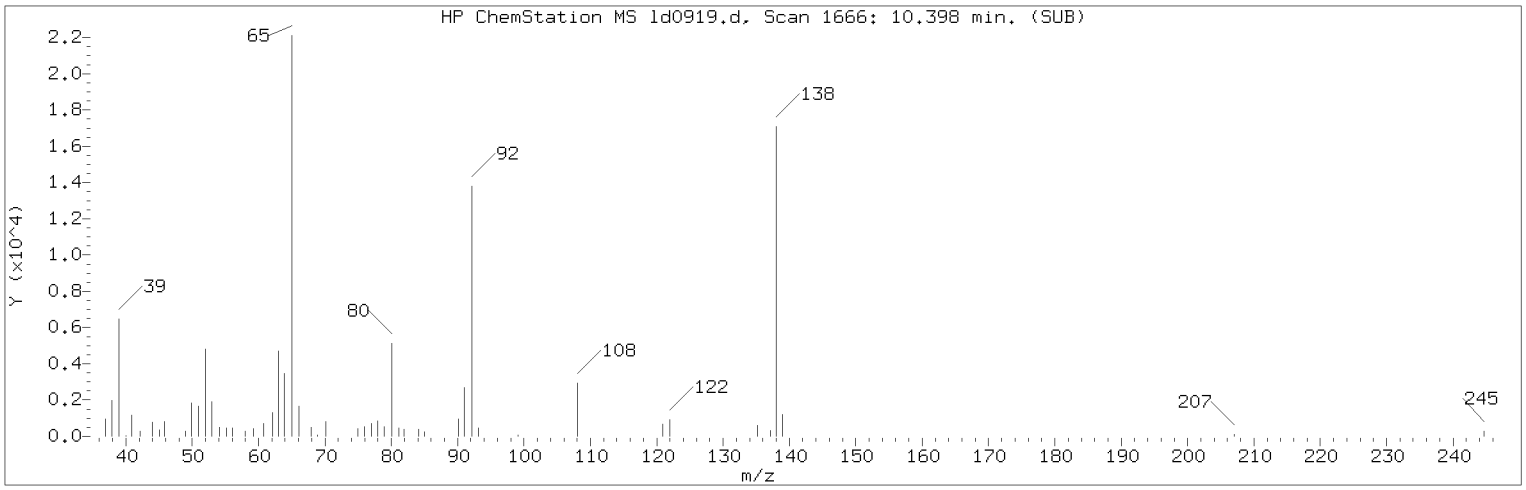
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R05 Lab Sample ID: 1030982

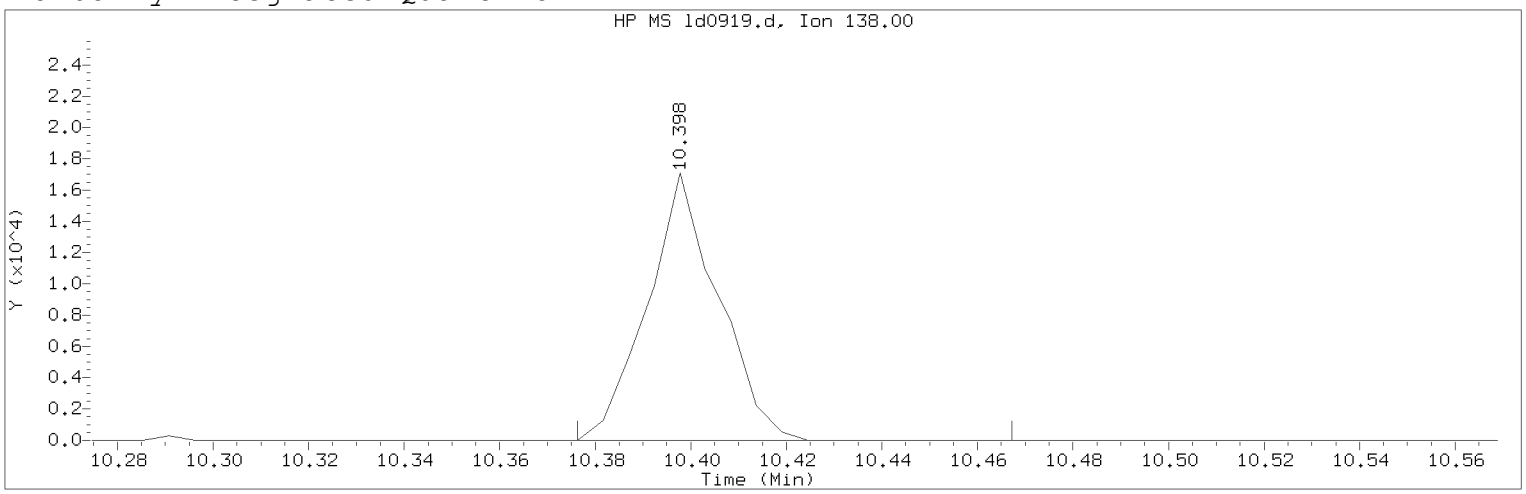
Compound Number	: 104
Compound Name	: 2-Nitroaniline
Scan Number	: 1666
Retention Time (minutes)	: 10.398
Relative Retention Time	: 0.00051
Quant Ion	: 138.00
Area (flag)	: 17614A
On-column Amount (ng/ul)	: 0.5169

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R05 Lab Sample ID: 1030982

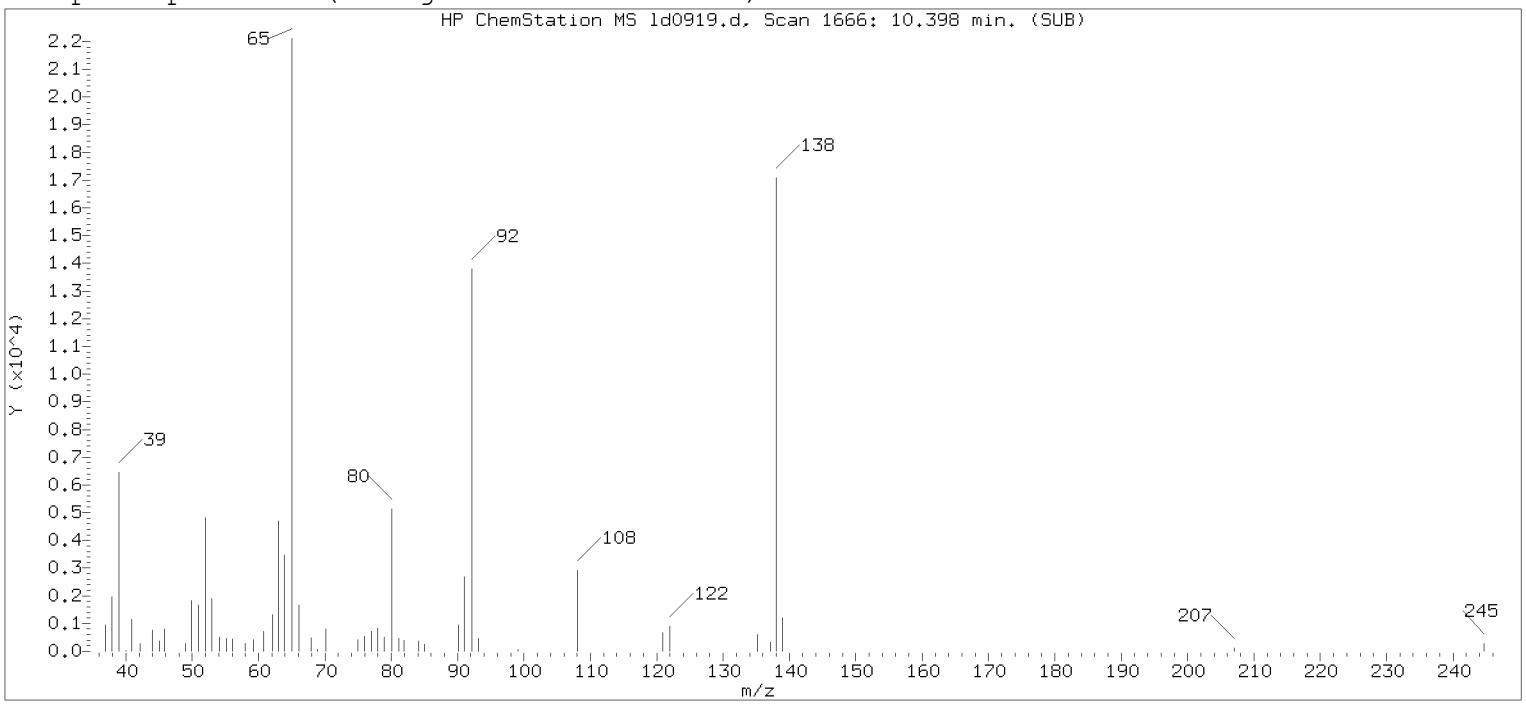
Compound Number : 104
Compound Name : 2-Nitroaniline
Scan Number : 1666
Retention Time (minutes) : 10.398
Quant Ion : 138.00
Area (flag) : 17614A
On-column Amount (ng/ul) : 0.5169
Integration start scan : 1661 Integration stop scan: 1678
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

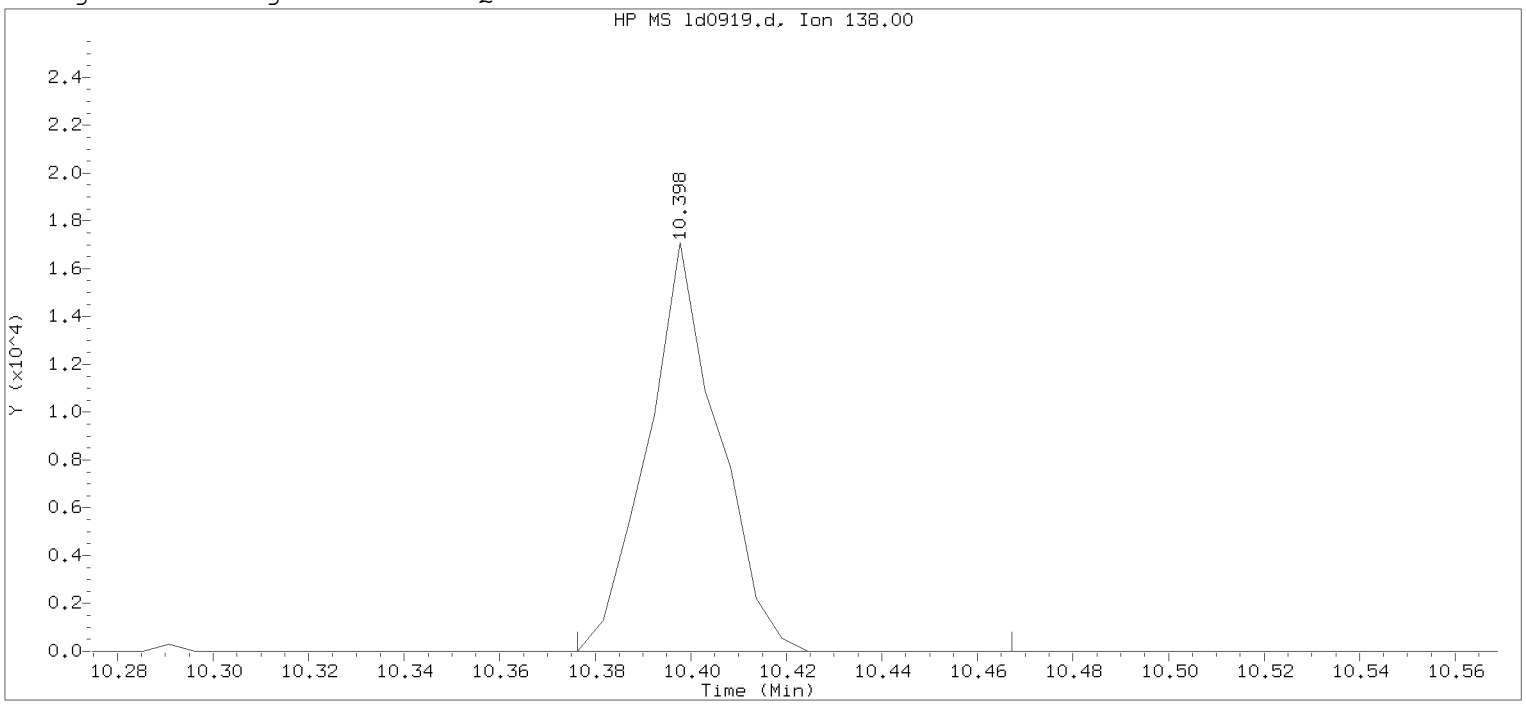
Analyst responsible for change: Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

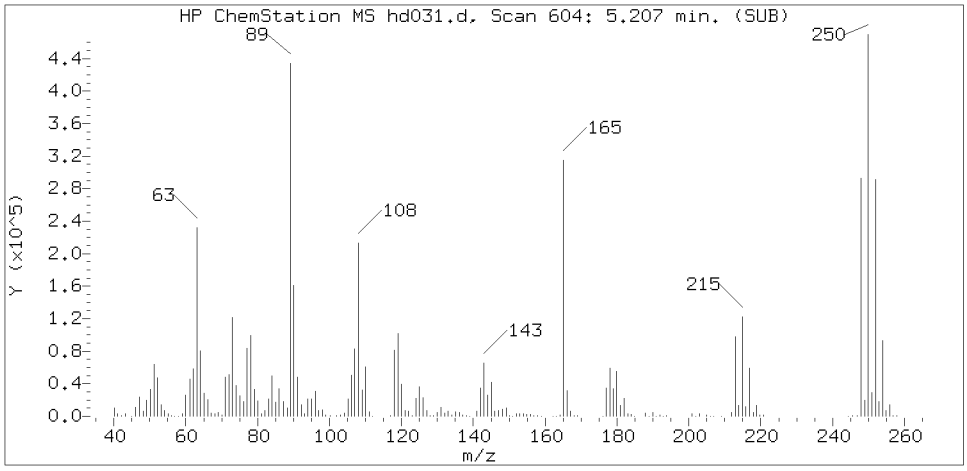
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 16-Apr-2019 01:52 chemist

Sample Name: 34R05 Lab Sample ID: 1030982

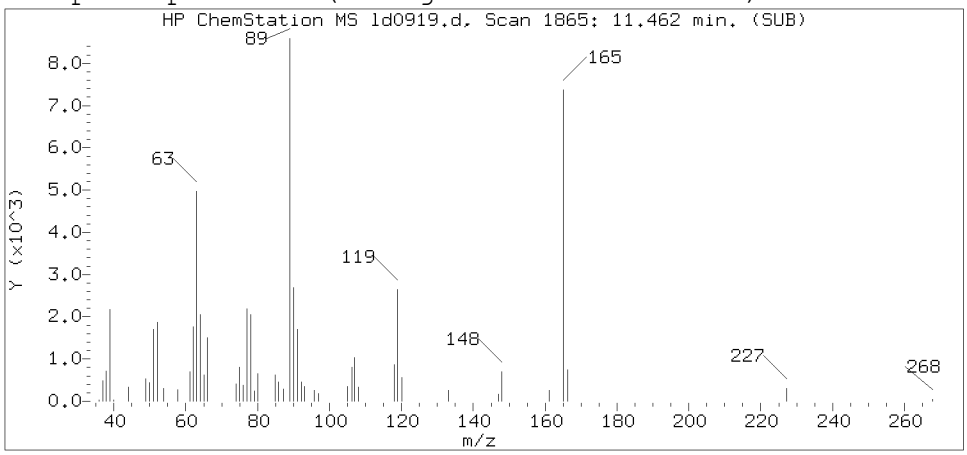
Compound Number	: 104		
Compound Name	: 2-Nitroaniline		
Scan Number	: 1666		
Retention Time (minutes)	: 10.398		
Quant Ion	: 138.00		
Area	: 17614		
On-column Amount (ng/ul)	: 0.5169		
Integration start scan	: 1661	Integration stop scan:	1678
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: kbeck

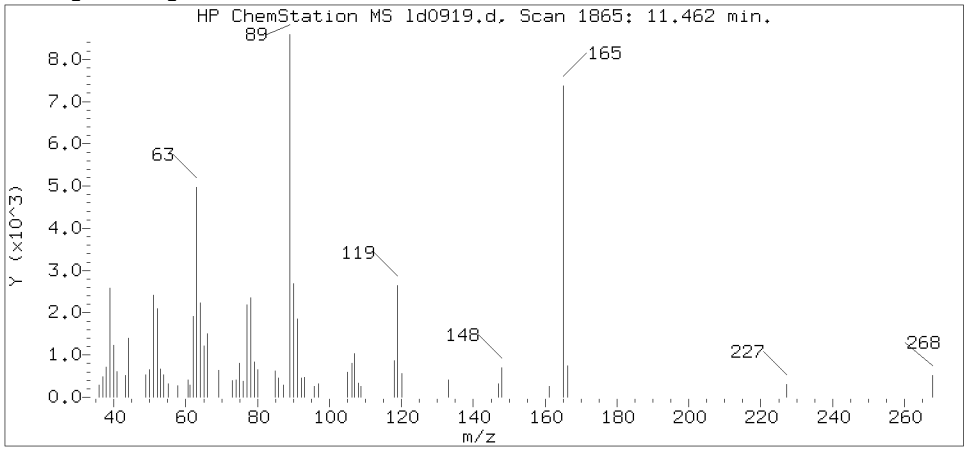
Reference Standard Spectrum for 2,4-Dinitrotoluene

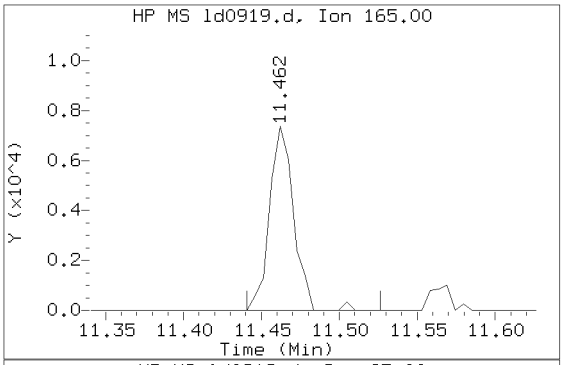


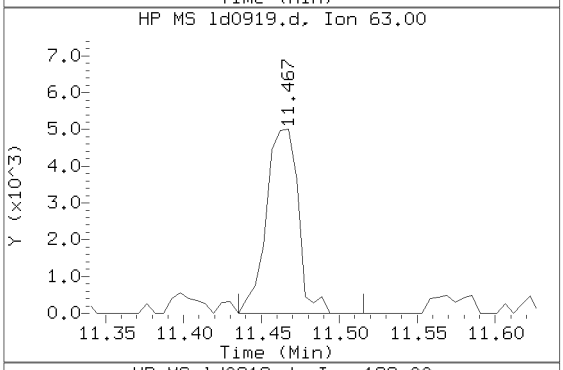
Sample Spectrum (Background Subtracted)

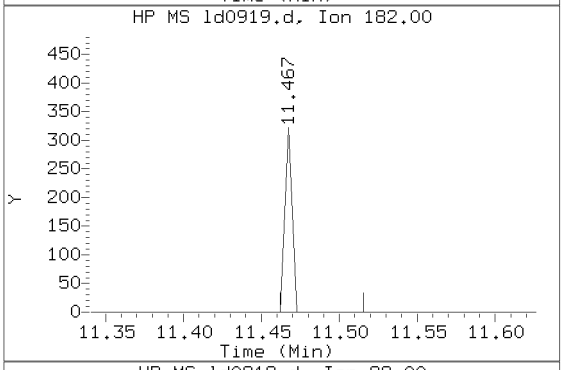


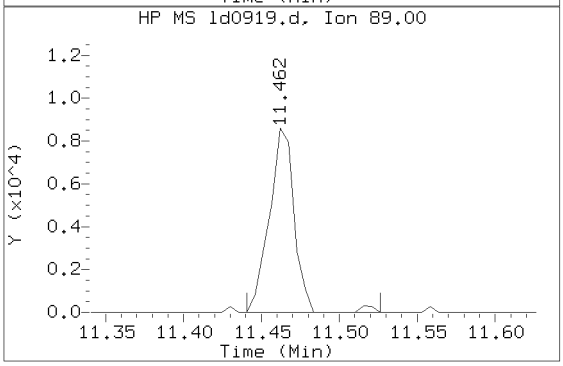
Sample Spectrum (Unaltered)











Data File: /chem/HP20296.i/19apr15a.b/ld0919.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:21 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R05 Lab Sample ID: 1030982

Compound Number	: 123
Compound Name	: 2,4-Dinitrotoluene
Scan Number	: 1865
Retention Time (minutes)	: 11.462
Relative Retention Time	: 0.00047
Quant Ion	: 165.00
Area (flag)	: 7923
On-column Amount (ng/ul)	: 0.2247

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0920.d
Injection date and time: **16-APR-2019 01:50**
Data file Sample Info. Line: 34R06;1030983;1;0;SAMPLE;;DRRAAP;
Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 249 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.300	(0.000)	900	152	234942	(-6)	5.00	
68) Naphthalene-d8	8.274	(0.005)	1269	136	890091	(-6)	5.00	
118) Acenaphthene-d10	11.104	(0.005)	1798	164	399701	(-9)	5.00	
158) Phenanthrene-d10	13.082	(0.005)	2168	188	742817	(-9)	5.00	
180) Pyrene-d10	14.997	(0.005)	2526	212	724427	(-11)	5.00	
218) Perylene-d12	19.437	(0.011)	3356	264	648764	(-14)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.156	(0.000)	82	2147671	24.056	96%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061	(0.000)	172	2655280	19.931	80%		44 - 102
184) Terphenyl-d14	(5)	15.324	(0.000)	244	2169306	17.184	69%		33 - 126

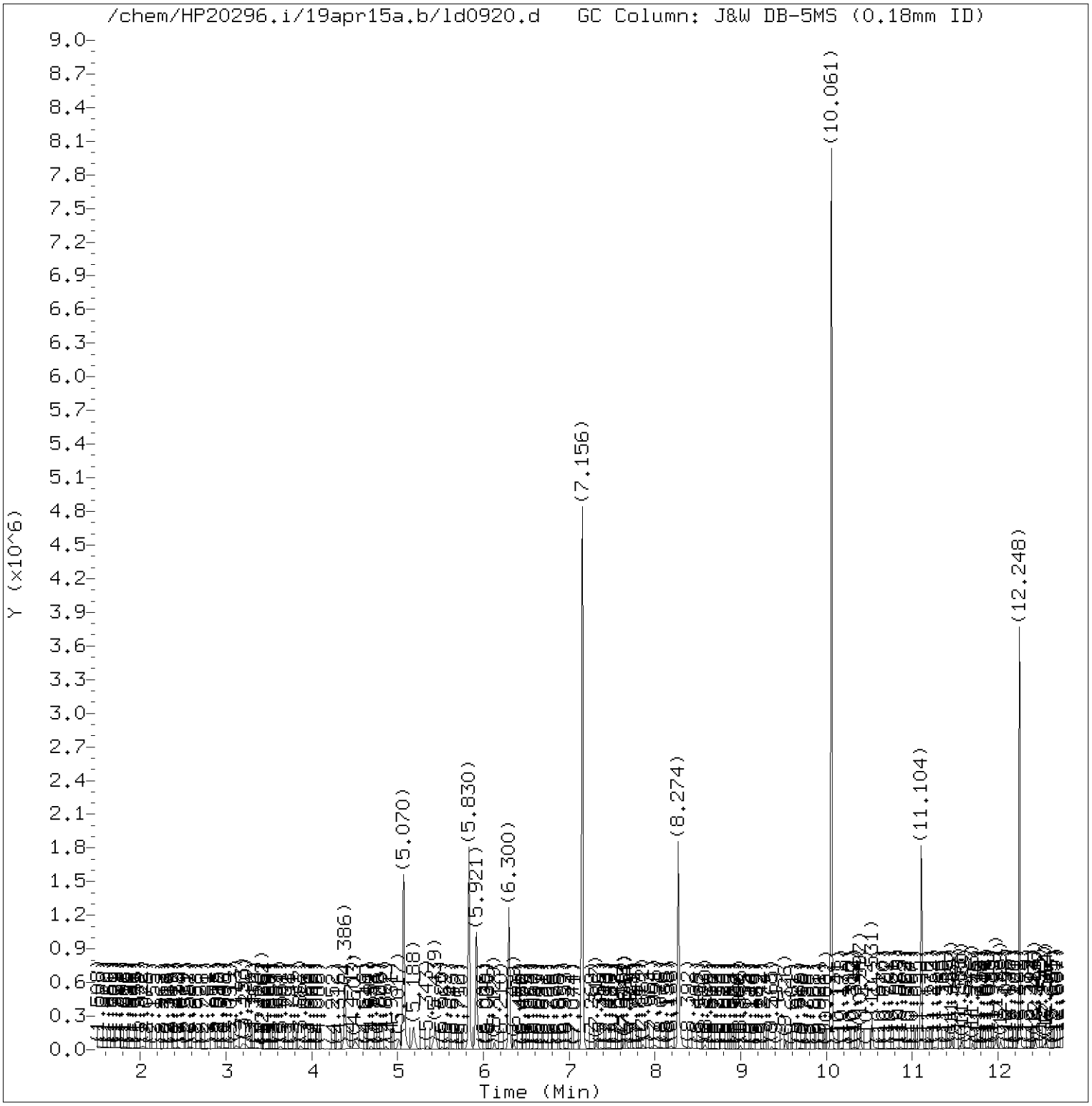
Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.183	(0.000)	77	24051	0.264	1.06		J	0.2
104) 2-Nitroaniline	(3)	10.397	(0.000)	138	21771A	0.592	2.38		J	0.5
113) 2,6-Dinitrotoluene	(3)				Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)	11.462	(0.000)	165	10645	0.280	1.12		J	0.2
129) Diethylphthalate	(3)				Not Detected					0.1
134) 4-Nitroaniline	(3)				Not Detected					0.3
204) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					0.4

A = User selected an alternate peak.

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

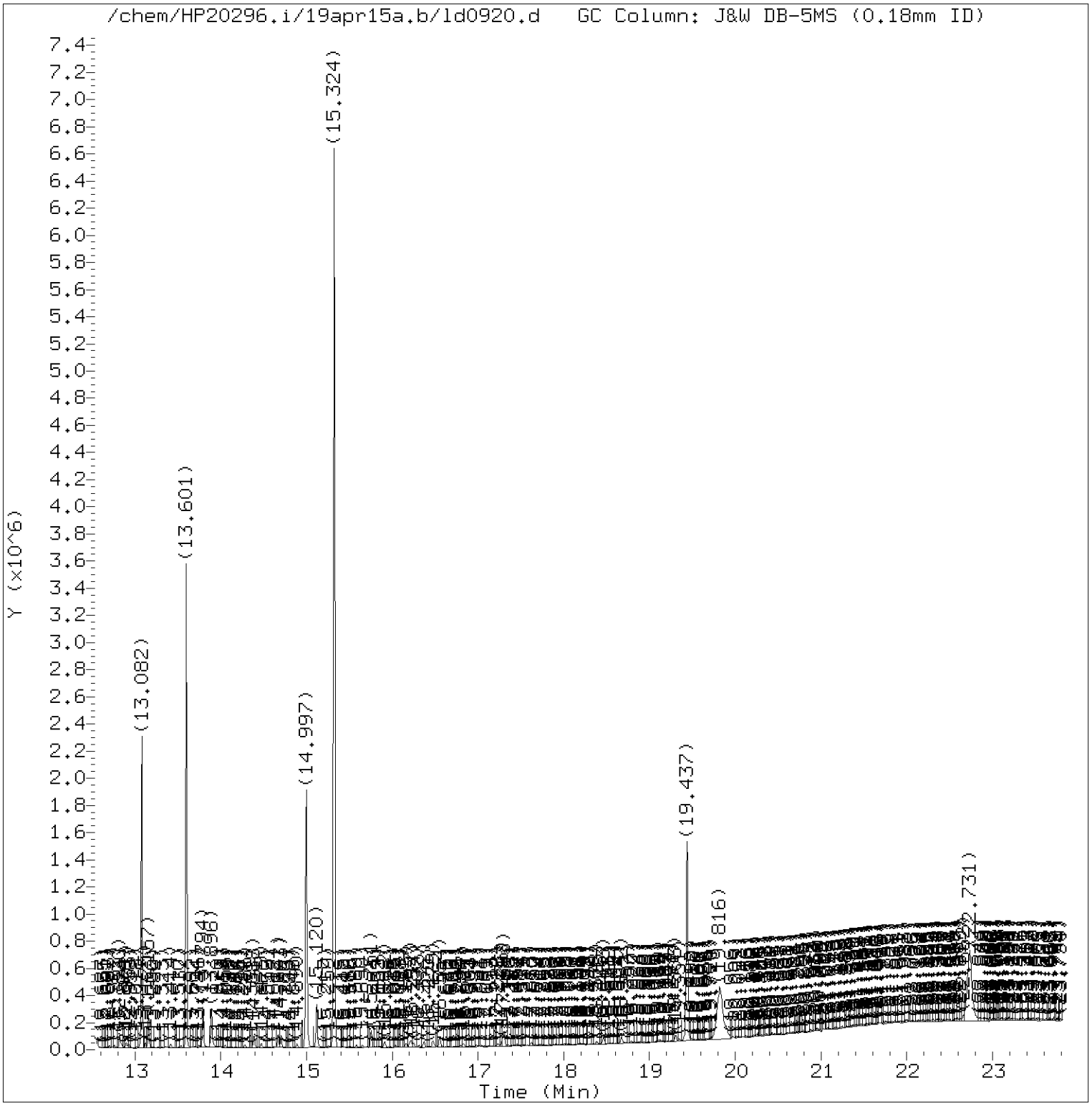
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R06 Lab Sample ID: 1030983

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R06 Lab Sample ID: 1030983

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

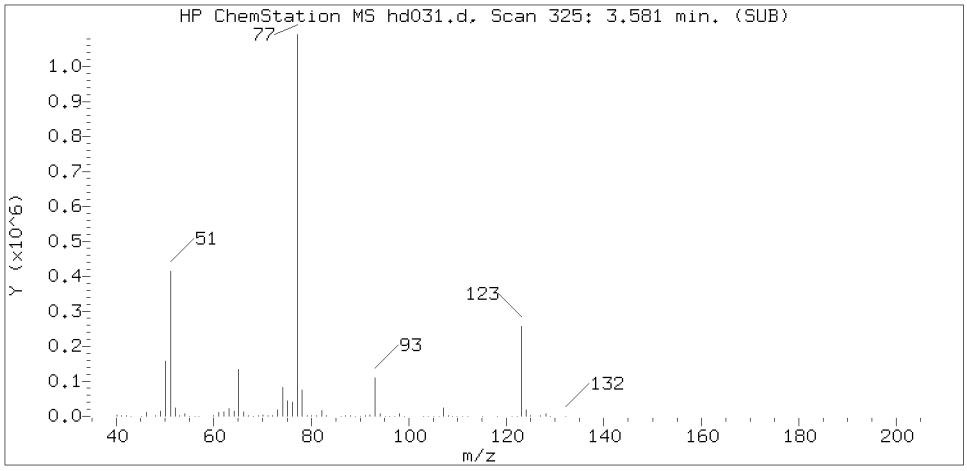
Sample Name: 34R06 Lab Sample ID: 1030983

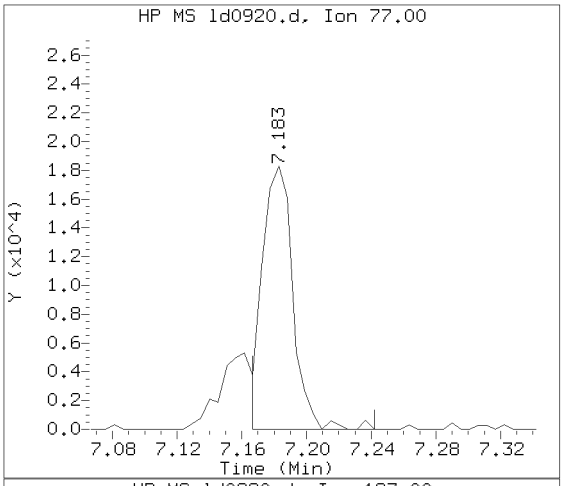
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.300	152	234942	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	2147671	24.056
46) Nitrobenzene	(2)	7.183	77	24051	0.264
68)*Naphthalene-d8	(2)	8.274	136	890091	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2655280	19.931
104) 2-Nitroaniline	(3)	10.397	138	21771A	0.592
118)*Acenaphthene-d10	(3)	11.104	164	399701	5.000
123) 2,4-Dinitrotoluene	(3)	11.462	165	10645	0.280
158)*Phenanthrene-d10	(4)	13.082	188	742817	5.000
180)*Pyrene-d10	(5)	14.997	212	724427	5.000
184)$Terphenyl-d14	(5)	15.324	244	2169306	17.184
218)*Perylene-d12	(6)	19.437	264	648764	5.000

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

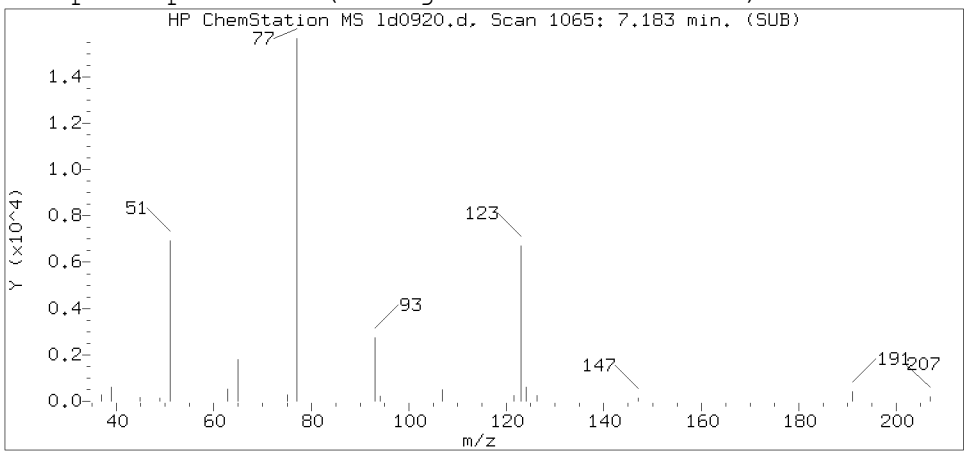
Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

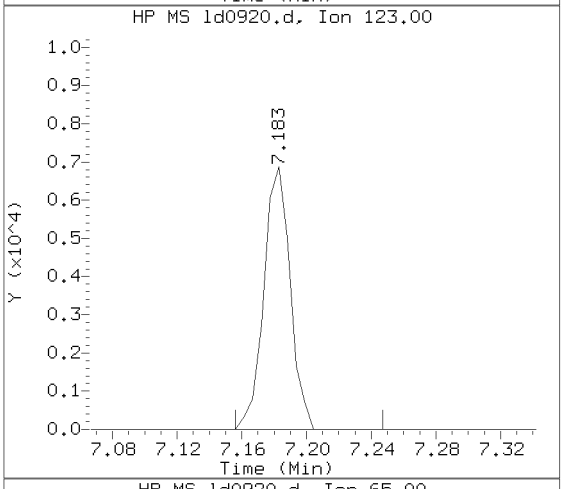
Reference Standard Spectrum for Nitrobenzene



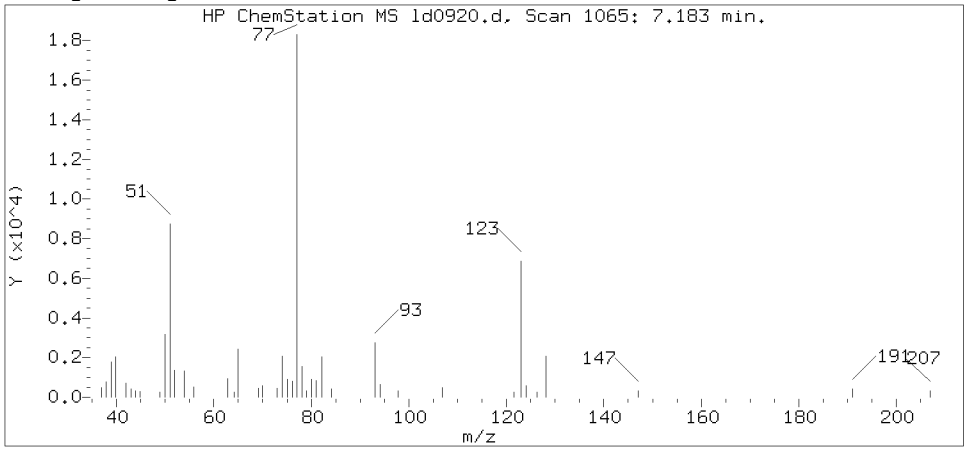


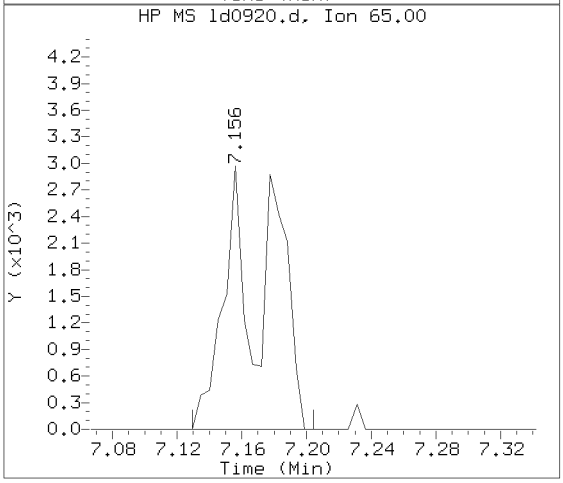
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

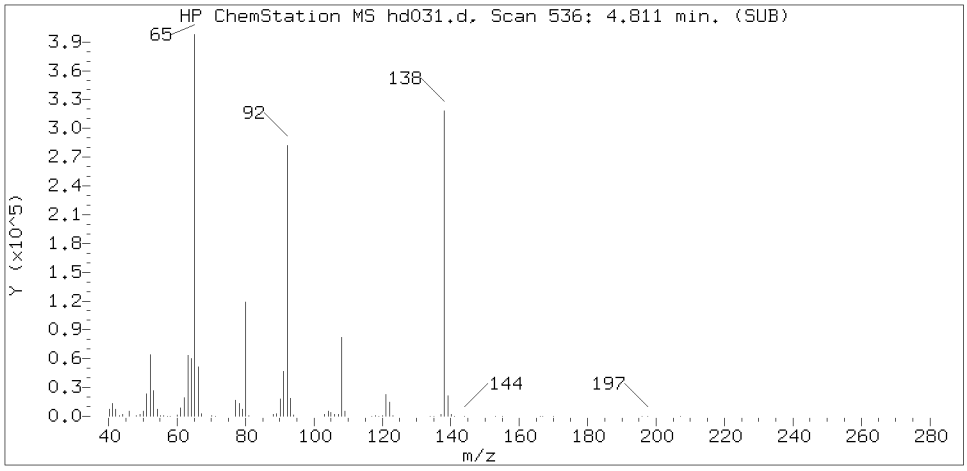
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

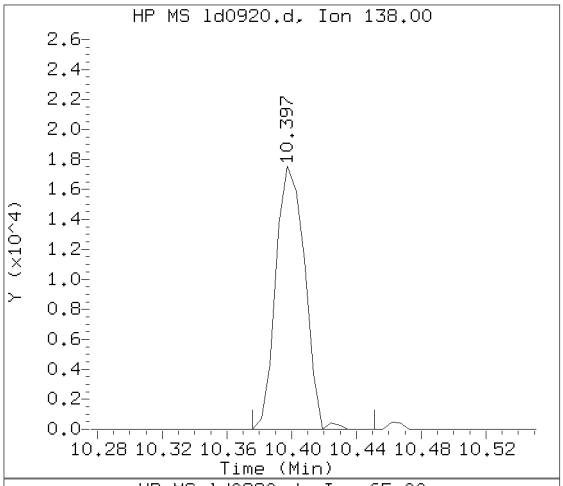
Sample Name: 34R06 Lab Sample ID: 1030983

Compound Number	: 46
Compound Name	: Nitrobenzene
Scan Number	: 1065
Retention Time (minutes)	: 7.183
Relative Retention Time	: 0.00009
Quant Ion	: 77.00
Area (flag)	: 24051
On-column Amount (ng/ul)	: 0.2641

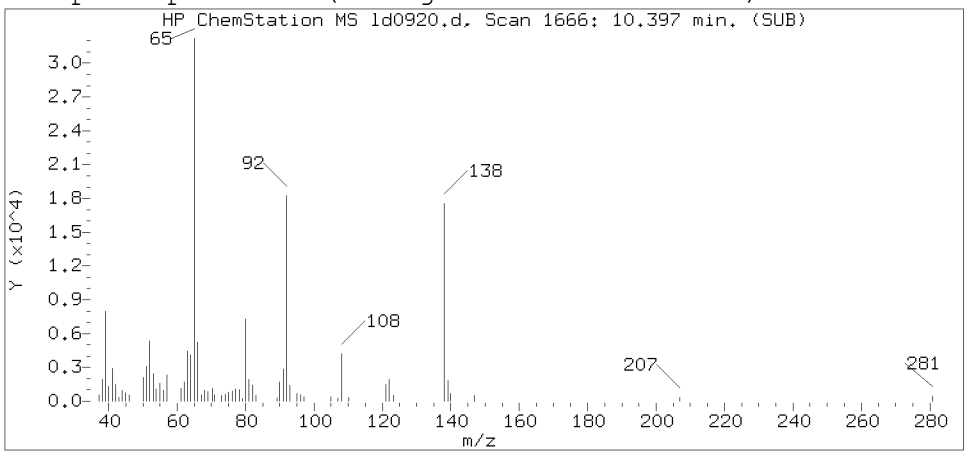
Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

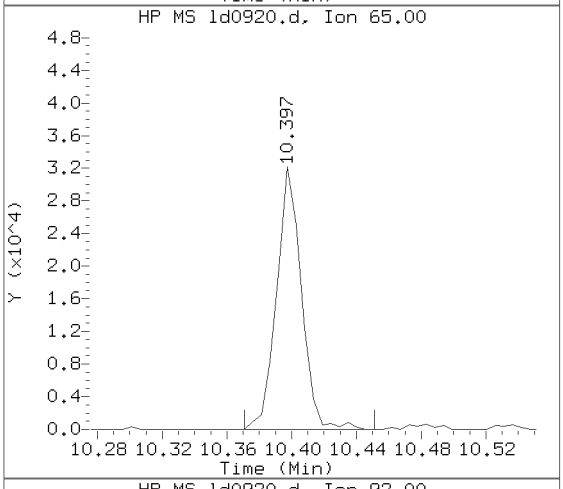
Reference Standard Spectrum for 2-Nitroaniline



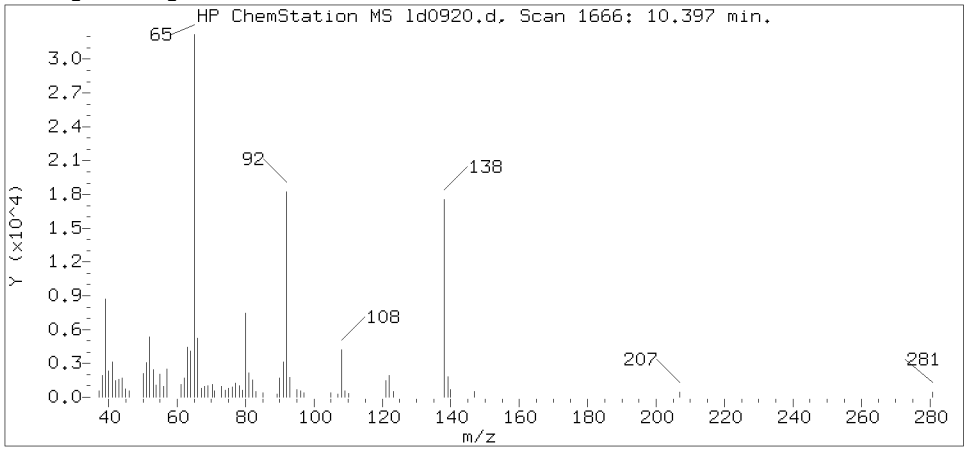


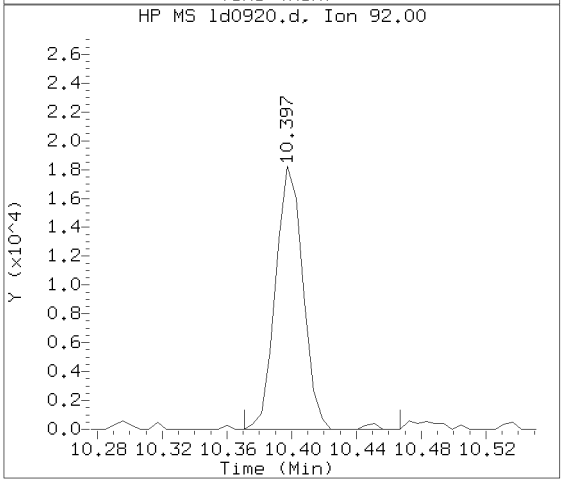
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

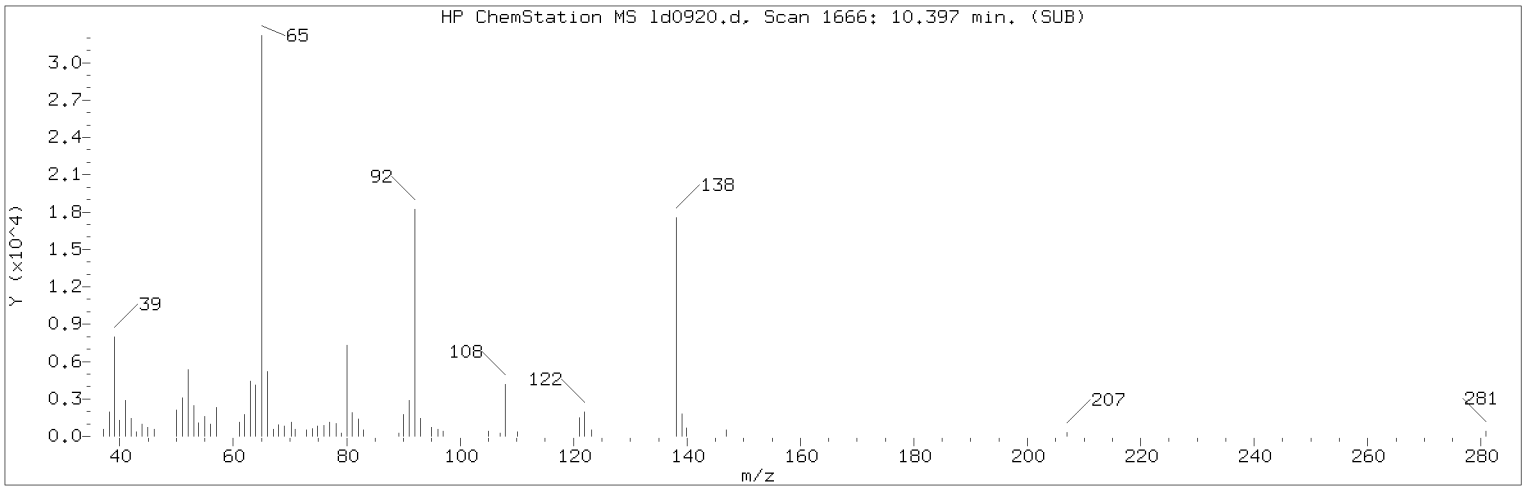
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R06 Lab Sample ID: 1030983

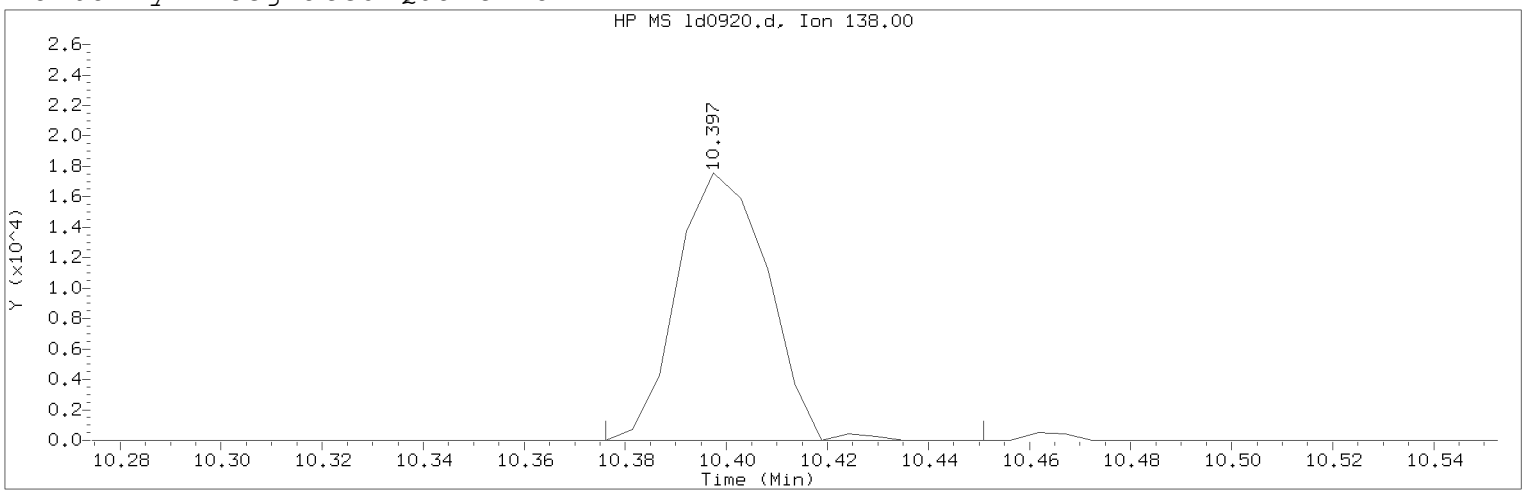
Compound Number	: 104
Compound Name	: 2-Nitroaniline
Scan Number	: 1666
Retention Time (minutes)	: 10.397
Relative Retention Time	: 0.00051
Quant Ion	: 138.00
Area (flag)	: 21771A
On-column Amount (ng/ul)	: 0.5918

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R06 Lab Sample ID: 1030983

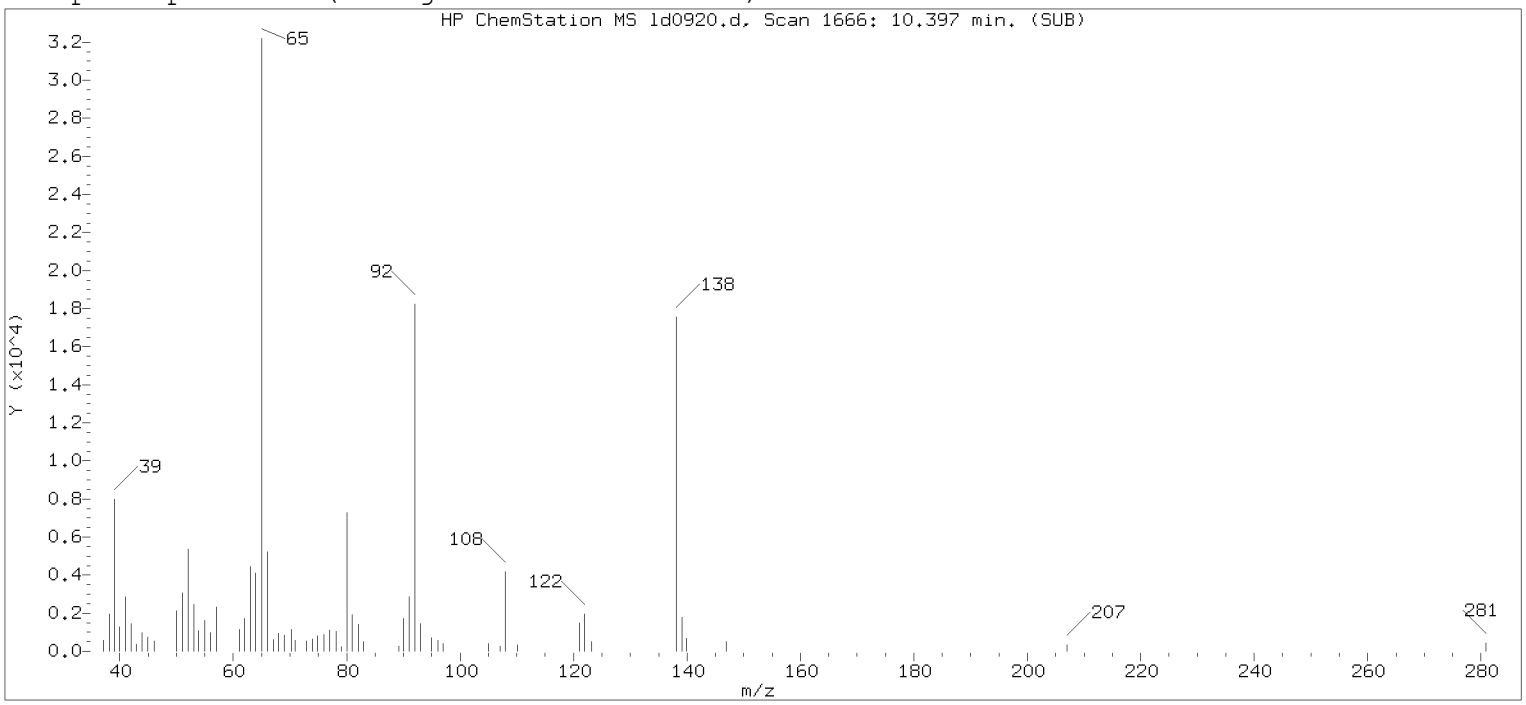
Compound Number : 104
Compound Name : 2-Nitroaniline
Scan Number : 1666
Retention Time (minutes) : 10.397
Quant Ion : 138.00
Area (flag) : 21771A
On-column Amount (ng/ul) : 0.5918
Integration start scan : 1661 Integration stop scan: 1675
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

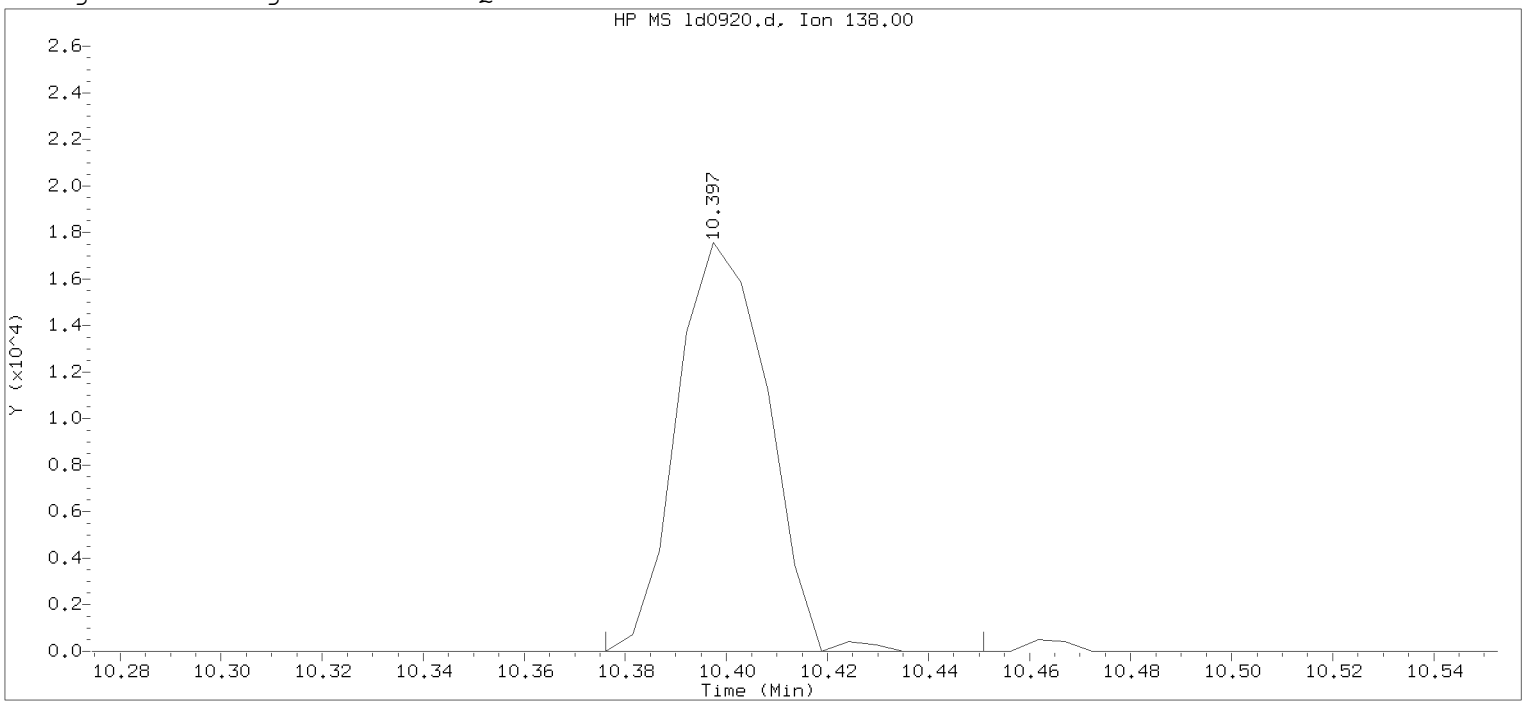
Analyst responsible for change: Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

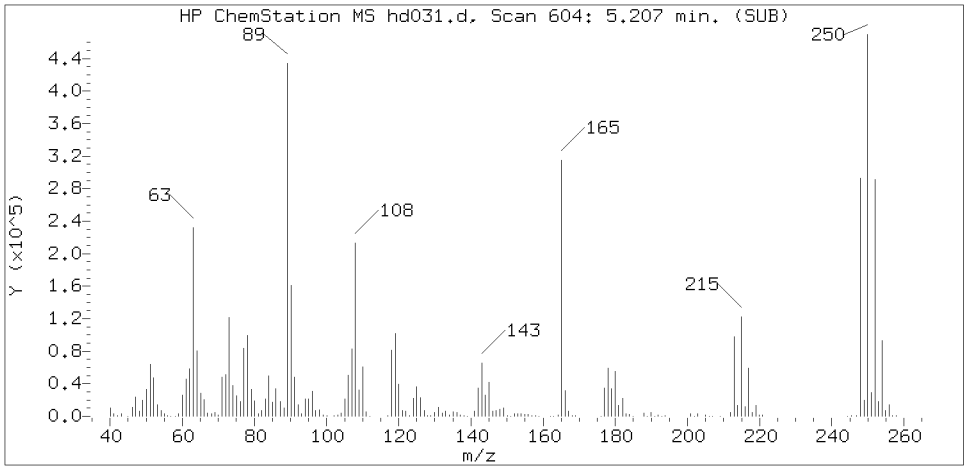
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 16-Apr-2019 02:21 chemist

Sample Name: 34R06 Lab Sample ID: 1030983

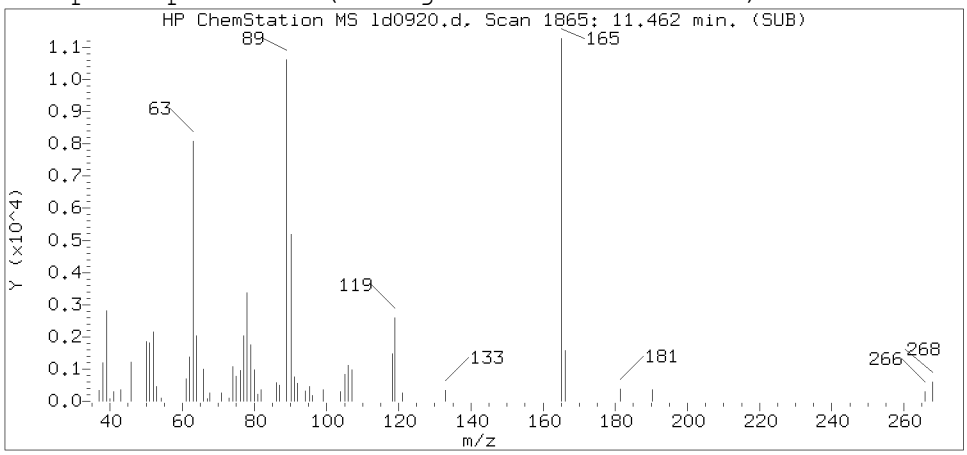
Compound Number	: 104		
Compound Name	: 2-Nitroaniline		
Scan Number	: 1666		
Retention Time (minutes)	: 10.397		
Quant Ion	: 138.00		
Area	: 21771		
On-column Amount (ng/ul)	: 0.5918		
Integration start scan	: 1661	Integration stop scan:	1675
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ART34 Page 597

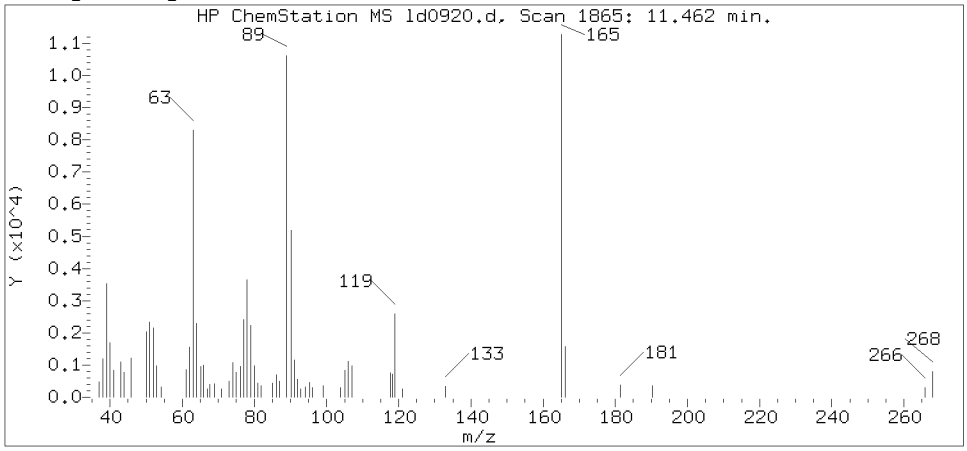
Reference Standard Spectrum for 2,4-Dinitrotoluene

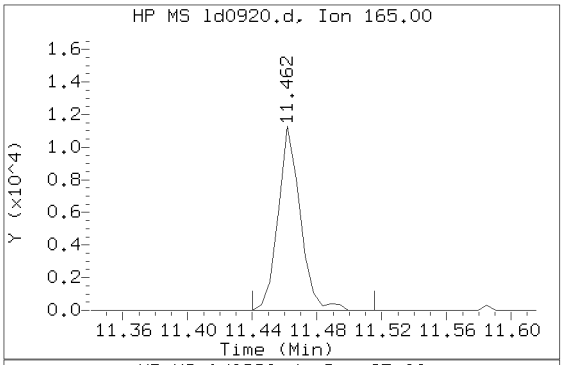


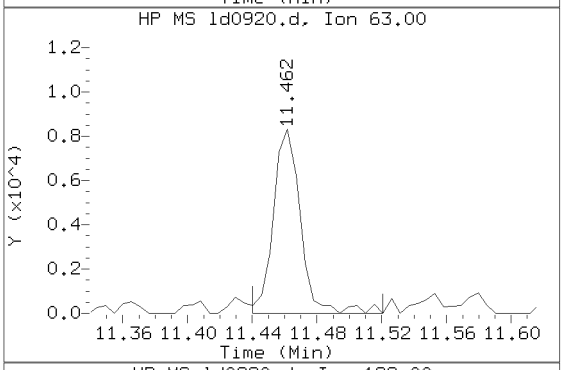
Sample Spectrum (Background Subtracted)

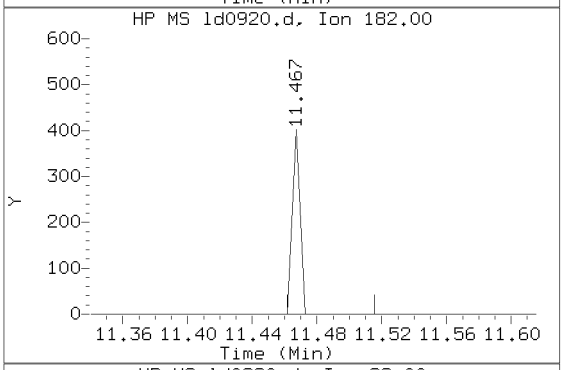


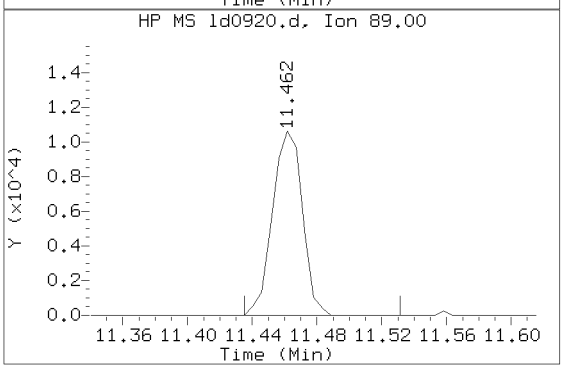
Sample Spectrum (Unaltered)











Data File: /chem/HP20296.i/19apr15a.b/ld0920.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 01:50 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R06 Lab Sample ID: 1030983

Compound Number	: 123
Compound Name	: 2,4-Dinitrotoluene
Scan Number	: 1865
Retention Time (minutes)	: 11.462
Relative Retention Time	: 0.00047
Quant Ion	: 165.00
Area (flag)	: 10645
On-column Amount (ng/ul)	: 0.2797

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0921.d Injection date and time: **16-APR-2019 02:18**
Data file Sample Info. Line: 34R07;1030984;1;0;SAMPLE;;DRRAAP; Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 251 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.295	(0.005)	899	152	227073	(-10)	5.00	
68) Naphthalene-d8	8.274	(0.005)	1269	136	860700	(-9)	5.00	
118) Acenaphthene-d10	11.104	(0.005)	1798	164	368081	(-16)	5.00	
158) Phenanthrene-d10	13.083	(0.005)	2168	188	708456	(-13)	5.00	
180) Pyrene-d10	14.997	(0.005)	2526	212	690021	(-15)	5.00	
218) Perylene-d12	19.437	(0.011)	3356	264	618132	(-18)	5.00	

Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.156	(0.000)	82	2092564	24.239	97%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061	(0.000)	172	2617217	21.333	85%		44 - 102
184) Terphenyl-d14	(5)	15.324	(0.000)	244	2356925	19.601	78%		33 - 126

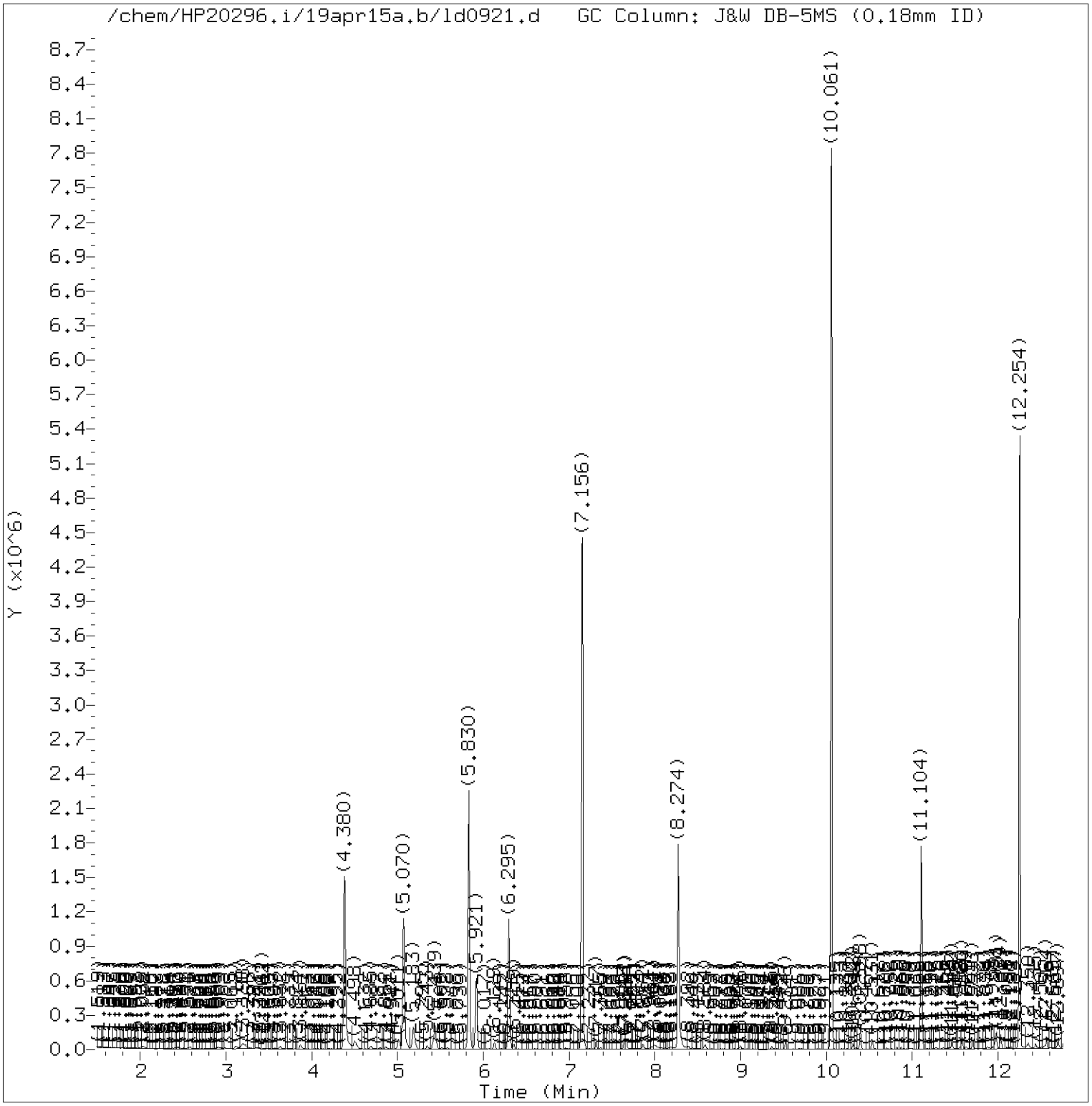
Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.178	(0.000)	77	23049	0.262	1.04		J	0.2
104) 2-Nitroaniline	(3)	10.398	(0.000)	138	22490A	0.664	2.64		J	0.5
113) 2,6-Dinitrotoluene	(3)				Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)	11.462	(0.000)	165	7853	0.224	0.89		J	0.2
129) Diethylphthalate	(3)				Not Detected					0.1
134) 4-Nitroaniline	(3)	11.981	(0.000)	138	9759A	0.327	1.30		J	0.3
204) bis(2-Ethylhexyl)phthalate	(5)				Not Detected					0.4

A = User selected an alternate peak.

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

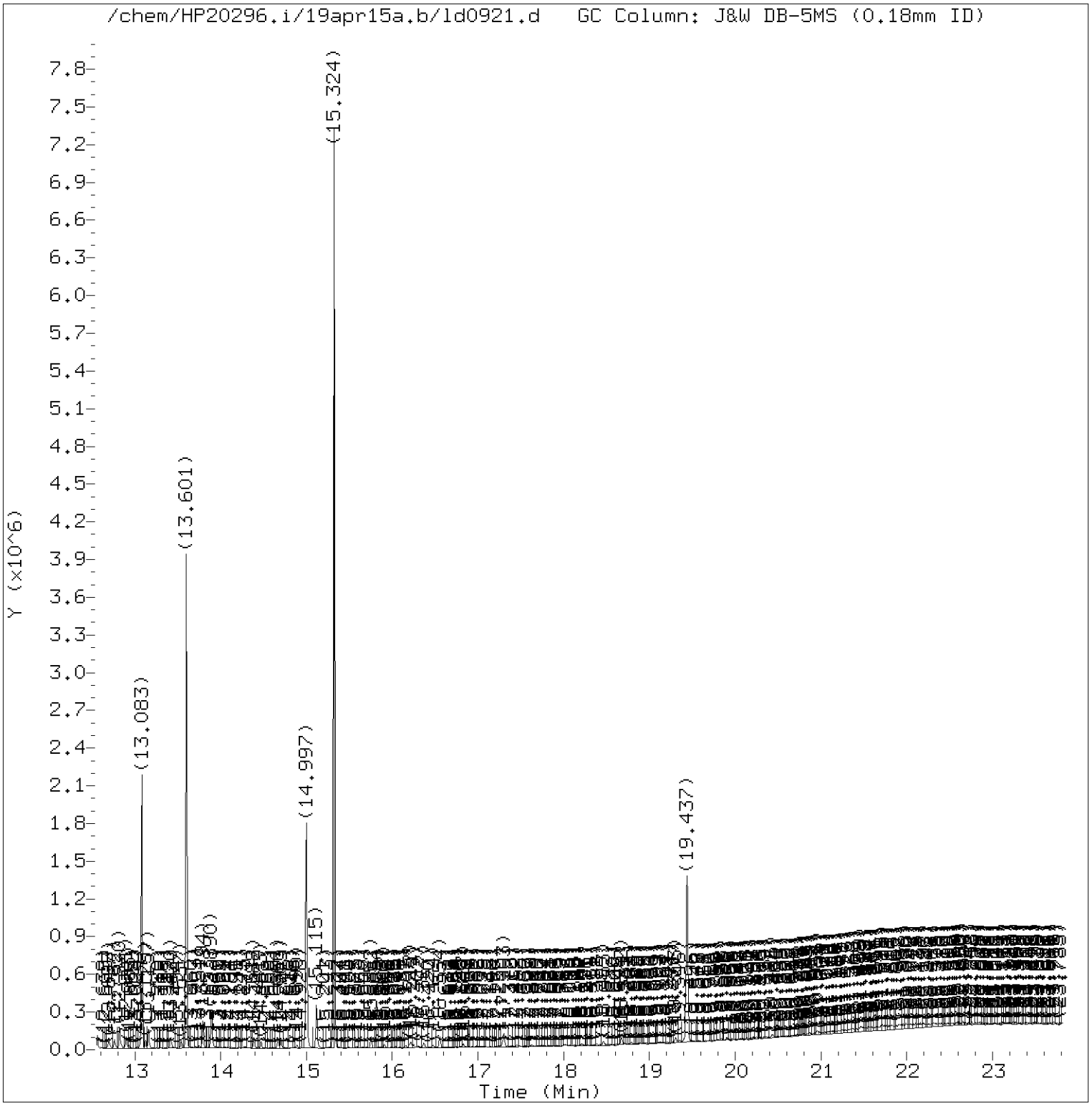
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

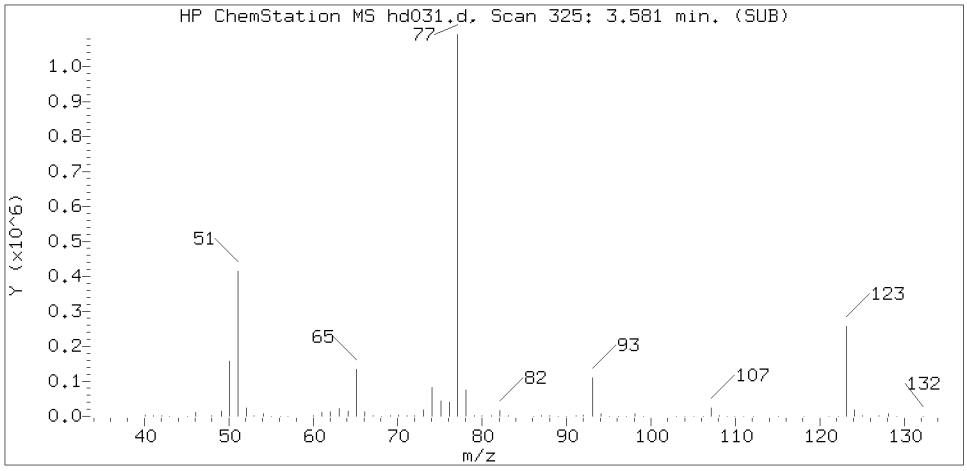
Sample Name: 34R07 Lab Sample ID: 1030984

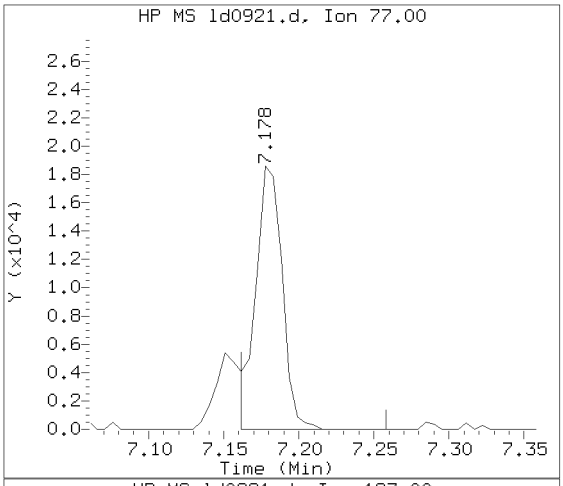
Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.295	152	227073	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	2092564	24.239
46) Nitrobenzene	(2)	7.178	77	23049	0.262
68)*Naphthalene-d8	(2)	8.274	136	860700	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2617217	21.333
104) 2-Nitroaniline	(3)	10.398	138	22490A	0.664
118)*Acenaphthene-d10	(3)	11.104	164	368081	5.000
123) 2,4-Dinitrotoluene	(3)	11.462	165	7853	0.224
134) 4-Nitroaniline	(3)	11.981	138	9759A	0.327
158)*Phenanthrene-d10	(4)	13.083	188	708456	5.000
180)*Pyrene-d10	(5)	14.997	212	690021	5.000
184)$Terphenyl-d14	(5)	15.324	244	2356925	19.601
218)*Perylene-d12	(6)	19.437	264	618132	5.000

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

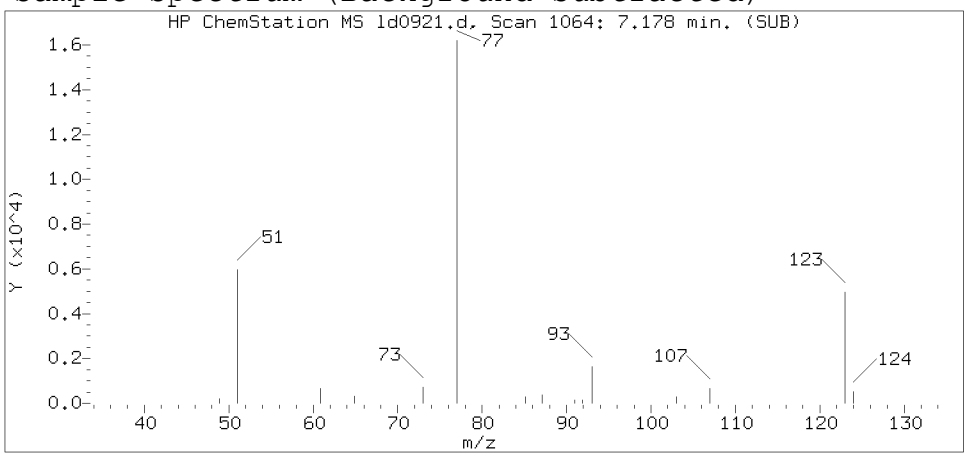
Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

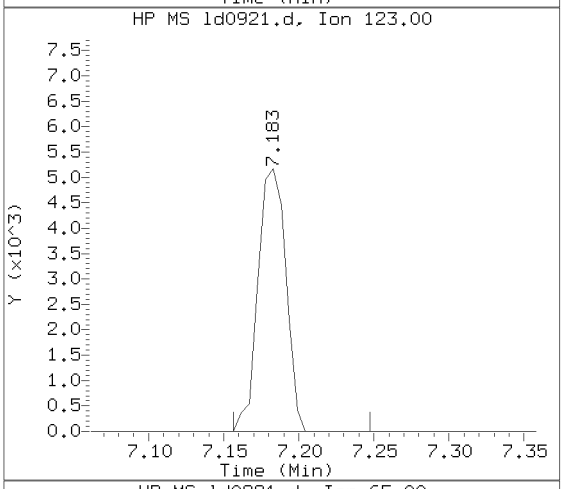
Reference Standard Spectrum for Nitrobenzene



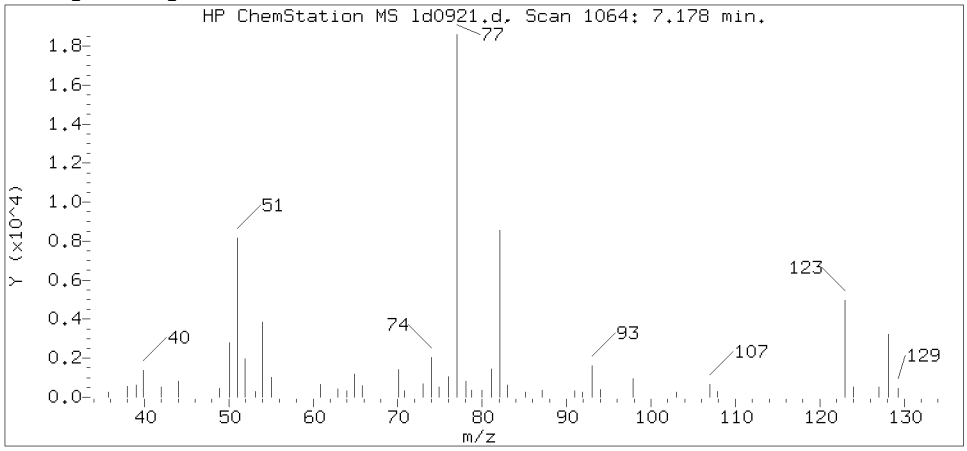


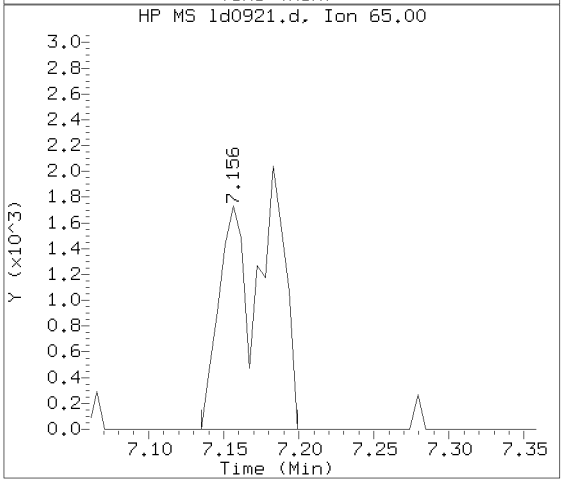
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

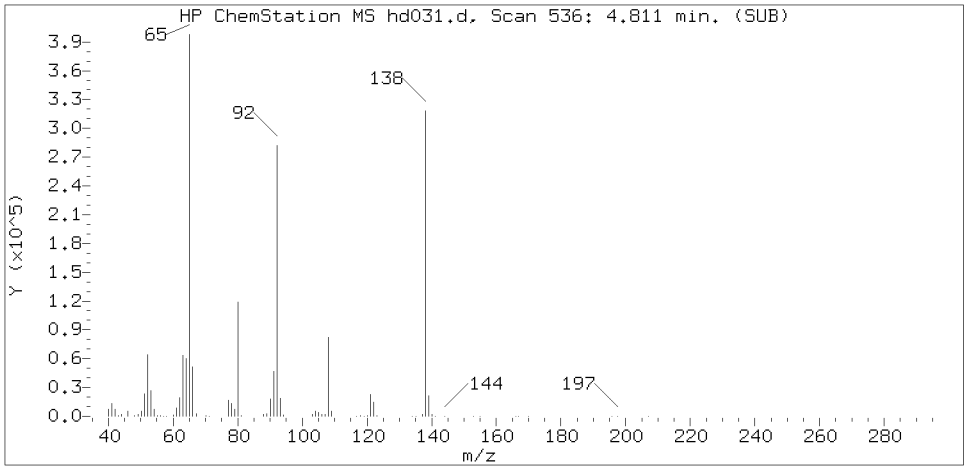
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

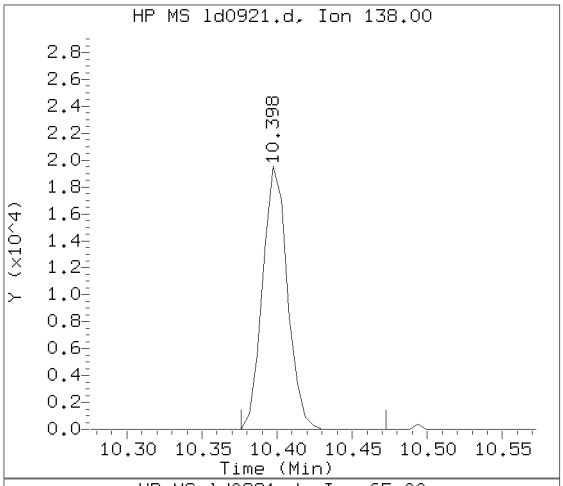
Sample Name: 34R07 Lab Sample ID: 1030984

Compound Number	: 46
Compound Name	: Nitrobenzene
Scan Number	: 1064
Retention Time (minutes)	: 7.178
Relative Retention Time	: 0.00073
Quant Ion	: 77.00
Area (flag)	: 23049
On-column Amount (ng/ul)	: 0.2617

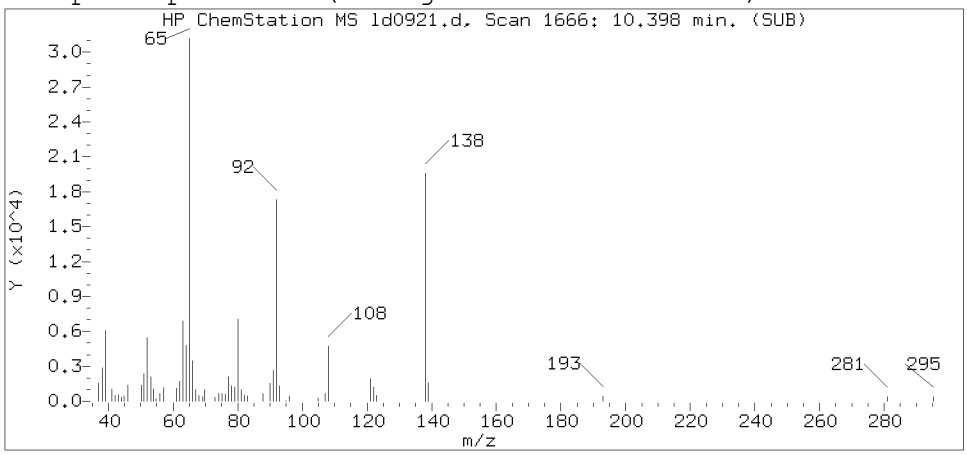
Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

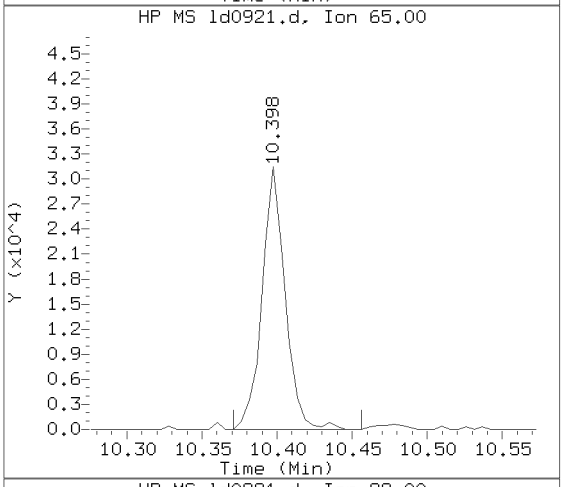
Reference Standard Spectrum for 2-Nitroaniline



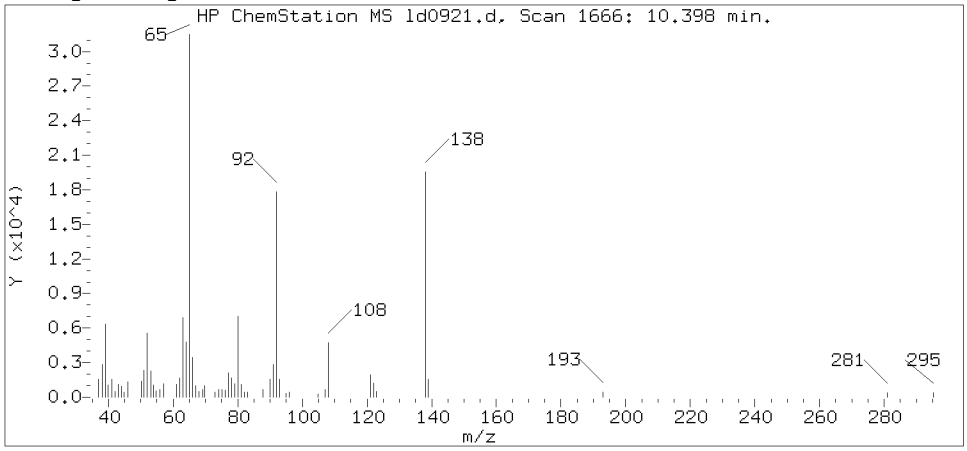


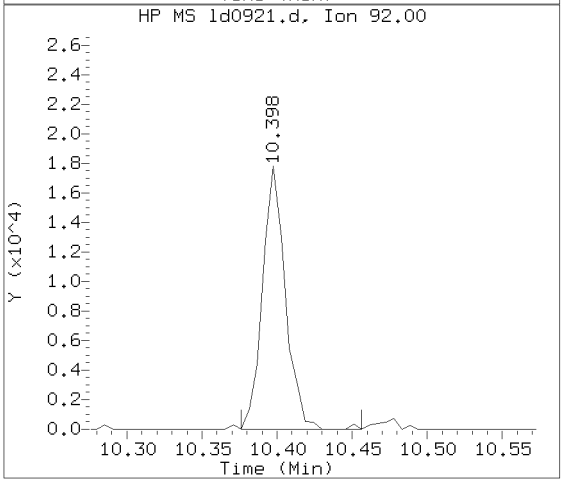
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

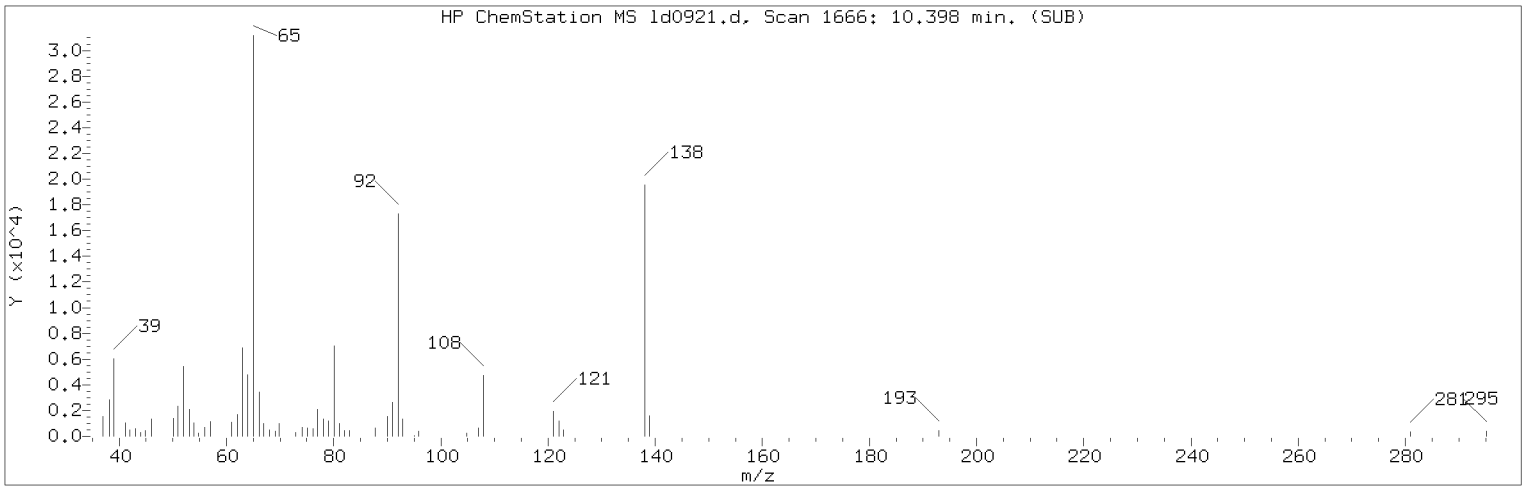
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

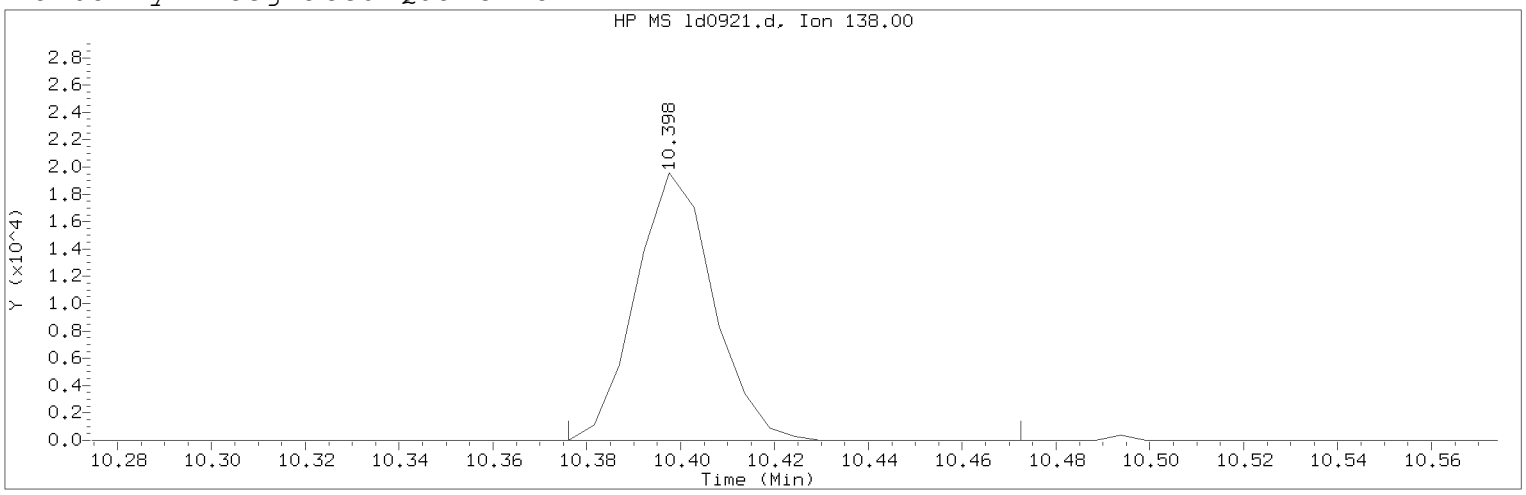
Compound Number	: 104
Compound Name	: 2-Nitroaniline
Scan Number	: 1666
Retention Time (minutes)	: 10.398
Relative Retention Time	: 0.00051
Quant Ion	: 138.00
Area (flag)	: 22490A
On-column Amount (ng/ul)	: 0.6638

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

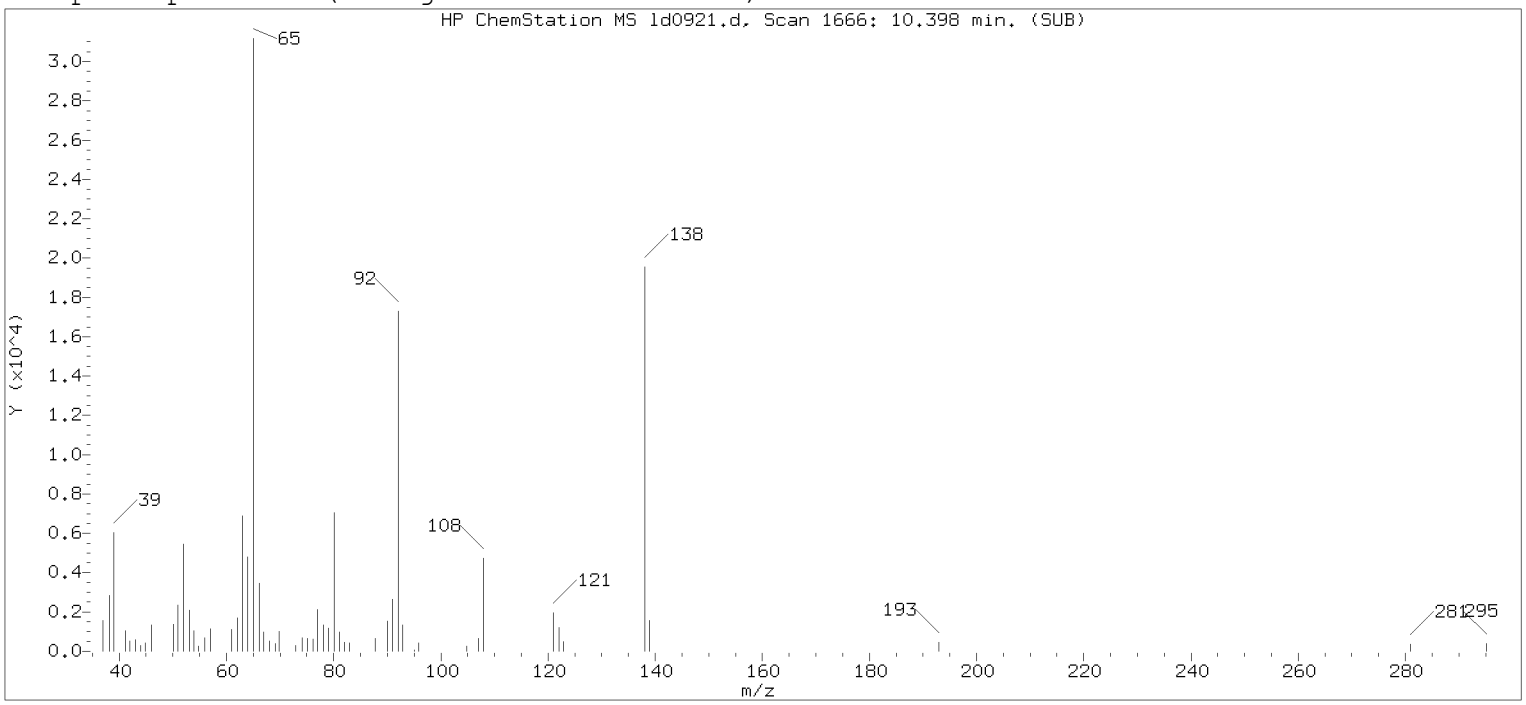
Compound Number : 104
Compound Name : 2-Nitroaniline
Scan Number : 1666
Retention Time (minutes) : 10.398
Quant Ion : 138.00
Area (flag) : 22490A
On-column Amount (ng/ul) : 0.6638
Integration start scan : 1661 Integration stop scan: 1679
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

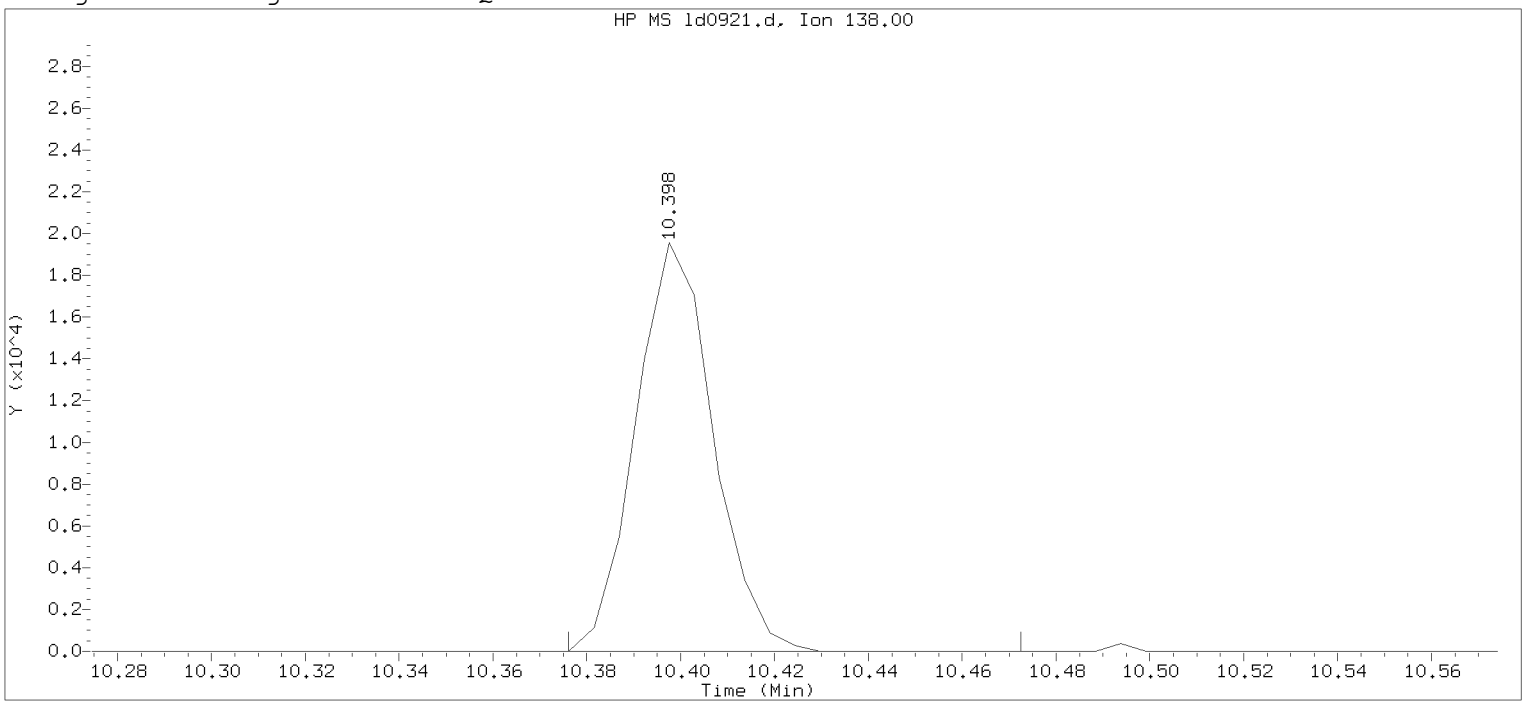
Analyst responsible for change: Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

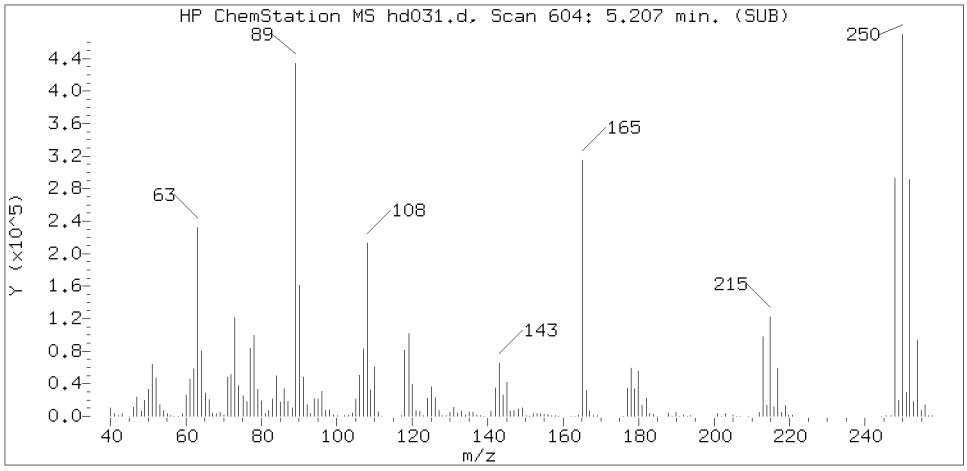
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 16-Apr-2019 02:49 chemist

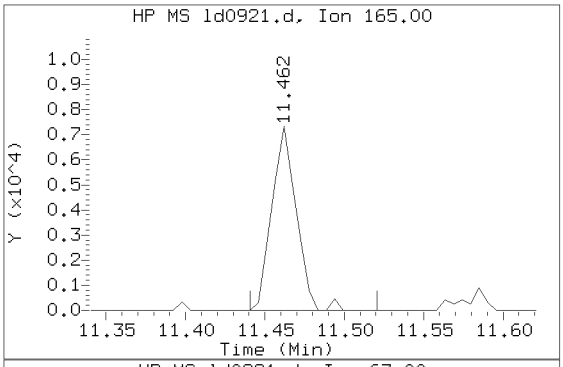
Sample Name: 34R07 Lab Sample ID: 1030984

Compound Number	: 104		
Compound Name	: 2-Nitroaniline		
Scan Number	: 1666		
Retention Time (minutes)	: 10.398		
Quant Ion	: 138.00		
Area	: 22490		
On-column Amount (ng/ul)	: 0.6638		
Integration start scan	: 1661	Integration stop scan:	1679
Y at integration start	: 0	Y at integration end:	0

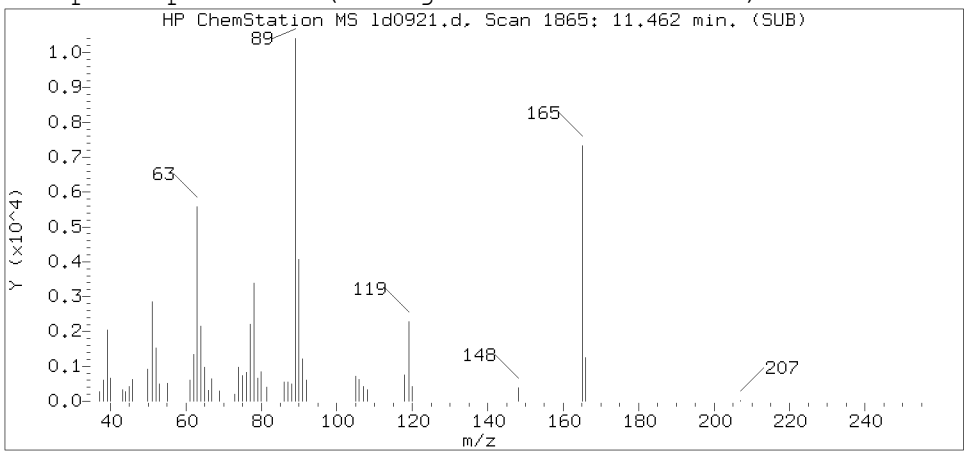
Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ART kira.beck

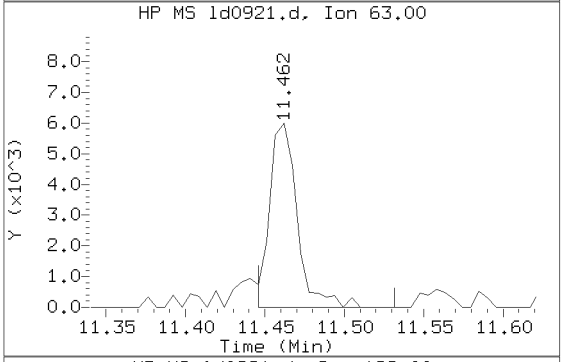
Reference Standard Spectrum for 2,4-Dinitrotoluene

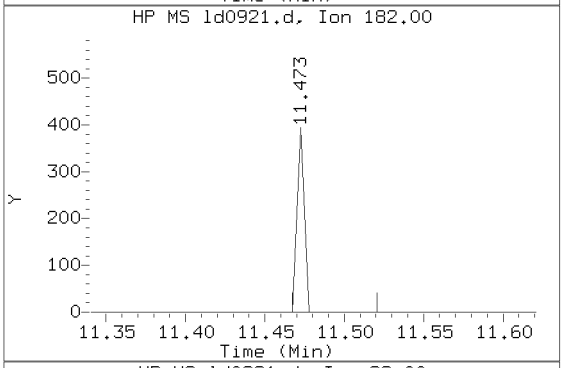




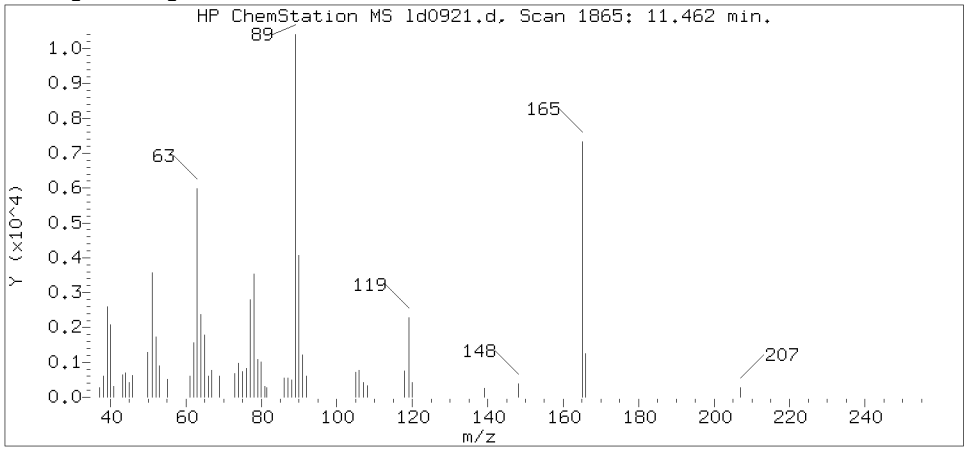
Sample Spectrum (Background Subtracted)

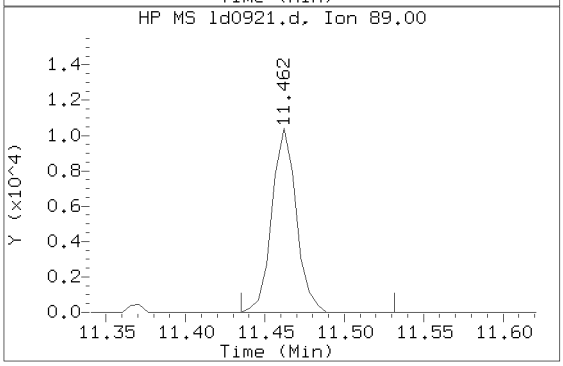






Sample Spectrum (Unaltered)





Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

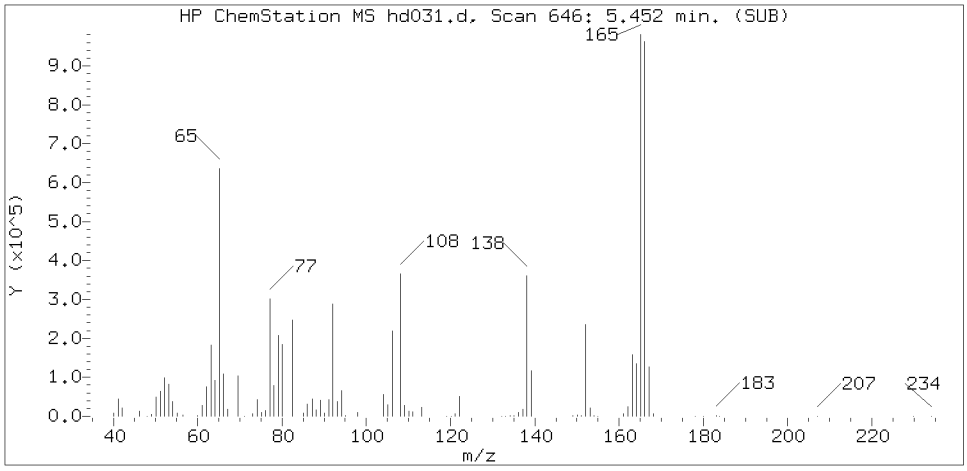
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

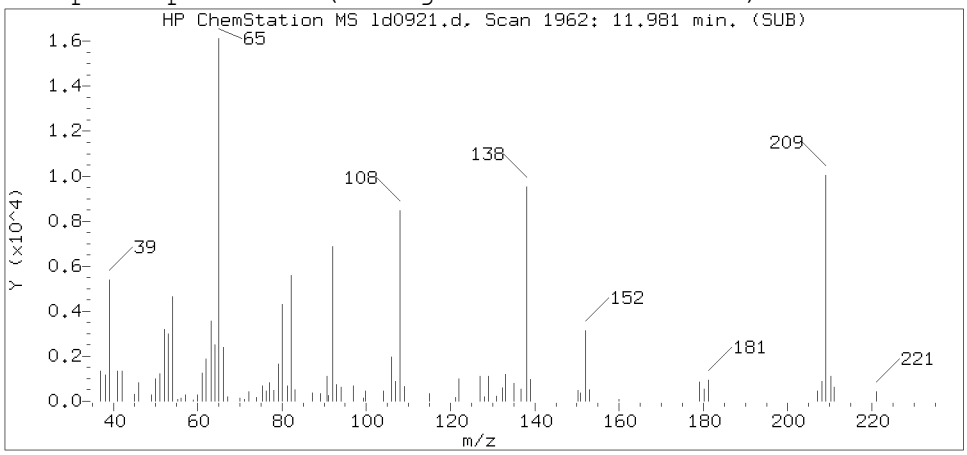
Compound Number	: 123
Compound Name	: 2,4-Dinitrotoluene
Scan Number	: 1865
Retention Time (minutes)	: 11.462
Relative Retention Time	: 0.00047
Quant Ion	: 165.00
Area (flag)	: 7853
On-column Amount (ng/ul)	: 0.2241

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

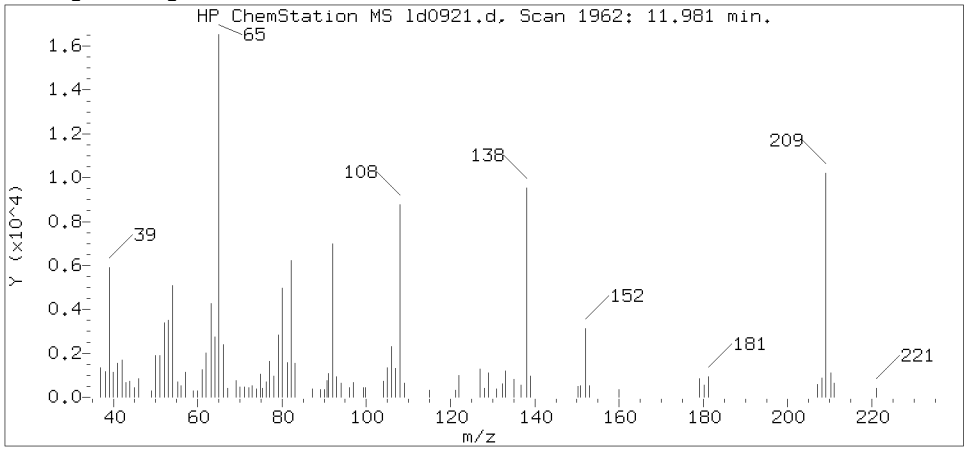
Reference Standard Spectrum for 4-Nitroaniline

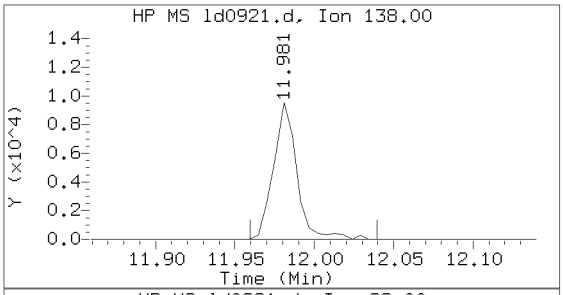


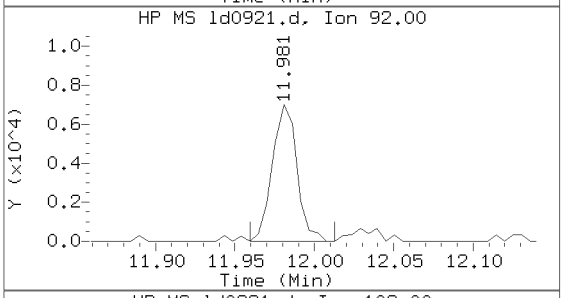
Sample Spectrum (Background Subtracted)

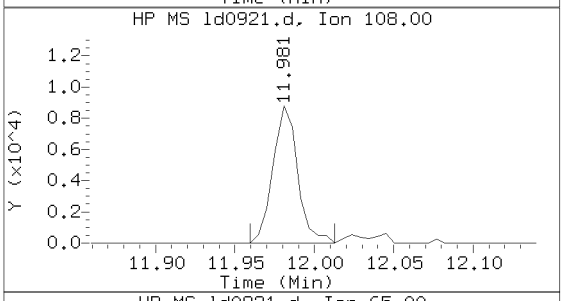


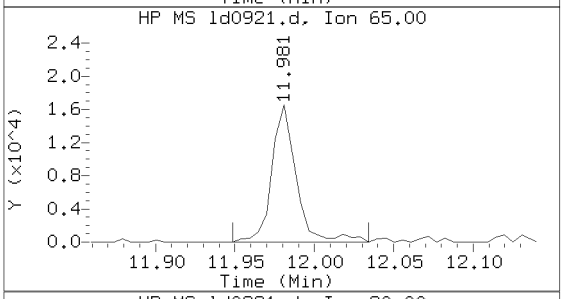
Sample Spectrum (Unaltered)

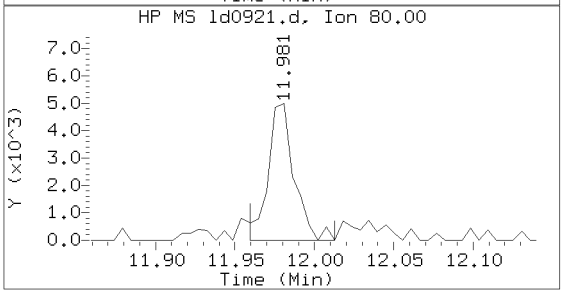












Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

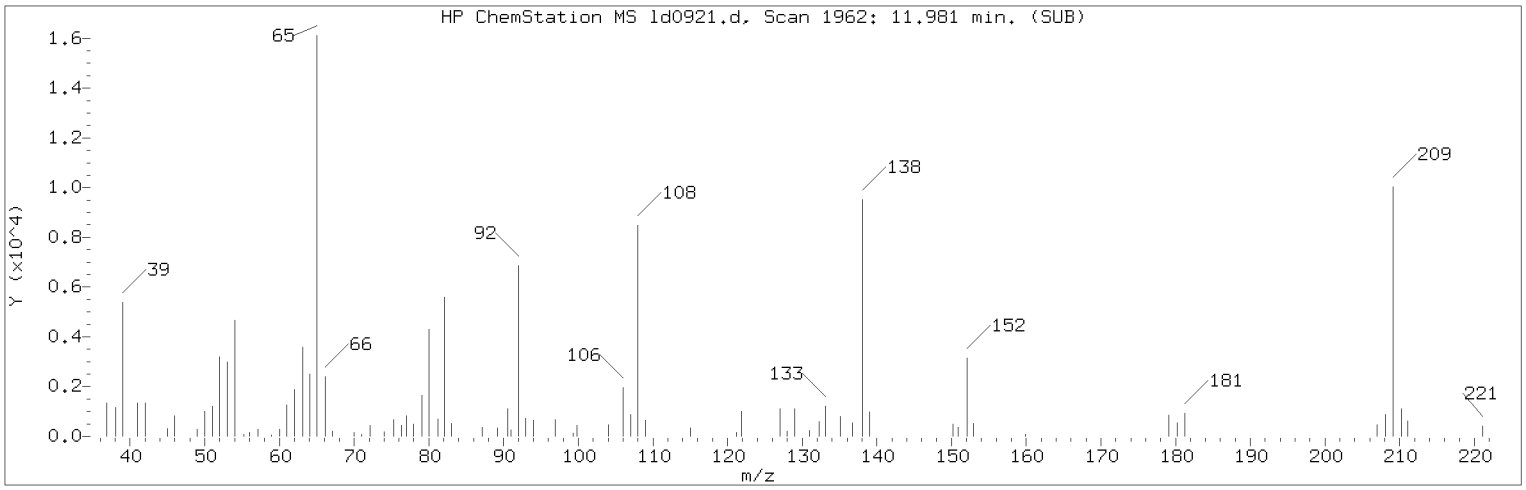
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

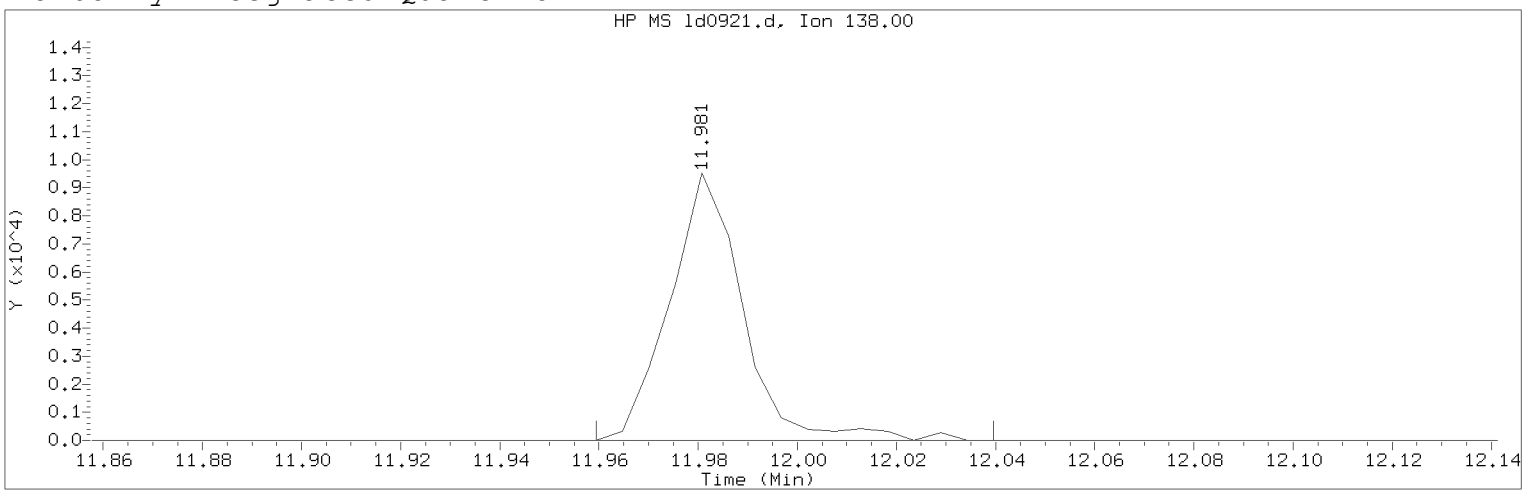
Compound Number	: 134
Compound Name	: 4-Nitroaniline
Scan Number	: 1962
Retention Time (minutes)	: 11.981
Relative Retention Time	: 0.00093
Quant Ion	: 138.00
Area (flag)	: 9759A
On-column Amount (ng/ul)	: 0.3266

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R07 Lab Sample ID: 1030984

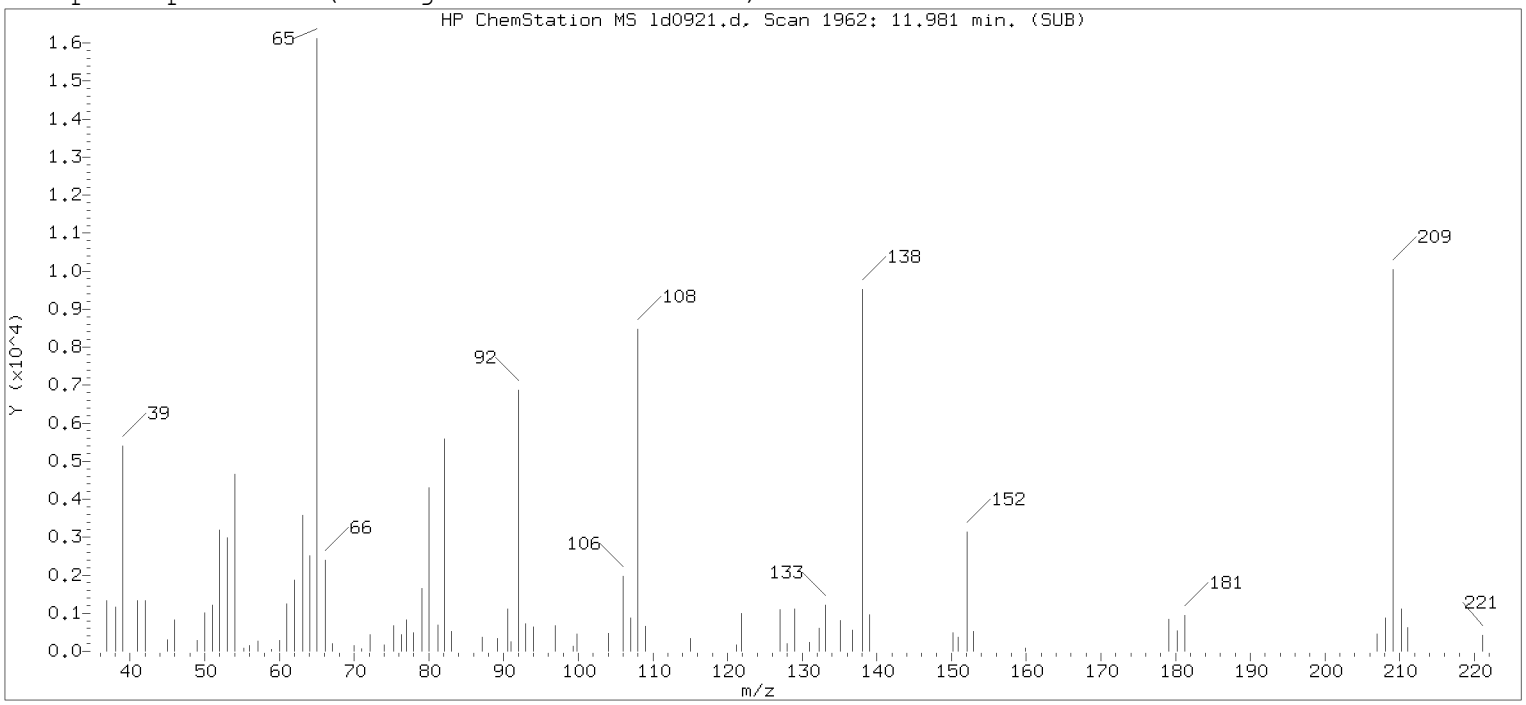
Compound Number : 134
Compound Name : 4-Nitroaniline
Scan Number : 1962
Retention Time (minutes) : 11.981
Quant Ion : 138.00
Area (flag) : 9759A
On-column Amount (ng/ul) : 0.3266
Integration start scan : 1957 Integration stop scan: 1972
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

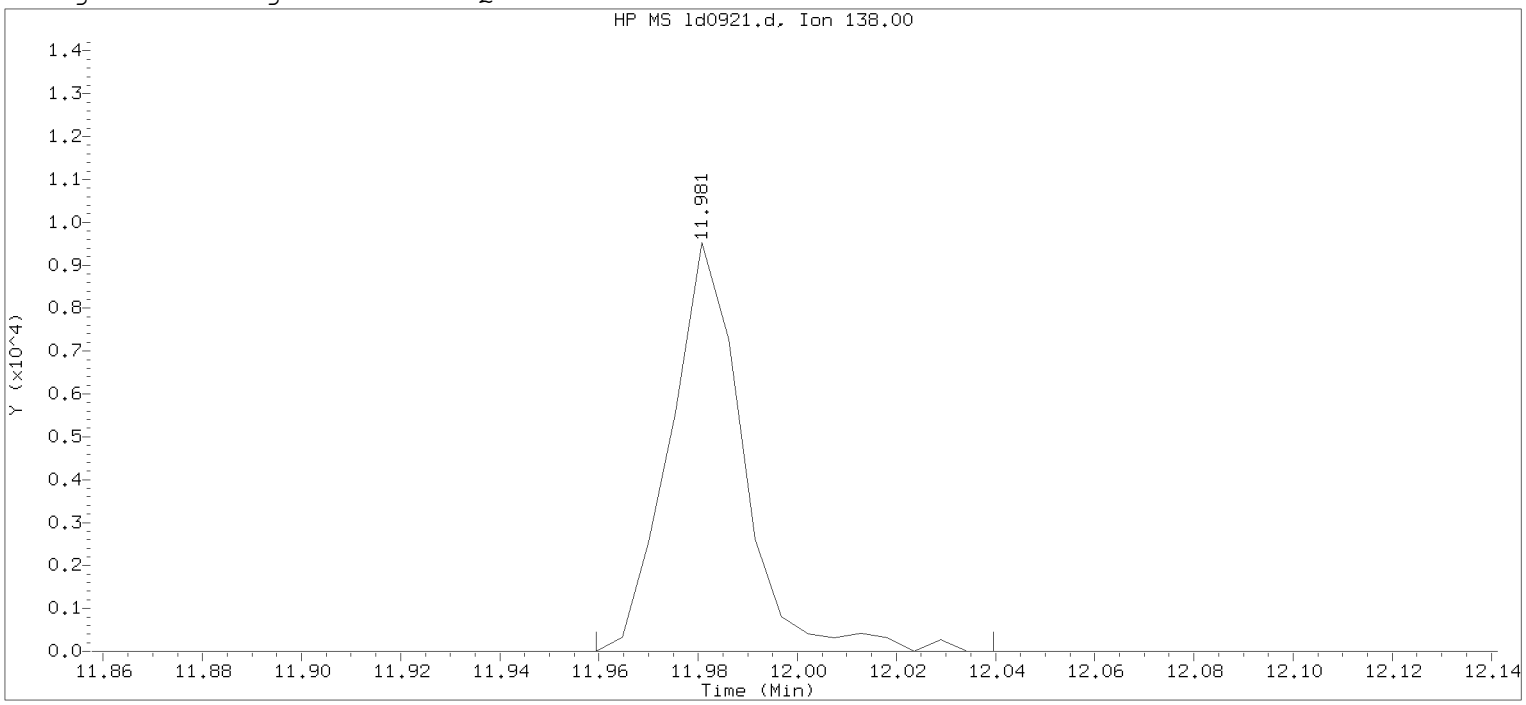
Analyst responsible for change: Digitally signed by Kira N. Beck
on 04/18/2019 at 11:37.
Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53.
PARALLAX ID: hb01996

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0921.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 02:18 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 16-Apr-2019 02:49 chemist

Sample Name: 34R07 Lab Sample ID: 1030984

Compound Number	: 134		
Compound Name	: 4-Nitroaniline		
Scan Number	: 1962		
Retention Time (minutes)	: 11.981		
Quant Ion	: 138.00		
Area	: 9759		
On-column Amount (ng/ul)	: 0.3266		
Integration start scan	: 1957	Integration stop scan:	1972
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Kira N. Beck on 04/18/2019 at 11:37.
Target 3.5 esignature user: KBECK Page 510

Standards Data

Semivolatiles by GC/MS

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP20296 **HP #12**

Data Directory Path is - D:\data\19mar04a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	LC0200.D	rvDFTPP0259	03/04/2019	22:10		
art12405	LC0201.D	rvSTD0449	03/04/2019	22:23		
art12405	LC0210.D	rvDFTPP0259	03/05/2019	01:36		
art12405	LC0211.D	rvSTD0449	03/05/2019	01:52		
art12405	LC0212.D	rvSTD0439	03/05/2019	02:40		
art12405	LC0213.D	rvSTD0439	03/05/2019	03:08		
art12405	LC0214.D	rvSTD0439	03/05/2019	03:37		
art12405	LC0215.D	rvSTD0439	03/05/2019	04:06		
art12405	LC0216.D	rvSTD0439	03/05/2019	04:35		
art12405	LC0217.D	rvSTD0439	03/05/2019	05:04		
art12405	LC0218.D	rvSTD0439	03/05/2019	05:33		
art12405	LC0219.D	rvSTD0439	03/05/2019	06:01		
art12405	LC0220.D	rvSTD0439	03/05/2019	06:30		
art12405	LC0221.D	rvICV3208	03/05/2019	06:59		
art12405	LC0222.D	BASICV3248	03/05/2019	07:28		
art12405	LC0223.D	rvICV3208b	03/05/2019	07:56		

Lancaster Laboratories
Semi-Volatiles
Runlog for Agilent GC/MS System HP20296 **HP #12**

Data Directory Path is - D:\data\19apr15a\

OPERATOR	FILE	LLI#	DATE	TIME	BATCH	DILUTION FACTOR
art12405	LD0900.D	rvDFTPP0999	04/15/2019	19:35		
art12405	LD0900a.D	rvDFTPP0999	04/15/2019	20:07		
art12405	LD0900b.D	rvDFTPP0999	04/15/2019	20:22		
art12405	LD0901.D	blank	04/15/2019	20:39	19101WAI	
art12405	LD0910.D	rvDFTPP0999	04/15/2019	20:57		
art12405	LD0911.D	rvSTD0929	04/15/2019	21:10		
art12405	LD0912.D	SBLKWP102	04/15/2019	22:00	19102WAP	
art12405	LD0913.D	102WPLCS	04/15/2019	22:29	19102WAP	
art12405	LD0914.D	1030977	04/15/2019	22:57	19102WAP	
art12405	LD0915.D	1030978	04/15/2019	23:26	19102WAP	
art12405	LD0916.D	1030979	04/15/2019	23:55	19102WAP	
art12405	LD0917.D	1030980	04/16/2019	00:23	19102WAP	
art12405	LD0918.D	1030981	04/16/2019	00:52	19102WAP	
art12405	LD0919.D	1030982	04/16/2019	01:21	19102WAP	
art12405	LD0920.D	1030983	04/16/2019	01:50	19102WAP	
art12405	LD0921.D	1030984	04/16/2019	02:18	19102WAP	
art12405	LD0922.D	BLANK	04/16/2019	02:47		
art12405	LD0923.D	BLANK	04/16/2019	03:16		
art12405	LD0924.D	BLANK	04/16/2019	03:45		
art12405	LD0925.D	BLANK	04/16/2019	04:14		

Data File: /chem/HP20296.i/19mar04a.b/lc0210.d

Date : 05-MAR-2019 01:36

Client ID: DFTPP12.5

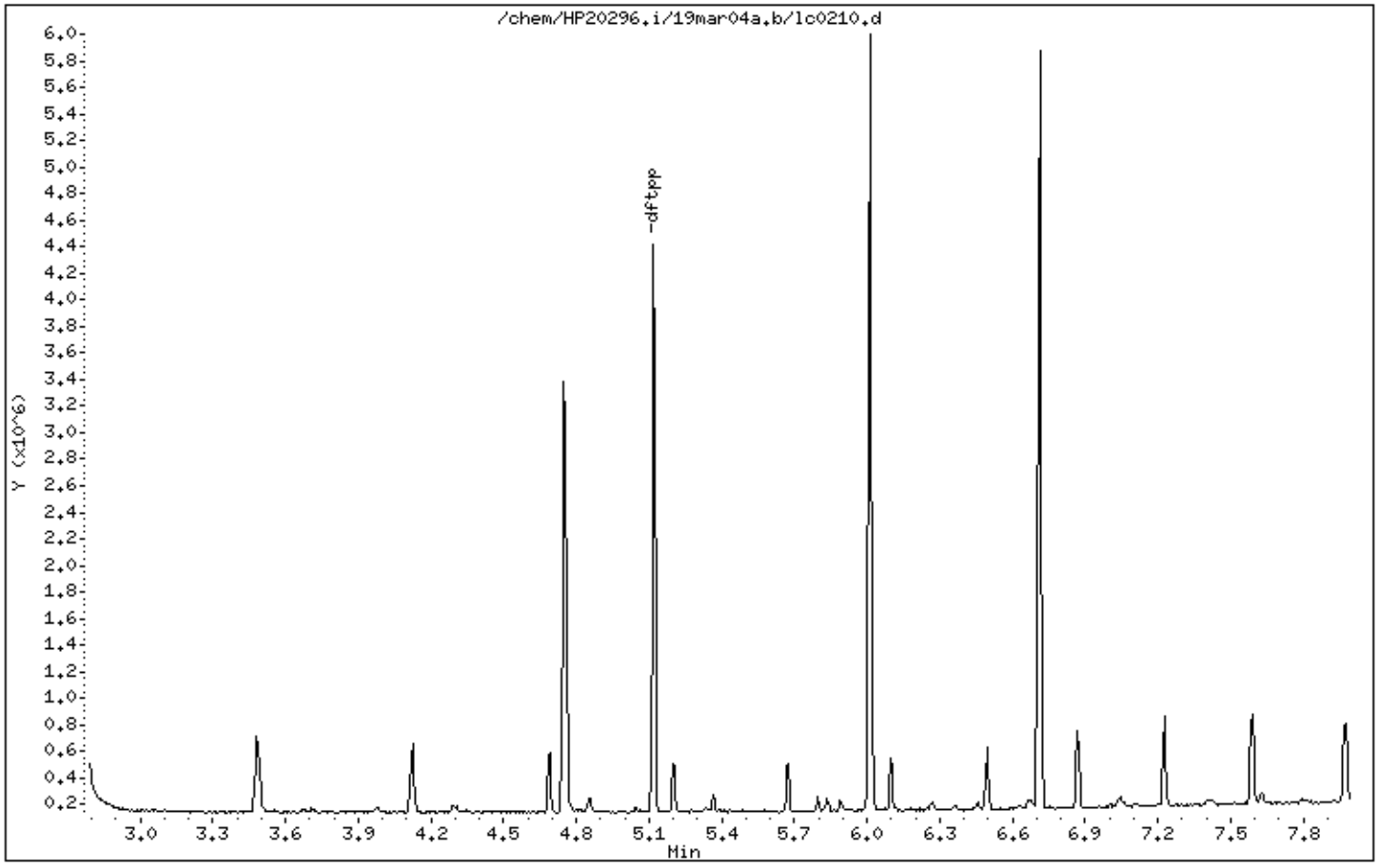
Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0259;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/19mar04a.b/lc0210.d

Date : 05-MAR-2019 01:36

Client ID: DFTPP12.5

Instrument: HP20296.i

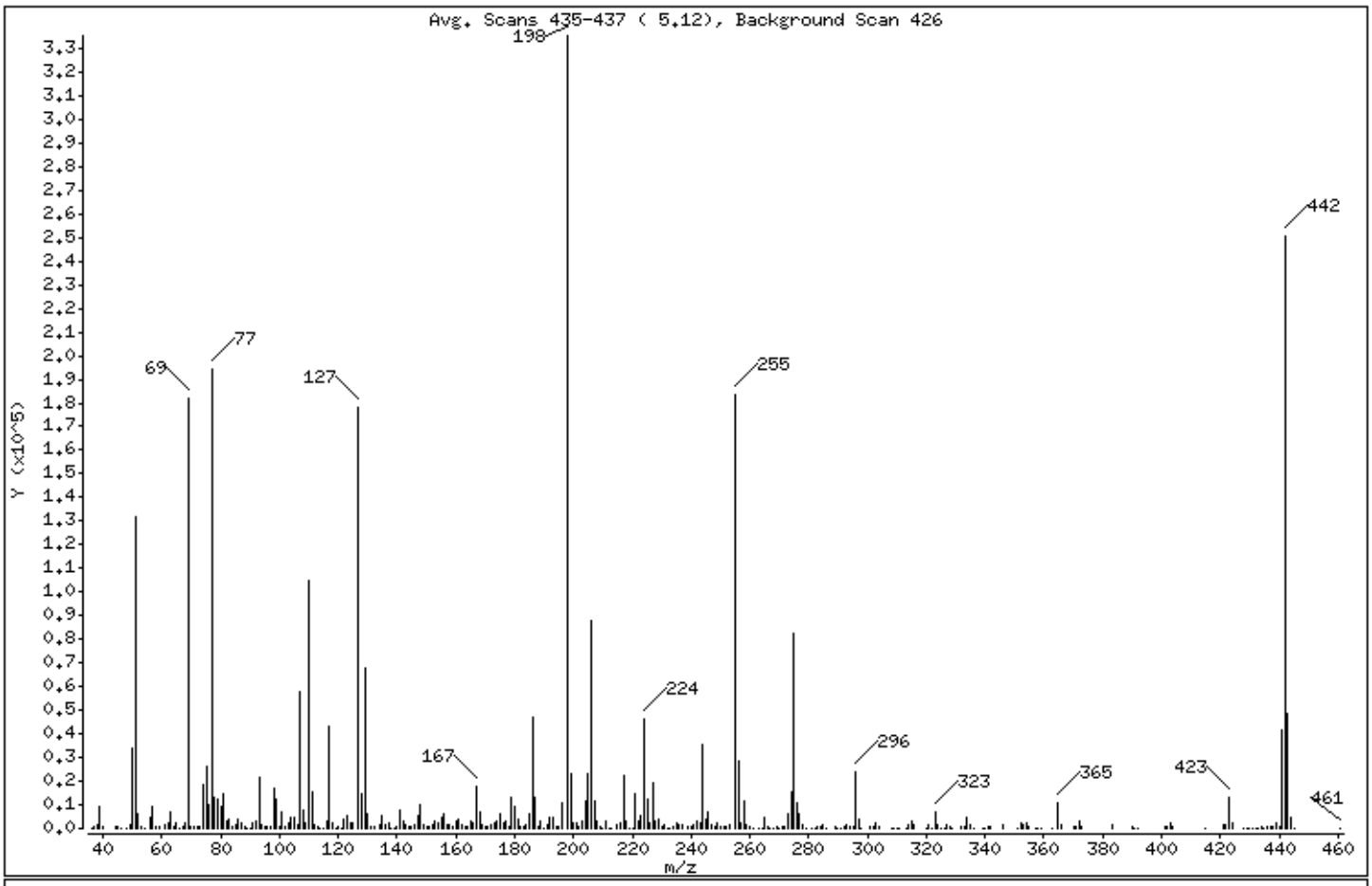
Sample Info: DFTPP12.5;rvDFTPP0259;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	39.35
68	Less than 2.00% of mass 69	0.78 (1.45)
69	Mass 69 relative abundance	54.15
70	Less than 2.00% of mass 69	0.22 (0.40)
127	10.00 - 80.00% of mass 198	53.18
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	7.00
275	10.00 - 60.00% of mass 198	24.64
365	Greater than 1.00% of mass 198	3.27
441	0.01 - 24.00% of mass 442	12.40 (16.60)
442	50.00 - 99.99% of mass 198	74.71
443	15.00 - 24.00% of mass 442	14.58 (19.52)

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Date : 05-MAR-2019 01:36

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0259;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: lc0210.d
Spectrum: Avg. Scans 435-437 (5,12), Background Scan 426
Location of Maximum: 198.00
Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	91	124.00	2540	209.00	909	298.00	235
37.00	569	125.00	2507	210.00	140	301.00	500
38.00	1641	127.00	178368	211.00	3468	302.00	586
39.00	9148	128.00	14530	212.00	237	303.00	2322
40.00	590	129.00	68200	213.00	271	304.00	1017
44.00	693	130.00	6169	215.00	1391	308.00	300
45.00	426	131.00	1057	216.00	2282	309.00	215
46.00	265	132.00	1100	217.00	22384	310.00	320
48.00	289	134.00	1588	218.00	3082	311.00	103
49.00	1166	135.00	5014	219.00	378	313.00	161
50.00	33600	136.00	1900	220.00	168	314.00	1197
51.00	131904	137.00	2552	221.00	14392	315.00	2866
52.00	5890	138.00	83	222.00	3186	316.00	1370
53.00	434	139.00	146	223.00	5092	320.00	108
54.00	88	140.00	647	224.00	45936	321.00	1214
56.00	4461	141.00	7699	225.00	12393	322.00	330
57.00	9624	142.00	2913	226.00	2126	323.00	7218
58.00	696	143.00	1826	227.00	18904	324.00	1291
59.00	390	144.00	607	228.00	3116	325.00	277
61.00	1615	145.00	905	229.00	4121	326.00	188
62.00	2409	146.00	1901	230.00	514	327.00	1814
63.00	6583	147.00	5049	231.00	1677	328.00	679
64.00	433	148.00	10362	232.00	358	329.00	199
65.00	2031	149.00	1899	233.00	359	332.00	526
66.00	176	150.00	653	234.00	699	333.00	775
67.00	864	151.00	1010	235.00	1986	334.00	4425
68.00	2629	152.00	1270	236.00	1232	335.00	1306
69.00	181568	153.00	2965	237.00	1488	336.00	87
70.00	725	154.00	2508	239.00	859	339.00	201
71.00	737	155.00	4582	240.00	521	340.00	208
72.00	438	156.00	6425	241.00	1697	341.00	786
73.00	603	157.00	1782	242.00	2961	342.00	514
74.00	18224	158.00	1392	243.00	2091	346.00	1167
75.00	26528	159.00	1150	244.00	35736	351.00	83
76.00	9710	160.00	3144	245.00	4143	352.00	2293

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Date : 05-MAR-2019 01:36

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0259;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: lc0210.d
Spectrum: Avg. Scans 435-437 (5,12), Background Scan 426
Location of Maximum: 198.00
Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	194176	161.00	3930	246.00	7085	353.00	1818
78.00	13025	162.00	1218	247.00	1708	354.00	2615
79.00	12522	163.00	429	248.00	461	355.00	794
80.00	9171	164.00	481	249.00	2208	357.00	208
81.00	14624	165.00	3277	250.00	443	358.00	111
82.00	2929	166.00	2580	251.00	536	359.00	287
83.00	3656	167.00	17368	252.00	895	363.00	104
84.00	573	168.00	6637	253.00	1657	365.00	10967
85.00	1619	169.00	1233	255.00	183488	366.00	1452
86.00	3494	170.00	605	256.00	28704	370.00	422
87.00	1974	171.00	913	257.00	2102	371.00	429
88.00	628	172.00	1170	258.00	11398	372.00	2880
89.00	89	173.00	2045	259.00	1433	373.00	762
90.00	218	174.00	3237	260.00	443	383.00	1190
91.00	2290	175.00	6372	261.00	150	390.00	538
92.00	3440	176.00	2254	263.00	96	391.00	378
93.00	21664	177.00	3209	264.00	286	392.00	352
94.00	1444	178.00	964	265.00	4468	401.00	448
95.00	770	179.00	12912	266.00	838	402.00	974
96.00	538	180.00	9042	267.00	42	403.00	2696
97.00	706	181.00	3589	268.00	255	404.00	1042
98.00	17144	182.00	819	269.00	465	415.00	44
99.00	12148	183.00	466	270.00	241	421.00	1596
100.00	982	184.00	1207	271.00	558	422.00	1826
101.00	7022	185.00	6240	272.00	1121	423.00	13262
102.00	544	186.00	47312	273.00	6229	424.00	2352
103.00	2610	187.00	13370	274.00	15265	428.00	143
104.00	4809	188.00	1094	275.00	82640	429.00	282
105.00	4592	189.00	3277	276.00	11116	430.00	159
106.00	1636	190.00	269	277.00	6422	431.00	145
107.00	57856	191.00	1628	278.00	1358	432.00	105
108.00	8074	192.00	4401	279.00	348	433.00	270
109.00	2131	193.00	4287	281.00	209	434.00	423
110.00	104848	194.00	714	282.00	251	435.00	233
111.00	15542	195.00	949	283.00	611	436.00	405

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Date : 05-MAR-2019 01:36

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0259;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

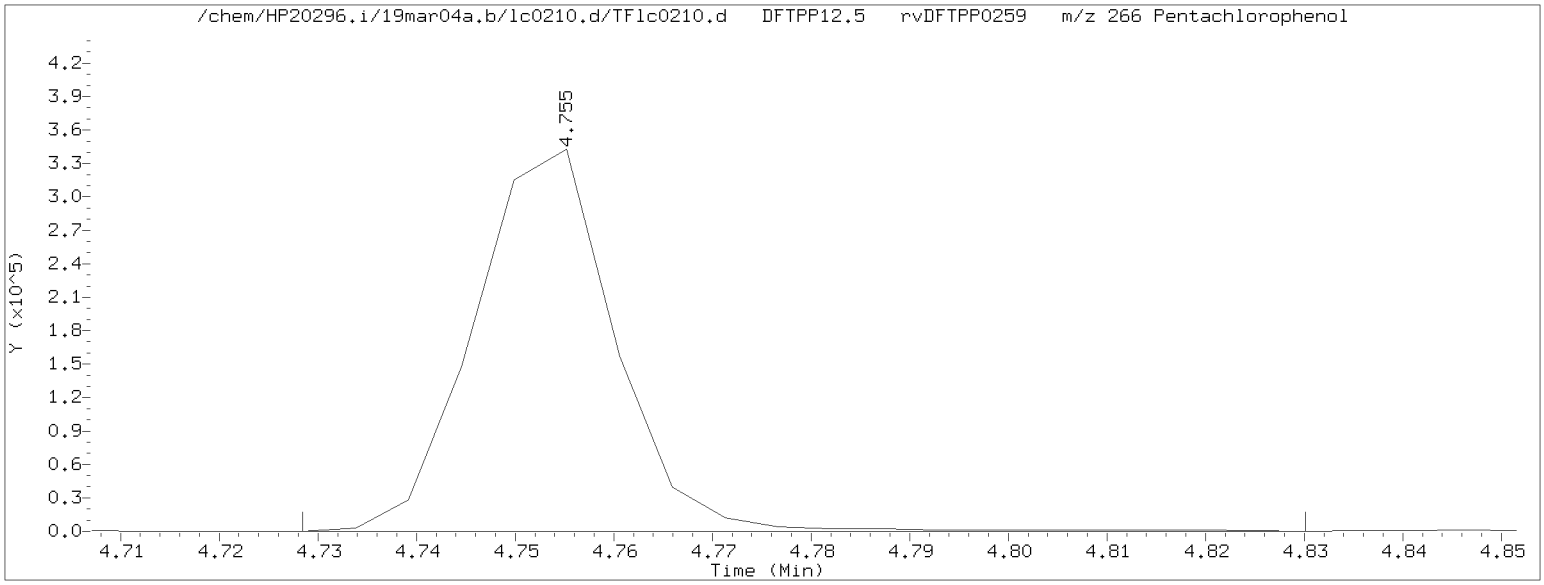
Data File: lc0210.d
Spectrum: Avg. Scans 435-437 (5.12), Background Scan 426
Location of Maximum: 198.00
Number of points: 326

m/z	Y	m/z	Y	m/z	Y	m/z	Y
112.00	1349	196.00	10786	284.00	679	437.00	661
113.00	784	198.00	335360	285.00	1650	438.00	908
114.00	381	199.00	23480	286.00	85	439.00	2283
115.00	58	200.00	1981	289.00	501	440.00	1035
116.00	3248	201.00	1961	290.00	368	441.00	41592
117.00	42896	202.00	985	291.00	127	442.00	250496
118.00	2675	203.00	2816	292.00	581	443.00	48904
119.00	252	204.00	11931	293.00	1631	444.00	4699
120.00	749	205.00	22760	294.00	403	445.00	287
121.00	253	206.00	88264	295.00	546	461.00	92
122.00	3770	207.00	11743	296.00	23728		
123.00	5079	208.00	3289	297.00	3515		

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Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

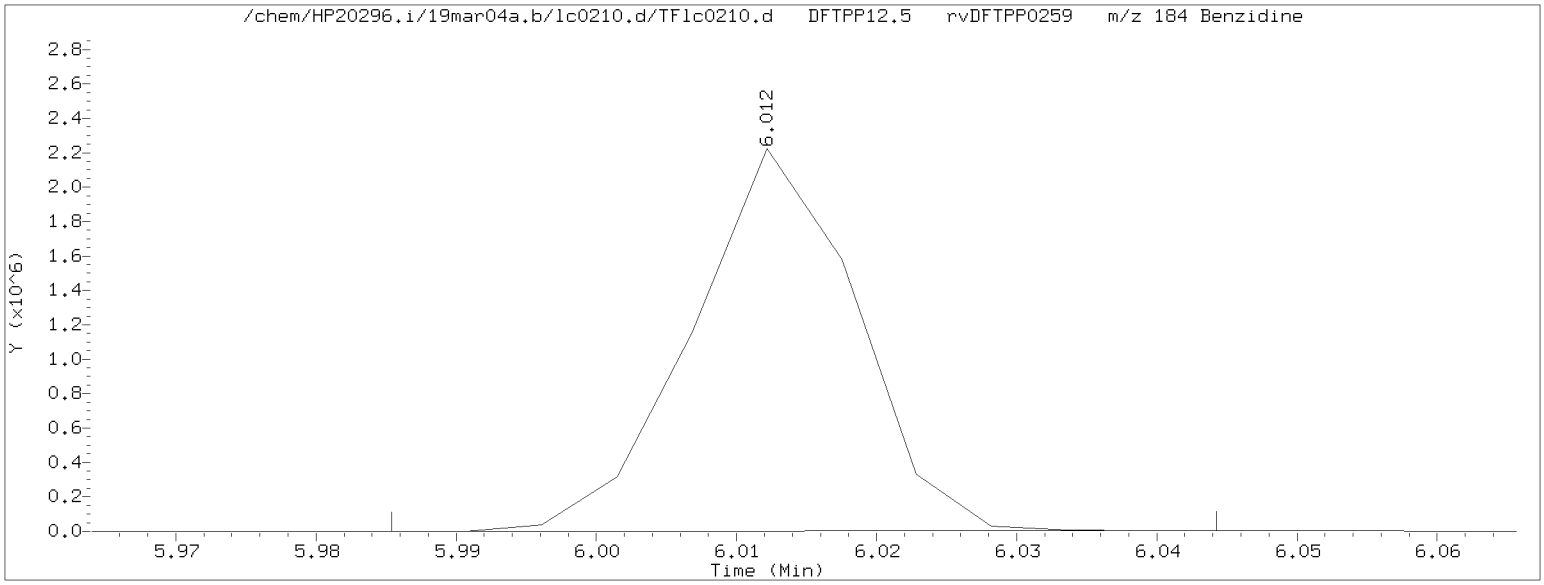
Instrument ID: HP20296.i Injection Date: 05-MAR-2019 01:36 Operator: art12405



Pentachlorophenol EICP peak height = 342912 EICP peak height at 10% = 34291 Pentachlorophenol EICP area = 340563

Pentachlorophenol EICP peak apex (min.) = 4.755
RT at 10% of front half of EICP (min.) = 4.739 'Front' peak width (min.) = 0.0157666667
RT at 10% of back half of EICP (min.) = 4.767 'Tailing' peak width (min.) = 0.0117166667

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0117166667}{0.0157666667} = 0.743$$



Benzidine EICP peak height = 2221629 EICP peak height at 10% = 222163 Benzidine EICP area = 1820950

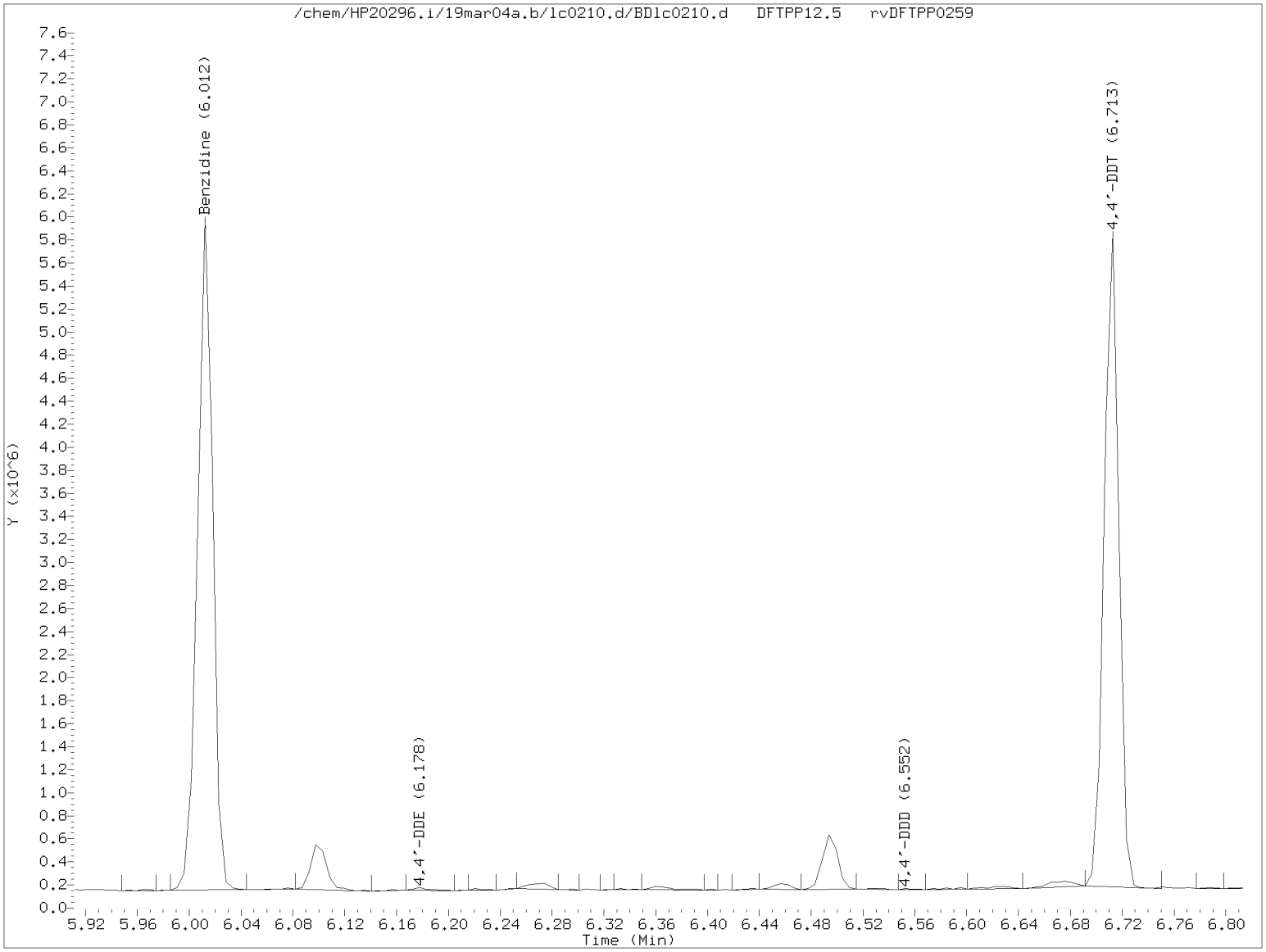
Benzidine EICP peak apex (min.) = 6.012
RT at 10% of front half of EICP (min.) = 6.000 'Front' peak width (min.) = 0.0124833333
RT at 10% of back half of EICP (min.) = 6.025 'Tailing' peak width (min.) = 0.0126000000

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0126000000}{0.0124833333} = 1.009$$

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26. PARALLAX ID: reb00745

Assessment of GC Column Performance and Injection Port Inertness for

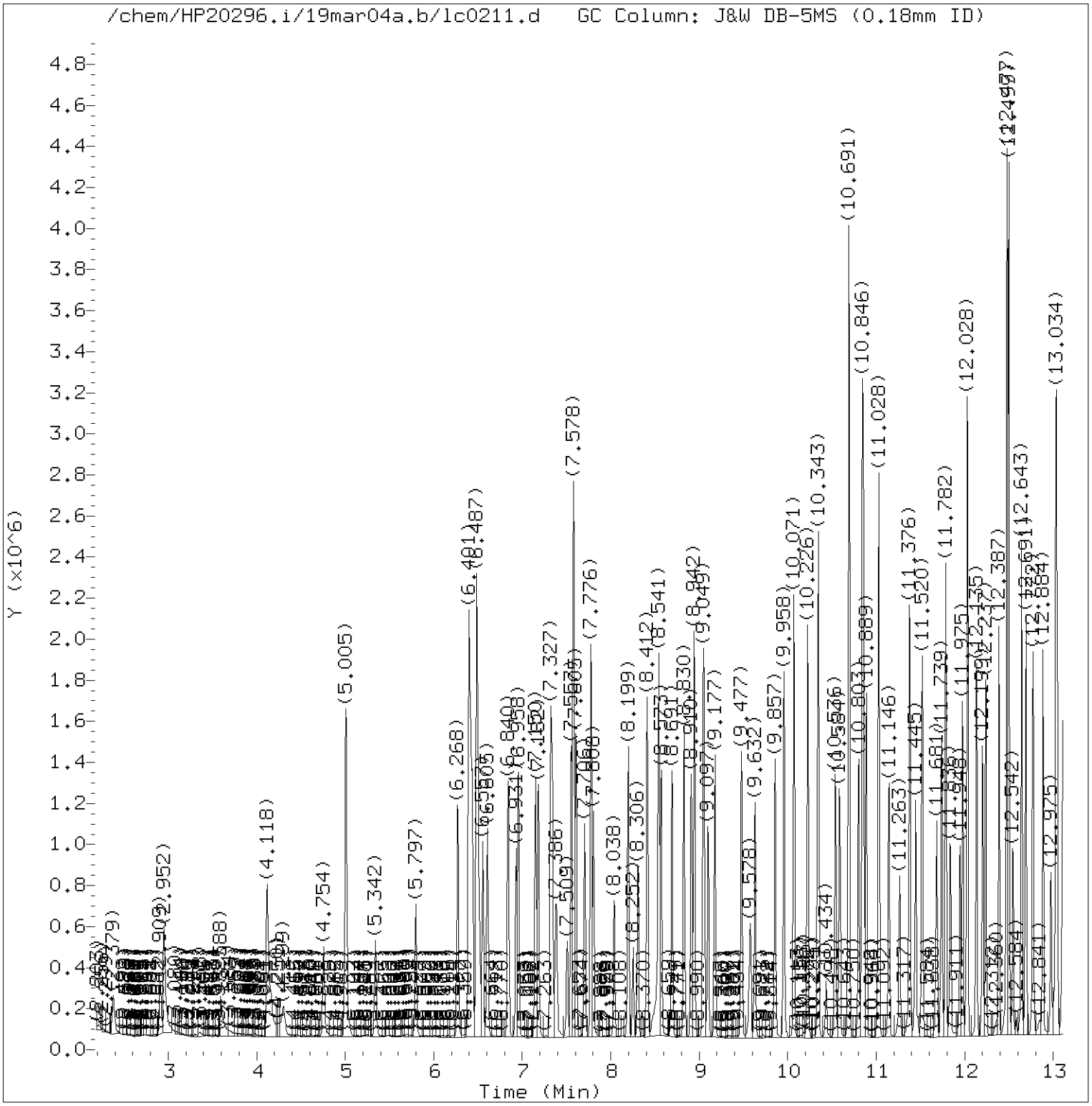
Instrument ID: HP20296.i Injection Date: 05-MAR-2019 01:36 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{17279 + 6956}{17279 + 6956 + 4552568} \times 100 = 0.5$$

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26. PARALLAX ID: reb00745



Total Ion Chromatogram (TIC)

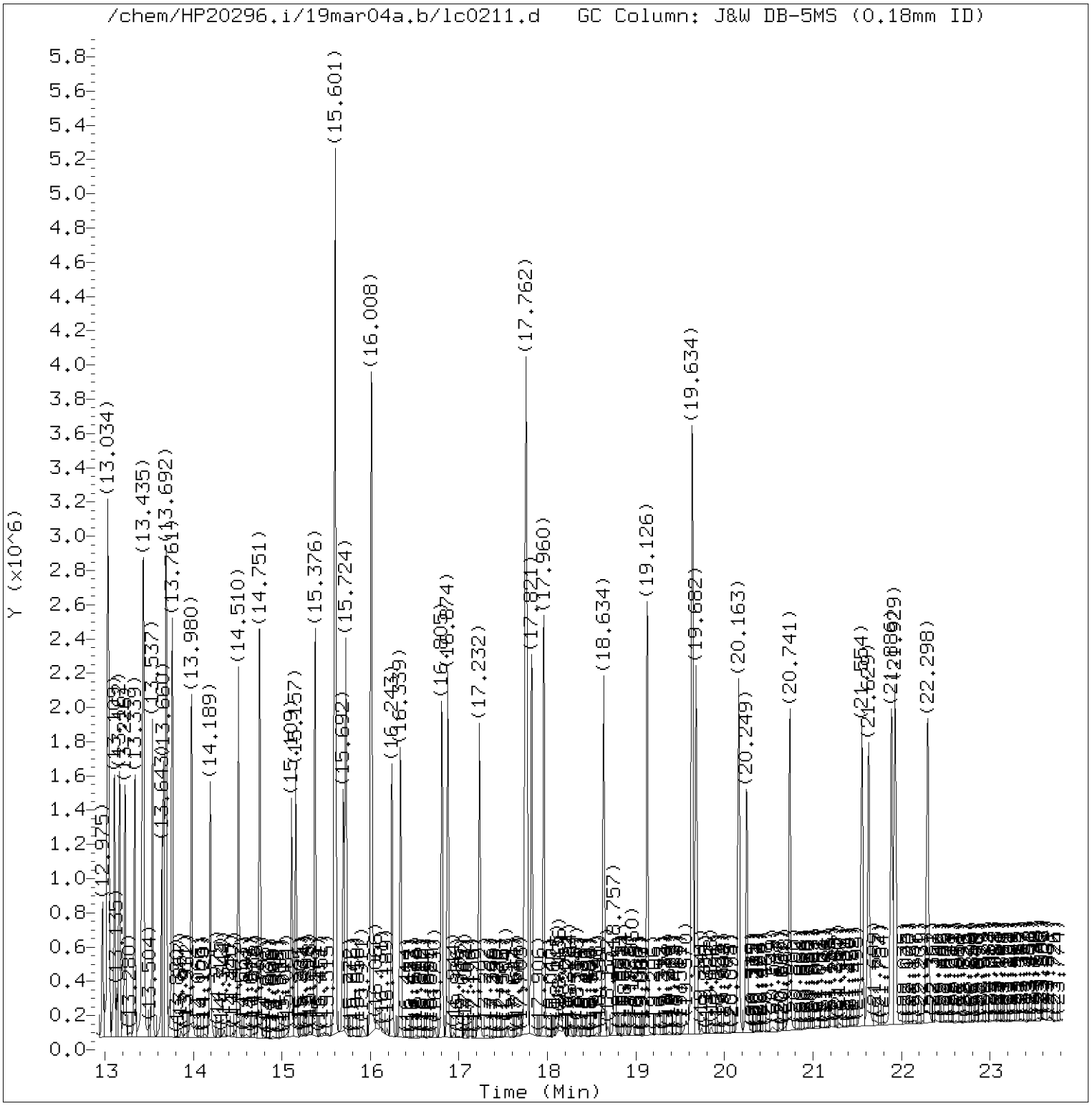
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

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on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.379	88	169474	7.500
5) N-Nitrosodimethylamine	(1)	2.909	74	273618	7.500
6) Pyridine	(1)	2.952	79	465175	7.500
8) 2-Picoline	(1)	4.118	93	498317M	7.500
9) N-Nitrosomethylethylamine	(1)	4.305	88	205375	7.500
10) Methyl methanesulfonate	(1)	4.754	80	248621	7.500
12)$2-Fluorophenol	(1)	5.005	112	789604	15.000
14) N-Nitrosodiethylamine	(1)	5.342	102	195458	7.500
43) Total Cresols	(1)			804837	15.000
16) Ethyl methanesulfonate	(1)	5.797	109	203681	7.500
17) Benzaldehyde	(1)	6.268	77	379369	7.500
18)$Phenol-d6	(1)	6.401	99	1051918	15.000
19) Phenol	(1)	6.417	94	596710	7.500
20) Aniline	(1)	6.434	93	692906	7.500
21) a-methylstyrene	(1)	6.524	118	80246	7.500
23) bis(2-Chloroethyl)ether	(1)	6.557	93	443253	7.500
24) 2-Chlorophenol	(1)	6.605	128	381647	7.500
25) 1,3-Dichlorobenzene	(1)	6.840	146	402178	7.500
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	183308	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	398424	7.500
28) Benzyl alcohol	(1)	7.150	108	264304	7.500
29) 1,2-Dichlorobenzene	(1)	7.182	146	387510	7.500
31) Indene	(1)	7.321	115	539575	7.500
32) 2-Methylphenol	(1)	7.337	108	381306	7.500
35) bis(2-Chloroisopropyl)ether	(1)	7.380	45	438182	7.500
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.380	45	438182	7.500
100) Isosafrole	(3)			319700	7.500
36) N-Nitrosopyrrolidine	(1)	7.509	100	209578	7.500
37) Acetophenone	(1)	7.551	105	589513	7.500
38) 4-Methylphenol	(1)	7.578	108	423531	7.500
39) N-Nitroso-di-n-propylamine	(1)	7.578	70	318698	7.500
40) N-Nitrosomorpholine	(1)	7.578	56	213318	7.500
41) o-Toluidine	(1)	7.605	106	661825	7.500
44) Hexachloroethane	(1)	7.706	117	180860	7.500
45)$Nitrobenzene-d5	(2)	7.776	82	955756	15.000
46) Nitrobenzene	(2)	7.808	77	488514	7.500
50) N-Nitrosopiperidine	(2)	8.043	114	193864	7.500
125) 2,4_2,6-Dinitrotoluenes	(3)			395189	15.000
52) Isophorone	(2)	8.199	82	849933	7.500
53) 2-Nitrophenol	(2)	8.311	139	193026	7.500

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.412	107	425792	7.500
59) O,O,O-Triethylphosphorothioate	(2)	8.541	198	162747	7.500
58) Benzoic acid	(2)	8.552	105	377957	10.000
57) bis(2-Chloroethoxy)methane	(2)	8.573	93	568845	7.500
62) 2,4-Dichlorophenol	(2)	8.691	162	303167	7.500
151) Diallate trans/cis	(4)			393333	7.500
65) 1,2,4-Trichlorobenzene	(2)	8.830	180	326462	7.500
68)*Naphthalene-d8	(2)	8.910	136	704176	5.000
69) Naphthalene	(2)	8.942	128	1078925	7.500
70) 4-Chloroaniline	(2)	9.044	127	441444	7.500
71) 2,6-Dichlorophenol	(2)	9.054	162	295043	7.500
72) Hexachloropropene	(2)	9.097	213	219403	7.500
74) Hexachlorobutadiene	(2)	9.177	225	185423	7.500
78) Quinoline	(2)	9.477	129	636870	7.500
79) Caprolactam	(2)	9.578	113	107542	7.500
80) N-Nitrosodi-n-butylamine	(2)	9.632	84	310752	7.500
83) 4-Chloro-3-methylphenol	(2)	9.857	107	372348	7.500
85) Safrole	(2)	9.958	162	261490	7.500
86) 2-Methylnaphthalene	(2)	10.071	142	696485	7.500
87) 1-Methylnaphthalene	(2)	10.226	142	656942	7.500
88) Hexachlorocyclopentadiene	(3)	10.343	237	214489	7.500
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.343	216	321664	7.500
91) cis-Isosafrole	(3)	10.434	162	48995	1.275
93) 2,4,6-Trichlorophenol	(3)	10.536	196	222122	7.500
95) 2,4,5-Trichlorophenol	(3)	10.584	196	227731	7.500
96)$2-Fluorobiphenyl	(3)	10.691	172	1506629	15.000
97) trans-Isosafrole	(3)	10.803	162	270705	6.225
98) 1,1'-Biphenyl	(3)	10.846	154	829590	7.500
99) 2-Chloronaphthalene	(3)	10.857	162	677072	7.500
101) 1-Chloronaphthalene	(3)	10.889	162	589964	7.500
103) Diphenyl ether	(3)	11.028	170	429473	7.500
104) 2-Nitroaniline	(3)	11.028	138	214013	7.500
108) 1,4-Naphthoquinone	(3)	11.146	158	276341	7.500
109) 1,4-Dinitrobenzene	(3)	11.263	168	106268	7.500
110) Dimethylphthalate	(3)	11.376	163	735043	7.500
111) 1,3-Dinitrobenzene	(3)	11.381	168	116536	7.500
113) 2,6-Dinitrotoluene	(3)	11.445	165	168305	7.500
114) Acenaphthylene	(3)	11.520	152	937253	7.500
117) 3-Nitroaniline	(3)	11.681	138	185938	7.500
118)*Acenaphthene-d10	(3)	11.739	164	334468	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.787	153	691399	7.500
120) 2,4-Dinitrophenol	(3)	11.841	184	137579	10.000
121) 4-Nitrophenol	(3)	11.948	109	124705	7.500
122) Pentachlorobenzene	(3)	11.975	250	269886	7.500
123) 2,4-Dinitrotoluene	(3)	12.028	165	226884	7.500
124) Dibenzofuran	(3)	12.034	168	895116	7.500
126) 1-Naphthylamine	(3)	12.135	143	668808	7.500
127) 2,3,4,6-Tetrachlorophenol	(3)	12.205	232	175074	7.500
128) 2-Naphthylamine	(3)	12.242	143	636857	7.500
129) Diethylphthalate	(3)	12.387	149	715096	7.500
130) Thionazin	(3)	12.477	107	154639	7.500
131) Fluorene	(3)	12.477	166	727330	7.500
133) 5-Nitro-o-toluidine	(3)	12.494	152	211419	7.500
134) 4-Nitroaniline	(3)	12.499	138	183071	7.500
132) 4-Chlorophenyl-phenylether	(3)	12.499	204	336751	7.500
135) 4,6-Dinitro-2-methylphenol	(4)	12.547	198	131079	7.500
136) N-Nitrosodiphenylamine	(4)	12.643	169	604869	7.500
137) NDPA as diphenylamine	(4)	12.643	169	604869	7.500
139) 1,2-Diphenylhydrazine	(4)	12.691	77	928851	7.500
140)$2,4,6-Tribromophenol	(3)	12.772	330	207412	15.000
142) Tetraethyldithiopyrophosphate	(4)	12.884	97	151669	7.500
144) 1,3,5-Trinitrobenzene	(4)	12.975	213	74724	7.500
145) Diallate (peak 1)	(4)	13.028	86	339704	6.225
146) Phorate	(4)	13.034	75	573990	7.500
147) Phenacetin	(4)	13.044	108	438844	7.500
148) 4-Bromophenyl-phenylether	(4)	13.109	248	195020	7.500
149) Diallate (peak 2)	(4)	13.135	86	53629	1.275
150) Hexachlorobenzene	(4)	13.162	284	212444	7.500
152) Dimethoate	(4)	13.226	87	372292	7.500
153) Atrazine	(4)	13.339	200	189187	7.500
154) Pentachlorophenol	(4)	13.419	266	153442	7.500
155) 4-Aminobiphenyl	(4)	13.430	169	712038	7.500
156) Pentachloronitrobenzene	(4)	13.440	237	99840	7.500
157) Pronamide	(4)	13.537	173	331948	7.500
158)*Phenanthrene-d10	(4)	13.660	188	656092	5.000
159) Dinoseb	(4)	13.681	211	196415	7.500
160) Phenanthrene	(4)	13.692	178	1065422	7.500
162) Anthracene	(4)	13.761	178	1064929	7.500
168) Carbazole	(4)	13.980	167	963471	7.500
169) Methyl parathion	(4)	14.189	109	300028	7.500

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

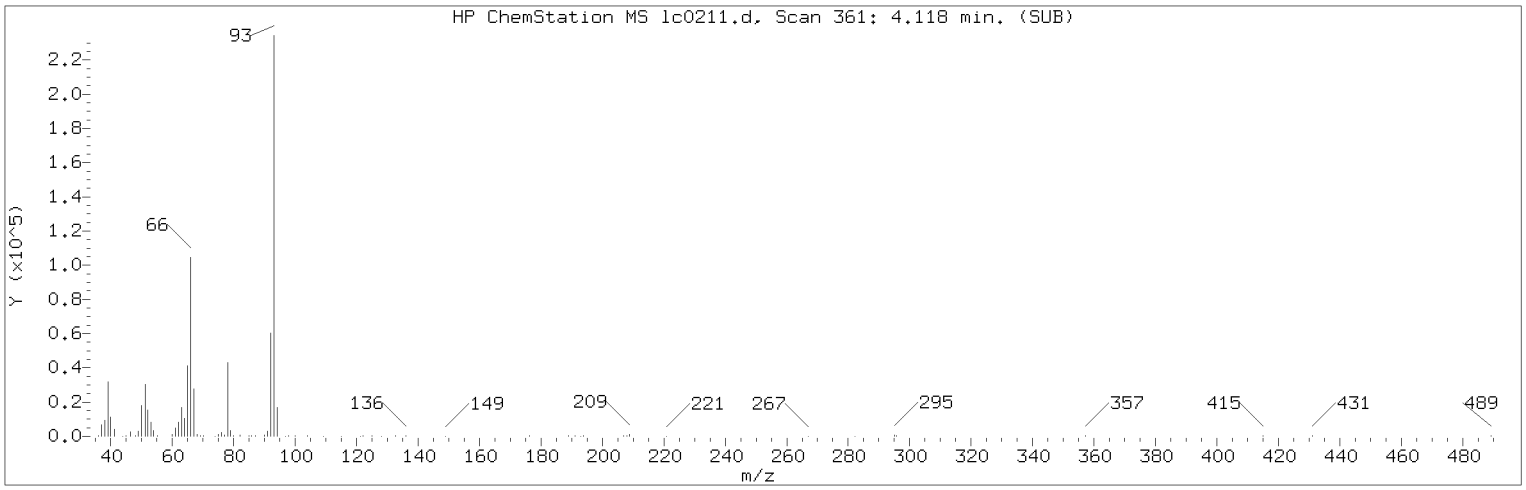
Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.510	149	1315530	7.500
172) Parathion	(4)	14.745	109	187610	7.500
173) 4-Nitroquinoline-1-oxide	(4)	14.751	190	131445	7.500
227) Total PAHs	(6)			18408611	135.000
174) Octachlorostyrene	(4)	15.109	308	88544	7.500
176) Isodrin	(4)	15.157	193	122839	7.500
178) Fluoranthene	(4)	15.376	202	1182662	7.500
179) Benzidine	(5)	15.601	184	2431984	22.500
180)*Pyrene-d10	(5)	15.692	212	638422	5.000
182) Pyrene	(5)	15.724	202	1179013	7.500
184)$Terphenyl-d14	(5)	16.008	244	1506228	15.000
187) p-Dimethylaminoazobenzene	(5)	16.243	225	203974	7.500
190) Chlorobenzilate	(5)	16.339	139	415727	7.500
192) 3,3'-Dimethylbenzidine	(5)	16.805	212	844630	7.500
193) Butylbenzylphthalate	(5)	16.874	149	621850	7.500
196) 2-Acetylaminofluorene	(5)	17.232	181	548095	7.500
198) 3,3'-Dichlorobenzidine	(5)	17.746	252	443052	7.500
200) Benzo(a)anthracene	(5)	17.762	228	1166786	7.500
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.767	231	246184	7.500
201) Chrysene	(5)	17.821	228	1097044	7.500
204) bis(2-Ethylhexyl)phthalate	(5)	17.960	149	932058	7.500
208) 6-Methylchrysene	(5)	18.634	242	789779	7.500
210) Di-n-octylphthalate	(6)	19.126	149	1667783	7.500
211) Benzo(b)fluoranthene	(6)	19.634	252	1187626	7.500
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.639	256	495431	7.500
213) Benzo(k)fluoranthene	(6)	19.682	252	1155663	7.500
216) Benzo(a)pyrene	(6)	20.163	252	1120372	7.500
218)*Perylene-d12	(6)	20.249	264	677101	5.000
220) 3-Methylcholanthrene	(6)	20.741	268	576312	7.500
222) Dibenz(a,h)acridine	(6)	21.554	279	967591	7.500
223) Dibenz(a,j)acridine	(6)	21.629	279	951830	7.500
224) Indeno(1,2,3-cd)pyrene	(6)	21.886	276	1119807M	7.500
225) Dibenz(a,h)anthracene	(6)	21.929	278	1134938	7.500
226) Benzo(g,h,i)perylene	(6)	22.298	276	1146015	7.500

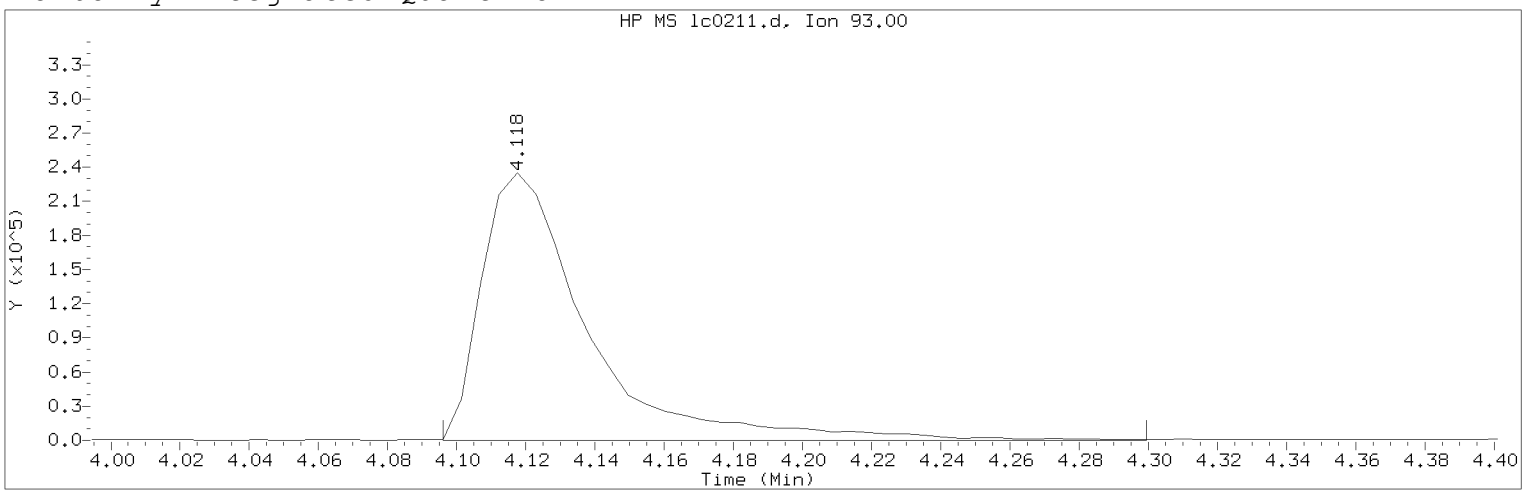
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

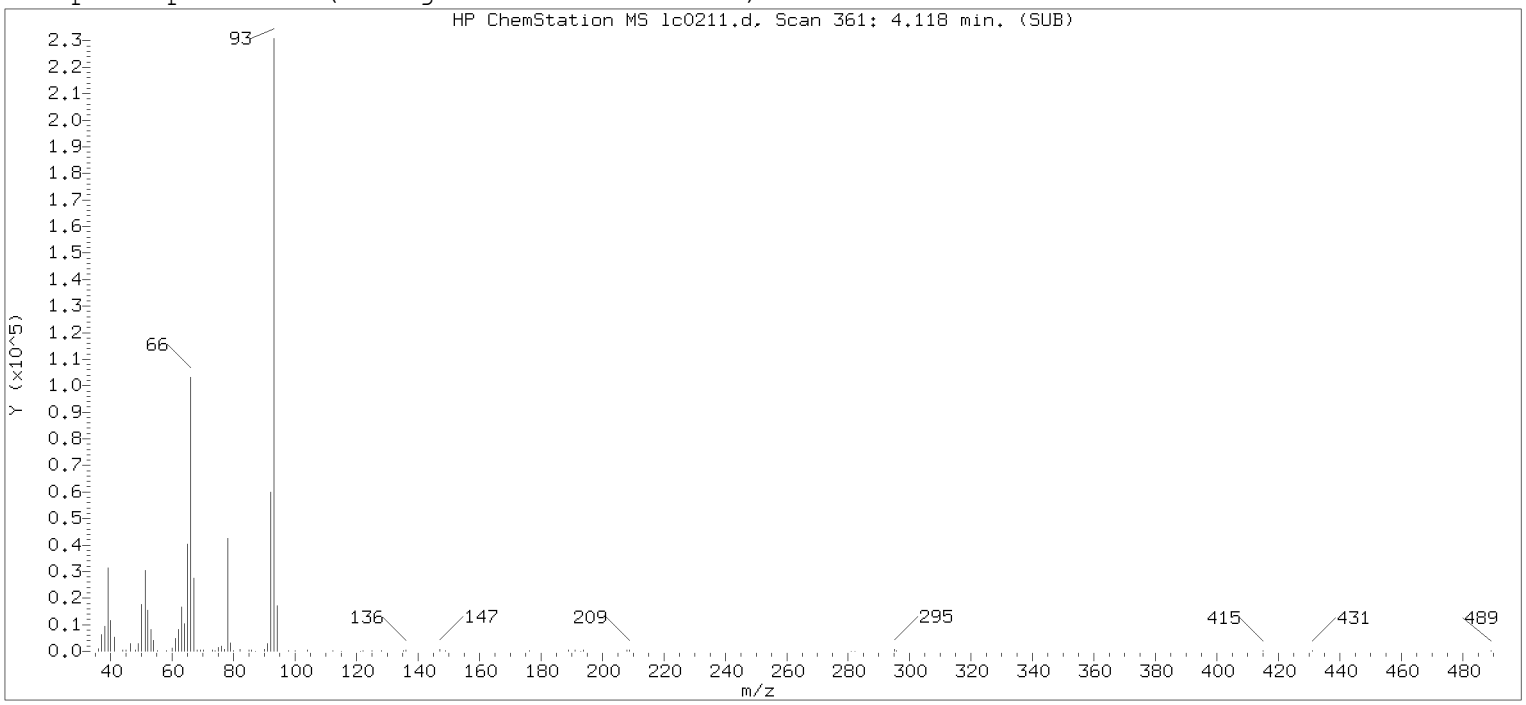
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 361
Retention Time (minutes) : 4.118
Quant Ion : 93.00
Area (flag) : 498317M
On-Column Amount (ng/ul) : 7.5000
Integration start scan : 356 Integration stop scan: 394
Y at integration start : 67 Y at integration end: 67

Reason for manual integration: improper integration

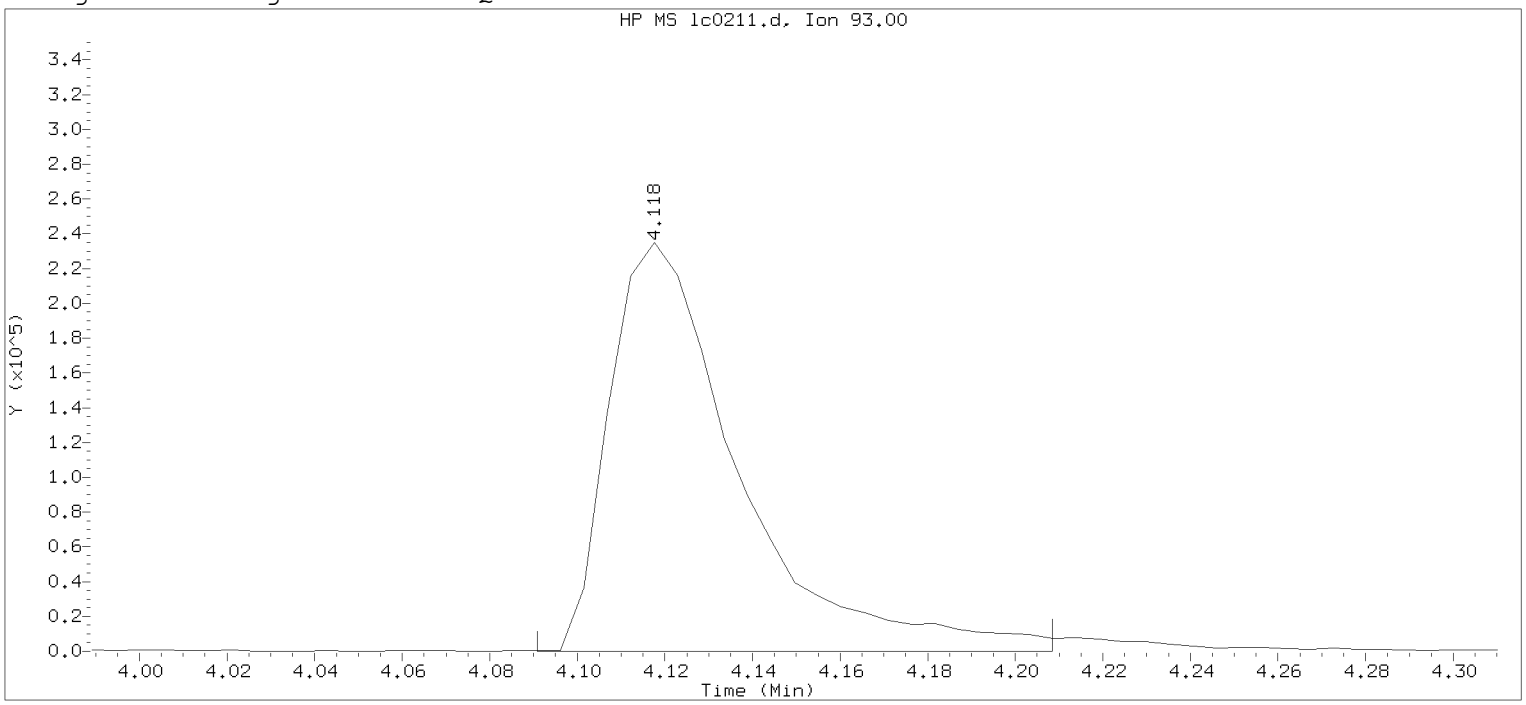
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

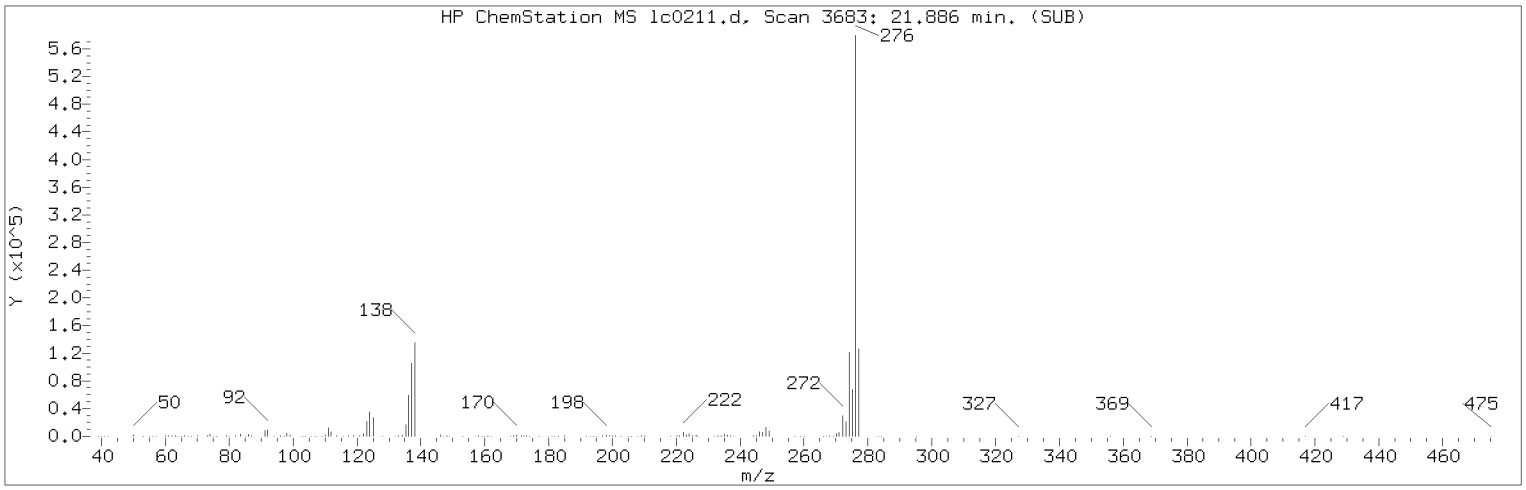
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 12:50
Date, time and analyst ID of latest file update: 05-Mar-2019 12:50 lmh00956

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

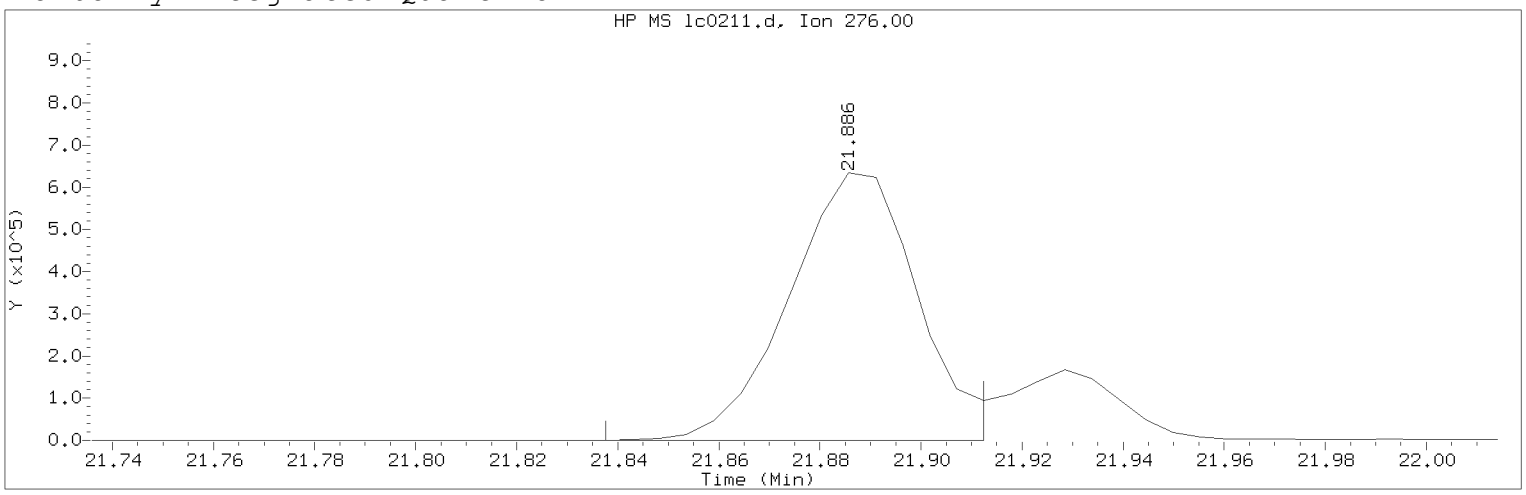
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 361		
Retention Time (minutes)	: 4.118		
Quant Ion	: 93.00		
Area	: 482740		
On-column Amount (ng/ul)	: 6.4186		
Integration start scan	: 355	Integration stop scan:	377
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2019-03-05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

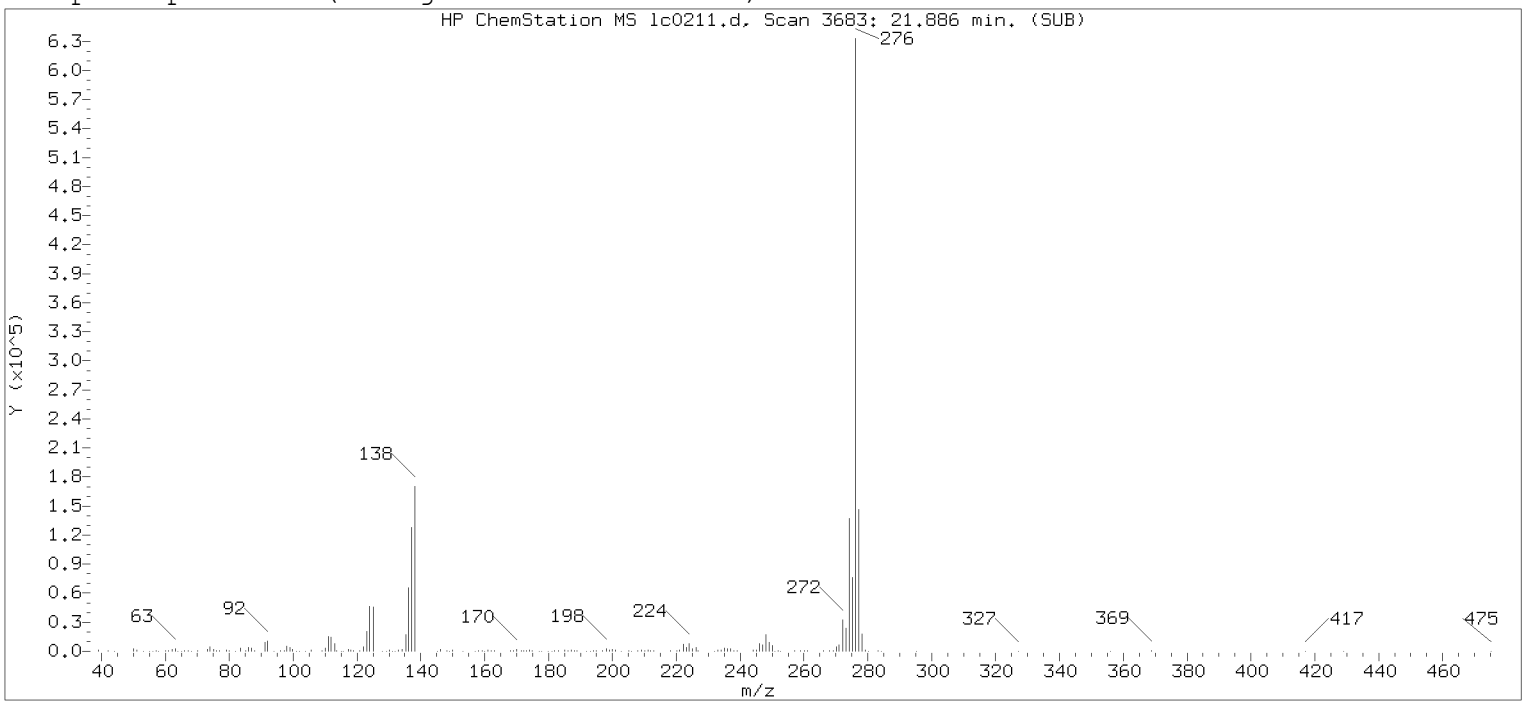
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3683
Retention Time (minutes) : 21.886
Quant Ion : 276.00
Area (flag) : 1119807M
On-Column Amount (ng/ul) : 7.5000
Integration start scan : 3673 Integration stop scan: 3687
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

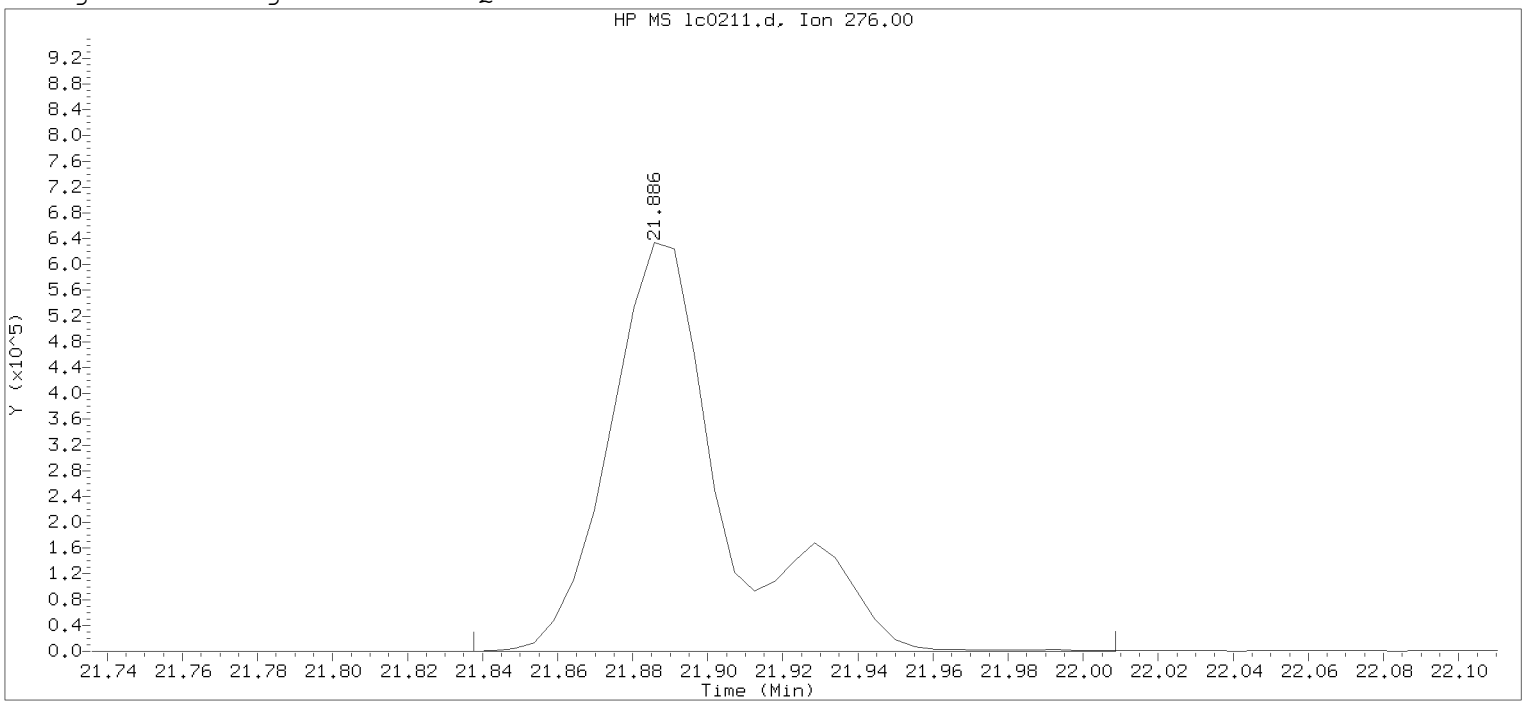
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



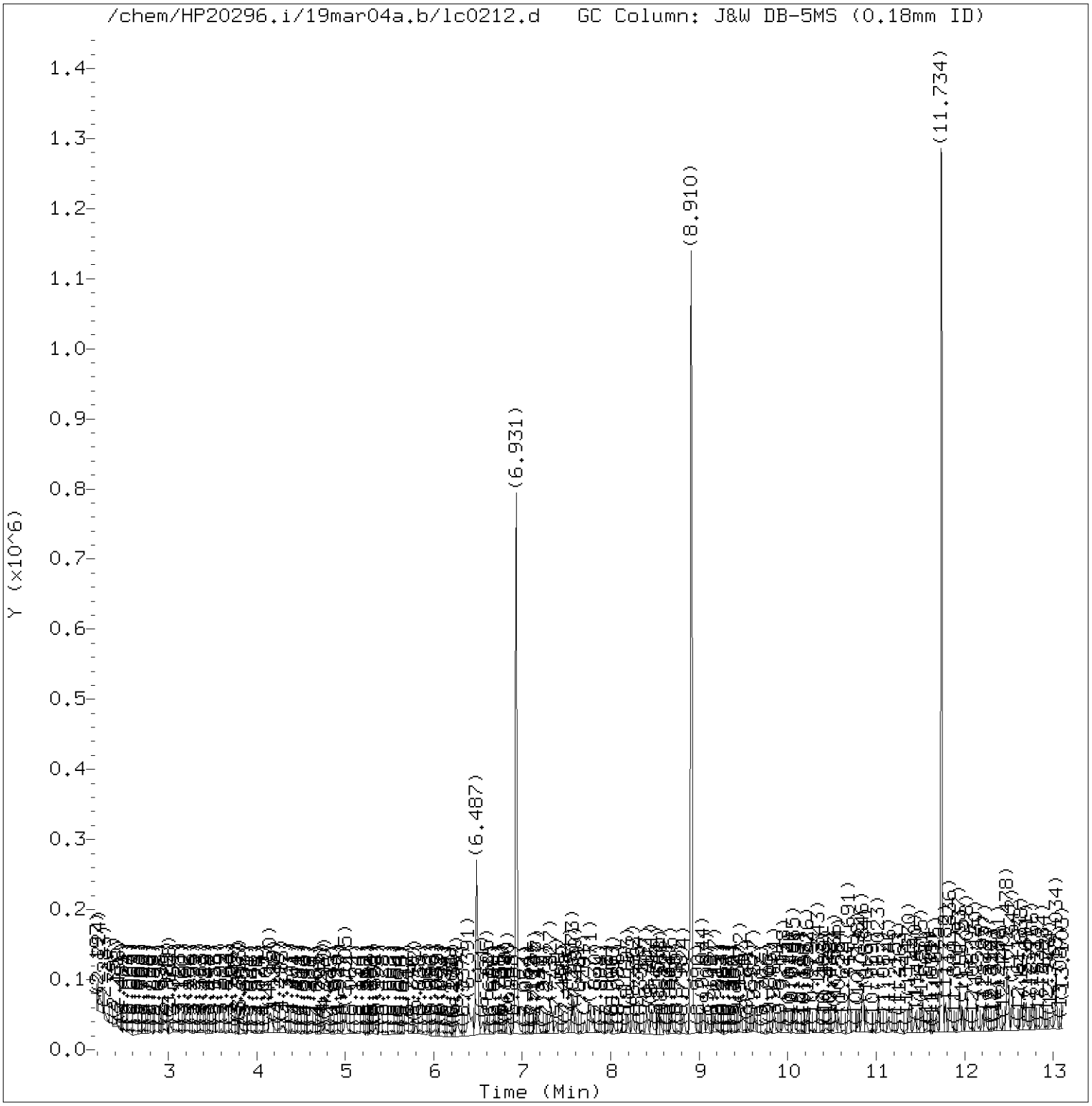
Data File: /chem/HP20296.i/19mar04a.b/lc0211.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 01:52 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 12:50
Date, time and analyst ID of latest file update: 05-Mar-2019 12:50 lmh00956

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0449

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3683		
Retention Time (minutes)	: 21.886		
Quant Ion	: 276.00		
Area	: 1361686		
On-column Amount (ng/ul)	: 8.7377		
Integration start scan	: 3673	Integration stop scan:	3705
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2019-03-05



Total Ion Chromatogram (TIC)

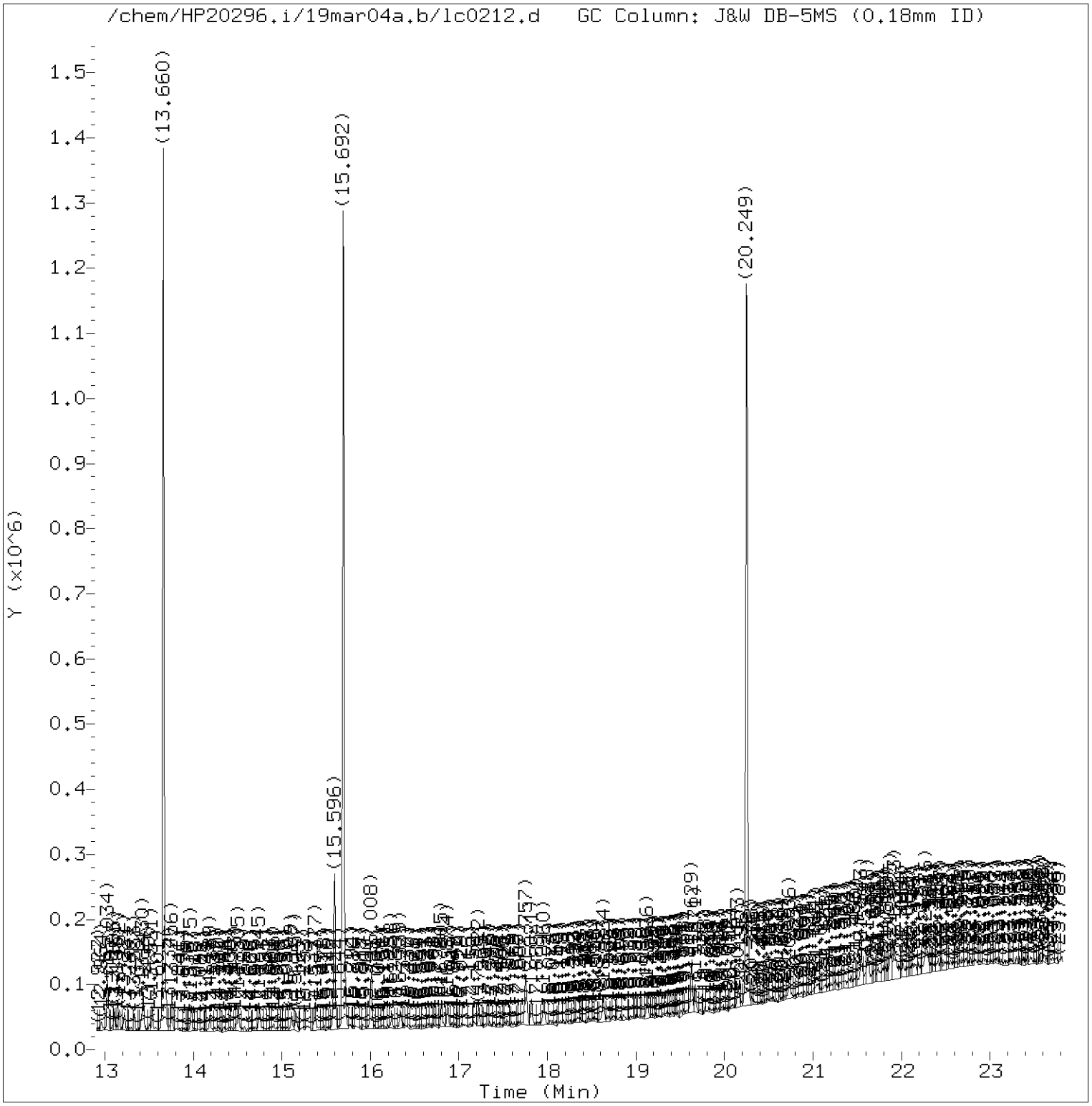
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.401	88	3887M	0.202
5) N-Nitrosodimethylamine	(1)	2.957	74	5205M	0.168
6) Pyridine	(1)	3.021	79	11933M	0.226
8) 2-Picoline	(1)	4.150	93	11266M	0.199
9) N-Nitrosomethylethylamine	(1)	4.310	88	3593M	0.154
10) Methyl methanesulfonate	(1)	4.759	80	4218	0.150
12)$2-Fluorophenol	(1)	5.005	112	13084	0.292
14) N-Nitrosodiethylamine	(1)	5.342	102	2652	0.120
43) Total Cresols	(1)			14737	0.323
16) Ethyl methanesulfonate	(1)	5.792	109	3506	0.152
17) Benzaldehyde	(1)	6.268	77	5489M	0.128
18)$Phenol-d6	(1)	6.391	99	19128	0.321
19) Phenol	(1)	6.407	94	10743	0.159
20) Aniline	(1)	6.434	93	12069M	0.154
21) a-methylstyrene	(1)	6.482	118	1680	0.185
23) bis(2-Chloroethyl)ether	(1)	6.551	93	8256	0.164
24) 2-Chlorophenol	(1)	6.605	128	6372M	0.147
25) 1,3-Dichlorobenzene	(1)	6.840	146	6245	0.137
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	155907	5.000
27) 1,4-Dichlorobenzene	(1)	6.952	146	7803	0.173
28) Benzyl alcohol	(1)	7.150	108	4918	0.164
29) 1,2-Dichlorobenzene	(1)	7.177	146	6341	0.144
31) Indene	(1)	7.321	115	8581	0.140
32) 2-Methylphenol	(1)	7.327	108	6881	0.159
100) Isosafrole	(3)			5453	0.152
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.391	45	8272M	0.166
35) bis(2-Chloroisopropyl)ether	(1)	7.391	45	8255M	0.166
36) N-Nitrosopyrrolidine	(1)	7.503	100	3923M	0.165
37) Acetophenone	(1)	7.546	105	9134M	0.137
40) N-Nitrosomorpholine	(1)	7.567	56	4653M	0.192
38) 4-Methylphenol	(1)	7.573	108	7856	0.164
39) N-Nitroso-di-n-propylamine	(1)	7.573	70	7420	0.205
41) o-Toluidine	(1)	7.600	106	11494	0.153
44) Hexachloroethane	(1)	7.707	117	3214	0.157
45)$Nitrobenzene-d5	(2)	7.771	82	16912M	0.311
46) Nitrobenzene	(2)	7.803	77	8173	0.147
50) N-Nitrosopiperidine	(2)	8.038	114	3056	0.138
125) 2,4_2,6-Dinitrotoluenes	(3)			6147	0.276
52) Isophorone	(2)	8.193	82	15256M	0.158
53) 2-Nitrophenol	(2)	8.306	139	3307	0.150

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Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.413	107	7764M	0.160
58) Benzoic acid	(2)	8.461	105	18006M	0.558
59) O,O,O-Triethylphosphorothioate	(2)	8.536	198	2295	0.124
57) bis(2-Chloroethoxy)methane	(2)	8.568	93	9476M	0.146
62) 2,4-Dichlorophenol	(2)	8.691	162	5280	0.153
151) Diallate trans/cis	(4)			6549	0.154
65) 1,2,4-Trichlorobenzene	(2)	8.830	180	5274	0.142
68)*Naphthalene-d8	(2)	8.910	136	601452	5.000
69) Naphthalene	(2)	8.942	128	18547	0.137
70) 4-Chloroaniline	(2)	9.038	127	8994	0.179
71) 2,6-Dichlorophenol	(2)	9.049	162	5129	0.153
72) Hexachloropropene	(2)	9.092	213	2991	0.120
74) Hexachlorobutadiene	(2)	9.177	225	3270	0.155
78) Quinoline	(2)	9.472	129	14057	0.194
79) Caprolactam	(2)	9.546	113	1784	0.146
80) N-Nitrosodi-n-butylamine	(2)	9.627	84	6904	0.195
83) 4-Chloro-3-methylphenol	(2)	9.851	107	7268	0.171
85) Safrole	(2)	9.958	162	5018	0.169
86) 2-Methylnaphthalene	(2)	10.071	142	12022	0.137
87) 1-Methylnaphthalene	(2)	10.226	142	11328	0.137
88) Hexachlorocyclopentadiene	(3)	10.343	237	3174	0.131
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.343	216	5838	0.161
91) cis-Isosafrole	(3)	10.429	162	1013	0.031
93) 2,4,6-Trichlorophenol	(3)	10.536	196	3453	0.138
95) 2,4,5-Trichlorophenol	(3)	10.584	196	4130	0.161
96)$2-Fluorobiphenyl	(3)	10.691	172	24649	0.291
97) trans-Isosafrole	(3)	10.798	162	4440	0.121
98) 1,1'-Biphenyl	(3)	10.841	154	11103	0.119
99) 2-Chloronaphthalene	(3)	10.852	162	11217	0.147
101) 1-Chloronaphthalene	(3)	10.884	162	11242	0.169
104) 2-Nitroaniline	(3)	11.023	138	3807	0.158
103) Diphenyl ether	(3)	11.028	170	6929	0.143
108) 1,4-Naphthoquinone	(3)	11.140	158	4794	0.154
109) 1,4-Dinitrobenzene	(3)	11.253	168	1805	0.151
110) Dimethylphthalate	(3)	11.370	163	12494	0.151
111) 1,3-Dinitrobenzene	(3)	11.381	168	1896	0.145
113) 2,6-Dinitrotoluene	(3)	11.440	165	2568	0.136
114) Acenaphthylene	(3)	11.515	152	15992	0.137
117) 3-Nitroaniline	(3)	11.675	138	3121	0.149
118)*Acenaphthene-d10	(3)	11.734	164	282332	5.000

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Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.782	153	10131	0.128
120) 2,4-Dinitrophenol	(3)	11.836	184	10143	0.873
121) 4-Nitrophenol	(3)	11.937	109	9145	0.652
122) Pentachlorobenzene	(3)	11.980	250	5029	0.166
123) 2,4-Dinitrotoluene	(3)	12.023	165	3579	0.140
124) Dibenzofuran	(3)	12.028	168	14237	0.141
126) 1-Naphthylamine	(3)	12.130	143	11769	0.156
127) 2,3,4,6-Tetrachlorophenol	(3)	12.205	232	3017	0.153
128) 2-Naphthylamine	(3)	12.237	143	11955	0.167
129) Diethylphthalate	(3)	12.381	149	12326	0.153
130) Thionazin	(3)	12.472	107	2636	0.151
131) Fluorene	(3)	12.478	166	12499	0.137
133) 5-Nitro-o-toluidine	(3)	12.488	152	2953M	0.124
134) 4-Nitroaniline	(3)	12.488	138	2907	0.141
132) 4-Chlorophenyl-phenylether	(3)	12.499	204	5250	0.139
135) 4,6-Dinitro-2-methylphenol	(4)	12.542	198	7021	0.497
136) N-Nitrosodiphenylamine	(4)	12.638	169	10878	0.167
137) NDPA as diphenylamine	(4)	12.638	169	10878	0.167
139) 1,2-Diphenylhydrazine	(4)	12.691	77	16816M	0.168
140)$2,4,6-Tribromophenol	(3)	12.766	330	3961	0.339
142) Tetraethyldithiopyrophosphate	(4)	12.884	97	4190	0.257
144) 1,3,5-Trinitrobenzene	(4)	12.964	213	1168	0.145
146) Phorate	(4)	13.028	75	9359	0.137
145) Diallate (peak 1)	(4)	13.028	86	5766	0.131
147) Phenacetin	(4)	13.034	108	7474	0.158
148) 4-Bromophenyl-phenylether	(4)	13.103	248	2799	0.133
149) Diallate (peak 2)	(4)	13.141	86	783	0.023
150) Hexachlorobenzene	(4)	13.168	284	3873	0.144
152) Dimethoate	(4)	13.221	87	6239	0.156
153) Atrazine	(4)	13.333	200	3229	0.158
154) Pentachlorophenol	(4)	13.419	266	2671	0.162
155) 4-Aminobiphenyl	(4)	13.430	169	11654	0.152
156) Pentachloronitrobenzene	(4)	13.435	237	1047	0.097
157) Pronamide	(4)	13.537	173	4921	0.138
158)*Phenanthrene-d10	(4)	13.660	188	529922	5.000
159) Dinoseb	(4)	13.681	211	2579	0.122
160) Phenanthrene	(4)	13.692	178	18409	0.141
162) Anthracene	(4)	13.756	178	17320	0.137
168) Carbazole	(4)	13.981	167	16905	0.163
169) Methyl parathion	(4)	14.189	109	5043M	0.156

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Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

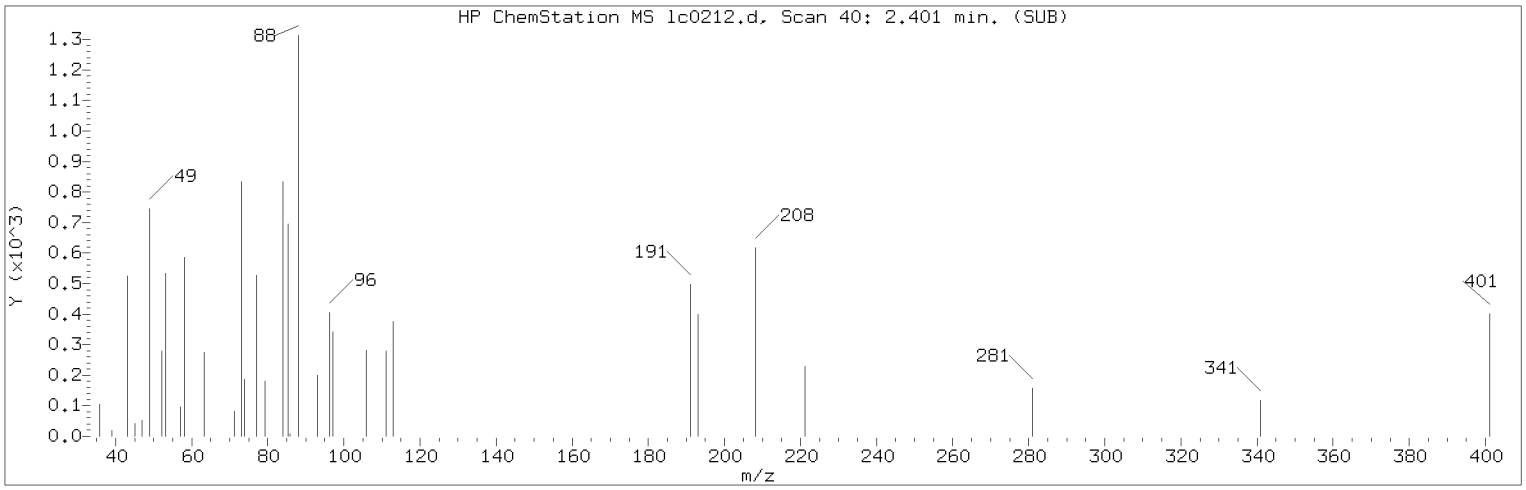
Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.505	149	20048	0.142
173) 4-Nitroquinoline-1-oxide	(4)	14.740	190	1585	0.112
172) Parathion	(4)	14.740	109	2878M	0.142
227) Total PAHs	(6)			300226	2.437
174) Octachlorostyrene	(4)	15.114	308	1388	0.146
176) Isodrin	(4)	15.157	193	4275	0.323
178) Fluoranthene	(4)	15.377	202	19157	0.137
179) Benzidine	(5)	15.596	184	104495	1.156
180)*Pyrene-d10	(5)	15.692	212	534034	5.000
182) Pyrene	(5)	15.719	202	20364	0.138
184)$Terphenyl-d14	(5)	16.008	244	28796	0.343
187) p-Dimethylaminoazobenzene	(5)	16.238	225	3011	0.132
190) Chlorobenzilate	(5)	16.339	139	6473	0.140
192) 3,3'-Dimethylbenzidine	(5)	16.805	212	14194	0.151
193) Butylbenzylphthalate	(5)	16.874	149	9604	0.138
196) 2-Acetylaminofluorene	(5)	17.227	181	8972	0.147
198) 3,3'-Dichlorobenzidine	(5)	17.741	252	7418	0.150
200) Benzo(a)anthracene	(5)	17.757	228	19637	0.137
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.767	231	4180	0.152
201) Chrysene	(5)	17.821	228	15648	0.126
204) bis(2-Ethylhexyl)phthalate	(5)	17.955	149	14067	0.135
208) 6-Methylchrysene	(5)	18.634	242	11936	0.136
210) Di-n-octylphthalate	(6)	19.126	149	23853	0.132
211) Benzo(b)fluoranthene	(6)	19.623	252	19942	0.138
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.629	256	7631	0.142
213) Benzo(k)fluoranthene	(6)	19.671	252	16818	0.129
216) Benzo(a)pyrene	(6)	20.153	252	17818M	0.135
218)*Perylene-d12	(6)	20.249	264	551885	5.000
220) 3-Methylcholanthrene	(6)	20.736	268	8604	0.137
222) Dibenz(a,h)acridine	(6)	21.549	279	15711	0.149
223) Dibenz(a,j)acridine	(6)	21.624	279	16596	0.160
224) Indeno(1,2,3-cd)pyrene	(6)	21.880	276	17506M	0.134
225) Dibenz(a,h)anthracene	(6)	21.923	278	18717	0.137
226) Benzo(g,h,i)perylene	(6)	22.282	276	18371	0.135

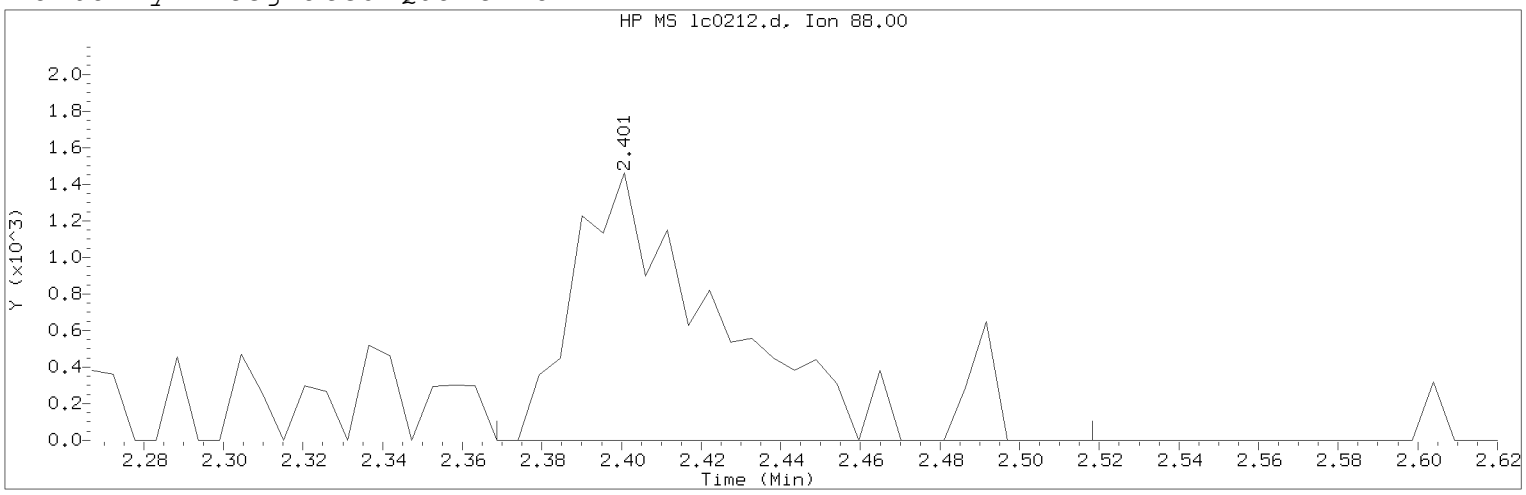
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Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

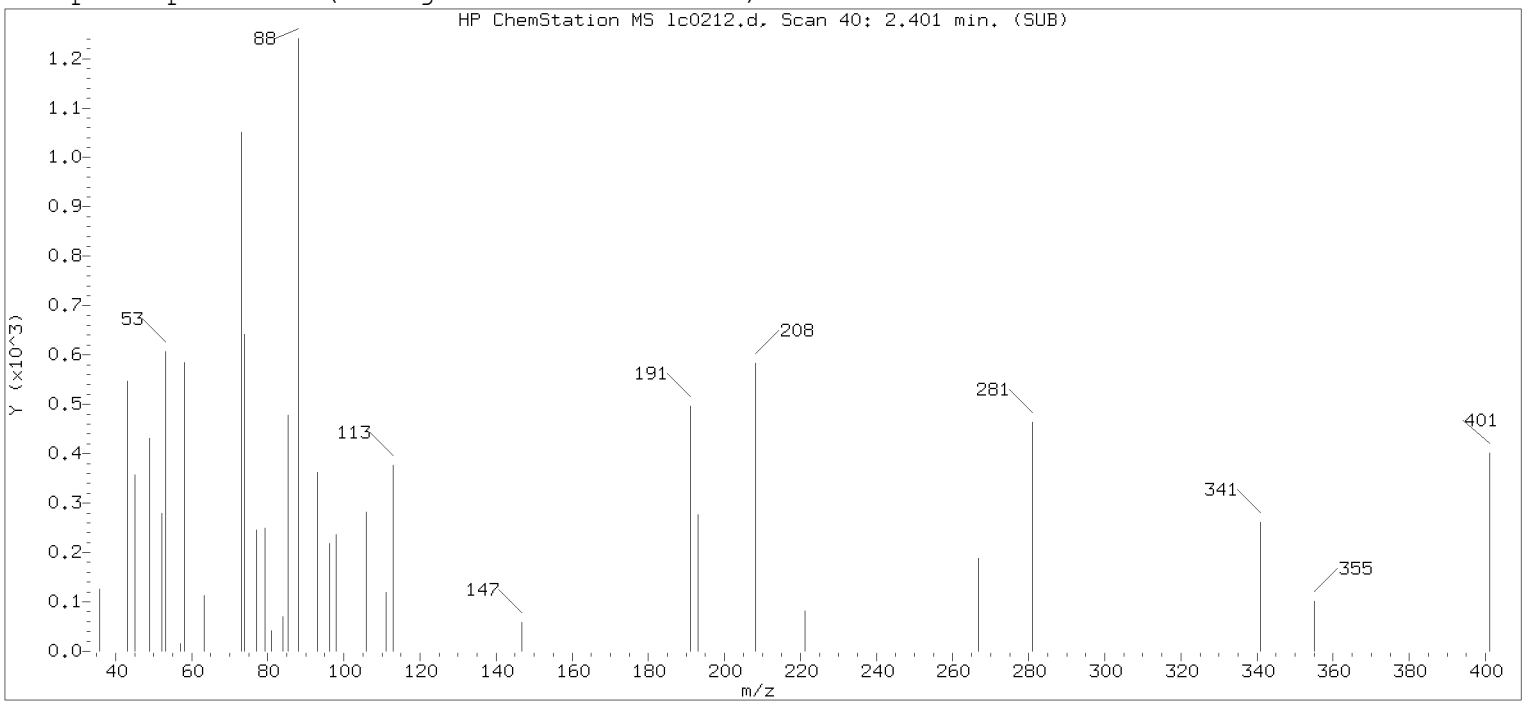
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 40
Retention Time (minutes) : 2.401
Quant Ion : 88.00
Area (flag) : 3887M
On-Column Amount (ng/ul) : 0.2022
Integration start scan : 33 Integration stop scan: 61
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

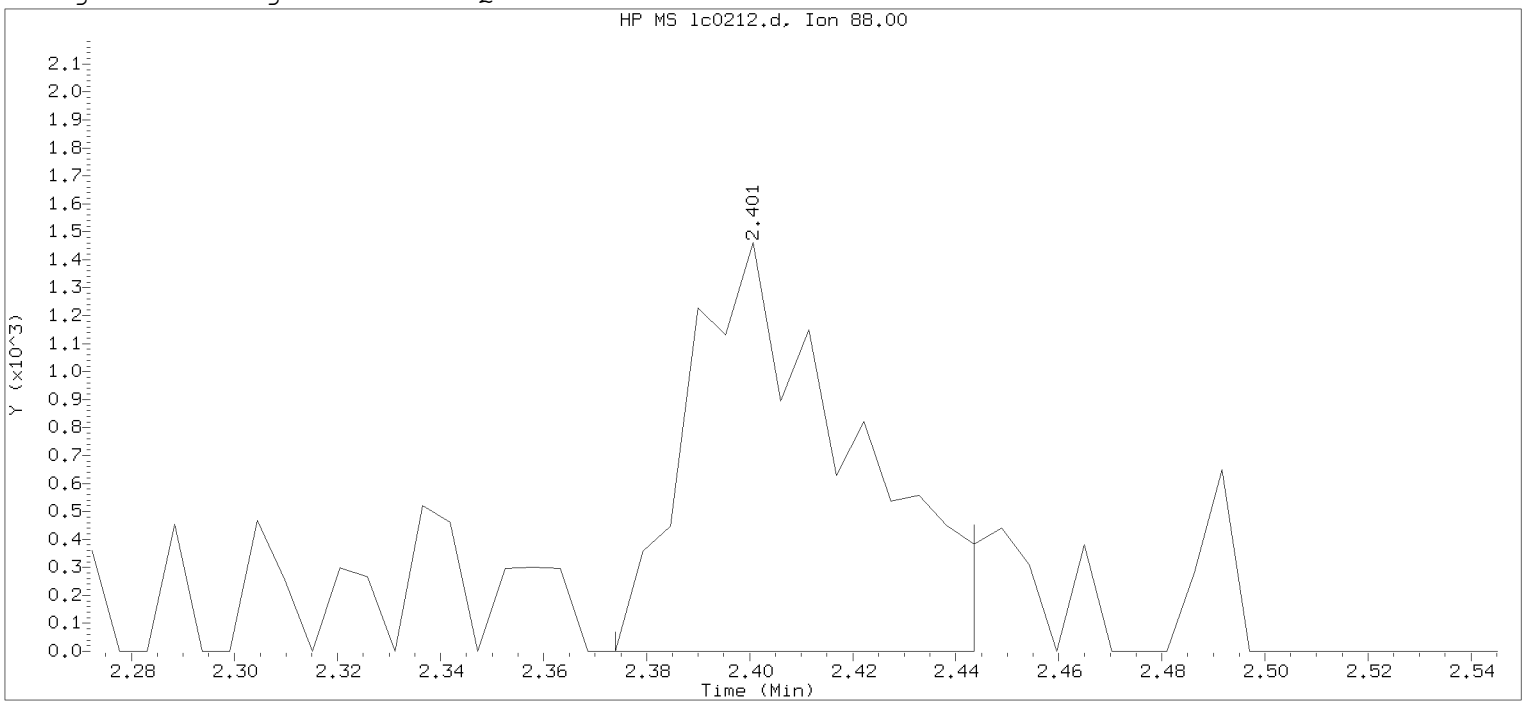
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

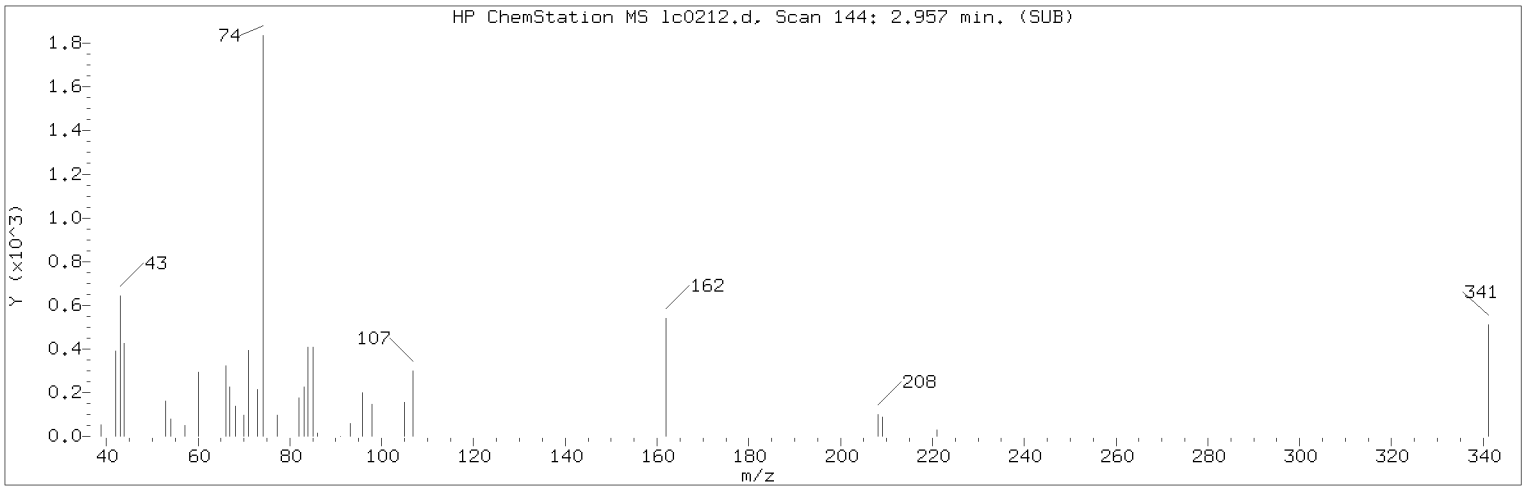
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

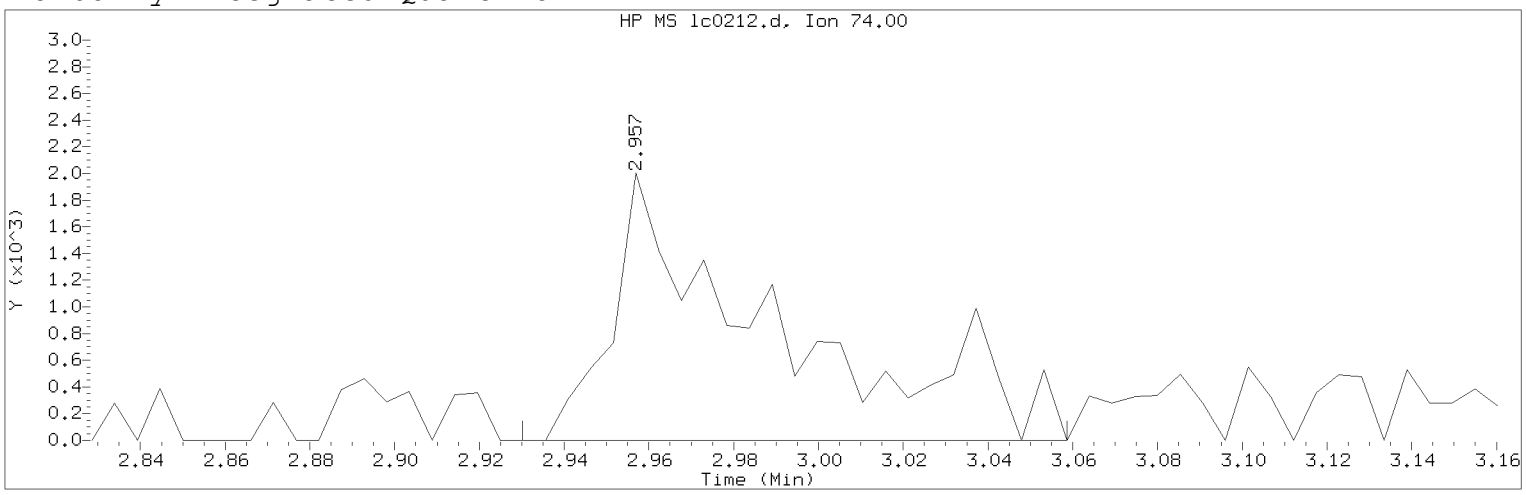
Compound Number	: 1		
Compound Name	: 1,4-Dioxane		
Scan Number	: 40		
Retention Time (minutes)	: 2.401		
Quant Ion	: 88.00		
Area	: 3163		
On-column Amount (ng/ul)	: 0.1377		
Integration start scan	: 34	Integration stop scan:	47
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

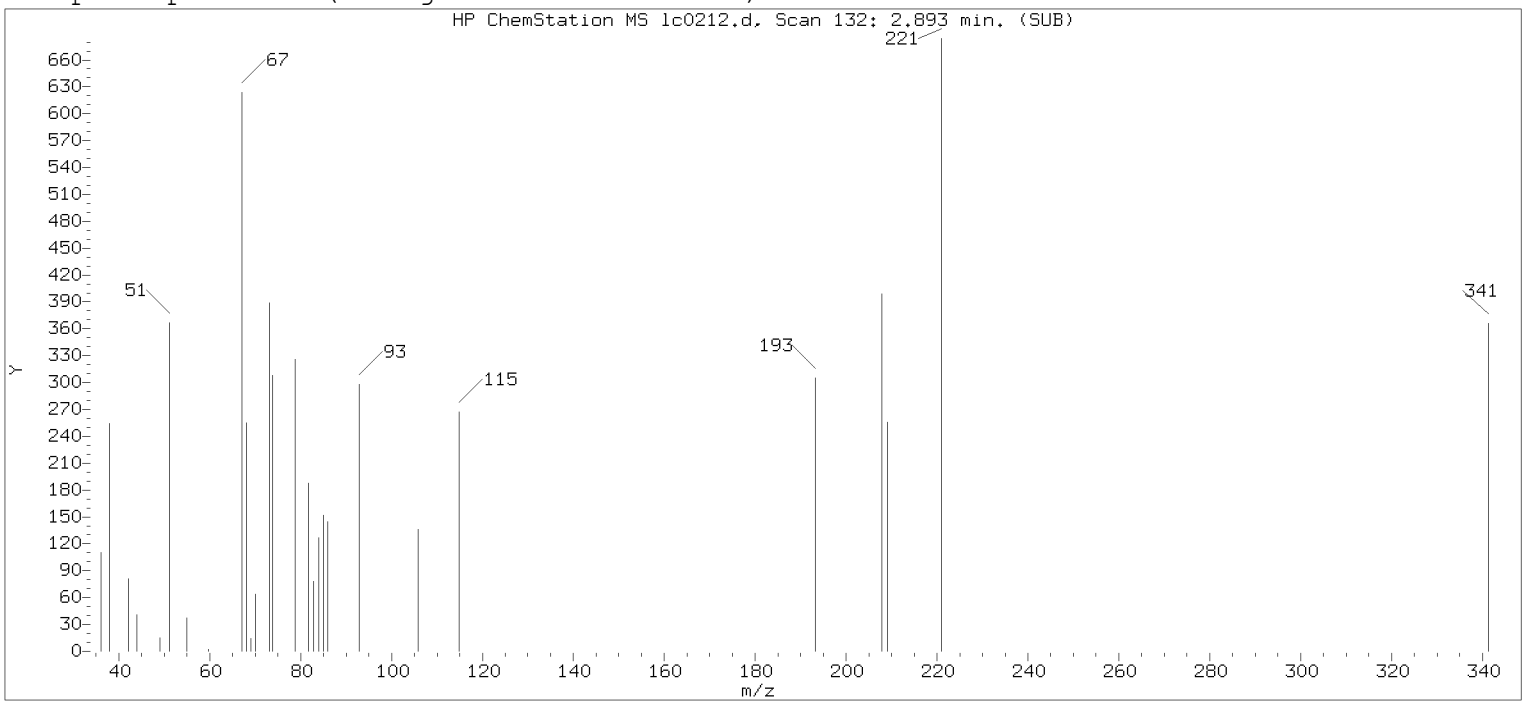
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 144
Retention Time (minutes) : 2.957
Quant Ion : 74.00
Area (flag) : 5205M
On-Column Amount (ng/ul) : 0.1677
Integration start scan : 138 Integration stop scan: 162
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

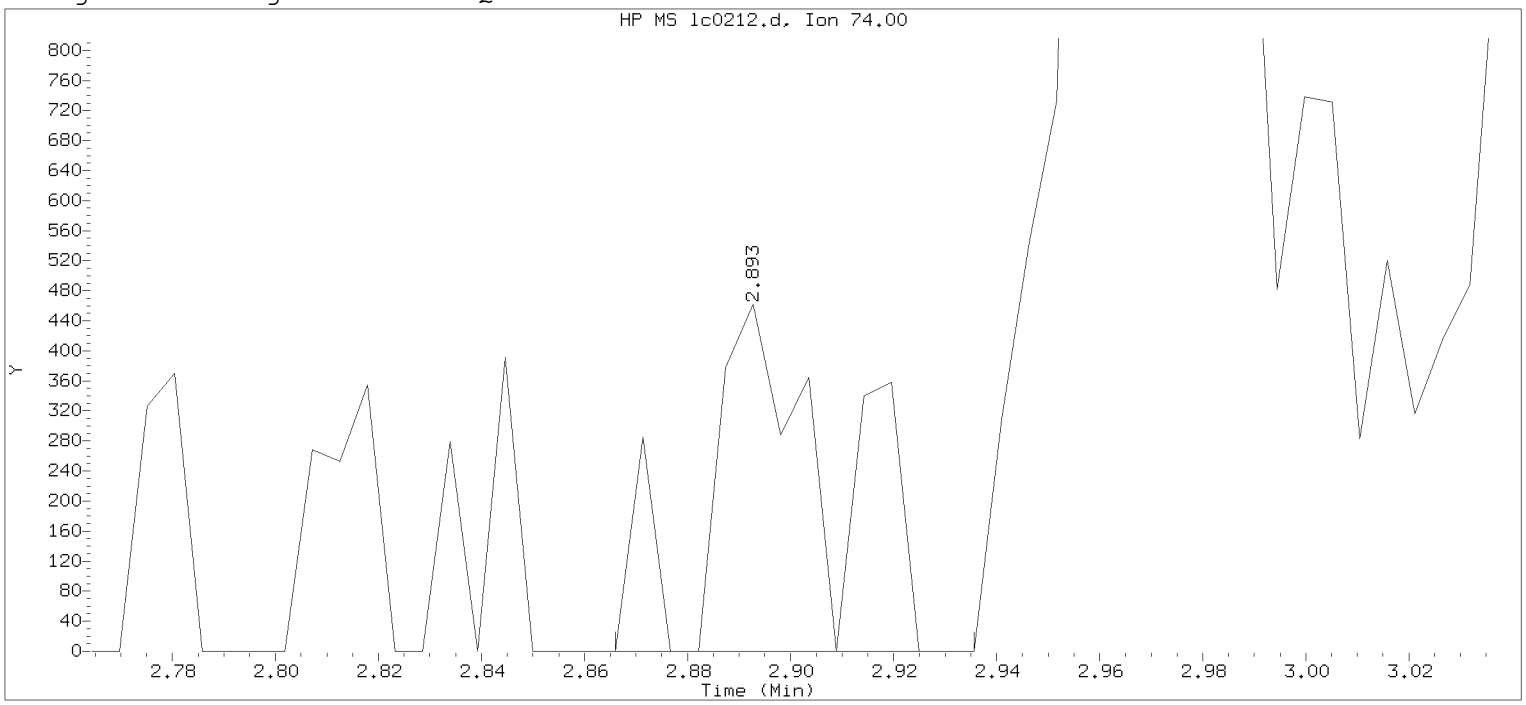
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

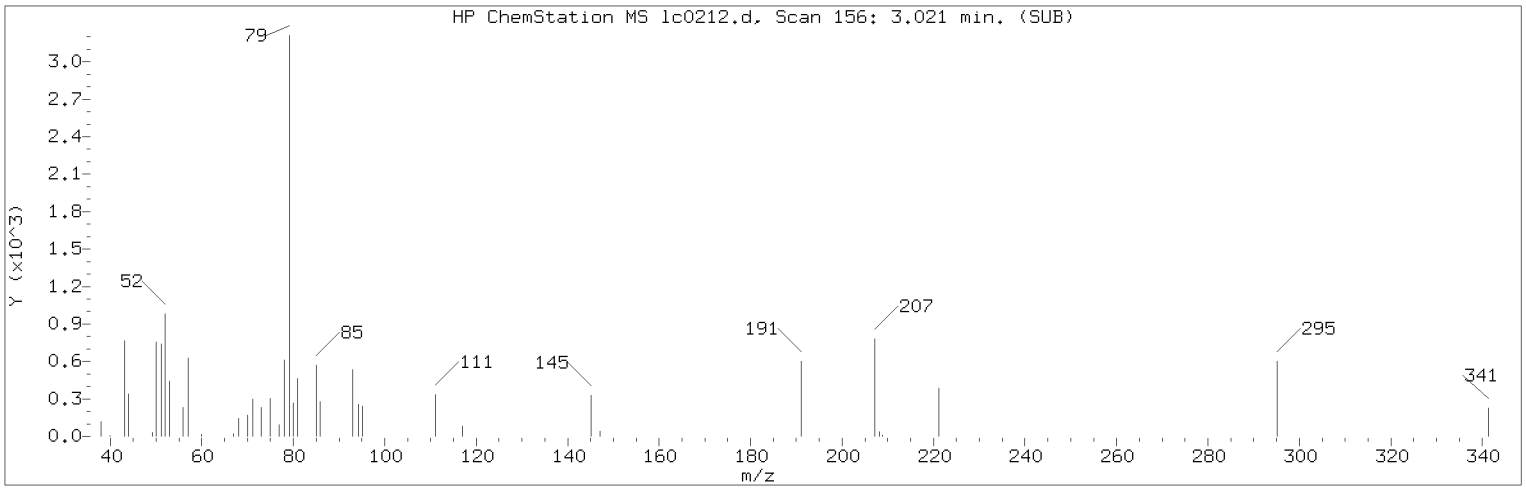
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

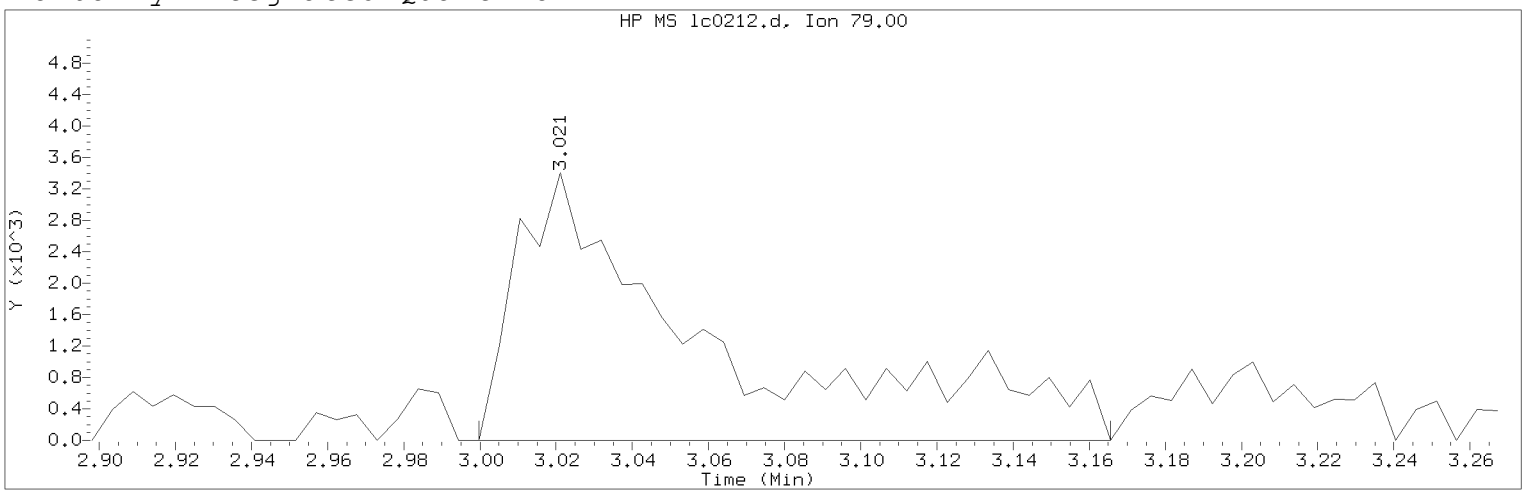
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 132		
Retention Time (minutes)	: 2.893		
Quant Ion	: 74.00		
Area	: 794		
On-column Amount (ng/ul)	: 0.0216		
Integration start scan	: 126	Integration stop scan:	139
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2.40

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

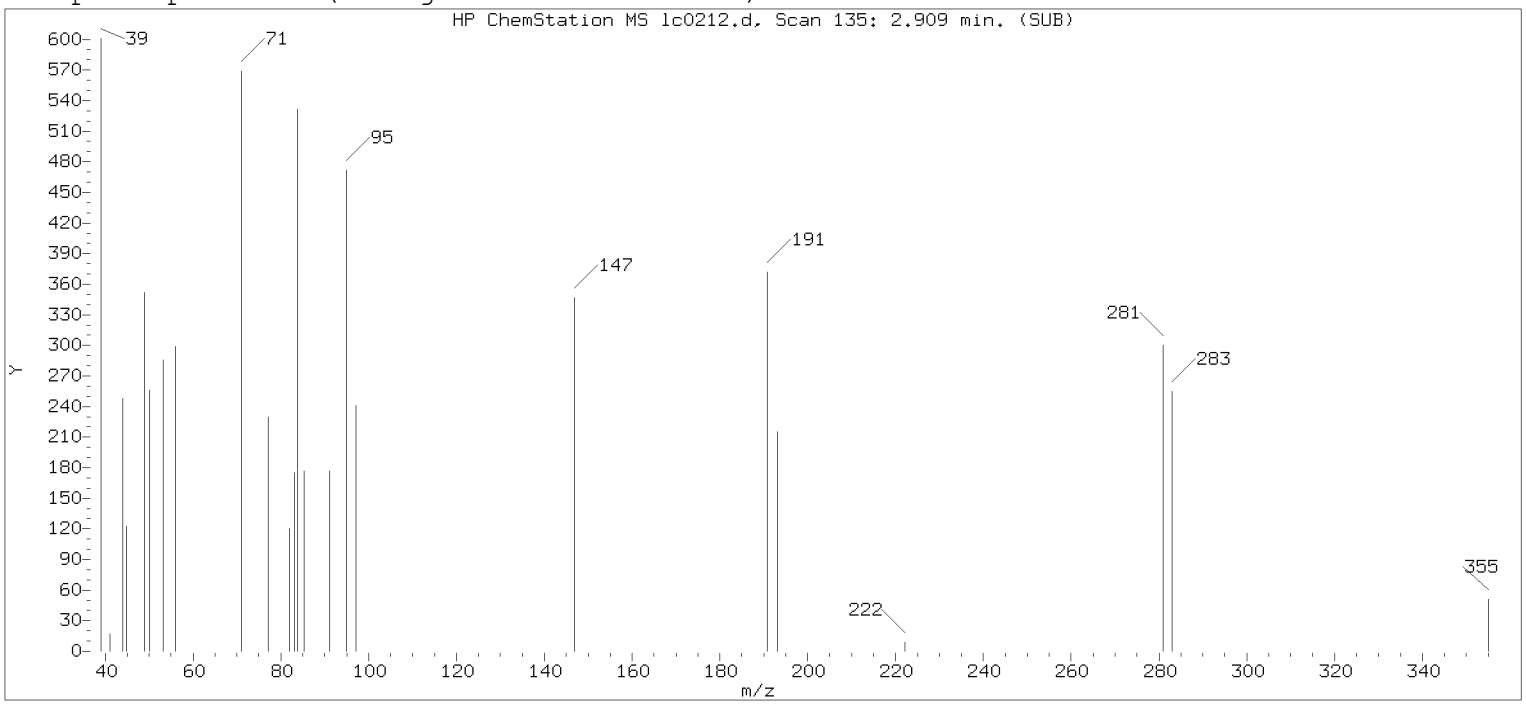
Compound Number : 6
Compound Name : Pyridine
Scan Number : 156
Retention Time (minutes) : 3.021
Quant Ion : 79.00
Area (flag) : 11933M
On-Column Amount (ng/ul) : 0.2262
Integration start scan : 151 Integration stop scan: 182
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

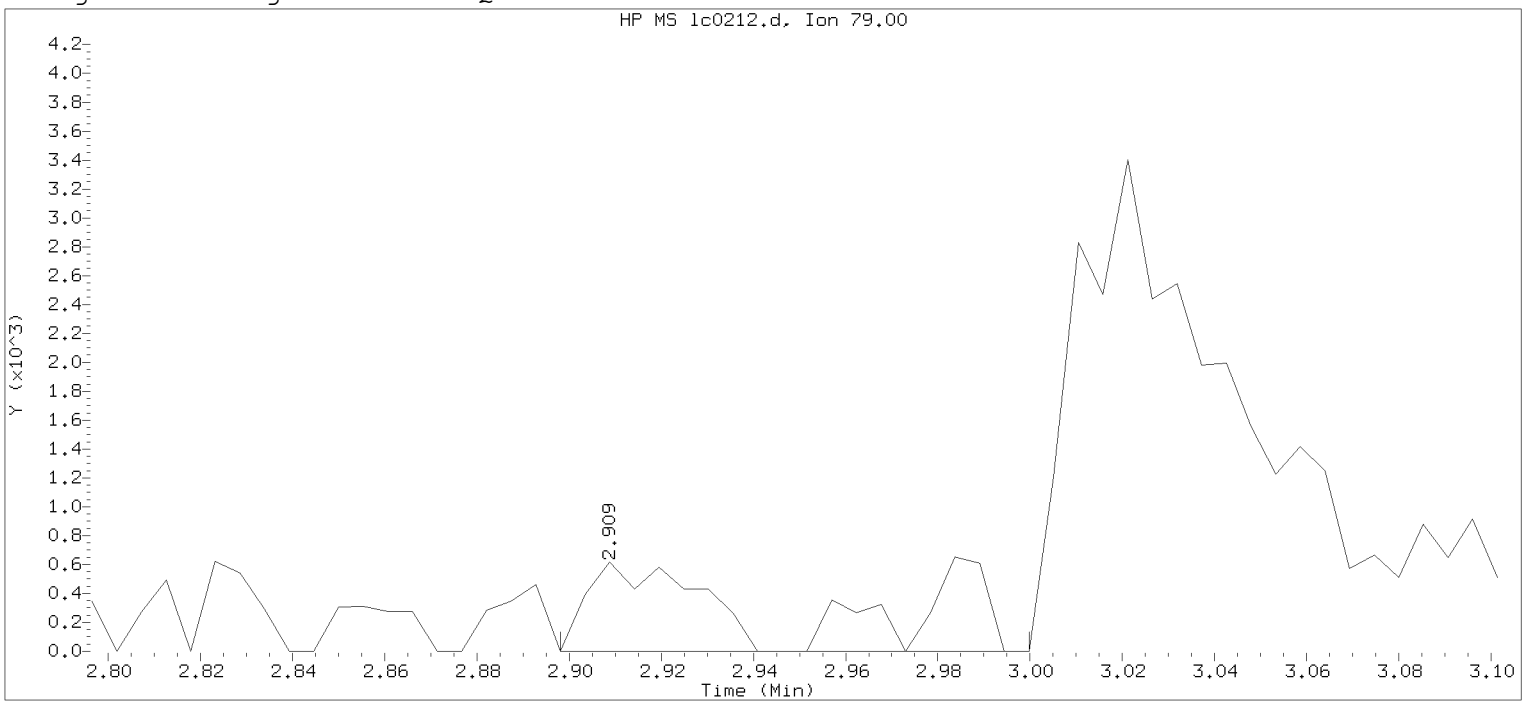
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

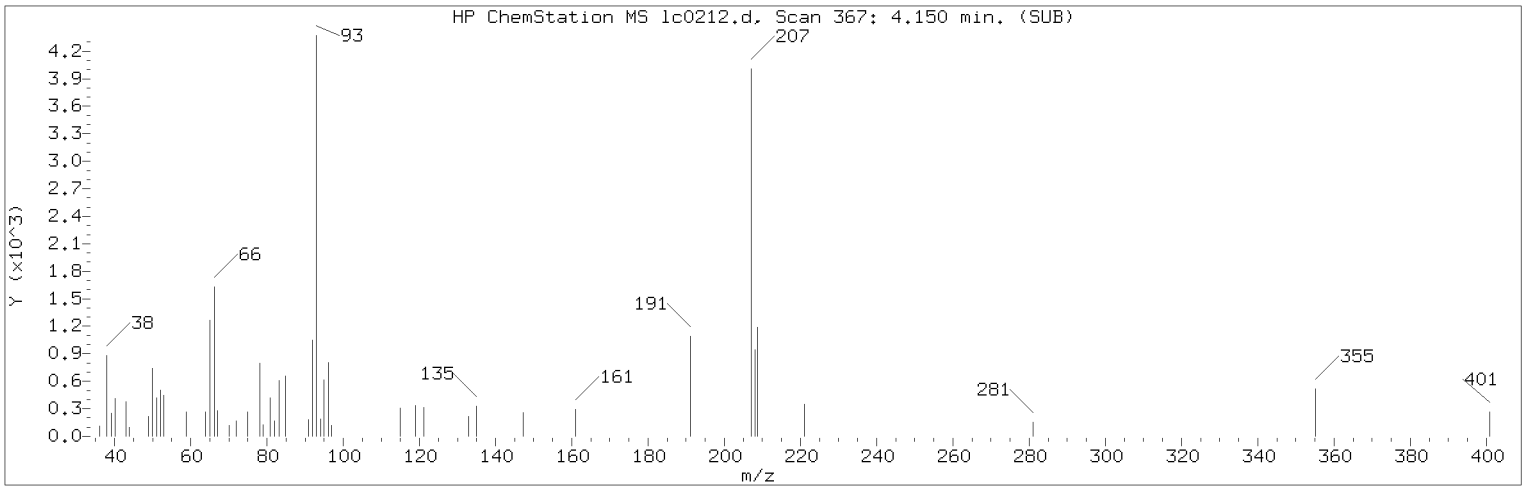
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

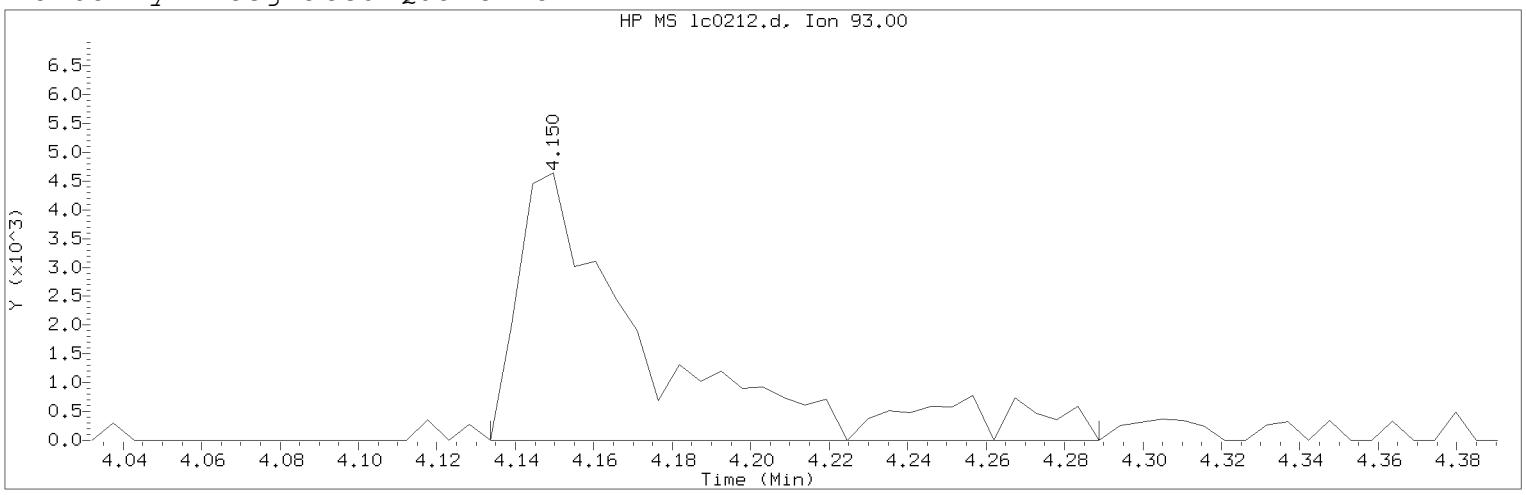
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 135		
Retention Time (minutes)	: 2.909		
Quant Ion	: 79.00		
Area	: 1801		
On-column Amount (ng/ul)	: 0.0284		
Integration start scan	: 132	Integration stop scan:	151
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

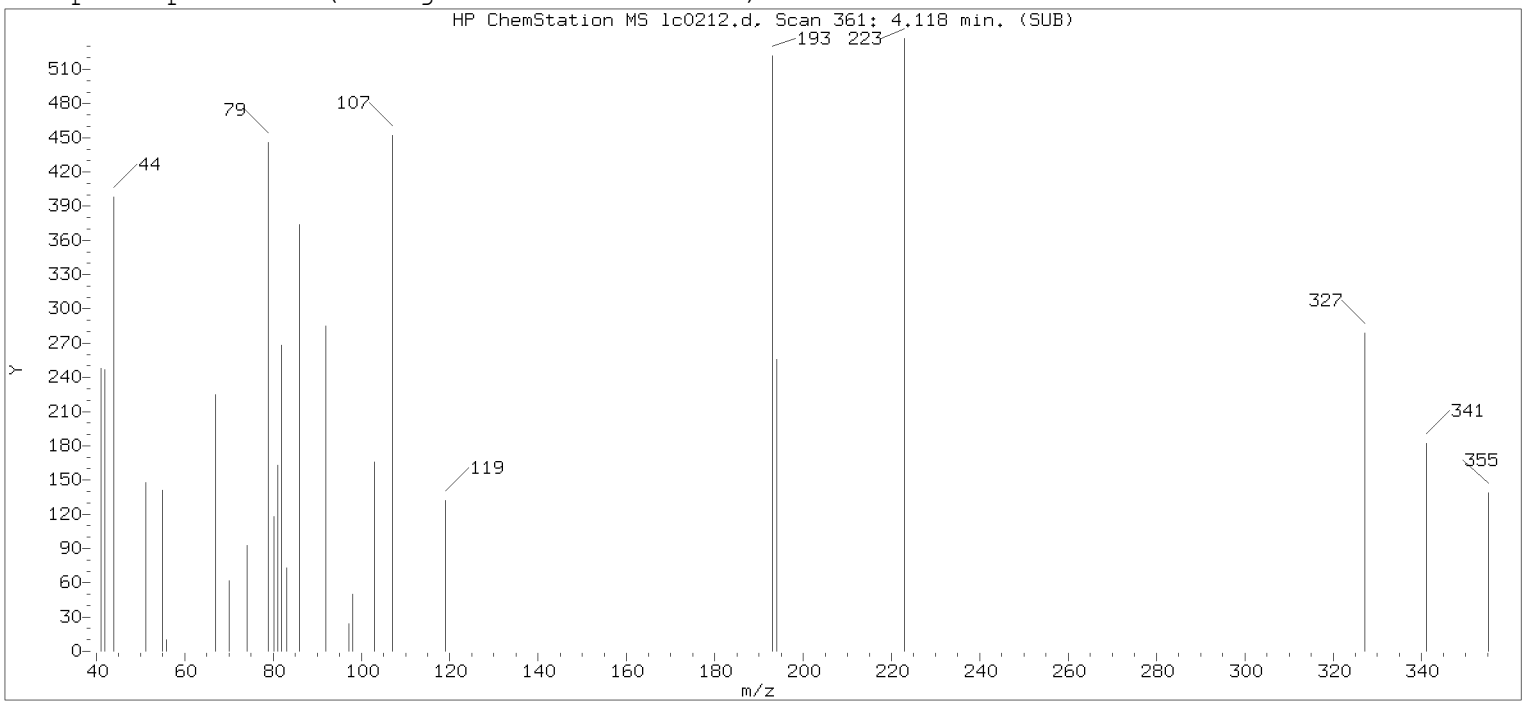
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 367
Retention Time (minutes) : 4.150
Quant Ion : 93.00
Area (flag) : 11266M
On-Column Amount (ng/ul) : 0.1994
Integration start scan : 363 Integration stop scan: 392
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

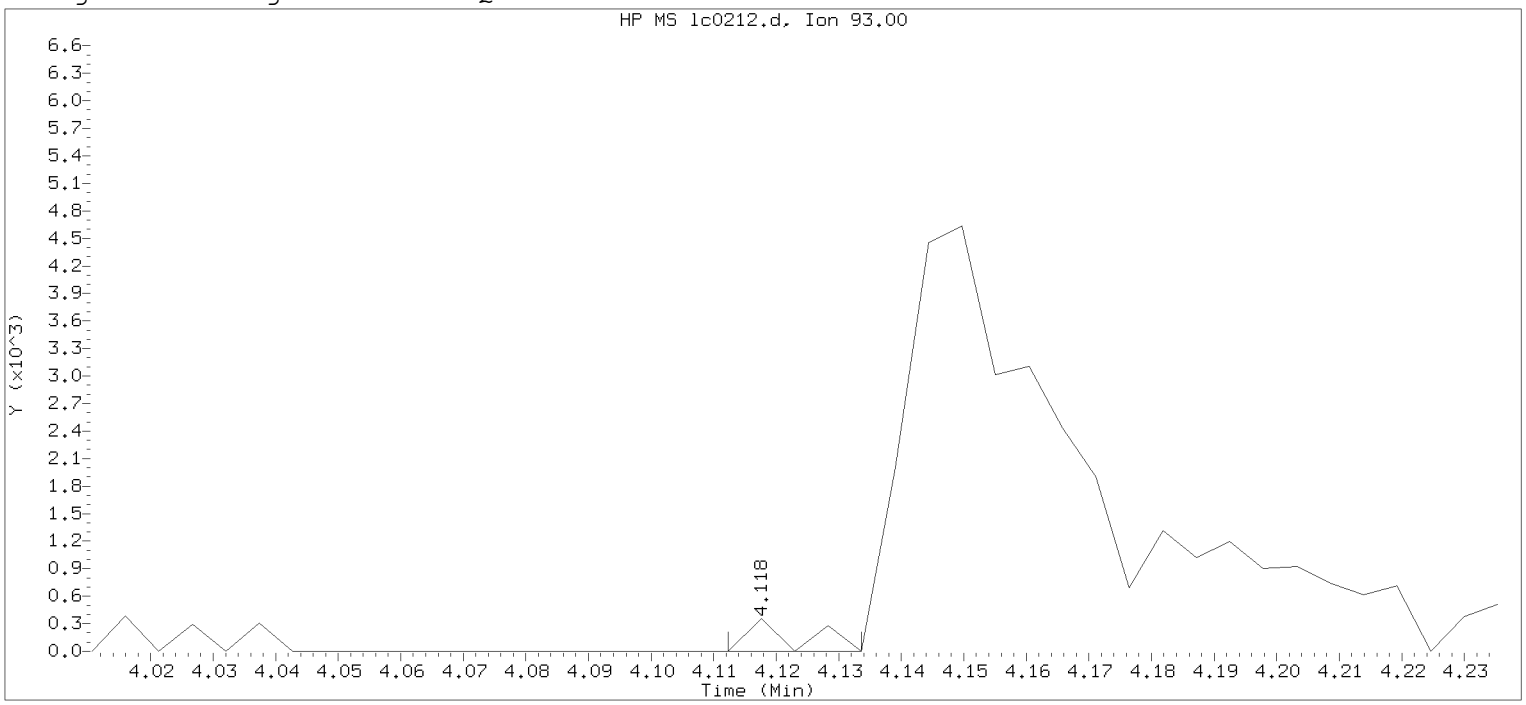
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

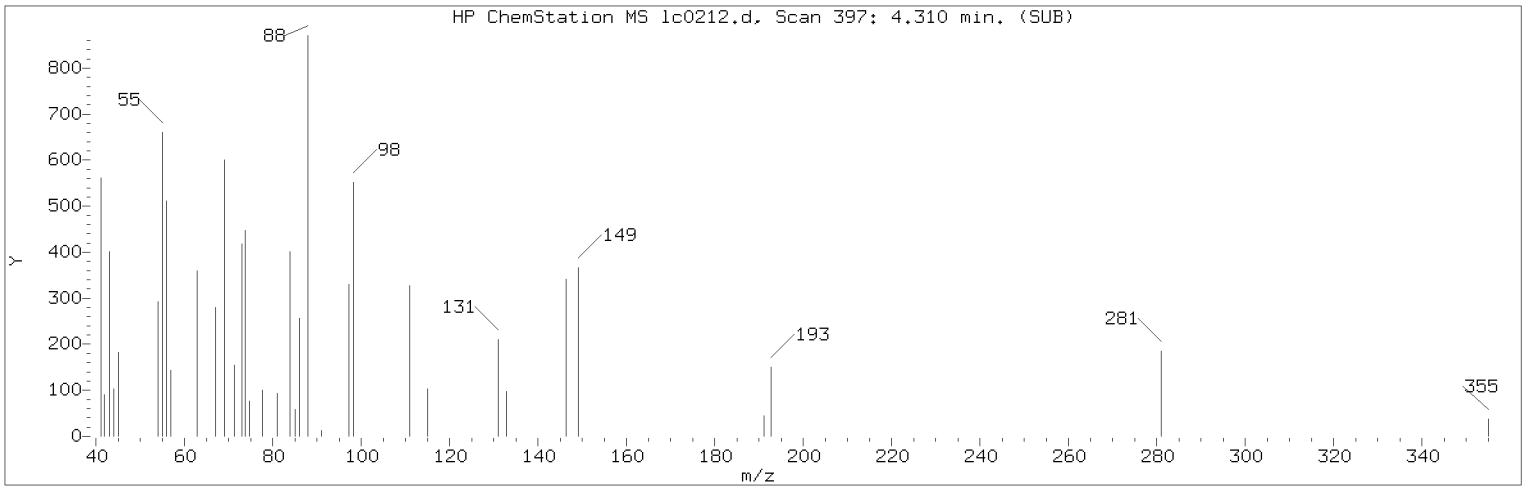
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

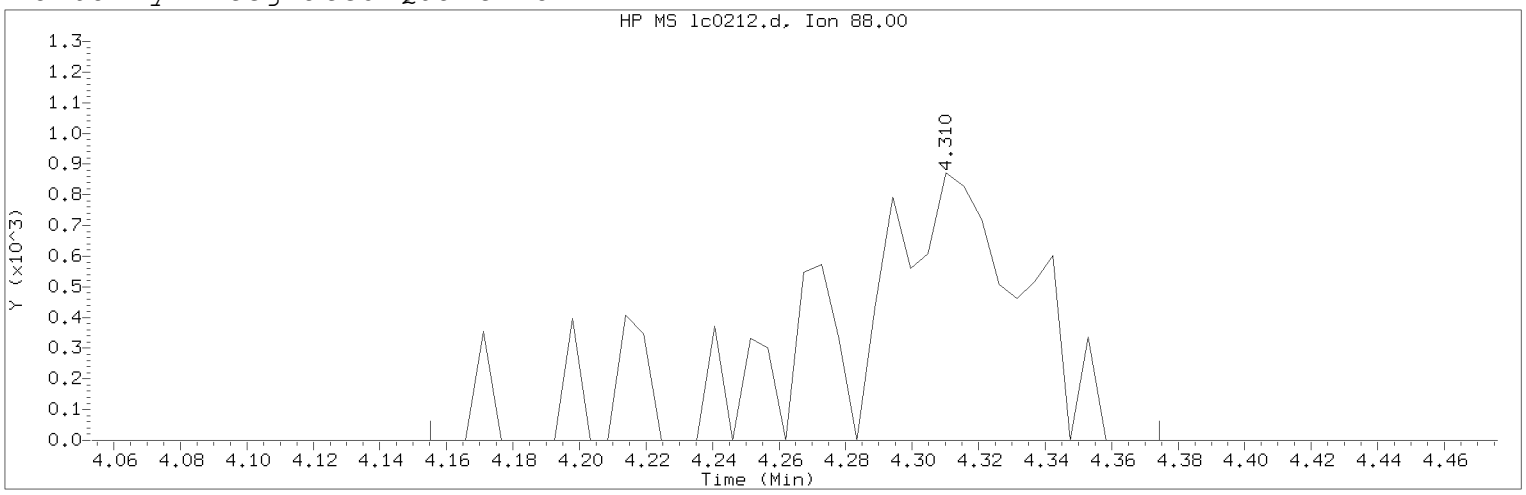
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 361		
Retention Time (minutes)	: 4.118		
Quant Ion	: 93.00		
Area	: 204		
On-column Amount (ng/ul)	: 0.0032		
Integration start scan	: 359	Integration stop scan:	363
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2.0.44

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

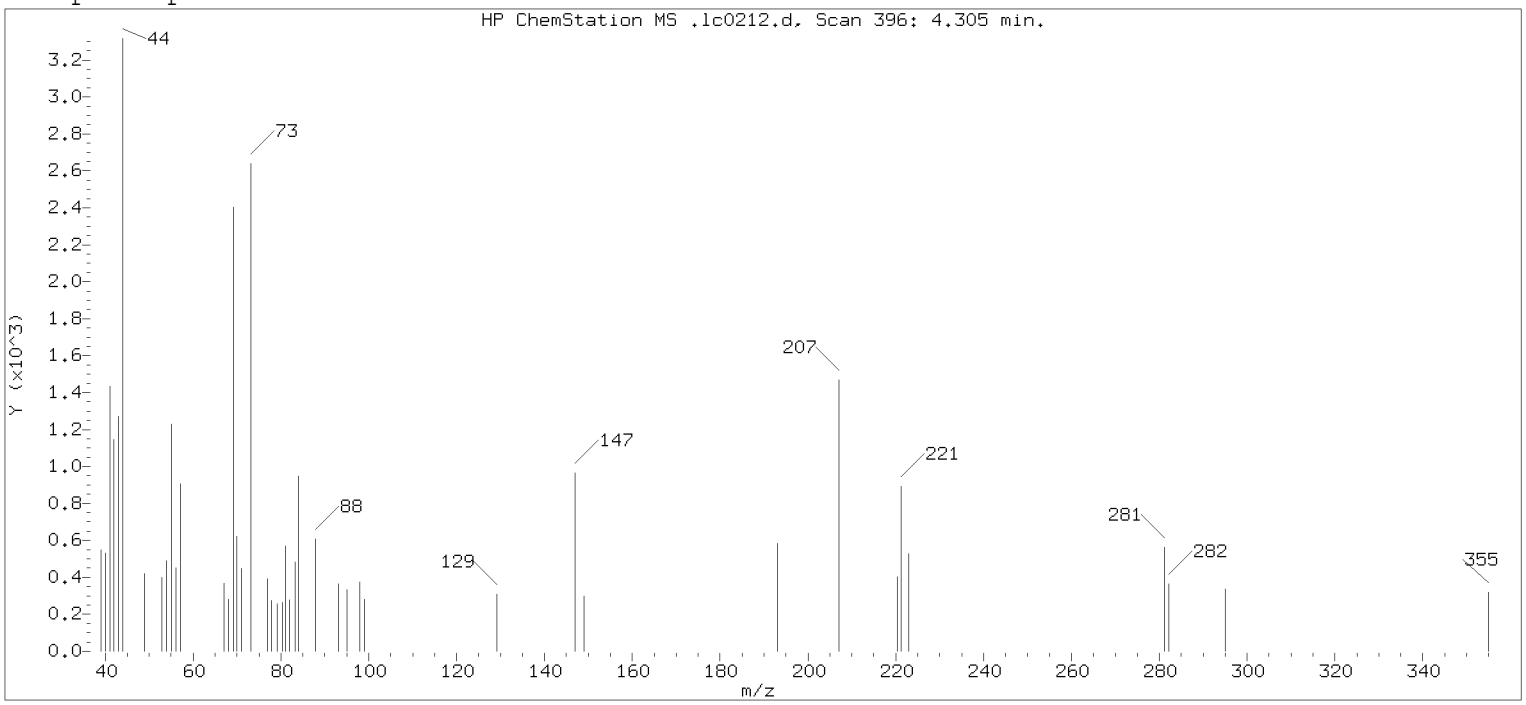
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 397
Retention Time (minutes) : 4.310
Quant Ion : 88.00
Area (flag) : 3593M
On-Column Amount (ng/ul) : 0.1543
Integration start scan : 367 Integration stop scan: 408
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

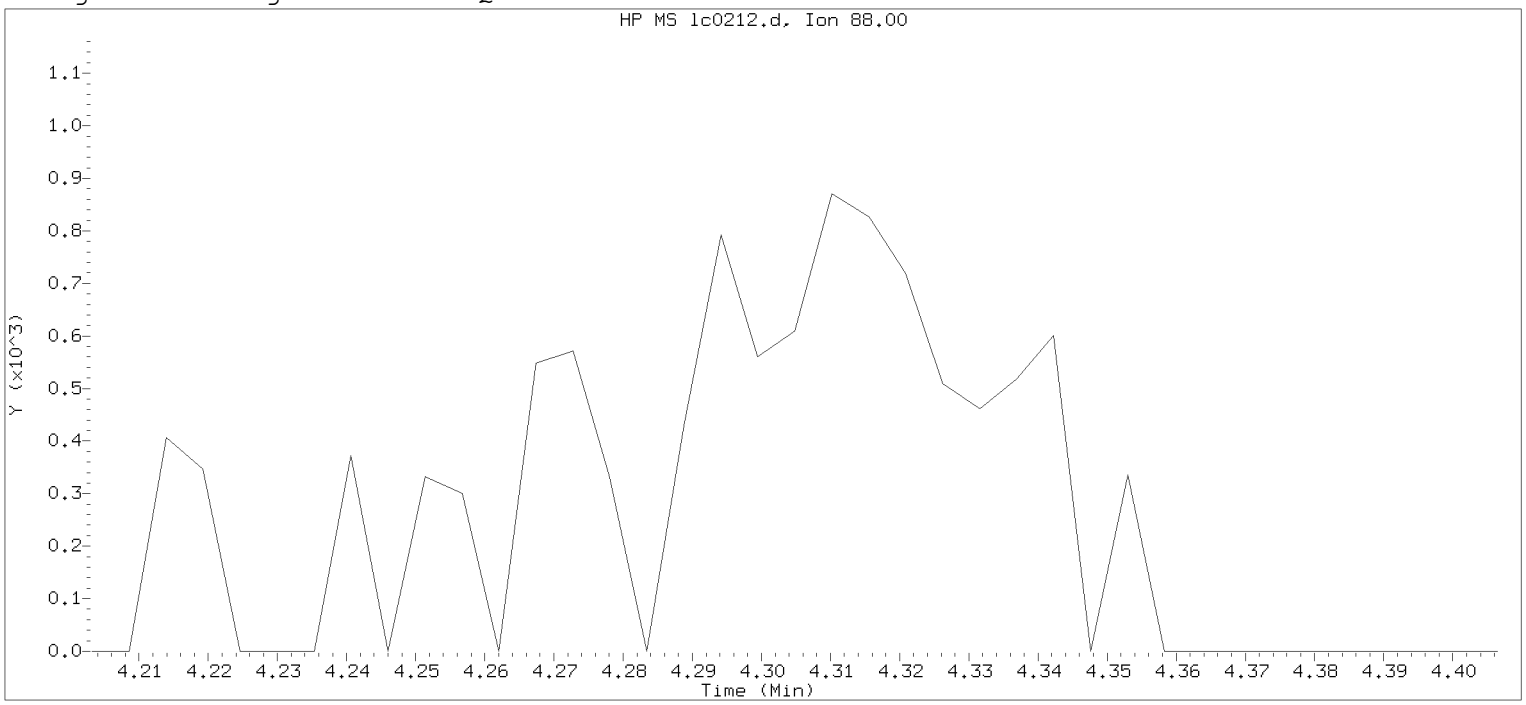
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

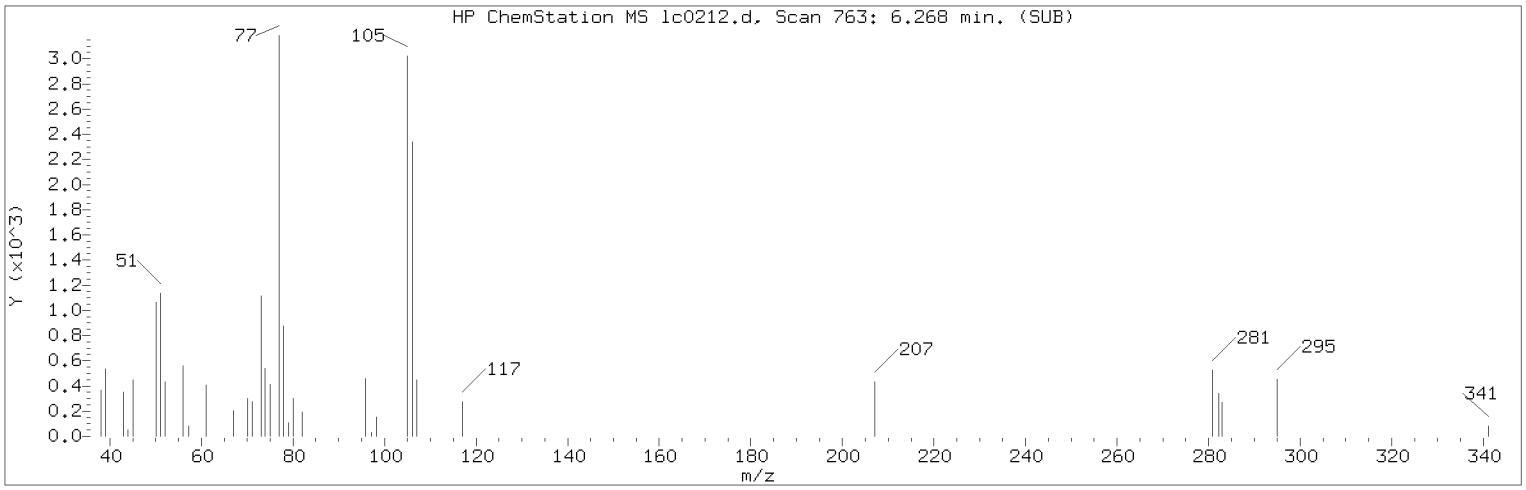
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

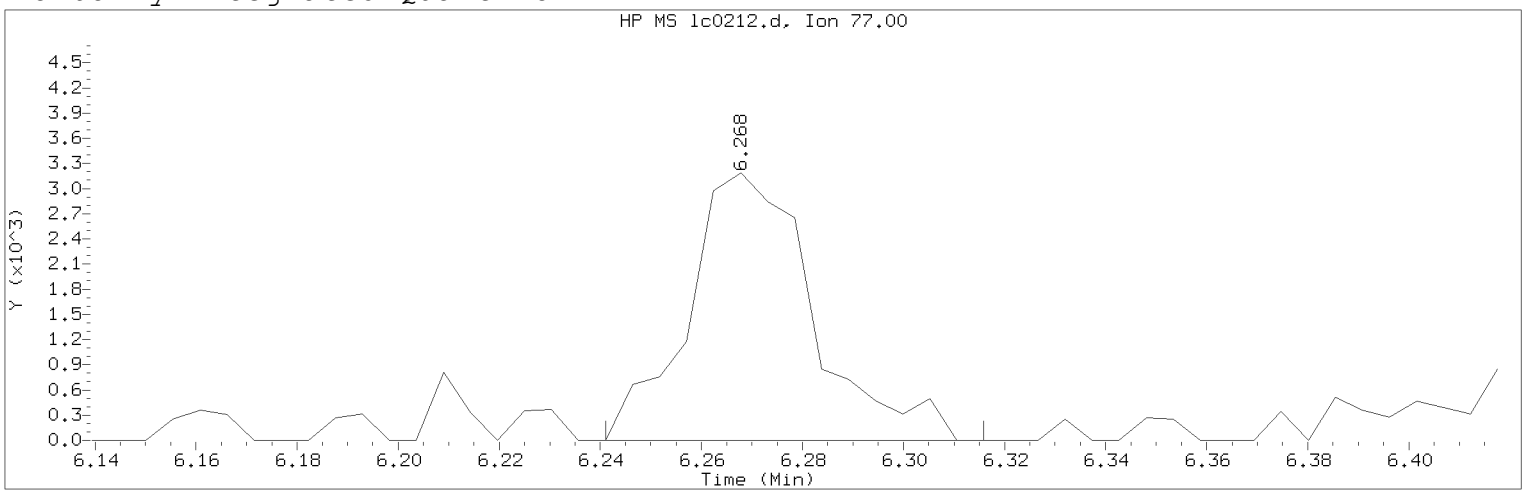
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.305
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

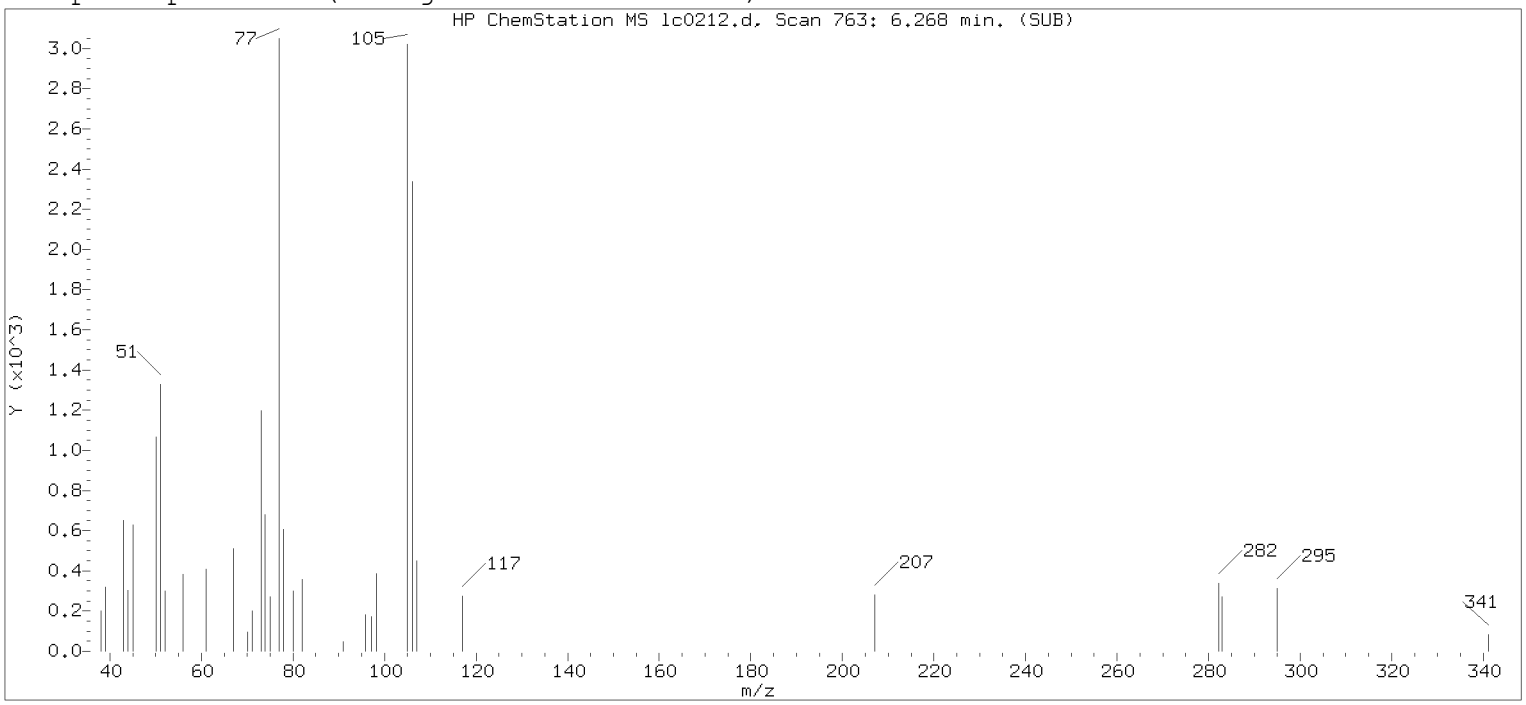
Compound Number	: 17		
Compound Name	: Benzaldehyde		
Scan Number	: 763		
Retention Time (minutes)	: 6.268		
Quant Ion	: 77.00		
Area (flag)	: 5489M		
On-Column Amount (ng/ul)	: 0.1276		
Integration start scan	: 757	Integration stop scan:	771
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

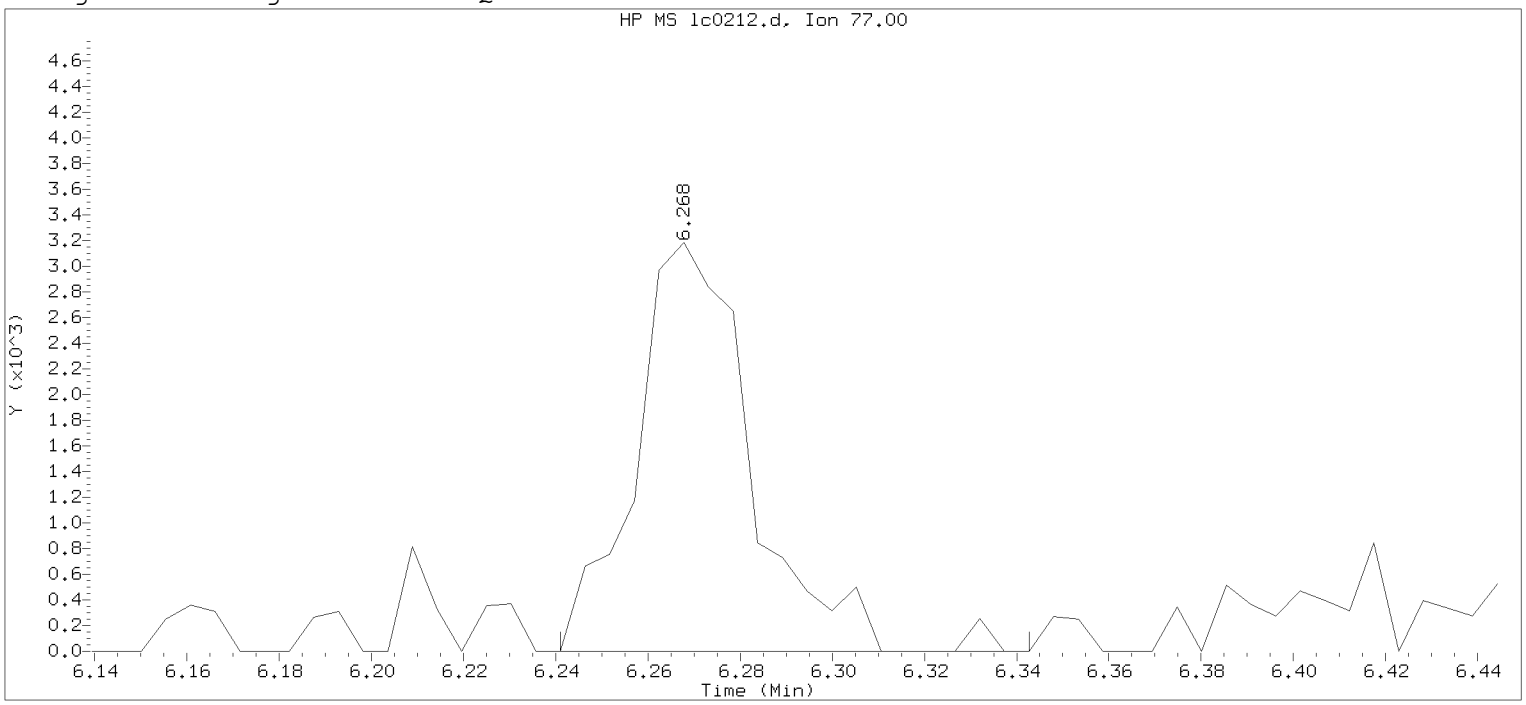
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

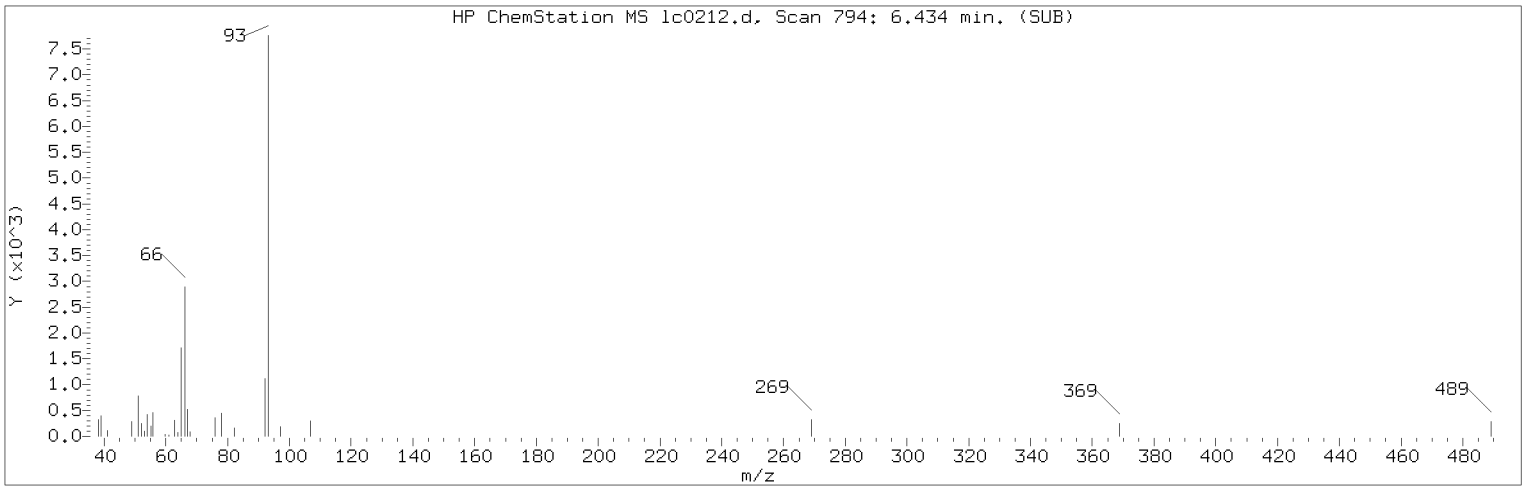
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

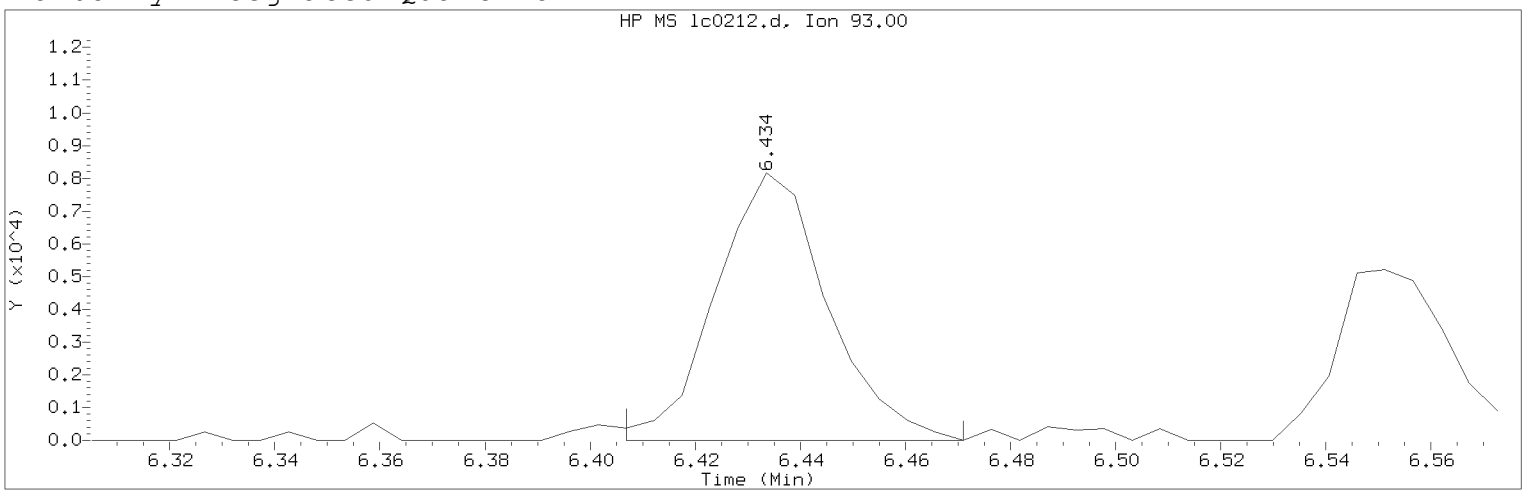
Compound Number	: 17		
Compound Name	: Benzaldehyde		
Scan Number	: 763		
Retention Time (minutes)	: 6.268		
Quant Ion	: 77.00		
Area	: 5571		
On-column Amount (ng/ul)	: 0.1396		
Integration start scan	: 757	Integration stop scan:	776
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

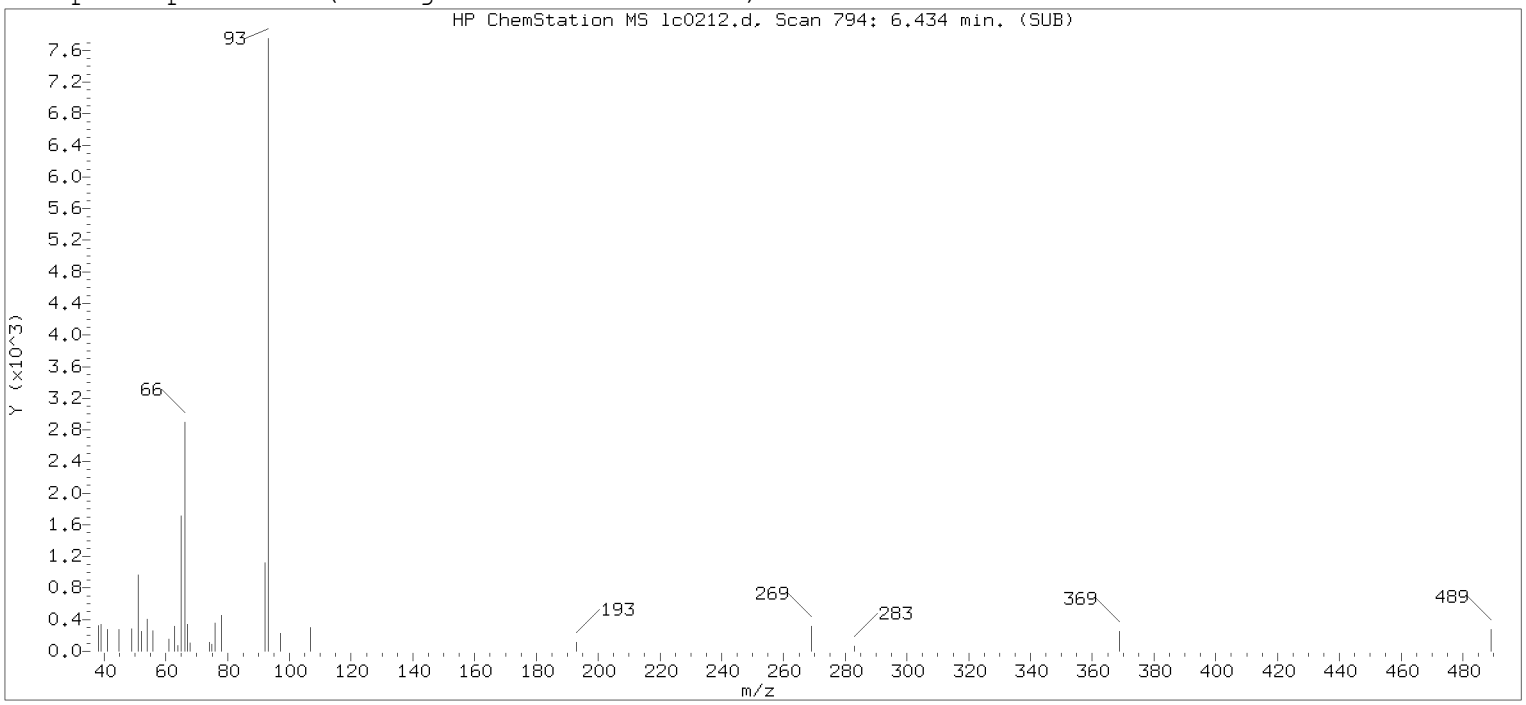
Compound Number : 20
Compound Name : Aniline
Scan Number : 794
Retention Time (minutes) : 6.434
Quant Ion : 93.00
Area (flag) : 12069M
On-Column Amount (ng/ul) : 0.1536
Integration start scan : 788 Integration stop scan: 800
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

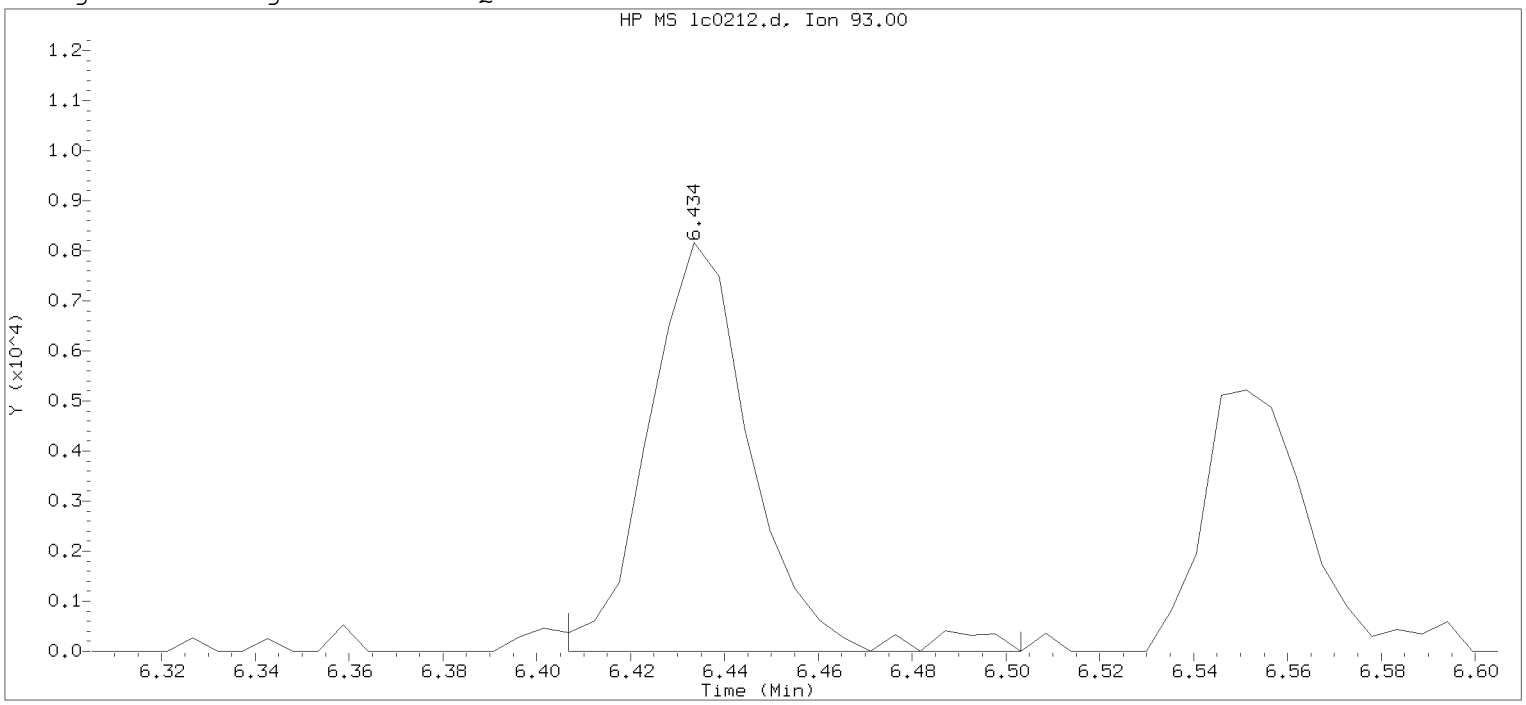
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

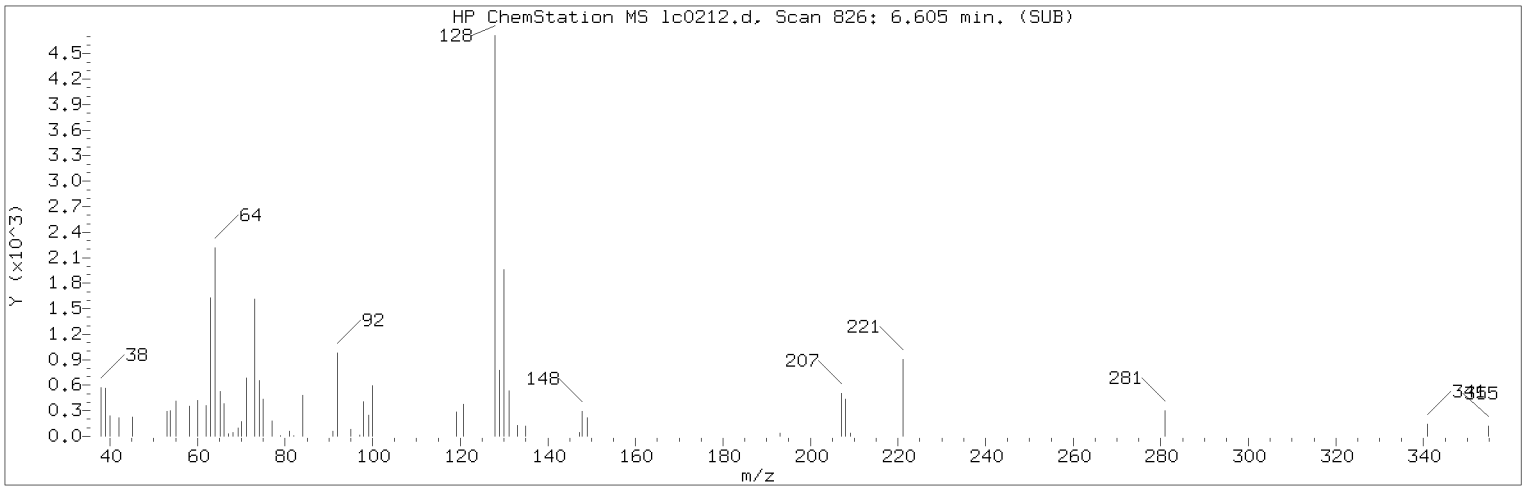
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

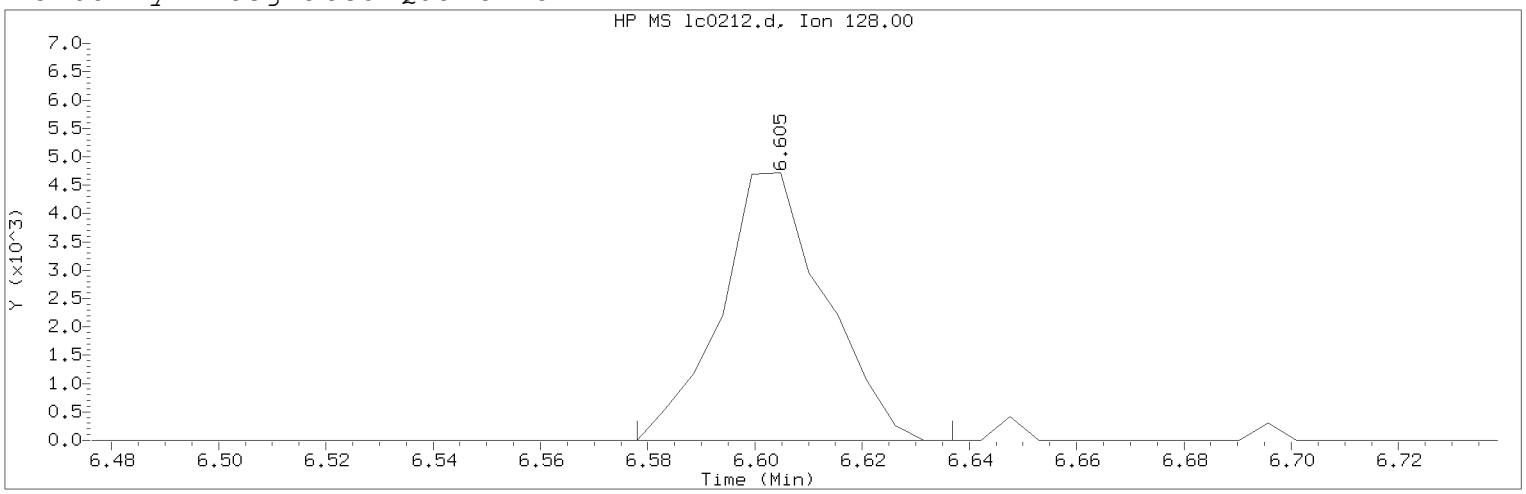
Compound Number	: 20		
Compound Name	: Aniline		
Scan Number	: 794		
Retention Time (minutes)	: 6.434		
Quant Ion	: 93.00		
Area	: 12461		
On-column Amount (ng/ul)	: 0.1387		
Integration start scan	: 788	Integration stop scan:	806
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

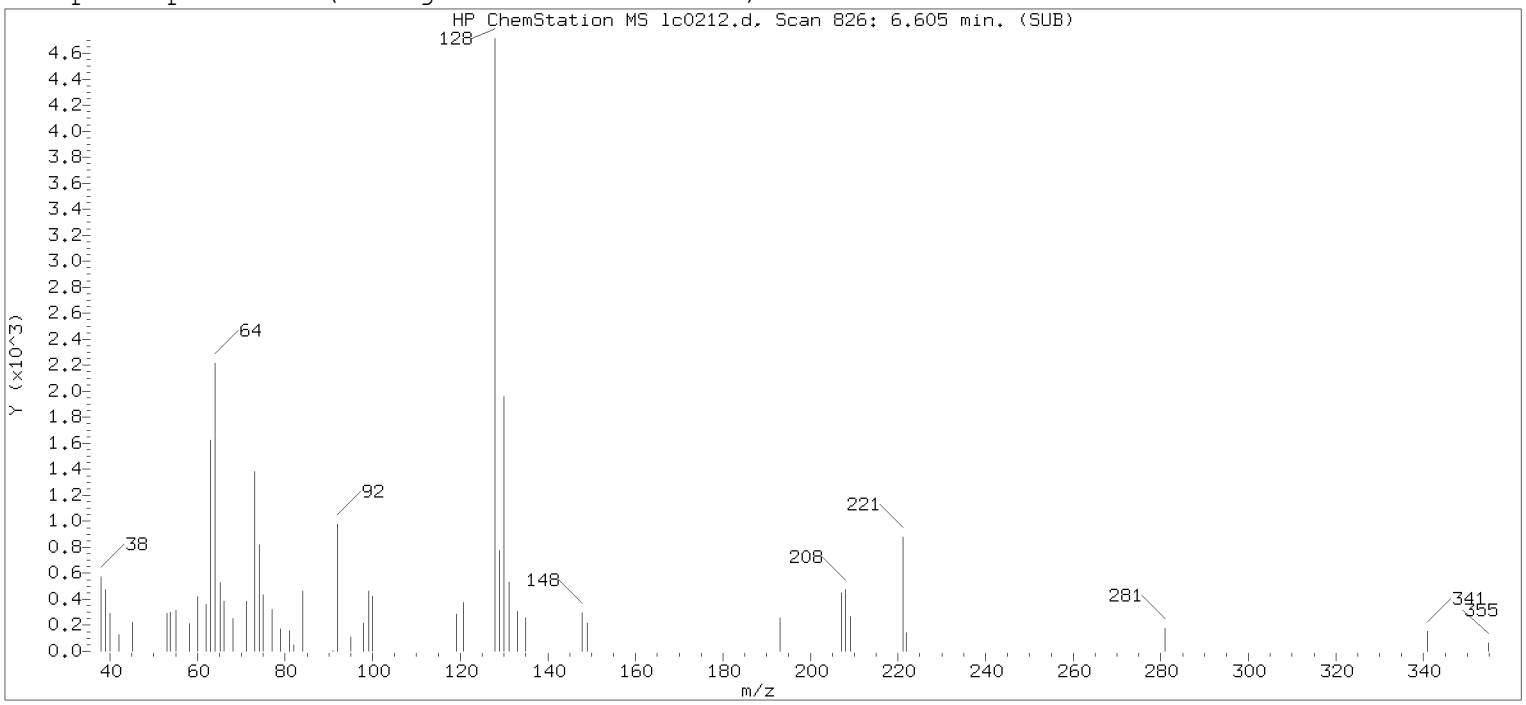
Compound Number : 24
Compound Name : 2-Chlorophenol
Scan Number : 826
Retention Time (minutes) : 6.605
Quant Ion : 128.00
Area (flag) : 6372M
On-Column Amount (ng/ul) : 0.1472
Integration start scan : 820 Integration stop scan: 831
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

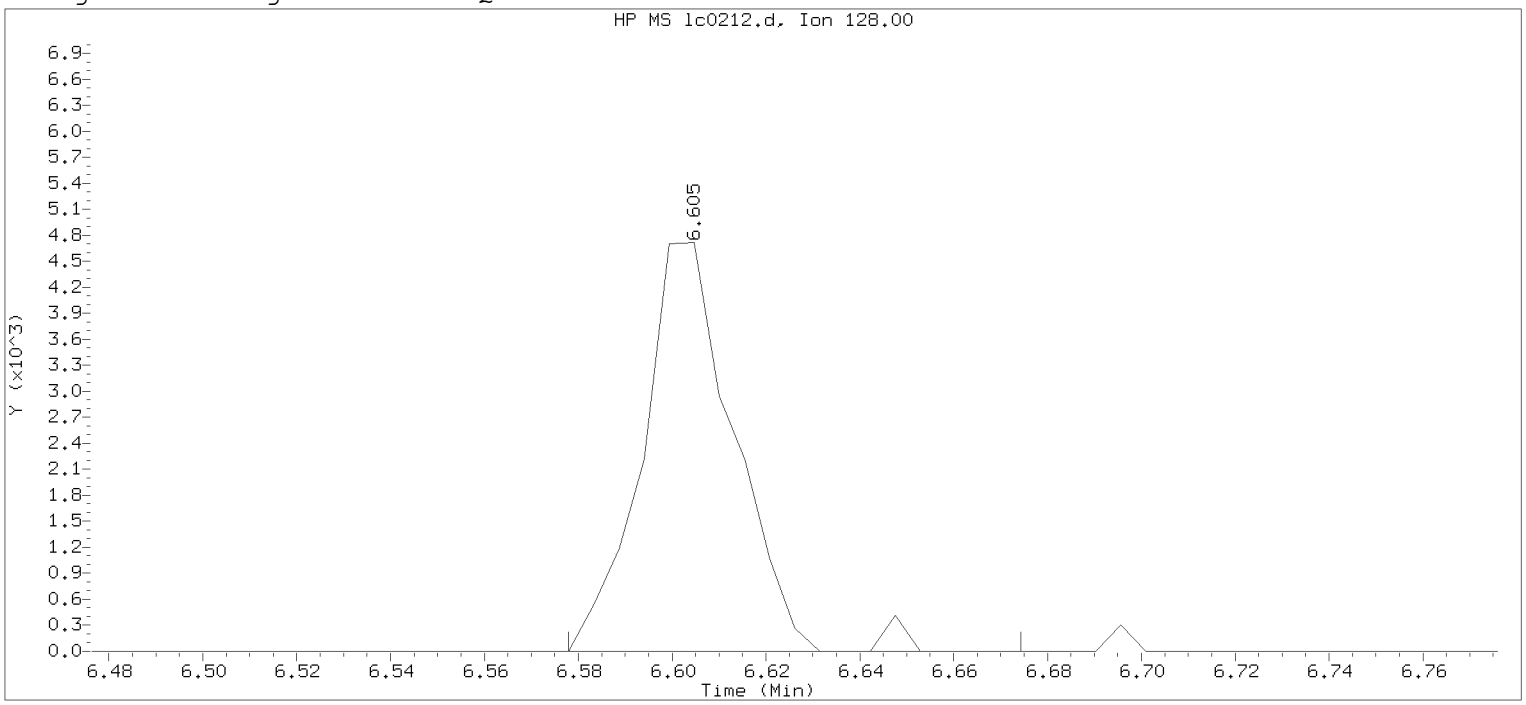
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

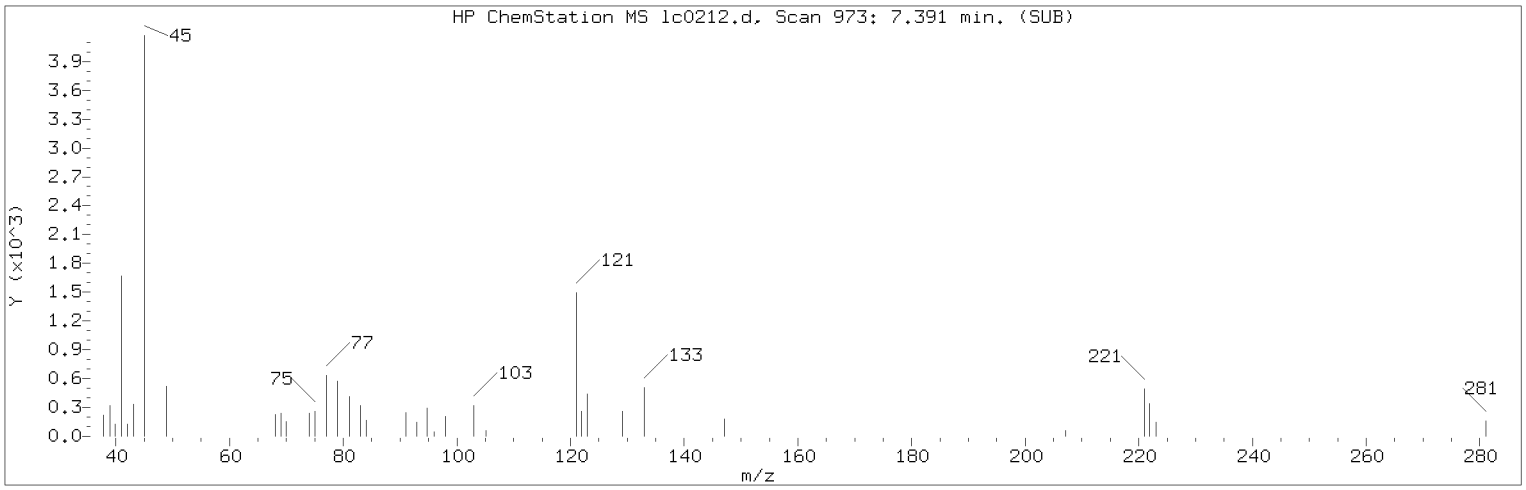
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

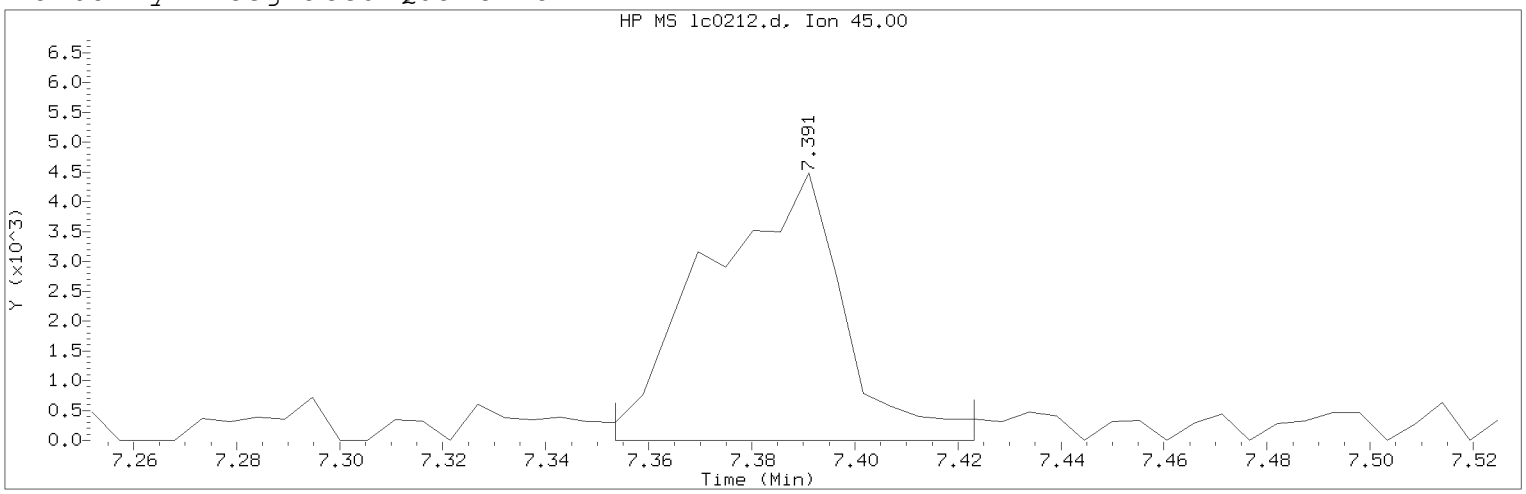
Compound Number	: 24		
Compound Name	: 2-Chlorophenol		
Scan Number	: 826		
Retention Time (minutes)	: 6.605		
Quant Ion	: 128.00		
Area	: 6505		
On-column Amount (ng/ul)	: 0.1370		
Integration start scan	: 820	Integration stop scan:	838
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.652

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

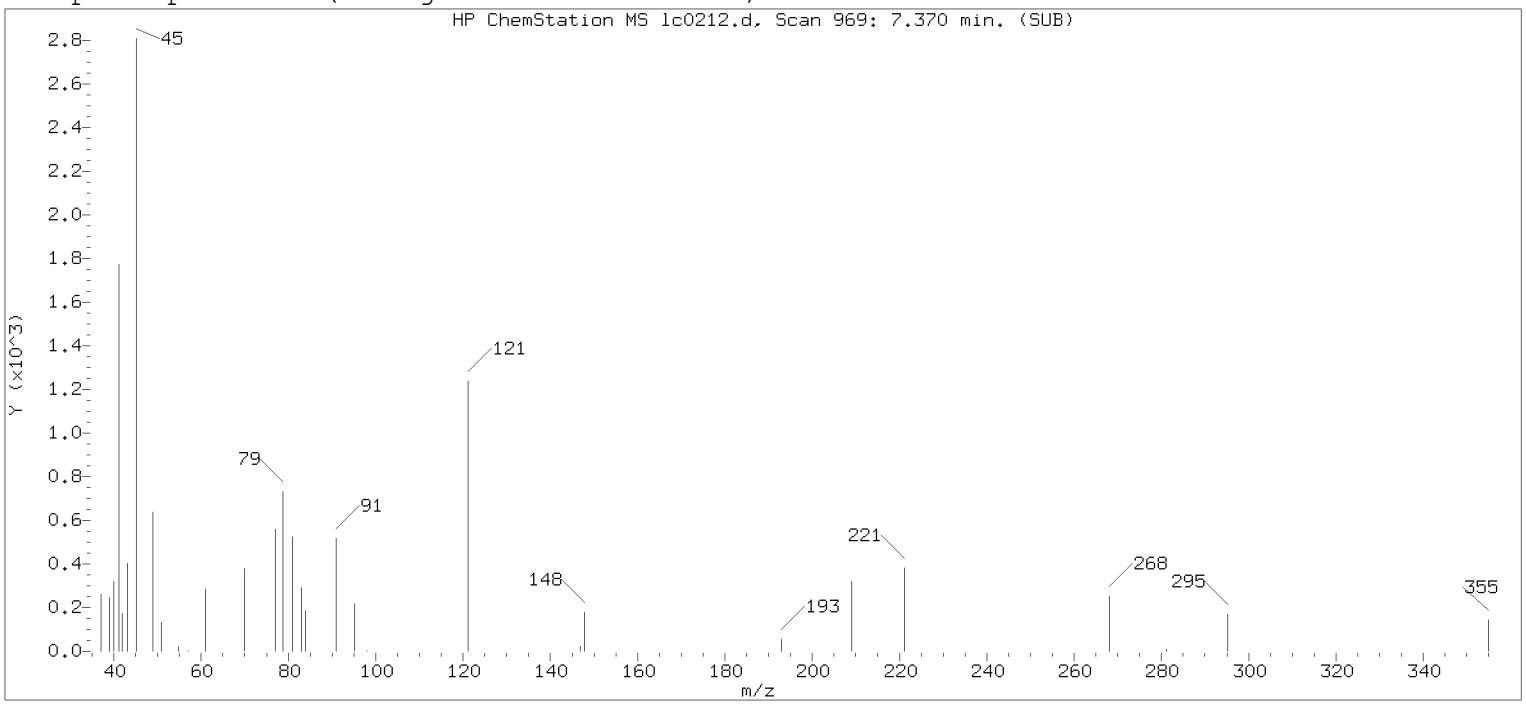
Compound Number	: 34		
Compound Name	: 2,2'-oxybis(1-Chloropropane)		
Scan Number	: 973		
Retention Time (minutes)	: 7.391		
Quant Ion	: 45.00		
Area (flag)	: 8272M		
On-Column Amount (ng/ul)	: 0.1665		
Integration start scan	: 965	Integration stop scan:	978
Y at integration start	: 5	Y at integration end:	5

Reason for manual integration: improper integration

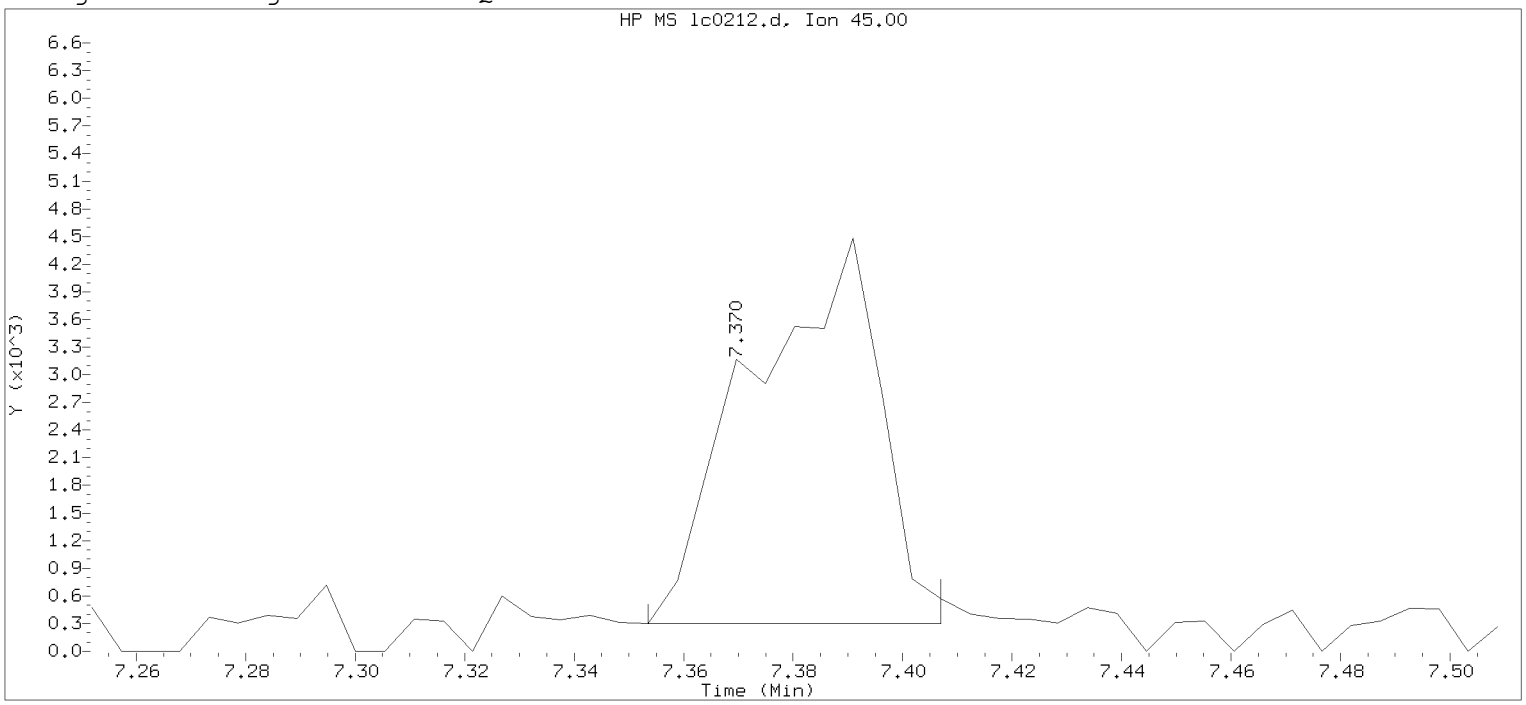
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

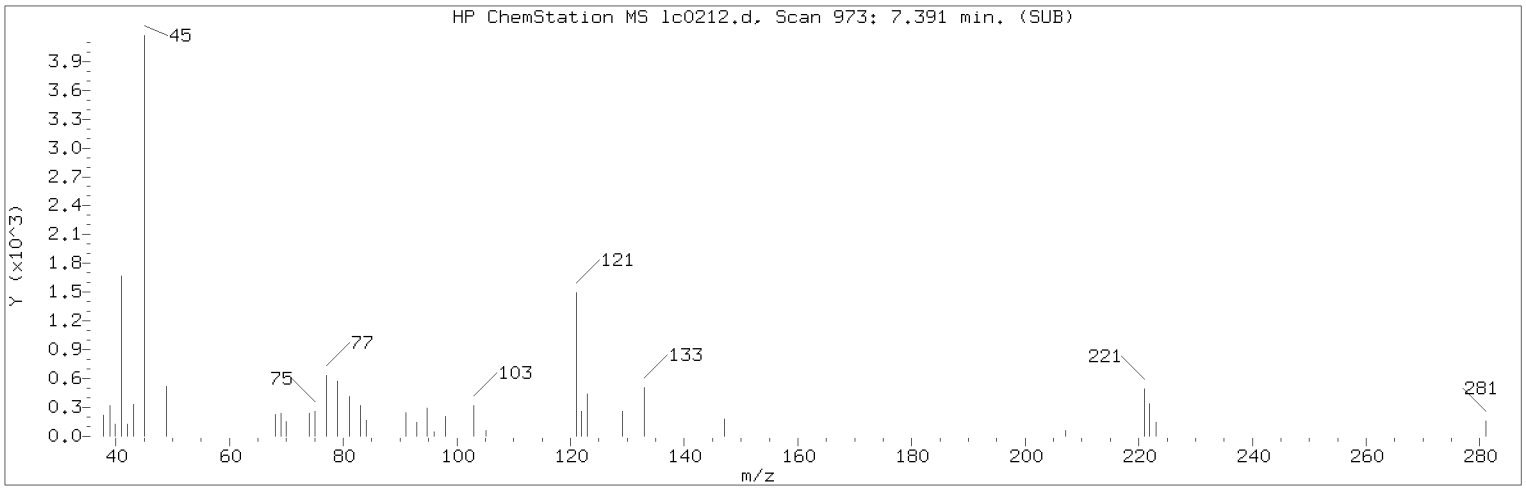
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

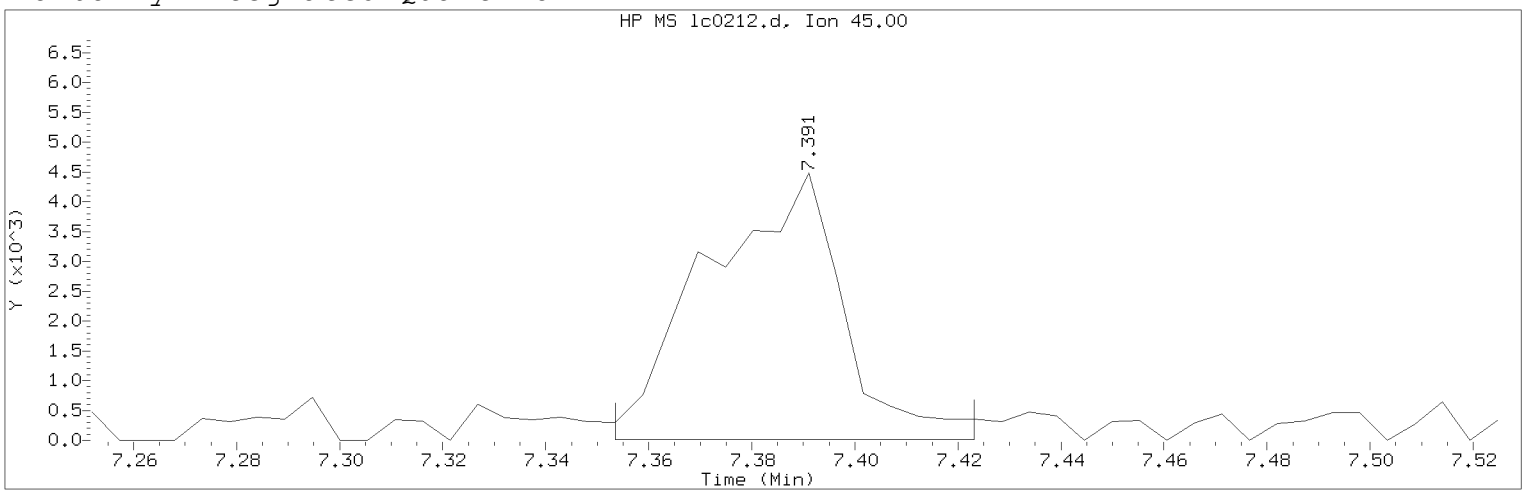
Compound Number	: 34		
Compound Name	: 2,2'-oxybis(1-Chloropropane)		
Scan Number	: 969		
Retention Time (minutes)	: 7.370		
Quant Ion	: 45.00		
Area	: 6839		
On-column Amount (ng/ul)	: 0.0922		
Integration start scan	: 965	Integration stop scan:	975
Y at integration start	: 299	Y at integration end:	299

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2.4.4

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

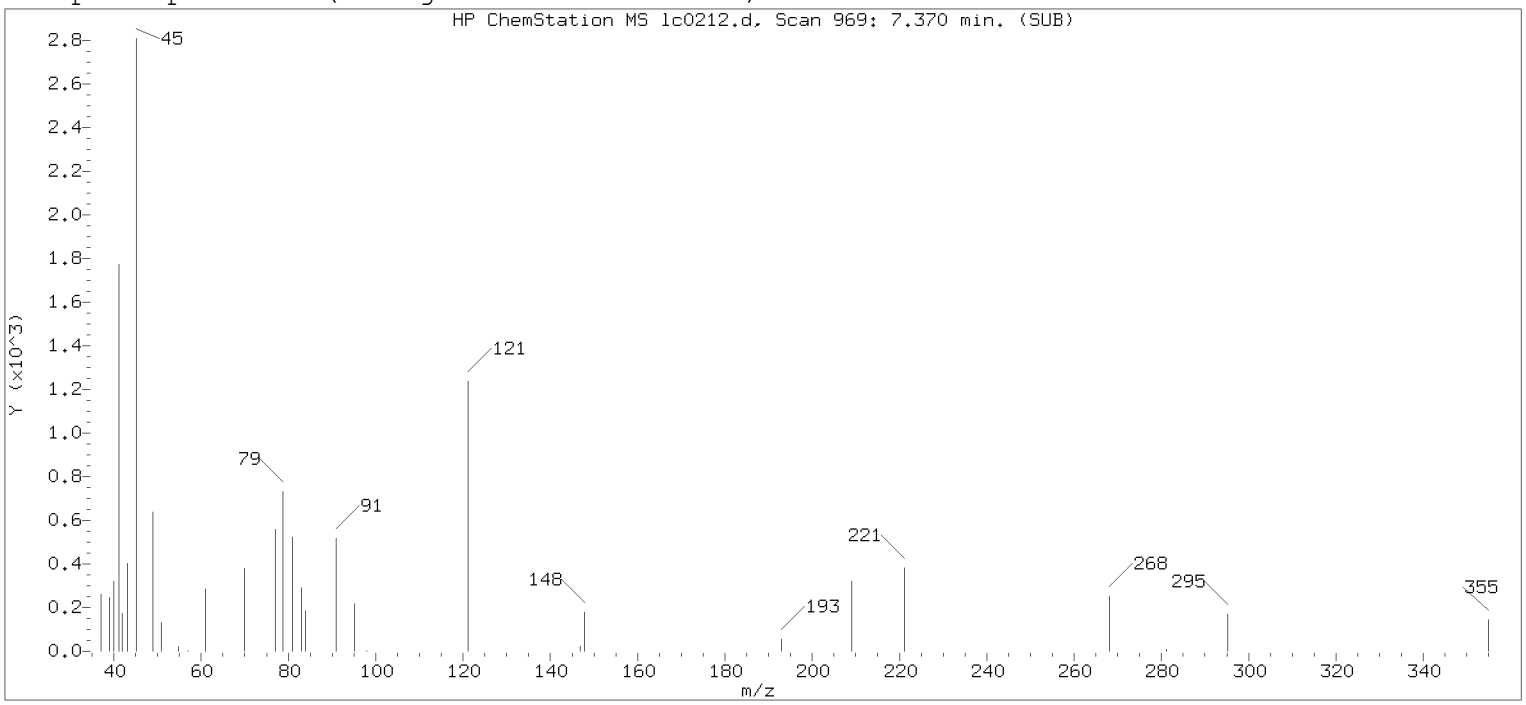
Compound Number : 35
Compound Name : bis(2-Chloroisopropyl)ether
Scan Number : 973
Retention Time (minutes) : 7.391
Quant Ion : 45.00
Area (flag) : 8255M
On-Column Amount (ng/ul) : 0.1661
Integration start scan : 965 Integration stop scan: 978
Y at integration start : 9 Y at integration end: 9

Reason for manual integration: improper integration

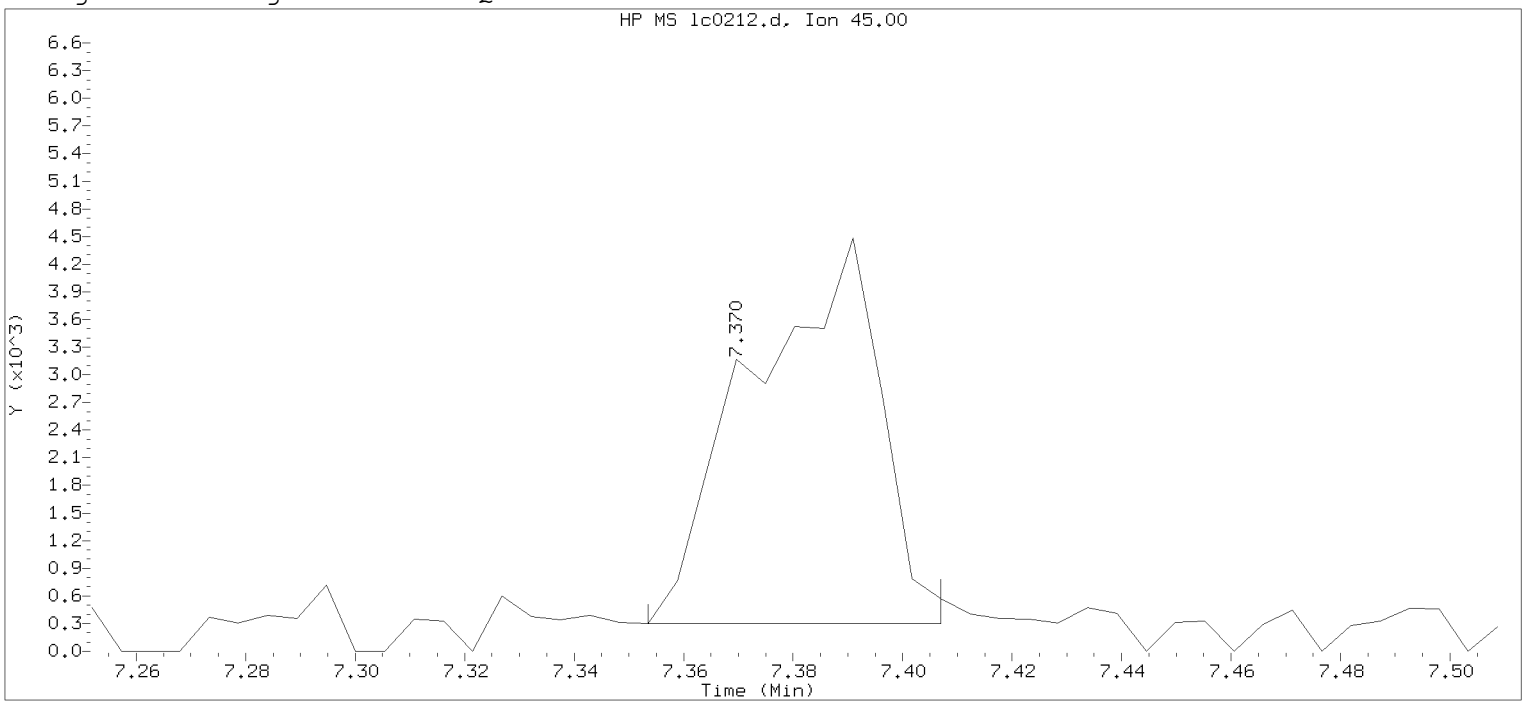
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

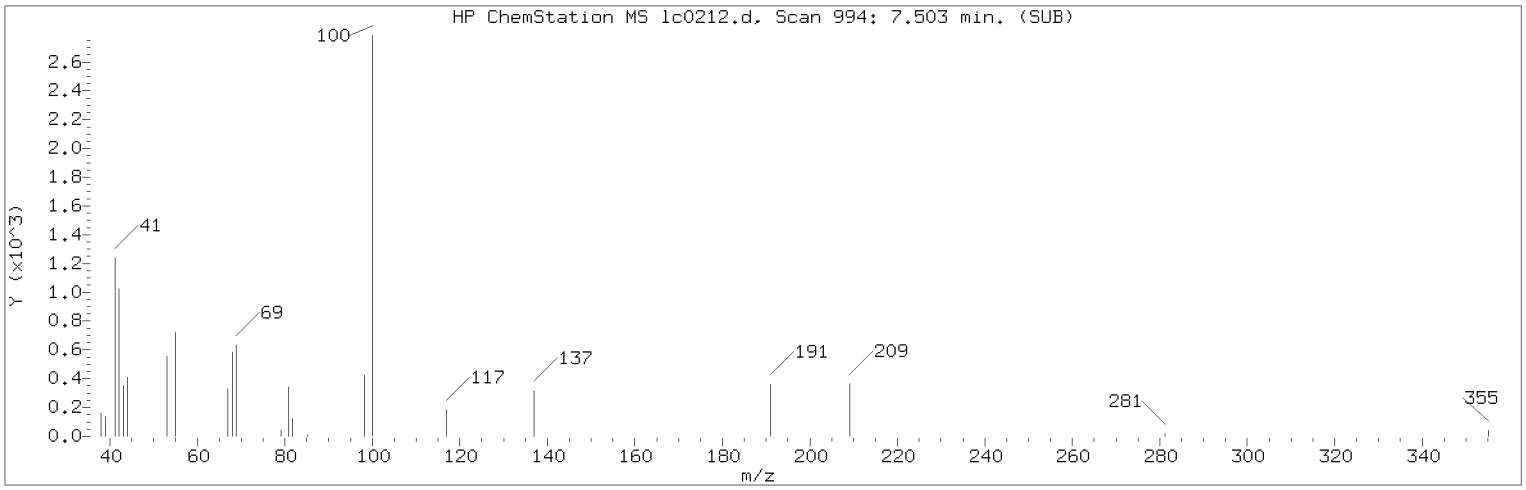
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

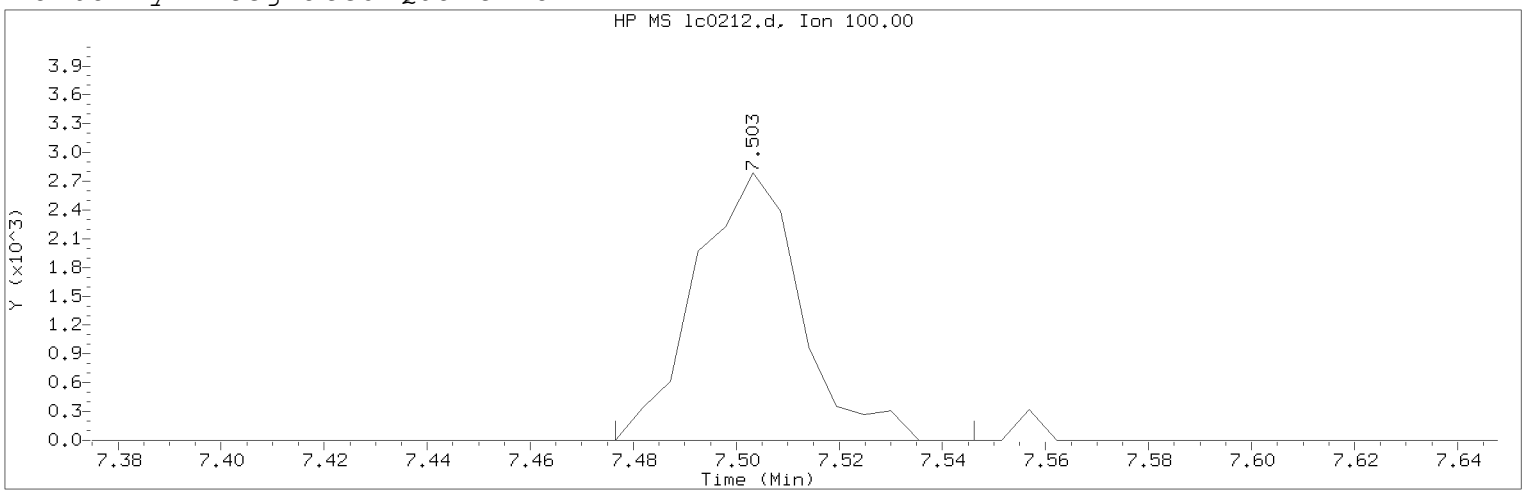
Compound Number	: 35		
Compound Name	: bis(2-Chloroisopropyl)ether		
Scan Number	: 969		
Retention Time (minutes)	: 7.370		
Quant Ion	: 45.00		
Area	: 6839		
On-column Amount (ng/ul)	: 0.0922		
Integration start scan	: 965	Integration stop scan:	975
Y at integration start	: 299	Y at integration end:	299

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2.0.655

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

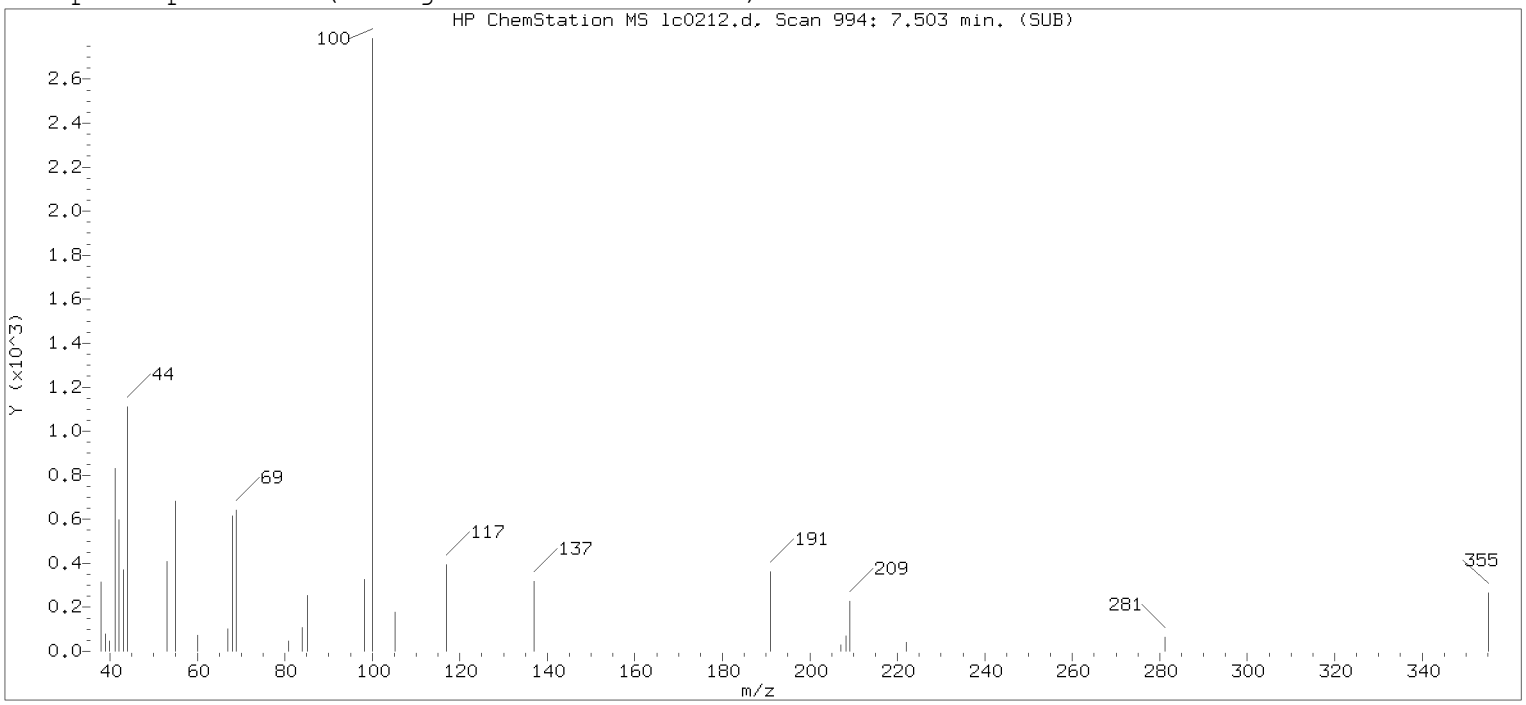
Compound Number : 36
Compound Name : N-Nitrosopyrrolidine
Scan Number : 994
Retention Time (minutes) : 7.503
Quant Ion : 100.00
Area (flag) : 3923M
On-Column Amount (ng/ul) : 0.1651
Integration start scan : 988 Integration stop scan: 1001
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

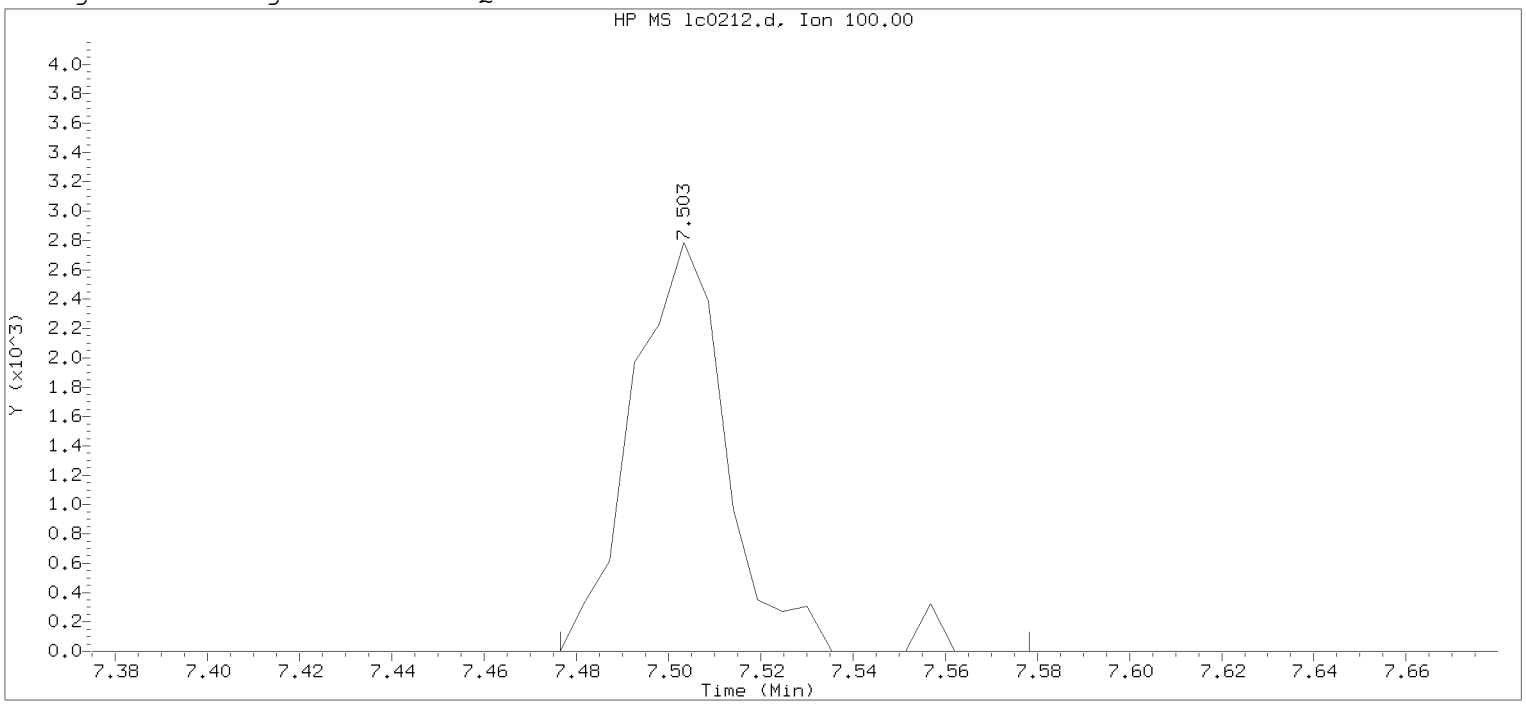
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

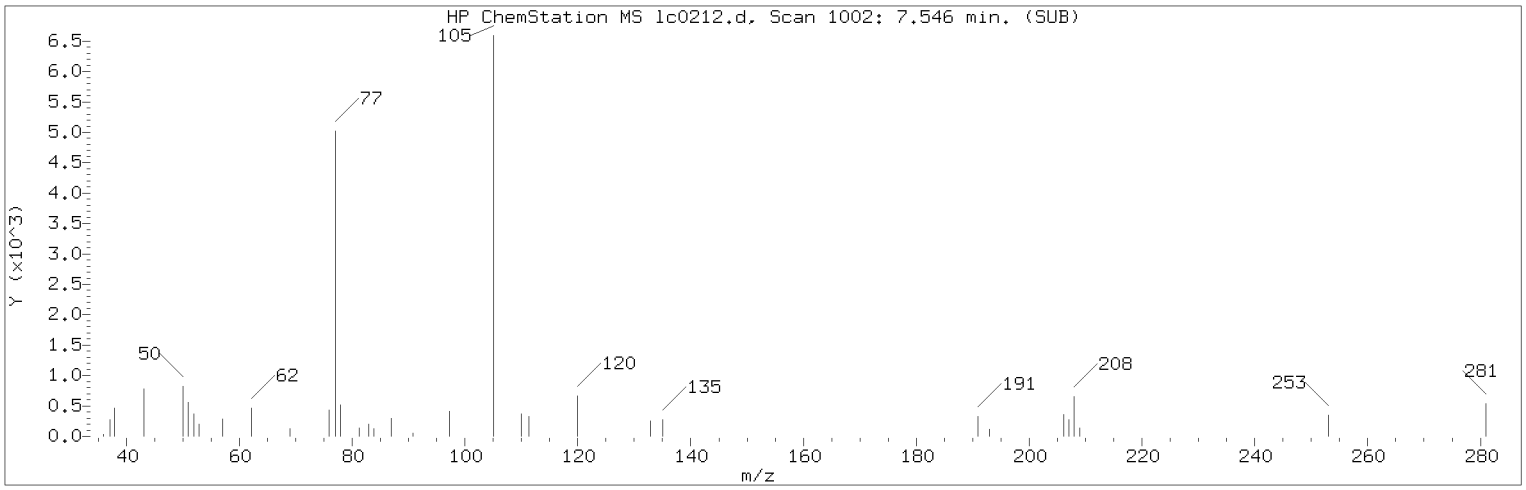
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

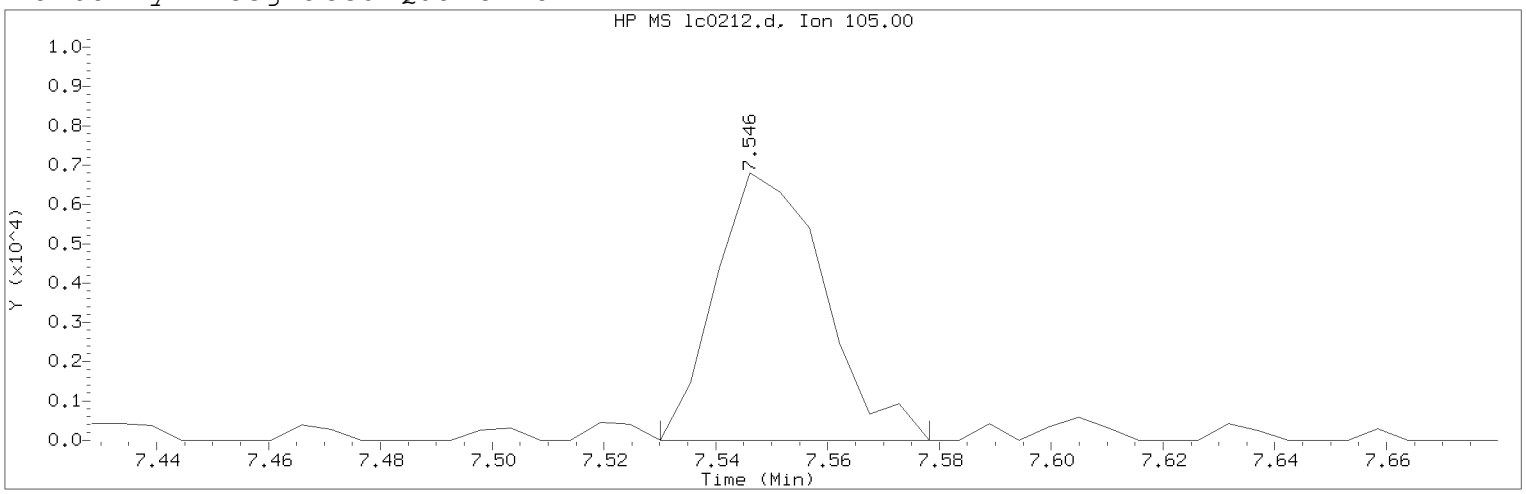
Compound Number	: 36		
Compound Name	: N-Nitrosopyrrolidine		
Scan Number	: 994		
Retention Time (minutes)	: 7.503		
Quant Ion	: 100.00		
Area	: 4026		
On-column Amount (ng/ul)	: 0.1477		
Integration start scan	: 988	Integration stop scan:	1007
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

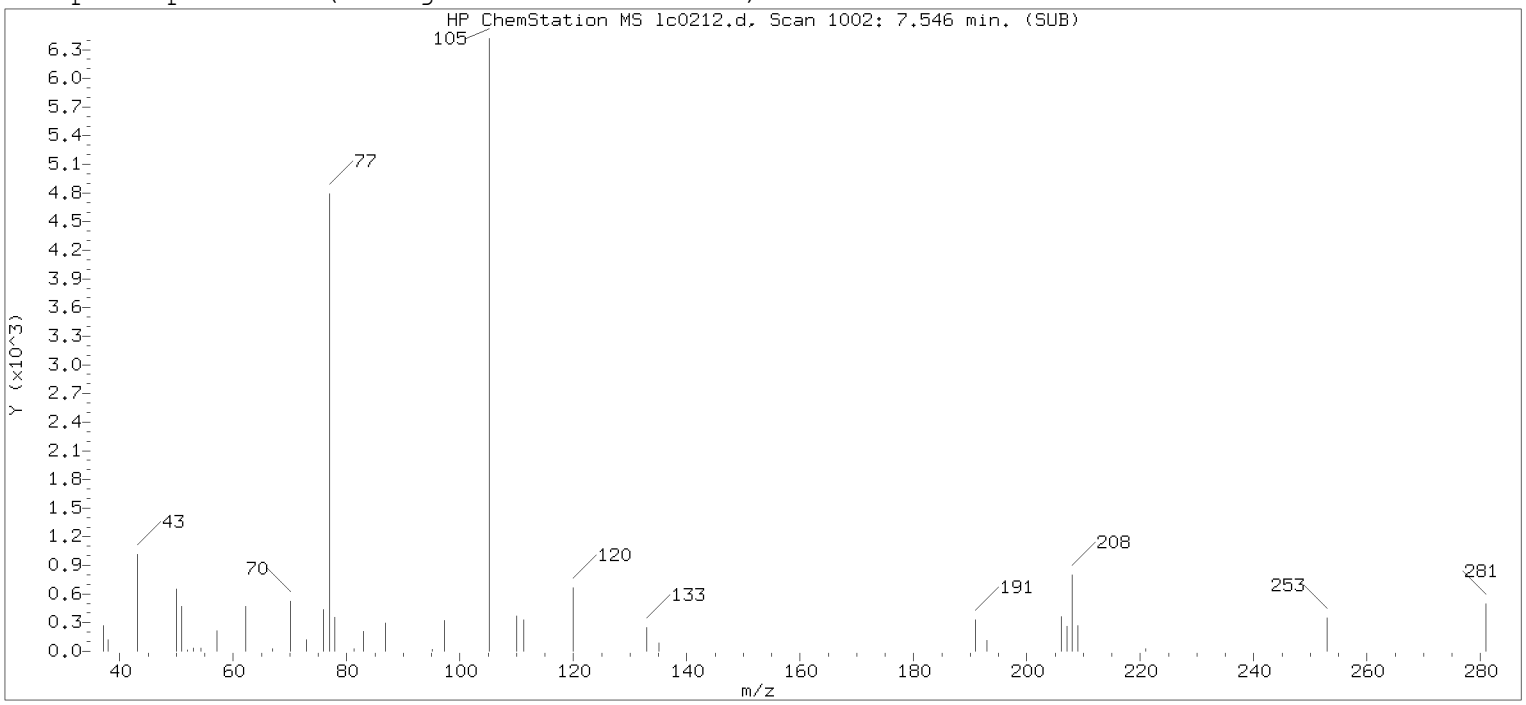
Compound Number : 37
Compound Name : Acetophenone
Scan Number : 1002
Retention Time (minutes) : 7.546
Quant Ion : 105.00
Area (flag) : 9134M
On-Column Amount (ng/ul) : 0.1366
Integration start scan : 998 Integration stop scan: 1007
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

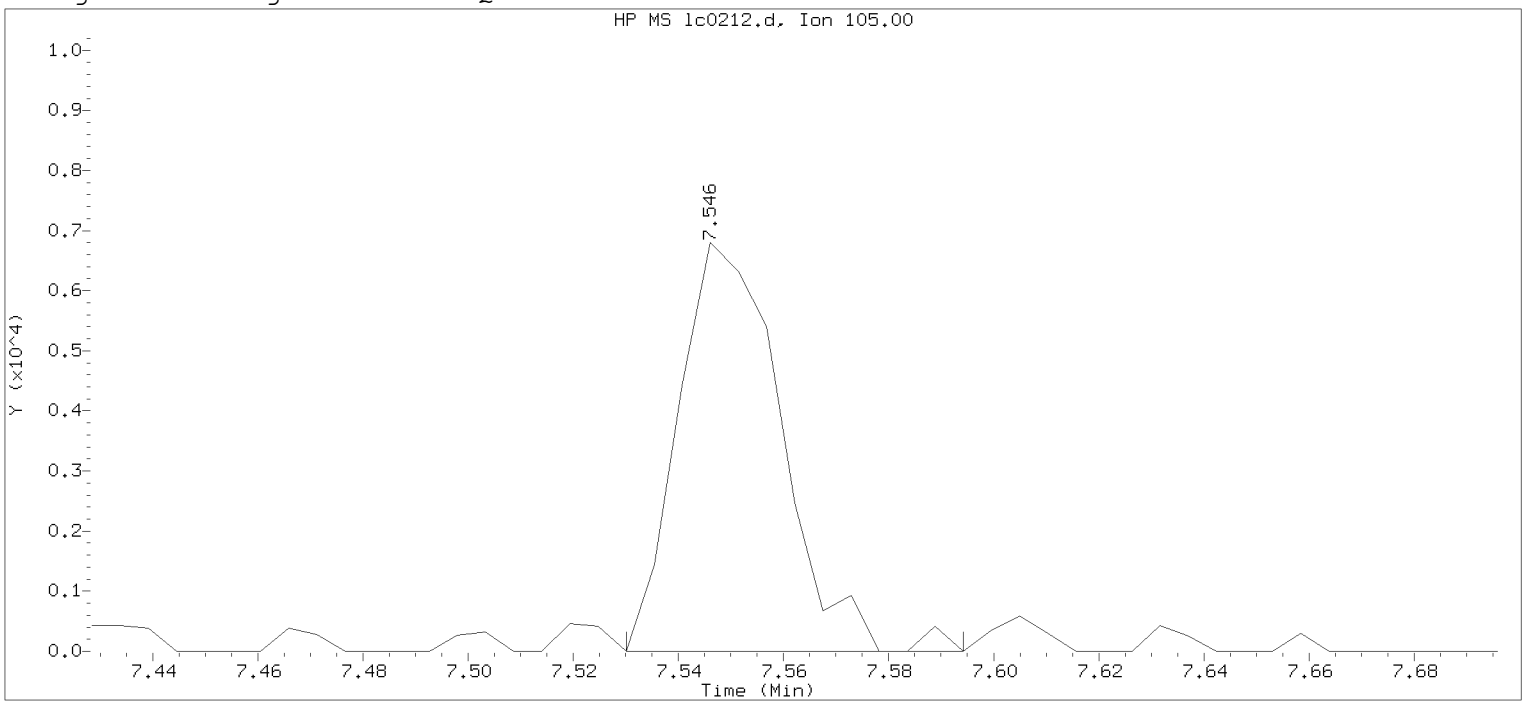
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

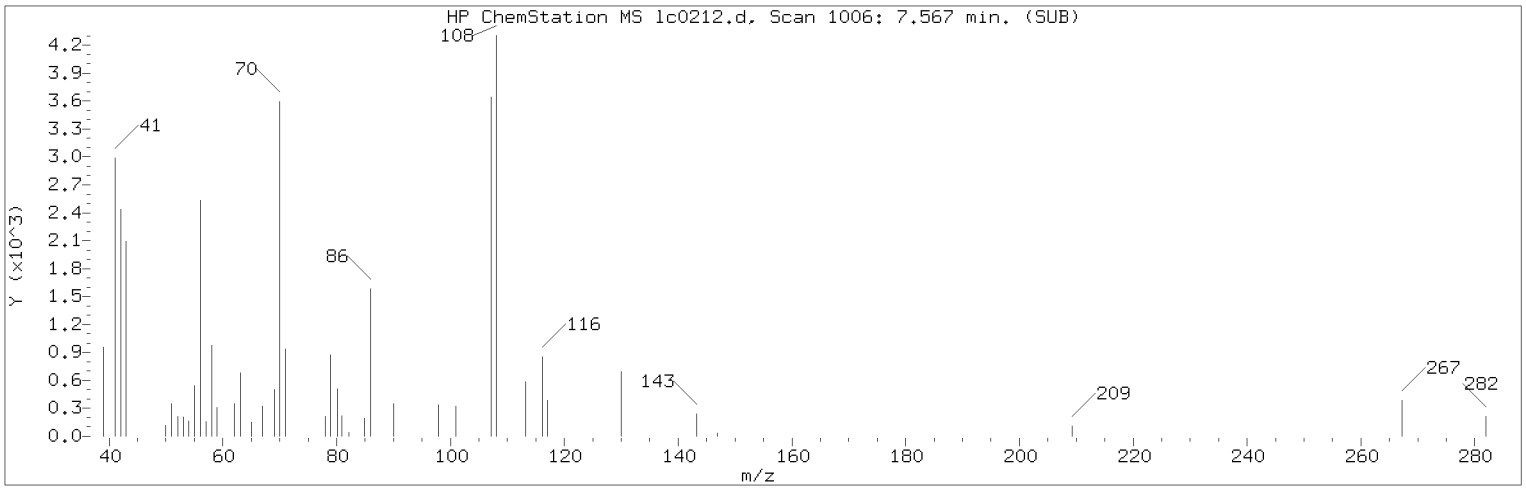
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

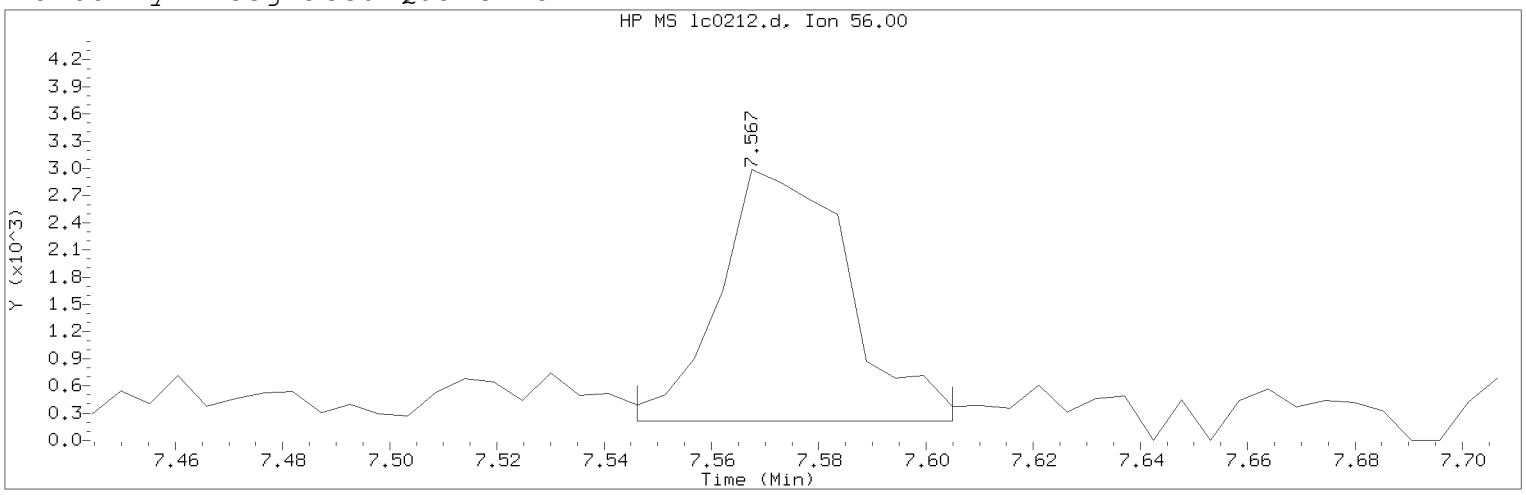
Compound Number	: 37		
Compound Name	: Acetophenone		
Scan Number	: 1002		
Retention Time (minutes)	: 7.546		
Quant Ion	: 105.00		
Area	: 9267		
On-column Amount (ng/ul)	: 0.1288		
Integration start scan	: 998	Integration stop scan:	1010
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

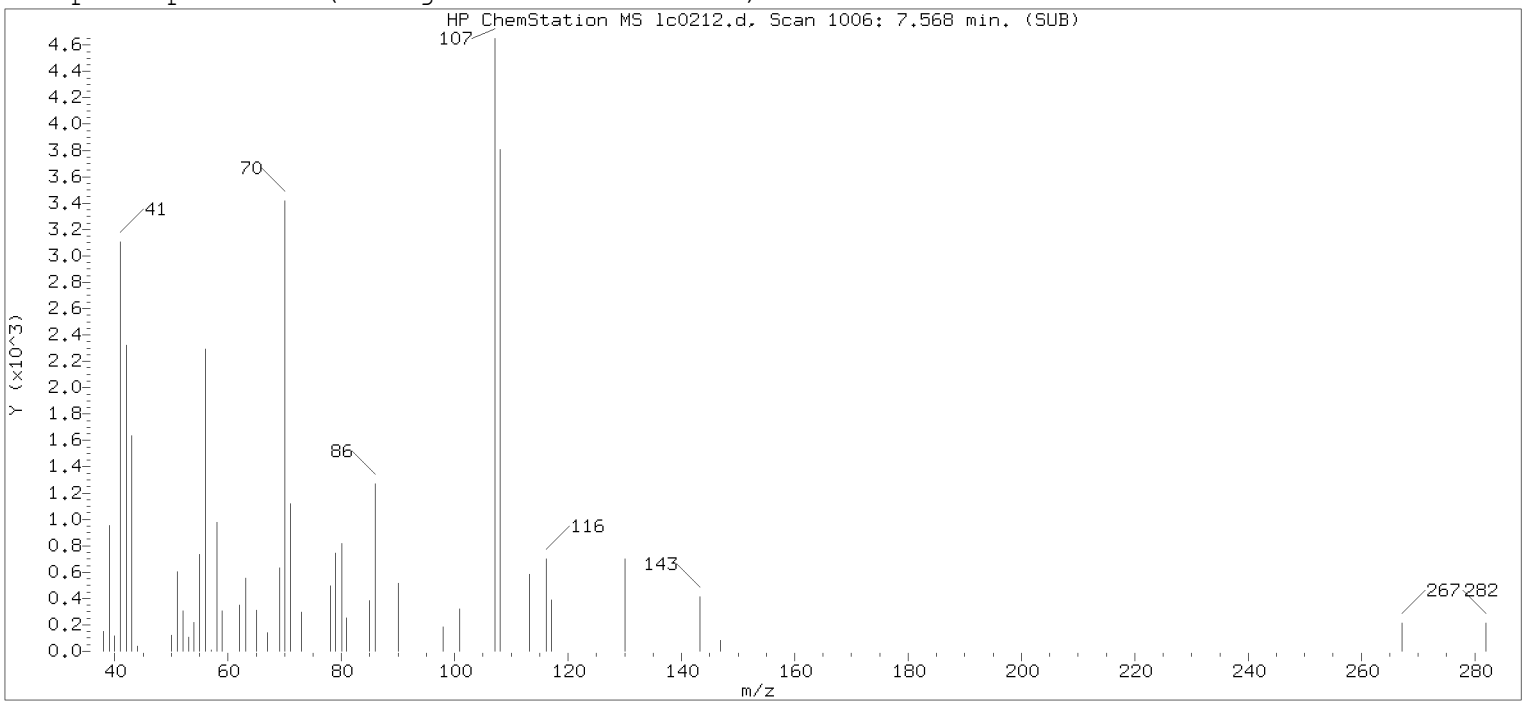
Compound Number : 40
Compound Name : N-Nitrosomorpholine
Scan Number : 1006
Retention Time (minutes) : 7.567
Quant Ion : 56.00
Area (flag) : 4653M
On-Column Amount (ng/ul) : 0.1923
Integration start scan : 1001 Integration stop scan: 1012
Y at integration start : 215 Y at integration end: 215

Reason for manual integration: improper integration

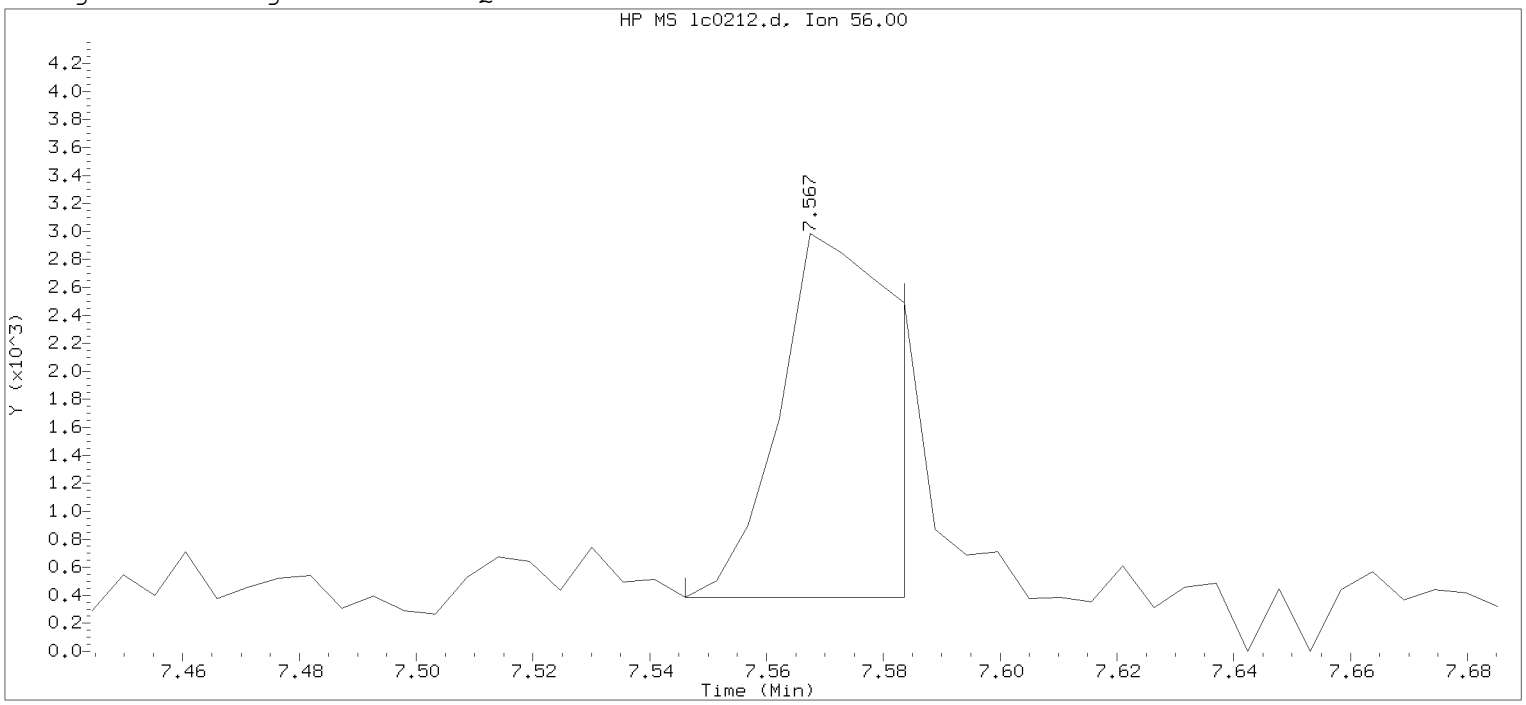
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

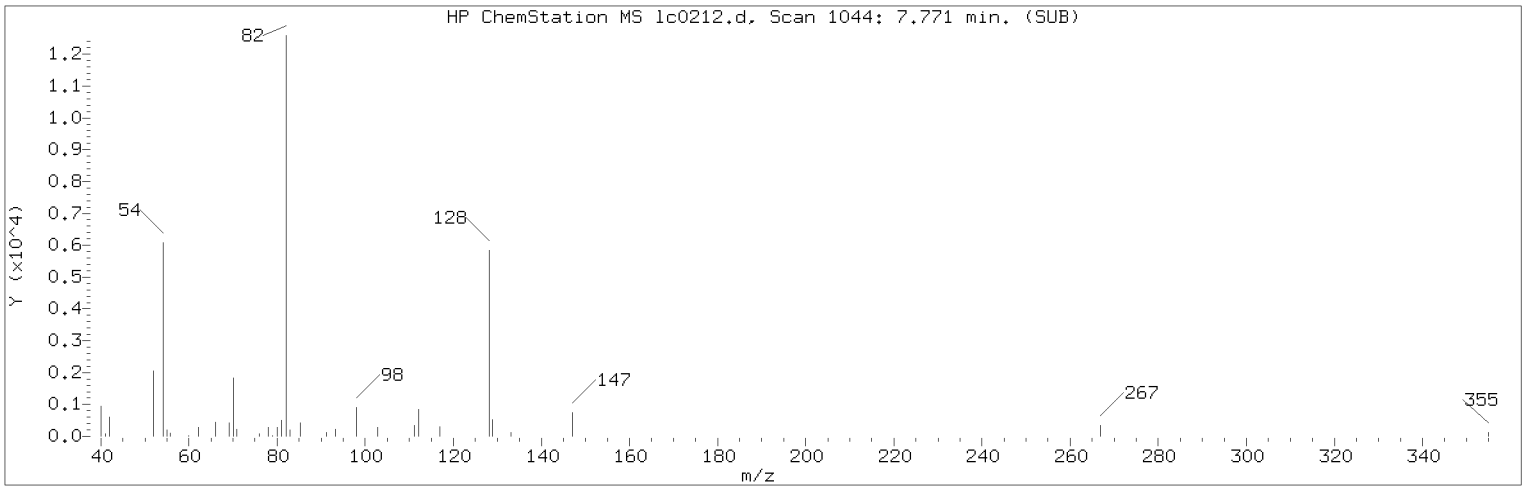
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

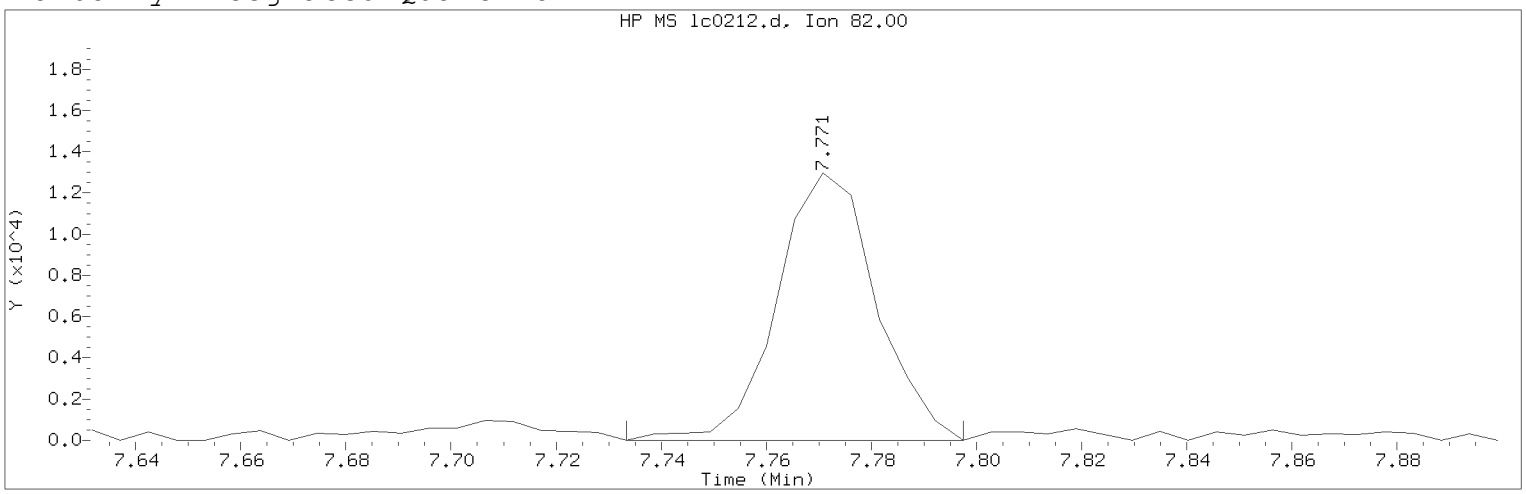
Compound Number	: 40		
Compound Name	: N-Nitrosomorpholine		
Scan Number	: 1006		
Retention Time (minutes)	: 7.567		
Quant Ion	: 56.00		
Area	: 3300		
On-column Amount (ng/ul)	: 0.1040		
Integration start scan	: 1001	Integration stop scan:	1008
Y at integration start	: 387	Y at integration end:	387

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.062

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

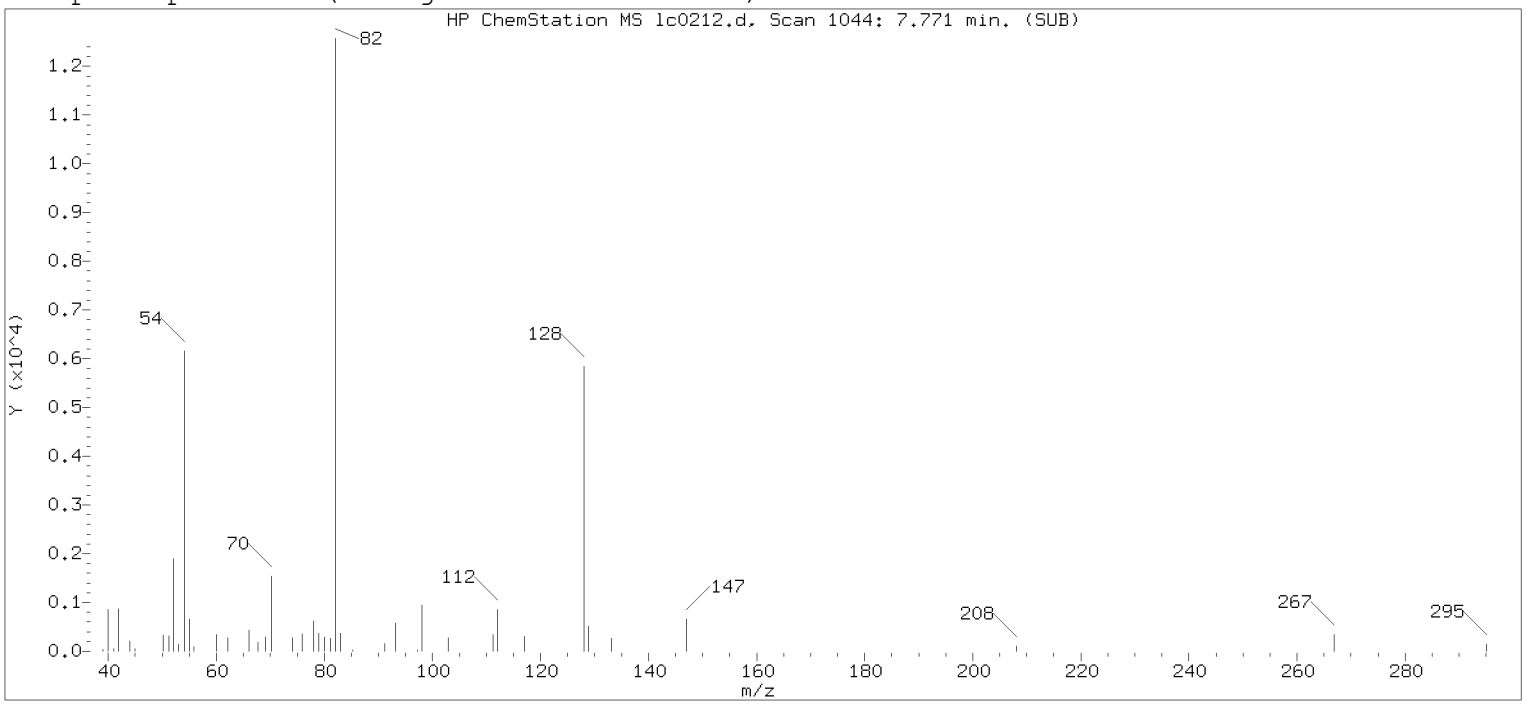
Compound Number : 45
Compound Name : Nitrobenzene-d5
Scan Number : 1044
Retention Time (minutes) : 7.771
Quant Ion : 82.00
Area (flag) : 16912M
On-Column Amount (ng/ul) : 0.3108
Integration start scan : 1036 Integration stop scan: 1048
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

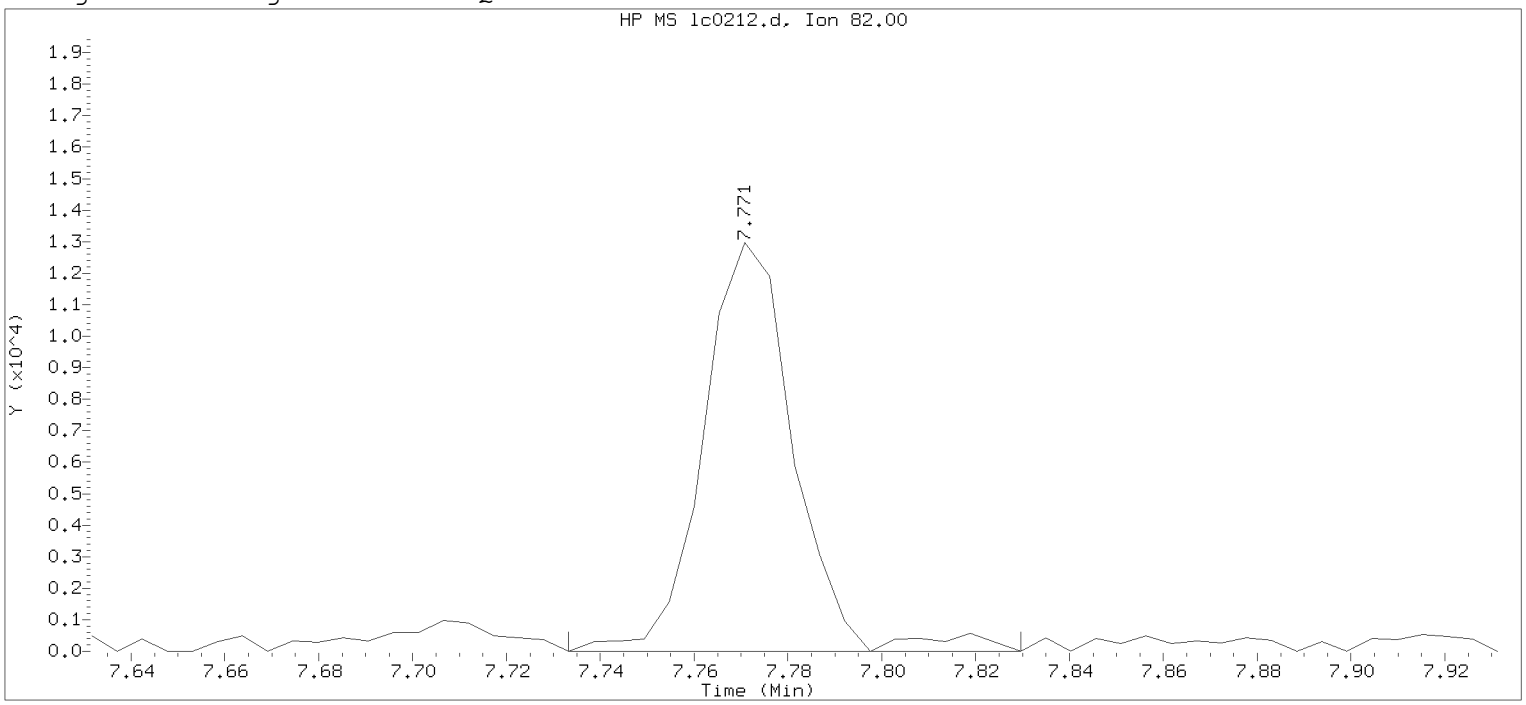
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

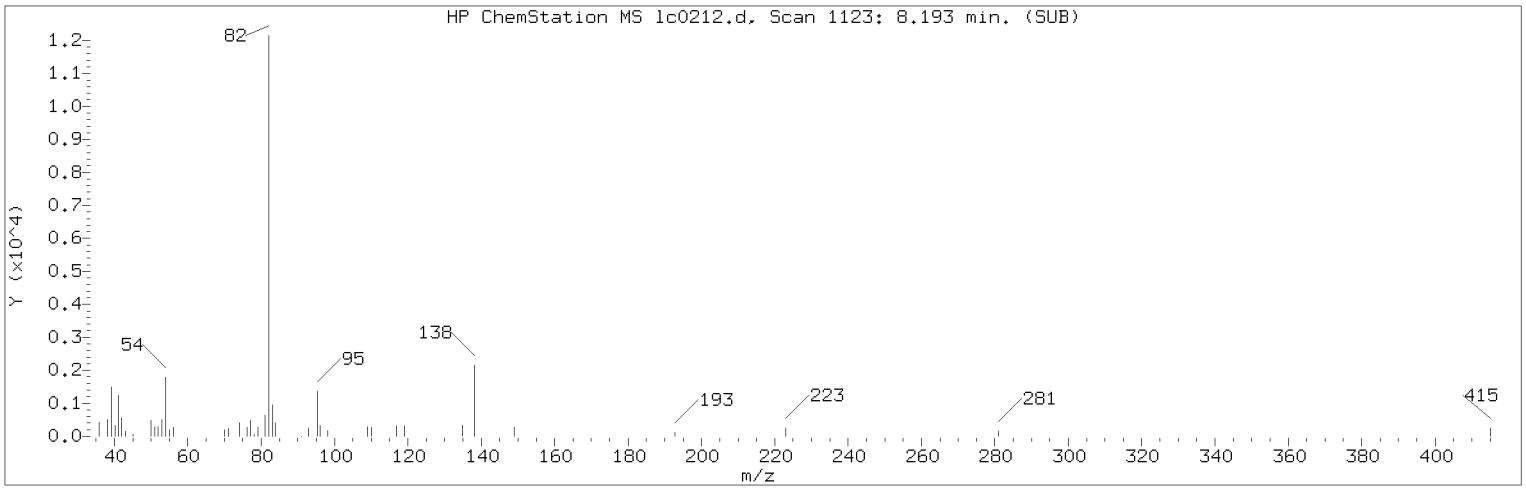
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

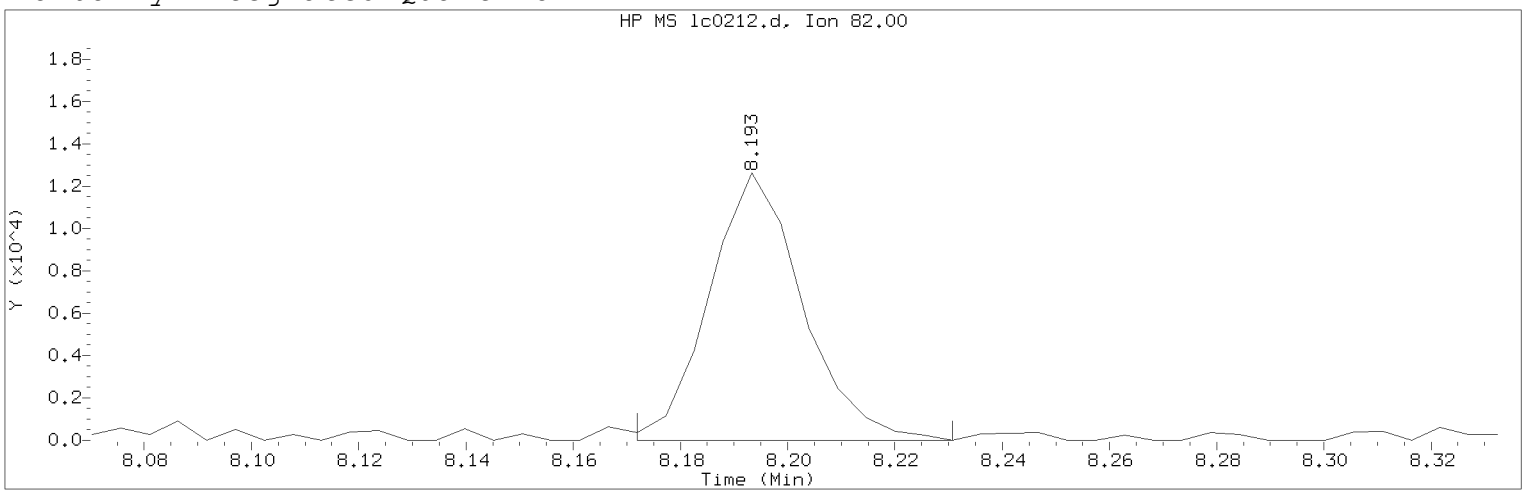
Compound Number	: 45		
Compound Name	: Nitrobenzene-d5		
Scan Number	: 1044		
Retention Time (minutes)	: 7.771		
Quant Ion	: 82.00		
Area	: 17543		
On-column Amount (ng/ul)	: 0.2878		
Integration start scan	: 1036	Integration stop scan:	1054
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2019-03-05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

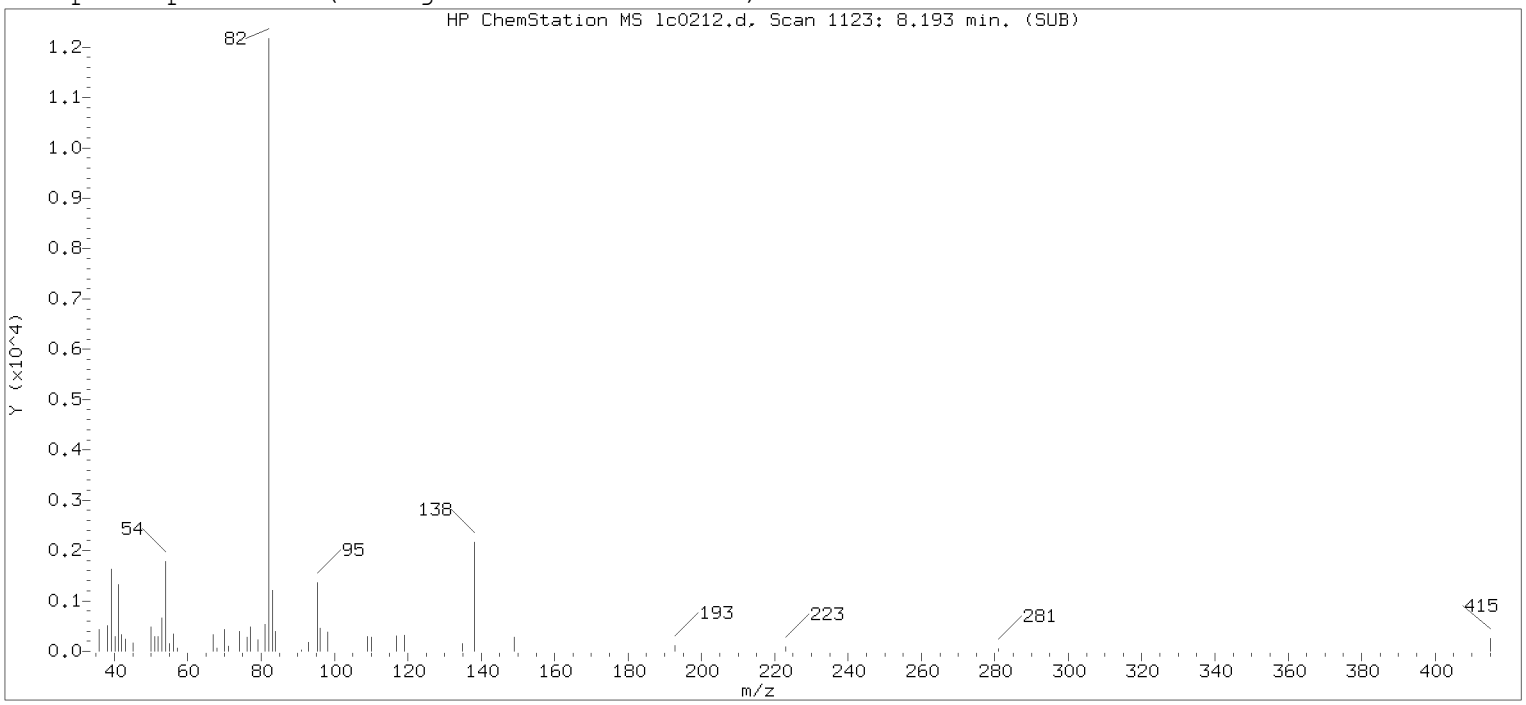
Compound Number : 52
Compound Name : Isophorone
Scan Number : 1123
Retention Time (minutes) : 8.193
Quant Ion : 82.00
Area (flag) : 15256M
On-Column Amount (ng/ul) : 0.1576
Integration start scan : 1118 Integration stop scan: 1129
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

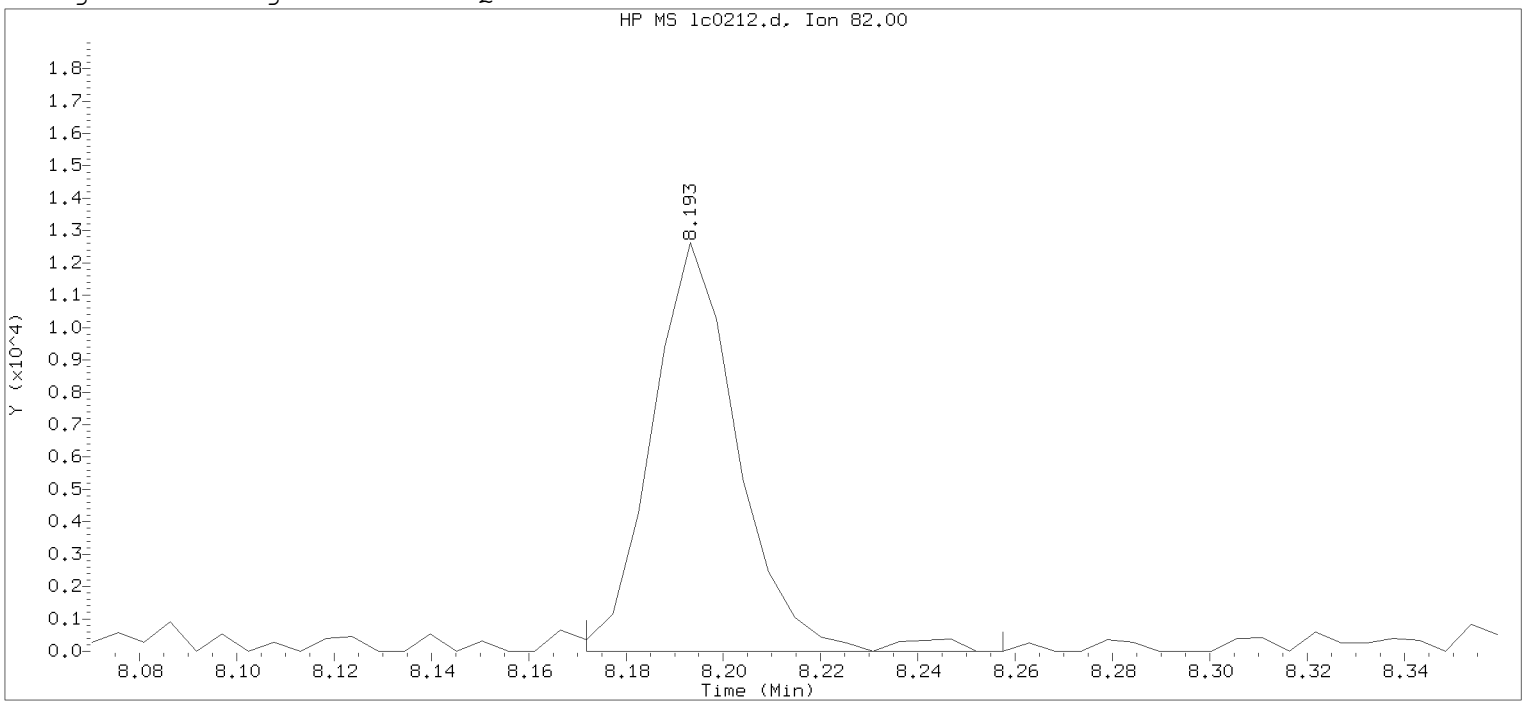
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

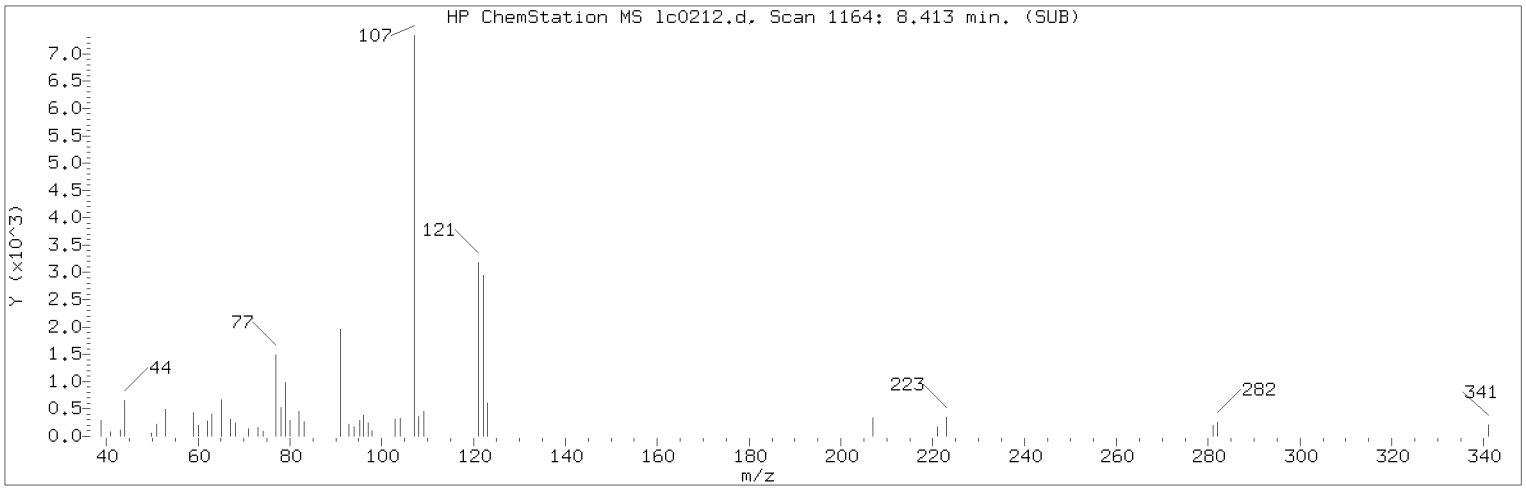
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

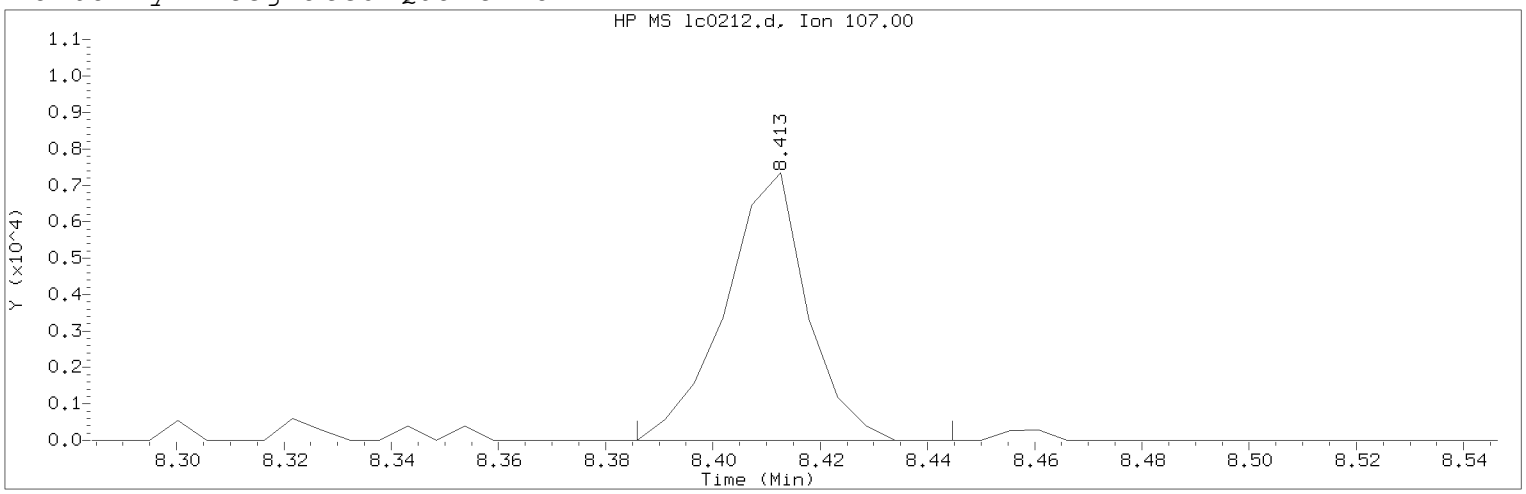
Compound Number	: 52		
Compound Name	: Isophorone		
Scan Number	: 1123		
Retention Time (minutes)	: 8.193		
Quant Ion	: 82.00		
Area	: 15517		
On-column Amount (ng/ul)	: 0.1436		
Integration start scan	: 1118	Integration stop scan:	1134
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

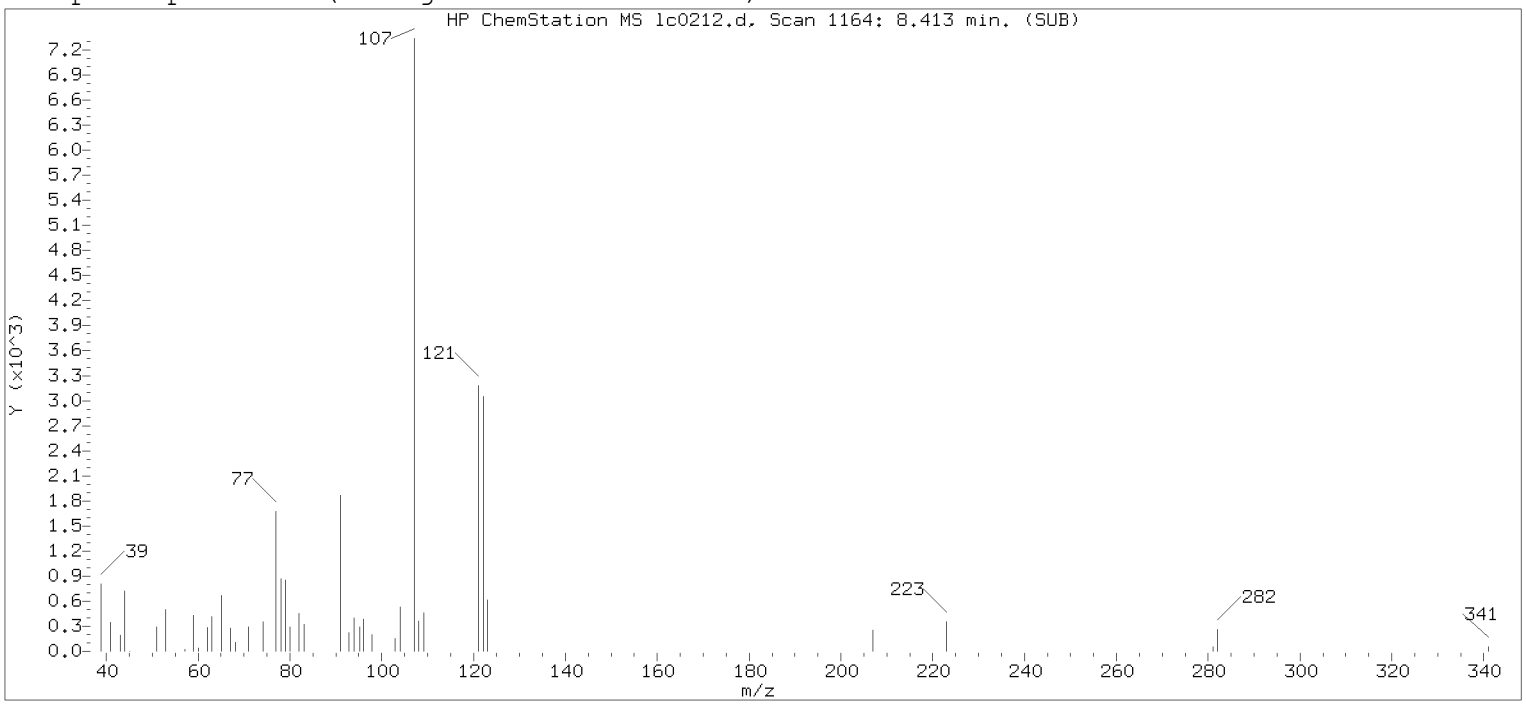
Compound Number : 55
Compound Name : 2,4-Dimethylphenol
Scan Number : 1164
Retention Time (minutes) : 8.413
Quant Ion : 107.00
Area (flag) : 7764M
On-Column Amount (ng/ul) : 0.1601
Integration start scan : 1158 Integration stop scan: 1169
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

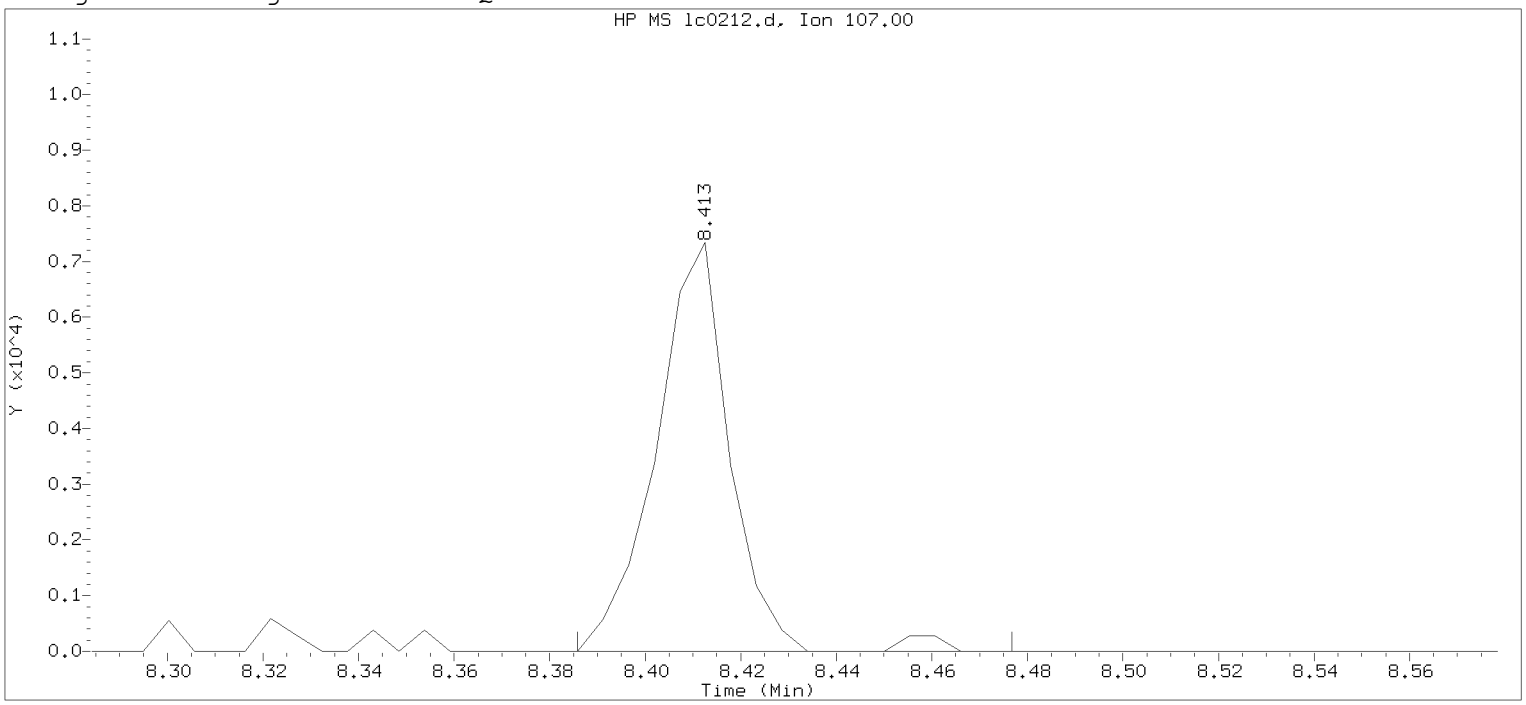
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

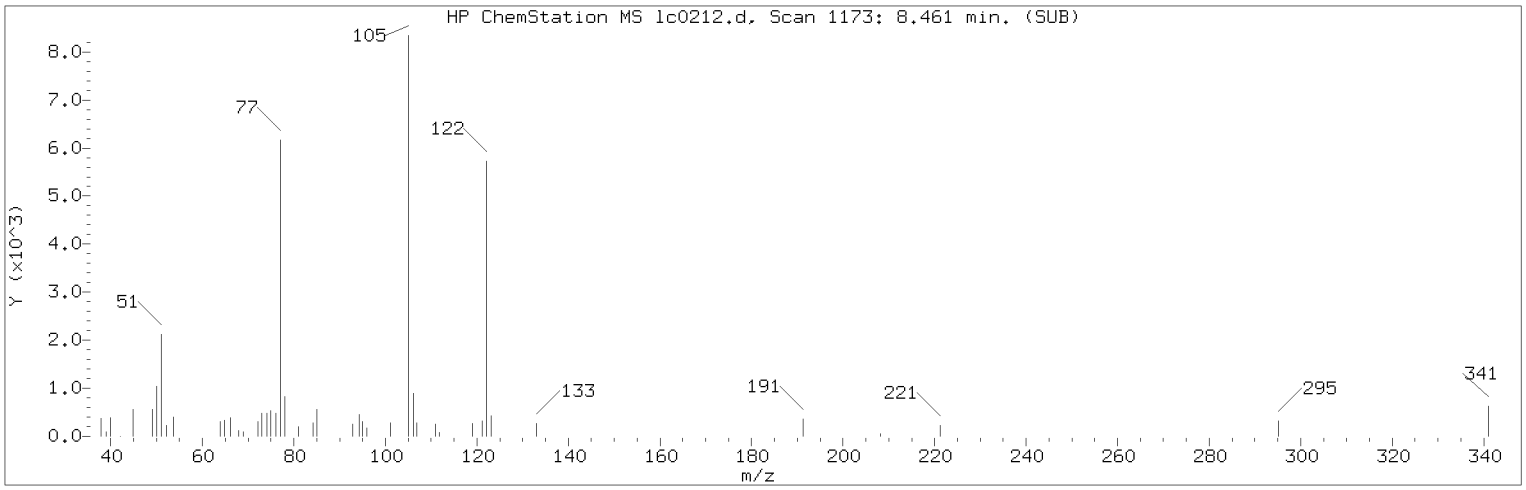
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

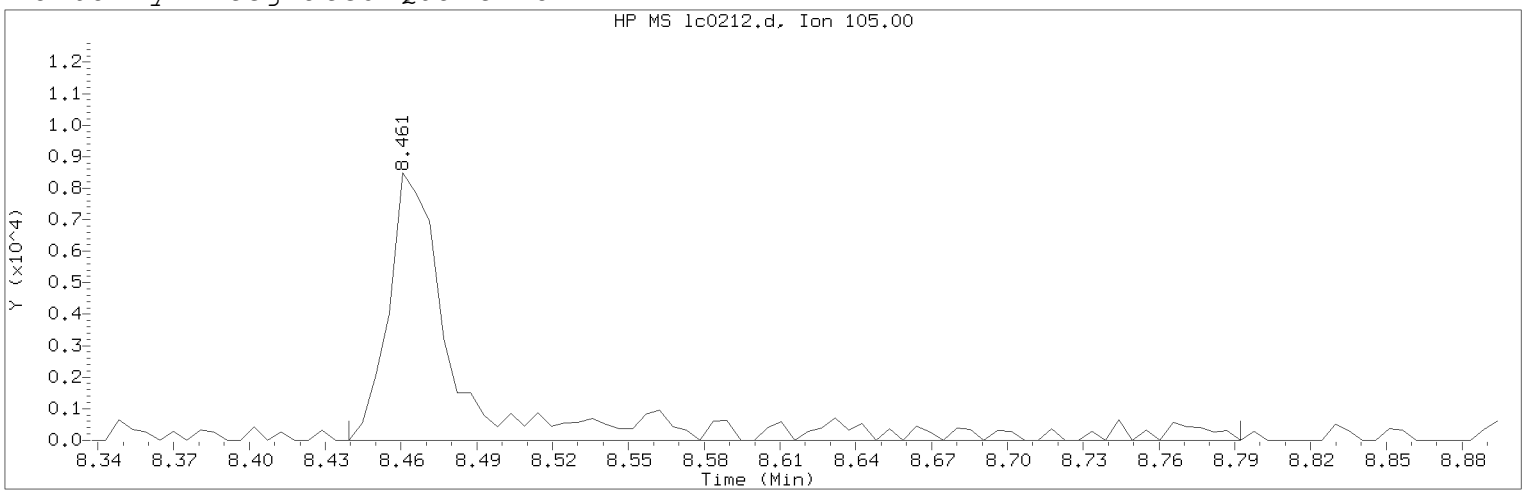
Compound Number	: 55		
Compound Name	: 2,4-Dimethylphenol		
Scan Number	: 1164		
Retention Time (minutes)	: 8.413		
Quant Ion	: 107.00		
Area	: 7940		
On-column Amount (ng/ul)	: 0.1535		
Integration start scan	: 1158	Integration stop scan:	1175
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

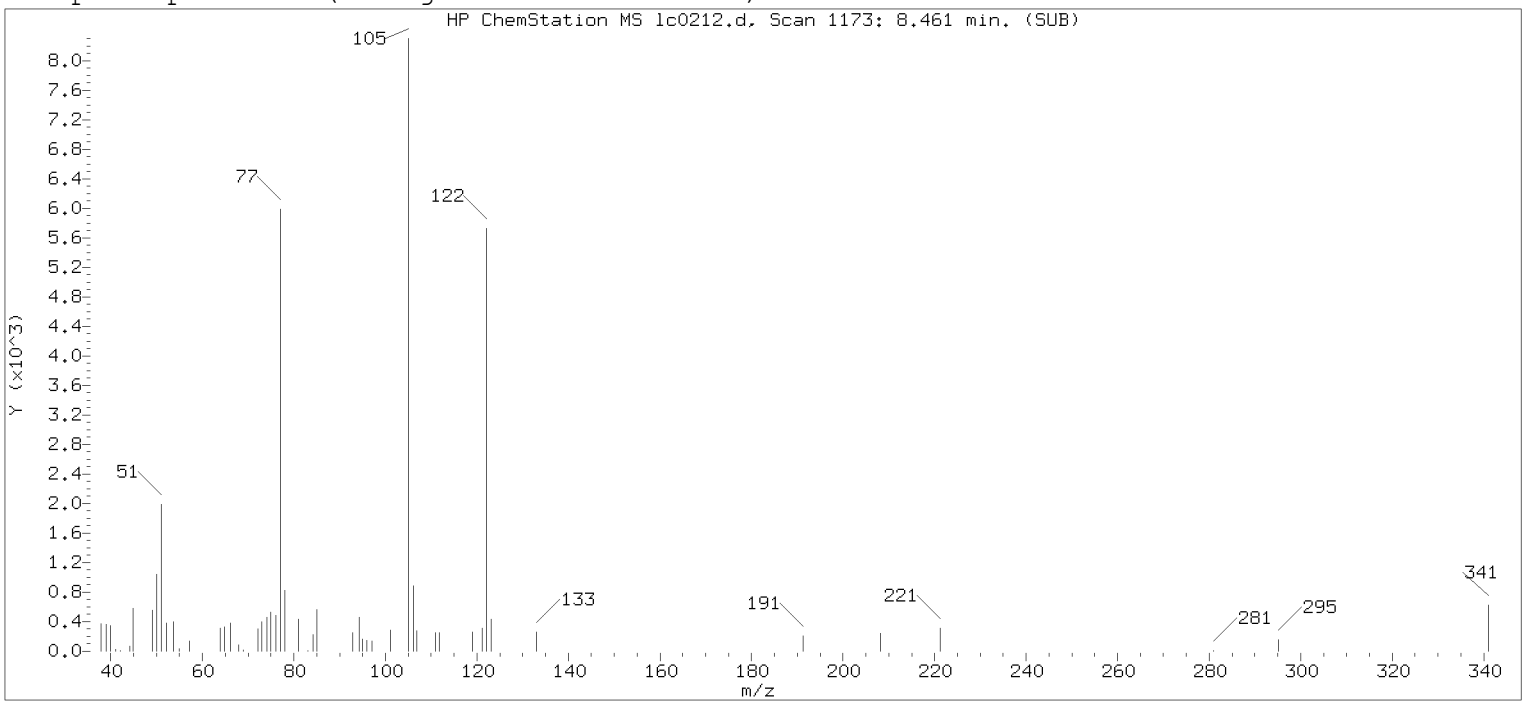
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1173
Retention Time (minutes) : 8.461
Quant Ion : 105.00
Area (flag) : 18006M
On-Column Amount (ng/ul) : 0.5578
Integration start scan : 1168 Integration stop scan: 1234
Y at integration start : -2 Y at integration end: -2

Reason for manual integration: improper integration

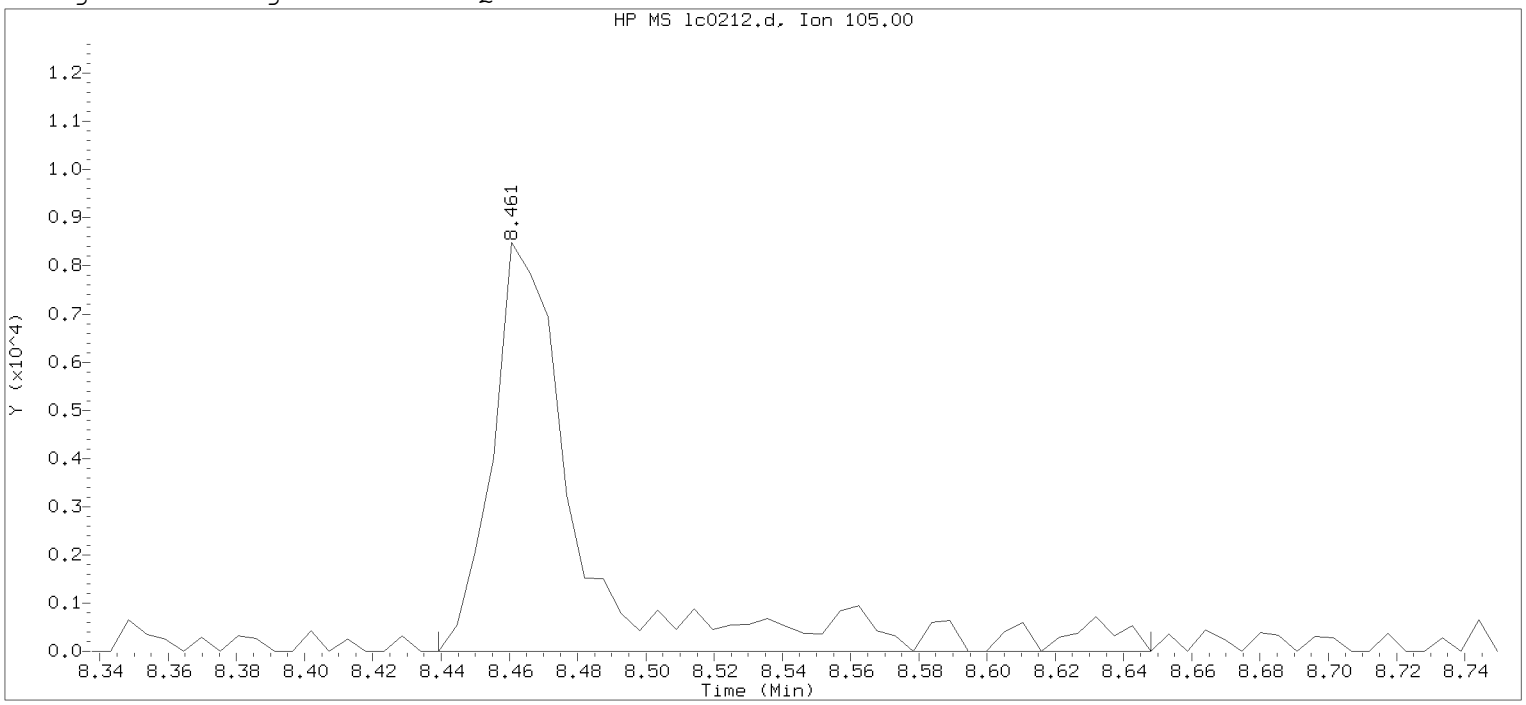
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

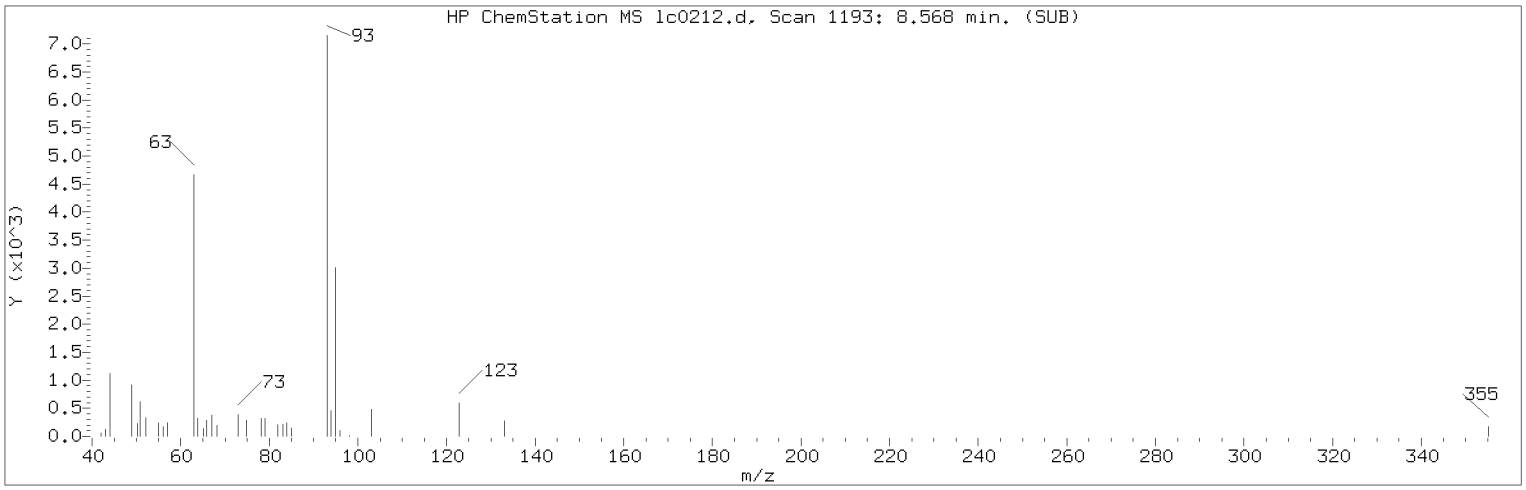
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

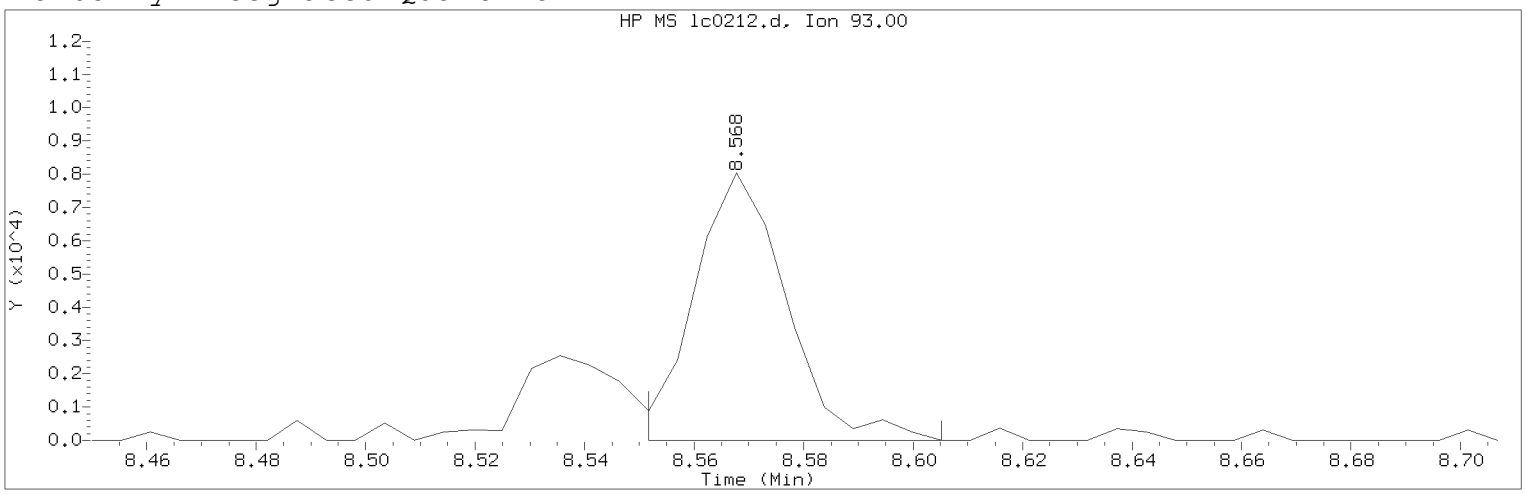
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1173		
Retention Time (minutes)	: 8.461		
Quant Ion	: 105.00		
Area	: 16060		
On-column Amount (ng/ul)	: 0.4870		
Integration start scan	: 1168	Integration stop scan:	1207
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2.0.0

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

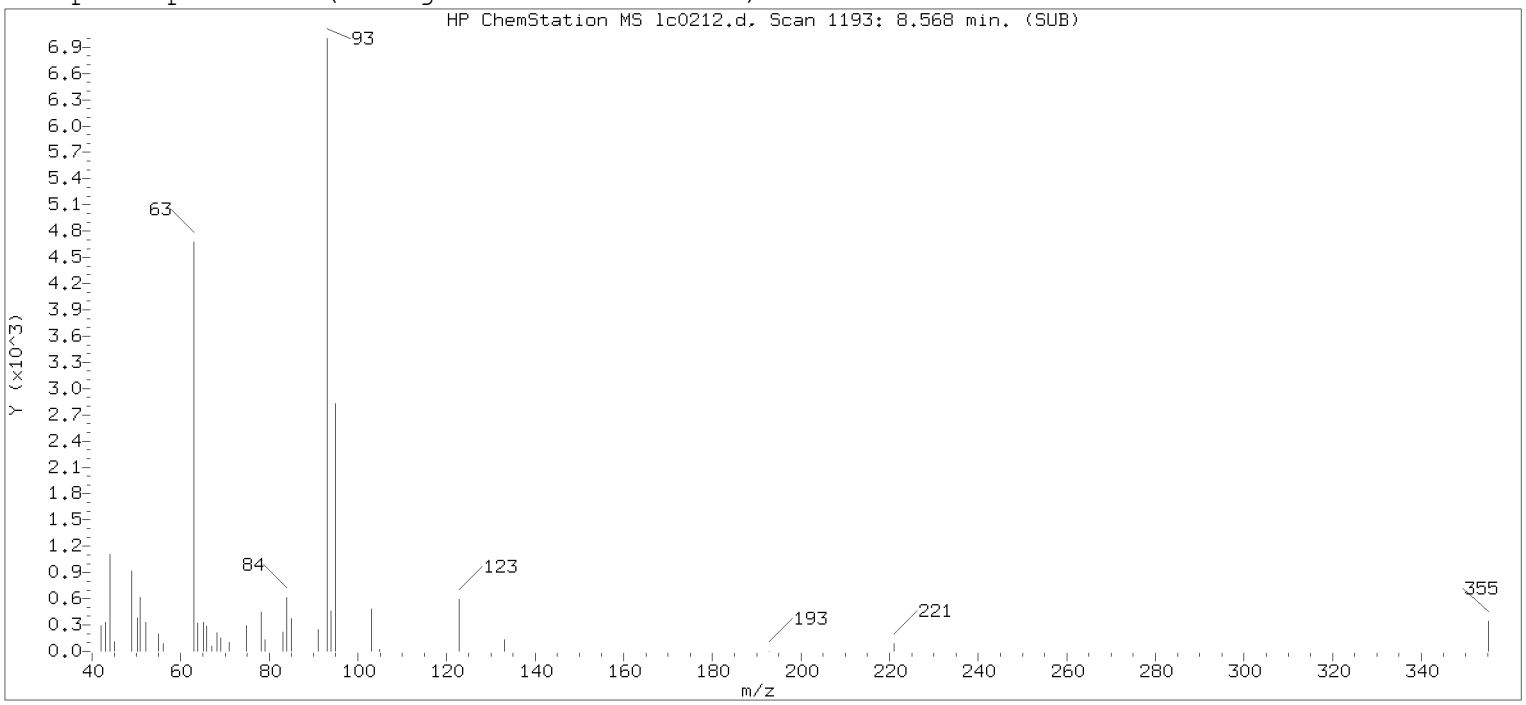
Compound Number : 57
Compound Name : bis(2-Chloroethoxy)methane
Scan Number : 1193
Retention Time (minutes) : 8.568
Quant Ion : 93.00
Area (flag) : 9476M
On-Column Amount (ng/ul) : 0.1463
Integration start scan : 1189 Integration stop scan: 1199
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

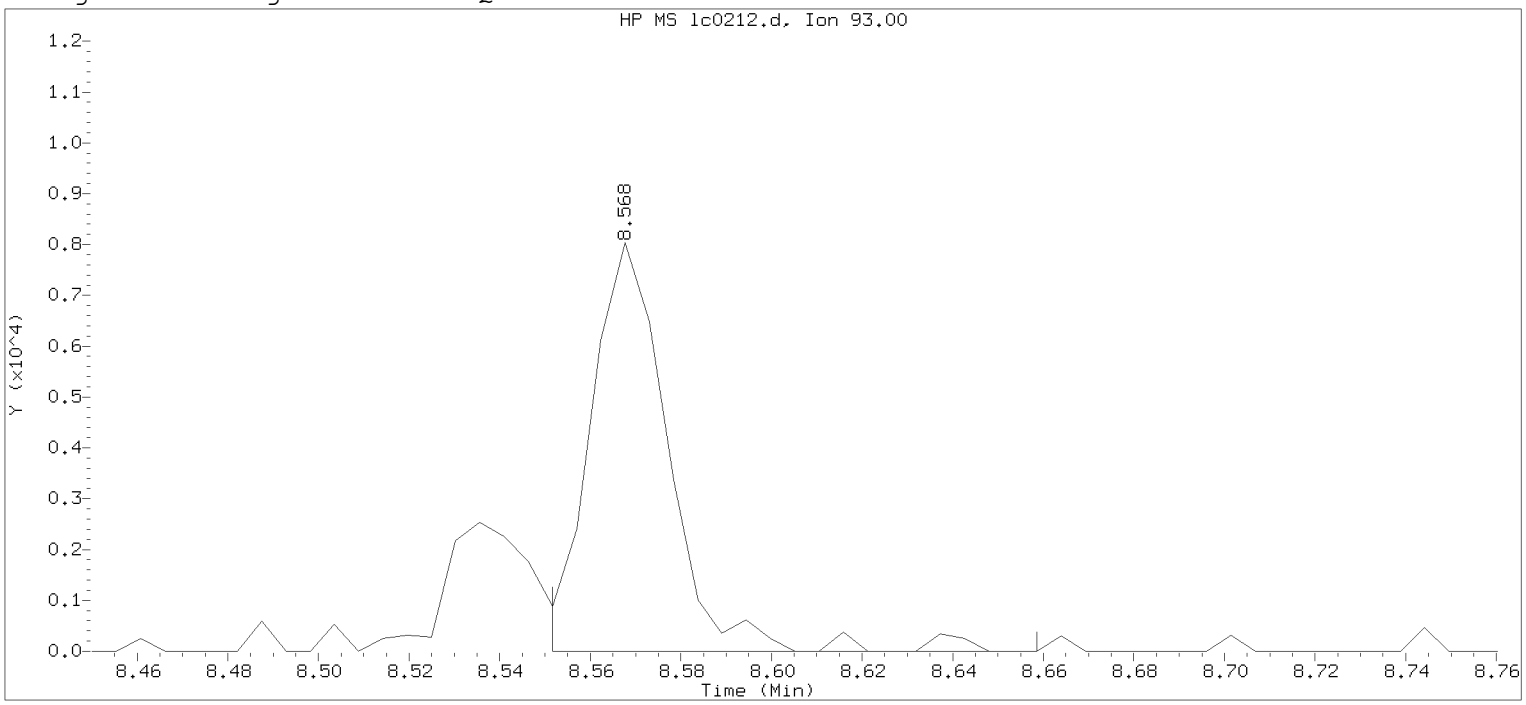
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

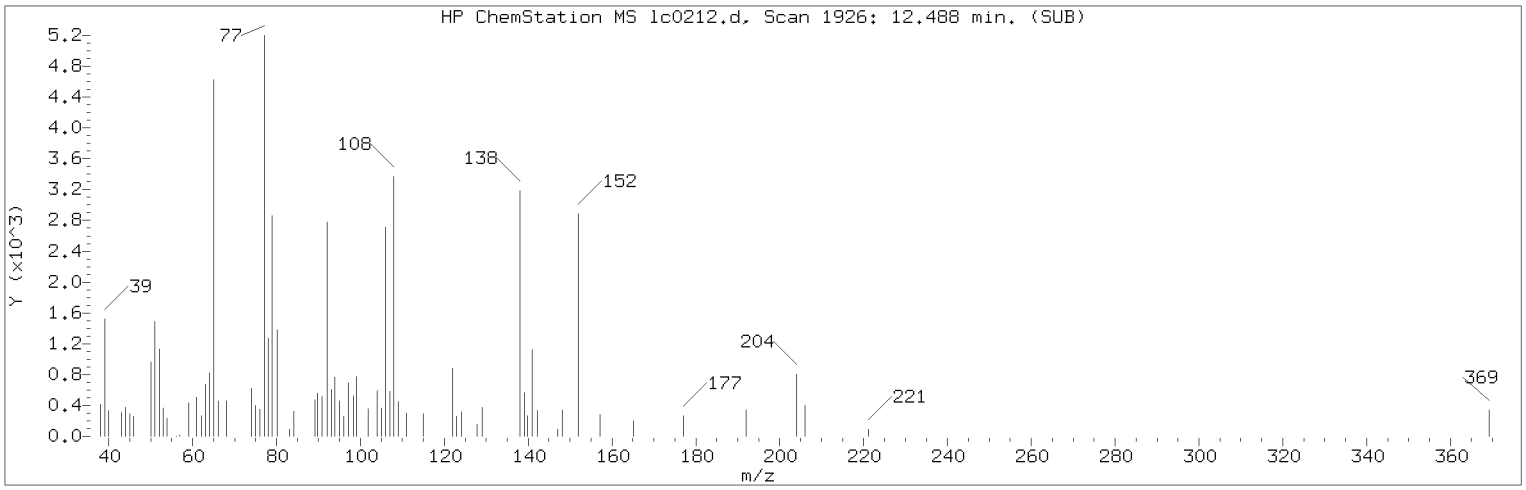
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

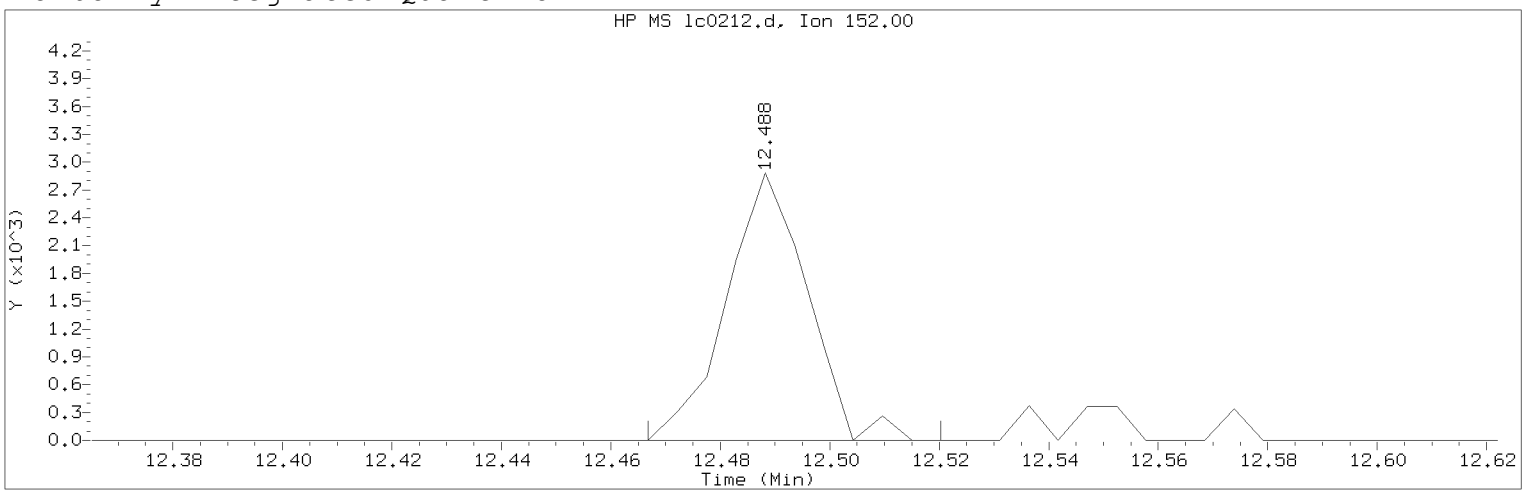
Compound Number	: 57		
Compound Name	: bis(2-Chloroethoxy)methane		
Scan Number	: 1193		
Retention Time (minutes)	: 8.568		
Quant Ion	: 93.00		
Area	: 9647		
On-column Amount (ng/ul)	: 0.1410		
Integration start scan	: 1189	Integration stop scan:	1209
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

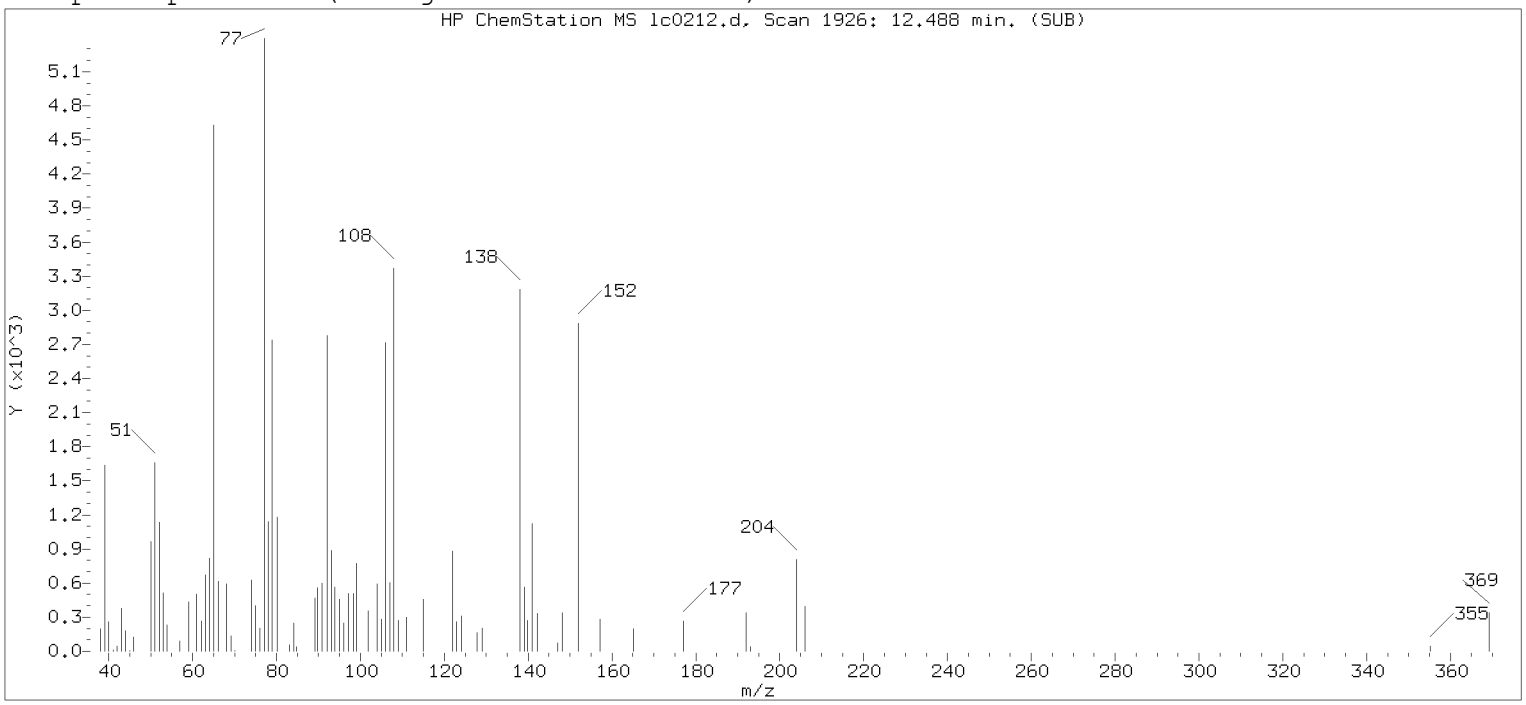
Compound Number : 133
Compound Name : 5-Nitro-o-toluidine
Scan Number : 1926
Retention Time (minutes) : 12.488
Quant Ion : 152.00
Area (flag) : 2953M
On-Column Amount (ng/ul) : 0.1241
Integration start scan : 1921 Integration stop scan: 1931
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

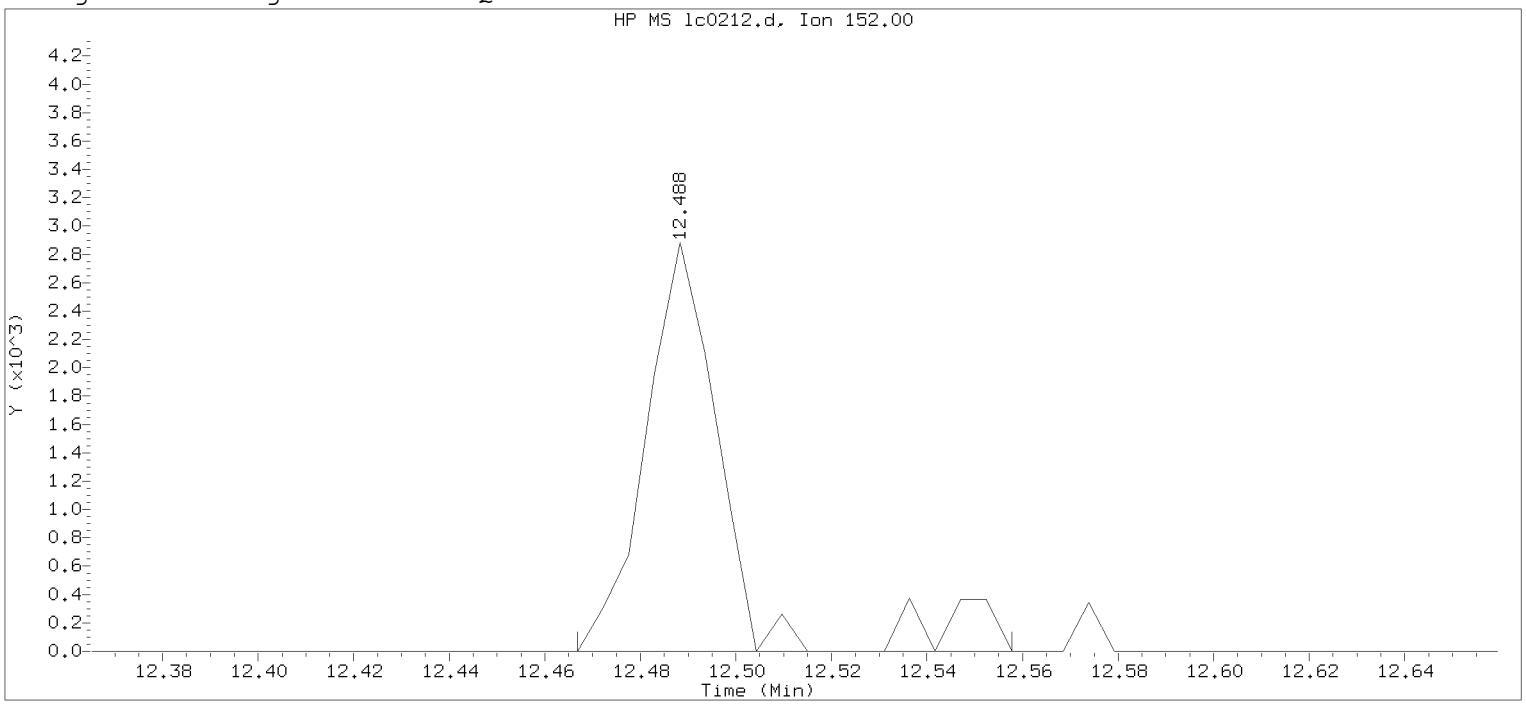
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

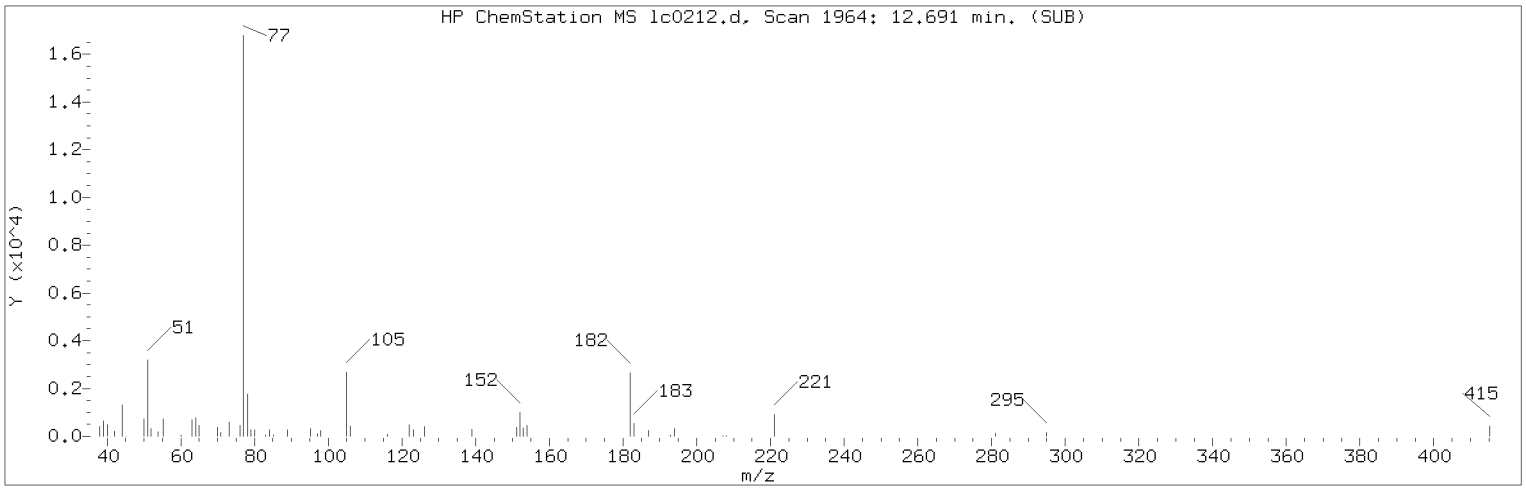
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

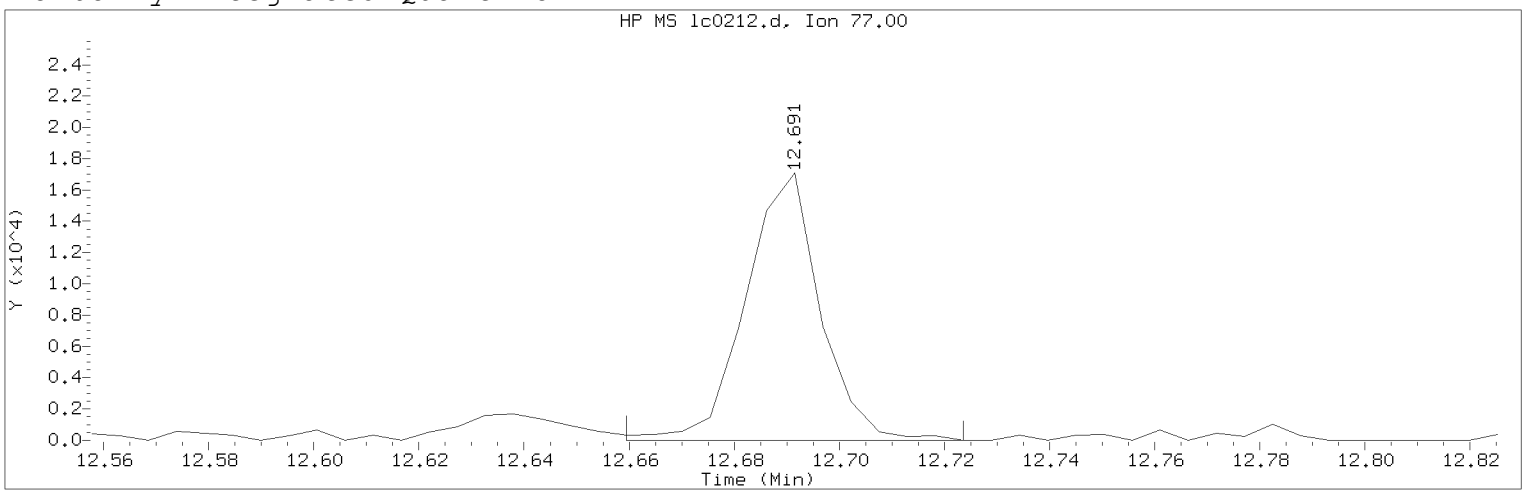
Compound Number	: 133		
Compound Name	: 5-Nitro-o-toluidine		
Scan Number	: 1926		
Retention Time (minutes)	: 12.488		
Quant Ion	: 152.00		
Area	: 3309		
On-column Amount (ng/ul)	: 0.1402		
Integration start scan	: 1921	Integration stop scan:	1938
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

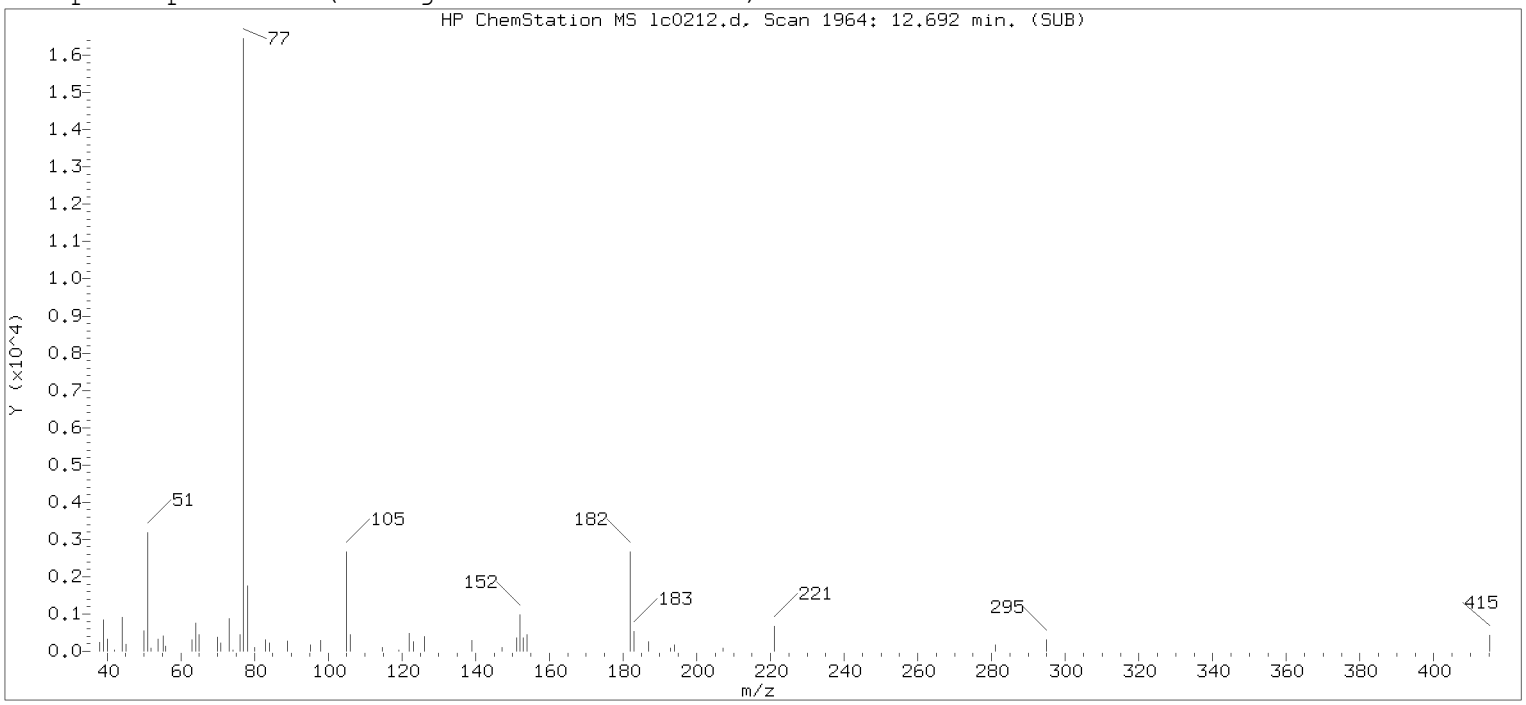
Compound Number : 139
Compound Name : 1,2-Diphenylhydrazine
Scan Number : 1964
Retention Time (minutes) : 12.691
Quant Ion : 77.00
Area (flag) : 16816M
On-Column Amount (ng/ul) : 0.1681
Integration start scan : 1957 Integration stop scan: 1969
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

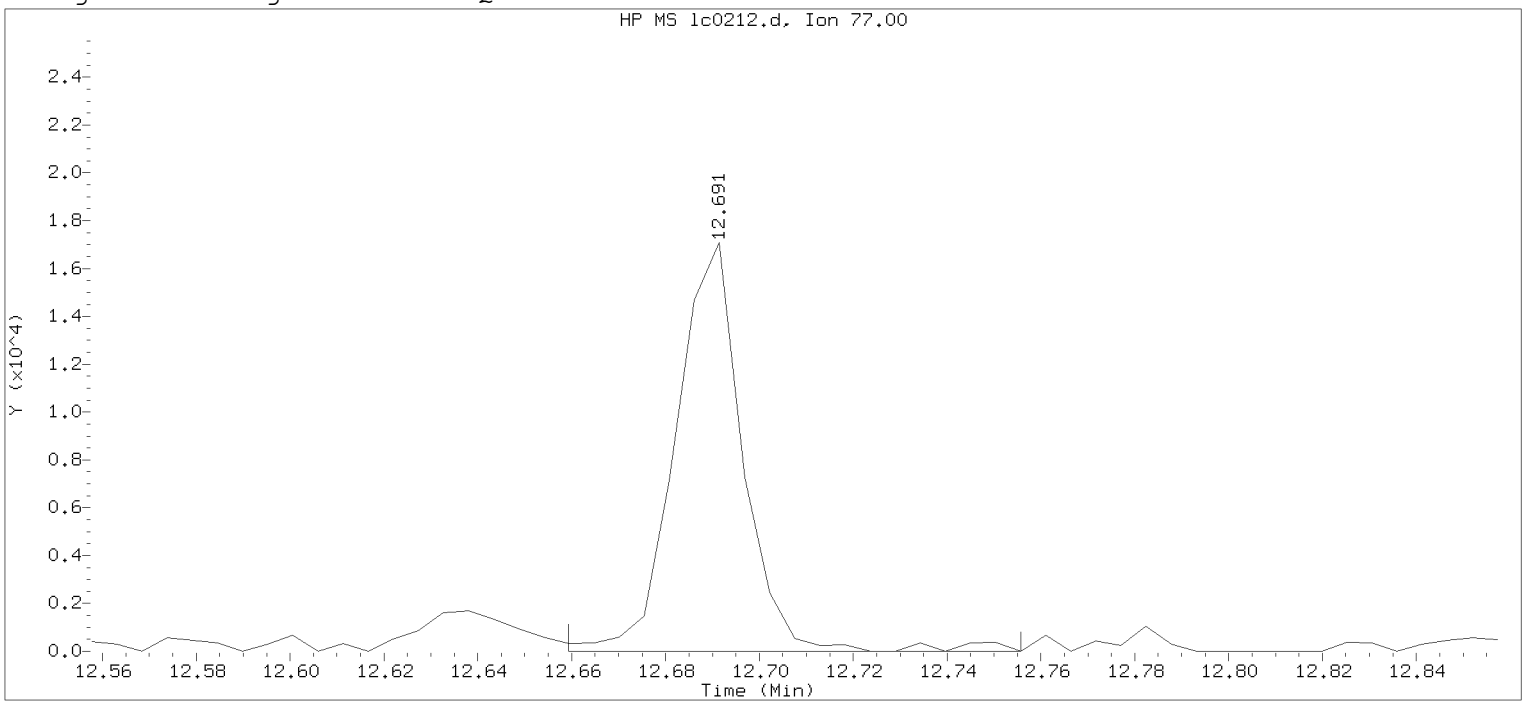
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

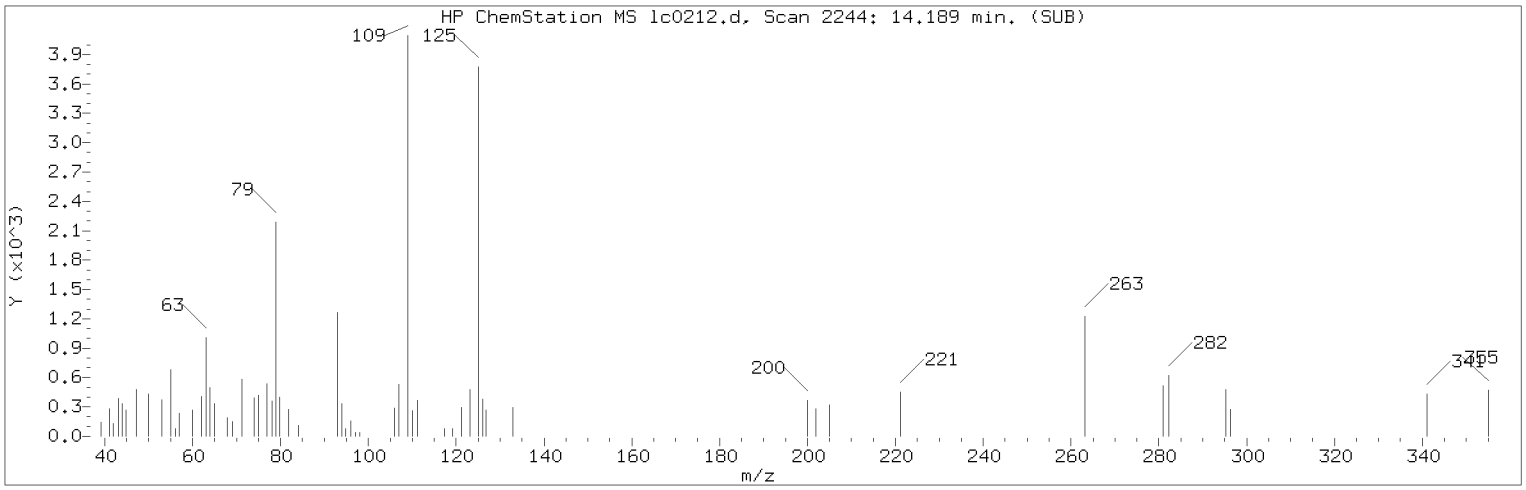
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

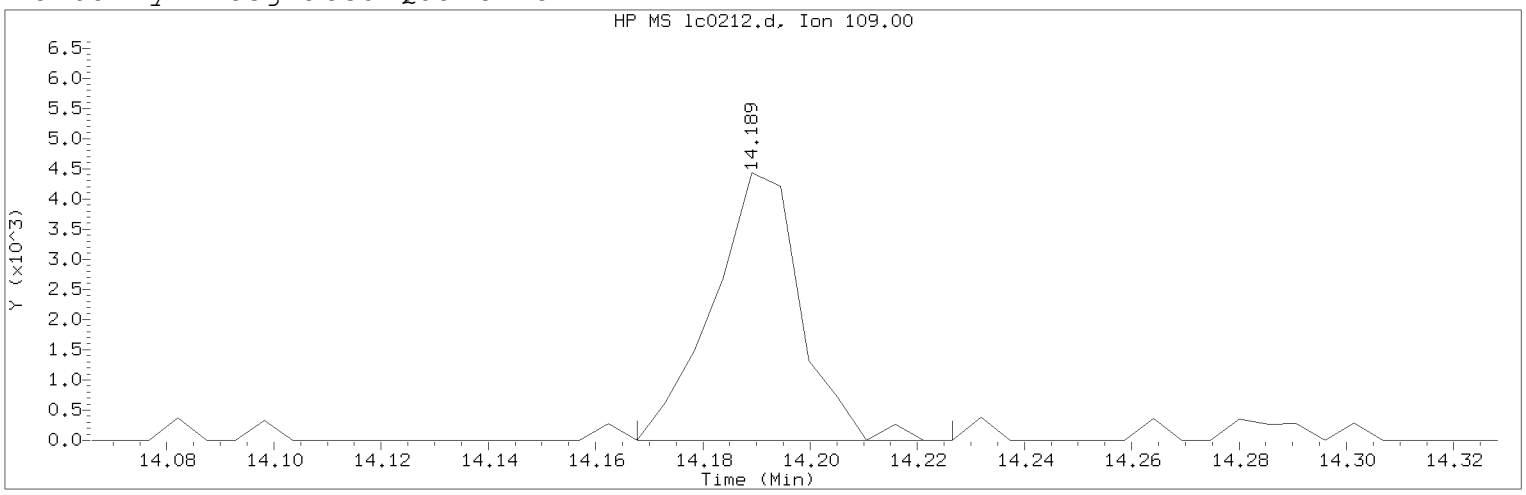
Compound Number	: 139		
Compound Name	: 1,2-Diphenylhydrazine		
Scan Number	: 1964		
Retention Time (minutes)	: 12.691		
Quant Ion	: 77.00		
Area	: 17108		
On-column Amount (ng/ul)	: 0.1484		
Integration start scan	: 1957	Integration stop scan:	1975
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

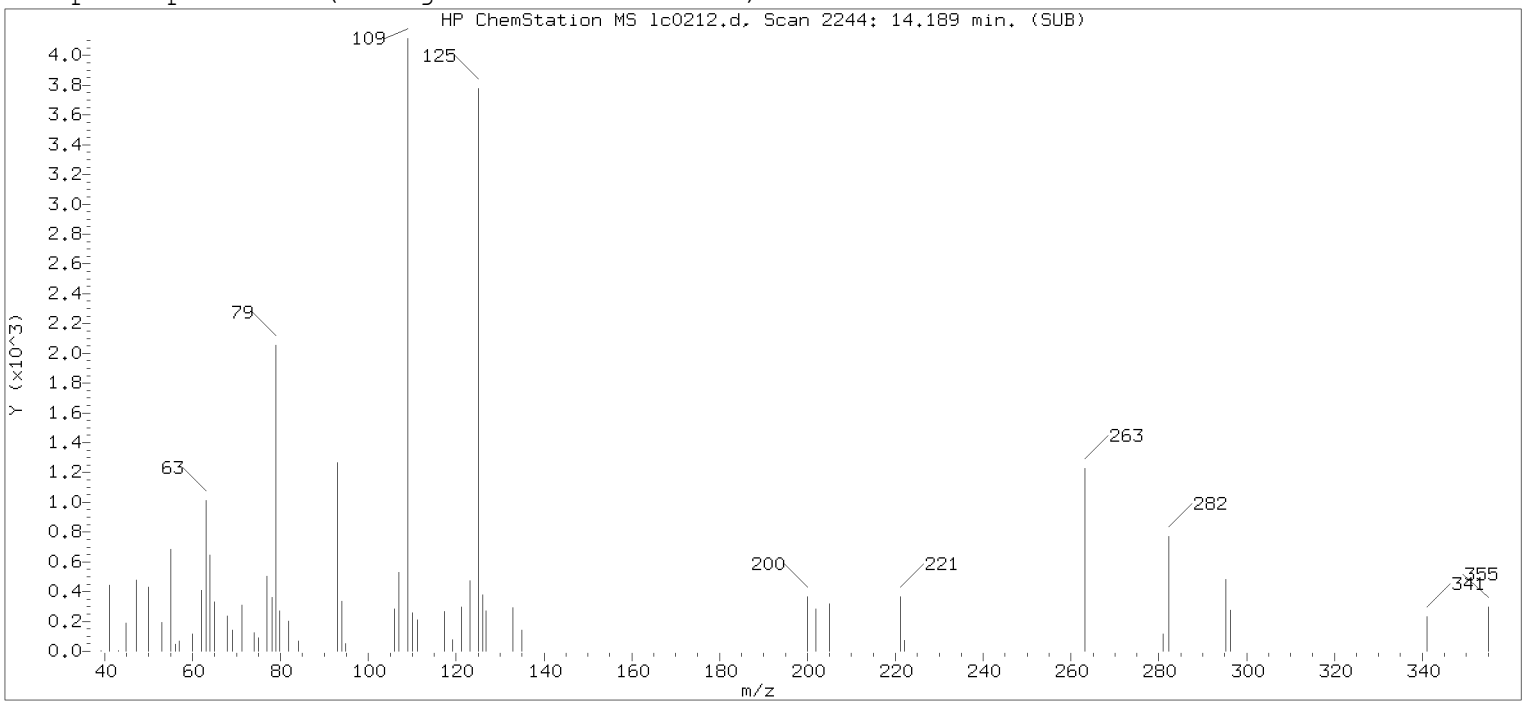
Compound Number : 169
Compound Name : Methyl parathion
Scan Number : 2244
Retention Time (minutes) : 14.189
Quant Ion : 109.00
Area (flag) : 5043M
On-Column Amount (ng/ul) : 0.1561
Integration start scan : 2239 Integration stop scan: 2250
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

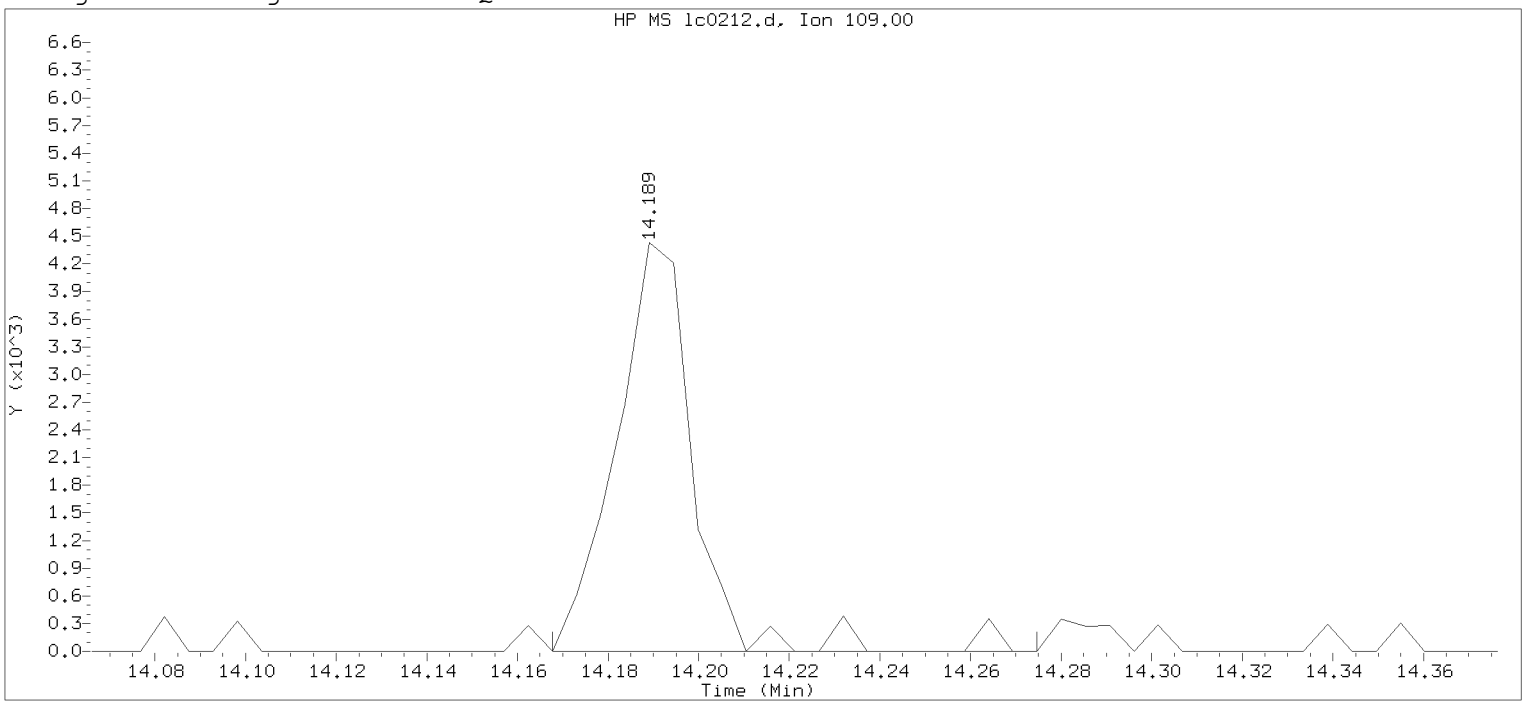
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

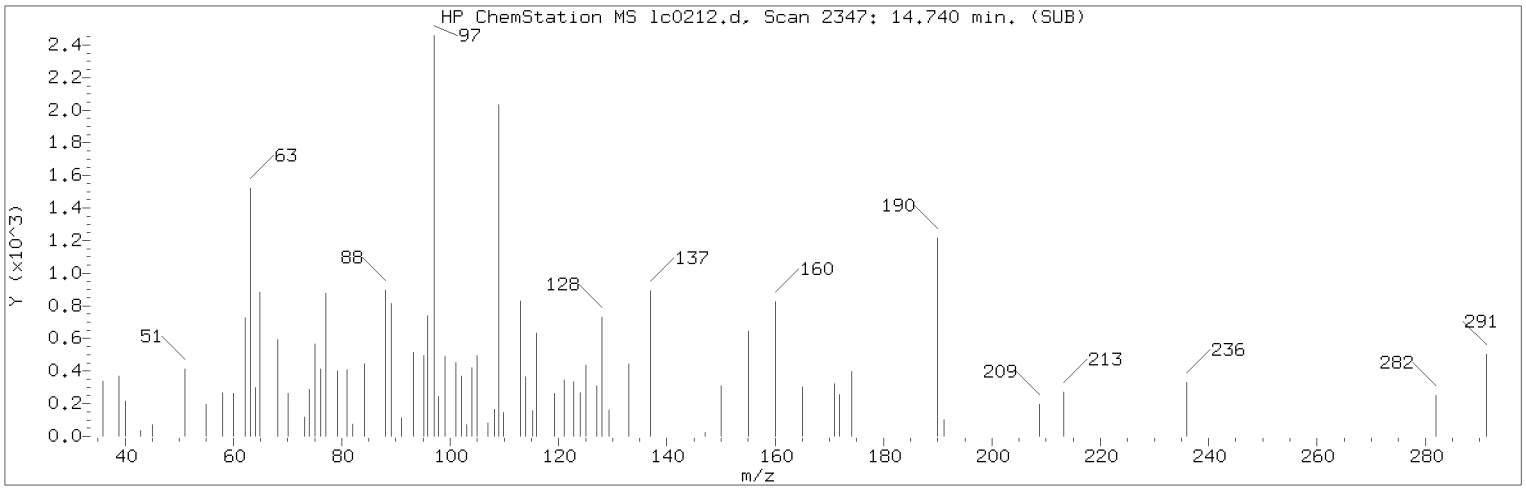
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

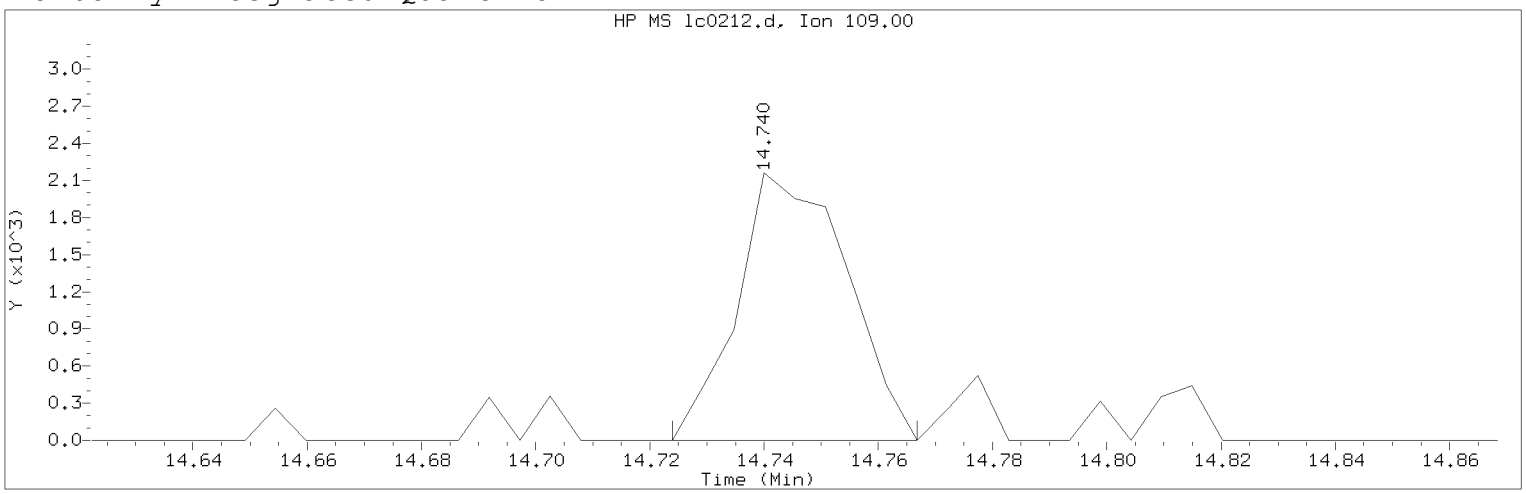
Compound Number	: 169		
Compound Name	: Methyl parathion		
Scan Number	: 2244		
Retention Time (minutes)	: 14.189		
Quant Ion	: 109.00		
Area	: 5281		
On-column Amount (ng/ul)	: 0.1504		
Integration start scan	: 2239	Integration stop scan:	2259
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

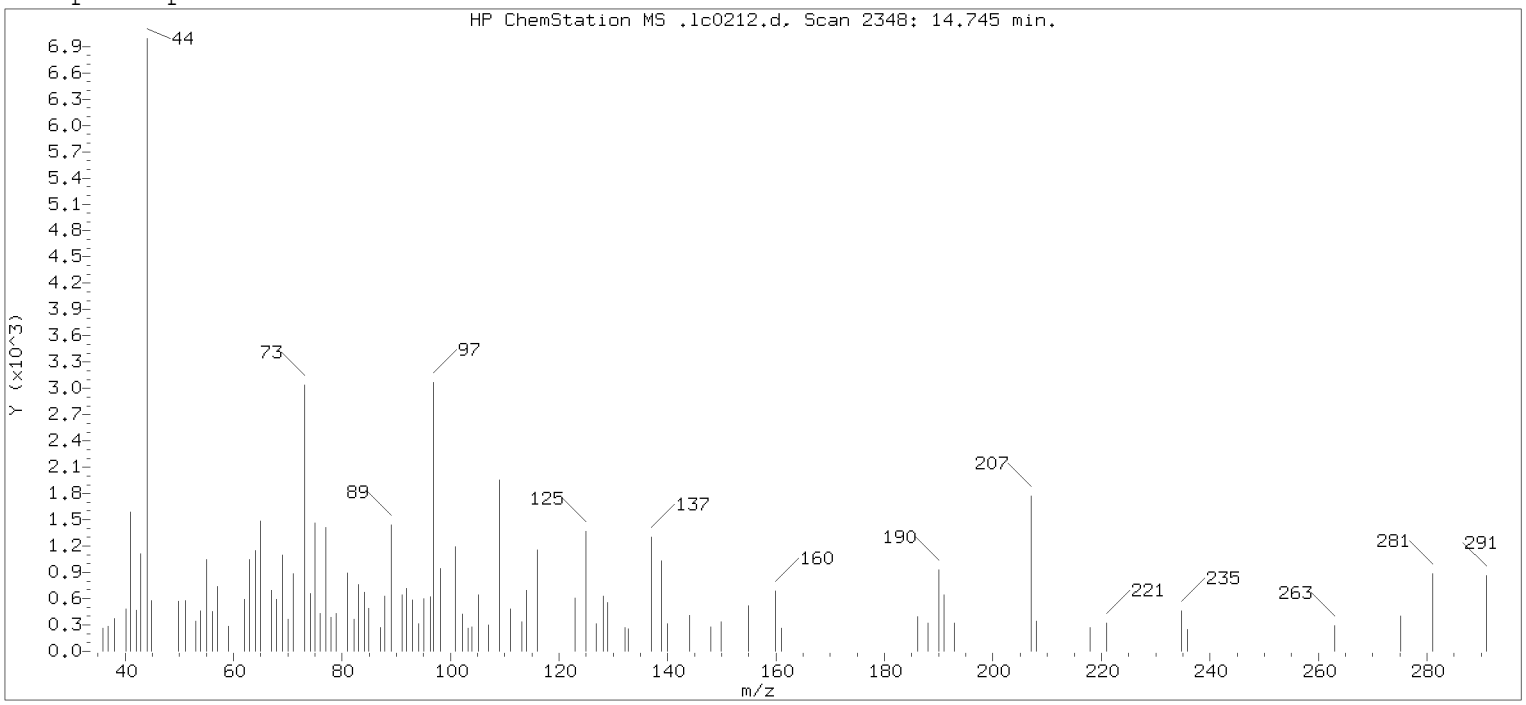
Compound Number : 172
Compound Name : Parathion
Scan Number : 2347
Retention Time (minutes) : 14.740
Quant Ion : 109.00
Area (flag) : 2878M
On-Column Amount (ng/ul) : 0.1424
Integration start scan : 2343 Integration stop scan: 2351
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

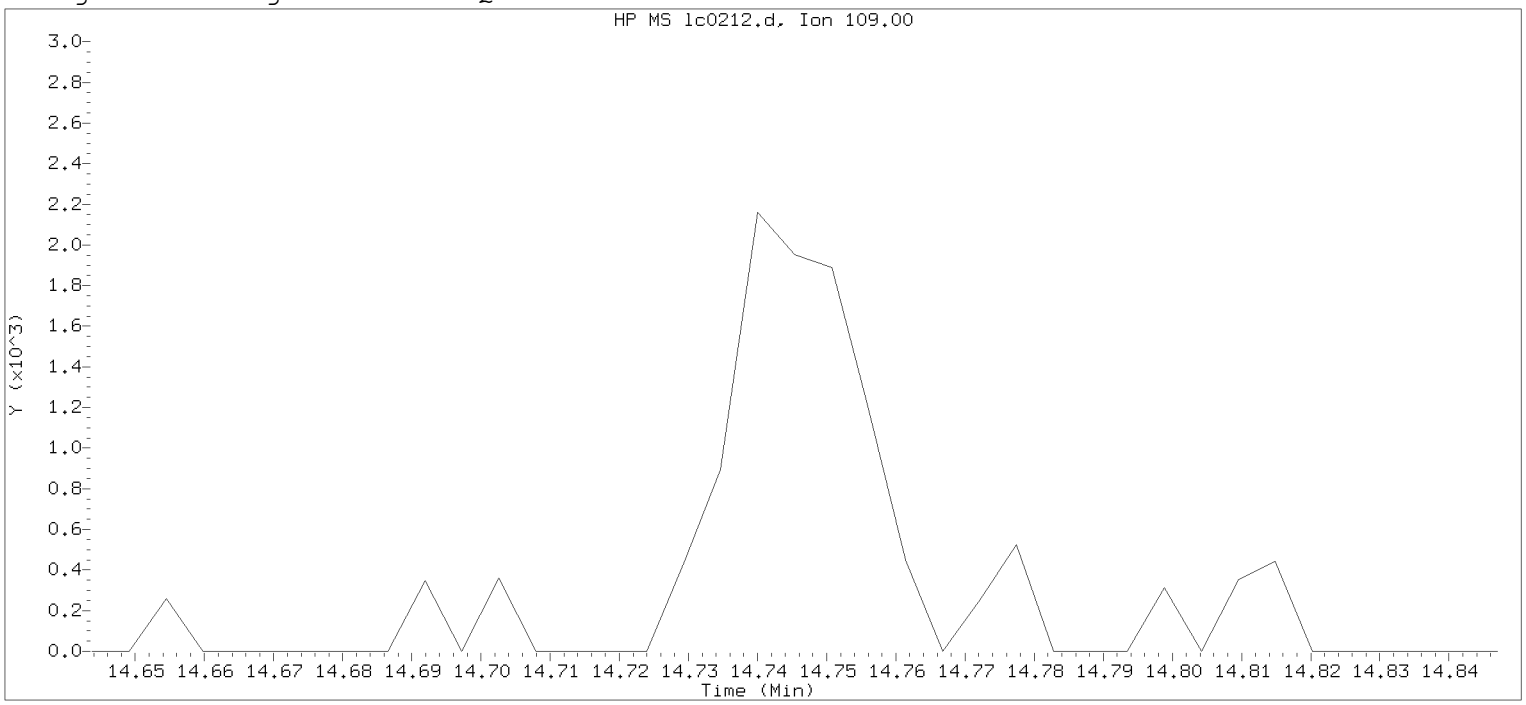
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

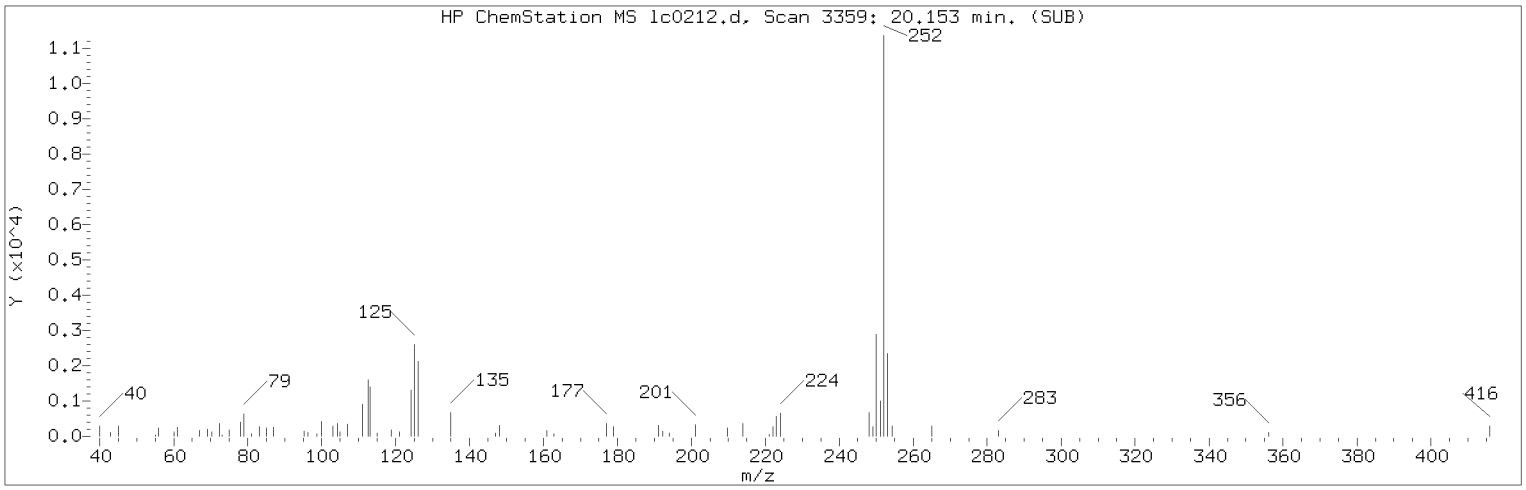
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

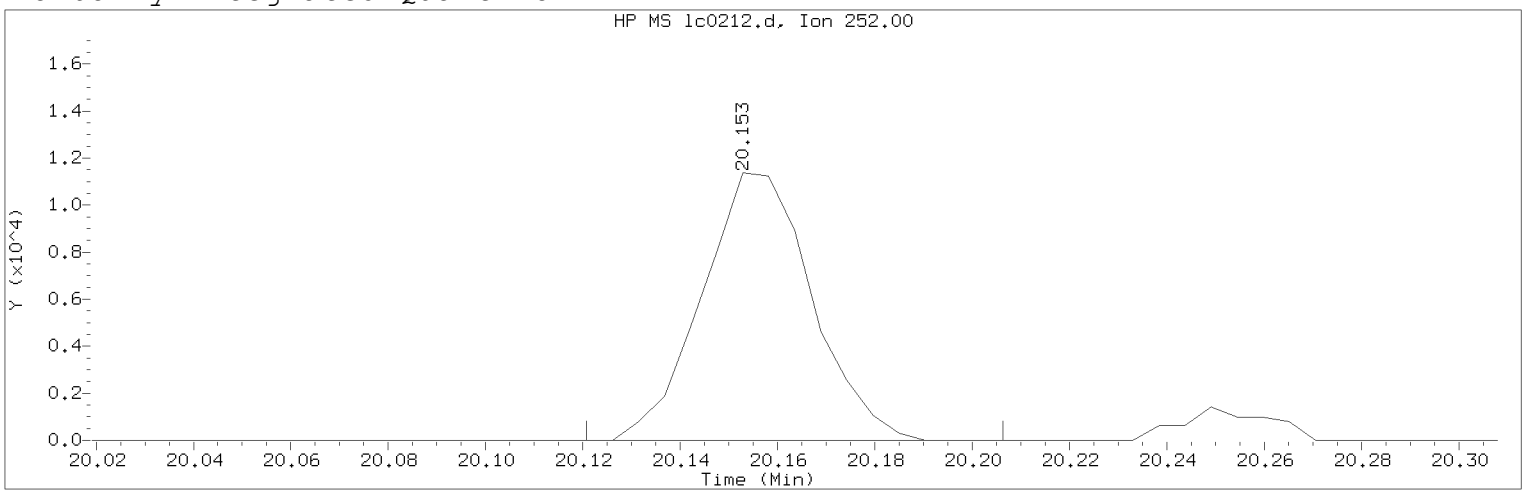
Compound Number : 172
Compound Name : Parathion
Expected RT (minutes) : 14.745
Quant Ion : 109.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

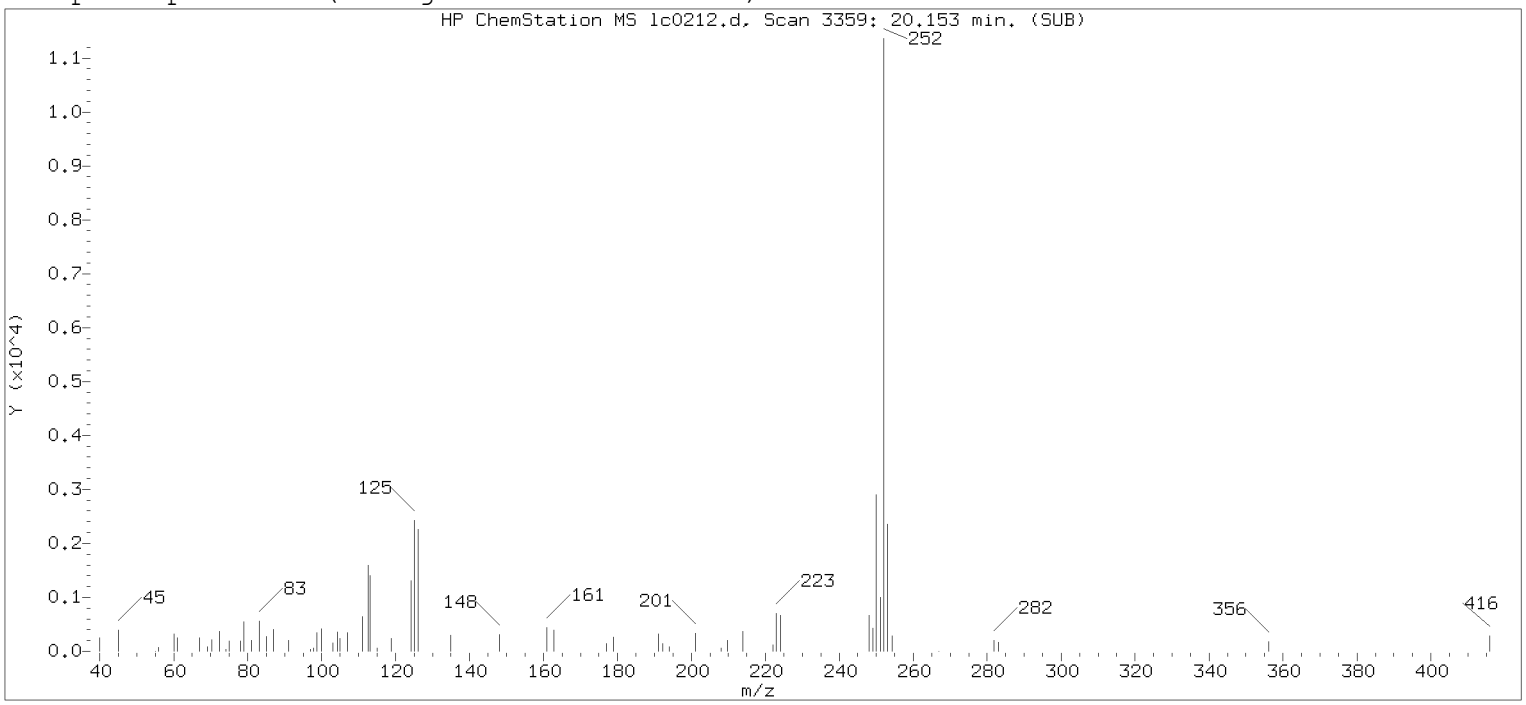
Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3359		
Retention Time (minutes)	: 20.153		
Quant Ion	: 252.00		
Area (flag)	: 17818M		
On-Column Amount (ng/ul)	: 0.1348		
Integration start scan	: 3352	Integration stop scan:	3368
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

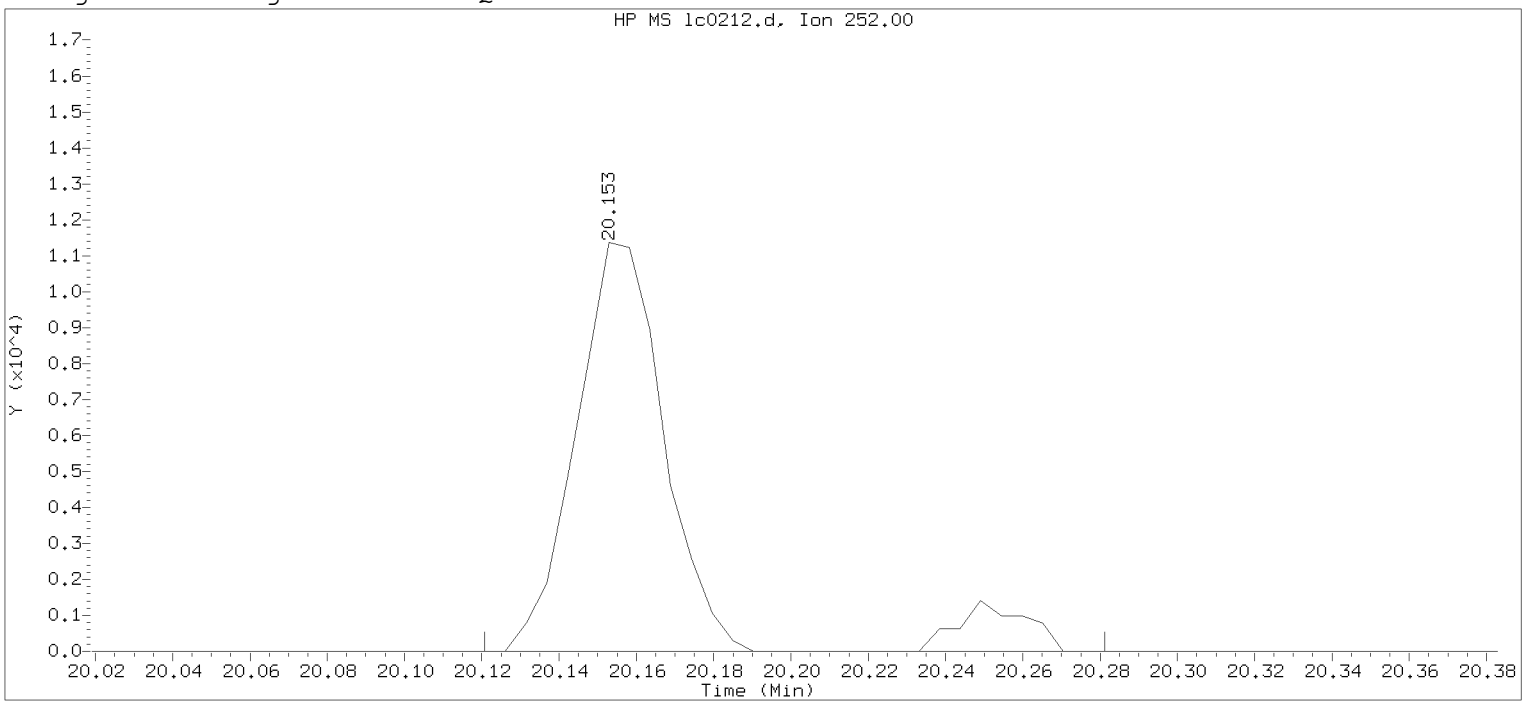
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

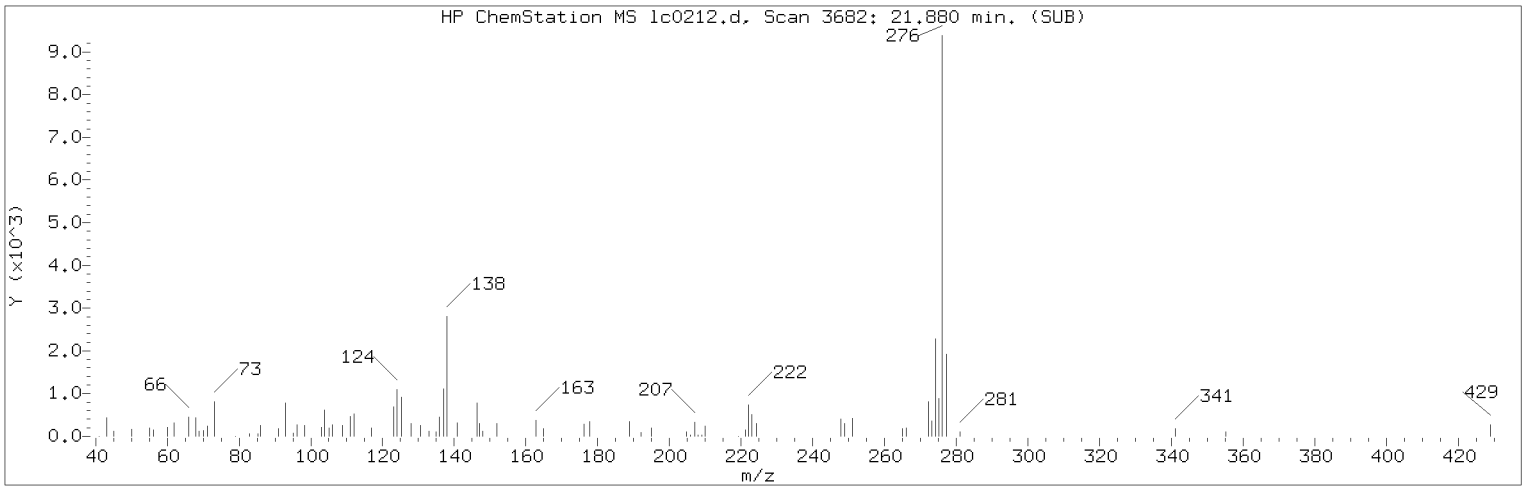
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

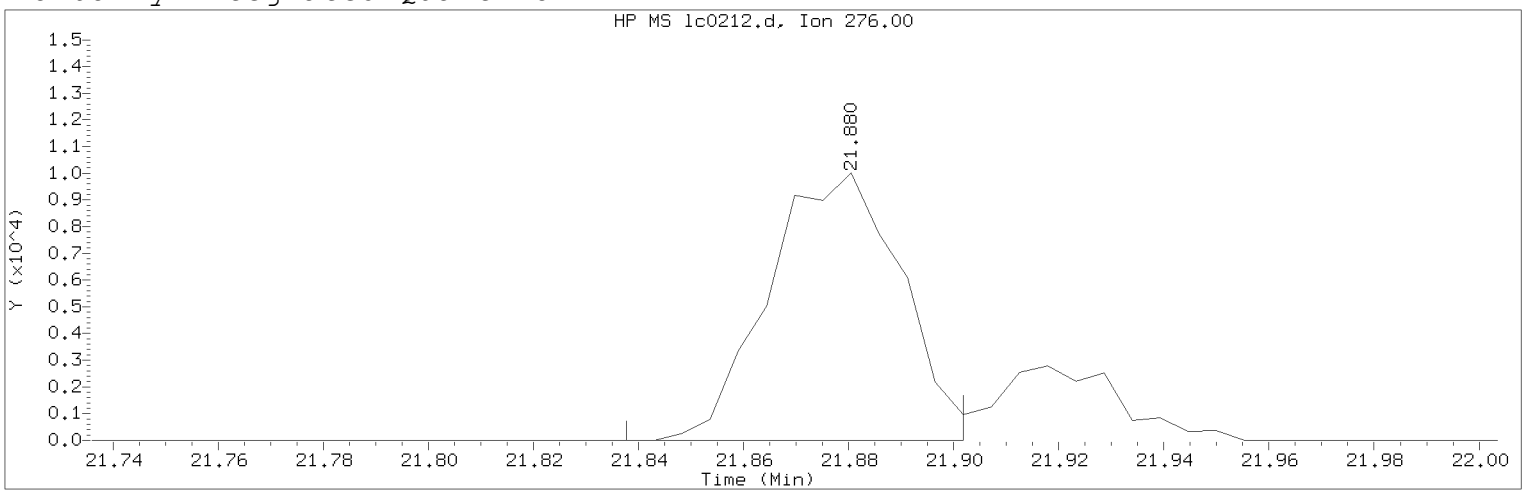
Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3359		
Retention Time (minutes)	: 20.153		
Quant Ion	: 252.00		
Area	: 19554		
On-column Amount (ng/ul)	: 0.1519		
Integration start scan	: 3352	Integration stop scan:	3382
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

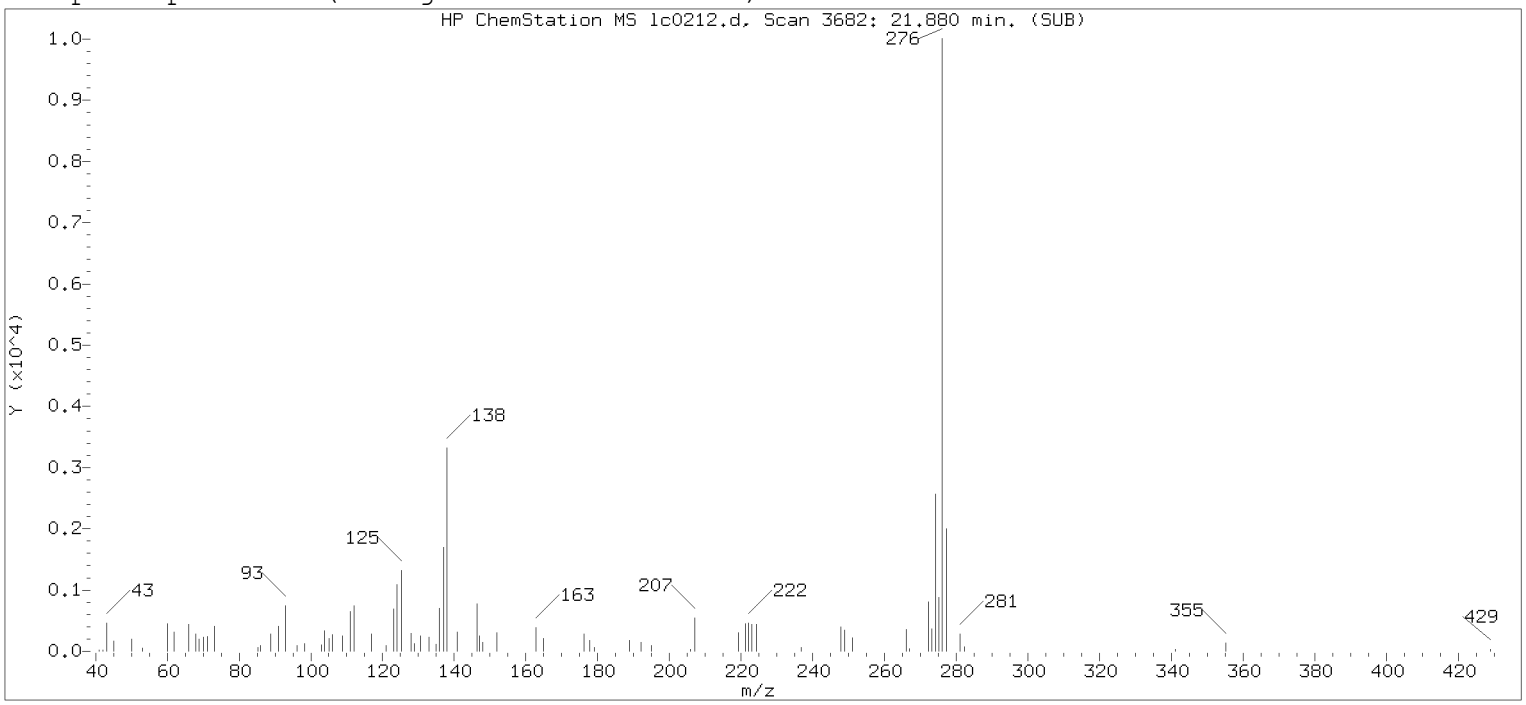
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3682
Retention Time (minutes) : 21.880
Quant Ion : 276.00
Area (flag) : 17506M
On-Column Amount (ng/ul) : 0.1338
Integration start scan : 3673 Integration stop scan: 3685
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

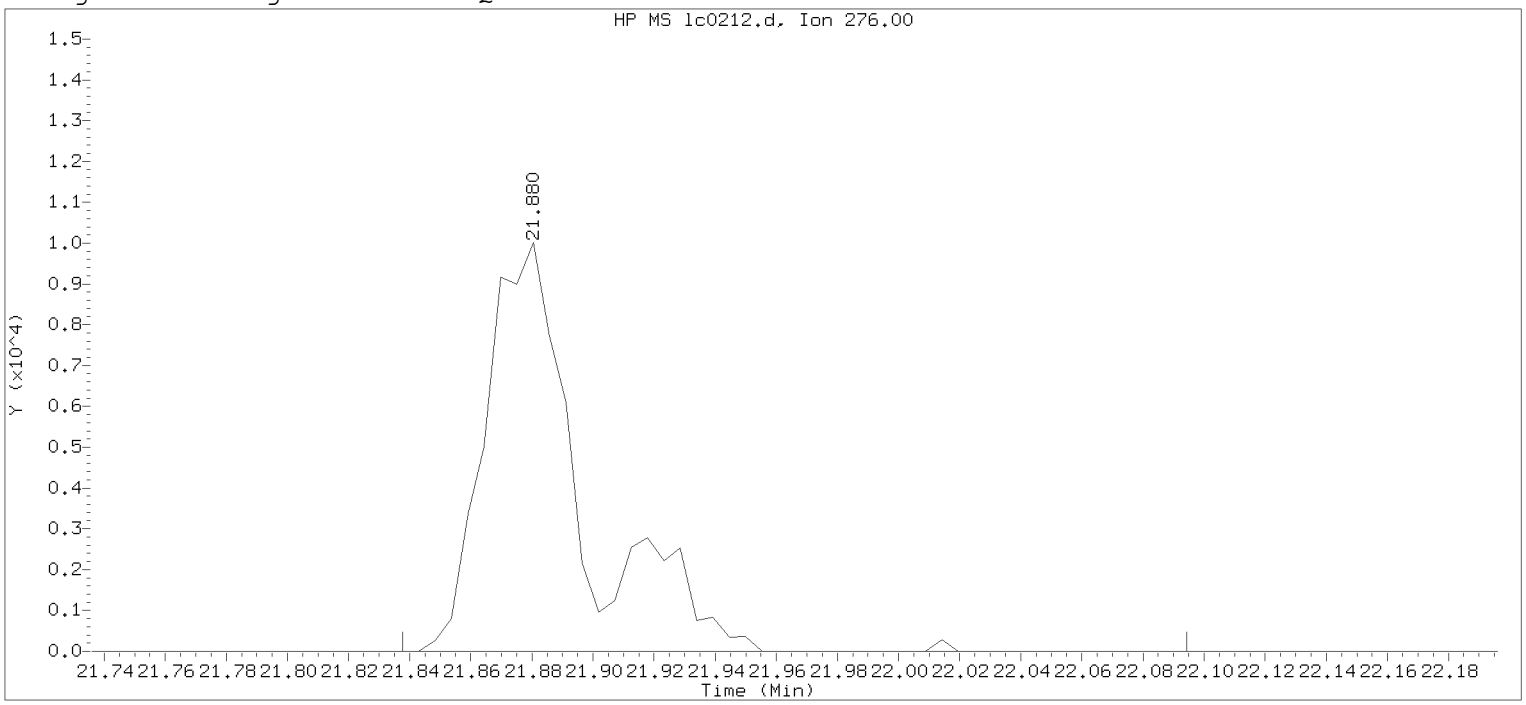
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:10.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



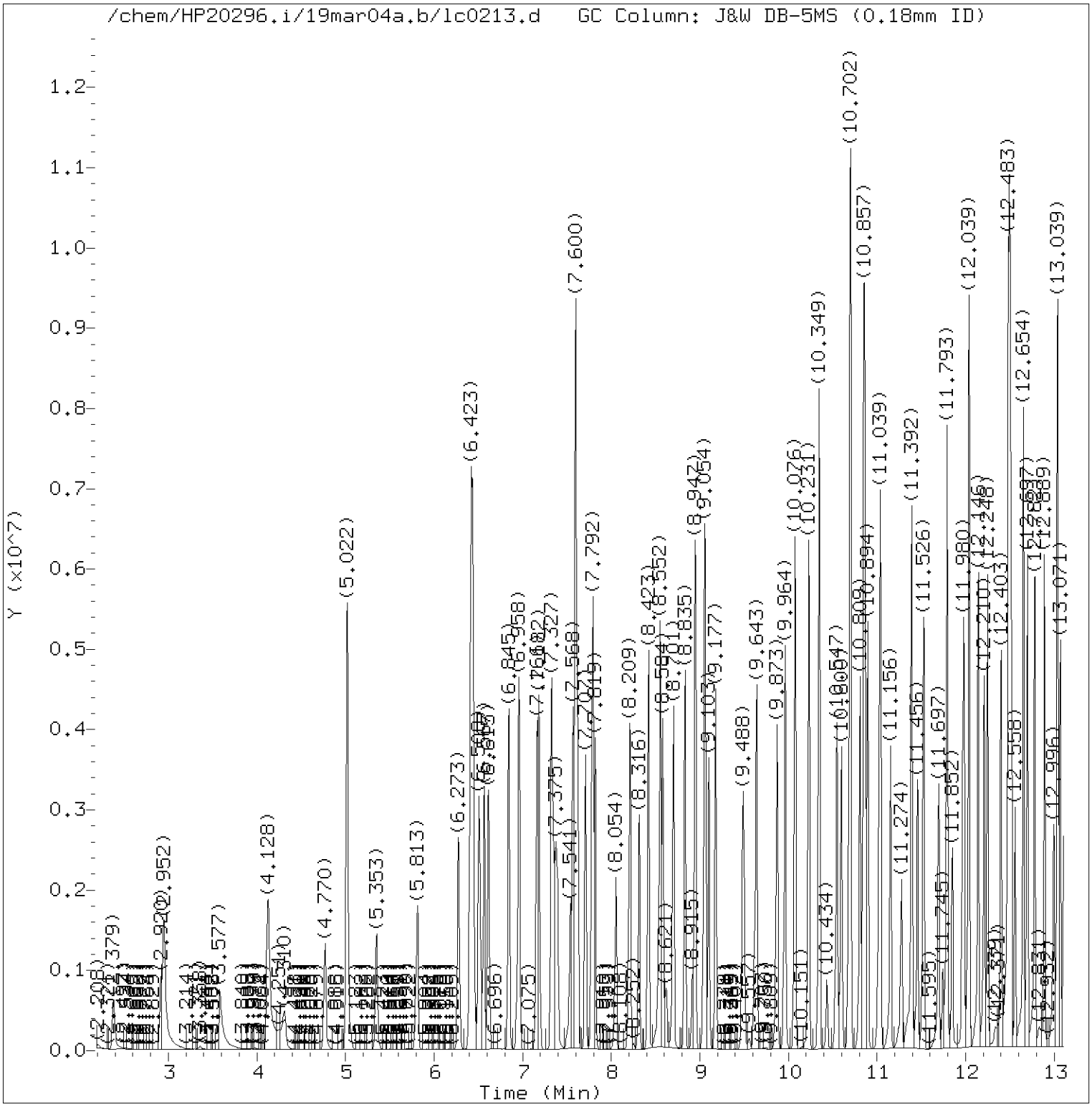
Data File: /chem/HP20296.i/19mar04a.b/lc0212.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 02:40 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3682		
Retention Time (minutes)	: 21.880		
Quant Ion	: 276.00		
Area	: 21967		
On-column Amount (ng/ul)	: 0.1729		
Integration start scan	: 3673	Integration stop scan:	3721
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:10.
Target 3.5 esignature user ART at 2019.04.04



Total Ion Chromatogram (TIC)

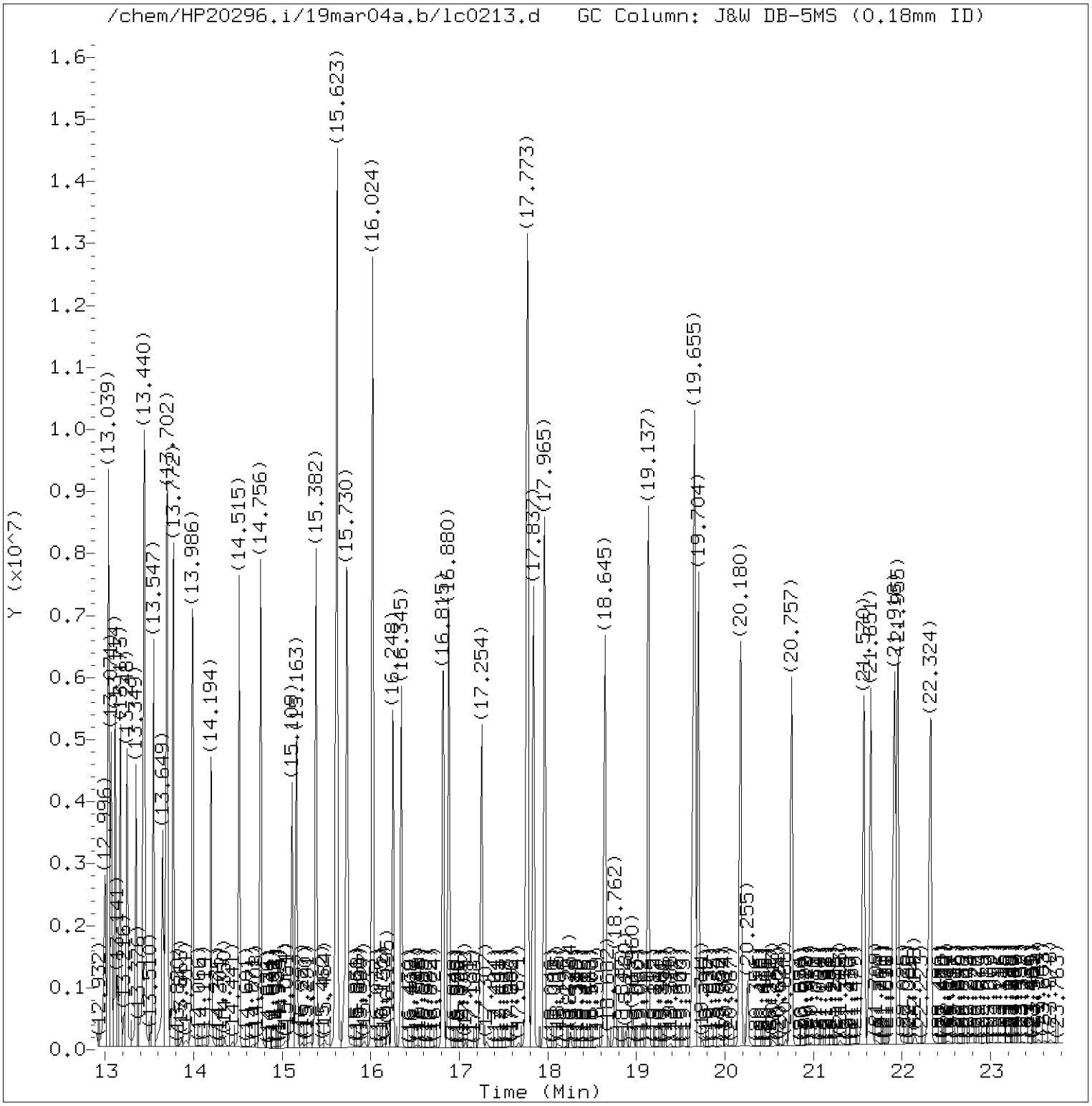
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.379	88	664229	33.872
5) N-Nitrosodimethylamine	(1)	2.920	74	1027085	33.234
6) Pyridine	(1)	2.952	79	1727488M	33.074
8) 2-Picoline	(1)	4.128	93	1837533	32.969
9) N-Nitrosomethylethylamine	(1)	4.310	88	747501	32.775
10) Methyl methanesulfonate	(1)	4.770	80	919016	33.005
12)$2-Fluorophenol	(1)	5.022	112	2869093	65.501
14) N-Nitrosodiethylamine	(1)	5.353	102	750456	33.568
43) Total Cresols	(1)			2926019	65.511
16) Ethyl methanesulfonate	(1)	5.813	109	780782	33.544
17) Benzaldehyde	(1)	6.273	77	1039012	28.519
18)$Phenol-d6	(1)	6.418	99	3837340	65.618
19) Phenol	(1)	6.439	94	2139488	32.552
20) Aniline	(1)	6.444	93	2532828	32.839
21) a-methylstyrene	(1)	6.525	118	270069M	31.607
23) bis(2-Chloroethyl)ether	(1)	6.567	93	1624971	32.883
24) 2-Chlorophenol	(1)	6.615	128	1409092	32.988
25) 1,3-Dichlorobenzene	(1)	6.845	146	1504346	33.181
26)*1,4-Dichlorobenzene-d4	(1)	6.936	152	138547	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	1490213	33.180
28) Benzyl alcohol	(1)	7.161	108	893696	31.677
29) 1,2-Dichlorobenzene	(1)	7.182	146	1429940	32.980
31) Indene	(1)	7.322	115	1843389	31.831
32) 2-Methylphenol	(1)	7.343	108	1380621	32.698
100) Isosafrole	(3)			1168757	33.143
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.391	45	1573118	32.571
35) bis(2-Chloroisopropyl)ether	(1)	7.391	45	1573118	32.571
36) N-Nitrosopyrrolidine	(1)	7.541	100	777863	33.066
37) Acetophenone	(1)	7.568	105	2063991	32.198
38) 4-Methylphenol	(1)	7.594	108	1545398	32.813
39) N-Nitroso-di-n-propylamine	(1)	7.600	70	1163417	32.820
40) N-Nitrosomorpholine	(1)	7.605	56	770387	32.660
41) o-Toluidine	(1)	7.621	106	2397073	32.703
44) Hexachloroethane	(1)	7.707	117	666485	32.960
45)$Nitrobenzene-d5	(2)	7.792	82	3488659	66.323
46) Nitrobenzene	(2)	7.819	77	1766382	33.021
125) 2,4_2,6-Dinitrotoluenes	(3)			1328311	63.917
50) N-Nitrosopiperidine	(2)	8.054	114	719186	33.402
52) Isophorone	(2)	8.209	82	3107225	33.185
53) 2-Nitrophenol	(2)	8.316	139	710998	33.296

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.423	107	1540646	33.032
59) O,O,O-Triethylphosphorothioate	(2)	8.552	198	605904	33.454
57) bis(2-Chloroethoxy)methane	(2)	8.584	93	1836946	31.335
58) Benzoic acid	(2)	8.621	105	1075952M	33.740
62) 2,4-Dichlorophenol	(2)	8.701	162	1125757	33.416
151) Diallate trans/cis	(4)			1230890	31.390
65) 1,2,4-Trichlorobenzene	(2)	8.835	180	1182208	33.044
68)*Naphthalene-d8	(2)	8.915	136	520056	5.000
69) Naphthalene	(2)	8.947	128	3927255	32.239
70) 4-Chloroaniline	(2)	9.054	127	1602284	33.078
71) 2,6-Dichlorophenol	(2)	9.065	162	1067908	33.037
72) Hexachloropropene	(2)	9.103	213	819802	33.508
74) Hexachlorobutadiene	(2)	9.177	225	675235	33.127
78) Quinoline	(2)	9.488	129	2321814	33.143
80) N-Nitrosodi-n-butylamine	(2)	9.643	84	1380697	36.039
79) Caprolactam	(2)	9.643	113	330516A	30.593
83) 4-Chloro-3-methylphenol	(2)	9.873	107	1326812	32.804
85) Safrole	(2)	9.964	162	969422	33.392
86) 2-Methylnaphthalene	(2)	10.076	142	2536242	32.201
87) 1-Methylnaphthalene	(2)	10.231	142	2402012	32.297
88) Hexachlorocyclopentadiene	(3)	10.349	237	761437	32.702
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.349	216	1156241	32.887
91) cis-Isosafrole	(3)	10.434	162	182816	5.685
93) 2,4,6-Trichlorophenol	(3)	10.547	196	793081	32.787
95) 2,4,5-Trichlorophenol	(3)	10.600	196	779550	32.159
96)$2-Fluorobiphenyl	(3)	10.702	172	5372651	65.537
97) trans-Isosafrole	(3)	10.809	162	985941	27.458
98) 1,1'-Biphenyl	(3)	10.852	154	2800399	31.951
99) 2-Chloronaphthalene	(3)	10.868	162	2675244	34.286
101) 1-Chloronaphthalene	(3)	10.894	162	1808248	30.506
103) Diphenyl ether	(3)	11.033	170	1538965	32.841
104) 2-Nitroaniline	(3)	11.044	138	763808	32.781
108) 1,4-Naphthoquinone	(3)	11.156	158	944388	32.135
109) 1,4-Dinitrobenzene	(3)	11.279	168	392729	33.299
110) Dimethylphthalate	(3)	11.392	163	2321786	30.957
111) 1,3-Dinitrobenzene	(3)	11.397	168	403184	32.318
113) 2,6-Dinitrotoluene	(3)	11.461	165	589966	32.513
114) Acenaphthylene	(3)	11.526	152	3335344	31.660
117) 3-Nitroaniline	(3)	11.697	138	664366	32.798
118)*Acenaphthene-d10	(3)	11.739	164	247791	5.000

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.793	153	2457121	33.304
120) 2,4-Dinitrophenol	(3)	11.852	184	388598	33.578
121) 4-Nitrophenol	(3)	11.969	109	499949	34.499
122) Pentachlorobenzene	(3)	11.986	250	958705	32.711
124) Dibenzofuran	(3)	12.039	168	3163660	32.636
123) 2,4-Dinitrotoluene	(3)	12.044	165	738345	31.403
126) 1-Naphthylamine	(3)	12.146	143	2464923	33.258
127) 2,3,4,6-Tetrachlorophenol	(3)	12.210	232	648147	33.325
128) 2-Naphthylamine	(3)	12.248	143	2437245	33.815
129) Diethylphthalate	(3)	12.403	149	2364341	31.641
131) Fluorene	(3)	12.483	166	2548266	31.261
130) Thionazin	(3)	12.494	107	497342	31.227
132) 4-Chlorophenyl-phenylether	(3)	12.504	204	1162316	32.283
133) 5-Nitro-o-toluidine	(3)	12.510	152	735496	32.400
134) 4-Nitroaniline	(3)	12.520	138	623467A	32.083
135) 4,6-Dinitro-2-methylphenol	(4)	12.563	198	470912	33.396
136) N-Nitrosodiphenylamine	(4)	12.654	169	2181893	33.456
137) NDPA as diphenylamine	(4)	12.654	169	2181893	33.456
139) 1,2-Diphenylhydrazine	(4)	12.697	77	3123792	32.415
140)$2,4,6-Tribromophenol	(3)	12.782	330	778911	67.072
142) Tetraethyldithiopyrophosphate	(4)	12.889	97	513706	32.521
144) 1,3,5-Trinitrobenzene	(4)	12.996	213	290835	34.576
145) Diallate (peak 1)	(4)	13.034	86	1042539	25.769
146) Phorate	(4)	13.039	75	1846394	30.331
147) Phenacetin	(4)	13.071	108	1582714	33.454
148) 4-Bromophenyl-phenylether	(4)	13.114	248	682934	33.017
149) Diallate (peak 2)	(4)	13.135	86	188351	5.620
150) Hexachlorobenzene	(4)	13.173	284	790682	32.025
152) Dimethoate	(4)	13.248	87	1302134	32.999
153) Atrazine	(4)	13.349	200	568923	30.743
154) Pentachlorophenol	(4)	13.430	266	537871	33.032
155) 4-Aminobiphenyl	(4)	13.440	169	2481375	32.945
156) Pentachloronitrobenzene	(4)	13.446	237	359490	33.429
157) Pronamide	(4)	13.547	173	1224492	33.787
158)*Phenanthrene-d10	(4)	13.665	188	469417	5.000
159) Dinoseb	(4)	13.692	211	724679	33.790
160) Phenanthrene	(4)	13.702	178	3969672	32.680
162) Anthracene	(4)	13.772	178	3813606	32.553
168) Carbazole	(4)	13.986	167	3500069	33.561
169) Methyl parathion	(4)	14.194	109	1052883	33.048

A = User selected an alternate hit.
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$ = Compound is a surrogate standard.

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on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

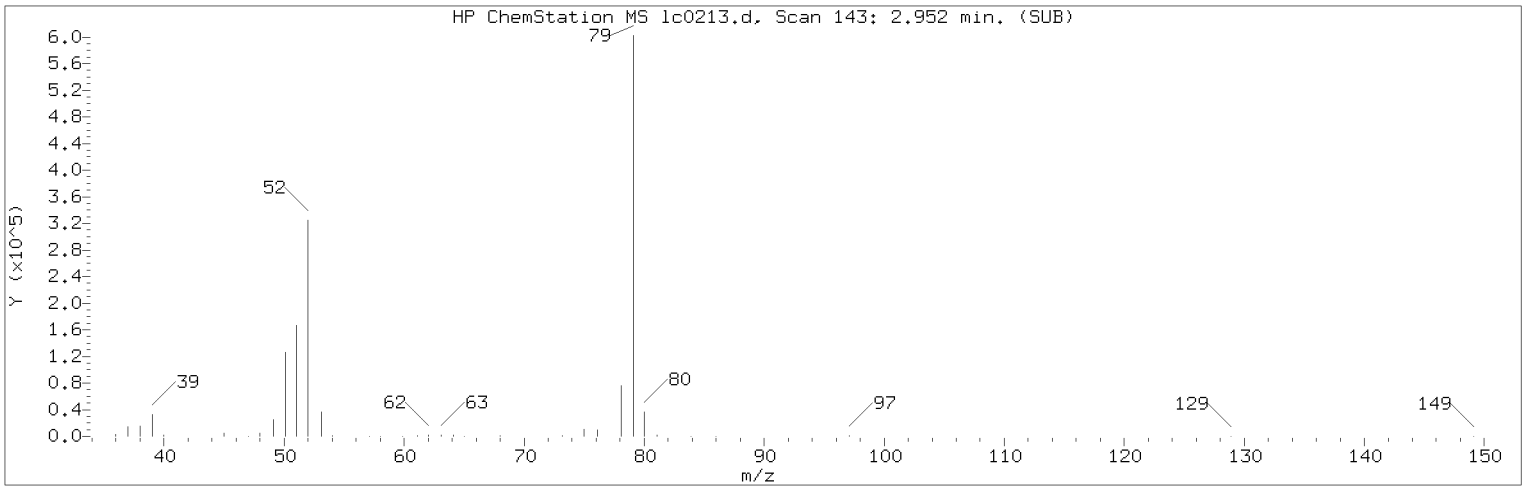
Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.515	149	4558203	32.859
172) Parathion	(4)	14.756	109	683238	33.598
173) 4-Nitroquinoline-1-oxide	(4)	14.761	190	511259	34.566
227) Total PAHs	(6)			66628668	582.453
174) Octachlorostyrene	(4)	15.109	308	286866	31.858
176) Isodrin	(4)	15.163	193	423689	32.792
178) Fluoranthene	(4)	15.382	202	4231582	32.581
179) Benzidine	(5)	15.623	184	8460450	97.221
180)*Pyrene-d10	(5)	15.697	212	472757	5.000
182) Pyrene	(5)	15.735	202	4265585	31.768
184)$Terphenyl-d14	(5)	16.024	244	5343764	65.399
187) p-Dimethylaminoazobenzene	(5)	16.254	225	735586	32.942
190) Chlorobenzilate	(5)	16.345	139	1492713	32.878
192) 3,3'-Dimethylbenzidine	(5)	16.821	212	2997148	32.702
193) Butylbenzylphthalate	(5)	16.885	149	2230368	32.861
196) 2-Acetylaminofluorene	(5)	17.254	181	1976831	32.944
198) 3,3'-Dichlorobenzidine	(5)	17.757	252	1569694	32.679
200) Benzo(a)anthracene	(5)	17.773	228	4143376	31.678
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.778	231	866040	32.573
201) Chrysene	(5)	17.842	228	3941730	33.735
204) bis(2-Ethylhexyl)phthalate	(5)	17.965	149	3362501	32.948
208) 6-Methylchrysene	(5)	18.650	242	2898063	33.200
210) Di-n-octylphthalate	(6)	19.137	149	6116266	33.059
211) Benzo(b)fluoranthene	(6)	19.650	252	4371163	31.964
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.661	256	1883974	33.596
213) Benzo(k)fluoranthene	(6)	19.704	252	4118918A	32.885
216) Benzo(a)pyrene	(6)	20.180	252	4114297	32.531
218)*Perylene-d12	(6)	20.255	264	505887	5.000
220) 3-Methylcholanthrene	(6)	20.757	268	2134053	33.203
222) Dibenz(a,h)acridine	(6)	21.570	279	3537522	33.014
223) Dibenz(a,j)acridine	(6)	21.651	279	3408975	32.708
224) Indeno(1,2,3-cd)pyrene	(6)	21.918	276	4230402M	33.315
225) Dibenz(a,h)anthracene	(6)	21.955	278	4079088	31.679
226) Benzo(g,h,i)perylene	(6)	22.330	276	4143009	32.118

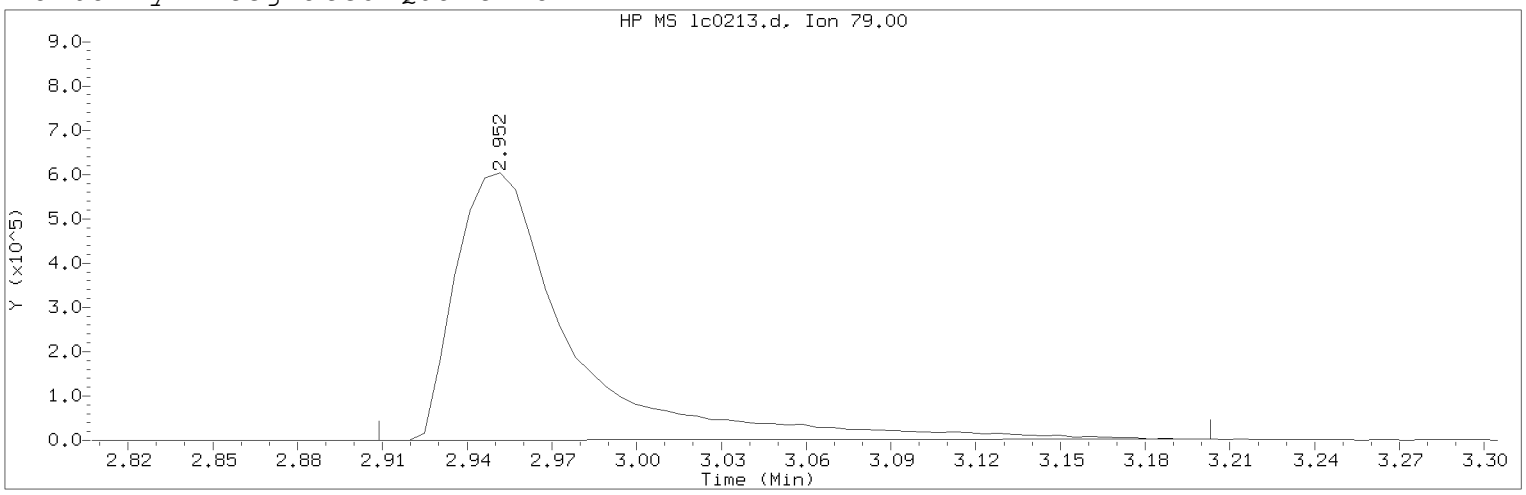
M = Compound was manually integrated.
A = User selected an alternate hit.
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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

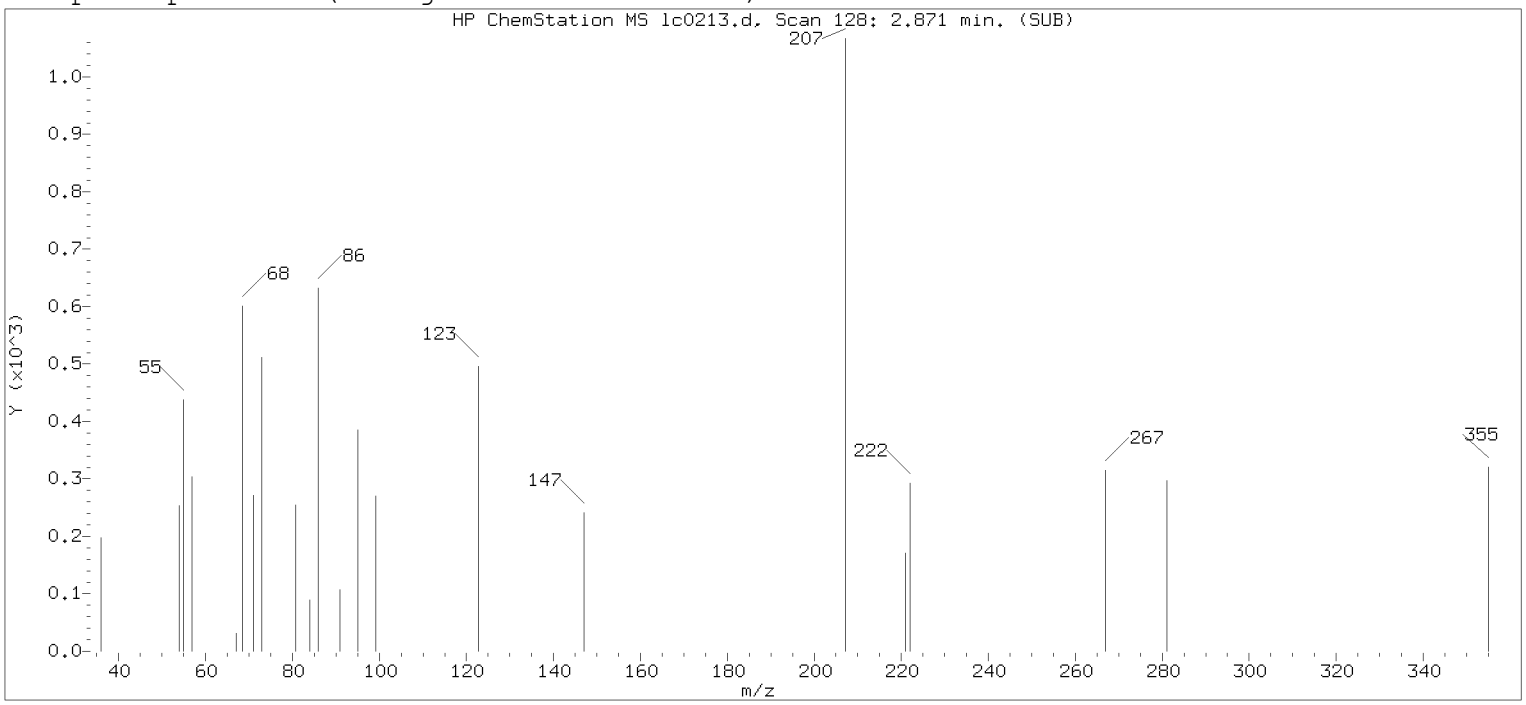
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 143		
Retention Time (minutes)	: 2.952		
Quant Ion	: 79.00		
Area (flag)	: 1727488M		
On-Column Amount (ng/ul)	: 33.0743		
Integration start scan	: 134	Integration stop scan:	189
Y at integration start	: 0	Y at integration end:	2212

Reason for manual integration: improper integration

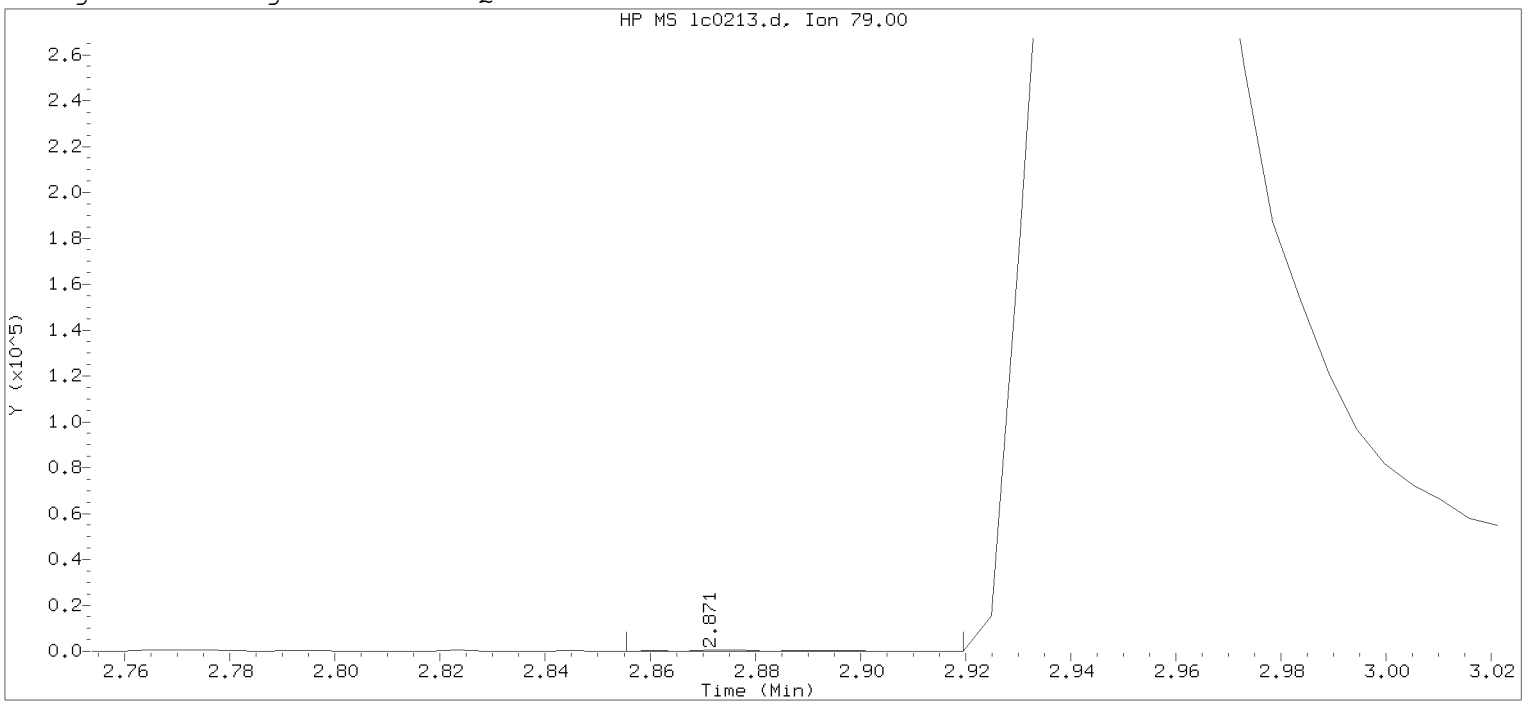
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

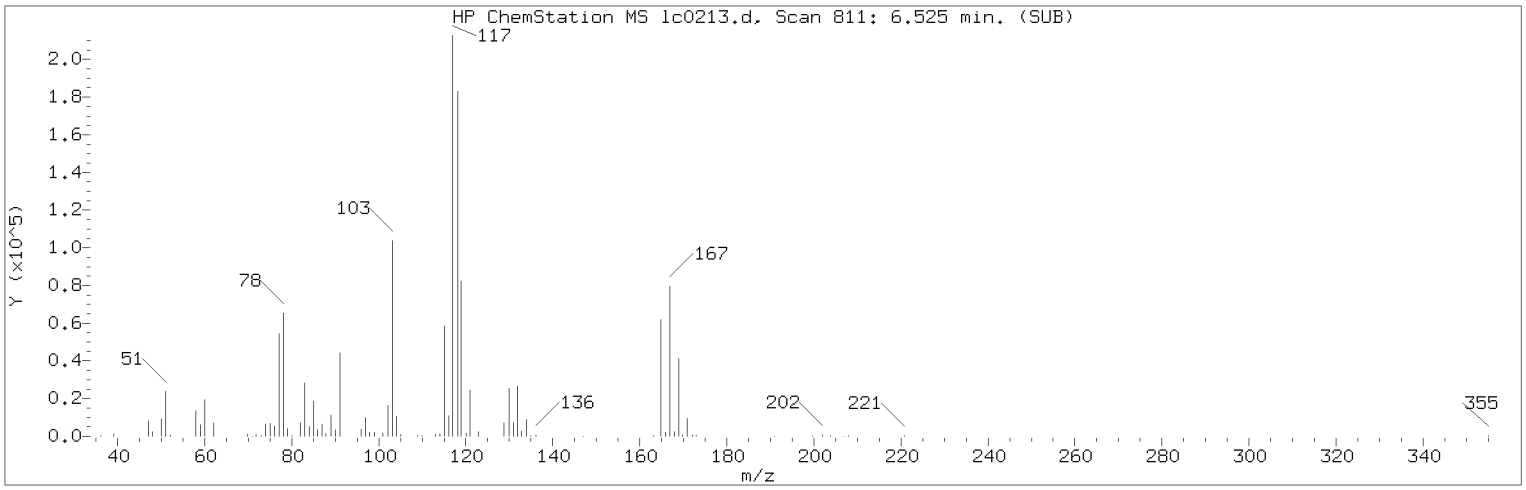
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

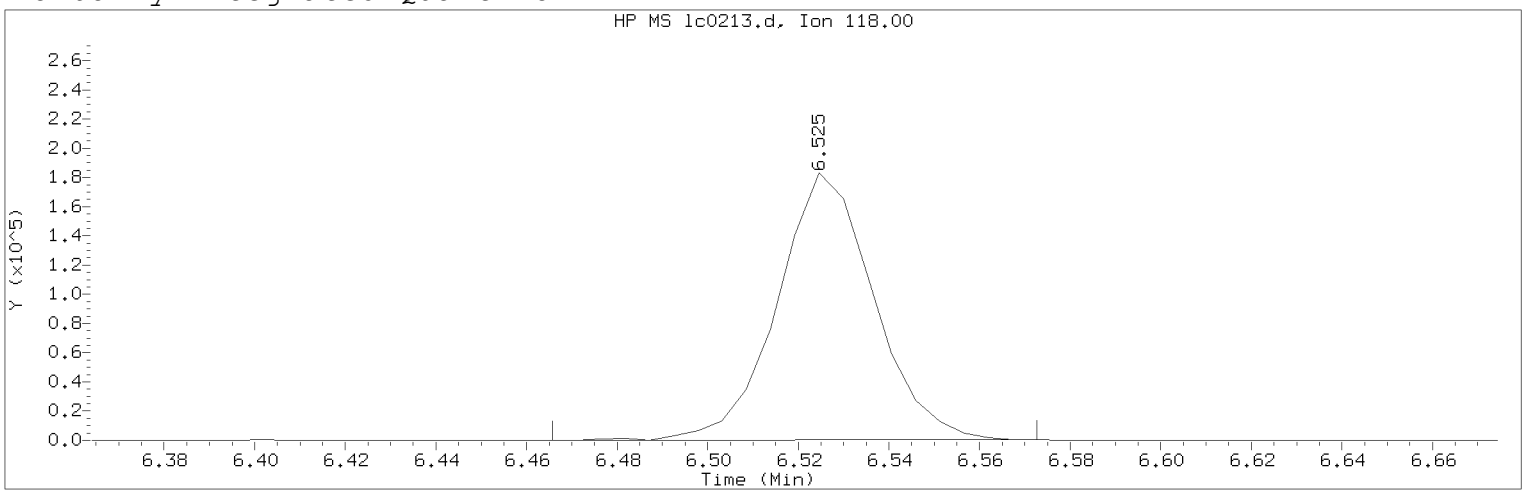
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 128		
Retention Time (minutes)	: 2.871		
Quant Ion	: 79.00		
Area	: 793		
On-column Amount (ng/ul)	: 0.0141		
Integration start scan	: 124	Integration stop scan:	136
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

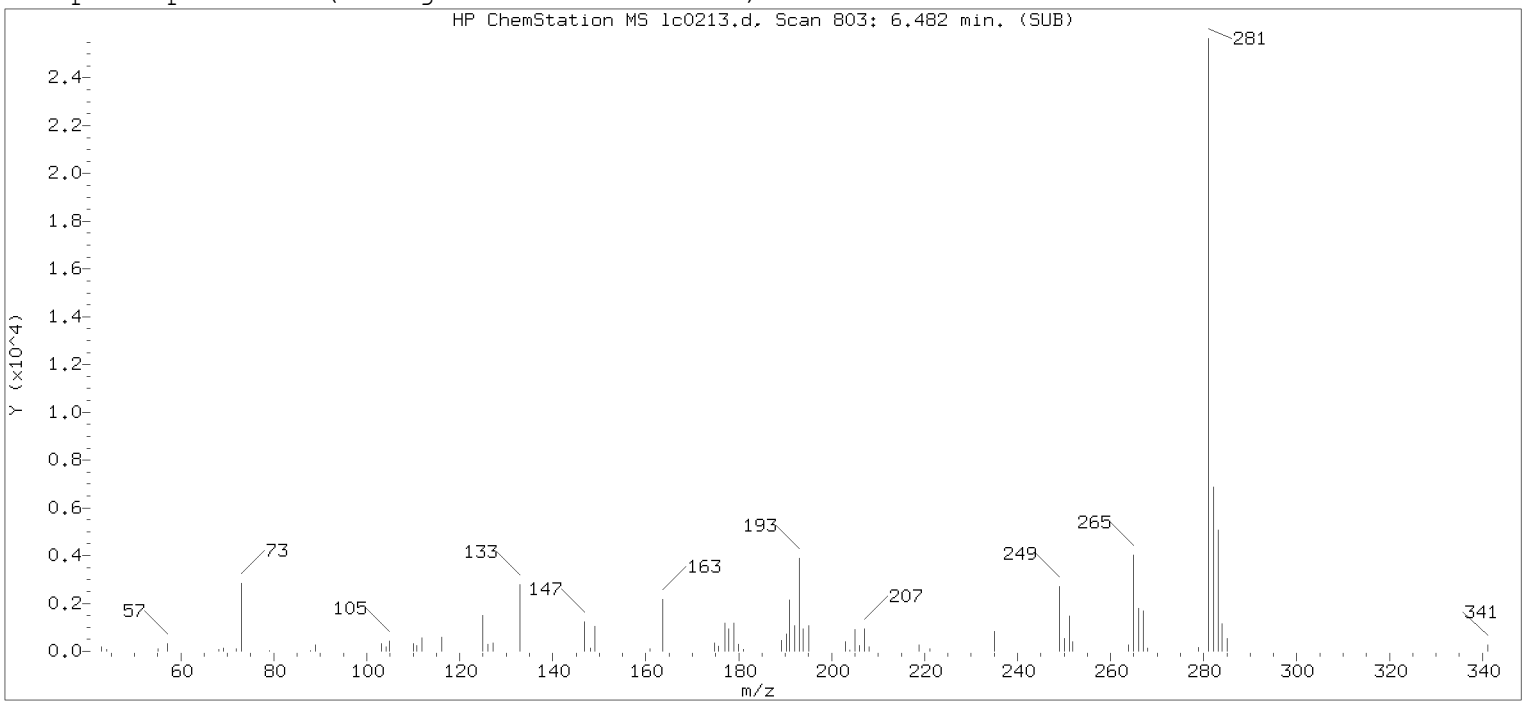
Compound Number : 21
Compound Name : a-methylstyrene
Scan Number : 811
Retention Time (minutes) : 6.525
Quant Ion : 118.00
Area (flag) : 270069M
On-Column Amount (ng/ul) : 31.6071
Integration start scan : 799 Integration stop scan: 819
Y at integration start : 0 Y at integration end: 271

Reason for manual integration: improper integration

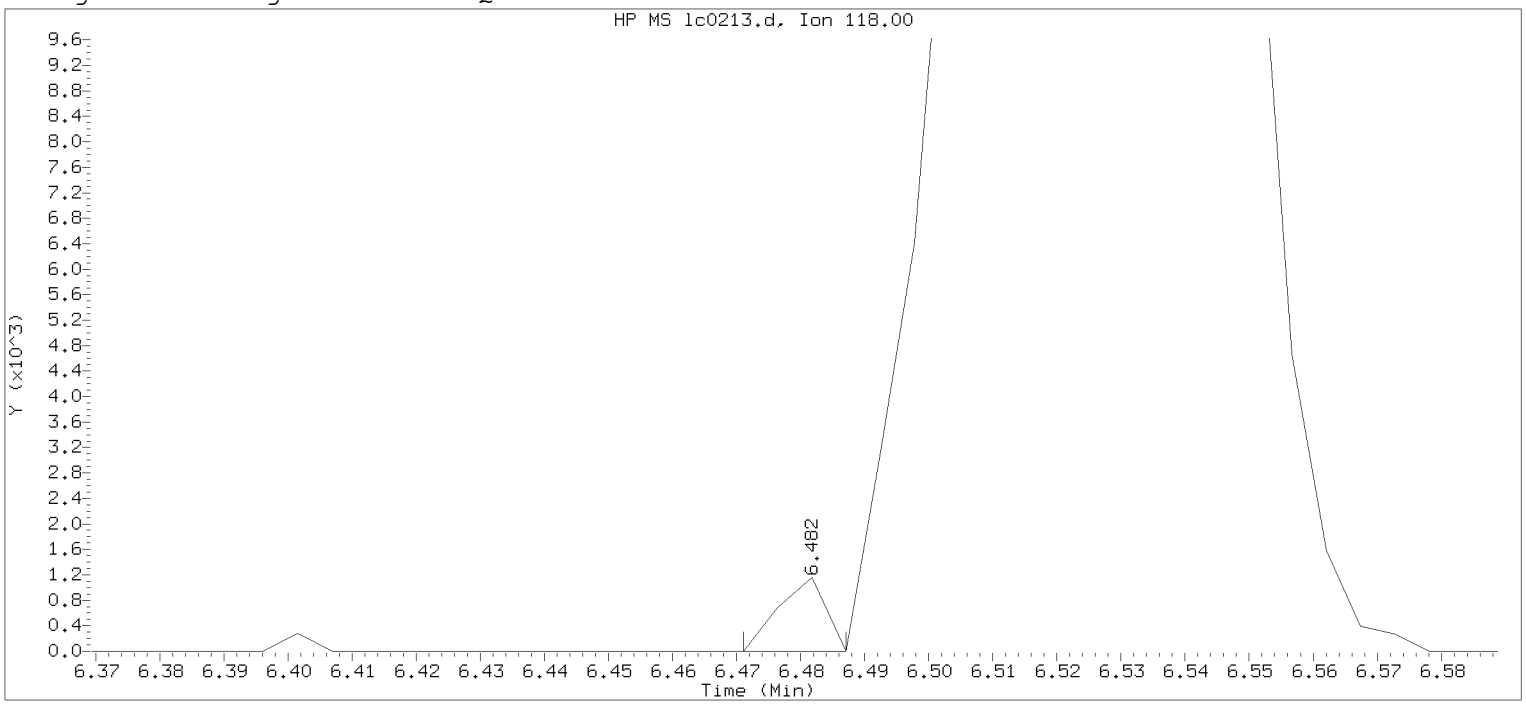
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

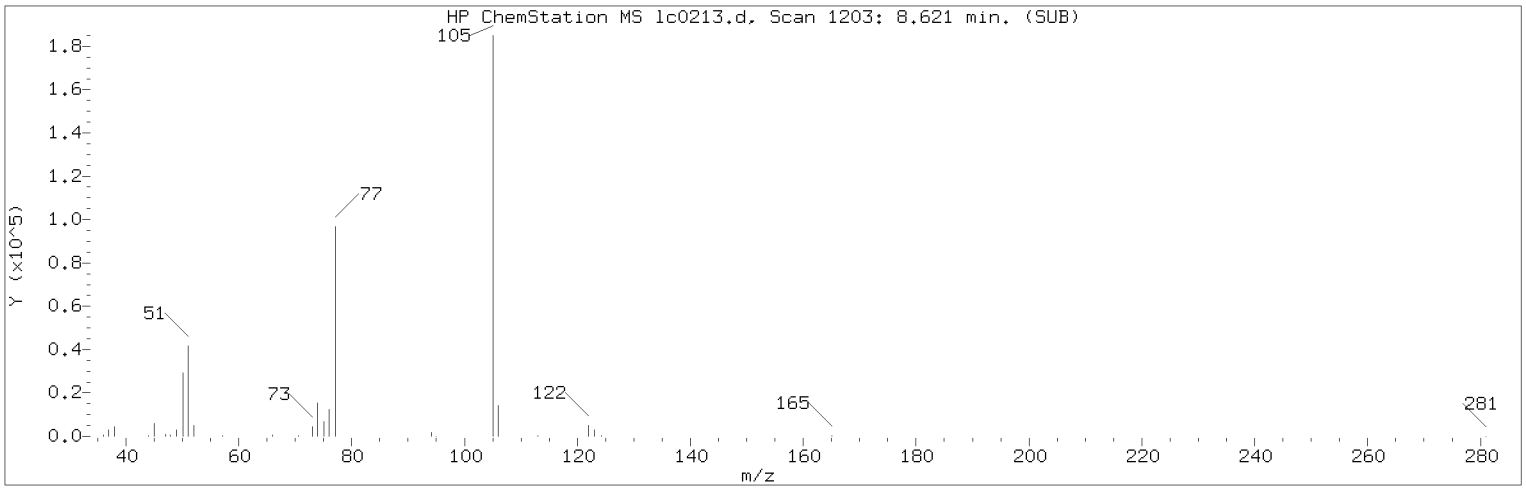
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

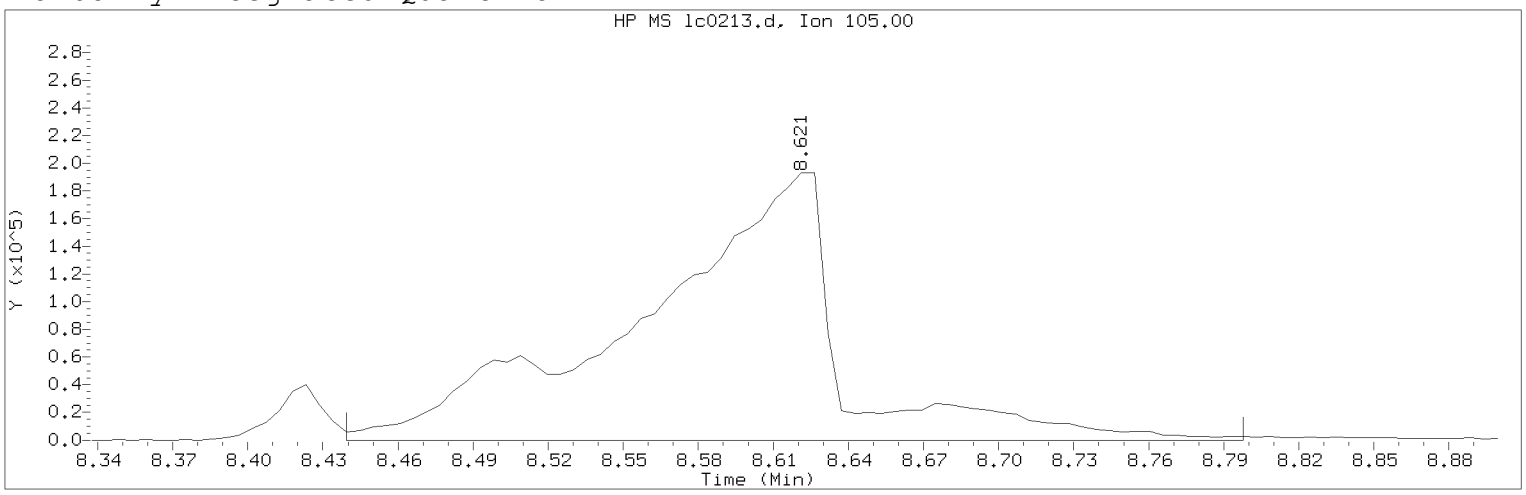
Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 803		
Retention Time (minutes)	: 6.482		
Quant Ion	: 118.00		
Area	: 590		
On-column Amount (ng/ul)	: 0.0611		
Integration start scan	: 800	Integration stop scan:	803
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019.04

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

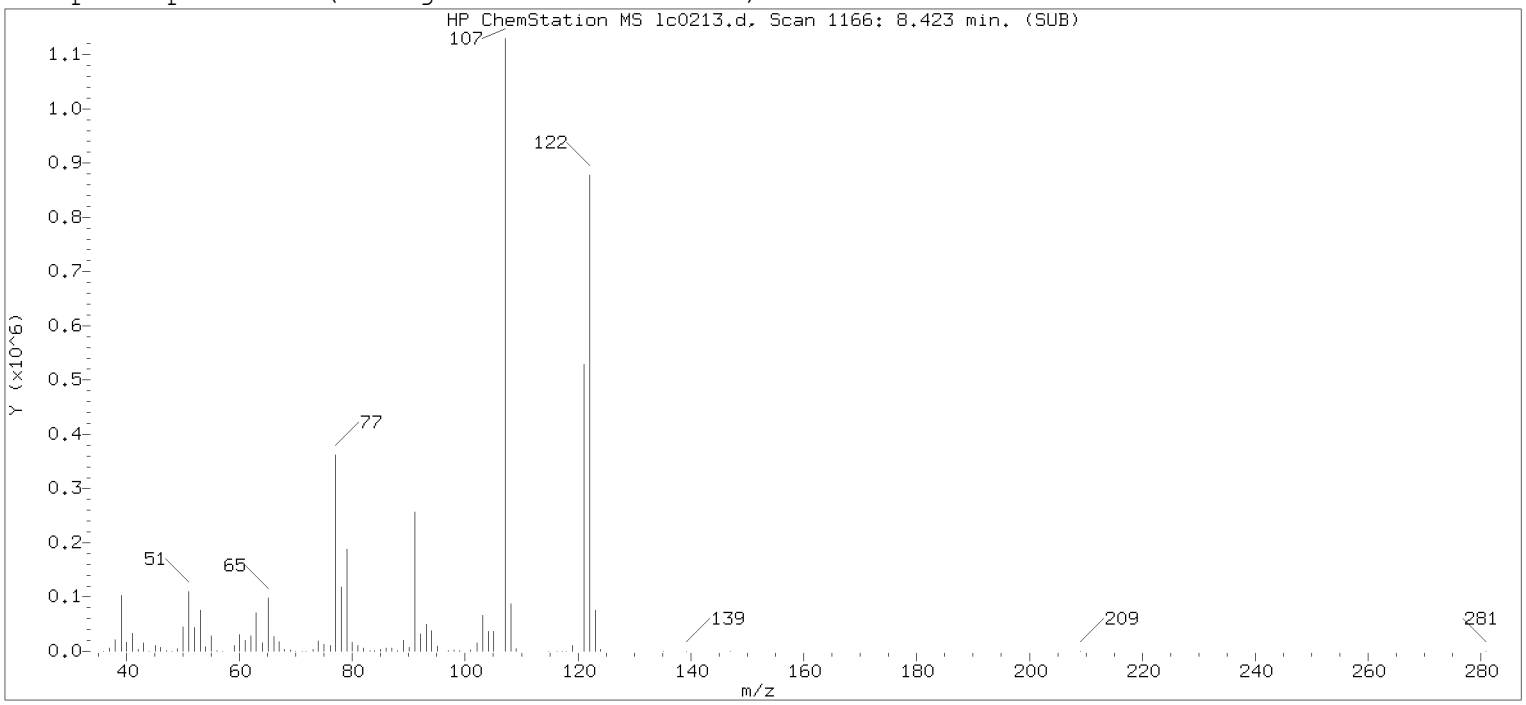
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1203
Retention Time (minutes) : 8.621
Quant Ion : 105.00
Area (flag) : 1075952M
On-Column Amount (ng/ul) : 33.7403
Integration start scan : 1168 Integration stop scan: 1235
Y at integration start : -173 Y at integration end: -173

Reason for manual integration: improper integration

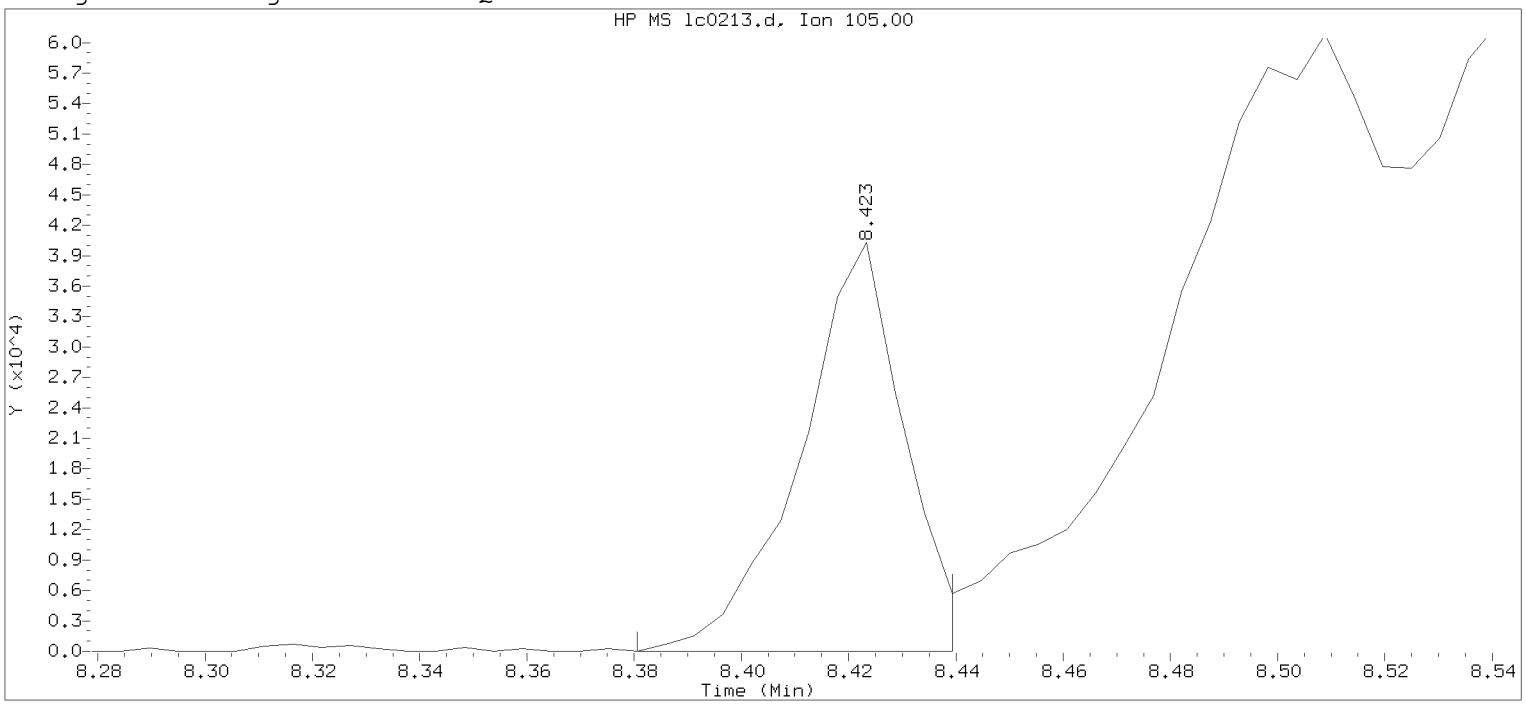
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

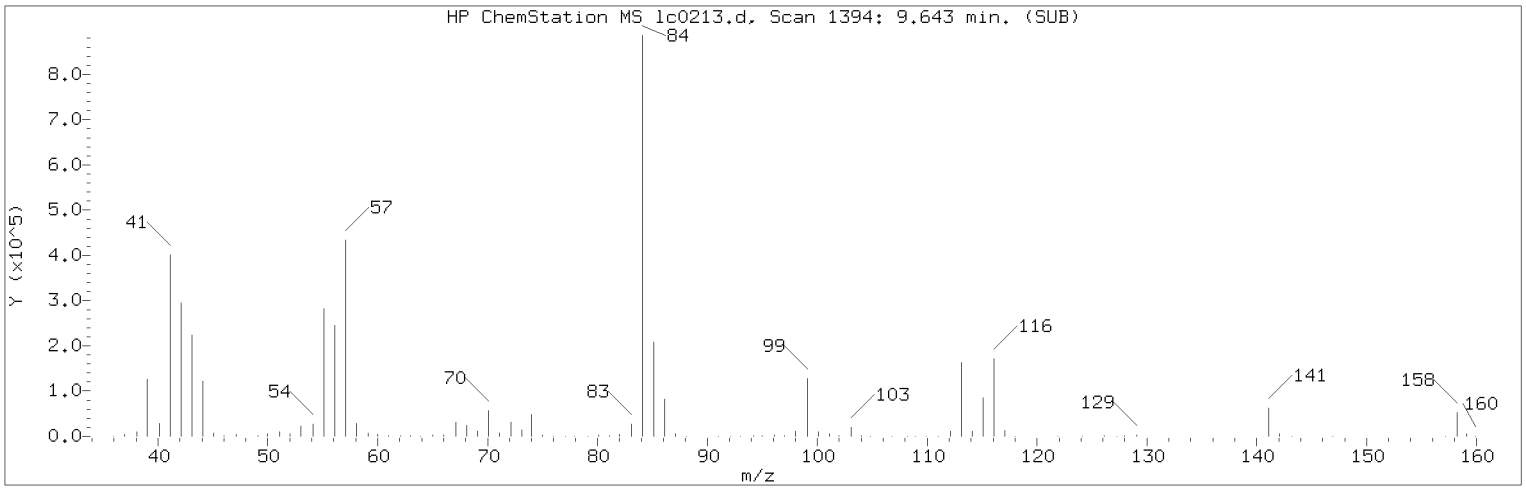
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

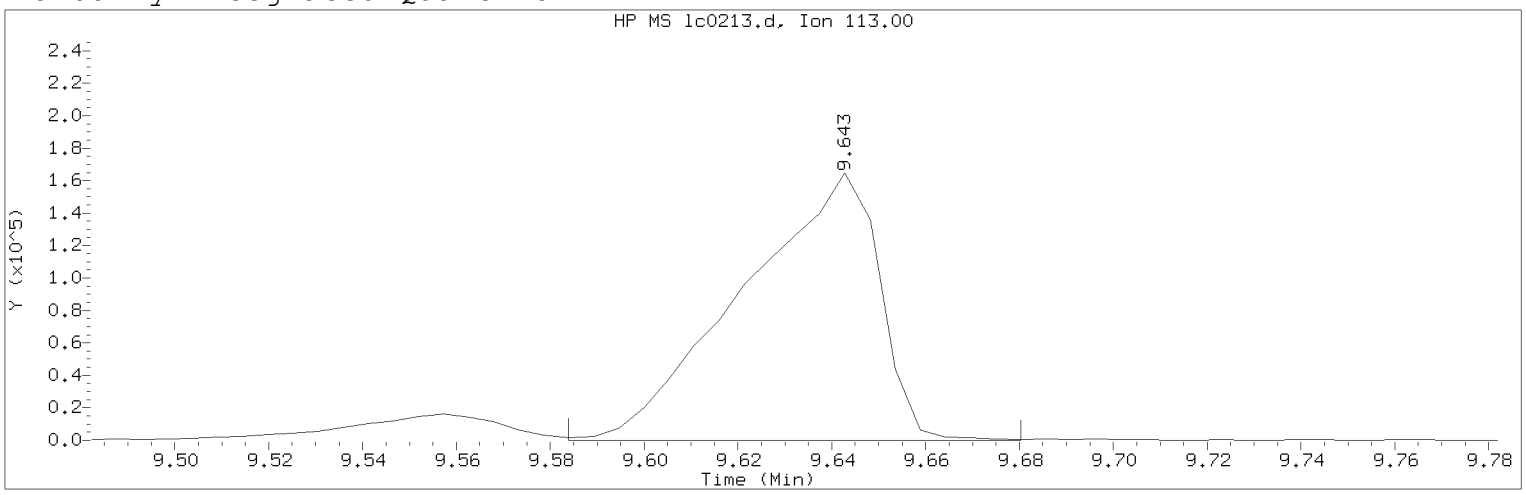
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1166		
Retention Time (minutes)	: 8.423		
Quant Ion	: 105.00		
Area	: 53404		
On-column Amount (ng/ul)	: 1.8726		
Integration start scan	: 1157	Integration stop scan:	1168
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

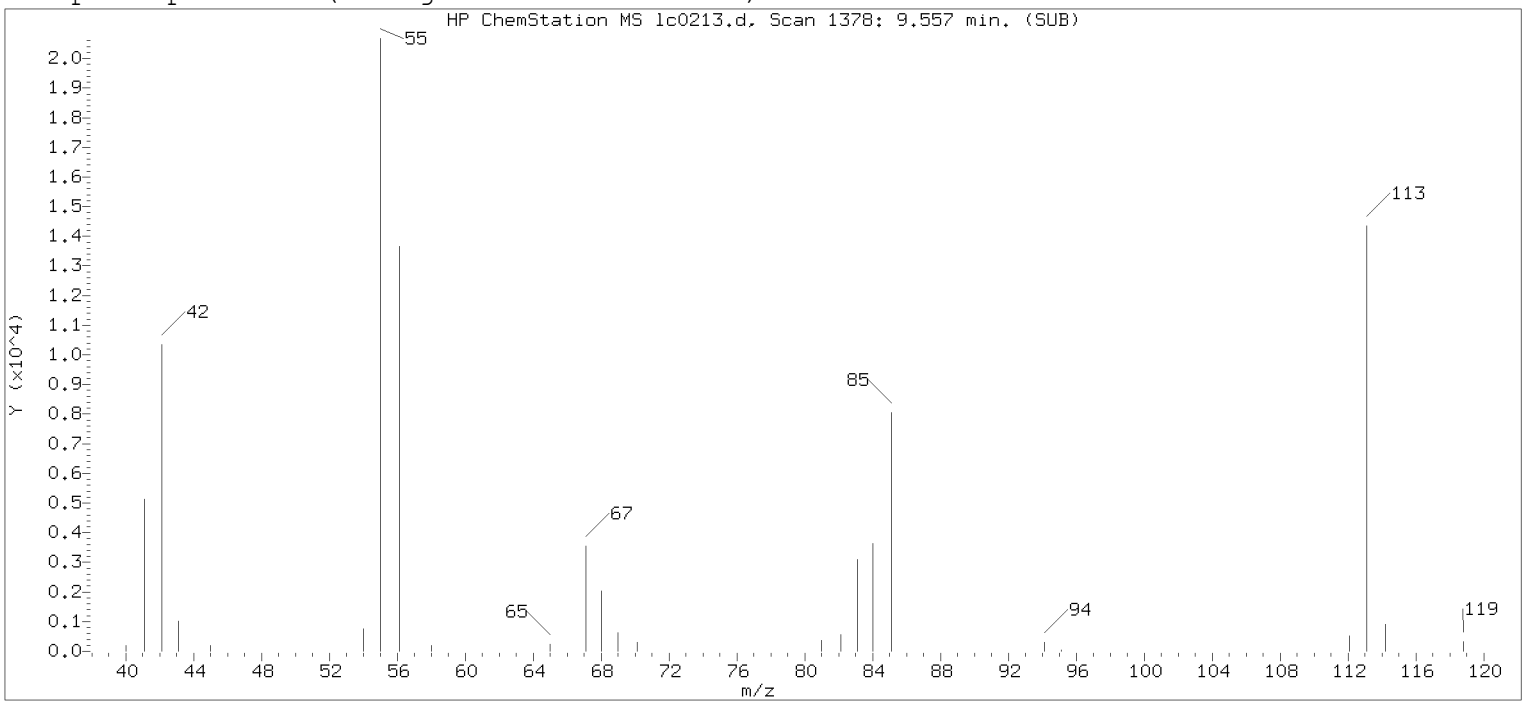
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1394
Retention Time (minutes) : 9.643
Quant Ion : 113.00
Area (flag) : 330516A
On-Column Amount (ng/ul) : 30.5935
Integration start scan : 1382 Integration stop scan: 1400
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

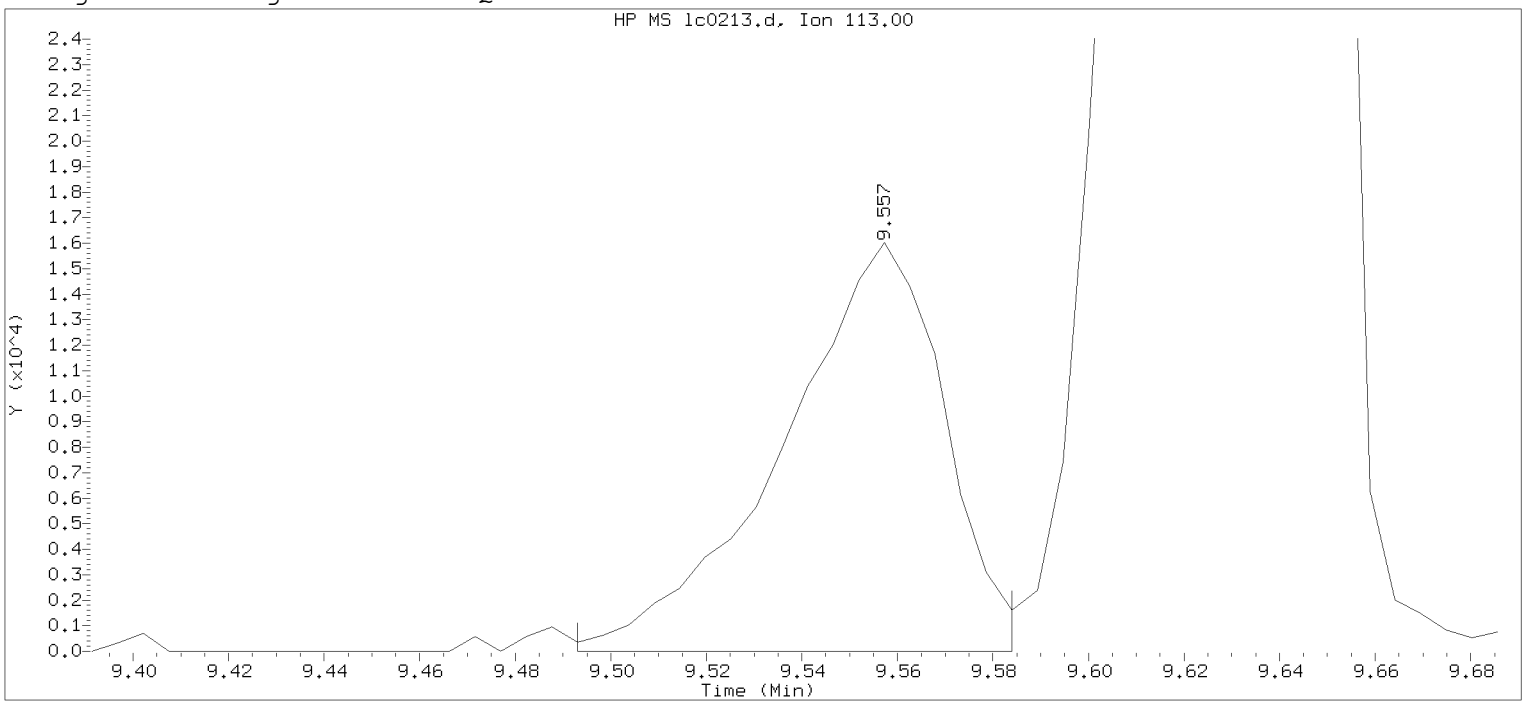
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

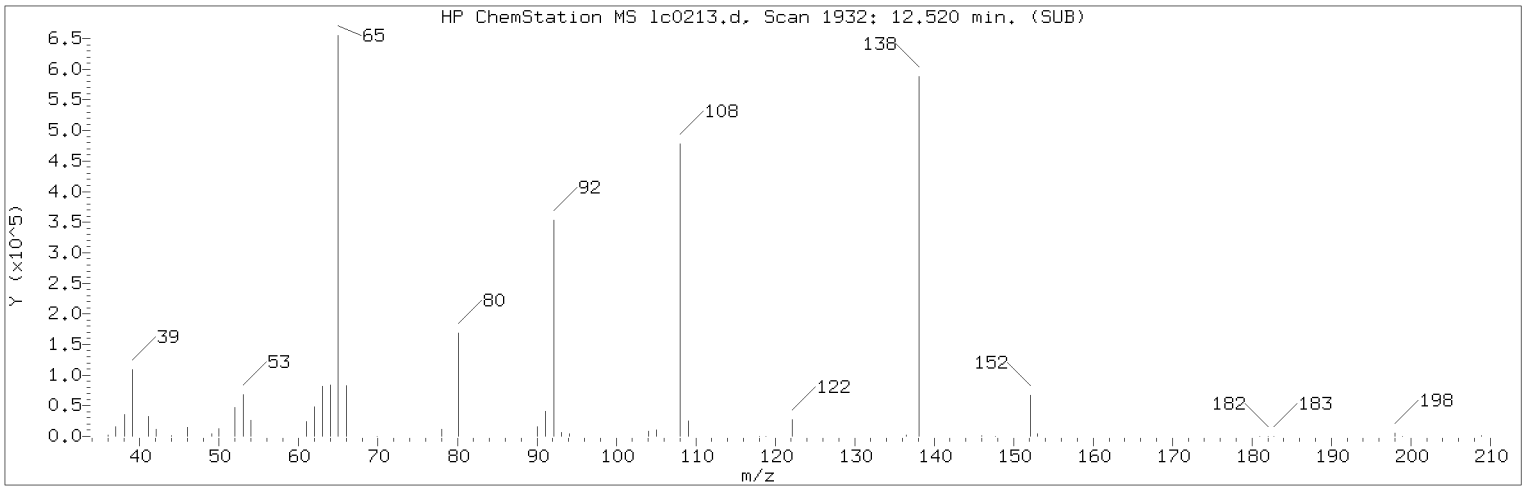
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

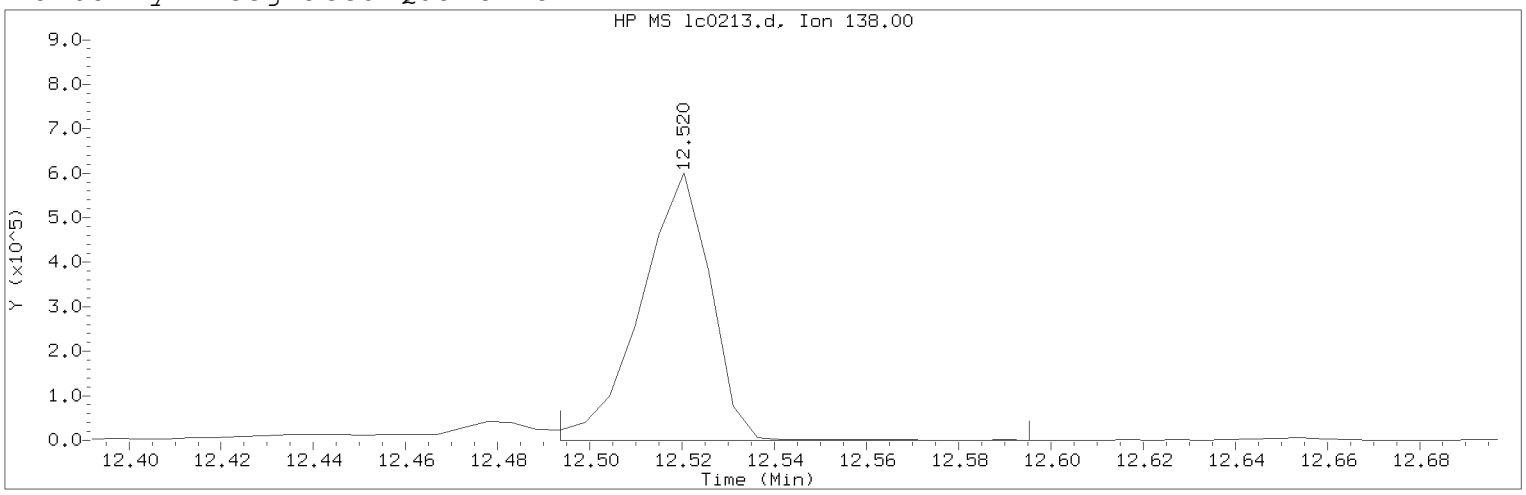
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1378		
Retention Time (minutes)	: 9.557		
Quant Ion	: 113.00		
Area	: 37492		
On-column Amount (ng/ul)	: 3.5261		
Integration start scan	: 1365	Integration stop scan:	1382
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019.03.05 17:11:24 -05'00'

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

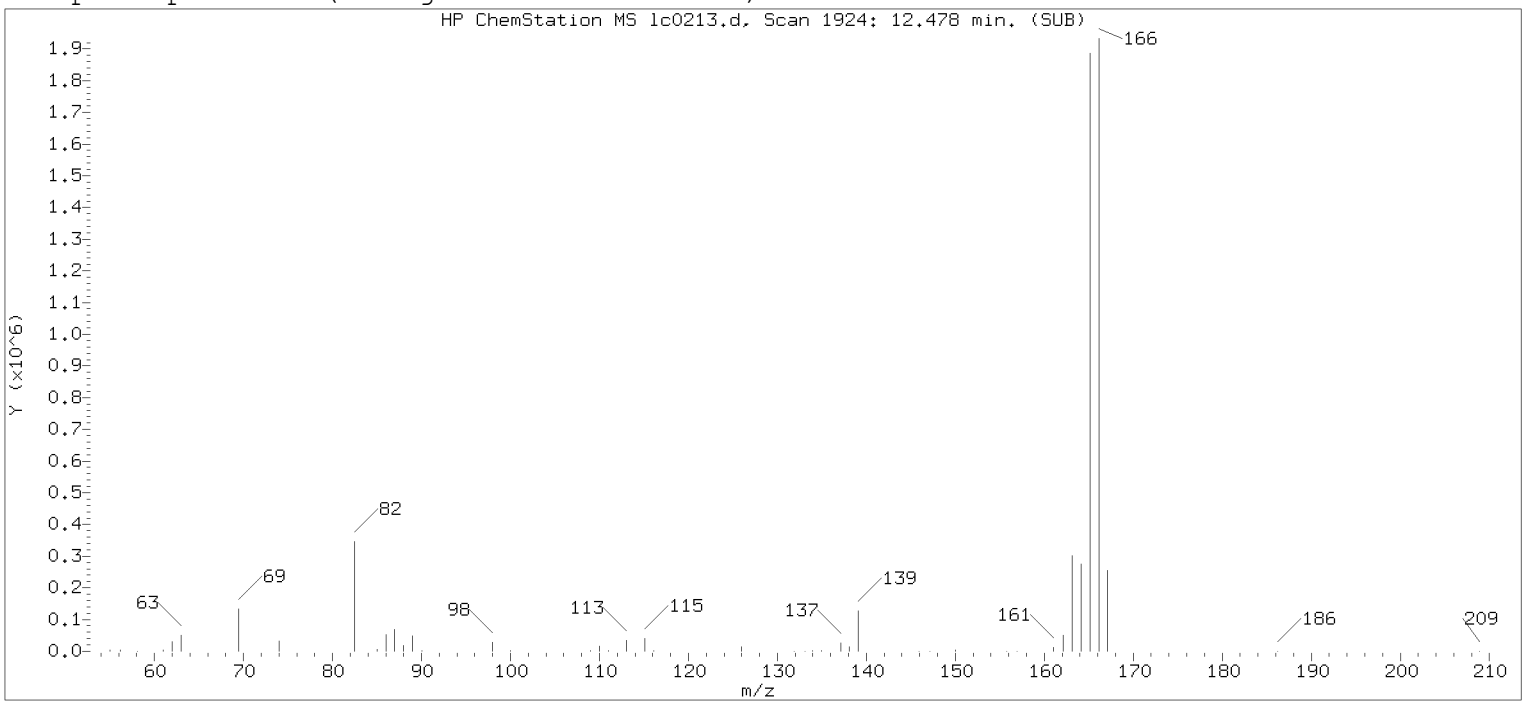
Compound Number : 134
Compound Name : 4-Nitroaniline
Scan Number : 1932
Retention Time (minutes) : 12.520
Quant Ion : 138.00
Area (flag) : 623467A
On-Column Amount (ng/ul) : 32.0829
Integration start scan : 1926 Integration stop scan: 1945
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

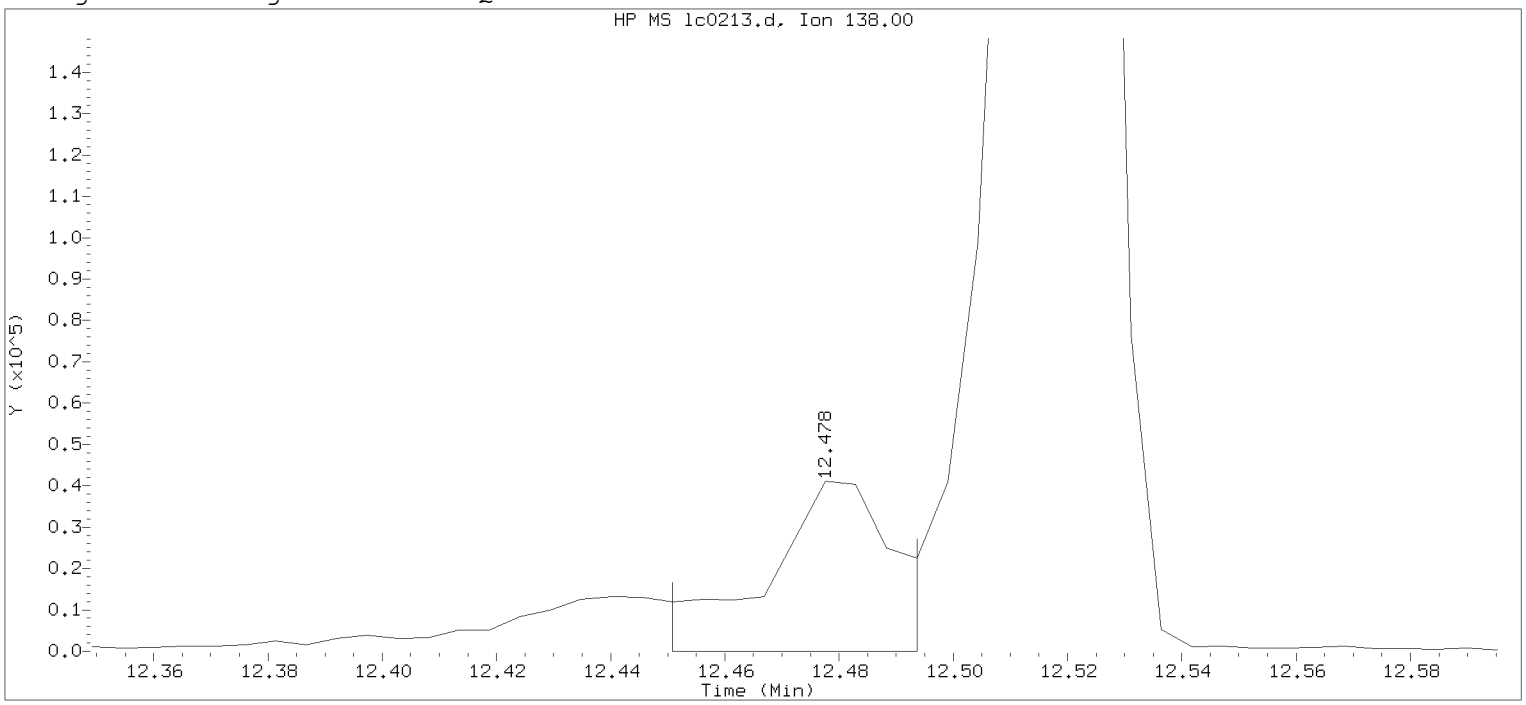
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

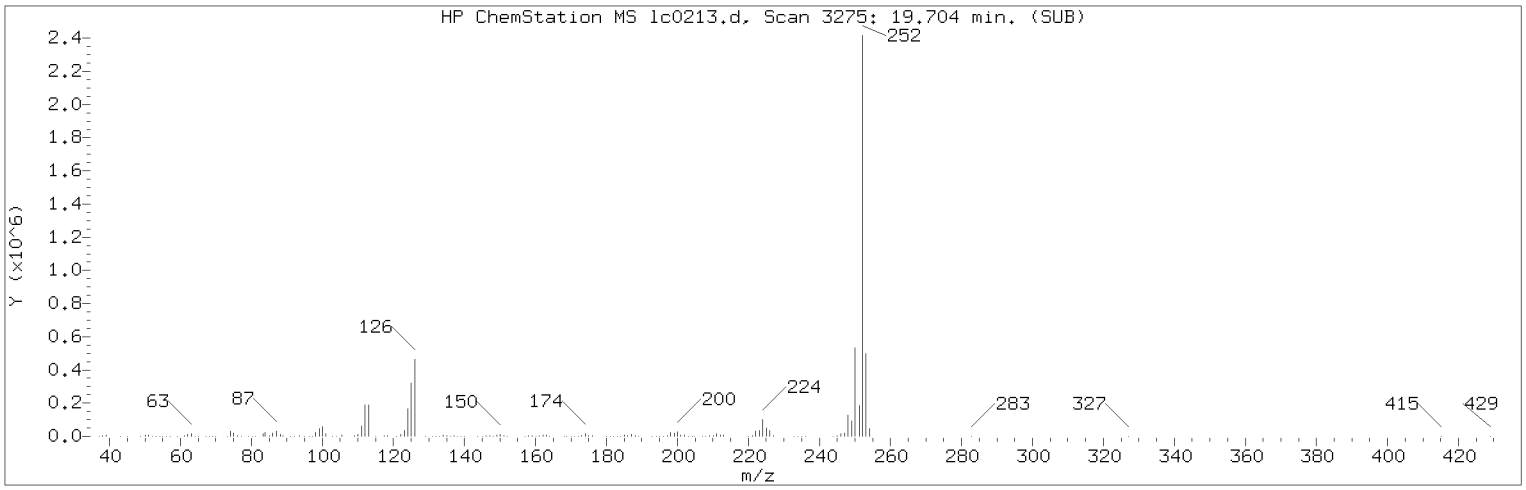
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

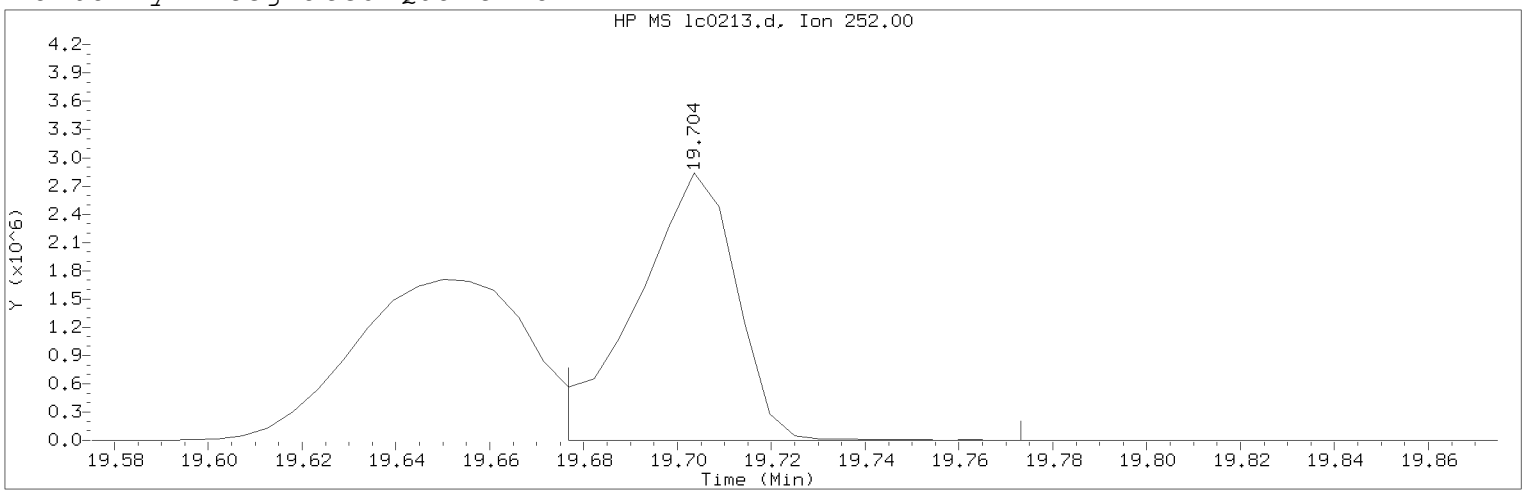
Compound Number	: 134		
Compound Name	: 4-Nitroaniline		
Scan Number	: 1924		
Retention Time (minutes)	: 12.478		
Quant Ion	: 138.00		
Area	: 60656		
On-column Amount (ng/ul)	: 3.0368		
Integration start scan	: 1918	Integration stop scan:	1926
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

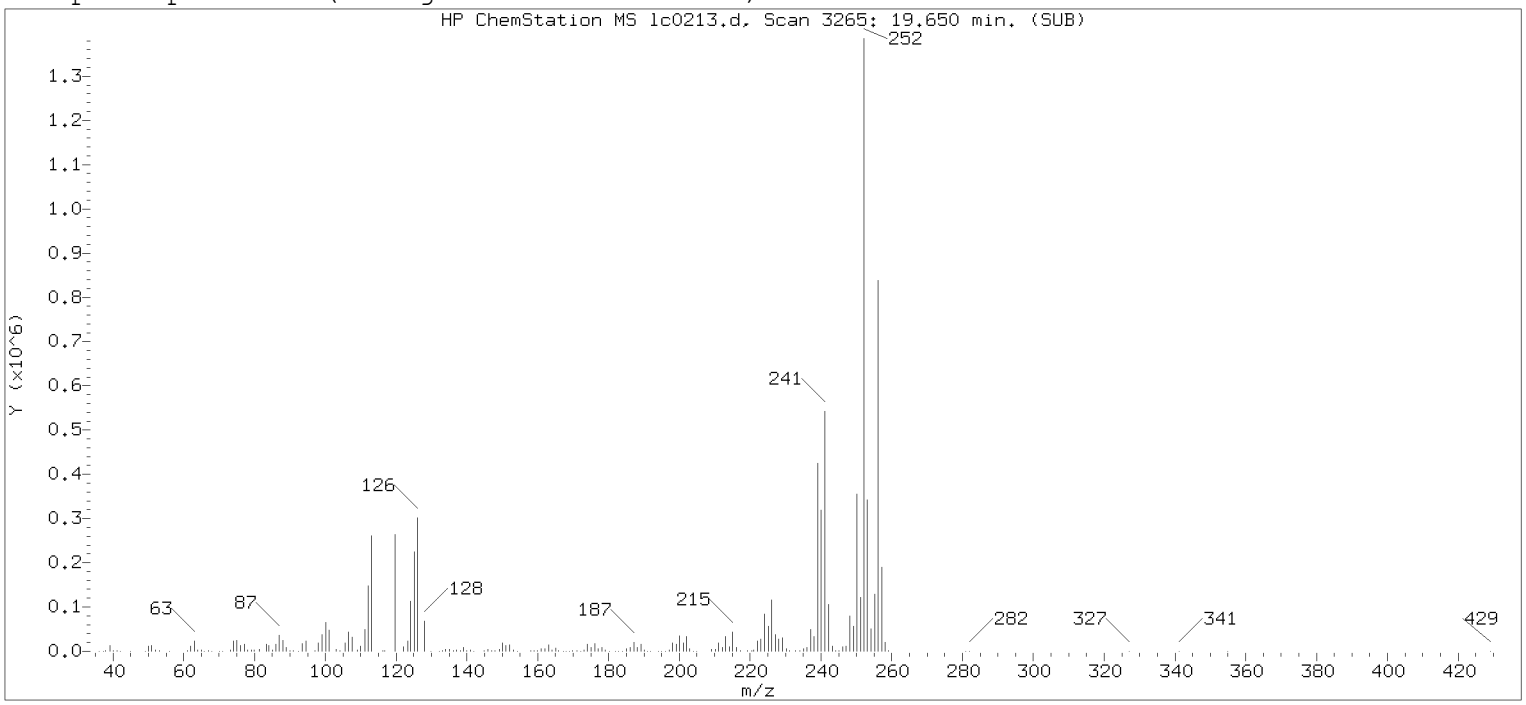
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3275
Retention Time (minutes) : 19.704
Quant Ion : 252.00
Area (flag) : 4118918A
On-Column Amount (ng/ul) : 32.8854
Integration start scan : 3269 Integration stop scan: 3287
Y at integration start : 533 Y at integration end: 533

Reason for manual integration: improper integration

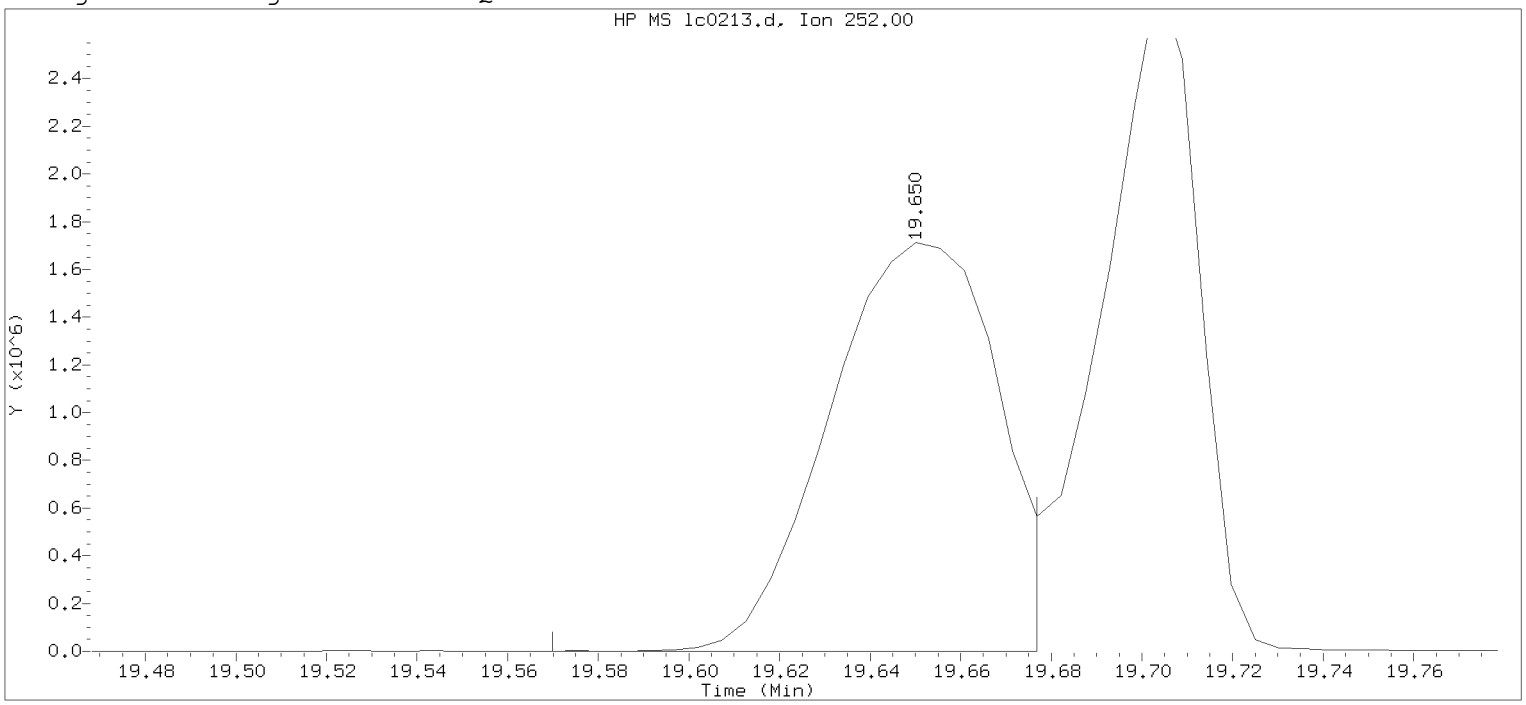
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

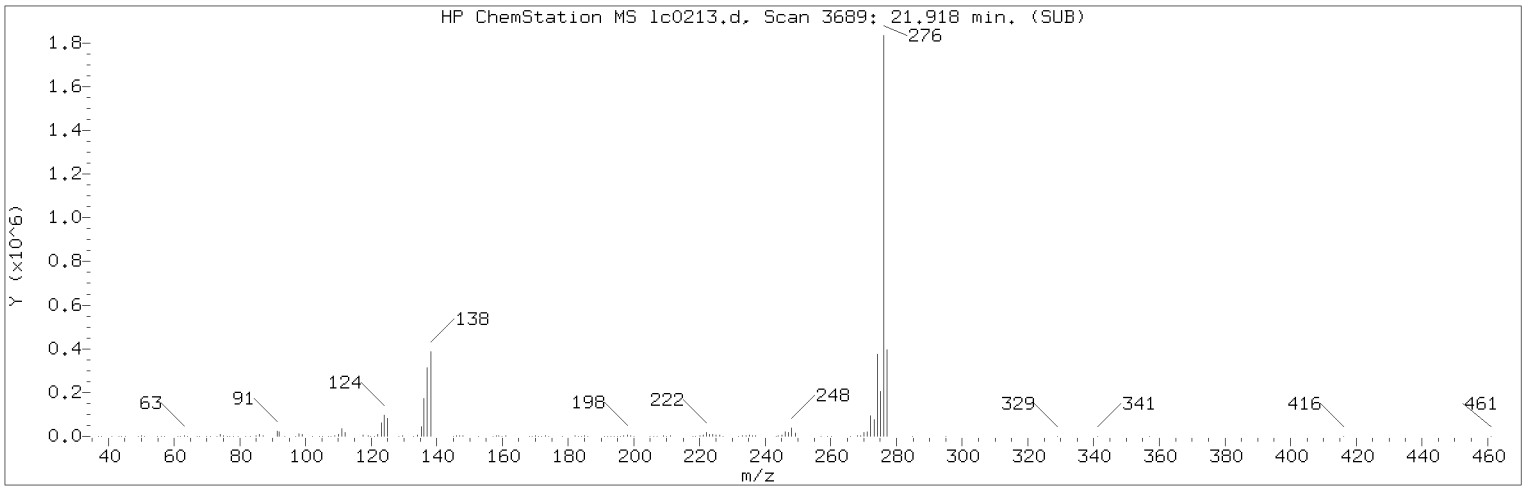
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

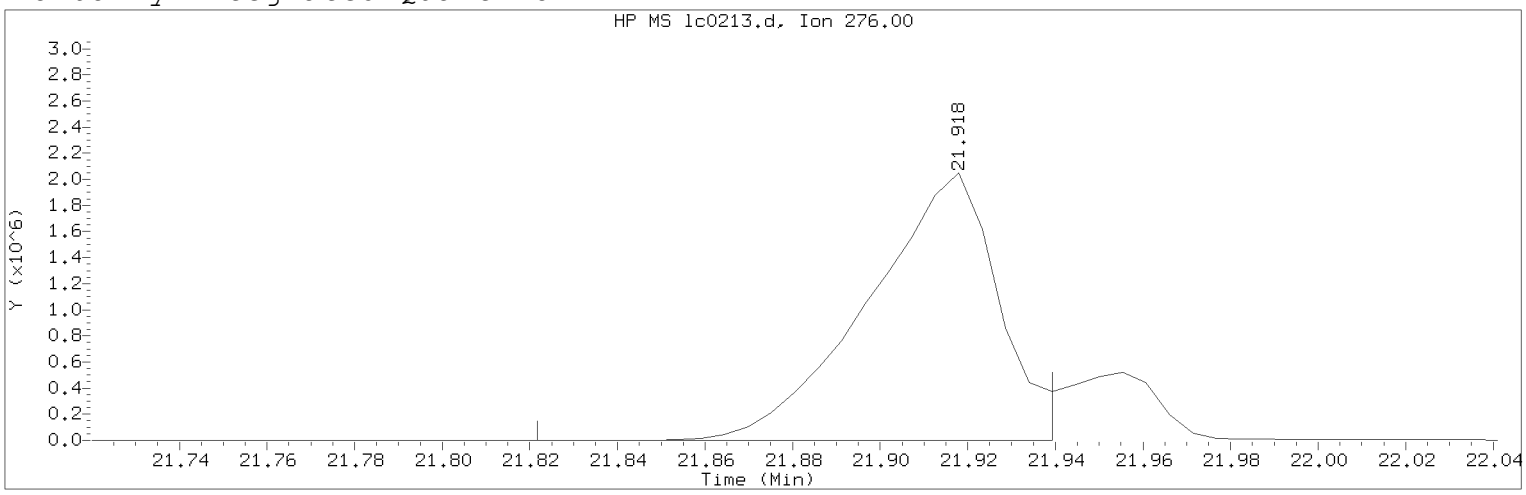
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3265		
Retention Time (minutes)	: 19.650		
Quant Ion	: 252.00		
Area	: 4371163		
On-column Amount (ng/ul)	: 34.8493		
Integration start scan	: 3249	Integration stop scan:	3269
Y at integration start	: 533	Y at integration end:	533

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

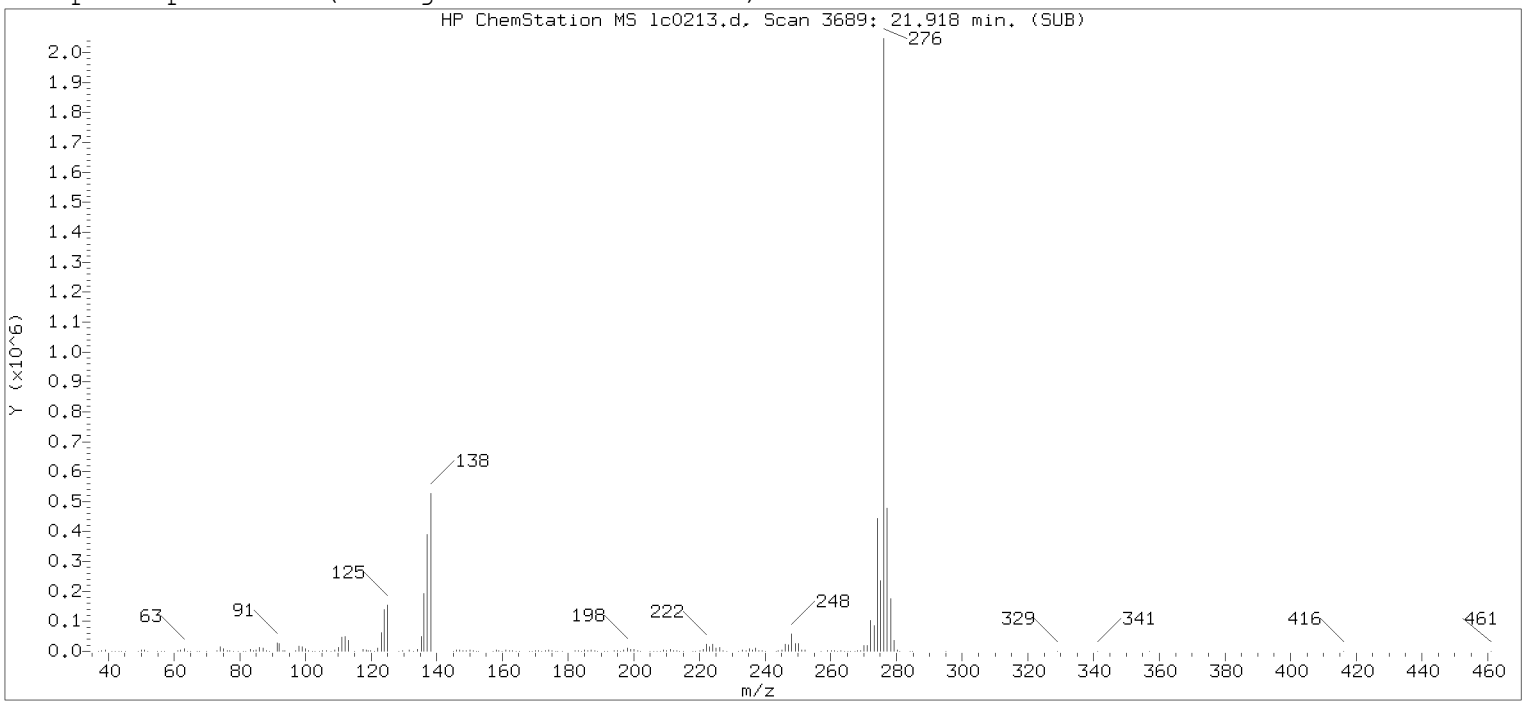
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3689
Retention Time (minutes) : 21.918
Quant Ion : 276.00
Area (flag) : 4230402M
On-Column Amount (ng/ul) : 33.3153
Integration start scan : 3670 Integration stop scan: 3692
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

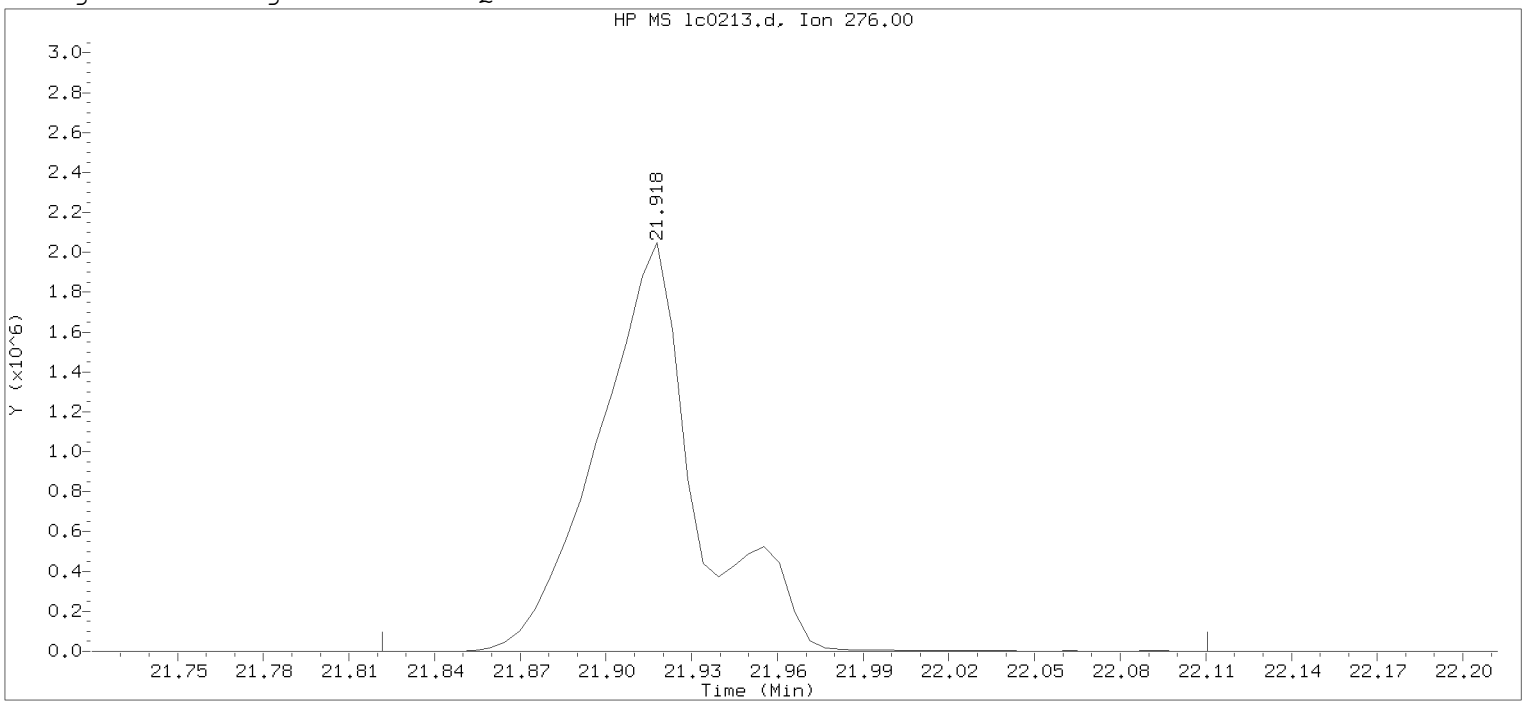
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



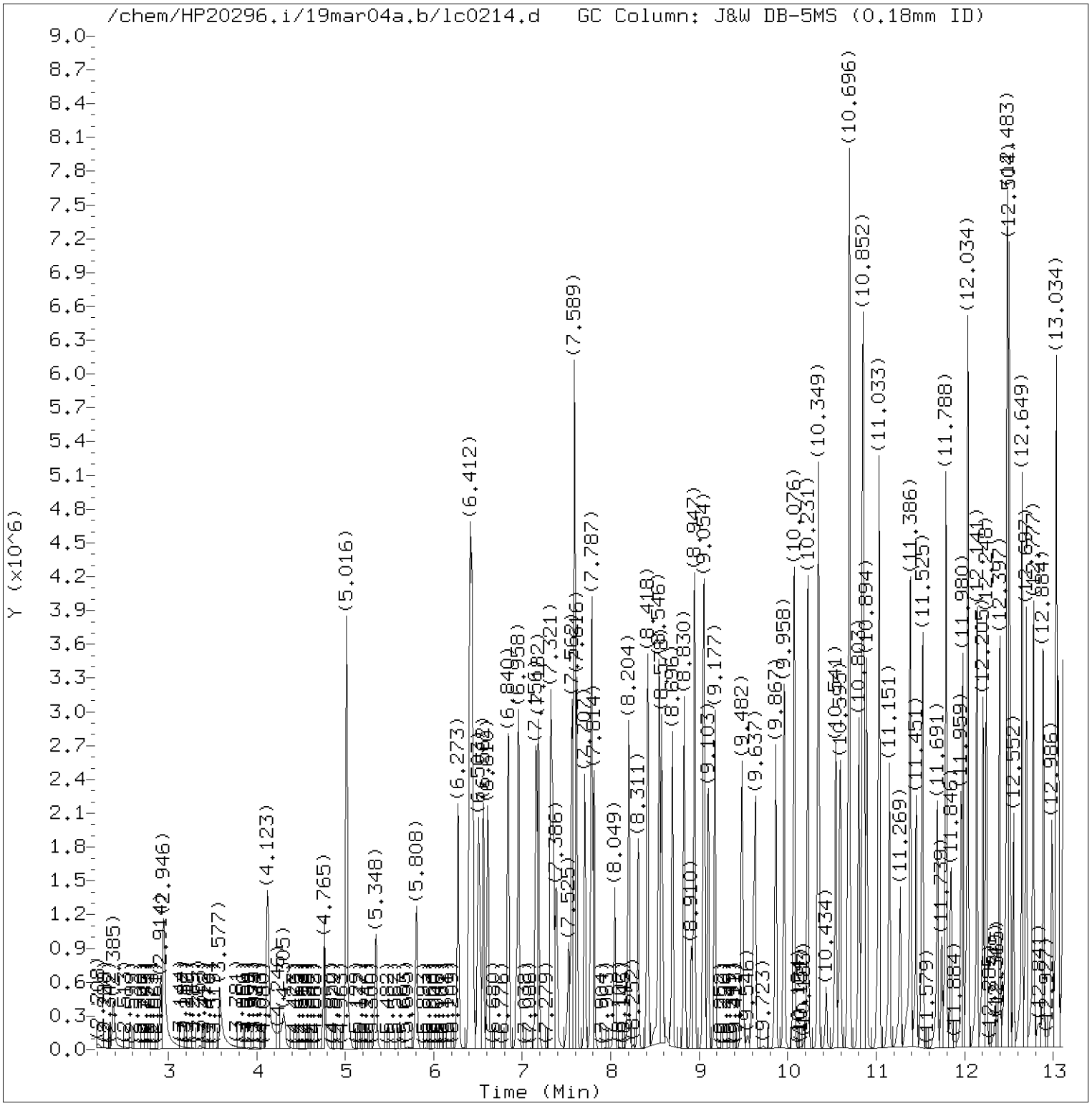
Data File: /chem/HP20296.i/19mar04a.b/lc0213.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:08 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD30 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3689		
Retention Time (minutes)	: 21.918		
Quant Ion	: 276.00		
Area	: 4941023		
On-column Amount (ng/ul)	: 42.4364		
Integration start scan	: 3670	Integration stop scan:	3724
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019.04



Total Ion Chromatogram (TIC)

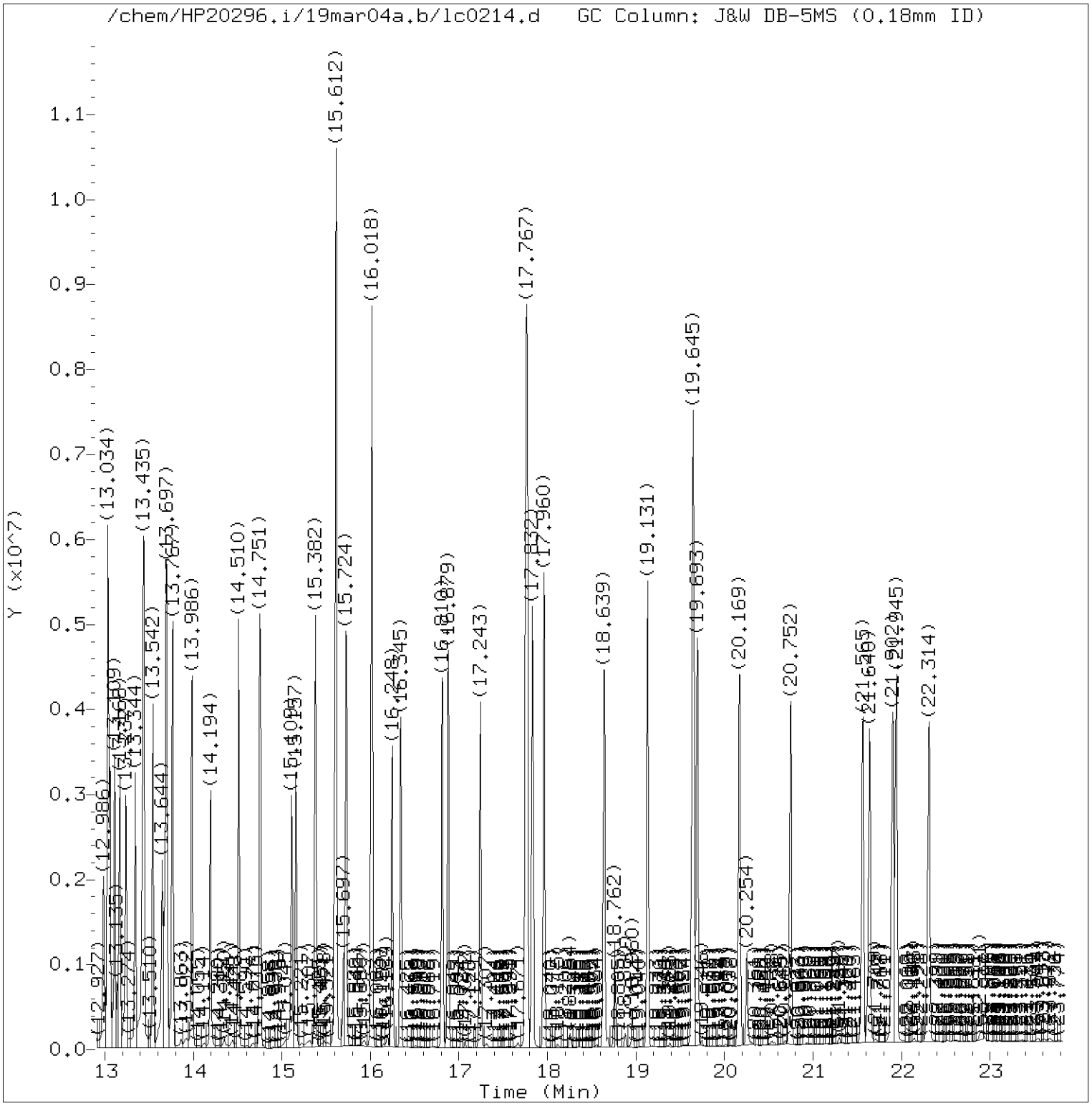
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.379	88	419767	20.641
5) N-Nitrosodimethylamine	(1)	2.914	74	636664	20.125
6) Pyridine	(1)	2.946	79	1107462	20.513
8) 2-Picoline	(1)	4.123	93	1167859	20.353
9) N-Nitrosomethylethylamine	(1)	4.305	88	476362	20.310
10) Methyl methanesulfonate	(1)	4.765	80	584710	20.383
12)$2-Fluorophenol	(1)	5.016	112	1806212	40.273
14) N-Nitrosodiethylamine	(1)	5.348	102	461566	20.155
43) Total Cresols	(1)			1896387	41.067
16) Ethyl methanesulfonate	(1)	5.808	109	485660	20.296
17) Benzaldehyde	(1)	6.273	77	790416	20.824
18)$Phenol-d6	(1)	6.412	99	2444107	40.634
19) Phenol	(1)	6.428	94	1384876	20.428
20) Aniline	(1)	6.439	93	1623838	20.418
21) a-methylstyrene	(1)	6.525	118	187354	20.968
23) bis(2-Chloroethyl)ether	(1)	6.562	93	1041197	20.427
24) 2-Chlorophenol	(1)	6.610	128	900833	20.440
25) 1,3-Dichlorobenzene	(1)	6.845	146	952661	20.391
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	141374	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	955764	20.562
28) Benzyl alcohol	(1)	7.156	108	602242	20.604
29) 1,2-Dichlorobenzene	(1)	7.182	146	909458	20.367
31) Indene	(1)	7.321	115	1257539	20.836
32) 2-Methylphenol	(1)	7.343	108	900182	20.587
100) Isosafrole	(3)			757613	20.727
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.386	45	1005690	20.269
35) bis(2-Chloroisopropyl)ether	(1)	7.386	45	1005690	20.269
36) N-Nitrosopyrrolidine	(1)	7.525	100	502339	20.608
37) Acetophenone	(1)	7.562	105	1360108	20.522
39) N-Nitroso-di-n-propylamine	(1)	7.589	70	744171	20.378
38) 4-Methylphenol	(1)	7.589	108	996205	20.480
40) N-Nitrosomorpholine	(1)	7.594	56	497025	20.428
41) o-Toluidine	(1)	7.616	106	1558824	20.553
44) Hexachloroethane	(1)	7.707	117	420061	20.237
45)$Nitrobenzene-d5	(2)	7.787	82	2217287	40.328
46) Nitrobenzene	(2)	7.814	77	1119022	20.064
50) N-Nitrosopiperidine	(2)	8.049	114	450187	20.057
125) 2,4_2,6-Dinitrotoluenes	(3)			871254	40.728
52) Isophorone	(2)	8.204	82	1963298	20.095
53) 2-Nitrophenol	(2)	8.311	139	444239	19.990

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.418	107	991209	20.275
59) O,O,O-Triethylphosphorothioate	(2)	8.546	198	390208	20.459
57) bis(2-Chloroethoxy)methane	(2)	8.578	93	1215978	19.950
58) Benzoic acid	(2)	8.589	105	696216M	20.638
62) 2,4-Dichlorophenol	(2)	8.696	162	715463	20.266
151) Diallate trans/cis	(4)			766847	19.775
65) 1,2,4-Trichlorobenzene	(2)	8.830	180	757185	20.219
68)*Naphthalene-d8	(2)	8.910	136	541367	5.000
69) Naphthalene	(2)	8.947	128	2524852	19.933
70) 4-Chloroaniline	(2)	9.049	127	1019093	20.140
71) 2,6-Dichlorophenol	(2)	9.060	162	682657	20.191
72) Hexachloropropene	(2)	9.103	213	532946	20.608
74) Hexachlorobutadiene	(2)	9.177	225	436211	20.369
78) Quinoline	(2)	9.482	129	1499440	20.371
79) Caprolactam	(2)	9.616	113	209263A	19.050
80) N-Nitrosodi-n-butylamine	(2)	9.637	84	894017	21.549
83) 4-Chloro-3-methylphenol	(2)	9.867	107	850104	20.127
85) Safrole	(2)	9.964	162	622510	20.395
86) 2-Methylnaphthalene	(2)	10.076	142	1615334	19.776
87) 1-Methylnaphthalene	(2)	10.231	142	1533075	19.851
88) Hexachlorocyclopentadiene	(3)	10.349	237	501530	20.764
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.349	216	744712	20.538
91) cis-Isosafrole	(3)	10.434	162	117409	3.523
93) 2,4,6-Trichlorophenol	(3)	10.541	196	504454	20.328
95) 2,4,5-Trichlorophenol	(3)	10.595	196	521485	20.748
96)$2-Fluorobiphenyl	(3)	10.696	172	3509616	41.360
97) trans-Isosafrole	(3)	10.803	162	640204	17.204
98) 1,1'-Biphenyl	(3)	10.846	154	1854220	20.521
99) 2-Chloronaphthalene	(3)	10.862	162	1684366	20.794
101) 1-Chloronaphthalene	(3)	10.894	162	1226781	20.225
103) Diphenyl ether	(3)	11.033	170	987983	20.475
104) 2-Nitroaniline	(3)	11.039	138	489316	20.422
108) 1,4-Naphthoquinone	(3)	11.151	158	610811	20.282
109) 1,4-Dinitrobenzene	(3)	11.274	168	251221	20.613
110) Dimethylphthalate	(3)	11.381	163	1489809	19.679
111) 1,3-Dinitrobenzene	(3)	11.386	168	270188	20.839
113) 2,6-Dinitrotoluene	(3)	11.451	165	378860	20.344
114) Acenaphthylene	(3)	11.525	152	2179750	20.250
117) 3-Nitroaniline	(3)	11.691	138	417546	20.172
118)*Acenaphthene-d10	(3)	11.739	164	252128	5.000

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.788	153	1605067	21.018
120) 2,4-Dinitrophenol	(3)	11.846	184	256022	21.129
121) 4-Nitrophenol	(3)	11.959	109	322138	21.194
122) Pentachlorobenzene	(3)	11.980	250	637124	20.890
124) Dibenzofuran	(3)	12.034	168	2057366	20.564
123) 2,4-Dinitrotoluene	(3)	12.039	165	492394	20.385
126) 1-Naphthylamine	(3)	12.141	143	1563559	20.483
127) 2,3,4,6-Tetrachlorophenol	(3)	12.205	232	418481	20.750
128) 2-Naphthylamine	(3)	12.248	143	1552899	20.768
129) Diethylphthalate	(3)	12.397	149	1441049	19.290
131) Fluorene	(3)	12.478	166	1625474	19.697
130) Thionazin	(3)	12.488	107	302658	19.098
133) 5-Nitro-o-toluidine	(3)	12.499	152	452760	19.733
132) 4-Chlorophenyl-phenylether	(3)	12.504	204	750322	20.318
134) 4-Nitroaniline	(3)	12.510	138	380145A	19.477
135) 4,6-Dinitro-2-methylphenol	(4)	12.552	198	281833	20.097
136) N-Nitrosodiphenylamine	(4)	12.649	169	1378015	20.847
137) NDPA as diphenylamine	(4)	12.649	169	1378015	20.847
139) 1,2-Diphenylhydrazine	(4)	12.697	77	2026725	20.784
140)$2,4,6-Tribromophenol	(3)	12.777	330	494272	41.202
142) Tetraethyldithiopyrophosphate	(4)	12.884	97	319322	20.249
144) 1,3,5-Trinitrobenzene	(4)	12.986	213	175202	20.653
145) Diallate (peak 1)	(4)	13.028	86	658481	16.470
146) Phorate	(4)	13.039	75	1137430	19.112
147) Phenacetin	(4)	13.055	108	951594	20.182
148) 4-Bromophenyl-phenylether	(4)	13.109	248	454307	21.377
149) Diallate (peak 2)	(4)	13.135	86	108366	3.305
150) Hexachlorobenzene	(4)	13.168	284	498659	20.268
152) Dimethoate	(4)	13.237	87	793128	20.173
153) Atrazine	(4)	13.344	200	377937	20.387
154) Pentachlorophenol	(4)	13.424	266	345046	20.886
155) 4-Aminobiphenyl	(4)	13.435	169	1557378	20.554
156) Pentachloronitrobenzene	(4)	13.446	237	221123	20.479
157) Pronamide	(4)	13.542	173	741143	20.405
158)*Phenanthrene-d10	(4)	13.665	188	465701	5.000
159) Dinoseb	(4)	13.686	211	441534	20.495
160) Phenanthrene	(4)	13.697	178	2454642	20.275
162) Anthracene	(4)	13.767	178	2389740	20.418
168) Carbazole	(4)	13.986	167	2126593	20.366
169) Methyl parathion	(4)	14.194	109	652608	20.427

A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

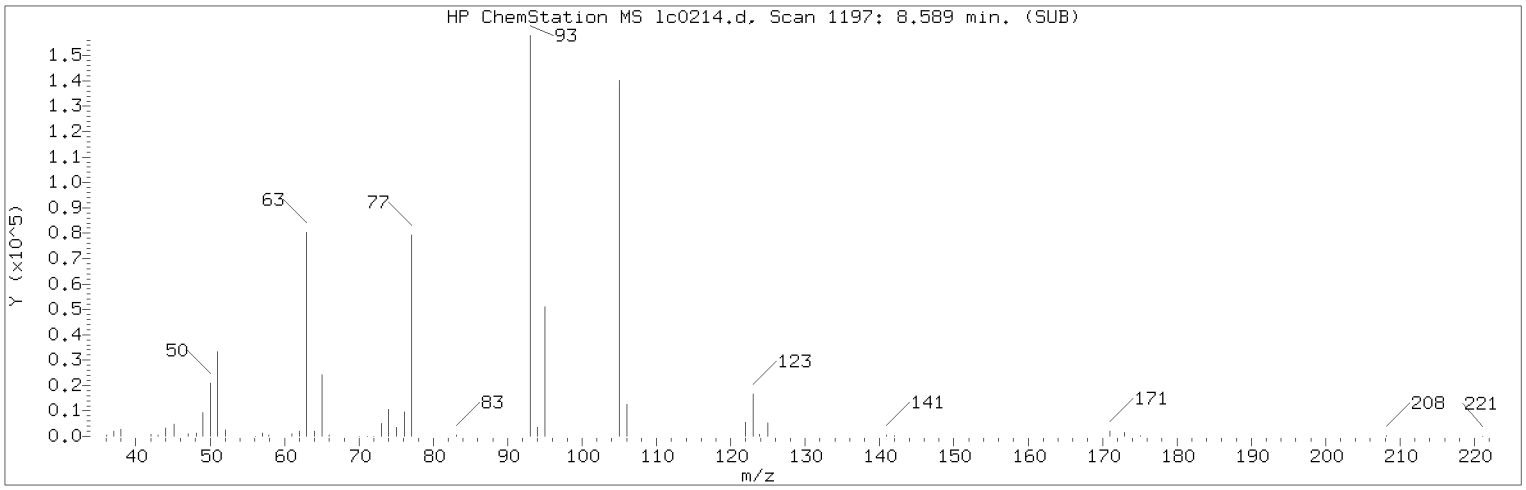
Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.510	149	2831984	20.382
172) Parathion	(4)	14.751	109	426133	20.734
173) 4-Nitroquinoline-1-oxide	(4)	14.756	190	319863	21.164
227) Total PAHs	(6)			42561469	364.752
174) Octachlorostyrene	(4)	15.109	308	195011	21.184
176) Isodrin	(4)	15.157	193	267911	20.591
178) Fluoranthene	(4)	15.382	202	2651389	20.430
179) Benzidine	(5)	15.612	184	5541018	61.902
180)*Pyrene-d10	(5)	15.697	212	478582	5.000
182) Pyrene	(5)	15.724	202	2695275	19.871
184)$Terphenyl-d14	(5)	16.018	244	3385885	40.617
187) p-Dimethylaminoazobenzene	(5)	16.248	225	482118	20.866
190) Chlorobenzilate	(5)	16.345	139	951661	20.465
192) 3,3'-Dimethylbenzidine	(5)	16.815	212	1950346	20.670
193) Butylbenzylphthalate	(5)	16.879	149	1398881	20.238
196) 2-Acetylaminofluorene	(5)	17.243	181	1249417	20.375
198) 3,3'-Dichlorobenzidine	(5)	17.751	252	1026642	20.729
200) Benzo(a)anthracene	(5)	17.767	228	2697620	20.279
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.773	231	576005	20.913
201) Chrysene	(5)	17.832	228	2546188	21.123
204) bis(2-Ethylhexyl)phthalate	(5)	17.960	149	2087192	20.135
208) 6-Methylchrysene	(5)	18.645	242	1829196	20.461
210) Di-n-octylphthalate	(6)	19.131	149	3757967	19.981
211) Benzo(b)fluoranthene	(6)	19.645	252	2756732	19.865
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.650	256	1196601	20.644
213) Benzo(k)fluoranthene	(6)	19.693	252	2673437A	20.731
216) Benzo(a)pyrene	(6)	20.174	252	2624389	20.301
218)*Perylene-d12	(6)	20.254	264	514509	5.000
220) 3-Methylcholanthrene	(6)	20.752	268	1372827	20.657
222) Dibenz(a,h)acridine	(6)	21.565	279	2288480	20.655
223) Dibenz(a,j)acridine	(6)	21.640	279	2206657	20.537
224) Indeno(1,2,3-cd)pyrene	(6)	21.902	276	2703605M	20.693
225) Dibenz(a,h)anthracene	(6)	21.945	278	2637168	20.103
226) Benzo(g,h,i)perylene	(6)	22.314	276	2647732	20.136

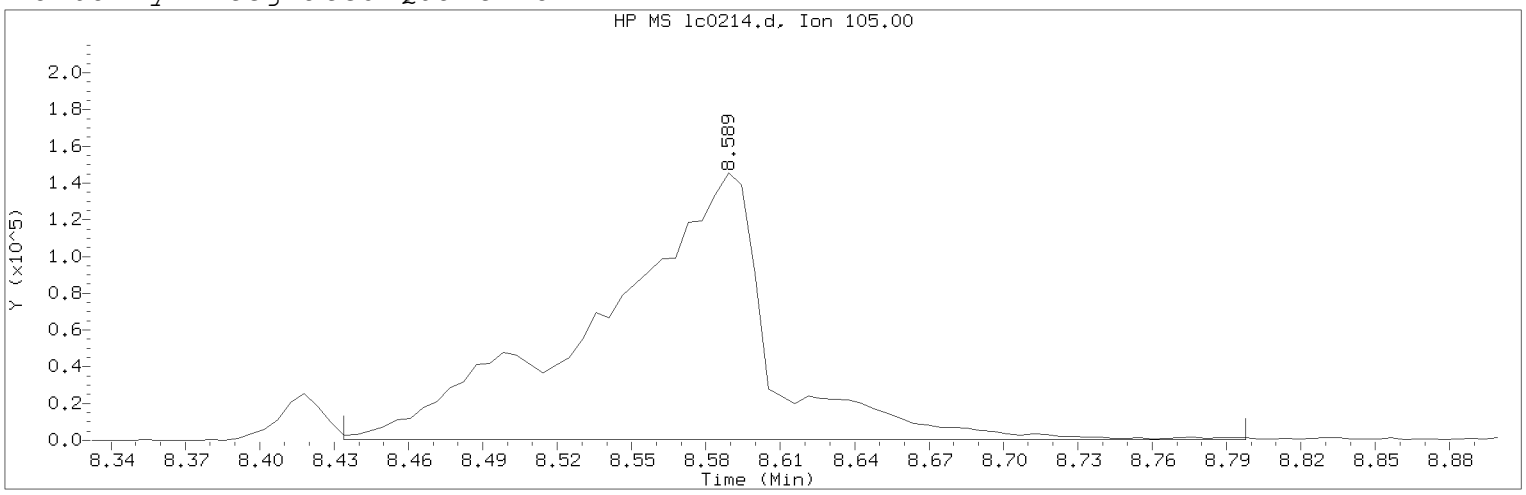
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

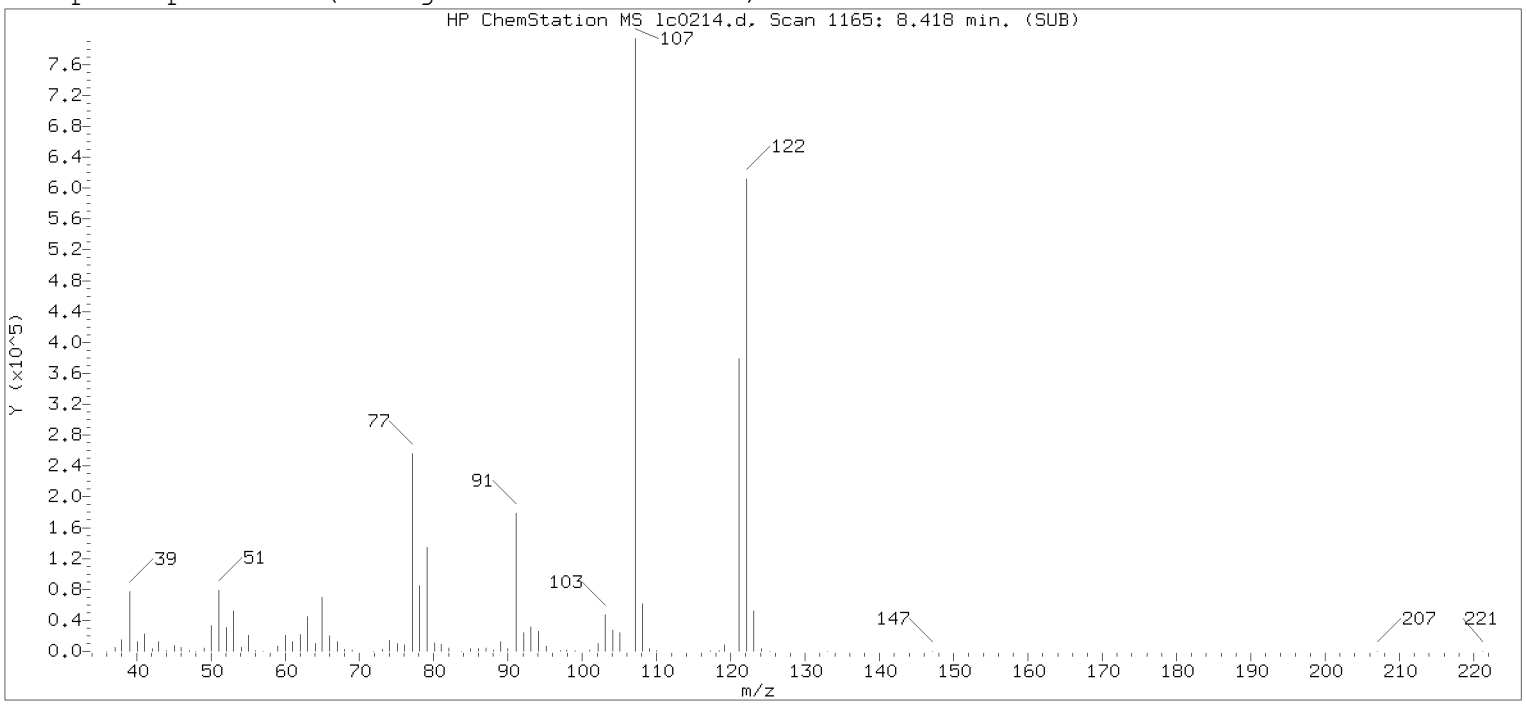
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1197
Retention Time (minutes) : 8.589
Quant Ion : 105.00
Area (flag) : 696216M
On-Column Amount (ng/ul) : 20.6383
Integration start scan : 1167 Integration stop scan: 1235
Y at integration start : 208 Y at integration end: 208

Reason for manual integration: improper integration

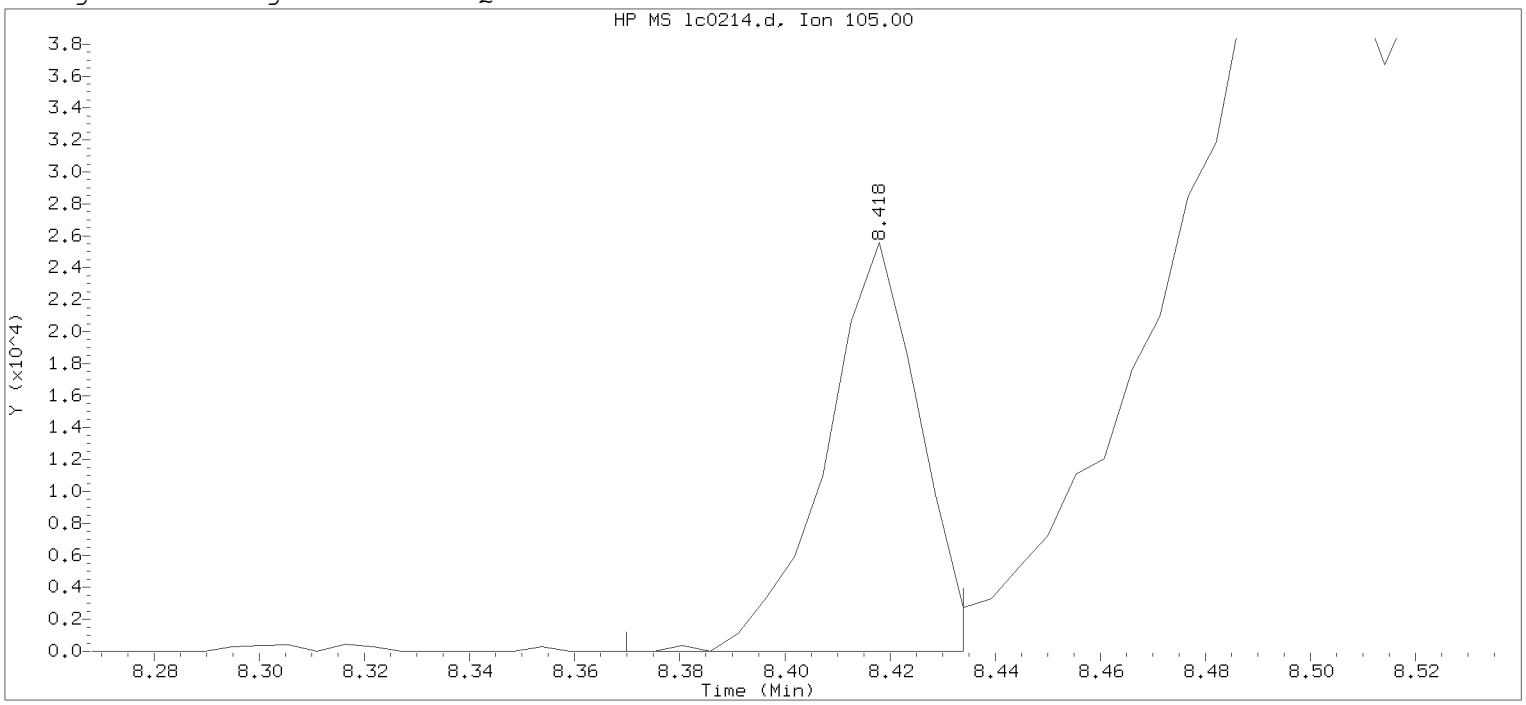
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

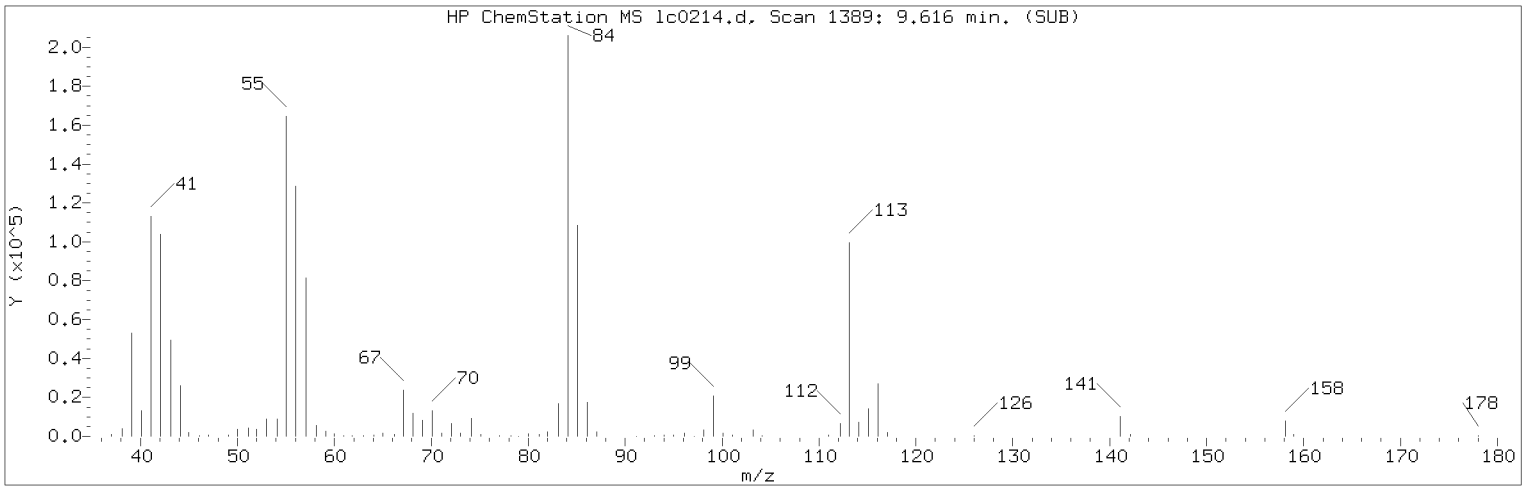
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

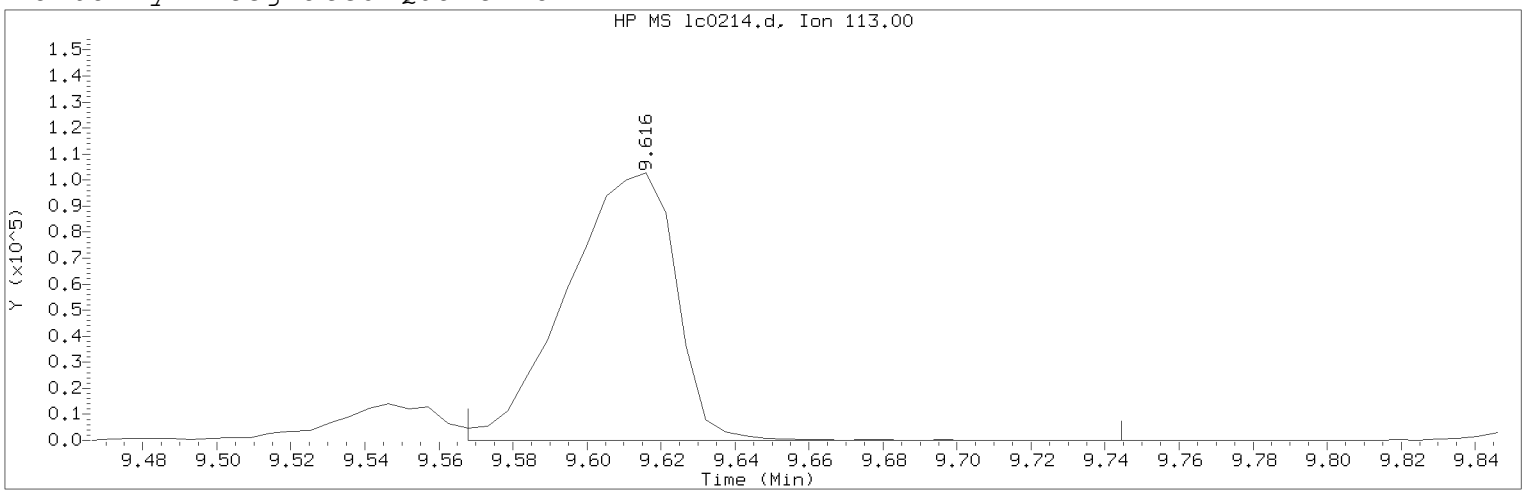
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1165		
Retention Time (minutes)	: 8.418		
Quant Ion	: 105.00		
Area	: 31444		
On-column Amount (ng/ul)	: 1.0592		
Integration start scan	: 1155	Integration stop scan:	1167
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ART at 2019-03-05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

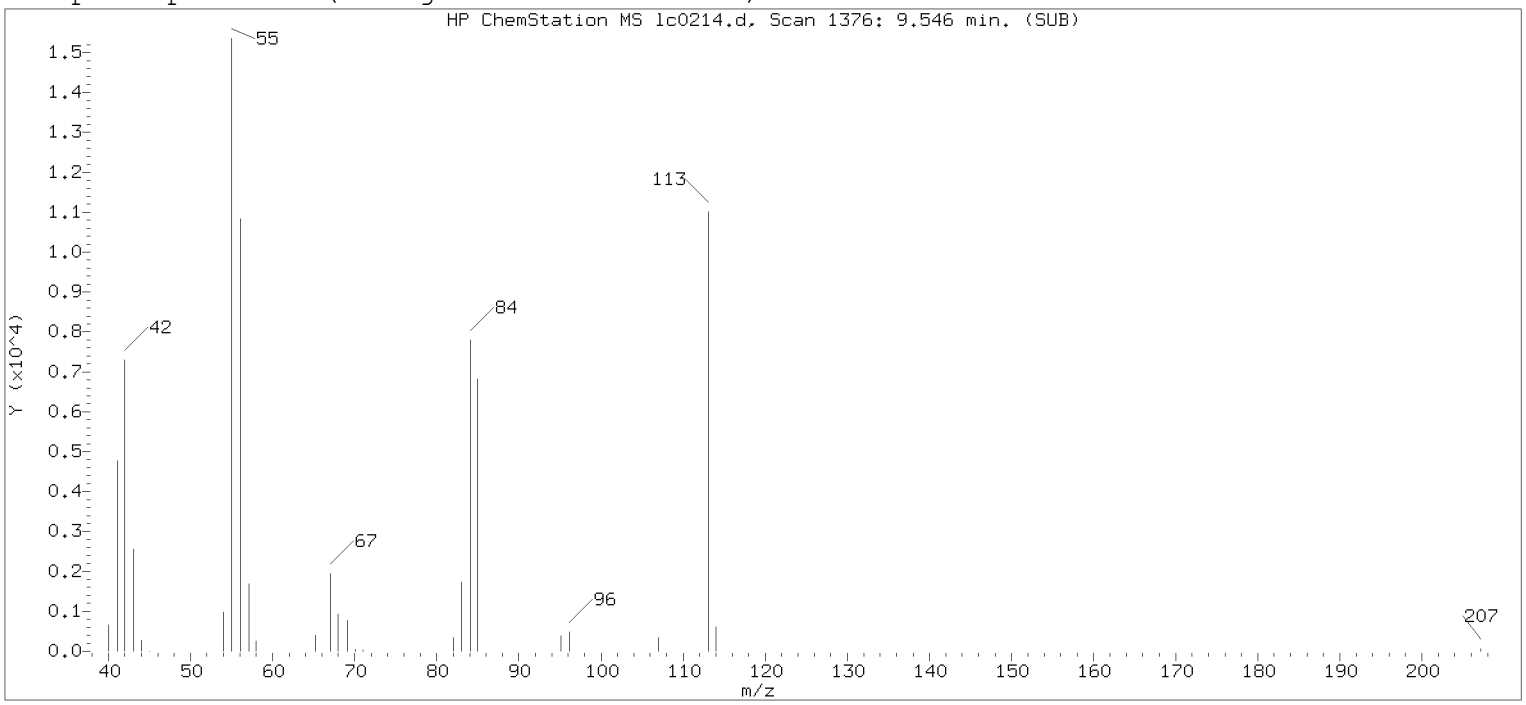
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1389
Retention Time (minutes) : 9.616
Quant Ion : 113.00
Area (flag) : 209263A
On-Column Amount (ng/ul) : 19.0496
Integration start scan : 1379 Integration stop scan: 1412
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

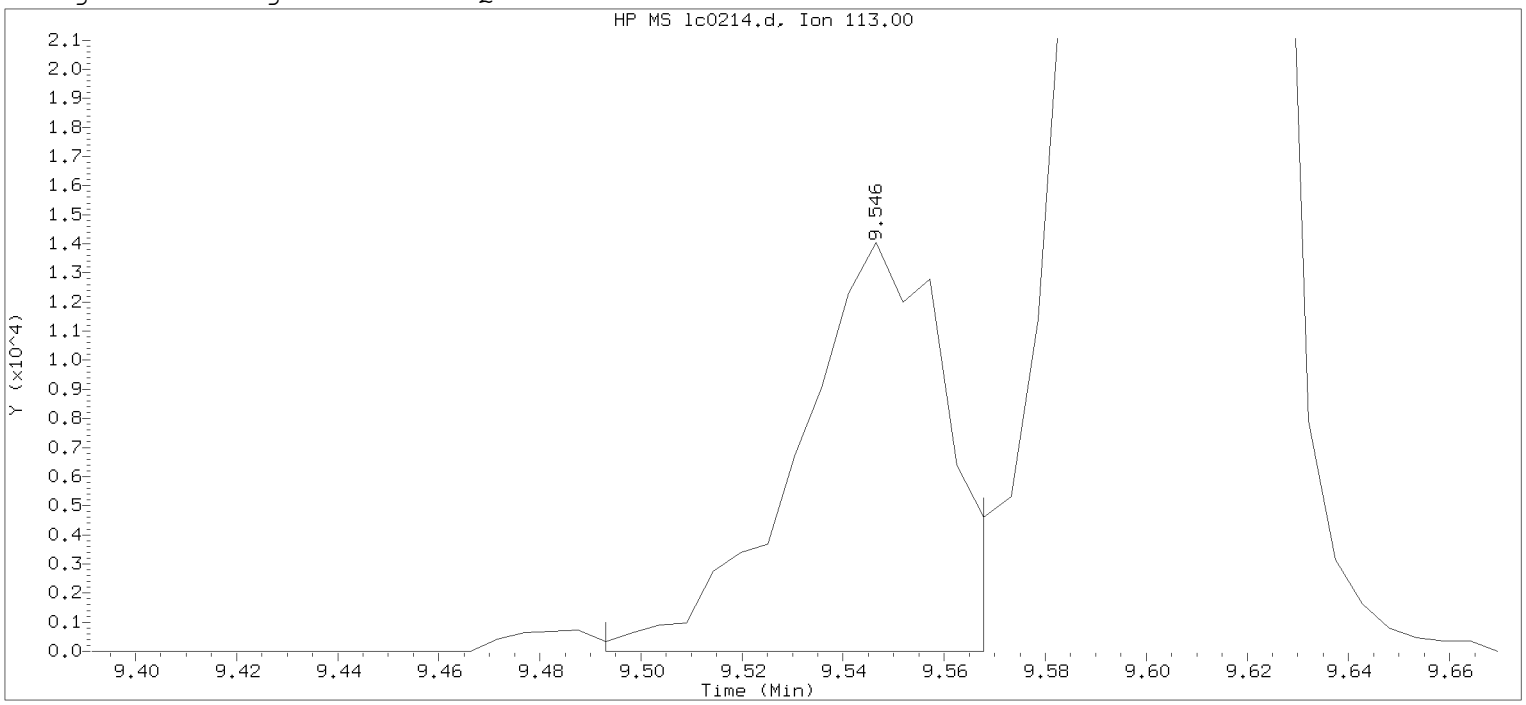
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

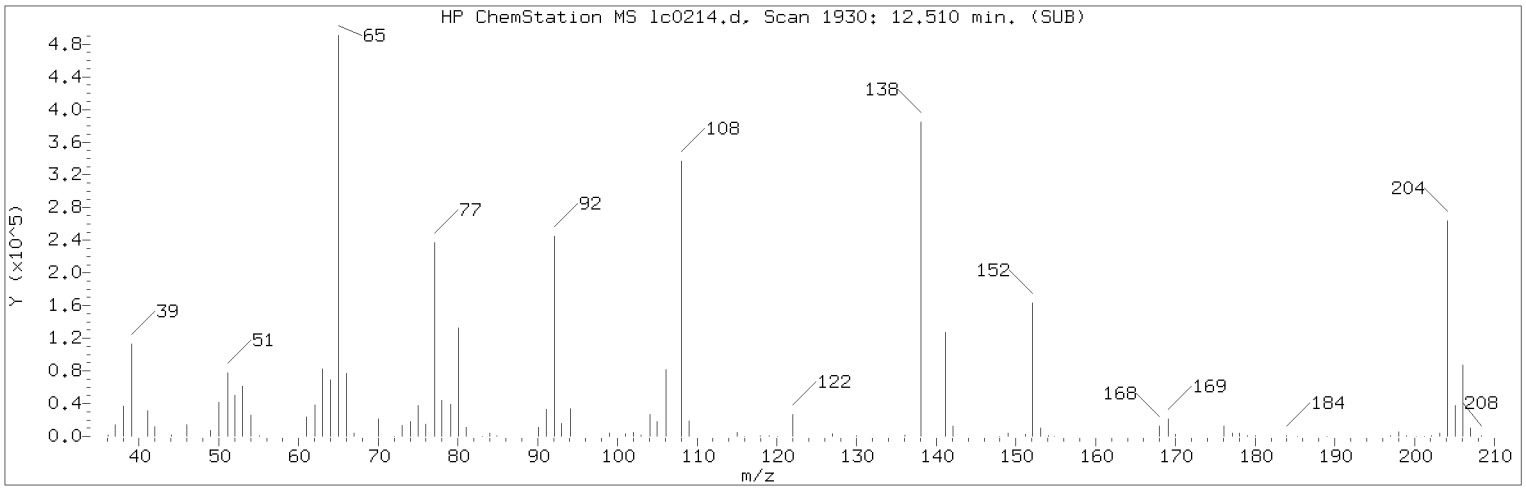
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

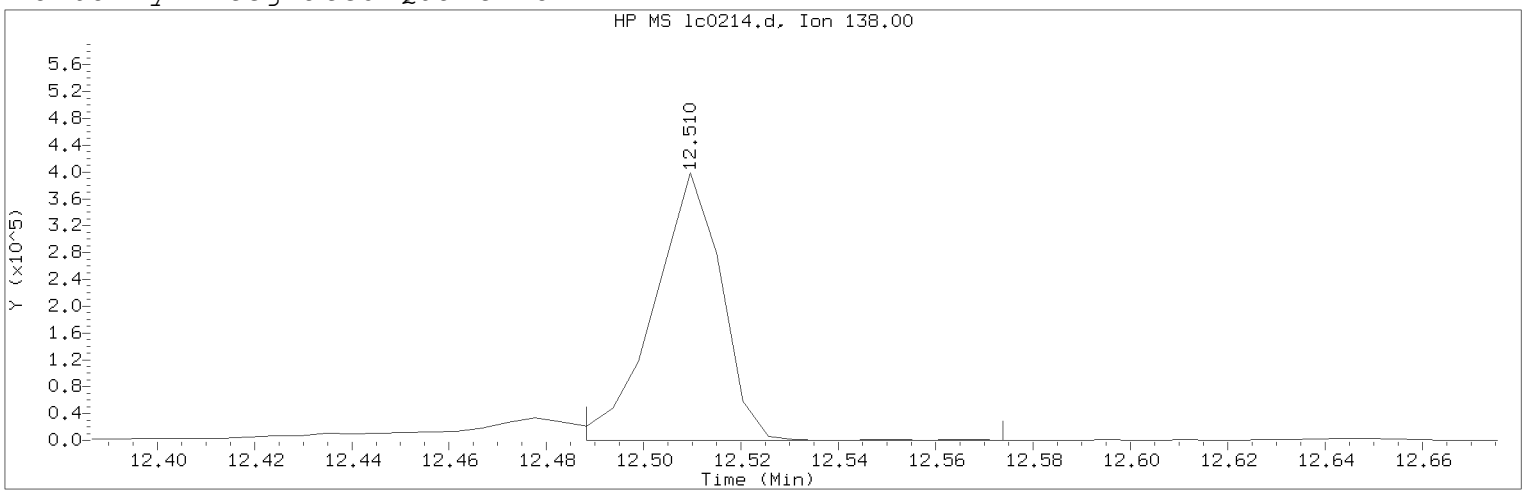
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1376		
Retention Time (minutes)	: 9.546		
Quant Ion	: 113.00		
Area	: 28291		
On-column Amount (ng/ul)	: 2.5560		
Integration start scan	: 1365	Integration stop scan:	1379
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

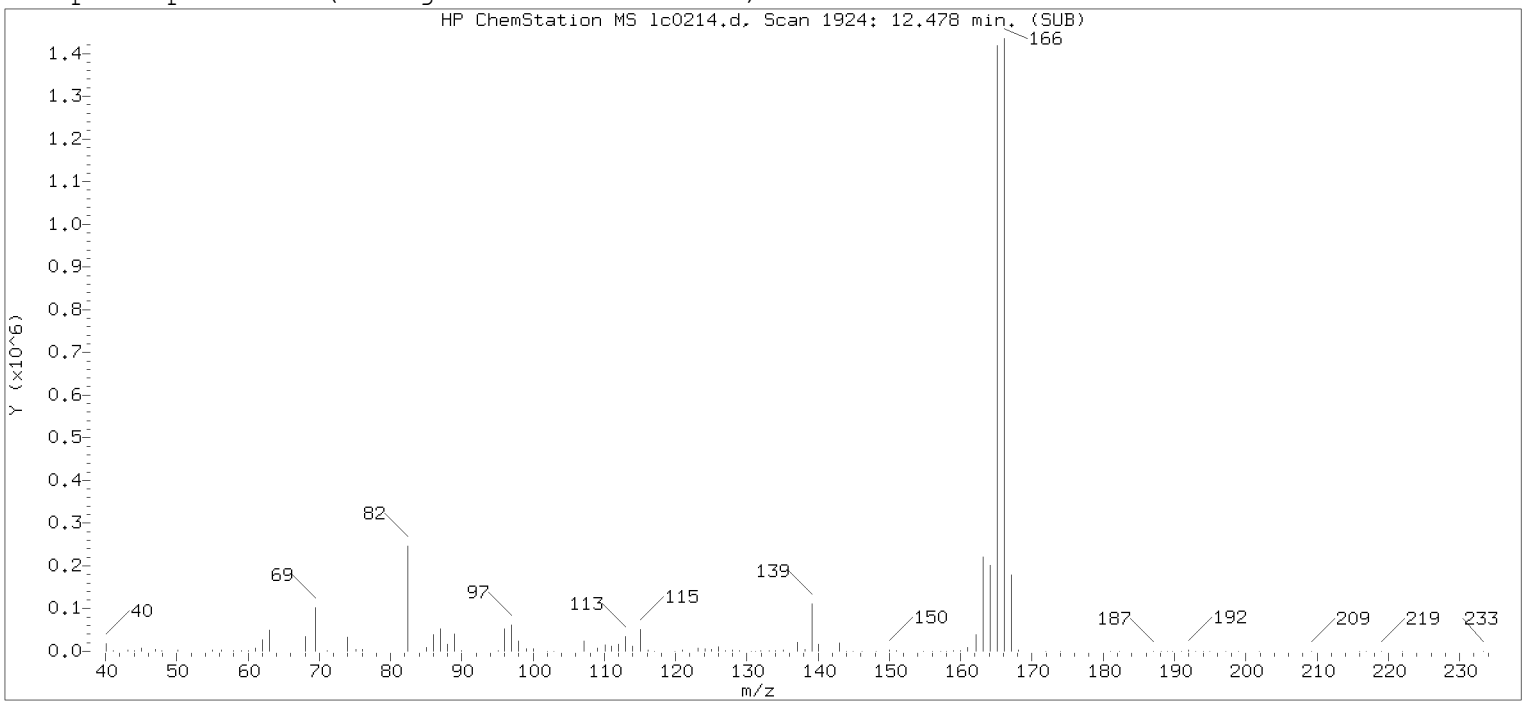
Compound Number : 134
Compound Name : 4-Nitroaniline
Scan Number : 1930
Retention Time (minutes) : 12.510
Quant Ion : 138.00
Area (flag) : 380145A
On-Column Amount (ng/ul) : 19.4768
Integration start scan : 1925 Integration stop scan: 1941
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

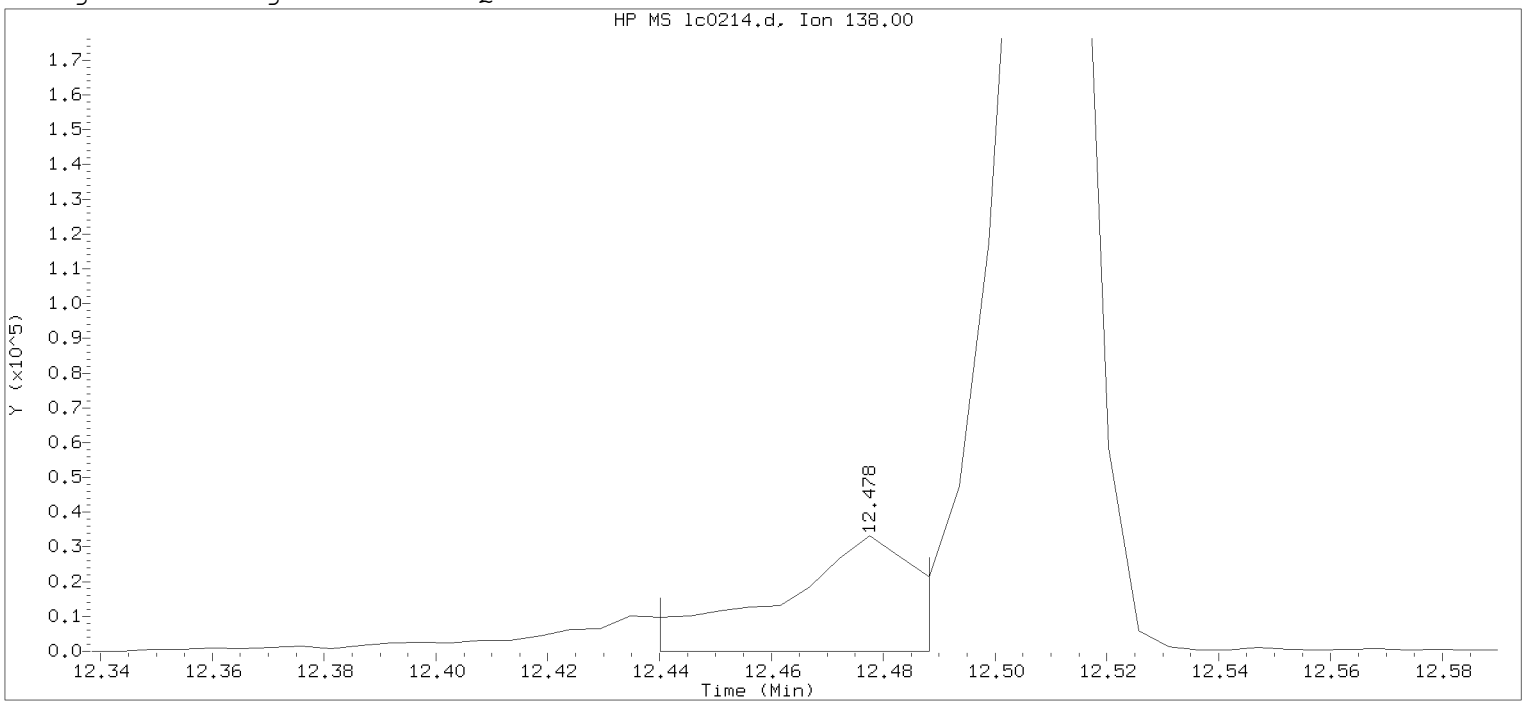
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

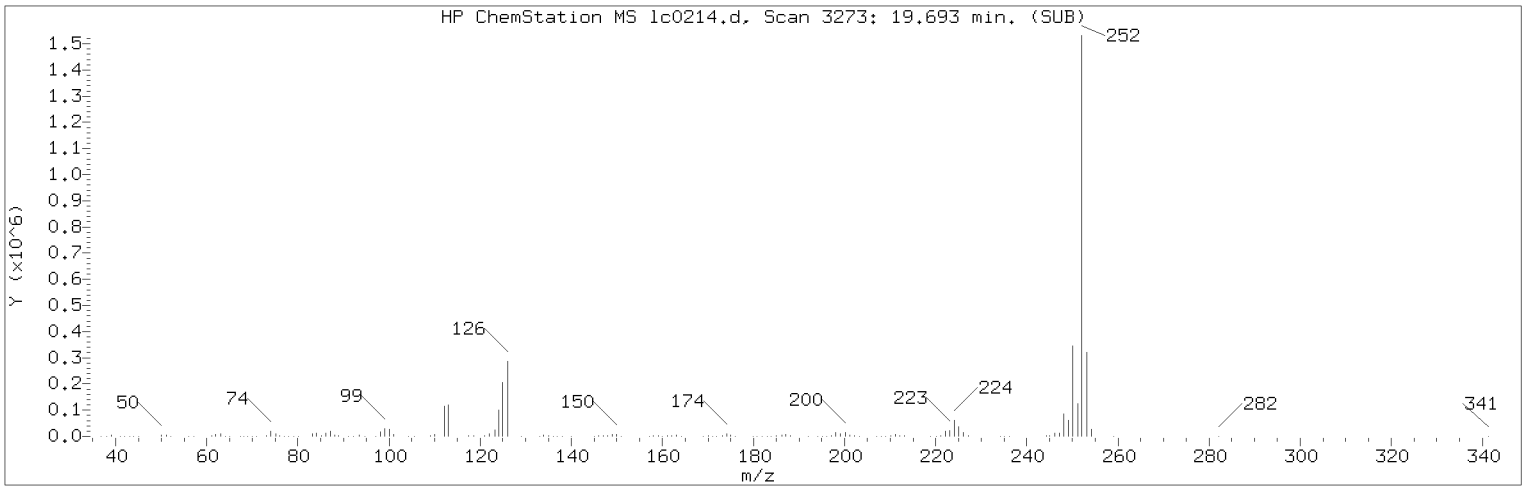
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

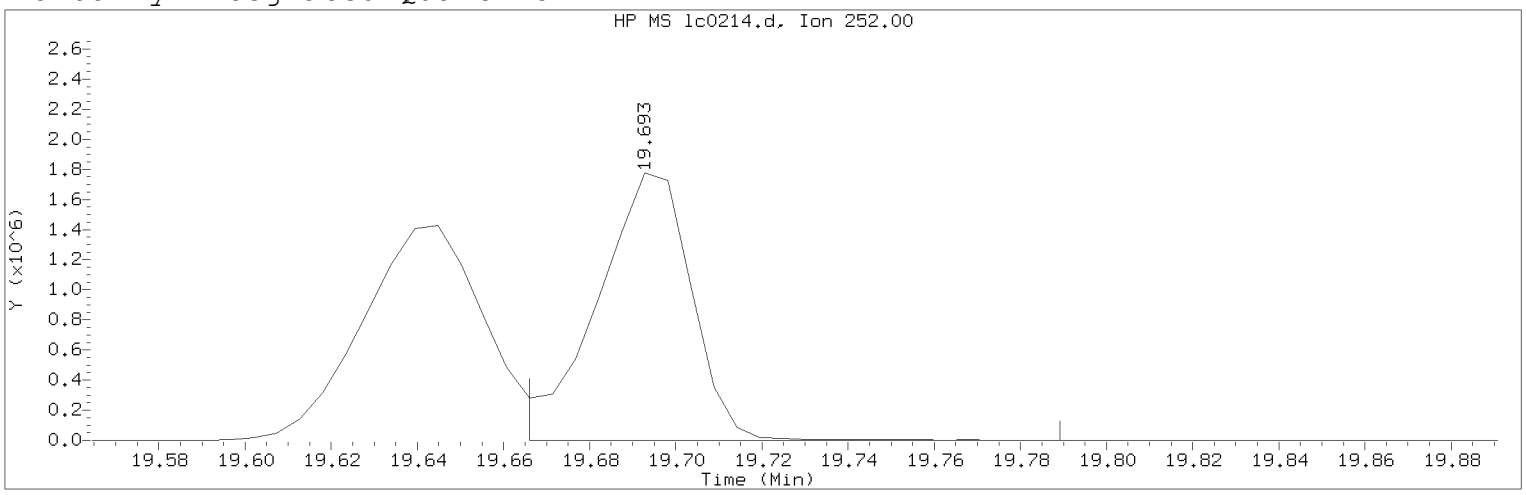
Compound Number	: 134		
Compound Name	: 4-Nitroaniline		
Scan Number	: 1924		
Retention Time (minutes)	: 12.478		
Quant Ion	: 138.00		
Area	: 54314		
On-column Amount (ng/ul)	: 2.6725		
Integration start scan	: 1916	Integration stop scan:	1925
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

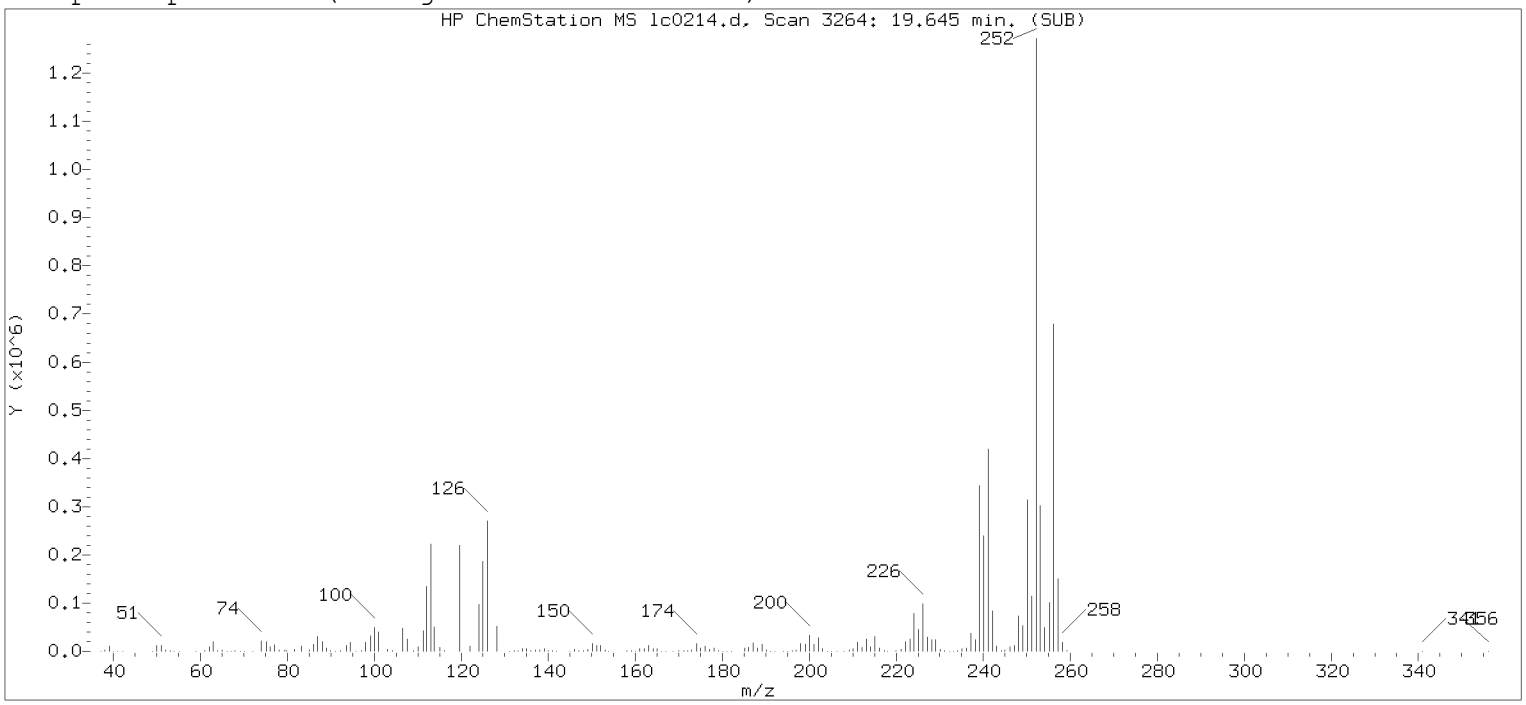
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3273
Retention Time (minutes) : 19.693
Quant Ion : 252.00
Area (flag) : 2673437A
On-Column Amount (ng/ul) : 20.7312
Integration start scan : 3267 Integration stop scan: 3290
Y at integration start : 831 Y at integration end: 831

Reason for manual integration: improper integration

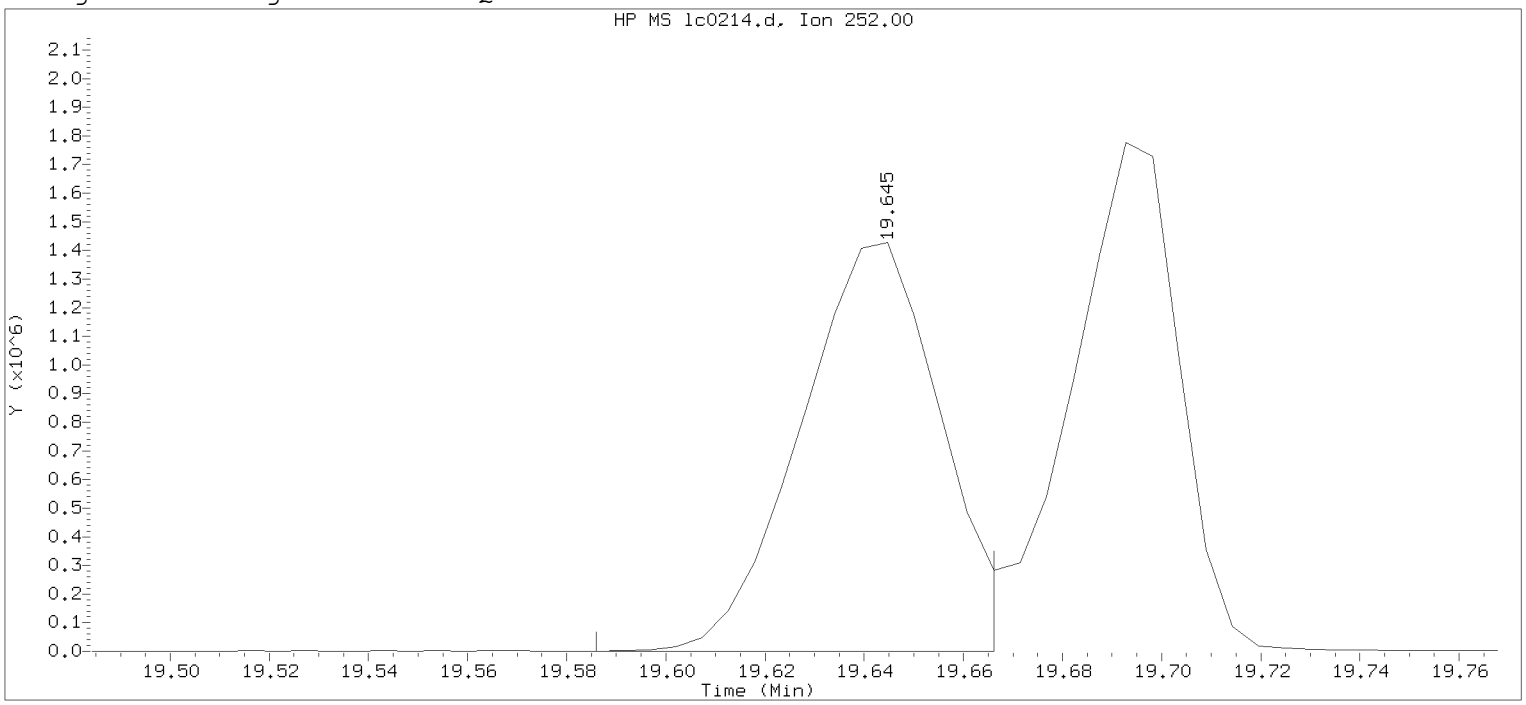
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

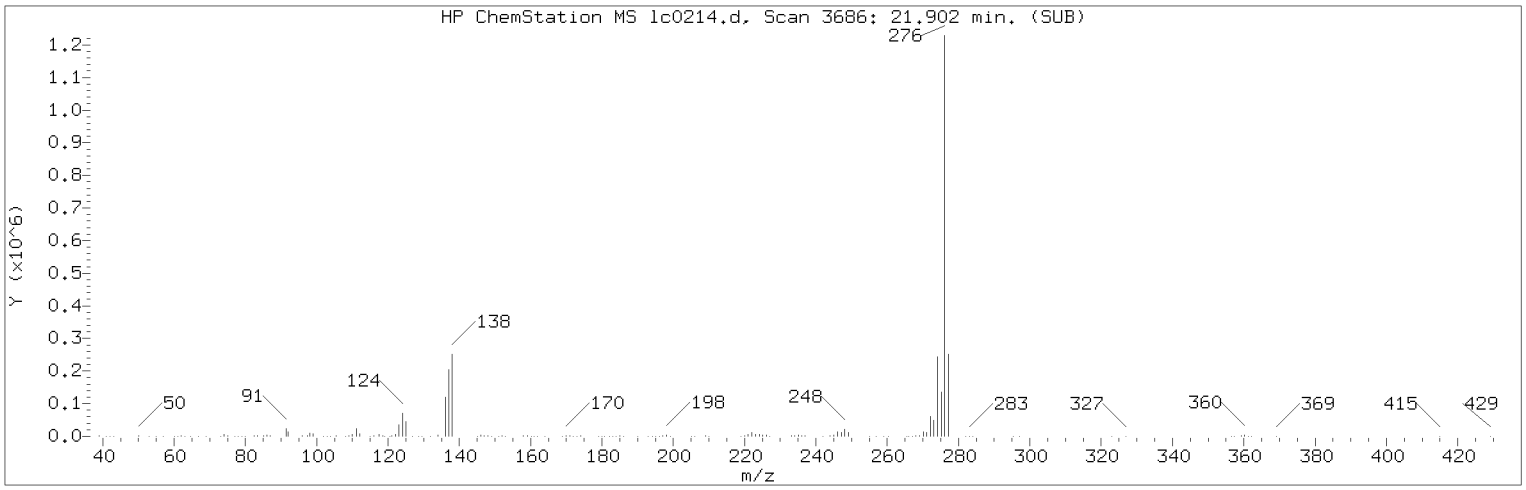
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

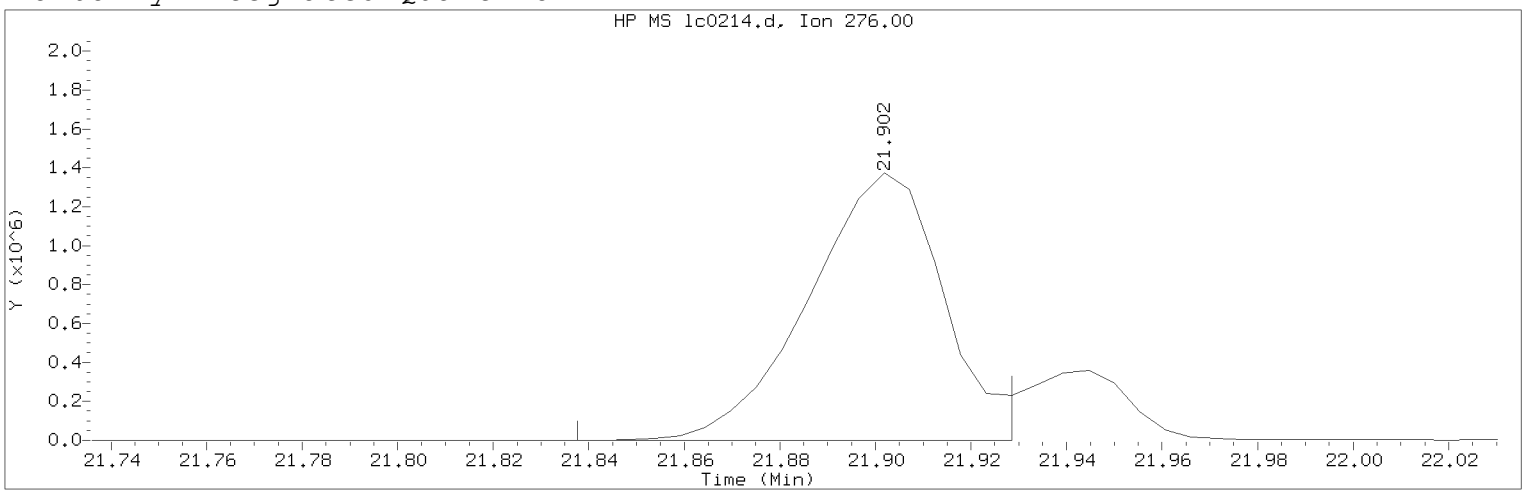
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3264		
Retention Time (minutes)	: 19.645		
Quant Ion	: 252.00		
Area	: 2756732		
On-column Amount (ng/ul)	: 21.6099		
Integration start scan	: 3252	Integration stop scan:	3267
Y at integration start	: 831	Y at integration end:	831

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

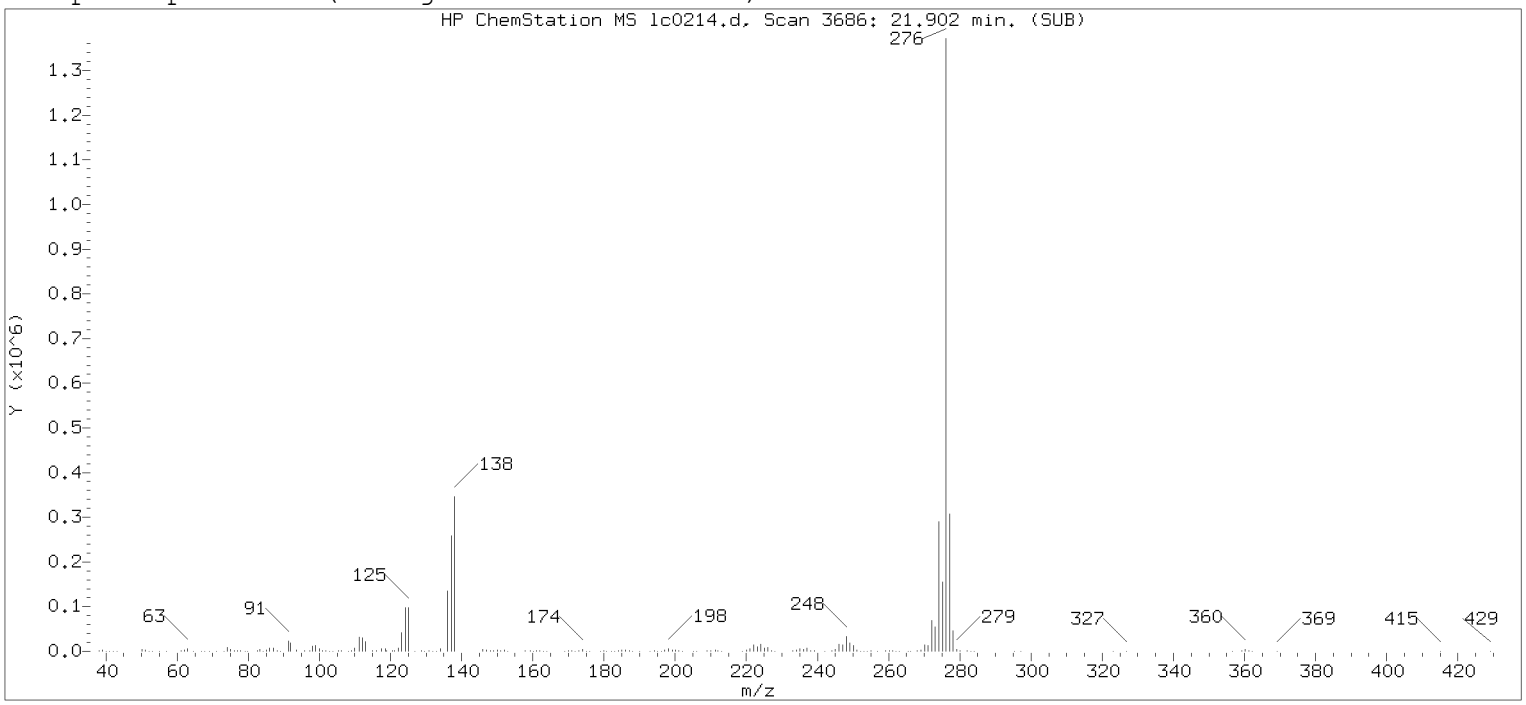
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3686
Retention Time (minutes) : 21.902
Quant Ion : 276.00
Area (flag) : 2703605M
On-Column Amount (ng/ul) : 20.6929
Integration start scan : 3673 Integration stop scan: 3690
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

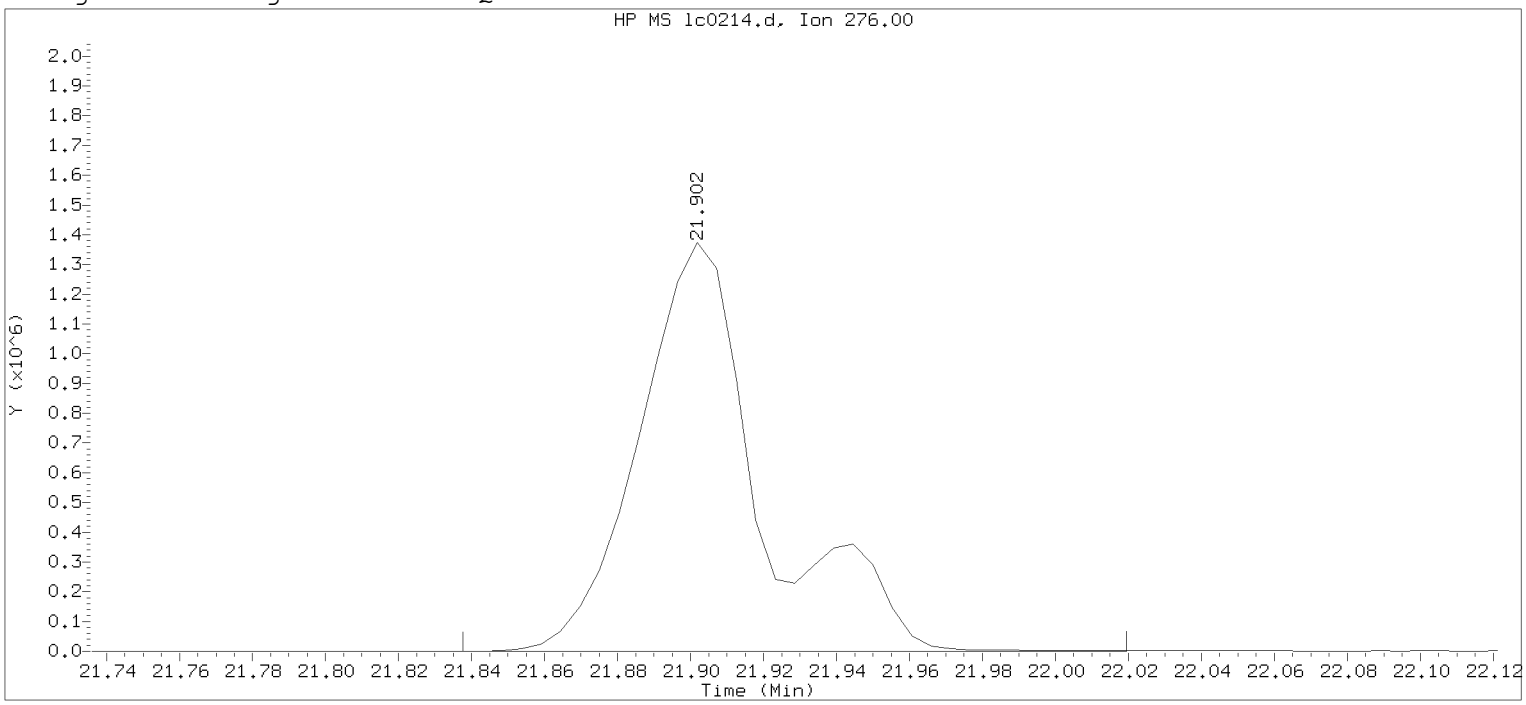
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:11.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



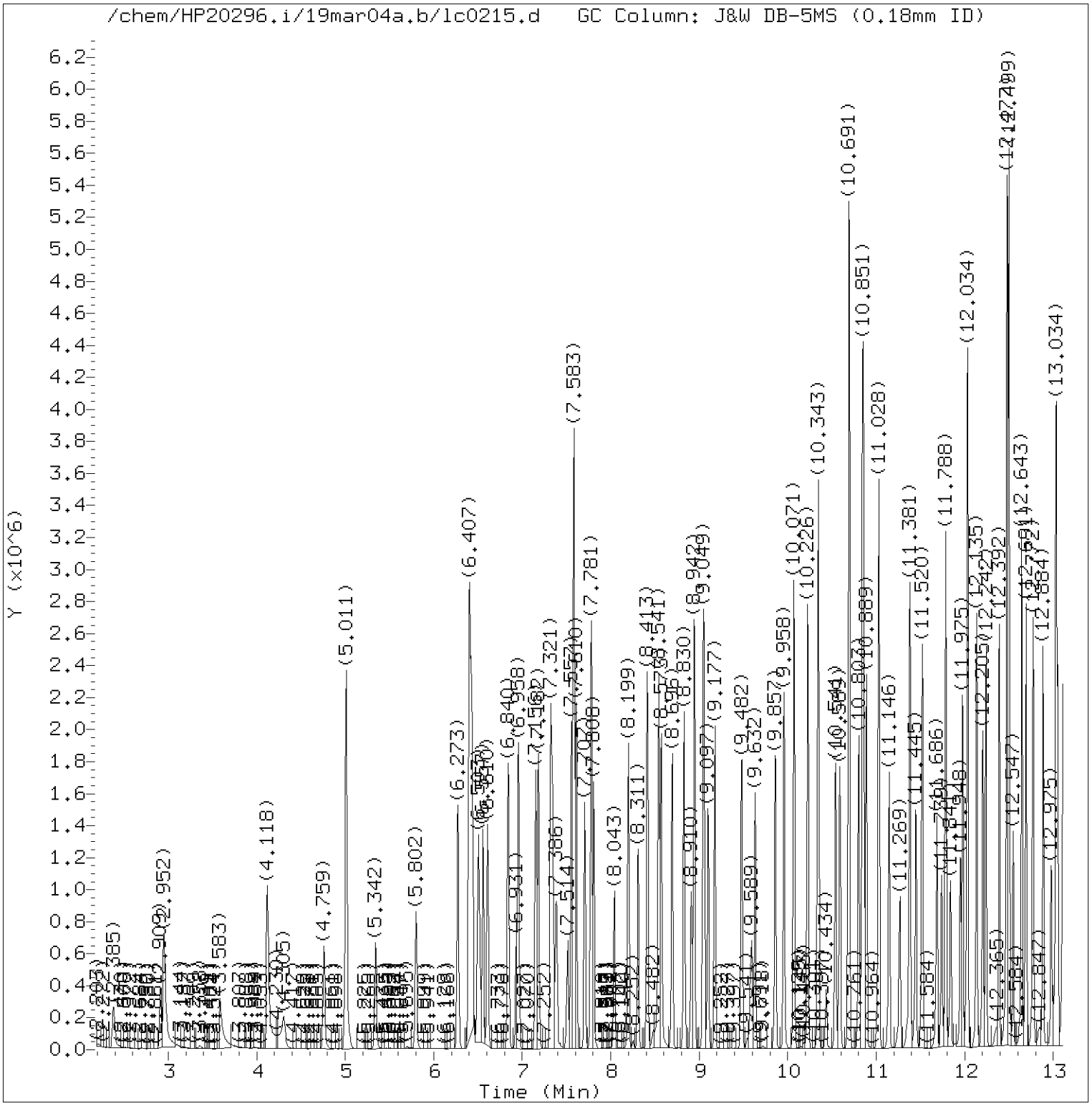
Data File: /chem/HP20296.i/19mar04a.b/lc0214.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 03:37 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD20 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3686		
Retention Time (minutes)	: 21.902		
Quant Ion	: 276.00		
Area	: 3196405		
On-column Amount (ng/ul)	: 26.9925		
Integration start scan	: 3673	Integration stop scan:	3707
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:11.
Target 3.5 esignature user ART at 2019.03.05 17:11:20 -05'00'



Total Ion Chromatogram (TIC)

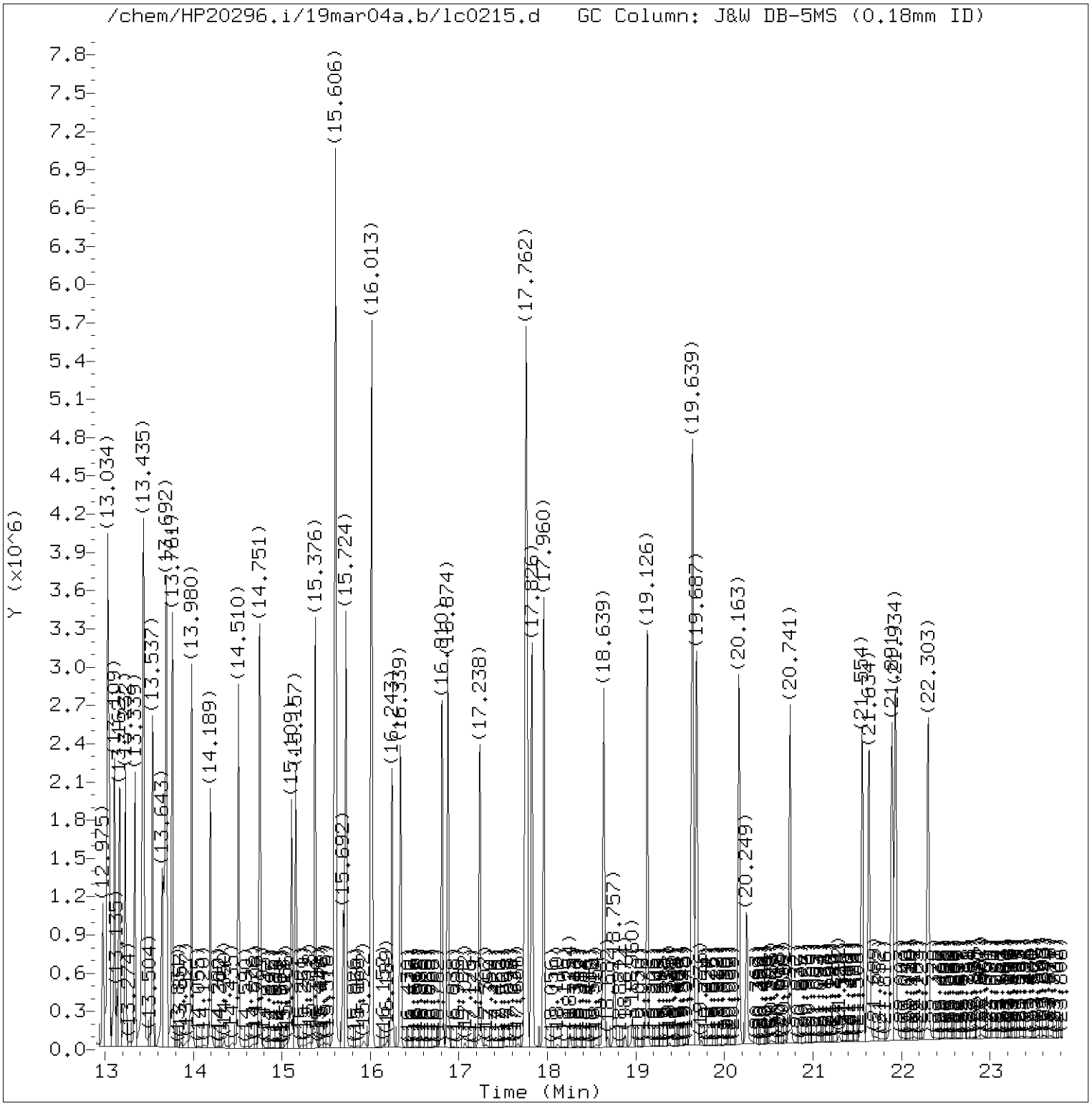
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.385	88	248477	12.191
5) N-Nitrosodimethylamine	(1)	2.914	74	394364	12.377
6) Pyridine	(1)	2.952	79	671687	12.358
8) 2-Picoline	(1)	4.118	93	716056	12.387
9) N-Nitrosomethylethylamine	(1)	4.305	88	282819	12.070
10) Methyl methanesulfonate	(1)	4.759	80	364737	12.561
12)$2-Fluorophenol	(1)	5.011	112	1122009	24.817
14) N-Nitrosodiethylamine	(1)	5.342	102	285241	12.369
43) Total Cresols	(1)			1171310	25.069
16) Ethyl methanesulfonate	(1)	5.802	109	297887	12.364
17) Benzaldehyde	(1)	6.273	77	521479	13.304
18)$Phenol-d6	(1)	6.401	99	1501738	24.779
19) Phenol	(1)	6.423	94	856375	12.500
20) Aniline	(1)	6.439	93	998925	12.447
21) a-methylstyrene	(1)	6.524	118	111727	12.405
23) bis(2-Chloroethyl)ether	(1)	6.557	93	630638	12.307
24) 2-Chlorophenol	(1)	6.610	128	545632	12.313
25) 1,3-Dichlorobenzene	(1)	6.840	146	599199	12.643
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	142864	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	596657	12.651
28) Benzyl alcohol	(1)	7.156	108	377005	12.697
29) 1,2-Dichlorobenzene	(1)	7.182	146	562013	12.466
31) Indene	(1)	7.321	115	783063	12.753
32) 2-Methylphenol	(1)	7.337	108	552166	12.497
100) Isosafrole	(3)			470824	12.664
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.386	45	627535	12.512
35) bis(2-Chloroisopropyl)ether	(1)	7.386	45	627535	12.512
36) N-Nitrosopyrrolidine	(1)	7.514	100	308491	12.518
37) Acetophenone	(1)	7.557	105	857259	12.723
38) 4-Methylphenol	(1)	7.583	108	619144	12.572
39) N-Nitroso-di-n-propylamine	(1)	7.583	70	464481	12.565
40) N-Nitrosomorpholine	(1)	7.583	56	319287	12.861
41) o-Toluidine	(1)	7.610	106	966470	12.582
44) Hexachloroethane	(1)	7.707	117	264910	12.597
45)$Nitrobenzene-d5	(2)	7.781	82	1381787	24.913
46) Nitrobenzene	(2)	7.808	77	699740	12.442
50) N-Nitrosopiperidine	(2)	8.043	114	284437	12.536
125) 2,4_2,6-Dinitrotoluenes	(3)			554767	25.392
52) Isophorone	(2)	8.199	82	1227908	12.458
53) 2-Nitrophenol	(2)	8.311	139	276155	12.352

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.413	107	609866	12.388
59) O,O,O-Triethylphosphorothioate	(2)	8.541	198	245715	12.691
58) Benzoic acid	(2)	8.562	105	425847M	12.499
57) bis(2-Chloroethoxy)methane	(2)	8.573	93	825055	13.165
62) 2,4-Dichlorophenol	(2)	8.696	162	459261	12.783
151) Diallate trans/cis	(4)			513233	12.562
65) 1,2,4-Trichlorobenzene	(2)	8.830	180	486530	12.771
68)*Naphthalene-d8	(2)	8.910	136	546756	5.000
69) Naphthalene	(2)	8.942	128	1583542	12.403
70) 4-Chloroaniline	(2)	9.044	127	643074	12.562
71) 2,6-Dichlorophenol	(2)	9.060	162	439385	12.774
72) Hexachloropropene	(2)	9.102	213	331105	12.632
74) Hexachlorobutadiene	(2)	9.177	225	264890	12.309
78) Quinoline	(2)	9.482	129	914029	12.346
79) Caprolactam	(2)	9.589	113	140251A	12.606
80) N-Nitrosodi-n-butylamine	(2)	9.632	84	452219	11.174
83) 4-Chloro-3-methylphenol	(2)	9.857	107	523235	12.324
85) Safrole	(2)	9.958	162	384280	12.474
86) 2-Methylnaphthalene	(2)	10.071	142	1016261	12.355
87) 1-Methylnaphthalene	(2)	10.226	142	952173	12.265
88) Hexachlorocyclopentadiene	(3)	10.343	237	319122	12.903
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.343	216	456703	12.451
91) cis-Isosafrole	(3)	10.434	162	73850	2.172
93) 2,4,6-Trichlorophenol	(3)	10.541	196	306381	12.265
95) 2,4,5-Trichlorophenol	(3)	10.589	196	329641	12.833
96)$2-Fluorobiphenyl	(3)	10.691	172	2146517	24.980
97) trans-Isosafrole	(3)	10.803	162	396974	10.492
98) 1,1'-Biphenyl	(3)	10.846	154	1185331	12.835
99) 2-Chloronaphthalene	(3)	10.857	162	963785	11.926
101) 1-Chloronaphthalene	(3)	10.889	162	834488	13.295
103) Diphenyl ether	(3)	11.028	170	619656	12.633
104) 2-Nitroaniline	(3)	11.033	138	302212	12.464
108) 1,4-Naphthoquinone	(3)	11.146	158	381152	12.496
109) 1,4-Dinitrobenzene	(3)	11.269	168	150561	12.271
110) Dimethylphthalate	(3)	11.381	163	1031678	13.202
111) 1,3-Dinitrobenzene	(3)	11.386	168	164164	12.500
113) 2,6-Dinitrotoluene	(3)	11.451	165	235149	12.474
114) Acenaphthylene	(3)	11.520	152	1342708	12.351
117) 3-Nitroaniline	(3)	11.686	138	259749	12.416
118)*Acenaphthene-d10	(3)	11.739	164	255386	5.000

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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.788	153	999673	12.837
120) 2,4-Dinitrophenol	(3)	11.841	184	156376	12.680
121) 4-Nitrophenol	(3)	11.948	109	204881	13.096
122) Pentachlorobenzene	(3)	11.980	250	394352	12.698
123) 2,4-Dinitrotoluene	(3)	12.034	165	319618	12.918
124) Dibenzofuran	(3)	12.034	168	1288364	12.659
126) 1-Naphthylamine	(3)	12.135	143	960824	12.445
127) 2,3,4,6-Tetrachlorophenol	(3)	12.205	232	255586	12.508
128) 2-Naphthylamine	(3)	12.242	143	947119	12.504
129) Diethylphthalate	(3)	12.392	149	981647	12.851
131) Fluorene	(3)	12.477	166	1026936	12.328
130) Thionazin	(3)	12.483	107	205624	12.731
133) 5-Nitro-o-toluidine	(3)	12.499	152	299455	12.786
132) 4-Chlorophenyl-phenylether	(3)	12.499	204	482551	12.798
134) 4-Nitroaniline	(3)	12.504	138	251396A	12.661
135) 4,6-Dinitro-2-methylphenol	(4)	12.547	198	183051	12.427
136) N-Nitrosodiphenylamine	(4)	12.643	169	848345	12.269
137) NDPA as diphenylamine	(4)	12.643	169	848345	12.269
139) 1,2-Diphenylhydrazine	(4)	12.691	77	1294812	12.587
140)$2,4,6-Tribromophenol	(3)	12.772	330	304035	25.015
142) Tetraethyldithiopyrophosphate	(4)	12.884	97	205013	12.389
144) 1,3,5-Trinitrobenzene	(4)	12.980	213	109906	12.357
145) Diallate (peak 1)	(4)	13.028	86	439237	10.423
146) Phorate	(4)	13.034	75	787999	12.564
147) Phenacetin	(4)	13.050	108	605908	12.281
148) 4-Bromophenyl-phenylether	(4)	13.109	248	278597	12.467
149) Diallate (peak 2)	(4)	13.135	86	73996	2.139
150) Hexachlorobenzene	(4)	13.167	284	308262	12.019
152) Dimethoate	(4)	13.232	87	497252	12.134
153) Atrazine	(4)	13.339	200	256499	12.978
154) Pentachlorophenol	(4)	13.424	266	219744	12.603
155) 4-Aminobiphenyl	(4)	13.435	169	996290	12.495
156) Pentachloronitrobenzene	(4)	13.440	237	139654	12.341
157) Pronamide	(4)	13.537	173	478743	12.517
158)*Phenanthrene-d10	(4)	13.665	188	490141	5.000
159) Dinoseb	(4)	13.681	211	278454	12.335
160) Phenanthrene	(4)	13.697	178	1550863	12.236
162) Anthracene	(4)	13.761	178	1557303	12.614
168) Carbazole	(4)	13.980	167	1372533	12.492
169) Methyl parathion	(4)	14.189	109	418249	12.454

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Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

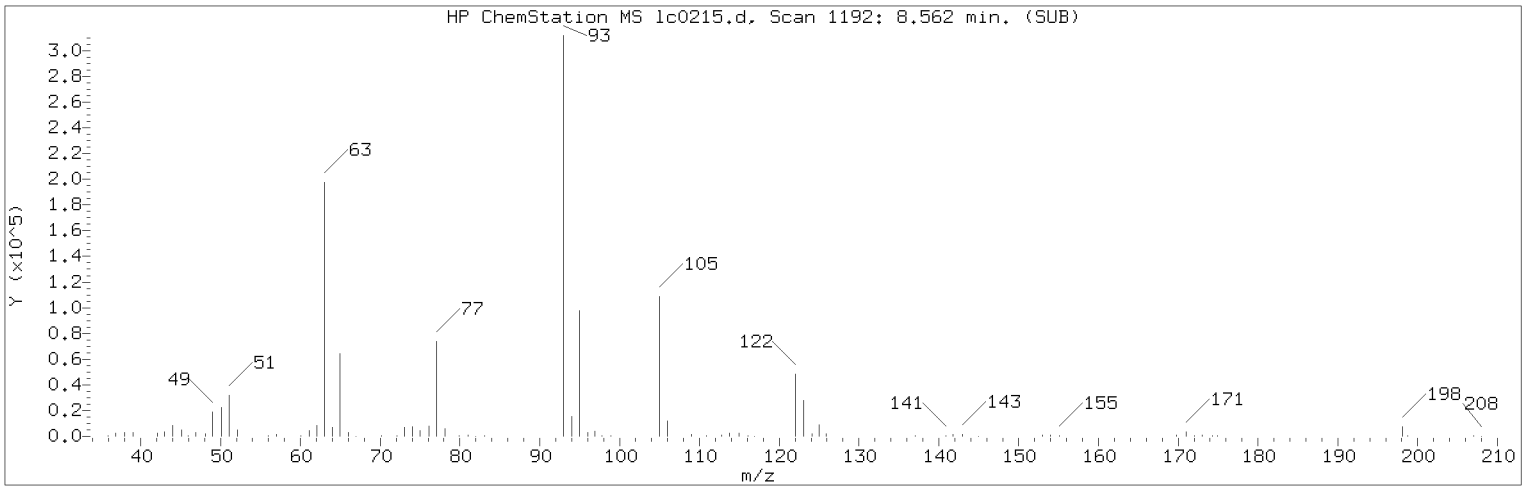
Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.510	149	1798579	12.349
172) Parathion	(4)	14.745	109	275221	12.667
173) 4-Nitroquinoline-1-oxide	(4)	14.751	190	189830	12.071
227) Total PAHs	(6)			26348102	224.315
174) Octachlorostyrene	(4)	15.109	308	122251	12.588
176) Isodrin	(4)	15.157	193	170748	12.477
178) Fluoranthene	(4)	15.376	202	1676430	12.318
179) Benzidine	(5)	15.606	184	3465350	38.104
180)*Pyrene-d10	(5)	15.692	212	483630	5.000
182) Pyrene	(5)	15.724	202	1688241	12.353
184)$Terphenyl-d14	(5)	16.013	244	2116247	25.091
187) p-Dimethylaminoazobenzene	(5)	16.243	225	287756	12.368
190) Chlorobenzilate	(5)	16.339	139	589704	12.537
192) 3,3'-Dimethylbenzidine	(5)	16.810	212	1178185	12.392
193) Butylbenzylphthalate	(5)	16.874	149	871723	12.485
196) 2-Acetylaminofluorene	(5)	17.238	181	771418	12.462
198) 3,3'-Dichlorobenzidine	(5)	17.746	252	632383	12.601
200) Benzo(a)anthracene	(5)	17.762	228	1671946	12.450
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.767	231	356650	12.734
201) Chrysene	(5)	17.826	228	1557468	12.728
204) bis(2-Ethylhexyl)phthalate	(5)	17.960	149	1288509	12.350
208) 6-Methylchrysene	(5)	18.639	242	1120212	12.425
210) Di-n-octylphthalate	(6)	19.126	149	2275422	12.354
211) Benzo(b)fluoranthene	(6)	19.634	252	1704104	12.493
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.645	256	740237	12.864
213) Benzo(k)fluoranthene	(6)	19.687	252	1621537A	12.731
216) Benzo(a)pyrene	(6)	20.163	252	1584787	12.476
218)*Perylene-d12	(6)	20.254	264	505815	5.000
220) 3-Methylcholanthrene	(6)	20.741	268	815761	12.489
222) Dibenz(a,h)acridine	(6)	21.554	279	1366949	12.537
223) Dibenz(a,j)acridine	(6)	21.634	279	1334599	12.601
224) Indeno(1,2,3-cd)pyrene	(6)	21.891	276	1604991M	12.496
225) Dibenz(a,h)anthracene	(6)	21.934	278	1590274	12.364
226) Benzo(g,h,i)perylene	(6)	22.303	276	1618865	12.519

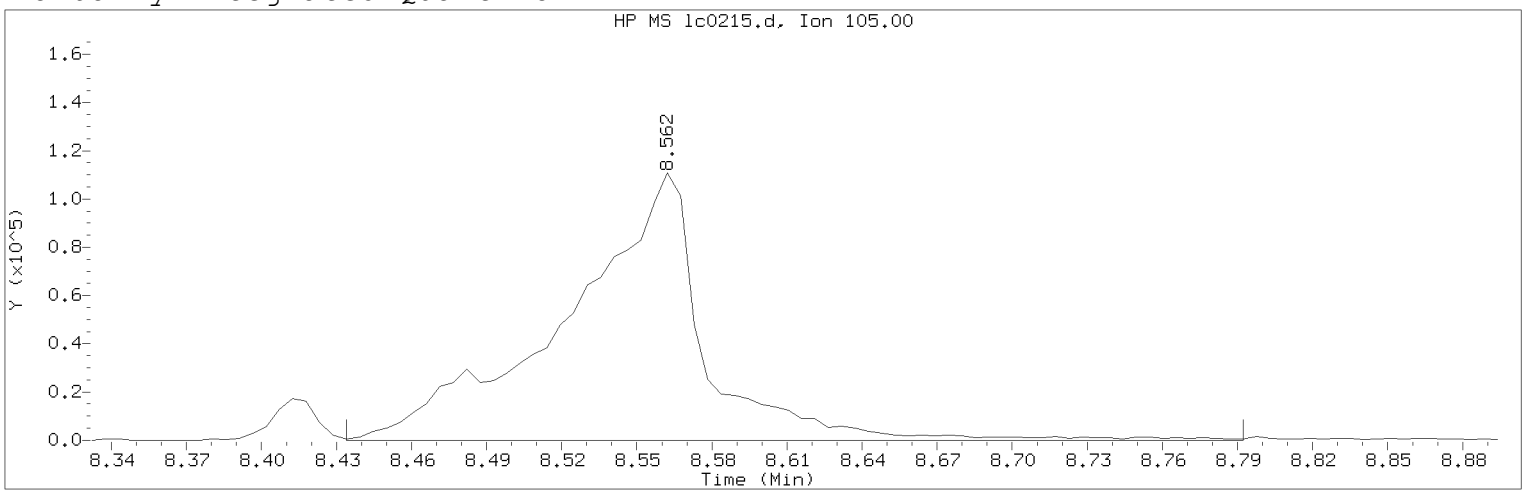
M = Compound was manually integrated.
A = User selected an alternate hit.
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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

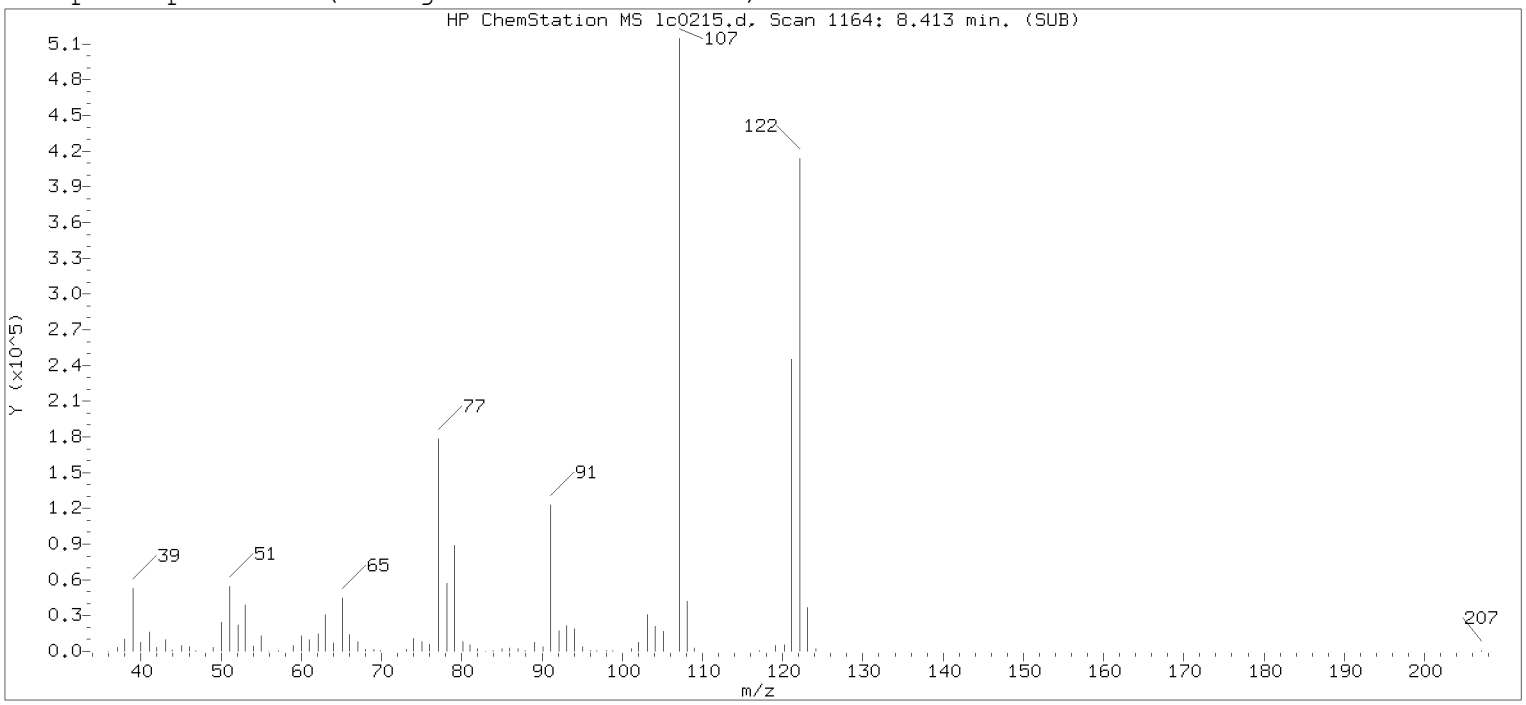
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1192
Retention Time (minutes) : 8.562
Quant Ion : 105.00
Area (flag) : 425847M
On-Column Amount (ng/ul) : 12.4994
Integration start scan : 1167 Integration stop scan: 1234
Y at integration start : -66 Y at integration end: -15

Reason for manual integration: improper integration

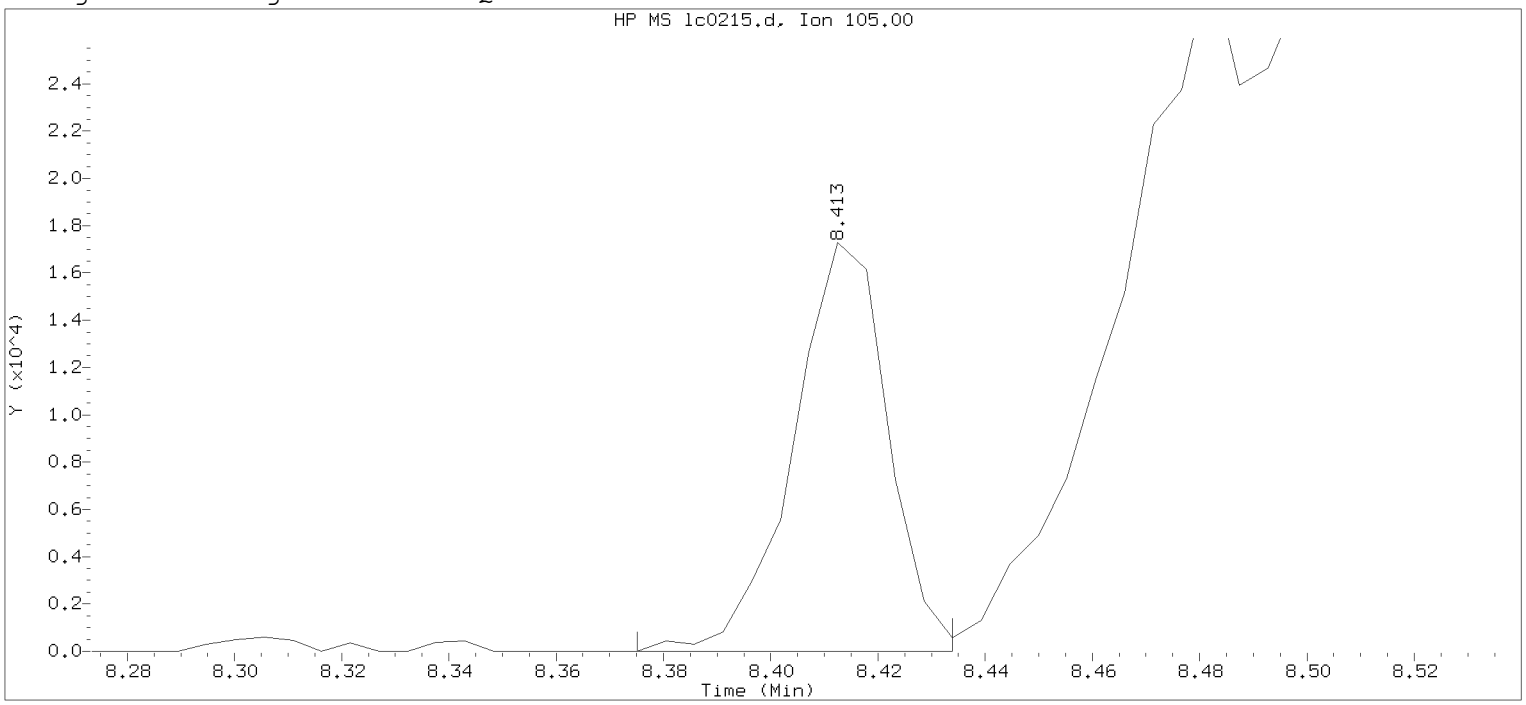
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

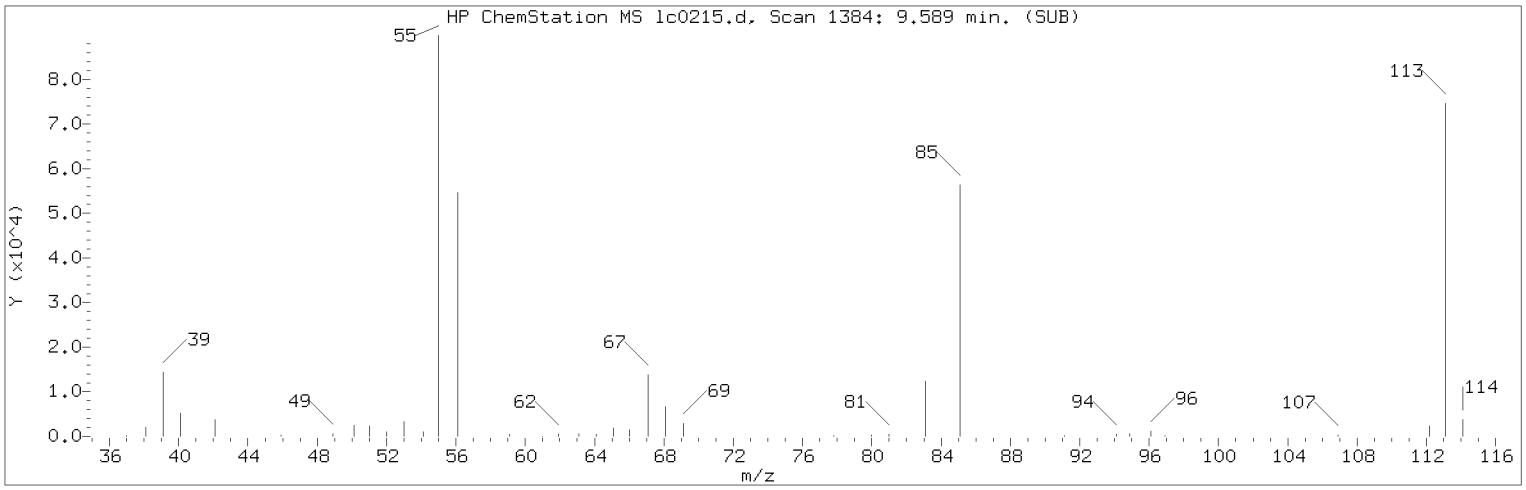
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

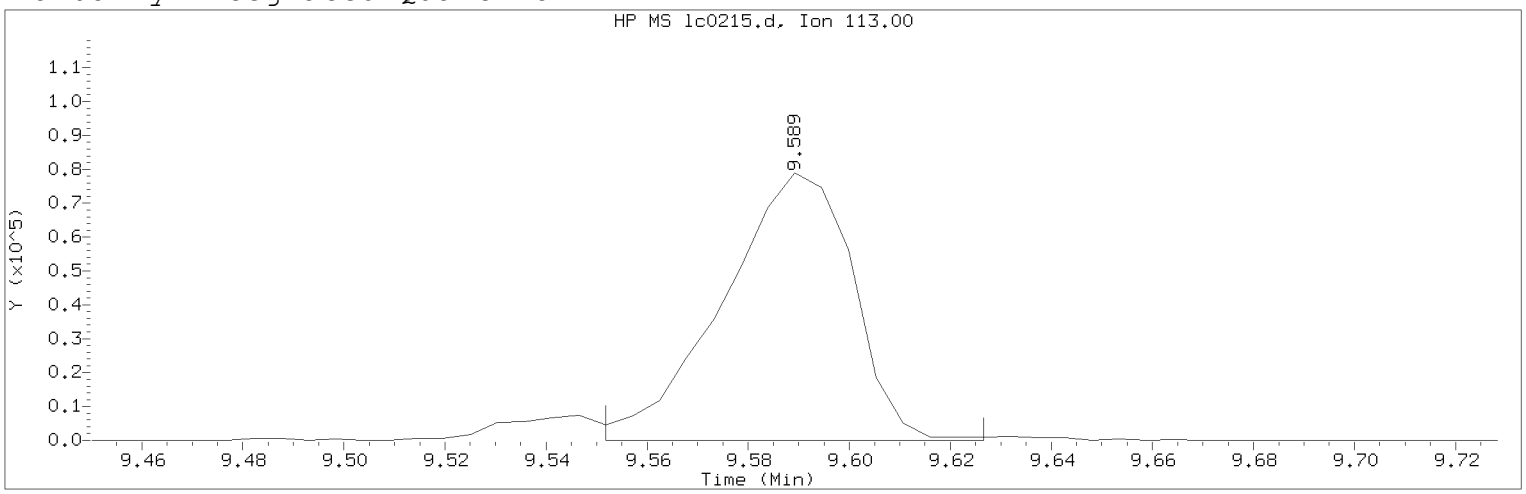
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1164		
Retention Time (minutes)	: 8.413		
Quant Ion	: 105.00		
Area	: 21131		
On-column Amount (ng/ul)	: 0.7048		
Integration start scan	: 1156	Integration stop scan:	1167
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

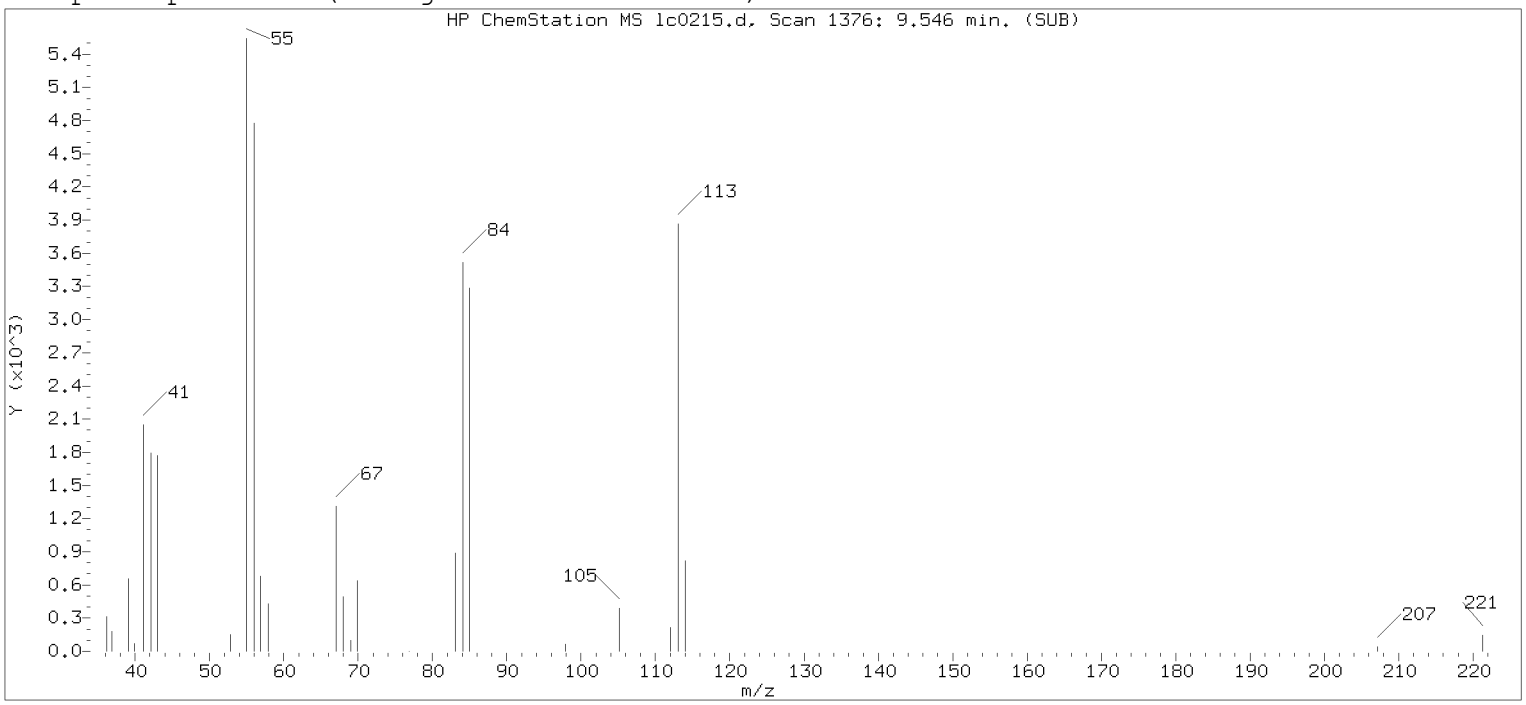
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1384
Retention Time (minutes) : 9.589
Quant Ion : 113.00
Area (flag) : 140251A
On-Column Amount (ng/ul) : 12.6058
Integration start scan : 1376 Integration stop scan: 1390
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

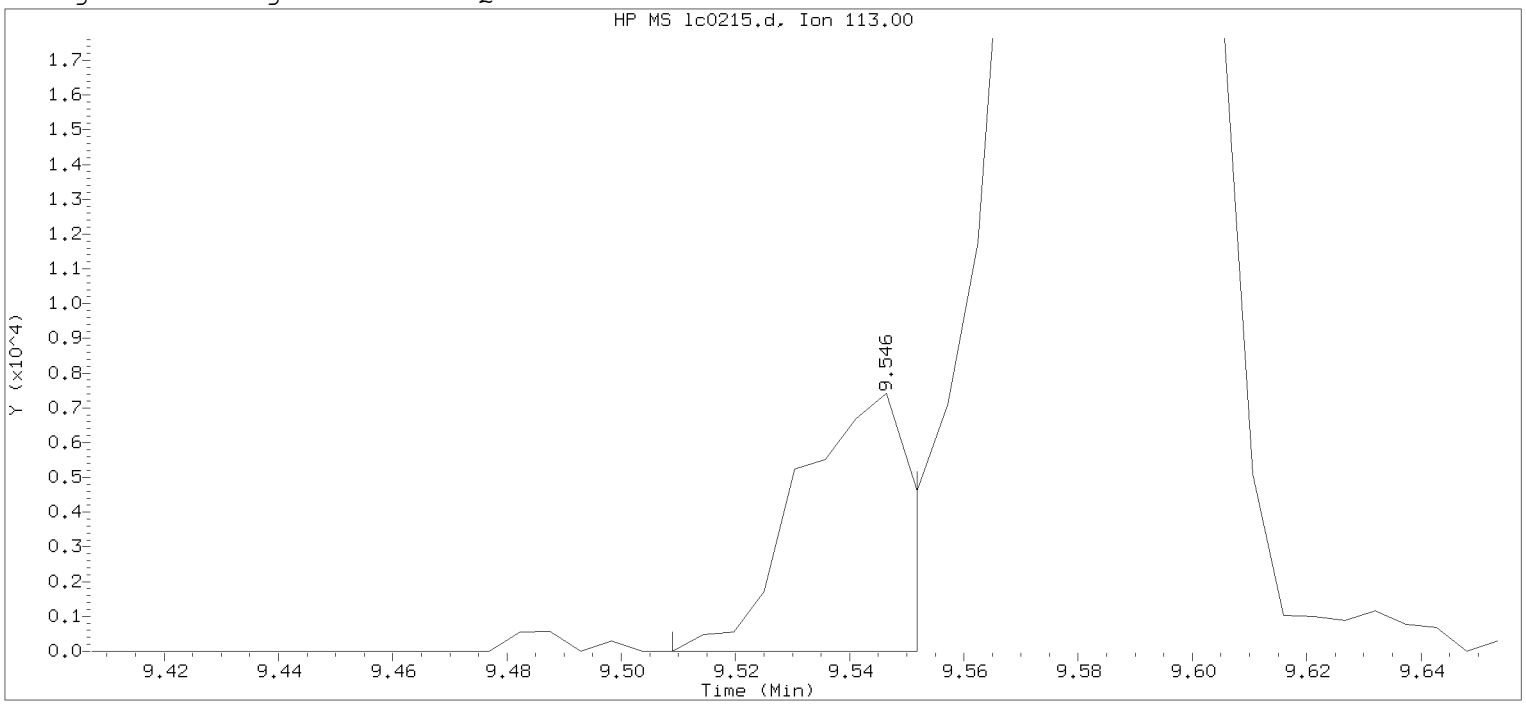
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

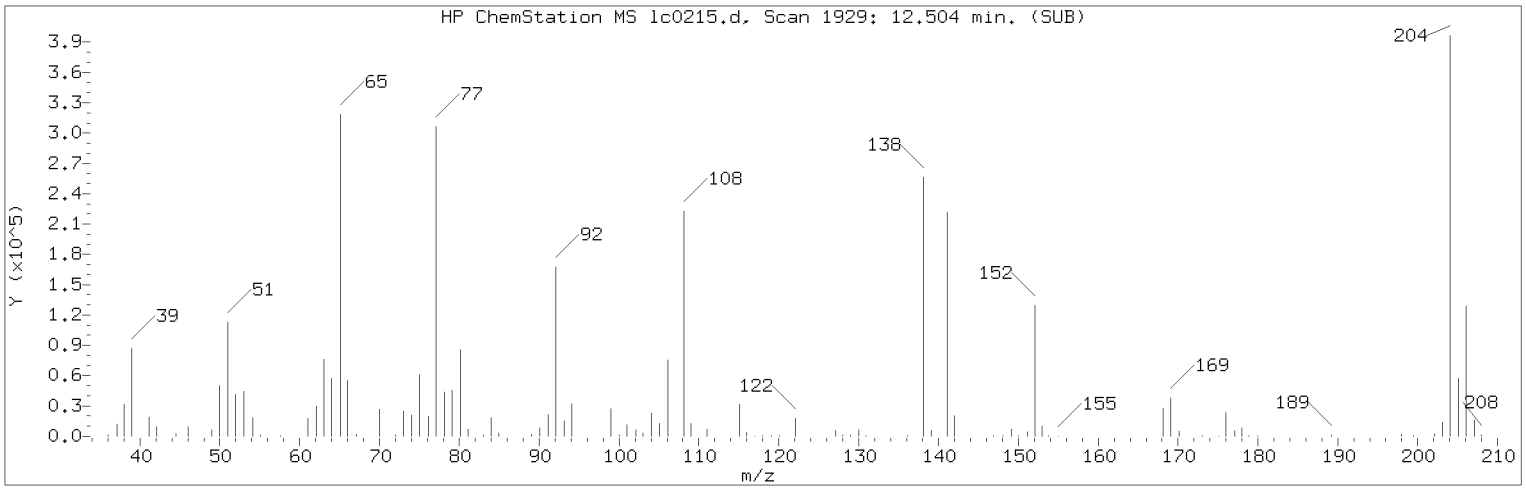
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

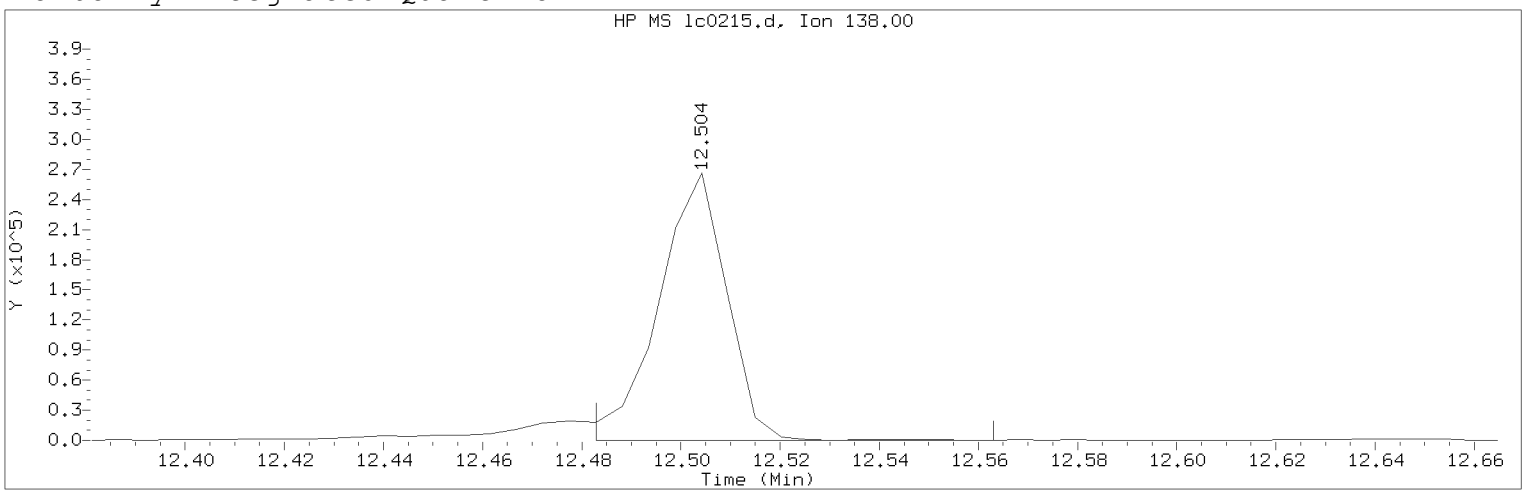
Compound Number	: 79		
Compound Name	: Caprolactam		
Scan Number	: 1376		
Retention Time (minutes)	: 9.546		
Quant Ion	: 113.00		
Area	: 9604		
On-column Amount (ng/ul)	: 0.8591		
Integration start scan	: 1368	Integration stop scan:	1376
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2.730

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

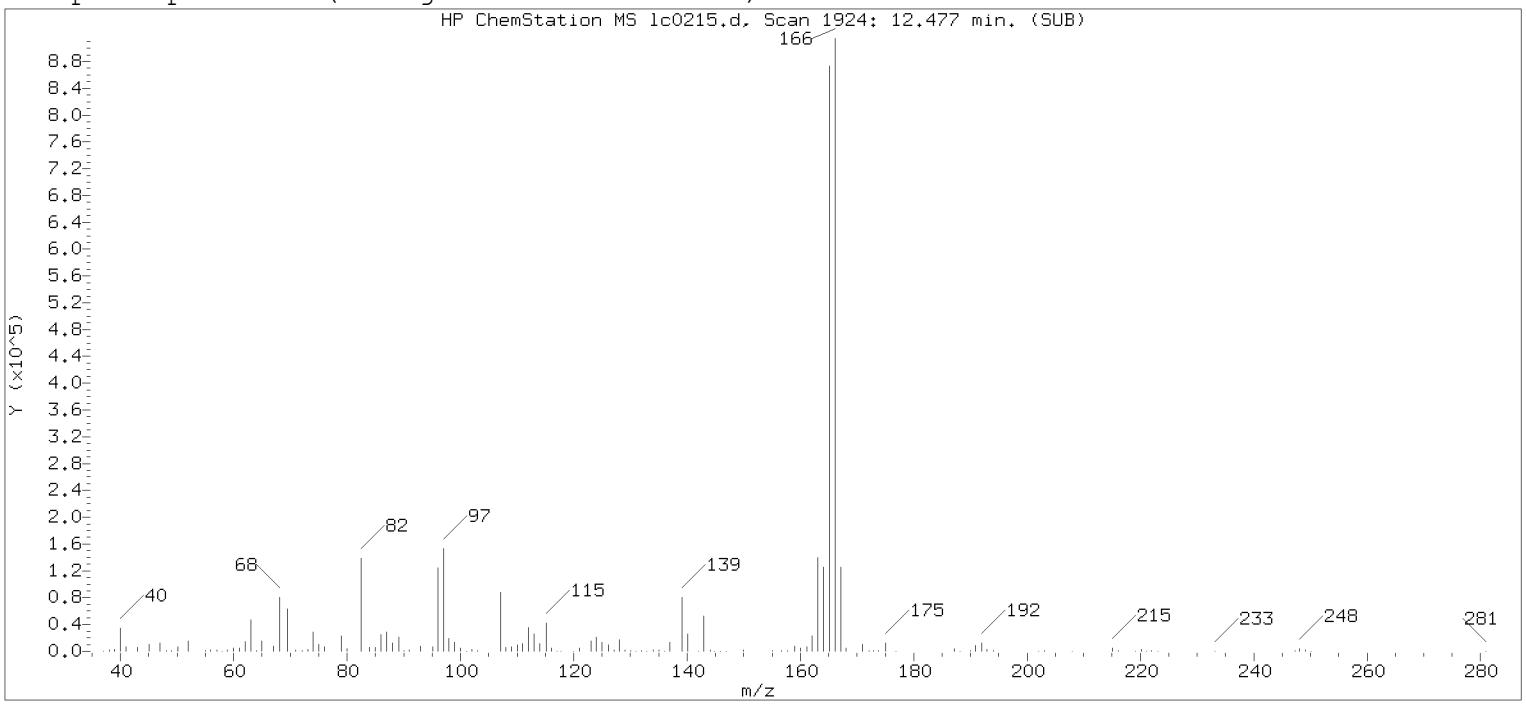
Compound Number : 134
Compound Name : 4-Nitroaniline
Scan Number : 1929
Retention Time (minutes) : 12.504
Quant Ion : 138.00
Area (flag) : 251396A
On-Column Amount (ng/ul) : 12.6613
Integration start scan : 1924 Integration stop scan: 1939
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

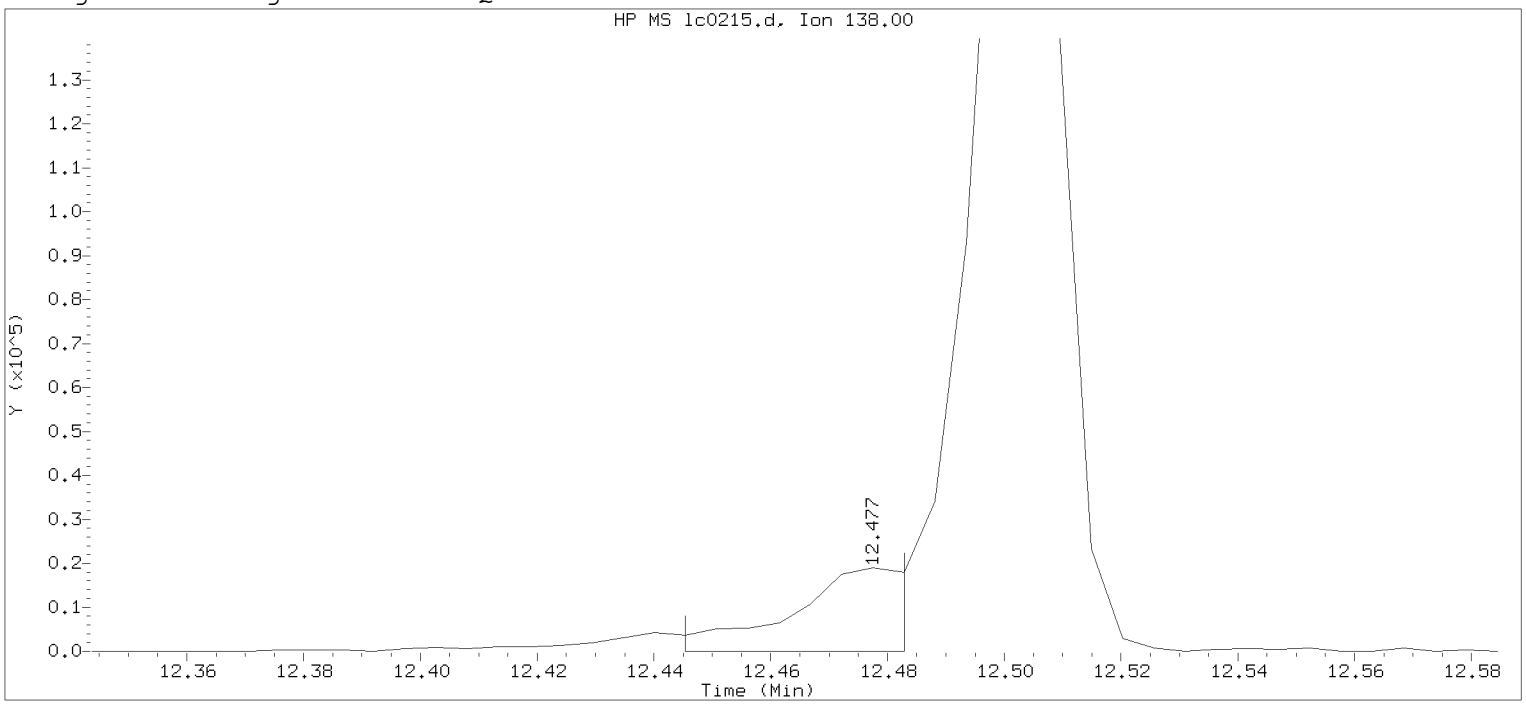
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

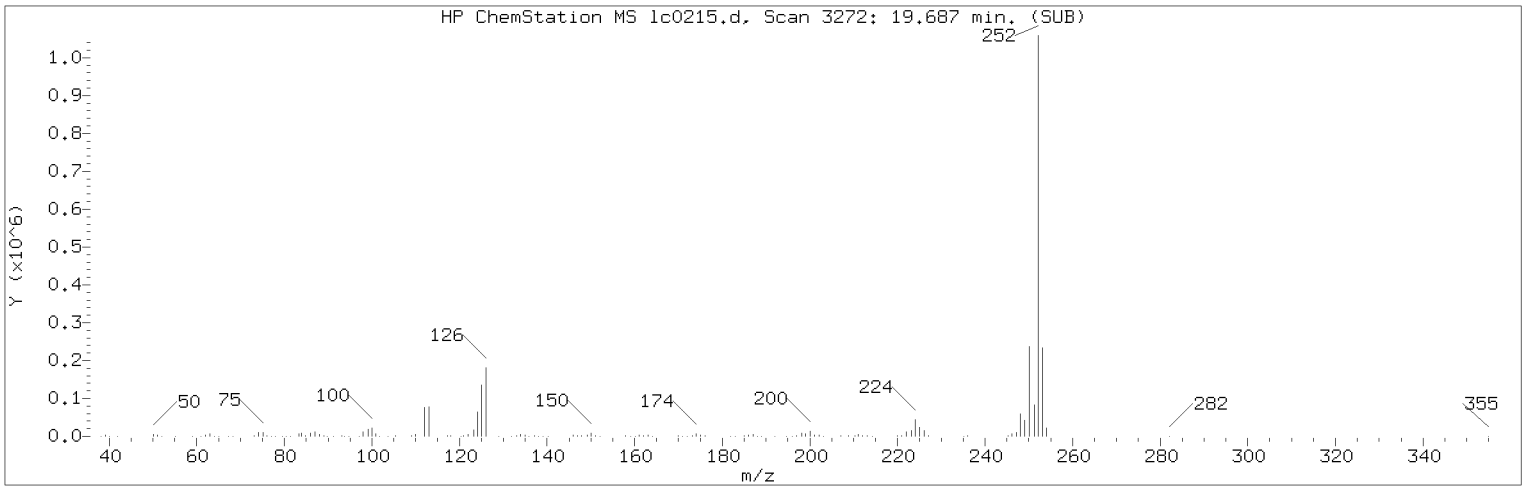
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

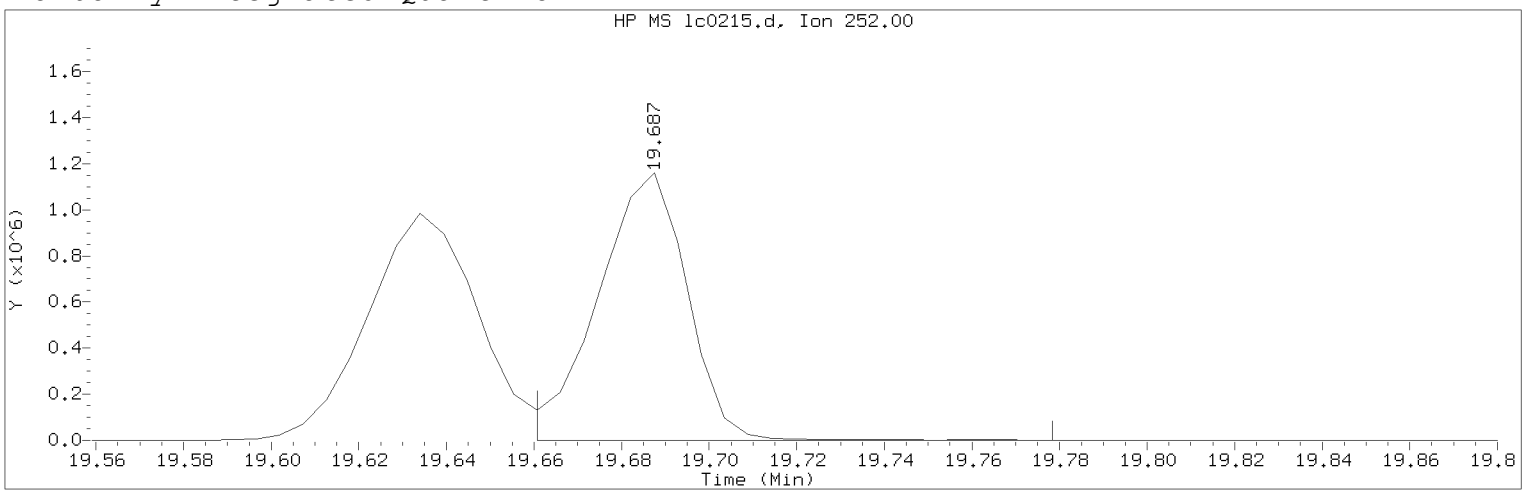
Compound Number	: 134		
Compound Name	: 4-Nitroaniline		
Scan Number	: 1924		
Retention Time (minutes)	: 12.477		
Quant Ion	: 138.00		
Area	: 23985		
On-column Amount (ng/ul)	: 1.1651		
Integration start scan	: 1917	Integration stop scan:	1924
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2.732

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

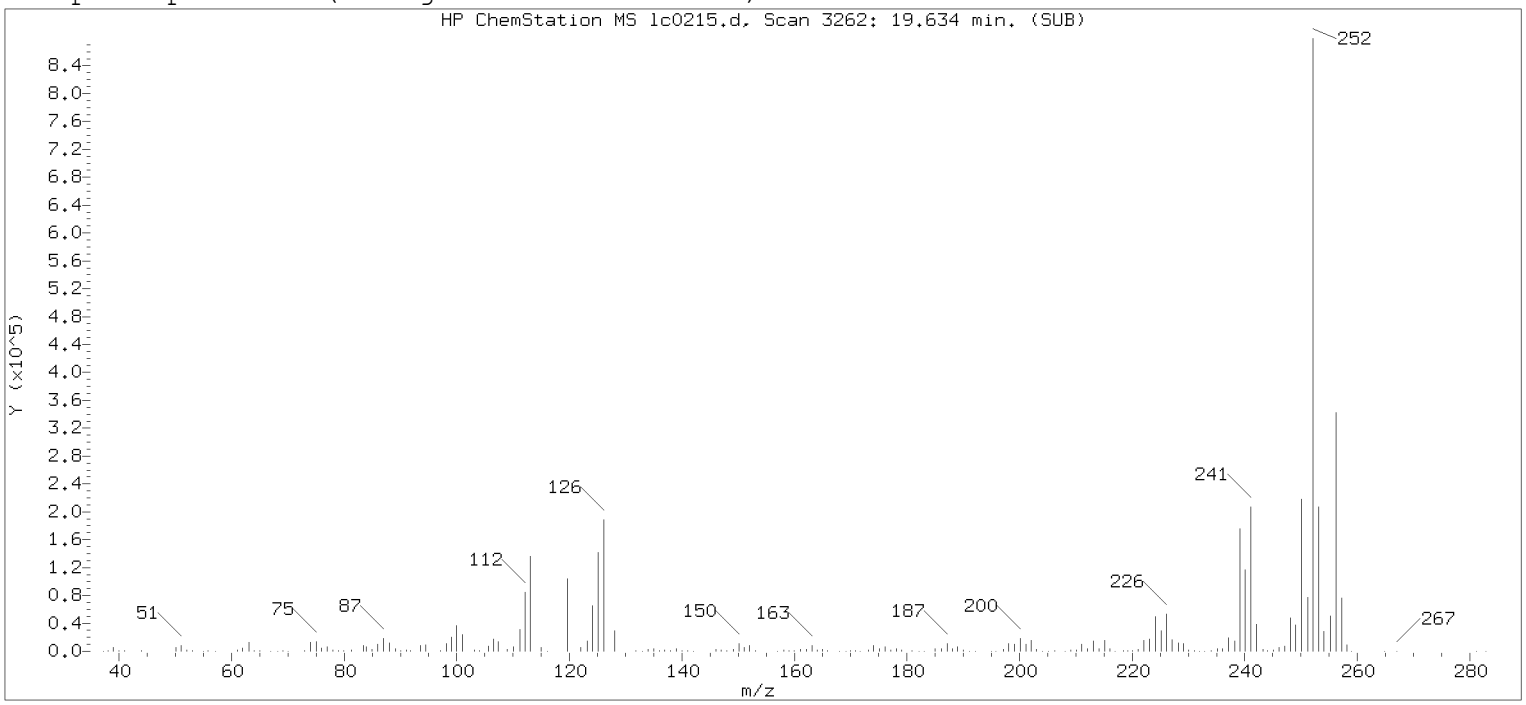
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3272
Retention Time (minutes) : 19.687
Quant Ion : 252.00
Area (flag) : 1621537A
On-Column Amount (ng/ul) : 12.7312
Integration start scan : 3266 Integration stop scan: 3288
Y at integration start : 472 Y at integration end: 472

Reason for manual integration: improper integration

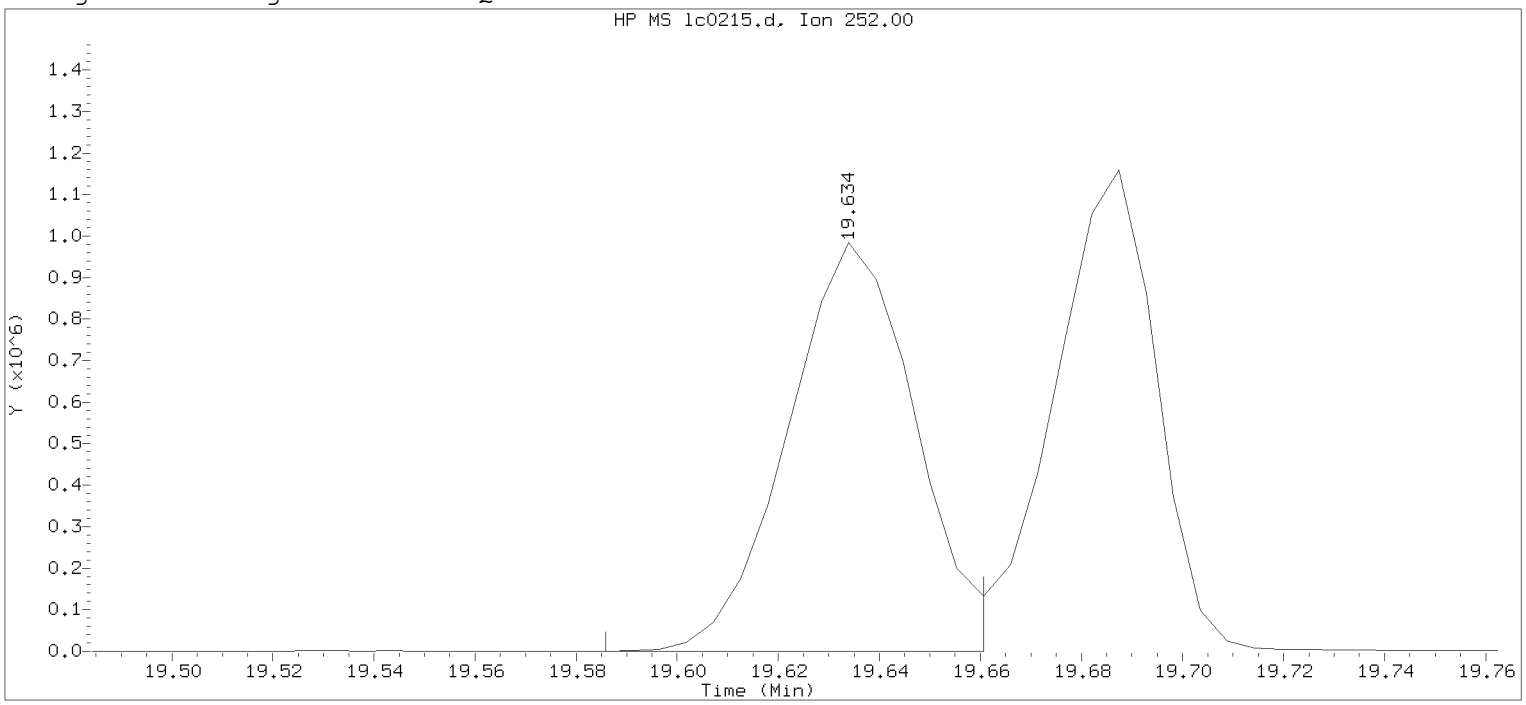
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

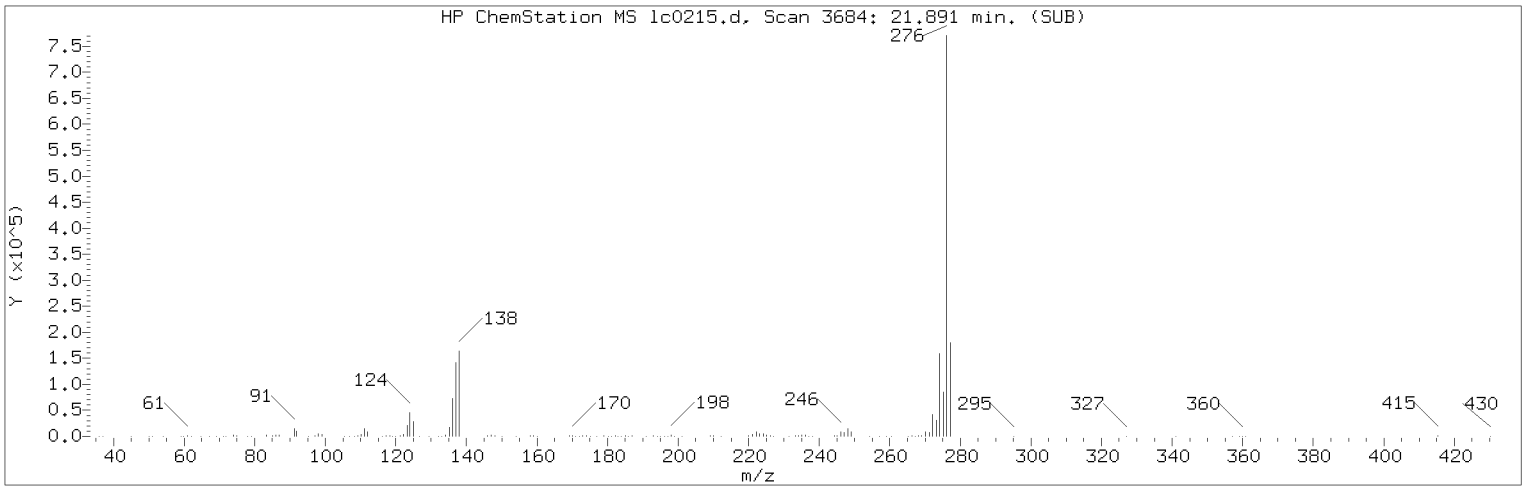
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

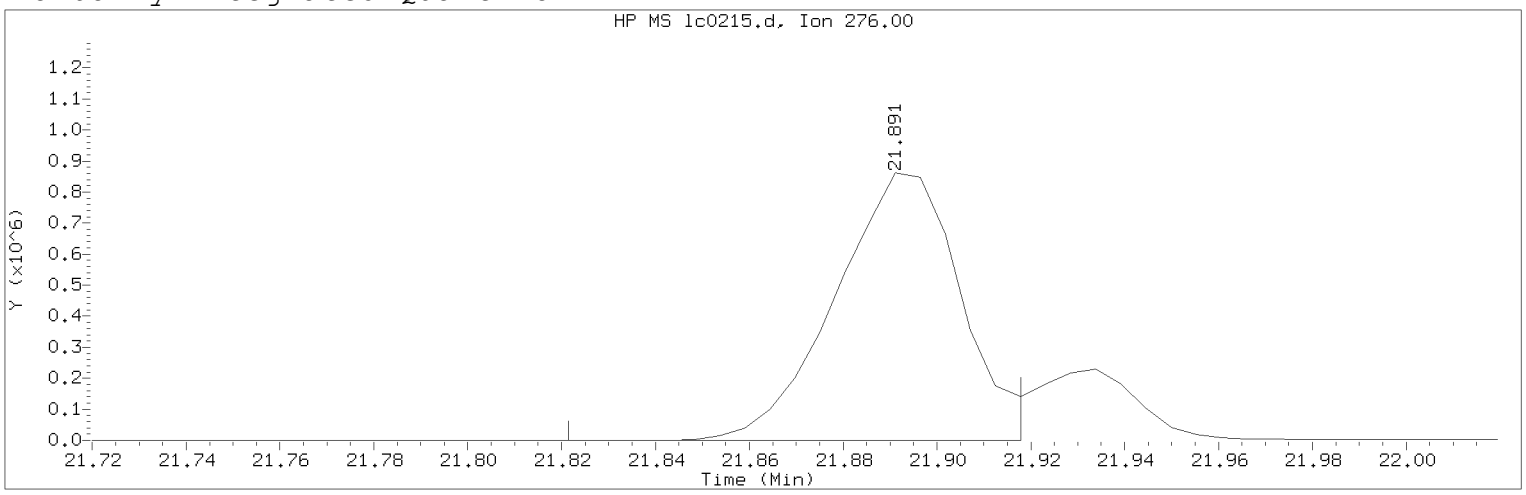
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3262		
Retention Time (minutes)	: 19.634		
Quant Ion	: 252.00		
Area	: 1704104		
On-column Amount (ng/ul)	: 13.5880		
Integration start scan	: 3252	Integration stop scan:	3266
Y at integration start	: 472	Y at integration end:	472

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Target 3.5 esignature user ART [illegible]

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

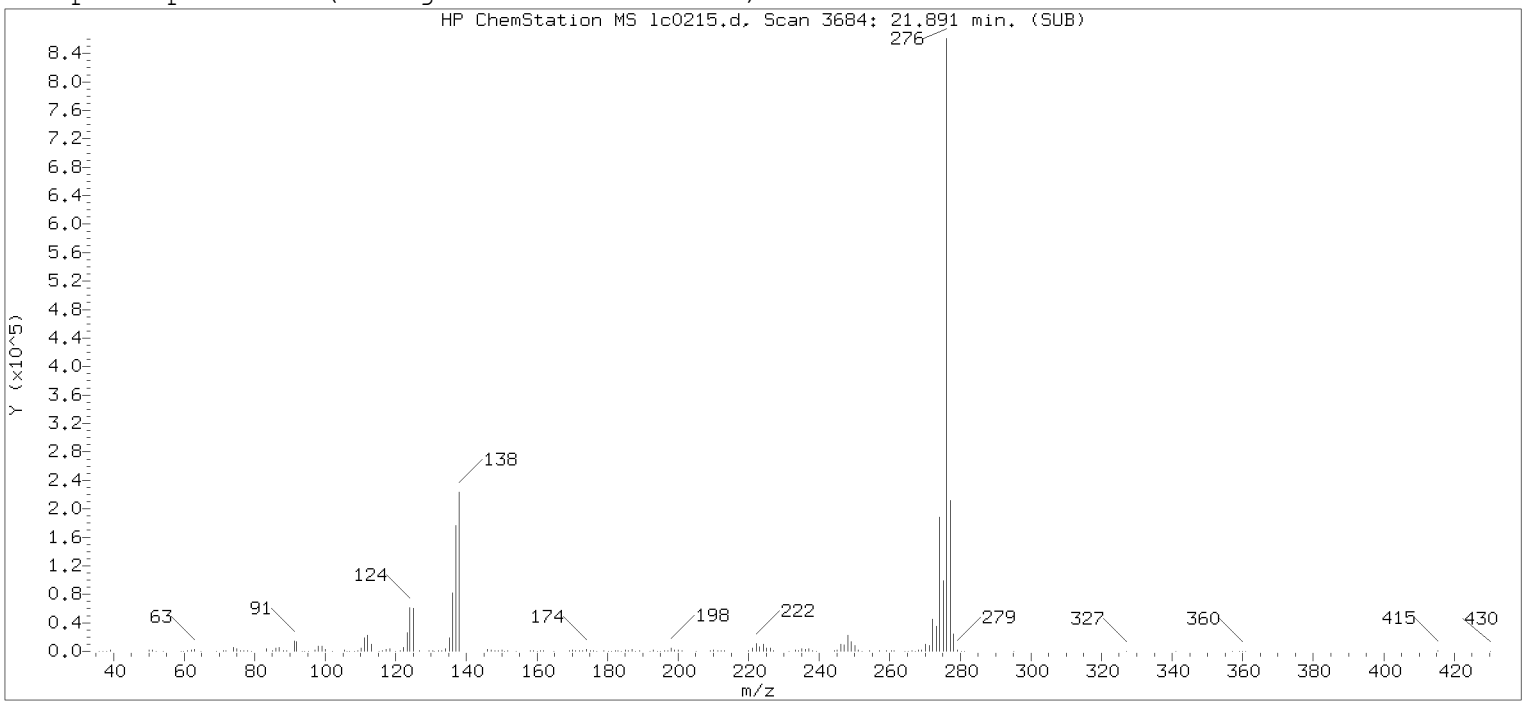
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3684
Retention Time (minutes) : 21.891
Quant Ion : 276.00
Area (flag) : 1604991M
On-Column Amount (ng/ul) : 12.4964
Integration start scan : 3670 Integration stop scan: 3688
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

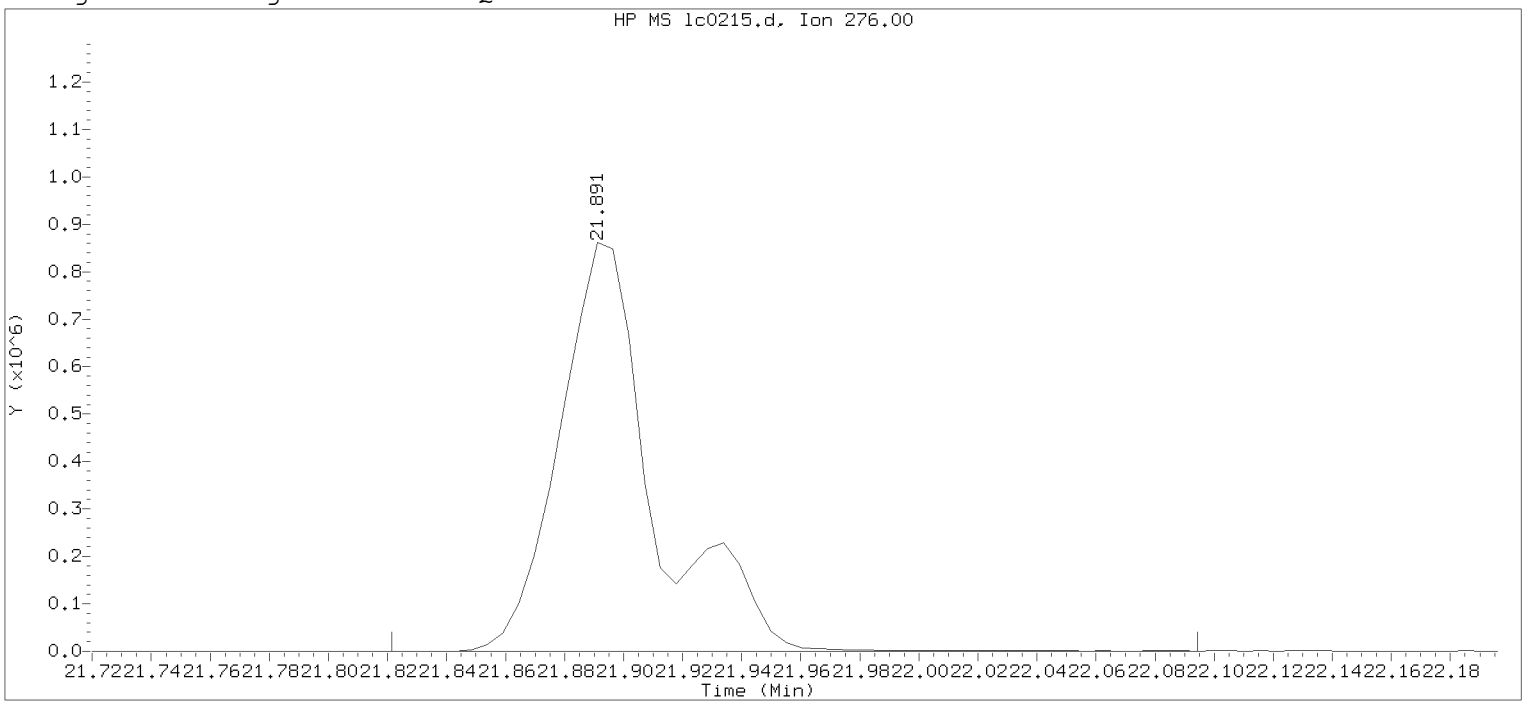
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



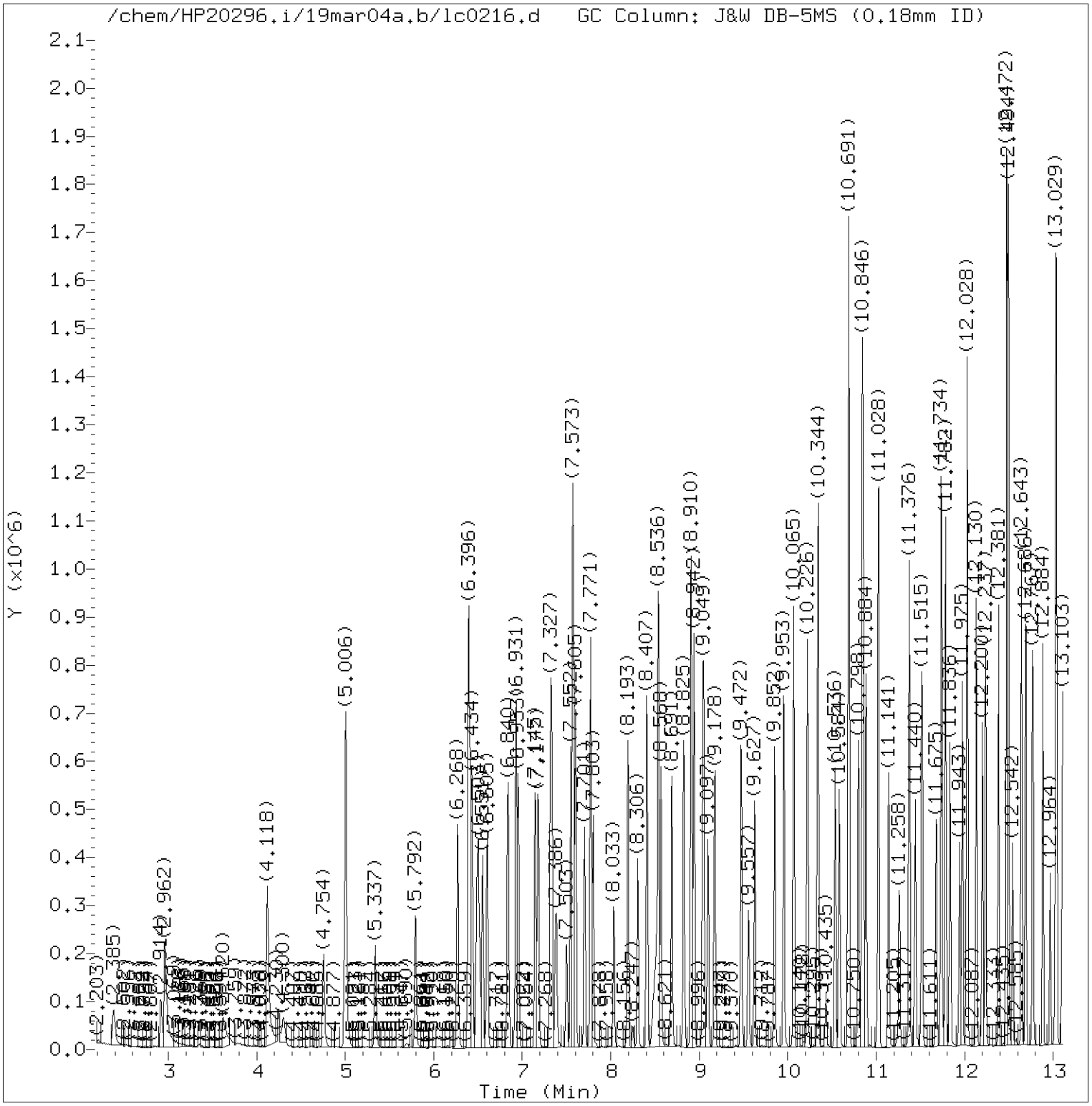
Data File: /chem/HP20296.i/19mar04a.b/lc0215.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:06 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:28
Date, time and analyst ID of latest file update: 05-Mar-2019 14:28 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3684		
Retention Time (minutes)	: 21.891		
Quant Ion	: 276.00		
Area	: 1931740		
On-column Amount (ng/ul)	: 16.5933		
Integration start scan	: 3670	Integration stop scan:	3721
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2.736



Total Ion Chromatogram (TIC)

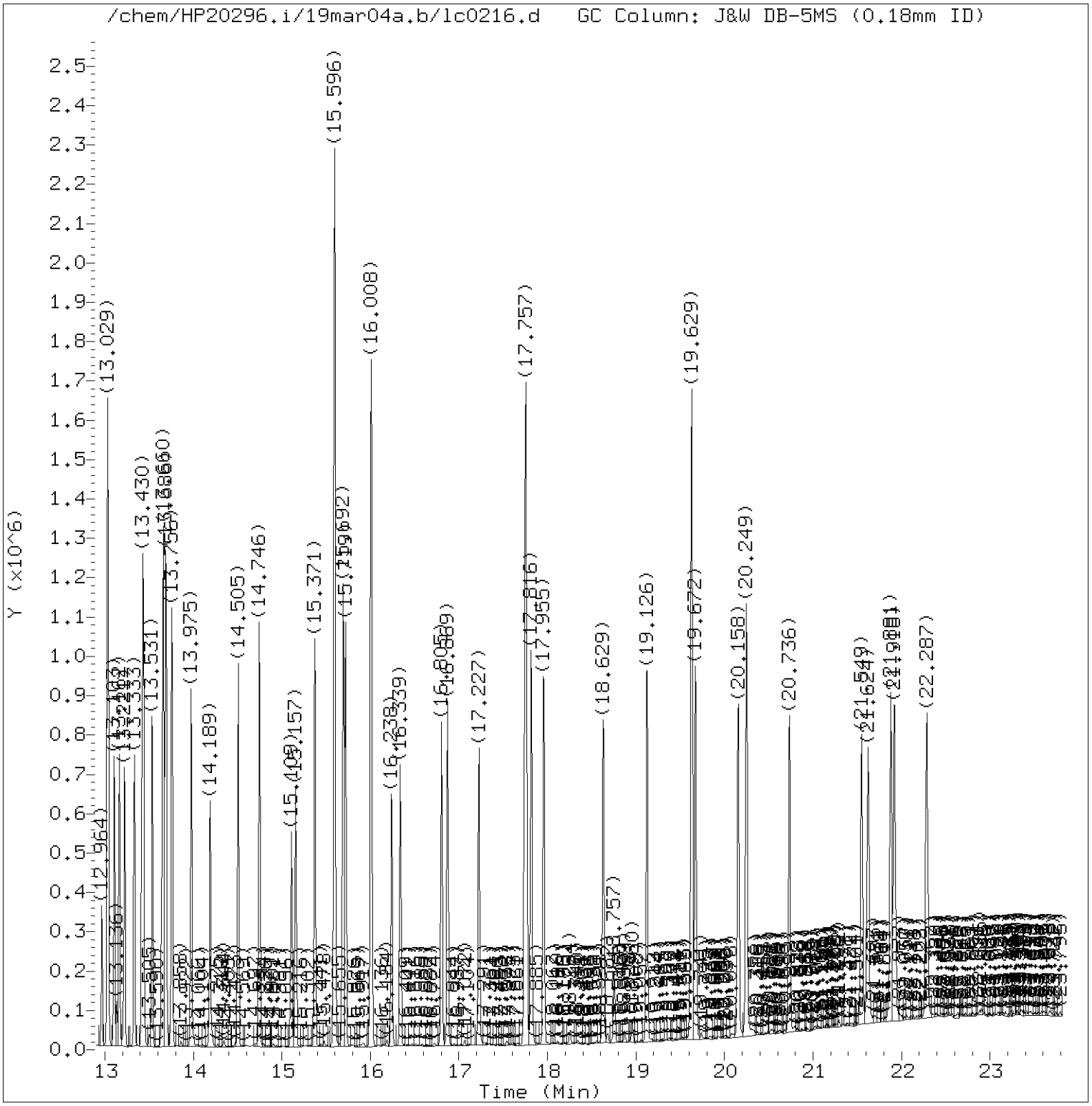
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.385	88	74180	3.583
5) N-Nitrosodimethylamine	(1)	2.914	74	111834	3.479
6) Pyridine	(1)	2.962	79	205302	3.692
8) 2-Picoline	(1)	4.118	93	209865	3.576
9) N-Nitrosomethylethylamine	(1)	4.310	88	84753	3.565
10) Methyl methanesulfonate	(1)	4.754	80	106292	3.600
12)$2-Fluorophenol	(1)	5.006	112	334422	7.260
14) N-Nitrosodiethylamine	(1)	5.337	102	82310	3.527
43) Total Cresols	(1)			345141	7.249
16) Ethyl methanesulfonate	(1)	5.792	109	88282	3.603
17) Benzaldehyde	(1)	6.268	77	155429	3.838
18)$Phenol-d6	(1)	6.391	99	444380	7.209
19) Phenol	(1)	6.412	94	253775	3.635
20) Aniline	(1)	6.434	93	298053	3.642
21) a-methylstyrene	(1)	6.519	118	33744	3.668
23) bis(2-Chloroethyl)ether	(1)	6.551	93	187950	3.606
24) 2-Chlorophenol	(1)	6.605	128	161994	3.596
25) 1,3-Dichlorobenzene	(1)	6.840	146	174948	3.624
26)*1,4-Dichlorobenzene-d4	(1)	6.926	152	146728	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	175064	3.641
28) Benzyl alcohol	(1)	7.150	108	108542	3.596
29) 1,2-Dichlorobenzene	(1)	7.177	146	166845	3.632
31) Indene	(1)	7.316	115	221138	3.553
32) 2-Methylphenol	(1)	7.332	108	161183	3.590
100) Isosafrole	(3)			136764	3.593
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.386	45	182202	3.578
35) bis(2-Chloroisopropyl)ether	(1)	7.386	45	182202	3.578
36) N-Nitrosopyrrolidine	(1)	7.503	100	89043	3.562
37) Acetophenone	(1)	7.552	105	246334	3.596
38) 4-Methylphenol	(1)	7.573	108	183958	3.659
39) N-Nitroso-di-n-propylamine	(1)	7.573	70	140943	3.720
40) N-Nitrosomorpholine	(1)	7.573	56	94750	3.723
41) o-Toluidine	(1)	7.605	106	286393	3.654
44) Hexachloroethane	(1)	7.701	117	74305	3.498
45)$Nitrobenzene-d5	(2)	7.771	82	405034	7.328
46) Nitrobenzene	(2)	7.803	77	208909	3.715
50) N-Nitrosopiperidine	(2)	8.038	114	81963	3.632
125) 2,4_2,6-Dinitrotoluenes	(3)			165861	7.366
52) Isophorone	(2)	8.193	82	361156	3.674
53) 2-Nitrophenol	(2)	8.306	139	79101	3.572

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.407	107	181064	3.685
58) Benzoic acid	(2)	8.530	105	238614M	7.084
59) O,O,O-Triethylphosphorothioate	(2)	8.541	198	72560	3.741
57) bis(2-Chloroethoxy)methane	(2)	8.568	93	234777	3.740
62) 2,4-Dichlorophenol	(2)	8.691	162	131638	3.674
151) Diallate trans/cis	(4)			163385	3.849
65) 1,2,4-Trichlorobenzene	(2)	8.825	180	141181	3.708
68)*Naphthalene-d8	(2)	8.910	136	548029	5.000
69) Naphthalene	(2)	8.942	128	457304	3.602
70) 4-Chloroaniline	(2)	9.044	127	184459	3.625
71) 2,6-Dichlorophenol	(2)	9.055	162	127183	3.701
72) Hexachloropropene	(2)	9.097	213	93540	3.597
74) Hexachlorobutadiene	(2)	9.178	225	78697	3.668
78) Quinoline	(2)	9.472	129	274517	3.709
79) Caprolactam	(2)	9.557	113	45201	3.989
80) N-Nitrosodi-n-butylamine	(2)	9.627	84	132081	3.344
83) 4-Chloro-3-methylphenol	(2)	9.852	107	151738	3.601
85) Safrole	(2)	9.958	162	115199	3.735
86) 2-Methylnaphthalene	(2)	10.071	142	296574	3.622
87) 1-Methylnaphthalene	(2)	10.226	142	280728	3.631
88) Hexachlorocyclopentadiene	(3)	10.344	237	90383	3.575
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.344	216	139065	3.683
91) cis-Isosafrole	(3)	10.435	162	20819	0.601
93) 2,4,6-Trichlorophenol	(3)	10.536	196	90818	3.560
95) 2,4,5-Trichlorophenol	(3)	10.584	196	96513	3.656
96)$2-Fluorobiphenyl	(3)	10.691	172	656775	7.412
97) trans-Isosafrole	(3)	10.798	162	115945	2.992
98) 1,1'-Biphenyl	(3)	10.841	154	342166	3.615
99) 2-Chloronaphthalene	(3)	10.852	162	280607	3.429
101) 1-Chloronaphthalene	(3)	10.884	162	262550	3.982
104) 2-Nitroaniline	(3)	11.023	138	86446	3.504
103) Diphenyl ether	(3)	11.028	170	188026	3.715
108) 1,4-Naphthoquinone	(3)	11.141	158	115084	3.668
109) 1,4-Dinitrobenzene	(3)	11.264	168	43866	3.512
110) Dimethylphthalate	(3)	11.376	163	319967	3.916
111) 1,3-Dinitrobenzene	(3)	11.376	168	50183	3.706
113) 2,6-Dinitrotoluene	(3)	11.440	165	69725	3.610
114) Acenaphthylene	(3)	11.515	152	396729	3.564
117) 3-Nitroaniline	(3)	11.675	138	78298	3.645
118)*Acenaphthene-d10	(3)	11.734	164	264105	5.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.782	153	294732	3.674
120) 2,4-Dinitrophenol	(3)	11.836	184	84151	6.761
121) 4-Nitrophenol	(3)	11.943	109	54398	3.433
122) Pentachlorobenzene	(3)	11.975	250	119918	3.737
123) 2,4-Dinitrotoluene	(3)	12.023	165	96136	3.756
124) Dibenzofuran	(3)	12.028	168	398538	3.779
126) 1-Naphthylamine	(3)	12.130	143	283990	3.594
127) 2,3,4,6-Tetrachlorophenol	(3)	12.200	232	76653	3.651
128) 2-Naphthylamine	(3)	12.237	143	268094	3.483
129) Diethylphthalate	(3)	12.381	149	311524	3.903
131) Fluorene	(3)	12.472	166	313906	3.661
130) Thionazin	(3)	12.478	107	61666	3.703
133) 5-Nitro-o-toluidine	(3)	12.488	152	89037	3.691
134) 4-Nitroaniline	(3)	12.494	138	84959	4.054
132) 4-Chlorophenyl-phenylether	(3)	12.499	204	142051	3.664
135) 4,6-Dinitro-2-methylphenol	(4)	12.542	198	53505	3.564
136) N-Nitrosodiphenylamine	(4)	12.643	169	260985	3.676
137) NDPA as diphenylamine	(4)	12.643	169	260985	3.676
139) 1,2-Diphenylhydrazine	(4)	12.686	77	393893	3.718
140)$2,4,6-Tribromophenol	(3)	12.772	330	91153	7.301
142) Tetraethyldithiopyrophosphate	(4)	12.879	97	65231	3.806
144) 1,3,5-Trinitrobenzene	(4)	12.970	213	32472	3.578
145) Diallate (peak 1)	(4)	13.023	86	140019	3.198
146) Phorate	(4)	13.029	75	247632	3.813
147) Phenacetin	(4)	13.039	108	187917	3.703
148) 4-Bromophenyl-phenylether	(4)	13.109	248	83591M	3.649
149) Diallate (peak 2)	(4)	13.136	86	23366	0.651
150) Hexachlorobenzene	(4)	13.162	284	94337	3.594
152) Dimethoate	(4)	13.221	87	160277	3.782
153) Atrazine	(4)	13.333	200	83025	4.002
154) Pentachlorophenol	(4)	13.419	266	62492	3.525
155) 4-Aminobiphenyl	(4)	13.430	169	303372	3.699
156) Pentachloronitrobenzene	(4)	13.435	237	39757	3.468
157) Pronamide	(4)	13.531	173	147002	3.730
158)*Phenanthrene-d10	(4)	13.660	188	505806	5.000
159) Dinoseb	(4)	13.681	211	80774	3.520
160) Phenanthrene	(4)	13.692	178	453484	3.511
162) Anthracene	(4)	13.756	178	460659	3.637
168) Carbazole	(4)	13.975	167	416777	3.690
169) Methyl parathion	(4)	14.189	109	126736	3.675

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

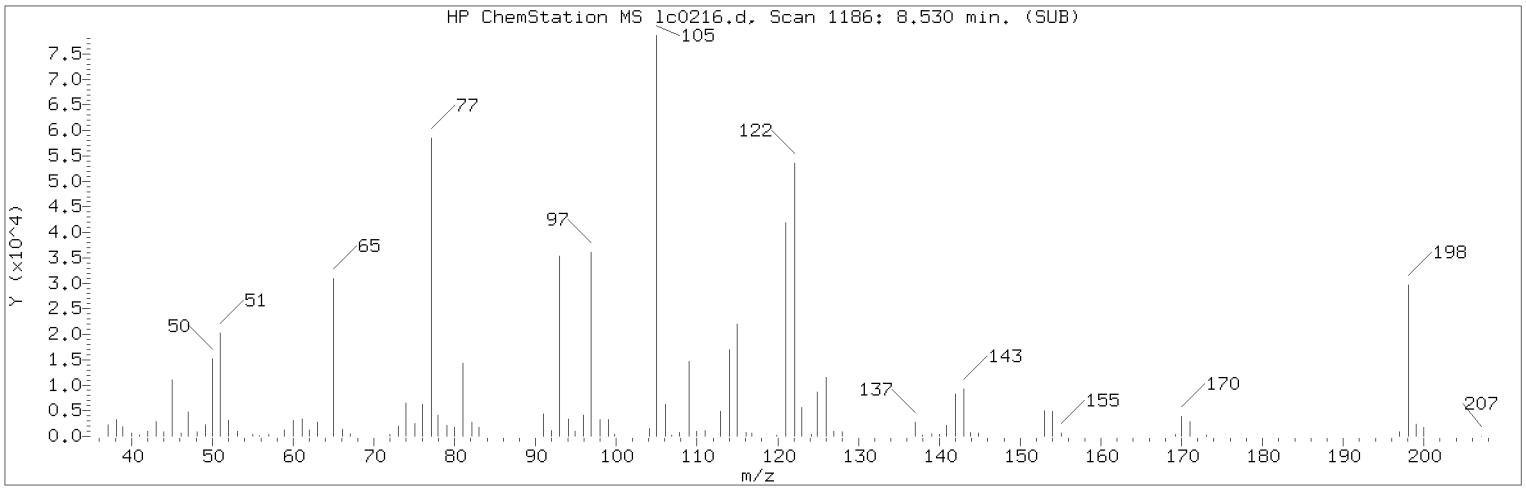
Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.505	149	544516	3.647
172) Parathion	(4)	14.746	109	79881	3.599
173) 4-Nitroquinoline-1-oxide	(4)	14.751	190	49188	3.152
227) Total PAHs	(6)			7733622	64.462
174) Octachlorostyrene	(4)	15.109	308	36762	3.684
176) Isodrin	(4)	15.157	193	53477	3.779
178) Fluoranthene	(4)	15.371	202	502526	3.606
179) Benzidine	(5)	15.596	184	1019946	10.780
180)*Pyrene-d10	(5)	15.692	212	508414	5.000
182) Pyrene	(5)	15.719	202	502947	3.540
184)$Terphenyl-d14	(5)	16.008	244	650981	7.373
187) p-Dimethylaminoazobenzene	(5)	16.243	225	82578	3.445
190) Chlorobenzilate	(5)	16.339	139	172455	3.537
192) 3,3'-Dimethylbenzidine	(5)	16.805	212	338946	3.457
193) Butylbenzylphthalate	(5)	16.869	149	254764	3.523
196) 2-Acetylaminofluorene	(5)	17.227	181	216430	3.403
198) 3,3'-Dichlorobenzidine	(5)	17.741	252	175761	3.408
200) Benzo(a)anthracene	(5)	17.757	228	495217	3.546
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.762	231	99789	3.456
201) Chrysene	(5)	17.816	228	464517	3.633
204) bis(2-Ethylhexyl)phthalate	(5)	17.960	149	369040	3.435
208) 6-Methylchrysene	(5)	18.634	242	317384	3.422
210) Di-n-octylphthalate	(6)	19.126	149	640253	3.432
211) Benzo(b)fluoranthene	(6)	19.629	252	496822	3.557
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.634	256	210987	3.584
213) Benzo(k)fluoranthene	(6)	19.672	252	487227A	3.706
216) Benzo(a)pyrene	(6)	20.158	252	456889	3.519
218)*Perylene-d12	(6)	20.249	264	523278	5.000
220) 3-Methylcholanthrene	(6)	20.736	268	237787	3.563
222) Dibenz(a,h)acridine	(6)	21.549	279	386608	3.488
223) Dibenz(a,j)acridine	(6)	21.624	279	385693	3.564
224) Indeno(1,2,3-cd)pyrene	(6)	21.881	276	438155M	3.365
225) Dibenz(a,h)anthracene	(6)	21.923	278	462509	3.519
226) Benzo(g,h,i)perylene	(6)	22.287	276	472697	3.568

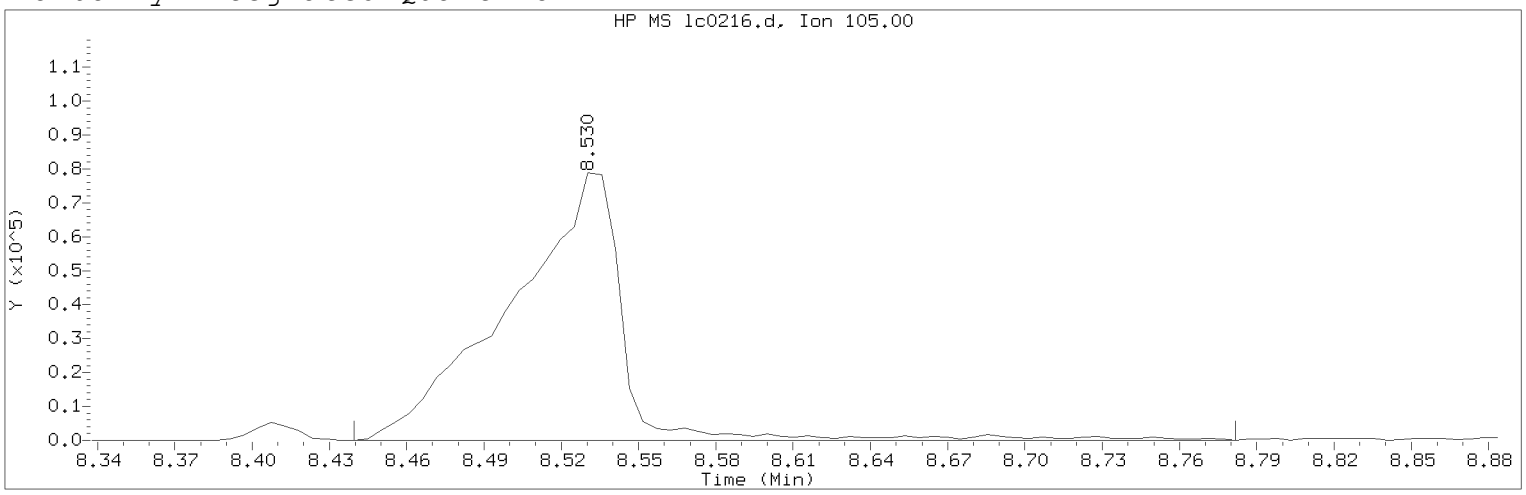
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

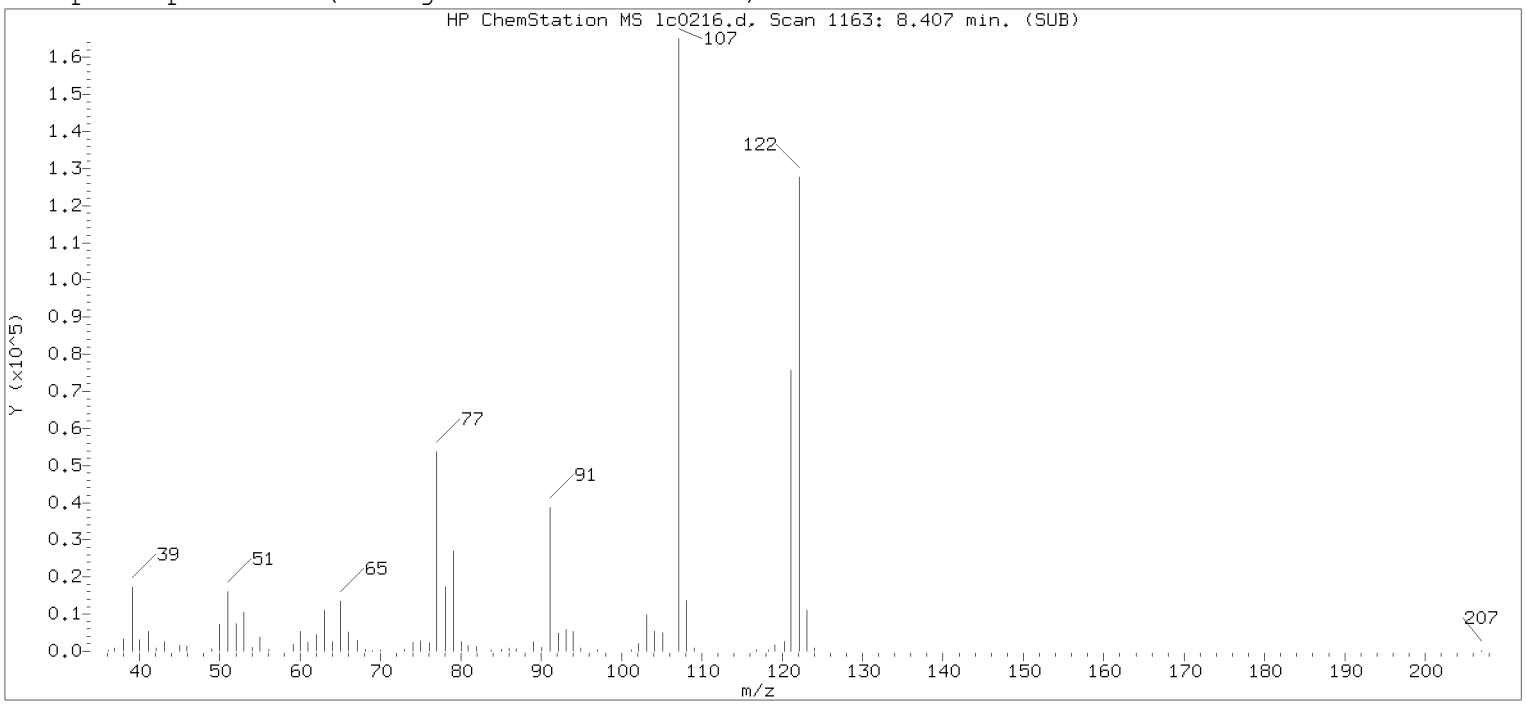
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1186
Retention Time (minutes) : 8.530
Quant Ion : 105.00
Area (flag) : 238614M
On-Column Amount (ng/ul) : 7.0843
Integration start scan : 1168 Integration stop scan: 1232
Y at integration start : -25 Y at integration end: -25

Reason for manual integration: improper integration

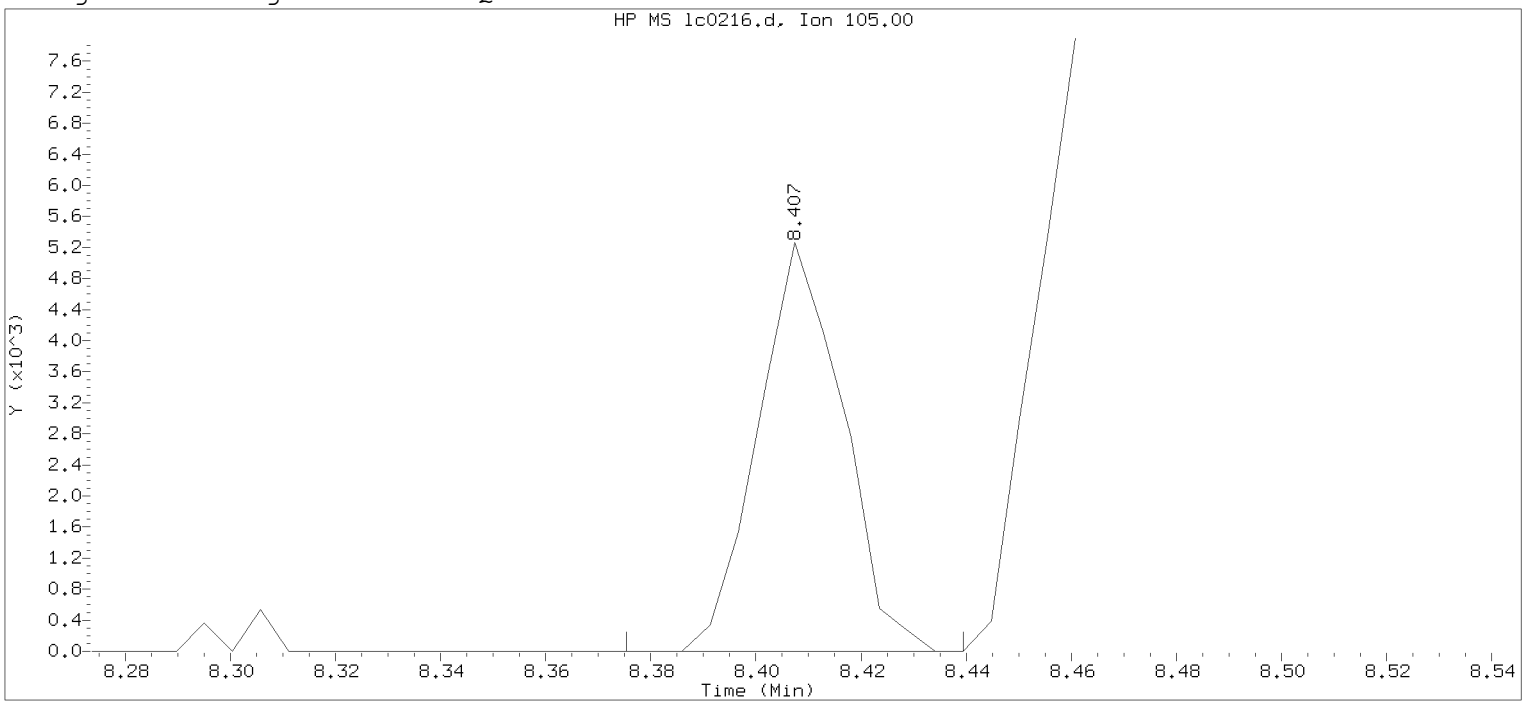
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

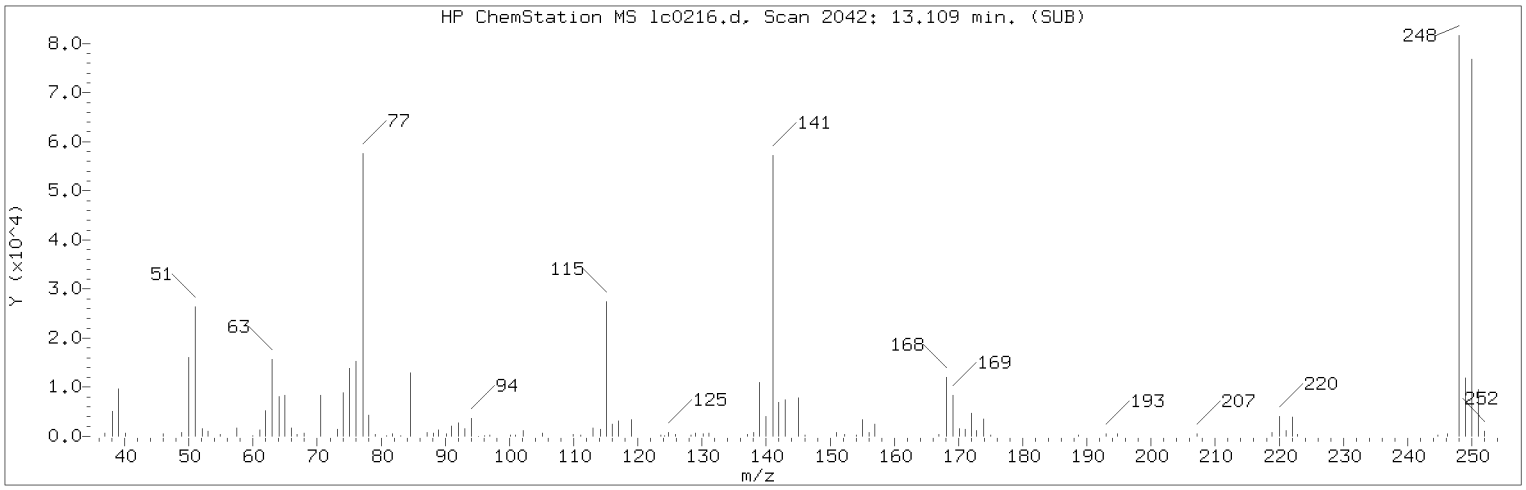
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

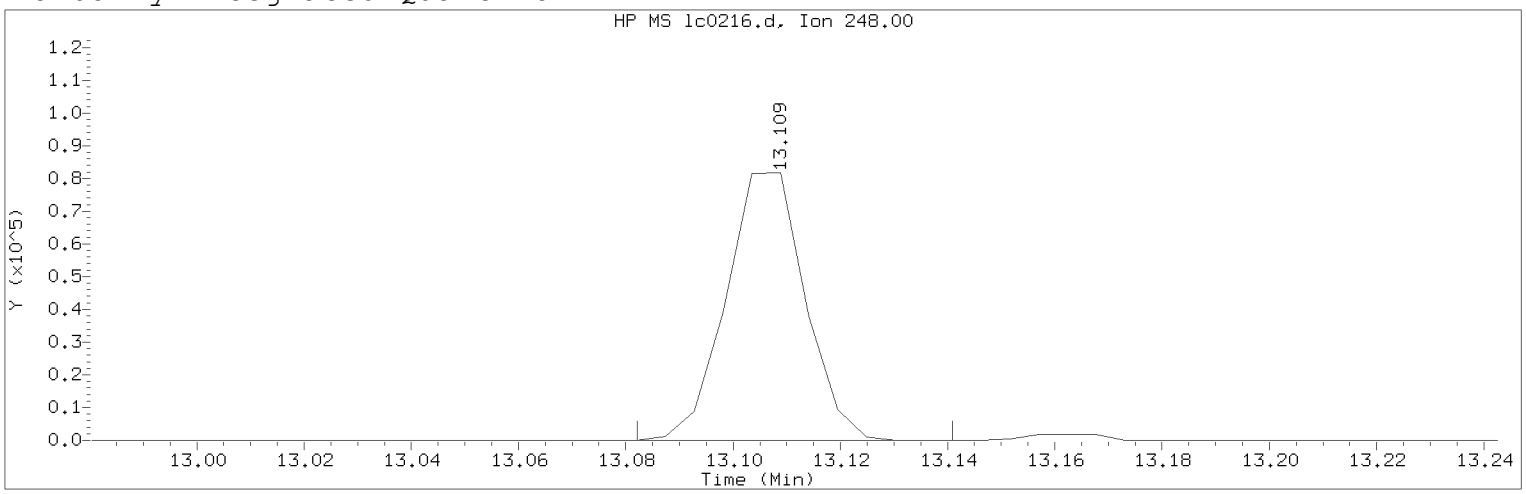
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1163		
Retention Time (minutes)	: 8.407		
Quant Ion	: 105.00		
Area	: 5881		
On-column Amount (ng/ul)	: 0.1957		
Integration start scan	: 1156	Integration stop scan:	1168
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

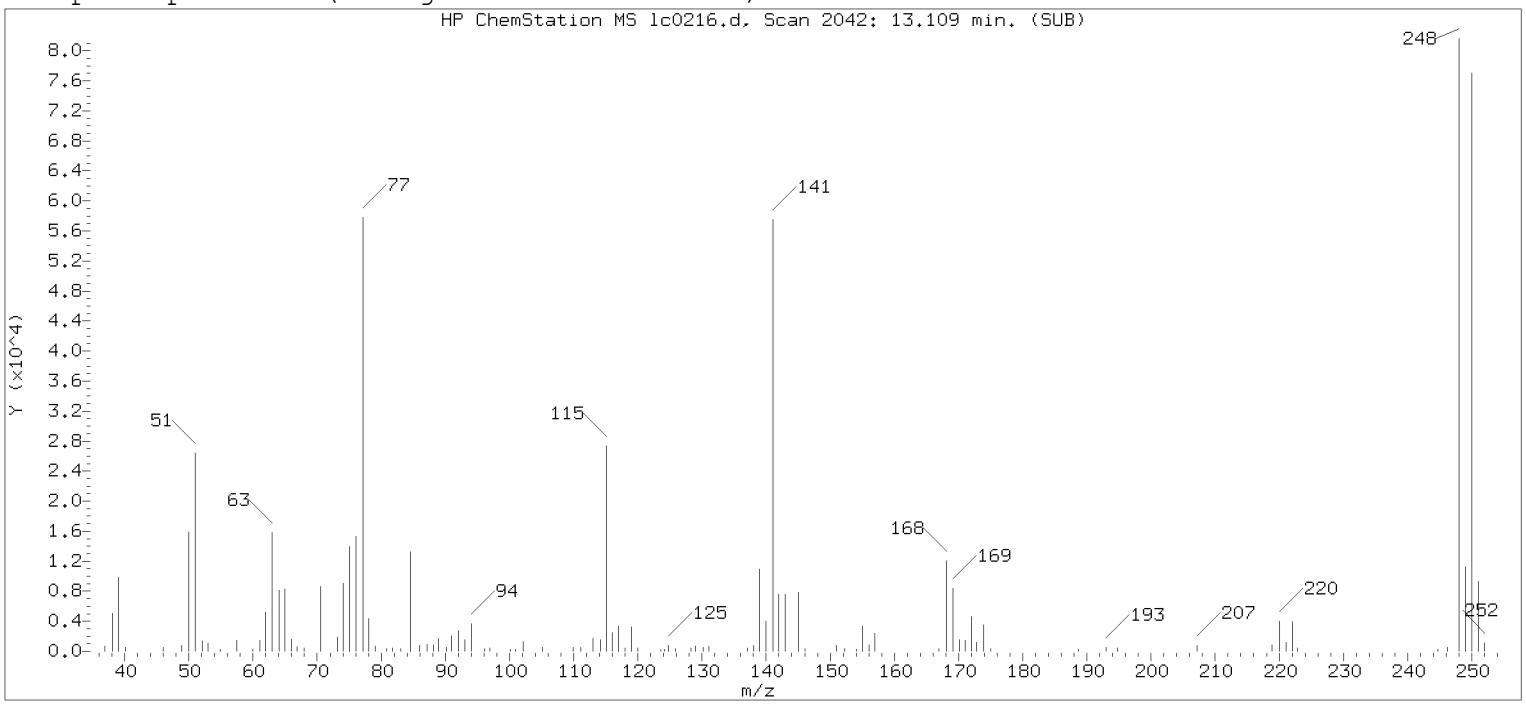
Compound Number : 148
Compound Name : 4-Bromophenyl-phenylether
Scan Number : 2042
Retention Time (minutes) : 13.109
Quant Ion : 248.00
Area (flag) : 83591M
On-Column Amount (ng/ul) : 3.6490
Integration start scan : 2036 Integration stop scan: 2047
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

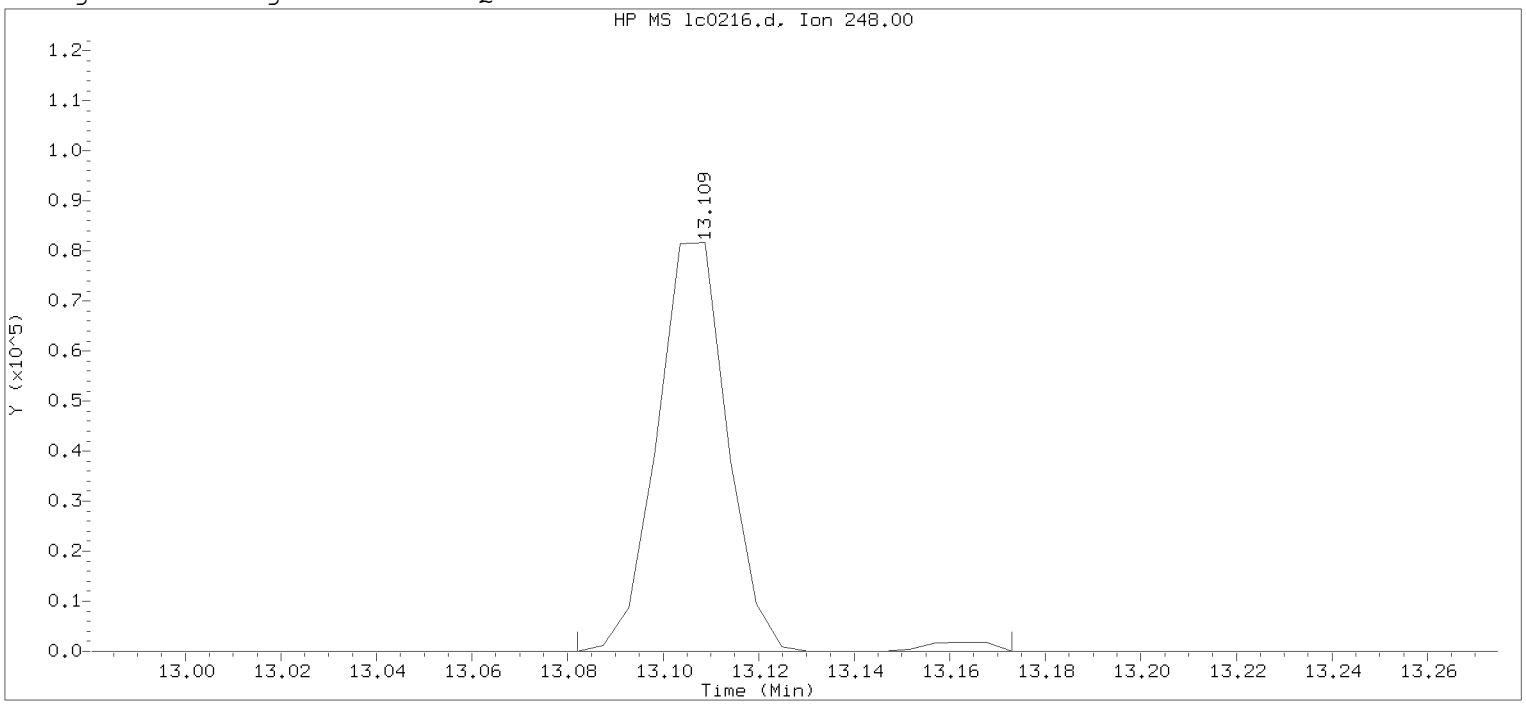
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

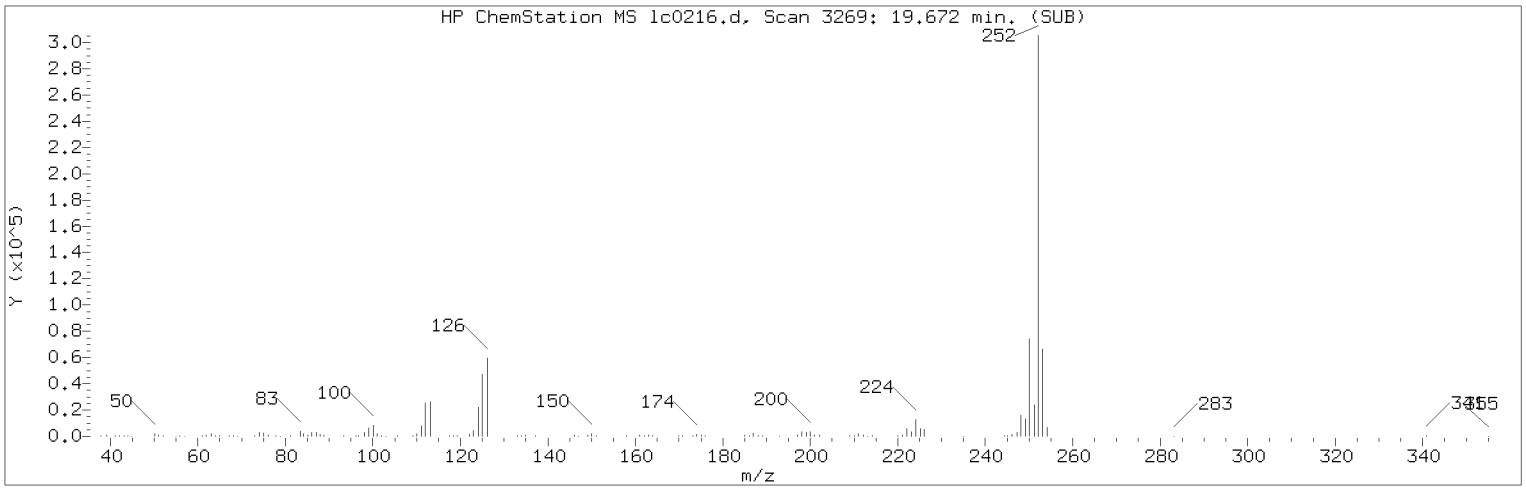
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

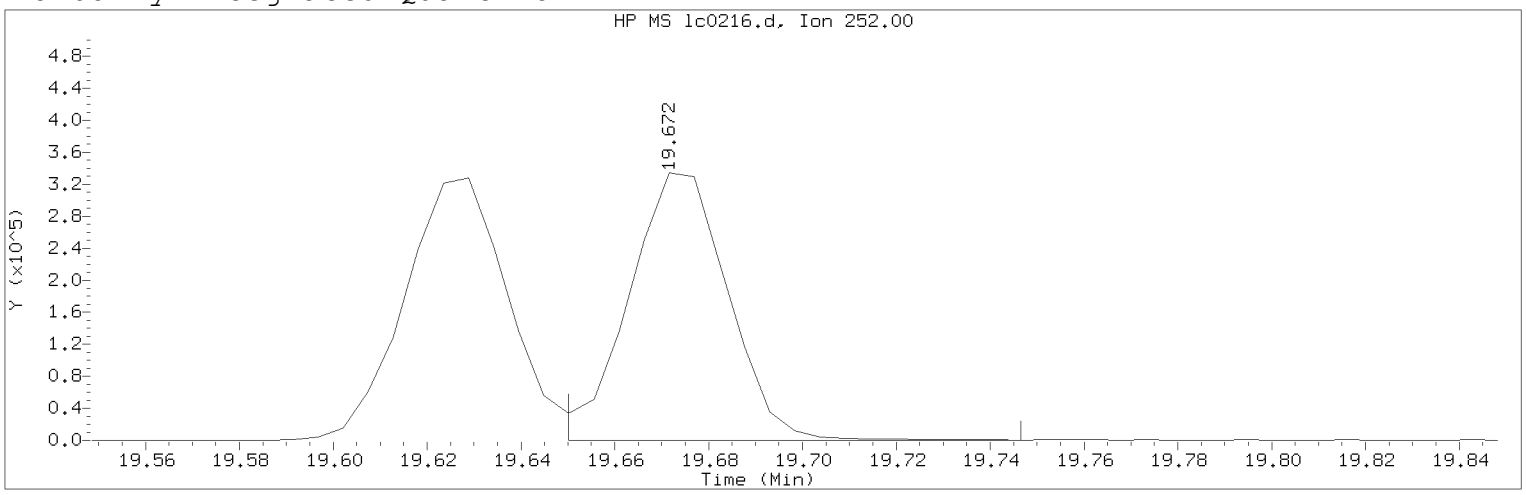
Compound Number	: 148		
Compound Name	: 4-Bromophenyl-phenylether		
Scan Number	: 2042		
Retention Time (minutes)	: 13.109		
Quant Ion	: 248.00		
Area	: 85393		
On-column Amount (ng/ul)	: 4.0362		
Integration start scan	: 2036	Integration stop scan:	2053
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

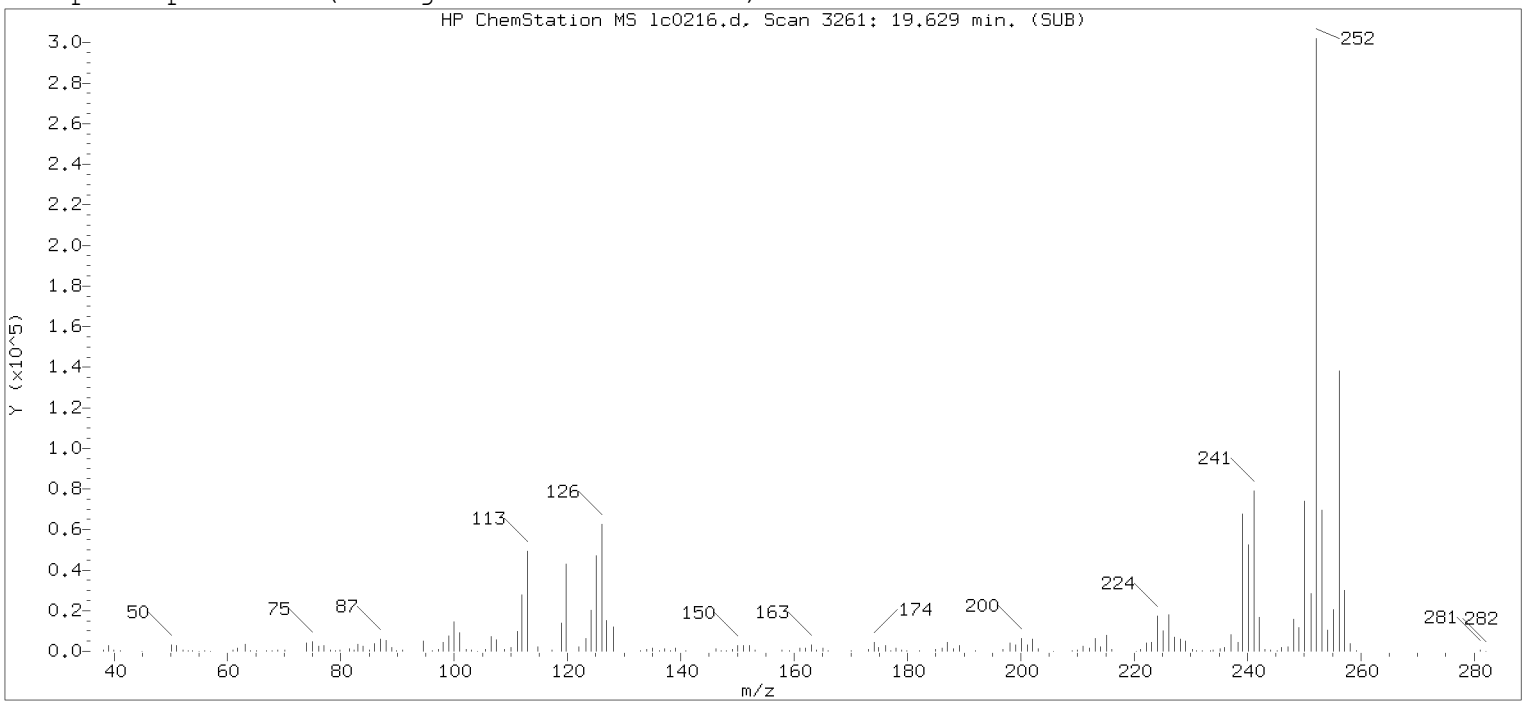
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3269
Retention Time (minutes) : 19.672
Quant Ion : 252.00
Area (flag) : 487227A
On-Column Amount (ng/ul) : 3.7063
Integration start scan : 3264 Integration stop scan: 3282
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

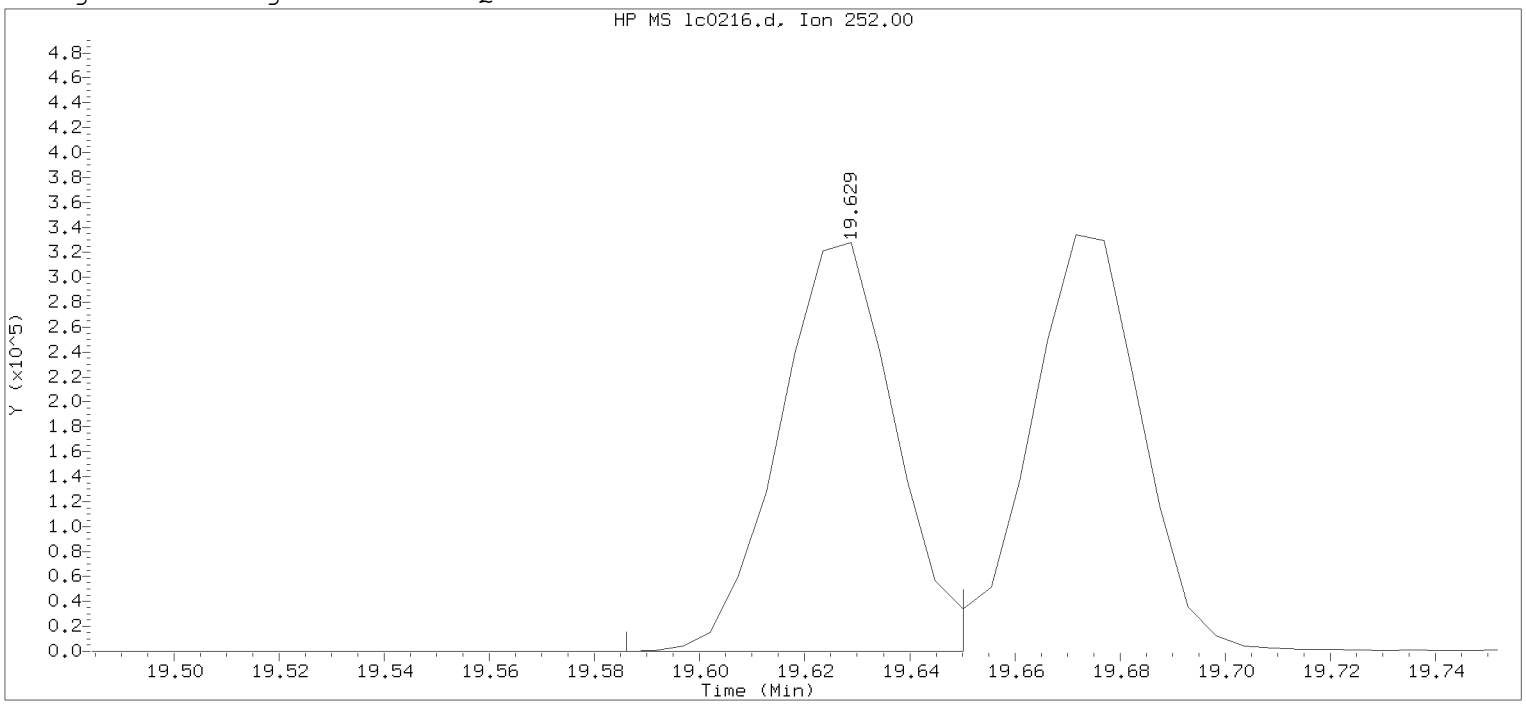
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

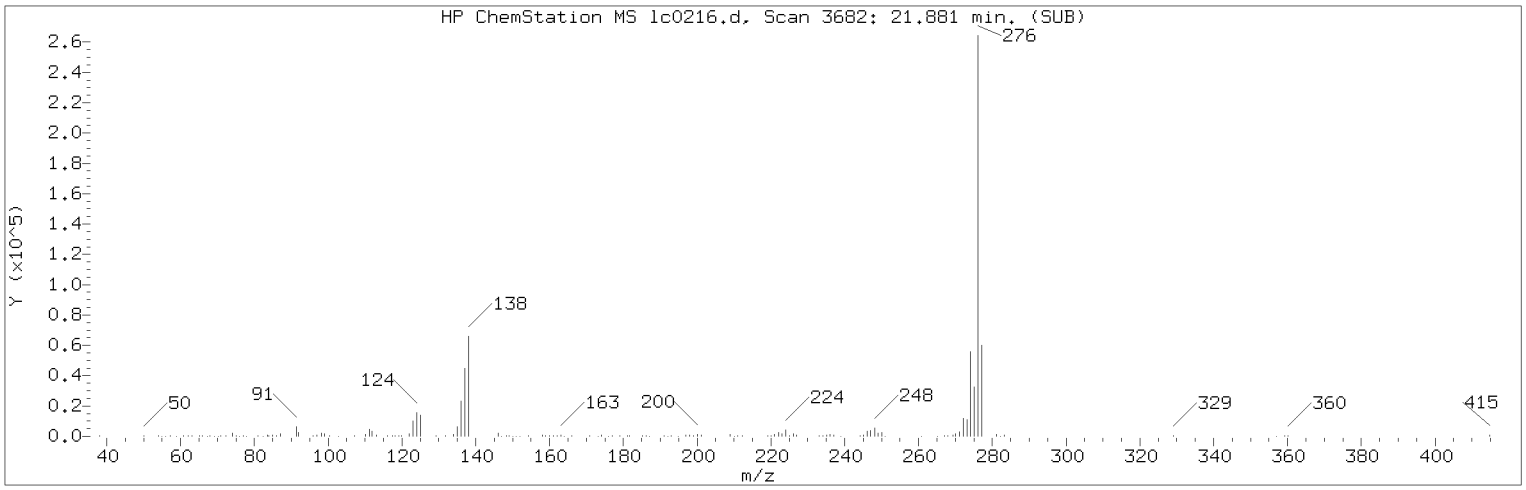
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

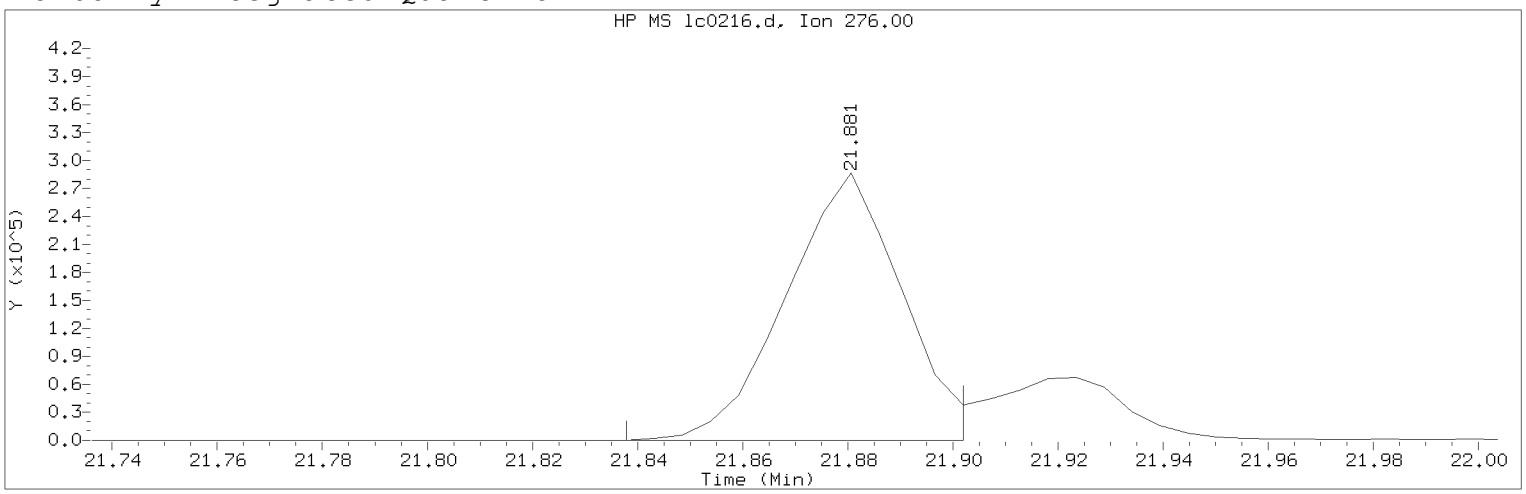
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3261		
Retention Time (minutes)	: 19.629		
Quant Ion	: 252.00		
Area	: 496822		
On-column Amount (ng/ul)	: 3.8293		
Integration start scan	: 3252	Integration stop scan:	3264
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

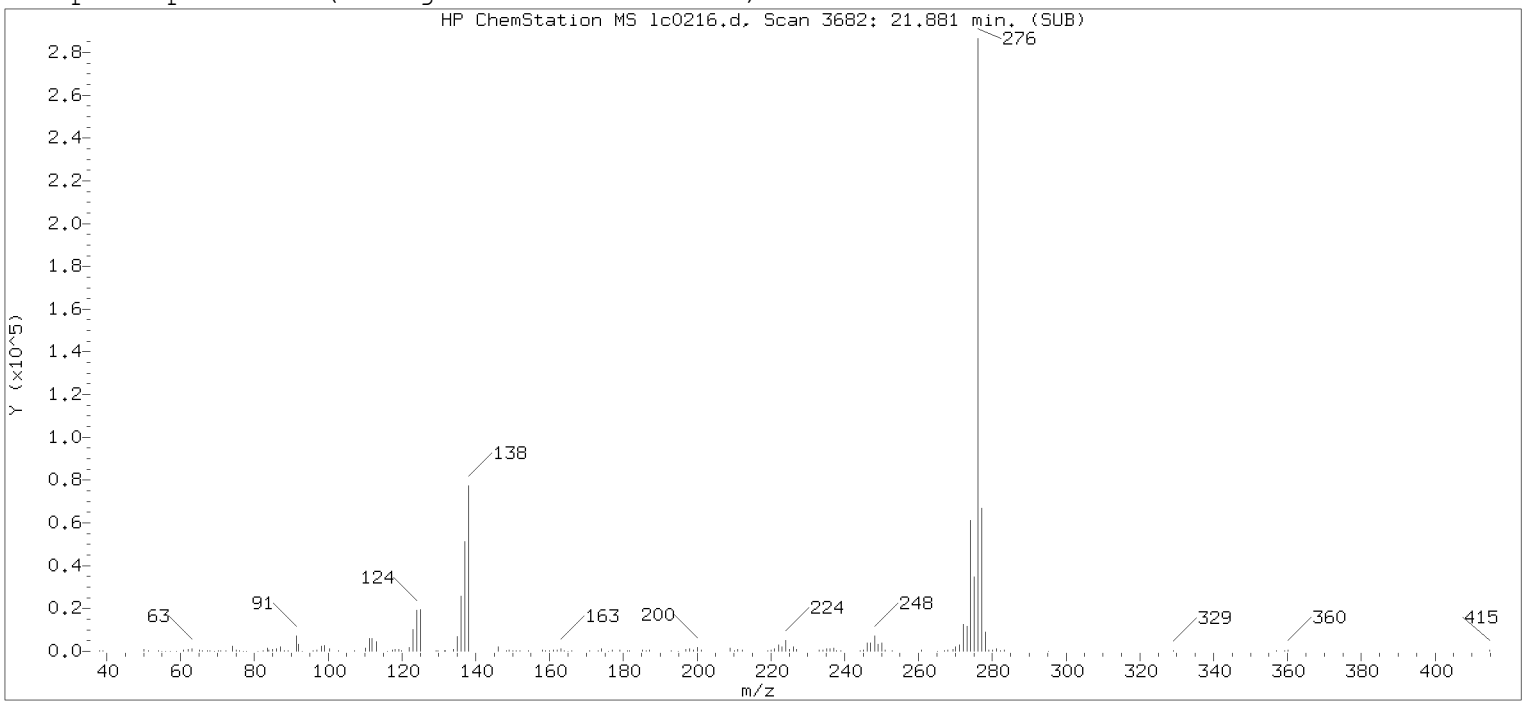
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3682
Retention Time (minutes) : 21.881
Quant Ion : 276.00
Area (flag) : 438155M
On-Column Amount (ng/ul) : 3.3653
Integration start scan : 3673 Integration stop scan: 3685
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

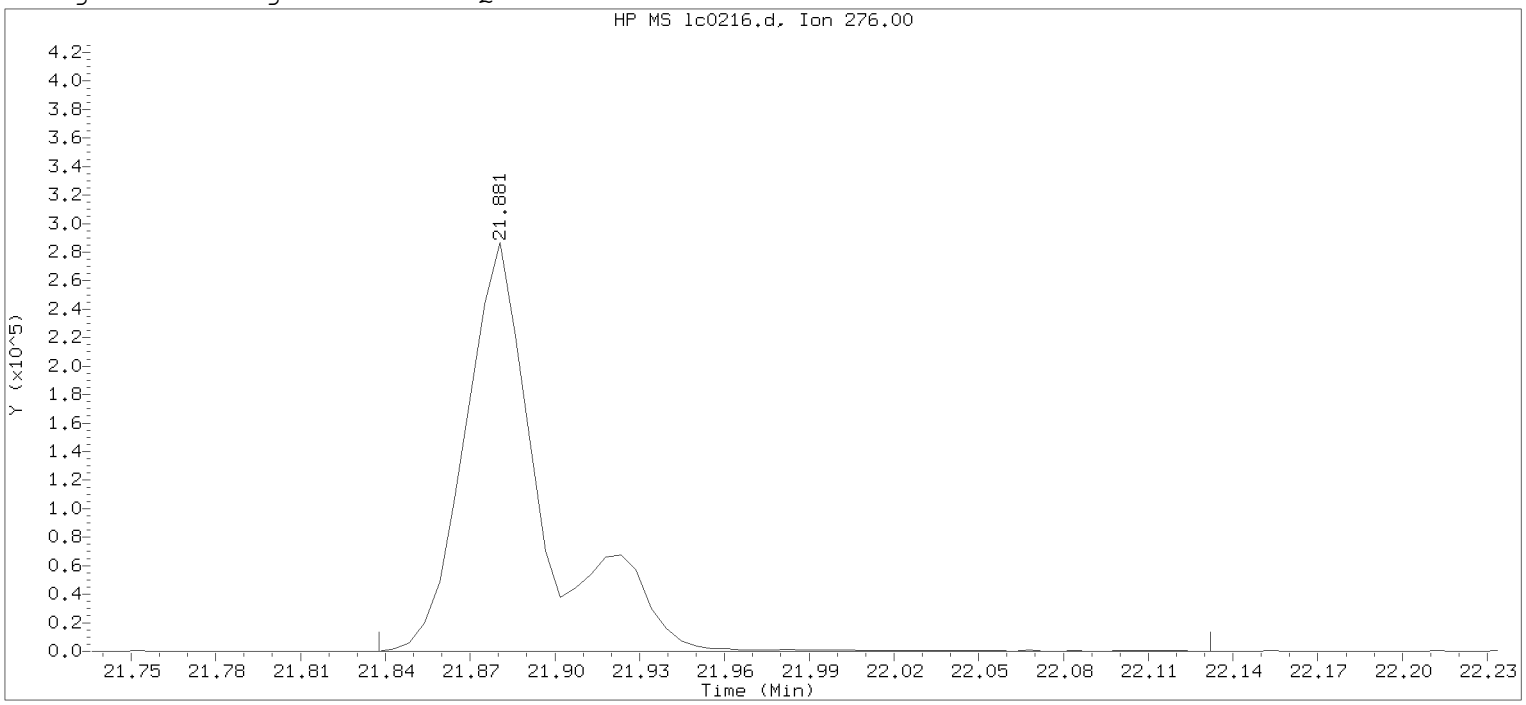
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



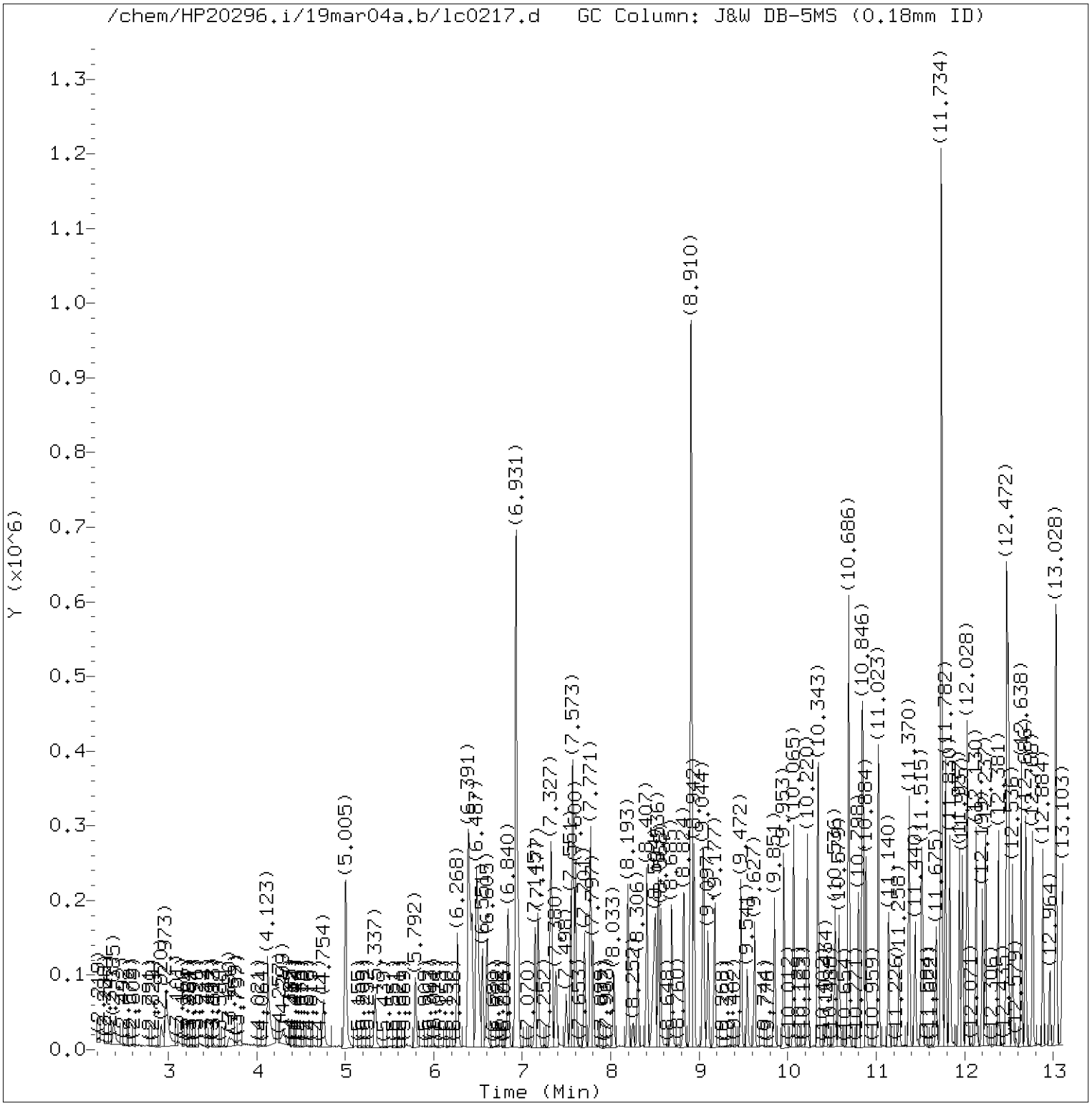
Data File: /chem/HP20296.i/19mar04a.b/lc0216.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 04:35 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD3.75 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3682		
Retention Time (minutes)	: 21.881		
Quant Ion	: 276.00		
Area	: 555425		
On-column Amount (ng/ul)	: 4.6118		
Integration start scan	: 3673	Integration stop scan:	3728
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2.7.50



Total Ion Chromatogram (TIC)

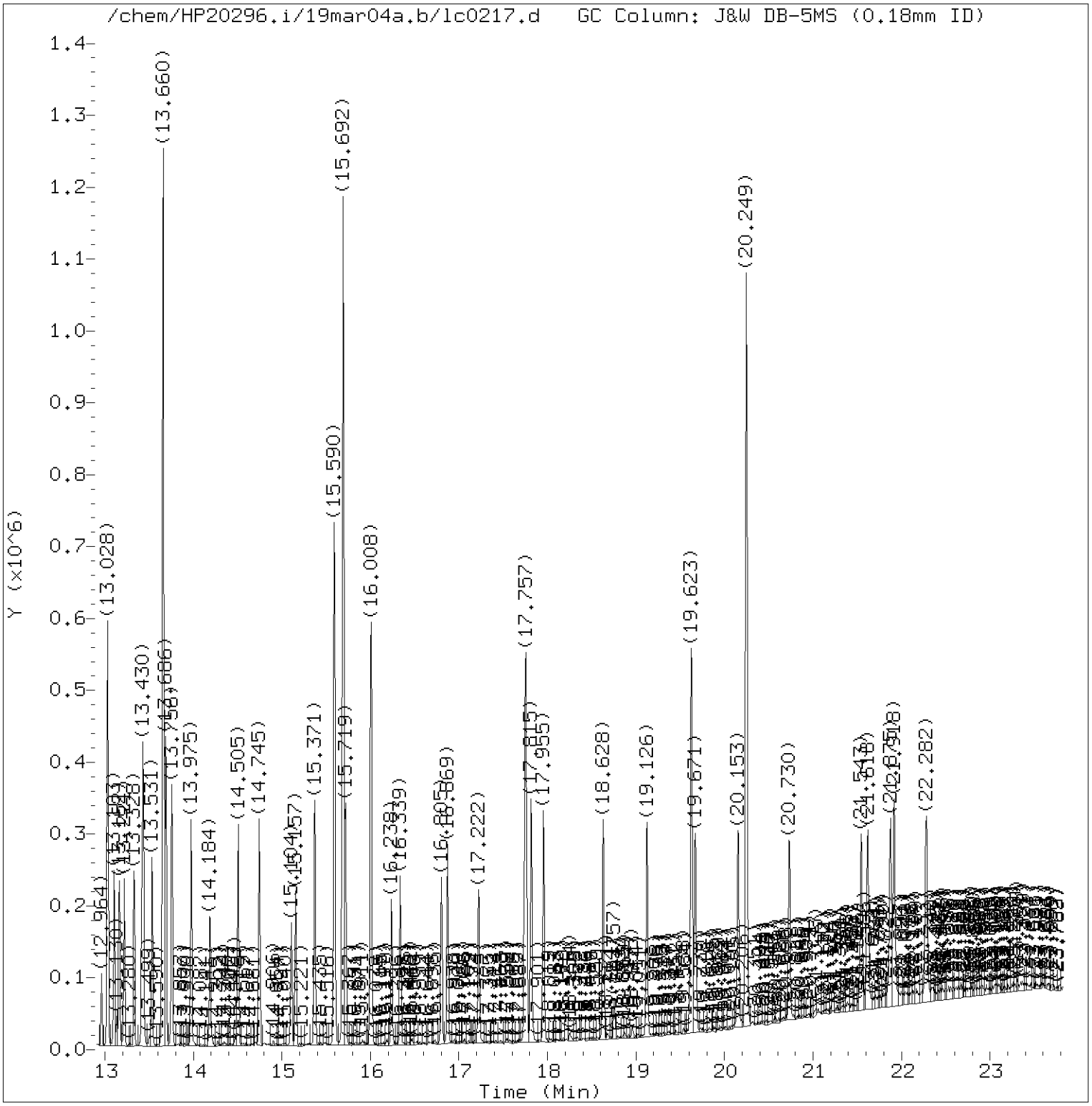
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.385	88	25893	1.278
5) N-Nitrosodimethylamine	(1)	2.920	74	37299M	1.201
6) Pyridine	(1)	2.973	79	68465	1.262
8) 2-Picoline	(1)	4.123	93	68984	1.214
9) N-Nitrosomethylethylamine	(1)	4.299	88	28084M	1.219
10) Methyl methanesulfonate	(1)	4.754	80	34056	1.195
12)$2-Fluorophenol	(1)	5.005	112	109013	2.441
14) N-Nitrosodiethylamine	(1)	5.337	102	27131	1.203
43) Total Cresols	(1)			109515	2.384
16) Ethyl methanesulfonate	(1)	5.792	109	29093	1.224
17) Benzaldehyde	(1)	6.268	77	50374	1.273
18)$Phenol-d6	(1)	6.391	99	143149	2.403
19) Phenol	(1)	6.412	94	82148	1.215
20) Aniline	(1)	6.434	93	95875	1.210
21) a-methylstyrene	(1)	6.524	118	9772	1.114
23) bis(2-Chloroethyl)ether	(1)	6.551	93	62760	1.238
24) 2-Chlorophenol	(1)	6.605	128	50859	1.173
25) 1,3-Dichlorobenzene	(1)	6.840	146	57538	1.228
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	142906	5.000
27) 1,4-Dichlorobenzene	(1)	6.952	146	58392	1.247
28) Benzyl alcohol	(1)	7.145	108	31966	1.111
29) 1,2-Dichlorobenzene	(1)	7.177	146	56016	1.252
31) Indene	(1)	7.316	115	63958	1.083
32) 2-Methylphenol	(1)	7.332	108	51125	1.182
35) bis(2-Chloroisopropyl)ether	(1)	7.380	45	63286	1.272
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.380	45	63286	1.272
100) Isosafrole	(3)			44277	1.158
36) N-Nitrosopyrrolidine	(1)	7.498	100	28470	1.182
37) Acetophenone	(1)	7.546	105	77715	1.178
39) N-Nitroso-di-n-propylamine	(1)	7.567	70	47078	1.271
38) 4-Methylphenol	(1)	7.573	108	58390	1.202
40) N-Nitrosomorpholine	(1)	7.573	56	32411	1.298
41) o-Toluidine	(1)	7.600	106	95025	1.246
44) Hexachloroethane	(1)	7.701	117	25448	1.233
45)$Nitrobenzene-d5	(2)	7.771	82	137054	2.457
46) Nitrobenzene	(2)	7.803	77	68428	1.210
50) N-Nitrosopiperidine	(2)	8.033	114	26652	1.180
125) 2,4_2,6-Dinitrotoluenes	(3)			52388	2.329
52) Isophorone	(2)	8.193	82	115134	1.171
53) 2-Nitrophenol	(2)	8.306	139	25743	1.164

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.407	107	60888	1.228
58) Benzoic acid	(2)	8.504	105	103463M	3.134
59) O,O,O-Triethylphosphorothioate	(2)	8.541	198	22967	1.182
57) bis(2-Chloroethoxy)methane	(2)	8.568	93	79939	1.257
62) 2,4-Dichlorophenol	(2)	8.685	162	42911	1.194
151) Diallate trans/cis	(4)			52996	1.269
65) 1,2,4-Trichlorobenzene	(2)	8.830	180	48166	1.250
68)*Naphthalene-d8	(2)	8.910	136	554843	5.000
69) Naphthalene	(2)	8.942	128	154664	1.210
70) 4-Chloroaniline	(2)	9.038	127	59649	1.172
71) 2,6-Dichlorophenol	(2)	9.054	162	41770	1.209
72) Hexachloropropene	(2)	9.097	213	29017	1.124
74) Hexachlorobutadiene	(2)	9.177	225	27555	1.266
78) Quinoline	(2)	9.472	129	88330	1.190
79) Caprolactam	(2)	9.541	113	14616	1.270
80) N-Nitrosodi-n-butylamine	(2)	9.627	84	42349	1.087
83) 4-Chloro-3-methylphenol	(2)	9.851	107	50356	1.191
85) Safrole	(2)	9.953	162	37322	1.204
86) 2-Methylnaphthalene	(2)	10.065	142	99799	1.210
87) 1-Methylnaphthalene	(2)	10.220	142	90729	1.171
88) Hexachlorocyclopentadiene	(3)	10.343	237	30014	1.178
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.343	216	43787	1.155
91) cis-Isosafrole	(3)	10.434	162	6617	0.191
93) 2,4,6-Trichlorophenol	(3)	10.536	196	27982	1.102
95) 2,4,5-Trichlorophenol	(3)	10.584	196	30783	1.161
96)$2-Fluorobiphenyl	(3)	10.686	172	218737	2.435
97) trans-Isosafrole	(3)	10.798	162	37660	0.967
98) 1,1'-Biphenyl	(3)	10.841	154	114116	1.194
99) 2-Chloronaphthalene	(3)	10.852	162	93139	1.137
101) 1-Chloronaphthalene	(3)	10.884	162	84444	1.256
103) Diphenyl ether	(3)	11.023	170	61012	1.194
104) 2-Nitroaniline	(3)	11.023	138	28672	1.157
108) 1,4-Naphthoquinone	(3)	11.140	158	35459	1.130
109) 1,4-Dinitrobenzene	(3)	11.263	168	13748	1.105
110) Dimethylphthalate	(3)	11.370	163	102059	1.229
111) 1,3-Dinitrobenzene	(3)	11.376	168	15442	1.139
113) 2,6-Dinitrotoluene	(3)	11.440	165	23214	1.191
114) Acenaphthylene	(3)	11.515	152	129749	1.158
117) 3-Nitroaniline	(3)	11.675	138	23221	1.088
118)*Acenaphthene-d10	(3)	11.734	164	269162	5.000

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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.782	153	100313	1.230
120) 2,4-Dinitrophenol	(3)	11.836	184	37481	2.955
121) 4-Nitrophenol	(3)	11.937	109	34376	2.129
122) Pentachlorobenzene	(3)	11.975	250	41339	1.262
123) 2,4-Dinitrotoluene	(3)	12.023	165	29174	1.138
124) Dibenzofuran	(3)	12.028	168	124460	1.172
126) 1-Naphthylamine	(3)	12.130	143	97687	1.213
127) 2,3,4,6-Tetrachlorophenol	(3)	12.199	232	24580	1.165
128) 2-Naphthylamine	(3)	12.237	143	94671	1.207
129) Diethylphthalate	(3)	12.381	149	99810	1.231
131) Fluorene	(3)	12.472	166	102513	1.184
130) Thionazin	(3)	12.478	107	20660	1.223
133) 5-Nitro-o-toluidine	(3)	12.488	152	28439	1.171
134) 4-Nitroaniline	(3)	12.488	138	27546	1.283
132) 4-Chlorophenyl-phenylether	(3)	12.494	204	48507	1.231
135) 4,6-Dinitro-2-methylphenol	(4)	12.542	198	32155	2.179
136) N-Nitrosodiphenylamine	(4)	12.638	169	83407	1.204
137) NDPA as diphenylamine	(4)	12.638	169	83407	1.204
139) 1,2-Diphenylhydrazine	(4)	12.686	77	127500	1.229
140)$2,4,6-Tribromophenol	(3)	12.766	330	29301	2.333
142) Tetraethyldithiopyrophosphate	(4)	12.879	97	21230	1.259
144) 1,3,5-Trinitrobenzene	(4)	12.964	213	9106	1.021
145) Diallate (peak 1)	(4)	13.023	86	44763	1.040
146) Phorate	(4)	13.028	75	78119	1.228
147) Phenacetin	(4)	13.034	108	57820	1.173
148) 4-Bromophenyl-phenylether	(4)	13.103	248	27391	1.222
149) Diallate (peak 2)	(4)	13.130	86	8233	0.230
150) Hexachlorobenzene	(4)	13.162	284	29687	1.164
152) Dimethoate	(4)	13.221	87	47834	1.164
153) Atrazine	(4)	13.333	200	28348	1.365
154) Pentachlorophenol	(4)	13.414	266	17816	1.055
155) 4-Aminobiphenyl	(4)	13.430	169	99055	1.232
156) Pentachloronitrobenzene	(4)	13.435	237	13027	1.171
157) Pronamide	(4)	13.531	173	46020	1.198
158)*Phenanthrene-d10	(4)	13.660	188	497119	5.000
159) Dinoseb	(4)	13.681	211	21925	0.972
160) Phenanthrene	(4)	13.686	178	149676	1.189
162) Anthracene	(4)	13.756	178	152576	1.229
168) Carbazole	(4)	13.975	167	132145	1.200
169) Methyl parathion	(4)	14.189	109	35760	1.083

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$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

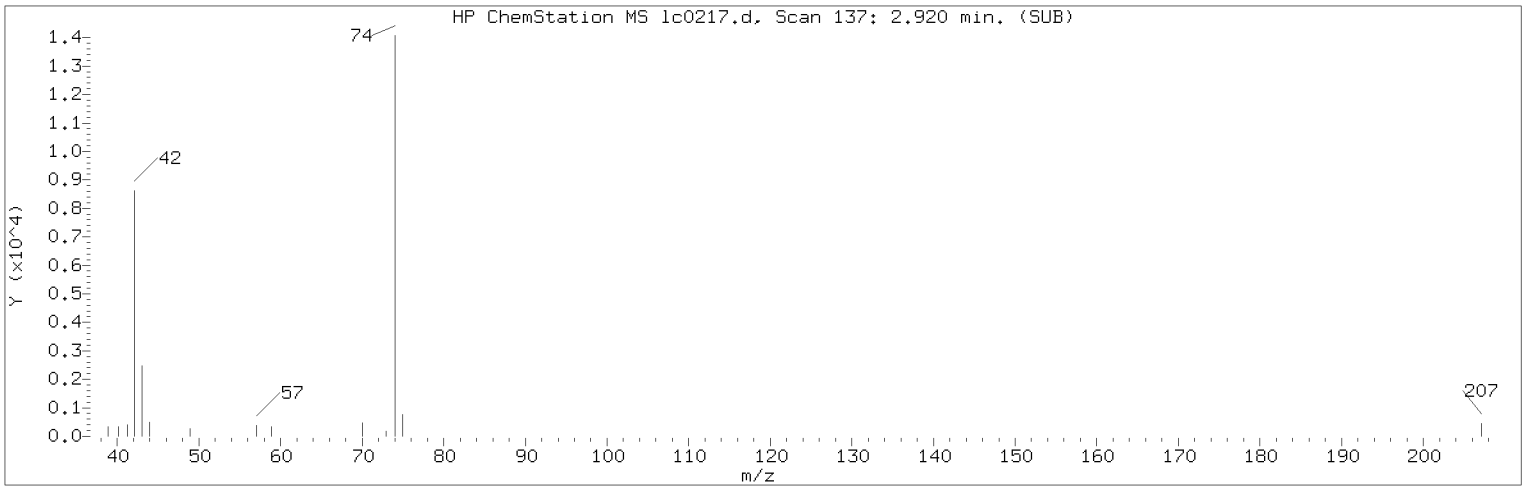
Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.505	149	175376	1.204
173) 4-Nitroquinoline-1-oxide	(4)	14.745	190	13917	0.907
172) Parathion	(4)	14.745	109	23222	1.091
227) Total PAHs	(6)			2524213	21.259
174) Octachlorostyrene	(4)	15.109	308	11124	1.152
176) Isodrin	(4)	15.157	193	17914	1.282
178) Fluoranthene	(4)	15.371	202	162775	1.197
179) Benzidine	(5)	15.590	184	312827	3.411
180)*Pyrene-d10	(5)	15.692	212	501659	5.000
182) Pyrene	(5)	15.719	202	167546	1.203
184)$Terphenyl-d14	(5)	16.008	244	215203	2.475
187) p-Dimethylaminoazobenzene	(5)	16.238	225	26567	1.143
190) Chlorobenzilate	(5)	16.339	139	51631	1.099
192) 3,3'-Dimethylbenzidine	(5)	16.805	212	101088	1.074
193) Butylbenzylphthalate	(5)	16.869	149	77534	1.111
196) 2-Acetylaminofluorene	(5)	17.222	181	68053	1.084
198) 3,3'-Dichlorobenzidine	(5)	17.741	252	53428	1.079
200) Benzo(a)anthracene	(5)	17.757	228	156529	1.151
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.762	231	27530	1.004
201) Chrysene	(5)	17.815	228	148055	1.184
204) bis(2-Ethylhexyl)phthalate	(5)	17.955	149	111862	1.083
208) 6-Methylchrysene	(5)	18.628	242	102309	1.138
210) Di-n-octylphthalate	(6)	19.126	149	190396	1.053
211) Benzo(b)fluoranthene	(6)	19.623	252	162409	1.174
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.629	256	64609	1.120
213) Benzo(k)fluoranthene	(6)	19.671	252	149482A	1.152
216) Benzo(a)pyrene	(6)	20.153	252	147561	1.152
218)*Perylene-d12	(6)	20.249	264	523297	5.000
220) 3-Methylcholanthrene	(6)	20.730	268	73157	1.119
222) Dibenz(a,h)acridine	(6)	21.543	279	120989	1.115
223) Dibenz(a,j)acridine	(6)	21.618	279	122011	1.146
224) Indeno(1,2,3-cd)pyrene	(6)	21.875	276	146253M	1.140
225) Dibenz(a,h)anthracene	(6)	21.918	278	149662	1.153
226) Benzo(g,h,i)perylene	(6)	22.282	276	153922	1.174

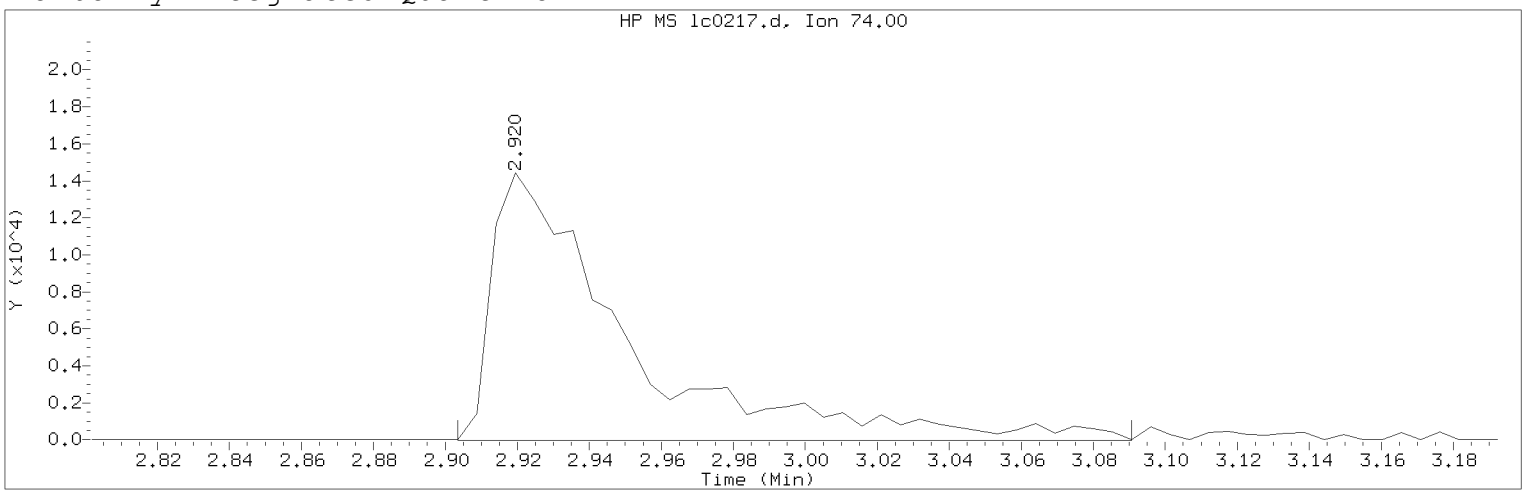
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

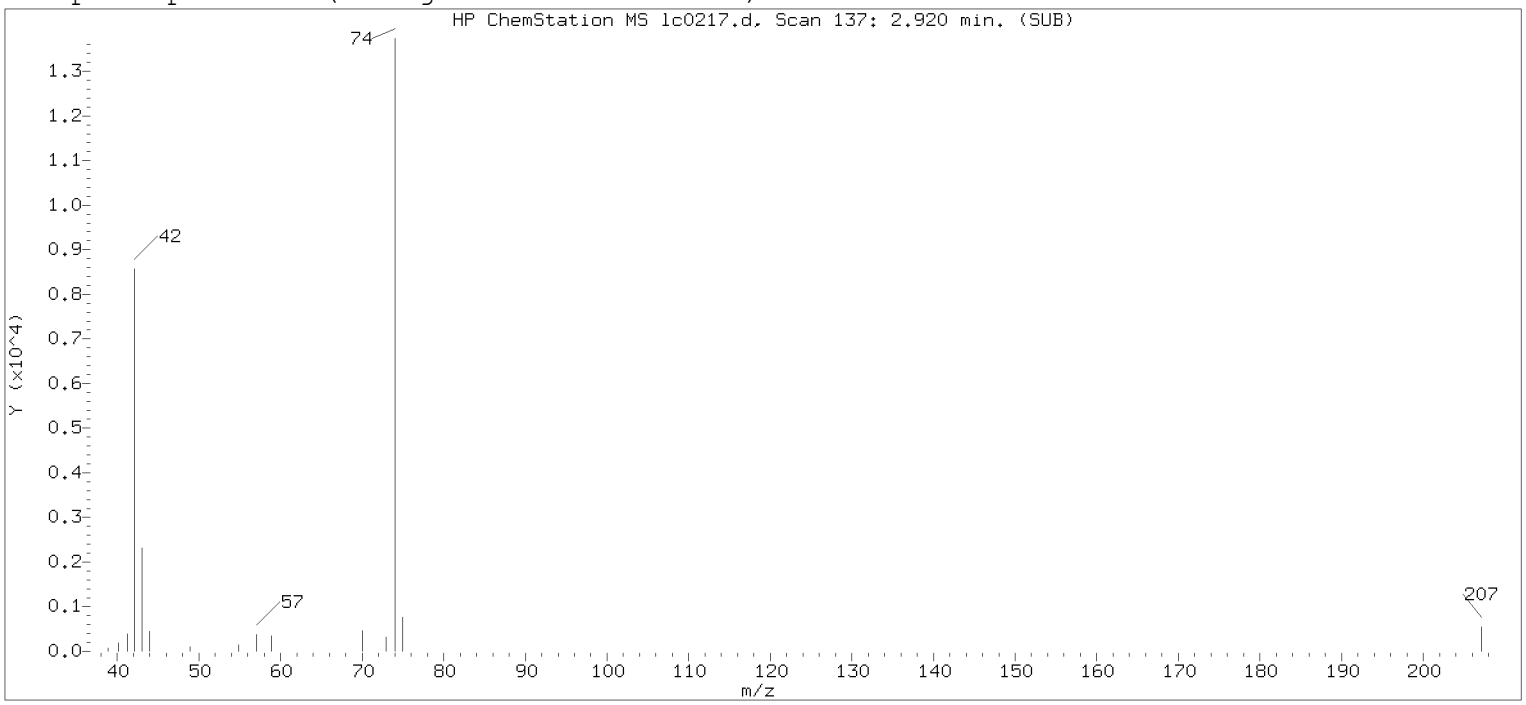
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 137
Retention Time (minutes) : 2.920
Quant Ion : 74.00
Area (flag) : 37299M
On-Column Amount (ng/ul) : 1.2008
Integration start scan : 133 Integration stop scan: 168
Y at integration start : -19 Y at integration end: -19

Reason for manual integration: improper integration

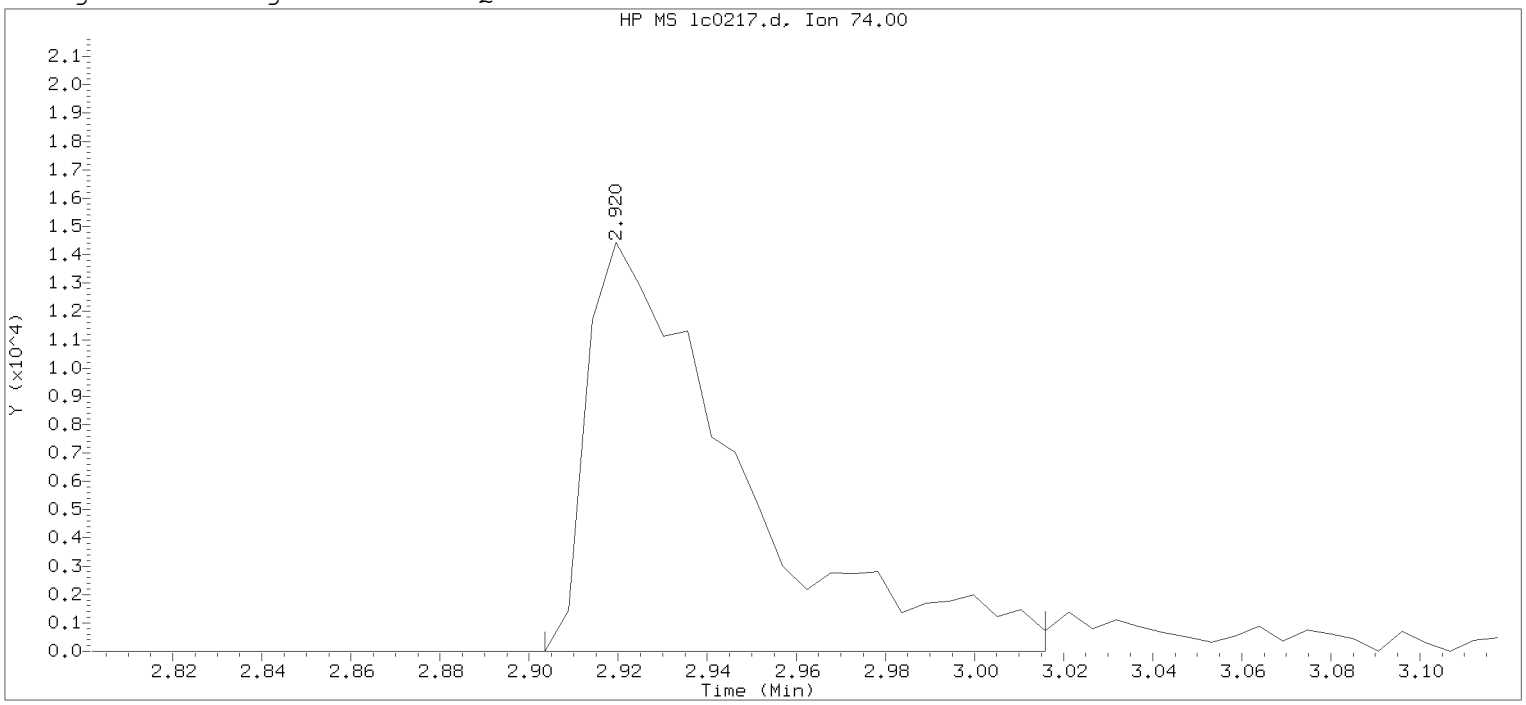
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

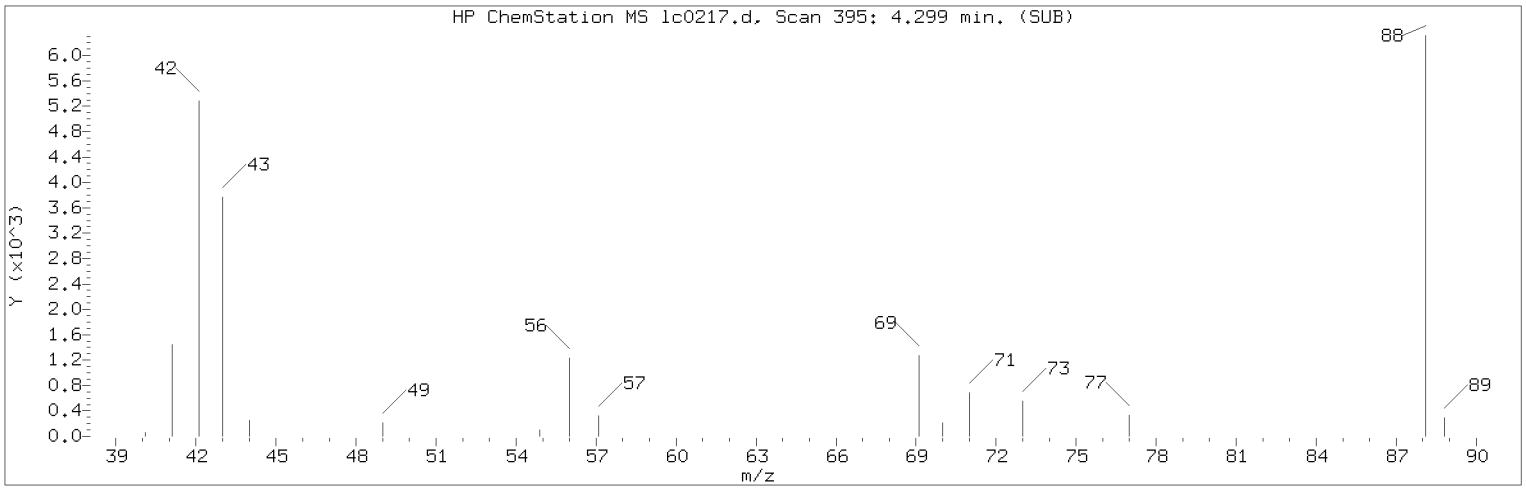
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

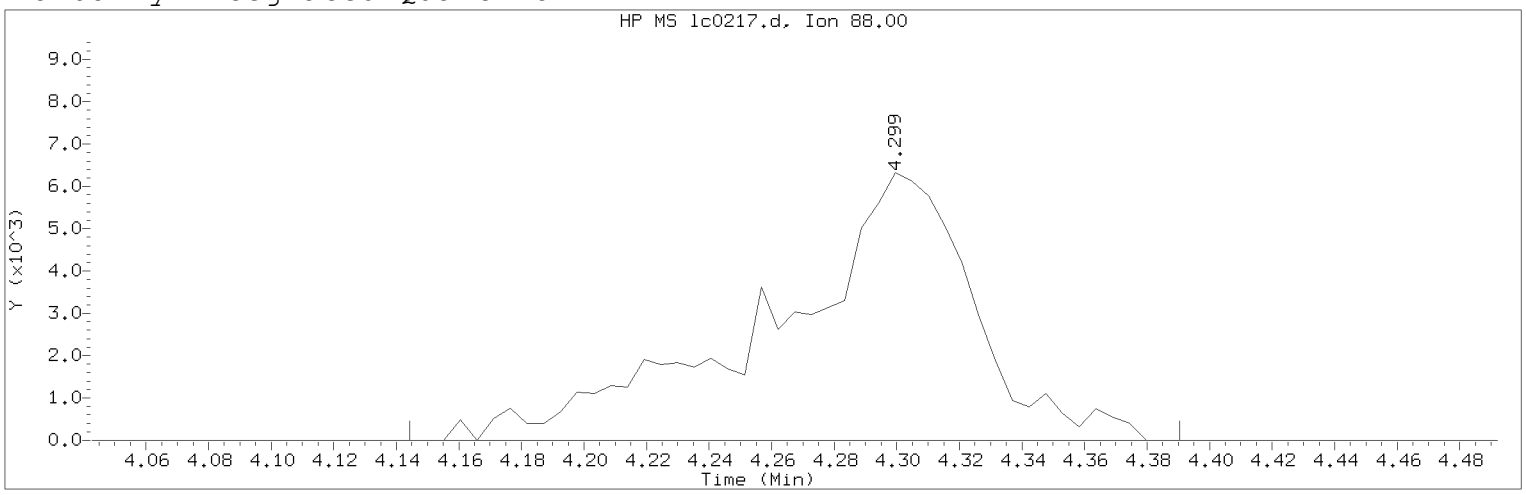
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 137		
Retention Time (minutes)	: 2.920		
Quant Ion	: 74.00		
Area	: 34011		
On-column Amount (ng/ul)	: 1.0077		
Integration start scan	: 133	Integration stop scan:	154
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

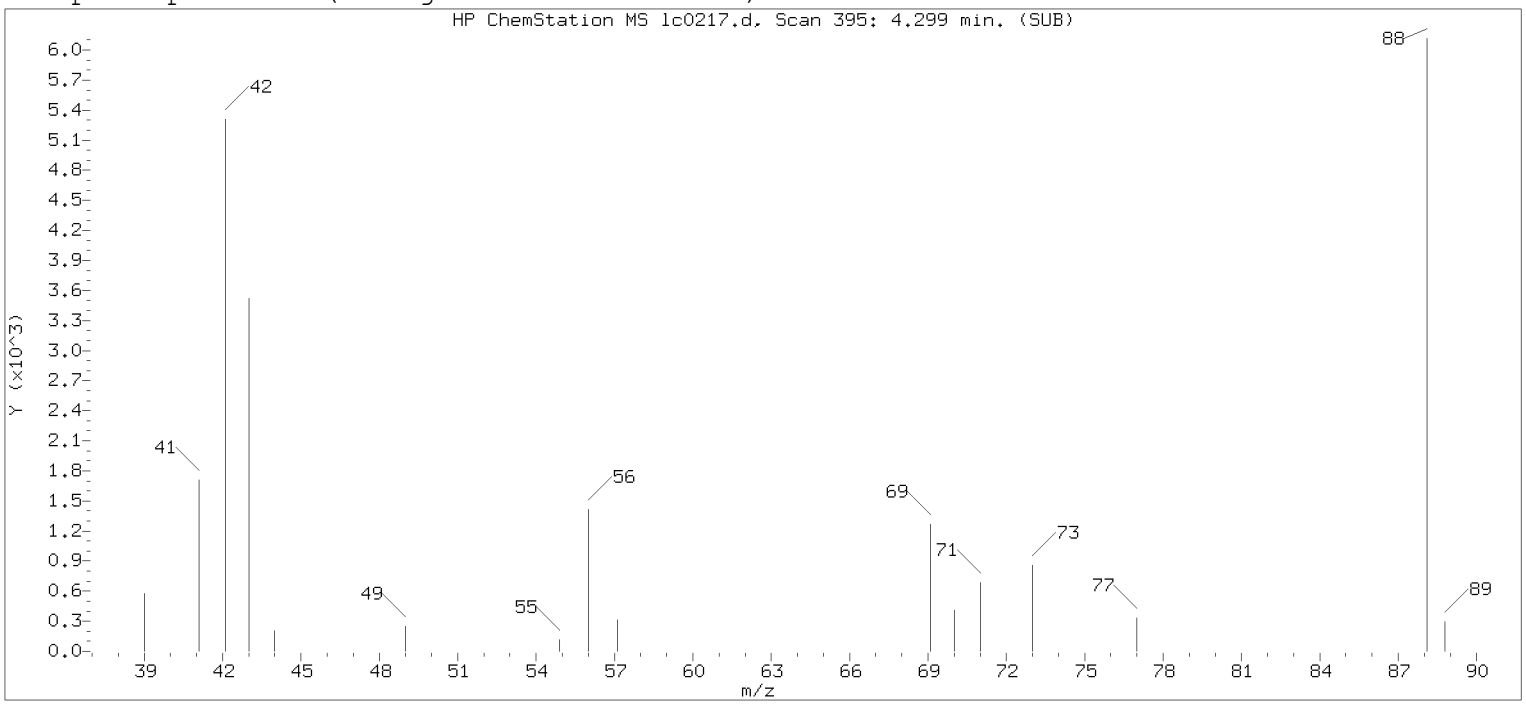
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 395
Retention Time (minutes) : 4.299
Quant Ion : 88.00
Area (flag) : 28084M
On-Column Amount (ng/ul) : 1.2190
Integration start scan : 365 Integration stop scan: 411
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

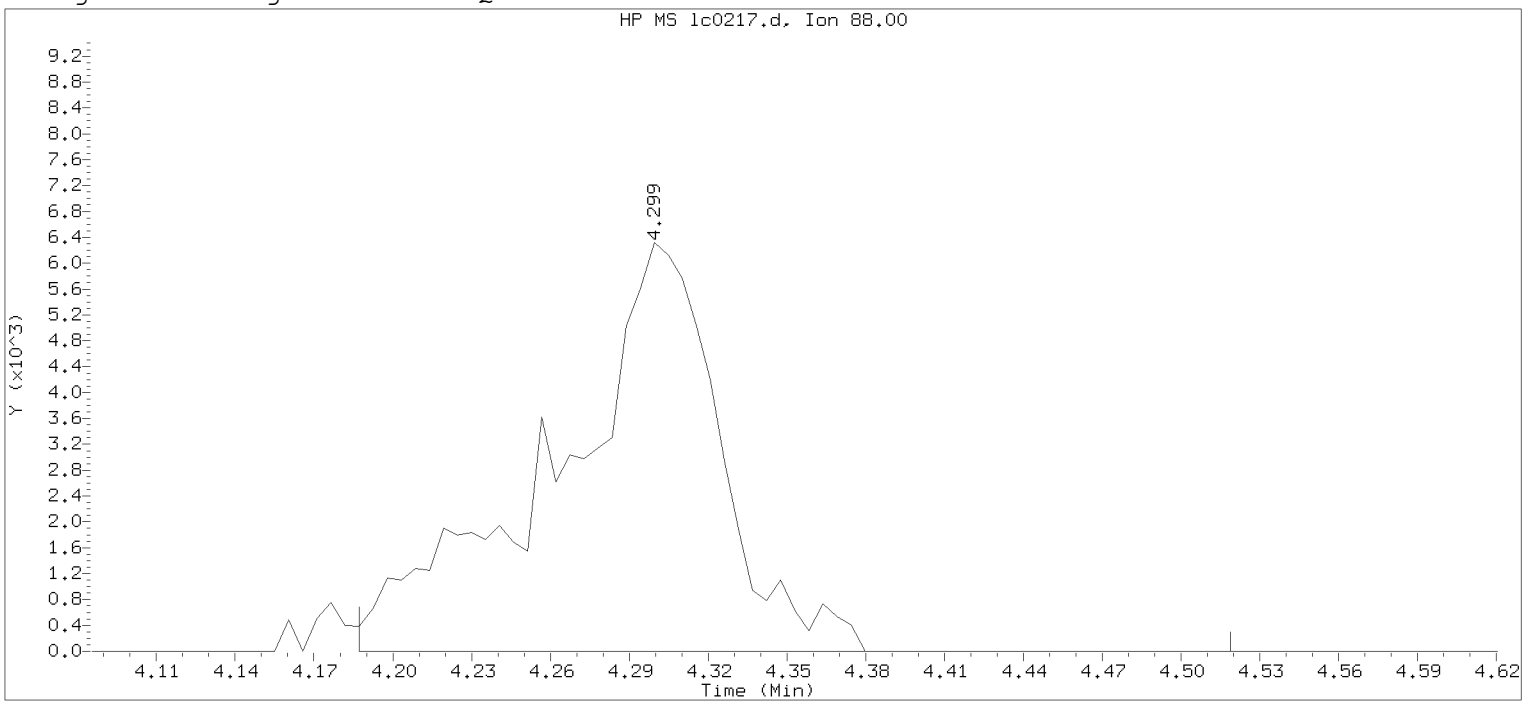
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

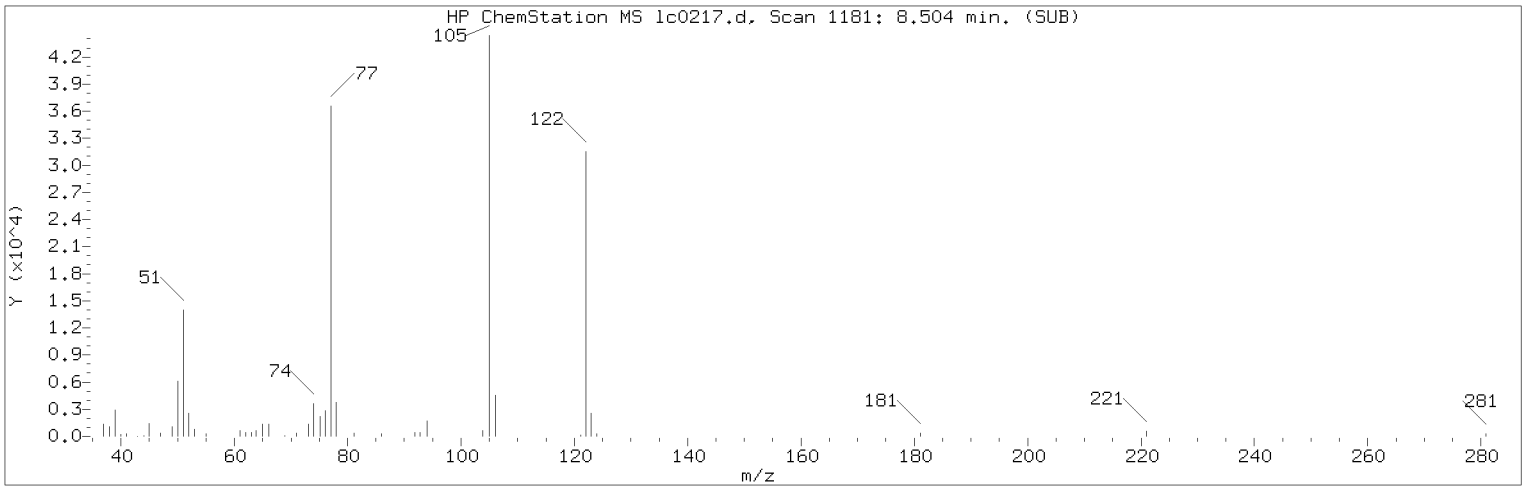
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

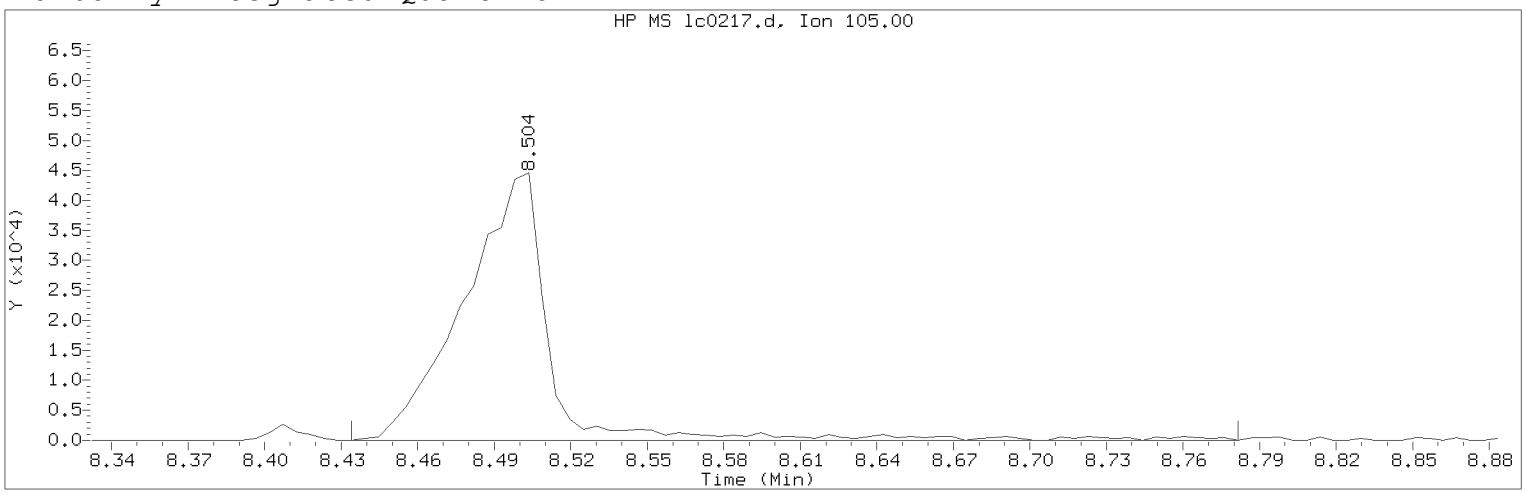
Compound Number	: 9		
Compound Name	: N-Nitrosomethylethylamine		
Scan Number	: 395		
Retention Time (minutes)	: 4.299		
Quant Ion	: 88.00		
Area	: 27330		
On-column Amount (ng/ul)	: 1.1468		
Integration start scan	: 373	Integration stop scan:	435
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2019-03-05 17:12:00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

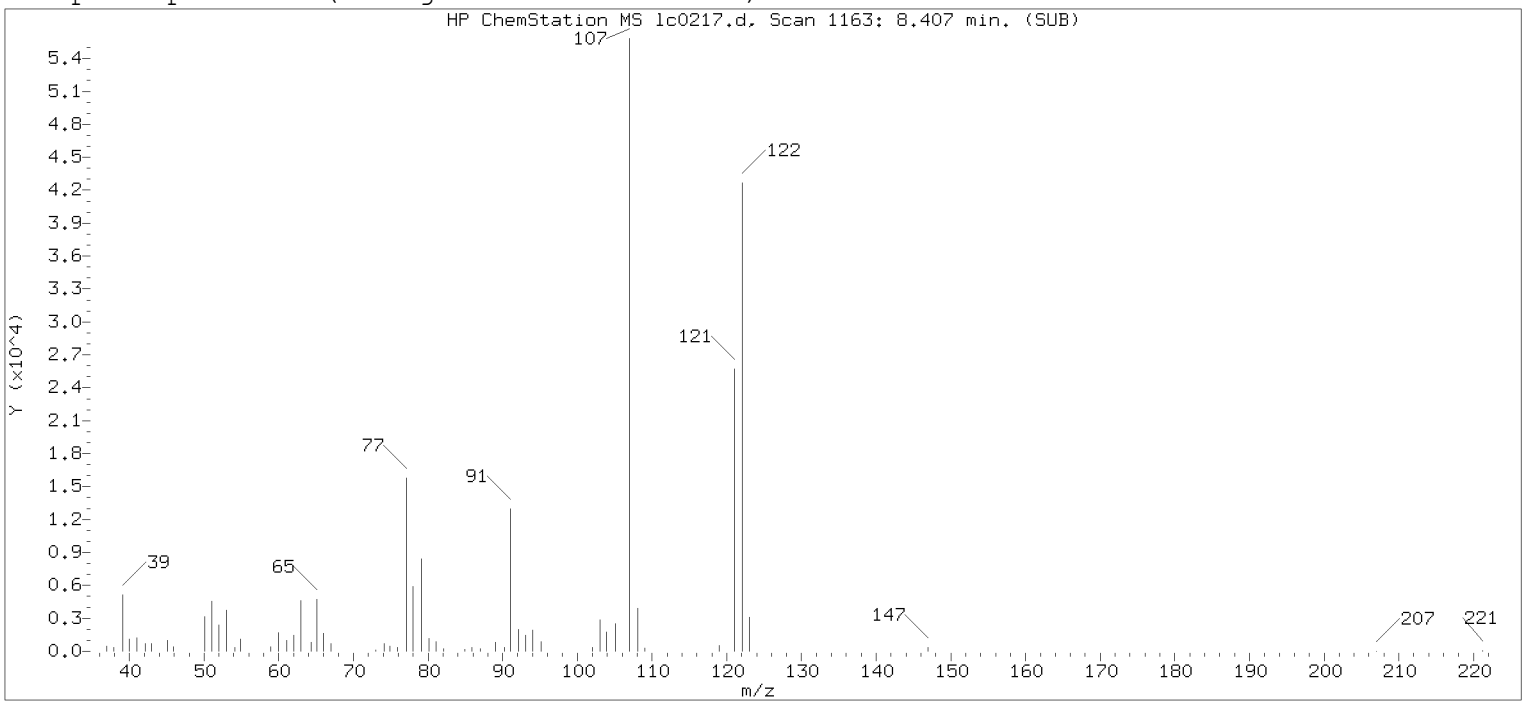
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1181
Retention Time (minutes) : 8.504
Quant Ion : 105.00
Area (flag) : 103463M
On-Column Amount (ng/ul) : 3.1337
Integration start scan : 1167 Integration stop scan: 1232
Y at integration start : -2 Y at integration end: -13

Reason for manual integration: improper integration

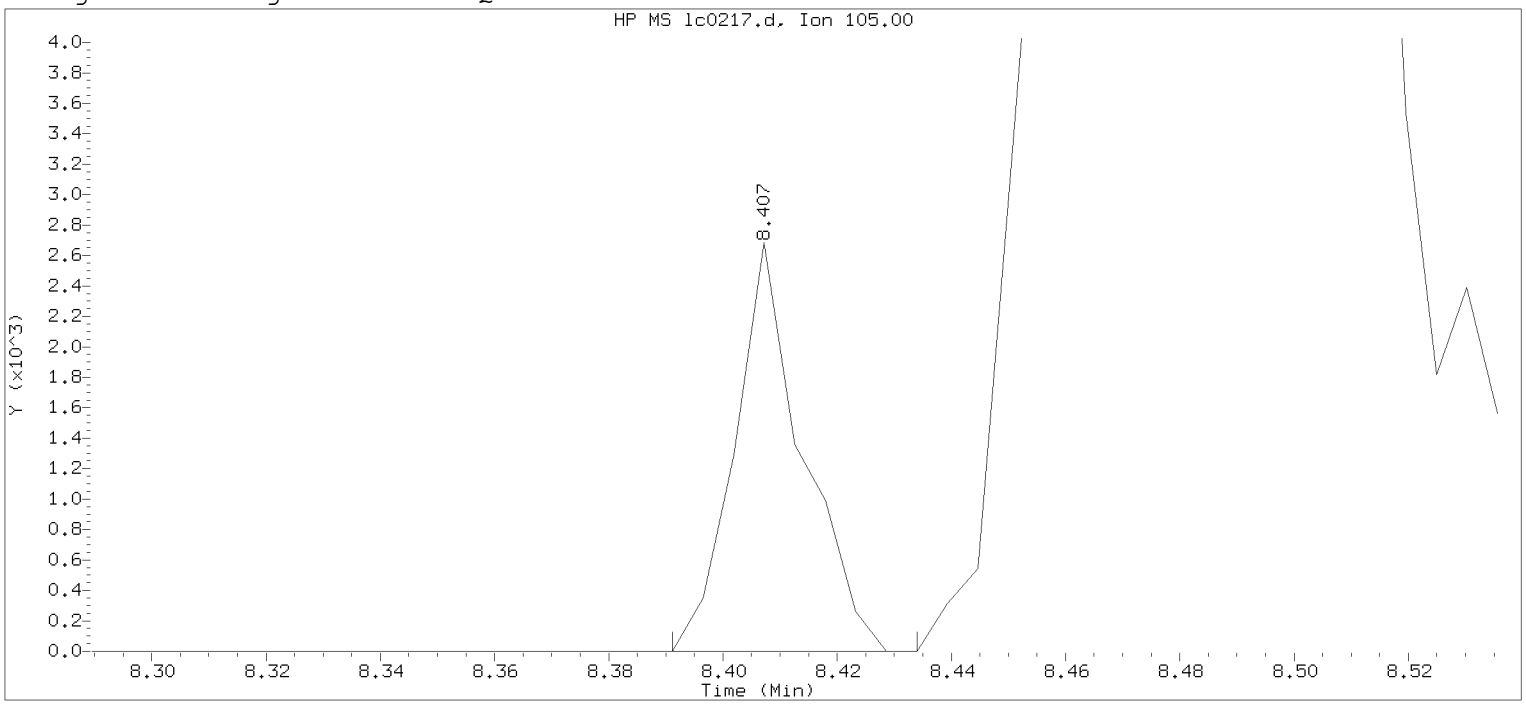
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

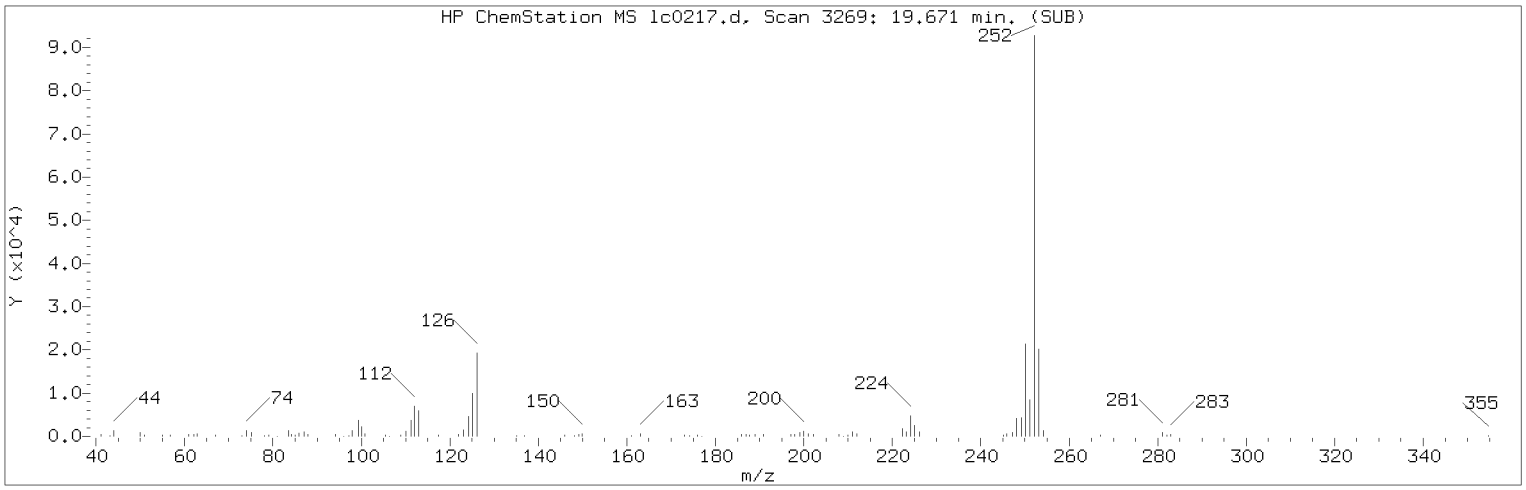
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

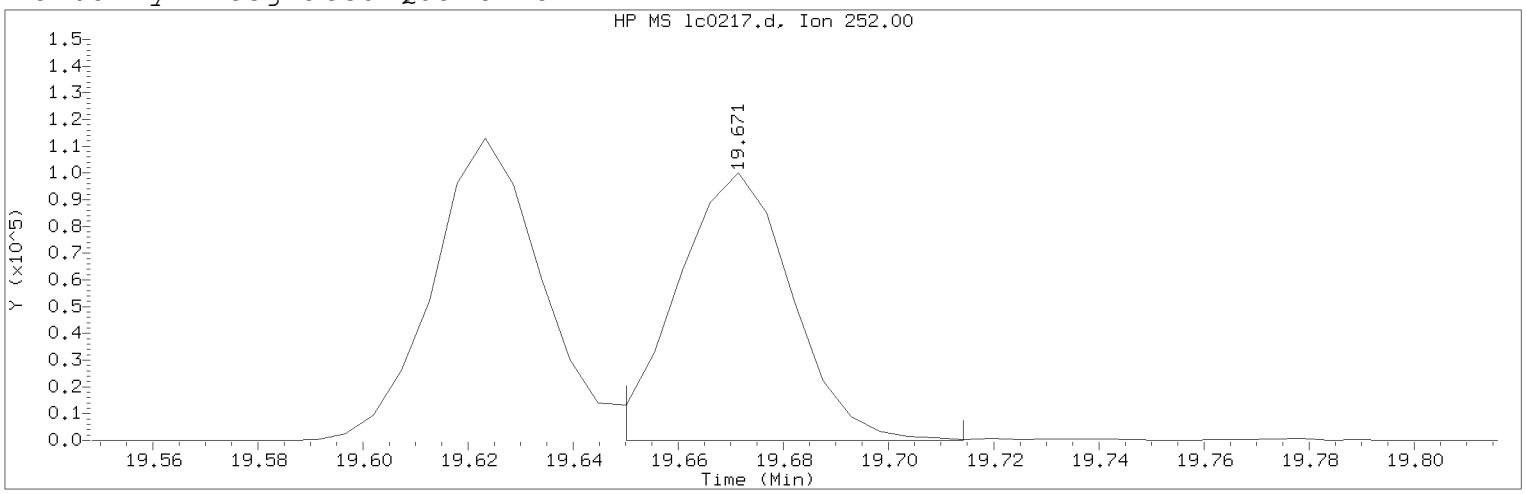
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1163		
Retention Time (minutes)	: 8.407		
Quant Ion	: 105.00		
Area	: 2225		
On-column Amount (ng/ul)	: 0.0731		
Integration start scan	: 1159	Integration stop scan:	1167
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

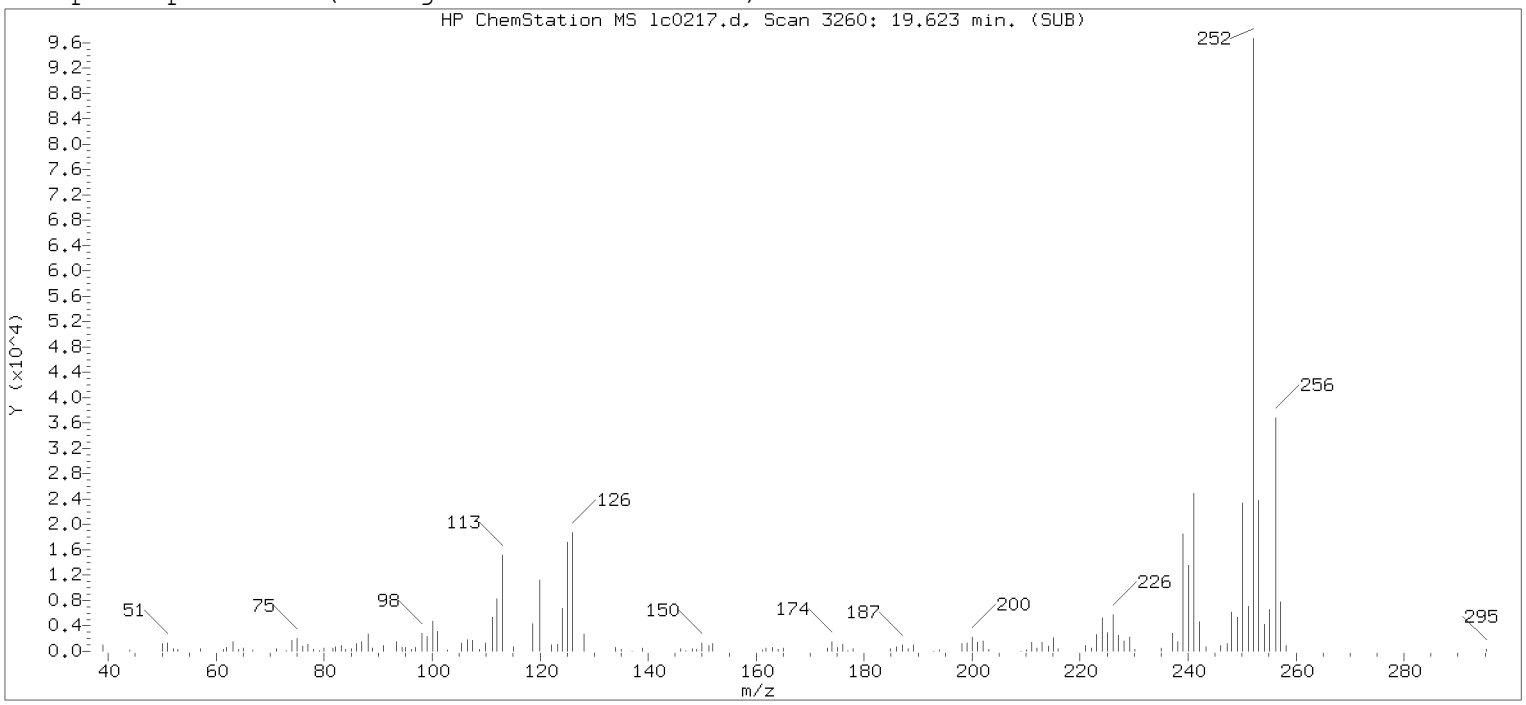
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3269
Retention Time (minutes) : 19.671
Quant Ion : 252.00
Area (flag) : 149482A
On-Column Amount (ng/ul) : 1.1519
Integration start scan : 3264 Integration stop scan: 3276
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

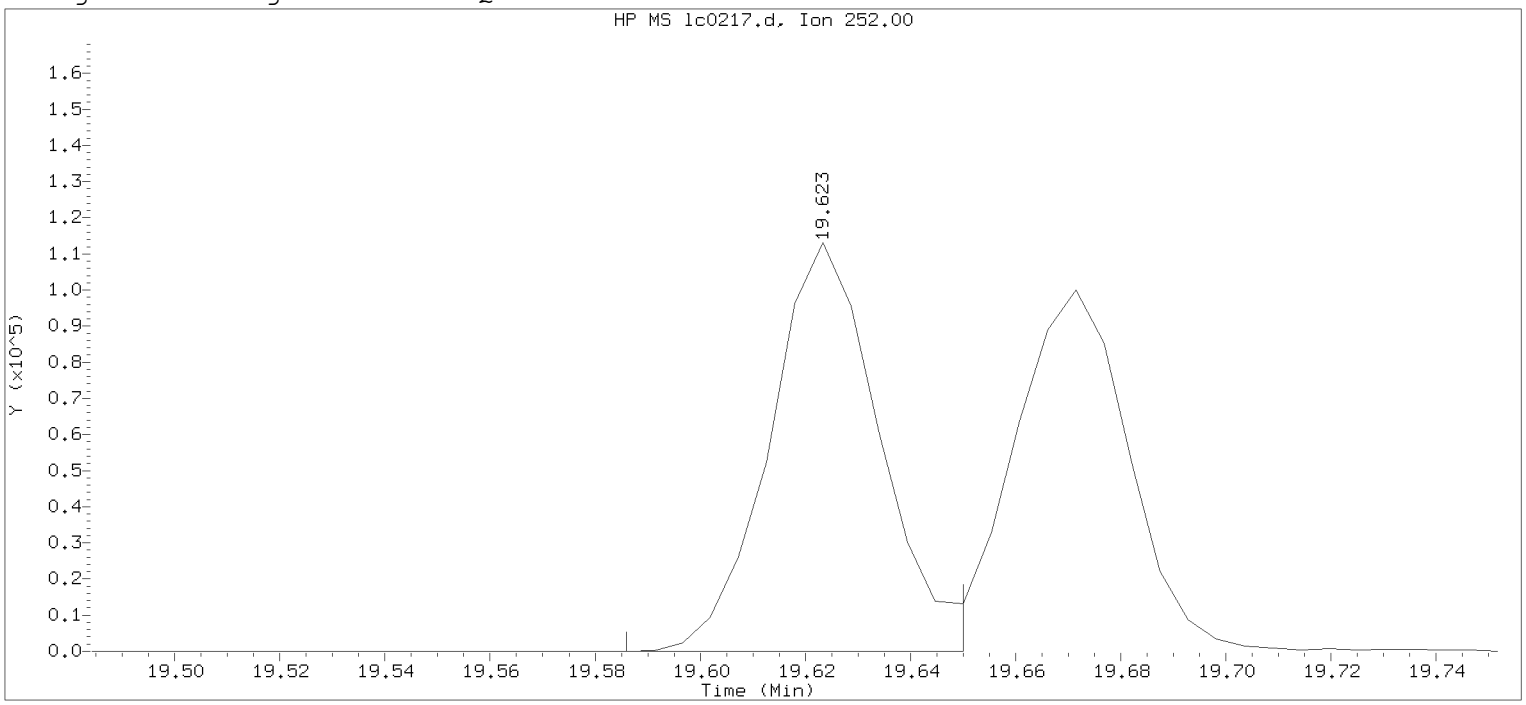
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

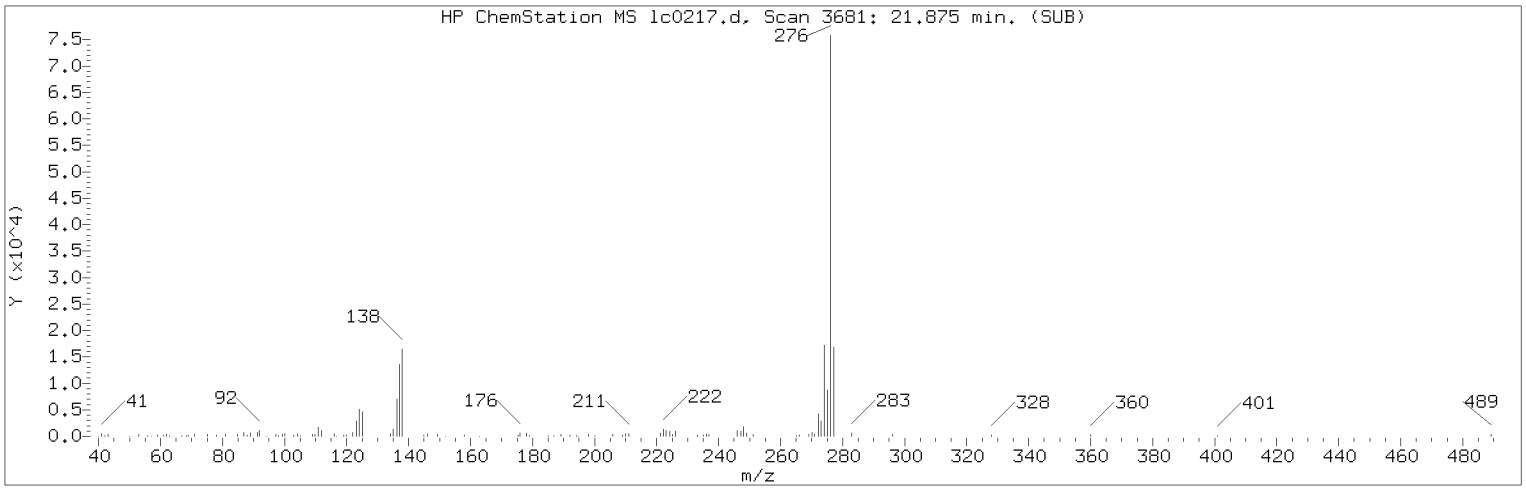
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

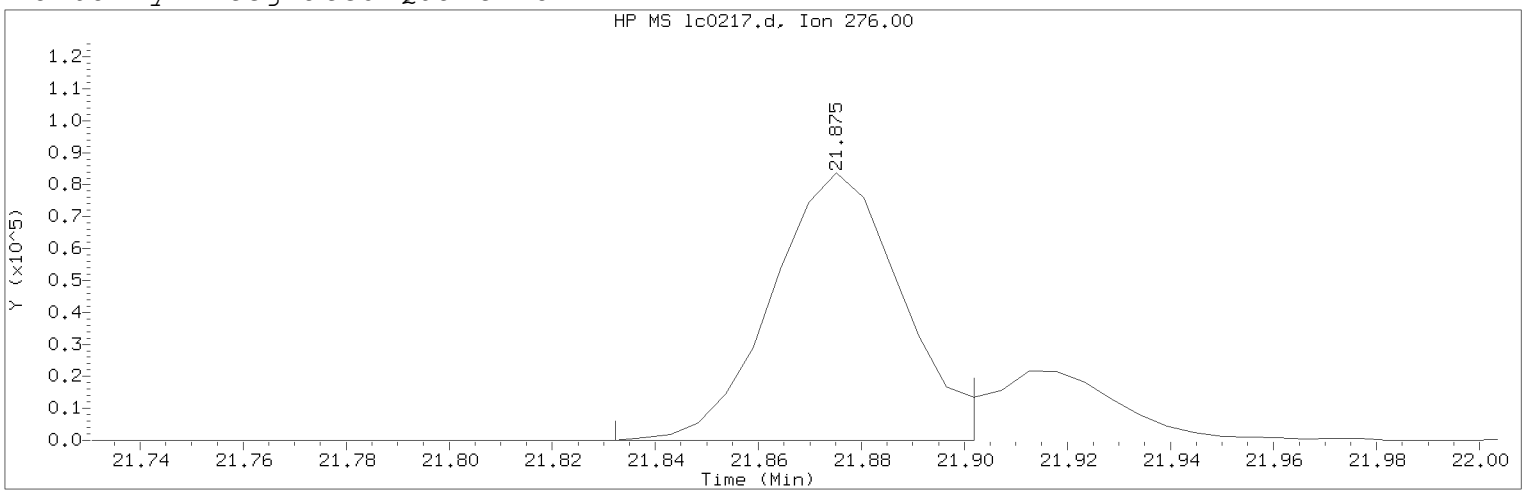
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3260		
Retention Time (minutes)	: 19.623		
Quant Ion	: 252.00		
Area	: 162409		
On-column Amount (ng/ul)	: 1.2517		
Integration start scan	: 3252	Integration stop scan:	3264
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

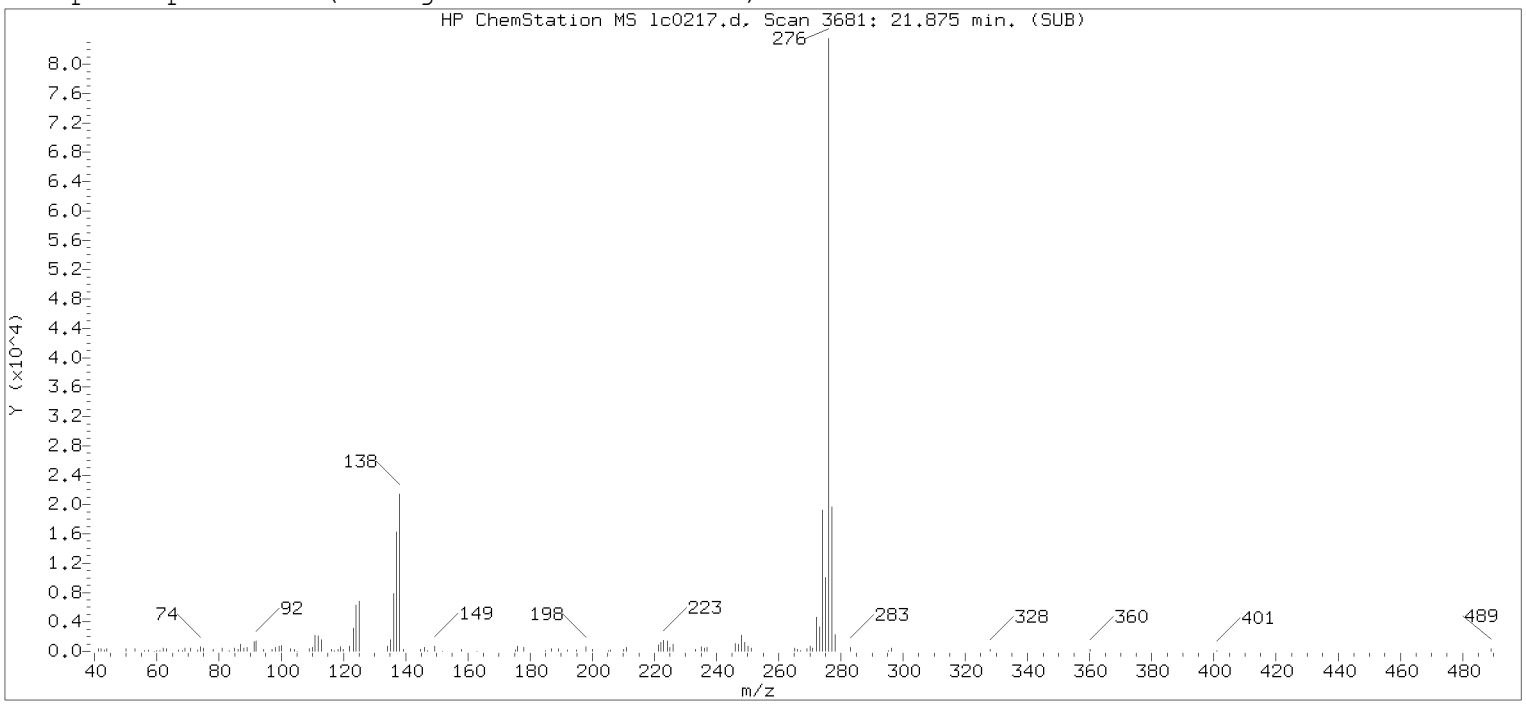
Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3681		
Retention Time (minutes)	: 21.875		
Quant Ion	: 276.00		
Area (flag)	: 146253M		
On-Column Amount (ng/ul)	: 1.1398		
Integration start scan	: 3672	Integration stop scan:	3685
Y at integration start	: 0	Y at integration end:	0

Reason for manual integration: improper integration

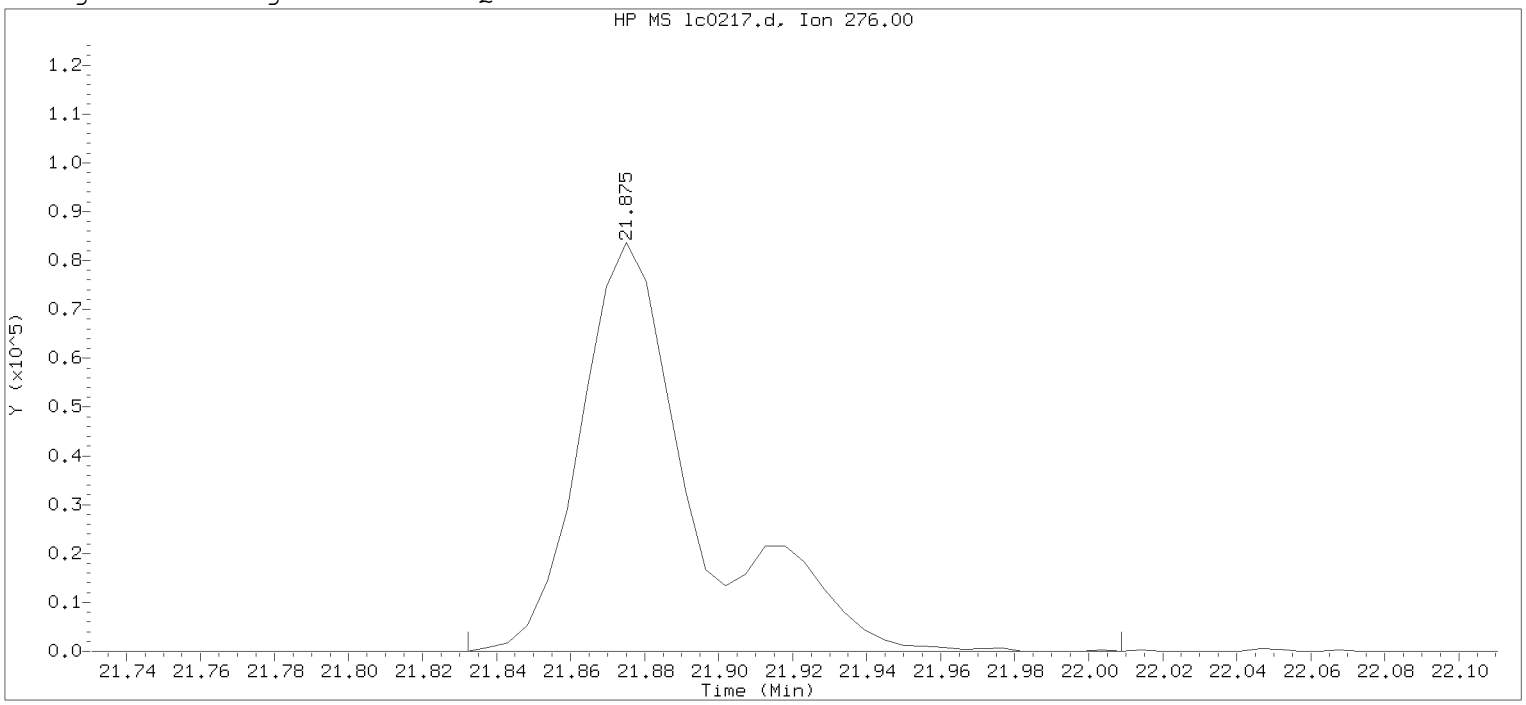
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



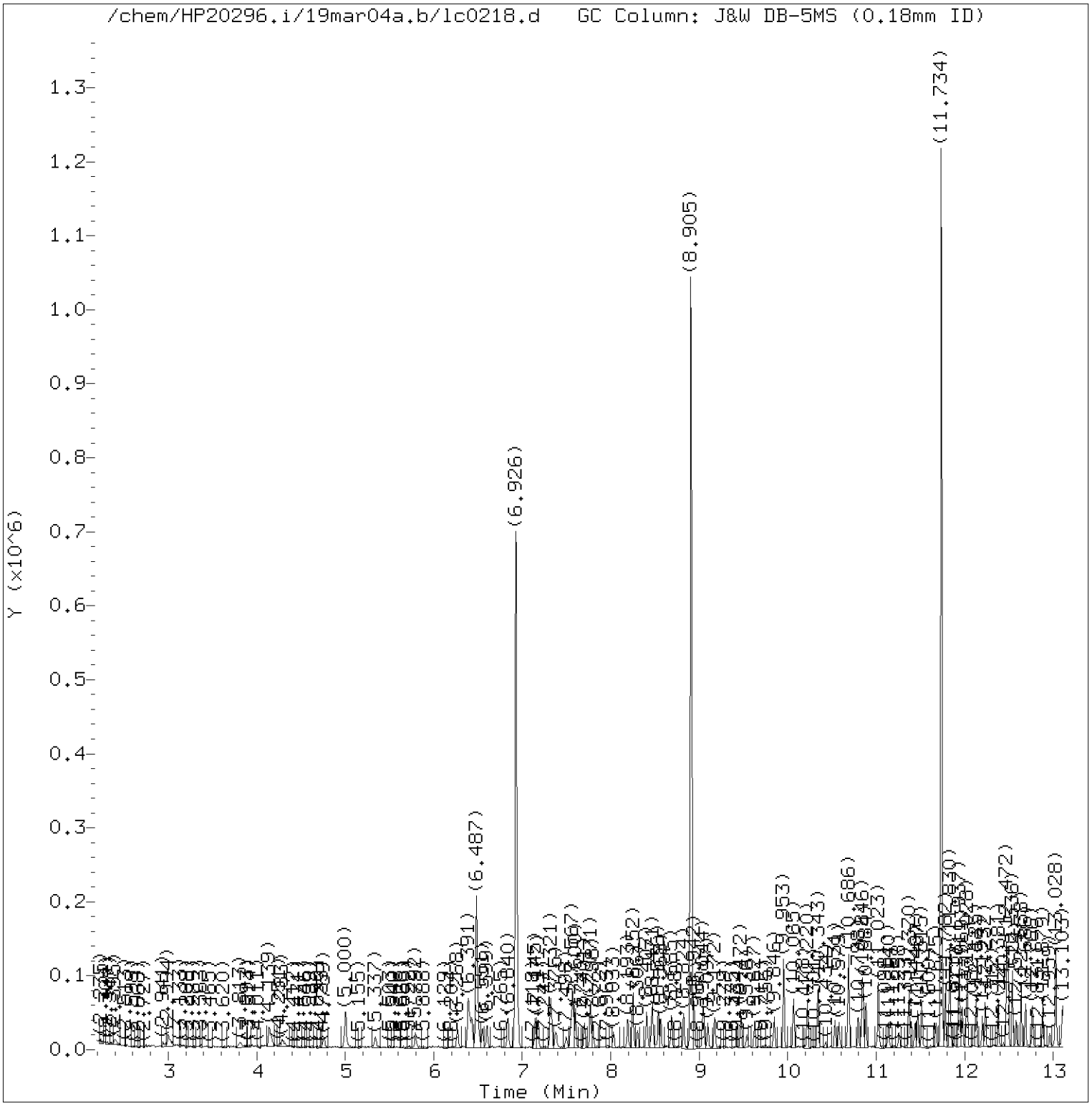
Data File: /chem/HP20296.i/19mar04a.b/lc0217.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:04 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD1.25 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3681		
Retention Time (minutes)	: 21.875		
Quant Ion	: 276.00		
Area	: 181492		
On-column Amount (ng/ul)	: 1.5069		
Integration start scan	: 3672	Integration stop scan:	3705
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2019-03-05



Total Ion Chromatogram (TIC)

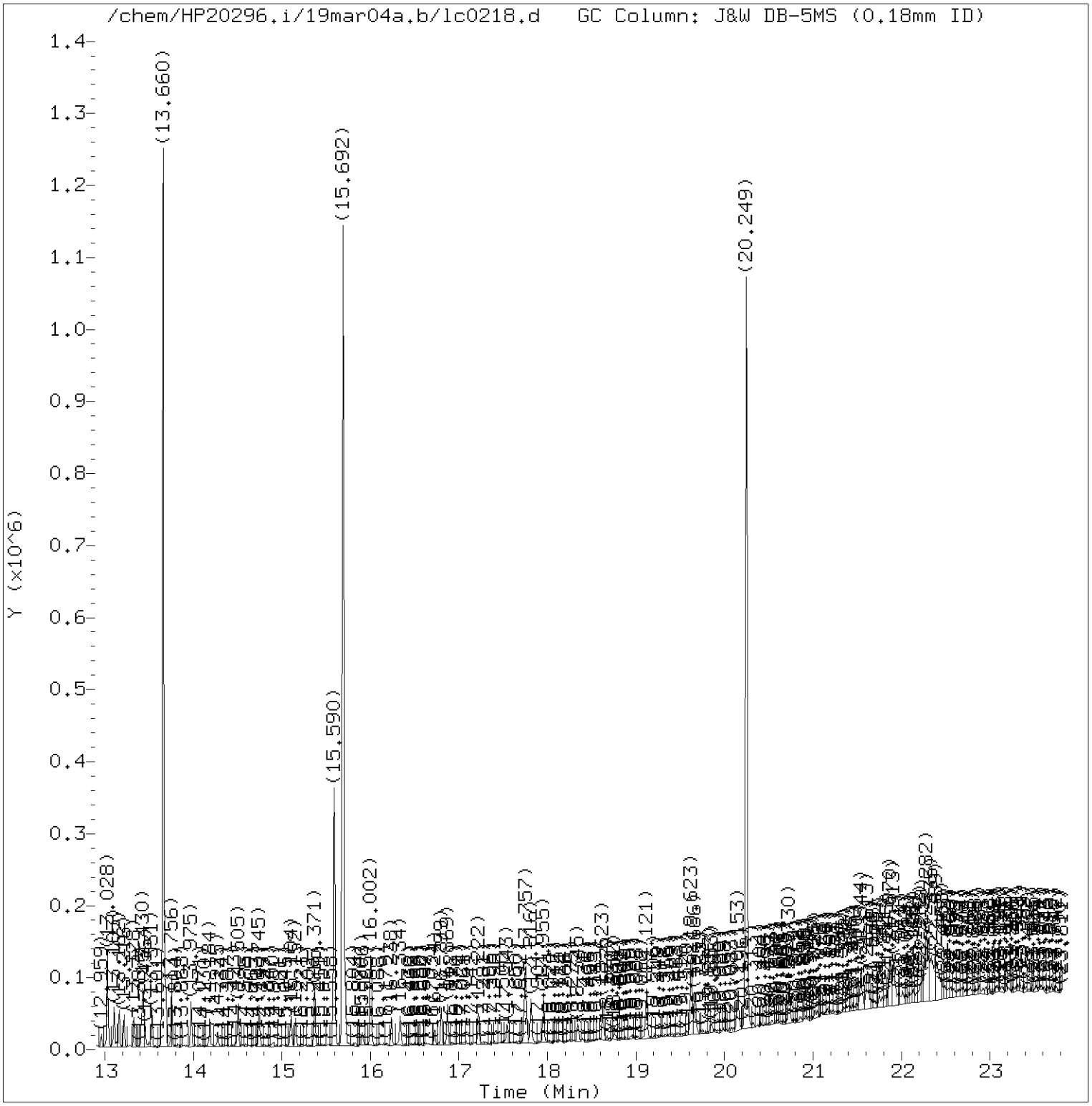
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.395	88	5007	0.245
5) N-Nitrosodimethylamine	(1)	2.941	74	7410	0.236
6) Pyridine	(1)	2.994	79	18989M	0.346
8) 2-Picoline	(1)	4.139	93	15258M	0.266
9) N-Nitrosomethylethylamine	(1)	4.310	88	6431M	0.276
10) Methyl methanesulfonate	(1)	4.765	80	7289M	0.253
12)$2-Fluorophenol	(1)	5.000	112	21607	0.482
14) N-Nitrosodiethylamine	(1)	5.337	102	5588M	0.246
43) Total Cresols	(1)			24754	0.528
16) Ethyl methanesulfonate	(1)	5.792	109	6216	0.258
17) Benzaldehyde	(1)	6.268	77	8415	0.210
18)$Phenol-d6	(1)	6.391	99	31984	0.527
19) Phenol	(1)	6.412	94	17415	0.254
20) Aniline	(1)	6.428	93	20664	0.257
21) a-methylstyrene	(1)	6.525	118	4166M	0.470
23) bis(2-Chloroethyl)ether	(1)	6.551	93	13296	0.258
24) 2-Chlorophenol	(1)	6.605	128	10519	0.242
25) 1,3-Dichlorobenzene	(1)	6.835	146	12083	0.254
26)*1,4-Dichlorobenzene-d4	(1)	6.926	152	144397	5.000
27) 1,4-Dichlorobenzene	(1)	6.952	146	14098	0.290
28) Benzyl alcohol	(1)	7.145	108	6787	0.234
29) 1,2-Dichlorobenzene	(1)	7.182	146	11953	0.262
31) Indene	(1)	7.316	115	15577	0.261
32) 2-Methylphenol	(1)	7.332	108	11512	0.261
35) bis(2-Chloroisopropyl)ether	(1)	7.380	45	12740	0.253
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.380	45	12740	0.253
100) Isosafrole	(3)			8627	0.232
36) N-Nitrosopyrrolidine	(1)	7.498	100	6089	0.250
37) Acetophenone	(1)	7.546	105	13900	0.214
39) N-Nitroso-di-n-propylamine	(1)	7.567	70	8587	0.232
40) N-Nitrosomorpholine	(1)	7.567	56	6716	0.266
38) 4-Methylphenol	(1)	7.573	108	13242	0.267
41) o-Toluidine	(1)	7.600	106	21054	0.270
44) Hexachloroethane	(1)	7.696	117	4919	0.236
45)$Nitrobenzene-d5	(2)	7.771	82	27517	0.494
46) Nitrobenzene	(2)	7.803	77	14516	0.255
50) N-Nitrosopiperidine	(2)	8.033	114	5383	0.239
125) 2,4_2,6-Dinitrotoluenes	(3)			10649	0.483
52) Isophorone	(2)	8.193	82	23530	0.240
53) 2-Nitrophenol	(2)	8.300	139	5107	0.230

M = Compound was manually integrated.
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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.407	107	11767	0.239
58) Benzoic acid	(2)	8.471	105	24211M	0.732
59) O,O,O-Triethylphosphorothioate	(2)	8.536	198	4905	0.252
57) bis(2-Chloroethoxy)methane	(2)	8.568	93	16588	0.259
62) 2,4-Dichlorophenol	(2)	8.685	162	9021	0.250
151) Diallate trans/cis	(4)			10744	0.257
65) 1,2,4-Trichlorobenzene	(2)	8.824	180	9110	0.238
68)*Naphthalene-d8	(2)	8.905	136	555885	5.000
69) Naphthalene	(2)	8.942	128	32264	0.252
70) 4-Chloroaniline	(2)	9.044	127	12703	0.249
71) 2,6-Dichlorophenol	(2)	9.049	162	8583	0.248
72) Hexachloropropene	(2)	9.097	213	6476	0.250
74) Hexachlorobutadiene	(2)	9.177	225	5798	0.263
78) Quinoline	(2)	9.472	129	18898	0.254
79) Caprolactam	(2)	9.541	113	2163	0.188
80) N-Nitrosodi-n-butylamine	(2)	9.627	84	8139	0.208
83) 4-Chloro-3-methylphenol	(2)	9.846	107	10369	0.246
85) Safrole	(2)	9.953	162	7281	0.234
86) 2-Methylnaphthalene	(2)	10.065	142	20987	0.253
87) 1-Methylnaphthalene	(2)	10.220	142	19134	0.247
88) Hexachlorocyclopentadiene	(3)	10.343	237	5758	0.232
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.343	216	8697	0.238
91) cis-Isosafrole	(3)	10.434	162	1189	0.035
93) 2,4,6-Trichlorophenol	(3)	10.531	196	6316	0.255
95) 2,4,5-Trichlorophenol	(3)	10.579	196	5921	0.232
96)$2-Fluorobiphenyl	(3)	10.686	172	43266	0.496
97) trans-Isosafrole	(3)	10.798	162	7438	0.196
98) 1,1'-Biphenyl	(3)	10.841	154	20891	0.228
99) 2-Chloronaphthalene	(3)	10.852	162	20927	0.261
101) 1-Chloronaphthalene	(3)	10.884	162	18435	0.277
103) Diphenyl ether	(3)	11.023	170	13835	0.274
104) 2-Nitroaniline	(3)	11.023	138	5772	0.240
108) 1,4-Naphthoquinone	(3)	11.135	158	6183	0.203
109) 1,4-Dinitrobenzene	(3)	11.253	168	2294	0.190
110) Dimethylphthalate	(3)	11.370	163	20927	0.259
111) 1,3-Dinitrobenzene	(3)	11.370	168	2849	0.216
113) 2,6-Dinitrotoluene	(3)	11.440	165	4072	0.219
114) Acenaphthylene	(3)	11.515	152	26297	0.242
117) 3-Nitroaniline	(3)	11.675	138	5315	0.256
118)*Acenaphthene-d10	(3)	11.734	164	261728	5.000

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Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.782	153	21314	0.266
120) 2,4-Dinitrophenol	(3)	11.830	184	18761	1.521
121) 4-Nitrophenol	(3)	11.937	109	15799	1.006
122) Pentachlorobenzene	(3)	11.969	250	8164	0.255
123) 2,4-Dinitrotoluene	(3)	12.018	165	6577	0.264
124) Dibenzofuran	(3)	12.028	168	27347	0.263
126) 1-Naphthylamine	(3)	12.125	143	19707	0.252
127) 2,3,4,6-Tetrachlorophenol	(3)	12.199	232	5516	0.266
128) 2-Naphthylamine	(3)	12.232	143	19484	0.255
129) Diethylphthalate	(3)	12.381	149	21968	0.279
130) Thionazin	(3)	12.472	107	4160	0.253
131) Fluorene	(3)	12.472	166	22412	0.264
133) 5-Nitro-o-toluidine	(3)	12.483	152	5188	0.224
134) 4-Nitroaniline	(3)	12.488	138	5867M	0.276
132) 4-Chlorophenyl-phenylether	(3)	12.494	204	9693	0.253
135) 4,6-Dinitro-2-methylphenol	(4)	12.536	198	12403	0.844
136) N-Nitrosodiphenylamine	(4)	12.638	169	16688	0.243
137) NDPA as diphenylamine	(4)	12.638	169	16688	0.243
139) 1,2-Diphenylhydrazine	(4)	12.686	77	24720	0.241
140)$2,4,6-Tribromophenol	(3)	12.766	330	6305	0.514
142) Tetraethyldithiopyrophosphate	(4)	12.879	97	4440	0.264
144) 1,3,5-Trinitrobenzene	(4)	12.959	213	1686M	0.190
145) Diallate (peak 1)	(4)	13.023	86	9247	0.216
146) Phorate	(4)	13.028	75	14682M	0.234
147) Phenacetin	(4)	13.034	108	10913	0.226
148) 4-Bromophenyl-phenylether	(4)	13.103	248	6052	0.268
149) Diallate (peak 2)	(4)	13.135	86	1497	0.042
150) Hexachlorobenzene	(4)	13.162	284	6440	0.253
152) Dimethoate	(4)	13.216	87	8524	0.208
153) Atrazine	(4)	13.328	200	4569	0.221
154) Pentachlorophenol	(4)	13.414	266	3851	0.229
155) 4-Aminobiphenyl	(4)	13.430	169	17717	0.225
156) Pentachloronitrobenzene	(4)	13.435	237	2205	0.199
157) Pronamide	(4)	13.531	173	8736	0.231
158)*Phenanthrene-d10	(4)	13.660	188	495347	5.000
159) Dinoseb	(4)	13.681	211	4750	0.211
160) Phenanthrene	(4)	13.686	178	30941	0.247
162) Anthracene	(4)	13.756	178	28851	0.235
168) Carbazole	(4)	13.975	167	27161	0.248
169) Methyl parathion	(4)	14.184	109	7390	0.225

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on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

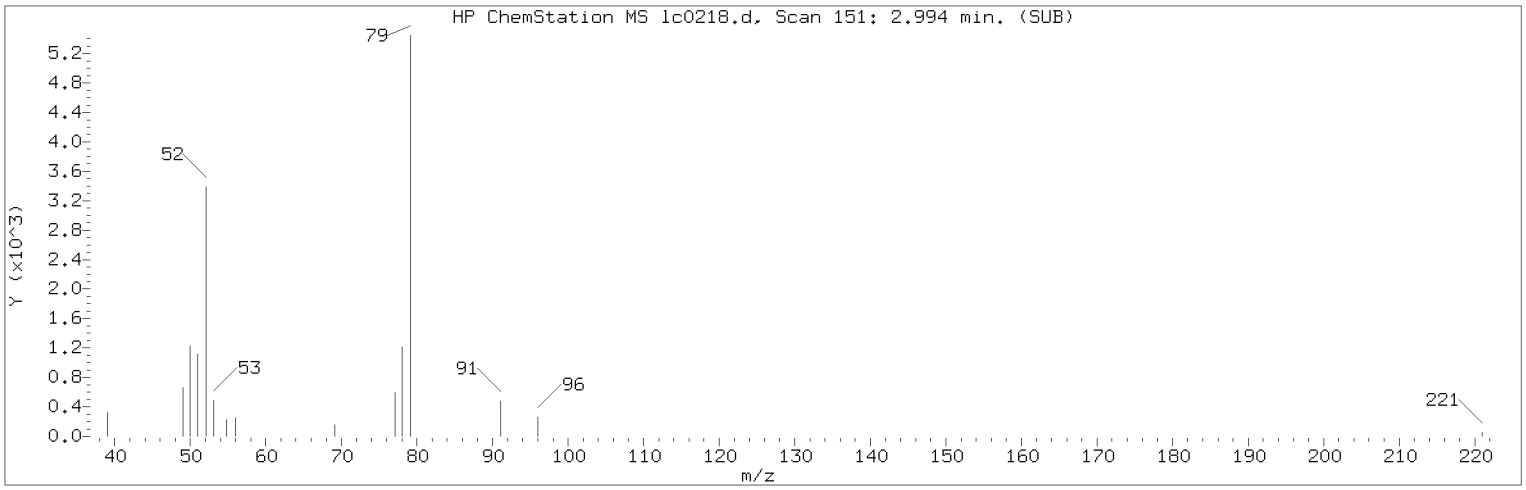
Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	14.505	149	32173	0.222
173) 4-Nitroquinoline-1-oxide	(4)	14.740	190	3248	0.213
172) Parathion	(4)	14.745	109	5234	0.247
227) Total PAHs	(6)			511319	4.419
174) Octachlorostyrene	(4)	15.109	308	2437	0.253
176) Isodrin	(4)	15.152	193	3604M	0.257
178) Fluoranthene	(4)	15.371	202	32578	0.242
179) Benzidine	(5)	15.590	184	164169	1.815
180)*Pyrene-d10	(5)	15.692	212	494684	5.000
182) Pyrene	(5)	15.719	202	35105	0.255
184)$Terphenyl-d14	(5)	16.002	244	44515	0.516
187) p-Dimethylaminoazobenzene	(5)	16.238	225	4211	0.184
190) Chlorobenzilate	(5)	16.334	139	11027	0.238
192) 3,3'-Dimethylbenzidine	(5)	16.799	212	21552	0.232
193) Butylbenzylphthalate	(5)	16.869	149	14527	0.211
196) 2-Acetylaminofluorene	(5)	17.222	181	11804	0.191
198) 3,3'-Dichlorobenzidine	(5)	17.741	252	11542	0.236
200) Benzo(a)anthracene	(5)	17.751	228	30025	0.227
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.757	231	6801	0.252
201) Chrysene	(5)	17.816	228	29619	0.241
204) bis(2-Ethylhexyl)phthalate	(5)	17.955	149	21336	0.210
208) 6-Methylchrysene	(5)	18.628	242	21133	0.238
210) Di-n-octylphthalate	(6)	19.126	149	37393	0.214
211) Benzo(b)fluoranthene	(6)	19.623	252	31203	0.236
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.629	256	13079	0.237
213) Benzo(k)fluoranthene	(6)	19.666	252	31550A	0.252
216) Benzo(a)pyrene	(6)	20.153	252	29872	0.243
218)*Perylene-d12	(6)	20.249	264	504712	5.000
220) 3-Methylcholanthrene	(6)	20.730	268	15395	0.245
222) Dibenz(a,h)acridine	(6)	21.544	279	26506	0.253
223) Dibenz(a,j)acridine	(6)	21.618	279	26624	0.259
224) Indeno(1,2,3-cd)pyrene	(6)	21.870	276	28144M	0.230
225) Dibenz(a,h)anthracene	(6)	21.918	278	30182	0.242
226) Benzo(g,h,i)perylene	(6)	22.282	276	30841	0.245

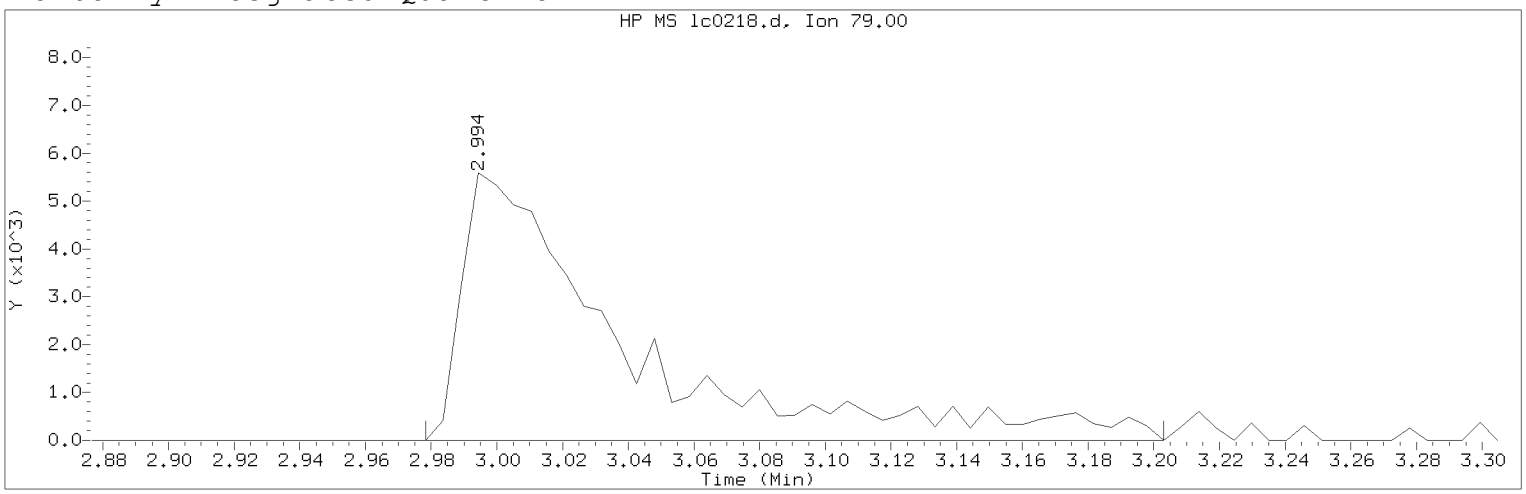
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

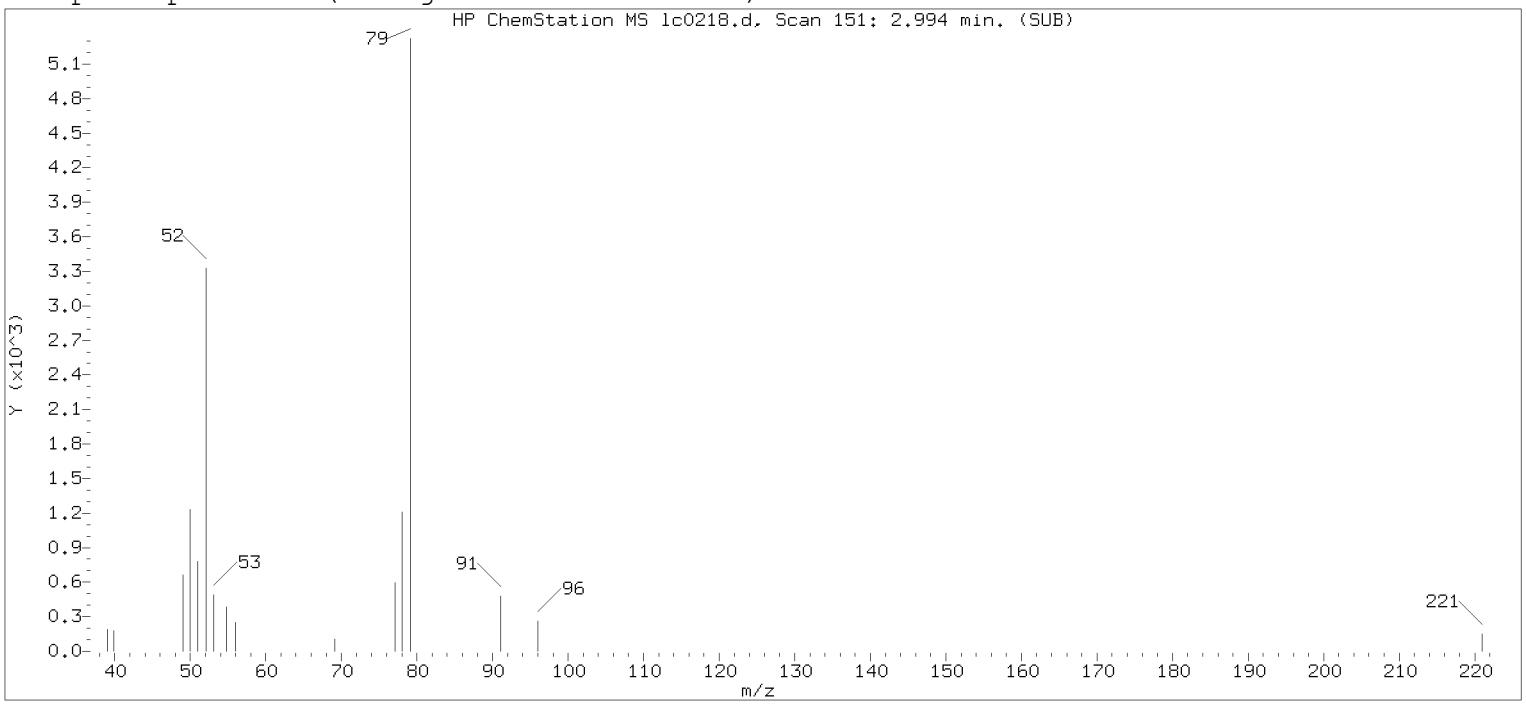
Compound Number : 6
Compound Name : Pyridine
Scan Number : 151
Retention Time (minutes) : 2.994
Quant Ion : 79.00
Area (flag) : 18989M
On-Column Amount (ng/ul) : 0.3463
Integration start scan : 147 Integration stop scan: 189
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

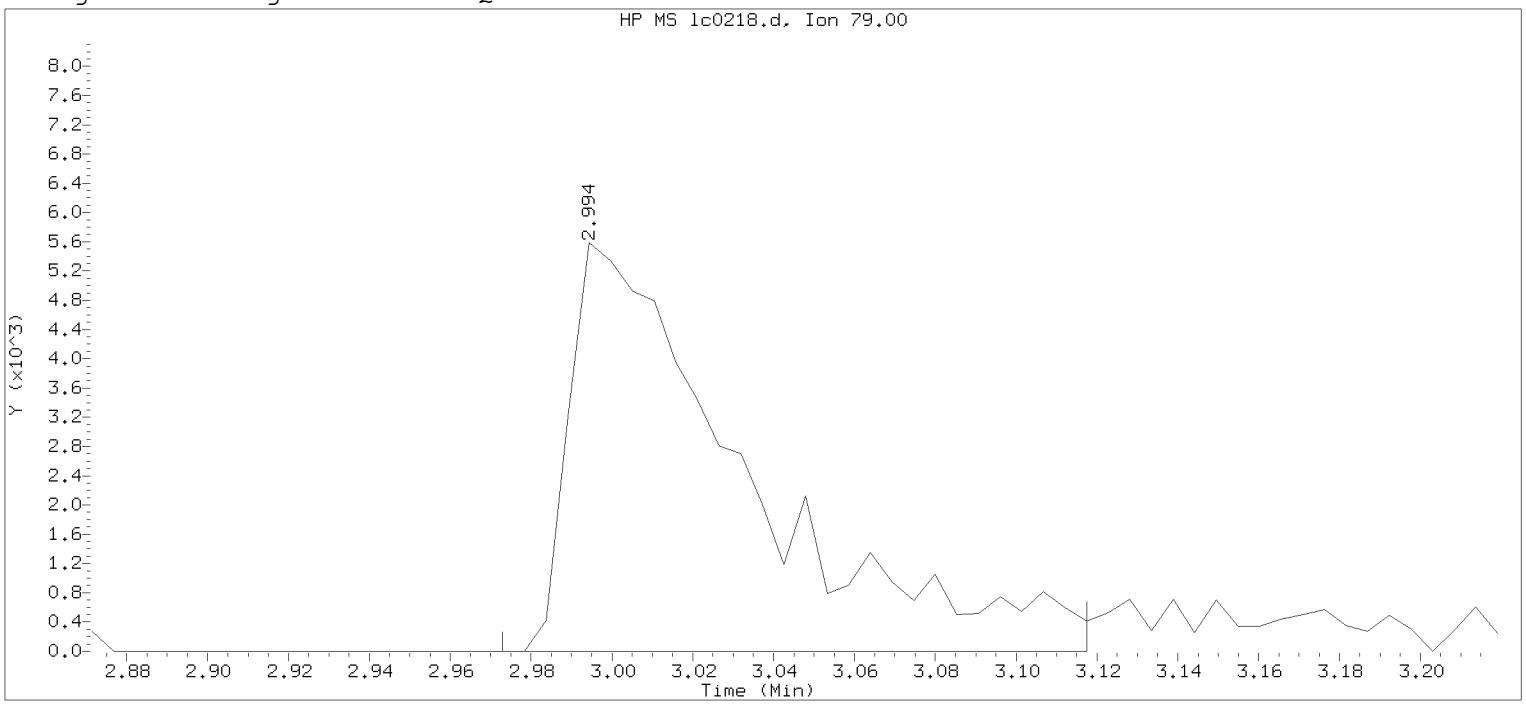
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

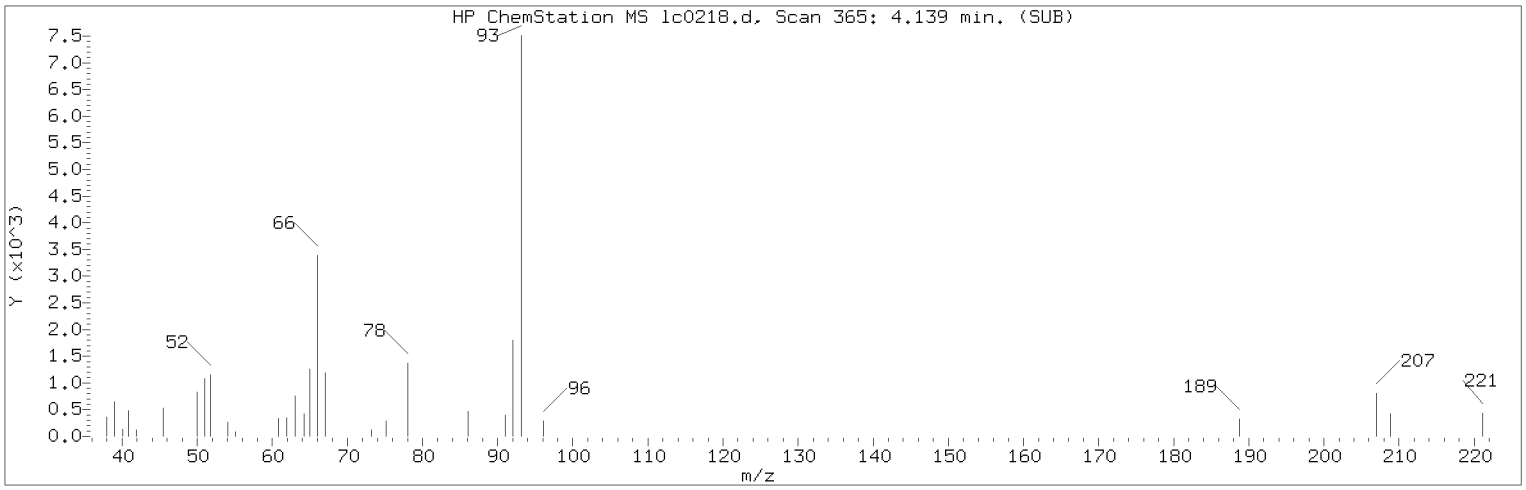
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

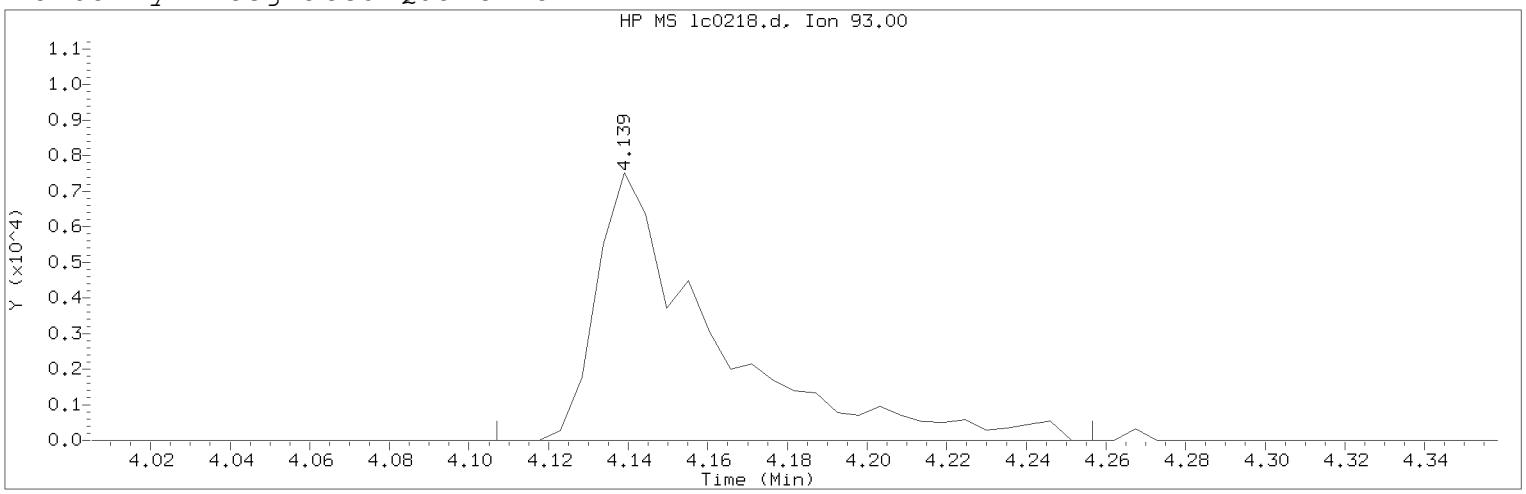
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 151		
Retention Time (minutes)	: 2.994		
Quant Ion	: 79.00		
Area	: 16742		
On-column Amount (ng/ul)	: 0.2851		
Integration start scan	: 146	Integration stop scan:	173
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

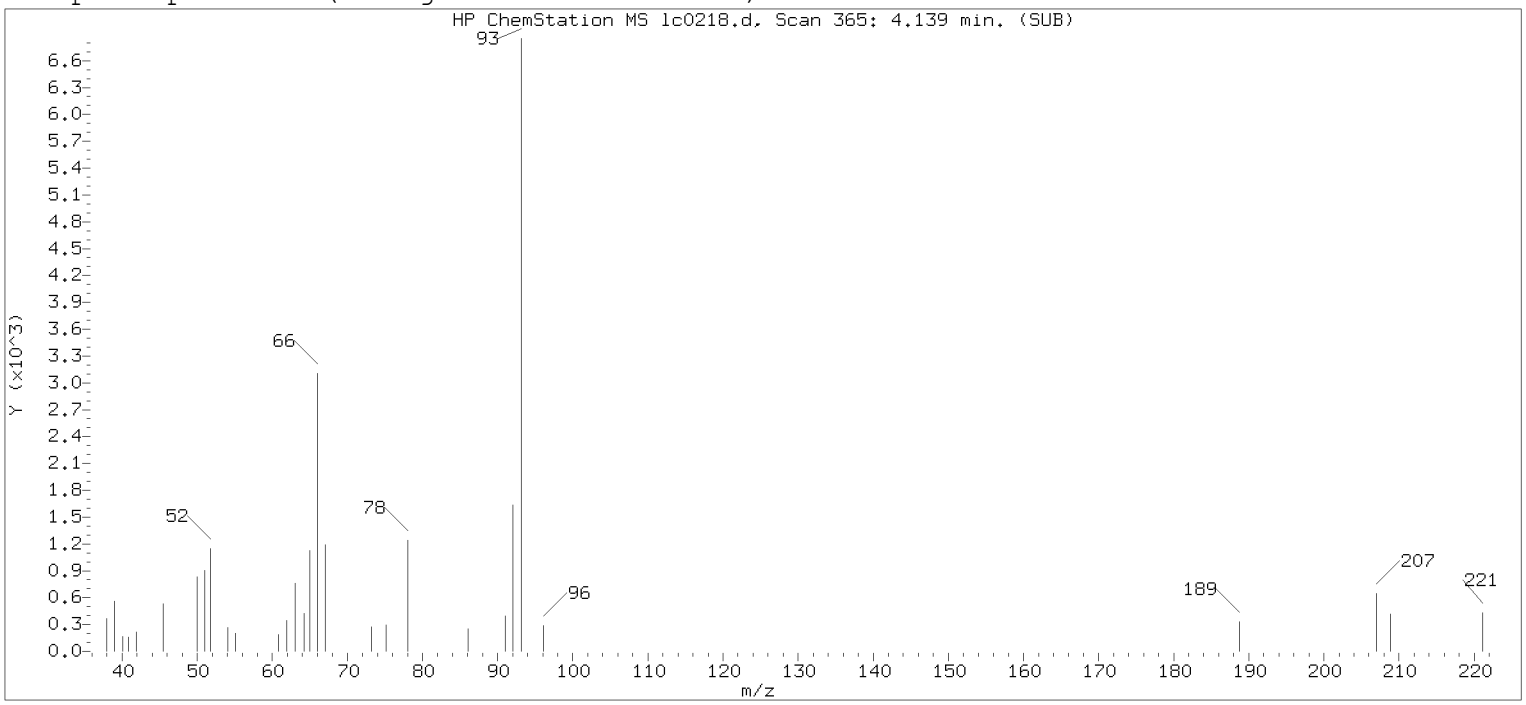
Compound Number : 8
Compound Name : 2-Picoline
Scan Number : 365
Retention Time (minutes) : 4.139
Quant Ion : 93.00
Area (flag) : 15258M
On-Column Amount (ng/ul) : 0.2657
Integration start scan : 358 Integration stop scan: 386
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

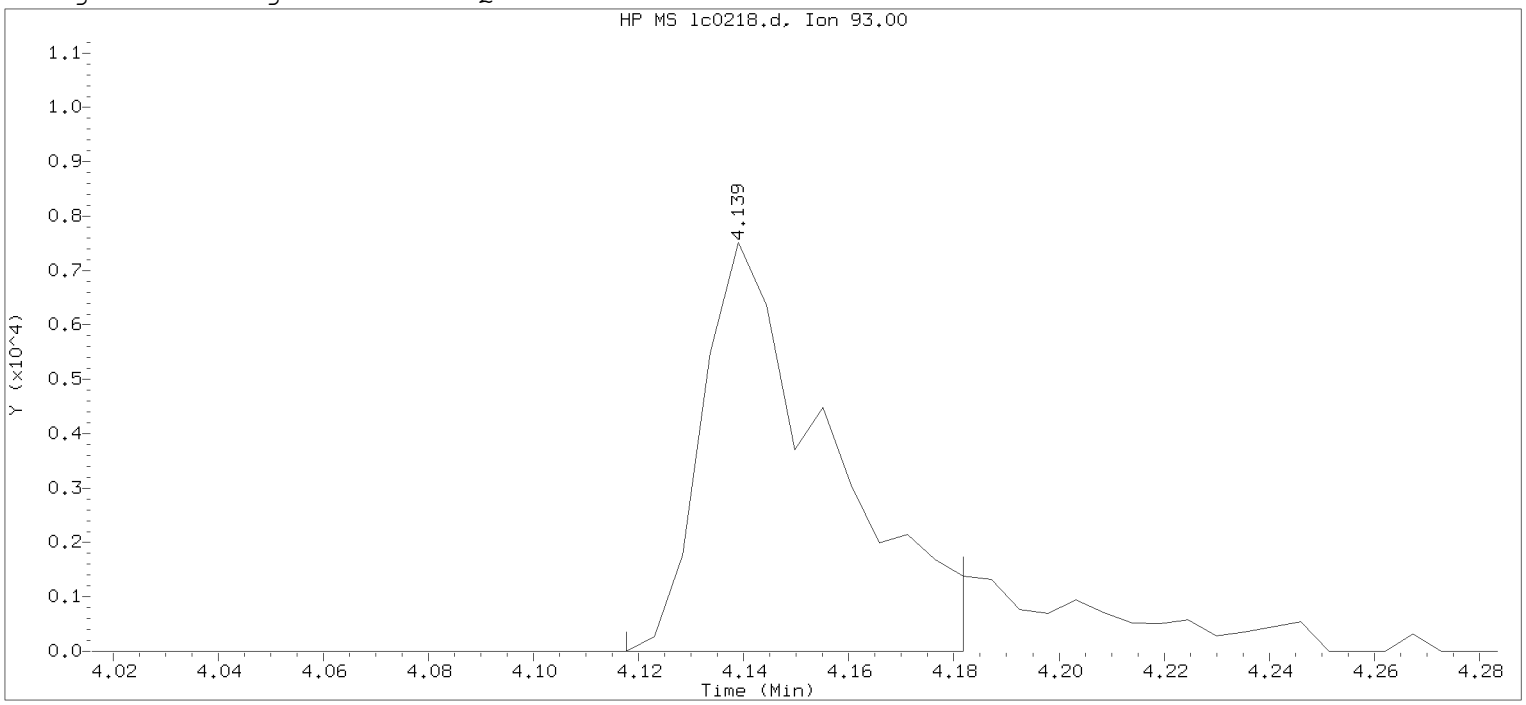
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

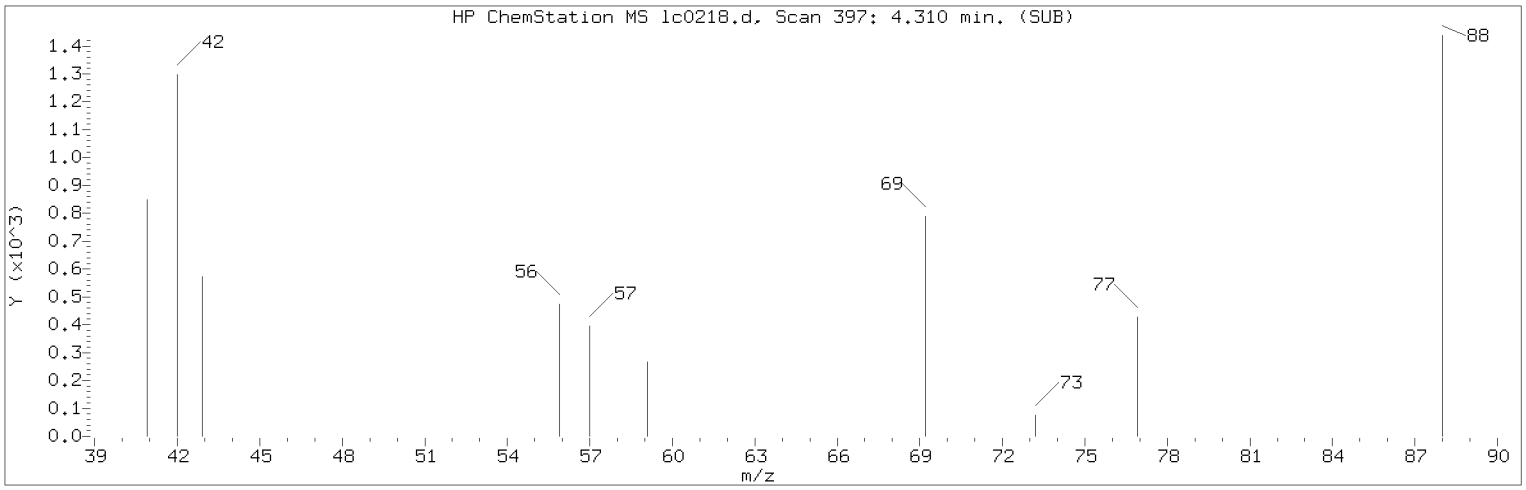
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

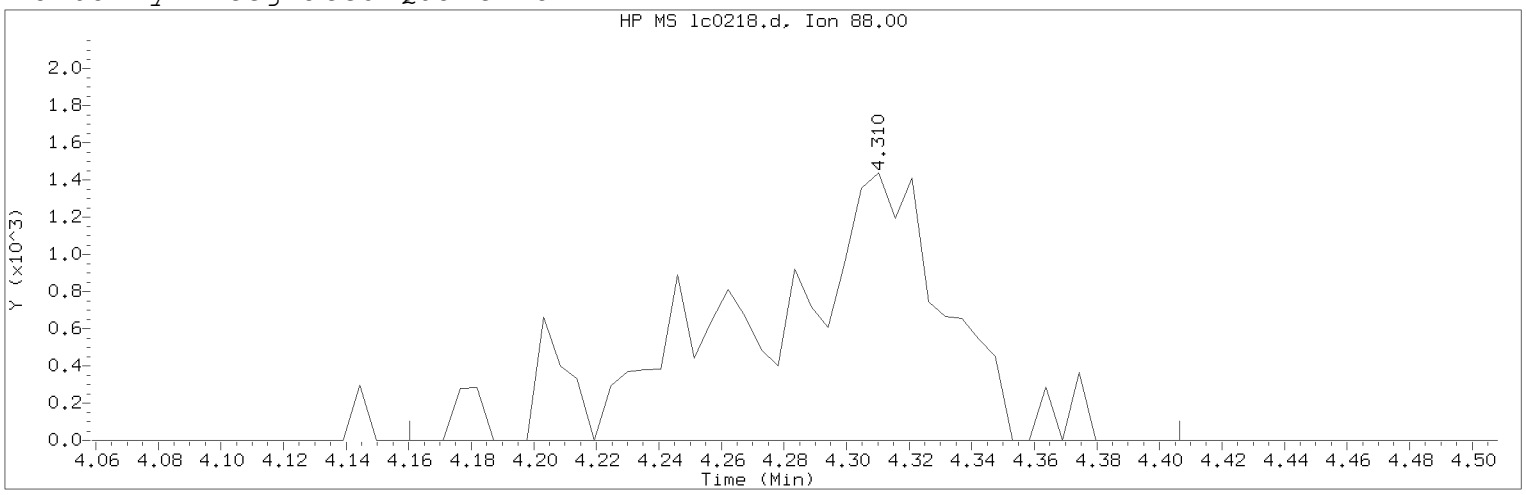
Compound Number	: 8		
Compound Name	: 2-Picoline		
Scan Number	: 365		
Retention Time (minutes)	: 4.139		
Quant Ion	: 93.00		
Area	: 12568		
On-column Amount (ng/ul)	: 0.2121		
Integration start scan	: 360	Integration stop scan:	372
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

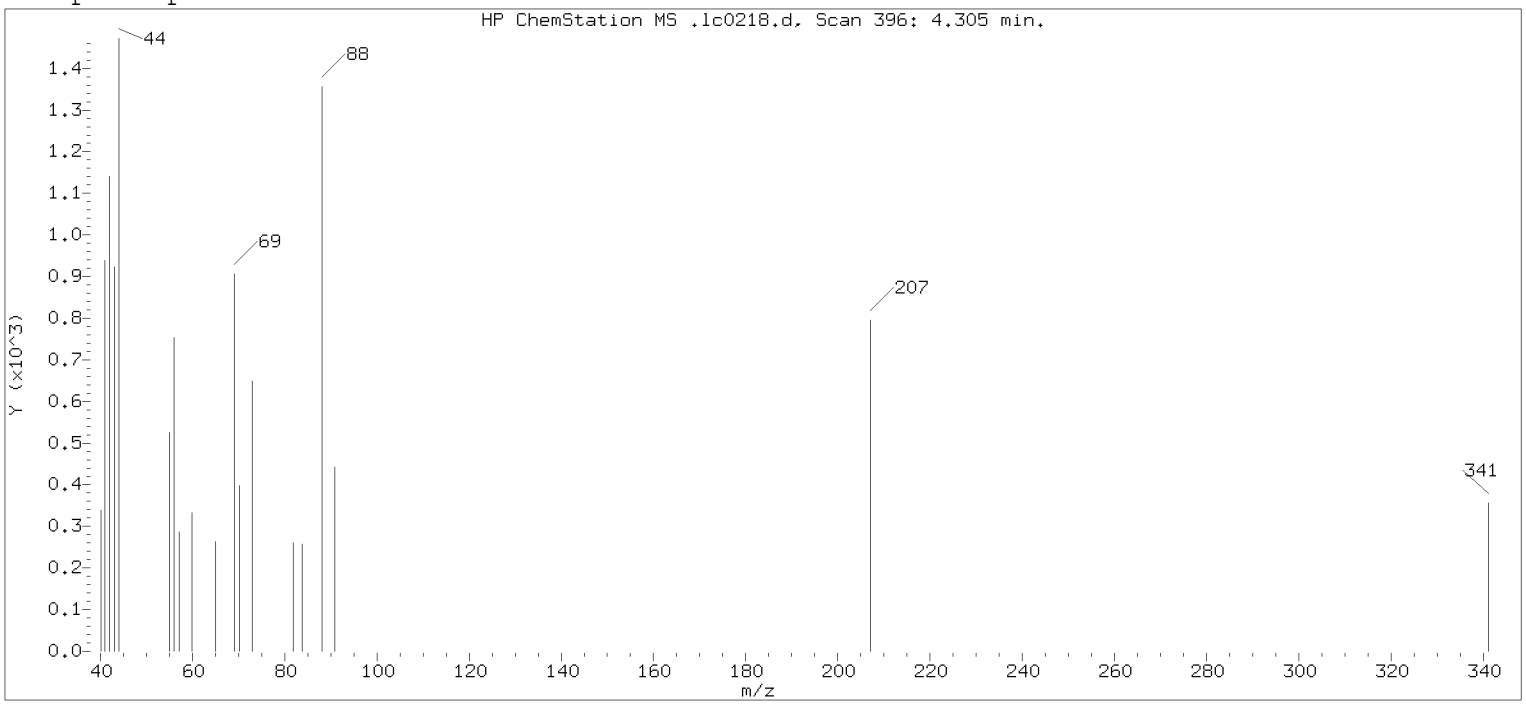
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 397
Retention Time (minutes) : 4.310
Quant Ion : 88.00
Area (flag) : 6431M
On-Column Amount (ng/ul) : 0.2762
Integration start scan : 368 Integration stop scan: 414
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

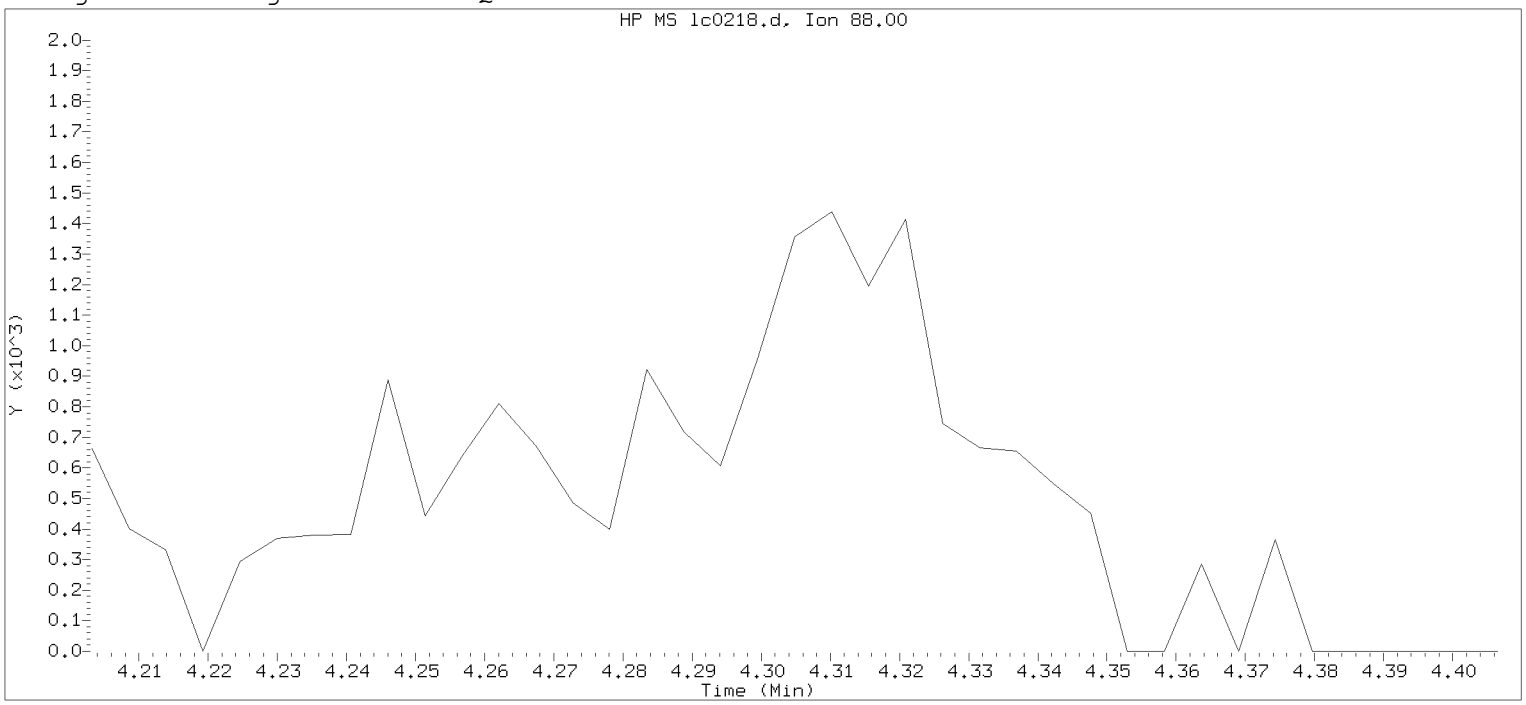
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

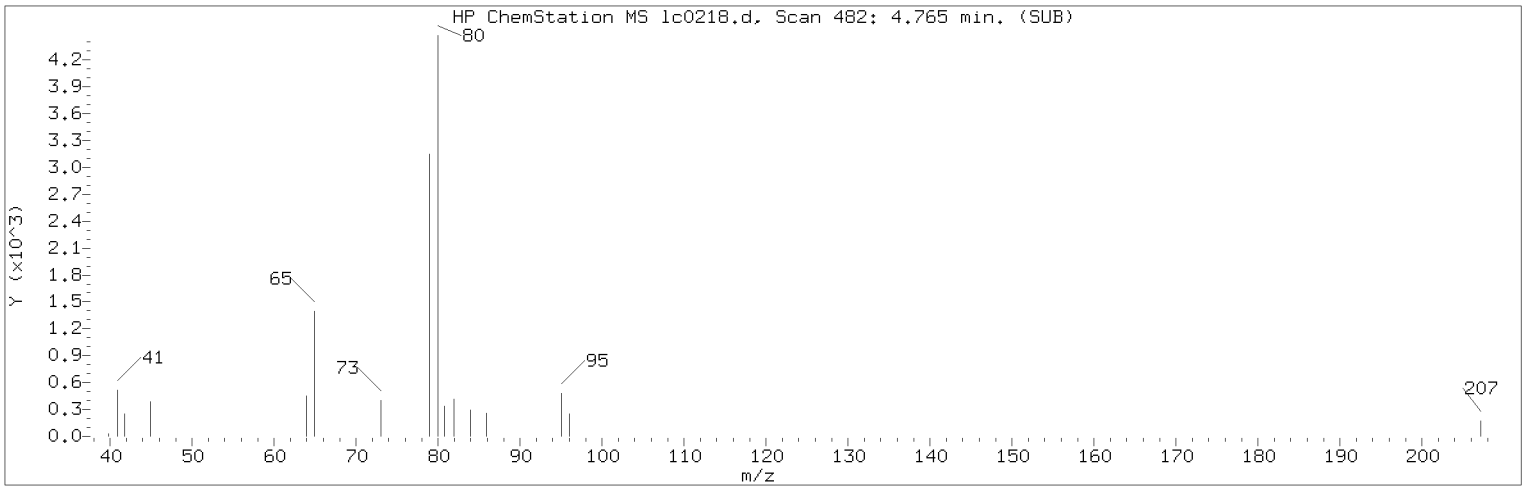
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

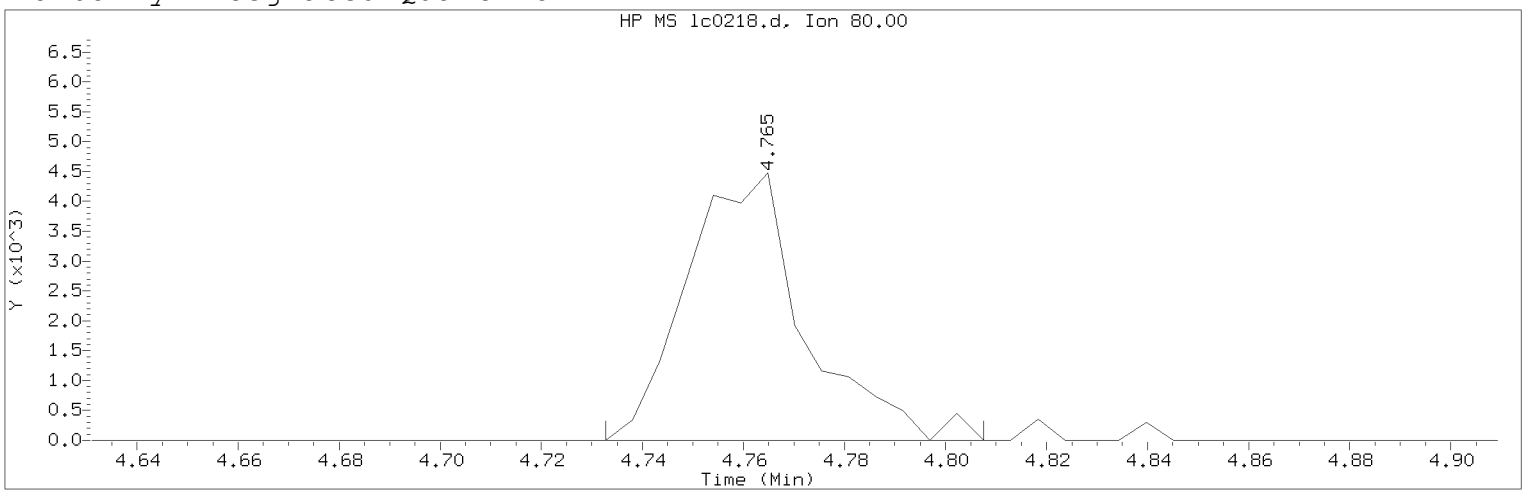
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.305
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

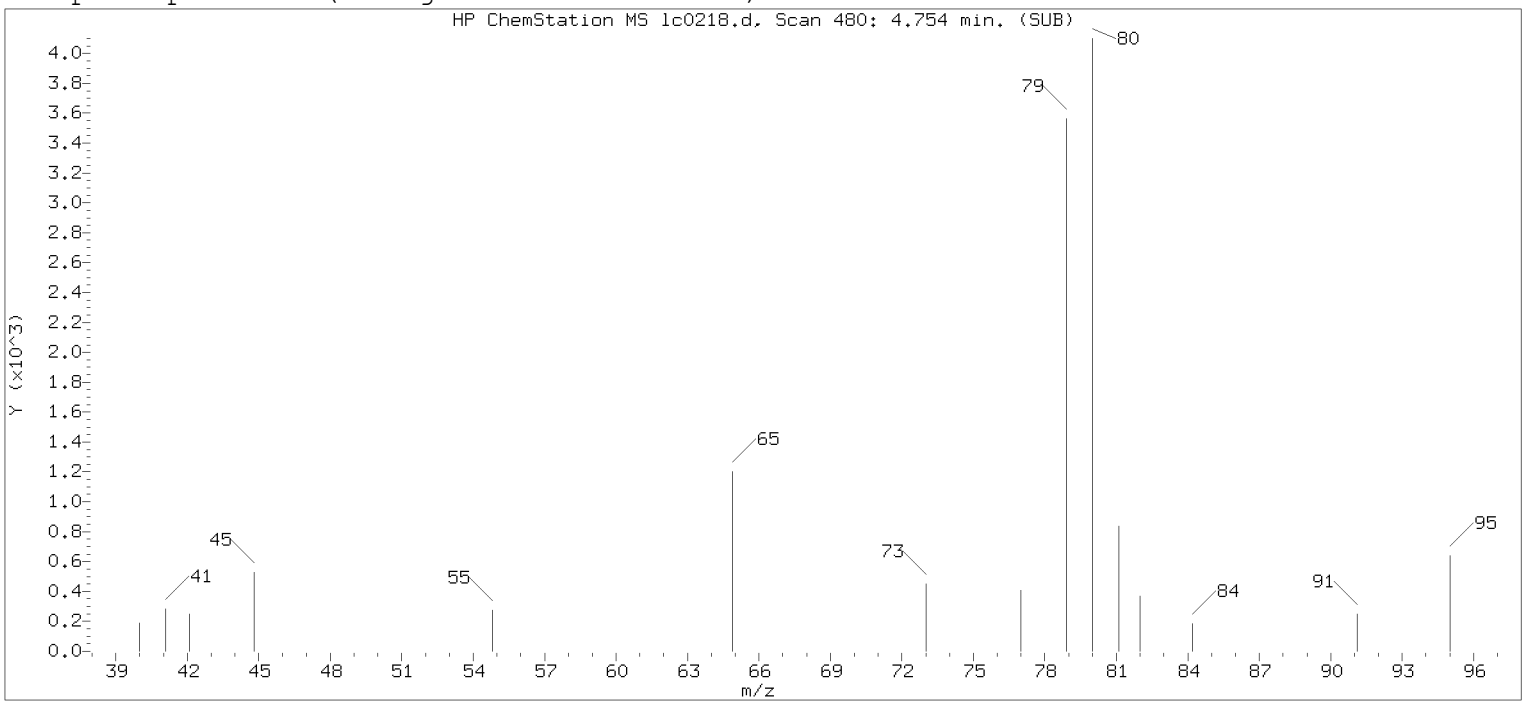
Compound Number : 10
Compound Name : Methyl methanesulfonate
Scan Number : 482
Retention Time (minutes) : 4.765
Quant Ion : 80.00
Area (flag) : 7289M
On-Column Amount (ng/ul) : 0.2531
Integration start scan : 475 Integration stop scan: 489
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

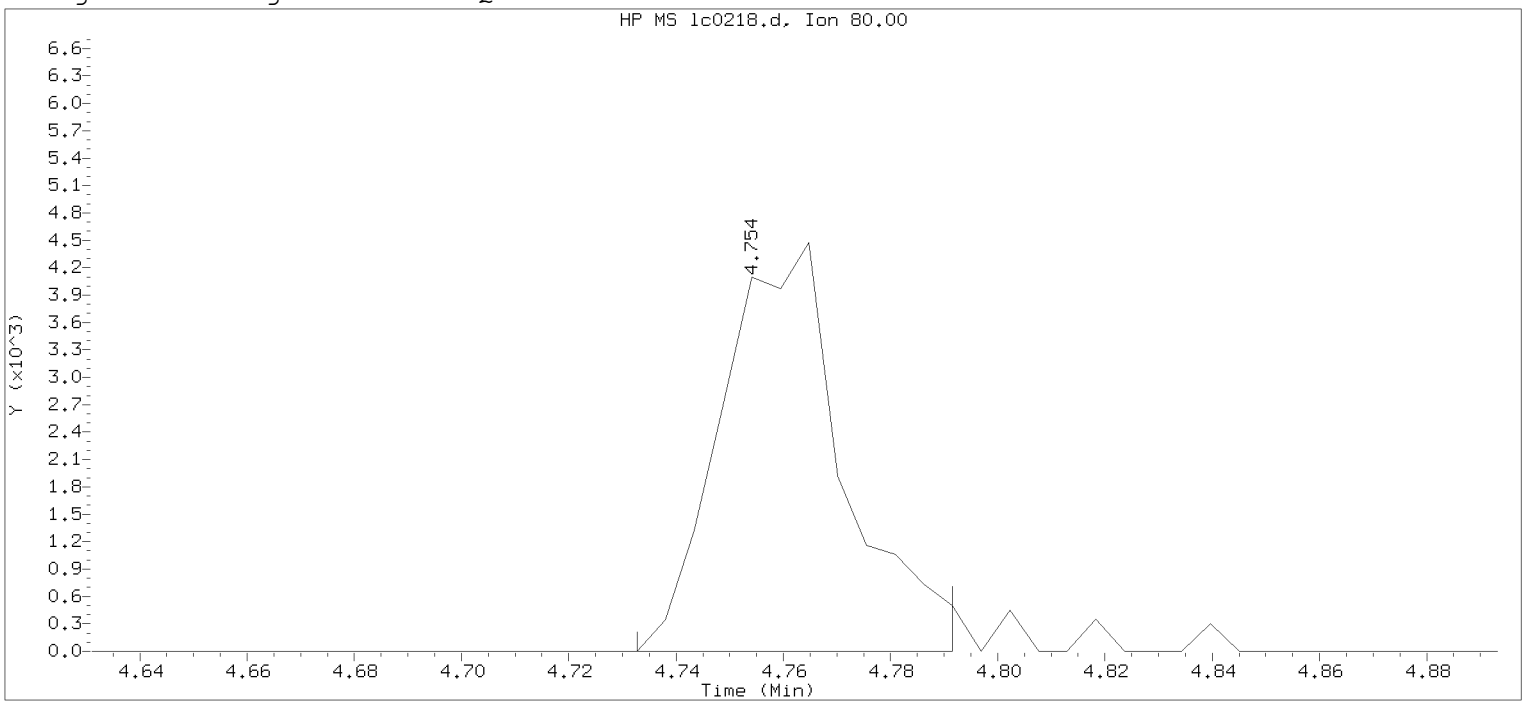
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

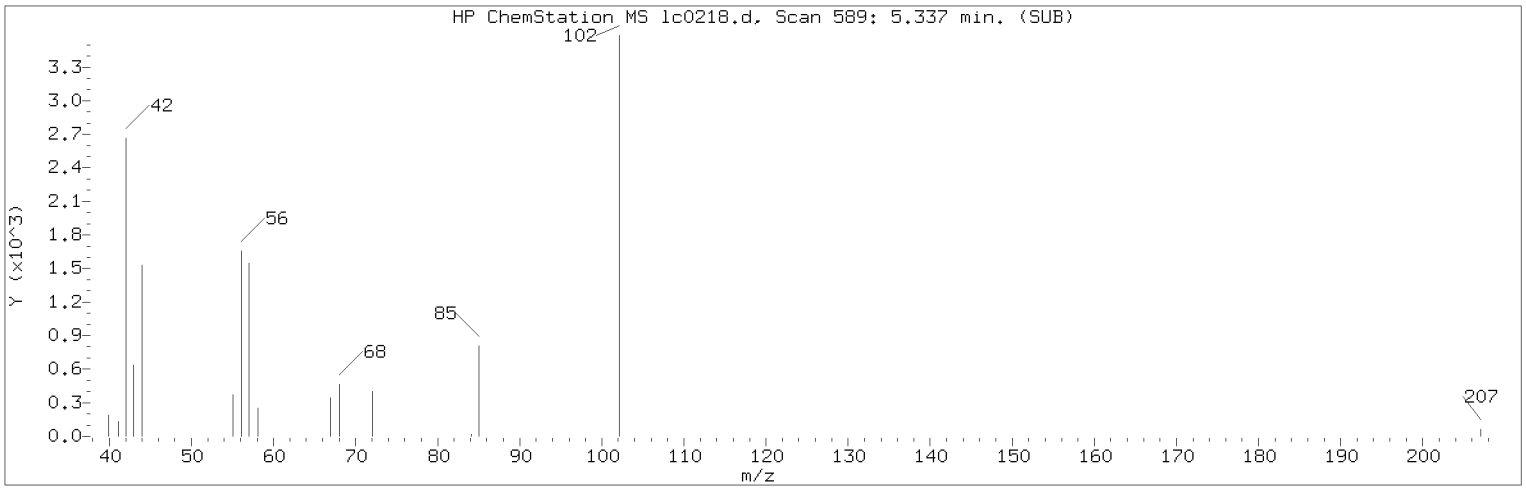
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

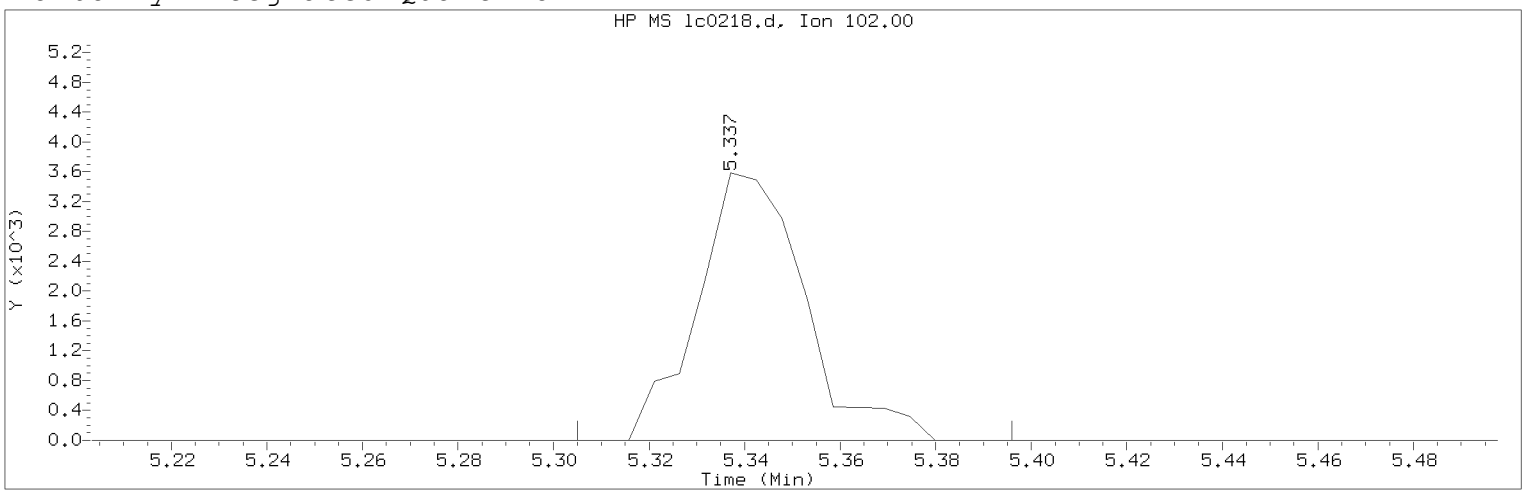
Compound Number	: 10		
Compound Name	: Methyl methanesulfonate		
Scan Number	: 480		
Retention Time (minutes)	: 4.754		
Quant Ion	: 80.00		
Area	: 7063		
On-column Amount (ng/ul)	: 0.2821		
Integration start scan	: 475	Integration stop scan:	486
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

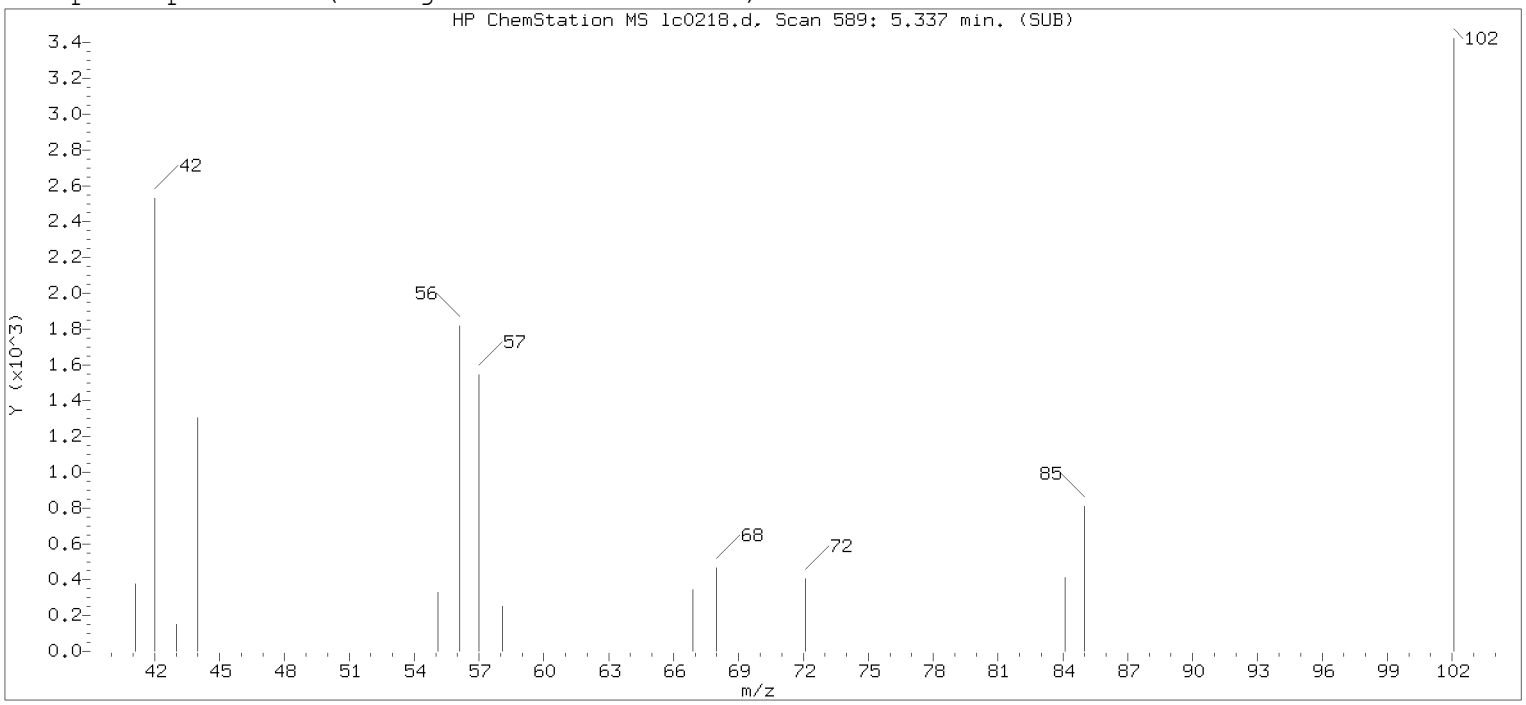
Compound Number : 14
Compound Name : N-Nitrosodiethylamine
Scan Number : 589
Retention Time (minutes) : 5.337
Quant Ion : 102.00
Area (flag) : 5588M
On-Column Amount (ng/ul) : 0.2458
Integration start scan : 582 Integration stop scan: 599
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

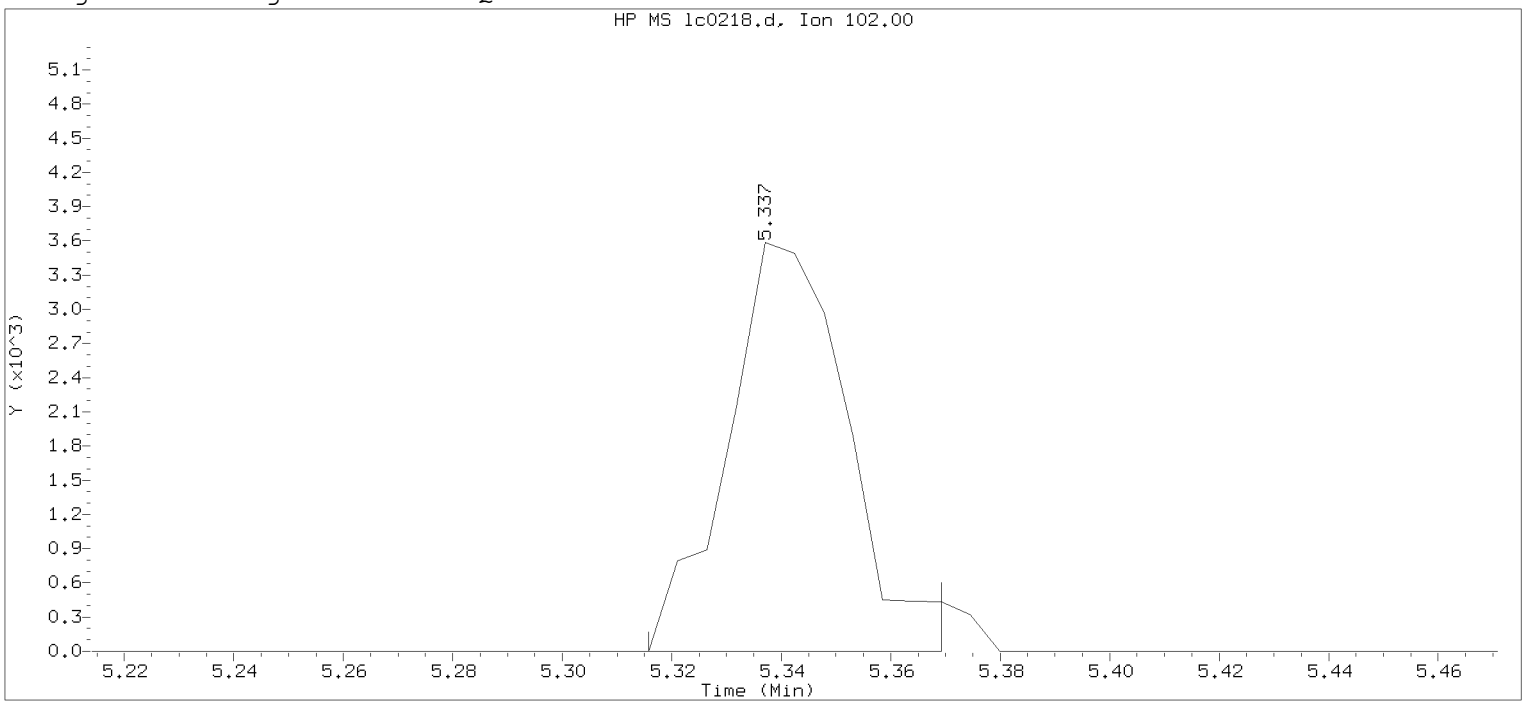
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

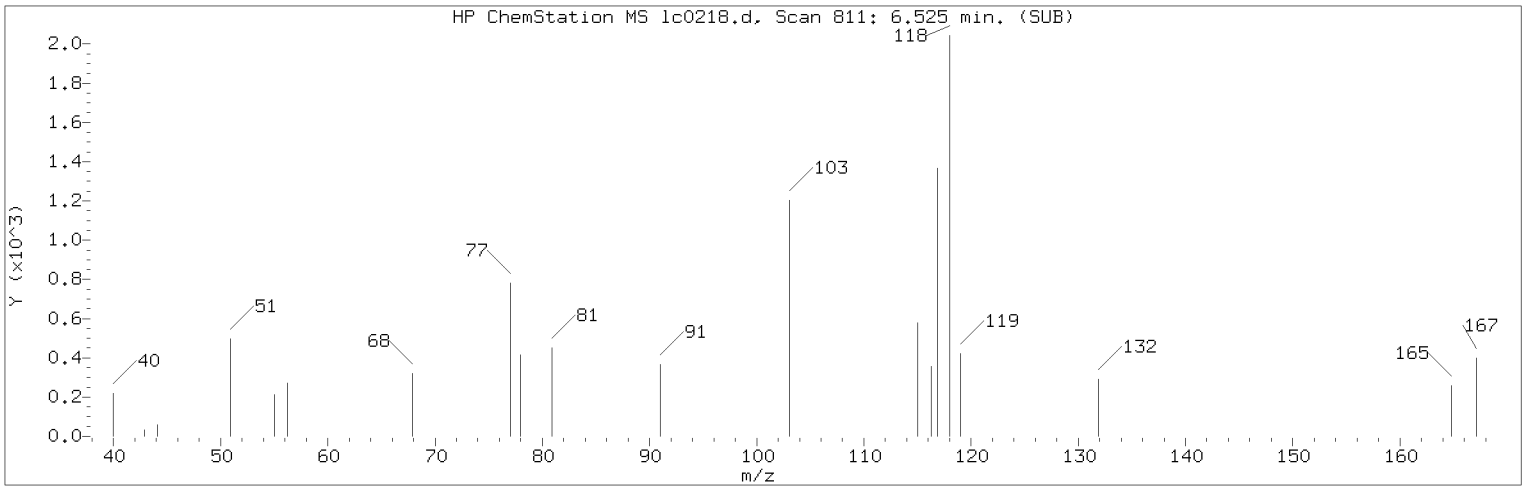
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

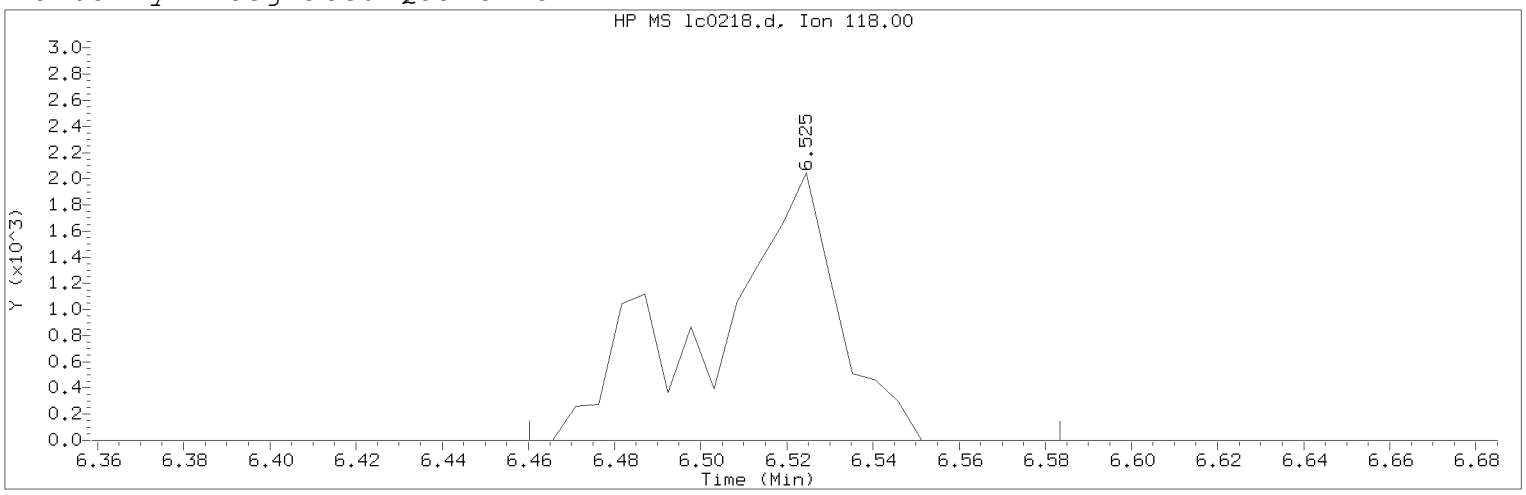
Compound Number	: 14		
Compound Name	: N-Nitrosodiethylamine		
Scan Number	: 589		
Retention Time (minutes)	: 5.337		
Quant Ion	: 102.00		
Area	: 5415		
On-column Amount (ng/ul)	: 0.2381		
Integration start scan	: 584	Integration stop scan:	594
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

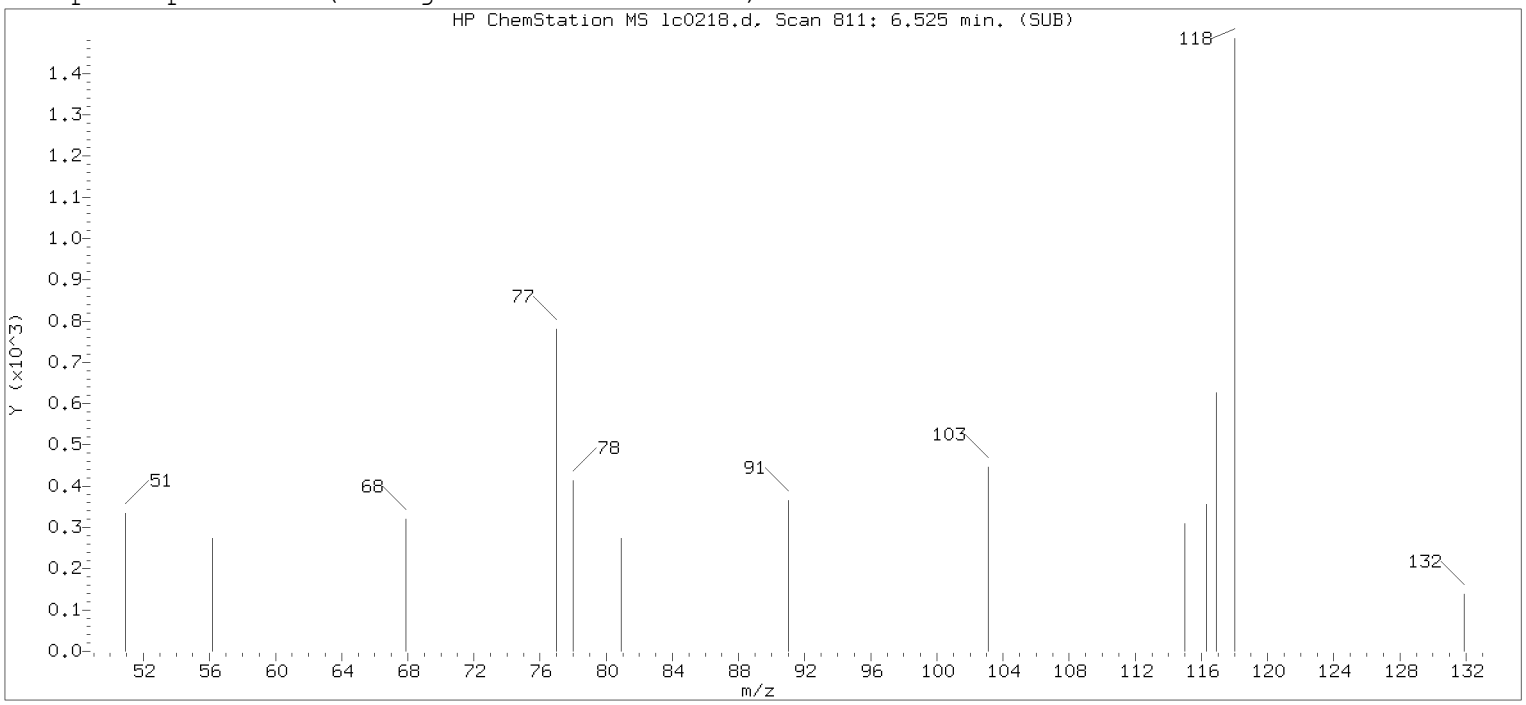
Compound Number : 21
Compound Name : a-methylstyrene
Scan Number : 811
Retention Time (minutes) : 6.525
Quant Ion : 118.00
Area (flag) : 4166M
On-Column Amount (ng/ul) : 0.4701
Integration start scan : 798 Integration stop scan: 821
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

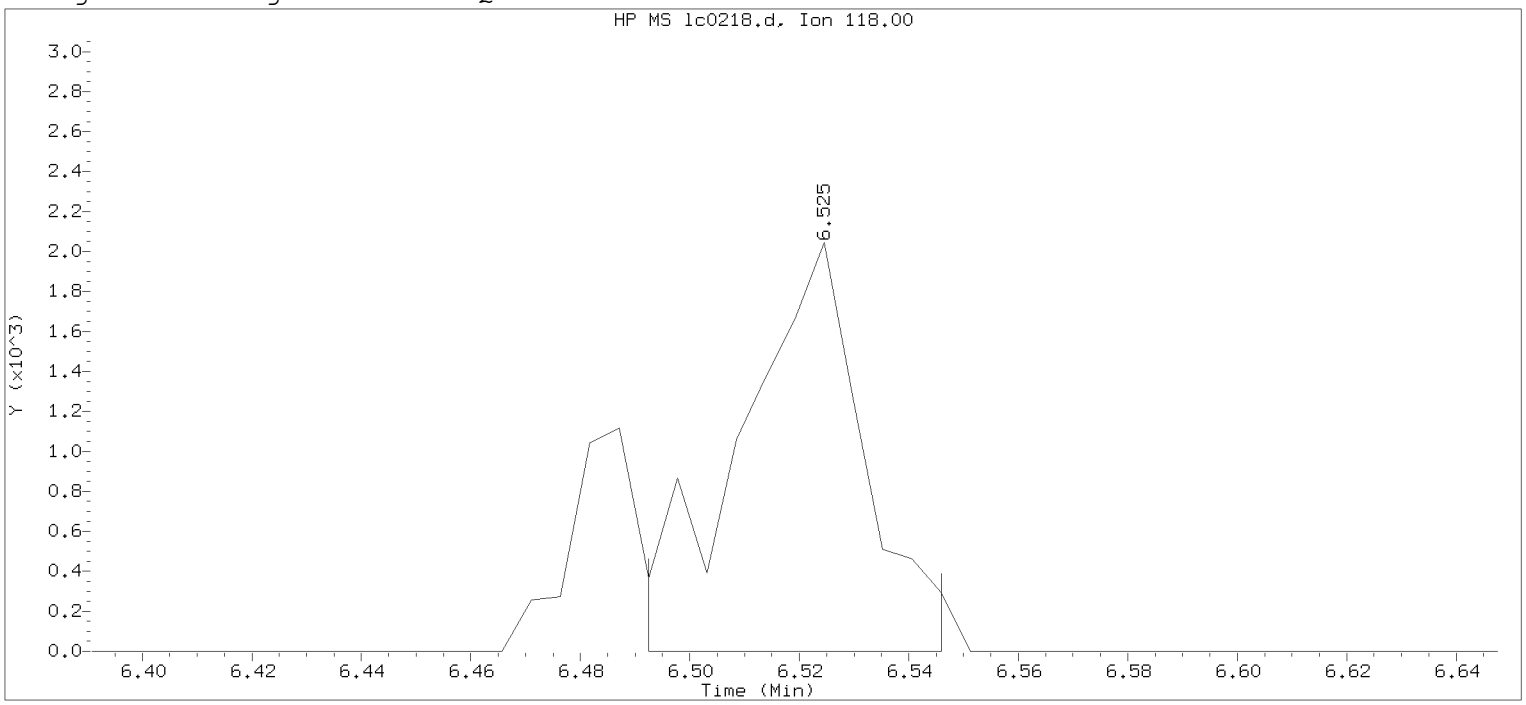
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

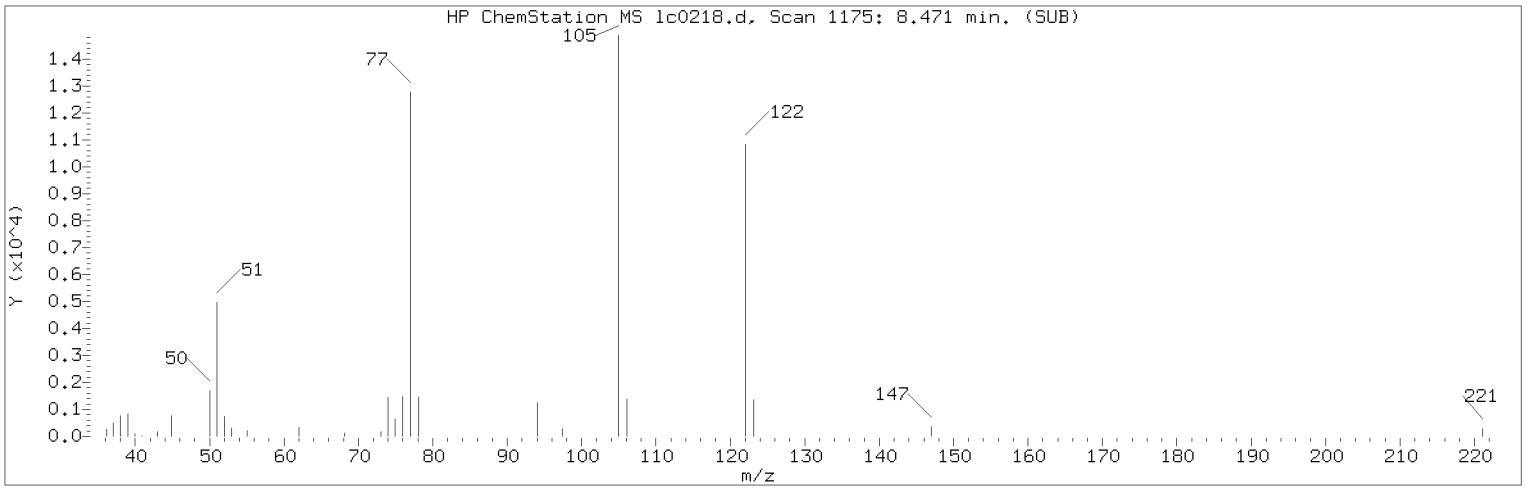
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

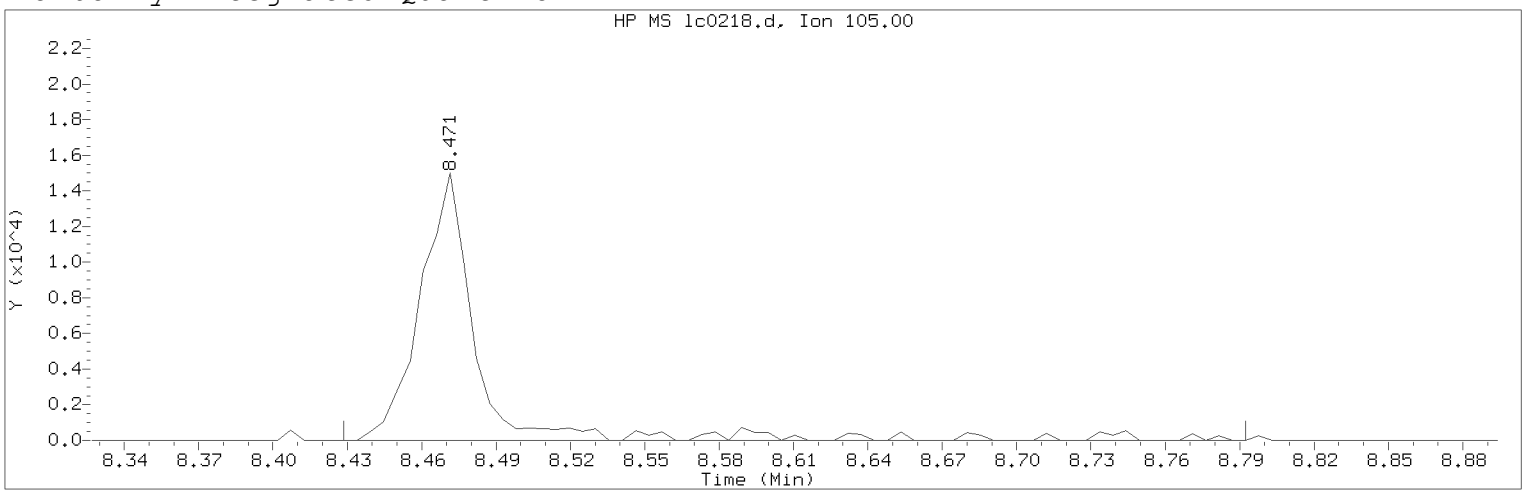
Compound Number	: 21		
Compound Name	: a-methylstyrene		
Scan Number	: 811		
Retention Time (minutes)	: 6.525		
Quant Ion	: 118.00		
Area	: 3196		
On-column Amount (ng/ul)	: 0.3176		
Integration start scan	: 804	Integration stop scan:	814
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ART Page 784

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

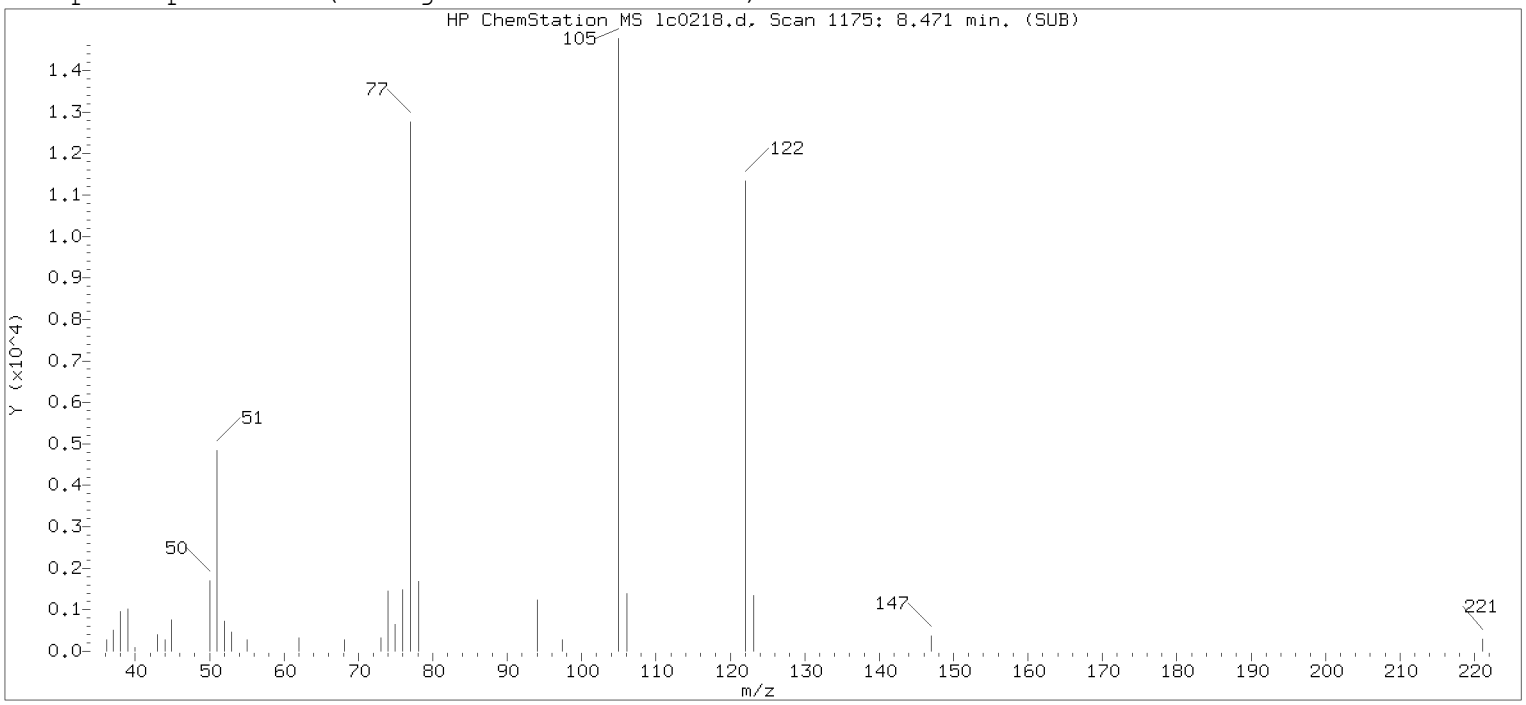
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1175
Retention Time (minutes) : 8.471
Quant Ion : 105.00
Area (flag) : 24211M
On-Column Amount (ng/ul) : 0.7319
Integration start scan : 1166 Integration stop scan: 1234
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

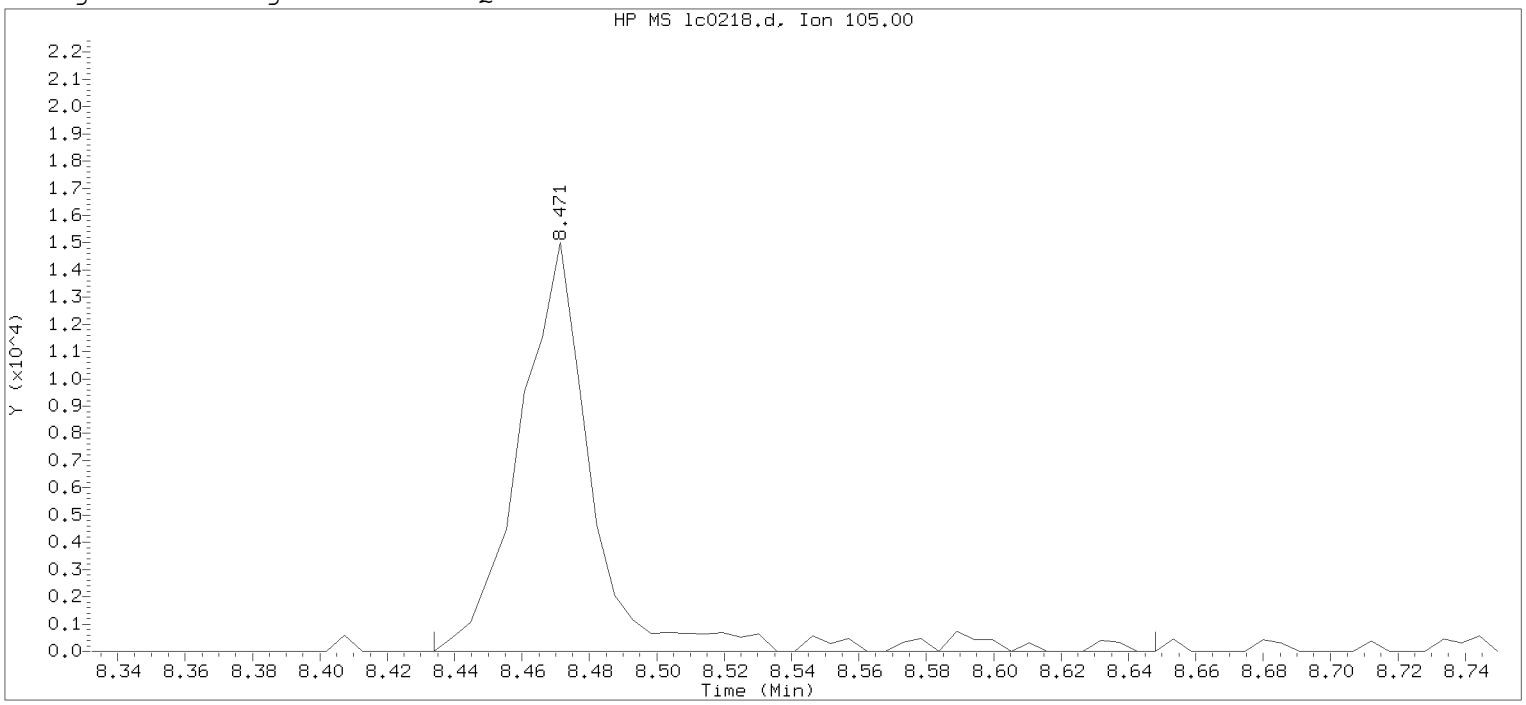
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

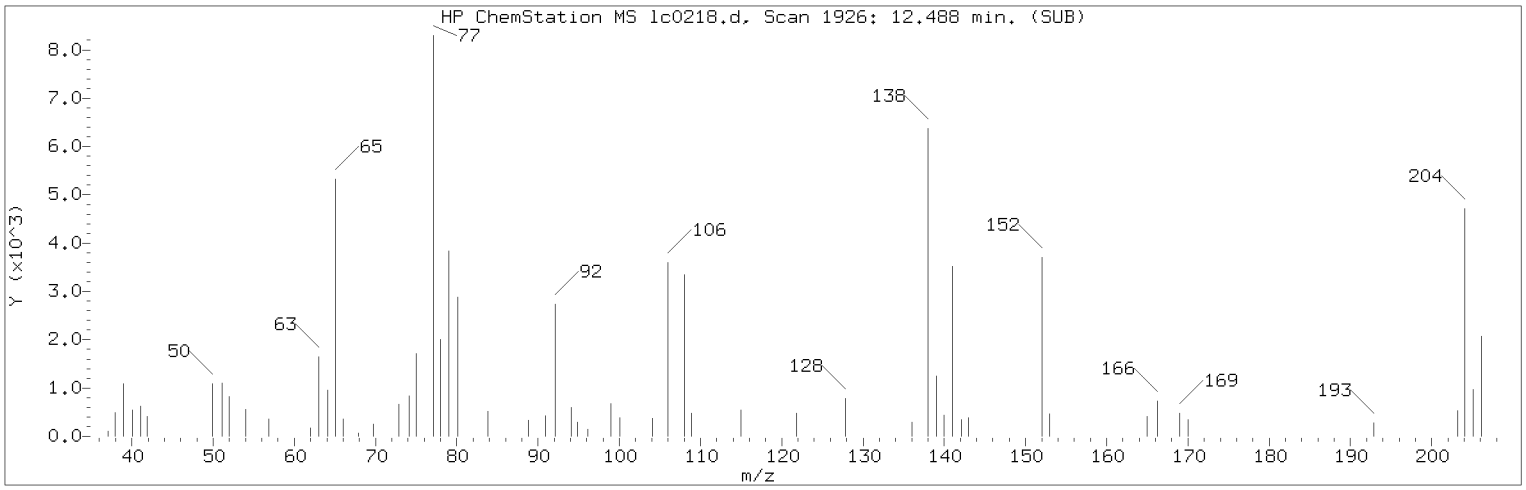
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

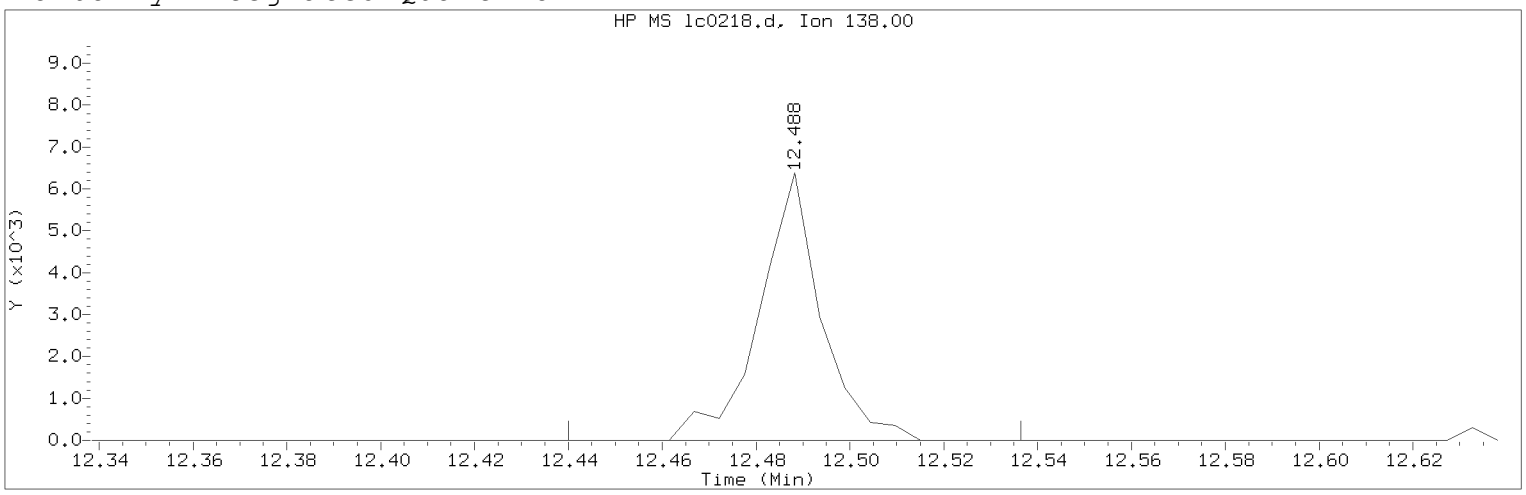
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1175		
Retention Time (minutes)	: 8.471		
Quant Ion	: 105.00		
Area	: 23093		
On-column Amount (ng/ul)	: 0.7576		
Integration start scan	: 1167	Integration stop scan:	1207
Y at integration start	: 0	Y at integration end:	0

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Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

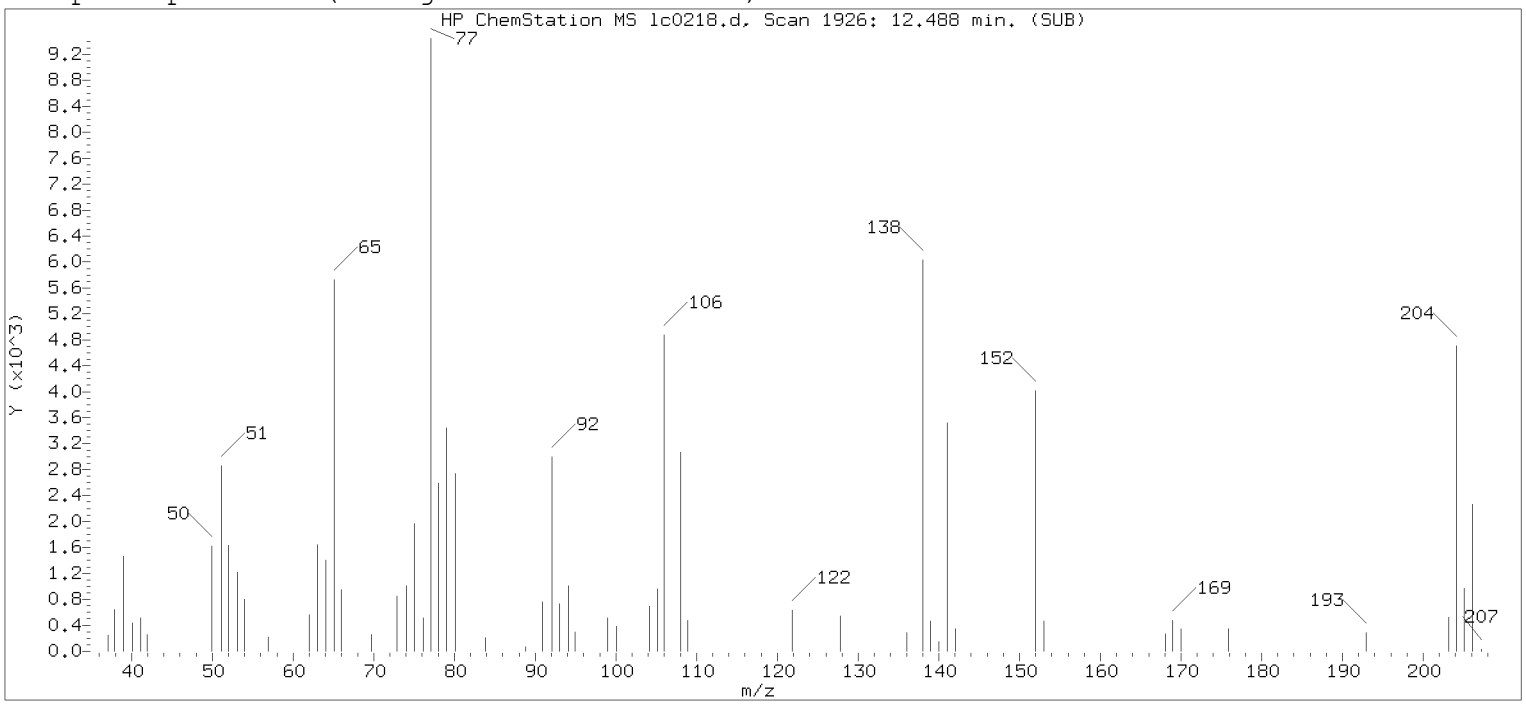
Compound Number : 134
Compound Name : 4-Nitroaniline
Scan Number : 1926
Retention Time (minutes) : 12.488
Quant Ion : 138.00
Area (flag) : 5867M
On-Column Amount (ng/ul) : 0.2761
Integration start scan : 1916 Integration stop scan: 1934
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

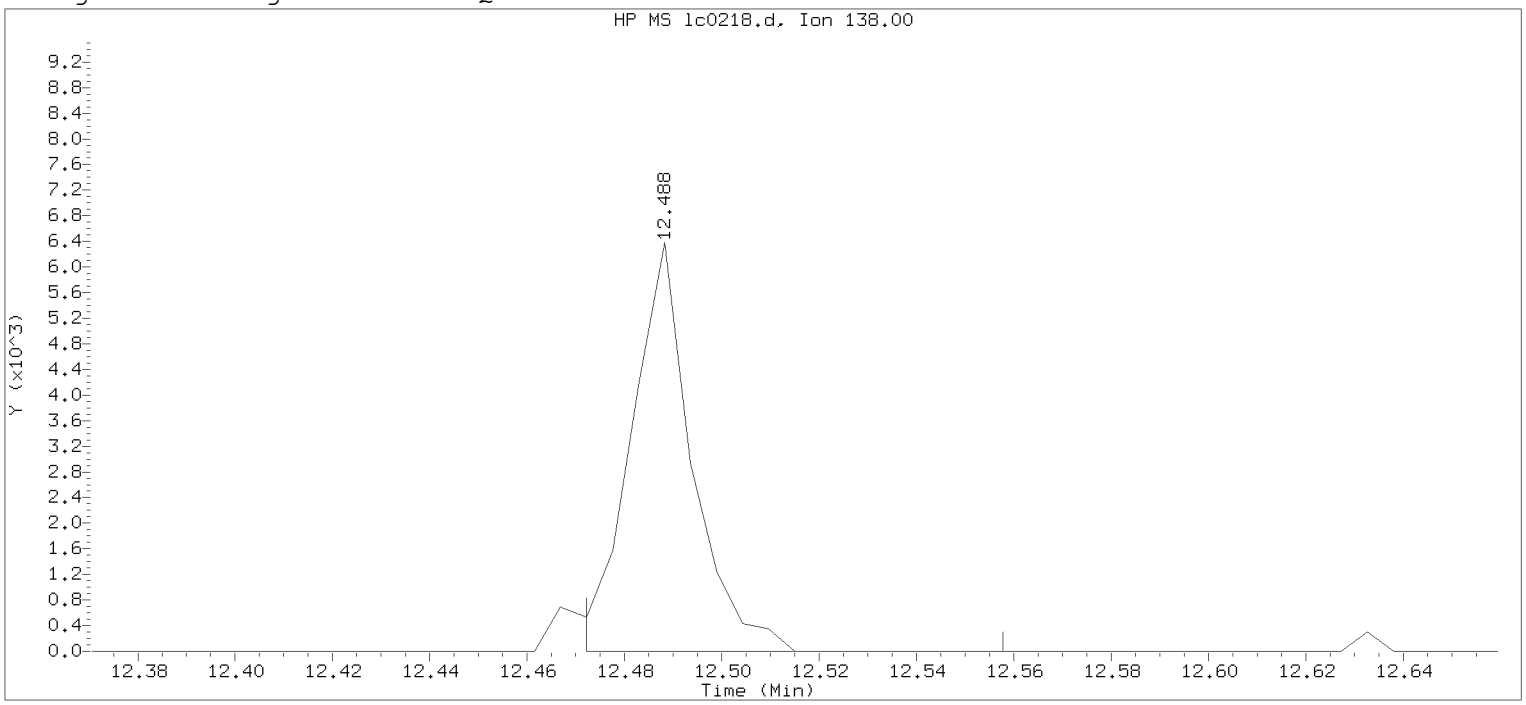
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

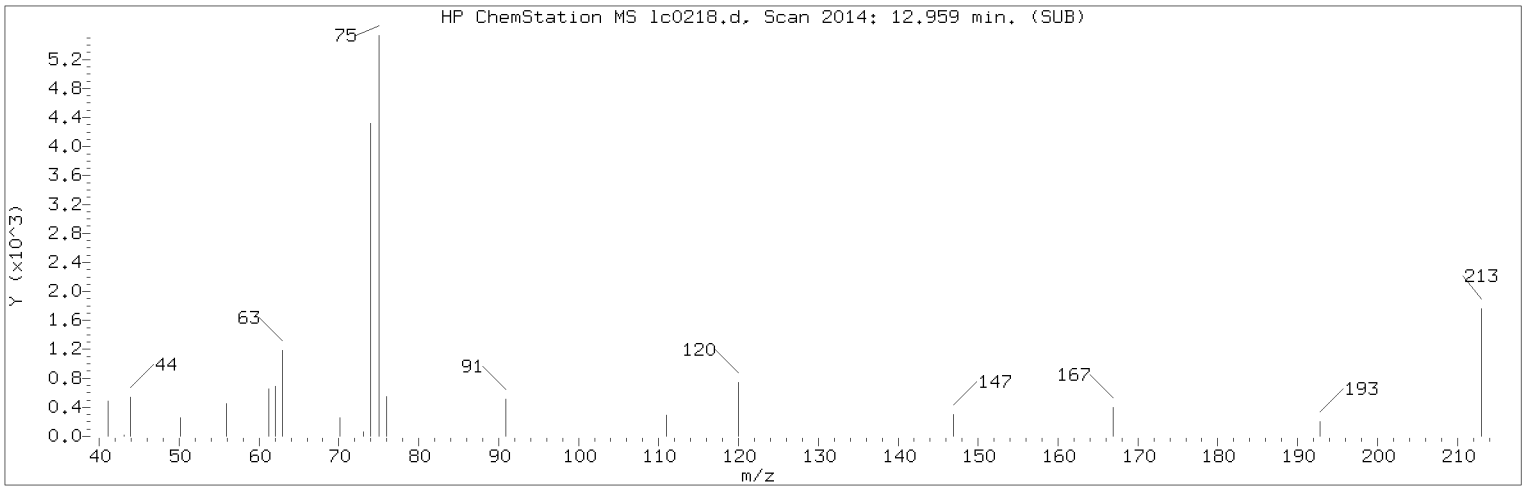
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

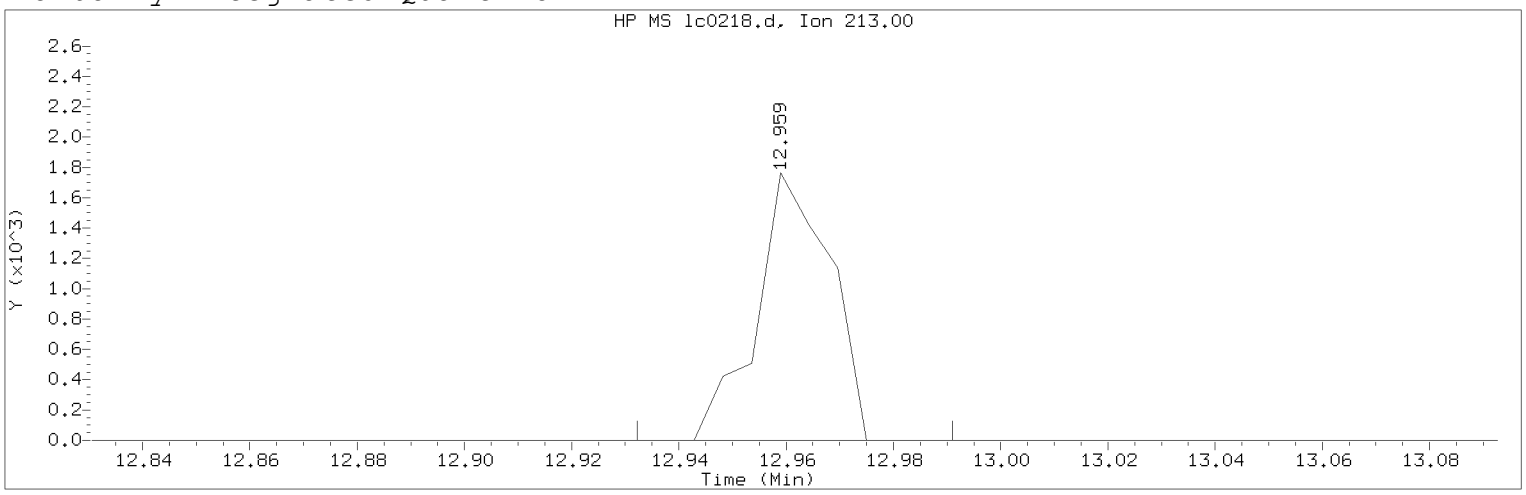
Compound Number	: 134		
Compound Name	: 4-Nitroaniline		
Scan Number	: 1926		
Retention Time (minutes)	: 12.488		
Quant Ion	: 138.00		
Area	: 5562		
On-column Amount (ng/ul)	: 0.2637		
Integration start scan	: 1922	Integration stop scan:	1938
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

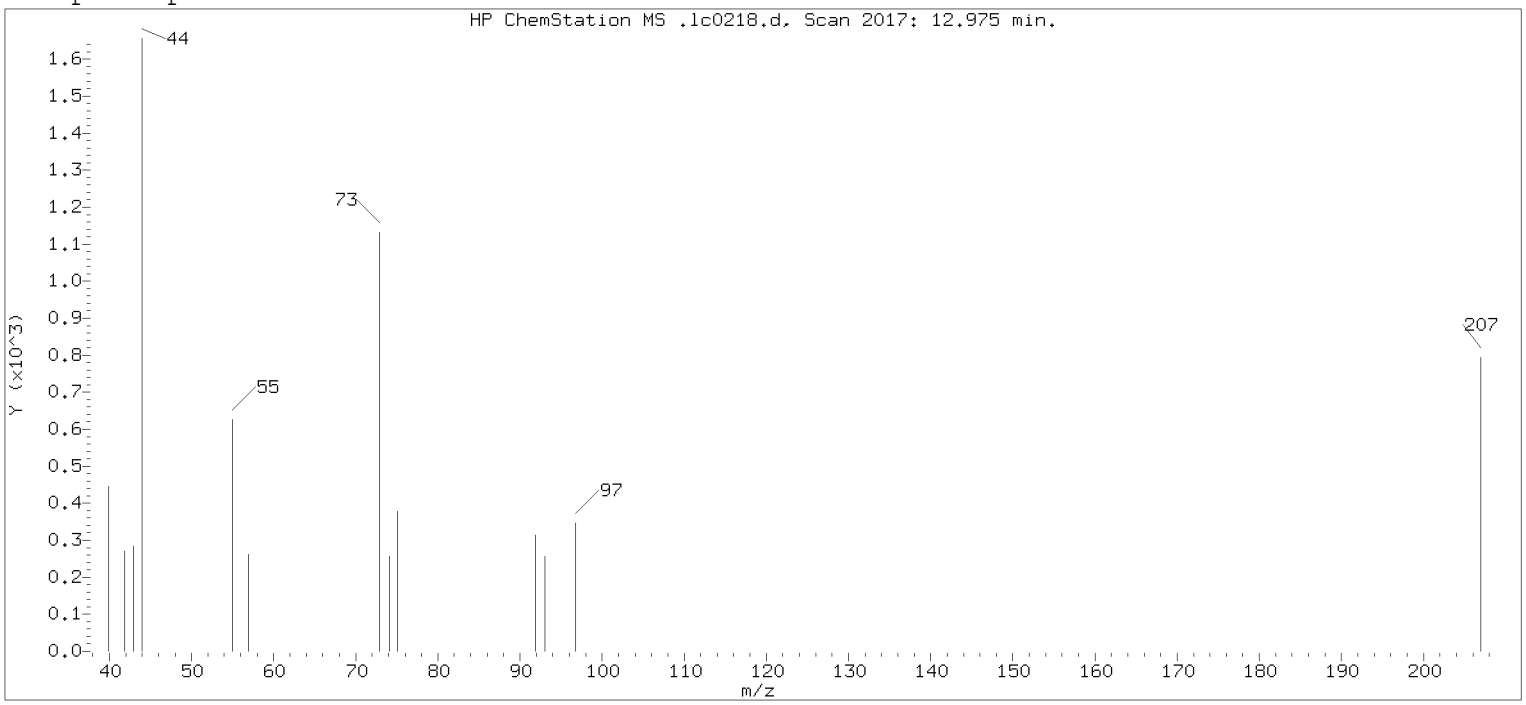
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 2014
Retention Time (minutes) : 12.959
Quant Ion : 213.00
Area (flag) : 1686M
On-Column Amount (ng/ul) : 0.1897
Integration start scan : 2008 Integration stop scan: 2019
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

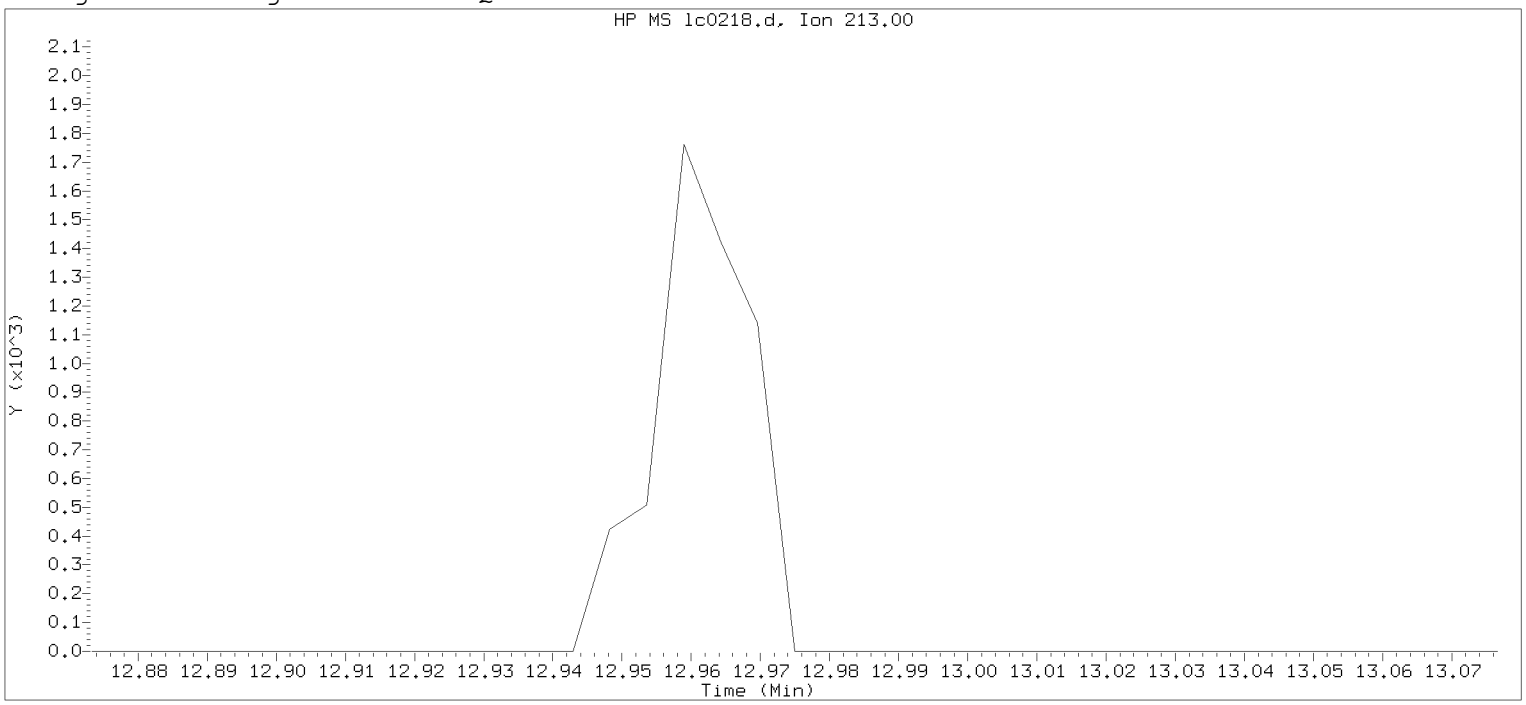
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

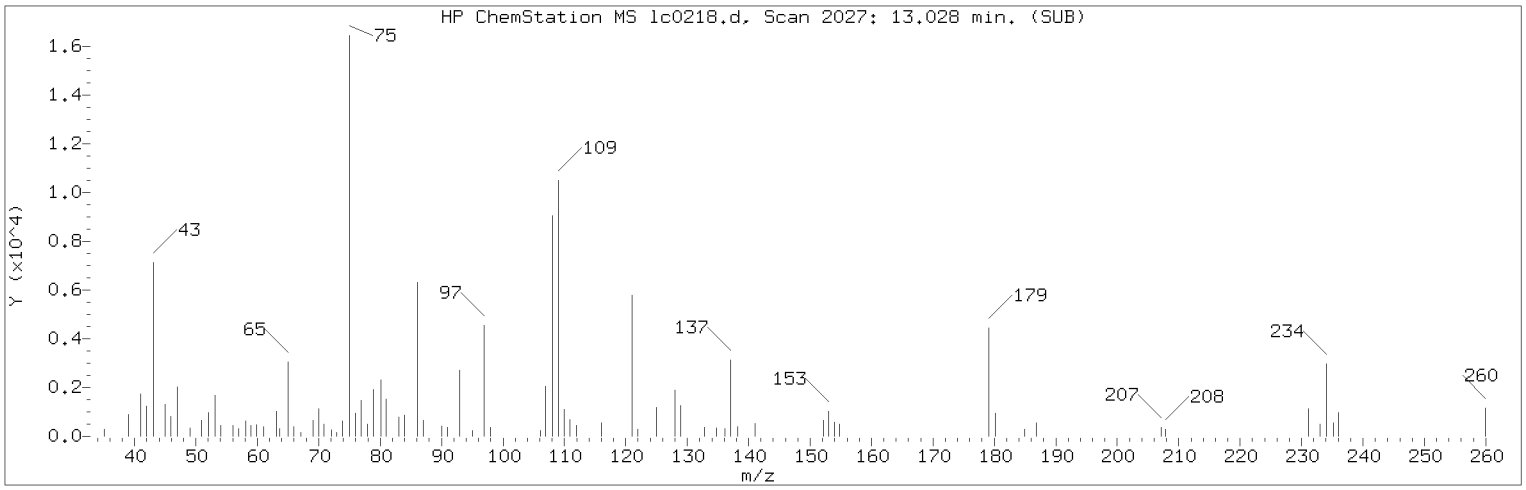
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

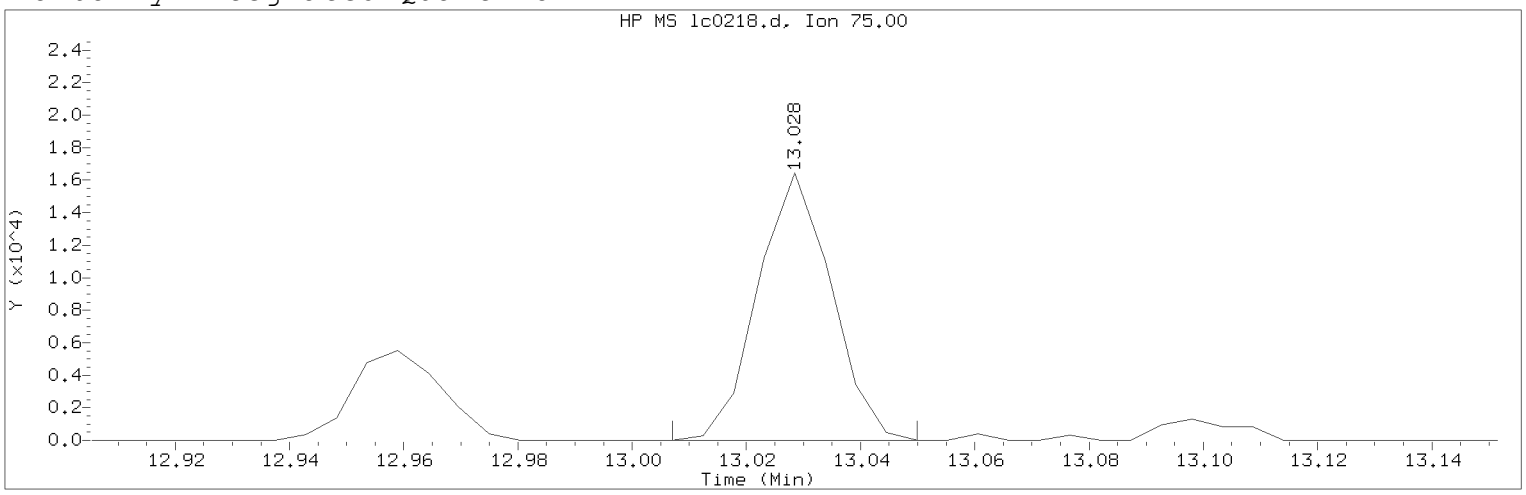
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Expected RT (minutes) : 12.975
Quant Ion : 213.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

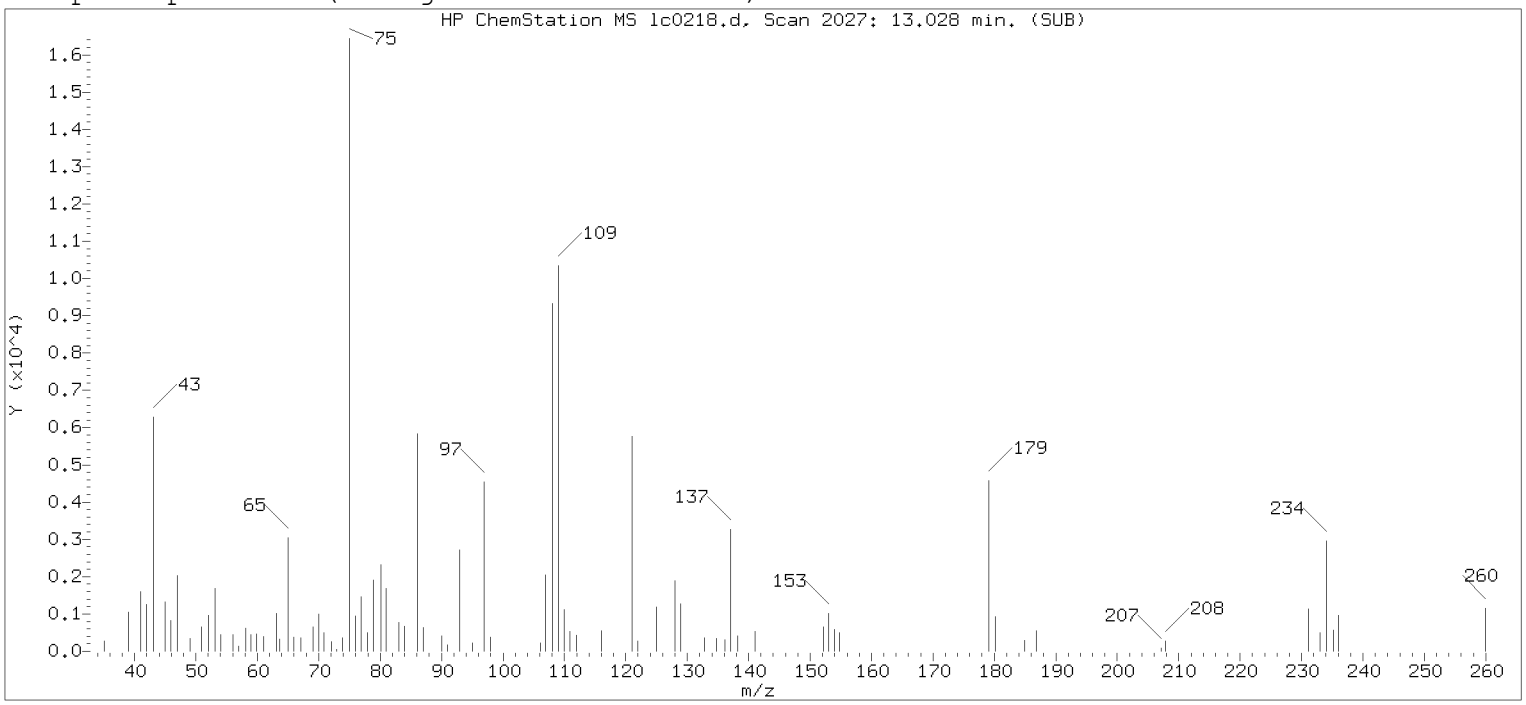
Compound Number : 146
Compound Name : Phorate
Scan Number : 2027
Retention Time (minutes) : 13.028
Quant Ion : 75.00
Area (flag) : 14682M
On-Column Amount (ng/ul) : 0.2337
Integration start scan : 2022 Integration stop scan: 2030
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

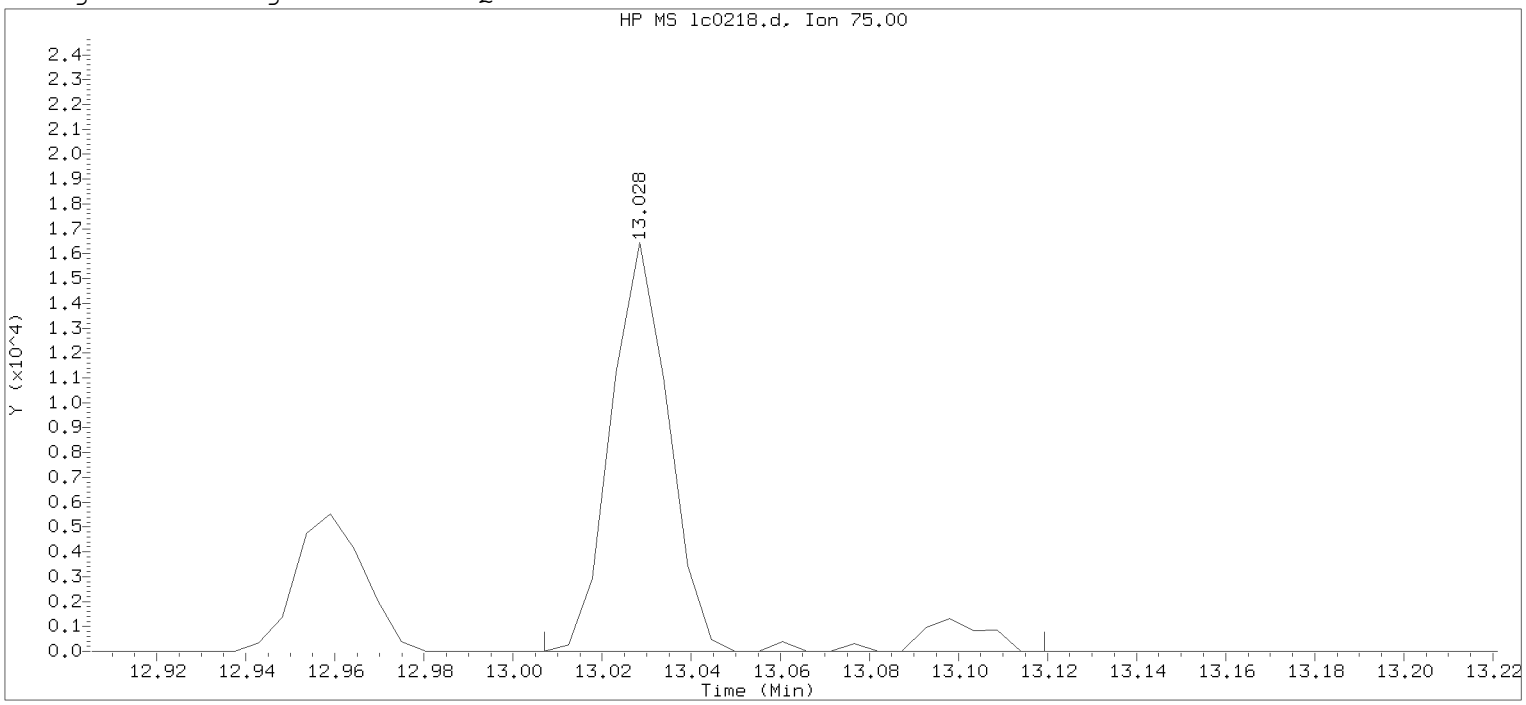
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

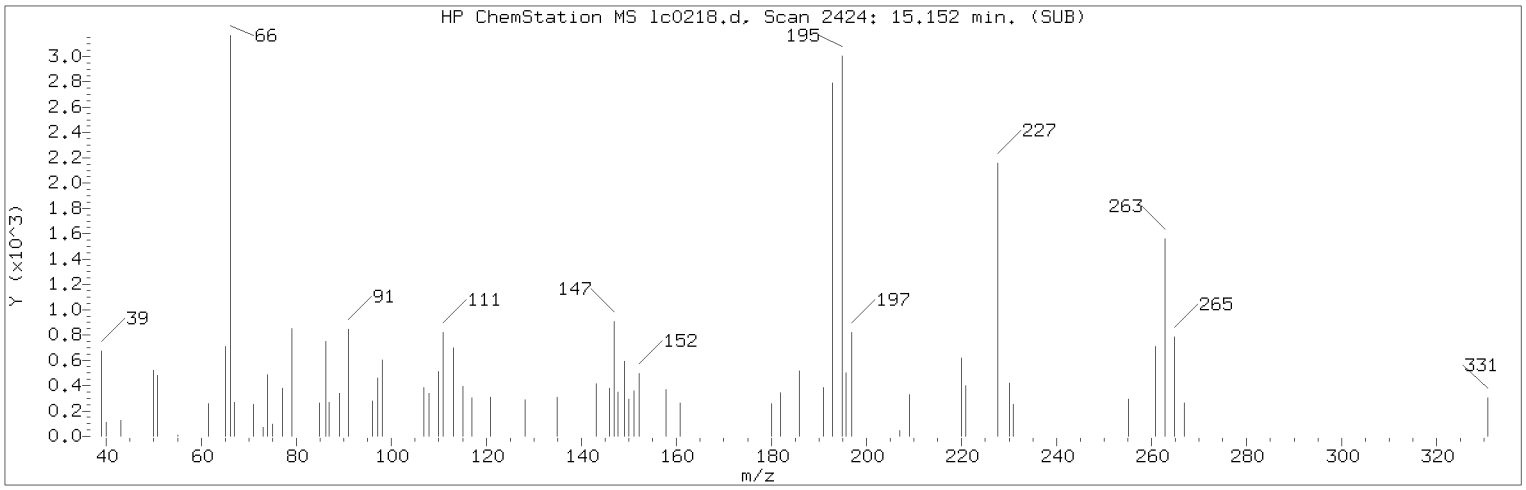
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

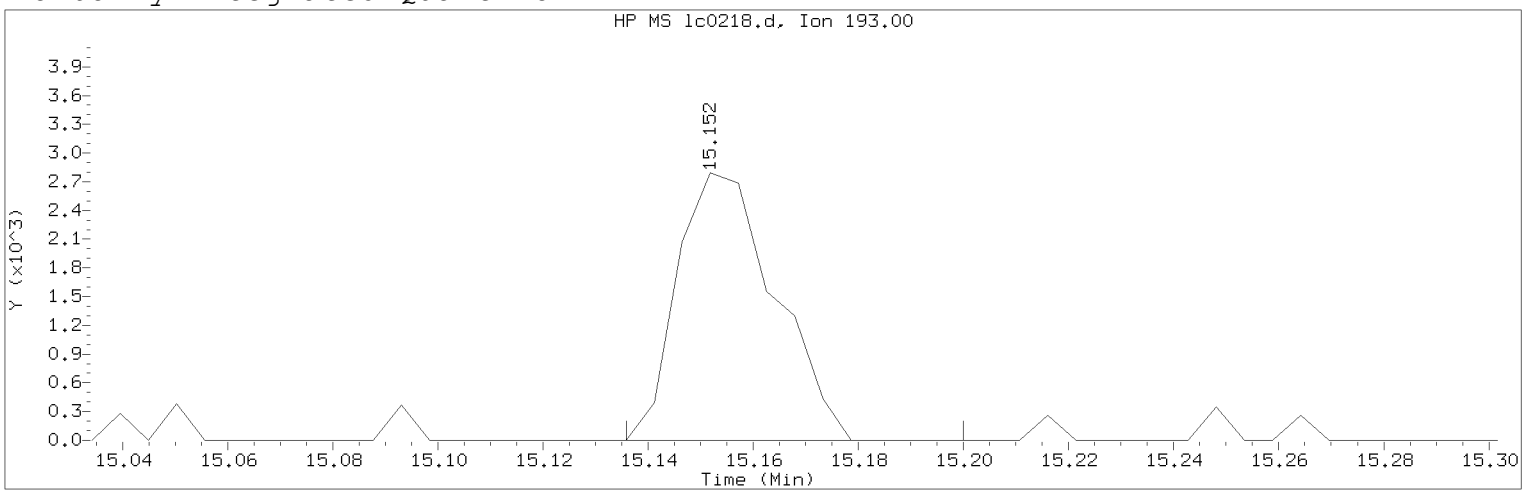
Compound Number	: 146		
Compound Name	: Phorate		
Scan Number	: 2027		
Retention Time (minutes)	: 13.028		
Quant Ion	: 75.00		
Area	: 16175		
On-column Amount (ng/ul)	: 0.2459		
Integration start scan	: 2022	Integration stop scan:	2043
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

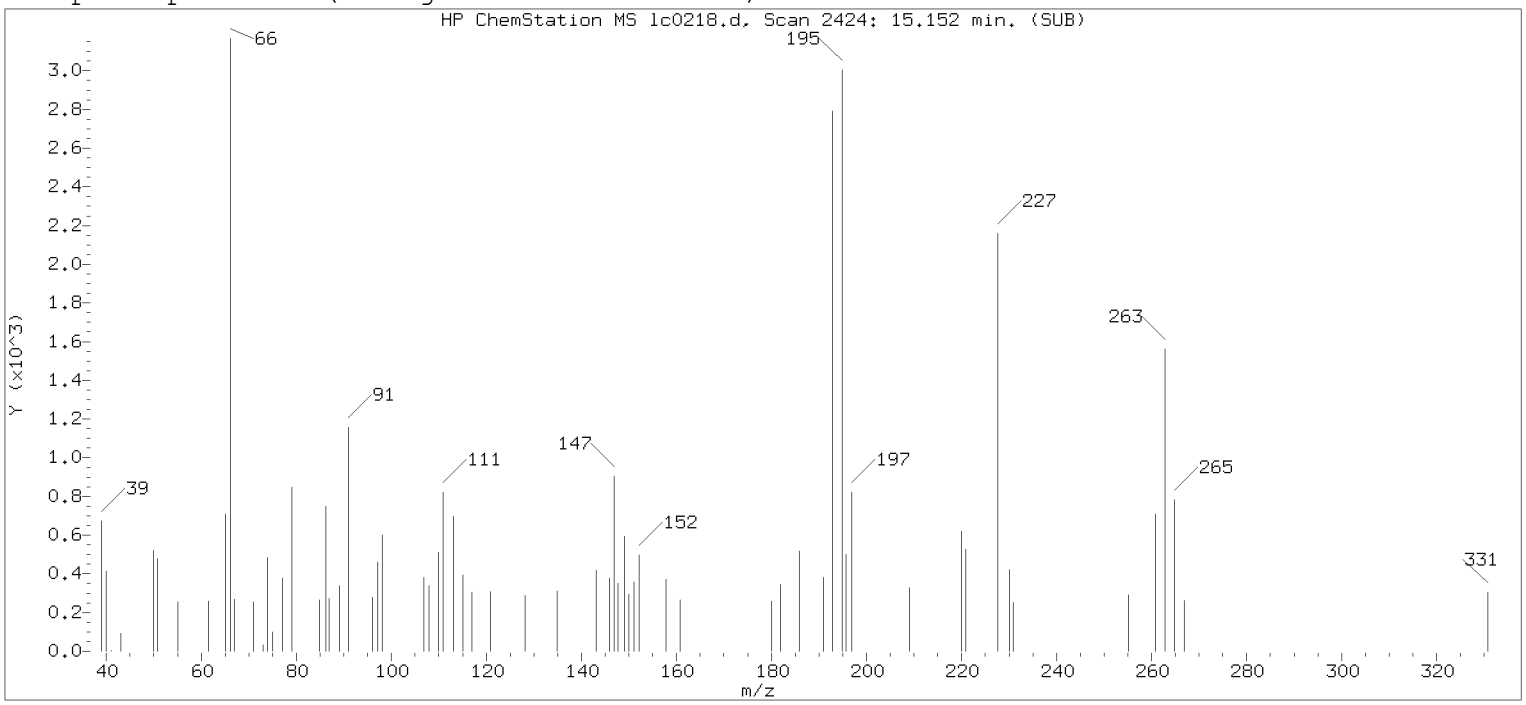
Compound Number : 176
Compound Name : Isodrin
Scan Number : 2424
Retention Time (minutes) : 15.152
Quant Ion : 193.00
Area (flag) : 3604M
On-Column Amount (ng/ul) : 0.2575
Integration start scan : 2420 Integration stop scan: 2432
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

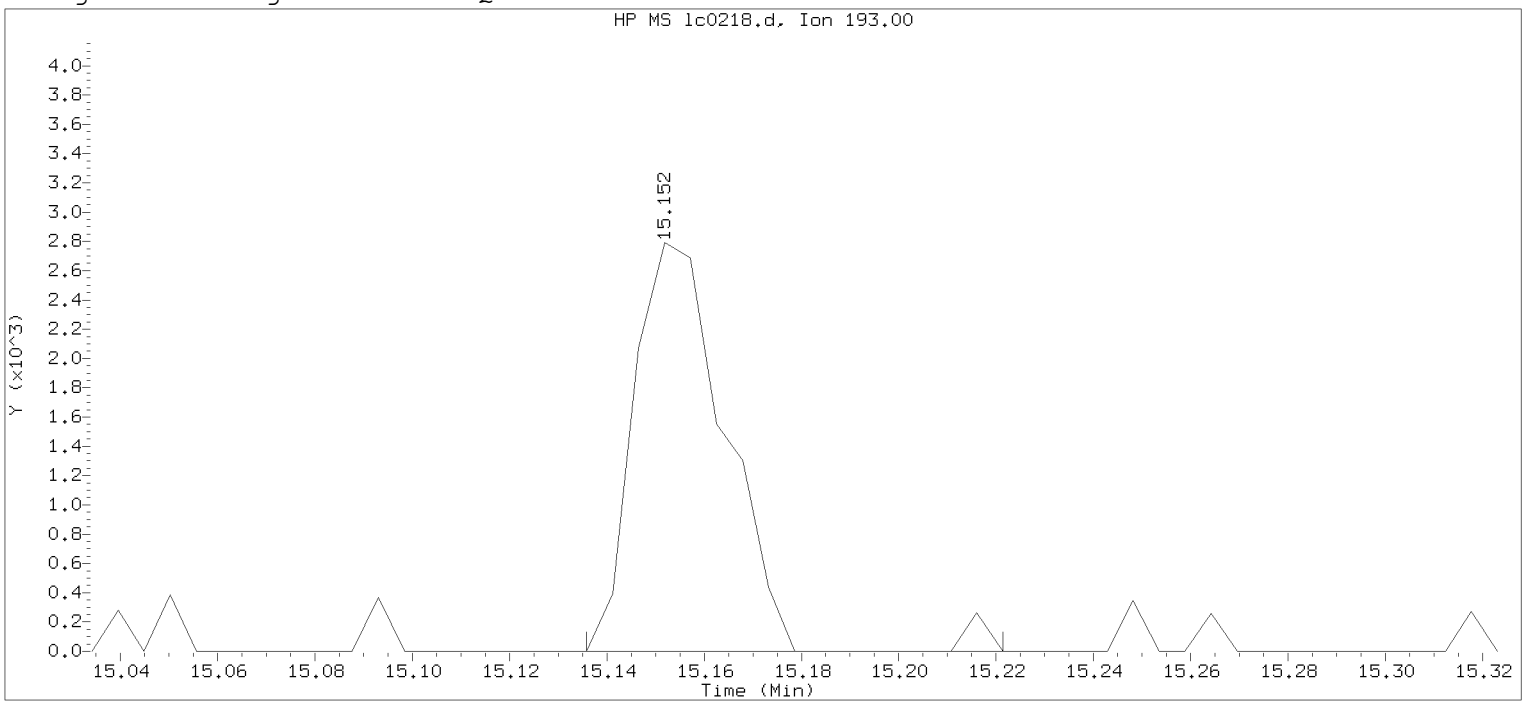
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

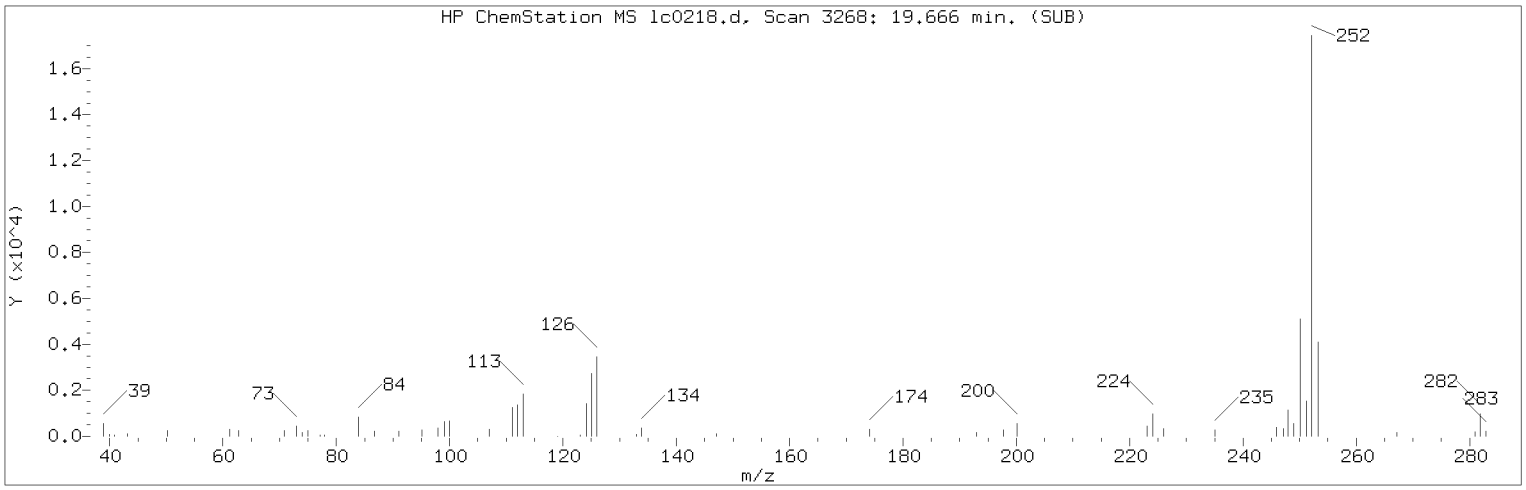
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

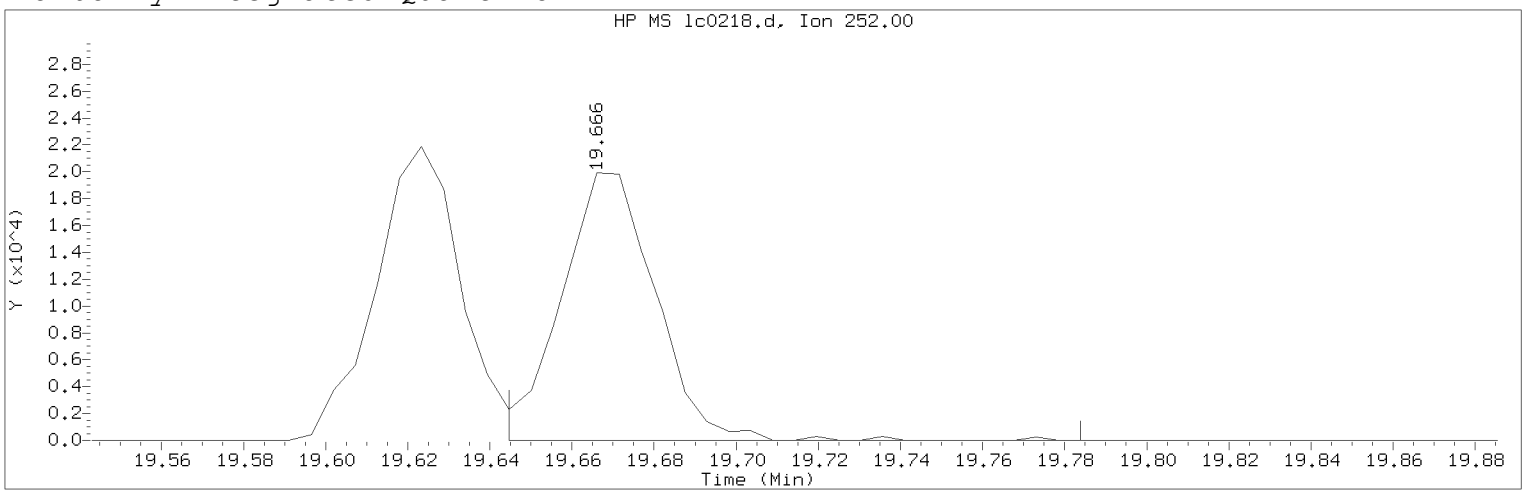
Compound Number	: 176		
Compound Name	: Isodrin		
Scan Number	: 2424		
Retention Time (minutes)	: 15.152		
Quant Ion	: 193.00		
Area	: 3689		
On-column Amount (ng/ul)	: 0.2625		
Integration start scan	: 2420	Integration stop scan:	2436
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

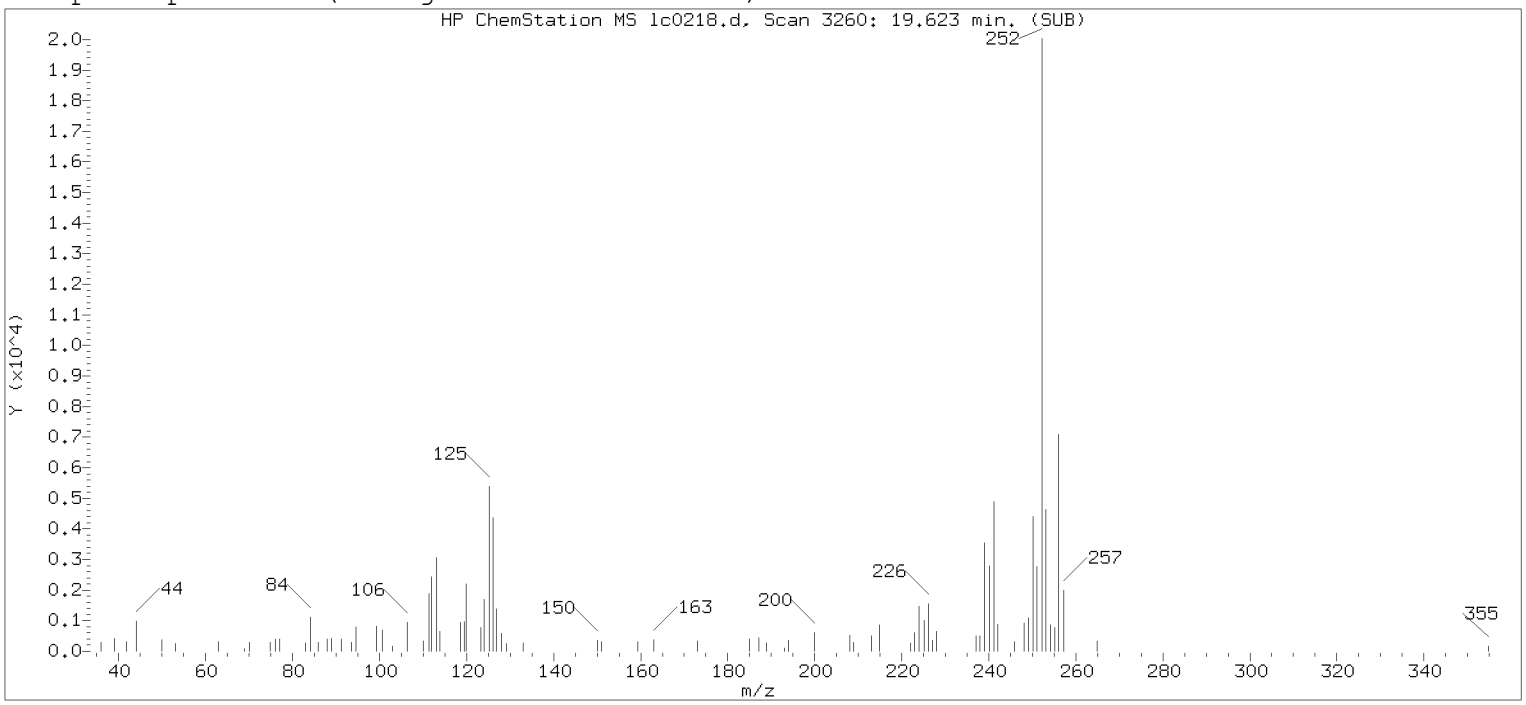
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3268
Retention Time (minutes) : 19.666
Quant Ion : 252.00
Area (flag) : 31550A
On-Column Amount (ng/ul) : 0.2518
Integration start scan : 3263 Integration stop scan: 3289
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

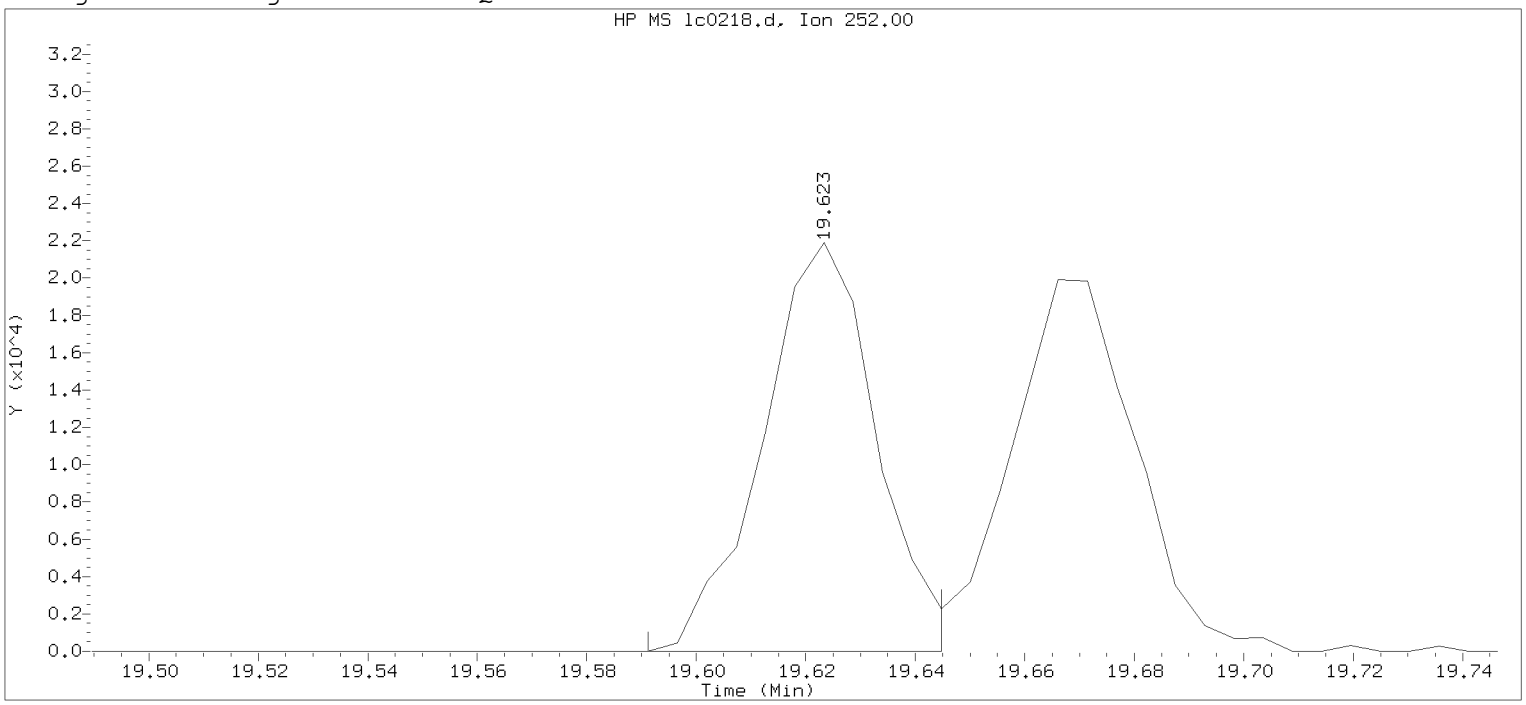
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

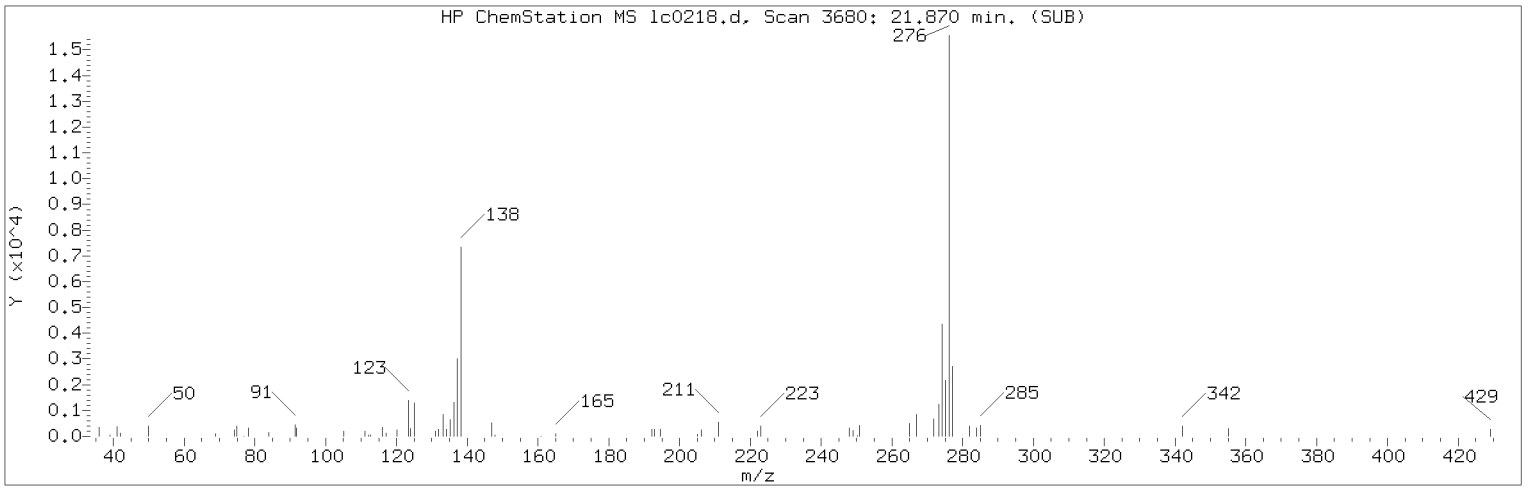
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

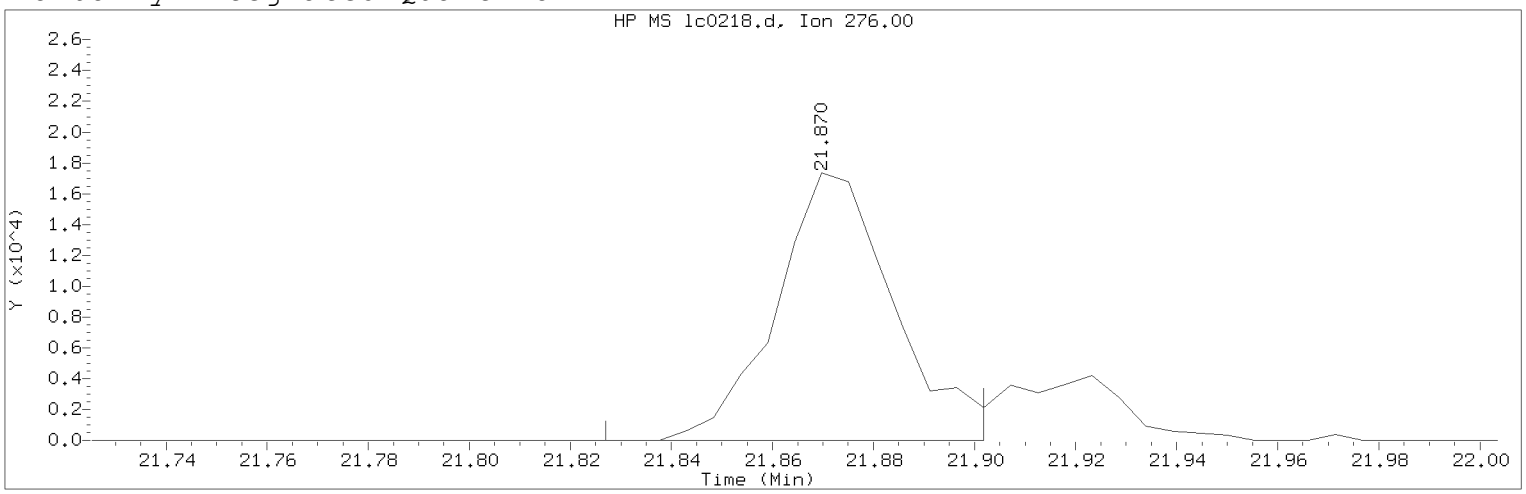
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3260		
Retention Time (minutes)	: 19.623		
Quant Ion	: 252.00		
Area	: 31203		
On-column Amount (ng/ul)	: 0.2494		
Integration start scan	: 3253	Integration stop scan:	3263
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART34 at 2019

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 16:49
Date, time and analyst ID of latest file update: 05-Mar-2019 16:49 art12405

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

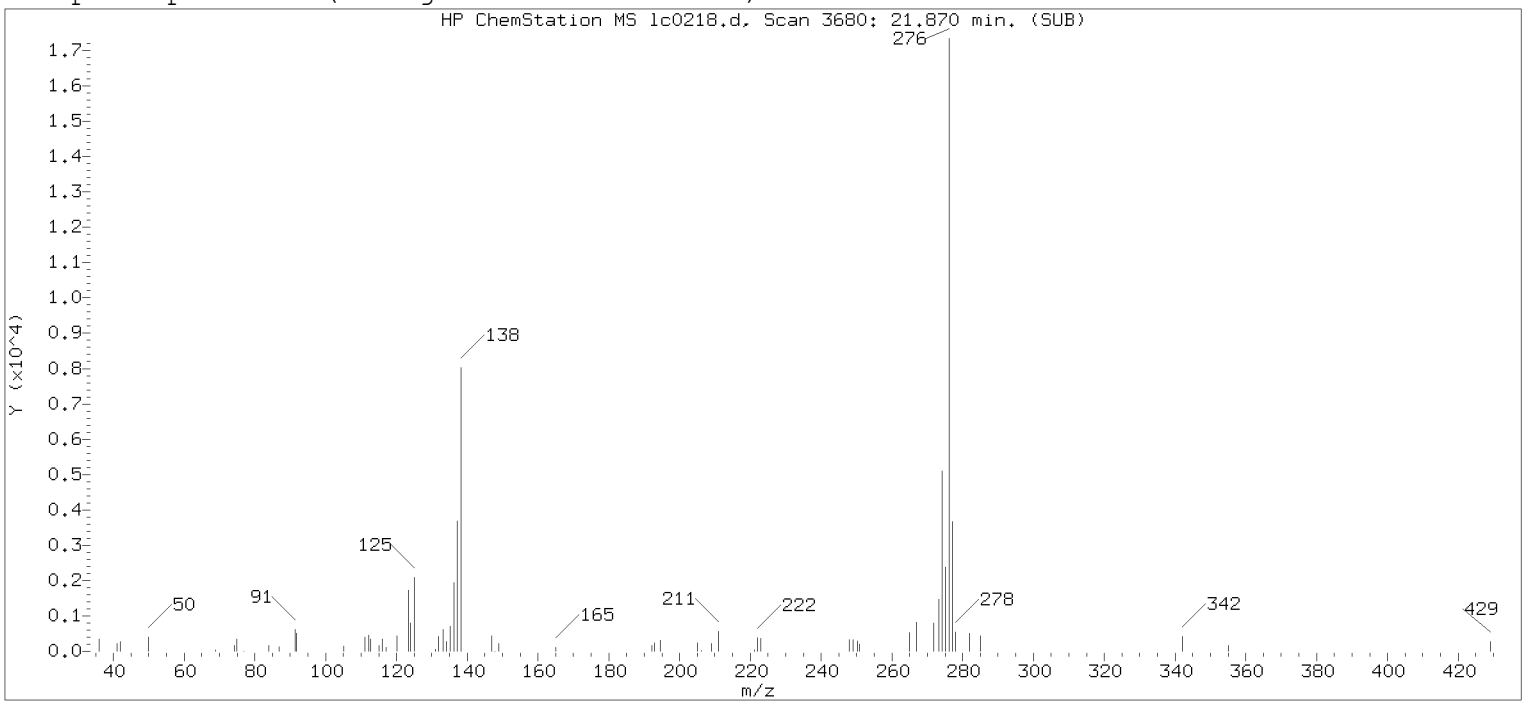
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3680
Retention Time (minutes) : 21.870
Quant Ion : 276.00
Area (flag) : 28144M
On-Column Amount (ng/ul) : 0.2300
Integration start scan : 3671 Integration stop scan: 3685
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

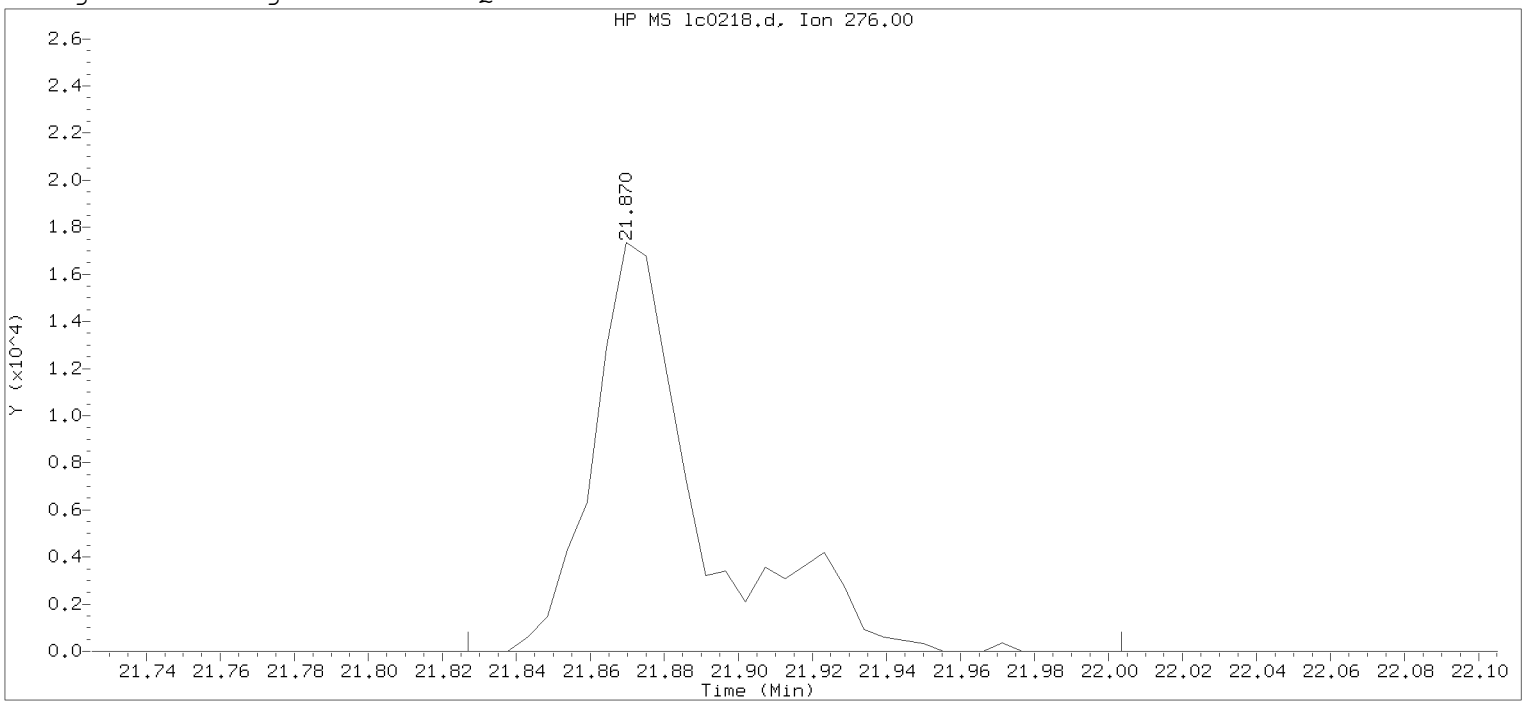
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:12.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



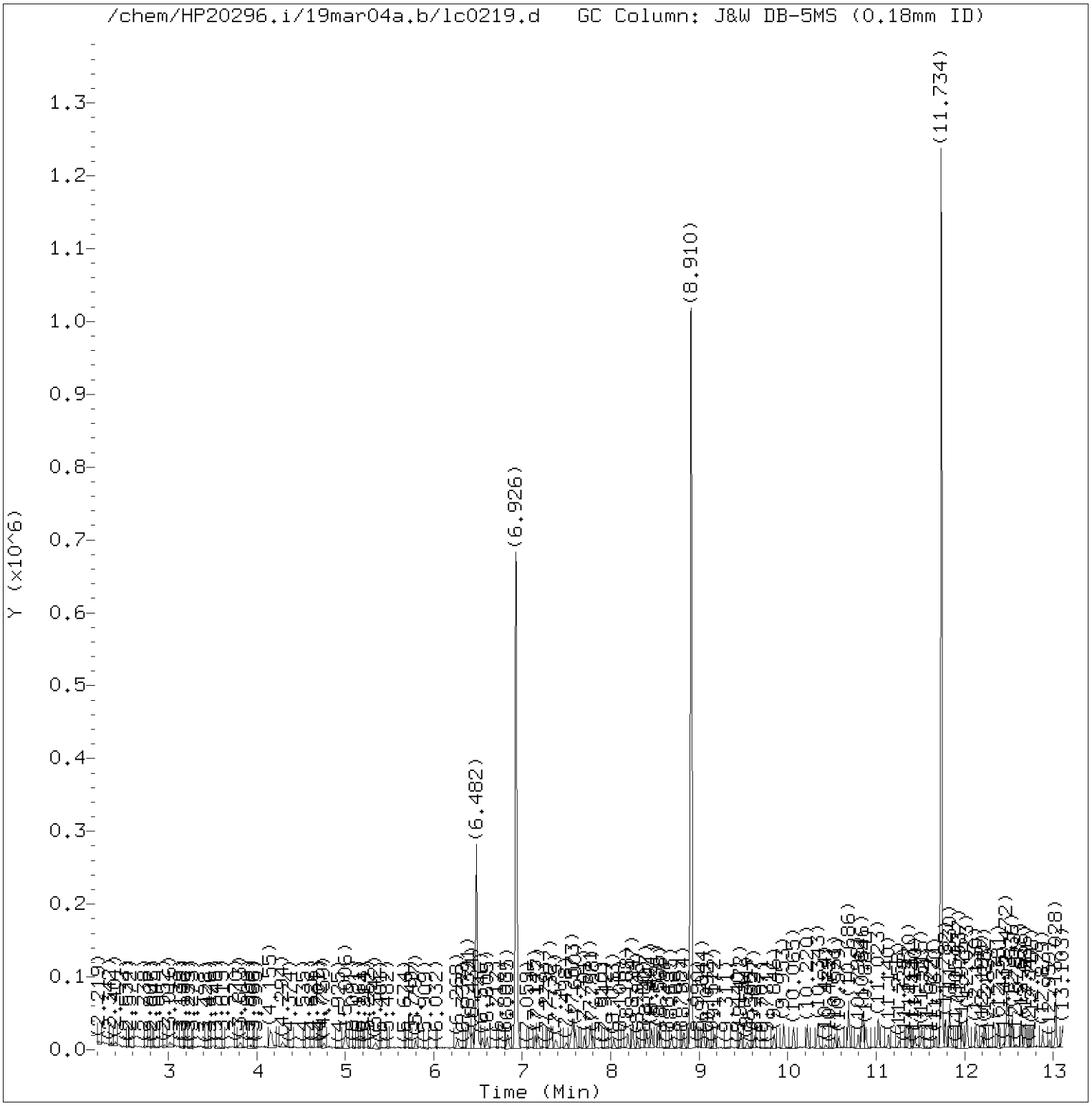
Data File: /chem/HP20296.i/19mar04a.b/lc0218.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 05:33 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: all1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.25 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3680		
Retention Time (minutes)	: 21.870		
Quant Ion	: 276.00		
Area	: 34533		
On-column Amount (ng/ul)	: 0.2973		
Integration start scan	: 3671	Integration stop scan:	3704
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:12.
Target 3.5 esignature user ART at 2019.03.05 17:12:34 -08'00'



Total Ion Chromatogram (TIC)

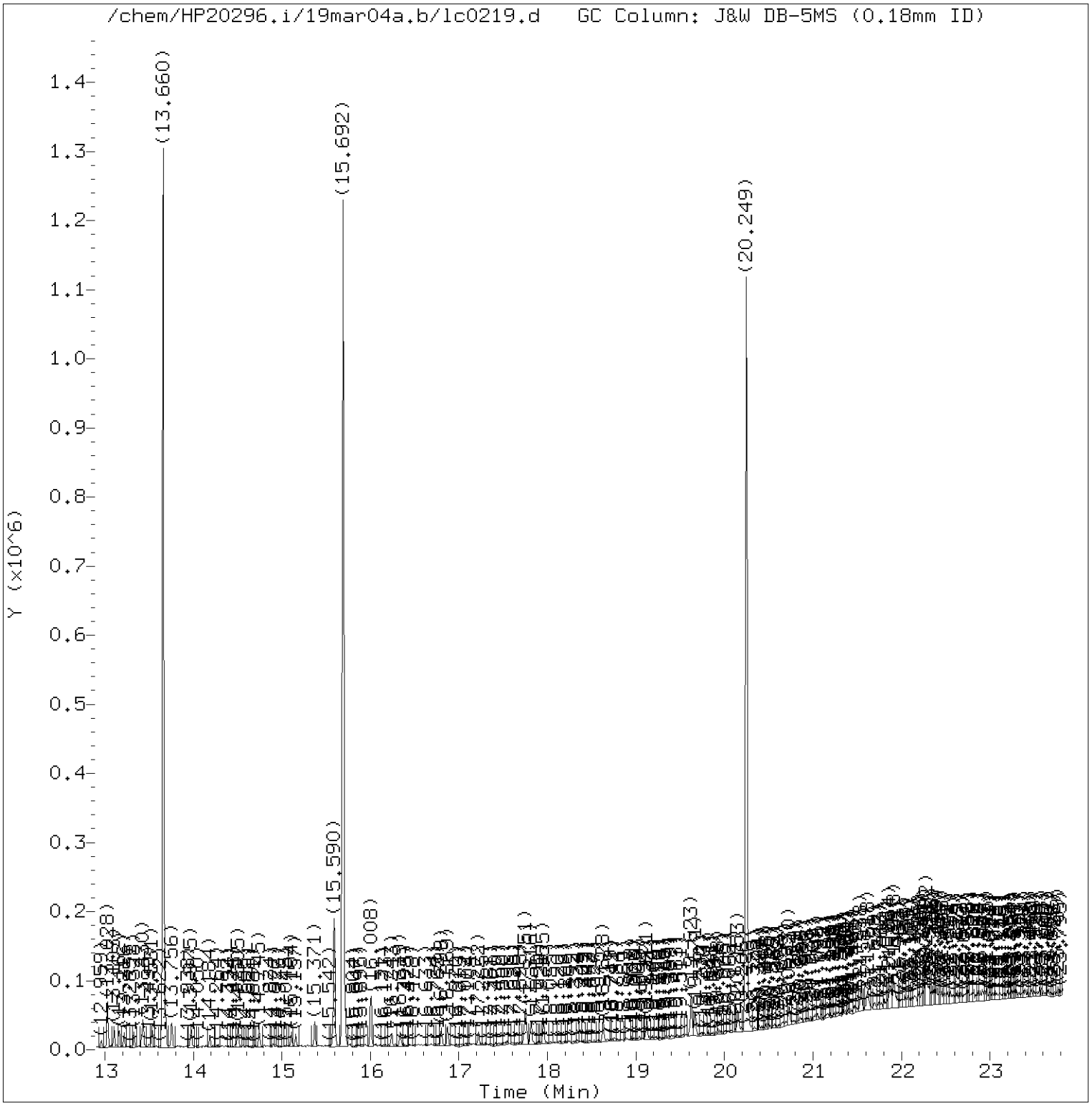
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.406	88	3202M	0.158
5) N-Nitrosodimethylamine	(1)	2.978	74	3459M	0.111
6) Pyridine	(1)	3.021	79	8616M	0.158
8) 2-Picoline	(1)	4.144	93	7735	0.136
9) N-Nitrosomethylethylamine	(1)	4.310	88	2615M	0.113
10) Methyl methanesulfonate	(1)	4.754	80	3269	0.114
12)$2-Fluorophenol	(1)	5.006	112	11344	0.255
14) N-Nitrosodiethylamine	(1)	5.342	102	2821	0.125
43) Total Cresols	(1)			11467	0.246
16) Ethyl methanesulfonate	(1)	5.797	109	2550	0.106
17) Benzaldehyde	(1)	6.273	77	3953	0.100
18)$Phenol-d6	(1)	6.391	99	15600	0.259
19) Phenol	(1)	6.407	94	8129	0.119
20) Aniline	(1)	6.434	93	10537	0.132
21) a-methylstyrene	(1)	6.519	118	754M	0.086
23) bis(2-Chloroethyl)ether	(1)	6.546	93	7013	0.137
24) 2-Chlorophenol	(1)	6.605	128	5601	0.130
25) 1,3-Dichlorobenzene	(1)	6.835	146	5778	0.123
26)*1,4-Dichlorobenzene-d4	(1)	6.926	152	143375	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	5696	0.118
28) Benzyl alcohol	(1)	7.150	108	3874	0.134
29) 1,2-Dichlorobenzene	(1)	7.177	146	5376	0.119
31) Indene	(1)	7.316	115	7133	0.120
32) 2-Methylphenol	(1)	7.332	108	5344	0.122
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.375	45	7058	0.141
35) bis(2-Chloroisopropyl)ether	(1)	7.375	45	7058	0.141
100) Isosafrole	(3)			4635	0.123
36) N-Nitrosopyrrolidine	(1)	7.493	100	2676	0.111
37) Acetophenone	(1)	7.546	105	7269	0.113
39) N-Nitroso-di-n-propylamine	(1)	7.567	70	5155	0.140
38) 4-Methylphenol	(1)	7.573	108	6123	0.124
40) N-Nitrosomorpholine	(1)	7.573	56	3403	0.136
41) o-Toluidine	(1)	7.600	106	9917	0.128
44) Hexachloroethane	(1)	7.701	117	2560	0.124
45)$Nitrobenzene-d5	(2)	7.765	82	14305	0.254
46) Nitrobenzene	(2)	7.803	77	6993	0.122
50) N-Nitrosopiperidine	(2)	8.038	114	3092	0.136
125) 2,4_2,6-Dinitrotoluenes	(3)			5620	0.251
52) Isophorone	(2)	8.193	82	12265	0.124
53) 2-Nitrophenol	(2)	8.306	139	2540	0.114

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
55) 2,4-Dimethylphenol	(2)	8.407	107	6170	0.124
58) Benzoic acid	(2)	8.466	105	10939M	0.328
59) O,O,O-Triethylphosphorothioate	(2)	8.536	198	2335	0.119
57) bis(2-Chloroethoxy)methane	(2)	8.568	93	7957	0.123
62) 2,4-Dichlorophenol	(2)	8.685	162	4471	0.123
151) Diallate trans/cis	(4)			5663	0.131
65) 1,2,4-Trichlorobenzene	(2)	8.824	180	4856	0.126
68)*Naphthalene-d8	(2)	8.910	136	560683	5.000
70) 4-Chloroaniline	(2)	9.038	127	7200	0.140
71) 2,6-Dichlorophenol	(2)	9.049	162	4213	0.121
72) Hexachloropropene	(2)	9.097	213	3496	0.134
74) Hexachlorobutadiene	(2)	9.177	225	2602	0.117
78) Quinoline	(2)	9.472	129	8868	0.118
79) Caprolactam	(2)	9.541	113	966M	0.083
80) N-Nitrosodi-n-butylamine	(2)	9.621	84	3716	0.094
83) 4-Chloro-3-methylphenol	(2)	9.846	107	5204	0.122
85) Safrole	(2)	9.953	162	3741	0.119
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.338	216	5152	0.139
88) Hexachlorocyclopentadiene	(3)	10.343	237	3323	0.132
91) cis-Isosafrole	(3)	10.429	162	612	0.018
93) 2,4,6-Trichlorophenol	(3)	10.531	196	3615	0.144
95) 2,4,5-Trichlorophenol	(3)	10.579	196	3222	0.125
96)$2-Fluorobiphenyl	(3)	10.691	172	21810	0.246
97) trans-Isosafrole	(3)	10.798	162	4023	0.105
98) 1,1'-Biphenyl	(3)	10.841	154	10298	0.111
101) 1-Chloronaphthalene	(3)	10.884	162	9769	0.145
104) 2-Nitroaniline	(3)	11.017	138	3219	0.132
103) Diphenyl ether	(3)	11.023	170	6314	0.123
108) 1,4-Naphthoquinone	(3)	11.140	158	3124	0.101
109) 1,4-Dinitrobenzene	(3)	11.258	168	1506	0.123
110) Dimethylphthalate	(3)	11.370	163	10429	0.127
111) 1,3-Dinitrobenzene	(3)	11.376	168	1365	0.102
113) 2,6-Dinitrotoluene	(3)	11.440	165	2124	0.113
117) 3-Nitroaniline	(3)	11.670	138	1973	0.094
118)*Acenaphthene-d10	(3)	11.734	164	265613	5.000
120) 2,4-Dinitrophenol	(3)	11.830	184	9123	0.729
121) 4-Nitrophenol	(3)	11.937	109	7430	0.466
122) Pentachlorobenzene	(3)	11.975	250	4209	0.130
123) 2,4-Dinitrotoluene	(3)	12.023	165	3496	0.138
124) Dibenzofuran	(3)	12.028	168	13237	0.125

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
126) 1-Naphthylamine	(3)	12.130	143	9078	0.114
127) 2,3,4,6-Tetrachlorophenol	(3)	12.199	232	2539	0.121
128) 2-Naphthylamine	(3)	12.232	143	9309	0.120
129) Diethylphthalate	(3)	12.381	149	11668	0.146
130) Thionazin	(3)	12.472	107	2250	0.135
133) 5-Nitro-o-toluidine	(3)	12.483	152	3000M	0.127
134) 4-Nitroaniline	(3)	12.488	138	2226	0.103
132) 4-Chlorophenyl-phenylether	(3)	12.494	204	5267	0.135
135) 4,6-Dinitro-2-methylphenol	(4)	12.536	198	5903	0.385
136) N-Nitrosodiphenylamine	(4)	12.638	169	8890	0.124
137) NDPA as diphenylamine	(4)	12.638	169	8890	0.124
139) 1,2-Diphenylhydrazine	(4)	12.686	77	12611	0.118
140)$2,4,6-Tribromophenol	(3)	12.766	330	3265	0.262
142) Tetraethyldithiopyrophosphate	(4)	12.879	97	2213	0.126
144) 1,3,5-Trinitrobenzene	(4)	12.964	213	932	0.101
145) Diallate (peak 1)	(4)	13.023	86	4636	0.104
147) Phenacetin	(4)	13.028	108	6701	0.133
146) Phorate	(4)	13.028	75	8053	0.123
148) 4-Bromophenyl-phenylether	(4)	13.103	248	3032	0.129
149) Diallate (peak 2)	(4)	13.130	86	1027	0.028
152) Dimethoate	(4)	13.216	87	4809	0.113
153) Atrazine	(4)	13.328	200	2335	0.108
154) Pentachlorophenol	(4)	13.419	266	1640	0.093
155) 4-Aminobiphenyl	(4)	13.424	169	10089	0.123
156) Pentachloronitrobenzene	(4)	13.435	237	947	0.082
157) Pronamide	(4)	13.531	173	4342	0.110
158)*Phenanthrene-d10	(4)	13.660	188	516571	5.000
159) Dinoseb	(4)	13.676	211	2006	0.086
168) Carbazole	(4)	13.975	167	13553	0.119
169) Methyl parathion	(4)	14.189	109	3737	0.109
170) Di-n-butylphthalate	(4)	14.505	149	17341	0.115
173) 4-Nitroquinoline-1-oxide	(4)	14.740	190	1157	0.073
172) Parathion	(4)	14.745	109	1766	0.080
174) Octachlorostyrene	(4)	15.104	308	1803	0.180
176) Isodrin	(4)	15.157	193	2282	0.156
179) Benzidine	(5)	15.590	184	85011	0.892
180)*Pyrene-d10	(5)	15.692	212	521465	5.000
184)$Terphenyl-d14	(5)	16.008	244	27253	0.300
187) p-Dimethylaminoazobenzene	(5)	16.248	225	2030M	0.084
190) Chlorobenzilate	(5)	16.334	139	5525	0.113

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

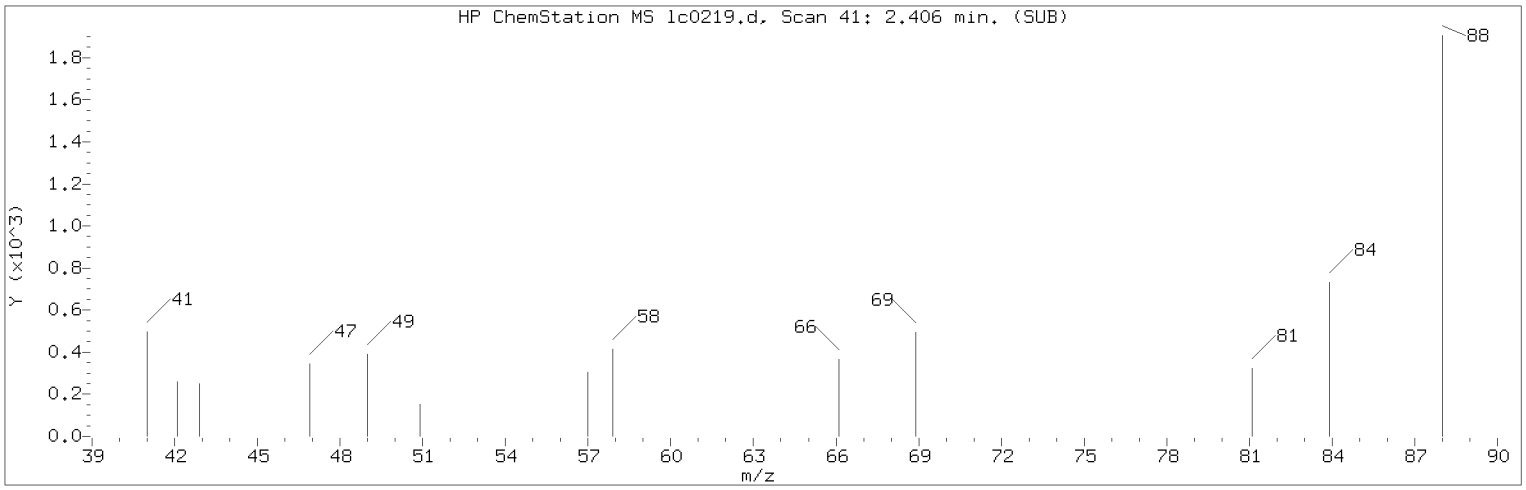
Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
192) 3,3'-Dimethylbenzidine	(5)	16.799	212	10854	0.111
193) Butylbenzylphthalate	(5)	16.869	149	7690	0.106
196) 2-Acetylaminofluorene	(5)	17.216	181	6264	0.096
198) 3,3'-Dichlorobenzidine	(5)	17.741	252	6371	0.124
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.762	231	3156	0.111
204) bis(2-Ethylhexyl)phthalate	(5)	17.955	149	11732	0.109
208) 6-Methylchrysene	(5)	18.628	242	10727	0.115
210) Di-n-octylphthalate	(6)	19.121	149	17450	0.096
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.623	256	7013	0.121
218)*Perylene-d12	(6)	20.249	264	528433	5.000
220) 3-Methylcholanthrene	(6)	20.730	268	7252	0.110
222) Dibenz(a,h)acridine	(6)	21.544	279	13713	0.125
223) Dibenz(a,j)acridine	(6)	21.618	279	11524	0.107

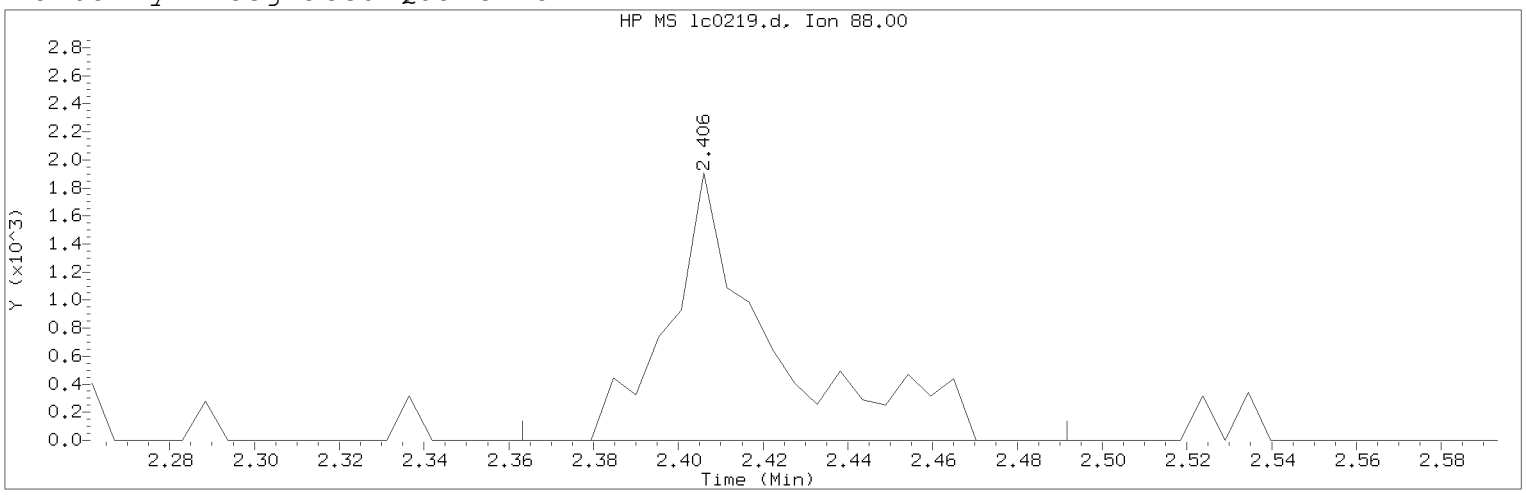
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

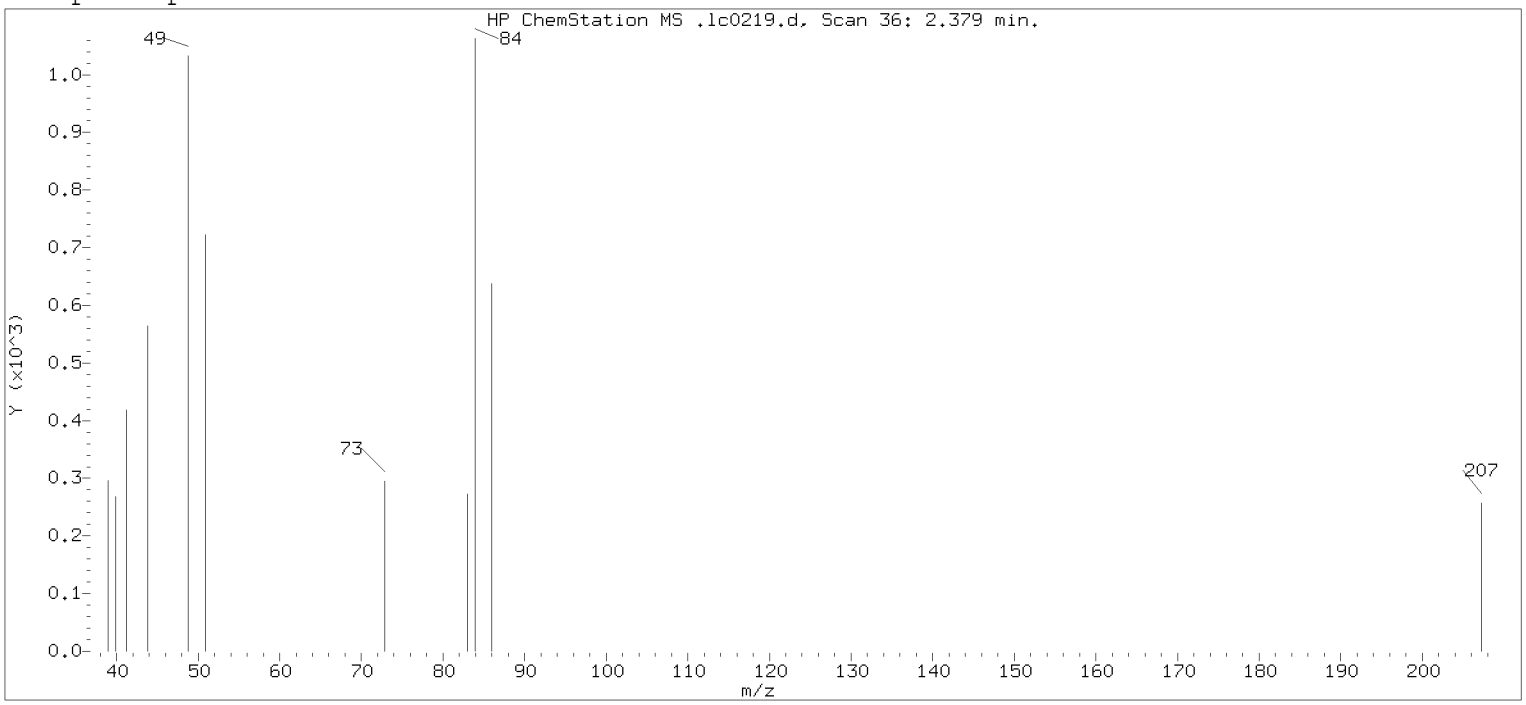
Compound Number : 1
Compound Name : 1,4-Dioxane
Scan Number : 41
Retention Time (minutes) : 2.406
Quant Ion : 88.00
Area (flag) : 3202M
On-Column Amount (ng/ul) : 0.1576
Integration start scan : 32 Integration stop scan: 56
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

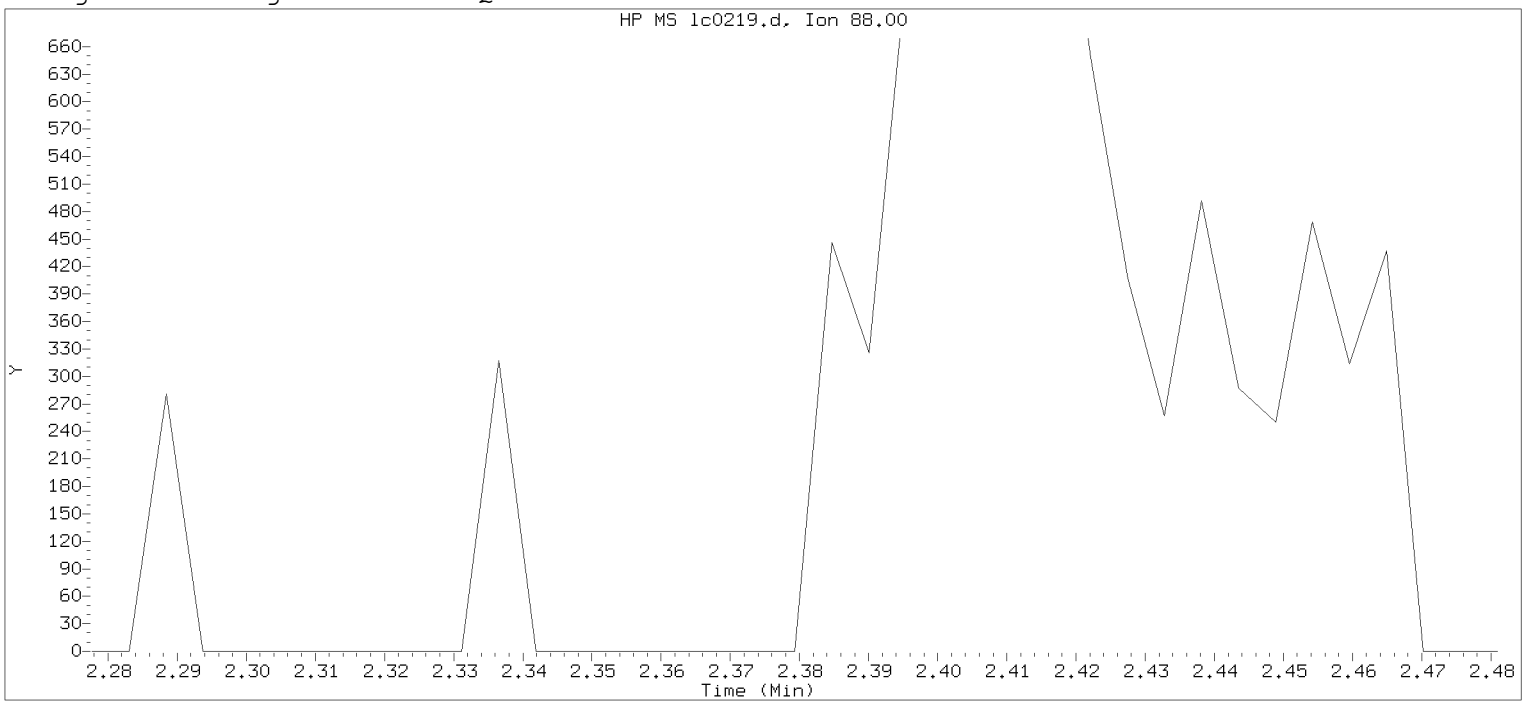
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

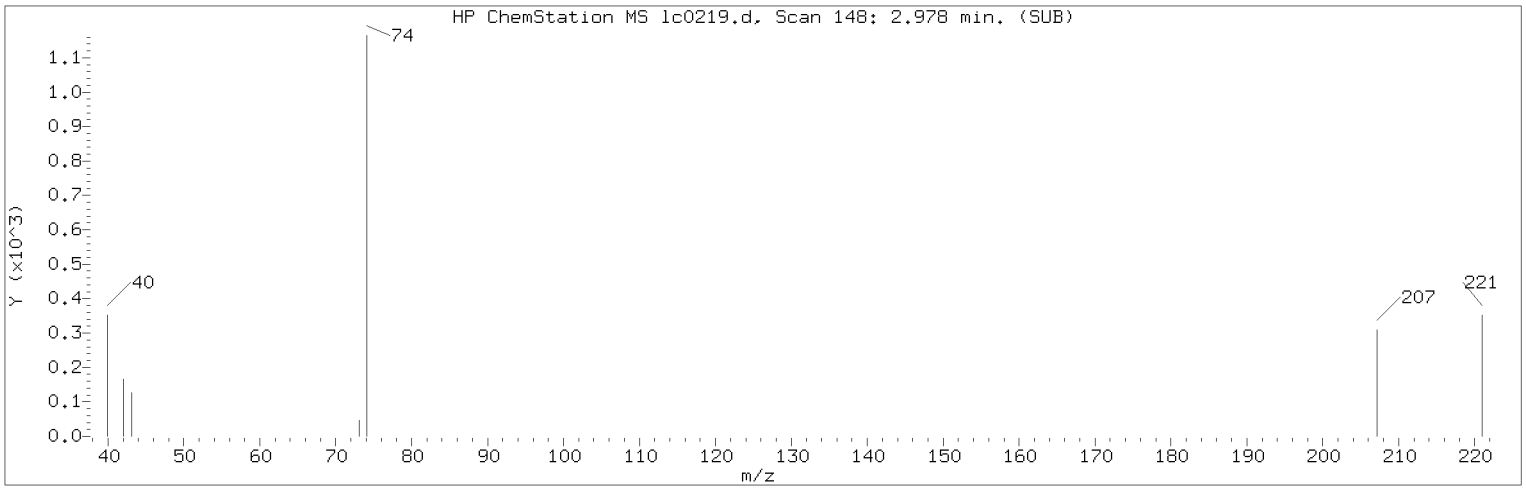
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

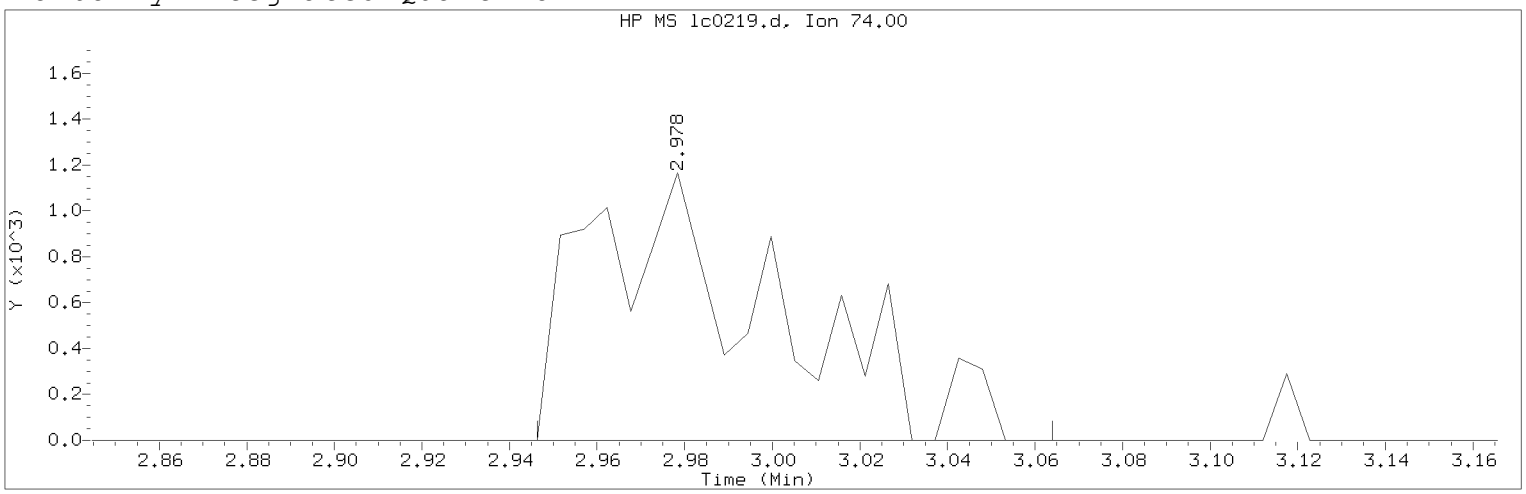
Compound Number : 1
Compound Name : 1,4-Dioxane
Expected RT (minutes) : 2.379
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.06

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

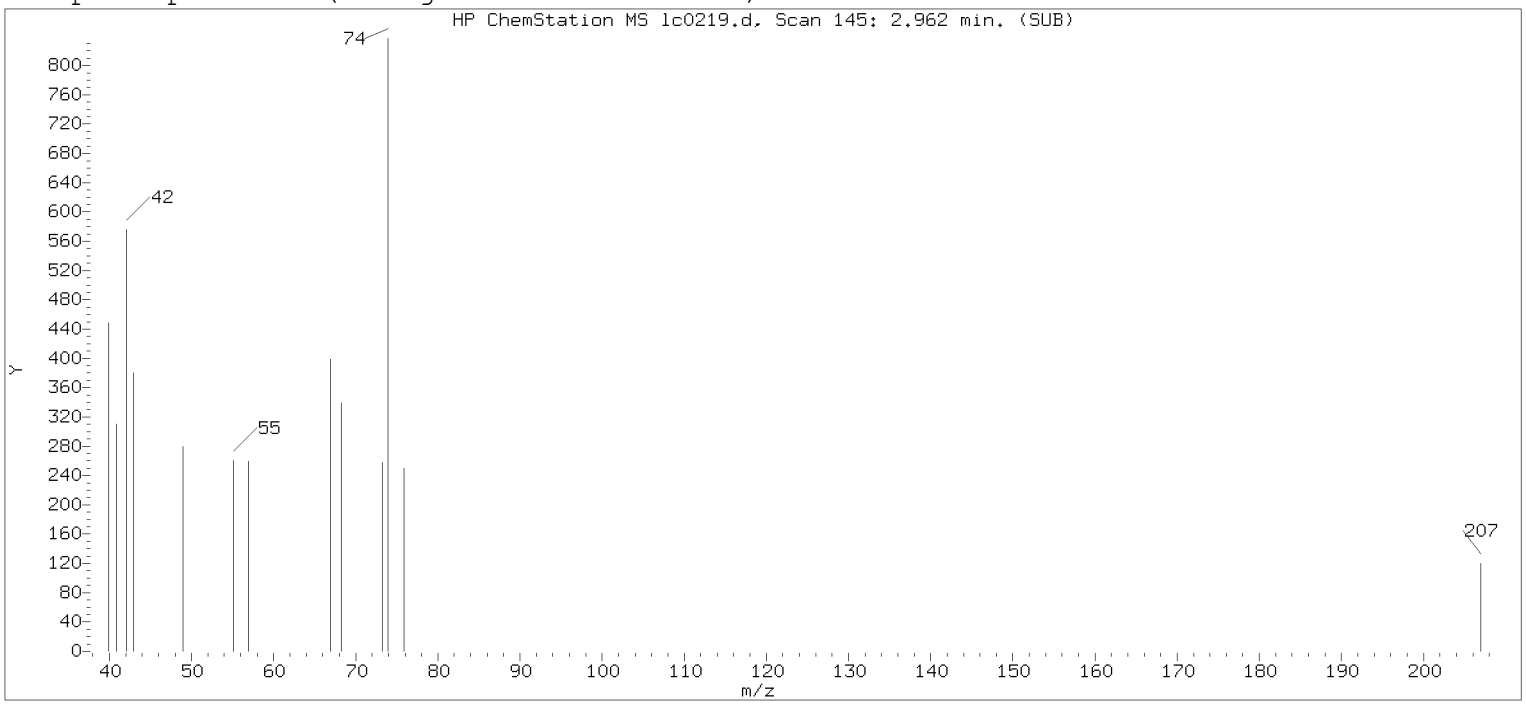
Compound Number : 5
Compound Name : N-Nitrosodimethylamine
Scan Number : 148
Retention Time (minutes) : 2.978
Quant Ion : 74.00
Area (flag) : 3459M
On-Column Amount (ng/ul) : 0.1110
Integration start scan : 141 Integration stop scan: 163
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

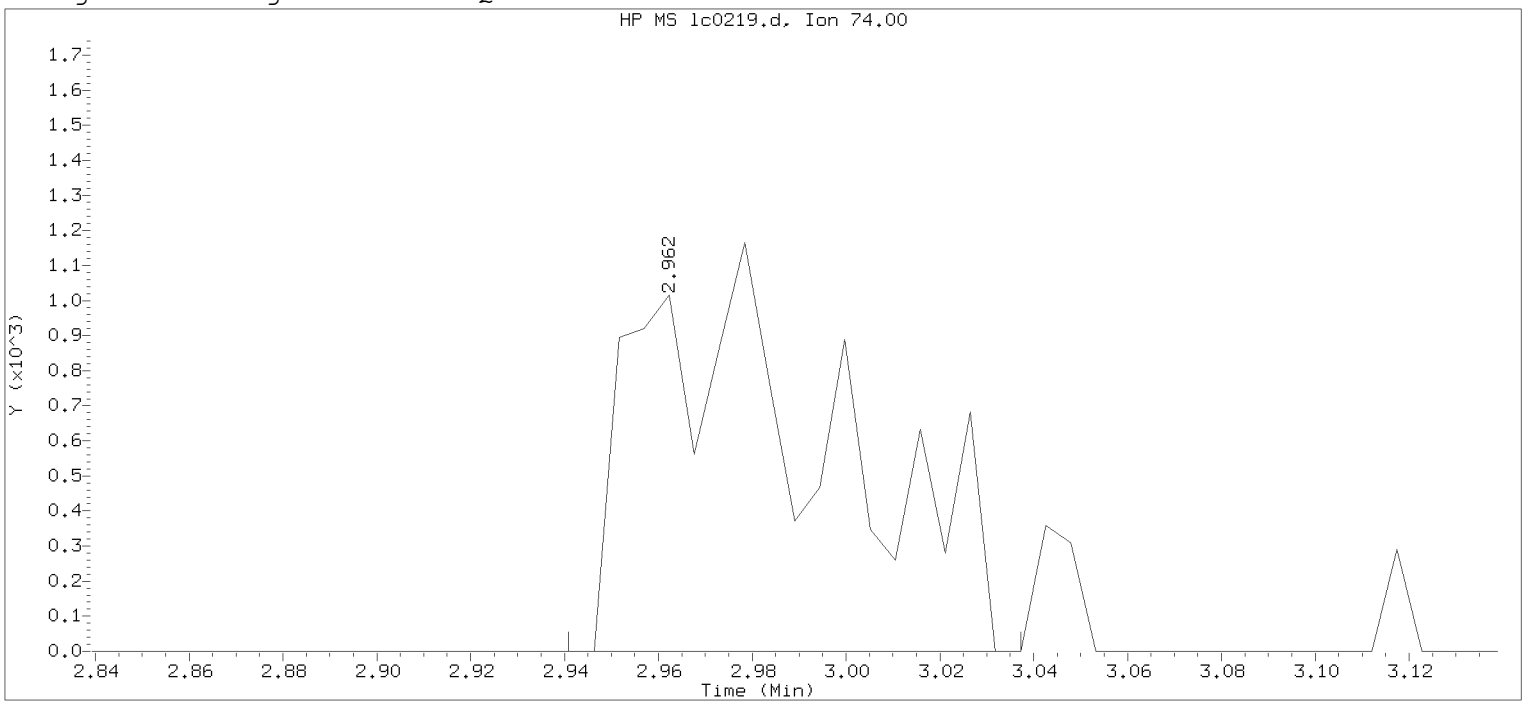
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

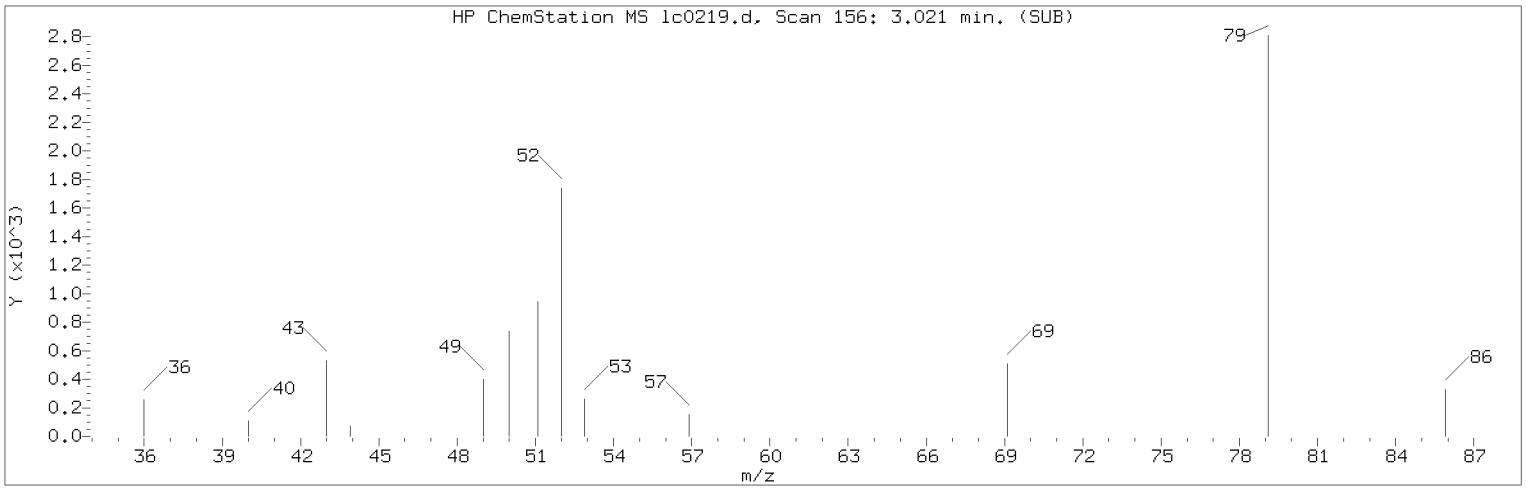
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

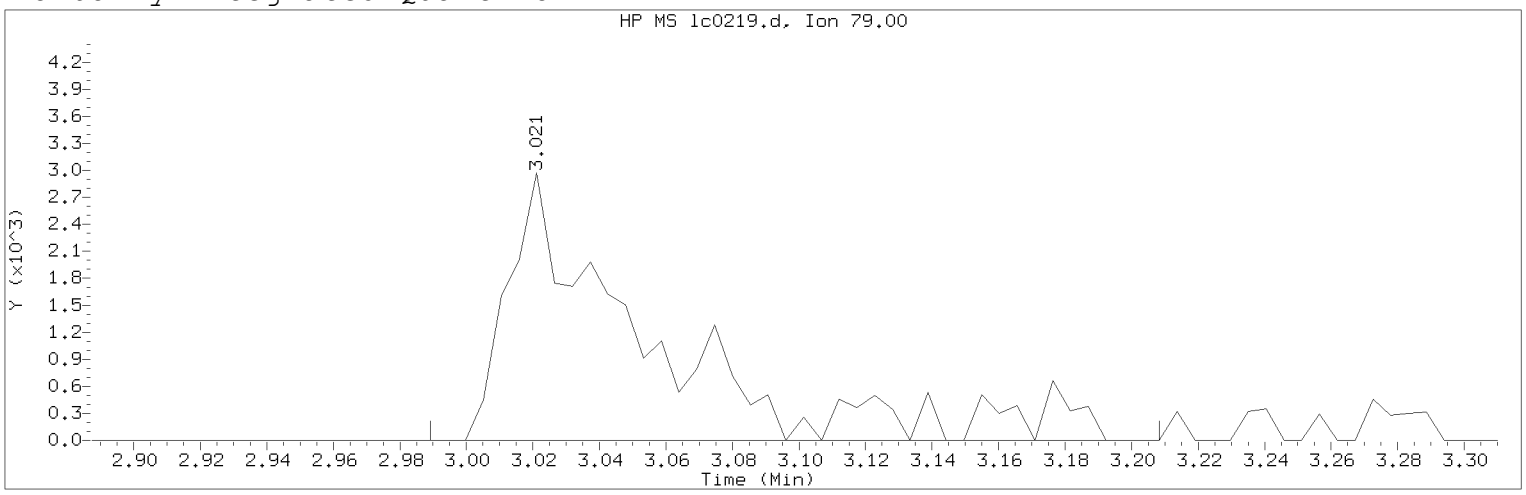
Compound Number	: 5		
Compound Name	: N-Nitrosodimethylamine		
Scan Number	: 145		
Retention Time (minutes)	: 2.962		
Quant Ion	: 74.00		
Area	: 3245		
On-column Amount (ng/ul)	: 0.0958		
Integration start scan	: 140	Integration stop scan:	158
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

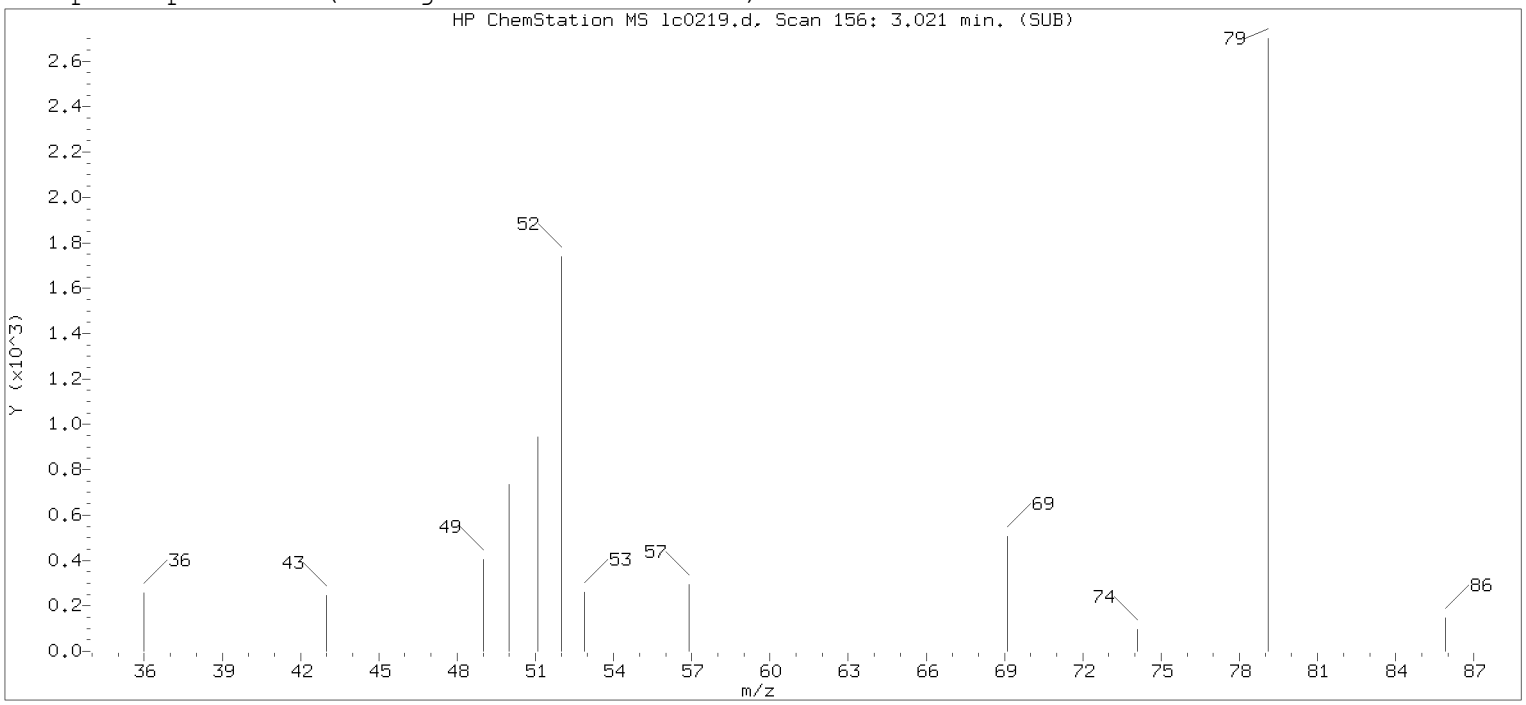
Compound Number : 6
Compound Name : Pyridine
Scan Number : 156
Retention Time (minutes) : 3.021
Quant Ion : 79.00
Area (flag) : 8616M
On-Column Amount (ng/ul) : 0.1583
Integration start scan : 149 Integration stop scan: 190
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

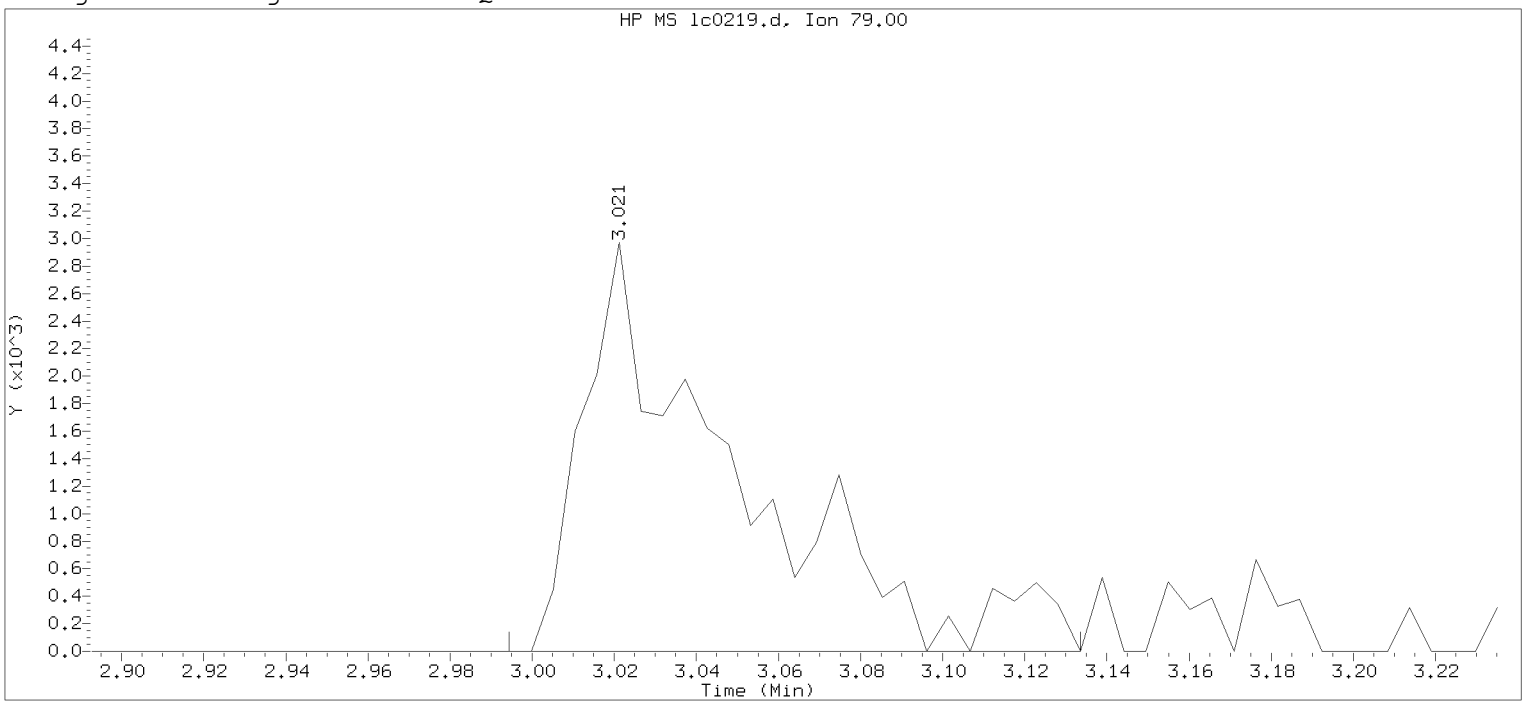
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

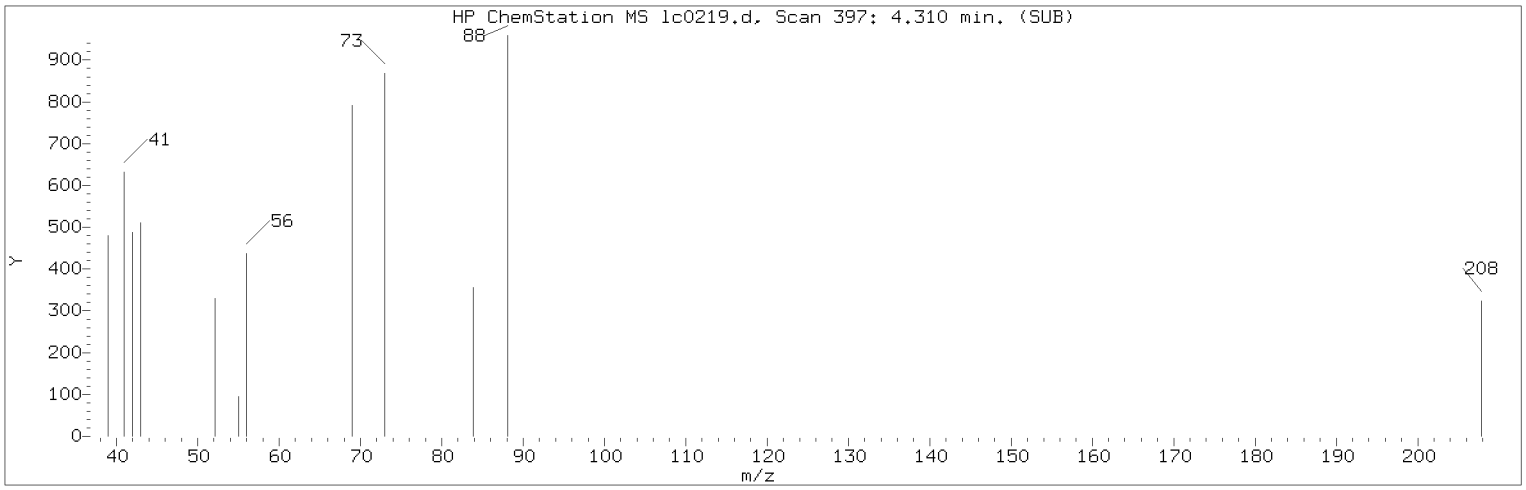
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

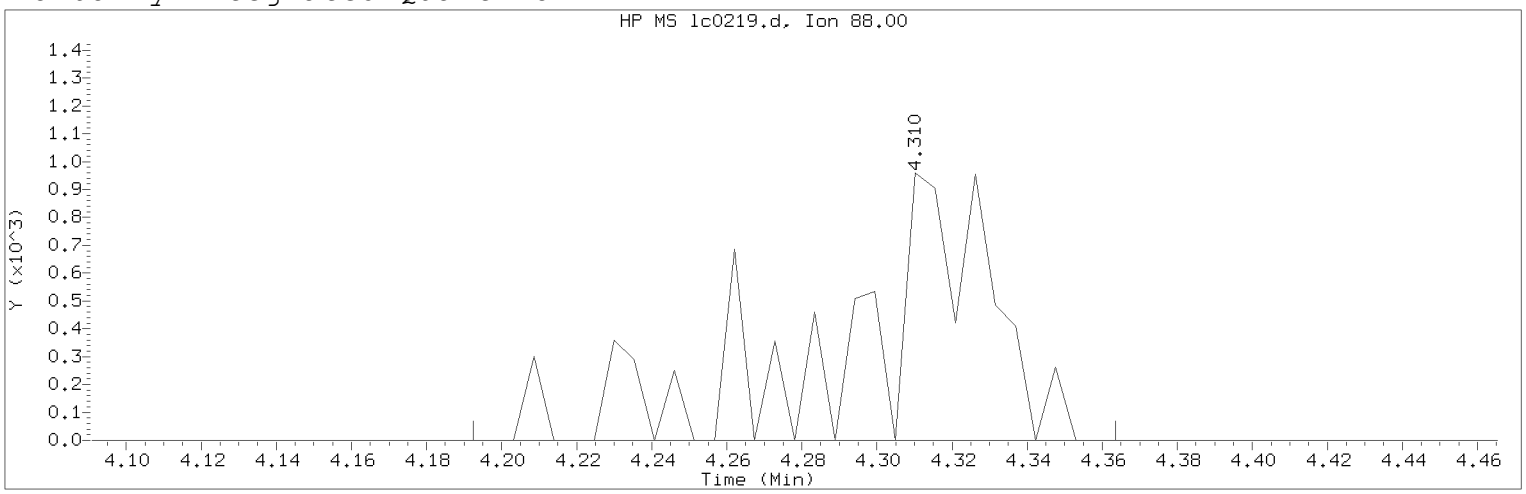
Compound Number	: 6		
Compound Name	: Pyridine		
Scan Number	: 156		
Retention Time (minutes)	: 3.021		
Quant Ion	: 79.00		
Area	: 7620		
On-column Amount (ng/ul)	: 0.1307		
Integration start scan	: 150	Integration stop scan:	176
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART at 2019-03-05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

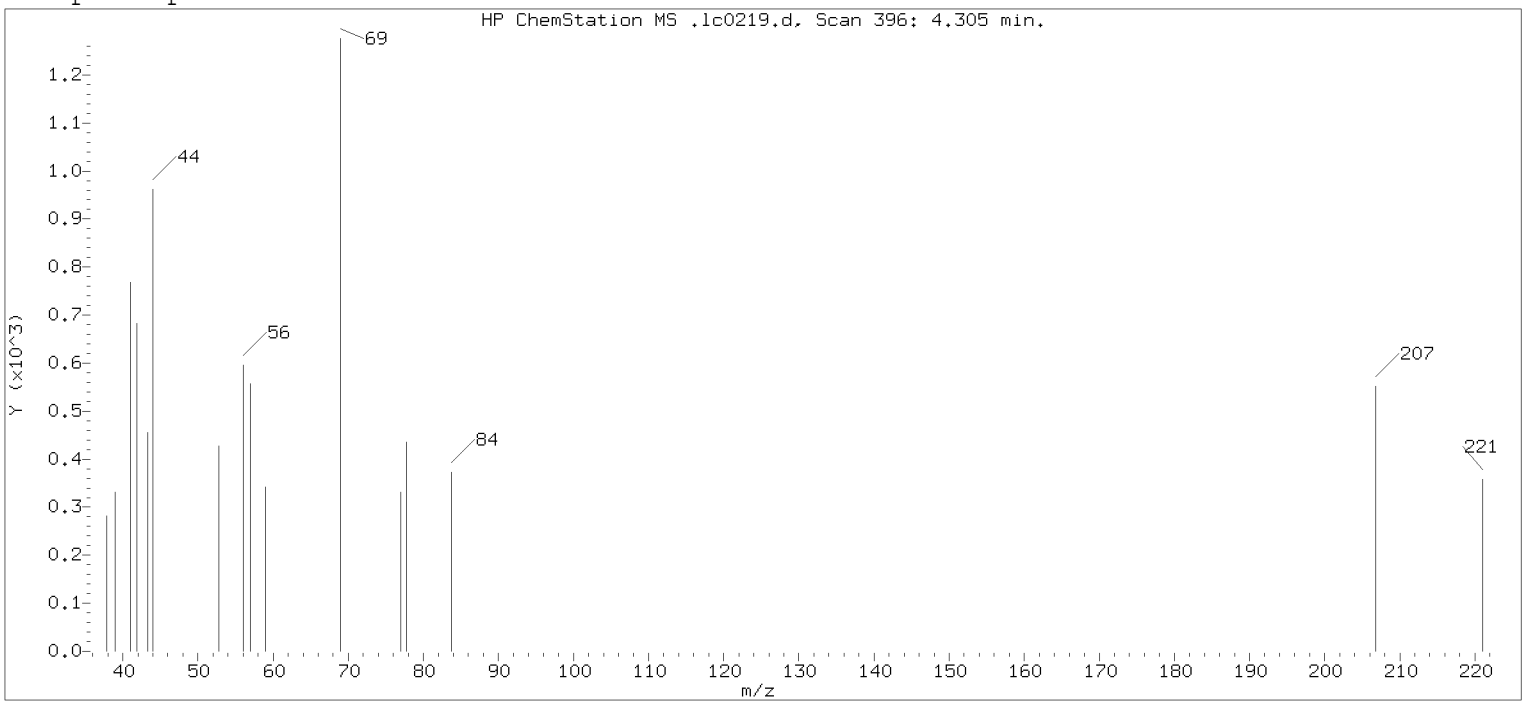
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Scan Number : 397
Retention Time (minutes) : 4.310
Quant Ion : 88.00
Area (flag) : 2615M
On-Column Amount (ng/ul) : 0.1132
Integration start scan : 374 Integration stop scan: 406
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

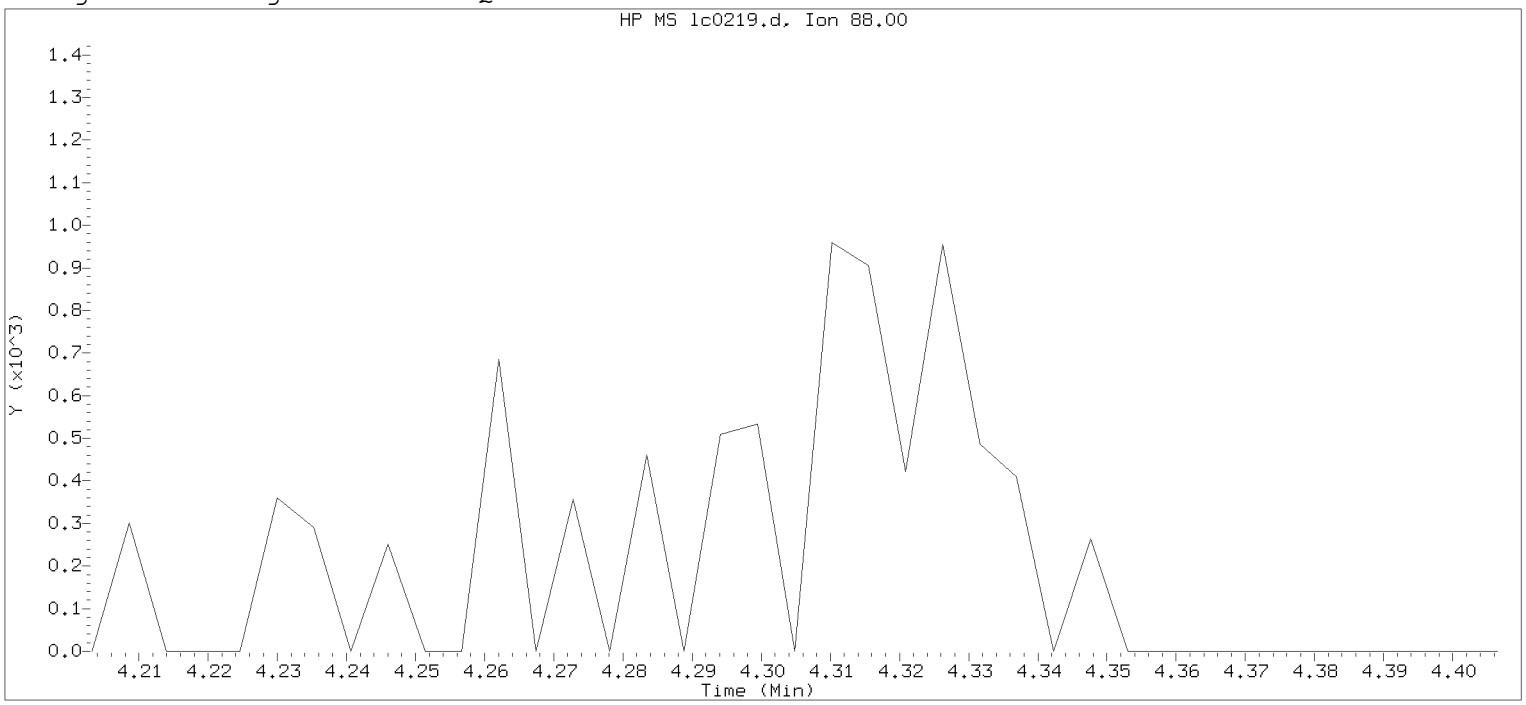
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

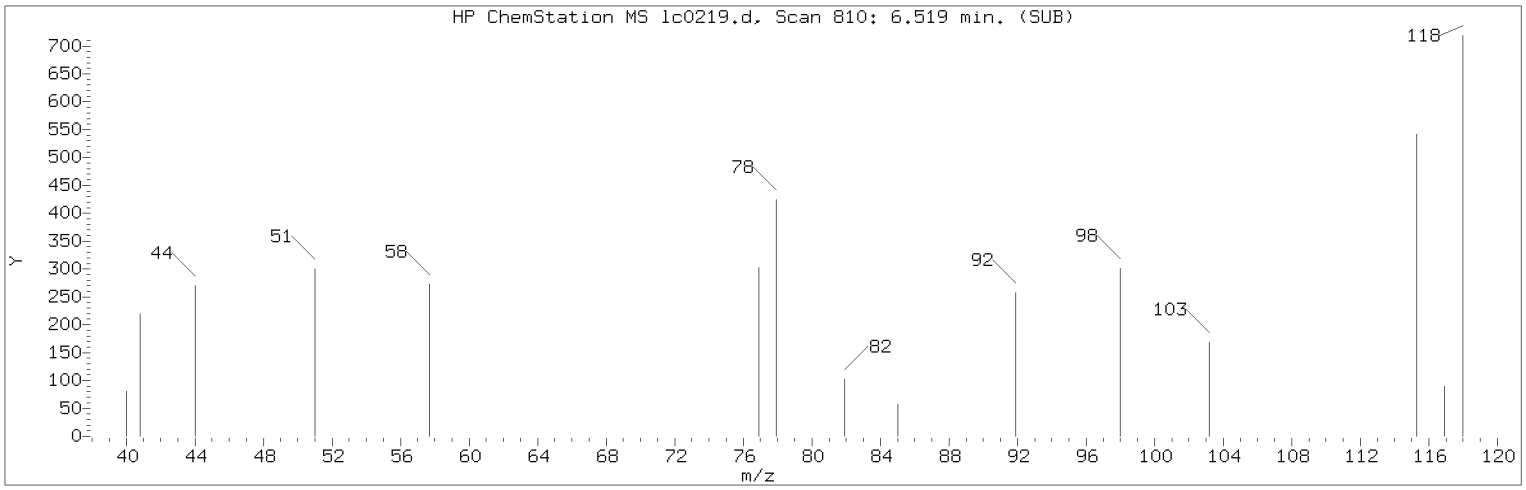
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

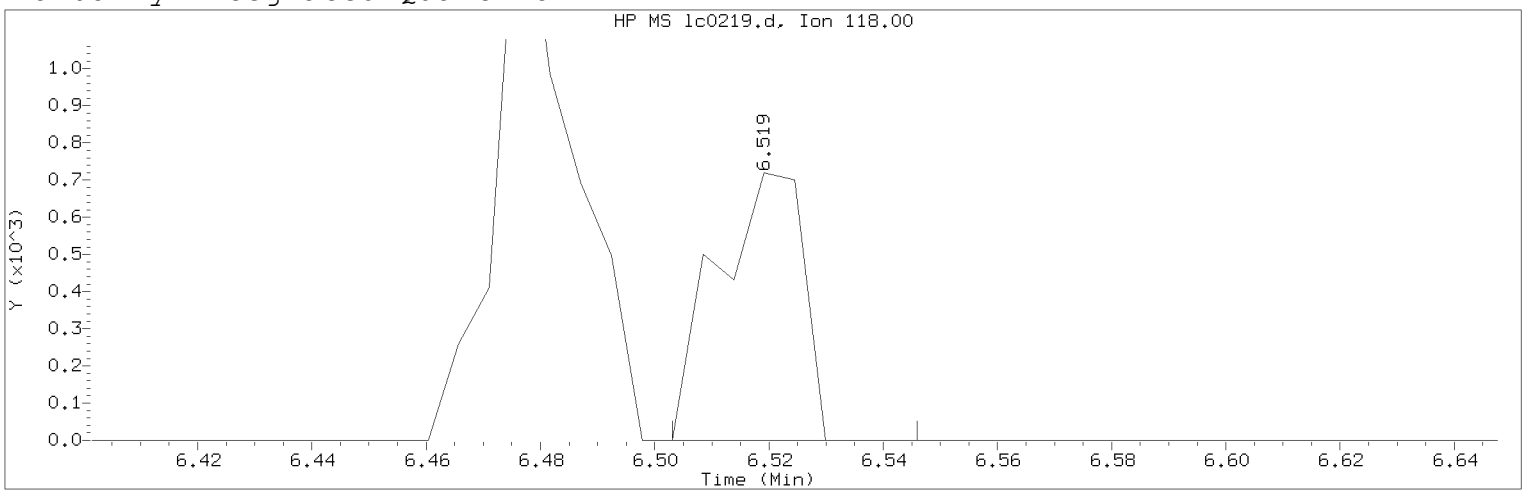
Compound Number : 9
Compound Name : N-Nitrosomethylethylamine
Expected RT (minutes) : 4.305
Quant Ion : 88.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

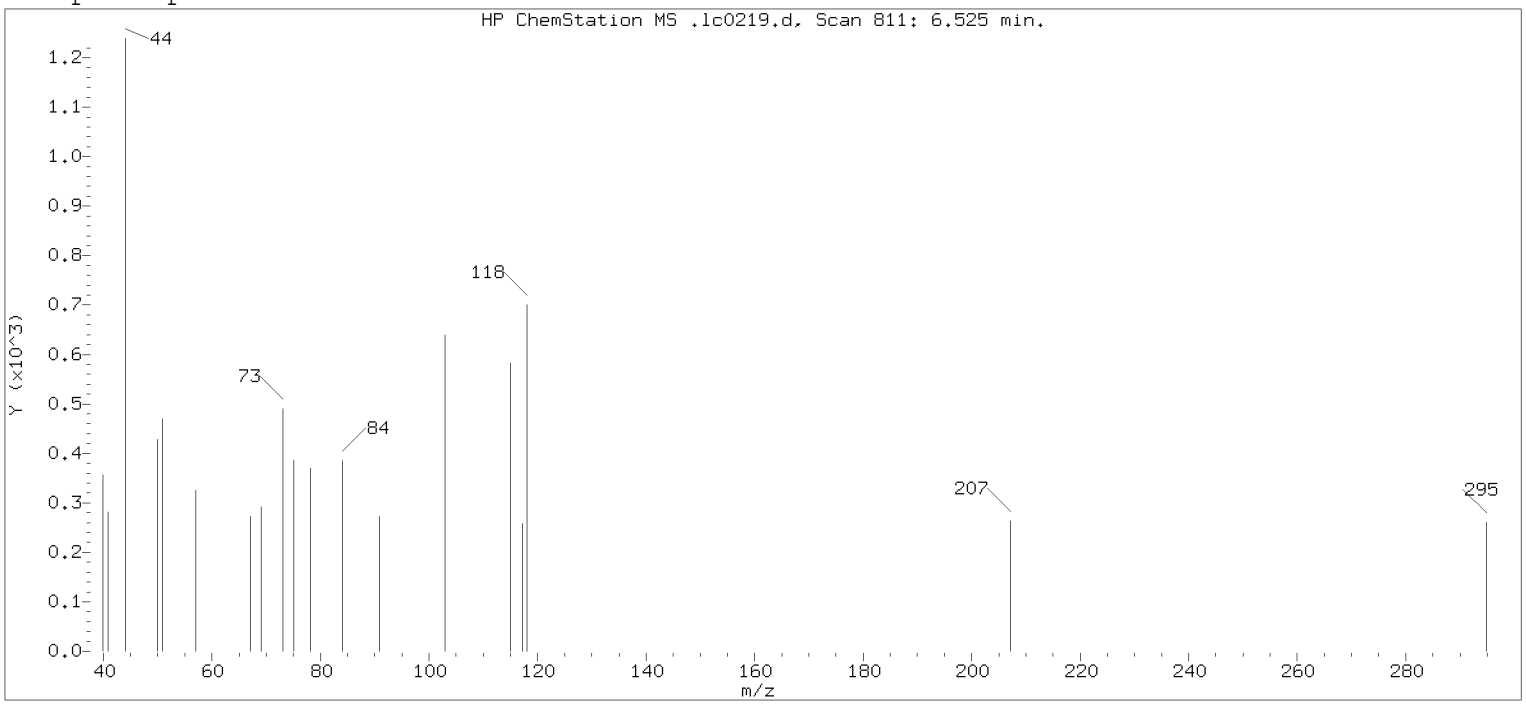
Compound Number : 21
Compound Name : a-methylstyrene
Scan Number : 810
Retention Time (minutes) : 6.519
Quant Ion : 118.00
Area (flag) : 754M
On-Column Amount (ng/ul) : 0.0858
Integration start scan : 806 Integration stop scan: 814
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

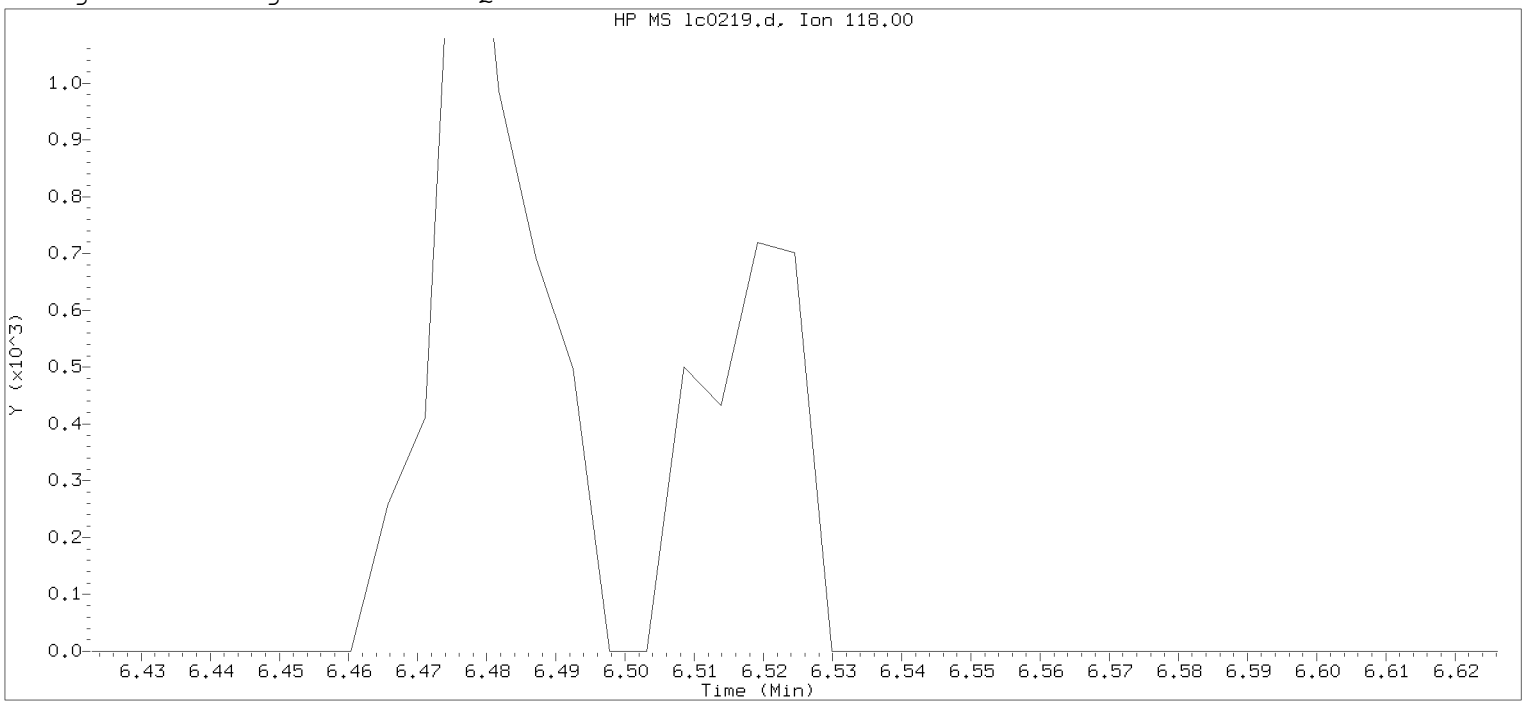
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

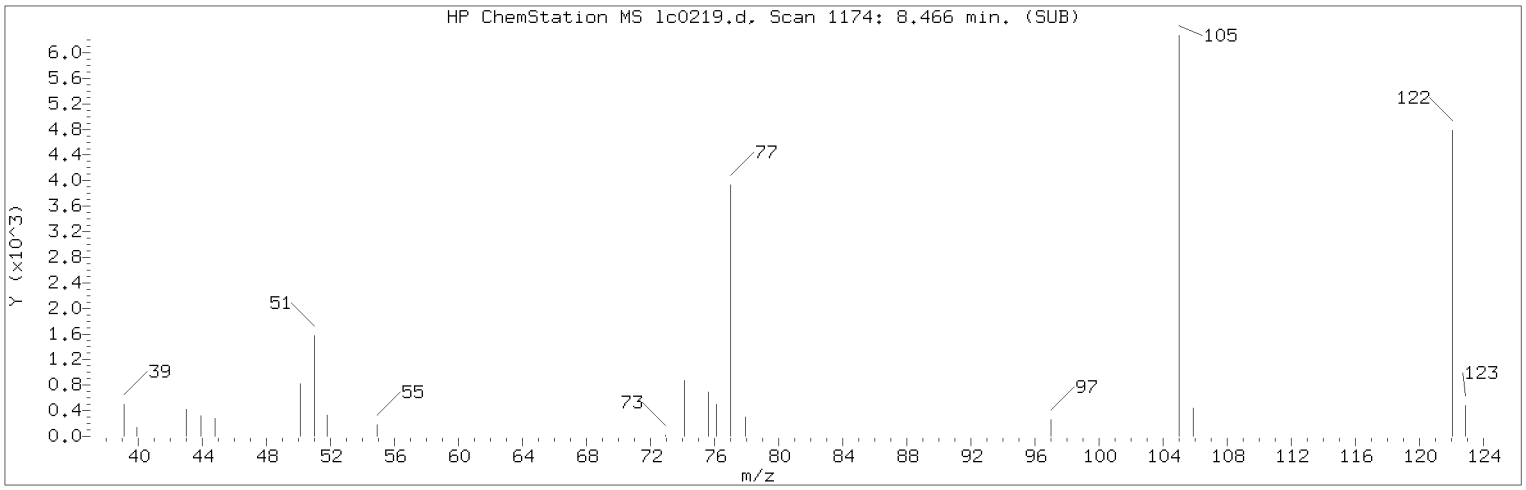
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

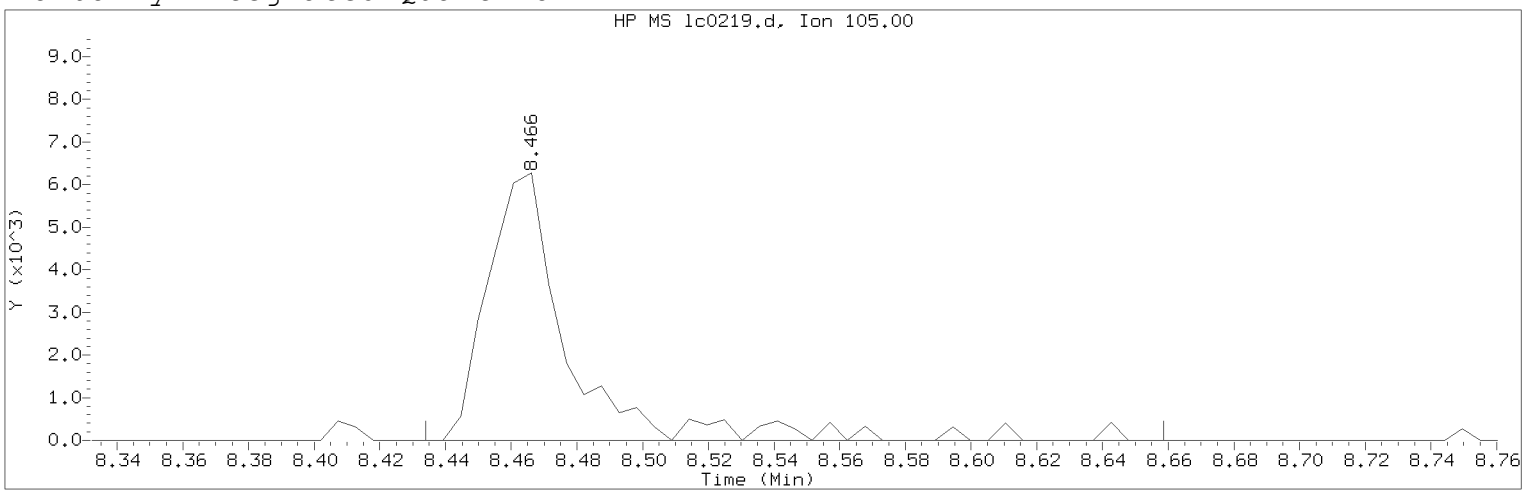
Compound Number : 21
Compound Name : a-methylstyrene
Expected RT (minutes) : 6.524
Quant Ion : 118.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

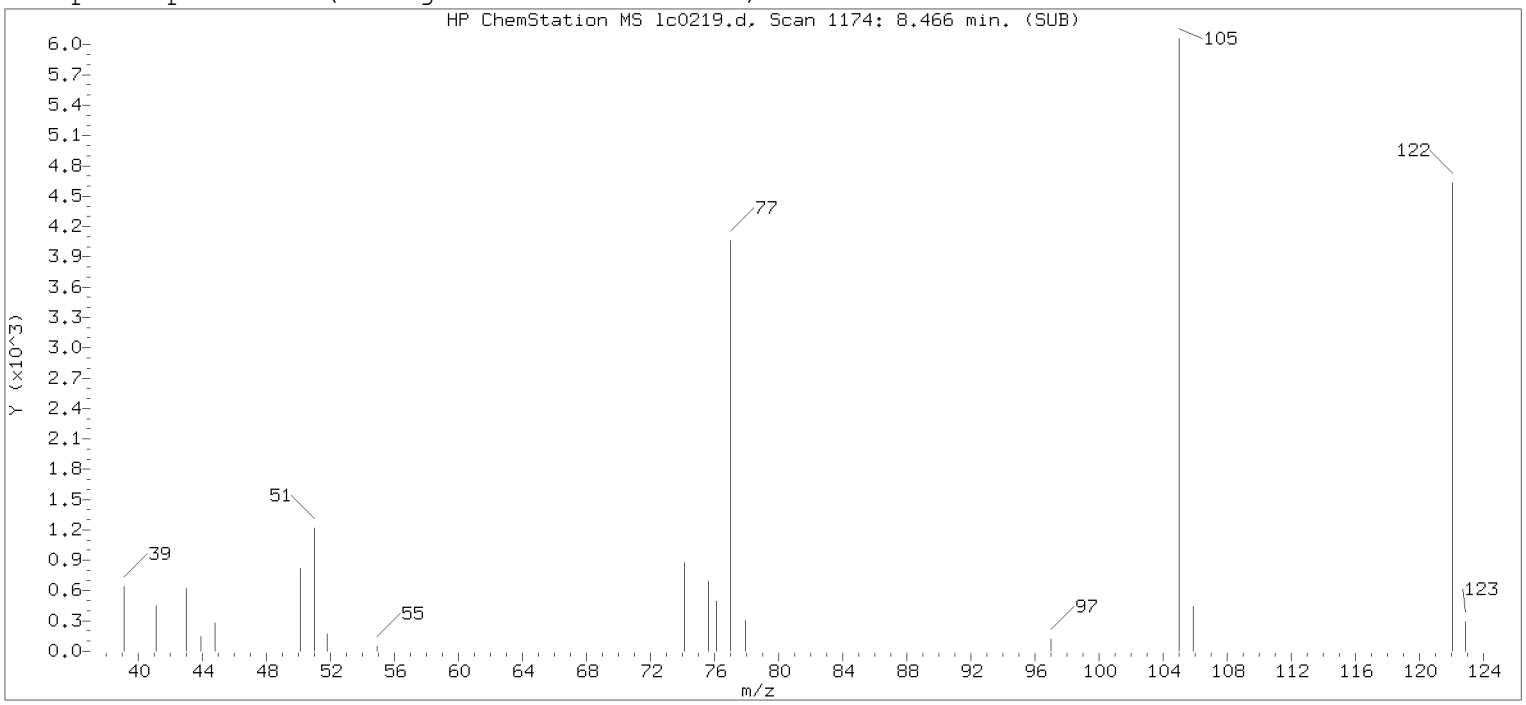
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1174
Retention Time (minutes) : 8.466
Quant Ion : 105.00
Area (flag) : 10939M
On-Column Amount (ng/ul) : 0.3279
Integration start scan : 1167 Integration stop scan: 1209
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

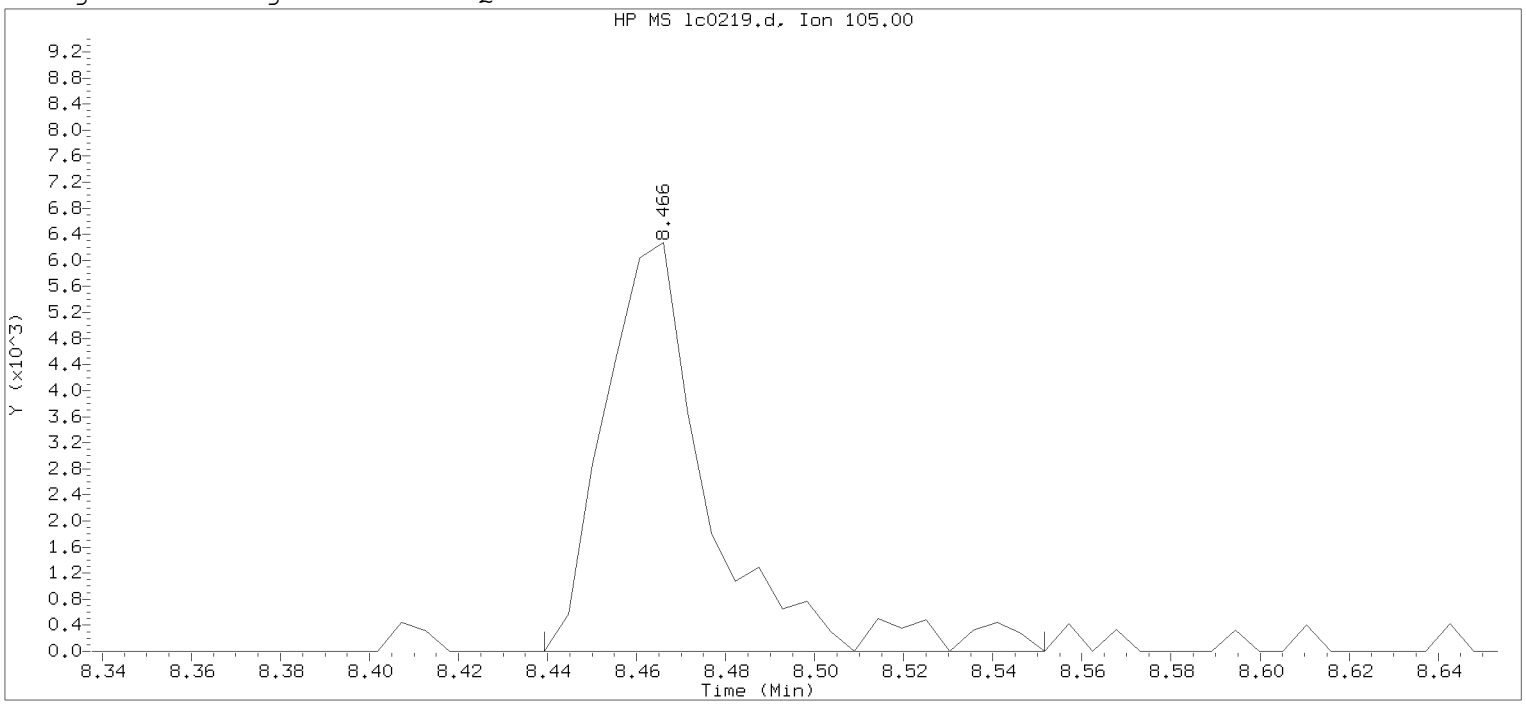
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

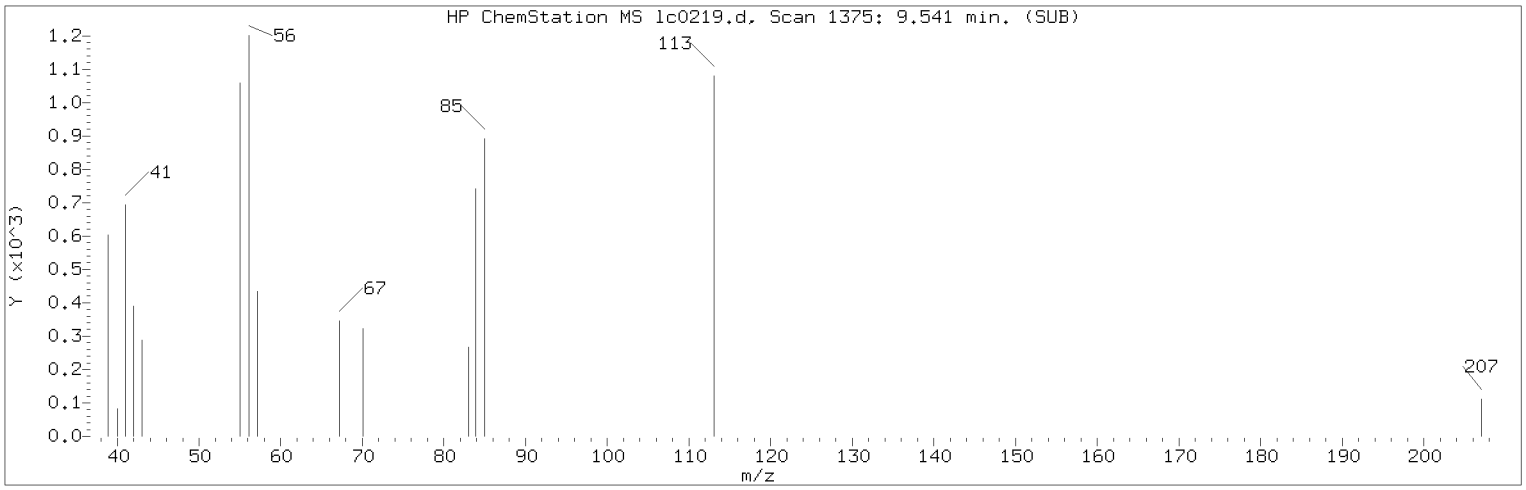
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

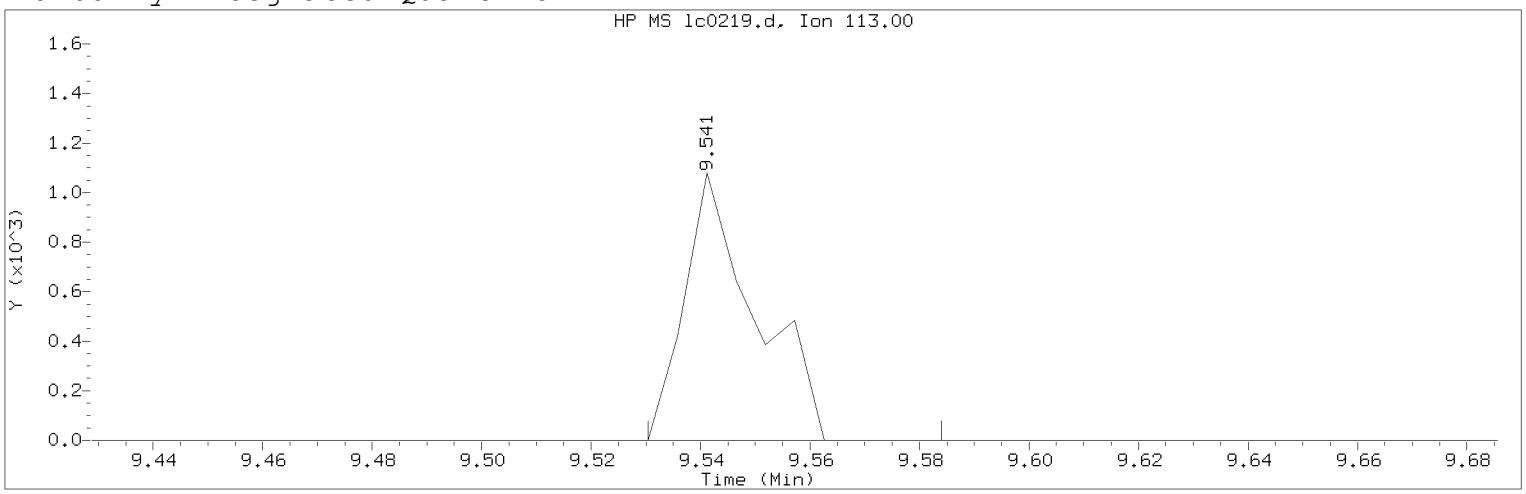
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1174		
Retention Time (minutes)	: 8.466		
Quant Ion	: 105.00		
Area	: 10328		
On-column Amount (ng/ul)	: 0.3359		
Integration start scan	: 1168	Integration stop scan:	1189
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

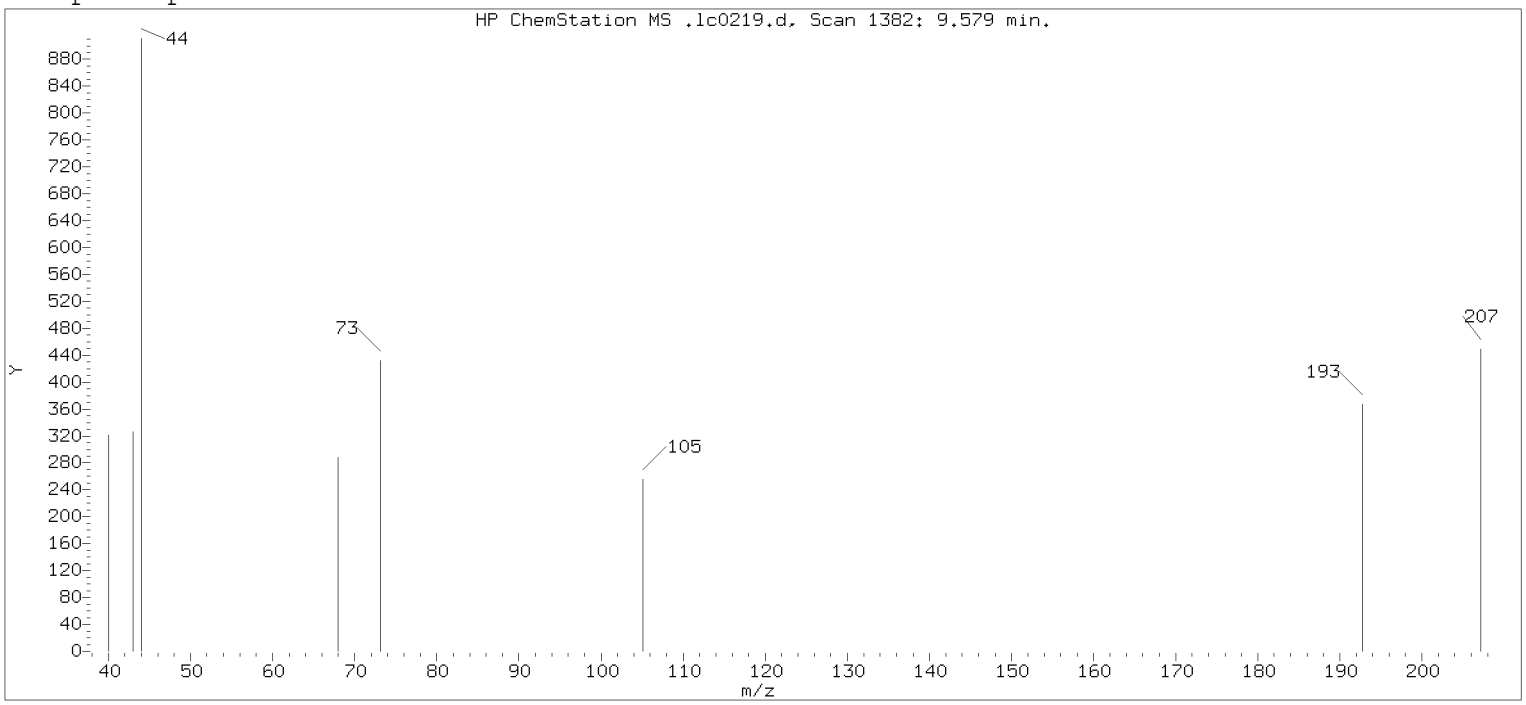
Compound Number : 79
Compound Name : Caprolactam
Scan Number : 1375
Retention Time (minutes) : 9.541
Quant Ion : 113.00
Area (flag) : 966M
On-Column Amount (ng/ul) : 0.0831
Integration start scan : 1372 Integration stop scan: 1382
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

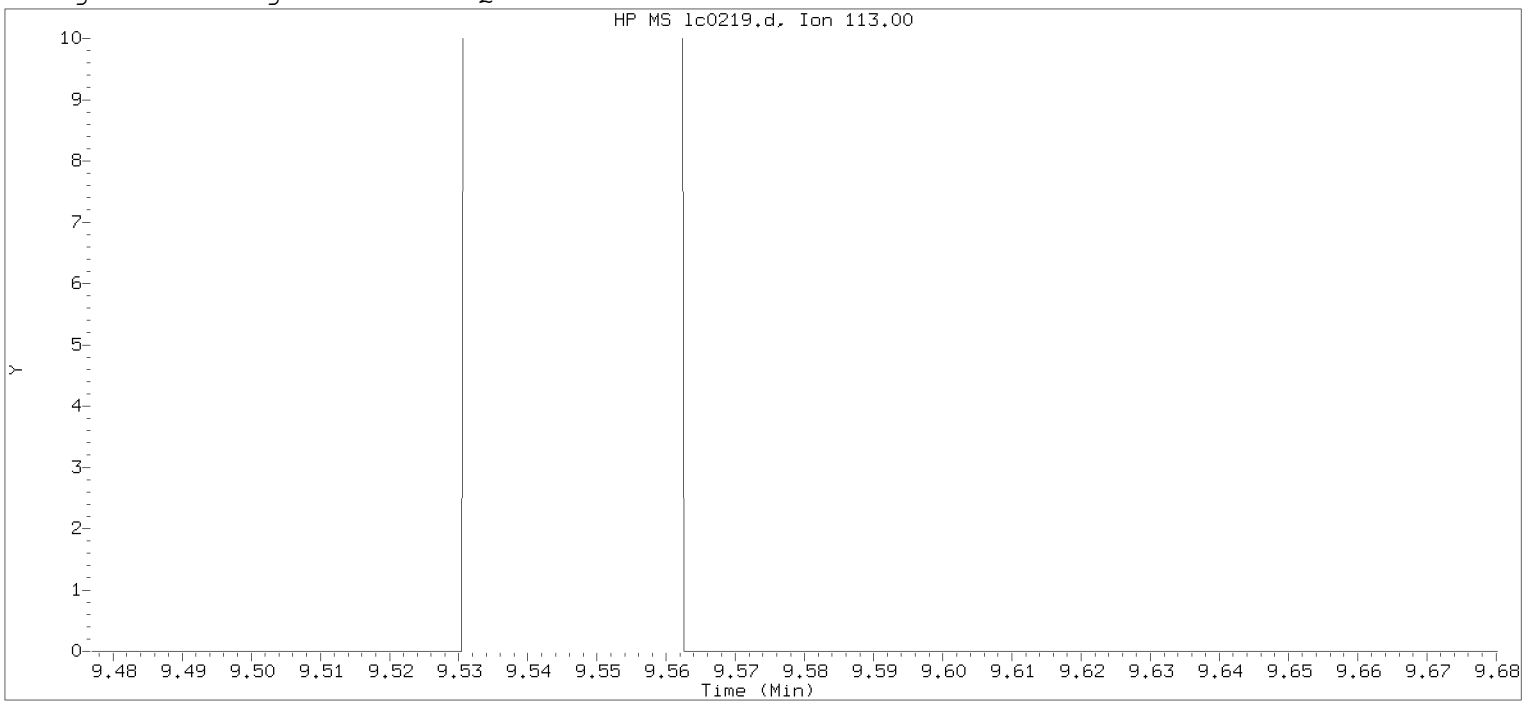
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

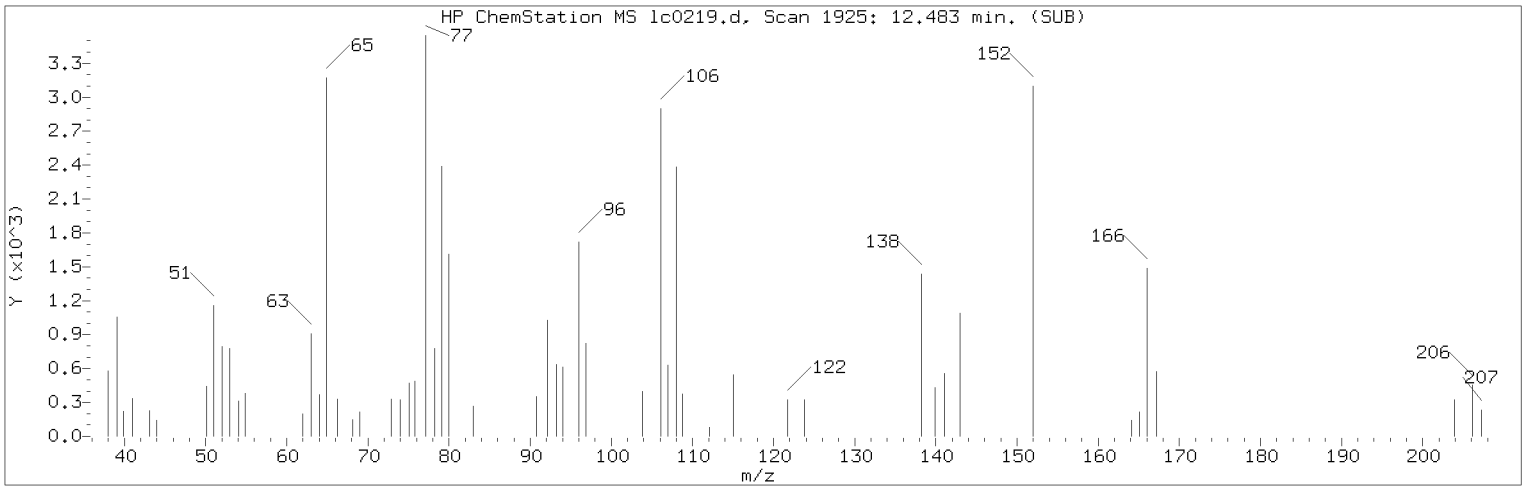
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

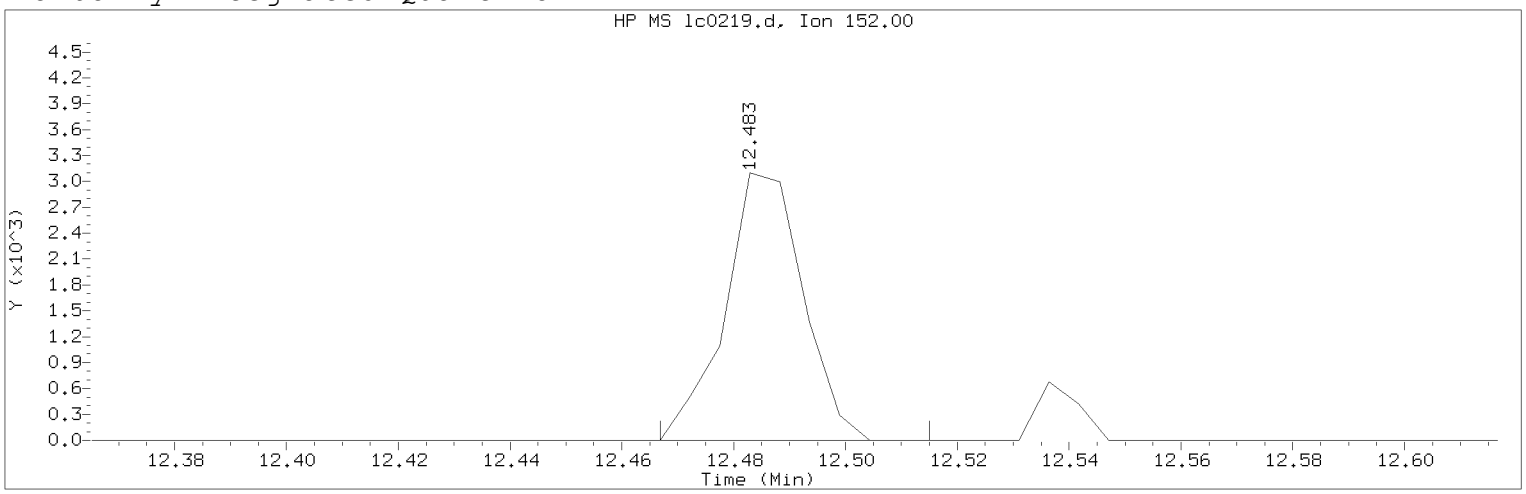
Compound Number : 79
Compound Name : Caprolactam
Expected RT (minutes) : 9.578
Quant Ion : 113.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

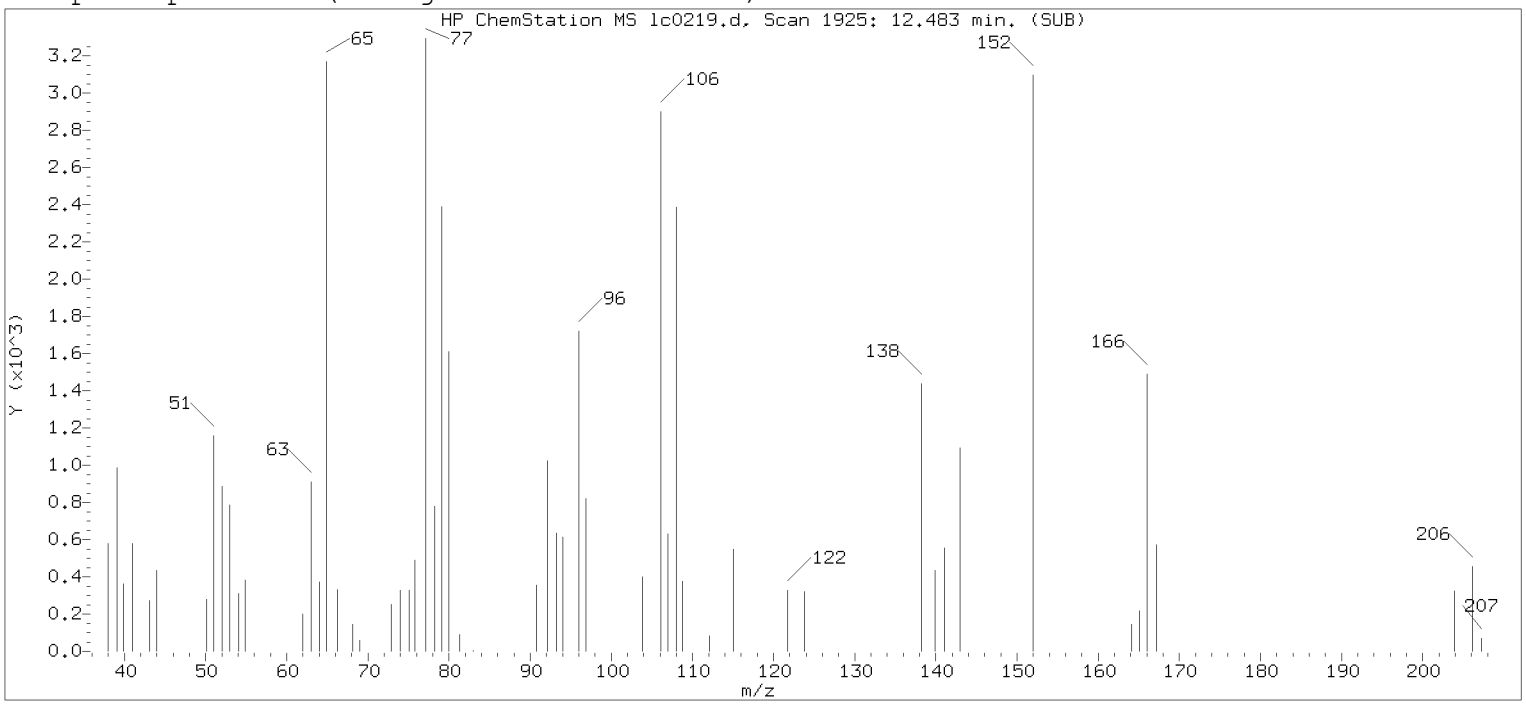
Compound Number : 133
Compound Name : 5-Nitro-o-toluidine
Scan Number : 1925
Retention Time (minutes) : 12.483
Quant Ion : 152.00
Area (flag) : 3000M
On-Column Amount (ng/ul) : 0.1274
Integration start scan : 1921 Integration stop scan: 1930
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

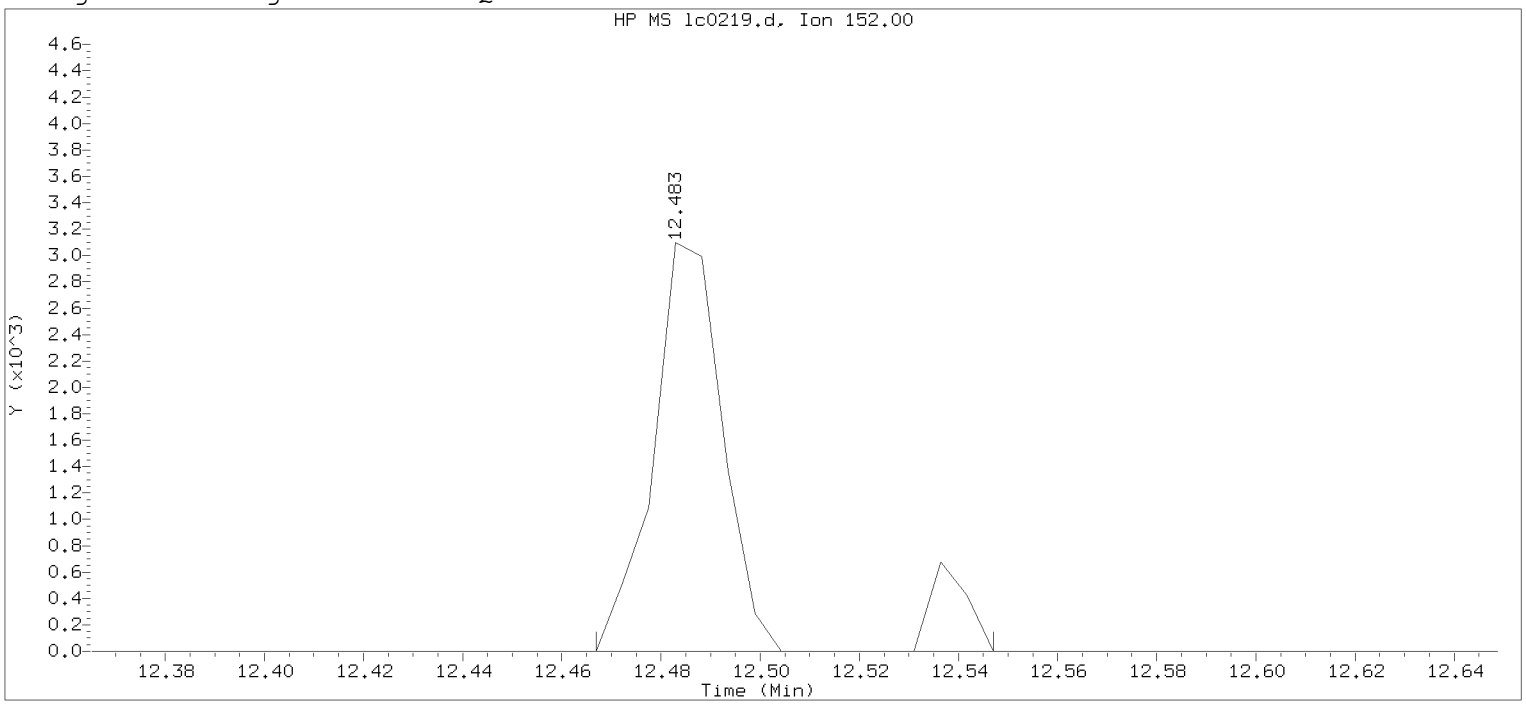
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

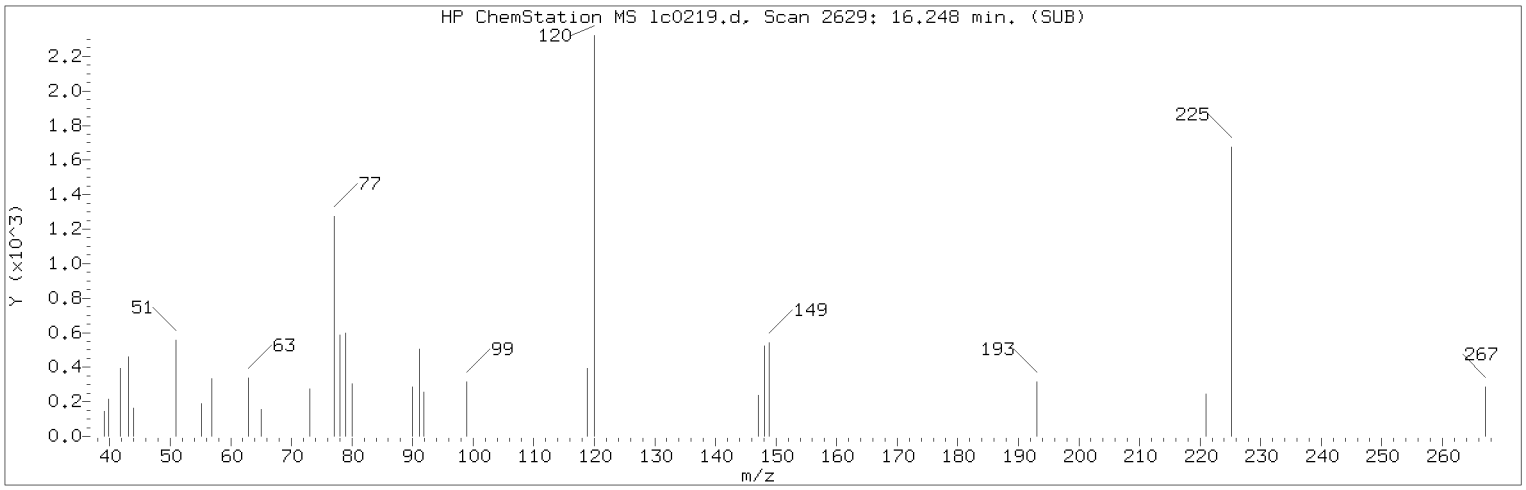
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

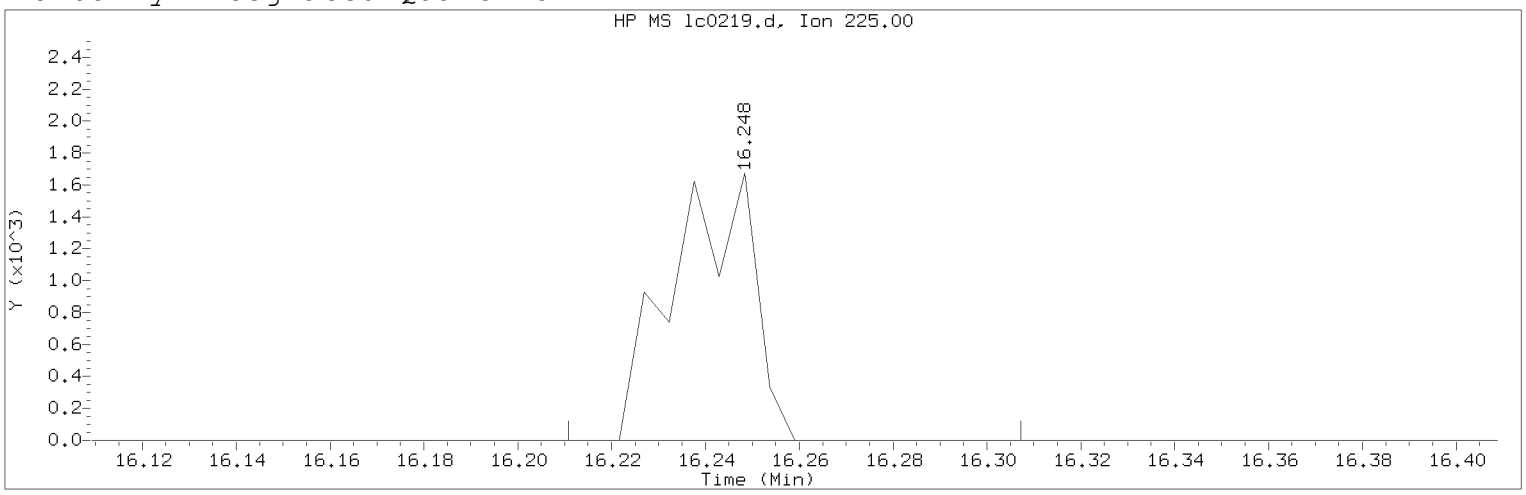
Compound Number : 133
Compound Name : 5-Nitro-o-toluidine
Scan Number : 1925
Retention Time (minutes) : 12.483
Quant Ion : 152.00
Area : 3352
On-column Amount (ng/ul) : 0.1510
Integration start scan : 1921 Integration stop scan: 1936
Y at integration start : 0 Y at integration end: 0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:04 art12405

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

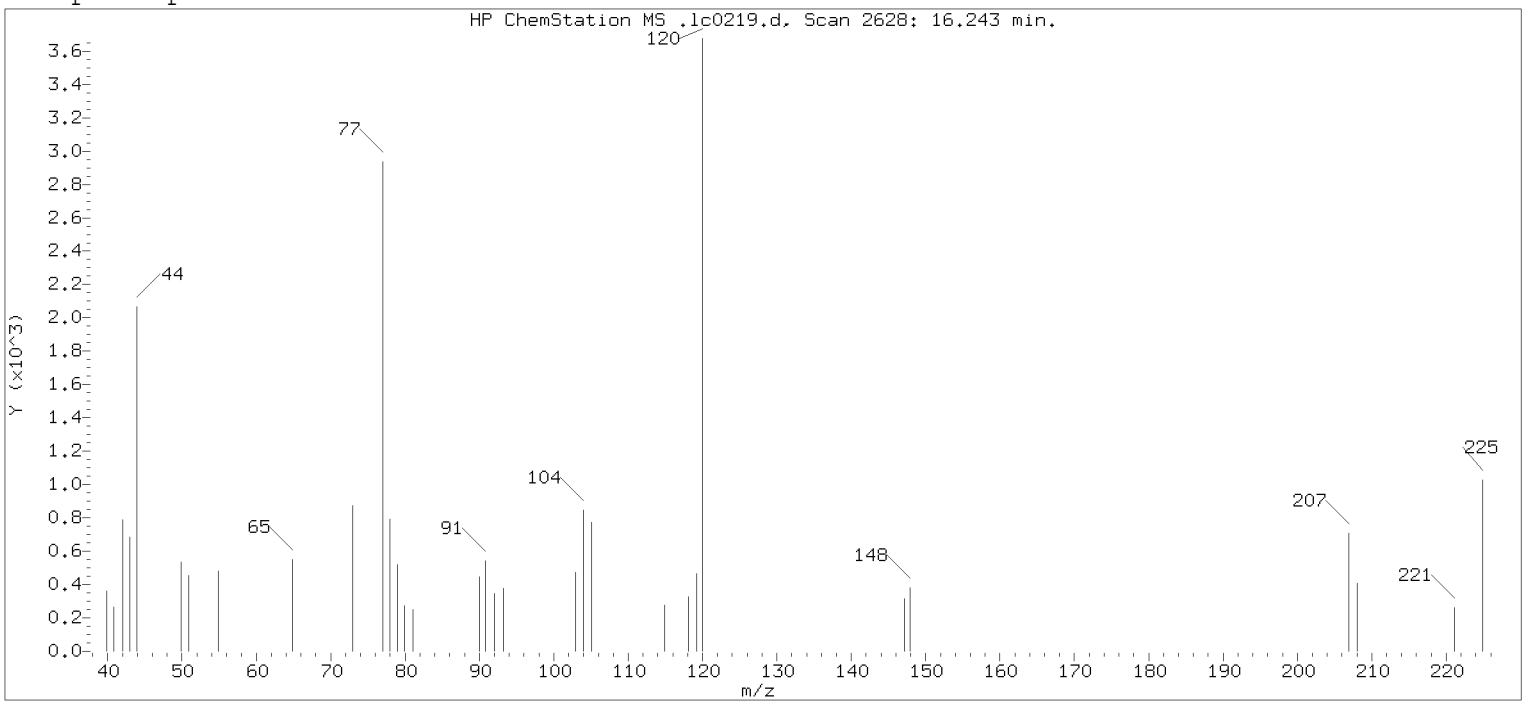
Compound Number : 187
Compound Name : p-Dimethylaminoazobenzene
Scan Number : 2629
Retention Time (minutes) : 16.248
Quant Ion : 225.00
Area (flag) : 2030M
On-Column Amount (ng/ul) : 0.0840
Integration start scan : 2621 Integration stop scan: 2639
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: missed peak

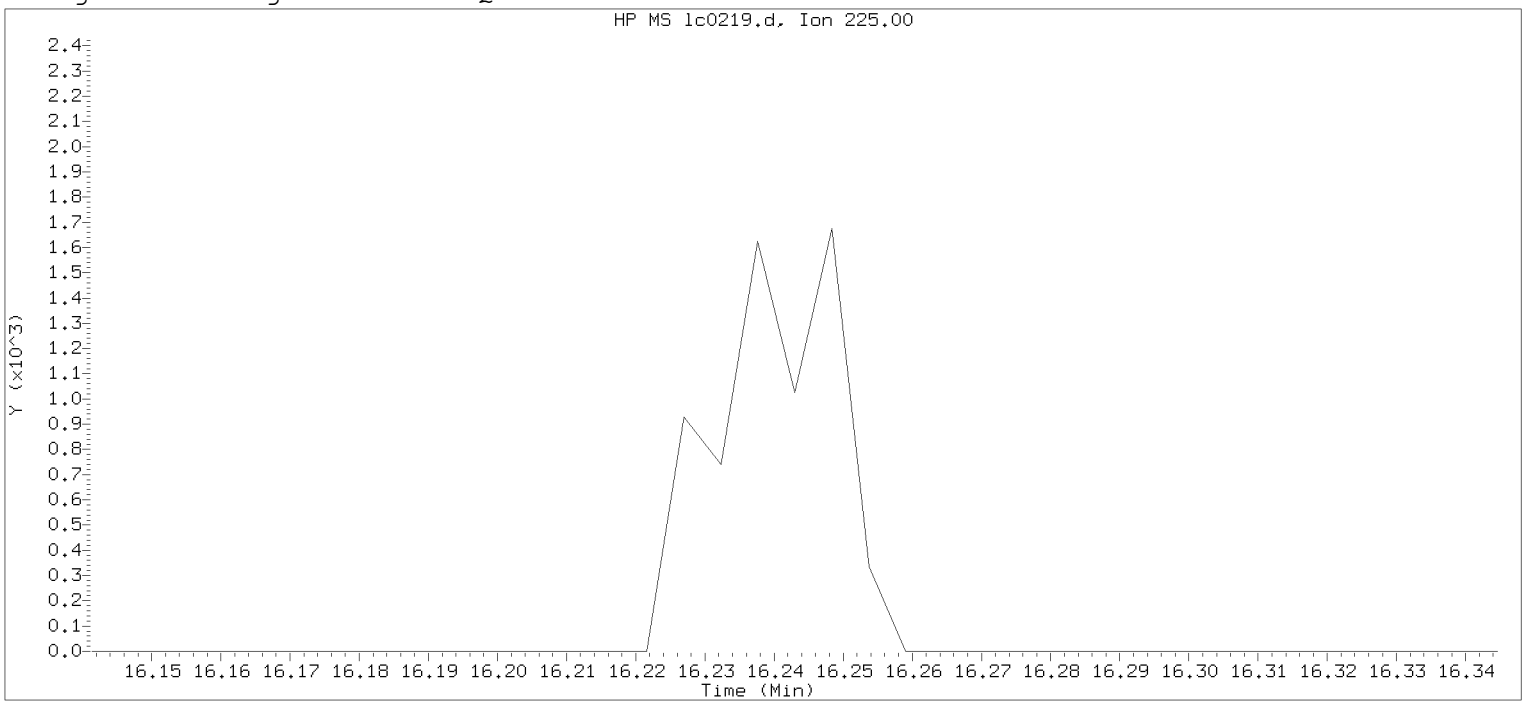
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:13.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum



Original Integration of Quant Ion



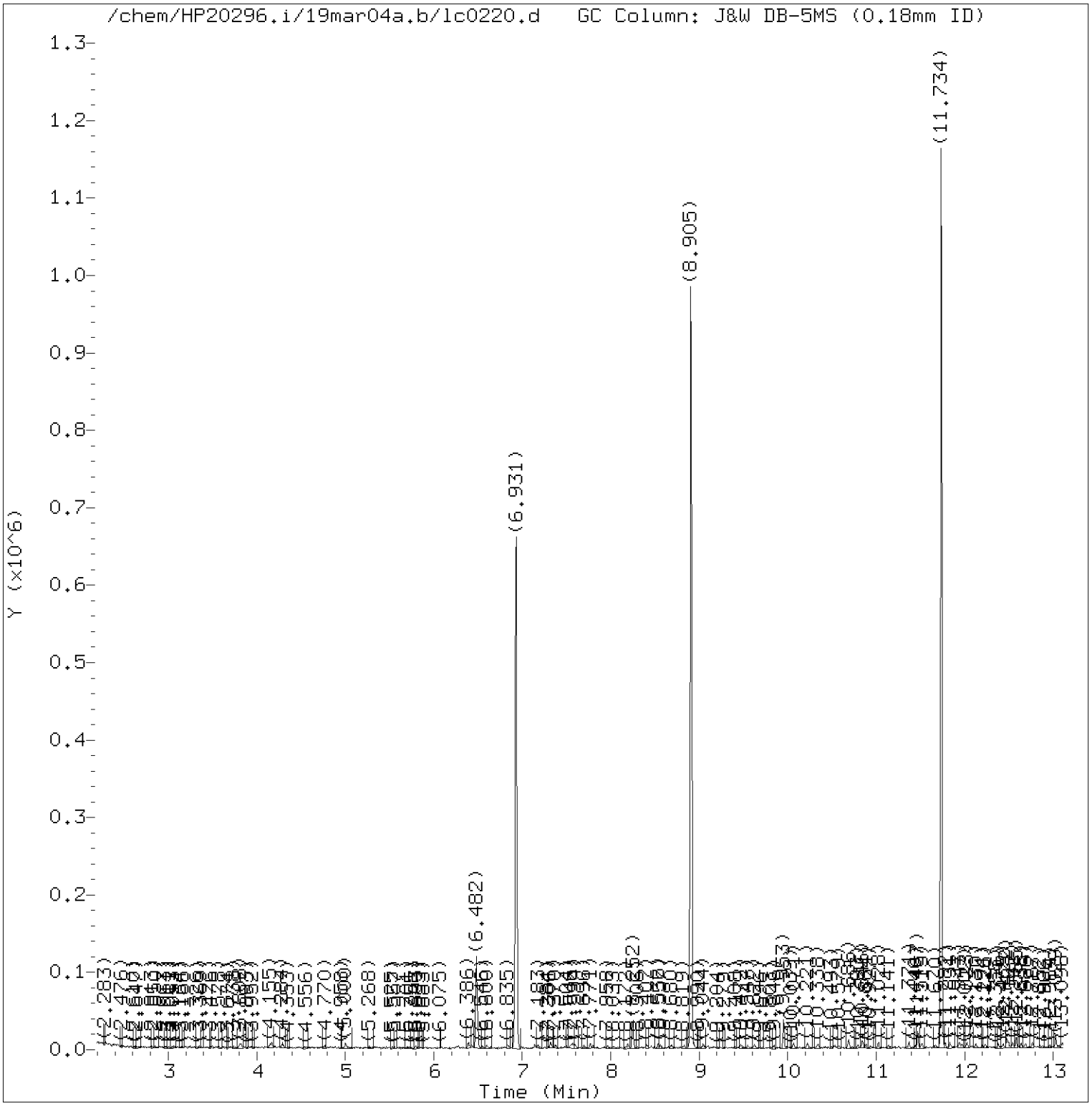
Data File: /chem/HP20296.i/19mar04a.b/lc0219.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:01 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: mdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.125 Lab Sample ID: rvSTD0439

Compound Number : 187
Compound Name : p-Dimethylaminoazobenzene
Expected RT (minutes) : 16.243
Quant Ion : 225.00

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:13.
Target 3.5 esignature user ART34 at 2019.03.05



Total Ion Chromatogram (TIC)

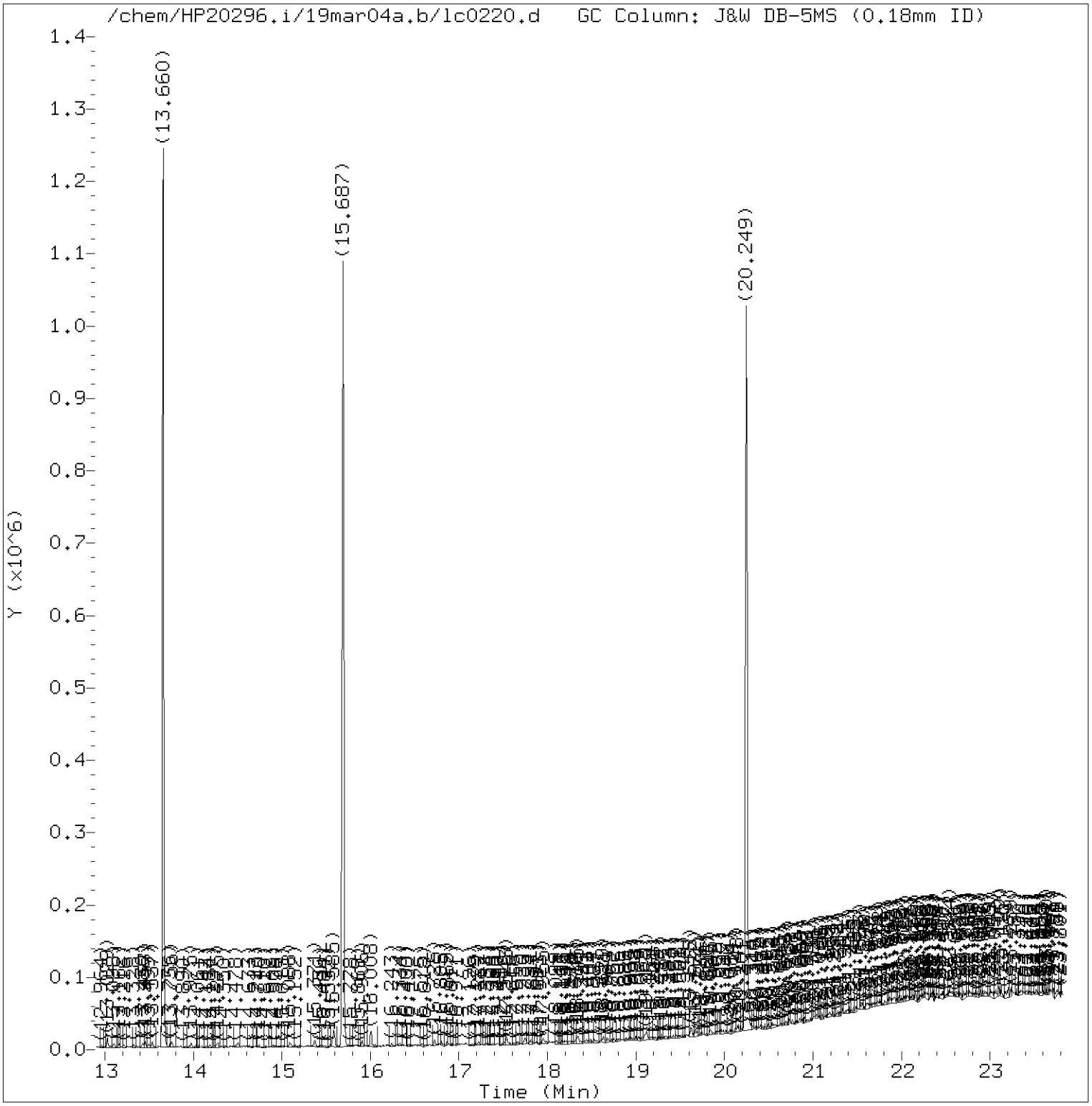
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:07 art12405

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:14.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:07 art12405

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:14.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:07 art12405

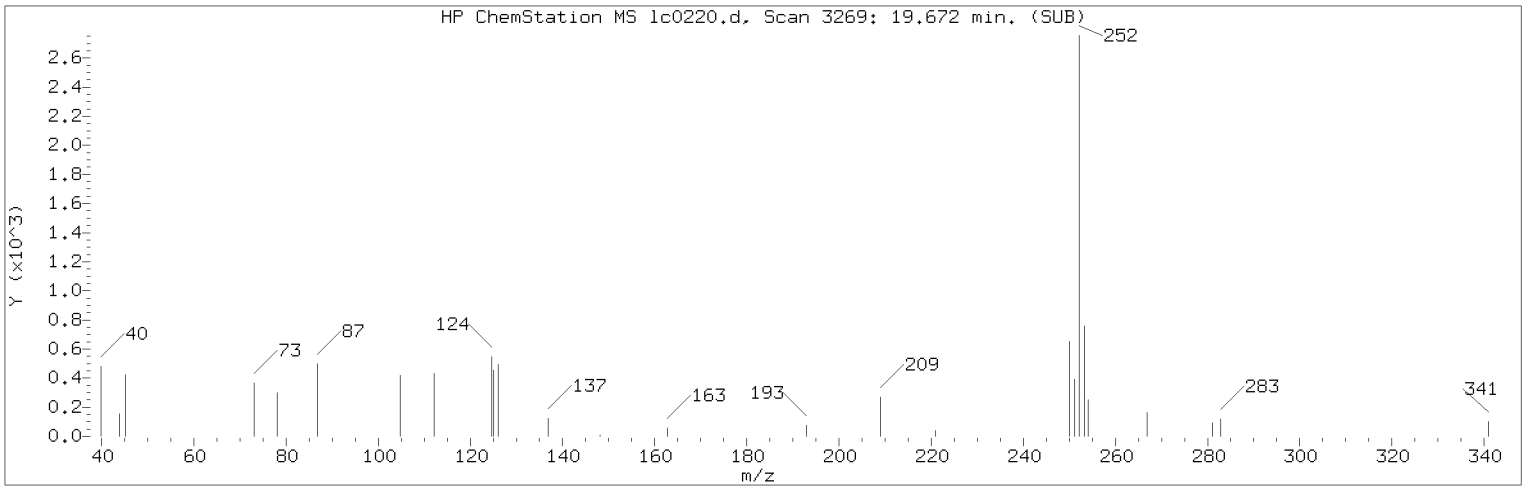
Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	138146	5.000
45)$Nitrobenzene-d5	(2)	7.766	82	2824	0.053
68)*Naphthalene-d8	(2)	8.905	136	530202	5.000
69) Naphthalene	(2)	8.942	128	3552	0.029
86) 2-Methylnaphthalene	(2)	10.066	142	2483	0.031
87) 1-Methylnaphthalene	(2)	10.226	142	2238	0.030
96)$2-Fluorobiphenyl	(3)	10.691	172	5014	0.058
99) 2-Chloronaphthalene	(3)	10.852	162	2120	0.027
114) Acenaphthylene	(3)	11.515	152	2676	0.025
118)*Acenaphthene-d10	(3)	11.734	164	258234	5.000
119) Acenaphthene	(3)	11.782	153	2226	0.028
131) Fluorene	(3)	12.472	166	2086	0.025
150) Hexachlorobenzene	(4)	13.162	284	375	0.015
158)*Phenanthrene-d10	(4)	13.660	188	491915	5.000
160) Phenanthrene	(4)	13.692	178	2643	0.021
162) Anthracene	(4)	13.756	178	3185	0.026
227) Total PAHs	(6)			54631	0.477
178) Fluoranthene	(4)	15.366	202	4161	0.031
180)*Pyrene-d10	(5)	15.692	212	496522	5.000
182) Pyrene	(5)	15.719	202	3889	0.028
184)$Terphenyl-d14	(5)	16.003	244	8375	0.097
200) Benzo(a)anthracene	(5)	17.757	228	3140	0.024
201) Chrysene	(5)	17.816	228	2860	0.023
211) Benzo(b)fluoranthene	(6)	19.629	252	3602	0.027
213) Benzo(k)fluoranthene	(6)	19.672	252	3458A	0.028
216) Benzo(a)pyrene	(6)	20.148	252	2986M	0.024
218)*Perylene-d12	(6)	20.249	264	505107	5.000
224) Indeno(1,2,3-cd)pyrene	(6)	21.870	276	3191M	0.026
225) Dibenz(a,h)anthracene	(6)	21.918	278	2707	0.022
226) Benzo(g,h,i)perylene	(6)	22.282	276	3548	0.028

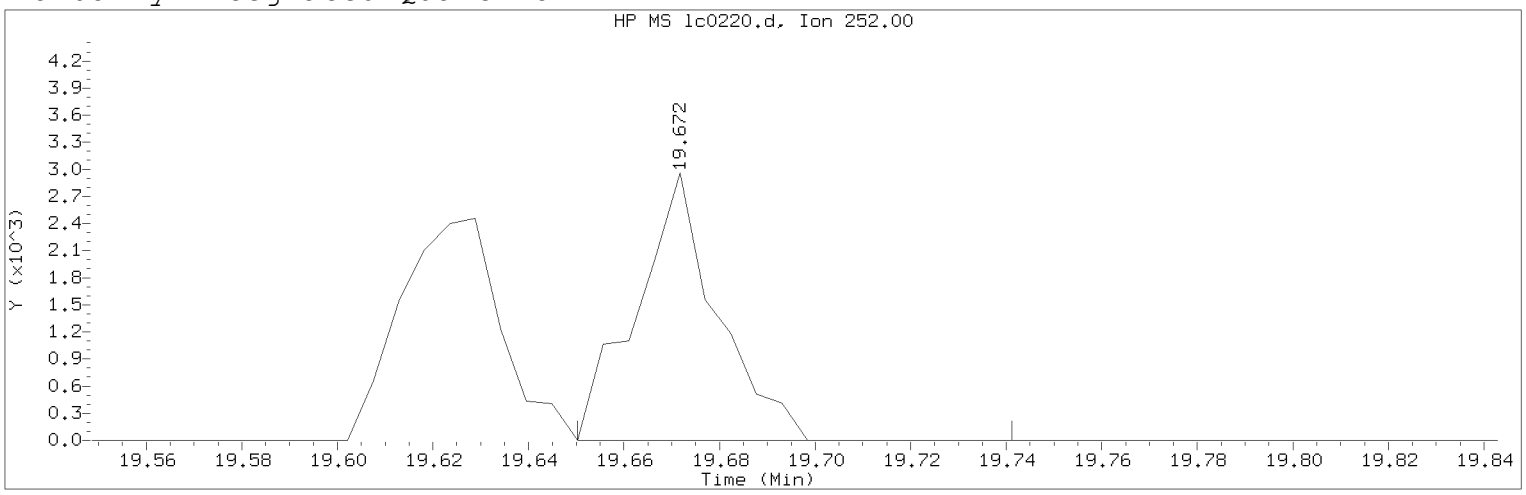
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:14.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:07 art12405

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

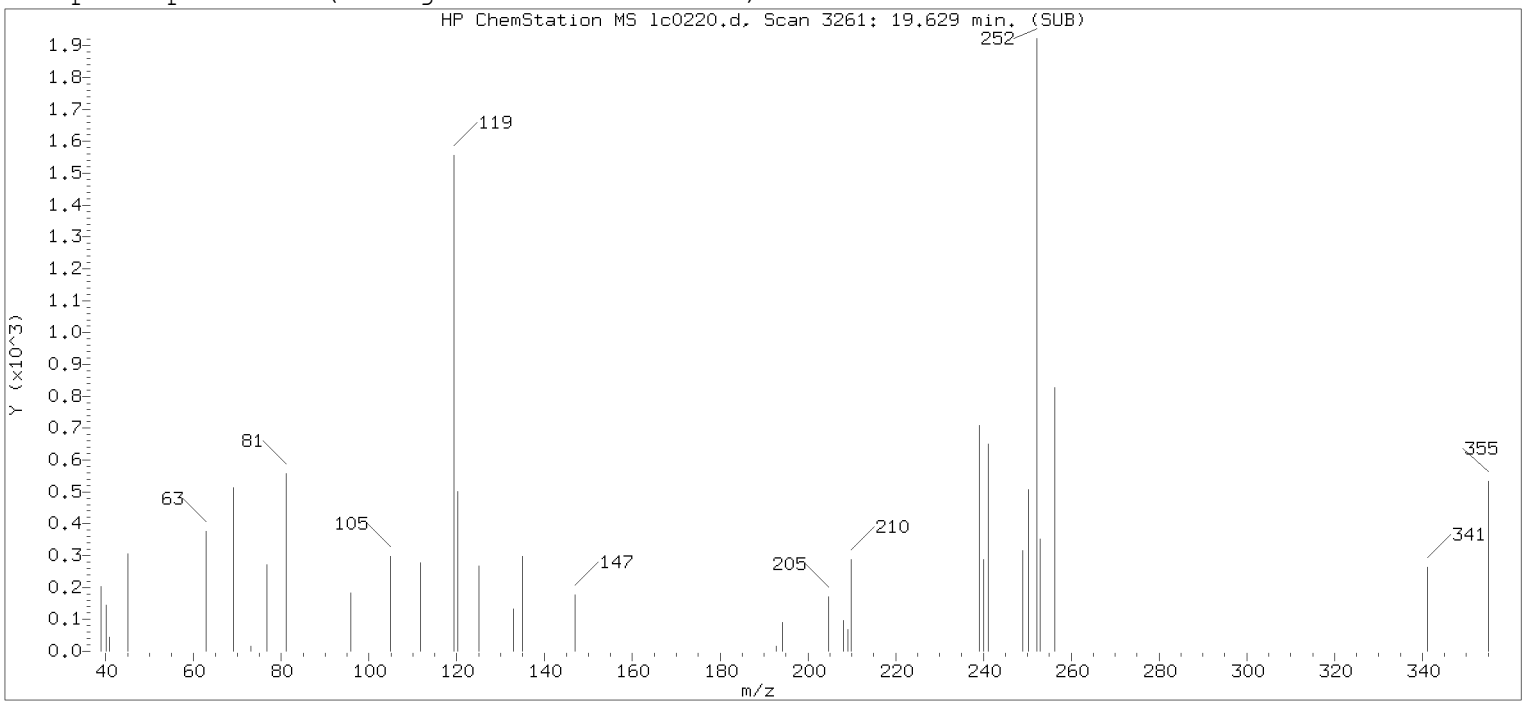
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3269
Retention Time (minutes) : 19.672
Quant Ion : 252.00
Area (flag) : 3458A
On-Column Amount (ng/ul) : 0.0276
Integration start scan : 3264 Integration stop scan: 3281
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

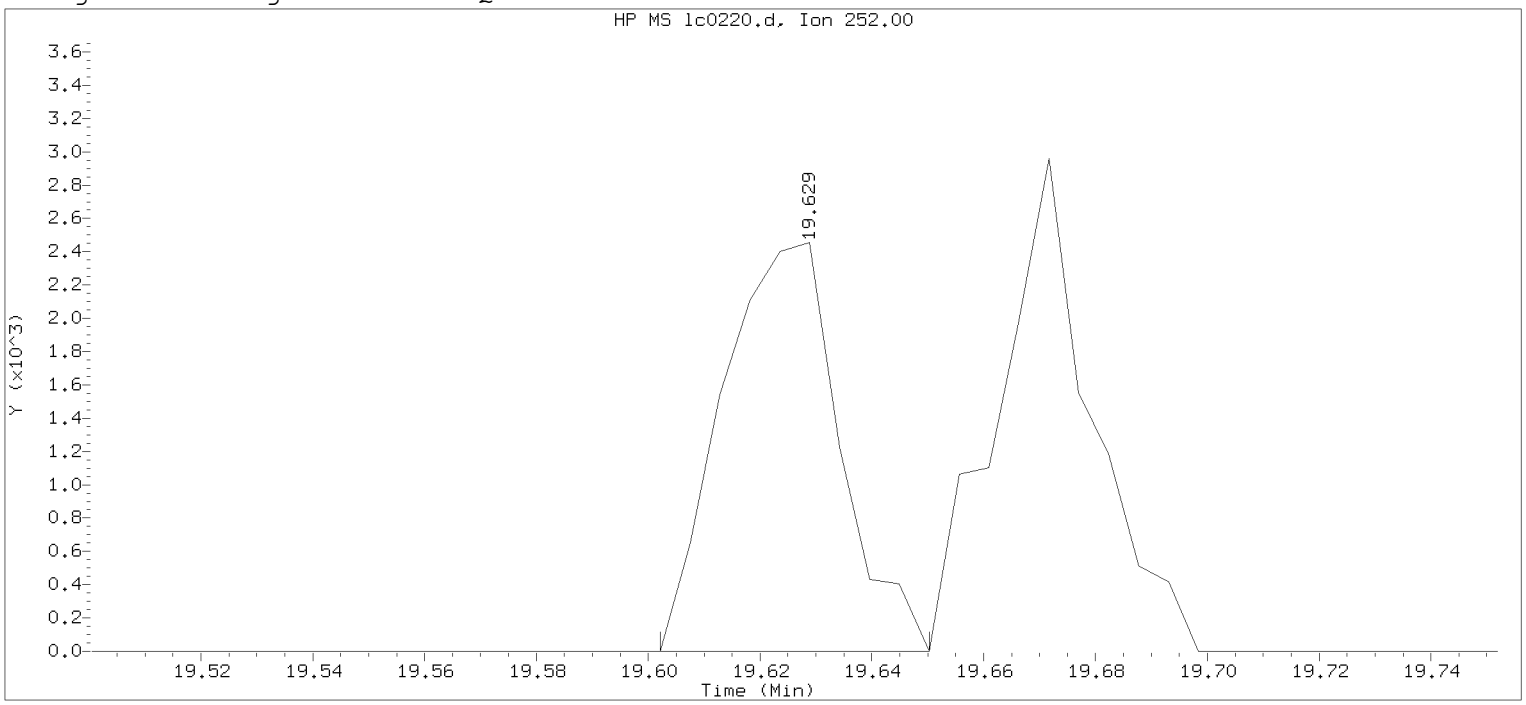
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:14.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

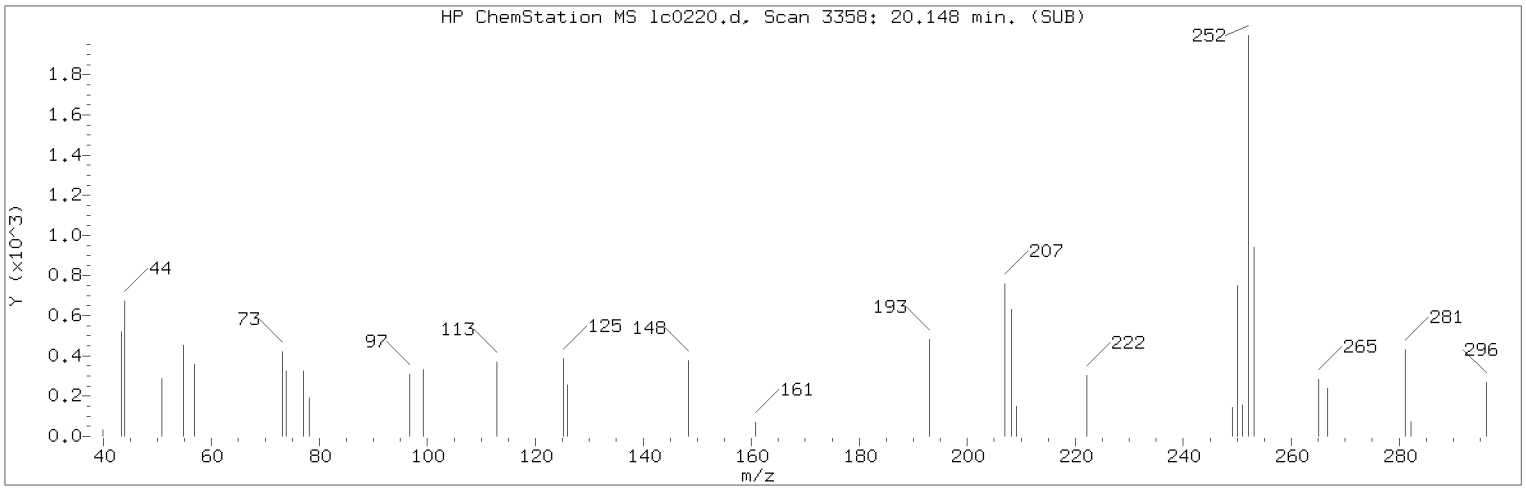
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

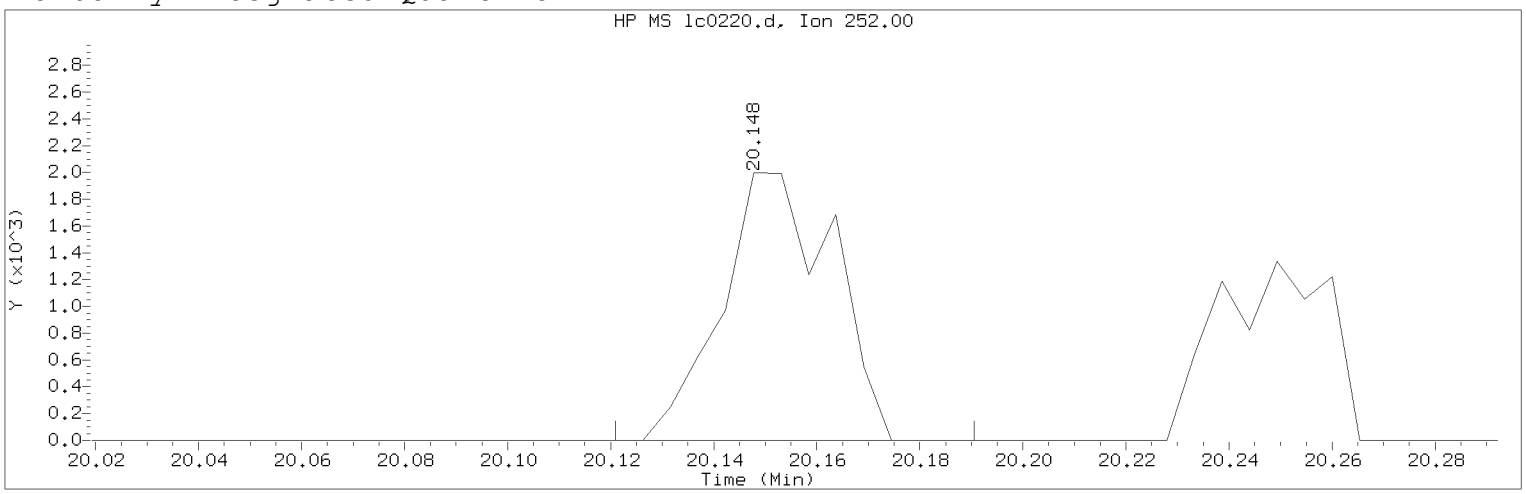
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3261		
Retention Time (minutes)	: 19.629		
Quant Ion	: 252.00		
Area	: 3602		
On-column Amount (ng/ul)	: 0.0288		
Integration start scan	: 3255	Integration stop scan:	3264
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:14.
Target 3.5 esignature user ART34 at 2019.03.07

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:07 art12405

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

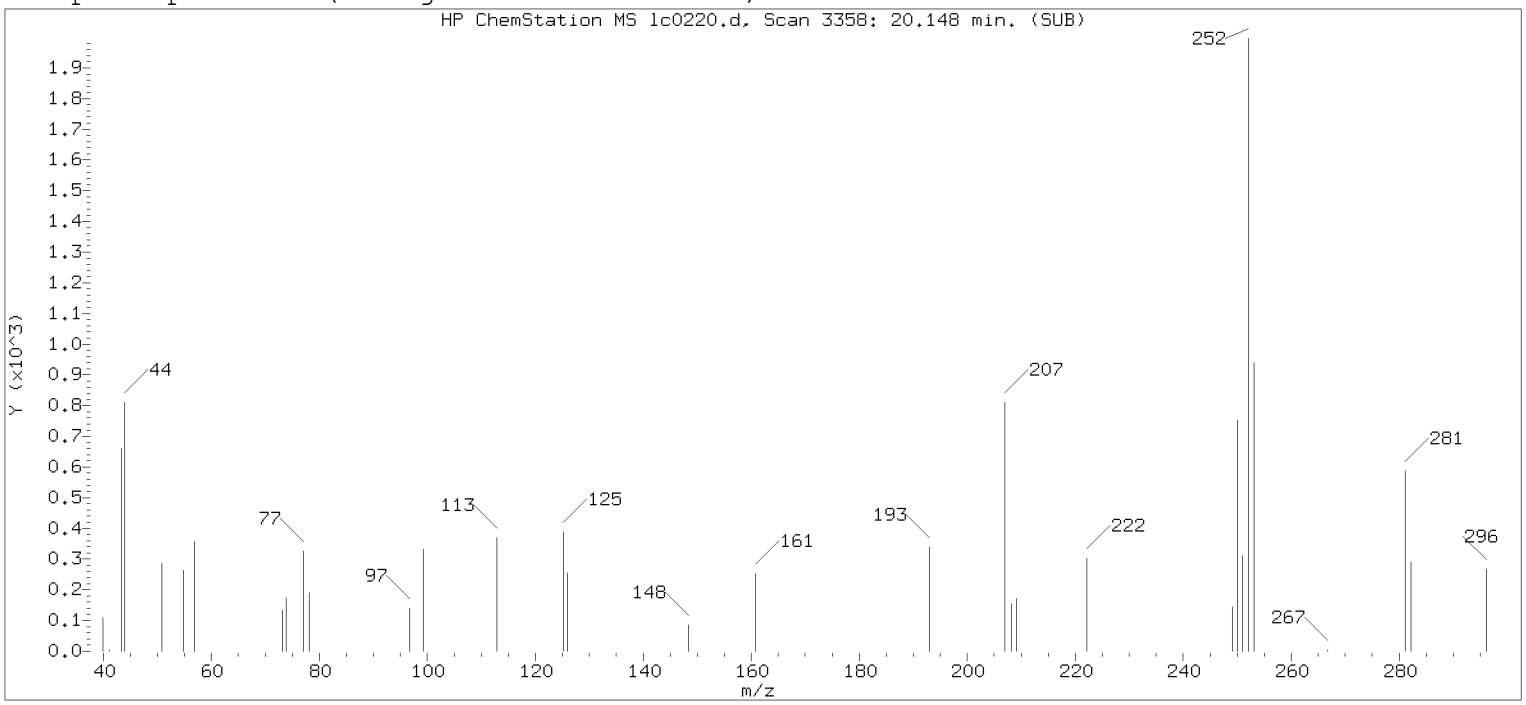
Compound Number : 216
Compound Name : Benzo(a)pyrene
Scan Number : 3358
Retention Time (minutes) : 20.148
Quant Ion : 252.00
Area (flag) : 2986M
On-Column Amount (ng/ul) : 0.0242
Integration start scan : 3352 Integration stop scan: 3365
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

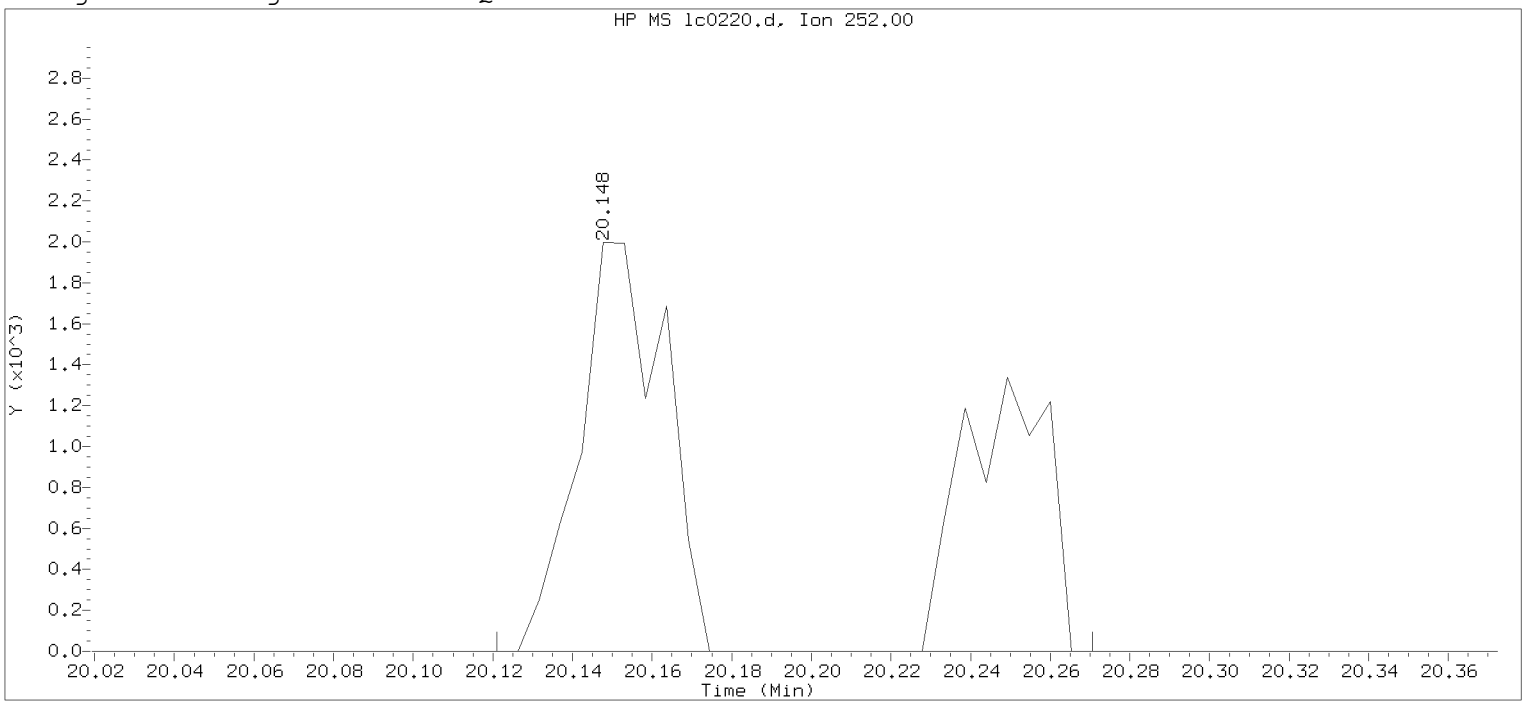
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:14.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

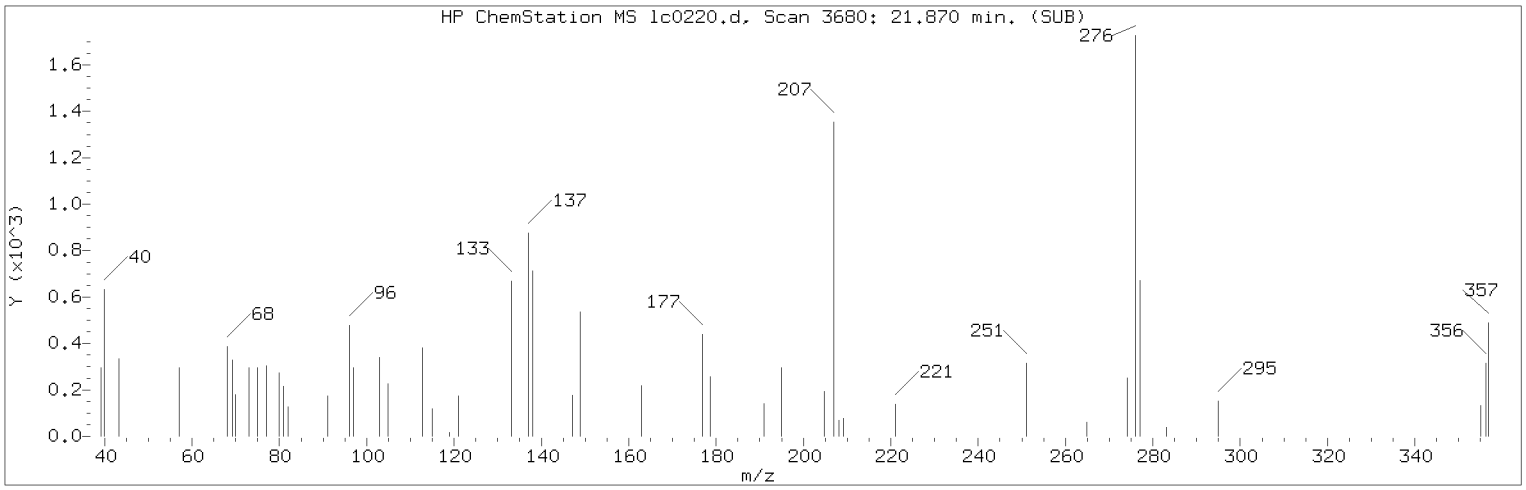
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

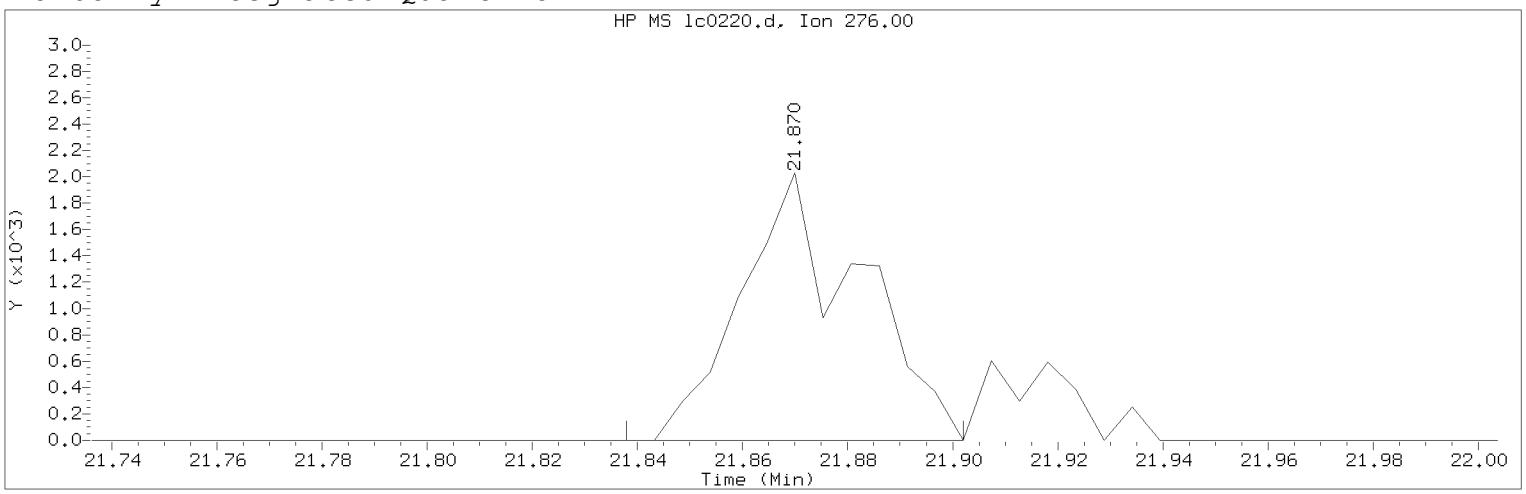
Compound Number	: 216		
Compound Name	: Benzo(a)pyrene		
Scan Number	: 3358		
Retention Time (minutes)	: 20.148		
Quant Ion	: 252.00		
Area	: 4997		
On-column Amount (ng/ul)	: 0.0424		
Integration start scan	: 3352	Integration stop scan:	3380
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:14.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 17:07 art12405

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

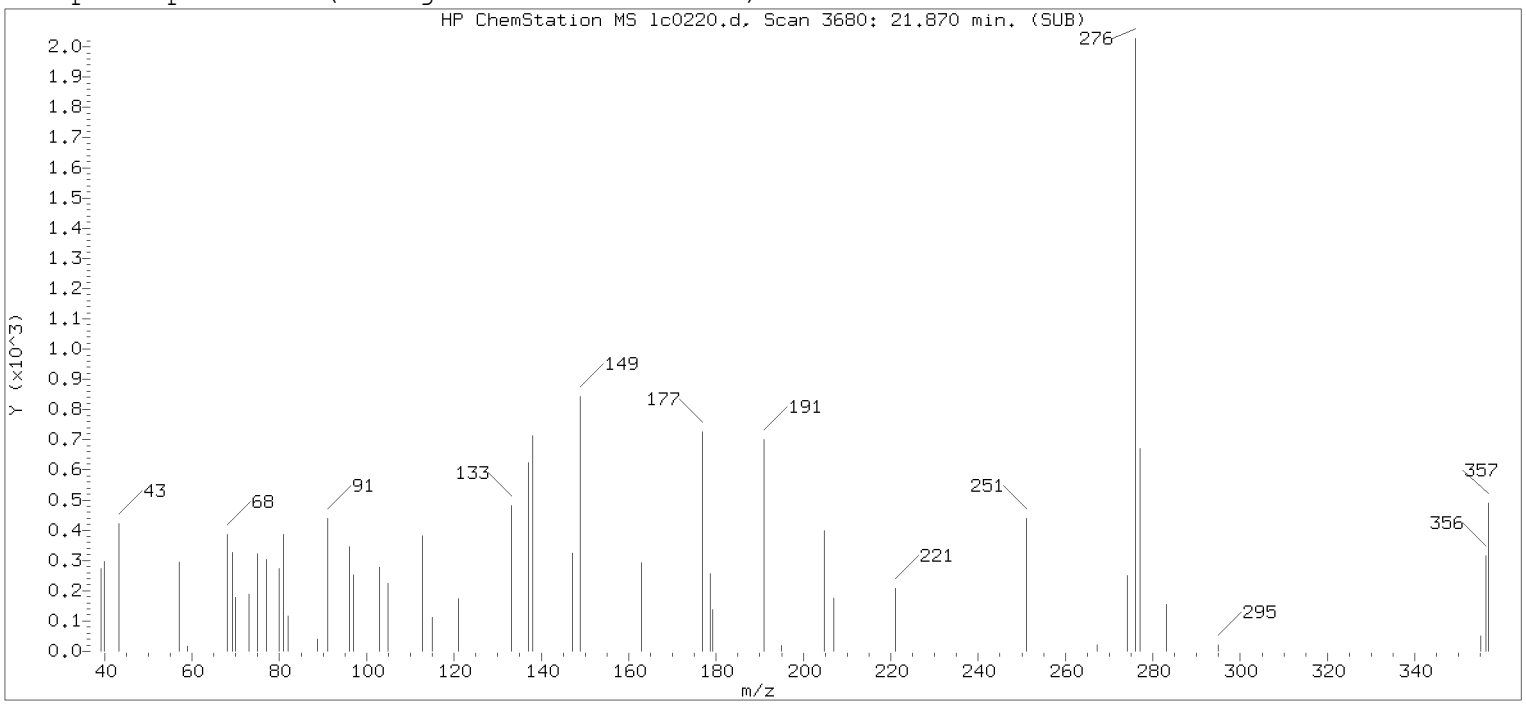
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3680
Retention Time (minutes) : 21.870
Quant Ion : 276.00
Area (flag) : 3191M
On-Column Amount (ng/ul) : 0.0261
Integration start scan : 3673 Integration stop scan: 3685
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

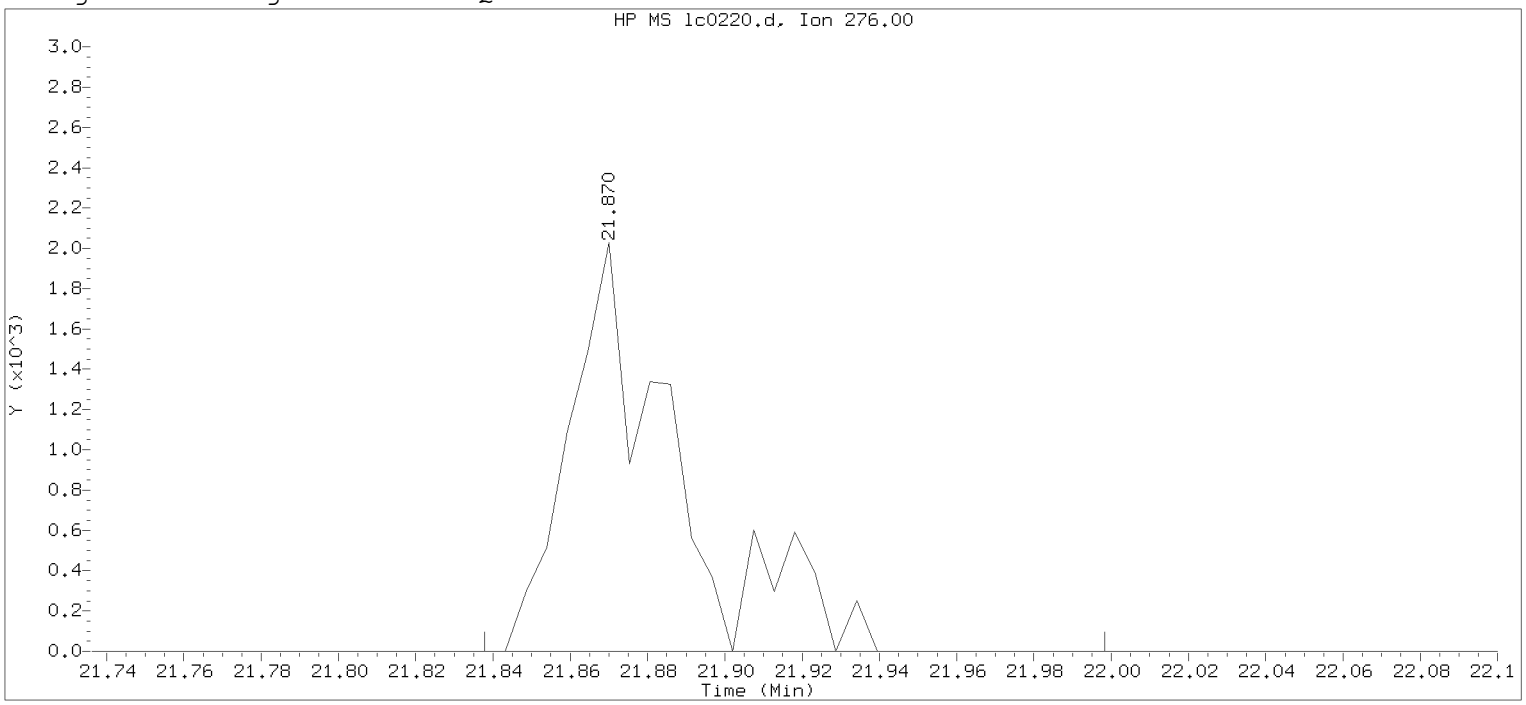
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:14.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



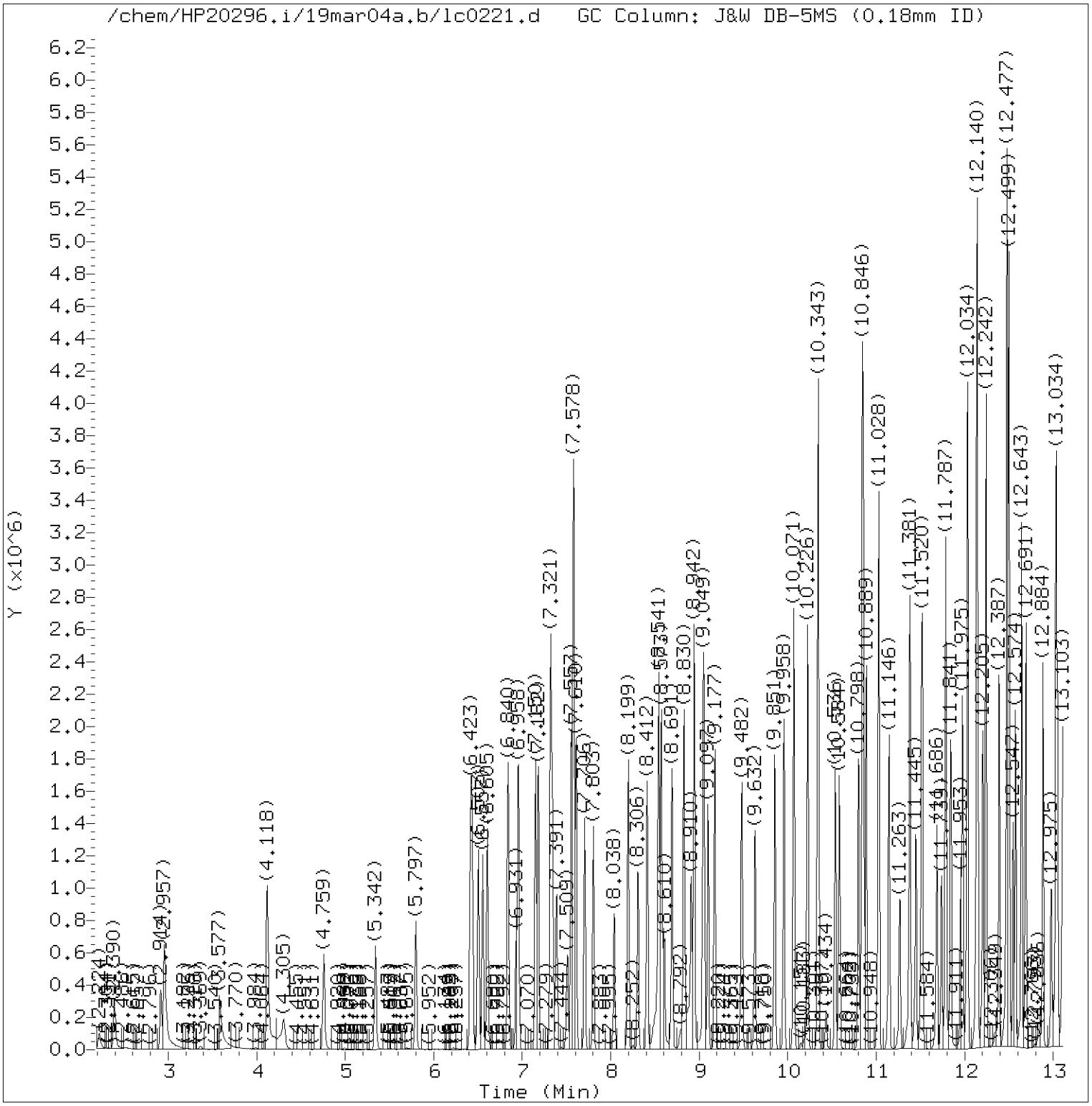
Data File: /chem/HP20296.i/19mar04a.b/lc0220.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:30 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: pahmdlall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD0.025 Lab Sample ID: rvSTD0439

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3680		
Retention Time (minutes)	: 21.870		
Quant Ion	: 276.00		
Area	: 3875		
On-column Amount (ng/ul)	: 0.0333		
Integration start scan	: 3673	Integration stop scan:	3703
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:14.
Target 3.5 esignature user ART at 2019.03.05



Total Ion Chromatogram (TIC)

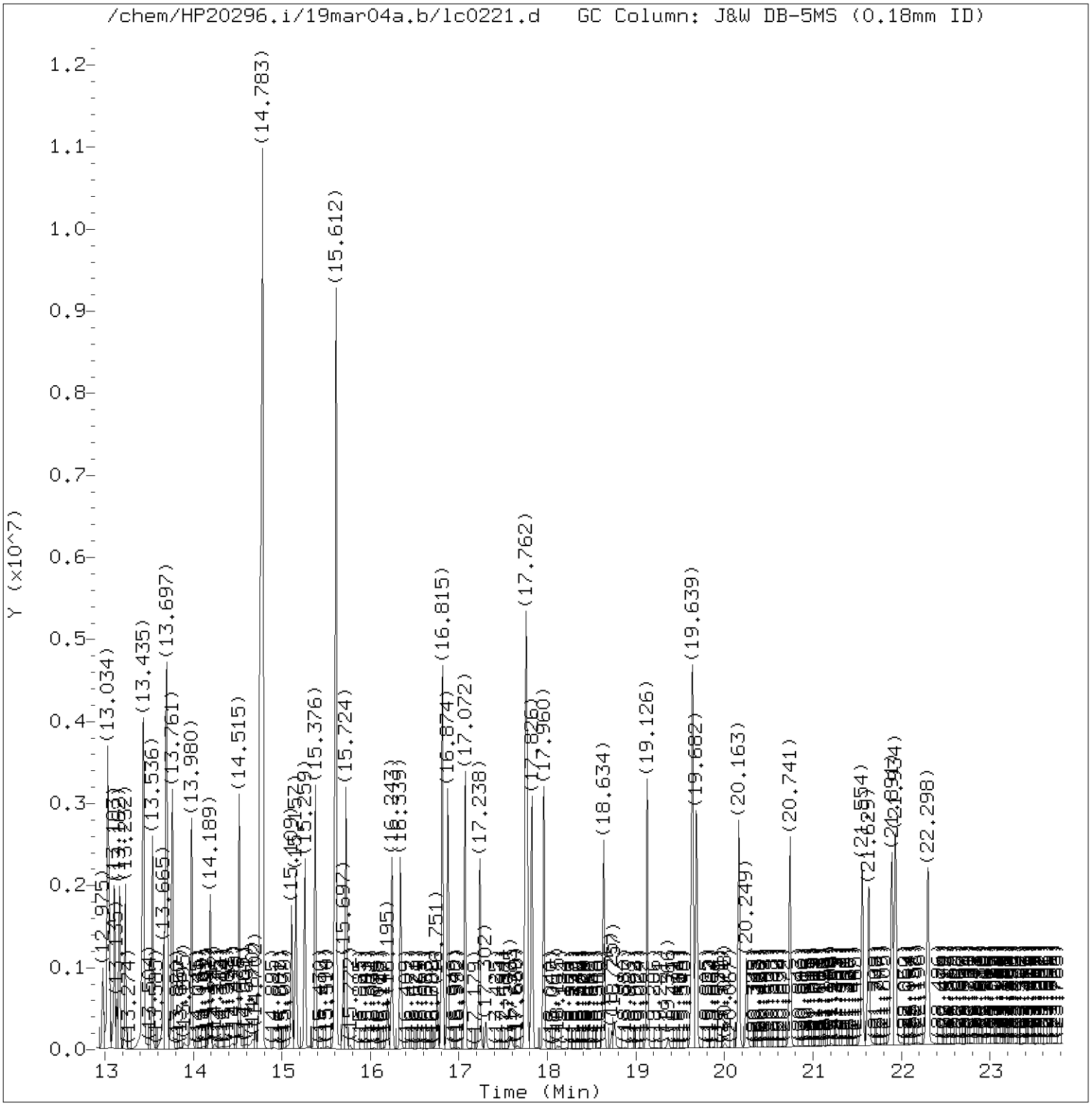
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	2.390	88	240352	12.377
5) N-Nitrosodimethylamine	(1)	2.914	74	372794	12.518
6) Pyridine	(1)	2.957	79	592217	11.385
8) 2-Picoline	(1)	4.118	93	655774	12.036
9) N-Nitrosomethylethylamine	(1)	4.305	88	258166	11.688
10) Methyl methanesulfonate	(1)	4.759	80	340281	12.452
14) N-Nitrosodiethylamine	(1)	5.342	102	261600	12.129
43) Total Cresols	(1)	5.660	100	1068346	24.005
16) Ethyl methanesulfonate	(1)	5.797	109	271757	11.867
19) Phenol	(1)	6.417	94	783990	12.059
20) Aniline	(1)	6.434	93	798518	10.467
23) bis(2-Chloroethyl)ether	(1)	6.557	93	590166	12.081
24) 2-Chlorophenol	(1)	6.605	128	504816	12.217
25) 1,3-Dichlorobenzene	(1)	6.840	146	556526	12.354
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	137003	5.000
27) 1,4-Dichlorobenzene	(1)	6.958	146	565181	12.257
28) Benzyl alcohol	(1)	7.150	108	367080	13.313
29) 1,2-Dichlorobenzene	(1)	7.182	146	535121	12.371
31) Indene	(1)	7.321	115	964121	17.031
32) 2-Methylphenol	(1)	7.337	108	490798	11.745
100) Isosafrole	(3)	7.383	162	422149	11.912
35) bis(2-Chloroisopropyl)ether	(1)	7.391	45	554410	11.597
34) 2,2'-oxybis(1-Chloropropane)	(1)	7.391	45	554410	11.597
36) N-Nitrosopyrrolidine	(1)	7.514	100	274873	11.903
37) Acetophenone	(1)	7.557	105	819302	13.271
39) N-Nitroso-di-n-propylamine	(1)	7.578	70	436678	12.447
38) 4-Methylphenol	(1)	7.578	108	577548	12.260
40) N-Nitrosomorpholine	(1)	7.578	56	284946	11.899
41) o-Toluidine	(1)	7.610	106	857228	11.568
44) Hexachloroethane	(1)	7.701	117	238390	12.051
46) Nitrobenzene	(2)	7.803	77	638648	12.020
50) N-Nitrosopiperidine	(2)	8.043	114	245450	11.690
125) 2,4_2,6-Dinitrotoluenes	(3)	8.050	165	525787	25.434
52) Isophorone	(2)	8.199	82	1092746	11.955
53) 2-Nitrophenol	(2)	8.311	139	253144	12.230
59) O,O,O-Triethylphosphorothioate	(2)	8.541	198	235530	12.955
57) bis(2-Chloroethoxy)methane	(2)	8.573	93	733159	12.242
58) Benzoic acid	(2)	8.610	105	883691M	28.599
62) 2,4-Dichlorophenol	(2)	8.691	162	411866	12.238
151) Diallate trans/cis	(4)	8.775	86	489836	12.340

M = Compound was manually integrated.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
65) 1,2,4-Trichlorobenzene	(2)	8.830	180	441004	12.323
68)*Naphthalene-d8	(2)	8.910	136	519280	5.000
69) Naphthalene	(2)	8.942	128	1431325	11.950
70) 4-Chloroaniline	(2)	9.044	127	572662	12.030
71) 2,6-Dichlorophenol	(2)	9.054	162	386530	11.964
72) Hexachloropropene	(2)	9.097	213	313067	12.960
74) Hexachlorobutadiene	(2)	9.177	225	261570	12.721
78) Quinoline	(2)	9.482	129	869048	12.512
80) N-Nitrosodi-n-butylamine	(2)	9.632	84	401343	11.004
83) 4-Chloro-3-methylphenol	(2)	9.851	107	485032	12.298
85) Safrole	(2)	9.958	162	343609	11.843
86) 2-Methylnaphthalene	(2)	10.071	142	937389	12.121
87) 1-Methylnaphthalene	(2)	10.226	142	883163	12.202
89) 1,2,4,5-Tetrachlorobenzene	(3)	10.343	216	435935	12.570
91) cis-Isosafrole	(3)	10.434	162	46746	1.464
93) 2,4,6-Trichlorophenol	(3)	10.536	196	292443	12.445
95) 2,4,5-Trichlorophenol	(3)	10.584	196	307505	12.719
97) trans-Isosafrole	(3)	10.803	162	375403	10.448
98) 1,1'-Biphenyl	(3)	10.846	154	1129268	12.996
99) 2-Chloronaphthalene	(3)	10.857	162	922025	12.118
101) 1-Chloronaphthalene	(3)	10.889	162	797589	12.629
103) Diphenyl ether	(3)	11.028	170	591429	12.346
104) 2-Nitroaniline	(3)	11.033	138	282463	12.363
108) 1,4-Naphthoquinone	(3)	11.146	158	441112	15.247
109) 1,4-Dinitrobenzene	(3)	11.269	168	146329	12.754
110) Dimethylphthalate	(3)	11.381	163	966192	12.621
111) 1,3-Dinitrobenzene	(3)	11.381	168	154060	12.320
113) 2,6-Dinitrotoluene	(3)	11.451	165	220734	12.528
114) Acenaphthylene	(3)	11.520	152	1284859	12.486
117) 3-Nitroaniline	(3)	11.686	138	238548	12.120
118)*Acenaphthene-d10	(3)	11.739	164	248227	5.000
119) Acenaphthene	(3)	11.782	153	961135	12.663
120) 2,4-Dinitrophenol	(3)	11.841	184	288309	24.644
121) 4-Nitrophenol	(3)	11.953	109	192337	12.916
122) Pentachlorobenzene	(3)	11.975	250	368478	12.151
124) Dibenzofuran	(3)	12.034	168	1236946	12.528
123) 2,4-Dinitrotoluene	(3)	12.034	165	305053	12.906
126) 1-Naphthylamine	(3)	12.135	143	1560726	21.014
127) 2,3,4,6-Tetrachlorophenol	(3)	12.205	232	258421	13.136
129) Diethylphthalate	(3)	12.387	149	1010215	13.509

* = Compound is an internal standard.

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on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
131) Fluorene	(3)	12.477	166	963751	11.969
130) Thionazin	(3)	12.483	107	203370	13.051
133) 5-Nitro-o-toluidine	(3)	12.493	152	279096	12.684
132) 4-Chlorophenyl-phenylether	(3)	12.499	204	443415	12.184
134) 4-Nitroaniline	(3)	12.504	138	229258	11.376
135) 4,6-Dinitro-2-methylphenol	(4)	12.547	198	178426	12.505
137) NDPA as diphenylamine	(4)	12.643	169	809377	12.141
136) N-Nitrosodiphenylamine	(4)	12.643	169	809377	12.141
139) 1,2-Diphenylhydrazine	(4)	12.691	77	1249892	12.536
142) Tetraethyldithiopyrophosphate	(4)	12.884	97	199559	12.235
144) 1,3,5-Trinitrobenzene	(4)	12.980	213	99726M	11.564
145) Diallate (peak 1)	(4)	13.028	86	371167	8.916
146) Phorate	(4)	13.034	75	742972	12.188
147) Phenacetin	(4)	13.050	108	553956	11.814
148) 4-Bromophenyl-phenylether	(4)	13.109	248	261858	11.940
149) Diallate (peak 2)	(4)	13.135	86	118669	3.424
150) Hexachlorobenzene	(4)	13.162	284	288966	11.698
152) Dimethoate	(4)	13.232	87	478184	12.037
154) Pentachlorophenol	(4)	13.424	266	206096	12.617
155) 4-Aminobiphenyl	(4)	13.435	169	1010833	13.225
156) Pentachloronitrobenzene	(4)	13.440	237	131113	12.189
157) Pronamide	(4)	13.536	173	464163	12.653
158)*Phenanthrene-d10	(4)	13.659	188	480654	5.000
159) Dinoseb	(4)	13.681	211	255397	11.713
160) Phenanthrene	(4)	13.692	178	1480248	12.180
162) Anthracene	(4)	13.761	178	1440822	12.107
168) Carbazole	(4)	13.980	167	1333901	12.546
169) Methyl parathion	(4)	14.189	109	406836	12.746
170) Di-n-butylphthalate	(4)	14.515	149	1699360	12.067
172) Parathion	(4)	14.751	109	275711M	13.402
173) 4-Nitroquinoline-1-oxide	(4)	14.783	190	2354645A	158.769
227) Total PAHs	(6)	15.000	100	24614835	219.030
176) Isodrin	(4)	15.157	193	169609	12.487
178) Fluoranthene	(4)	15.376	202	1576433	12.045
179) Benzidine	(5)	15.612	184	4727587	54.857
180)*Pyrene-d10	(5)	15.692	212	471441	5.000
182) Pyrene	(5)	15.724	202	1601657	12.200
187) p-Dimethylaminoazobenzene	(5)	16.243	225	291036	13.318
190) Chlorobenzilate	(5)	16.339	139	558992M	12.663
192) 3,3'-Dimethylbenzidine	(5)	16.815	212	2092327	23.663

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

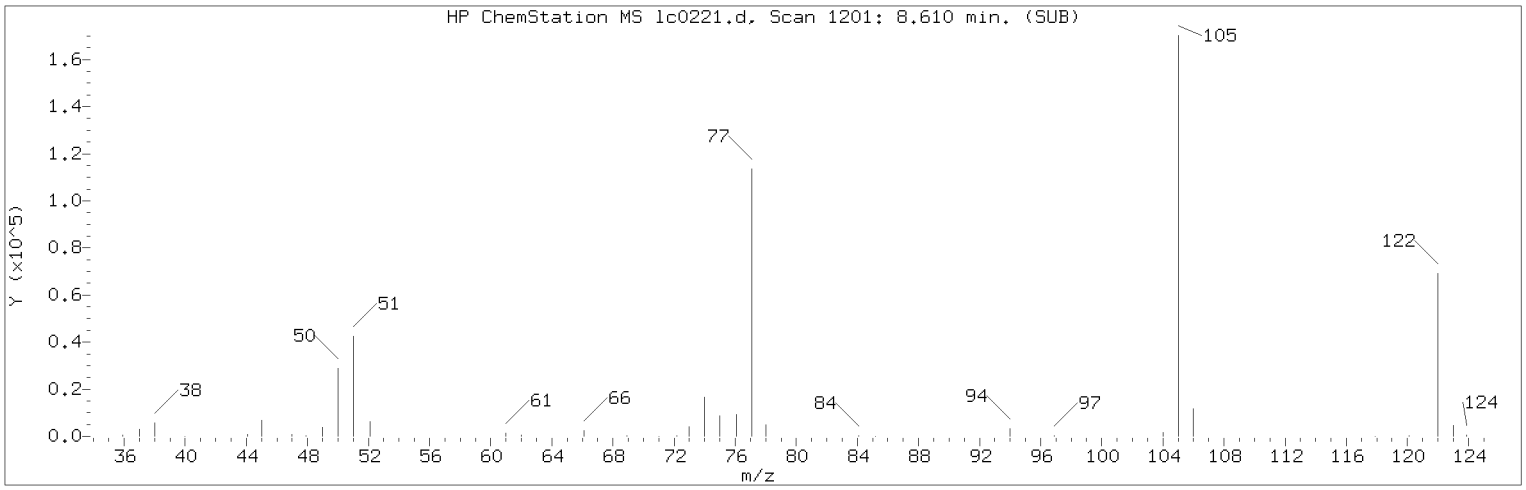
Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
193) Butylbenzylphthalate	(5)	16.874	149	830553	12.663
196) 2-Acetylaminofluorene	(5)	17.238	181	699537	11.861
198) 3,3'-Dichlorobenzidine	(5)	17.751	252	610840	13.122
200) Benzo(a)anthracene	(5)	17.762	228	1561555	12.379
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.767	231	331272	12.858
201) Chrysene	(5)	17.826	228	1469871	12.570
204) bis(2-Ethylhexyl)phthalate	(5)	17.960	149	1215642	12.529
208) 6-Methylchrysene	(5)	18.634	242	1011320	11.970
210) Di-n-octylphthalate	(6)	19.126	149	2118178	12.199
211) Benzo(b)fluoranthene	(6)	19.634	252	1590776	12.080
212) 7,12-Dimethylbenz[a]anthracene	(6)	19.639	256	712164	12.972
213) Benzo(k)fluoranthene	(6)	19.687	252	1509860A	12.108
216) Benzo(a)pyrene	(6)	20.163	252	1452463	11.856
218)*Perylene-d12	(6)	20.249	264	502362	5.000
220) 3-Methylcholanthrene	(6)	20.741	268	785791	12.563
222) Dibenz(a,h)acridine	(6)	21.554	279	1232607	11.832
223) Dibenz(a,j)acridine	(6)	21.634	279	1135128	11.107
224) Indeno(1,2,3-cd)pyrene	(6)	21.891	276	1479546M	12.148
225) Dibenz(a,h)anthracene	(6)	21.934	278	1518844	12.246
226) Benzo(g,h,i)perylene	(6)	22.298	276	1471138	11.720

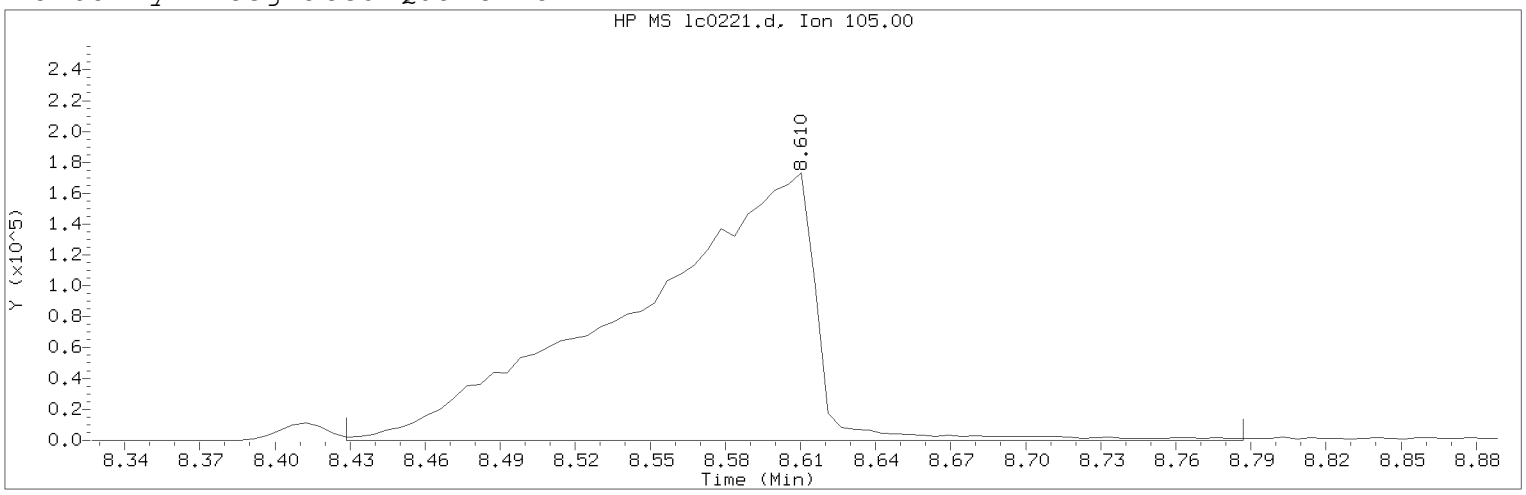
M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

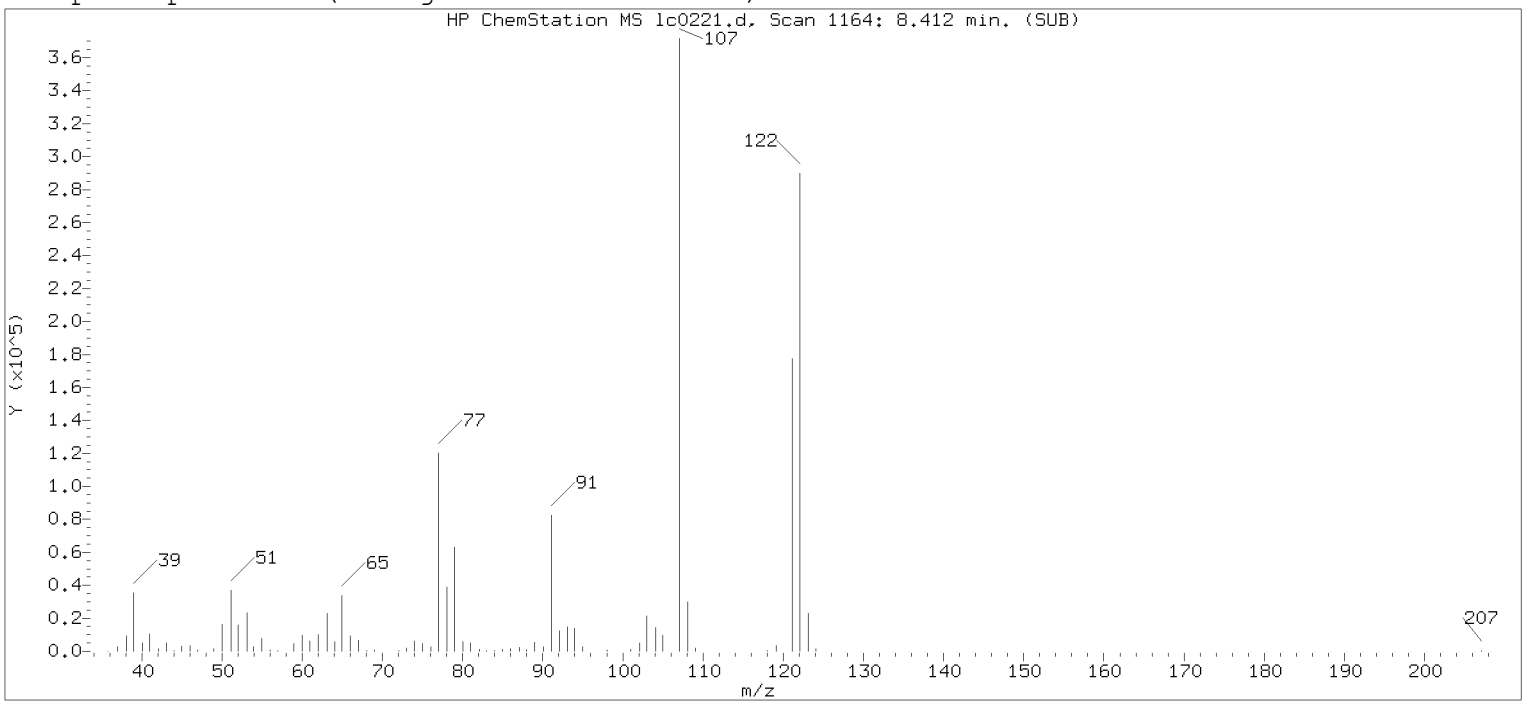
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1201
Retention Time (minutes) : 8.610
Quant Ion : 105.00
Area (flag) : 883691M
On-Column Amount (ng/ul) : 28.5988
Integration start scan : 1166 Integration stop scan: 1233
Y at integration start : -90 Y at integration end: -90

Reason for manual integration: improper integration

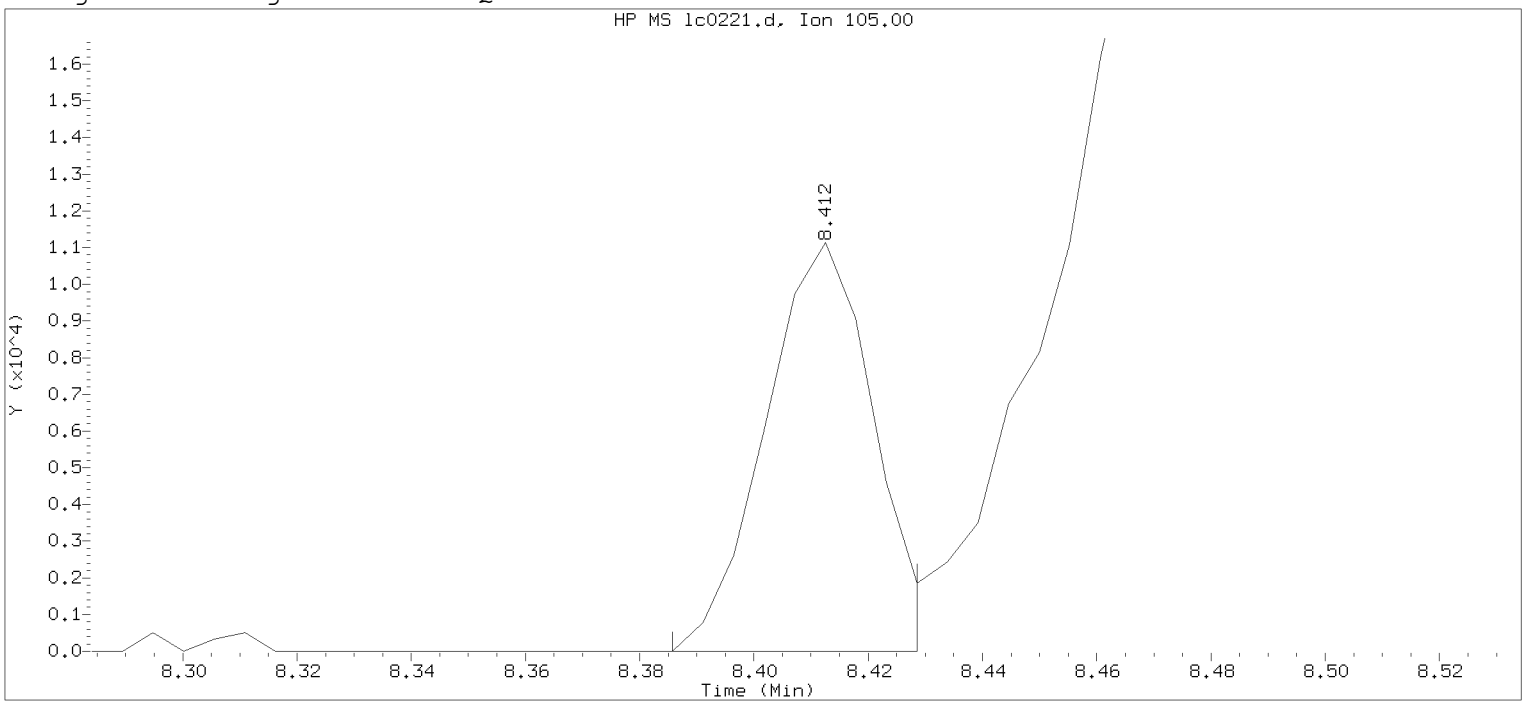
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

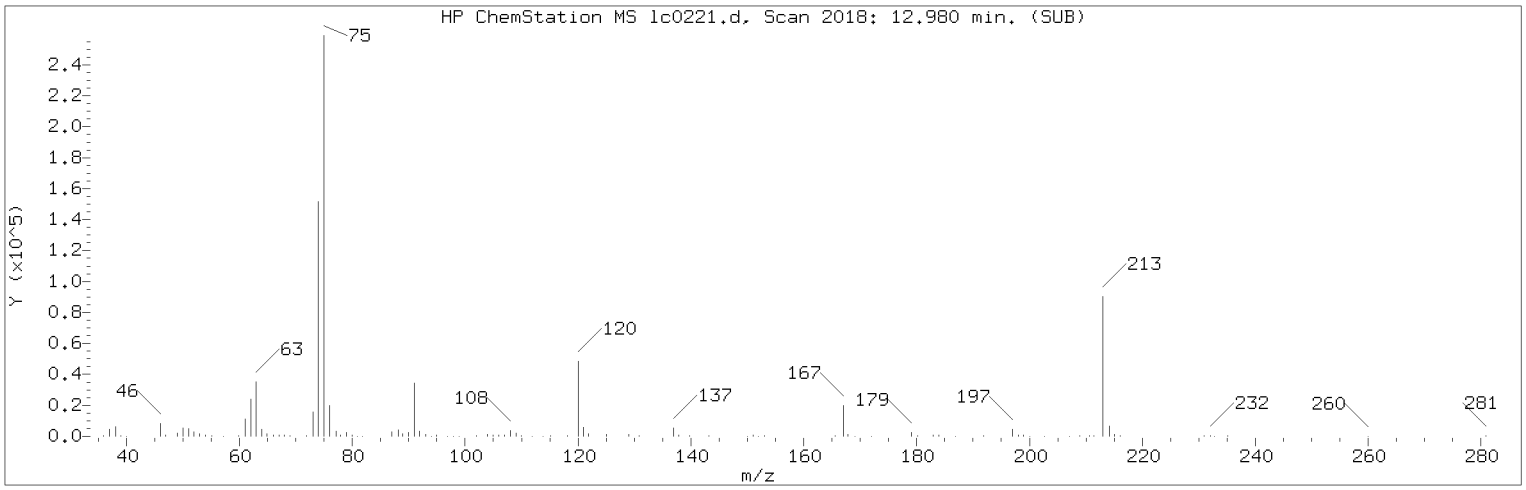
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

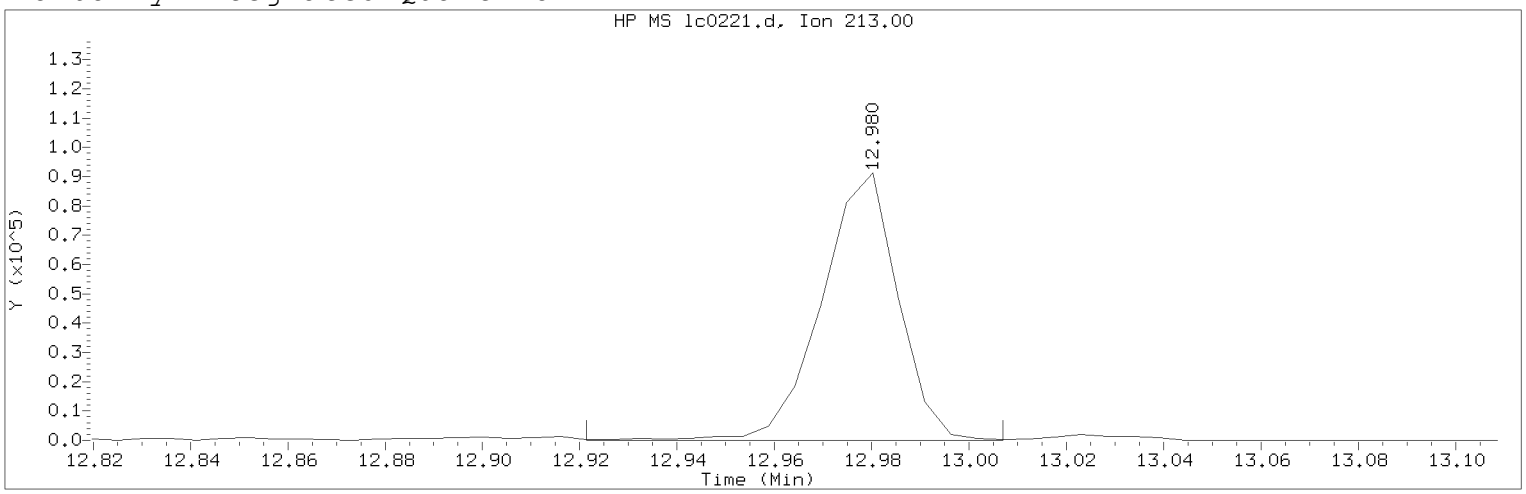
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1164		
Retention Time (minutes)	: 8.412		
Quant Ion	: 105.00		
Area	: 14412		
On-column Amount (ng/ul)	: 0.5061		
Integration start scan	: 1158	Integration stop scan:	1166
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user ART at 2019-03

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

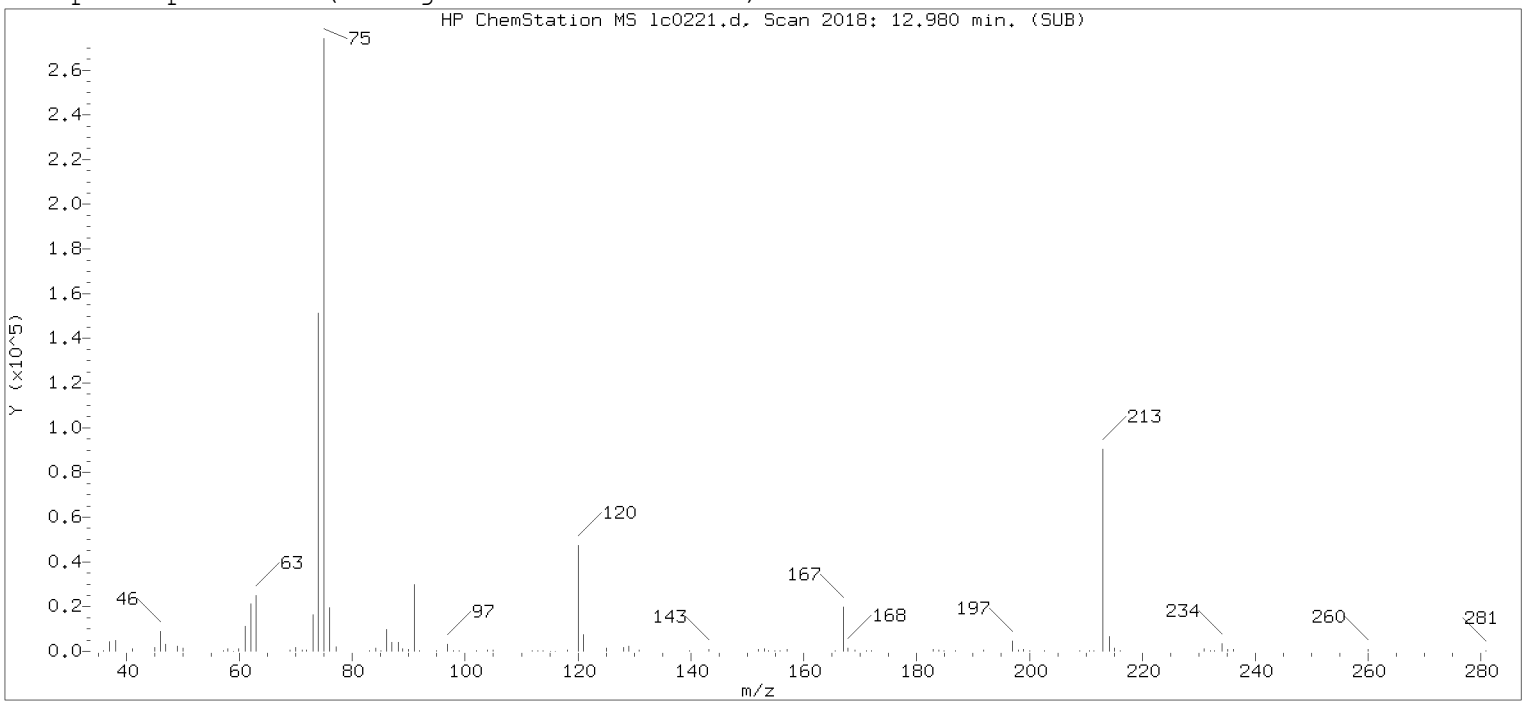
Compound Number : 144
Compound Name : 1,3,5-Trinitrobenzene
Scan Number : 2018
Retention Time (minutes) : 12.980
Quant Ion : 213.00
Area (flag) : 99726M
On-Column Amount (ng/ul) : 11.5643
Integration start scan : 2006 Integration stop scan: 2022
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

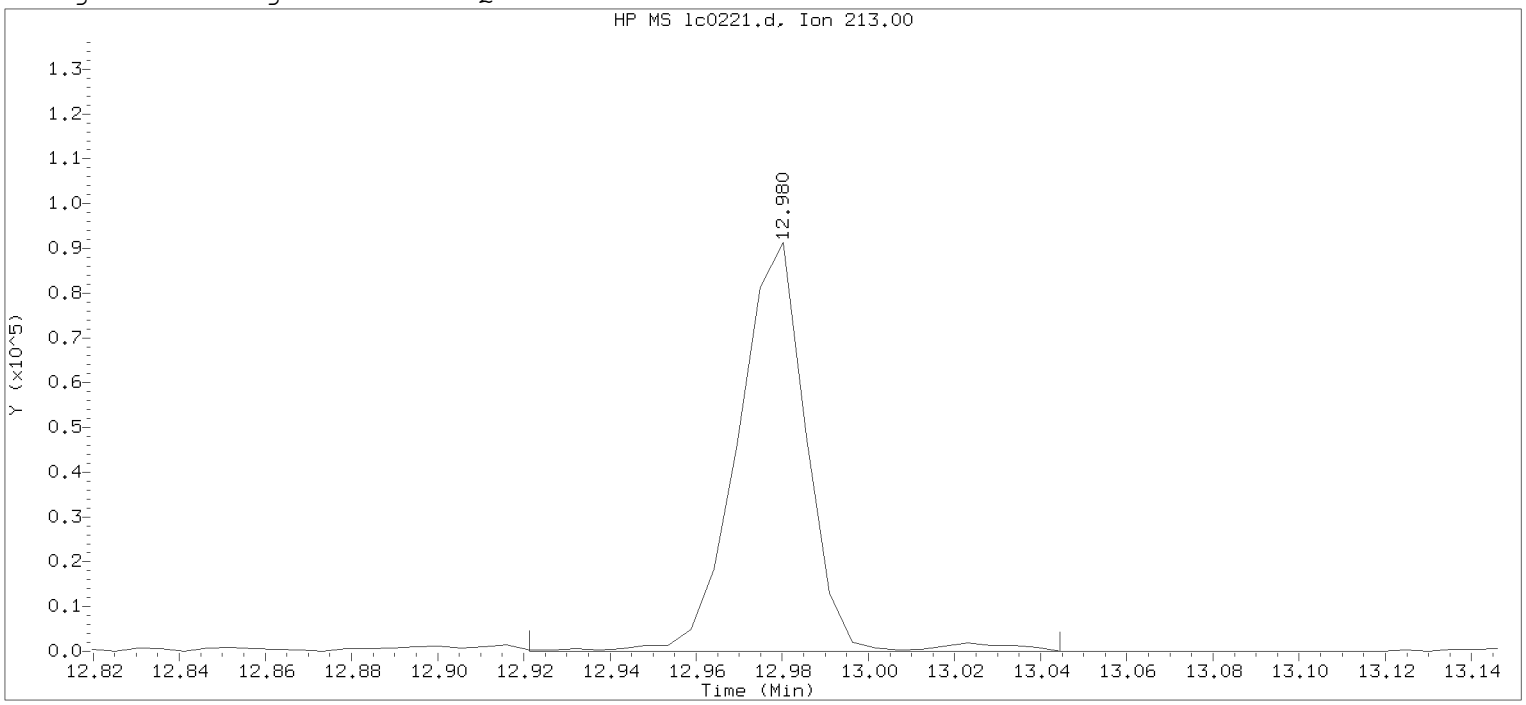
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

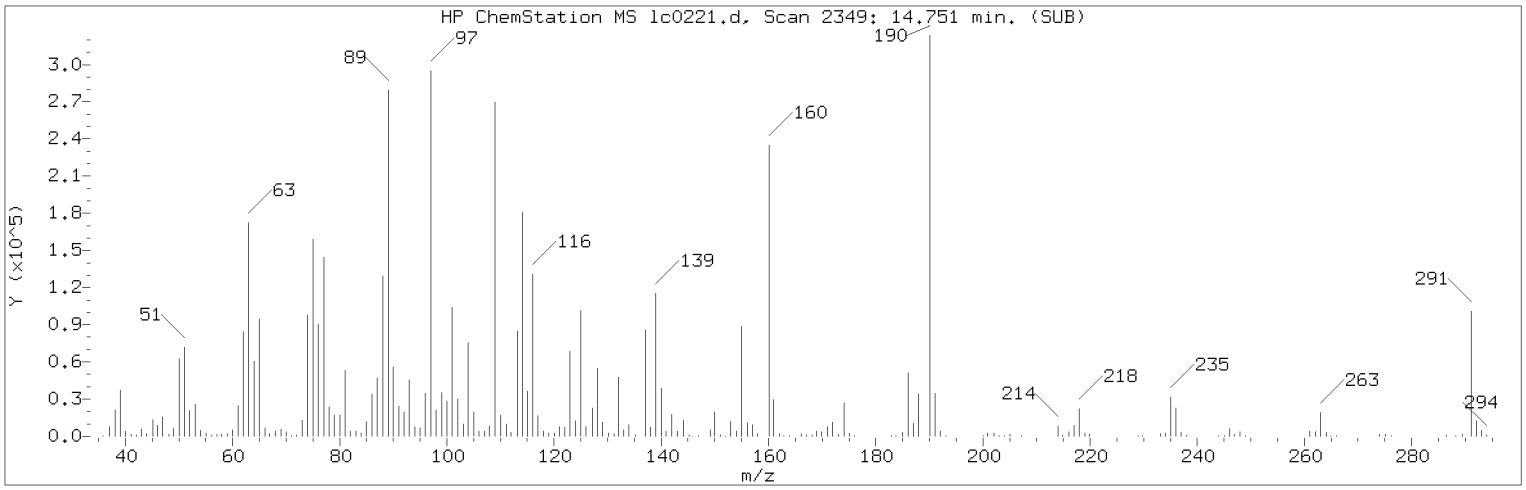
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

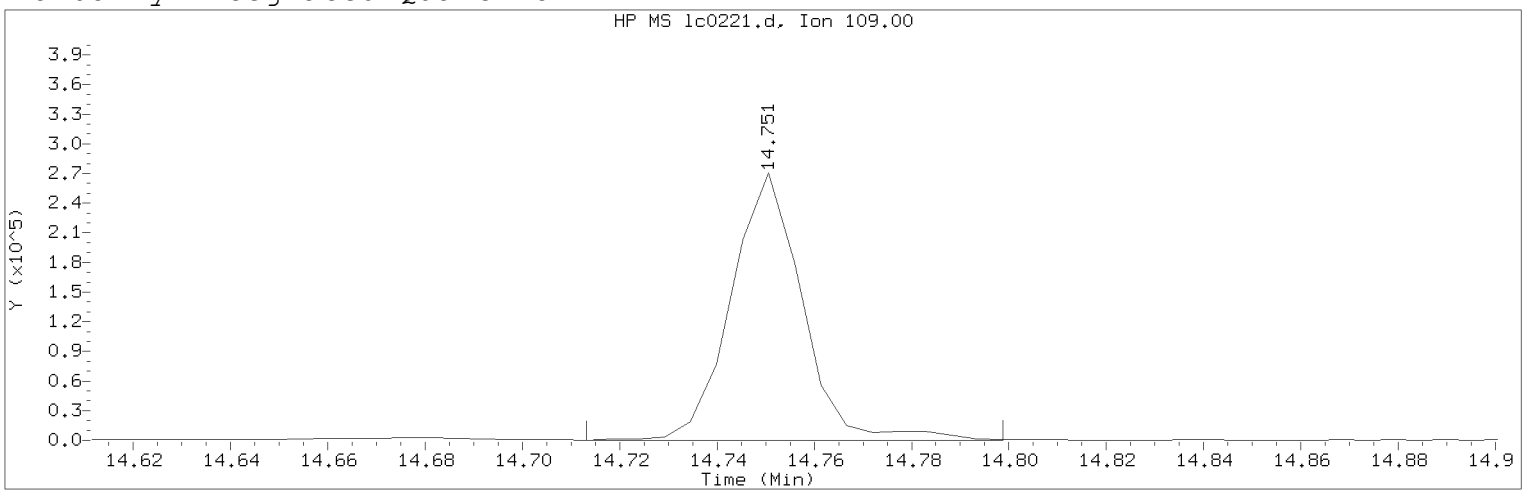
Compound Number	: 144		
Compound Name	: 1,3,5-Trinitrobenzene		
Scan Number	: 2018		
Retention Time (minutes)	: 12.980		
Quant Ion	: 213.00		
Area	: 101885		
On-column Amount (ng/ul)	: 12.8847		
Integration start scan	: 2006	Integration stop scan:	2029
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user ART34 at 2019.03.05

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

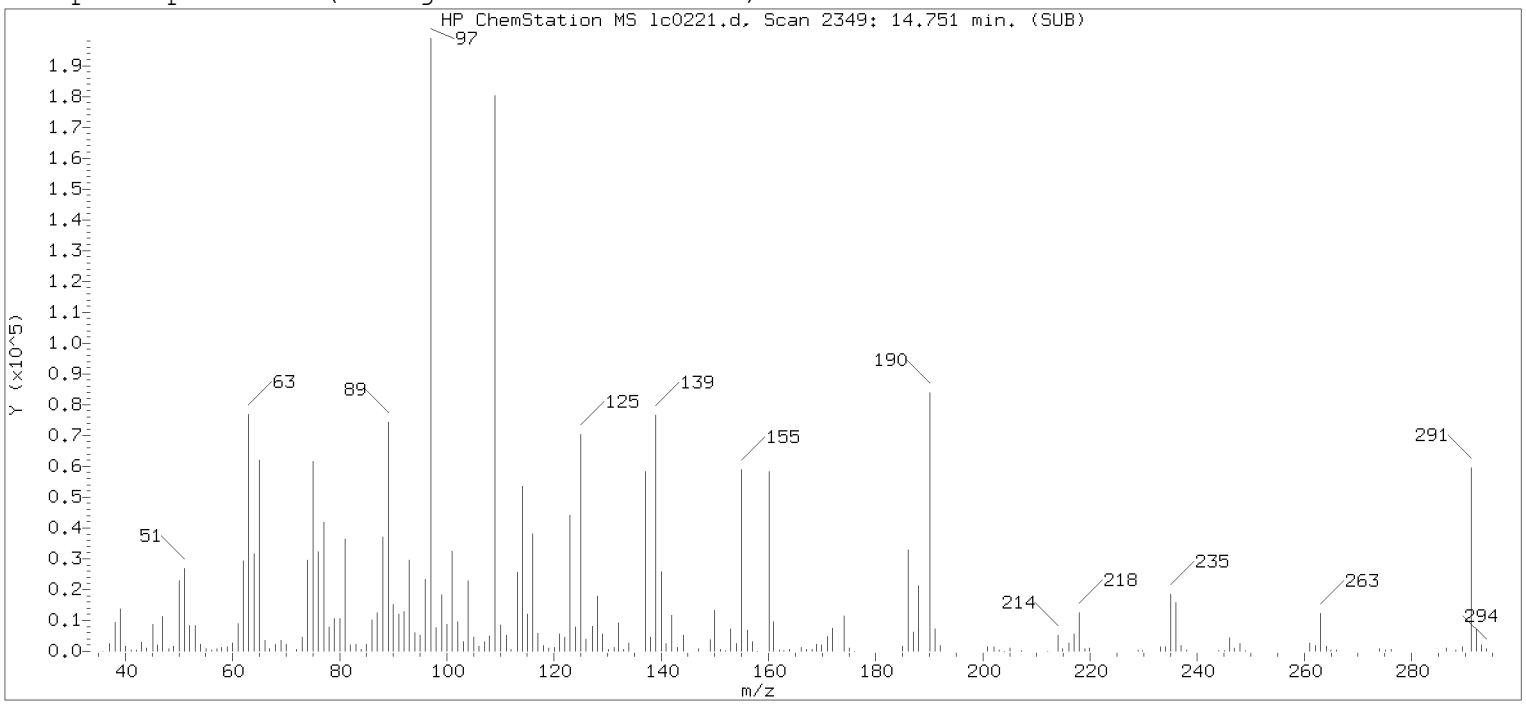
Compound Number : 172
Compound Name : Parathion
Scan Number : 2349
Retention Time (minutes) : 14.751
Quant Ion : 109.00
Area (flag) : 275711M
On-Column Amount (ng/ul) : 13.4022
Integration start scan : 2341 Integration stop scan: 2357
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

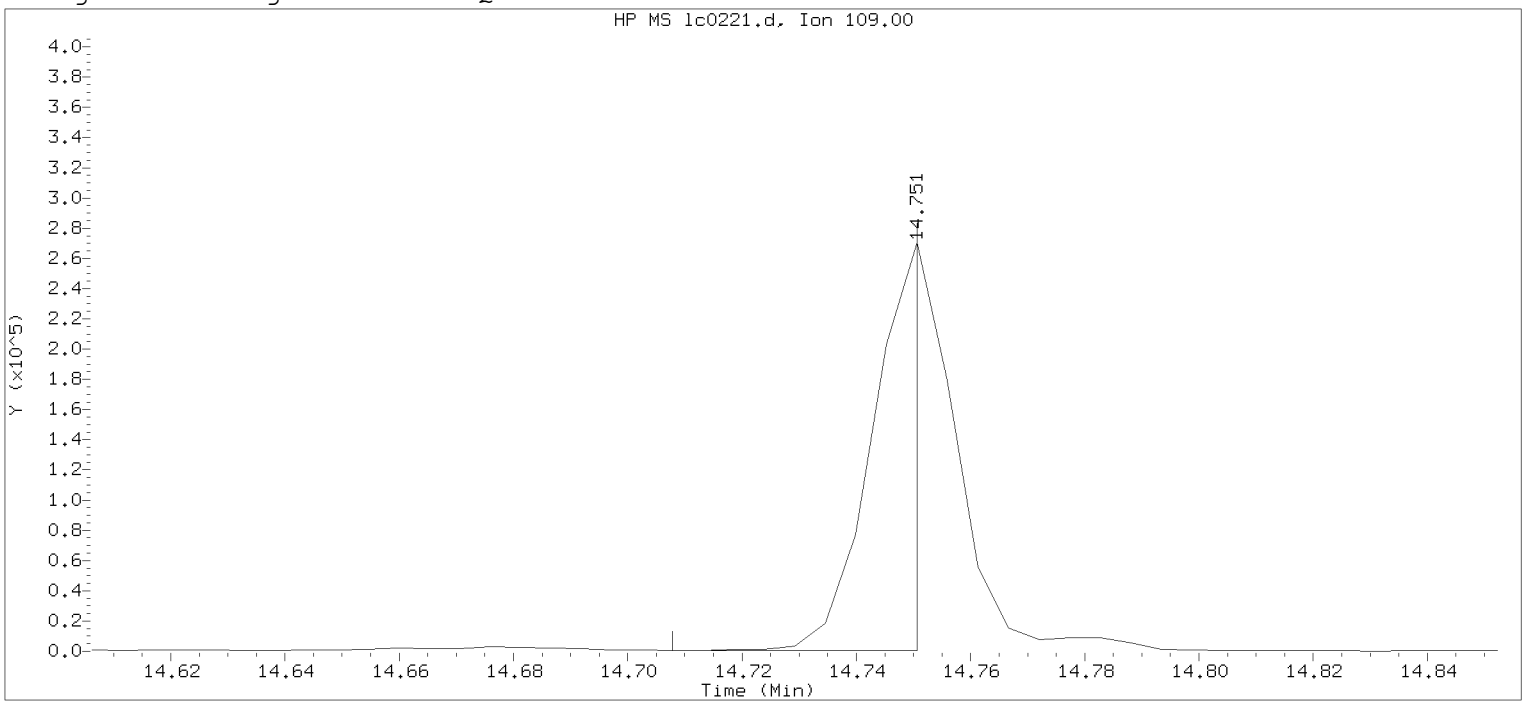
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

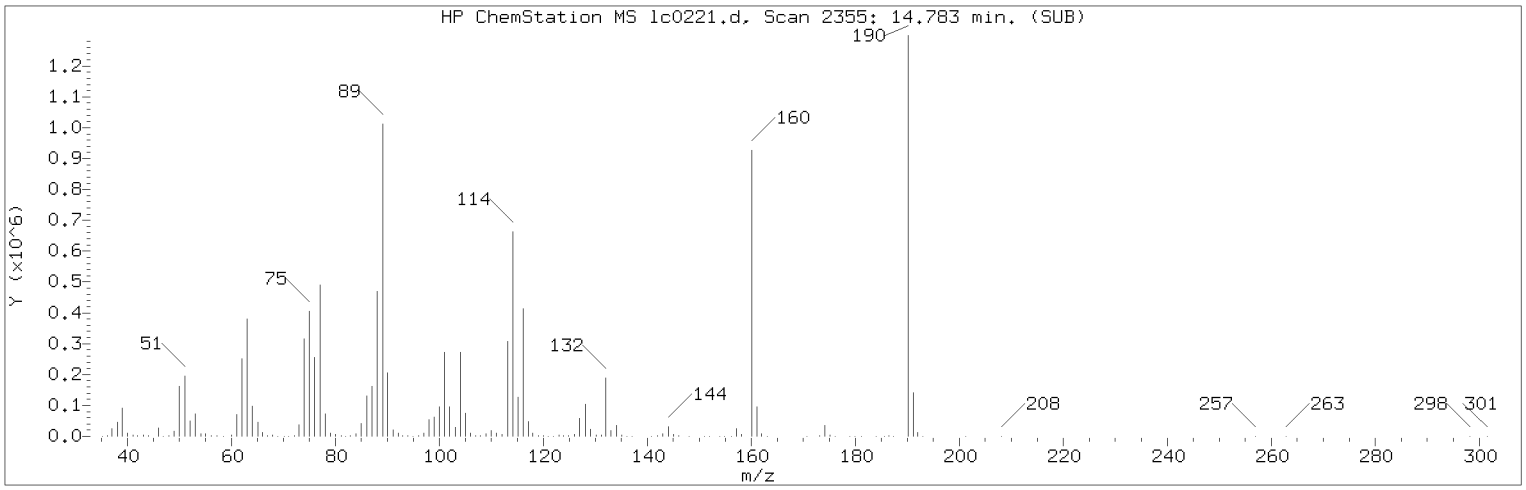
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

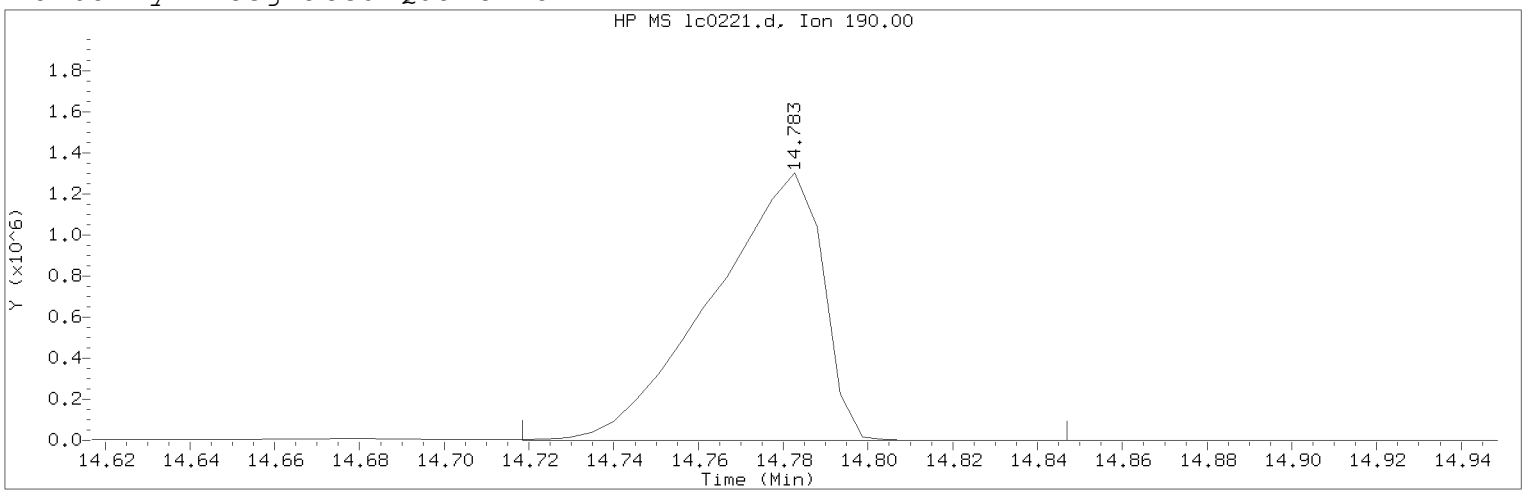
Compound Number	: 172		
Compound Name	: Parathion		
Scan Number	: 2349		
Retention Time (minutes)	: 14.751		
Quant Ion	: 109.00		
Area	: 140247		
On-column Amount (ng/ul)	: 6.9764		
Integration start scan	: 2340	Integration stop scan:	2348
Y at integration start	: 524	Y at integration end:	524

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user ART34 at 2019.03

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

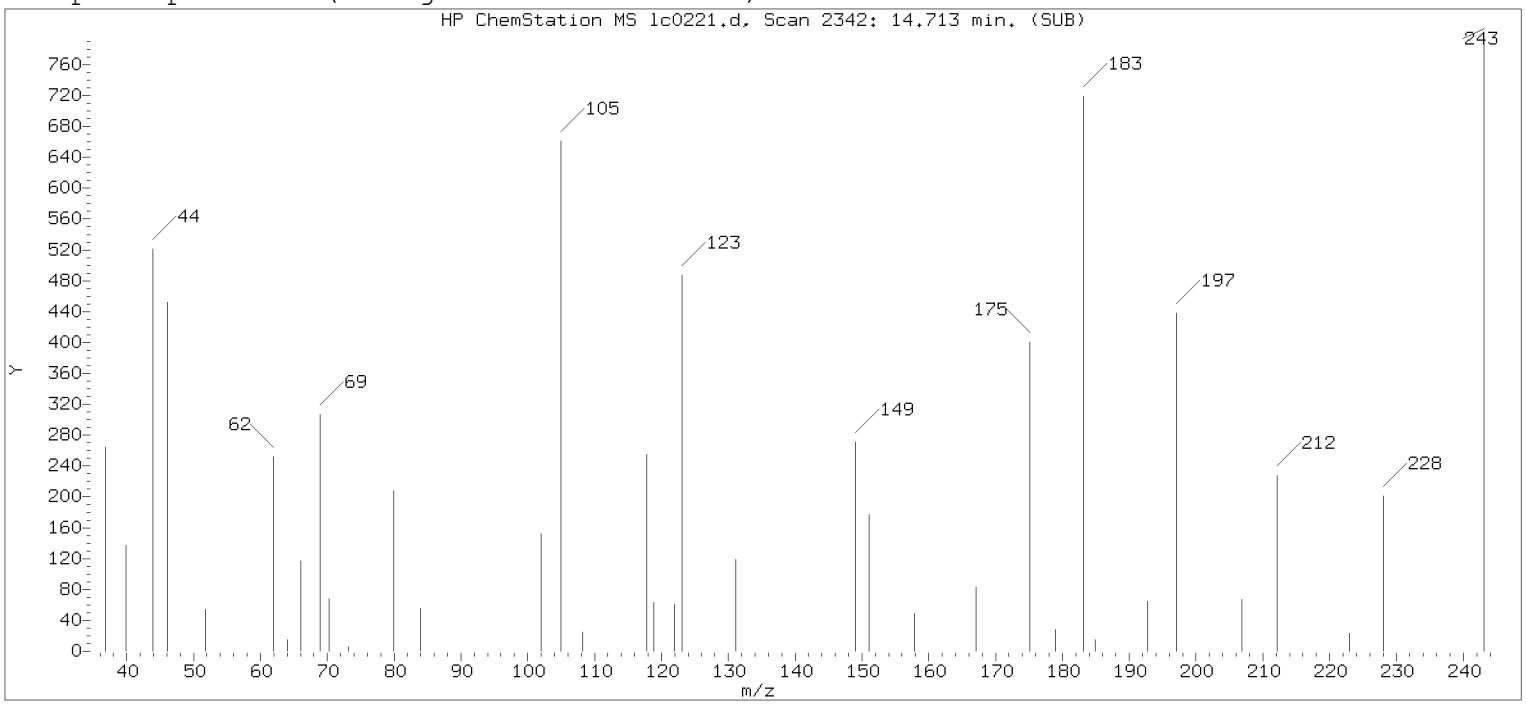
Compound Number : 173
Compound Name : 4-Nitroquinoline-1-oxide
Scan Number : 2355
Retention Time (minutes) : 14.783
Quant Ion : 190.00
Area (flag) : 2354645A
On-Column Amount (ng/ul) : 158.7690
Integration start scan : 2342 Integration stop scan: 2366
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

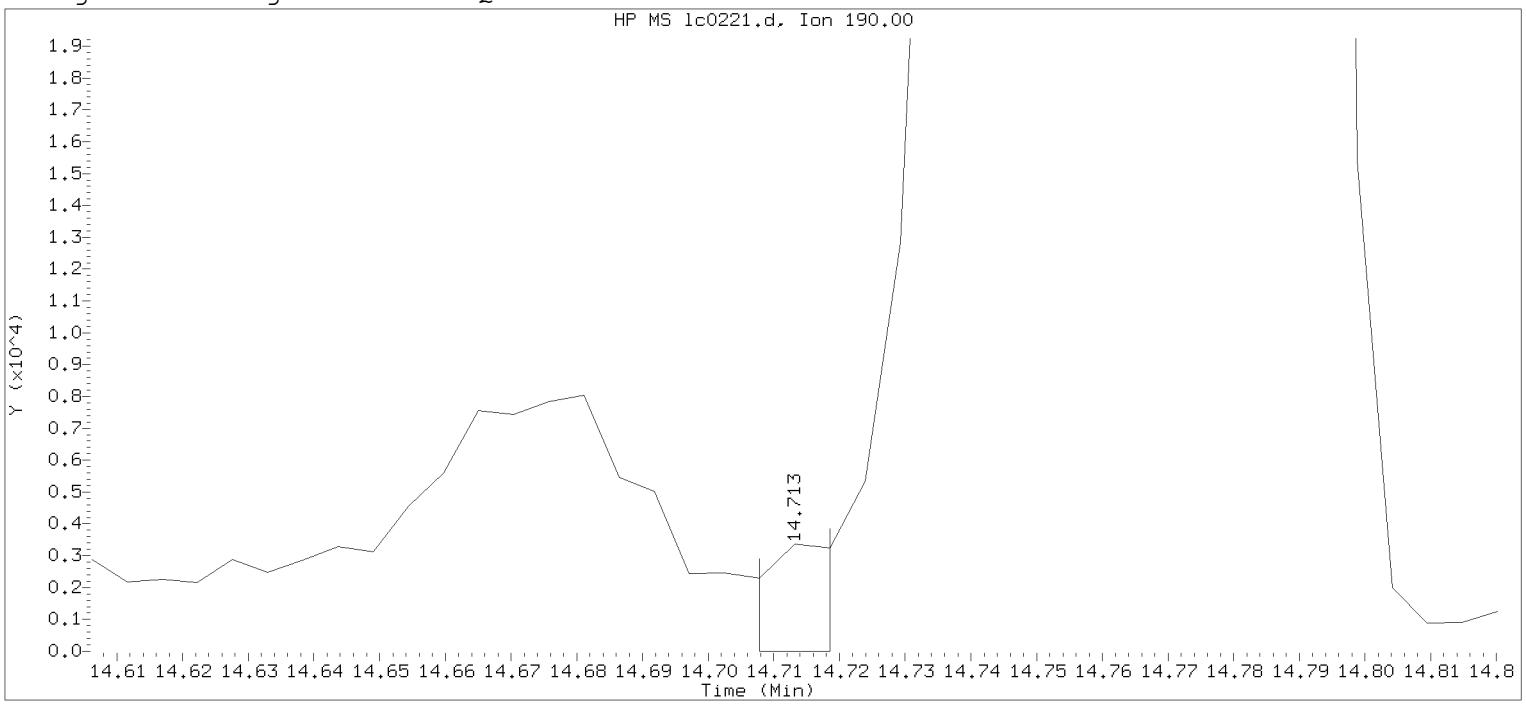
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

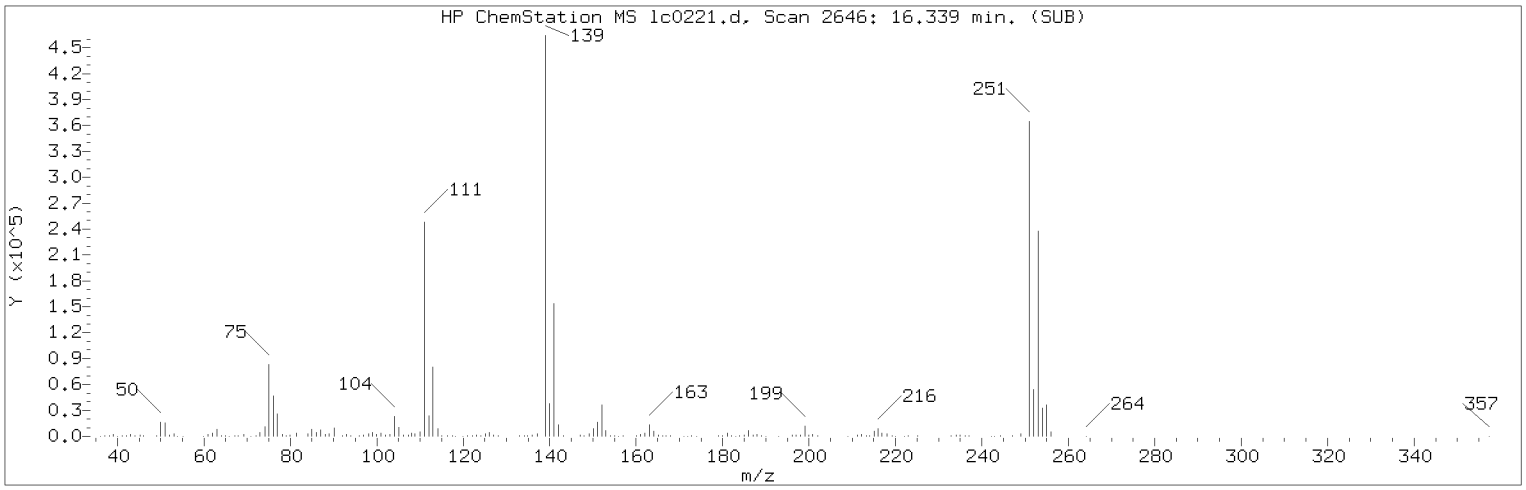
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

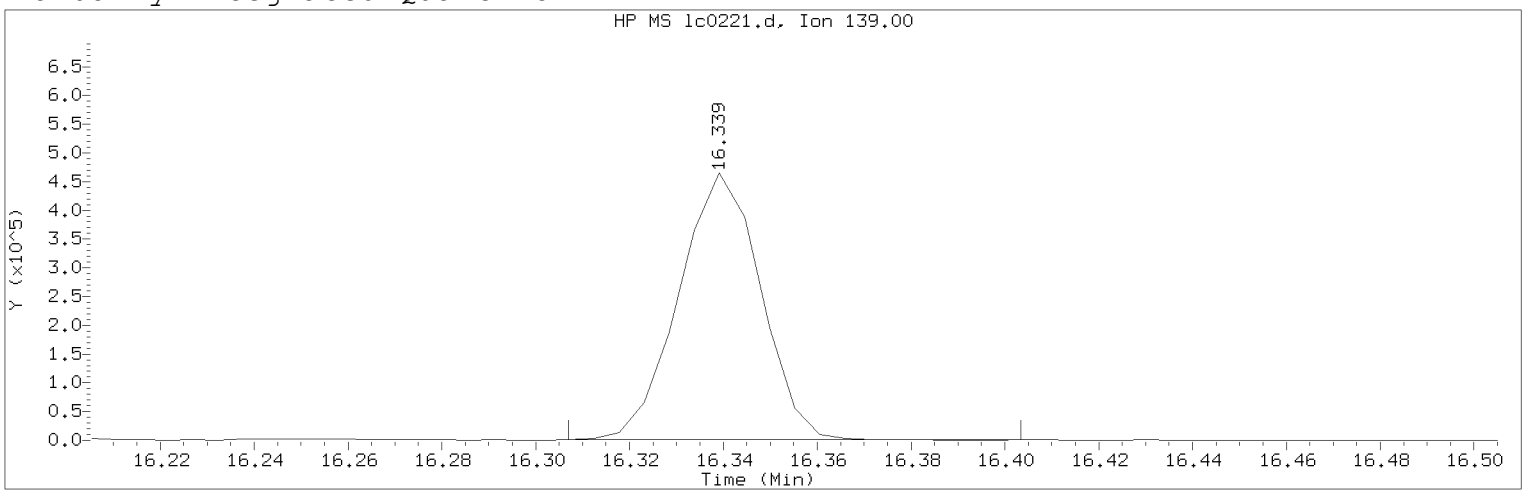
Compound Number	: 173		
Compound Name	: 4-Nitroquinoline-1-oxide		
Scan Number	: 2342		
Retention Time (minutes)	: 14.713		
Quant Ion	: 190.00		
Area	: 1967		
On-column Amount (ng/ul)	: 2.6886		
Integration start scan	: 2340	Integration stop scan:	2342
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user name: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

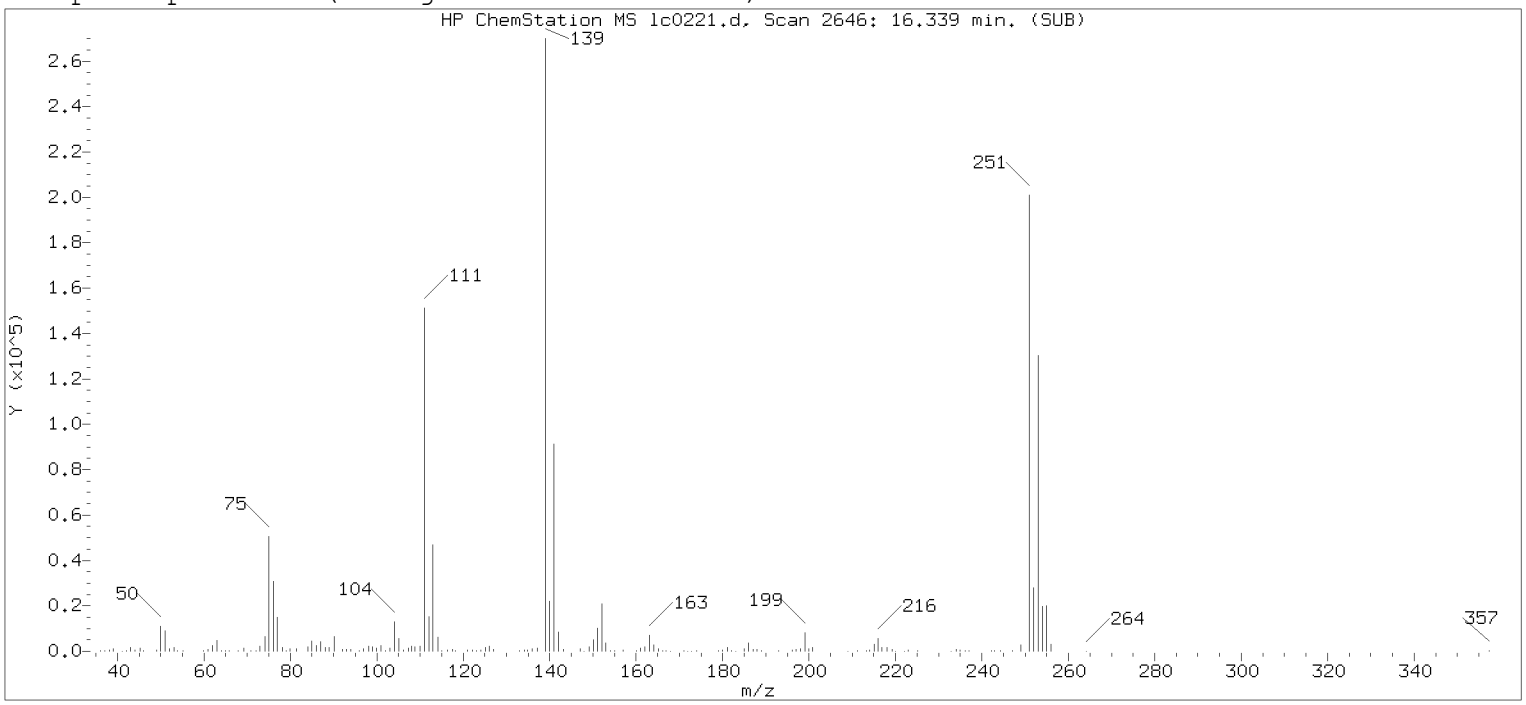
Compound Number : 190
Compound Name : Chlorobenzilate
Scan Number : 2646
Retention Time (minutes) : 16.339
Quant Ion : 139.00
Area (flag) : 558992M
On-Column Amount (ng/ul) : 12.6626
Integration start scan : 2639 Integration stop scan: 2657
Y at integration start : 1087 Y at integration end: 665

Reason for manual integration: improper integration

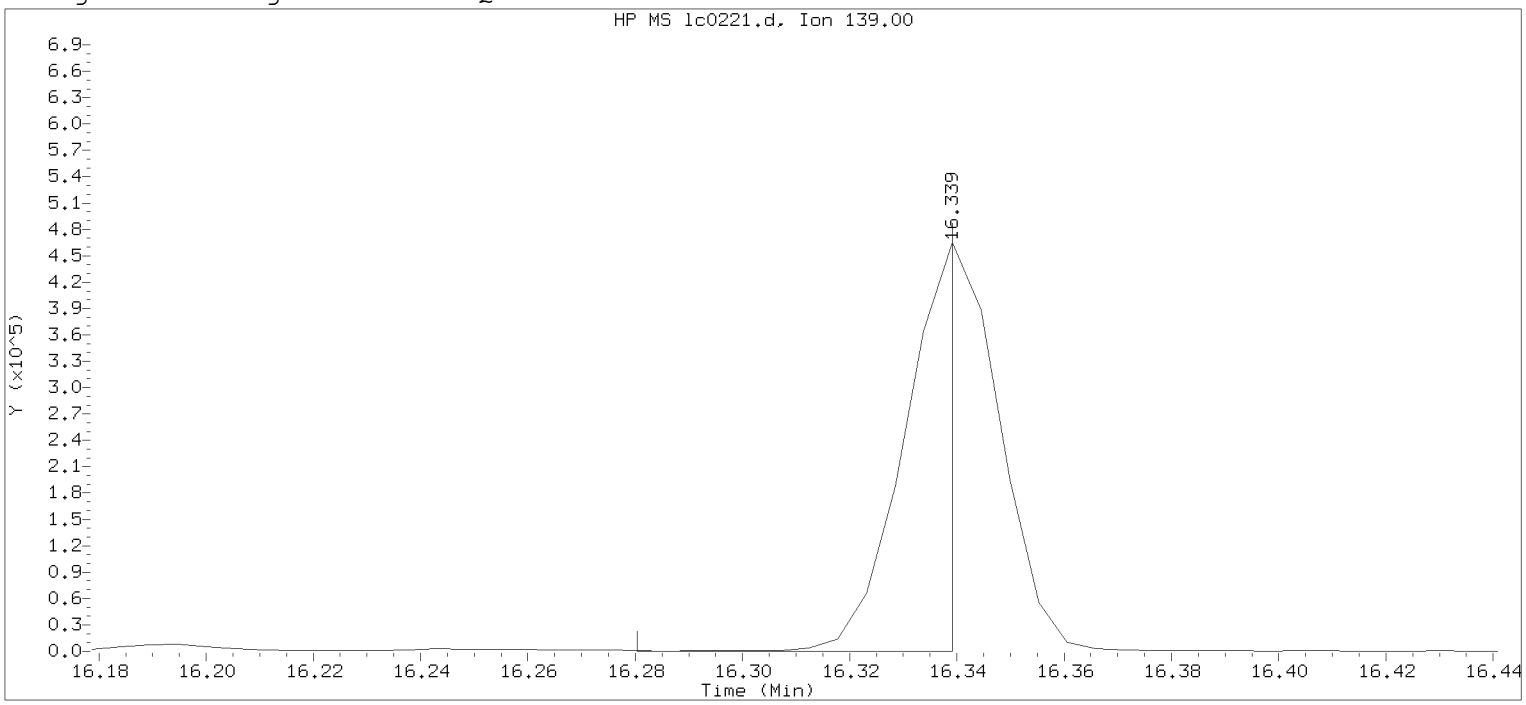
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

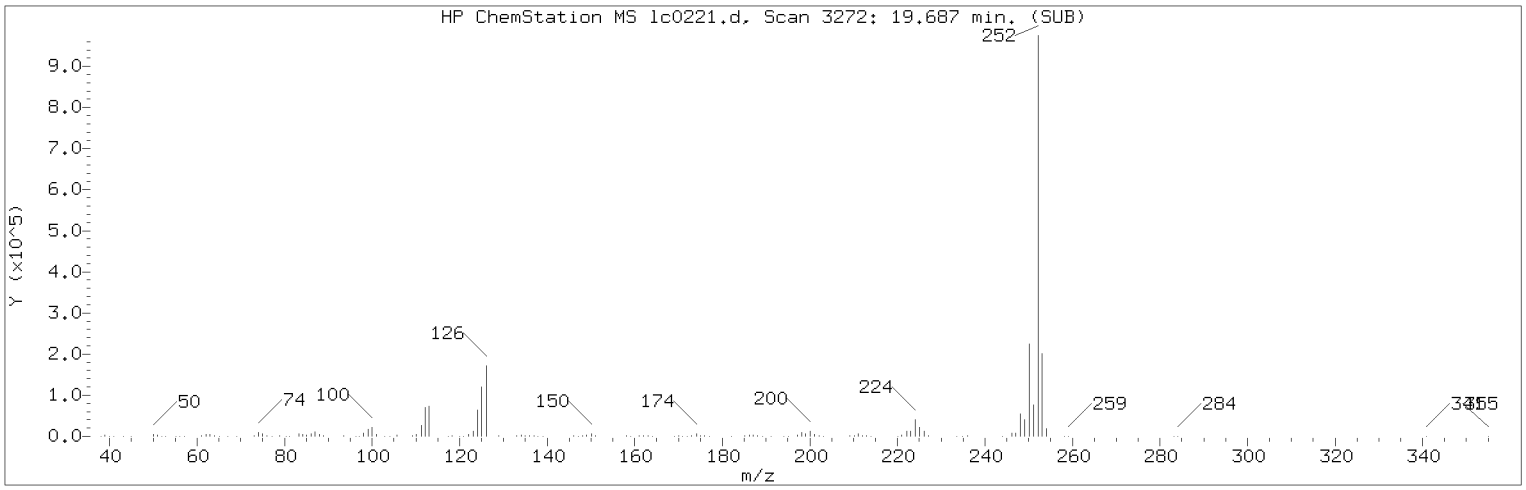
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

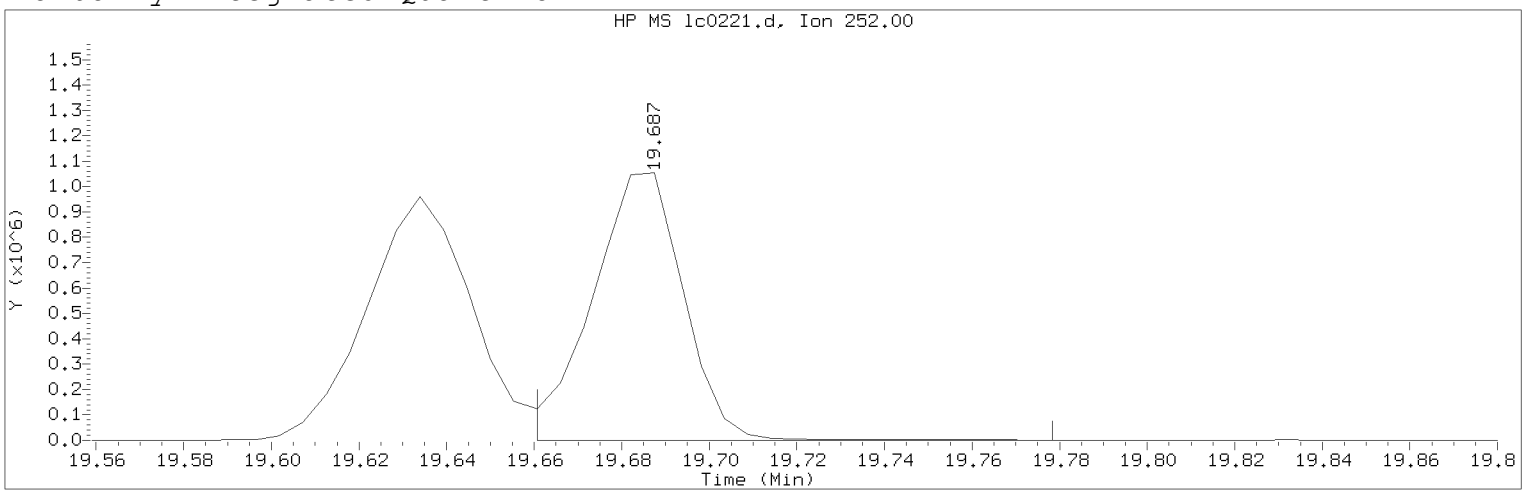
Compound Number	: 190		
Compound Name	: Chlorobenzilate		
Scan Number	: 2646		
Retention Time (minutes)	: 16.339		
Quant Ion	: 139.00		
Area	: 278355		
On-column Amount (ng/ul)	: 6.4777		
Integration start scan	: 2634	Integration stop scan:	2645
Y at integration start	: 356	Y at integration end:	356

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user ART34 at 2019.03.07

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

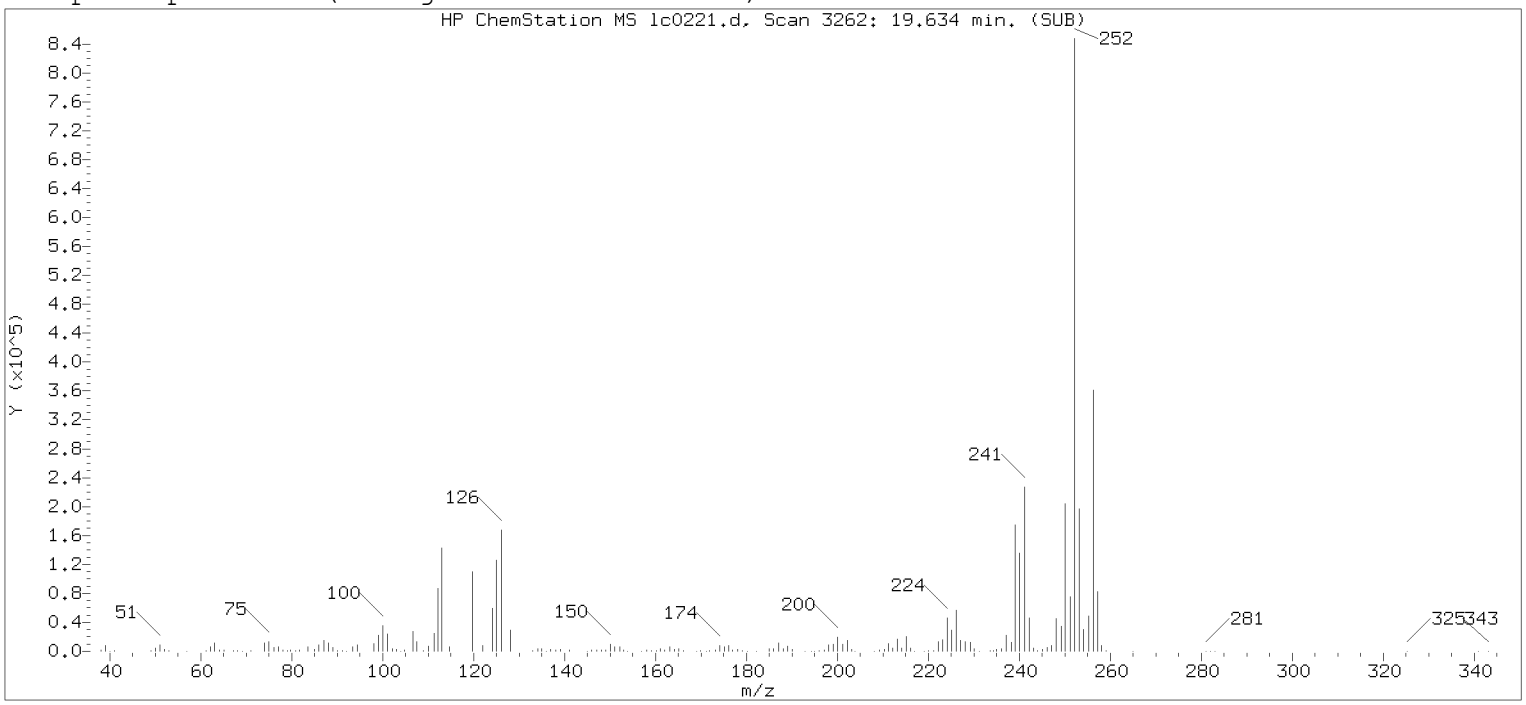
Compound Number : 213
Compound Name : Benzo(k)fluoranthene
Scan Number : 3272
Retention Time (minutes) : 19.687
Quant Ion : 252.00
Area (flag) : 1509860A
On-Column Amount (ng/ul) : 12.1075
Integration start scan : 3266 Integration stop scan: 3288
Y at integration start : 308 Y at integration end: 308

Reason for manual integration: improper integration

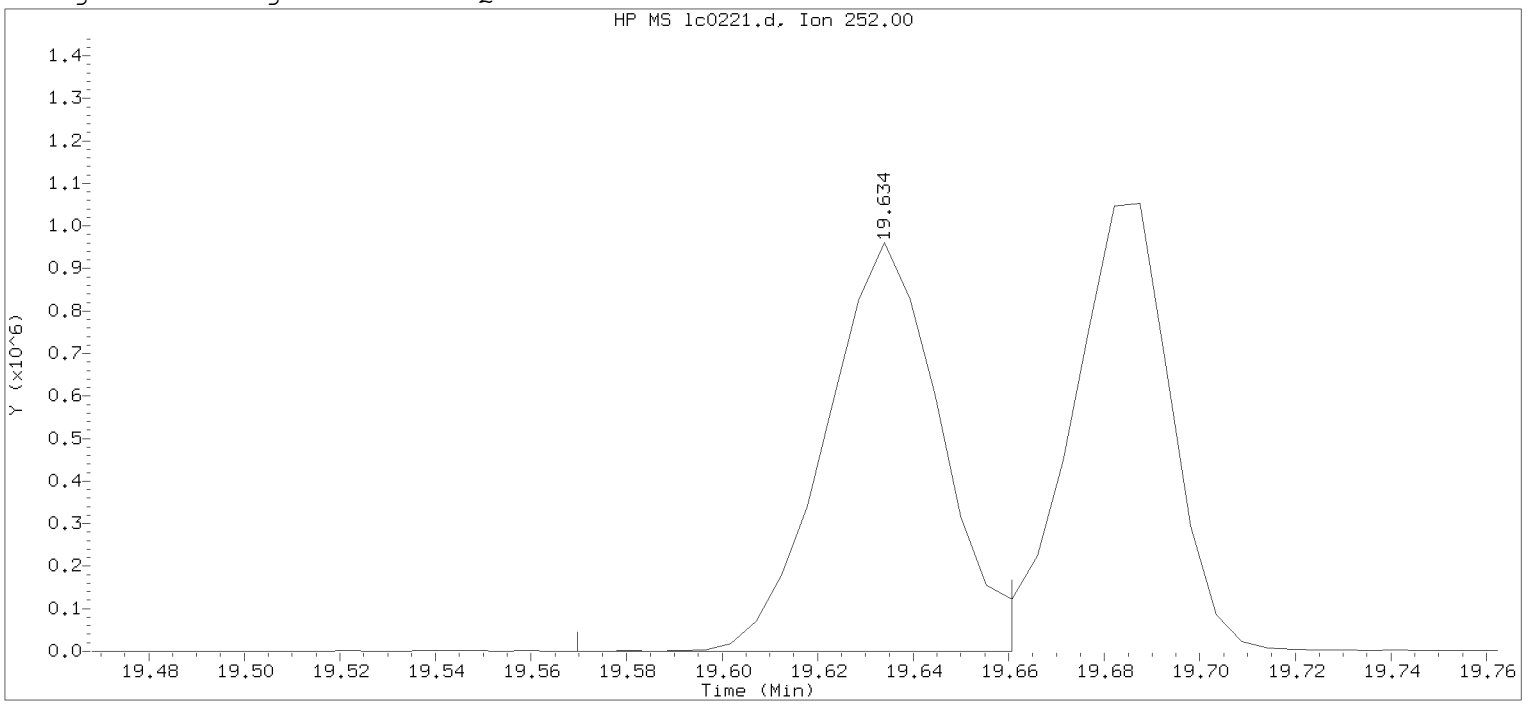
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

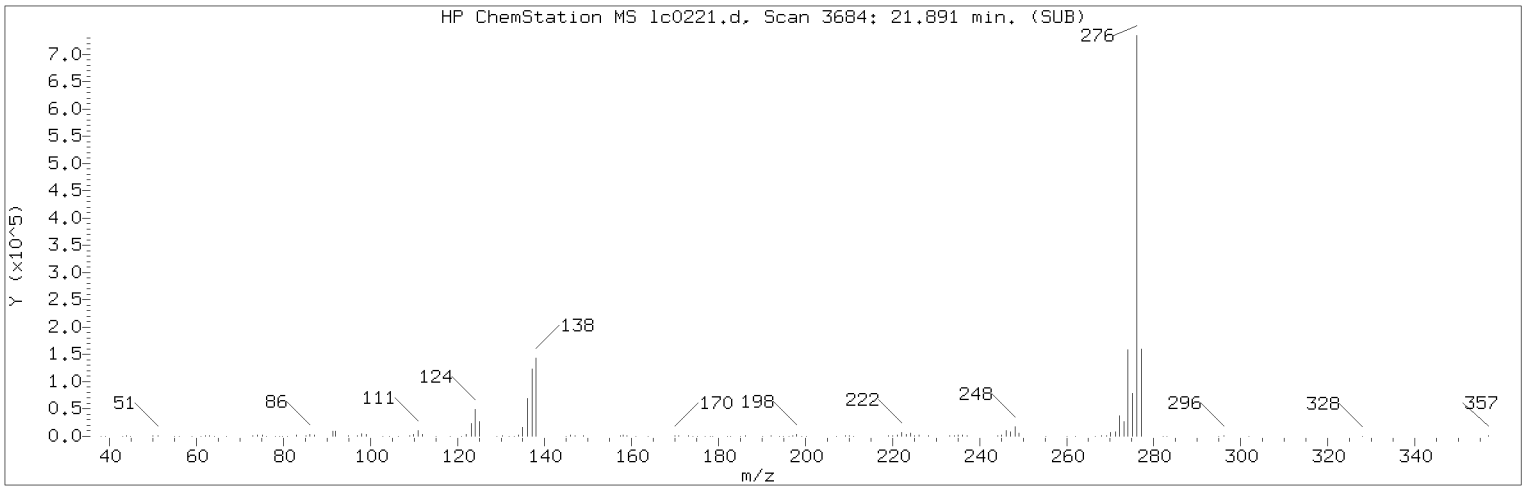
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

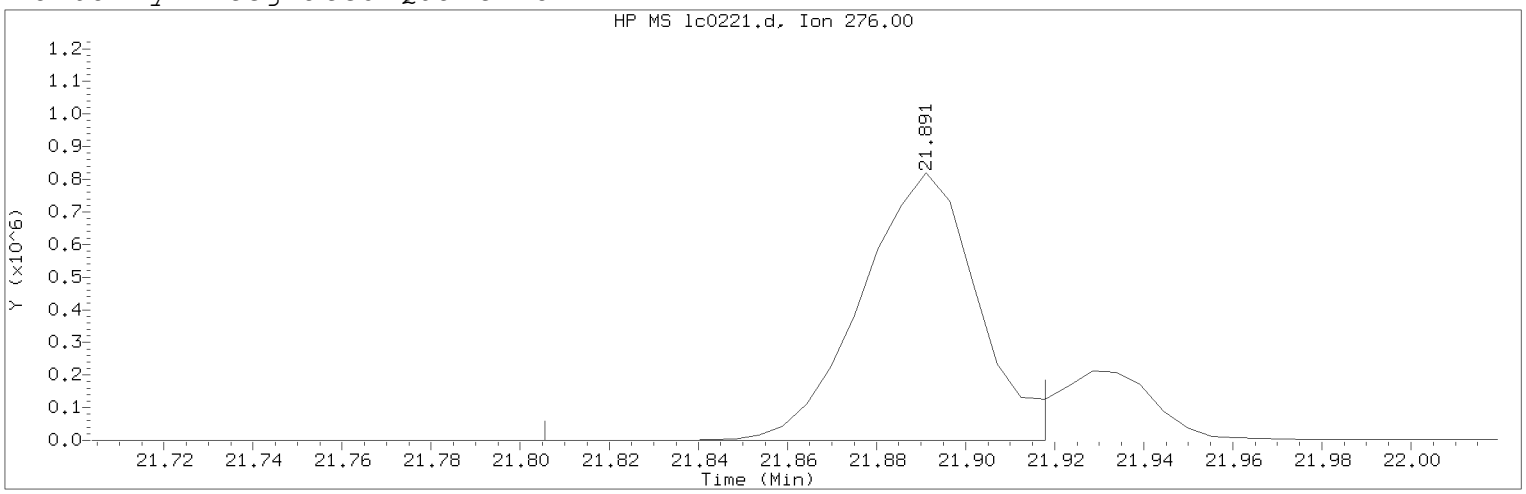
Compound Number	: 213		
Compound Name	: Benzo(k)fluoranthene		
Scan Number	: 3262		
Retention Time (minutes)	: 19.634		
Quant Ion	: 252.00		
Area	: 1590776		
On-column Amount (ng/ul)	: 12.7715		
Integration start scan	: 3249	Integration stop scan:	3266
Y at integration start	: 308	Y at integration end:	308

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user ART at 2019-03-05 17:33:49

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv1
Calibration date and time: 05-MAR-2019 17:32
Date, time and analyst ID of latest file update: 05-Mar-2019 17:32 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

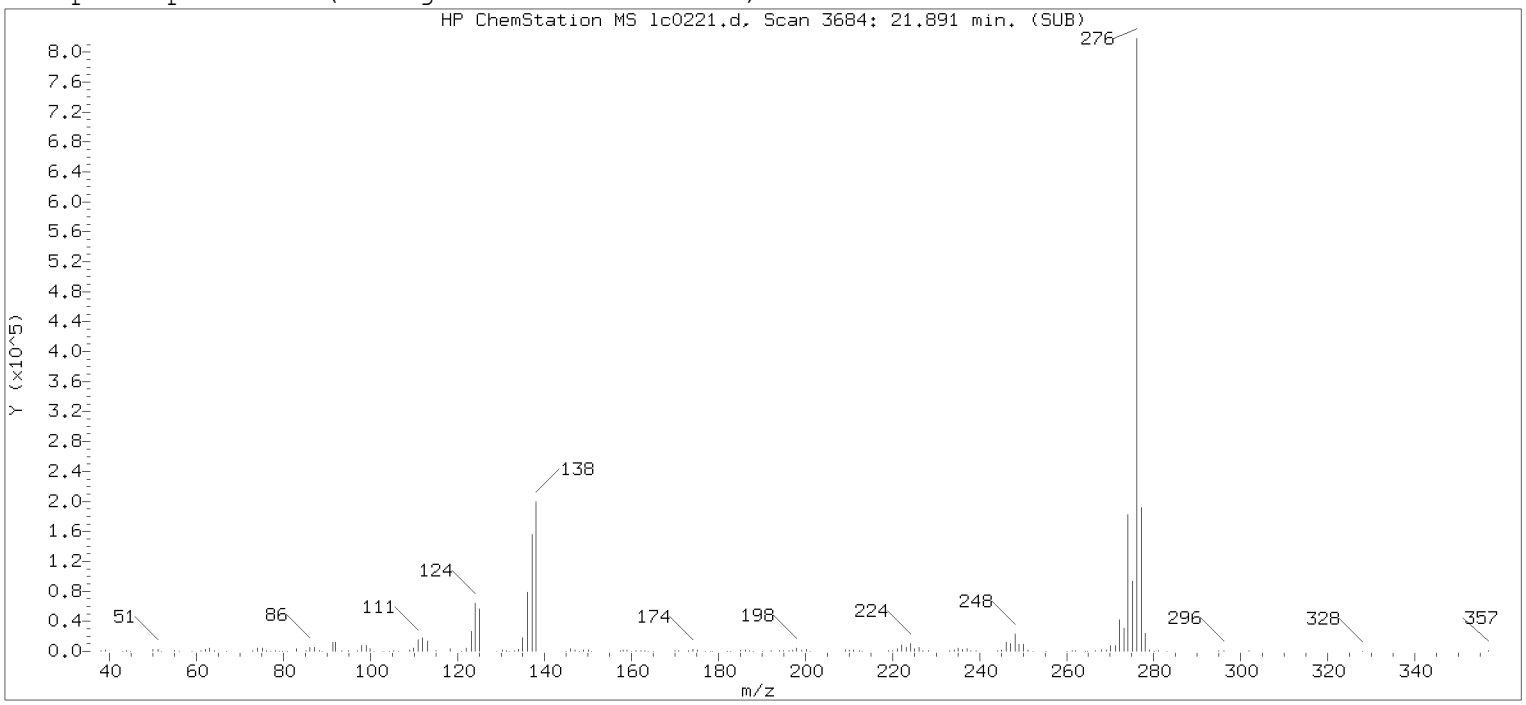
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3684
Retention Time (minutes) : 21.891
Quant Ion : 276.00
Area (flag) : 1479546M
On-Column Amount (ng/ul) : 12.1480
Integration start scan : 3667 Integration stop scan: 3688
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

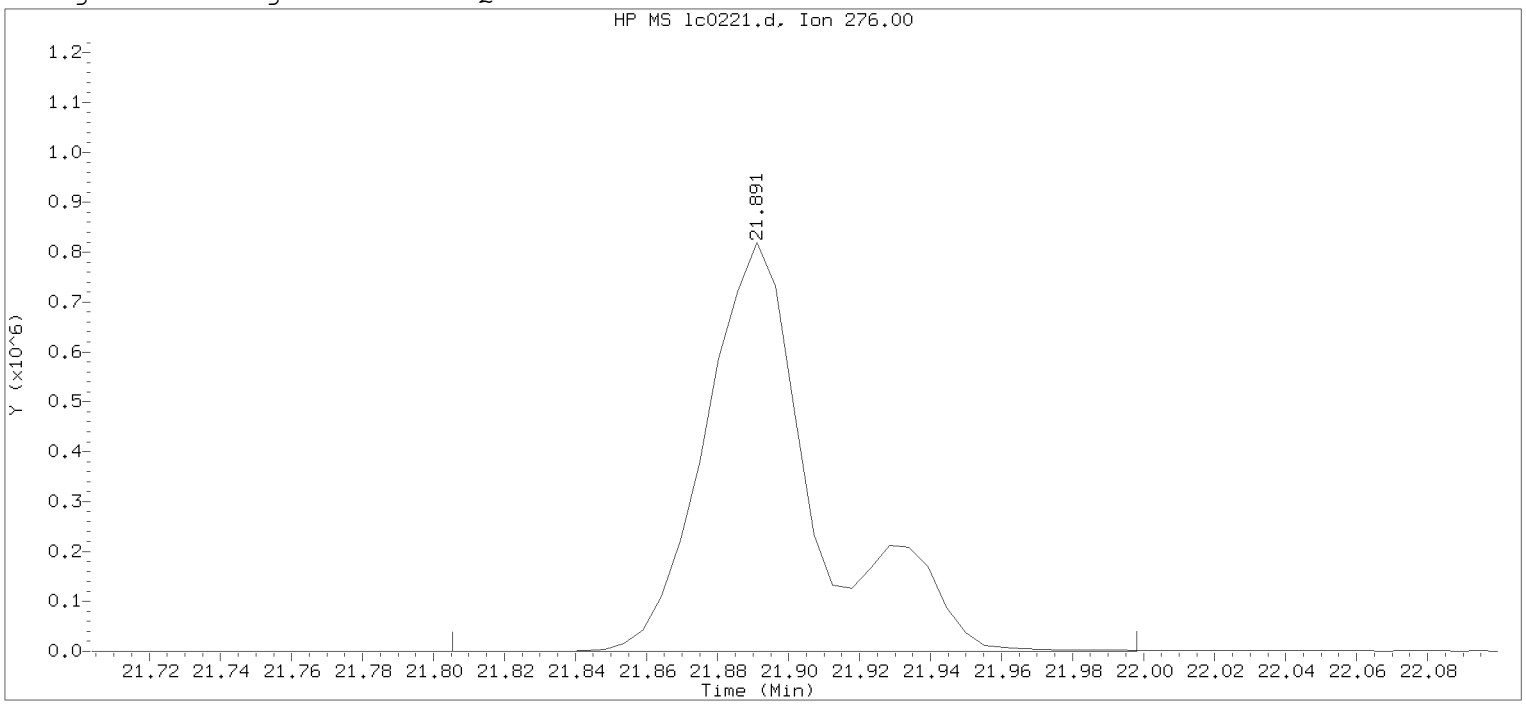
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:33.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Matthew E. Barton on 03/07/2019 at 08:26.
PARALLAX ID: reb00745

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



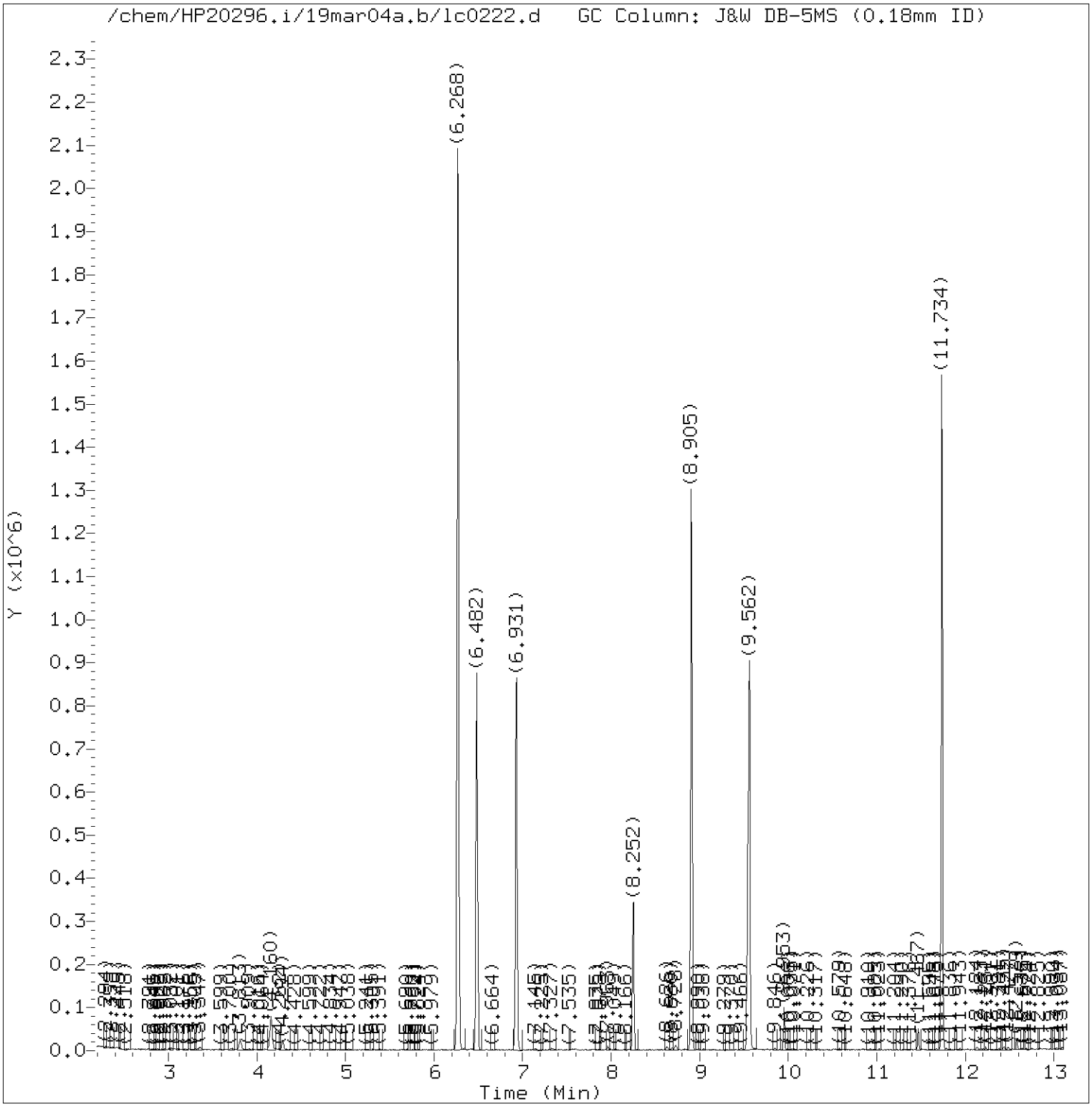
Data File: /chem/HP20296.i/19mar04a.b/lc0221.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 06:59 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icvall1
Calibration date and time: 05-MAR-2019 14:29
Date, time and analyst ID of latest file update: 05-Mar-2019 14:29 lmh00956

Sample Name: SSTD12.5 Lab Sample ID: rvICV0479

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3684		
Retention Time (minutes)	: 21.891		
Quant Ion	: 276.00		
Area	: 1775261		
On-column Amount (ng/ul)	: 15.3540		
Integration start scan	: 3667	Integration stop scan:	3703
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 03/05/2019 at 17:33.
Target 3.5 esignature user ART34 at 2019.03.5



Total Ion Chromatogram (TIC)

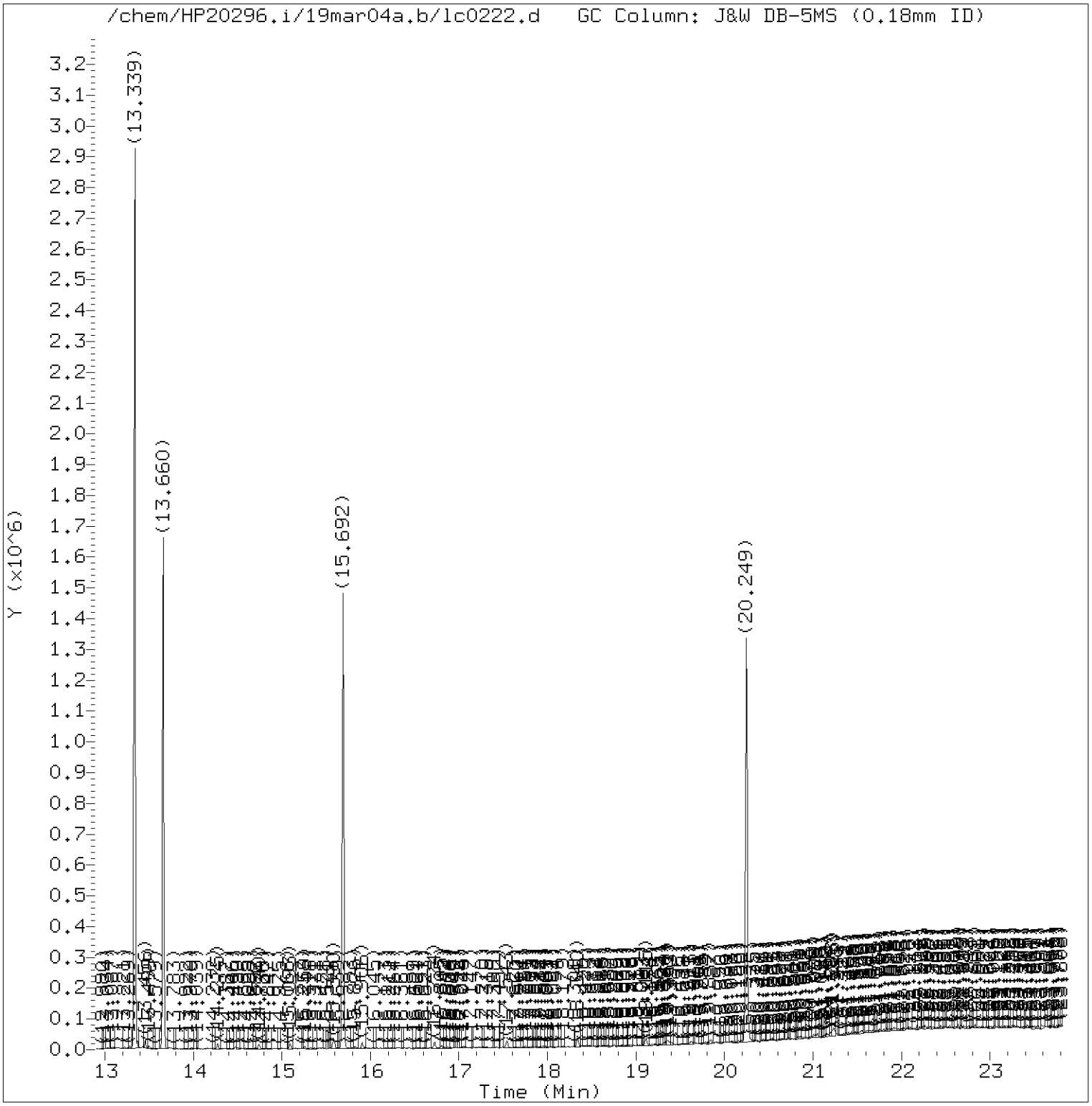
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0222.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 07:28 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 05-MAR-2019 17:00
Date, time and analyst ID of latest file update: 05-Mar-2019 17:16 art12405

Sample Name: SSTD12.5 Lab Sample ID: BASICV3248

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:18.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0222.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 07:28 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 05-MAR-2019 17:00
Date, time and analyst ID of latest file update: 05-Mar-2019 17:16 art12405

Sample Name: SSTD12.5 Lab Sample ID: BASICV3248

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:18.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0222.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 07:28 Analyst ID: art12405

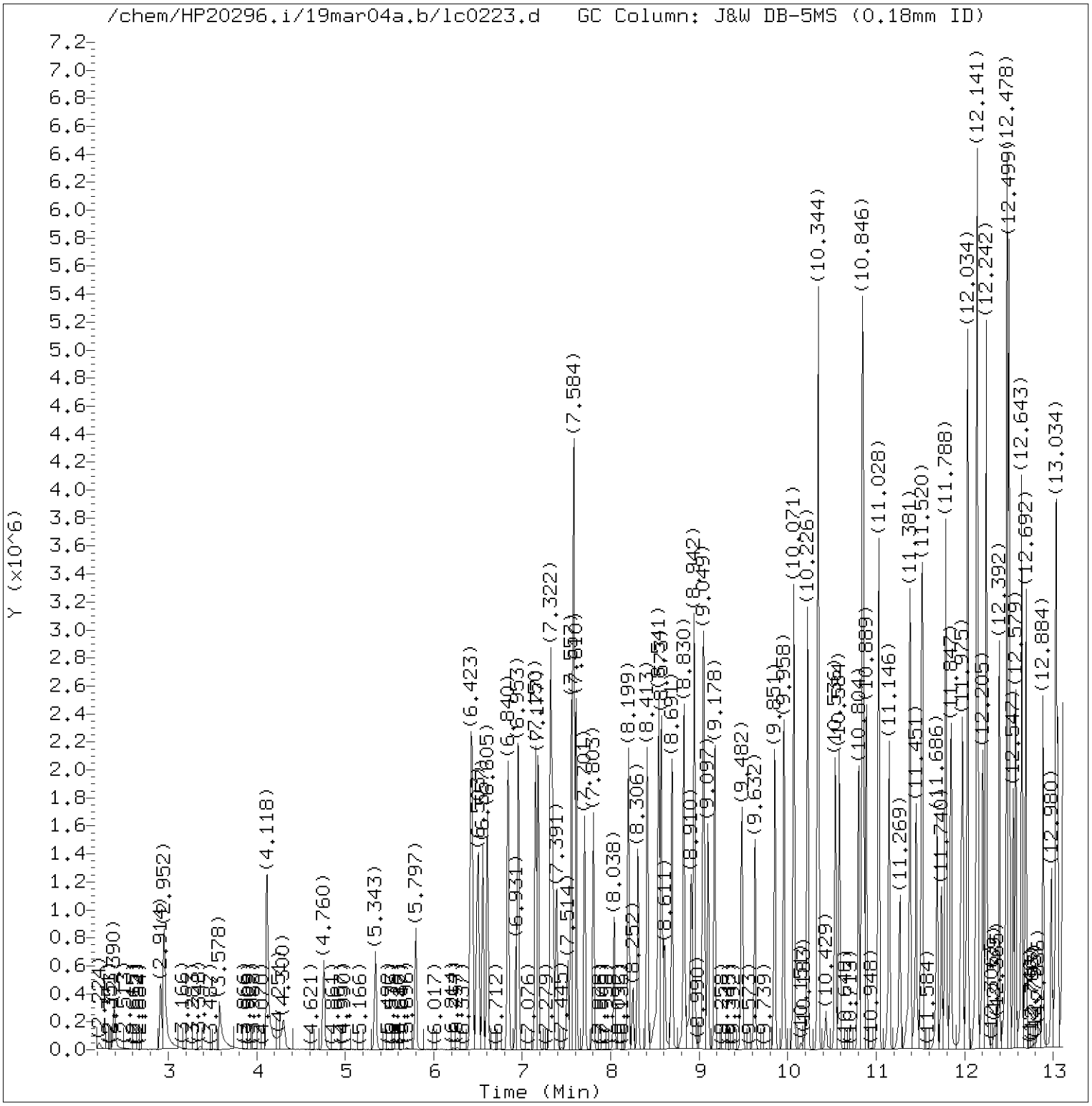
Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: basicvall1
Calibration date and time: 05-MAR-2019 17:00
Date, time and analyst ID of latest file update: 05-Mar-2019 17:16 art12405

Sample Name: SSTD12.5 Lab Sample ID: BASICV3248

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
17) Benzaldehyde	(1)	6.268	77	683010	13.633
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	180873	5.000
68)*Naphthalene-d8	(2)	8.905	136	684040	5.000
79) Caprolactam	(2)	9.562	113	183708	12.947
118)*Acenaphthene-d10	(3)	11.734	164	334378	5.000
153) Atrazine	(4)	13.339	200	365016	13.506
158)*Phenanthrene-d10	(4)	13.660	188	646875	5.000
180)*Pyrene-d10	(5)	15.692	212	634604	5.000
218)*Perylene-d12	(6)	20.249	264	629267	5.000

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:18.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

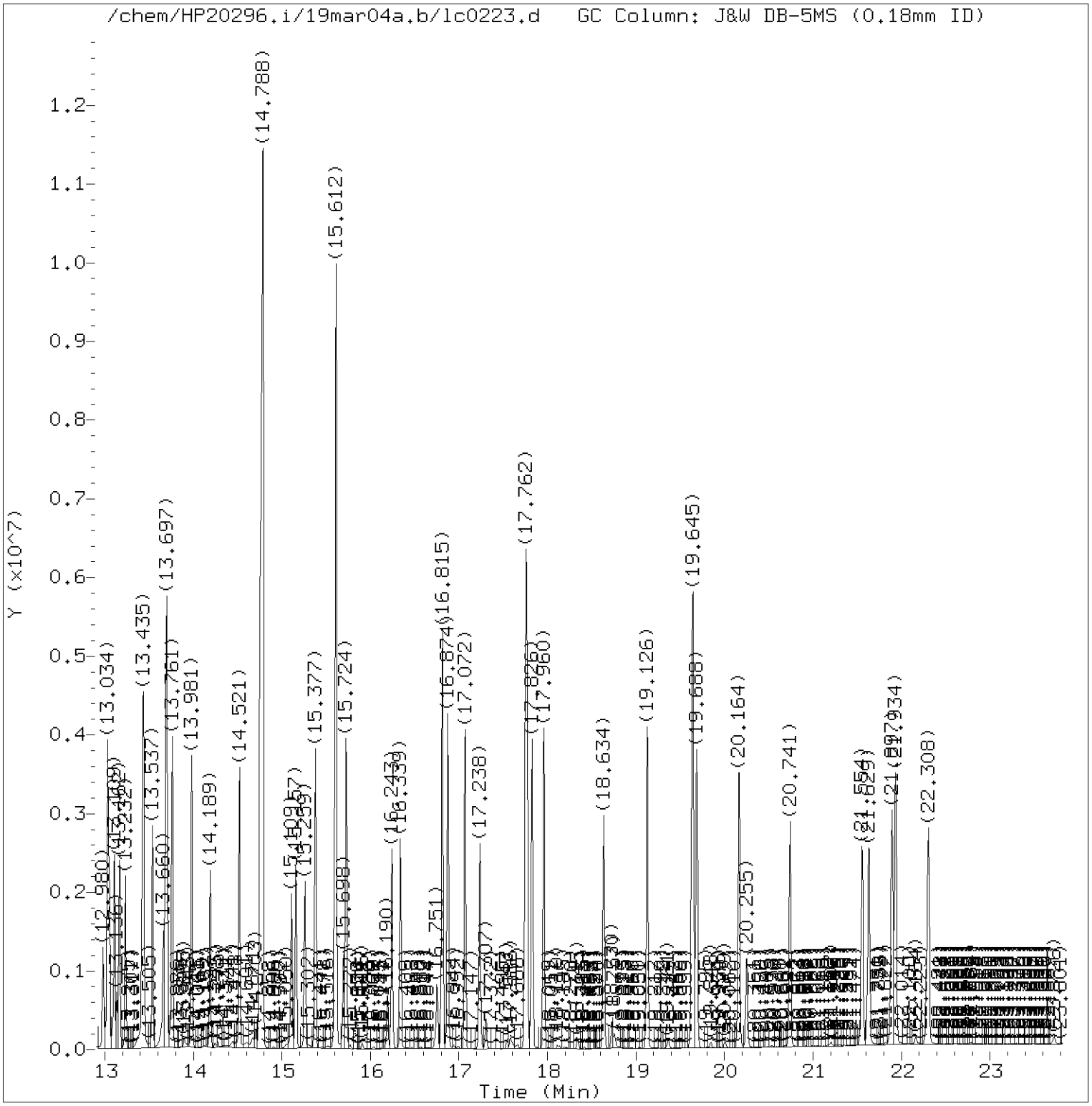
Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0223.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 07:56 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv4
Calibration date and time: 05-MAR-2019 17:28
Date, time and analyst ID of latest file update: 05-Mar-2019 17:28 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV3208b

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:29.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0223.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 07:56 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv4
Calibration date and time: 05-MAR-2019 17:28
Date, time and analyst ID of latest file update: 05-Mar-2019 17:28 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV3208b

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:29.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19mar04a.b/lc0223.d Instrument ID: HP20296.i
Injection date and time: 05-MAR-2019 07:56 Analyst ID: art12405

Method used: /chem/HP20296.i/19mar04a.b/rv8270d.m Sublist used: icv4
Calibration date and time: 05-MAR-2019 17:28
Date, time and analyst ID of latest file update: 05-Mar-2019 17:28 art12405

Sample Name: SSTD12.5 Lab Sample ID: rvICV3208b

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.931	152	154073	5.000
55) 2,4-Dimethylphenol	(2)	8.413	107	585248	11.297
68)*Naphthalene-d8	(2)	8.910	136	584231	5.000
88) Hexachlorocyclopentadiene	(3)	10.344	237	605706	22.680
118)*Acenaphthene-d10	(3)	11.740	164	282195	5.000
128) 2-Naphthylamine	(3)	12.242	143	2051843	24.951
158)*Phenanthrene-d10	(4)	13.660	188	558724	5.000
180)*Pyrene-d10	(5)	15.698	212	542339	5.000
218)*Perylene-d12	(6)	20.255	264	584581	5.000

* = Compound is an internal standard.

Digitally signed by Ashley R. Transue
on 03/05/2019 at 17:29.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/19apr15a.b/ld0910.d

Page 1

Date : 15-APR-2019 20:57

Client ID: DFTPP12.5

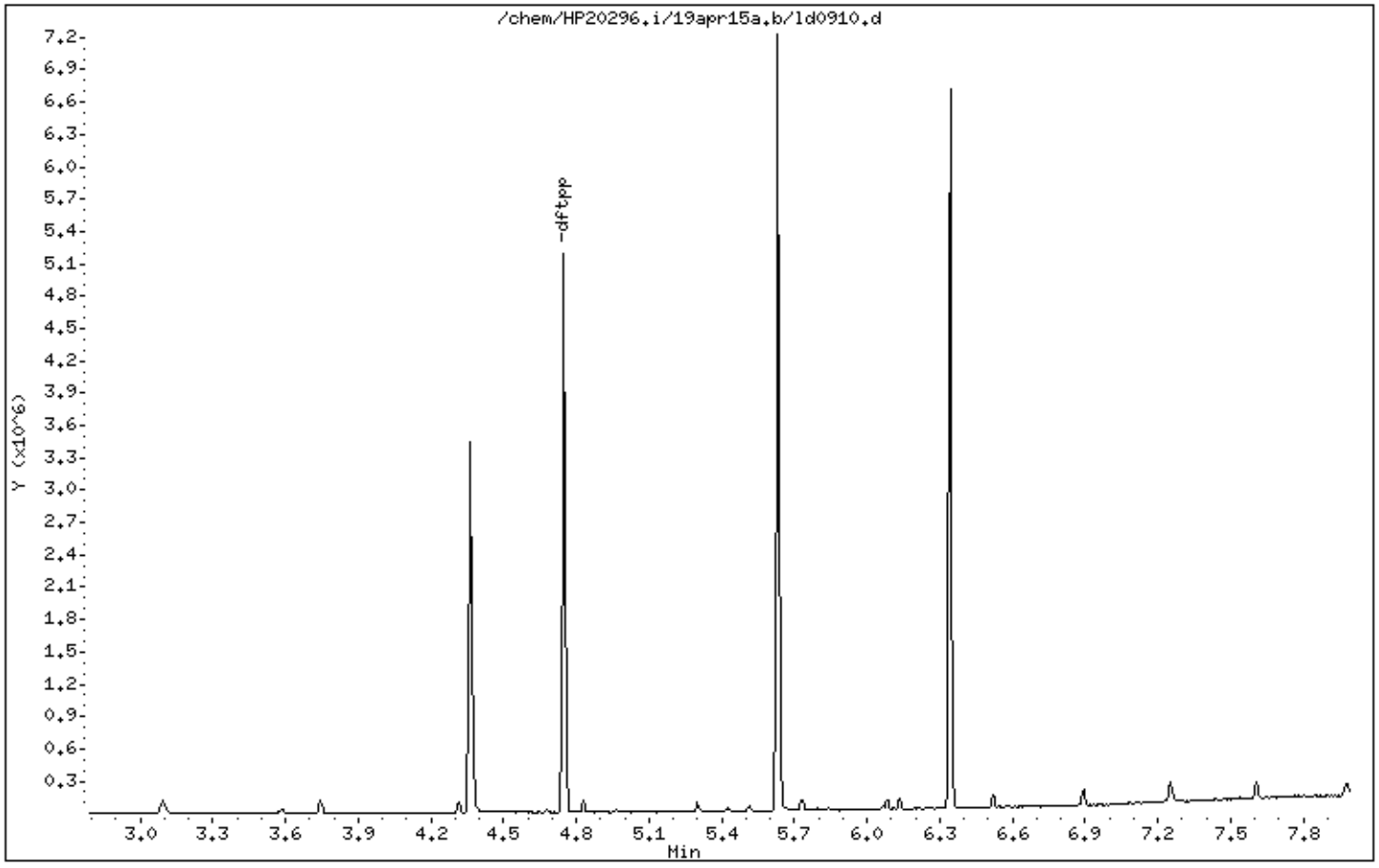
Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0999;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18



Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Data File: /chem/HP20296.i/19apr15a.b/ld0910.d

Date : 15-APR-2019 20:57

Client ID: DFTPP12.5

Instrument: HP20296.i

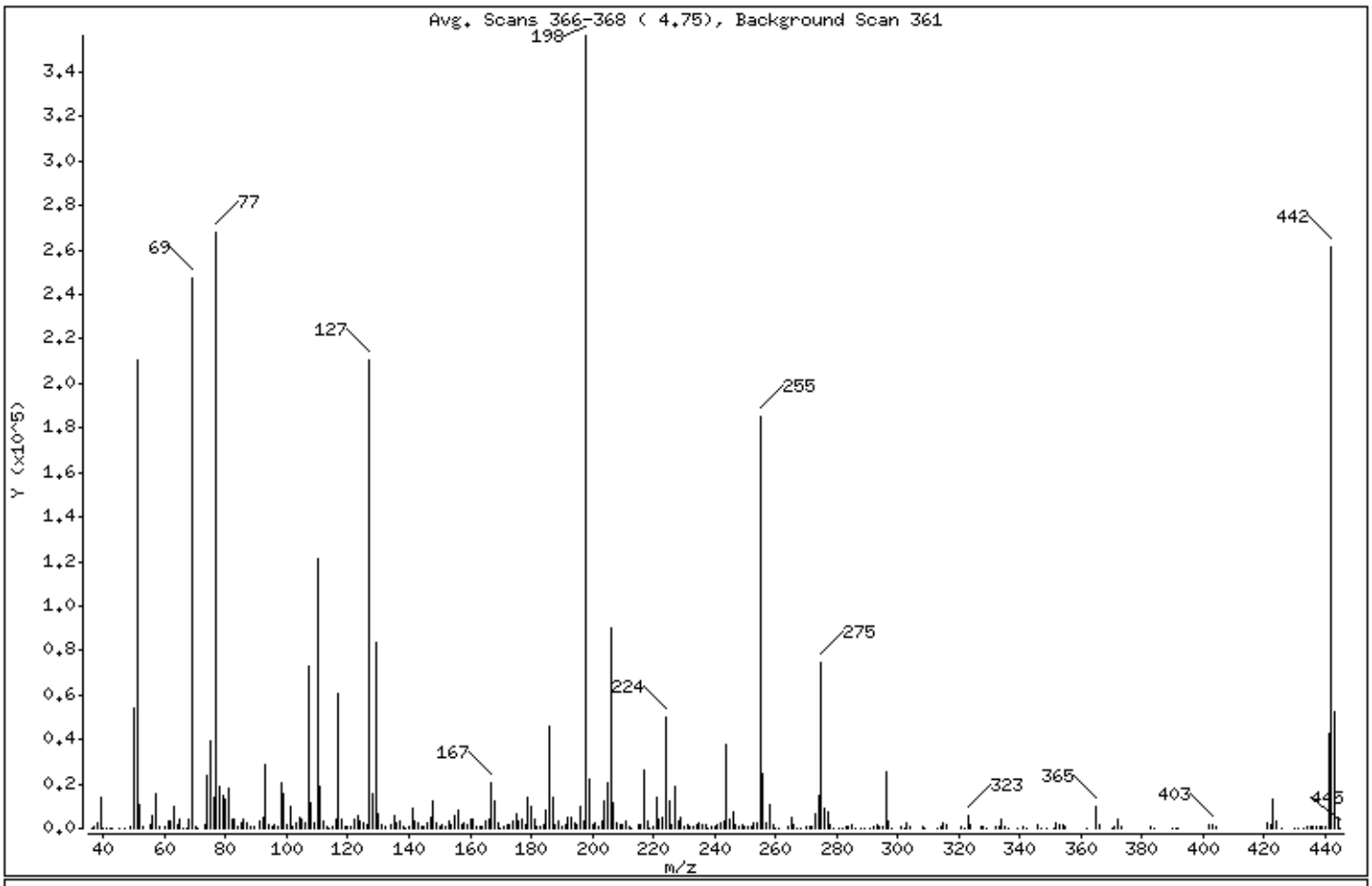
Sample Info: DFTPP12.5;rvDFTPP0999;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS

Column diameter: 0.18

1 dftpp



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	10.00 - 80.00% of mass 198	59.10
68	Less than 2.00% of mass 69	1.17 (1.68)
69	Mass 69 relative abundance	69.52
70	Less than 2.00% of mass 69	0.31 (0.45)
127	10.00 - 80.00% of mass 198	58.96
197	Less than 2.00% of mass 198	0.83
199	5.00 - 9.00% of mass 198	6.28
275	10.00 - 60.00% of mass 198	20.88
365	Greater than 1.00% of mass 198	2.76
441	0.01 - 24.00% of mass 442	11.90 (16.26)
442	50.00 - 99.99% of mass 198	73.22
443	15.00 - 24.00% of mass 442	14.73 (20.12)

Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Date : 15-APR-2019 20:57

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0999;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: ld0910.d
Spectrum: Avg. Scans 366-368 (4.75), Background Scan 361
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	50	123.00	6098	204.00	12513	291.00	234
37.00	822	124.00	3271	205.00	20800	292.00	608
38.00	2277	125.00	2836	206.00	90400	293.00	1729
39.00	13656	126.00	1696	207.00	11103	294.00	442
40.00	364	127.00	210176	208.00	2780	295.00	774
41.00	344	128.00	15244	209.00	1332	296.00	25072
42.00	317	129.00	83784	210.00	1601	297.00	2922
43.00	222	130.00	6698	211.00	3498	298.00	180
45.00	156	131.00	1338	212.00	732	301.00	568
47.00	94	132.00	775	213.00	126	302.00	319
49.00	903	134.00	1797	215.00	1440	303.00	2367
50.00	54032	135.00	5743	216.00	1984	304.00	805
51.00	210624	136.00	2793	217.00	26368	308.00	587
52.00	10750	137.00	3461	218.00	3681	309.00	95
53.00	868	138.00	1126	219.00	357	313.00	97
55.00	1388	139.00	264	220.00	759	314.00	1100
56.00	5403	140.00	1038	221.00	14237	315.00	2270
57.00	15739	141.00	9062	222.00	3870	316.00	1567
58.00	745	142.00	3443	223.00	5282	321.00	679
60.00	438	143.00	2294	224.00	50264	322.00	206
61.00	3141	144.00	668	225.00	12170	323.00	6119
62.00	3066	145.00	710	226.00	1250	324.00	1234
63.00	9862	146.00	2157	227.00	18600	327.00	1175
64.00	1339	147.00	4704	228.00	2953	328.00	637
65.00	4223	148.00	12146	229.00	4569	329.00	332
66.00	87	149.00	2651	230.00	557	332.00	465
67.00	405	150.00	744	231.00	1828	333.00	653
68.00	4156	151.00	1325	232.00	657	334.00	4052
69.00	247808	152.00	936	233.00	565	335.00	1073
70.00	1105	153.00	2973	234.00	1561	336.00	404
71.00	200	154.00	1884	235.00	2118	339.00	356
73.00	1916	155.00	5487	236.00	1240	341.00	938
74.00	23408	156.00	8274	237.00	1798	342.00	130
75.00	39696	157.00	1935	238.00	171	346.00	1877
76.00	13825	158.00	2049	239.00	1041	347.00	332

Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Date : 15-APR-2019 20:57

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0999;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

Data File: ld0910.d
Spectrum: Avg. Scans 366-368 (4.75), Background Scan 361
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
77.00	268032	159.00	1254	240.00	700	349.00	109
78.00	18712	160.00	3858	241.00	1458	351.00	252
79.00	14965	161.00	4253	242.00	2253	352.00	2324
80.00	13028	162.00	1090	243.00	3246	353.00	1581
81.00	18128	163.00	417	244.00	37560	354.00	1764
82.00	4376	164.00	740	245.00	4056	355.00	879
83.00	4383	165.00	3425	246.00	7446	362.00	109
84.00	874	166.00	3954	247.00	1384	365.00	9826
85.00	2705	167.00	20848	248.00	636	366.00	1557
86.00	4479	168.00	12646	249.00	1420	370.00	192
87.00	2573	169.00	2566	250.00	902	371.00	447
88.00	1042	170.00	409	251.00	465	372.00	4235
89.00	533	171.00	801	252.00	1068	373.00	697
91.00	3187	172.00	1715	253.00	2129	383.00	1177
92.00	4596	173.00	1993	254.00	2249	384.00	193
93.00	29024	174.00	3443	255.00	184768	390.00	267
94.00	2047	175.00	6522	256.00	24536	391.00	96
95.00	519	176.00	3080	257.00	2409	392.00	241
96.00	1364	177.00	3765	258.00	10764	402.00	1596
97.00	899	178.00	1297	259.00	1815	403.00	1770
98.00	20576	179.00	14330	260.00	91	404.00	702
99.00	15527	180.00	9596	261.00	144	421.00	2288
100.00	2002	181.00	4308	264.00	618	422.00	1830
101.00	9515	182.00	529	265.00	4607	423.00	13097
102.00	662	183.00	558	266.00	1289	424.00	3519
103.00	2558	184.00	1435	267.00	250	426.00	147
104.00	4829	185.00	7875	268.00	242	430.00	105
105.00	4261	186.00	45568	270.00	743	431.00	93
106.00	2283	187.00	13655	271.00	1059	433.00	354
107.00	73008	188.00	1417	272.00	744	434.00	684
108.00	11741	189.00	3227	273.00	6559	435.00	884
109.00	2055	190.00	956	274.00	15009	436.00	722
110.00	121192	191.00	1470	275.00	74424	437.00	933
111.00	18880	192.00	4639	276.00	9194	438.00	1106
112.00	2926	193.00	4820	277.00	7439	439.00	495

Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Date : 15-APR-2019 20:57

Client ID: DFTPP12.5 Instrument: HP20296.i

Sample Info: DFTPP12.5;rvDFTPP0999;1;3;DFTPP;

Operator: art12405

Column phase: DB-5MS Column diameter: 0.18

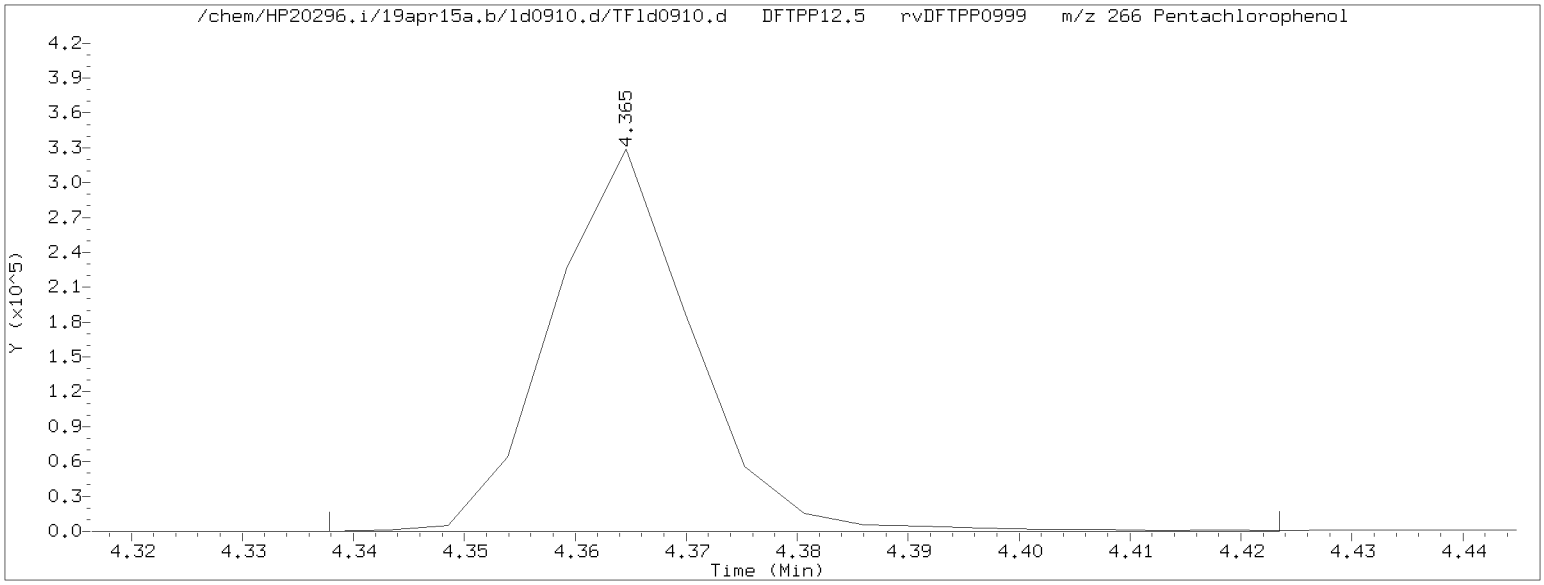
Data File: ld0910.d
Spectrum: Avg. Scans 366-368 (4.75), Background Scan 361
Location of Maximum: 198.00
Number of points: 316

m/z	Y	m/z	Y	m/z	Y	m/z	Y
113.00	1211	194.00	2179	278.00	1300	440.00	645
114.00	343	195.00	1239	279.00	280	441.00	42432
115.00	581	196.00	9877	281.00	24	442.00	260992
116.00	4155	197.00	2950	282.00	105	443.00	52520
117.00	61008	198.00	356416	283.00	1142	444.00	4606
118.00	3914	199.00	22392	284.00	455	445.00	377
119.00	602	200.00	1750	285.00	1304		
120.00	739	201.00	2591	286.00	352		
121.00	535	202.00	816	288.00	151		
122.00	3926	203.00	2922	289.00	393		

Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Assessment of GC Column Performance and Injection Port Inertness for

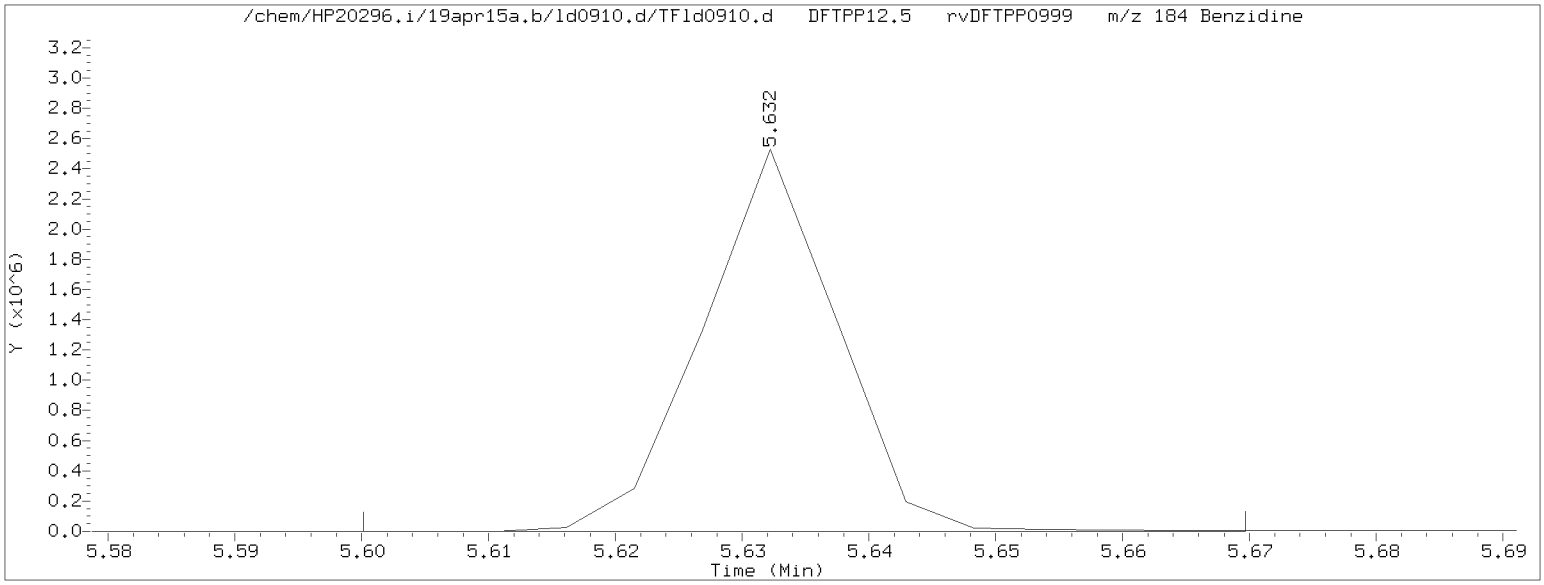
Instrument ID: HP20296.i Injection Date: 15-APR-2019 20:57 Operator: art12405



Pentachlorophenol EICP peak height = 328896 EICP peak height at 10% = 32890 Pentachlorophenol EICP area = 289486

Pentachlorophenol EICP peak apex (min.) = 4.365
RT at 10% of front half of EICP (min.) = 4.351 'Front' peak width (min.) = 0.0134666667
RT at 10% of back half of EICP (min.) = 4.378 'Tailing' peak width (min.) = 0.0137166667

$$\text{PCP tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0137166667}{0.0134666667} = 1.019$$



Benzidine EICP peak height = 2529792 EICP peak height at 10% = 252979 Benzidine EICP area = 1859648

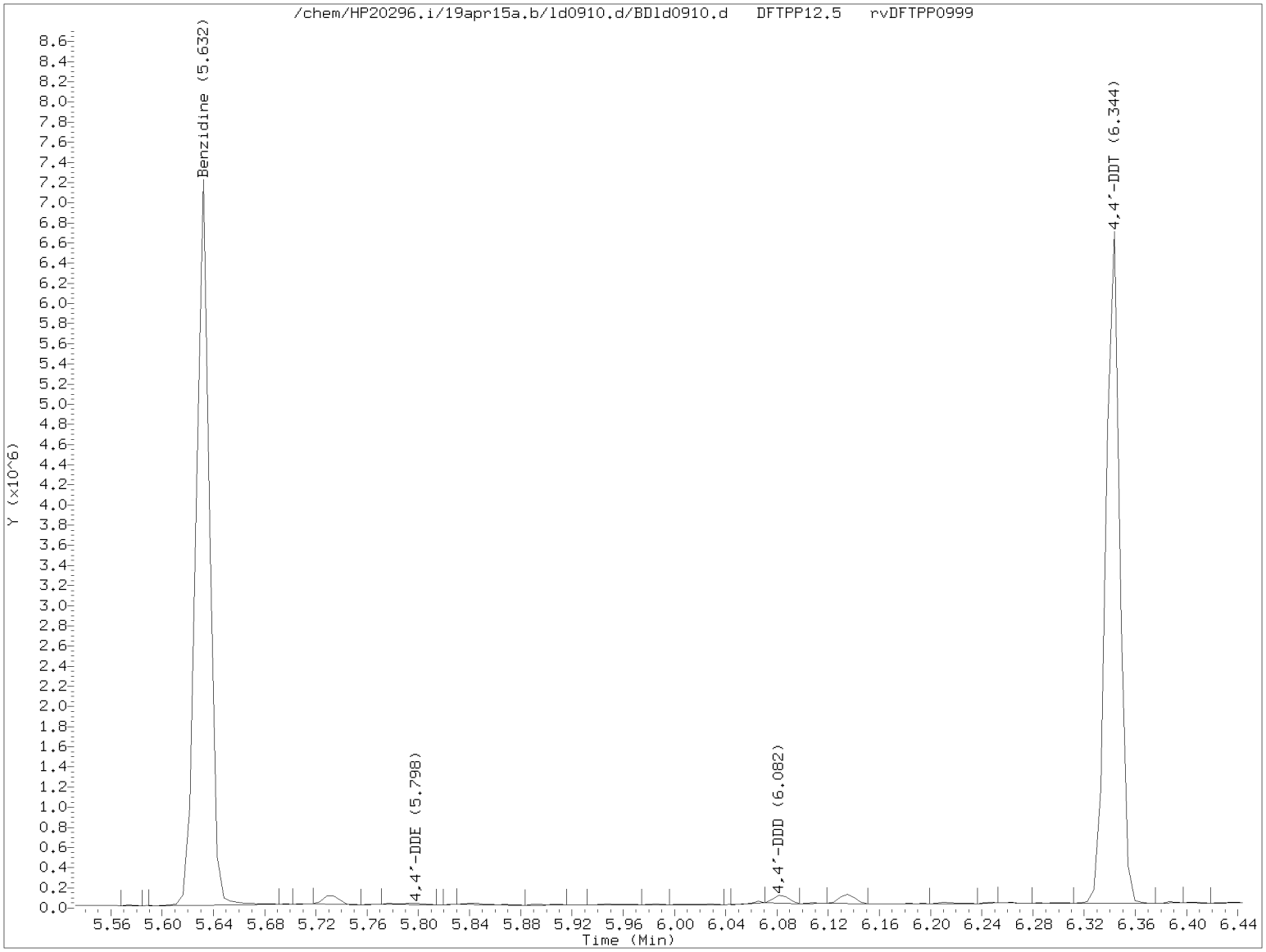
Benzidine EICP peak apex (min.) = 5.632
RT at 10% of front half of EICP (min.) = 5.621 'Front' peak width (min.) = 0.0112833333
RT at 10% of back half of EICP (min.) = 5.643 'Tailing' peak width (min.) = 0.0104166667

$$\text{Benzidine tailing factor} = \frac{\text{'Tailing' peak width (min.)}}{\text{'Front' peak width (min.)}} = \frac{0.0104166667}{0.0112833333} = 0.923$$

Secondary review performed and digitally signed by Chad A. Moline on 04/17/2019 at 15:00. PARALLAX ID: cam01237

Assessment of GC Column Performance and Injection Port Inertness for

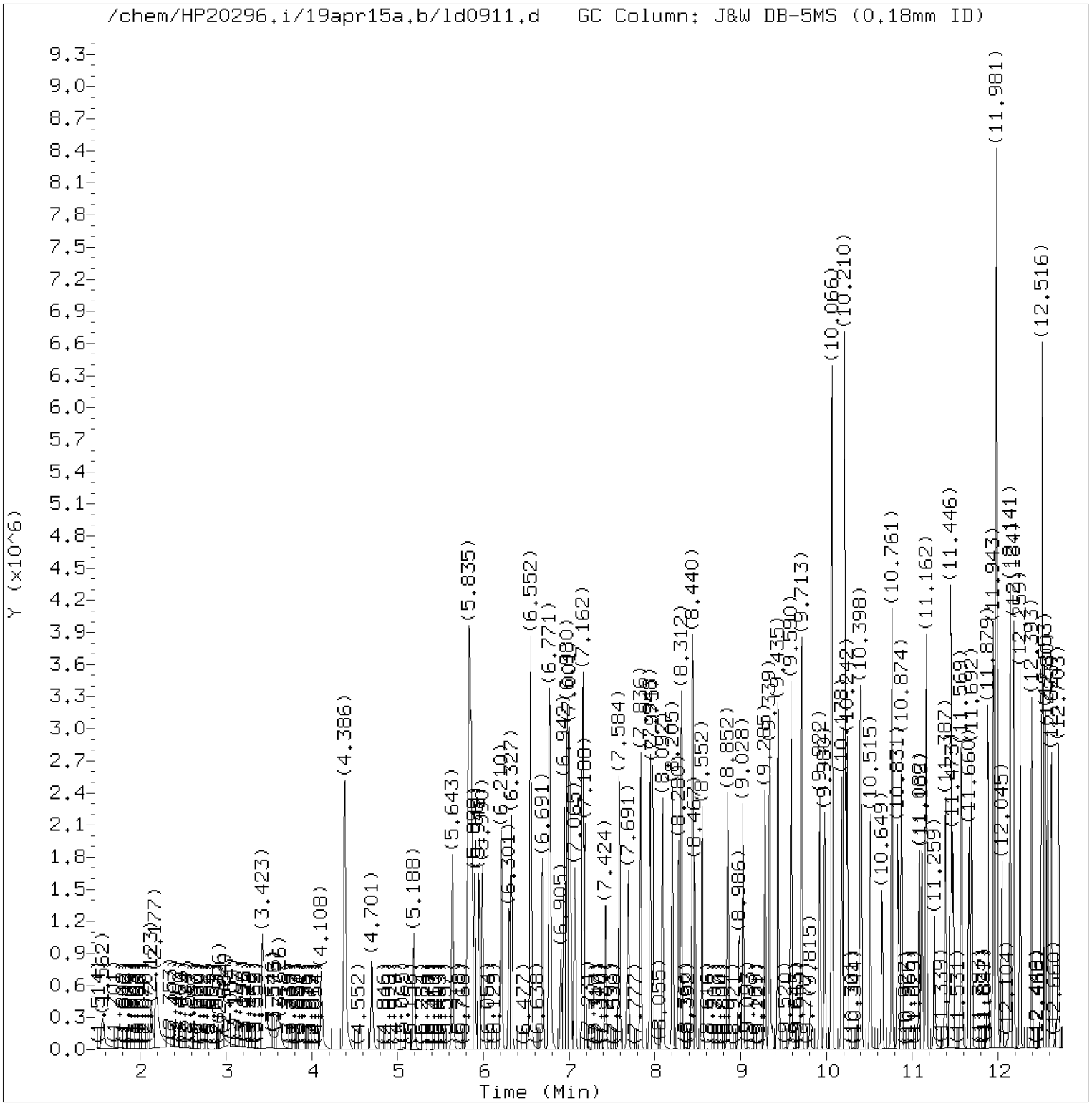
Instrument ID: HP20296.i Injection Date: 15-APR-2019 20:57 Operator: art12405



$$\% \text{ 4,4'-DDT breakdown} = \frac{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area}}{\text{4,4'-DDE TIC area + 4,4'-DDD TIC area + 4,4'-DDT TIC area}} \times 100$$

$$\% \text{ 4,4'-DDT breakdown} = \frac{19853 + 64881}{19853 + 64881 + 5085735} \times 100 = 1.6$$

Secondary review performed and digitally signed by Chad A. Moline on 04/17/2019 at 15:00. PARALLAX ID: cam01237



Total Ion Chromatogram (TIC)

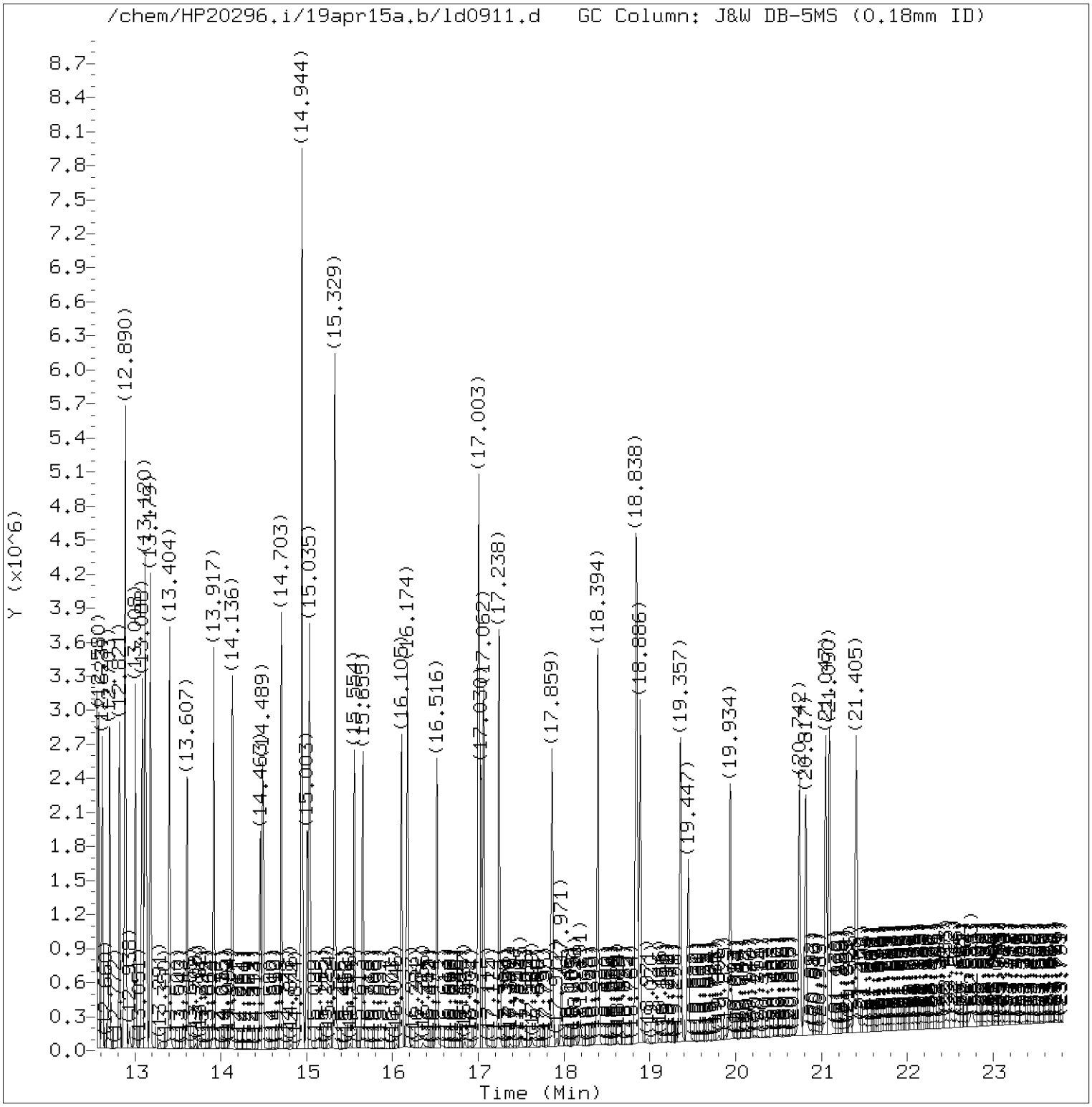
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
1) 1,4-Dioxane	(1)	1.562	88	290512	8.164
5) N-Nitrosodimethylamine	(1)	2.123	74	436094	7.991
6) Pyridine	(1)	2.177	79	769485	8.072
8) 2-Picoline	(1)	3.423	93	764651	7.658
9) N-Nitrosomethylethylamine	(1)	3.632	88	324580	8.019
10) Methyl methanesulfonate	(1)	4.113	80	444272	8.871
12)$2-Fluorophenol	(1)	4.386	112	1226820	15.733
14) N-Nitrosodiethylamine	(1)	4.701	102	302963	7.666
16) Ethyl methanesulfonate	(1)	5.188	109	333817	7.954
17) Benzaldehyde	(1)	5.643	77	631794	9.085
43) Total Cresols	(1)			1299419	15.945
20) Aniline	(1)	5.819	93	1124263	8.042
18)$Phenol-d6	(1)	5.835	99	1724530	16.331
19) Phenol	(1)	5.857	94	962180	8.077
21) a-methylstyrene	(1)	5.899	118	105116	6.823
23) bis(2-Chloroethyl)ether	(1)	5.948	93	772607	8.630
24) 2-Chlorophenol	(1)	5.990	128	568251	7.504
25) 1,3-Dichlorobenzene	(1)	6.210	146	596815	7.230
26)*1,4-Dichlorobenzene-d4	(1)	6.301	152	251061	5.000
27) 1,4-Dichlorobenzene	(1)	6.327	146	608706	7.203
29) 1,2-Dichlorobenzene	(1)	6.552	146	578813	7.302
28) Benzyl alcohol	(1)	6.552	108	373834	7.398
31) Indene	(1)	6.691	115	743006	7.162
32) 2-Methylphenol	(1)	6.771	108	605435	7.906
34) 2,2'-oxybis(1-Chloropropane)	(1)	6.777	45	989928	11.300
35) bis(2-Chloroisopropyl)ether	(1)	6.777	45	989928	11.300
36) N-Nitrosopyrrolidine	(1)	6.905	100	333493	7.881
37) Acetophenone	(1)	6.942	105	930777	8.228
40) N-Nitrosomorpholine	(1)	6.980	56	415032	9.458
39) N-Nitroso-di-n-propylamine	(1)	6.980	70	580044	9.022
41) o-Toluidine	(1)	6.996	106	1069833	7.878
38) 4-Methylphenol	(1)	7.017	108	693984	8.039
44) Hexachloroethane	(1)	7.065	117	296531	8.180
45)$Nitrobenzene-d5	(2)	7.162	82	1646512	17.393
46) Nitrobenzene	(2)	7.188	77	858257	8.888
100) Isosafrole	(3)			462206	7.419
50) N-Nitrosopiperidine	(2)	7.429	114	296489	7.769
52) Isophorone	(2)	7.584	82	1442202	8.681
53) 2-Nitrophenol	(2)	7.691	139	274220	7.289
55) 2,4-Dimethylphenol	(2)	7.836	107	655179	7.828

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
59) O,O,O-Triethylphosphorothioate	(2)	7.948	198	239144	7.237
57) bis(2-Chloroethoxy)methane	(2)	7.975	93	933075	8.572
58) Benzoic acid	(2)	7.991	105	203491M	3.623
125) 2,4_2,6-Dinitrotoluenes	(3)			535585	14.768
62) 2,4-Dichlorophenol	(2)	8.092	162	446858	7.305
65) 1,2,4-Trichlorobenzene	(2)	8.205	180	467665	7.190
68)*Naphthalene-d8	(2)	8.280	136	943810	5.000
69) Naphthalene	(2)	8.312	128	1624900	7.464
70) 4-Chloroaniline	(2)	8.440	127	673302	7.782
71) 2,6-Dichlorophenol	(2)	8.445	162	437683	7.453
72) Hexachloropropene	(2)	8.467	213	307944	7.014
74) Hexachlorobutadiene	(2)	8.552	225	258825	6.926
151) Diallate trans/cis	(4)			668392	9.731
78) Quinoline	(2)	8.852	129	964805	7.642
79) Caprolactam	(2)	8.986	113	154157	7.874
80) N-Nitrosodi-n-butylamine	(2)	9.028	84	519929	7.844
83) 4-Chloro-3-methylphenol	(2)	9.285	107	558153	7.786
85) Safrole	(2)	9.339	162	374669	7.105
86) 2-Methylnaphthalene	(2)	9.435	142	1023269	7.280
87) 1-Methylnaphthalene	(2)	9.590	142	972526	7.393
88) Hexachlorocyclopentadiene	(3)	9.713	237	270145	6.510
89) 1,2,4,5-Tetrachlorobenzene	(3)	9.713	216	450037	7.346
91) cis-Isosafrole	(3)	9.815	162	69707	1.236
93) 2,4,6-Trichlorophenol	(3)	9.922	196	302784	7.294
95) 2,4,5-Trichlorophenol	(3)	9.980	196	311109	7.285
96)$2-Fluorobiphenyl	(3)	10.066	172	2153740	14.736
97) trans-Isosafrole	(3)	10.178	162	392499	6.184
98) 1,1'-Biphenyl	(3)	10.210	154	1205808	7.856
99) 2-Chloronaphthalene	(3)	10.216	162	931025	6.927
101) 1-Chloronaphthalene	(3)	10.242	162	897099	8.041
103) Diphenyl ether	(3)	10.398	170	612812	7.242
104) 2-Nitroaniline	(3)	10.408	138	313748	7.774
108) 1,4-Naphthoquinone	(3)	10.515	158	353963	6.926
109) 1,4-Dinitrobenzene	(3)	10.649	168	146258	7.216
110) Dimethylphthalate	(3)	10.761	163	1073585	7.939
111) 1,3-Dinitrobenzene	(3)	10.767	168	162567	7.359
113) 2,6-Dinitrotoluene	(3)	10.831	165	237306	7.624
114) Acenaphthylene	(3)	10.874	152	1357028	7.465
117) 3-Nitroaniline	(3)	11.082	138	257624	7.410
118)*Acenaphthene-d10	(3)	11.109	164	438492	5.000

M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
119) Acenaphthene	(3)	11.162	153	1011343	7.543
120) 2,4-Dinitrophenol	(3)	11.259	184	140345	6.791
122) Pentachlorobenzene	(3)	11.387	250	375716	7.014
121) 4-Nitrophenol	(3)	11.441	109	206728	7.859
124) Dibenzofuran	(3)	11.446	168	1314064	7.534
123) 2,4-Dinitrotoluene	(3)	11.473	165	298279	7.144
126) 1-Naphthylamine	(3)	11.569	143	979293	7.464
127) 2,3,4,6-Tetrachlorophenol	(3)	11.660	232	232795	6.699
128) 2-Naphthylamine	(3)	11.692	143	940302	7.359
129) Diethylphthalate	(3)	11.879	149	1088574	8.240
131) Fluorene	(3)	11.943	166	1043860	7.339
132) 4-Chlorophenyl-phenylether	(3)	11.981	204	486129	7.562
130) Thionazin	(3)	11.981	107	243280	8.838
133) 5-Nitro-o-toluidine	(3)	11.986	152	296641	7.631
134) 4-Nitroaniline	(3)	11.997	138	285448	8.018
135) 4,6-Dinitro-2-methylphenol	(4)	12.045	198	159281	6.585
137) NDPA as diphenylamine	(4)	12.141	169	835607	7.394
136) N-Nitrosodiphenylamine	(4)	12.141	169	835607	7.394
139) 1,2-Diphenylhydrazine	(4)	12.184	77	1694652	10.027
140)$2,4,6-Tribromophenol	(3)	12.259	330	285090	13.871
142) Tetraethyldithiopyrophosphate	(4)	12.393	97	270785	9.794
144) 1,3,5-Trinitrobenzene	(4)	12.500	213	95561	6.537
145) Diallate (peak 1)	(4)	12.516	86	577329	8.181
146) Phorate	(4)	12.521	75	1117055	10.810
147) Phenacetin	(4)	12.553	108	691337	8.697
148) 4-Bromophenyl-phenylether	(4)	12.580	248	266113	7.158
149) Diallate (peak 2)	(4)	12.612	86	91063	1.550
150) Hexachlorobenzene	(4)	12.623	284	284254	6.788
152) Dimethoate	(4)	12.703	87	625228	9.284
153) Atrazine	(4)	12.821	200	248524	7.300
154) Pentachlorophenol	(4)	12.879	266	155885	5.630
155) 4-Aminobiphenyl	(4)	12.890	169	982519	7.583
156) Pentachloronitrobenzene	(4)	12.890	237	133817	7.339
157) Pronamide	(4)	13.008	173	499492	8.032
158)*Phenanthrene-d10	(4)	13.088	188	814805	5.000
160) Phenanthrene	(4)	13.120	178	1514983	7.353
159) Dinoseb	(4)	13.136	211	249012	6.737
162) Anthracene	(4)	13.179	178	1543180	7.649
168) Carbazole	(4)	13.404	167	1397036	7.751
169) Methyl parathion	(4)	13.612	109	471158	8.708

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

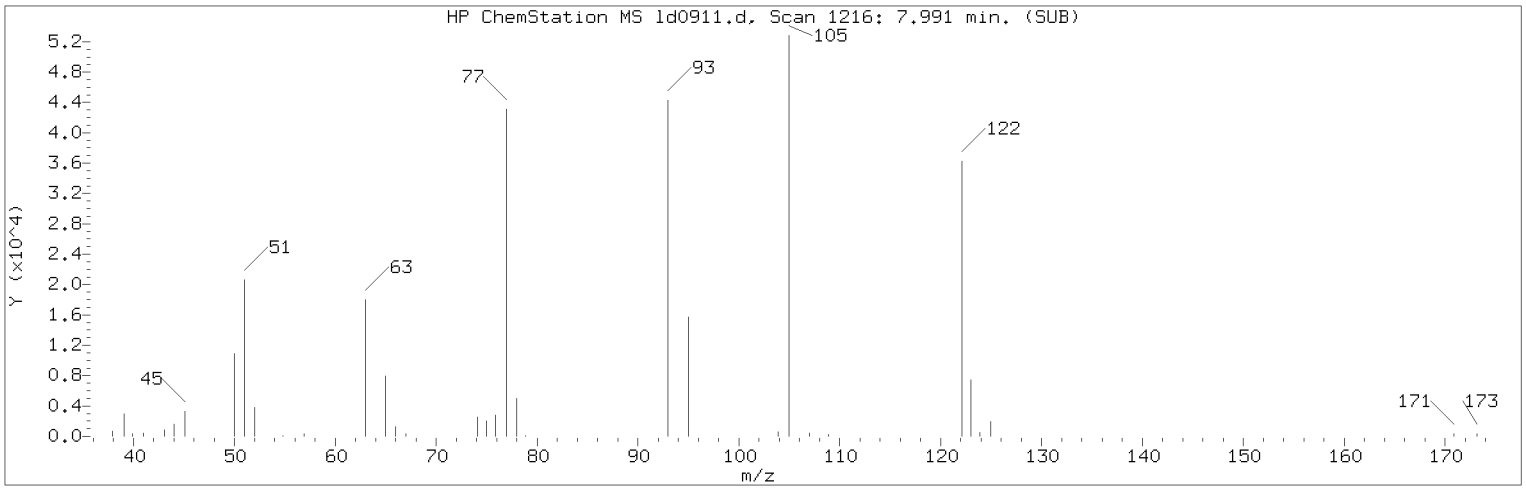
Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
170) Di-n-butylphthalate	(4)	13.917	149	1874520	7.852
173) 4-Nitroquinoline-1-oxide	(4)	14.131	190	111111	4.420
172) Parathion	(4)	14.136	109	307686	8.823
174) Octachlorostyrene	(4)	14.463	308	107069	6.765
176) Isodrin	(4)	14.489	193	175659	7.629
178) Fluoranthene	(4)	14.703	202	1591233	7.172
179) Benzidine	(5)	14.944	184	3177198	21.291
227) Total PAHs	(6)			24708901	132.741
180)*Pyrene-d10	(5)	15.003	212	816346	5.000
182) Pyrene	(5)	15.035	202	1657989	7.293
184)$Terphenyl-d14	(5)	15.329	244	2021006	14.206
187) p-Dimethylaminoazobenzene	(5)	15.554	225	251804	6.655
190) Chlorobenzilate	(5)	15.655	139	605591	7.922
192) 3,3'-Dimethylbenzidine	(5)	16.105	212	1023762	6.686
193) Butylbenzylphthalate	(5)	16.174	149	857468	7.550
196) 2-Acetylaminofluorene	(5)	16.516	181	650727	6.372
200) Benzo(a)anthracene	(5)	17.003	228	1521765	6.967
198) 3,3'-Dichlorobenzidine	(5)	17.009	252	575946	7.145
203) 4,4'-Methylenebis(2-chloroanil	(5)	17.030	231	310381	6.957
201) Chrysene	(5)	17.062	228	1432812	7.076
204) bis(2-Ethylhexyl)phthalate	(5)	17.244	149	1226948	7.303
208) 6-Methylchrysene	(5)	17.859	242	970041	6.630
210) Di-n-octylphthalate	(6)	18.394	149	2125647	8.141
211) Benzo(b)fluoranthene	(6)	18.838	252	1479296	7.470
212) 7,12-Dimethylbenz[a]anthracene	(6)	18.848	256	639122	7.742
213) Benzo(k)fluoranthene	(6)	18.886	252	1465899	7.817
216) Benzo(a)pyrene	(6)	19.357	252	1358614	7.375
218)*Perylene-d12	(6)	19.447	264	755402	5.000
220) 3-Methylcholanthrene	(6)	19.934	268	684046	7.273
222) Dibenz(a,h)acridine	(6)	20.742	279	1128696	7.205
223) Dibenz(a,j)acridine	(6)	20.817	279	1115356	7.258
224) Indeno(1,2,3-cd)pyrene	(6)	21.047	276	1346798M	7.354
225) Dibenz(a,h)anthracene	(6)	21.090	278	1387982	7.442
226) Benzo(g,h,i)perylene	(6)	21.405	276	1375424	7.287

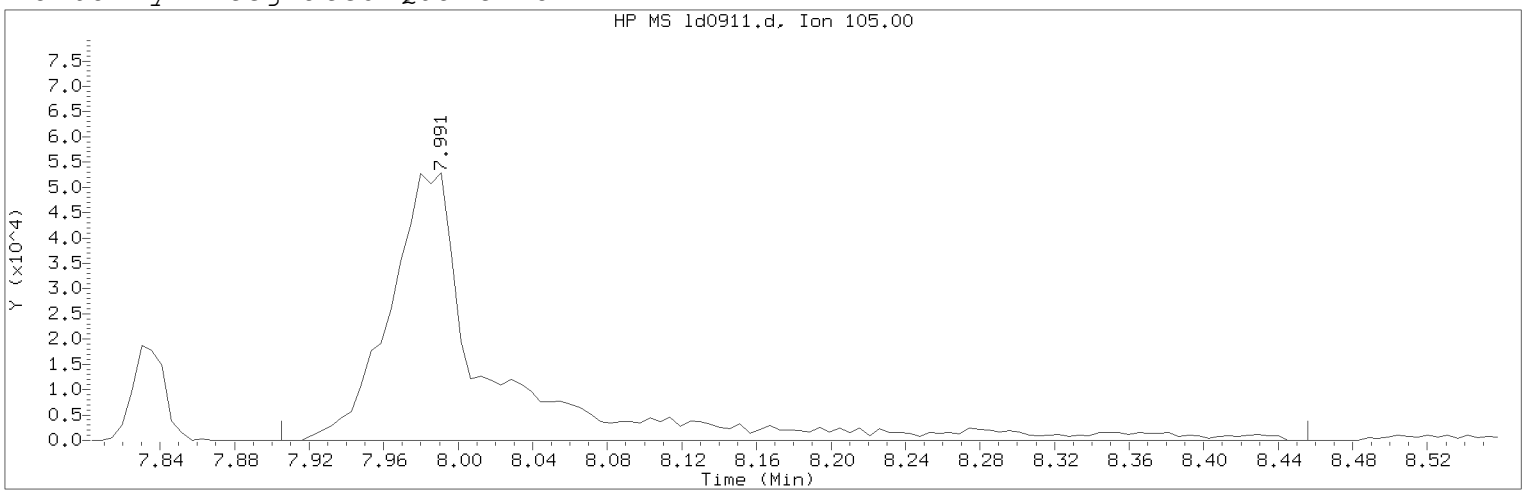
M = Compound was manually integrated.
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

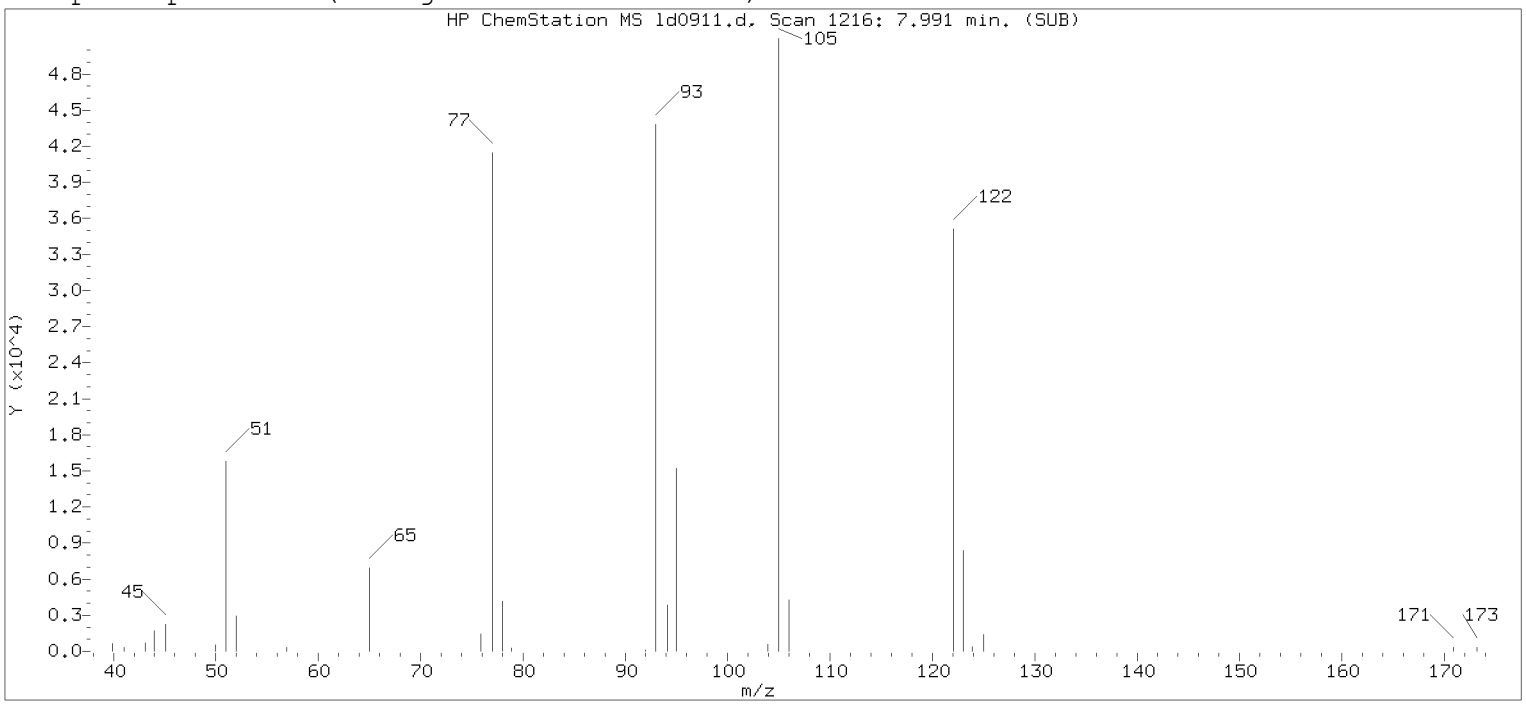
Compound Number : 58
Compound Name : Benzoic acid
Scan Number : 1216
Retention Time (minutes) : 7.991
Quant Ion : 105.00
Area (flag) : 203491M
On-Column Amount (ng/ul) : 3.6233
Integration start scan : 1199 Integration stop scan: 1302
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

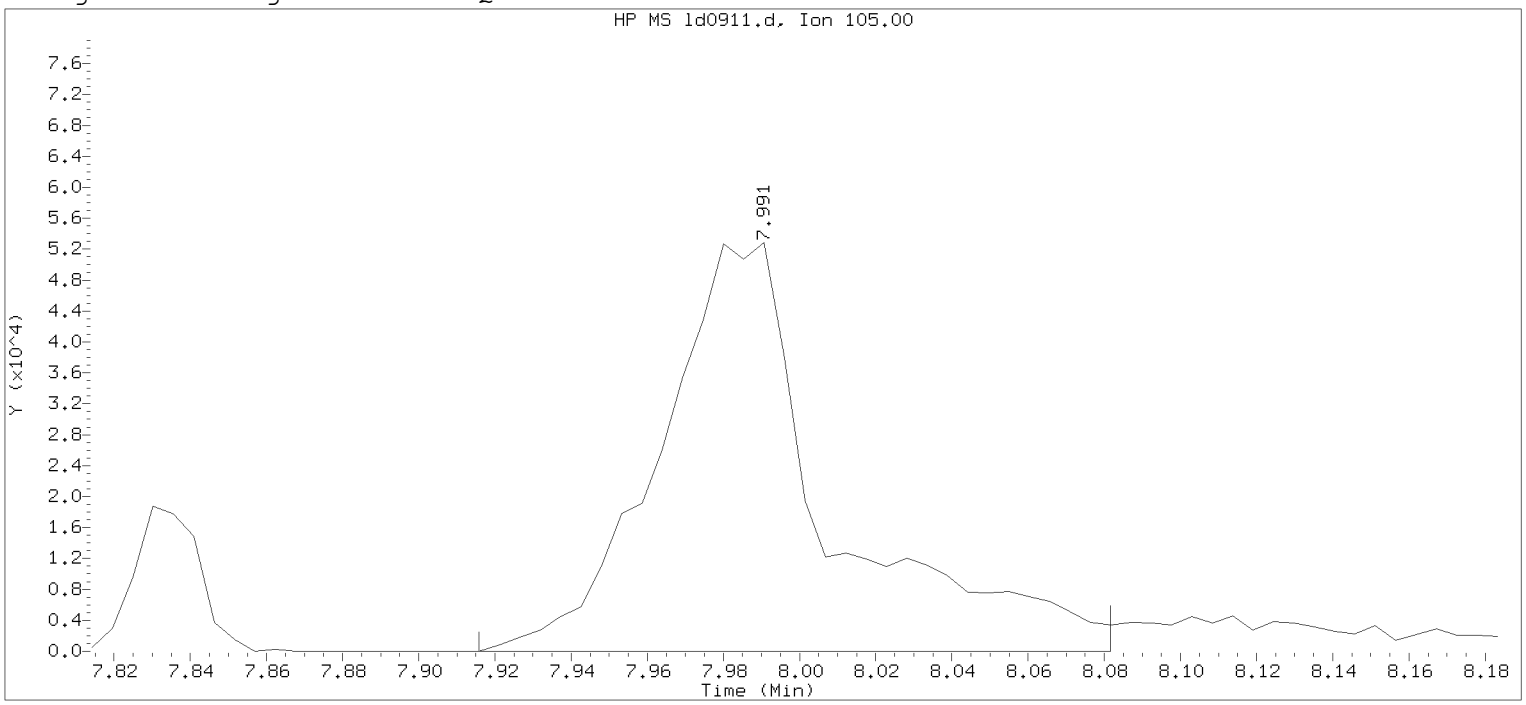
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 04/17/2019 at 15:00.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

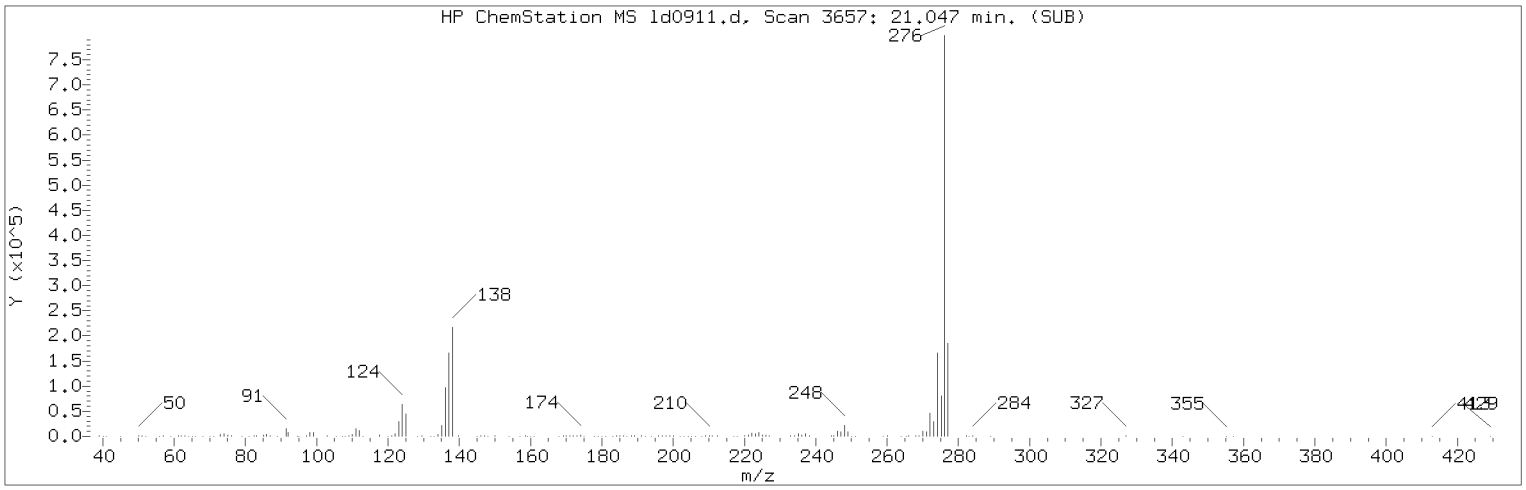
Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:41
Date, time and analyst ID of latest file update: 15-Apr-2019 21:41 chemist

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

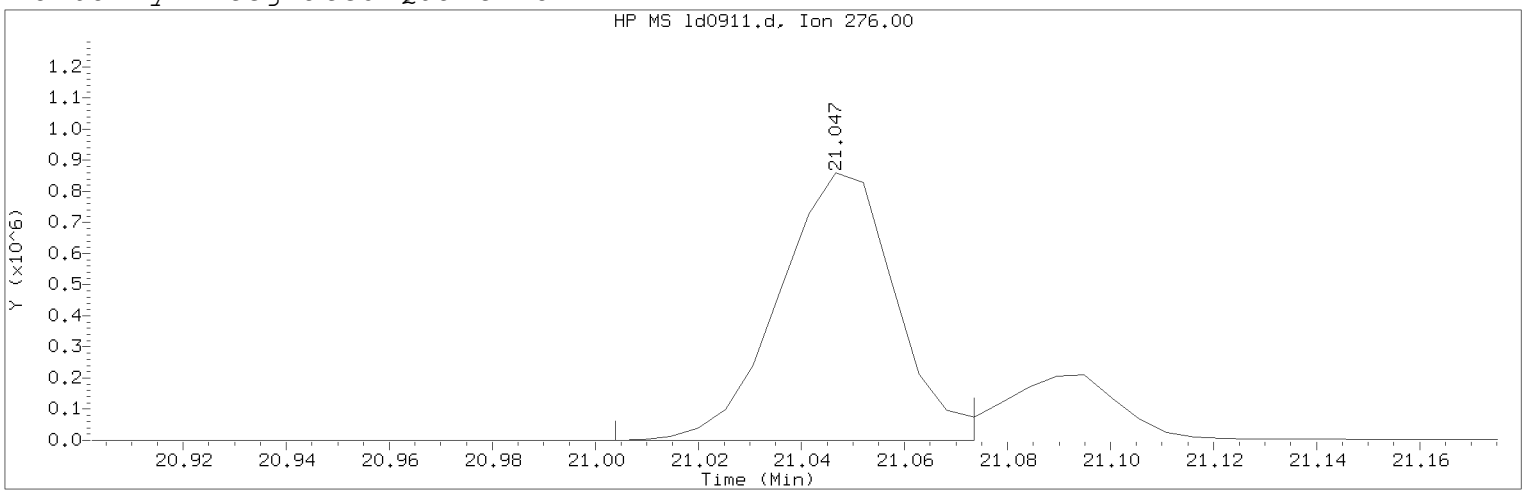
Compound Number	: 58		
Compound Name	: Benzoic acid		
Scan Number	: 1216		
Retention Time (minutes)	: 7.991		
Quant Ion	: 105.00		
Area	: 163373		
On-column Amount (ng/ul)	: 2.9090		
Integration start scan	: 1201	Integration stop scan:	1232
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ART34 at 2019.04.22

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:46
Date, time and analyst ID of latest file update: 15-Apr-2019 21:46 art12405

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

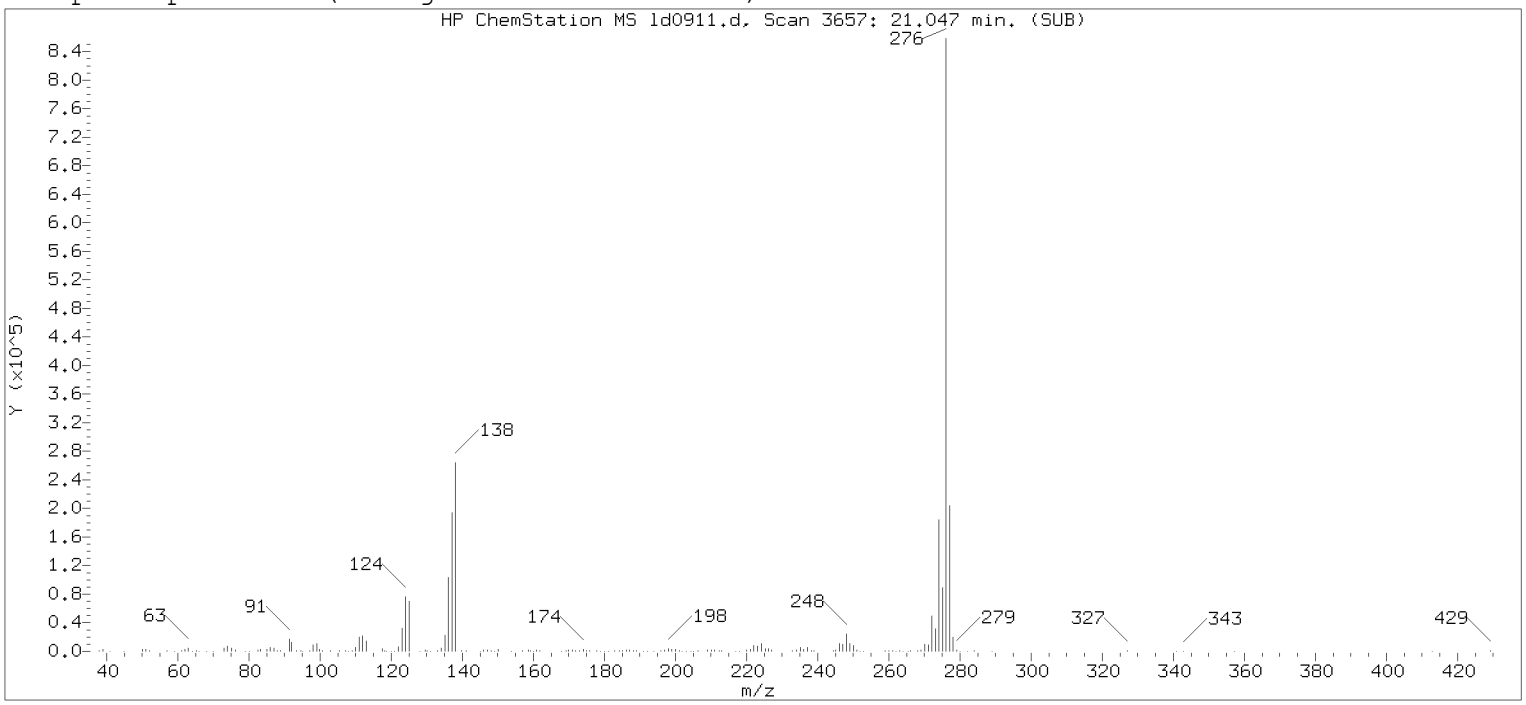
Compound Number : 224
Compound Name : Indeno(1,2,3-cd)pyrene
Scan Number : 3657
Retention Time (minutes) : 21.047
Quant Ion : 276.00
Area (flag) : 1346798M
On-Column Amount (ng/ul) : 7.3539
Integration start scan : 3648 Integration stop scan: 3661
Y at integration start : 0 Y at integration end: 0

Reason for manual integration: improper integration

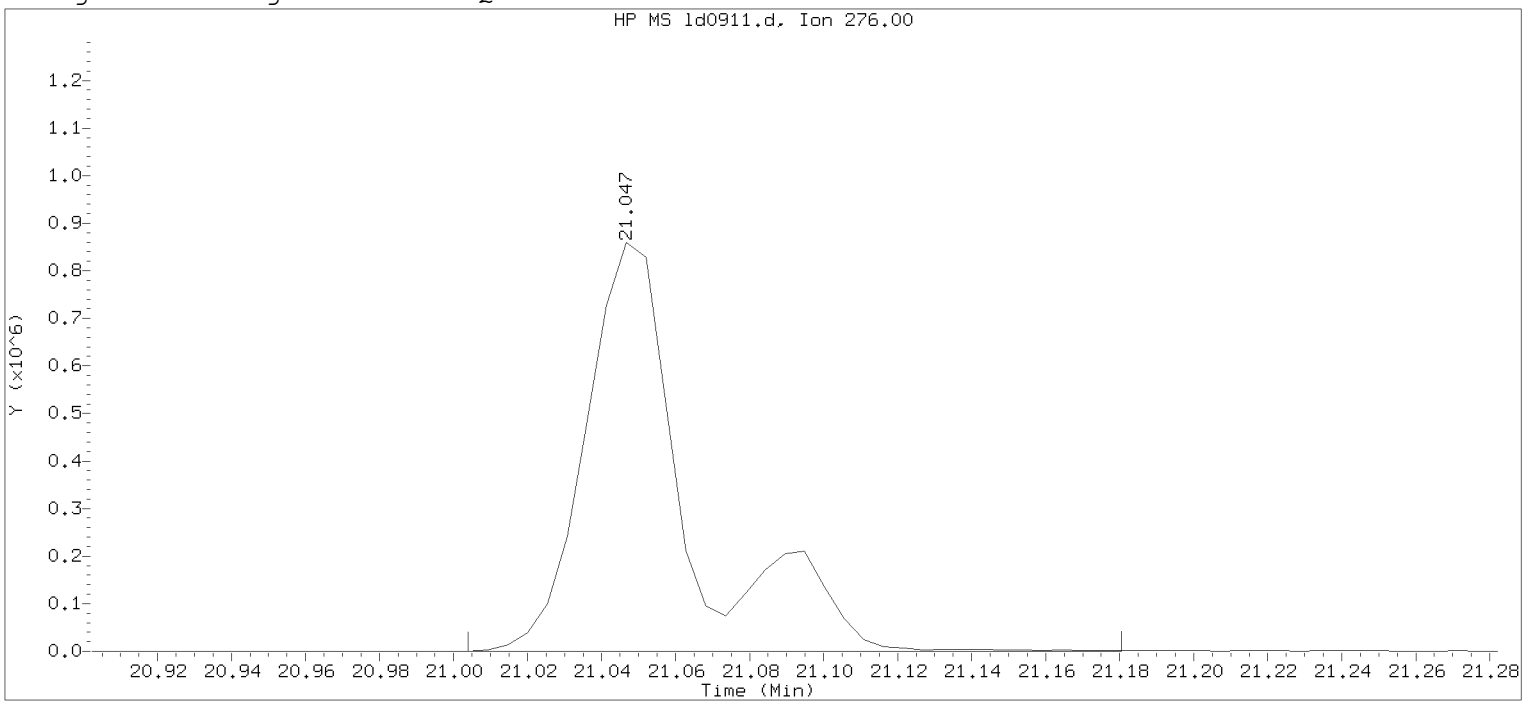
Analyst responsible for change: Digitally signed by Ashley R. Transue
on 04/15/2019 at 21:50.
Target 3.5 esignature user ID: art12405

Secondary review performed and digitally signed by Chad A. Moline on 04/17/2019 at 15:00.
PARALLAX ID: cam01237

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem/HP20296.i/19apr15a.b/ld0911.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 21:10 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: all1
Calibration date and time: 15-APR-2019 21:41
Date, time and analyst ID of latest file update: 15-Apr-2019 21:41 chemist

Sample Name: SSTD7.5 Lab Sample ID: rvSTD0929

Compound Number	: 224		
Compound Name	: Indeno(1,2,3-cd)pyrene		
Scan Number	: 3657		
Retention Time (minutes)	: 21.047		
Quant Ion	: 276.00		
Area	: 1661704		
On-column Amount (ng/ul)	: 9.0734		
Integration start scan	: 3648	Integration stop scan:	3681
Y at integration start	: 0	Y at integration end:	0

Digitally signed by Ashley R. Transue on 04/15/2019 at 21:50.
Target 3.5 esignature user ART34 at 2019.04.

Raw QC Data

Semivolatiles by GC/MS

Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0912.d Injection date and time: **15-APR-2019 22:00**
Data file Sample Info. Line: SBLKWP102;SBLKWP102;1;3;BLANK;;DRRAAP; Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.301(0.000)	900	152	221161 (-12)	5.00	
68) Naphthalene-d8	8.280(0.000)	1270	136	833261 (-12)	5.00	
118) Acenaphthene-d10	11.109(0.000)	1799	164	375346 (-14)	5.00	
158) Phenanthrene-d10	13.088(0.000)	2169	188	695943 (-15)	5.00	
180) Pyrene-d10	15.003(0.000)	2527	212	678841 (-17)	5.00	
218) Perylene-d12	19.442(0.005)	3357	264	632151 (-16)	5.00	

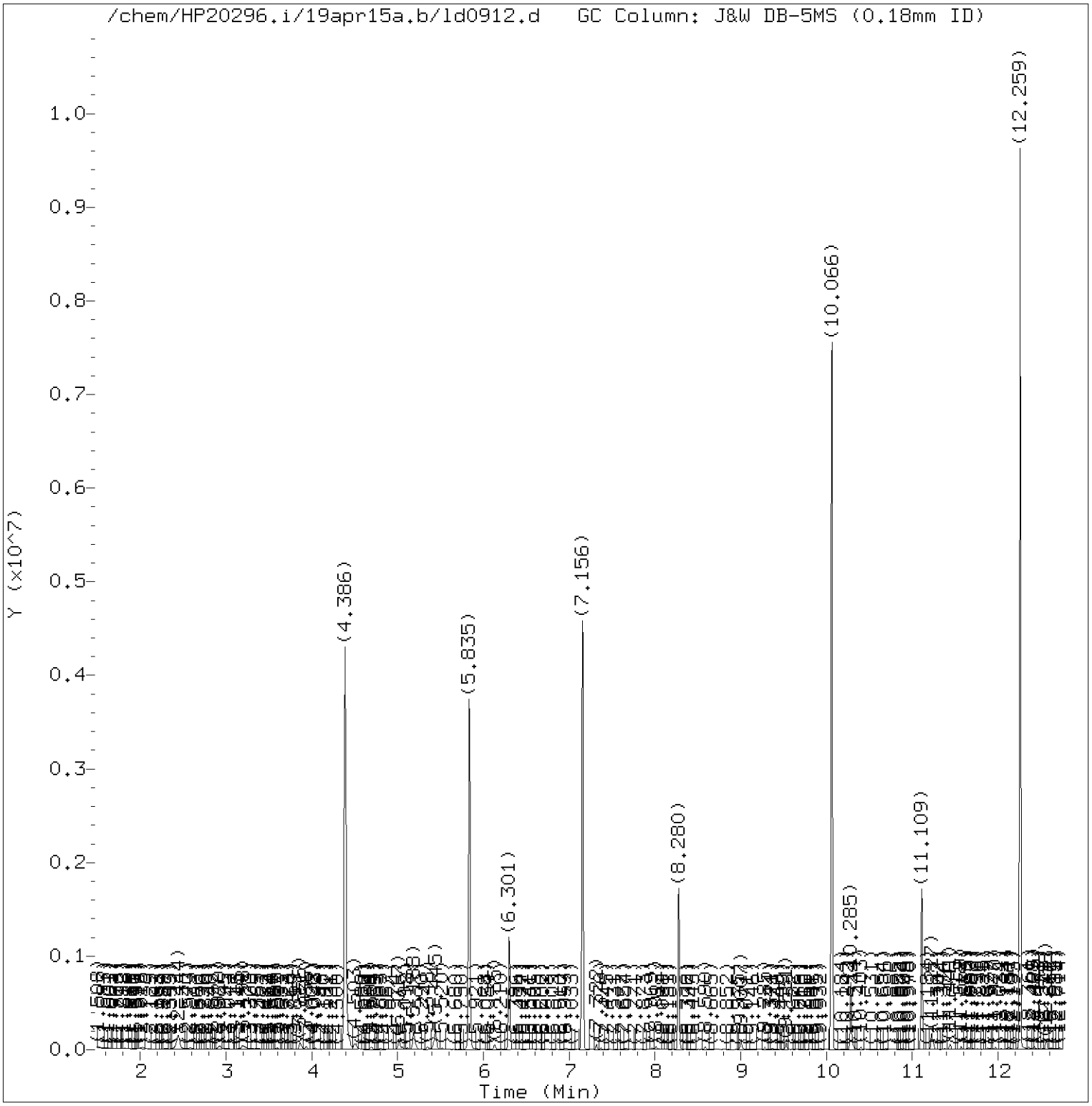
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
45) Nitrobenzene-d5	(2)	7.156(0.001)	82	2047378	24.496	98%
96) 2-Fluorobiphenyl	(3)	10.066(0.000)	172	2565148	20.504	82%
184) Terphenyl-d14	(5)	15.329(0.000)	244	2533286	21.414	86%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)			Not Detected					0.2
104) 2-Nitroaniline	(3)			Not Detected					0.5
113) 2,6-Dinitrotoluene	(3)			Not Detected					0.2
123) 2,4-Dinitrotoluene	(3)			Not Detected					0.2
129) Diethylphthalate	(3)			Not Detected					0.1
134) 4-Nitroaniline	(3)			Not Detected					0.3
204) bis(2-Ethylhexyl)phthalate	(5)			Not Detected					0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

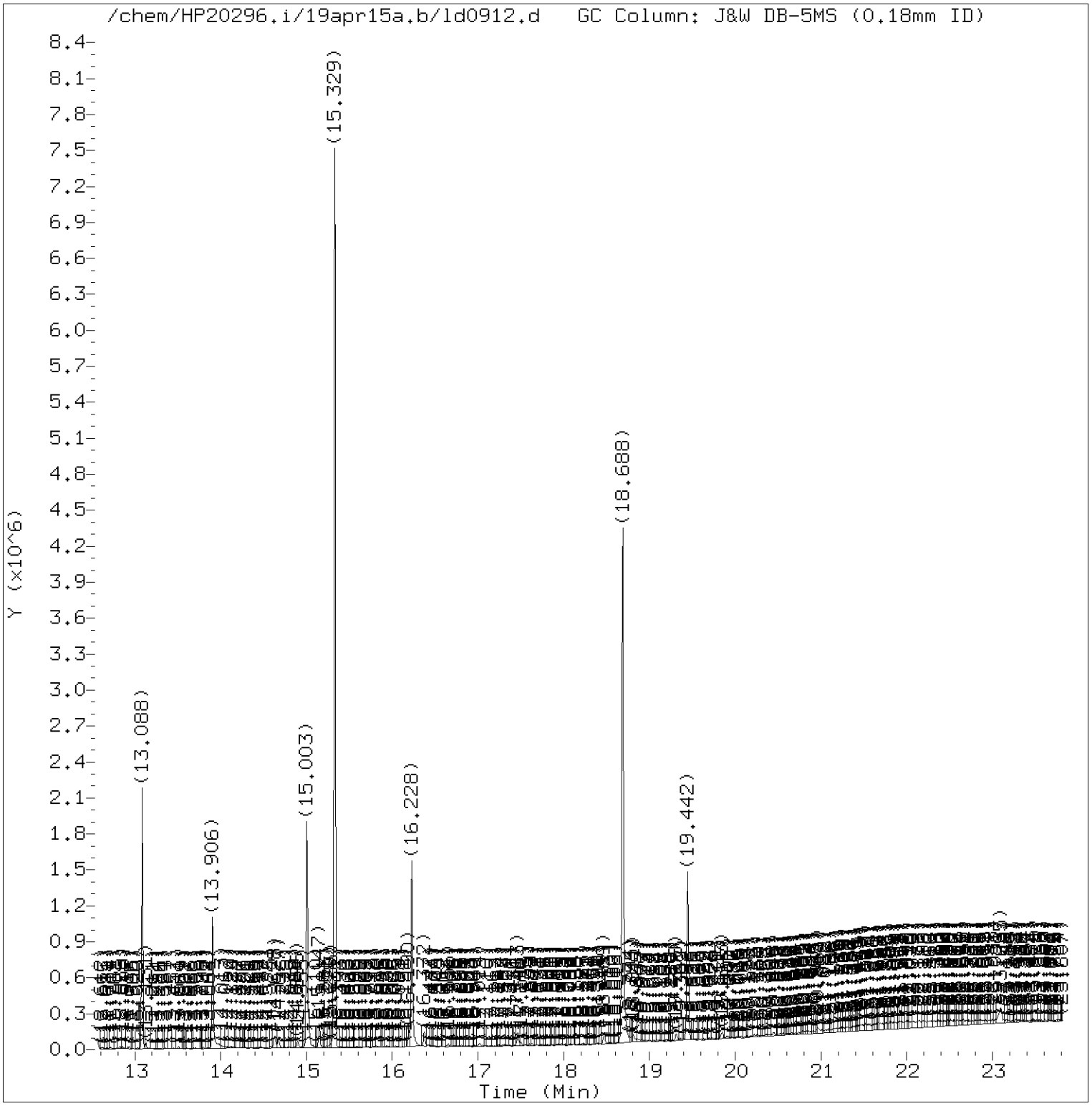
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0912.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:00 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: SBLKWP102 Lab Sample ID: SBLKWP102

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0912.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:00 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: SBLKWP102 Lab Sample ID: SBLKWP102

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0912.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:00 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: SBLKWP102 Lab Sample ID: SBLKWP102

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.301	152	221161	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	2047378	24.496
68)*Naphthalene-d8	(2)	8.280	136	833261	5.000
96)$2-Fluorobiphenyl	(3)	10.066	172	2565148	20.504
118)*Acenaphthene-d10	(3)	11.109	164	375346	5.000
158)*Phenanthrene-d10	(4)	13.088	188	695943	5.000
180)*Pyrene-d10	(5)	15.003	212	678841	5.000
184)$Terphenyl-d14	(5)	15.329	244	2533286	21.414
218)*Perylene-d12	(6)	19.442	264	632151	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0916.d
Data file Sample Info. Line: 34R03MS;1030979;1;3;MS;;DRRAAP;
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Injection date and time: **15-APR-2019 23:55**
Instrument ID: **HP20296.i** Batch: **19102WAP**

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 248 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.306(-0.005)	901	152	214534 (-15)	5.00	
68) Naphthalene-d8	8.274(0.005)	1269	136	854002 (-10)	5.00	
118) Acenaphthene-d10	11.109(0.000)	1799	164	375688 (-14)	5.00	
158) Phenanthrene-d10	13.083(0.005)	2168	188	714906 (-12)	5.00	
180) Pyrene-d10	15.003(0.000)	2527	212	674921 (-17)	5.00	
218) Perylene-d12	19.442(0.005)	3357	264	653100 (-14)	5.00	

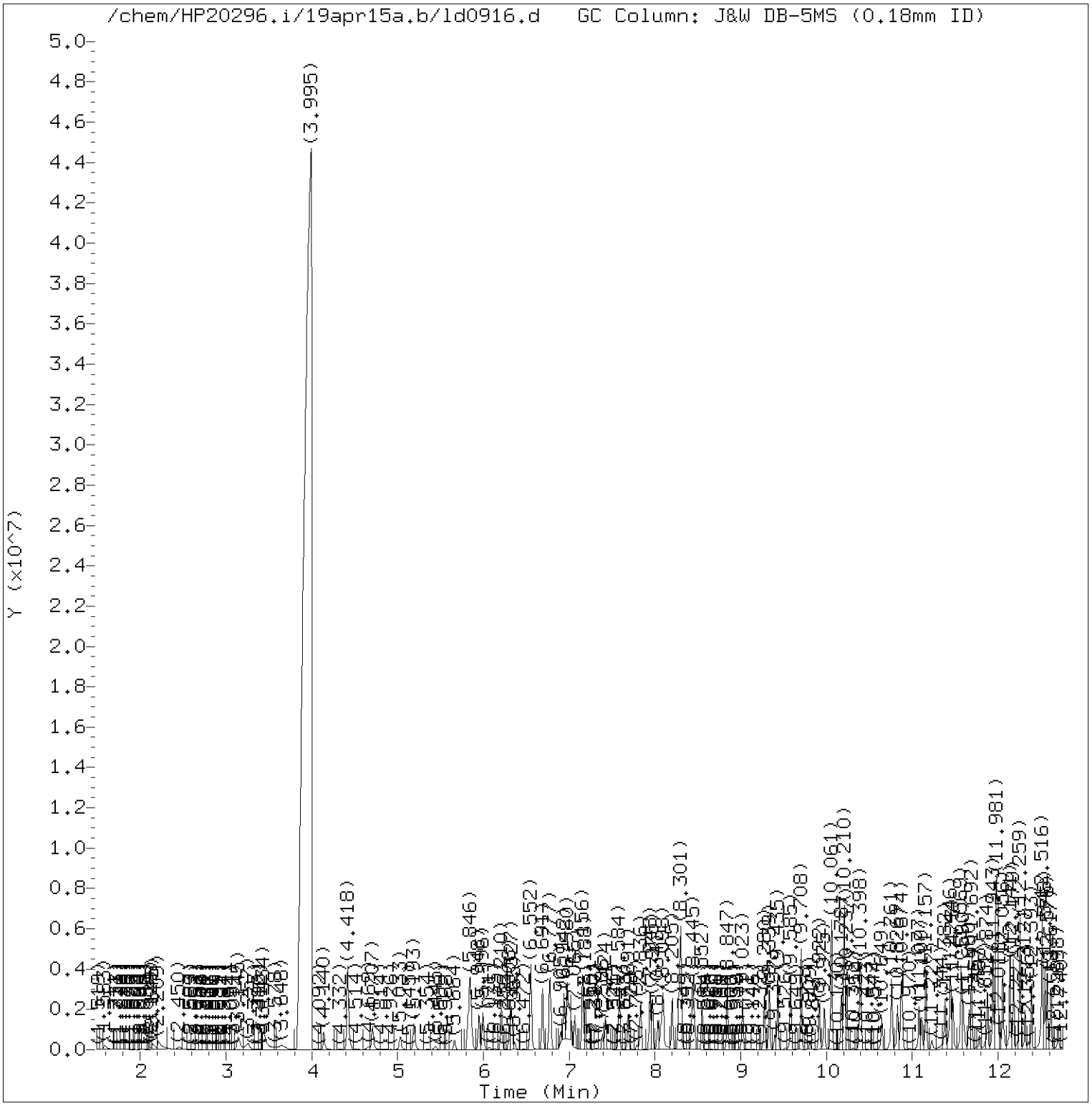
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.156(0.000)	82	1876935	21.912	88%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061(0.000)	172	2369522	18.923	76%		44 - 102
184) Terphenyl-d14	(5)	15.324(0.000)	244	1307302	11.115	44%		33 - 126

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.188(-0.000)	77	994868	11.386	45.91			0.2
104) 2-Nitroaniline	(3)	10.408(0.000)	138	394673	11.413	46.02			0.5
113) 2,6-Dinitrotoluene	(3)	10.826(0.000)	165	294898	11.058	44.59			0.2
123) 2,4-Dinitrotoluene	(3)	11.473(0.000)	165	349468	9.769	39.39			0.2
129) Diethylphthalate	(3)	11.879(0.000)	149	1061317	9.377	37.81			0.1
134) 4-Nitroaniline	(3)	11.997(0.000)	138	313225	10.269	41.41			0.3
204) bis(2-Ethylhexyl)phthalate	(5)	17.238(0.000)	149	1245017	8.963	36.14			0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

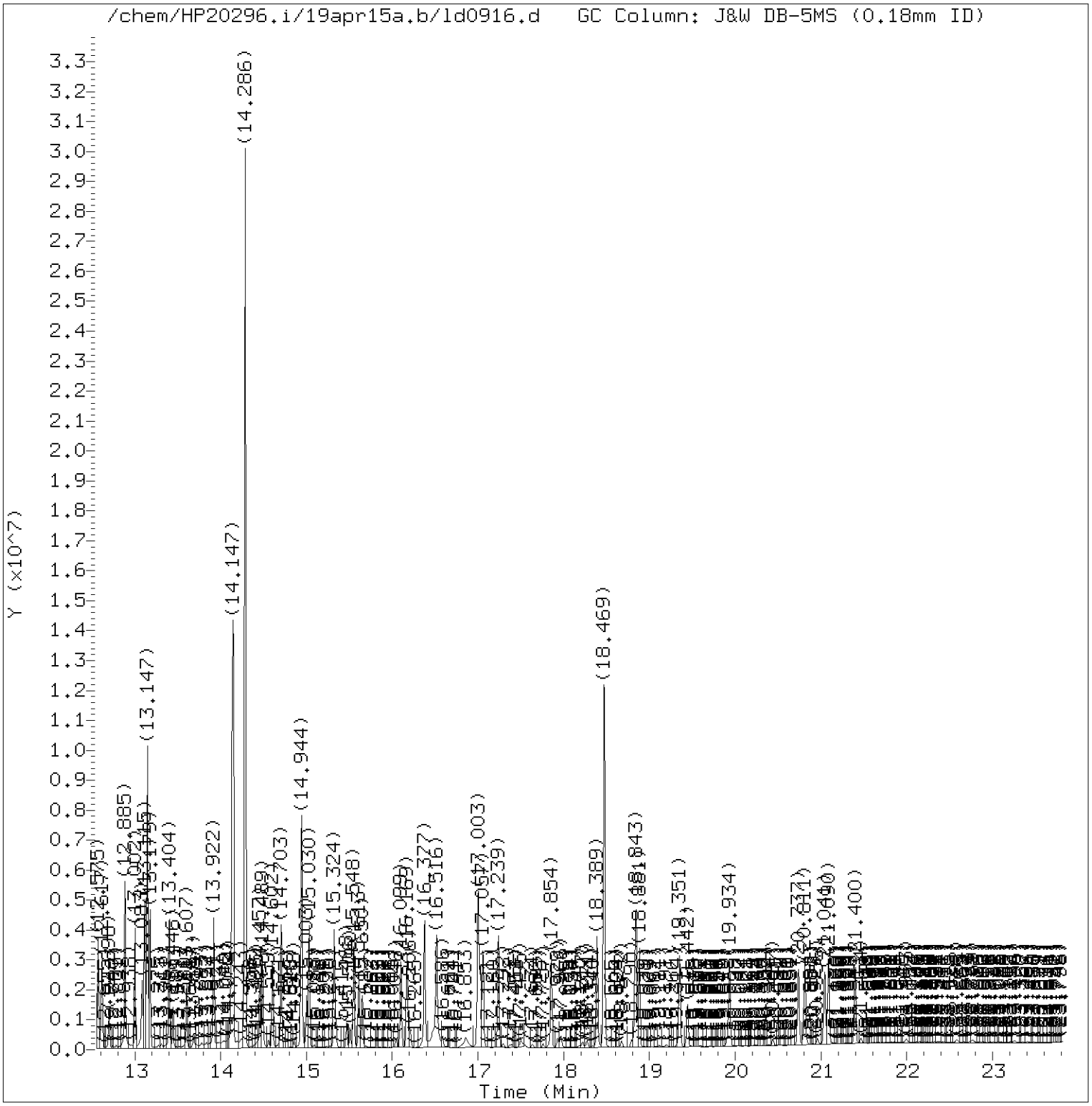
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0916.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 23:55 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R03MS Lab Sample ID: 1030979

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0916.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 23:55 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R03MS Lab Sample ID: 1030979

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0916.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 23:55 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 34R03MS Lab Sample ID: 1030979

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.306	152	214534	5.000
45)$Nitrobenzene-d5	(2)	7.156	82	1876935	21.912
46) Nitrobenzene	(2)	7.188	77	994868	11.386
68)*Naphthalene-d8	(2)	8.274	136	854002	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2369522	18.923
104) 2-Nitroaniline	(3)	10.408	138	394673	11.413
113) 2,6-Dinitrotoluene	(3)	10.826	165	294898	11.058
118)*Acenaphthene-d10	(3)	11.109	164	375688	5.000
123) 2,4-Dinitrotoluene	(3)	11.473	165	349468	9.769
129) Diethylphthalate	(3)	11.879	149	1061317	9.377
134) 4-Nitroaniline	(3)	11.997	138	313225	10.269
158)*Phenanthrene-d10	(4)	13.083	188	714906	5.000
180)*Pyrene-d10	(5)	15.003	212	674921	5.000
184)$Terphenyl-d14	(5)	15.324	244	1307302	11.115
204) bis(2-Ethylhexyl)phthalate	(5)	17.239	149	1245017	8.963
218)*Perylene-d12	(6)	19.442	264	653100	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

Data file: /chem/HP20296.i/19apr15a.b/ld0917.d
Injection date and time: **16-APR-2019 00:23**
Data file Sample Info. Line: 34R03MSD;1030980;1;3;MSD;;DRRAAP;
Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 249 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT	(+/-RT)	Scan	QIon	Area	(+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.306	(-0.005)	901	152	224438	(-11)	5.00	
68) Naphthalene-d8	8.280	(0.000)	1270	136	862448	(-9)	5.00	
118) Acenaphthene-d10	11.109	(0.000)	1799	164	379179	(-14)	5.00	
158) Phenanthrene-d10	13.083	(0.005)	2168	188	706317	(-13)	5.00	
180) Pyrene-d10	15.003	(0.000)	2527	212	683880	(-16)	5.00	
218) Perylene-d12	19.442	(0.005)	3357	264	652439	(-14)	5.00	

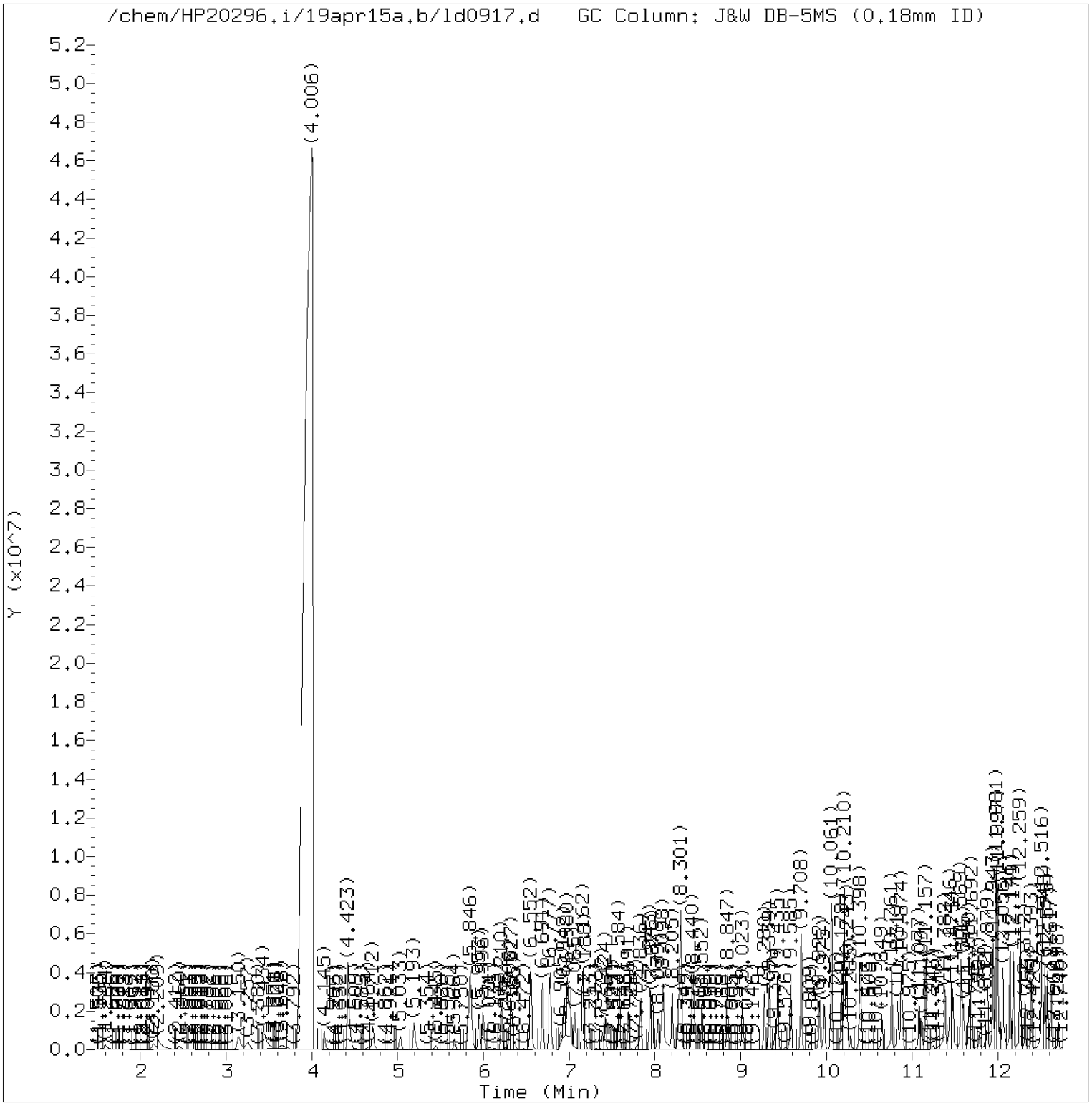
Surrogate Standards	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.	QC flags	QC Limits
45) Nitrobenzene-d5	(2)	7.162	(0.000)	82	2073310	23.967	96%		35 - 107
96) 2-Fluorobiphenyl	(3)	10.061	(0.000)	172	2682225	21.223	85%		44 - 102
184) Terphenyl-d14	(5)	15.324	(0.000)	244	1942107	16.296	65%		33 - 126

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.188	(-0.000)	77	1114202	12.626	50.71			0.2
104) 2-Nitroaniline	(3)	10.408	(-0.000)	138	435519	12.478	50.11			0.5
113) 2,6-Dinitrotoluene	(3)	10.831	(0.000)	165	314650	11.690	46.95			0.2
123) 2,4-Dinitrotoluene	(3)	11.473	(0.000)	165	409867	11.352	45.59			0.2
129) Diethylphthalate	(3)	11.879	(0.000)	149	1206686	10.563	42.42			0.1
134) 4-Nitroaniline	(3)	11.997	(0.000)	138	354846	11.527	46.29			0.3
204) bis(2-Ethylhexyl)phthalate	(5)	17.238	(0.000)	149	1524308	10.830	43.49			0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

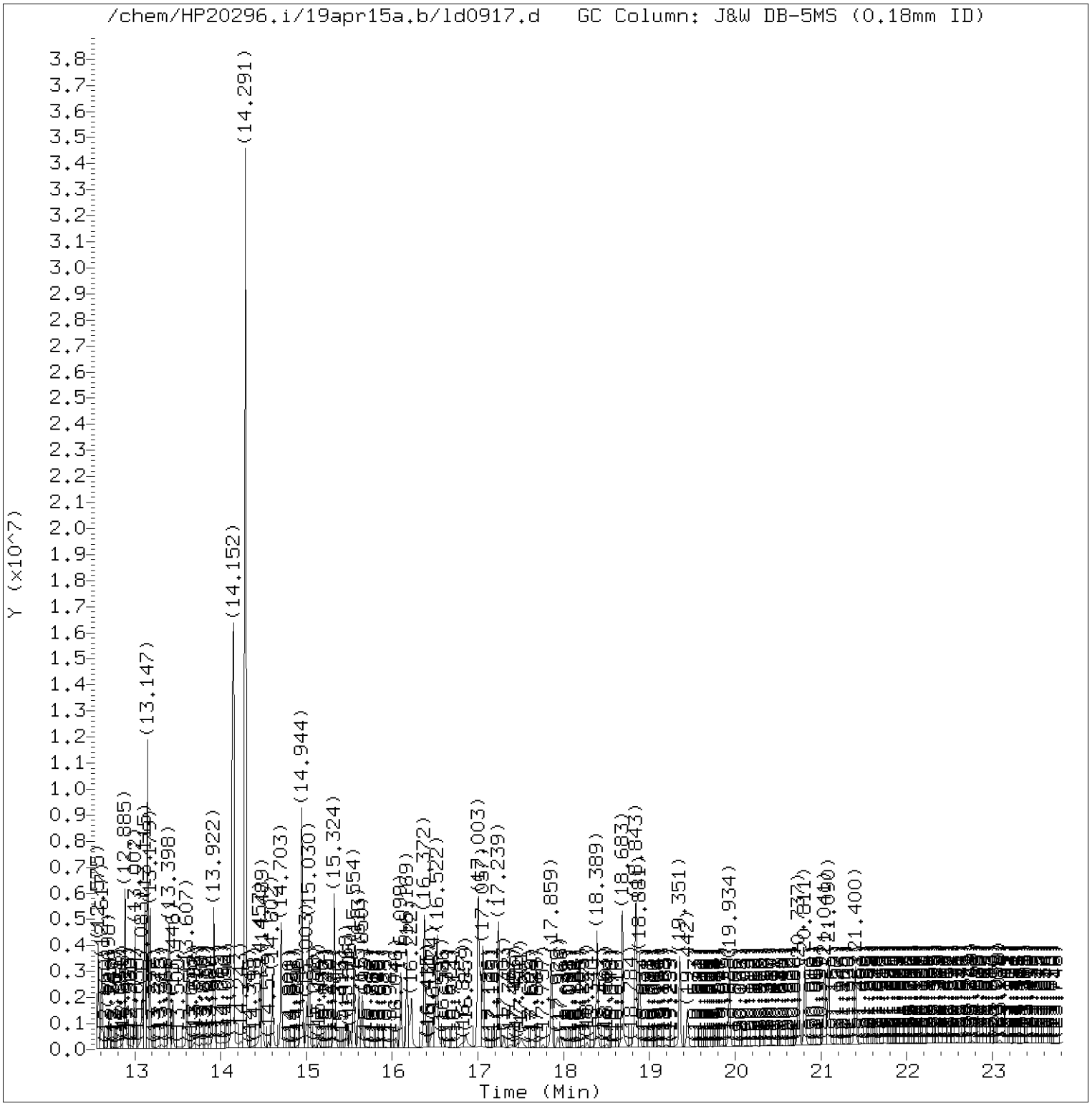
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0917.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:23 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R03MSD Lab Sample ID: 1030980

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0917.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:23 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R03MSD Lab Sample ID: 1030980

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0917.d Instrument ID: HP20296.i
Injection date and time: 16-APR-2019 00:23 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:27 knb25316

Sample Name: 34R03MSD Lab Sample ID: 1030980

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.306	152	224438	5.000
45)$Nitrobenzene-d5	(2)	7.162	82	2073310	23.967
46) Nitrobenzene	(2)	7.188	77	1114202	12.626
68)*Naphthalene-d8	(2)	8.280	136	862448	5.000
96)$2-Fluorobiphenyl	(3)	10.061	172	2682225	21.223
104) 2-Nitroaniline	(3)	10.408	138	435519	12.478
113) 2,6-Dinitrotoluene	(3)	10.831	165	314650	11.690
118)*Acenaphthene-d10	(3)	11.109	164	379179	5.000
123) 2,4-Dinitrotoluene	(3)	11.473	165	409867	11.352
129) Diethylphthalate	(3)	11.879	149	1206686	10.563
134) 4-Nitroaniline	(3)	11.997	138	354846	11.527
158)*Phenanthrene-d10	(4)	13.083	188	706317	5.000
180)*Pyrene-d10	(5)	15.003	212	683880	5.000
184)$Terphenyl-d14	(5)	15.324	244	1942107	16.296
204) bis(2-Ethylhexyl)phthalate	(5)	17.239	149	1524308	10.830
218)*Perylene-d12	(6)	19.442	264	652439	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Lancaster Laboratories, Inc.
Analysis Summary for GC/MS Semivolatiles

102WPLCS

Data file: /chem/HP20296.i/19apr15a.b/ld0913.d Injection date and time: **15-APR-2019 22:29**
Data file Sample Info. Line: 102WPLCS;102WPLCS;1;3;LCS;;DRRAAP; Instrument ID: **HP20296.i** Batch: **19102WAP**
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Blank Data file reference: **/chem/HP20296.i/19apr15a.b/ld0912.d**

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: **22228M**
Calibration date and time (Last Method Edit): 16-APR-2019 06:39
Mid Level Daily Calibration Standard Reference: **/chem/HP20296.i/19apr15a.b/ld0911.d**

Matrix: WATER Level: Low GPC clean-up: No On-Column Amount units: ng/ul In Sample Concentration units: ug/L

Sample Concentration Formula: On-Column Amount * DF * gpcf*(Uf * Vt/(Vo))

Dilution Factor (DF): 1 Unit Correction Factor (Uf): 1 Final Extract Volume (Vt): 1000 ul
Sample Volume (Vo): 250 ml Volume Injected (Vi): 1 ul

Analysis Comments:

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Change)	Conc. (on-column)	QC Flag
26) 1,4-Dichlorobenzene-d4	6.306(-0.005)	901	152	226871 (-10)	5.00	
68) Naphthalene-d8	8.280(0.000)	1270	136	880863 (-7)	5.00	
118) Acenaphthene-d10	11.109(0.000)	1799	164	389139 (-11)	5.00	
158) Phenanthrene-d10	13.088(0.000)	2169	188	686452 (-16)	5.00	
180) Pyrene-d10	15.003(0.000)	2527	212	710416 (-13)	5.00	
218) Perylene-d12	19.448(0.000)	3358	264	686064 (-9)	5.00	

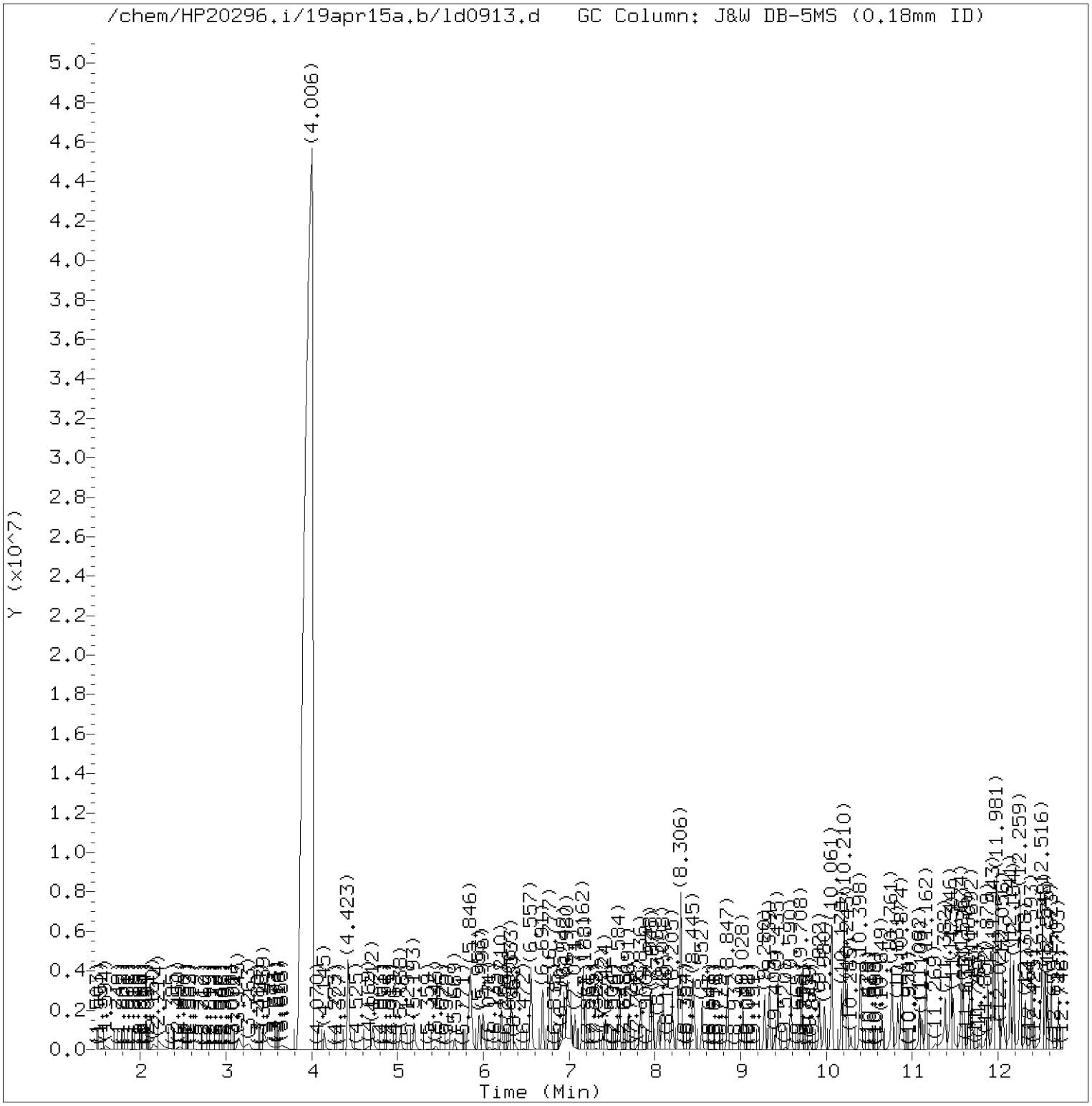
Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	%Rec.
45) Nitrobenzene-d5	(2)	7.162(0.000)	82	2009739	22.747	91%
96) 2-Fluorobiphenyl	(3)	10.066(0.000)	172	2524964	19.467	78%
184) Terphenyl-d14	(5)	15.329(0.000)	244	2498310	20.180	81%

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on-column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit (on-column)
46) Nitrobenzene	(2)	7.188(-0.000)	77	1041449	11.555	46.22			0.2
104) 2-Nitroaniline	(3)	10.408(0.000)	138	411577	11.491	45.96			0.5
113) 2,6-Dinitrotoluene	(3)	10.831(0.000)	165	299821	10.854	43.42			0.2
123) 2,4-Dinitrotoluene	(3)	11.473(0.000)	165	375686	10.139	40.56			0.2
129) Diethylphthalate	(3)	11.879(0.000)	149	1217088	10.382	41.53			0.1
134) 4-Nitroaniline	(3)	11.997(0.000)	138	317958	10.064	40.26			0.3
204) bis(2-Ethylhexyl)phthalate	(5)	17.238(0.000)	149	1658313	11.342	45.37			0.4

Total number of targets = 7

Digitally signed by Kira N. Beck on 04/18/2019 at 11:28. Target 3.5 esignature user ID: knb25316

Secondary review performed and digitally signed by Holly B. Ziegler on 04/18/2019 at 12:53. PARALLAX ID: hb01996



Total Ion Chromatogram (TIC)

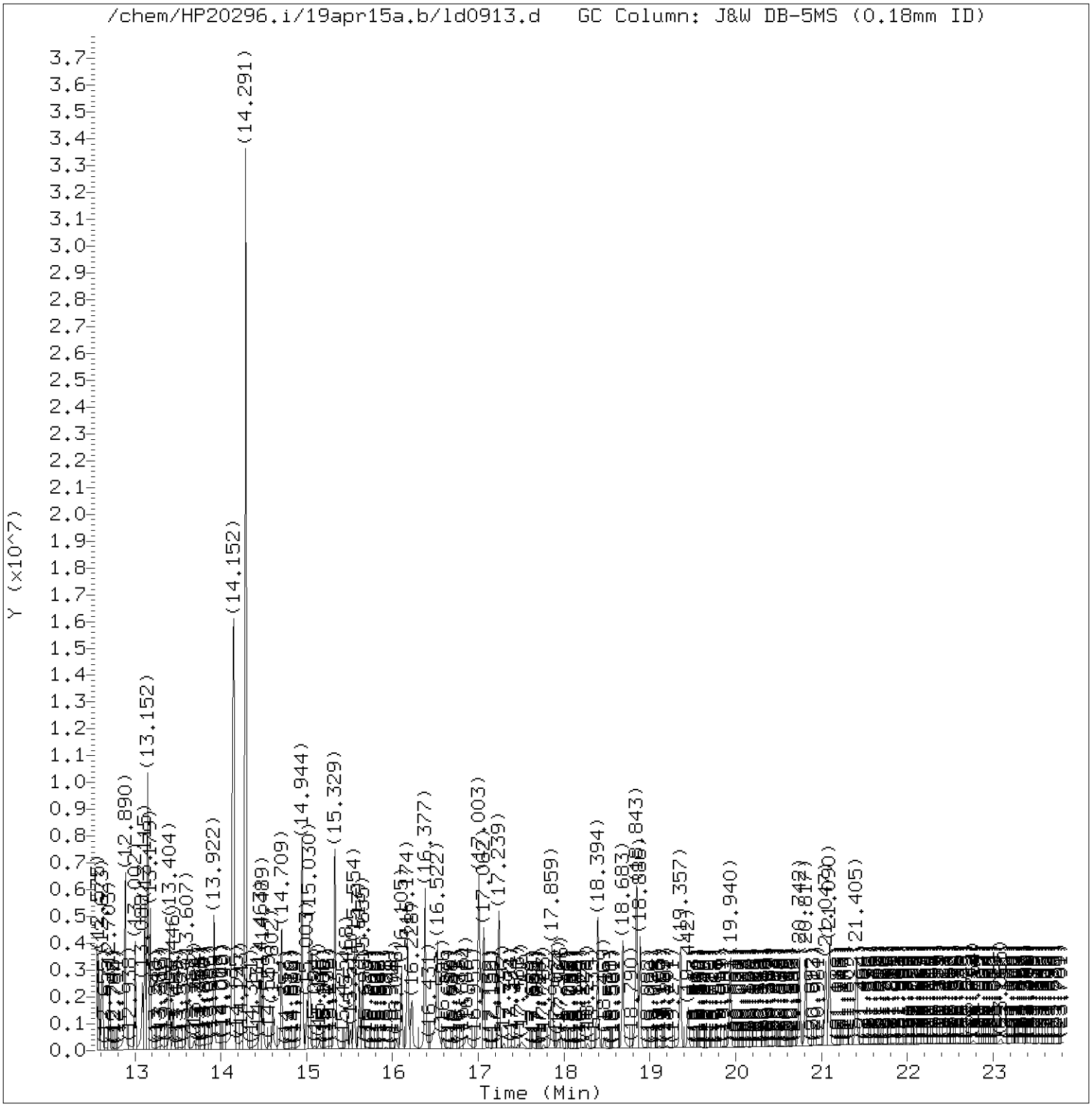
Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0913.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:29 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 102WPLCS Lab Sample ID: 102WPLCS

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316



Total Ion Chromatogram (TIC)

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0913.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:29 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 102WPLCS Lab Sample ID: 102WPLCS

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Quant Report

Target Revision 3.5

Data File: /chem/HP20296.i/19apr15a.b/ld0913.d Instrument ID: HP20296.i
Injection date and time: 15-APR-2019 22:29 Analyst ID: art12405

Method used: /chem/HP20296.i/19apr15a.b/rv8270d.m Sublist used: 22228M
Calibration date and time: 16-APR-2019 06:39
Date, time and analyst ID of latest file update: 18-Apr-2019 11:26 knb25316

Sample Name: 102WPLCS Lab Sample ID: 102WPLCS

Compounds	I.S. Ref.	RT	QIon	Area	On-Column Amount (ng/ul)
26)*1,4-Dichlorobenzene-d4	(1)	6.306	152	226871	5.000
45)$Nitrobenzene-d5	(2)	7.162	82	2009739	22.747
46) Nitrobenzene	(2)	7.188	77	1041449	11.555
68)*Naphthalene-d8	(2)	8.280	136	880863	5.000
96)$2-Fluorobiphenyl	(3)	10.066	172	2524964	19.467
104) 2-Nitroaniline	(3)	10.408	138	411577	11.491
113) 2,6-Dinitrotoluene	(3)	10.831	165	299821	10.854
118)*Acenaphthene-d10	(3)	11.109	164	389139	5.000
123) 2,4-Dinitrotoluene	(3)	11.473	165	375686	10.139
129) Diethylphthalate	(3)	11.879	149	1217088	10.382
134) 4-Nitroaniline	(3)	11.997	138	317958	10.064
158)*Phenanthrene-d10	(4)	13.088	188	686452	5.000
180)*Pyrene-d10	(5)	15.003	212	710416	5.000
184)$Terphenyl-d14	(5)	15.329	244	2498310	20.180
204) bis(2-Ethylhexyl)phthalate	(5)	17.239	149	1658313	11.342
218)*Perylene-d12	(6)	19.448	264	686064	5.000

* = Compound is an internal standard.
$ = Compound is a surrogate standard.

Digitally signed by Kira N. Beck
on 04/18/2019 at 11:28.
Target 3.5 esignature user ID: knb25316

Extraction/Distillation/Digestion Logs

Semivolatiles by GC/MS

Organic Extraction Batchlog Assigned to: 26557 Logan Brosemer Reviewed by: AT12405 4/15/19 Start Date: 4/15/19 Start time: 10:00

19102WAP026

Tech 1: LMB 26557 Tech 2: SM01656B

Dept: 26	Prep Analysis: 11010 8270D BNA Extraction										SVOAs 8270D/E MINI
QC	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	MS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments
1030979MS	34R03	248	SS1909526A	1.0	~~MS1910126A~~ ~~MS1910126B~~	1.0	1	✓	✓	153A	clear
1030980MSD	34R03	249	SS1909526A	↓	~~MS1910126A~~ ~~MS1910126B~~	↓	1	✓	✓	153A	clear
BLANKA	SBLKWP102	250	SS1909526A		—	—	1	✓	✓	Z	TapH2O
LCSA	102WPLCS	250	SS1909526A	↓	~~MS1910126A~~ ~~MS1910126B~~	1.0 1.0	1	✓	✓	Z	↓

Solvent Used	Lot No.
10N NaOH	4808F63
Methylene Chloride	191108
Sodium Sulfate	19102A
Sulfuric Acid	18804
—	—

NA

LMB 26557 4/15/19 (8) MS190882GB

LMB 26557 4/15/19 (8A) MS190962GB

Spike Solutions: Witness: ~

~~MS1910126B~~ APPIX #1 MINI SPIKE

~~MS1910126A~~ MINI SEP. LCS SPIKE #1

SS1909526A MINI SEP. BNA SURROGATE

Sample #	Sample Code	Amt (mL)	SS/IS Sol.	Amt (mL)	FV (mL)	pH <2	pH >11	BC	Comments	Analyses	List	Due Date	Prio
1 1030977	34R02	~~250~~ 248	SS1909526A	1.0	1	✓	✓	153A	clear	14241	22228	04/19/2019	N
2 1030978BKG	34R03	250	SS1909526A		1	✓	✓	153A	clear	14241	22228	04/19/2019	N
3 1030981	34R04	250	SS1909526A		1	✓	✓	153A	clear	14241	22228	04/19/2019	N
4 1030982	34R05	250	SS1909526A		1	✓	✓	153A	clear	14241	22228	04/19/2019	N
5 1030983	34R06	249	SS1909526A		1	✓	✓	153A	clear	14241	22228	04/19/2019	N
6 1030984	34R07	251	SS1909526A		1	✓	✓	153A	clear	14241	22228	04/19/2019	N
(8A) 7 1031808	J24-1	168	SS1909526A	↓	1	✓	✓	153a	tan	14241	29880	04/22/2019	N

(5b) Sample moved to batch 19102WAZ026

RAF34 Page 893 of 893

NA

Bench#	Bench#	Bench#		
Rack ID:		Work Station	Tumble	Micro Temp 100? ✓
Internal Standard	RVIST00949	Balance #	25996	

R-VAP ID4	90 C	R-VAP ID5	90 C	R-VAP ID	C
S-bath ID	C	S-bath ID	C	N-Evap	C
M-vap	C				

19102WAP026

DF = Dilution Factor FV = Final Volume

Documented temps are NIST corrected.

eurofins | Environment Testing TestAmerica

ANALYTICAL REPORT

Job Number: 240-110743-2

Job Description: RFAAP, Radford VA HWMU5

For:
Draper Aden Associates, Inc.
2206 South Main Street
Blacksburg, VA 24060

Attention: Janet Frazier



Approved for release.
Opal Johnson
Project Manager II
4/25/2019 10:30 AM

Opal Johnson, Project Manager II
4101 Shuffel Street NW, North Canton, OH, 44720
(330)966-9279
opal.johnson@testamericainc.com
04/25/2019

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to the NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory. This report is confidential and is intended for the sole use of TestAmerica and its client. All questions regarding this report should be directed to the TestAmerica Project Manager who has signed this report.

Table of Contents

Cover Title Page 1

Data Summaries 4

Definitions 4

Case Narrative 5

Detection Summary 6

Client Sample Results 7

Default Detection Limits 8

Surrogate Summary 9

QC Sample Results 10

QC Association 11

Chronicle 12

Certification Summary 13

Method Summary 14

Sample Summary 15

Manual Integration Summary 16

Reagent Traceability 20

COAs 78

Organic Sample Data 171

GC/MS Semi VOA 171

Method 8270D 171

Method 8270D QC Summary 172

Method 8270D Sample Data 181

Standards Data 186

Method 8270D ICAL Data 186

Method 8270D CCAL Data 256

Raw QC Data 285

Table of Contents

Method 8270D Tune Data 285
Method 8270D Blank Data 303
Method 8270D LCS/LCSD Data 311
Method 8270D Run Logs 317
Method 8270D Prep Data 319
Shipping and Receiving Documents 320
Client Chain of Custody 321

Definitions/Glossary

Client: Draper Aden Associates, Inc. Job ID: 240-110743-2
Project/Site: RFAAP, Radford VA HWMU5

Qualifiers

GC/MS Semi VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

CASE NARRATIVE

Client: Draper Aden Associates, Inc.

Project: RFAAP, Radford VA HWMU5

Report Number: 240-110743-2

With the exceptions noted as flags or footnotes, standard analytical protocols were followed in the analysis of the samples and no problems were encountered or anomalies observed. In addition all laboratory quality control samples were within established control limits, with any exceptions noted below. Each sample was analyzed to achieve the lowest possible reporting limit within the constraints of the method. In some cases, due to interference or analytes present at high concentrations, samples were diluted. For diluted samples, the reporting limits are adjusted relative to the dilution required.

Eurofins TestAmerica, Canton attests to the validity of the laboratory data generated by Eurofins TestAmerica facilities reported herein. All analyses performed by Eurofins TestAmerica facilities were done using established laboratory SOPs that incorporate QA/QC procedures described in the application methods. Eurofins TestAmerica's operations groups have reviewed the data for compliance with the laboratory QA/QC plan, and data have been found to be compliant with laboratory protocols unless otherwise noted below.

The test results in this report meet all NELAP requirements for parameters for which accreditation is required or available. Any exceptions to NELAP requirements are noted in this report. Pursuant to NELAP, this report may not be reproduced, except in full, without the written approval of the laboratory.

Calculations are performed before rounding to avoid round-off errors in calculated results.

All holding times were met and proper preservation noted for the methods performed on these samples, unless otherwise detailed in the individual sections below.

This laboratory report is confidential and is intended for the sole use of Eurofins TestAmerica and its client.

RECEIPT

The sample was received on 4/10/2019 10:10 AM; the sample arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 4.4° C.

Receipt Exceptions

The samples were extracted for 8270 and were placed on hold. Per client request p-nitroaniline analysis for sample 5W23 only was taken off hold on 04/23/19. Sample: 5WC23 (240-110743-6).

SEMIVOLATILE ORGANIC COMPOUNDS (GCMS)

Sample 5WC23 (240-110743-6) was analyzed for semivolatile organic compounds (GCMS) in accordance with EPA SW-846 Method 8270D. The sample was prepared on 04/11/2019 and analyzed on 04/16/2019.

Sample 5WC23 (240-110743-6) was prepped utilizing 280 mL for the intial volume which impacted the RL to have a slightly lower RL than the 2.0 ug/L.

No analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 240-110743-2

Client Sample ID: 5WC23

Lab Sample ID: 240-110743-6

No Detections.

This Detection Summary does not include radiochemical test results.

Client Sample ID: 5WC23 **Lab Sample ID: 240-110743-6**
Date Collected: 04/09/19 13:30 **Matrix: Water**
Date Received: 04/10/19 10:10

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Nitroaniline	1.8	U	1.8	0.82	ug/L		04/11/19 10:44	04/16/19 13:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*81*		*28 - 128*	*04/11/19 10:44*	*04/16/19 13:36*	*1*
Phenol-d5 (Surr)	*54*		*15 - 120*	*04/11/19 10:44*	*04/16/19 13:36*	*1*
Nitrobenzene-d5 (Surr)	*78*		*35 - 120*	*04/11/19 10:44*	*04/16/19 13:36*	*1*
2-Fluorophenol (Surr)	*75*		*17 - 120*	*04/11/19 10:44*	*04/16/19 13:36*	*1*
2-Fluorobiphenyl (Surr)	*72*		*32 - 120*	*04/11/19 10:44*	*04/16/19 13:36*	*1*
2,4,6-Tribromophenol (Surr)	*86*		*33 - 120*	*04/11/19 10:44*	*04/16/19 13:36*	*1*

Default Detection Limits

Client: Draper Aden Associates, Inc. Job ID: 240-110743-2
Project/Site: RFAAP, Radford VA HWMU5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Prep: 3510C

Analyte	RL	MDL	Units
p-Nitroaniline	2.0	0.92	ug/L

Surrogate Summary

Client: Draper Aden Associates, Inc. Job ID: 240-110743-2
Project/Site: RFAAP, Radford VA HWMU5

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Matrix: Water **Prep Type: Total/NA**

		Percent Surrogate Recovery (Acceptance Limits)							
		TPHL	PHL	NBZ	2FP	FBP	TBP		
Lab Sample ID	Client Sample ID	(28-128)	(15-120)	(35-120)	(17-120)	(32-120)	(33-120)		
240-110743-6	5WC23	81	54	78	75	72	86		
LCS 240-376039/15-A	Lab Control Sample	88	57	87	84	78	88		
MB 240-376039/14-A	Method Blank	95	51	85	68	79	78		

Surrogate Legend

TPHL = Terphenyl-d14 (Surr)
PHL = Phenol-d5 (Surr)
NBZ = Nitrobenzene-d5 (Surr)
2FP = 2-Fluorophenol (Surr)
FBP = 2-Fluorobiphenyl (Surr)
TBP = 2,4,6-Tribromophenol (Surr)

Method: 8270D - Semivolatile Organic Compounds (GC/MS)

Lab Sample ID: MB 240-376039/14-A
Matrix: Water
Analysis Batch: 376614

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 376039

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
p-Nitroaniline	2.0	U	2.0	0.92	ug/L		04/11/19 10:44	04/16/19 06:22	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Terphenyl-d14 (Surr)	*95*		*28 - 128*	*04/11/19 10:44*	*04/16/19 06:22*	*1*
Phenol-d5 (Surr)	*51*		*15 - 120*	*04/11/19 10:44*	*04/16/19 06:22*	*1*
Nitrobenzene-d5 (Surr)	*85*		*35 - 120*	*04/11/19 10:44*	*04/16/19 06:22*	*1*
2-Fluorophenol (Surr)	*68*		*17 - 120*	*04/11/19 10:44*	*04/16/19 06:22*	*1*
2-Fluorobiphenyl (Surr)	*79*		*32 - 120*	*04/11/19 10:44*	*04/16/19 06:22*	*1*
2,4,6-Tribromophenol (Surr)	*78*		*33 - 120*	*04/11/19 10:44*	*04/16/19 06:22*	*1*

Lab Sample ID: LCS 240-376039/15-A
Matrix: Water
Analysis Batch: 376614

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 376039

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
p-Nitroaniline			32.0	29.0		ug/L		91	54 - 135		

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Terphenyl-d14 (Surr)	*88*		*28 - 128*
Phenol-d5 (Surr)	*57*		*15 - 120*
Nitrobenzene-d5 (Surr)	*87*		*35 - 120*
2-Fluorophenol (Surr)	*84*		*17 - 120*
2-Fluorobiphenyl (Surr)	*78*		*32 - 120*
2,4,6-Tribromophenol (Surr)	*88*		*33 - 120*

QC Association Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 240-110743-2

GC/MS Semi VOA

Prep Batch: 376039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-110743-6	5WC23	Total/NA	Water	3510C	
MB 240-376039/14-A	Method Blank	Total/NA	Water	3510C	
LCS 240-376039/15-A	Lab Control Sample	Total/NA	Water	3510C	

Analysis Batch: 376614

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
240-110743-6	5WC23	Total/NA	Water	8270D	376039
MB 240-376039/14-A	Method Blank	Total/NA	Water	8270D	376039
LCS 240-376039/15-A	Lab Control Sample	Total/NA	Water	8270D	376039

Lab Chronicle

Client: Draper Aden Associates, Inc.
Job ID: 240-110743-2
Project/Site: RFAAP, Radford VA HWMU5

Client Sample ID: 5WC23
Date Collected: 04/09/19 13:30
Date Received: 04/10/19 10:10

Lab Sample ID: 240-110743-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			376039	04/11/19 10:44	ACS	TAL CAN
Total/NA	Analysis	8270D		1	376614	04/16/19 13:36	TMH	TAL CAN

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Accreditation/Certification Summary

Client: Draper Aden Associates, Inc. Job ID: 240-110743-2
Project/Site: RFAAP, Radford VA HWMU5

Laboratory: Eurofins TestAmerica, Canton

The accreditations/certifications listed below are applicable to this report.

Authority	Program	EPA Region	Identification Number	Expiration Date
Virginia	NELAP	3	460175	09-14-19

Method Summary

Client: Draper Aden Associates, Inc. Job ID: 240-110743-2
Project/Site: RFAAP, Radford VA HWMU5

Method	Method Description	Protocol	Laboratory
8270D	Semivolatile Organic Compounds (GC/MS)	SW846	TAL CAN
3510C	Liquid-Liquid Extraction (Separatory Funnel)	SW846	TAL CAN

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL CAN = Eurofins TestAmerica, Canton, 4101 Shuffel Street NW, North Canton, OH 44720, TEL (330)497-9396

Sample Summary

Client: Draper Aden Associates, Inc.
Project/Site: RFAAP, Radford VA HWMU5

Job ID: 240-110743-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
240-110743-6	5WC23	Water	04/09/19 13:30	04/10/19 10:10

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Instrument ID: A4AG2 Analysis Batch Number: 375192

Lab Sample ID: STD9 240-375192/2 IC Client Sample ID:

Date Analyzed: 04/08/19 09:39 Lab File ID: 90408002.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
1,4-Dioxane	4.27	Peak assignment corrected	hulat	04/08/19 10:03
Pyridine	4.56	Peak assignment corrected	hulat	04/08/19 10:05
4-Chloroaniline	7.73	Poor chromatography	hulat	04/08/19 10:06
Caprolactam	8.02	Poor chromatography	hulat	04/08/19 10:06
Benzaldehyde		Invalid Compound ID	hulat	04/08/19 13:24

Lab Sample ID: STD8 240-375192/3 IC Client Sample ID:

Date Analyzed: 04/08/19 10:05 Lab File ID: 90408003.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
4-Chloroaniline	7.73	Poor chromatography	hulat	04/08/19 10:29
Caprolactam	8.02	Poor chromatography	hulat	04/08/19 10:29
Benzaldehyde		Invalid Compound ID	hulat	04/08/19 13:25

Lab Sample ID: STD7 240-375192/4 IC Client Sample ID:

Date Analyzed: 04/08/19 10:29 Lab File ID: 90408004.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	7.71	Peak assignment corrected	hulat	04/08/19 10:52
4-Chloroaniline	7.73	Poor chromatography	hulat	04/08/19 10:53
Caprolactam	8.01	Poor chromatography	hulat	04/08/19 10:53

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Instrument ID: A4AG2 Analysis Batch Number: 375192

Lab Sample ID: STD6 240-375192/5 ICIS Client Sample ID:

Date Analyzed: 04/08/19 10:54 Lab File ID: 90408005.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	7.71	Peak assignment corrected	hulat	04/08/19 11:19
4-Chloroaniline	7.73	Poor chromatography	hulat	04/08/19 11:20
Caprolactam	8.01	Poor chromatography	hulat	04/08/19 11:20
2,4-Dinitrophenol	9.20	Poor chromatography	hulat	04/08/19 11:20

Lab Sample ID: STD5 240-375192/6 IC Client Sample ID:

Date Analyzed: 04/08/19 11:18 Lab File ID: 90408006.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrophenol	9.20	Peak assignment corrected	hulat	04/08/19 11:56

Lab Sample ID: STD4 240-375192/7 IC Client Sample ID:

Date Analyzed: 04/08/19 11:42 Lab File ID: 90408007.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrophenol	9.20	Peak assignment corrected	hulat	04/08/19 12:05

Lab Sample ID: STD3 240-375192/8 IC Client Sample ID:

Date Analyzed: 04/08/19 12:06 Lab File ID: 90408008.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
2,4-Dinitrophenol	9.20	Peak assignment corrected	hulat	04/08/19 12:32

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Instrument ID: A4AG2 Analysis Batch Number: 375192

Lab Sample ID: STD2 240-375192/9 IC Client Sample ID:

Date Analyzed: 04/08/19 12:30 Lab File ID: 90408009.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Benzoic acid	7.37	Poor chromatography	hulat	04/08/19 12:52
2,4-Dinitrophenol	9.20	Poor chromatography	hulat	04/08/19 12:53

Lab Sample ID: STD1 240-375192/10 IC Client Sample ID:

Date Analyzed: 04/08/19 12:54 Lab File ID: 90408010.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	8.01	Poor chromatography	hulat	04/08/19 13:20
Benzaldehyde		Invalid Compound ID	hulat	04/08/19 13:24
Indeno[1,2,3-cd]pyrene	17.76	Poor chromatography	hulat	04/08/19 13:20
Dibenz(a,h)anthracene	17.79	Poor chromatography	hulat	04/08/19 13:19
Benzo[g,h,i]perylene	18.38	Poor chromatography	hulat	04/08/19 13:19

Lab Sample ID: ICV 240-375192/11 Client Sample ID:

Date Analyzed: 04/08/19 13:19 Lab File ID: 90408011.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Naphthalene	7.71	Peak assignment corrected	hulat	04/08/19 13:42
4-Chloroaniline	7.73	Poor chromatography	hulat	04/08/19 13:43
Caprolactam	8.01	Poor chromatography	hulat	04/08/19 13:43
2,4-Dinitrophenol	9.20	Poor chromatography	hulat	04/08/19 13:43

GC/MS SEMI VOA MANUAL INTEGRATION SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Instrument ID: A4AG2 Analysis Batch Number: 376614

Lab Sample ID: STD6 240-376614/2 CCVIS Client Sample ID:

Date Analyzed: 04/16/19 05:54 Lab File ID: 90416002.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
Caprolactam	8.01	Poor chromatography	hulat	04/16/19 06:22

Lab Sample ID: 240-110743-6 Client Sample ID: 5WC23

Date Analyzed: 04/16/19 13:36 Lab File ID: 90416019.D GC Column: RXI-5SILMS/II ID: 0.25(mm)

COMPOUND NAME	RETENTION TIME	MANUAL INTEGRATION		
		REASON	ANALYST	DATE
p-Nitroaniline		Invalid Compound ID	hulat	04/17/19 05:57

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
exBENZALDEHYD_00066	07/11/19	01/11/19	MEOH, Lot 0000196628	500 mL	exLIST1_S11_00009	10 mL	Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL
.exLIST1_S11_00009	10/02/19		Restek, Lot A0137125		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
exBNASPIKE_00101	10/10/19	04/10/19	ACETONE, Lot 0000197752	500 mL	exLIST1_S1_00017	10 mL	1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,2-Diphenylhydrazine	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Methylphenol	10 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Methylphenol	10 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL
							Anthracene	20 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Diphenylamine	17.1 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							p-Nitroaniline	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	40 ug/mL
					EXLIST1_S10_00010	10 mL	Benzoic acid	40 ug/mL
							Indene	40 ug/mL
					exLIST1_S9_00015	10 mL	3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
.exLIST1_S1_00017	05/31/20		Restek, Lot A0143135		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,2-Diphenylhydrazine	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Methylphenol	500 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Methylphenol	500 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	855 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
.EXLIST1_S10_00010	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
.exLIST1_S9_00015	05/31/20		Restek, Lot A0143498		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
exBNASURR W_00071	09/26/19	03/26/19	MEOH, Lot 0000196628	2000 mL	SMLIST1 SURR_00010	8 mL	2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl (Surr)	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
.SMLIST1 SURR_00010	12/31/22		Restek, Lot A0133251		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMDFTPPW_00017							4,4'-DDD	
							4,4'-DDE	
							4-Methyl-1-cyclohexanemethanol	
							Diallate	
							Isosafrole	
							Methyl Phenols,Total	
							Tentatively Identified Compound	
					SMDFTPPR_00011	1 mL	4,4'-DDT	25 ug/mL
							Benzidine	25 ug/mL
							DFTPP	25 ug/mL
							Pentachlorophenol	25 ug/mL
.SMDFTPPR_00011	12/31/21	Restek, Lot A0144160			(Purchased Reagent)		4,4'-DDT	1000 ug/mL
							Benzidine	1000 ug/mL
							DFTPP	1000 ug/mL
							Pentachlorophenol	1000 ug/mL
SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
.SMIS R_00010	12/31/22	Restek, Lot A0133281			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
SMLIST1 L1+ W_00006	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1PAH+ST_00006	2 uL	1,1'-Biphenyl	0.1 ug/mL
							1-Methylnaphthalene	0.1 ug/mL
							2-Chloronaphthalene	0.1 ug/mL
							2-Methylnaphthalene	0.1 ug/mL
							Acenaphthene	0.1 ug/mL
							Acenaphthylene	0.1 ug/mL
							Anthracene	0.1 ug/mL
							Benzo[a]anthracene	0.1 ug/mL
							Benzo[a]pyrene	0.1 ug/mL
							Benzo[b]fluoranthene	0.1 ug/mL
							Benzo[g,h,i]perylene	0.1 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	0.1 ug/mL
							Chrysene	0.1 ug/mL
							Dibenz(a,h)anthracene	0.1 ug/mL
							Dibenzofuran	0.1 ug/mL
							Fluoranthene	0.1 ug/mL
							Fluorene	0.1 ug/mL
							Hexachlorobenzene	0.1 ug/mL
							Indeno[1,2,3-cd]pyrene	0.1 ug/mL
							Naphthalene	0.1 ug/mL
							Phenanthrene	0.1 ug/mL
							Pyrene	0.1 ug/mL
							Pyridine	0.2 ug/mL
							Atrazine	0.2 ug/mL
							Benzaldehyde	0.2 ug/mL
							Caprolactam	0.2 ug/mL
							2-Fluorobiphenyl (Surr)	0.1 ug/mL
							Nitrobenzene-d5 (Surr)	0.1 ug/mL
							Terphenyl-d14 (Surr)	0.1 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1PAH+ST_00006	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 PAH_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Anthracene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Chrysene	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Naphthalene	100 ug/mL
							Phenanthrene	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2-Fluorobiphenyl (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 PAH_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Anthracene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Chrysene	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Naphthalene	1000 ug/mL
							Phenanthrene	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2-Fluorobiphenyl (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L2 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	10 uL	1,1'-Biphenyl	0.5 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2,4,5-Tetrachlorobenzene	0.5 ug/mL
							1,2,4-Trichlorobenzene	0.5 ug/mL
							1,2-Dichlorobenzene	0.5 ug/mL
							1,3-Dichlorobenzene	0.5 ug/mL
							1,3-Dinitrobenzene	0.5 ug/mL
							1,4-Dichlorobenzene	0.5 ug/mL
							1,4-Dioxane	0.5 ug/mL
							1-Methylnaphthalene	0.5 ug/mL
							2,2'-oxybis[1-chloropropane]	0.5 ug/mL
							2,3,4,6-Tetrachlorophenol	0.5 ug/mL
							2,4,5-Trichlorophenol	0.5 ug/mL
							2,4,6-Trichlorophenol	0.5 ug/mL
							2,4-Dichlorophenol	0.5 ug/mL
							2,4-Dimethylphenol	0.5 ug/mL
							2,4-Dinitrophenol	1 ug/mL
							2,4-Dinitrotoluene	0.5 ug/mL
							2,6-Dichlorophenol	0.5 ug/mL
							2,6-Dinitrotoluene	0.5 ug/mL
							2-Chloronaphthalene	0.5 ug/mL
							2-Chlorophenol	0.5 ug/mL
							2-Methylnaphthalene	0.5 ug/mL
							2-Methylphenol	0.5 ug/mL
							2-Nitroaniline	0.5 ug/mL
							2-Nitrophenol	0.5 ug/mL
							3 & 4 Methylphenol	0.5 ug/mL
							3-Nitroaniline	0.5 ug/mL
							4,6-Dinitro-2-methylphenol	1 ug/mL
							4-Bromophenyl phenyl ether	0.5 ug/mL
							4-Chloro-3-methylphenol	0.5 ug/mL
							4-Chloroaniline	0.5 ug/mL
							4-Chlorophenyl phenyl ether	0.5 ug/mL
							4-Nitrophenol	1 ug/mL
							Acenaphthene	0.5 ug/mL
							Acenaphthylene	0.5 ug/mL
							Acetophenone	0.5 ug/mL
							Aniline	0.5 ug/mL
							Anthracene	0.5 ug/mL
							Azobenzene	0.5 ug/mL
							Benzo[a]anthracene	0.5 ug/mL
							Benzo[a]pyrene	0.5 ug/mL
							Benzo[b]fluoranthene	0.5 ug/mL
							Benzo[g,h,i]perylene	0.5 ug/mL
							Benzo[k]fluoranthene	0.5 ug/mL
							Benzyl alcohol	0.5 ug/mL
							Bis(2-chloroethoxy)methane	0.5 ug/mL
							Bis(2-chloroethyl)ether	0.5 ug/mL
							Bis(2-ethylhexyl) phthalate	0.5 ug/mL
							Butyl benzyl phthalate	0.5 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Carbazole	0.5 ug/mL
							Chrysene	0.5 ug/mL
							Di-n-butyl phthalate	0.5 ug/mL
							Di-n-octyl phthalate	0.5 ug/mL
							Dibenz(a,h)anthracene	0.5 ug/mL
							Dibenzofuran	0.5 ug/mL
							Diethyl phthalate	0.5 ug/mL
							Dimethyl phthalate	0.5 ug/mL
							Diphenylamine	0.425 ug/mL
							Fluoranthene	0.5 ug/mL
							Fluorene	0.5 ug/mL
							Hexachlorobenzene	0.5 ug/mL
							Hexachlorobutadiene	0.5 ug/mL
							Hexachlorocyclopentadiene	0.5 ug/mL
							Hexachloroethane	0.5 ug/mL
							Hexadecane	0.5 ug/mL
							Indeno[1,2,3-cd]pyrene	0.5 ug/mL
							Isophorone	0.5 ug/mL
							n-Decane	0.5 ug/mL
							N-Nitrosodi-n-propylamine	0.5 ug/mL
							N-Nitrosodimethylamine	0.5 ug/mL
							N-Nitrosodiphenylamine	0.5 ug/mL
							n-Octadecane	0.5 ug/mL
							Naphthalene	0.5 ug/mL
							Nitrobenzene	0.5 ug/mL
							p-Nitroaniline	0.5 ug/mL
							Pentachlorophenol	1 ug/mL
							Phenanthrene	0.5 ug/mL
							Phenol	0.5 ug/mL
							Pyrene	0.5 ug/mL
							Pyridine	1 ug/mL
							Benzoic acid	1 ug/mL
							Indene	1 ug/mL
							Atrazine	1 ug/mL
							Benzaldehyde	1 ug/mL
							Caprolactam	1 ug/mL
							3,3'-Dichlorobenzidine	1 ug/mL
							Benzidine	1 ug/mL
							2,4,6-Tribromophenol (Surr)	0.5 ug/mL
							2-Fluorobiphenyl (Surr)	0.5 ug/mL
							2-Fluorophenol (Surr)	0.5 ug/mL
							Nitrobenzene-d5 (Surr)	0.5 ug/mL
							Phenol-d5 (Surr)	0.5 ug/mL
							Terphenyl-d14 (Surr)	0.5 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L3 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	20 uL	1,1'-Biphenyl	1 ug/mL
							1,2,4,5-Tetrachlorobenzene	1 ug/mL
							1,2,4-Trichlorobenzene	1 ug/mL
							1,2-Dichlorobenzene	1 ug/mL
							1,3-Dichlorobenzene	1 ug/mL
							1,3-Dinitrobenzene	1 ug/mL
							1,4-Dichlorobenzene	1 ug/mL
							1,4-Dioxane	1 ug/mL
							1-Methylnaphthalene	1 ug/mL
							2,2'-oxybis[1-chloropropane]	1 ug/mL
							2,3,4,6-Tetrachlorophenol	1 ug/mL
							2,4,5-Trichlorophenol	1 ug/mL
							2,4,6-Trichlorophenol	1 ug/mL
							2,4-Dichlorophenol	1 ug/mL
							2,4-Dimethylphenol	1 ug/mL
							2,4-Dinitrophenol	2 ug/mL
							2,4-Dinitrotoluene	1 ug/mL
							2,6-Dichlorophenol	1 ug/mL
							2,6-Dinitrotoluene	1 ug/mL
							2-Chloronaphthalene	1 ug/mL
							2-Chlorophenol	1 ug/mL
							2-Methylnaphthalene	1 ug/mL
							2-Methylphenol	1 ug/mL
							2-Nitroaniline	1 ug/mL
							2-Nitrophenol	1 ug/mL
							3 & 4 Methylphenol	1 ug/mL
							3-Nitroaniline	1 ug/mL
							4,6-Dinitro-2-methylphenol	2 ug/mL
							4-Bromophenyl phenyl ether	1 ug/mL
							4-Chloro-3-methylphenol	1 ug/mL
							4-Chloroaniline	1 ug/mL
							4-Chlorophenyl phenyl ether	1 ug/mL
							4-Nitrophenol	2 ug/mL
							Acenaphthene	1 ug/mL
							Acenaphthylene	1 ug/mL
							Acetophenone	1 ug/mL
							Aniline	1 ug/mL
							Anthracene	1 ug/mL
							Azobenzene	1 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[a]anthracene	1 ug/mL
							Benzo[a]pyrene	1 ug/mL
							Benzo[b]fluoranthene	1 ug/mL
							Benzo[g,h,i]perylene	1 ug/mL
							Benzo[k]fluoranthene	1 ug/mL
							Benzyl alcohol	1 ug/mL
							Bis(2-chloroethoxy)methane	1 ug/mL
							Bis(2-chloroethyl)ether	1 ug/mL
							Bis(2-ethylhexyl) phthalate	1 ug/mL
							Butyl benzyl phthalate	1 ug/mL
							Carbazole	1 ug/mL
							Chrysene	1 ug/mL
							Di-n-butyl phthalate	1 ug/mL
							Di-n-octyl phthalate	1 ug/mL
							Dibenz(a,h)anthracene	1 ug/mL
							Dibenzofuran	1 ug/mL
							Diethyl phthalate	1 ug/mL
							Dimethyl phthalate	1 ug/mL
							Diphenylamine	0.85 ug/mL
							Fluoranthene	1 ug/mL
							Fluorene	1 ug/mL
							Hexachlorobenzene	1 ug/mL
							Hexachlorobutadiene	1 ug/mL
							Hexachlorocyclopentadiene	1 ug/mL
							Hexachloroethane	1 ug/mL
							Hexadecane	1 ug/mL
							Indeno[1,2,3-cd]pyrene	1 ug/mL
							Isophorone	1 ug/mL
							n-Decane	1 ug/mL
							N-Nitrosodi-n-propylamine	1 ug/mL
							N-Nitrosodimethylamine	1 ug/mL
							N-Nitrosodiphenylamine	1 ug/mL
							n-Octadecane	1 ug/mL
							Naphthalene	1 ug/mL
							Nitrobenzene	1 ug/mL
							p-Nitroaniline	1 ug/mL
							Pentachlorophenol	2 ug/mL
							Phenanthrene	1 ug/mL
							Phenol	1 ug/mL
							Pyrene	1 ug/mL
							Pyridine	2 ug/mL
							Benzoic acid	2 ug/mL
							Indene	2 ug/mL
							Atrazine	2 ug/mL
							Benzaldehyde	2 ug/mL
							Caprolactam	2 ug/mL
							3,3'-Dichlorobenzidine	2 ug/mL
							Benzidine	2 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4,6-Tribromophenol (Surr)	1 ug/mL
							2-Fluorobiphenyl (Surr)	1 ug/mL
							2-Fluorophenol (Surr)	1 ug/mL
							Nitrobenzene-d5 (Surr)	1 ug/mL
							Phenol-d5 (Surr)	1 ug/mL
							Terphenyl-d14 (Surr)	1 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L4 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	40 uL	1,1'-Biphenyl	2 ug/mL
							1,2,4,5-Tetrachlorobenzene	2 ug/mL
							1,2,4-Trichlorobenzene	2 ug/mL
							1,2-Dichlorobenzene	2 ug/mL
							1,3-Dichlorobenzene	2 ug/mL
							1,3-Dinitrobenzene	2 ug/mL
							1,4-Dichlorobenzene	2 ug/mL
							1,4-Dioxane	2 ug/mL
							1-Methylnaphthalene	2 ug/mL
							2,2'-oxybis[1-chloropropane]	2 ug/mL
							2,3,4,6-Tetrachlorophenol	2 ug/mL
							2,4,5-Trichlorophenol	2 ug/mL
							2,4,6-Trichlorophenol	2 ug/mL
							2,4-Dichlorophenol	2 ug/mL
							2,4-Dimethylphenol	2 ug/mL
							2,4-Dinitrophenol	4 ug/mL
							2,4-Dinitrotoluene	2 ug/mL
							2,6-Dichlorophenol	2 ug/mL
							2,6-Dinitrotoluene	2 ug/mL
							2-Chloronaphthalene	2 ug/mL
							2-Chlorophenol	2 ug/mL
							2-Methylnaphthalene	2 ug/mL
							2-Methylphenol	2 ug/mL
							2-Nitroaniline	2 ug/mL
							2-Nitrophenol	2 ug/mL
							3 & 4 Methylphenol	2 ug/mL
							3-Nitroaniline	2 ug/mL
							4,6-Dinitro-2-methylphenol	4 ug/mL
							4-Bromophenyl phenyl ether	2 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chloro-3-methylphenol	2 ug/mL
							4-Chloroaniline	2 ug/mL
							4-Chlorophenyl phenyl ether	2 ug/mL
							4-Nitrophenol	4 ug/mL
							Acenaphthene	2 ug/mL
							Acenaphthylene	2 ug/mL
							Acetophenone	2 ug/mL
							Aniline	2 ug/mL
							Anthracene	2 ug/mL
							Azobenzene	2 ug/mL
							Benzo[a]anthracene	2 ug/mL
							Benzo[a]pyrene	2 ug/mL
							Benzo[b]fluoranthene	2 ug/mL
							Benzo[g,h,i]perylene	2 ug/mL
							Benzo[k]fluoranthene	2 ug/mL
							Benzyl alcohol	2 ug/mL
							Bis(2-chloroethoxy)methane	2 ug/mL
							Bis(2-chloroethyl)ether	2 ug/mL
							Bis(2-ethylhexyl) phthalate	2 ug/mL
							Butyl benzyl phthalate	2 ug/mL
							Carbazole	2 ug/mL
							Chrysene	2 ug/mL
							Di-n-butyl phthalate	2 ug/mL
							Di-n-octyl phthalate	2 ug/mL
							Dibenz(a,h)anthracene	2 ug/mL
							Dibenzofuran	2 ug/mL
							Diethyl phthalate	2 ug/mL
							Dimethyl phthalate	2 ug/mL
							Diphenylamine	1.7 ug/mL
							Fluoranthene	2 ug/mL
							Fluorene	2 ug/mL
							Hexachlorobenzene	2 ug/mL
							Hexachlorobutadiene	2 ug/mL
							Hexachlorocyclopentadiene	2 ug/mL
							Hexachloroethane	2 ug/mL
							Hexadecane	2 ug/mL
							Indeno[1,2,3-cd]pyrene	2 ug/mL
							Isophorone	2 ug/mL
							n-Decane	2 ug/mL
							N-Nitrosodi-n-propylamine	2 ug/mL
							N-Nitrosodimethylamine	2 ug/mL
							N-Nitrosodiphenylamine	2 ug/mL
							n-Octadecane	2 ug/mL
							Naphthalene	2 ug/mL
							Nitrobenzene	2 ug/mL
							p-Nitroaniline	2 ug/mL
							Pentachlorophenol	4 ug/mL
							Phenanthrene	2 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol	2 ug/mL
							Pyrene	2 ug/mL
							Pyridine	4 ug/mL
							Benzoic acid	4 ug/mL
							Indene	4 ug/mL
							Atrazine	4 ug/mL
							Benzaldehyde	4 ug/mL
							Caprolactam	4 ug/mL
							3,3'-Dichlorobenzidine	4 ug/mL
							Benzidine	4 ug/mL
							2,4,6-Tribromophenol (Surr)	2 ug/mL
							2-Fluorobiphenyl (Surr)	2 ug/mL
							2-Fluorophenol (Surr)	2 ug/mL
							Nitrobenzene-d5 (Surr)	2 ug/mL
							Phenol-d5 (Surr)	2 ug/mL
							Terphenyl-d14 (Surr)	2 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22	Restek, Lot A0133281			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L5 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	100 uL	1,1'-Biphenyl	5 ug/mL
							1,2,4,5-Tetrachlorobenzene	5 ug/mL
							1,2,4-Trichlorobenzene	5 ug/mL
							1,2-Dichlorobenzene	5 ug/mL
							1,3-Dichlorobenzene	5 ug/mL
							1,3-Dinitrobenzene	5 ug/mL
							1,4-Dichlorobenzene	5 ug/mL
							1,4-Dioxane	5 ug/mL
							1-Methylnaphthalene	5 ug/mL
							2,2'-oxybis[1-chloropropane]	5 ug/mL
							2,3,4,6-Tetrachlorophenol	5 ug/mL
							2,4,5-Trichlorophenol	5 ug/mL
							2,4,6-Trichlorophenol	5 ug/mL
							2,4-Dichlorophenol	5 ug/mL
							2,4-Dimethylphenol	5 ug/mL
							2,4-Dinitrophenol	10 ug/mL
							2,4-Dinitrotoluene	5 ug/mL
							2,6-Dichlorophenol	5 ug/mL
							2,6-Dinitrotoluene	5 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Chloronaphthalene	5 ug/mL
							2-Chlorophenol	5 ug/mL
							2-Methylnaphthalene	5 ug/mL
							2-Methylphenol	5 ug/mL
							2-Nitroaniline	5 ug/mL
							2-Nitrophenol	5 ug/mL
							3 & 4 Methylphenol	5 ug/mL
							3-Nitroaniline	5 ug/mL
							4,6-Dinitro-2-methylphenol	10 ug/mL
							4-Bromophenyl phenyl ether	5 ug/mL
							4-Chloro-3-methylphenol	5 ug/mL
							4-Chloroaniline	5 ug/mL
							4-Chlorophenyl phenyl ether	5 ug/mL
							4-Nitrophenol	10 ug/mL
							Acenaphthene	5 ug/mL
							Acenaphthylene	5 ug/mL
							Acetophenone	5 ug/mL
							Aniline	5 ug/mL
							Anthracene	5 ug/mL
							Azobenzene	5 ug/mL
							Benzo[a]anthracene	5 ug/mL
							Benzo[a]pyrene	5 ug/mL
							Benzo[b]fluoranthene	5 ug/mL
							Benzo[g,h,i]perylene	5 ug/mL
							Benzo[k]fluoranthene	5 ug/mL
							Benzyl alcohol	5 ug/mL
							Bis(2-chloroethoxy)methane	5 ug/mL
							Bis(2-chloroethyl)ether	5 ug/mL
							Bis(2-ethylhexyl) phthalate	5 ug/mL
							Butyl benzyl phthalate	5 ug/mL
							Carbazole	5 ug/mL
							Chrysene	5 ug/mL
							Di-n-butyl phthalate	5 ug/mL
							Di-n-octyl phthalate	5 ug/mL
							Dibenz(a,h)anthracene	5 ug/mL
							Dibenzofuran	5 ug/mL
							Diethyl phthalate	5 ug/mL
							Dimethyl phthalate	5 ug/mL
							Diphenylamine	4.25 ug/mL
							Fluoranthene	5 ug/mL
							Fluorene	5 ug/mL
							Hexachlorobenzene	5 ug/mL
							Hexachlorobutadiene	5 ug/mL
							Hexachlorocyclopentadiene	5 ug/mL
							Hexachloroethane	5 ug/mL
							Hexadecane	5 ug/mL
							Indeno[1,2,3-cd]pyrene	5 ug/mL
							Isophorone	5 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							n-Decane	5 ug/mL
							N-Nitrosodi-n-propylamine	5 ug/mL
							N-Nitrosodimethylamine	5 ug/mL
							N-Nitrosodiphenylamine	5 ug/mL
							n-Octadecane	5 ug/mL
							Naphthalene	5 ug/mL
							Nitrobenzene	5 ug/mL
							p-Nitroaniline	5 ug/mL
							Pentachlorophenol	10 ug/mL
							Phenanthrene	5 ug/mL
							Phenol	5 ug/mL
							Pyrene	5 ug/mL
							Pyridine	10 ug/mL
							Benzoic acid	10 ug/mL
							Indene	10 ug/mL
							Atrazine	10 ug/mL
							Benzaldehyde	10 ug/mL
							Caprolactam	10 ug/mL
							3,3'-Dichlorobenzidine	10 ug/mL
							Benzidine	10 ug/mL
							2,4,6-Tribromophenol (Surr)	5 ug/mL
							2-Fluorobiphenyl (Surr)	5 ug/mL
							2-Fluorophenol (Surr)	5 ug/mL
							Nitrobenzene-d5 (Surr)	5 ug/mL
							Phenol-d5 (Surr)	5 ug/mL
							Terphenyl-d14 (Surr)	5 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L6 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	200 uL	1,1'-Biphenyl	10 ug/mL
							1,2,4,5-Tetrachlorobenzene	10 ug/mL
							1,2,4-Trichlorobenzene	10 ug/mL
							1,2-Dichlorobenzene	10 ug/mL
							1,3-Dichlorobenzene	10 ug/mL
							1,3-Dinitrobenzene	10 ug/mL
							1,4-Dichlorobenzene	10 ug/mL
							1,4-Dioxane	10 ug/mL
							1-Methylnaphthalene	10 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,2'-oxybis[1-chloropropane]	10 ug/mL
							2,3,4,6-Tetrachlorophenol	10 ug/mL
							2,4,5-Trichlorophenol	10 ug/mL
							2,4,6-Trichlorophenol	10 ug/mL
							2,4-Dichlorophenol	10 ug/mL
							2,4-Dimethylphenol	10 ug/mL
							2,4-Dinitrophenol	20 ug/mL
							2,4-Dinitrotoluene	10 ug/mL
							2,6-Dichlorophenol	10 ug/mL
							2,6-Dinitrotoluene	10 ug/mL
							2-Chloronaphthalene	10 ug/mL
							2-Chlorophenol	10 ug/mL
							2-Methylnaphthalene	10 ug/mL
							2-Methylphenol	10 ug/mL
							2-Nitroaniline	10 ug/mL
							2-Nitrophenol	10 ug/mL
							3 & 4 Methylphenol	10 ug/mL
							3-Nitroaniline	10 ug/mL
							4,6-Dinitro-2-methylphenol	20 ug/mL
							4-Bromophenyl phenyl ether	10 ug/mL
							4-Chloro-3-methylphenol	10 ug/mL
							4-Chloroaniline	10 ug/mL
							4-Chlorophenyl phenyl ether	10 ug/mL
							4-Nitrophenol	20 ug/mL
							Acenaphthene	10 ug/mL
							Acenaphthylene	10 ug/mL
							Acetophenone	10 ug/mL
							Aniline	10 ug/mL
							Anthracene	10 ug/mL
							Azobenzene	10 ug/mL
							Benzo[a]anthracene	10 ug/mL
							Benzo[a]pyrene	10 ug/mL
							Benzo[b]fluoranthene	10 ug/mL
							Benzo[g,h,i]perylene	10 ug/mL
							Benzo[k]fluoranthene	10 ug/mL
							Benzyl alcohol	10 ug/mL
							Bis(2-chloroethoxy)methane	10 ug/mL
							Bis(2-chloroethyl)ether	10 ug/mL
							Bis(2-ethylhexyl) phthalate	10 ug/mL
							Butyl benzyl phthalate	10 ug/mL
							Carbazole	10 ug/mL
							Chrysene	10 ug/mL
							Di-n-butyl phthalate	10 ug/mL
							Di-n-octyl phthalate	10 ug/mL
							Dibenz(a,h)anthracene	10 ug/mL
							Dibenzofuran	10 ug/mL
							Diethyl phthalate	10 ug/mL
							Dimethyl phthalate	10 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Diphenylamine	8.5 ug/mL
							Fluoranthene	10 ug/mL
							Fluorene	10 ug/mL
							Hexachlorobenzene	10 ug/mL
							Hexachlorobutadiene	10 ug/mL
							Hexachlorocyclopentadiene	10 ug/mL
							Hexachloroethane	10 ug/mL
							Hexadecane	10 ug/mL
							Indeno[1,2,3-cd]pyrene	10 ug/mL
							Isophorone	10 ug/mL
							n-Decane	10 ug/mL
							N-Nitrosodi-n-propylamine	10 ug/mL
							N-Nitrosodimethylamine	10 ug/mL
							N-Nitrosodiphenylamine	10 ug/mL
							n-Octadecane	10 ug/mL
							Naphthalene	10 ug/mL
							Nitrobenzene	10 ug/mL
							p-Nitroaniline	10 ug/mL
							Pentachlorophenol	20 ug/mL
							Phenanthrene	10 ug/mL
							Phenol	10 ug/mL
							Pyrene	10 ug/mL
							Pyridine	20 ug/mL
							Benzoic acid	20 ug/mL
							Indene	20 ug/mL
							Atrazine	20 ug/mL
							Benzaldehyde	20 ug/mL
							Caprolactam	20 ug/mL
							3,3'-Dichlorobenzidine	20 ug/mL
							Benzidine	20 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl (Surr)	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22	Restek, Lot A0133281			(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L7 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	300 uL	1,1'-Biphenyl	15 ug/mL
							1,2,4,5-Tetrachlorobenzene	15 ug/mL
							1,2,4-Trichlorobenzene	15 ug/mL
							1,2-Dichlorobenzene	15 ug/mL
							1,3-Dichlorobenzene	15 ug/mL
							1,3-Dinitrobenzene	15 ug/mL
							1,4-Dichlorobenzene	15 ug/mL
							1,4-Dioxane	15 ug/mL
							1-Methylnaphthalene	15 ug/mL
							2,2'-oxybis[1-chloropropane]	15 ug/mL
							2,3,4,6-Tetrachlorophenol	15 ug/mL
							2,4,5-Trichlorophenol	15 ug/mL
							2,4,6-Trichlorophenol	15 ug/mL
							2,4-Dichlorophenol	15 ug/mL
							2,4-Dimethylphenol	15 ug/mL
							2,4-Dinitrophenol	30 ug/mL
							2,4-Dinitrotoluene	15 ug/mL
							2,6-Dichlorophenol	15 ug/mL
							2,6-Dinitrotoluene	15 ug/mL
							2-Chloronaphthalene	15 ug/mL
							2-Chlorophenol	15 ug/mL
							2-Methylnaphthalene	15 ug/mL
							2-Methylphenol	15 ug/mL
							2-Nitroaniline	15 ug/mL
							2-Nitrophenol	15 ug/mL
							3 & 4 Methylphenol	15 ug/mL
							3-Nitroaniline	15 ug/mL
							4,6-Dinitro-2-methylphenol	30 ug/mL
							4-Bromophenyl phenyl ether	15 ug/mL
							4-Chloro-3-methylphenol	15 ug/mL
							4-Chloroaniline	15 ug/mL
							4-Chlorophenyl phenyl ether	15 ug/mL
							4-Nitrophenol	30 ug/mL
							Acenaphthene	15 ug/mL
							Acenaphthylene	15 ug/mL
							Acetophenone	15 ug/mL
							Aniline	15 ug/mL
							Anthracene	15 ug/mL
							Azobenzene	15 ug/mL
							Benzo[a]anthracene	15 ug/mL
							Benzo[a]pyrene	15 ug/mL
							Benzo[b]fluoranthene	15 ug/mL
							Benzo[g,h,i]perylene	15 ug/mL
							Benzo[k]fluoranthene	15 ug/mL
							Benzyl alcohol	15 ug/mL
							Bis(2-chloroethoxy)methane	15 ug/mL
							Bis(2-chloroethyl)ether	15 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Bis(2-ethylhexyl) phthalate	15 ug/mL
							Butyl benzyl phthalate	15 ug/mL
							Carbazole	15 ug/mL
							Chrysene	15 ug/mL
							Di-n-butyl phthalate	15 ug/mL
							Di-n-octyl phthalate	15 ug/mL
							Dibenz(a,h)anthracene	15 ug/mL
							Dibenzofuran	15 ug/mL
							Diethyl phthalate	15 ug/mL
							Dimethyl phthalate	15 ug/mL
							Diphenylamine	12.75 ug/mL
							Fluoranthene	15 ug/mL
							Fluorene	15 ug/mL
							Hexachlorobenzene	15 ug/mL
							Hexachlorobutadiene	15 ug/mL
							Hexachlorocyclopentadiene	15 ug/mL
							Hexachloroethane	15 ug/mL
							Hexadecane	15 ug/mL
							Indeno[1,2,3-cd]pyrene	15 ug/mL
							Isophorone	15 ug/mL
							n-Decane	15 ug/mL
							N-Nitrosodi-n-propylamine	15 ug/mL
							N-Nitrosodimethylamine	15 ug/mL
							N-Nitrosodiphenylamine	15 ug/mL
							n-Octadecane	15 ug/mL
							Naphthalene	15 ug/mL
							Nitrobenzene	15 ug/mL
							p-Nitroaniline	15 ug/mL
							Pentachlorophenol	30 ug/mL
							Phenanthrene	15 ug/mL
							Phenol	15 ug/mL
							Pyrene	15 ug/mL
							Pyridine	30 ug/mL
							Benzoic acid	30 ug/mL
							Indene	30 ug/mL
							Atrazine	30 ug/mL
							Benzaldehyde	30 ug/mL
							Caprolactam	30 ug/mL
							3,3'-Dichlorobenzidine	30 ug/mL
							Benzidine	30 ug/mL
							2,4,6-Tribromophenol (Surr)	15 ug/mL
							2-Fluorobiphenyl (Surr)	15 ug/mL
							2-Fluorophenol (Surr)	15 ug/mL
							Nitrobenzene-d5 (Surr)	15 ug/mL
							Phenol-d5 (Surr)	15 ug/mL
							Terphenyl-d14 (Surr)	15 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L8 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	400 uL	1,1'-Biphenyl	20 ug/mL
							1,2,4,5-Tetrachlorobenzene	20 ug/mL
							1,2,4-Trichlorobenzene	20 ug/mL
							1,2-Dichlorobenzene	20 ug/mL
							1,3-Dichlorobenzene	20 ug/mL
							1,3-Dinitrobenzene	20 ug/mL
							1,4-Dichlorobenzene	20 ug/mL
							1,4-Dioxane	20 ug/mL
							1-Methylnaphthalene	20 ug/mL
							2,2'-oxybis[1-chloropropane]	20 ug/mL
							2,3,4,6-Tetrachlorophenol	20 ug/mL
							2,4,5-Trichlorophenol	20 ug/mL
							2,4,6-Trichlorophenol	20 ug/mL
							2,4-Dichlorophenol	20 ug/mL
							2,4-Dimethylphenol	20 ug/mL
							2,4-Dinitrophenol	40 ug/mL
							2,4-Dinitrotoluene	20 ug/mL
							2,6-Dichlorophenol	20 ug/mL
							2,6-Dinitrotoluene	20 ug/mL
							2-Chloronaphthalene	20 ug/mL
							2-Chlorophenol	20 ug/mL
							2-Methylnaphthalene	20 ug/mL
							2-Methylphenol	20 ug/mL
							2-Nitroaniline	20 ug/mL
							2-Nitrophenol	20 ug/mL
							3 & 4 Methylphenol	20 ug/mL
							3-Nitroaniline	20 ug/mL
							4,6-Dinitro-2-methylphenol	40 ug/mL
							4-Bromophenyl phenyl ether	20 ug/mL
							4-Chloro-3-methylphenol	20 ug/mL
							4-Chloroaniline	20 ug/mL
							4-Chlorophenyl phenyl ether	20 ug/mL
							4-Nitrophenol	40 ug/mL
							Acenaphthene	20 ug/mL
							Acenaphthylene	20 ug/mL
							Acetophenone	20 ug/mL
							Aniline	20 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Anthracene	20 ug/mL
							Azobenzene	20 ug/mL
							Benzo[a]anthracene	20 ug/mL
							Benzo[a]pyrene	20 ug/mL
							Benzo[b]fluoranthene	20 ug/mL
							Benzo[g,h,i]perylene	20 ug/mL
							Benzo[k]fluoranthene	20 ug/mL
							Benzyl alcohol	20 ug/mL
							Bis(2-chloroethoxy)methane	20 ug/mL
							Bis(2-chloroethyl)ether	20 ug/mL
							Bis(2-ethylhexyl) phthalate	20 ug/mL
							Butyl benzyl phthalate	20 ug/mL
							Carbazole	20 ug/mL
							Chrysene	20 ug/mL
							Di-n-butyl phthalate	20 ug/mL
							Di-n-octyl phthalate	20 ug/mL
							Dibenz(a,h)anthracene	20 ug/mL
							Dibenzofuran	20 ug/mL
							Diethyl phthalate	20 ug/mL
							Dimethyl phthalate	20 ug/mL
							Diphenylamine	17 ug/mL
							Fluoranthene	20 ug/mL
							Fluorene	20 ug/mL
							Hexachlorobenzene	20 ug/mL
							Hexachlorobutadiene	20 ug/mL
							Hexachlorocyclopentadiene	20 ug/mL
							Hexachloroethane	20 ug/mL
							Hexadecane	20 ug/mL
							Indeno[1,2,3-cd]pyrene	20 ug/mL
							Isophorone	20 ug/mL
							n-Decane	20 ug/mL
							N-Nitrosodi-n-propylamine	20 ug/mL
							N-Nitrosodimethylamine	20 ug/mL
							N-Nitrosodiphenylamine	20 ug/mL
							n-Octadecane	20 ug/mL
							Naphthalene	20 ug/mL
							Nitrobenzene	20 ug/mL
							p-Nitroaniline	20 ug/mL
							Pentachlorophenol	40 ug/mL
							Phenanthrene	20 ug/mL
							Phenol	20 ug/mL
							Pyrene	20 ug/mL
							Pyridine	40 ug/mL
							Benzoic acid	40 ug/mL
							Indene	40 ug/mL
							Atrazine	40 ug/mL
							Benzaldehyde	40 ug/mL
							Caprolactam	40 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							3,3'-Dichlorobenzidine	40 ug/mL
							Benzidine	40 ug/mL
							2,4,6-Tribromophenol (Surr)	20 ug/mL
							2-Fluorobiphenyl (Surr)	20 ug/mL
							2-Fluorophenol (Surr)	20 ug/mL
							Nitrobenzene-d5 (Surr)	20 ug/mL
							Phenol-d5 (Surr)	20 ug/mL
							Terphenyl-d14 (Surr)	20 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 L9 W_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
					SMLIST1 STOCK_00012	500 uL	1,1'-Biphenyl	25 ug/mL
							1,2,4,5-Tetrachlorobenzene	25 ug/mL
							1,2,4-Trichlorobenzene	25 ug/mL
							1,2-Dichlorobenzene	25 ug/mL
							1,3-Dichlorobenzene	25 ug/mL
							1,3-Dinitrobenzene	25 ug/mL
							1,4-Dichlorobenzene	25 ug/mL
							1,4-Dioxane	25 ug/mL
							1-Methylnaphthalene	25 ug/mL
							2,2'-oxybis[1-chloropropane]	25 ug/mL
							2,3,4,6-Tetrachlorophenol	25 ug/mL
							2,4,5-Trichlorophenol	25 ug/mL
							2,4,6-Trichlorophenol	25 ug/mL
							2,4-Dichlorophenol	25 ug/mL
							2,4-Dimethylphenol	25 ug/mL
							2,4-Dinitrophenol	50 ug/mL
							2,4-Dinitrotoluene	25 ug/mL
							2,6-Dichlorophenol	25 ug/mL
							2,6-Dinitrotoluene	25 ug/mL
							2-Chloronaphthalene	25 ug/mL
							2-Chlorophenol	25 ug/mL
							2-Methylnaphthalene	25 ug/mL
							2-Methylphenol	25 ug/mL
							2-Nitroaniline	25 ug/mL
							2-Nitrophenol	25 ug/mL
							3 & 4 Methylphenol	25 ug/mL
							3-Nitroaniline	25 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							4,6-Dinitro-2-methylphenol	50 ug/mL
							4-Bromophenyl phenyl ether	25 ug/mL
							4-Chloro-3-methylphenol	25 ug/mL
							4-Chloroaniline	25 ug/mL
							4-Chlorophenyl phenyl ether	25 ug/mL
							4-Nitrophenol	50 ug/mL
							Acenaphthene	25 ug/mL
							Acenaphthylene	25 ug/mL
							Acetophenone	25 ug/mL
							Aniline	25 ug/mL
							Anthracene	25 ug/mL
							Azobenzene	25 ug/mL
							Benzo[a]anthracene	25 ug/mL
							Benzo[a]pyrene	25 ug/mL
							Benzo[b]fluoranthene	25 ug/mL
							Benzo[g,h,i]perylene	25 ug/mL
							Benzo[k]fluoranthene	25 ug/mL
							Benzyl alcohol	25 ug/mL
							Bis(2-chloroethoxy)methane	25 ug/mL
							Bis(2-chloroethyl)ether	25 ug/mL
							Bis(2-ethylhexyl) phthalate	25 ug/mL
							Butyl benzyl phthalate	25 ug/mL
							Carbazole	25 ug/mL
							Chrysene	25 ug/mL
							Di-n-butyl phthalate	25 ug/mL
							Di-n-octyl phthalate	25 ug/mL
							Dibenz(a,h)anthracene	25 ug/mL
							Dibenzofuran	25 ug/mL
							Diethyl phthalate	25 ug/mL
							Dimethyl phthalate	25 ug/mL
							Diphenylamine	21.25 ug/mL
							Fluoranthene	25 ug/mL
							Fluorene	25 ug/mL
							Hexachlorobenzene	25 ug/mL
							Hexachlorobutadiene	25 ug/mL
							Hexachlorocyclopentadiene	25 ug/mL
							Hexachloroethane	25 ug/mL
							Hexadecane	25 ug/mL
							Indeno[1,2,3-cd]pyrene	25 ug/mL
							Isophorone	25 ug/mL
							n-Decane	25 ug/mL
							N-Nitrosodi-n-propylamine	25 ug/mL
							N-Nitrosodimethylamine	25 ug/mL
							N-Nitrosodiphenylamine	25 ug/mL
							n-Octadecane	25 ug/mL
							Naphthalene	25 ug/mL
							Nitrobenzene	25 ug/mL
							p-Nitroaniline	25 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Pentachlorophenol	50 ug/mL
							Phenanthrene	25 ug/mL
							Phenol	25 ug/mL
							Pyrene	25 ug/mL
							Pyridine	50 ug/mL
							Benzoic acid	50 ug/mL
							Indene	50 ug/mL
							Atrazine	50 ug/mL
							Benzaldehyde	50 ug/mL
							Caprolactam	50 ug/mL
							3,3'-Dichlorobenzidine	50 ug/mL
							Benzidine	50 ug/mL
							2,4,6-Tribromophenol (Surr)	25 ug/mL
							2-Fluorobiphenyl (Surr)	25 ug/mL
							2-Fluorophenol (Surr)	25 ug/mL
							Nitrobenzene-d5 (Surr)	25 ug/mL
							Phenol-d5 (Surr)	25 ug/mL
							Terphenyl-d14 (Surr)	25 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
.SMLIST1 STOCK_00012	06/30/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 S1_00009	1 mL	1,1'-Biphenyl	100 ug/mL
							1,2,4,5-Tetrachlorobenzene	100 ug/mL
							1,2,4-Trichlorobenzene	100 ug/mL
							1,2-Dichlorobenzene	100 ug/mL
							1,3-Dichlorobenzene	100 ug/mL
							1,3-Dinitrobenzene	100 ug/mL
							1,4-Dichlorobenzene	100 ug/mL
							1,4-Dioxane	100 ug/mL
							1-Methylnaphthalene	100 ug/mL
							2,2'-oxybis[1-chloropropane]	100 ug/mL
							2,3,4,6-Tetrachlorophenol	100 ug/mL
							2,4,5-Trichlorophenol	100 ug/mL
							2,4,6-Trichlorophenol	100 ug/mL
							2,4-Dichlorophenol	100 ug/mL
							2,4-Dimethylphenol	100 ug/mL
							2,4-Dinitrophenol	200 ug/mL
							2,4-Dinitrotoluene	100 ug/mL
							2,6-Dichlorophenol	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2,6-Dinitrotoluene	100 ug/mL
							2-Chloronaphthalene	100 ug/mL
							2-Chlorophenol	100 ug/mL
							2-Methylnaphthalene	100 ug/mL
							2-Methylphenol	100 ug/mL
							2-Nitroaniline	100 ug/mL
							2-Nitrophenol	100 ug/mL
							3 & 4 Methylphenol	100 ug/mL
							3-Nitroaniline	100 ug/mL
							4,6-Dinitro-2-methylphenol	200 ug/mL
							4-Bromophenyl phenyl ether	100 ug/mL
							4-Chloro-3-methylphenol	100 ug/mL
							4-Chloroaniline	100 ug/mL
							4-Chlorophenyl phenyl ether	100 ug/mL
							4-Nitrophenol	200 ug/mL
							Acenaphthene	100 ug/mL
							Acenaphthylene	100 ug/mL
							Acetophenone	100 ug/mL
							Aniline	100 ug/mL
							Anthracene	100 ug/mL
							Azobenzene	100 ug/mL
							Benzo[a]anthracene	100 ug/mL
							Benzo[a]pyrene	100 ug/mL
							Benzo[b]fluoranthene	100 ug/mL
							Benzo[g,h,i]perylene	100 ug/mL
							Benzo[k]fluoranthene	100 ug/mL
							Benzyl alcohol	100 ug/mL
							Bis(2-chloroethoxy)methane	100 ug/mL
							Bis(2-chloroethyl)ether	100 ug/mL
							Bis(2-ethylhexyl) phthalate	100 ug/mL
							Butyl benzyl phthalate	100 ug/mL
							Carbazole	100 ug/mL
							Chrysene	100 ug/mL
							Di-n-butyl phthalate	100 ug/mL
							Di-n-octyl phthalate	100 ug/mL
							Dibenz(a,h)anthracene	100 ug/mL
							Dibenzofuran	100 ug/mL
							Diethyl phthalate	100 ug/mL
							Dimethyl phthalate	100 ug/mL
							Diphenylamine	85 ug/mL
							Fluoranthene	100 ug/mL
							Fluorene	100 ug/mL
							Hexachlorobenzene	100 ug/mL
							Hexachlorobutadiene	100 ug/mL
							Hexachlorocyclopentadiene	100 ug/mL
							Hexachloroethane	100 ug/mL
							Hexadecane	100 ug/mL
							Indeno[1,2,3-cd]pyrene	100 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Isophorone	100 ug/mL
							n-Decane	100 ug/mL
							N-Nitrosodi-n-propylamine	100 ug/mL
							N-Nitrosodimethylamine	100 ug/mL
							N-Nitrosodiphenylamine	100 ug/mL
							n-Octadecane	100 ug/mL
							Naphthalene	100 ug/mL
							Nitrobenzene	100 ug/mL
							p-Nitroaniline	100 ug/mL
							Pentachlorophenol	200 ug/mL
							Phenanthrene	100 ug/mL
							Phenol	100 ug/mL
							Pyrene	100 ug/mL
							Pyridine	200 ug/mL
					SMLIST1 S10_00005	1 mL	Benzoic acid	200 ug/mL
							Indene	200 ug/mL
					SMLIST1 S11_00006	1 mL	Atrazine	200 ug/mL
							Benzaldehyde	200 ug/mL
							Caprolactam	200 ug/mL
					SMLIST1 S9_00005	1 mL	3,3'-Dichlorobenzidine	200 ug/mL
							Benzidine	200 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 S1_00009	09/30/19		Restek, Lot A0136052		(Purchased Reagent)		1,1'-Biphenyl	1000 ug/mL
							1,2,4,5-Tetrachlorobenzene	1000 ug/mL
							1,2,4-Trichlorobenzene	1000 ug/mL
							1,2-Dichlorobenzene	1000 ug/mL
							1,3-Dichlorobenzene	1000 ug/mL
							1,3-Dinitrobenzene	1000 ug/mL
							1,4-Dichlorobenzene	1000 ug/mL
							1,4-Dioxane	1000 ug/mL
							1-Methylnaphthalene	1000 ug/mL
							2,2'-oxybis[1-chloropropane]	1000 ug/mL
							2,3,4,6-Tetrachlorophenol	1000 ug/mL
							2,4,5-Trichlorophenol	1000 ug/mL
							2,4,6-Trichlorophenol	1000 ug/mL
							2,4-Dichlorophenol	1000 ug/mL
							2,4-Dimethylphenol	1000 ug/mL
							2,4-Dinitrophenol	2000 ug/mL
							2,4-Dinitrotoluene	1000 ug/mL
							2,6-Dichlorophenol	1000 ug/mL
							2,6-Dinitrotoluene	1000 ug/mL
							2-Chloronaphthalene	1000 ug/mL
							2-Chlorophenol	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							2-Methylnaphthalene	1000 ug/mL
							2-Methylphenol	1000 ug/mL
							2-Nitroaniline	1000 ug/mL
							2-Nitrophenol	1000 ug/mL
							3 & 4 Methylphenol	1000 ug/mL
							3-Nitroaniline	1000 ug/mL
							4,6-Dinitro-2-methylphenol	2000 ug/mL
							4-Bromophenyl phenyl ether	1000 ug/mL
							4-Chloro-3-methylphenol	1000 ug/mL
							4-Chloroaniline	1000 ug/mL
							4-Chlorophenyl phenyl ether	1000 ug/mL
							4-Nitrophenol	2000 ug/mL
							Acenaphthene	1000 ug/mL
							Acenaphthylene	1000 ug/mL
							Acetophenone	1000 ug/mL
							Aniline	1000 ug/mL
							Anthracene	1000 ug/mL
							Azobenzene	1000 ug/mL
							Benzo[a]anthracene	1000 ug/mL
							Benzo[a]pyrene	1000 ug/mL
							Benzo[b]fluoranthene	1000 ug/mL
							Benzo[g,h,i]perylene	1000 ug/mL
							Benzo[k]fluoranthene	1000 ug/mL
							Benzyl alcohol	1000 ug/mL
							Bis(2-chloroethoxy)methane	1000 ug/mL
							Bis(2-chloroethyl)ether	1000 ug/mL
							Bis(2-ethylhexyl) phthalate	1000 ug/mL
							Butyl benzyl phthalate	1000 ug/mL
							Carbazole	1000 ug/mL
							Chrysene	1000 ug/mL
							Di-n-butyl phthalate	1000 ug/mL
							Di-n-octyl phthalate	1000 ug/mL
							Dibenz(a,h)anthracene	1000 ug/mL
							Dibenzofuran	1000 ug/mL
							Diethyl phthalate	1000 ug/mL
							Dimethyl phthalate	1000 ug/mL
							Diphenylamine	850 ug/mL
							Fluoranthene	1000 ug/mL
							Fluorene	1000 ug/mL
							Hexachlorobenzene	1000 ug/mL
							Hexachlorobutadiene	1000 ug/mL
							Hexachlorocyclopentadiene	1000 ug/mL
							Hexachloroethane	1000 ug/mL
							Hexadecane	1000 ug/mL
							Indeno[1,2,3-cd]pyrene	1000 ug/mL
							Isophorone	1000 ug/mL
							n-Decane	1000 ug/mL
							N-Nitrosodi-n-propylamine	1000 ug/mL

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							N-Nitrosodimethylamine	1000 ug/mL
							N-Nitrosodiphenylamine	1000 ug/mL
							n-Octadecane	1000 ug/mL
							Naphthalene	1000 ug/mL
							Nitrobenzene	1000 ug/mL
							p-Nitroaniline	1000 ug/mL
							Pentachlorophenol	2000 ug/mL
							Phenanthrene	1000 ug/mL
							Phenol	1000 ug/mL
							Pyrene	1000 ug/mL
							Pyridine	2000 ug/mL
..SMLIST1 S10_00005	10/31/19		Restek, Lot A0136865		(Purchased Reagent)		Benzoic acid	2000 ug/mL
							Indene	2000 ug/mL
..SMLIST1 S11_00006	06/30/19		Restek, Lot A0133451		(Purchased Reagent)		Atrazine	2000 ug/mL
							Benzaldehyde	2000 ug/mL
							Caprolactam	2000 ug/mL
..SMLIST1 S9_00005	10/31/19		Restek, Lot A0137351		(Purchased Reagent)		3,3'-Dichlorobenzidine	2000 ug/mL
							Benzidine	2000 ug/mL
..SMLIST1 SURR_00011	09/30/23		Restek, Lot A0141581		(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL
SMLIST1 SS W_00011	05/31/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMIS80PPMW_00019	100 uL	1,4-Dichlorobenzene-d4	4 ug/mL
							Acenaphthene-d10	4 ug/mL
							Chrysene-d12	4 ug/mL
							Naphthalene-d8	4 ug/mL
							Perylene-d12	4 ug/mL
							Phenanthrene-d10	4 ug/mL
.SMIS80PPMW_00019	08/15/19	08/15/18	MECL2, Lot 0000200432	40 mL	SMIS R_00010	1.6 mL	1,4-Dichlorobenzene-d4	80 ug/mL
							Acenaphthene-d10	80 ug/mL
							Chrysene-d12	80 ug/mL
							Naphthalene-d8	80 ug/mL
							Perylene-d12	80 ug/mL
							Phenanthrene-d10	80 ug/mL
..SMIS R_00010	12/31/22		Restek, Lot A0133281		(Purchased Reagent)		1,4-Dichlorobenzene-d4	2000 ug/mL
							Acenaphthene-d10	2000 ug/mL
							Chrysene-d12	2000 ug/mL
							Naphthalene-d8	2000 ug/mL
							Perylene-d12	2000 ug/mL
							Phenanthrene-d10	2000 ug/mL
SMLIST1 SS W_00011	05/31/19	01/09/19	MECL2, Lot 00002060239	2 mL	SMLIST1 SS ST_00011	200 uL	p-Nitroaniline	10 ug/mL
							2,4,6-Tribromophenol (Surr)	10 ug/mL
							2-Fluorobiphenyl (Surr)	10 ug/mL
							2-Fluorophenol (Surr)	10 ug/mL
							Nitrobenzene-d5 (Surr)	10 ug/mL

REAGENT TRACEABILITY SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Reagent ID	Exp Date	Prep Date	Dilutant Used	Reagent Final Volume	Parent Reagent		Analyte	Concentration
					Reagent ID	Volume Added		
							Phenol-d5 (Surr)	10 ug/mL
							Terphenyl-d14 (Surr)	10 ug/mL
.SMLIST1 SS ST_00011	05/31/19	01/09/19	MECL2, Lot 00002060239	10 mL	SMLIST1 SS S1_00009	1 mL	p-Nitroaniline	100 ug/mL
					SMLIST1 SURR_00011	200 uL	2,4,6-Tribromophenol (Surr)	100 ug/mL
							2-Fluorobiphenyl (Surr)	100 ug/mL
							2-Fluorophenol (Surr)	100 ug/mL
							Nitrobenzene-d5 (Surr)	100 ug/mL
							Phenol-d5 (Surr)	100 ug/mL
							Terphenyl-d14 (Surr)	100 ug/mL
..SMLIST1 SS S1_00009	12/31/19	Restek, Lot A0138890			(Purchased Reagent)		p-Nitroaniline	1000 ug/mL
..SMLIST1 SURR_00011	09/30/23	Restek, Lot A0141581			(Purchased Reagent)		2,4,6-Tribromophenol (Surr)	5000 ug/mL
							2-Fluorobiphenyl (Surr)	5000 ug/mL
							2-Fluorophenol (Surr)	5000 ug/mL
							Nitrobenzene-d5 (Surr)	5000 ug/mL
							Phenol-d5 (Surr)	5000 ug/mL
							Terphenyl-d14 (Surr)	5000 ug/mL

Reagent

exBENZALDEHYD_00066

LABORATORY STANDARDS DOCUMENTATION FORM
FOR TESTAMERICA LABORATORIES, INC.

Standard No. 3997668 ID exBENZALDEHYD_00066 Exp: 07/11/19 Prpd: JM1 Crl: 01/11/19 Benzaldehyde BNA Spike

Standard Name _____

Date Created 1/11/19

Extractionist Initials BB

Extractionist Comments Please confirm new Spike.

♦ **Please return copy of chromatogram and recovery results** ♦

Date Analyzed 1-11-19

Passed? Yes [X]

No [ ]

Returned copy of chromatogram and recovery page to Extractions? Yes [X]

No [ ]

Analyst Initials _____

Analyst Comments _____

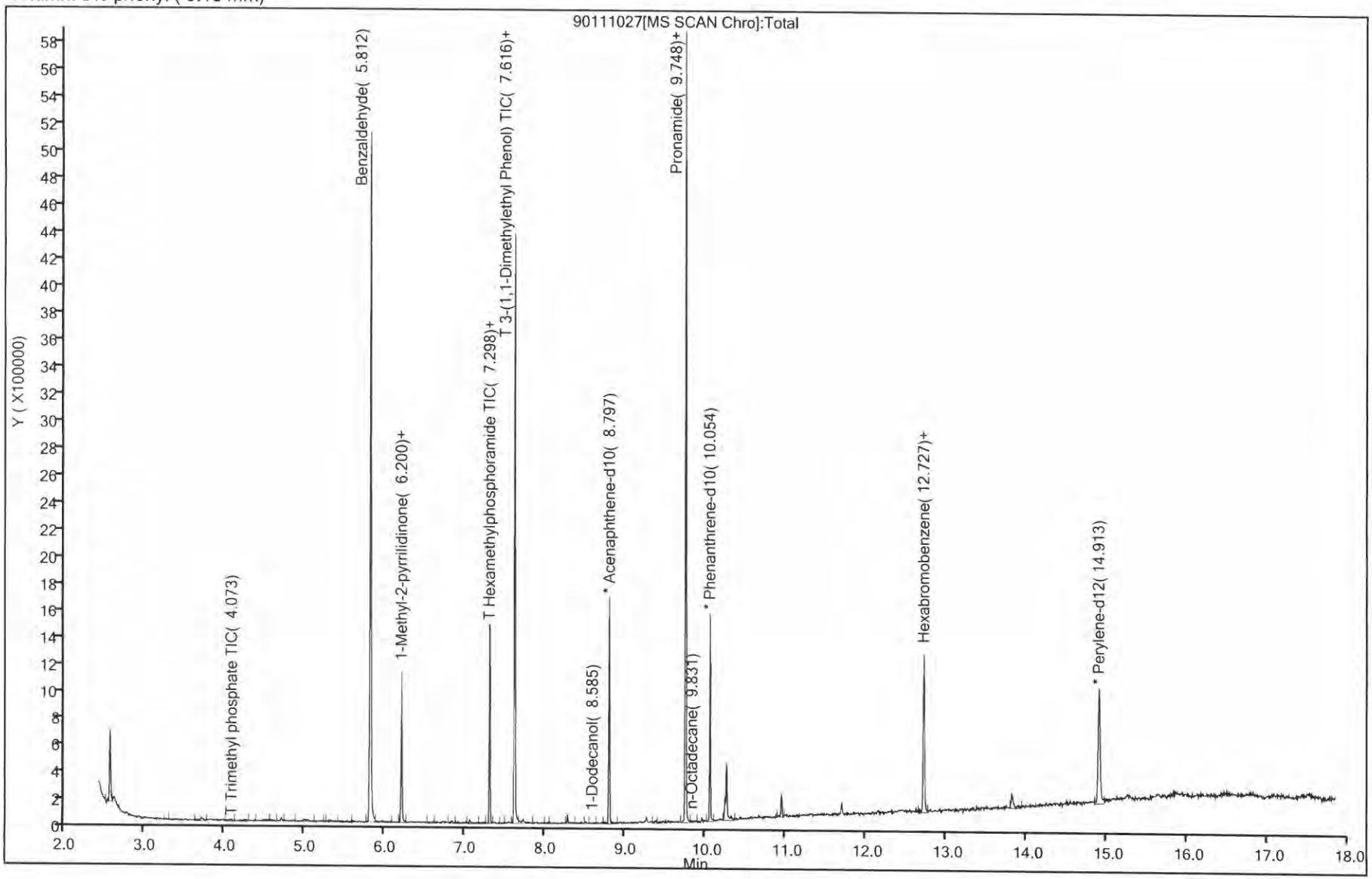
WI-NC-020A_101207

Report Date: 14-Jan-2019 09:40:37 Chrom Revision: 2.3 13-Dec-2018 17:23:12

Preliminary Report

TestAmerica Canton

Data File:	\\chromna\Canton\ChromData\A4HP10\20190111-83617.b\90111027.D				
Injection Date:	11-Jan-2019 21:01:30	Instrument ID:	A4HP10	Operator ID:	001710
Lims ID:	benzalhehyde	Lab Sample ID:	Client 240-363684/27-A	Worklist Smp#:	27
Client ID:					
Injection Vol:	1.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	27
Method:	8270_10	Limit Group:	MSS 8270C ICAL		
Column: 5% phenyl (0.18 mm)					



Reagent

exBNASPIKE_00101

LABORATORY STANDARDS DOCUMENTATION FORM
FOR TESTAMERICA LABORATORIES, INC.

Standard No. 4110180 — ID: exBNASPIKE_00101 — Exp: 10/10/19 Prpd: BMB Crt: 04/10/19 — List 1 BNA Spike — 4110184 — ID: exBNA TCLPspk_00044 — Exp: 10/10/19 Prpd: BMB Crt: 04/10/19 — List 1 TCLP BNA Spike

Standard Name _____

Date Created 4/10/19

Extractionist Initials BB

Extractionist Comments Please, dear god, confirm this new spike ☺

♦ **Please return copy of chromatogram and recovery results** ♦

Date Analyzed 4/11/19

Passed? Yes [X]

No [ ]

Returned copy of chromatogram and recovery page to Extractions? Yes [X]

No [ ]

Analyst Initials MJ

Analyst Comments _____

WI-NC-020A_101207

Report Date: 11-Apr-2019 10:30:06 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Preliminary Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\90411006.D

Injection Date: 11-Apr-2019 10:01:56 Instrument ID: A4AG3 Operator ID:

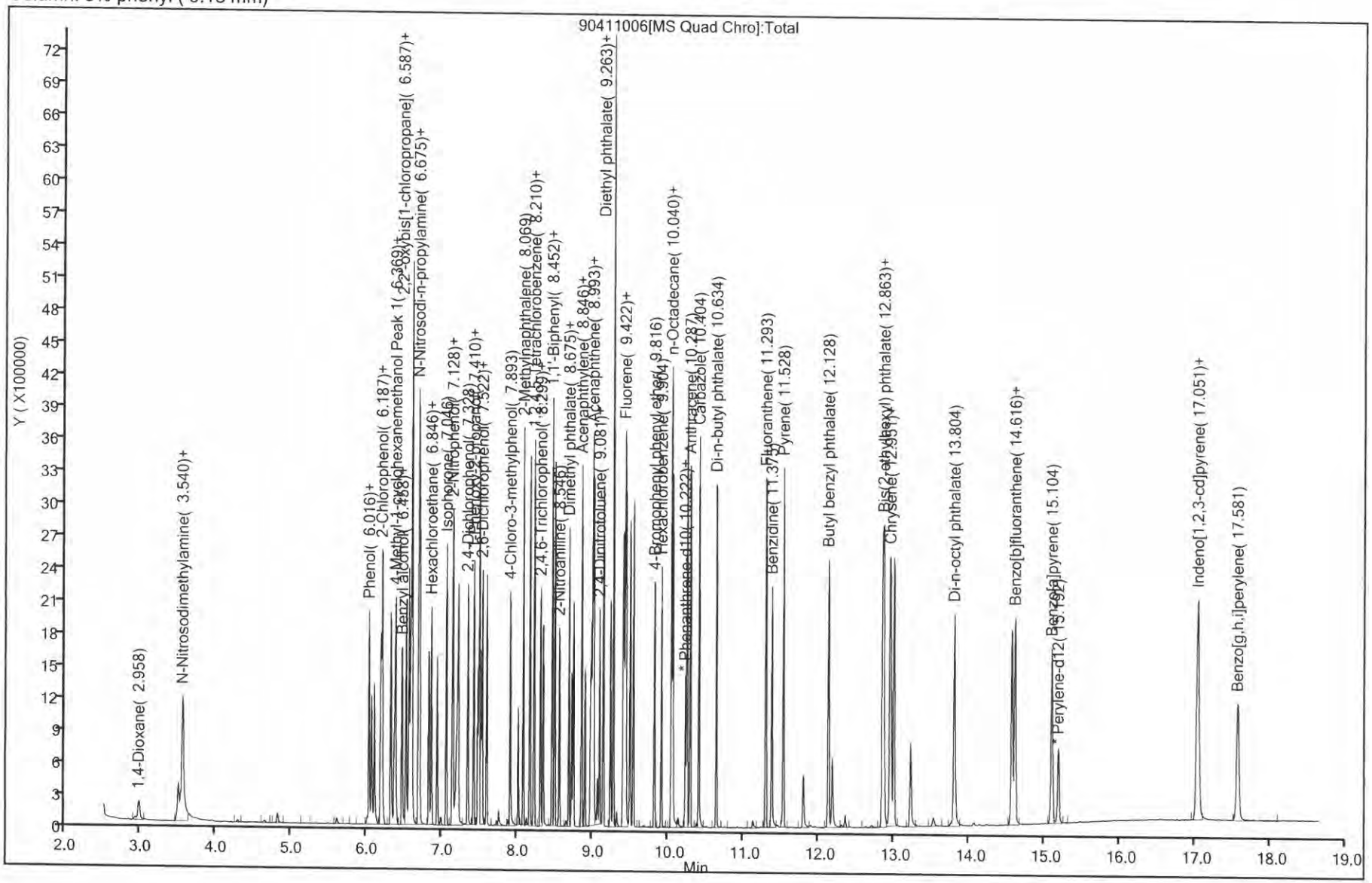
Lims ID: bnaspk101 Lab Sample ID: Client 240-375951/6-A Worklist Smp#: 6

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 0

Method: 8270 AG3 Limit Group: MSS 8270C ICAL

Column: 5% phenyl (0.18 mm)



Report Date: 11-Apr-2019 10:30:05 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Preliminary Report

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\90411006.D
Lims ID: bnaspk101
Client ID:
Sample Type: Client
Inject. Date: 11-Apr-2019 10:01:56 ALS Bottle#: 0 Worklist Smp#: 6
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086045-006
Misc. Info.: BNASPK101
Operator ID: Instrument ID: A4AG3

Method: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\8270 AG3.m
Limit Group: MSS 8270C ICAL
Last Update: 11-Apr-2019 10:29:30 Calib Date: 27-Mar-2019 00:08:11
Integrator: RTE ID Type: RT Order ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG3\20190326-85531.b\90326028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0308

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.352	6.351	0.001	92	130998	4.00	
* 2 Naphthalene-d8	136	7.463	7.463	0.000	100	479498	4.00	
* 3 Acenaphthene-d10	164	8.963	8.963	0.000	96	239472	4.00	
* 4 Phenanthrene-d10	188	10.228	10.228	0.000	97	467557	4.00	
* 5 Chrysene-d12	240	12.963	12.969	-0.006	99	426199	4.00	
* 6 Perylene-d12	264	15.192	15.198	-0.006	93	365904	4.00	
$ 7 2-Fluorophenol	112		5.140				ND	
$ 8 Phenol-d5	99		5.999				ND	
$ 9 Nitrobenzene-d5	82		6.828				ND	
$ 10 2-Fluorobiphenyl (Surr)	172		8.363				ND	
$ 11 2,4,6-Tribromophenol	330		9.628				ND	
$ 12 Terphenyl-d14	244		11.634				ND	
13 1,4-Dioxane	88	2.958	2.958	-0.011	90	153222	8.72	M
14 N-Nitrosodimethylamine	74	3.481	3.493	-0.012	79	239058	9.35	
15 Pyridine	79	3.540	3.546	-0.006	79	823799	18.8	
17 Dimethylformamide	73		4.093				ND	7
18 Ethyl methacrylate	69		4.181				ND	
16 Chlorobenzene TIC	112		4.370				ND	i
19 2-Picoline	93		4.701				ND	
20 N-Nitrosomethylethylamine	88		4.813				ND	
21 Acrylamide	71		5.066				ND	
23 n,n'-Dimethylacetamide	44		5.075				ND	
22 Methyl methanesulfonate	80		5.113				ND	
25 N-Nitrosodiethylamine	102		5.513				ND	
26 Ethyl methanesulfonate	79		5.772				ND	
27 2-Methylcyclohexanone	68		5.881				ND	U
28 3-Methylcyclohexanone	69		5.916				ND	U
30 Benzaldehyde	77		5.957				ND	
29 4-Methylcyclohexanone	55		5.963				ND	U
31 Phenol	94	6.016	6.011	0.006	94	477556	8.63	
32 Aniline	93	6.052	6.052	0.000	32	370838	5.51	9a

Preliminary Report

Data File: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\90411006.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
33 Bis(2-chloroethyl)ether	93	6.087	6.093	-0.006	84	420909	9.16	
36 2-Chlorophenol	128	6.175	6.169	0.006	96	396404	9.10	
37 n-Decane	57	6.193	6.193	0.000	91	556405	10.1	
35 Pentachloroethane	167		6.254				ND	
39 1,3-Dichlorobenzene	146	6.305	6.310	-0.005	93	447769	9.18	
34 4-Methyl-1-cyclohexanemeth	55	6.369	6.341	0.028	0	21525	NC	ig
24 Phenylmercaptan	110		6.351				ND	ig
40 1,4-Dichlorobenzene	146	6.369	6.369	0.000	90	447942	9.01	
41 Benzyl alcohol	108	6.458	6.458	0.001	86	238102	8.12	M
38 4-Methyl-1-cyclohexanemeth	55	6.511	6.475	0.035	0	19671	NC	ig
42 1-Methyl-2-pyrrilidinone	99		6.481				ND	U
44 1,2-Dichlorobenzene	146	6.511	6.511	0.000	93	421796	9.03	
45 2-Methylphenol	108	6.546	6.546	0.000	95	353993	8.77	
46 2,2'-oxybis[1-chloropropan	45	6.569	6.569	0.000	74	691953	10.7	
47 Indene	115	6.587	6.587	0.000	77	1369213	18.2	
48 3 & 4 Methylphenol	108	6.675	6.675	0.000	94	379223	8.84	
50 N-Nitrosodi-n-propylamine	70	6.675	6.681	-0.006	90	293265	9.47	
52 Acetophenone	105	6.687	6.693	-0.006	90	557752	9.08	
49 N-Nitrosopyrrolidine	100		6.801				ND	
54 Hexachloroethane	117	6.810	6.816	-0.006	90	185650	9.30	
51 N-Nitrosomorpholine	56		6.831				ND	
55 Nitrobenzene	77	6.846	6.846	0.000	91	464481	9.95	
53 2-Toluidine	106		6.872				ND	
57 Isophorone	82	7.046	7.046	0.000	97	806928	9.33	
56 N-Nitrosopiperidine	114		7.113				ND	
59 2-Nitrophenol	139	7.122	7.122	0.000	90	208624	9.69	
43 2-Chloroaniline	127		7.122				ND	
58 2,4-Dimethylphenol	107	7.134	7.134	0.000	96	407817	9.19	
60 1,3,5-Trichlorobenzene	180		7.175				ND	
63 Benzoic acid	105	7.193	7.193	0.000	13	490579	16.5	9M
64 Bis(2-chloroethoxy)methane	93	7.205	7.205	0.001	89	470330	9.40	
62 o,o',o''-Triethylphosphoro	198		7.319				ND	
66 2,4-Dichlorophenol	162	7.328	7.334	-0.006	96	320259	9.48	
61 1-Phenoxy-2-propanol	94	7.410	7.374	0.037	0	2155	NC	ig
68 1,2,4-Trichlorobenzene	180	7.410	7.410	0.000	91	357422	9.48	
206 3 & 4 Chlorophenol	128		7.416				ND	
65 alpha,alpha-Dimethyl phene	58		7.436				ND	
69 Naphthalene	128	7.481	7.487	-0.006	97	1146542	8.95	
70 4-Chloroaniline	127	7.505	7.505	0.001	1	334473	5.89	9M
71 2,6-Dichlorophenol	162	7.522	7.522	0.000	85	317333	9.46	
73 Hexachlorobutadiene	225	7.581	7.587	-0.006	94	203904	9.65	
74 1,2,3-Trichlorobenzene	180		7.640				ND	
72 Hexachloropropene	213		7.713				ND	
75 Benzothiazole	135		7.728				ND	
78 Caprolactam	113		7.793				ND	
80 4-Chloro-3-methylphenol	107	7.893	7.899	-0.005	94	349094	9.08	
77 Quinoline	129		7.907				ND	
76 N-Nitrosodi-n-butylamine	84		7.913				ND	
79 p-Phenylene diamine	108		7.942				ND	
67 4-tert-Butylphenol	135		7.946				ND	
82 2-Methylnaphthalene	142	8.069	8.069	0.000	89	780588	9.17	

Preliminary Report

Data File: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\90411006.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
81 Safrole, Total	162		8.113				ND	
83 1-Methylnaphthalene	142	8.157	8.157	0.000	89	713971	9.01	
85 Hexachlorocyclopentadiene	237	8.210	8.210	0.000	84	207121	8.87	
86 1,2,4,5-Tetrachlorobenzene	216	8.216	8.216	0.000	99	351574	9.86	
84 1,2,3,5-Tetrachlorobenzene	216		8.234				ND	
88 2,4,6-Trichlorophenol	196	8.299	8.299	0.001	94	221746	9.73	
89 2,4,5-Trichlorophenol	196	8.334	8.334	0.000	94	229931	9.61	
87 Isosafrole Peak 1	162		8.360				ND	
92 1,1'-Biphenyl	154	8.452	8.457	-0.005	96	909121	9.38	
91 2,4-Toluene diamine	121		8.457				ND	g
96 2-Chloronaphthalene	162	8.487	8.487	0.000	98	688695	9.44	
93 1,2,3,4 -Tetrachlorobenzen	216		8.493				ND	
95 3,4-Dichloronitrobenzene	109		8.510				ND	
99 2-Nitroaniline	65	8.546	8.552	-0.005	75	256823	10.4	
90 Isosafrole Peak 2	162		8.554				ND	
98 Phenyl ether	170		8.569				ND	U
97 1-Chloronaphthalene	162		8.660				ND	U
102 Dimethyl phthalate	163	8.675	8.681	-0.006	96	774099	9.58	
103 1,3-Dinitrobenzene	168	8.716	8.716	0.000	84	133169	10.1	
104 2,6-Dinitrotoluene	165	8.740	8.740	0.000	70	186305	9.97	
100 1,4-Naphthoquinone	158		8.766				ND	
101 1,4-Dinitrobenzene	168		8.789				ND	
105 Acenaphthylene	152	8.846	8.846	0.001	93	1084933	9.10	
106 3-Nitroaniline	138	8.893	8.893	0.000	91	158156	7.97	
108 2,4-Dinitrophenol	184	8.975	8.981	-0.006	77	151025	14.2	
109 Acenaphthene	153	8.993	8.993	0.000	93	693674	9.14	
110 4-Nitrophenol	109	9.004	9.010	-0.006	89	251201	20.7	
111 2,4-Dinitrotoluene	165	9.081	9.087	-0.006	79	238298	10.1	
94 o-Phenylphenol	170		9.093				ND	U
113 Dibenzofuran	168	9.134	9.134	0.000	89	968415	9.14	
116 2,3,4,6-Tetrachlorophenol	232	9.228	9.234	-0.006	76	177374	9.62	
112 Pentachlorobenzene	250		9.260				ND	
118 Diethyl phthalate	149	9.263	9.269	-0.006	96	801732	10.2	
117 Hexadecane	57	9.263	9.269	-0.006	84	659186	10.6	
115 2,3,5,6-Tetrachlorophenol	232		9.342				ND	
114 1-Naphthylamine	143		9.342				ND	
122 4-Chlorophenyl phenyl ethe	204	9.399	9.399	0.001	94	368843	9.19	
119 2-Naphthylamine	143		9.407				ND	
125 4-Nitroaniline	138	9.410	9.410	0.000	80	199083	10.1	
126 Fluorene	166	9.422	9.428	-0.006	60	775108	9.31	
127 4,6-Dinitro-2-methylphenol	198	9.434	9.440	-0.006	59	235183	16.4	
123 Tributyl phosphate	99		9.451				ND	
121 Thionazin	97		9.483				ND	
128 N-Nitrosodiphenylamine	169	9.487	9.493	-0.005	65	562019	8.76	
129 Diphenylamine	169	9.487	9.493	-0.005	93	562019	7.44	
131 1,2-Diphenylhydrazine	77	9.534	9.534	0.000	95	891985	9.35	
130 Azobenzene	77	9.534	9.534	0.000	97	892046	9.35	
124 N-Nitro-o-toluidine	152		9.560				ND	
107 Benzophenone	105		9.575				ND	U
132 Sulfotepp	202		9.730				ND	
138 4-Bromophenyl phenyl ether	248	9.816	9.816	0.000	65	213696	8.90	

Preliminary Report

Data File: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\90411006.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
133 1,3,5-Trinitrobenzene	213		9.819				ND	
135 Phenacetin	108		9.866				ND	
134 Diallate Peak 1	86		9.872				ND	
136 Phorate	121		9.883				ND	
120 3 & 4 Phenoxyphenol	186		9.904				ND	
141 Hexachlorobenzene	284	9.904	9.910	-0.006	86	216399	8.63	
140 Atrazine	200		9.916				ND	
137 Diallate Peak 2	86		9.954				ND	
139 Dimethoate	87		10.030				ND	
142 n-Octadecane	57	10.040	10.040	0.000	93	687758	11.4	
145 Pentachlorophenol	266	10.057	10.057	0.000	74	268991	16.0	
143 4-Aminobiphenyl	169		10.183				ND	
144 Pronamide	173		10.201				ND	
146 Pentachloronitrobenzene	237		10.230				ND	
149 Phenanthrene	178	10.246	10.251	-0.005	97	1145607	9.17	
150 Anthracene	178	10.293	10.293	0.001	97	1185504	9.28	
147 Disulfoton	88		10.319				ND	
148 Dinoseb	211		10.330				ND	
152 Carbazole	167	10.404	10.410	-0.006	83	1068169	10.0	
154 Di-n-butyl phthalate	149	10.640	10.640	0.001	100	1396098	9.75	
153 Methyl parathion	109		10.648				ND	
155 Diphenylsulfone	125		10.710				ND	
151 Chlorpyrifos	97		10.792				ND	
156 Ethyl Parathion	97		10.972				ND	
157 4-Nitroquinoline-1-oxide	190		11.048				ND	
158 Methapyrilene	58		11.083				ND	
160 Fluoranthene	202	11.298	11.298	0.000	97	1271367	9.46	
159 Isodrin	66		11.342				ND	
161 Benzidine	184	11.375	11.376	-0.006	99	737251	10.4	
163 Pyrene	202	11.528	11.529	-0.006	96	1289569	10.1	
165 4,4'-DDE	246		11.575				ND	i
162 Kepone	272		11.808				ND	i
166 Aramite Peak 2	185		11.819				ND	U
164 Aramite Peak 1	185		11.819				ND	U
169 4,4'-DDD	235		11.939				ND	i
167 p-Dimethylamino azobenzene	225		11.972				ND	
168 Chlorobenzilate	139		12.001				ND	
171 Butyl benzyl phthalate	149	12.128	12.128	-0.006	95	597060	9.79	
170 Famphur	218		12.289				ND	i
173 4,4'-DDT	235		12.298				ND	ig
172 3,3'-Dimethylbenzidine	212		12.360				ND	
174 2-Acetylaminofluorene	181		12.695				ND	
176 Bis(2-ethylhexyl) phthalat	149	12.845	12.846	-0.006	95	853375	10.2	
175 3,3'-Dimethoxybenzidine	244		12.851				ND	
178 3,3'-Dichlorobenzidine	252	12.869	12.863	0.000	73	534060	14.7	
179 Benzo[a]anthracene	228	12.945	12.945	-0.006	99	1128246	9.07	
180 Chrysene	228	12.998	12.998	-0.006	94	1092661	9.20	
181 Hexabromobenzene	232		13.057				ND	U
177 4,4'-Methylene bis(2-chlor	231		13.089				ND	
183 Di-n-octyl phthalate	149	13.804	13.805	-0.006	98	1386588	9.81	
182 6-Methylchrysene	242		13.919				ND	

Preliminary Report

Data File: \\chromna\Canton\ChromData\A4AG3\20190411-86045.b\90411006.D

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags
185 Benzo[b]fluoranthene	252	14.575	14.575	-0.005	95	1048424	9.78	
186 Benzo[k]fluoranthene	252	14.616	14.616	-0.006	96	1111506	9.94	
184 7,12-Dimethylbenz(a)anthra	256		14.836				ND	
187 Benzo[a]pyrene	252	15.104	15.104	-0.006	77	948706	9.24	
188 3-Methylcholanthrene	268		15.977				ND	
190 Dibenz[a,j]acridine	279		16.757				ND	
189 Dibenz[a,h]acridine	279		16.965				ND	
191 Indeno[1,2,3-cd]pyrene	276	17.045	17.045	-0.006	93	1123728	10.3	p
192 Dibenz(a,h)anthracene	278	17.057	17.056	-0.006	75	913907	9.98	p
193 Benzo[g,h,i]perylene	276	17.586	17.585	-0.006	96	936776	9.94	
194 Dibenzo[a,e]pyrene	302		20.130				ND	i
211 3-(1,1-Dimethylethyl Pheno	1		0.000				ND	i
202 Tricresyl phosphate TIC	1		0.000				ND	
201 Total Cresols	1		0.000				ND	
199 Tris(2,3-dibromopropyl)pho	1		0.000				ND	i
198 Triphenyl Phosphate TIC	1		0.000				ND	i
203 4-isopropylphenol TIC	1		0.000				ND	i
205 2-Isopropylphenol TIC	1		0.000				ND	i
308 1,2,4,5-Tetrachlorobenzene	1		0.000				ND	
209 3-isopropylphenol TIC	1		0.000				ND	i
200 Trimethyl phosphate TIC	1		0.000				ND	
197 Perylene TIC	1		0.000				ND	i
195 Alpha-Terpineol TIC	1		0.000				ND	i
204 2-Chloroaniline TIC	1		0.000				ND	i
212 3,3'-Dimethoxybenzidine TI	1		0.000				ND	
196 Diisobutyl phthalate TIC	1		0.000				ND	i
210 4-Chlorophenol TIC	1		0.000				ND	i
214 2,3,7,8 TCDF TIC	304		12.500				ND	6i
S 215 Isosafrole	162		5.181				ND	7
S 216 4-Methyl-1-cyclohexanemeth	55		6.170				ND	
S 217 Diallate	86		6.385				ND	7
S 218 Aramite, Total	185		7.898				ND	7
S 219 Methyl Phenols,Total	100				0		17.6	
T 220 Octadecane (TIC)	57		5.900				ND	1
T 223 Kepone TIC	272		12.000				ND	1
T 208 2,3,7,8-TCDD TIC	322		12.500				ND	1
T 222 Hexachlorophene TIC	198		15.500				ND	1
T 225 Hexamethylphosphoramide TI	44		0.000				ND	1
T 226 1-Phenoxy-2-propanol TIC	1		0.000				ND	1
T 224 Hydroquinone TIC	110		0.000				ND	1
T 227 Decane TIC	57		9.600				ND	1

Preliminary Report

QC Flag Legend

Processing Flags

NC - Not Calibrated
1 - Missing Peaks
6 - Missing Quant Standard
7 - Failed Limit of Detection
9 - Failed A Reference Spectral Test
i - Failed Initial Calibration Limits
p - Peak ID'ed as Multiple Compounds
g - Not in Limit Group or Failed to Calibrate

Review Flags

M - Manually Integrated
U - Marked Undetected
a - User Assigned ID

Reagents:

SMIS80PPMW_00019	Amount Added:	5.00	Units: uL	Run Reagent

Reagent

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exBNASURR W_00071

LABORATORY STANDARDS DOCUMENTATION FORM FOR TESTAMERICA LABORATORIES, INC.

Standard No. 4085241 ID: exBNASURR W_00071 Exp: 09/26/19 Prpd: BMB Crt: 03/26/19

Standard Name BNA Surrogates

Date Created 3/26/19

Extractionist Initials BB

Extractionist Comments Please confirm new surrogate.

♦ **Please return copy of chromatogram and recovery results** ♦

Date Analyzed 3/27/19

Passed? Yes [X]

No [ ]

Returned copy of chromatogram and recovery page to Extractions? Yes [X]

No [ ]

Analyst Initials MU

Analyst Comments

WI-NC-020A_101207

Report Date: 27-Mar-2019 12:48:48 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Preliminary Report

TestAmerica Canton

Data File: \\chromna\Canton\ChromData\A4HP9\20190327-85547.b\90327009.D

Injection Date: 27-Mar-2019 10:55:30 Instrument ID: A4HP9 Operator ID:

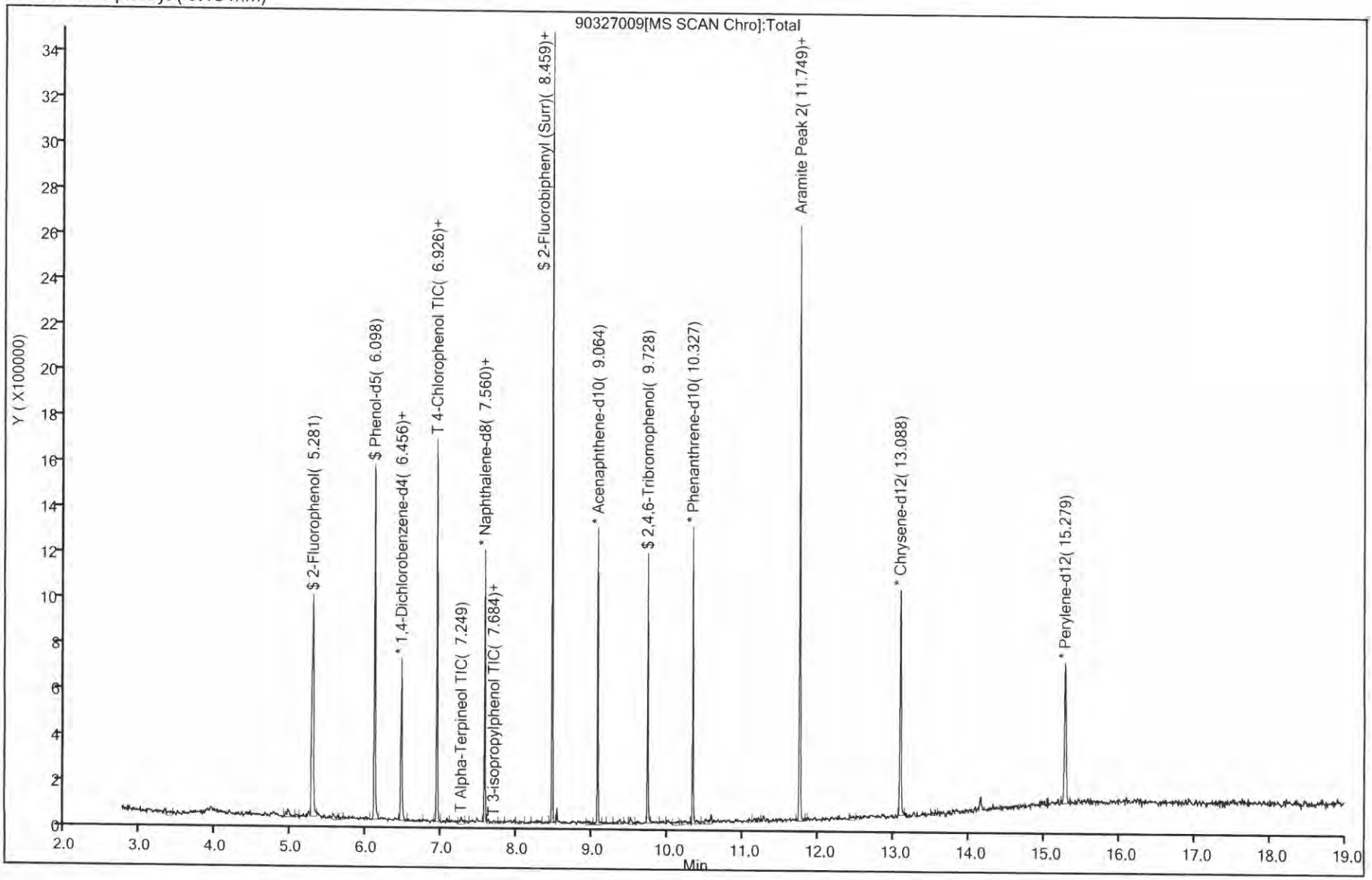
Lims ID: Surr071 Lab Sample ID: Client 240-373475/9-A Worklist Smp#: 9

Client ID:

Injection Vol: 1.0 ul Dil. Factor: 1.0000 ALS Bottle#: 9

Method: 8270 _9 Limit Group: MSS 8270C ICAL

Column: 5% phenyl (0.18 mm)



Report Date: 27-Mar-2019 12:48:48 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Preliminary Report

TestAmerica Canton

Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4HP9\20190327-85547.b\90327009.D
Lims ID: Surr071
Client ID:
Sample Type: Client
Inject. Date: 27-Mar-2019 10:55:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 1.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085547-009
Misc. Info.: SURR071
Operator ID: Instrument ID: A4HP9

Method: \\chromna\Canton\ChromData\A4HP9\20190327-85547.b\8270 _9.m
Limit Group: MSS 8270C ICAL
Last Update: 27-Mar-2019 10:35:34 Calib Date: 22-Mar-2019 17:35:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4HP9\20190322-85424.b\90322010.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0333

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ul	Flags	
* 1 1,4-Dichlorobenzene-d4	152	6.456	6.448	0.008	93	104028	4.00		
* 2 Naphthalene-d8	136	7.560	7.564	-0.004	97	384007	4.00		
* 3 Acenaphthene-d10	164	9.064	9.062	0.002	90	212759	4.00		
* 4 Phenanthrene-d10	188	10.327	10.331	-0.004	95	372443	4.00		
* 5 Chrysene-d12	240	13.094	13.092	0.002	98	372018	4.00		
* 6 Perylene-d12	264	15.285	15.283	0.002	98	322528	4.00		
$ 7 2-Fluorophenol	112	5.281	5.240	0.043	91	395682	9.16	92%	
$ 8 Phenol-d5	99	6.098	6.093	0.008	95	546539	9.02	90%	
$ 9 Nitrobenzene-d5	82	6.926	6.921	0.002	85	605830	10.1	101%	
$ 10 2-Fluorobiphenyl (Surr)	172	8.459	8.455	0.002	99	675731	9.55	96%	
$ 11 2,4,6-Tribromophenol	330	9.728	9.729	-0.004	80	62307	10.0	100%	
$ 12 Terphenyl-d14	244	11.755	11.750	0.003	99	717567	10.8	108%	
25 1,4-Dioxane	88		3.123				ND		
26 N-Nitrosodimethylamine	74		3.622				ND		
27 Pyridine	79		3.681				ND		
20 Dimethylformamide	73		3.991				ND		ig
28 Ethyl methacrylate	69		4.103				ND		ig
31 2-Picoline	93		4.549				ND		i
32 N-Nitrosomethylethylamine	88		4.684				ND		i
303 Acrylamide	71		4.978				ND		ig
34 Methyl methanesulfonate	80		5.013				ND		i
233 n,n'-Dimethylacetamide	44		5.090				ND		ig
36 N-Nitrosodiethylamine	102		5.436				ND		i
37 Ethyl methanesulfonate	79		5.707				ND		ig
308 2-Methylcyclohexanone	68		5.918				ND		ig
309 3-Methylcyclohexanone	69		5.953				ND		ig
307 4-Methylcyclohexanone	55		6.000				ND		ig
41 Benzaldehyde	77		6.054				ND		
43 Phenol	94		6.101				ND		
44 Aniline	93		6.148				ND		
42 Phenylmercaptan	110		6.153				ND		i

Reagent

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exLIST1_S1_00017

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110 Benner Circle
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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995 **Lot No.:** A0143135

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2,000µg/mL, Methylene chloride, 5mL/ampul

4078954
ID: exLIST1_S1_00017
Exp 05/31/20 Prpd:BMB Opn:03/21/19
8270 List 1/Std #1 MegaMi

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2020 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBJ7415) **Purity** 99%	1,006.6 µg/mL	+/- 5.8525 µg/mL +/- 12.0330 µg/mL +/- 19.1503 µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 180322JLM) **Purity** 99%	1,006.7 µg/mL	+/- 5.8530 µg/mL +/- 12.0342 µg/mL +/- 19.1522 µg/mL	Gravimetric Unstressed Stressed
3	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	2,012.8 µg/mL	+/- 11.7026 µg/mL +/- 24.0611 µg/mL +/- 38.2929 µg/mL	Gravimetric Unstressed Stressed
4	Phenol **CAS #** 108-95-2 (Lot SHBF9719V) **Purity** 99%	1,009.5 µg/mL	+/- 5.8693 µg/mL +/- 12.0676 µg/mL +/- 19.2054 µg/mL	Gravimetric Unstressed Stressed
5	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,005.1 µg/mL	+/- 5.8437 µg/mL +/- 12.0150 µg/mL +/- 19.1217 µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot SHBD4430V) **Purity** 99%	1,006.9 µg/mL	+/- 5.8542 µg/mL +/- 12.0365 µg/mL +/- 19.1560 µg/mL	Gravimetric Unstressed Stressed
7	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBJ8526) **Purity** 99%	1,005.6 µg/mL	+/- 5.8466 µg/mL +/- 12.0210 µg/mL +/- 19.1312 µg/mL	Gravimetric Unstressed Stressed

8	2-Chlorophenol		1,007.0	µg/mL	+/-	5.8548	µg/mL	Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)			+/-	12.0377	µg/mL	Unstressed
	Purity 99%				+/-	19.1579	µg/mL	Stressed
9	1,3-Dichlorobenzene		1,006.1	µg/mL	+/-	5.8496	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBQ7100V)			+/-	12.0270	µg/mL	Unstressed
	Purity 99%				+/-	19.1408	µg/mL	Stressed
10	1,4-Dichlorobenzene		1,005.9	µg/mL	+/-	5.8484	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/-	12.0246	µg/mL	Unstressed
	Purity 99%				+/-	19.1370	µg/mL	Stressed
11	Benzyl alcohol		1,008.9	µg/mL	+/-	5.8658	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/-	12.0605	µg/mL	Unstressed
	Purity 99%				+/-	19.1940	µg/mL	Stressed
12	1,2-Dichlorobenzene		1,007.0	µg/mL	+/-	5.8548	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot SHBG3111V)			+/-	12.0377	µg/mL	Unstressed
	Purity 99%				+/-	19.1579	µg/mL	Stressed
13	2-Methylphenol (o-cresol)		1,005.8	µg/mL	+/-	5.8478	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBC1479V)			+/-	12.0234	µg/mL	Unstressed
	Purity 99%				+/-	19.1351	µg/mL	Stressed
14	2,2'-oxybis(1-chloropropane)		1,003.4	µg/mL	+/-	5.8339	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 7867100)			+/-	11.9947	µg/mL	Unstressed
	Purity 99%				+/-	19.0894	µg/mL	Stressed
15	Acetophenone		1,003.9	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot STBG8586)			+/-	12.0007	µg/mL	Unstressed
	Purity 99%				+/-	19.0989	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		501.9	µg/mL	+/-	2.9248	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/-	6.0030	µg/mL	Unstressed
	Purity 99%				+/-	9.5506	µg/mL	Stressed
17	4-Methylphenol (p-cresol)		503.2	µg/mL	+/-	2.9324	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/-	6.0186	µg/mL	Unstressed
	Purity 99%				+/-	9.5753	µg/mL	Stressed
18	N-Nitroso-di-n-propylamine		1,005.4	µg/mL	+/-	5.8455	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot 2D5VJ)			+/-	12.0186	µg/mL	Unstressed
	Purity 99%				+/-	19.1274	µg/mL	Stressed
19	Hexachloroethane		1,005.3	µg/mL	+/-	5.8449	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/-	12.0174	µg/mL	Unstressed
	Purity 99%				+/-	19.1255	µg/mL	Stressed
20	Nitrobenzene		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBG5577V)			+/-	12.0282	µg/mL	Unstressed
	Purity 99%				+/-	19.1427	µg/mL	Stressed
21	Isophorone		1,004.4	µg/mL	+/-	5.8397	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/-	12.0067	µg/mL	Unstressed
	Purity 98%				+/-	19.1085	µg/mL	Stressed
22	2-Nitrophenol		1,008.8	µg/mL	+/-	5.8653	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/-	12.0593	µg/mL	Unstressed
	Purity 99%				+/-	19.1921	µg/mL	Stressed
23	2,4-Dimethylphenol		1,009.3	µg/mL	+/-	5.8682	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/-	12.0652	µg/mL	Unstressed
	Purity 99%				+/-	19.2016	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,008.5 µg/mL	+/- 5.8635	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 5670100)		+/- 12.0557	µg/mL	Unstressed
	Purity 99%			+/- 19.1864	µg/mL	Stressed
25	2,4-Dichlorophenol		1,009.4 µg/mL	+/- 5.8687	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBJ8113V)		+/- 12.0664	µg/mL	Unstressed
	Purity 99%			+/- 19.2035	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,009.0 µg/mL	+/- 5.8664	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ9215)		+/- 12.0616	µg/mL	Unstressed
	Purity 99%			+/- 19.1959	µg/mL	Stressed
27	Naphthalene		1,007.7 µg/mL	+/- 5.8589	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBZ8680V)		+/- 12.0461	µg/mL	Unstressed
	Purity 99%			+/- 19.1712	µg/mL	Stressed
28	2,6-Dichlorophenol		1,003.5 µg/mL	+/- 5.8344	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBP8620V)		+/- 11.9959	µg/mL	Unstressed
	Purity 99%			+/- 19.0913	µg/mL	Stressed
29	4-Chloroaniline		1,007.0 µg/mL	+/- 5.8548	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)		+/- 12.0377	µg/mL	Unstressed
	Purity 99%			+/- 19.1579	µg/mL	Stressed
30	Hexachlorobutadiene		1,009.4 µg/mL	+/- 5.8687	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)		+/- 12.0664	µg/mL	Unstressed
	Purity 99%			+/- 19.2035	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,007.2 µg/mL	+/- 5.8559	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)		+/- 12.0401	µg/mL	Unstressed
	Purity 99%			+/- 19.1617	µg/mL	Stressed
32	2-Methylnaphthalene		1,002.3 µg/mL	+/- 5.8277	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBF0201V)		+/- 11.9820	µg/mL	Unstressed
	Purity 96%			+/- 19.0692	µg/mL	Stressed
33	1-Methylnaphthalene		1,007.3 µg/mL	+/- 5.8565	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-9)		+/- 12.0413	µg/mL	Unstressed
	Purity 99%			+/- 19.1636	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,005.1 µg/mL	+/- 5.8437	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot MKBW7717V)		+/- 12.0150	µg/mL	Unstressed
	Purity 99%			+/- 19.1217	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,007.5 µg/mL	+/- 5.8577	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012017H)		+/- 12.0437	µg/mL	Unstressed
	Purity 99%			+/- 19.1674	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,006.9 µg/mL	+/- 5.8542	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBF3742V)		+/- 12.0365	µg/mL	Unstressed
	Purity 99%			+/- 19.1560	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,005.1 µg/mL	+/- 5.8437	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)		+/- 12.0150	µg/mL	Unstressed
	Purity 99%			+/- 19.1217	µg/mL	Stressed
38	2-Chloronaphthalene		1,004.7 µg/mL	+/- 5.8414	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)		+/- 12.0102	µg/mL	Unstressed
	Purity 99%			+/- 19.1141	µg/mL	Stressed
39	Biphenyl		1,008.9 µg/mL	+/- 5.8658	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)		+/- 12.0605	µg/mL	Unstressed
	Purity 99%			+/- 19.1940	µg/mL	Stressed

40	2-Nitroaniline		1,008.3	µg/mL	+/-	5.8623	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/-	12.0533	µg/mL	Unstressed
	Purity 99%				+/-	19.1826	µg/mL	Stressed
41	Acenaphthylene		1,003.7	µg/mL	+/-	5.8354	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot O03R)			+/-	11.9978	µg/mL	Unstressed
	Purity 97%				+/-	19.0943	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,005.0	µg/mL	+/-	5.8432	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBB1436V)			+/-	12.0138	µg/mL	Unstressed
	Purity 99%				+/-	19.1198	µg/mL	Stressed
43	Dimethylphthalate		1,007.3	µg/mL	+/-	5.8565	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/-	12.0413	µg/mL	Unstressed
	Purity 99%				+/-	19.1636	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,006.3	µg/mL	+/-	5.8507	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/-	12.0294	µg/mL	Unstressed
	Purity 99%				+/-	19.1446	µg/mL	Stressed
45	3-Nitroaniline		1,007.3	µg/mL	+/-	5.8565	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBX1283V)			+/-	12.0413	µg/mL	Unstressed
	Purity 99%				+/-	19.1636	µg/mL	Stressed
46	Acenaphthene		1,007.4	µg/mL	+/-	5.8571	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCC8329)			+/-	12.0425	µg/mL	Unstressed
	Purity 99%				+/-	19.1655	µg/mL	Stressed
47	2,4-Dinitrophenol		2,015.6	µg/mL	+/-	11.7189	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBG3580V)			+/-	24.0946	µg/mL	Unstressed
	Purity 99%				+/-	38.3462	µg/mL	Stressed
48	Dibenzofuran		1,008.7	µg/mL	+/-	5.8647	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKCD9952)			+/-	12.0581	µg/mL	Unstressed
	Purity 99%				+/-	19.1902	µg/mL	Stressed
49	4-Nitrophenol		2,012.8	µg/mL	+/-	11.7026	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBV0501V)			+/-	24.0611	µg/mL	Unstressed
	Purity 99%				+/-	38.2929	µg/mL	Stressed
50	2,4-Dinitrotoluene		1,009.7	µg/mL	+/-	5.8705	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690)			+/-	12.0700	µg/mL	Unstressed
	Purity 99%				+/-	19.2092	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,007.0	µg/mL	+/-	5.8548	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot PR-30126)			+/-	12.0377	µg/mL	Unstressed
	Purity 99%				+/-	19.1579	µg/mL	Stressed
52	Fluorene		1,006.3	µg/mL	+/-	5.8507	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10207515)			+/-	12.0294	µg/mL	Unstressed
	Purity 99%				+/-	19.1446	µg/mL	Stressed
53	n-Hexadecane (C16)		1,009.5	µg/mL	+/-	5.8693	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBJ7508)			+/-	12.0676	µg/mL	Unstressed
	Purity 99%				+/-	19.2054	µg/mL	Stressed
54	Diethylphthalate		1,008.0	µg/mL	+/-	5.8606	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKCB0810V)			+/-	12.0497	µg/mL	Unstressed
	Purity 99%				+/-	19.1769	µg/mL	Stressed
55	4-Chlorophenyl phenyl ether		1,007.3	µg/mL	+/-	5.8565	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKCD9935)			+/-	12.0413	µg/mL	Unstressed
	Purity 99%				+/-	19.1636	µg/mL	Stressed

56	4-Nitroaniline		1,008.3	µg/mL	+/-	5.8625	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	12.0535	µg/mL	Unstressed
	Purity 98%				+/-	19.1830	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,010.2	µg/mL	+/-	11.6875	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LRAC0549)			+/-	24.0301	µg/mL	Unstressed
	Purity 99%				+/-	38.2435	µg/mL	Stressed
58	Diphenylamine		857.6	µg/mL	+/-	4.9977	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	10.2574	µg/mL	Unstressed
	Purity 99%				+/-	16.3191	µg/mL	Stressed
59	Azobenzene		1,009.6	µg/mL	+/-	5.8699	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBQ0927V)			+/-	12.0688	µg/mL	Unstressed
	Purity 99%				+/-	19.2073	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,009.1	µg/mL	+/-	5.8670	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	12.0628	µg/mL	Unstressed
	Purity 99%				+/-	19.1978	µg/mL	Stressed
61	Hexachlorobenzene		1,007.6	µg/mL	+/-	5.8583	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot LRAB8468)			+/-	12.0449	µg/mL	Unstressed
	Purity 99%				+/-	19.1693	µg/mL	Stressed
62	Pentachlorophenol		2,018.5	µg/mL	+/-	11.7357	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 180924JACG)			+/-	24.1293	µg/mL	Unstressed
	Purity 99%				+/-	38.4014	µg/mL	Stressed
63	n-Octadecane (C18)		1,008.4	µg/mL	+/-	5.8629	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot T7N4E)			+/-	12.0545	µg/mL	Unstressed
	Purity 99%				+/-	19.1845	µg/mL	Stressed
64	Phenanthrene		1,005.8	µg/mL	+/-	5.8478	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCD3760)			+/-	12.0234	µg/mL	Unstressed
	Purity 99%				+/-	19.1351	µg/mL	Stressed
65	Anthracene		1,004.8	µg/mL	+/-	5.8420	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKCC7378)			+/-	12.0114	µg/mL	Unstressed
	Purity 99%				+/-	19.1160	µg/mL	Stressed
66	Carbazole		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 7528800)			+/-	12.0318	µg/mL	Unstressed
	Purity 99%				+/-	19.1484	µg/mL	Stressed
67	Di-n-butylphthalate		1,007.9	µg/mL	+/-	5.8600	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBW8599V)			+/-	12.0485	µg/mL	Unstressed
	Purity 99%				+/-	19.1750	µg/mL	Stressed
68	Fluoranthene		1,005.5	µg/mL	+/-	5.8459	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	12.0196	µg/mL	Unstressed
	Purity 98%				+/-	19.1290	µg/mL	Stressed
69	Pyrene		1,006.5	µg/mL	+/-	5.8519	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBT5695)			+/-	12.0318	µg/mL	Unstressed
	Purity 99%				+/-	19.1484	µg/mL	Stressed
70	Benzyl butyl phthalate		1,007.9	µg/mL	+/-	5.8600	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKCF0058)			+/-	12.0485	µg/mL	Unstressed
	Purity 99%				+/-	19.1750	µg/mL	Stressed
71	Benz(a)anthracene		1,009.7	µg/mL	+/-	5.8706	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot 0012018)			+/-	12.0704	µg/mL	Unstressed
	Purity 96%				+/-	19.2098	µg/mL	Stressed

72	Chrysene **CAS #** 218-01-9 **Purity** 99%	(Lot 012015)	1,008.5 µg/mL	+/- 5.8635 +/- 12.0557 +/- 19.1864	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
73	Bis(2-ethylhexyl)phthalate **CAS #** 117-81-7 **Purity** 99%	(Lot MKBZ3868V)	1,009.3 µg/mL	+/- 5.8682 +/- 12.0652 +/- 19.2016	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
74	Di-n-octyl phthalate **CAS #** 117-84-0 **Purity** 99%	(Lot 7460000)	1,005.9 µg/mL	+/- 5.8484 +/- 12.0246 +/- 19.1370	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
75	Benzo(b)fluoranthene **CAS #** 205-99-2 **Purity** 99%	(Lot 012012B)	1,006.6 µg/mL	+/- 5.8525 +/- 12.0330 +/- 19.1503	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
76	Benzo(k)fluoranthene **CAS #** 207-08-9 **Purity** 99%	(Lot 012018K)	1,007.9 µg/mL	+/- 5.8600 +/- 12.0485 +/- 19.1750	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
77	Benzo(a)pyrene **CAS #** 50-32-8 **Purity** 99%	(Lot 1-TIF-87-1)	1,009.1 µg/mL	+/- 5.8670 +/- 12.0628 +/- 19.1978	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
78	Indeno(1,2,3-cd)pyrene **CAS #** 193-39-5 **Purity** 99%	(Lot ER082107-02)	1,008.3 µg/mL	+/- 5.8623 +/- 12.0533 +/- 19.1826	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
79	Dibenz(a,h)anthracene **CAS #** 53-70-3 **Purity** 99%	(Lot ER032211-01)	1,005.7 µg/mL	+/- 5.8472 +/- 12.0222 +/- 19.1332	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
80	Benzo(g,h,i)perylene **CAS #** 191-24-2 **Purity** 99%	(Lot ER05121401)	1,007.6 µg/mL	+/- 5.8583 +/- 12.0449 +/- 19.1693	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.
This lot was approved even though the %D for 4,6-DN-2-MP was greater than 10%.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

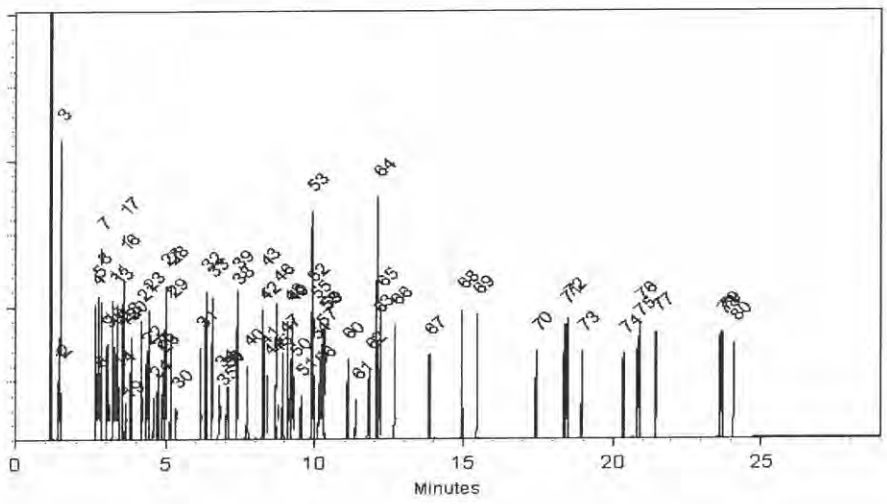
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician

Date Mixed: 12-Nov-2018 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 26-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

EXLIST1_S10_00010

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
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Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ilac-MRA

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569731 **Lot No.:** A0136865

Description : 8270 List 1 / Std #10

8270 List 1 / Std #10 2,000µg/mL, Methylene chloride, 5mL/ampul

4078959
ID EXLIST1_S10_00010
Exp:10/31/19 Prpd:BMB Opn:03/21/19
8270 List 1/Standard #10

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : October 31, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Indene **CAS #** 95-13-6 (Lot MKBV0236V) **Purity** 97%	2,004.3 µg/mL	+/- 11.6534 µg/mL +/- 112.3815 µg/mL +/- 115.0111 µg/mL	Gravimetric Unstressed Stressed
2	Benzoic acid **CAS #** 65-85-0 (Lot MKCC9722) **Purity** 99%	2,013.3 µg/mL	+/- 11.7053 µg/mL +/- 112.8819 µg/mL +/- 115.5232 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

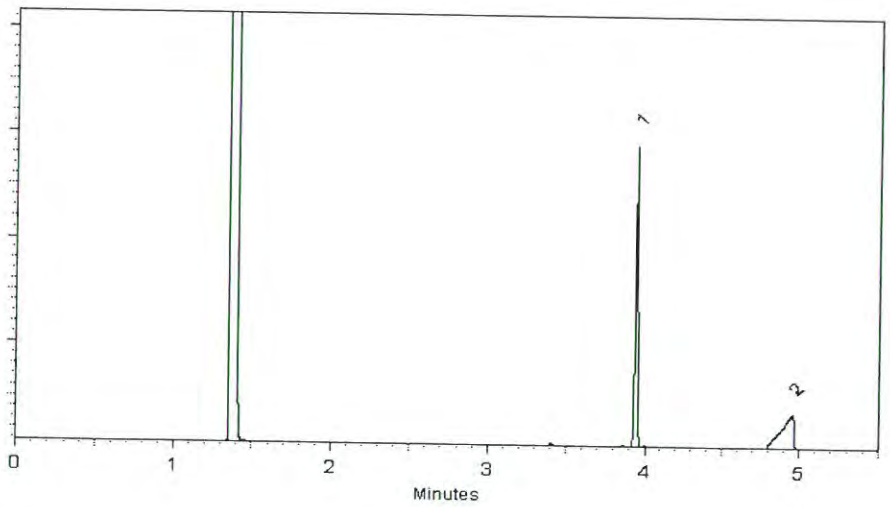
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Alice Brooks

Alice Brooks - Mix Technician

Date Mixed: 04-Apr-2018 **Balance:** B442140311

Jennifer L Pollino

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 06-Apr-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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exLIST1_S11_00009

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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0137125

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : October 31, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzaldehyde **CAS #** 100-52-7 **Purity** 99% (Lot SHBG8690V)	2,001.1 µg/mL	+/- 11.6345 µg/mL +/- 64.1460 µg/mL +/- 74.5673 µg/mL	Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 **Purity** 99% (Lot I16X016)	2,002.0 µg/mL	+/- 11.6398 µg/mL +/- 64.1754 µg/mL +/- 74.6014 µg/mL	Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 **Purity** 99% (Lot 77P7D)	2,002.6 µg/mL	+/- 11.6432 µg/mL +/- 64.1941 µg/mL +/- 74.6232 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

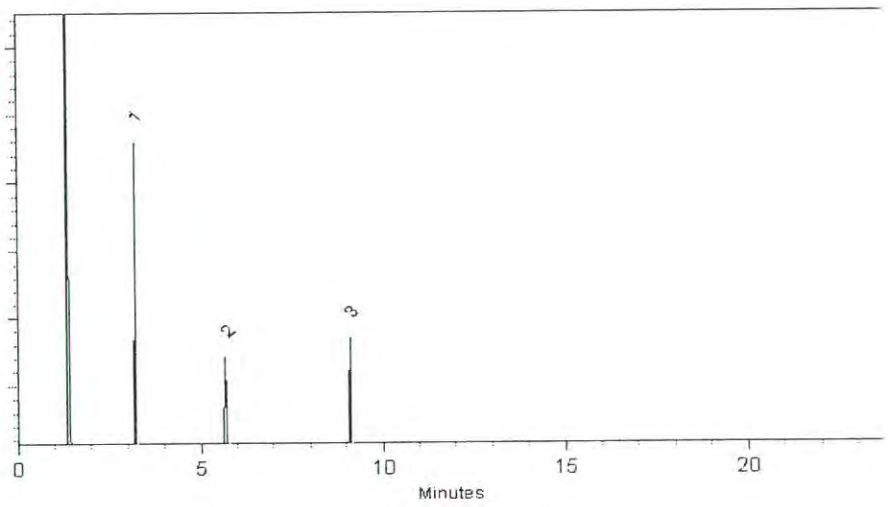
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician **Date Mixed:** 12-Apr-2018 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 16-Apr-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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exLIST1_S9_00015

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730 **Lot No.:** A0143498

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000µg/mL, Methylene chloride, 5mL/ampul

4078765
ID exLIST1_S9_00015
Exp:05/31/20 Prpd:BMB Opn:03/21/19
8270 List 1/Std #9

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : May 31, 2020 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	Benzidine **CAS #** 92-87-5 (Lot 180810JACG) **Purity** 99%	2,018.6 µg/mL	+/- 11.7363 µg/mL +/- 24.1305 µg/mL +/- 38.4033 µg/mL	Gravimetric Unstressed Stressed
2	3,3'-Dichlorobenzidine **CAS #** 91-94-1 (Lot 070518JACG) **Purity** 99%	2,014.4 µg/mL	+/- 11.7119 µg/mL +/- 24.0803 µg/mL +/- 38.3234 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

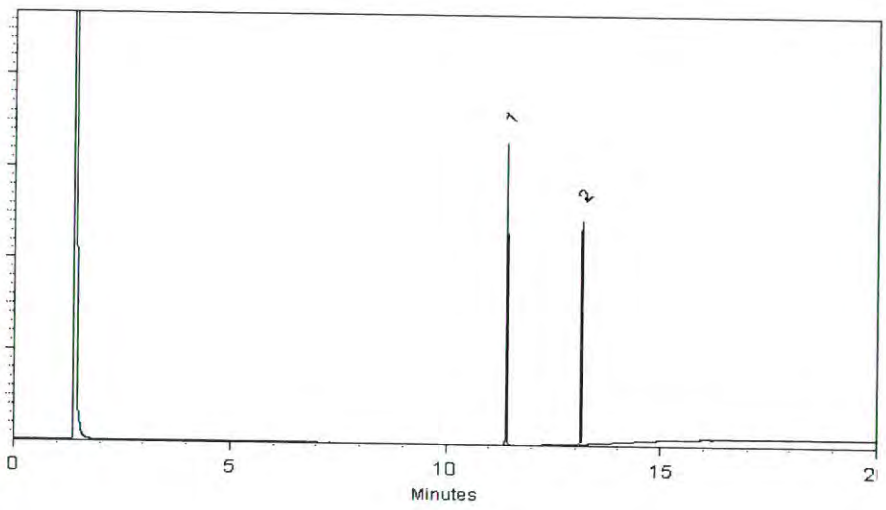
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Tom Suckar - Mix Technician **Date Mixed:** 26-Nov-2018 **Balance:** B516847571

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 27-Nov-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31615 **Lot No.:** A0144160

Description : GC/MS Tuning Mixture

GC/MS Tuning Mixture 1,000µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : December 31, 2021 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Pentachlorophenol	1,003.2 µg/mL	+/- 5.8873	µg/mL	Gravimetric
	CAS # 87-86-5 (Lot 180924JACG)		+/- 45.6950	µg/mL	Unstressed
	Purity 99%		+/- 65.9774	µg/mL	Stressed
2	DFTPP (Decafluorotriphenylphosphine)	1,009.2 µg/mL	+/- 5.9226	µg/mL	Gravimetric
	CAS # 5074-71-5 (Lot 10198748)		+/- 45.9683	µg/mL	Unstressed
	Purity 99%		+/- 66.3720	µg/mL	Stressed
3	Benzidine	1,001.2 µg/mL	+/- 5.8756	µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 180810JACG)		+/- 45.6039	µg/mL	Unstressed
	Purity 99%		+/- 65.8458	µg/mL	Stressed
4	4,4'-DDT	1,008.0 µg/mL	+/- 5.9155	µg/mL	Gravimetric
	CAS # 50-29-3 (Lot S37912V)		+/- 45.9136	µg/mL	Unstressed
	Purity 99%		+/- 66.2930	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

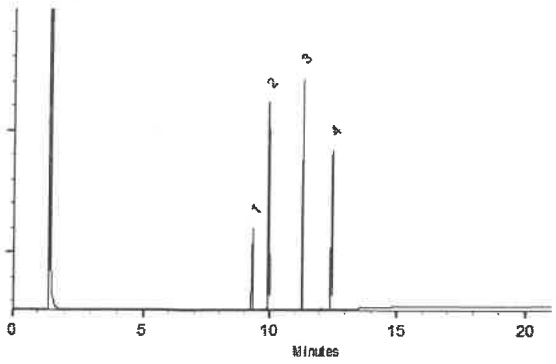
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 14-Dec-2018 **Balance:** B516847571

Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Dec-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567684 **Lot No.:** A0133281

Description : 8270 Internal Standard

8270 Internal Standard 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2022 **Storage:** 10°C or colder

Handling: Sonication required. Mix is photosensitive.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dichlorobenzene-d4	2,000.9 µg/mL	+/- 11.6334 µg/mL	Gravimetric
	CAS # 3855-82-1 (Lot PR-18488)		+/- 90.1217 µg/mL	Unstressed
	Purity 99%		+/- 100.0012 µg/mL	Stressed
2	Naphthalene-d8	2,000.1 µg/mL	+/- 11.6285 µg/mL	Gravimetric
	CAS # 1146-65-2 (Lot M-1452)		+/- 90.0835 µg/mL	Unstressed
	Purity 99%		+/- 99.9587 µg/mL	Stressed
3	Acenaphthene-d10	2,000.2 µg/mL	+/- 11.6290 µg/mL	Gravimetric
	CAS # 15067-26-2 (Lot PR-25444)		+/- 90.0880 µg/mL	Unstressed
	Purity 99%		+/- 99.9637 µg/mL	Stressed
4	Phenanthrene-d10	2,002.8 µg/mL	+/- 11.6442 µg/mL	Gravimetric
	CAS # 1517-22-2 (Lot PR-23065)		+/- 90.2051 µg/mL	Unstressed
	Purity 99%		+/- 100.0937 µg/mL	Stressed
5	Chrysene-d12	2,001.4 µg/mL	+/- 11.6360 µg/mL	Gravimetric
	CAS # 1719-03-5 (Lot PR-27952)		+/- 90.1420 µg/mL	Unstressed
	Purity 99%		+/- 100.0237 µg/mL	Stressed
6	Perylene-d12	2,002.3 µg/mL	+/- 11.6413 µg/mL	Gravimetric
	CAS # 1520-96-3 (Lot PR-24113)		+/- 90.1825 µg/mL	Unstressed
	Purity 99%		+/- 100.0687 µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

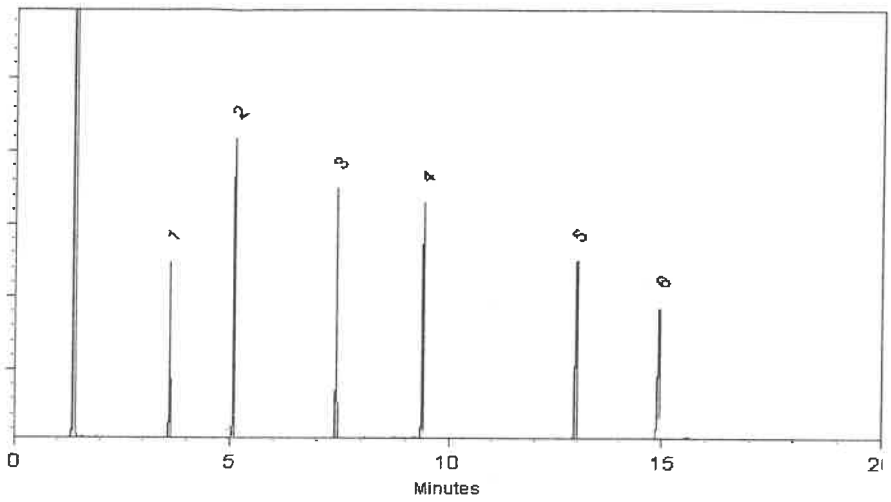
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Larry J. Moore - Mix Technician

Date Mixed: 13-Dec-2017 **Balance:** 1128353505

Amanda Miller - Operations Tech-ARM QC

Date Passed: 18-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995 **Lot No.:** A0136052

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2019 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBH5677) **Purity** 99%	1,002.0 µg/mL	+/- 5.8257 µg/mL +/- 11.9780 µg/mL +/- 19.0628 µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 161108JLM) **Purity** 99%	1,002.0 µg/mL	+/- 5.8257 µg/mL +/- 11.9780 µg/mL +/- 19.0628 µg/mL	Gravimetric Unstressed Stressed
3	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	2,011.2 µg/mL	+/- 11.6933 µg/mL +/- 24.0420 µg/mL +/- 38.2625 µg/mL	Gravimetric Unstressed Stressed
4	Phenol **CAS #** 108-95-2 (Lot SHBF1351V) **Purity** 99%	1,005.1 µg/mL	+/- 5.8439 µg/mL +/- 12.0154 µg/mL +/- 19.1224 µg/mL	Gravimetric Unstressed Stressed
5	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,002.6 µg/mL	+/- 5.8292 µg/mL +/- 11.9851 µg/mL +/- 19.0742 µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot SHBD4430V) **Purity** 99%	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 11.9708 µg/mL +/- 19.0513 µg/mL	Gravimetric Unstressed Stressed
7	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBH3926V) **Purity** 99%	1,000.7 µg/mL	+/- 5.8180 µg/mL +/- 11.9620 µg/mL +/- 19.0374 µg/mL	Gravimetric Unstressed Stressed

8	2-Chlorophenol		1,007.1	µg/mL	+/- 5.8552	µg/mL	Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)			+/- 12.0385	µg/mL	Unstressed
	Purity 99%				+/- 19.1592	µg/mL	Stressed
9	1,3-Dichlorobenzene		1,001.0	µg/mL	+/- 5.8199	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/- 11.9660	µg/mL	Unstressed
	Purity 99%				+/- 19.0437	µg/mL	Stressed
10	1,4-Dichlorobenzene		1,004.4	µg/mL	+/- 5.8397	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/- 12.0067	µg/mL	Unstressed
	Purity 99%				+/- 19.1084	µg/mL	Stressed
11	Benzyl alcohol		1,005.2	µg/mL	+/- 5.8443	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/- 12.0162	µg/mL	Unstressed
	Purity 99%				+/- 19.1236	µg/mL	Stressed
12	1,2-Dichlorobenzene		1,001.2	µg/mL	+/- 5.8211	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/- 11.9684	µg/mL	Unstressed
	Purity 99%				+/- 19.0475	µg/mL	Stressed
13	2-Methylphenol (o-cresol)		1,001.6	µg/mL	+/- 5.8234	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBH6379)			+/- 11.9732	µg/mL	Unstressed
	Purity 99%				+/- 19.0551	µg/mL	Stressed
14	2,2'-oxybis(1-chloropropane)		1,006.7	µg/mL	+/- 5.8528	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 5510800)			+/- 12.0336	µg/mL	Unstressed
	Purity 98%				+/- 19.1513	µg/mL	Stressed
15	Acetophenone		1,005.5	µg/mL	+/- 5.8459	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot STBG7113)			+/- 12.0194	µg/mL	Unstressed
	Purity 99%				+/- 19.1287	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		501.0	µg/mL	+/- 2.9196	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/- 5.9923	µg/mL	Unstressed
	Purity 99%				+/- 9.5334	µg/mL	Stressed
17	4-Methylphenol (p-cresol)		501.7	µg/mL	+/- 2.9235	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/- 6.0002	µg/mL	Unstressed
	Purity 99%				+/- 9.5461	µg/mL	Stressed
18	N-Nitroso-di-n-propylamine		1,003.1	µg/mL	+/- 5.8323	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot NOPCF)			+/- 11.9915	µg/mL	Unstressed
	Purity 99%				+/- 19.0843	µg/mL	Stressed
19	Hexachloroethane		1,003.4	µg/mL	+/- 5.8339	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/- 11.9947	µg/mL	Unstressed
	Purity 99%				+/- 19.0894	µg/mL	Stressed
20	Nitrobenzene		1,002.3	µg/mL	+/- 5.8273	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBG5577V)			+/- 11.9812	µg/mL	Unstressed
	Purity 99%				+/- 19.0678	µg/mL	Stressed
21	Isophorone		1,003.3	µg/mL	+/- 5.8334	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/- 11.9938	µg/mL	Unstressed
	Purity 98%				+/- 19.0879	µg/mL	Stressed
22	2-Nitrophenol		1,007.7	µg/mL	+/- 5.8587	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/- 12.0457	µg/mL	Unstressed
	Purity 99%				+/- 19.1706	µg/mL	Stressed
23	2,4-Dimethylphenol		1,000.9	µg/mL	+/- 5.8191	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/- 11.9644	µg/mL	Unstressed
	Purity 99%				+/- 19.0412	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,001.3	µg/mL	+/-	5.8215	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 4621000)			+/-	11.9692	µg/mL	Unstressed
	Purity 99%				+/-	19.0488	µg/mL	Stressed
25	2,4-Dichlorophenol		1,003.1	µg/mL	+/-	5.8323	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.9915	µg/mL	Unstressed
	Purity 99%				+/-	19.0843	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,005.0	µg/mL	+/-	5.8432	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ0905)			+/-	12.0138	µg/mL	Unstressed
	Purity 99%				+/-	19.1198	µg/mL	Stressed
27	Naphthalene		1,000.5	µg/mL	+/-	5.8168	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	11.9596	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
28	2,6-Dichlorophenol		1,001.3	µg/mL	+/-	5.8215	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBP8620V)			+/-	11.9692	µg/mL	Unstressed
	Purity 99%				+/-	19.0488	µg/mL	Stressed
29	4-Chloroaniline		1,001.3	µg/mL	+/-	5.8215	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	11.9692	µg/mL	Unstressed
	Purity 99%				+/-	19.0488	µg/mL	Stressed
30	Hexachlorobutadiene		1,002.5	µg/mL	+/-	5.8284	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	11.9835	µg/mL	Unstressed
	Purity 99%				+/-	19.0716	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	12.0282	µg/mL	Unstressed
	Purity 99%				+/-	19.1427	µg/mL	Stressed
32	2-Methylnaphthalene		1,007.7	µg/mL	+/-	5.8587	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/-	12.0459	µg/mL	Unstressed
	Purity 96%				+/-	19.1708	µg/mL	Stressed
33	1-Methylnaphthalene		1,005.5	µg/mL	+/-	5.8463	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-9)			+/-	12.0202	µg/mL	Unstressed
	Purity 99%				+/-	19.1300	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,004.3	µg/mL	+/-	5.8389	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot MKBW7717V)			+/-	12.0051	µg/mL	Unstressed
	Purity 99%				+/-	19.1059	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,007.1	µg/mL	+/-	5.8552	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012017H)			+/-	12.0385	µg/mL	Unstressed
	Purity 99%				+/-	19.1592	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,003.5	µg/mL	+/-	5.8342	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBF3742V)			+/-	11.9955	µg/mL	Unstressed
	Purity 99%				+/-	19.0907	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	12.0306	µg/mL	Unstressed
	Purity 99%				+/-	19.1465	µg/mL	Stressed
38	2-Chloronaphthalene		1,002.9	µg/mL	+/-	5.8308	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/-	11.9883	µg/mL	Unstressed
	Purity 99%				+/-	19.0792	µg/mL	Stressed
39	Biphenyl		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)			+/-	11.9684	µg/mL	Unstressed
	Purity 99%				+/-	19.0475	µg/mL	Stressed

40	2-Nitroaniline		1,004.5	µg/mL	+/- 5.8401	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/- 12.0075	µg/mL	Unstressed
	Purity 99%				+/- 19.1097	µg/mL	Stressed
41	Acenaphthylene		1,006.0	µg/mL	+/- 5.8491	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot O03R)			+/- 12.0260	µg/mL	Unstressed
	Purity 97%				+/- 19.1392	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,001.8	µg/mL	+/- 5.8246	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)			+/- 11.9756	µg/mL	Unstressed
	Purity 99%				+/- 19.0590	µg/mL	Stressed
43	Dimethylphthalate		1,003.7	µg/mL	+/- 5.8358	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/- 11.9987	µg/mL	Unstressed
	Purity 99%				+/- 19.0957	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,000.7	µg/mL	+/- 5.8183	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/- 11.9628	µg/mL	Unstressed
	Purity 99%				+/- 19.0387	µg/mL	Stressed
45	3-Nitroaniline		1,005.2	µg/mL	+/- 5.8443	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBX1283V)			+/- 12.0162	µg/mL	Unstressed
	Purity 99%				+/- 19.1236	µg/mL	Stressed
46	Acenaphthene		1,005.9	µg/mL	+/- 5.8482	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCC8329)			+/- 12.0242	µg/mL	Unstressed
	Purity 99%				+/- 19.1363	µg/mL	Stressed
47	2,4-Dinitrophenol		2,008.3	µg/mL	+/- 11.6766	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/- 24.0077	µg/mL	Unstressed
	Purity 99%				+/- 38.2080	µg/mL	Stressed
48	Dibenzofuran		1,005.5	µg/mL	+/- 5.8463	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/- 12.0202	µg/mL	Unstressed
	Purity 99%				+/- 19.1300	µg/mL	Stressed
49	4-Nitrophenol		2,009.3	µg/mL	+/- 11.6824	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBV0501V)			+/- 24.0197	µg/mL	Unstressed
	Purity 99%				+/- 38.2270	µg/mL	Stressed
50	2,4-Dinitrotoluene		1,003.9	µg/mL	+/- 5.8366	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/- 12.0003	µg/mL	Unstressed
	Purity 99%				+/- 19.0983	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,001.9	µg/mL	+/- 5.8253	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B180305L)			+/- 11.9772	µg/mL	Unstressed
	Purity 99%				+/- 19.0615	µg/mL	Stressed
52	Fluorene		1,002.0	µg/mL	+/- 5.8257	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/- 11.9780	µg/mL	Unstressed
	Purity 99%				+/- 19.0628	µg/mL	Stressed
53	n-Hexadecane (C16)		1,001.6	µg/mL	+/- 5.8234	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBG2582V)			+/- 11.9732	µg/mL	Unstressed
	Purity 99%				+/- 19.0551	µg/mL	Stressed
54	Diethylphthalate		1,003.3	µg/mL	+/- 5.8335	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBV9622V)			+/- 11.9939	µg/mL	Unstressed
	Purity 99%				+/- 19.0881	µg/mL	Stressed
55	4-Chlorophenyl phenyl ether		1,001.1	µg/mL	+/- 5.8203	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBX5225V)			+/- 11.9668	µg/mL	Unstressed
	Purity 99%				+/- 19.0450	µg/mL	Stressed

56	4-Nitroaniline		1,003.1	µg/mL	+/-	5.8319	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	11.9907	µg/mL	Unstressed
	Purity 98%				+/-	19.0830	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,003.7	µg/mL	+/-	11.6495	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC25844V)			+/-	23.9520	µg/mL	Unstressed
	Purity 99%				+/-	38.1192	µg/mL	Stressed
58	Diphenylamine		852.3	µg/mL	+/-	4.9555	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	10.1888	µg/mL	Unstressed
	Purity 99%				+/-	16.2154	µg/mL	Stressed
59	Azobenzene		1,005.5	µg/mL	+/-	5.8463	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBQ0927V)			+/-	12.0202	µg/mL	Unstressed
	Purity 99%				+/-	19.1300	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,022.3	µg/mL	+/-	5.9439	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	12.2210	µg/mL	Unstressed
	Purity 99%				+/-	19.4496	µg/mL	Stressed
61	Hexachlorobenzene		1,002.5	µg/mL	+/-	5.8288	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot 7013600)			+/-	11.9843	µg/mL	Unstressed
	Purity 99%				+/-	19.0729	µg/mL	Stressed
62	Pentachlorophenol		2,002.1	µg/mL	+/-	11.6406	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 170306KJA)			+/-	23.9336	µg/mL	Unstressed
	Purity 99%				+/-	38.0900	µg/mL	Stressed
63	n-Octadecane (C18)		1,002.9	µg/mL	+/-	5.8308	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	11.9883	µg/mL	Unstressed
	Purity 99%				+/-	19.0792	µg/mL	Stressed
64	Phenanthrene		1,001.1	µg/mL	+/-	5.8203	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCB1762V)			+/-	11.9668	µg/mL	Unstressed
	Purity 99%				+/-	19.0450	µg/mL	Stressed
65	Anthracene		1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBV7759V)			+/-	11.9573	µg/mL	Unstressed
	Purity 99%				+/-	19.0298	µg/mL	Stressed
66	Carbazole		1,000.5	µg/mL	+/-	5.8168	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 6489700)			+/-	11.9596	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
67	Di-n-butylphthalate		1,005.7	µg/mL	+/-	5.8470	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBT0244V)			+/-	12.0218	µg/mL	Unstressed
	Purity 99%				+/-	19.1325	µg/mL	Stressed
68	Fluoranthene		1,005.5	µg/mL	+/-	5.8463	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	12.0204	µg/mL	Unstressed
	Purity 98%				+/-	19.1302	µg/mL	Stressed
69	Pyrene		1,005.8	µg/mL	+/-	5.8478	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBT5695)			+/-	12.0234	µg/mL	Unstressed
	Purity 99%				+/-	19.1351	µg/mL	Stressed
70	Benzyl butyl phthalate		1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKBZ4553V)			+/-	11.9571	µg/mL	Unstressed
	Purity 98%				+/-	19.0295	µg/mL	Stressed
71	Benz(a)anthracene		1,003.1	µg/mL	+/-	5.8323	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot 0012012)			+/-	11.9915	µg/mL	Unstressed
	Purity 98%				+/-	19.0842	µg/mL	Stressed

72	Chrysene		1,004.6	µg/mL	+/-	5.8408	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	12.0091	µg/mL	Unstressed
	Purity 99%				+/-	19.1122	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,002.7	µg/mL	+/-	5.8296	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	11.9859	µg/mL	Unstressed
	Purity 99%				+/-	19.0754	µg/mL	Stressed
74	Di-n-octyl phthalate		1,007.9	µg/mL	+/-	5.8602	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 6016000)			+/-	12.0489	µg/mL	Unstressed
	Purity 99%				+/-	19.1756	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot 012012B)			+/-	11.9971	µg/mL	Unstressed
	Purity 99%				+/-	19.0932	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012017K)			+/-	12.0282	µg/mL	Unstressed
	Purity 99%				+/-	19.1427	µg/mL	Stressed
77	Benzo(a)pyrene		1,002.1	µg/mL	+/-	5.8261	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	11.9788	µg/mL	Unstressed
	Purity 99%				+/-	19.0640	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,004.0	µg/mL	+/-	5.8373	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	12.0019	µg/mL	Unstressed
	Purity 99%				+/-	19.1008	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	11.9764	µg/mL	Unstressed
	Purity 99%				+/-	19.0602	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.9	µg/mL	+/-	5.8195	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	11.9652	µg/mL	Unstressed
	Purity 99%				+/-	19.0425	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.
This lot was approved even though the %D for 4,6-DN-2-MP was greater than 10%.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

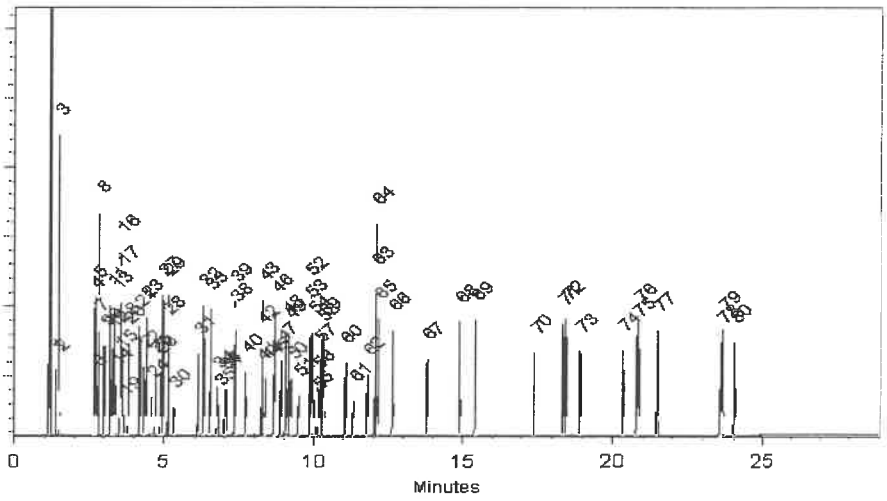
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician

Date Mixed: 12-Mar-2018 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Mar-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 S1_00009

RESTEK
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995 **Lot No.:** A0136052

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2019 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	1,4-Dioxane **CAS #** 123-91-1 (Lot SHBH5677) **Purity** 99%	1,002.0 µg/mL	+/- 5.8257 µg/mL +/- 11.9780 µg/mL +/- 19.0628 µg/mL	Gravimetric Unstressed Stressed
2	N-Nitrosodimethylamine **CAS #** 62-75-9 (Lot 161108JLM) **Purity** 99%	1,002.0 µg/mL	+/- 5.8257 µg/mL +/- 11.9780 µg/mL +/- 19.0628 µg/mL	Gravimetric Unstressed Stressed
3	Pyridine **CAS #** 110-86-1 (Lot SHBC7174V) **Purity** 99%	2,011.2 µg/mL	+/- 11.6933 µg/mL +/- 24.0420 µg/mL +/- 38.2625 µg/mL	Gravimetric Unstressed Stressed
4	Phenol **CAS #** 108-95-2 (Lot SHBF1351V) **Purity** 99%	1,005.1 µg/mL	+/- 5.8439 µg/mL +/- 12.0154 µg/mL +/- 19.1224 µg/mL	Gravimetric Unstressed Stressed
5	Aniline **CAS #** 62-53-3 (Lot K22Z462) **Purity** 99%	1,002.6 µg/mL	+/- 5.8292 µg/mL +/- 11.9851 µg/mL +/- 19.0742 µg/mL	Gravimetric Unstressed Stressed
6	Bis(2-chloroethyl)ether **CAS #** 111-44-4 (Lot SHBD4430V) **Purity** 99%	1,001.4 µg/mL	+/- 5.8222 µg/mL +/- 11.9708 µg/mL +/- 19.0513 µg/mL	Gravimetric Unstressed Stressed
7	n-Decane (C10) **CAS #** 124-18-5 (Lot SHBH3926V) **Purity** 99%	1,000.7 µg/mL	+/- 5.8180 µg/mL +/- 11.9620 µg/mL +/- 19.0374 µg/mL	Gravimetric Unstressed Stressed

8	2-Chlorophenol		1,007.1	µg/mL	+/- 5.8552	µg/mL	Gravimetric
	CAS # 95-57-8	(Lot STBF2690V)			+/- 12.0385	µg/mL	Unstressed
	Purity 99%				+/- 19.1592	µg/mL	Stressed
9	1,3-Dichlorobenzene		1,001.0	µg/mL	+/- 5.8199	µg/mL	Gravimetric
	CAS # 541-73-1	(Lot BCBM5751V)			+/- 11.9660	µg/mL	Unstressed
	Purity 99%				+/- 19.0437	µg/mL	Stressed
10	1,4-Dichlorobenzene		1,004.4	µg/mL	+/- 5.8397	µg/mL	Gravimetric
	CAS # 106-46-7	(Lot MKBS4401V)			+/- 12.0067	µg/mL	Unstressed
	Purity 99%				+/- 19.1084	µg/mL	Stressed
11	Benzyl alcohol		1,005.2	µg/mL	+/- 5.8443	µg/mL	Gravimetric
	CAS # 100-51-6	(Lot SHBC1850V)			+/- 12.0162	µg/mL	Unstressed
	Purity 99%				+/- 19.1236	µg/mL	Stressed
12	1,2-Dichlorobenzene		1,001.2	µg/mL	+/- 5.8211	µg/mL	Gravimetric
	CAS # 95-50-1	(Lot 68996CMV)			+/- 11.9684	µg/mL	Unstressed
	Purity 99%				+/- 19.0475	µg/mL	Stressed
13	2-Methylphenol (o-cresol)		1,001.6	µg/mL	+/- 5.8234	µg/mL	Gravimetric
	CAS # 95-48-7	(Lot SHBH6379)			+/- 11.9732	µg/mL	Unstressed
	Purity 99%				+/- 19.0551	µg/mL	Stressed
14	2,2'-oxybis(1-chloropropane)		1,006.7	µg/mL	+/- 5.8528	µg/mL	Gravimetric
	CAS # 108-60-1	(Lot 5510800)			+/- 12.0336	µg/mL	Unstressed
	Purity 98%				+/- 19.1513	µg/mL	Stressed
15	Acetophenone		1,005.5	µg/mL	+/- 5.8459	µg/mL	Gravimetric
	CAS # 98-86-2	(Lot STBG7113)			+/- 12.0194	µg/mL	Unstressed
	Purity 99%				+/- 19.1287	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		501.0	µg/mL	+/- 2.9196	µg/mL	Gravimetric
	CAS # 108-39-4	(Lot SHBD0627V)			+/- 5.9923	µg/mL	Unstressed
	Purity 99%				+/- 9.5334	µg/mL	Stressed
17	4-Methylphenol (p-cresol)		501.7	µg/mL	+/- 2.9235	µg/mL	Gravimetric
	CAS # 106-44-5	(Lot 49396APV)			+/- 6.0002	µg/mL	Unstressed
	Purity 99%				+/- 9.5461	µg/mL	Stressed
18	N-Nitroso-di-n-propylamine		1,003.1	µg/mL	+/- 5.8323	µg/mL	Gravimetric
	CAS # 621-64-7	(Lot NOPCF)			+/- 11.9915	µg/mL	Unstressed
	Purity 99%				+/- 19.0843	µg/mL	Stressed
19	Hexachloroethane		1,003.4	µg/mL	+/- 5.8339	µg/mL	Gravimetric
	CAS # 67-72-1	(Lot 4H3SF)			+/- 11.9947	µg/mL	Unstressed
	Purity 99%				+/- 19.0894	µg/mL	Stressed
20	Nitrobenzene		1,002.3	µg/mL	+/- 5.8273	µg/mL	Gravimetric
	CAS # 98-95-3	(Lot SHBG5577V)			+/- 11.9812	µg/mL	Unstressed
	Purity 99%				+/- 19.0678	µg/mL	Stressed
21	Isophorone		1,003.3	µg/mL	+/- 5.8334	µg/mL	Gravimetric
	CAS # 78-59-1	(Lot MKBG2442V)			+/- 11.9938	µg/mL	Unstressed
	Purity 98%				+/- 19.0879	µg/mL	Stressed
22	2-Nitrophenol		1,007.7	µg/mL	+/- 5.8587	µg/mL	Gravimetric
	CAS # 88-75-5	(Lot BCBH7602V)			+/- 12.0457	µg/mL	Unstressed
	Purity 99%				+/- 19.1706	µg/mL	Stressed
23	2,4-Dimethylphenol		1,000.9	µg/mL	+/- 5.8191	µg/mL	Gravimetric
	CAS # 105-67-9	(Lot 10165155)			+/- 11.9644	µg/mL	Unstressed
	Purity 99%				+/- 19.0412	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,001.3	µg/mL	+/-	5.8215	µg/mL	Gravimetric
	CAS # 111-91-1	(Lot 4621000)			+/-	11.9692	µg/mL	Unstressed
	Purity 99%				+/-	19.0488	µg/mL	Stressed
25	2,4-Dichlorophenol		1,003.1	µg/mL	+/-	5.8323	µg/mL	Gravimetric
	CAS # 120-83-2	(Lot BCBH1617V)			+/-	11.9915	µg/mL	Unstressed
	Purity 99%				+/-	19.0843	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,005.0	µg/mL	+/-	5.8432	µg/mL	Gravimetric
	CAS # 120-82-1	(Lot SHBJ0905)			+/-	12.0138	µg/mL	Unstressed
	Purity 99%				+/-	19.1198	µg/mL	Stressed
27	Naphthalene		1,000.5	µg/mL	+/-	5.8168	µg/mL	Gravimetric
	CAS # 91-20-3	(Lot MKBW2603V)			+/-	11.9596	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
28	2,6-Dichlorophenol		1,001.3	µg/mL	+/-	5.8215	µg/mL	Gravimetric
	CAS # 87-65-0	(Lot MKBP8620V)			+/-	11.9692	µg/mL	Unstressed
	Purity 99%				+/-	19.0488	µg/mL	Stressed
29	4-Chloroaniline		1,001.3	µg/mL	+/-	5.8215	µg/mL	Gravimetric
	CAS # 106-47-8	(Lot BCBJ1580V)			+/-	11.9692	µg/mL	Unstressed
	Purity 99%				+/-	19.0488	µg/mL	Stressed
30	Hexachlorobutadiene		1,002.5	µg/mL	+/-	5.8284	µg/mL	Gravimetric
	CAS # 87-68-3	(Lot J31X013)			+/-	11.9835	µg/mL	Unstressed
	Purity 99%				+/-	19.0716	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 59-50-7	(Lot STBC7309V)			+/-	12.0282	µg/mL	Unstressed
	Purity 99%				+/-	19.1427	µg/mL	Stressed
32	2-Methylnaphthalene		1,007.7	µg/mL	+/-	5.8587	µg/mL	Gravimetric
	CAS # 91-57-6	(Lot STBG8884)			+/-	12.0459	µg/mL	Unstressed
	Purity 96%				+/-	19.1708	µg/mL	Stressed
33	1-Methylnaphthalene		1,005.5	µg/mL	+/-	5.8463	µg/mL	Gravimetric
	CAS # 90-12-0	(Lot 525000-9)			+/-	12.0202	µg/mL	Unstressed
	Purity 99%				+/-	19.1300	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,004.3	µg/mL	+/-	5.8389	µg/mL	Gravimetric
	CAS # 95-94-3	(Lot MKBW7717V)			+/-	12.0051	µg/mL	Unstressed
	Purity 99%				+/-	19.1059	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,007.1	µg/mL	+/-	5.8552	µg/mL	Gravimetric
	CAS # 77-47-4	(Lot 0012017H)			+/-	12.0385	µg/mL	Unstressed
	Purity 99%				+/-	19.1592	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,003.5	µg/mL	+/-	5.8342	µg/mL	Gravimetric
	CAS # 88-06-2	(Lot STBF3742V)			+/-	11.9955	µg/mL	Unstressed
	Purity 99%				+/-	19.0907	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,006.4	µg/mL	+/-	5.8513	µg/mL	Gravimetric
	CAS # 95-95-4	(Lot FHN01)			+/-	12.0306	µg/mL	Unstressed
	Purity 99%				+/-	19.1465	µg/mL	Stressed
38	2-Chloronaphthalene		1,002.9	µg/mL	+/-	5.8308	µg/mL	Gravimetric
	CAS # 91-58-7	(Lot AJ2UI)			+/-	11.9883	µg/mL	Unstressed
	Purity 99%				+/-	19.0792	µg/mL	Stressed
39	Biphenyl		1,001.2	µg/mL	+/-	5.8211	µg/mL	Gravimetric
	CAS # 92-52-4	(Lot MKBV9808V)			+/-	11.9684	µg/mL	Unstressed
	Purity 99%				+/-	19.0475	µg/mL	Stressed

40	2-Nitroaniline		1,004.5	µg/mL	+/- 5.8401	µg/mL	Gravimetric
	CAS # 88-74-4	(Lot MKBK7597V)			+/- 12.0075	µg/mL	Unstressed
	Purity 99%				+/- 19.1097	µg/mL	Stressed
41	Acenaphthylene		1,006.0	µg/mL	+/- 5.8491	µg/mL	Gravimetric
	CAS # 208-96-8	(Lot O03R)			+/- 12.0260	µg/mL	Unstressed
	Purity 97%				+/- 19.1392	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,001.8	µg/mL	+/- 5.8246	µg/mL	Gravimetric
	CAS # 99-65-0	(Lot BCBN4329V)			+/- 11.9756	µg/mL	Unstressed
	Purity 99%				+/- 19.0590	µg/mL	Stressed
43	Dimethylphthalate		1,003.7	µg/mL	+/- 5.8358	µg/mL	Gravimetric
	CAS # 131-11-3	(Lot 10117699)			+/- 11.9987	µg/mL	Unstressed
	Purity 99%				+/- 19.0957	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,000.7	µg/mL	+/- 5.8183	µg/mL	Gravimetric
	CAS # 606-20-2	(Lot BCBB8606V)			+/- 11.9628	µg/mL	Unstressed
	Purity 99%				+/- 19.0387	µg/mL	Stressed
45	3-Nitroaniline		1,005.2	µg/mL	+/- 5.8443	µg/mL	Gravimetric
	CAS # 99-09-2	(Lot MKBX1283V)			+/- 12.0162	µg/mL	Unstressed
	Purity 99%				+/- 19.1236	µg/mL	Stressed
46	Acenaphthene		1,005.9	µg/mL	+/- 5.8482	µg/mL	Gravimetric
	CAS # 83-32-9	(Lot MKCC8329)			+/- 12.0242	µg/mL	Unstressed
	Purity 99%				+/- 19.1363	µg/mL	Stressed
47	2,4-Dinitrophenol		2,008.3	µg/mL	+/- 11.6766	µg/mL	Gravimetric
	CAS # 51-28-5	(Lot STBF9439V)			+/- 24.0077	µg/mL	Unstressed
	Purity 99%				+/- 38.2080	µg/mL	Stressed
48	Dibenzofuran		1,005.5	µg/mL	+/- 5.8463	µg/mL	Gravimetric
	CAS # 132-64-9	(Lot MKBW2691V)			+/- 12.0202	µg/mL	Unstressed
	Purity 99%				+/- 19.1300	µg/mL	Stressed
49	4-Nitrophenol		2,009.3	µg/mL	+/- 11.6824	µg/mL	Gravimetric
	CAS # 100-02-7	(Lot MKBV0501V)			+/- 24.0197	µg/mL	Unstressed
	Purity 99%				+/- 38.2270	µg/mL	Stressed
50	2,4-Dinitrotoluene		1,003.9	µg/mL	+/- 5.8366	µg/mL	Gravimetric
	CAS # 121-14-2	(Lot MKAA0690V)			+/- 12.0003	µg/mL	Unstressed
	Purity 99%				+/- 19.0983	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,001.9	µg/mL	+/- 5.8253	µg/mL	Gravimetric
	CAS # 58-90-2	(Lot B180305L)			+/- 11.9772	µg/mL	Unstressed
	Purity 99%				+/- 19.0615	µg/mL	Stressed
52	Fluorene		1,002.0	µg/mL	+/- 5.8257	µg/mL	Gravimetric
	CAS # 86-73-7	(Lot 10193329)			+/- 11.9780	µg/mL	Unstressed
	Purity 99%				+/- 19.0628	µg/mL	Stressed
53	n-Hexadecane (C16)		1,001.6	µg/mL	+/- 5.8234	µg/mL	Gravimetric
	CAS # 544-76-3	(Lot SHBG2582V)			+/- 11.9732	µg/mL	Unstressed
	Purity 99%				+/- 19.0551	µg/mL	Stressed
54	Diethylphthalate		1,003.3	µg/mL	+/- 5.8335	µg/mL	Gravimetric
	CAS # 84-66-2	(Lot MKBV9622V)			+/- 11.9939	µg/mL	Unstressed
	Purity 99%				+/- 19.0881	µg/mL	Stressed
55	4-Chlorophenyl phenyl ether		1,001.1	µg/mL	+/- 5.8203	µg/mL	Gravimetric
	CAS # 7005-72-3	(Lot MKBX5225V)			+/- 11.9668	µg/mL	Unstressed
	Purity 99%				+/- 19.0450	µg/mL	Stressed

56	4-Nitroaniline		1,003.1	µg/mL	+/-	5.8319	µg/mL	Gravimetric
	CAS # 100-01-6	(Lot BCBG4702V)			+/-	11.9907	µg/mL	Unstressed
	Purity 98%				+/-	19.0830	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,003.7	µg/mL	+/-	11.6495	µg/mL	Gravimetric
	CAS # 534-52-1	(Lot LC25844V)			+/-	23.9520	µg/mL	Unstressed
	Purity 99%				+/-	38.1192	µg/mL	Stressed
58	Diphenylamine		852.3	µg/mL	+/-	4.9555	µg/mL	Gravimetric
	CAS # 122-39-4	(Lot MKBN8295V)			+/-	10.1888	µg/mL	Unstressed
	Purity 99%				+/-	16.2154	µg/mL	Stressed
59	Azobenzene		1,005.5	µg/mL	+/-	5.8463	µg/mL	Gravimetric
	CAS # 103-33-3	(Lot BCBQ0927V)			+/-	12.0202	µg/mL	Unstressed
	Purity 99%				+/-	19.1300	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,022.3	µg/mL	+/-	5.9439	µg/mL	Gravimetric
	CAS # 101-55-3	(Lot STBB9729V)			+/-	12.2210	µg/mL	Unstressed
	Purity 99%				+/-	19.4496	µg/mL	Stressed
61	Hexachlorobenzene		1,002.5	µg/mL	+/-	5.8288	µg/mL	Gravimetric
	CAS # 118-74-1	(Lot 7013600)			+/-	11.9843	µg/mL	Unstressed
	Purity 99%				+/-	19.0729	µg/mL	Stressed
62	Pentachlorophenol		2,002.1	µg/mL	+/-	11.6406	µg/mL	Gravimetric
	CAS # 87-86-5	(Lot 170306KJA)			+/-	23.9336	µg/mL	Unstressed
	Purity 99%				+/-	38.0900	µg/mL	Stressed
63	n-Octadecane (C18)		1,002.9	µg/mL	+/-	5.8308	µg/mL	Gravimetric
	CAS # 593-45-3	(Lot OGCDK)			+/-	11.9883	µg/mL	Unstressed
	Purity 99%				+/-	19.0792	µg/mL	Stressed
64	Phenanthrene		1,001.1	µg/mL	+/-	5.8203	µg/mL	Gravimetric
	CAS # 85-01-8	(Lot MKCB1762V)			+/-	11.9668	µg/mL	Unstressed
	Purity 99%				+/-	19.0450	µg/mL	Stressed
65	Anthracene		1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS # 120-12-7	(Lot MKBV7759V)			+/-	11.9573	µg/mL	Unstressed
	Purity 99%				+/-	19.0298	µg/mL	Stressed
66	Carbazole		1,000.5	µg/mL	+/-	5.8168	µg/mL	Gravimetric
	CAS # 86-74-8	(Lot 6489700)			+/-	11.9596	µg/mL	Unstressed
	Purity 99%				+/-	19.0336	µg/mL	Stressed
67	Di-n-butylphthalate		1,005.7	µg/mL	+/-	5.8470	µg/mL	Gravimetric
	CAS # 84-74-2	(Lot MKBT0244V)			+/-	12.0218	µg/mL	Unstressed
	Purity 99%				+/-	19.1325	µg/mL	Stressed
68	Fluoranthene		1,005.5	µg/mL	+/-	5.8463	µg/mL	Gravimetric
	CAS # 206-44-0	(Lot MKBQ6360V)			+/-	12.0204	µg/mL	Unstressed
	Purity 98%				+/-	19.1302	µg/mL	Stressed
69	Pyrene		1,005.8	µg/mL	+/-	5.8478	µg/mL	Gravimetric
	CAS # 129-00-0	(Lot BCBT5695)			+/-	12.0234	µg/mL	Unstressed
	Purity 99%				+/-	19.1351	µg/mL	Stressed
70	Benzyl butyl phthalate		1,000.3	µg/mL	+/-	5.8156	µg/mL	Gravimetric
	CAS # 85-68-7	(Lot MKBZ4553V)			+/-	11.9571	µg/mL	Unstressed
	Purity 98%				+/-	19.0295	µg/mL	Stressed
71	Benz(a)anthracene		1,003.1	µg/mL	+/-	5.8323	µg/mL	Gravimetric
	CAS # 56-55-3	(Lot 0012012)			+/-	11.9915	µg/mL	Unstressed
	Purity 98%				+/-	19.0842	µg/mL	Stressed

72	Chrysene		1,004.6	µg/mL	+/-	5.8408	µg/mL	Gravimetric
	CAS # 218-01-9	(Lot 012015)			+/-	12.0091	µg/mL	Unstressed
	Purity 99%				+/-	19.1122	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,002.7	µg/mL	+/-	5.8296	µg/mL	Gravimetric
	CAS # 117-81-7	(Lot MKBZ3868V)			+/-	11.9859	µg/mL	Unstressed
	Purity 99%				+/-	19.0754	µg/mL	Stressed
74	Di-n-octyl phthalate		1,007.9	µg/mL	+/-	5.8602	µg/mL	Gravimetric
	CAS # 117-84-0	(Lot 6016000)			+/-	12.0489	µg/mL	Unstressed
	Purity 99%				+/-	19.1756	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,003.6	µg/mL	+/-	5.8350	µg/mL	Gravimetric
	CAS # 205-99-2	(Lot 012012B)			+/-	11.9971	µg/mL	Unstressed
	Purity 99%				+/-	19.0932	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,006.2	µg/mL	+/-	5.8501	µg/mL	Gravimetric
	CAS # 207-08-9	(Lot 012017K)			+/-	12.0282	µg/mL	Unstressed
	Purity 99%				+/-	19.1427	µg/mL	Stressed
77	Benzo(a)pyrene		1,002.1	µg/mL	+/-	5.8261	µg/mL	Gravimetric
	CAS # 50-32-8	(Lot ER071309-02)			+/-	11.9788	µg/mL	Unstressed
	Purity 99%				+/-	19.0640	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,004.0	µg/mL	+/-	5.8373	µg/mL	Gravimetric
	CAS # 193-39-5	(Lot ER082107-02)			+/-	12.0019	µg/mL	Unstressed
	Purity 99%				+/-	19.1008	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,001.9	µg/mL	+/-	5.8249	µg/mL	Gravimetric
	CAS # 53-70-3	(Lot ER032211-01)			+/-	11.9764	µg/mL	Unstressed
	Purity 99%				+/-	19.0602	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,000.9	µg/mL	+/-	5.8195	µg/mL	Gravimetric
	CAS # 191-24-2	(Lot ER05121401)			+/-	11.9652	µg/mL	Unstressed
	Purity 99%				+/-	19.0425	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Specific Reference Material Notes:

N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.
This lot was approved even though the %D for 4,6-DN-2-MP was greater than 10%.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

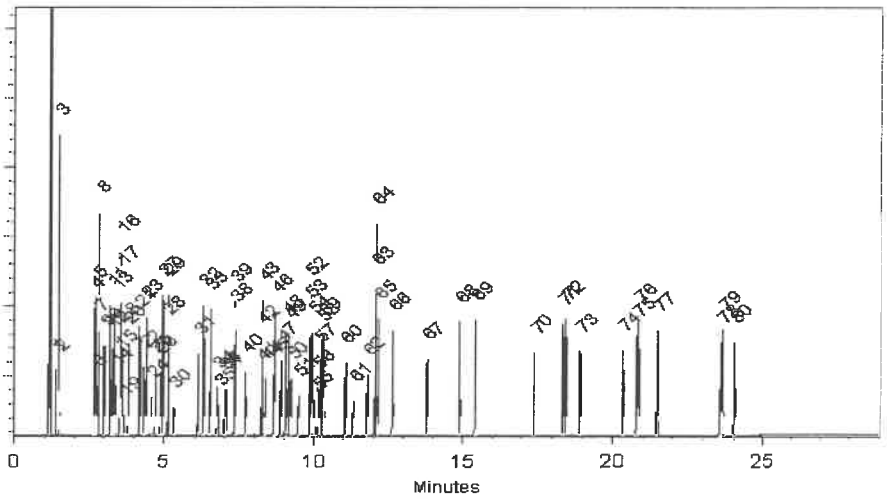
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Joseph Jaglowski - Mix Technician

Date Mixed: 12-Mar-2018 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 27-Mar-2018

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 S11_00006

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Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569732 **Lot No.:** A0133451

Description : 8270 List 1 / Std #11

8270 List 1 / Std #11 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : June 30, 2019 **Storage:** 10°C or colder

Handling: This product is photosensitive.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzaldehyde **CAS #** 100-52-7 **Purity** 99%	(Lot SHBG8690V)	2,012.4 µg/mL	+/- 11.7003 µg/mL +/- 64.5088 µg/mL +/- 74.9890 µg/mL		Gravimetric Unstressed Stressed
2	epsilon-Caprolactam **CAS #** 105-60-2 **Purity** 99%	(Lot I16X016)	2,006.2 µg/mL	+/- 11.6642 µg/mL +/- 64.3101 µg/mL +/- 74.7579 µg/mL		Gravimetric Unstressed Stressed
3	Atrazine **CAS #** 1912-24-9 **Purity** 99%	(Lot 77P7D)	2,003.6 µg/mL	+/- 11.6491 µg/mL +/- 64.2267 µg/mL +/- 74.6611 µg/mL		Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

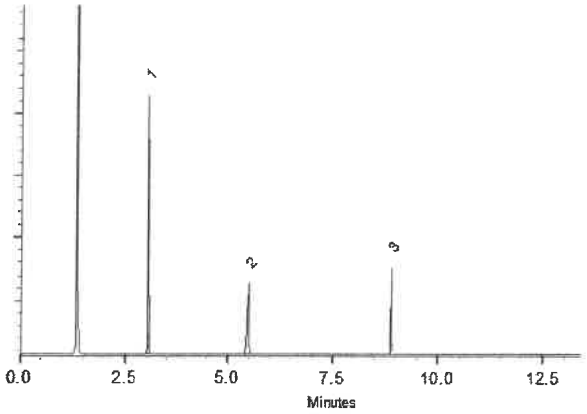
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brownson - Mix Technician

Date Mixed: 17-Dec-2017 **Balance:** 1128360905

Justine Albertson - Operations Tech-ARM QC

Date Passed: 19-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 569730 **Lot No.:** A0137351

Description : 8270 List 1 / Std #9

8270 List 1 / Std #9 2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : October 31, 2019 **Storage:** 10°C or colder

Handling: Contains carcinogen/reproductive toxin.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	Benzidine	2,000.3 µg/mL	+/- 11.6301	µg/mL	Gravimetric
	CAS # 92-87-5 (Lot 171228KJA)		+/- 23.9121	µg/mL	Unstressed
	Purity 99%		+/- 38.0558	µg/mL	Stressed
2	3,3'-Dichlorobenzidine	2,005.7 µg/mL	+/- 11.6611	µg/mL	Gravimetric
	CAS # 91-94-1 (Lot 180328JNA)		+/- 23.9759	µg/mL	Unstressed
	Purity 99%		+/- 38.1572	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

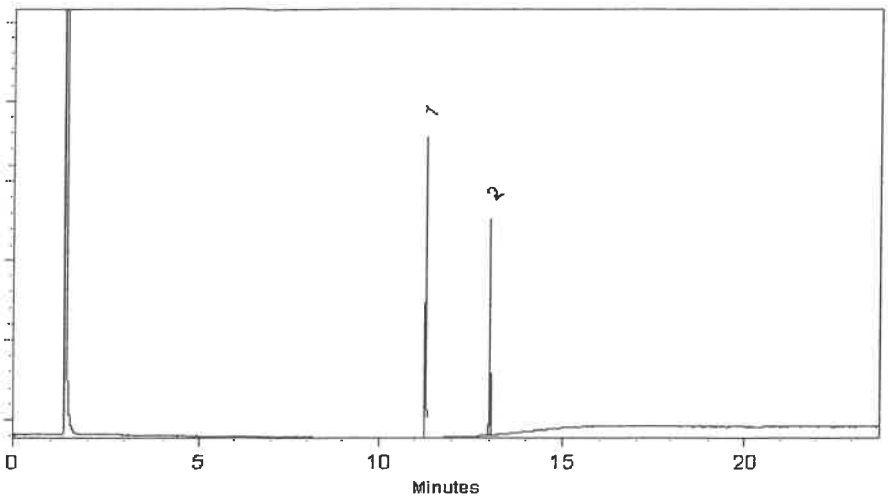
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
75°C (hold 1 min.) to 330°C
@ 20°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Dawn Brownson - Mix Technician **Date Mixed:** 20-Apr-2018 **Balance:** 1128360905

Jennifer Pollino - Operations Tech-ARM QC **Date Passed:** 24-Apr-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

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Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 571995.SEC **Lot No.:** A0138890

Description : 8270 List 1 / Std #1 MegaMix (2017)

8270 List 1 / Std #1 MegaMix (2017) 500-2,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 10 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2019 **Storage:** 0°C or colder

Handling: Carcinogen/reproductive toxin. Photosensitive. Sonicate.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	1,4-Dioxane	1,006.2 µg/mL	+/- 5.8637	µg/mL	Gravimetric
	CAS # 123-91-1.SEC (Lot MUFZH)		+/- 12.0348	µg/mL	Unstressed
	Purity 99%		+/- 19.1468	µg/mL	Stressed
2	N-Nitrosodimethylamine	1,000.6 µg/mL	+/- 5.8310	µg/mL	Gravimetric
	CAS # 62-75-9.SEC (Lot 61H72)		+/- 11.9678	µg/mL	Unstressed
	Purity 99%		+/- 19.0402	µg/mL	Stressed
3	Pyridine	2,007.0 µg/mL	+/- 11.6689	µg/mL	Gravimetric
	CAS # 110-86-1.SEC (Lot QN8DK)		+/- 23.9918	µg/mL	Unstressed
	Purity 99%		+/- 38.1826	µg/mL	Stressed
4	Phenol	1,010.0 µg/mL	+/- 5.8858	µg/mL	Gravimetric
	CAS # 108-95-2.SEC (Lot EDPYN)		+/- 12.0802	µg/mL	Unstressed
	Purity 99%		+/- 19.2191	µg/mL	Stressed
5	Aniline	1,002.2 µg/mL	+/- 5.8403	µg/mL	Gravimetric
	CAS # 62-53-3.SEC (Lot ZCD3N)		+/- 11.9869	µg/mL	Unstressed
	Purity 99%		+/- 19.0707	µg/mL	Stressed
6	Bis(2-chloroethyl)ether	1,006.8 µg/mL	+/- 5.8671	µg/mL	Gravimetric
	CAS # 111-44-4.SEC (Lot FA010143)		+/- 12.0419	µg/mL	Unstressed
	Purity 99%		+/- 19.1582	µg/mL	Stressed
7	n-Decane (C10)	1,007.0 µg/mL	+/- 5.8683	µg/mL	Gravimetric
	CAS # 124-18-5.SEC (Lot UCVNN)		+/- 12.0443	µg/mL	Unstressed
	Purity 99%		+/- 19.1620	µg/mL	Stressed

8	2-Chlorophenol		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 95-57-8.SEC	(Lot GJ01)			+/-	11.9606	µg/mL	Unstressed
	Purity 99%				+/-	19.0288	µg/mL	Stressed
9	1,3-Dichlorobenzene		1,004.0	µg/mL	+/-	5.8508	µg/mL	Gravimetric
	CAS # 541-73-1.SEC	(Lot FMDFD-KA)			+/-	12.0084	µg/mL	Unstressed
	Purity 99%				+/-	19.1049	µg/mL	Stressed
10	1,4-Dichlorobenzene		1,005.2	µg/mL	+/-	5.8578	µg/mL	Gravimetric
	CAS # 106-46-7.SEC	(Lot 4Y5DC)			+/-	12.0228	µg/mL	Unstressed
	Purity 99%				+/-	19.1278	µg/mL	Stressed
11	Benzyl alcohol		1,002.8	µg/mL	+/-	5.8438	µg/mL	Gravimetric
	CAS # 100-51-6.SEC	(Lot QZBUO)			+/-	11.9941	µg/mL	Unstressed
	Purity 99%				+/-	19.0821	µg/mL	Stressed
12	1,2-Dichlorobenzene		1,001.6	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 95-50-1.SEC	(Lot R6QDM)			+/-	11.9797	µg/mL	Unstressed
	Purity 99%				+/-	19.0593	µg/mL	Stressed
13	2-Methylphenol (o-cresol)		1,006.2	µg/mL	+/-	5.8637	µg/mL	Gravimetric
	CAS # 95-48-7.SEC	(Lot NC7HL)			+/-	12.0348	µg/mL	Unstressed
	Purity 99%				+/-	19.1468	µg/mL	Stressed
14	2,2'-oxybis(1-chloropropane)		1,008.2	µg/mL	+/-	5.8753	µg/mL	Gravimetric
	CAS # 108-60-1.SEC	(Lot 2-KMW-57-8)			+/-	12.0587	µg/mL	Unstressed
	Purity 99%				+/-	19.1849	µg/mL	Stressed
15	Acetophenone		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 98-86-2.SEC	(Lot NSGTI)			+/-	11.9678	µg/mL	Unstressed
	Purity 99%				+/-	19.0402	µg/mL	Stressed
16	3-Methylphenol (m-cresol)		500.8	µg/mL	+/-	2.9184	µg/mL	Gravimetric
	CAS # 108-39-4.SEC	(Lot 6LHTM)			+/-	5.9899	µg/mL	Unstressed
	Purity 99%				+/-	9.5296	µg/mL	Stressed
17	4-Methylphenol (p-cresol)		500.0	µg/mL	+/-	2.9138	µg/mL	Gravimetric
	CAS # 106-44-5.SEC	(Lot 65S2E)			+/-	5.9803	µg/mL	Unstressed
	Purity 99%				+/-	9.5144	µg/mL	Stressed
18	N-Nitroso-di-n-propylamine		1,008.2	µg/mL	+/-	5.8753	µg/mL	Gravimetric
	CAS # 621-64-7.SEC	(Lot 4817800)			+/-	12.0587	µg/mL	Unstressed
	Purity 99%				+/-	19.1849	µg/mL	Stressed
19	Hexachloroethane		1,000.4	µg/mL	+/-	5.8299	µg/mL	Gravimetric
	CAS # 67-72-1.SEC	(Lot 10173016)			+/-	11.9654	µg/mL	Unstressed
	Purity 99%				+/-	19.0364	µg/mL	Stressed
20	Nitrobenzene		1,005.2	µg/mL	+/-	5.8578	µg/mL	Gravimetric
	CAS # 98-95-3.SEC	(Lot FLYIG)			+/-	12.0228	µg/mL	Unstressed
	Purity 99%				+/-	19.1278	µg/mL	Stressed
21	Isophorone		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 78-59-1.SEC	(Lot XHGJI)			+/-	11.9750	µg/mL	Unstressed
	Purity 99%				+/-	19.0517	µg/mL	Stressed
22	2-Nitrophenol		1,007.2	µg/mL	+/-	5.8695	µg/mL	Gravimetric
	CAS # 88-75-5.SEC	(Lot GXJ7J)			+/-	12.0467	µg/mL	Unstressed
	Purity 99%				+/-	19.1658	µg/mL	Stressed
23	2,4-Dimethylphenol		1,007.8	µg/mL	+/-	5.8730	µg/mL	Gravimetric
	CAS # 105-67-9.SEC	(Lot MKBL3650V)			+/-	12.0539	µg/mL	Unstressed
	Purity 99%				+/-	19.1772	µg/mL	Stressed

24	Bis(2-chloroethoxy)methane		1,008.0	µg/mL	+/-	5.8741	µg/mL	Gravimetric
	CAS # 111-91-1 *	(Lot 4621000)			+/-	12.0563	µg/mL	Unstressed
	Purity 99%				+/-	19.1811	µg/mL	Stressed
25	2,4-Dichlorophenol		1,009.2	µg/mL	+/-	5.8811	µg/mL	Gravimetric
	CAS # 120-83-2.SEC	(Lot FHM01)			+/-	12.0706	µg/mL	Unstressed
	Purity 99%				+/-	19.2039	µg/mL	Stressed
26	1,2,4-Trichlorobenzene		1,007.0	µg/mL	+/-	5.8683	µg/mL	Gravimetric
	CAS # 120-82-1.SEC	(Lot 3LYYC)			+/-	12.0443	µg/mL	Unstressed
	Purity 99%				+/-	19.1620	µg/mL	Stressed
27	Naphthalene		1,003.2	µg/mL	+/-	5.8462	µg/mL	Gravimetric
	CAS # 91-20-3.SEC	(Lot SKZ5N)			+/-	11.9989	µg/mL	Unstressed
	Purity 99%				+/-	19.0897	µg/mL	Stressed
28	2,6-Dichlorophenol		1,003.8	µg/mL	+/-	5.8497	µg/mL	Gravimetric
	CAS # 87-65-0.SEC	(Lot SIDBB)			+/-	12.0061	µg/mL	Unstressed
	Purity 99%				+/-	19.1011	µg/mL	Stressed
29	4-Chloroaniline		1,002.2	µg/mL	+/-	5.8403	µg/mL	Gravimetric
	CAS # 106-47-8.SEC	(Lot 10171860)			+/-	11.9869	µg/mL	Unstressed
	Purity 99%				+/-	19.0707	µg/mL	Stressed
30	Hexachlorobutadiene		1,009.0	µg/mL	+/-	5.8799	µg/mL	Gravimetric
	CAS # 87-68-3.SEC	(Lot 6878400)			+/-	12.0682	µg/mL	Unstressed
	Purity 97%				+/-	19.2000	µg/mL	Stressed
31	4-Chloro-3-methylphenol		1,007.4	µg/mL	+/-	5.8706	µg/mL	Gravimetric
	CAS # 59-50-7.SEC	(Lot FDO02)			+/-	12.0491	µg/mL	Unstressed
	Purity 99%				+/-	19.1696	µg/mL	Stressed
32	2-Methylnaphthalene		1,010.0	µg/mL	+/-	5.8857	µg/mL	Gravimetric
	CAS # 91-57-6.SEC	(Lot 76023-1)			+/-	12.0801	µg/mL	Unstressed
	Purity 98%				+/-	19.2189	µg/mL	Stressed
33	1-Methylnaphthalene		1,007.4	µg/mL	+/-	5.8706	µg/mL	Gravimetric
	CAS # 90-12-0.SEC	(Lot OEE3F)			+/-	12.0491	µg/mL	Unstressed
	Purity 99%				+/-	19.1696	µg/mL	Stressed
34	1,2,4,5-Tetrachlorobenzene		1,003.4	µg/mL	+/-	5.8473	µg/mL	Gravimetric
	CAS # 95-94-3.SEC	(Lot AF02)			+/-	12.0013	µg/mL	Unstressed
	Purity 99%				+/-	19.0935	µg/mL	Stressed
35	Hexachlorocyclopentadiene		1,008.4	µg/mL	+/-	5.8765	µg/mL	Gravimetric
	CAS # 77-47-4.SEC	(Lot 6975000)			+/-	12.0611	µg/mL	Unstressed
	Purity 99%				+/-	19.1887	µg/mL	Stressed
36	2,4,6-Trichlorophenol		1,009.6	µg/mL	+/-	5.8834	µg/mL	Gravimetric
	CAS # 88-06-2.SEC	(Lot UUMYM)			+/-	12.0754	µg/mL	Unstressed
	Purity 98%				+/-	19.2114	µg/mL	Stressed
37	2,4,5-Trichlorophenol		1,004.8	µg/mL	+/-	5.8555	µg/mL	Gravimetric
	CAS # 95-95-4.SEC	(Lot MKBQ9937V)			+/-	12.0180	µg/mL	Unstressed
	Purity 99%				+/-	19.1202	µg/mL	Stressed
38	2-Chloronaphthalene		1,005.0	µg/mL	+/-	5.8567	µg/mL	Gravimetric
	CAS # 91-58-7.SEC	(Lot 6779200)			+/-	12.0204	µg/mL	Unstressed
	Purity 99%				+/-	19.1240	µg/mL	Stressed
39	Biphenyl		1,009.4	µg/mL	+/-	5.8823	µg/mL	Gravimetric
	CAS # 92-52-4.SEC	(Lot 33OQE)			+/-	12.0730	µg/mL	Unstressed
	Purity 99%				+/-	19.2077	µg/mL	Stressed

40	2-Nitroaniline		1,003.0	µg/mL	+/-	5.8450	µg/mL	Gravimetric
	CAS # 88-74-4.SEC	(Lot T6E7B)			+/-	11.9965	µg/mL	Unstressed
	Purity 99%				+/-	19.0859	µg/mL	Stressed
41	Acenaphthylene		1,000.7	µg/mL	+/-	5.8316	µg/mL	Gravimetric
	CAS # 208-96-8.SEC	(Lot 0012014)			+/-	11.9690	µg/mL	Unstressed
	Purity 96%				+/-	19.0422	µg/mL	Stressed
42	1,3-Dinitrobenzene		1,006.0	µg/mL	+/-	5.8625	µg/mL	Gravimetric
	CAS # 99-65-0.SEC	(Lot TUOIE)			+/-	12.0324	µg/mL	Unstressed
	Purity 99%				+/-	19.1430	µg/mL	Stressed
43	Dimethylphthalate		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 131-11-3.SEC	(Lot 483WC)			+/-	11.9702	µg/mL	Unstressed
	Purity 99%				+/-	19.0440	µg/mL	Stressed
44	2,6-Dinitrotoluene		1,008.4	µg/mL	+/-	5.8765	µg/mL	Gravimetric
	CAS # 606-20-2.SEC	(Lot GE01)			+/-	12.0611	µg/mL	Unstressed
	Purity 99%				+/-	19.1887	µg/mL	Stressed
45	3-Nitroaniline		1,007.2	µg/mL	+/-	5.8695	µg/mL	Gravimetric
	CAS # 99-09-2.SEC	(Lot FGN03)			+/-	12.0467	µg/mL	Unstressed
	Purity 99%				+/-	19.1658	µg/mL	Stressed
46	Acenaphthene		1,004.2	µg/mL	+/-	5.8520	µg/mL	Gravimetric
	CAS # 83-32-9.SEC	(Lot BWZJE)			+/-	12.0108	µg/mL	Unstressed
	Purity 99%				+/-	19.1087	µg/mL	Stressed
47	2,4-Dinitrophenol		2,017.0	µg/mL	+/-	11.7270	µg/mL	Gravimetric
	CAS # 51-28-5.SEC	(Lot YTR6B)			+/-	24.1113	µg/mL	Unstressed
	Purity 99%				+/-	38.3728	µg/mL	Stressed
48	Dibenzofuran		1,001.2	µg/mL	+/-	5.8345	µg/mL	Gravimetric
	CAS # 132-64-9.SEC	(Lot 27ZGC)			+/-	11.9750	µg/mL	Unstressed
	Purity 99%				+/-	19.0517	µg/mL	Stressed
49	4-Nitrophenol		2,001.6	µg/mL	+/-	11.6375	µg/mL	Gravimetric
	CAS # 100-02-7.SEC	(Lot H75QG)			+/-	23.9273	µg/mL	Unstressed
	Purity 99%				+/-	38.0799	µg/mL	Stressed
50	2,4-Dinitrotoluene		1,007.4	µg/mL	+/-	5.8706	µg/mL	Gravimetric
	CAS # 121-14-2.SEC	(Lot SHRSA)			+/-	12.0491	µg/mL	Unstressed
	Purity 99%				+/-	19.1696	µg/mL	Stressed
51	2,3,4,6-Tetrachlorophenol		1,000.4	µg/mL	+/-	5.8299	µg/mL	Gravimetric
	CAS # 58-90-2.SEC	(Lot LRAB8148)			+/-	11.9654	µg/mL	Unstressed
	Purity 99%				+/-	19.0364	µg/mL	Stressed
52	Fluorene		1,004.2	µg/mL	+/-	5.8520	µg/mL	Gravimetric
	CAS # 86-73-7.SEC	(Lot 6818700)			+/-	12.0108	µg/mL	Unstressed
	Purity 99%				+/-	19.1087	µg/mL	Stressed
53	n-Hexadecane (C16)		1,005.6	µg/mL	+/-	5.8602	µg/mL	Gravimetric
	CAS # 544-76-3.SEC	(Lot A0328141)			+/-	12.0276	µg/mL	Unstressed
	Purity 99%				+/-	19.1354	µg/mL	Stressed
54	Diethylphthalate		1,009.4	µg/mL	+/-	5.8823	µg/mL	Gravimetric
	CAS # 84-66-2.SEC	(Lot UMBJC)			+/-	12.0730	µg/mL	Unstressed
	Purity 99%				+/-	19.2077	µg/mL	Stressed
55	4-Chlorophenyl phenyl ether		1,003.5	µg/mL	+/-	5.8480	µg/mL	Gravimetric
	CAS # 7005-72-3.SEC	(Lot P31G)			+/-	12.0027	µg/mL	Unstressed
	Purity 98%				+/-	19.0958	µg/mL	Stressed

56	4-Nitroaniline		1,002.0	µg/mL	+/-	5.8392	µg/mL	Gravimetric
	CAS # 100-01-6.SEC	(Lot 5ITRC)			+/-	11.9845	µg/mL	Unstressed
	Purity 99%				+/-	19.0669	µg/mL	Stressed
57	4,6-Dinitro-2-methylphenol (Dinitro-o-cresol)		2,005.2	µg/mL	+/-	11.6584	µg/mL	Gravimetric
	CAS # 534-52-1.SEC	(Lot 3256700)			+/-	23.9703	µg/mL	Unstressed
	Purity 99%				+/-	38.1483	µg/mL	Stressed
58	Diphenylamine		853.0	µg/mL	+/-	4.9709	µg/mL	Gravimetric
	CAS # 122-39-4.SEC	(Lot 10164691)			+/-	10.2024	µg/mL	Unstressed
	Purity 99%				+/-	16.2316	µg/mL	Stressed
59	Azobenzene		1,006.0	µg/mL	+/-	5.8625	µg/mL	Gravimetric
	CAS # 103-33-3.SEC	(Lot JUWAG)			+/-	12.0324	µg/mL	Unstressed
	Purity 99%				+/-	19.1430	µg/mL	Stressed
60	4-Bromophenyl phenyl ether		1,008.2	µg/mL	+/-	5.8753	µg/mL	Gravimetric
	CAS # 101-55-3.SEC	(Lot 84C6D)			+/-	12.0587	µg/mL	Unstressed
	Purity 99%				+/-	19.1849	µg/mL	Stressed
61	Hexachlorobenzene		1,001.6	µg/mL	+/-	5.8368	µg/mL	Gravimetric
	CAS # 118-74-1.SEC	(Lot G137934)			+/-	11.9797	µg/mL	Unstressed
	Purity 99%				+/-	19.0593	µg/mL	Stressed
62	Pentachlorophenol		2,018.0	µg/mL	+/-	11.7328	µg/mL	Gravimetric
	CAS # 87-86-5.SEC	(Lot 6143700)			+/-	24.1233	µg/mL	Unstressed
	Purity 99%				+/-	38.3919	µg/mL	Stressed
63	n-Octadecane (C18)		1,008.0	µg/mL	+/-	5.8741	µg/mL	Gravimetric
	CAS # 593-45-3.SEC	(Lot G14U045)			+/-	12.0563	µg/mL	Unstressed
	Purity 99%				+/-	19.1811	µg/mL	Stressed
64	Phenanthrene		1,001.6	µg/mL	+/-	5.8366	µg/mL	Gravimetric
	CAS # 85-01-8.SEC	(Lot 7248800)			+/-	11.9793	µg/mL	Unstressed
	Purity 98%				+/-	19.0585	µg/mL	Stressed
65	Anthracene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 120-12-7.SEC	(Lot WDFNJ)			+/-	11.9917	µg/mL	Unstressed
	Purity 99%				+/-	19.0783	µg/mL	Stressed
66	Carbazole		1,005.6	µg/mL	+/-	5.8602	µg/mL	Gravimetric
	CAS # 86-74-8.SEC	(Lot LMIZB)			+/-	12.0276	µg/mL	Unstressed
	Purity 99%				+/-	19.1354	µg/mL	Stressed
67	Di-n-butylphthalate		1,000.0	µg/mL	+/-	5.8275	µg/mL	Gravimetric
	CAS # 84-74-2.SEC	(Lot 42FSG)			+/-	11.9606	µg/mL	Unstressed
	Purity 99%				+/-	19.0288	µg/mL	Stressed
68	Fluoranthene		1,008.8	µg/mL	+/-	5.8788	µg/mL	Gravimetric
	CAS # 206-44-0.SEC	(Lot FREGF)			+/-	12.0659	µg/mL	Unstressed
	Purity 99%				+/-	19.1963	µg/mL	Stressed
69	Pyrene		1,003.6	µg/mL	+/-	5.8485	µg/mL	Gravimetric
	CAS # 129-00-0.SEC	(Lot ROVJC)			+/-	12.0037	µg/mL	Unstressed
	Purity 99%				+/-	19.0973	µg/mL	Stressed
70	Benzyl butyl phthalate		1,002.0	µg/mL	+/-	5.8389	µg/mL	Gravimetric
	CAS # 85-68-7.SEC	(Lot GX3GL)			+/-	11.9839	µg/mL	Unstressed
	Purity 98%				+/-	19.0660	µg/mL	Stressed
71	Benz(a)anthracene		1,000.6	µg/mL	+/-	5.8310	µg/mL	Gravimetric
	CAS # 56-55-3.SEC	(Lot MTENF)			+/-	11.9678	µg/mL	Unstressed
	Purity 99%				+/-	19.0402	µg/mL	Stressed

72	chrysene		1,003.6	µg/mL	+/-	5.8485	µg/mL	Gravimetric
	CAS # 218-01-9.SEC	(Lot NICZC)			+/-	12.0037	µg/mL	Unstressed
	Purity 99%				+/-	19.0973	µg/mL	Stressed
73	Bis(2-ethylhexyl)phthalate		1,006.6	µg/mL	+/-	5.8660	µg/mL	Gravimetric
	CAS # 117-81-7.SEC	(Lot MT8AG)			+/-	12.0395	µg/mL	Unstressed
	Purity 99%				+/-	19.1544	µg/mL	Stressed
74	Di-n-octyl phthalate		1,009.4	µg/mL	+/-	5.8823	µg/mL	Gravimetric
	CAS # 117-84-0.SEC	(Lot O8DLD)			+/-	12.0730	µg/mL	Unstressed
	Purity 99%				+/-	19.2077	µg/mL	Stressed
75	Benzo(b)fluoranthene		1,009.6	µg/mL	+/-	5.8835	µg/mL	Gravimetric
	CAS # 205-99-2.SEC	(Lot FLUSD)			+/-	12.0754	µg/mL	Unstressed
	Purity 99%				+/-	19.2115	µg/mL	Stressed
76	Benzo(k)fluoranthene		1,008.0	µg/mL	+/-	5.8743	µg/mL	Gravimetric
	CAS # 207-08-9.SEC	(Lot 6143600)			+/-	12.0566	µg/mL	Unstressed
	Purity 98%				+/-	19.1816	µg/mL	Stressed
77	Benzo(a)pyrene		1,008.8	µg/mL	+/-	5.8788	µg/mL	Gravimetric
	CAS # 50-32-8.SEC	(Lot NPEZF)			+/-	12.0659	µg/mL	Unstressed
	Purity 97%				+/-	19.1963	µg/mL	Stressed
78	Indeno(1,2,3-cd)pyrene		1,000.8	µg/mL	+/-	5.8322	µg/mL	Gravimetric
	CAS # 193-39-5.SEC	(Lot 022015)			+/-	11.9702	µg/mL	Unstressed
	Purity 99%				+/-	19.0440	µg/mL	Stressed
79	Dibenz(a,h)anthracene		1,002.6	µg/mL	+/-	5.8427	µg/mL	Gravimetric
	CAS # 53-70-3.SEC	(Lot 0012012)			+/-	11.9917	µg/mL	Unstressed
	Purity 99%				+/-	19.0783	µg/mL	Stressed
80	Benzo(g,h,i)perylene		1,001.3	µg/mL	+/-	5.8351	µg/mL	Gravimetric
	CAS # 191-24-2.SEC	(Lot 0062012)			+/-	11.9762	µg/mL	Unstressed
	Purity 95%				+/-	19.0536	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

*** Restek is unable to identify a reliable and/or acceptable second source for this material - the same batch of neat material may have been used to produce both the primary and secondary standard. The primary and secondary standards were prepared using different equipment and personnel.**

Specific Reference Material Notes:
N-nitrosodiphenylamine 1000 ug/mL equivalent when used for GC analysis. Actual formulation is diphenylamine 855 ug/mL.
N-Nitrosodiphenylamine is prone to breakdown in the injection port and will be converted to diphenylamine.
N-Nitrosodiphenylamine is also a reactive species that can initiate premature decomposition of other compounds in the mix. For these reasons diphenylamine is used in the preparation of this mixture. When comparing the response of this compound to mixtures manufactured using N-nitrosodiphenylamine, a difference in response will be observed.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

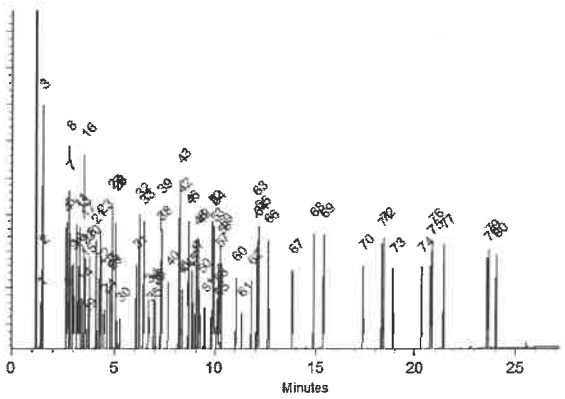
Carrier Gas:
hydrogen-constant flow 1.8 mL/min.

Temp. Program:
80°C (hold 0.1 min.) to 330°C
@ 9.6°C/min. (hold 2.86 min.)

Inj. Temp:
250°C

Det. Temp:
340°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Lane Kibe - Mix Technician

Date Mixed: 14-Jun-2018 **Balance:** B345965662

Justine Albertson - Operations Tech-ARM QC

Date Passed: 21-Jun-2018

Manufactured under Restek's ISO 9001:2015
Registered Quality System
Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 SURR_00010

Recd 8/10/18

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO Guide 34 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A0133251

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000µg/mL, Methylene chloride, 5mL/ampul

3744037
ID: SMLIST1 SURR_00010
Exp:12/31/22 Prpd:BMB Opn:08/10/18
8270 Surrogate Standard

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : December 31, 2022 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound		Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)		
1	2-Fluorophenol **CAS #** 367-12-4 **Purity** 99%	(Lot STBD7945V)	5,038.1 µg/mL	+/- 29.2918 +/- 147.0277 +/- 178.4124	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 **CAS #** 4165-62-2 **Purity** 99%	(Lot X-479)	5,031.4 µg/mL	+/- 29.2530 +/- 146.8331 +/- 178.1763	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 **CAS #** 4165-60-0 **Purity** 99%	(Lot PR-25462)	5,017.5 µg/mL	+/- 29.1720 +/- 146.4265 +/- 177.6829	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl **CAS #** 321-60-8 **Purity** 99%	(Lot Z20C043)	5,017.5 µg/mL	+/- 29.1720 +/- 146.4265 +/- 177.6829	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol **CAS #** 118-79-6 **Purity** 99%	(Lot 29699MJV)	5,043.2 µg/mL	+/- 29.3216 +/- 147.1775 +/- 178.5942	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 **CAS #** 1718-51-0 **Purity** 99%	(Lot PR-27278)	5,030.3 µg/mL	+/- 29.2464 +/- 146.8000 +/- 178.1362	µg/mL µg/mL µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

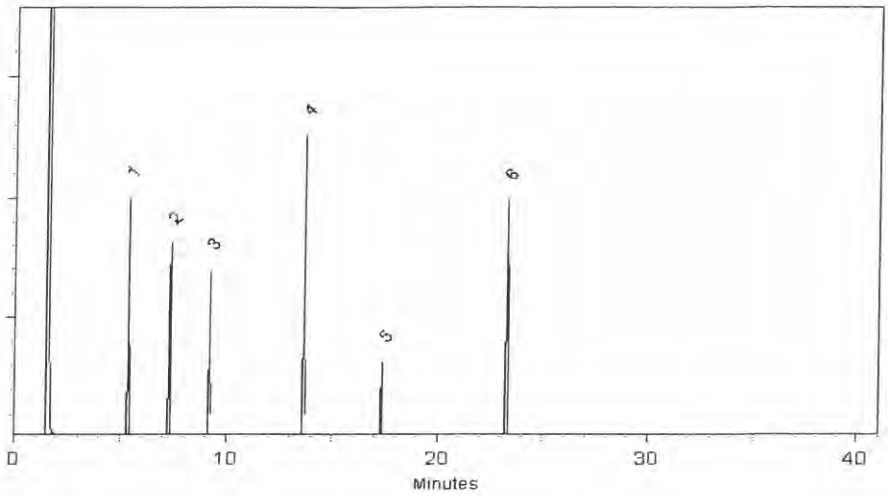
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Matt Fragassi - Mix Technician

Date Mixed: 12-Dec-2017 **Balance:** B442140311

Jennifer Pollino - Operations Tech-ARM QC

Date Passed: 14-Dec-2017

Manufactured under Restek's ISO 9001:2008 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO Guides 34 and 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Samples should be transferred into deactivated vials for handling and storage. Restek supplies deactivated vials along with most standards packed in 2 mL ampules. Due to space constraints, Restek does not supply vials for larger volume ampules. Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions. Restek will also deactivate larger volume vials from our inventory as a custom ordered item. Contact your Restek sales or customer service representative for details.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Reagent

SMLIST1 SURR_00011

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 567685 **Lot No.:** A0141581

Description : 8270 Surrogate Standard

8270 Surrogate Standard 5,000µg/mL, Methylene chloride, 5mL/ampul

Container Size : 5 mL **Pkg Amt:** > 5 mL

Expiration Date : September 30, 2023 **Storage:** 10°C or colder

Handling: Sonicate prior to use.

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBF3761V) **Purity** 99%	5,002.0 µg/mL	+/- 29.0821 µg/mL +/- 145.9751 µg/mL +/- 177.1352 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d5 **CAS #** 4165-62-2 (Lot CD-105) **Purity** 99%	5,000.6 µg/mL	+/- 29.0739 µg/mL +/- 145.9343 µg/mL +/- 177.0856 µg/mL	Gravimetric Unstressed Stressed
3	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29603) **Purity** 99%	5,006.0 µg/mL	+/- 29.1053 µg/mL +/- 146.0919 µg/mL +/- 177.2768 µg/mL	Gravimetric Unstressed Stressed
4	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot M09E045) **Purity** 99%	5,000.8 µg/mL	+/- 29.0751 µg/mL +/- 145.9401 µg/mL +/- 177.0927 µg/mL	Gravimetric Unstressed Stressed
5	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot 29699MJV) **Purity** 99%	5,000.8 µg/mL	+/- 29.0751 µg/mL +/- 145.9401 µg/mL +/- 177.0927 µg/mL	Gravimetric Unstressed Stressed
6	p-Terphenyl-d14 **CAS #** 1718-51-0 (Lot PR-21037) **Purity** 99%	5,001.0 µg/mL	+/- 29.0762 µg/mL +/- 145.9459 µg/mL +/- 177.0998 µg/mL	Gravimetric Unstressed Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

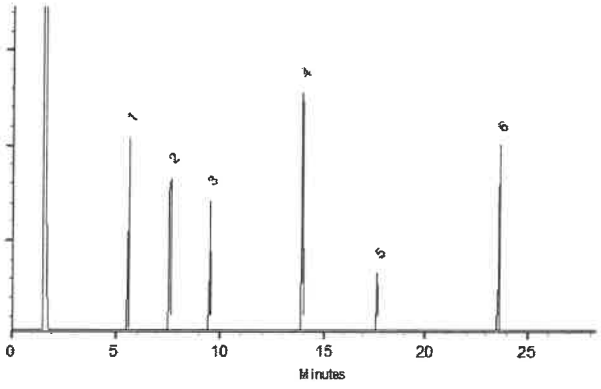
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

F. Joseph Tallon - Mix Technician

Date Mixed: 14-Sep-2018 **Balance:** B442140311

Justine Albertson - Operations Tech-ARM QC

Date Passed: 18-Sep-2018

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

  k is a coverage factor of 2, which gives a level of confidence of approximately 95%.
- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.
- If any undissolved material is visible inside the ampul, sonicate the unopened ampul until the material is completely dissolved.

Method 8270D

Semivolatile Organic Compounds (GC/MS) by Method 8270D

FORM II
GC/MS SEMI VOA SURROGATE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Matrix: Water Level: Low

GC Column (1): RXI-5SILMS/ ID: 0.25(mm)

Client Sample ID	Lab Sample ID	2FP #	PHL #	NBZ #	FBP #	TBP #	TPHL #
5WC23	240-110743-6	75	54	78	72	86	81
	MB 240-376039/14-A	68	51	85	79	78	95
	LCS 240-376039/15-A	84	57	87	78	88	88

	QC LIMITS
2FP = 2-Fluorophenol (Surr)	17-120
PHL = Phenol-d5 (Surr)	15-120
NBZ = Nitrobenzene-d5 (Surr)	35-120
FBP = 2-Fluorobiphenyl (Surr)	32-120
TBP = 2,4,6-Tribromophenol (Surr)	33-120
TPHL = Terphenyl-d14 (Surr)	28-128

Column to be used to flag recovery values

FORM II 8270D

FORM III
GC/MS SEMI VOA LAB CONTROL SAMPLE RECOVERY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Matrix: Water Level: Low Lab File ID: 90416033.D

Lab ID: LCS 240-376039/15-A Client ID:

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC	QC LIMITS REC	#
p-Nitroaniline	32.0	29.0	91	54-135	

Column to be used to flag recovery and RPD values

FORM III 8270D

FORM IV
GC/MS SEMI VOA METHOD BLANK SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab File ID: 90416003.D Lab Sample ID: MB 240-376039/14-A

Matrix: Water Date Extracted: 04/11/2019 10:44

Instrument ID: A4AG2 Date Analyzed: 04/16/2019 06:22

Level:(Low/Med) Low

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
	LCS 240-376039/15-A	90416033.D	04/16/2019 08:22
5WC23	240-110743-6	90416019.D	04/16/2019 13:36

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab File ID: 90408001.D DFTPP Injection Date: 04/08/2019

Instrument ID: A4AG2 DFTPP Injection Time: 09:22

Analysis Batch No.: 375192

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	51.1	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	36.5	
70	Less than 2.0% of mass 69	0.2	(0.6) 1
127	25.0 - 75.0% of mass 198	50.1	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.6	
275	10.0- 30.0% of mass 198	24.1	
365	Greater than 0.75% of mass 198	3.4	
441	Present, but less than mass 443	2.1	
442	40.0 - 110.0% of mass 198	97.6	
443	15.0 - 24.0% of mass 442	19.7	(20.2) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD9 240-375192/2	90408002.D	04/08/2019	09:39
	STD8 240-375192/3	90408003.D	04/08/2019	10:05
	STD7 240-375192/4	90408004.D	04/08/2019	10:29
	STD6 240-375192/5	90408005.D	04/08/2019	10:54
	STD5 240-375192/6	90408006.D	04/08/2019	11:18
	STD4 240-375192/7	90408007.D	04/08/2019	11:42
	STD3 240-375192/8	90408008.D	04/08/2019	12:06
	STD2 240-375192/9	90408009.D	04/08/2019	12:30
	STD1 240-375192/10	90408010.D	04/08/2019	12:54
	ICV 240-375192/11	90408011.D	04/08/2019	13:19

FORM V
GC/MS SEMI VOA INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab File ID: 90416001.D DFTPP Injection Date: 04/16/2019

Instrument ID: A4AG2 DFTPP Injection Time: 05:36

Analysis Batch No.: 376614

M/E	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
51	30.0- 80.0% of mass 198	49.4	
68	Less than 2.0% of mass 69	0.0	(0.0) 1
69	Mass 69 relative abundance	37.9	
70	Less than 2.0% of mass 69	0.2	(0.5) 1
127	25.0 - 75.0% of mass 198	51.2	
197	Less than 1.0% of mass 198	0.0	
198	Base Peak, 100% relative abundance	100.0	
199	5.0 to 9.0% of mass 198	6.9	
275	10.0- 30.0% of mass 198	25.2	
365	Greater than 0.75% of mass 198	3.9	
441	Present, but less than mass 443	1.4	
442	40.0 - 110.0% of mass 198	94.9	
443	15.0 - 24.0% of mass 442	20.0	(21.1) 2

1-Value is % mass 69 2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS AND STANDARDS:

CLIENT SAMPLE ID	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
	STD6 240-376614/2	90416002.D	04/16/2019	05:54
	MB 240-376039/14-A	90416003.D	04/16/2019	06:22
	LCS 240-376039/15-A	90416033.D	04/16/2019	08:22
5WC23	240-110743-6	90416019.D	04/16/2019	13:36

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Sample No.: STD6 240-375192/5 Date Analyzed: 04/08/2019 10:54

Instrument ID: A4AG2 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 90408005.D Heated Purge: (Y/N) N

Calibration ID: 50444

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		196990	6.64	865781	7.69	442766	9.19
UPPER LIMIT		393980	7.14	1731562	8.19	885532	9.69
LOWER LIMIT		98495	6.14	432891	7.19	221383	8.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-375192/11		216332	6.64	931246	7.69	476782	9.19
STD6 240-376614/2 CCVIS		203261	6.64	863270	7.69	439598	9.19

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
ANT = Acenaphthene-d10

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Sample No.: STD6 240-375192/5 Date Analyzed: 04/08/2019 10:54

Instrument ID: A4AG2 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 90408005.D Heated Purge: (Y/N) N

Calibration ID: 50444

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
INITIAL CALIBRATION MID-POINT		777962	10.47	745304	13.36	712301	15.71
UPPER LIMIT		1555924	10.97	1490608	13.86	1424602	16.21
LOWER LIMIT		388981	9.97	372652	12.86	356151	15.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
ICV 240-375192/11		853356	10.47	827626	13.36	792875	15.71
STD6 240-376614/2 CCVIS		780954	10.47	647213	13.36	630986	15.71

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12

Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Sample No.: STD6 240-376614/2 Date Analyzed: 04/16/2019 05:54

Instrument ID: A4AG2 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 90416002.D Heated Purge: (Y/N) N

Calibration ID: 50452

		DCBd4		NPT		ANT	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		203261	6.64	863270	7.69	439598	9.19
UPPER LIMIT		406522	7.14	1726540	8.19	879196	9.69
LOWER LIMIT		101631	6.14	431635	7.19	219799	8.69
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-376039/14-A		178130	6.64	715286	7.69	442805	9.19
LCS 240-376039/15-A		177476	6.64	800795	7.69	417649	9.18
240-110743-6	5WC23	167180	6.63	769138	7.69	406745	9.18

DCBd4 = 1,4-Dichlorobenzene-d4
NPT = Naphthalene-d8
NPT = Naphthalene-d8
ANT = Acenaphthene-d10
Area Limit = 50%-200% of internal standard area
ANT = Acenaphthene-d10
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM VIII
GC/MS SEMI VOA INTERNAL STANDARD AREA AND RETENTION TIME SUMMARY

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Sample No.: STD6 240-376614/2 Date Analyzed: 04/16/2019 05:54

Instrument ID: A4AG2 GC Column: RXI-5SILMS/IIG ID: 0.25(mm)

Lab File ID (Standard): 90416002.D Heated Purge: (Y/N) N

Calibration ID: 50452

		PHN		CRY		PRY	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
12/24 HOUR STD		780954	10.47	647213	13.36	630986	15.71
UPPER LIMIT		1561908	10.97	1294426	13.86	1261972	16.21
LOWER LIMIT		390477	9.97	323607	12.86	315493	15.21
LAB SAMPLE ID	CLIENT SAMPLE ID						
MB 240-376039/14-A		725380	10.47	630297	13.36	592507	15.71
LCS 240-376039/15-A		665114	10.47	631910	13.36	587477	15.71
240-110743-6	5WC23	774630	10.47	694057	13.35	642249	15.71

PHN = Phenanthrene-d10
CRY = Chrysene-d12
PRY = Perylene-d12
PRY = Perylene-d12
Area Limit = 50%-200% of internal standard area
RT Limit = ± 0.5 minutes of internal standard RT

Column used to flag values outside QC limits

FORM VIII 8270D

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Client Sample ID: 5WC23 Lab Sample ID: 240-110743-6

Matrix: Water Lab File ID: 90416019.D

Analysis Method: 8270D Date Collected: 04/09/2019 13:30

Extract. Method: 3510C Date Extracted: 04/11/2019 10:44

Sample wt/vol: 280(mL) Date Analyzed: 04/16/2019 13:36

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 5(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 376614 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-01-6	p-Nitroaniline	1.8	U	1.8	0.82

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	81		28-128
4165-62-2	Phenol-d5 (Surr)	54		15-120
4165-60-0	Nitrobenzene-d5 (Surr)	78		35-120
367-12-4	2-Fluorophenol (Surr)	75		17-120
321-60-8	2-Fluorobiphenyl (Surr)	72		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	86		33-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416019.D
Lims ID: 240-110743-B-6-A
Client ID: 5WC23
Sample Type: Client
Inject. Date: 16-Apr-2019 13:36:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-019
Misc. Info.: 240-110743-B-6-A
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 17-Apr-2019 06:21:51 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX1027

First Level Reviewer: gurneyk Date: 23-Apr-2019 17:21:02

	Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	OnCol Amt ng/ml	Flags
*	1 1,4-Dichlorobenzene-d4	152	6.630	6.636	-0.006	97	167180	400.0	
*	2 Naphthalene-d8	136	7.689	7.689	-0.001	100	769138	400.0	
*	3 Acenaphthene-d10	164	9.183	9.188	-0.005	95	406745	400.0	
*	4 Phenanthrene-d10	188	10.465	10.471	-0.006	95	774630	400.0	
*	5 Chrysene-d12	240	13.353	13.359	-0.006	98	694057	400.0	
*	6 Perylene-d12	264	15.706	15.706	0.000	97	642249	400.0	
$	7 2-Fluorophenol	112	5.583	5.584	-0.006	94	499351	1199.2	
$	8 Phenol-d5	99	6.289	6.283	0.000	0	493426	861.1	
$	9 Nitrobenzene-d5	82	7.071	7.077	-0.006	96	846785	1240.8	
$	10 2-Fluorobiphenyl (Surr)	172	8.577	8.571	0.000	99	1505650	1159.0	
$	11 2,4,6-Tribromophenol	330	9.859	9.858	-0.006	87	175770	1379.0	
$	12 Terphenyl-d14	244	11.935	11.936	-0.006	98	1646397	1299.9	
	125 4-Nitroaniline	138		9.641				ND	U

QC Flag Legend

Review Flags
U - Marked Undetected

Reagents:

SMIS80PPMW_00019 Amount Added: 5.00 Units: uL Run Reagent

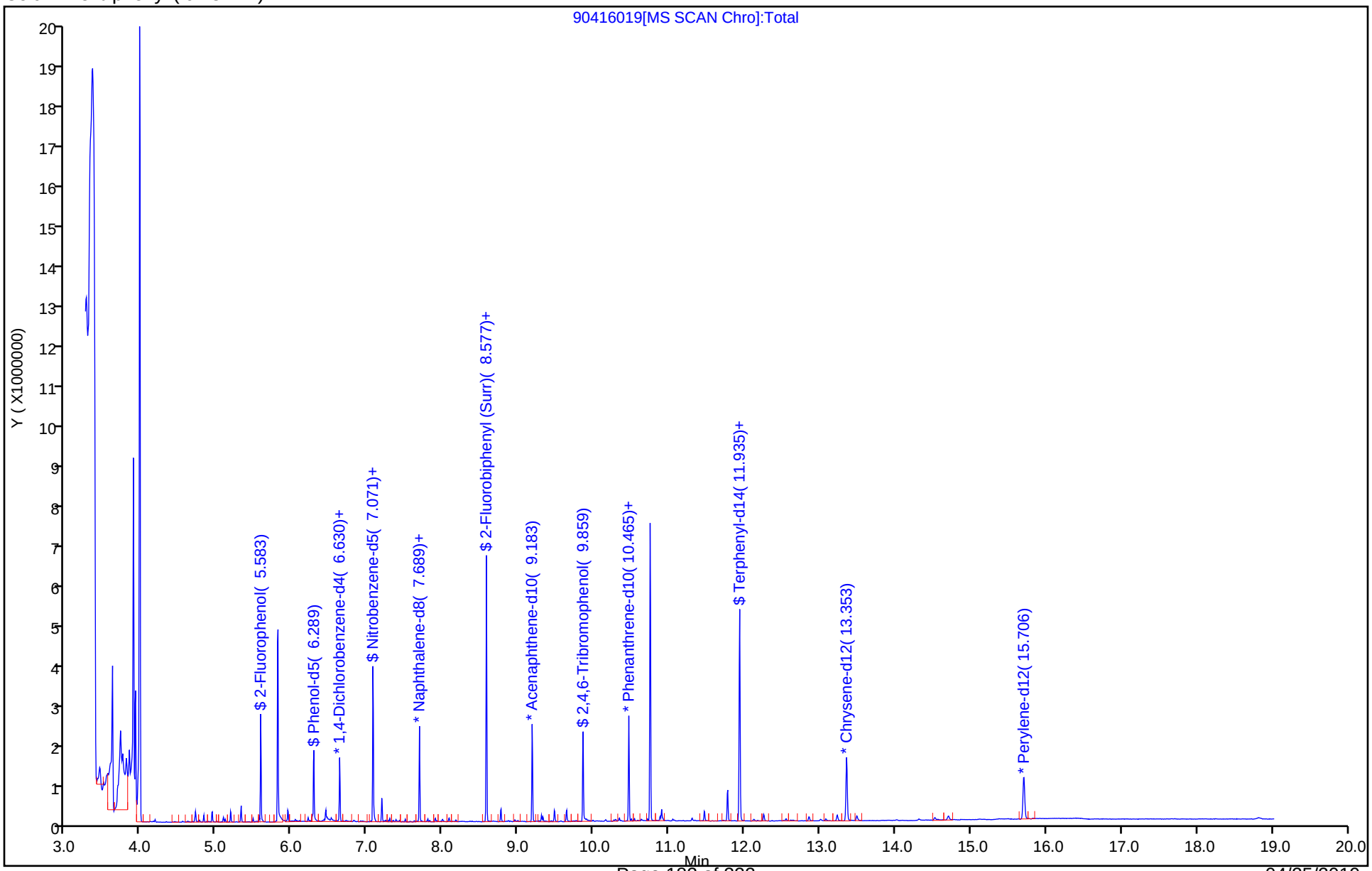
Report Date: 23-Apr-2019 17:21:03 Chrom Revision: 2.3 10-Apr-2019 17:48:54

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416019.D

Injection Date:	16-Apr-2019 13:36:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	240-110743-B-6-A	Lab Sample ID:	240-110743-6	Worklist Smp#:	19
Client ID:	5WC23				
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	19
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416019.D
Lims ID: 240-110743-B-6-A
Client ID: 5WC23
Sample Type: Client
Inject. Date: 16-Apr-2019 13:36:30 ALS Bottle#: 19 Worklist Smp#: 19
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-019
Misc. Info.: 240-110743-B-6-A
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 17-Apr-2019 06:21:51 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX1027

First Level Reviewer: gurneyk Date: 23-Apr-2019 17:21:02

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	1600.0	1199.2	74.95
$ 8 Phenol-d5	1600.0	861.1	53.82
$ 9 Nitrobenzene-d5	1600.0	1240.8	77.55
$ 10 2-Fluorobiphenyl (Surr)	1600.0	1159.0	72.44
$ 11 2,4,6-Tribromophenol	1600.0	1379.0	86.19
$ 12 Terphenyl-d14	1600.0	1299.9	81.24

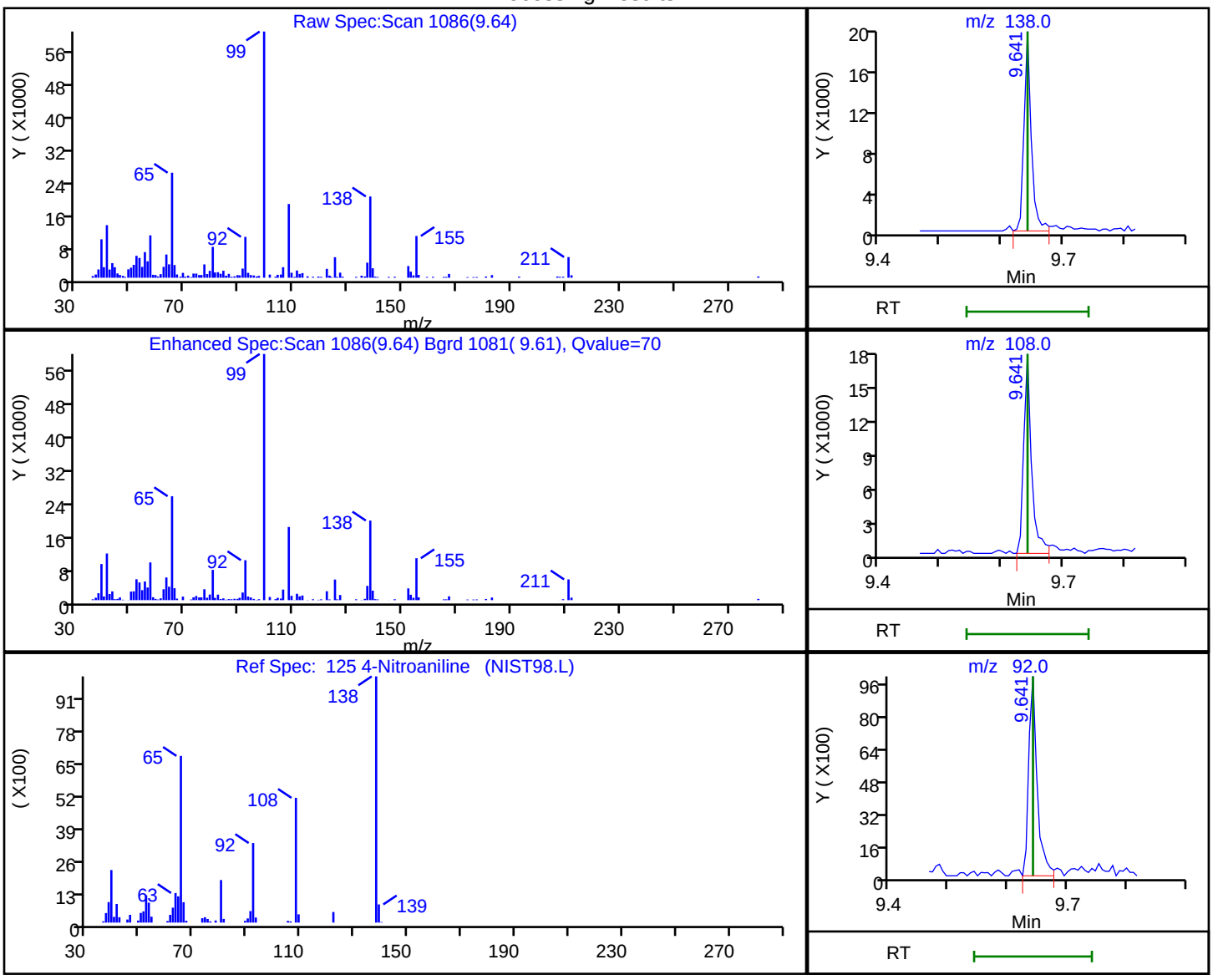
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416019.D				
Injection Date:	16-Apr-2019 13:36:30	Instrument ID:	A4AG2		
Lims ID:	240-110743-B-6-A	Lab Sample ID:	240-110743-6		
Client ID:	5WC23				
Operator ID:		ALS Bottle#:	19	Worklist Smp#:	19
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

125 4-Nitroaniline, CAS: 100-01-6

Processing Results



RT	Mass	Response	Amount
9.64	138.00	16552	60.484883
9.64	108.00	16206	
9.64	92.00	9994	

Reviewer: hulat, 17-Apr-2019 05:57:17

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-375192/10	90408010.D
Level 2	STD2 240-375192/9	90408009.D
Level 3	STD3 240-375192/8	90408008.D
Level 4	STD4 240-375192/7	90408007.D
Level 5	STD5 240-375192/6	90408006.D
Level 6	STD6 240-375192/5	90408005.D
Level 7	STD7 240-375192/4	90408004.D
Level 8	STD8 240-375192/3	90408003.D
Level 9	STD9 240-375192/2	90408002.D

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
1,4-Dioxane	0.3497	0.3907 0.3275	0.3682 0.3706	0.3373 0.4107	0.3459	Ave		0.3626				7.7		20.0			
N-Nitrosodimethylamine	0.9623	0.9570 0.9584	0.9430 0.9731	0.9521 0.9780	0.9235	Ave		0.9559				1.8		20.0			
Pyridine	0.8456 1.0042	0.9808 0.8950	0.9929 1.0534	0.8972 1.1079	0.8961	Ave		0.9637				8.9		20.0			
Benzaldehyde	+++++ 0.7430	1.1949 0.6278	1.1980 +++++	1.1430 +++++	0.9945	Qua	45.234	1.0381	-0.000144		0.0100				0.9970		0.9900
Phenol	1.4265	1.7640 1.3499	1.8911 1.3954	1.7525 1.4451	1.4571	Ave		1.5602			0.8000	13.3		20.0			
Aniline	2.2317	2.3425 2.3392	2.5458 2.3873	2.6032 2.2290	2.3804	Ave		2.3824				5.6		20.0			
Bis(2-chloroethyl)ether	1.5369	1.6855 1.6208	1.7178 1.4405	1.7096 1.3753	1.6654	Ave		1.5940			0.7000	8.1		20.0			
2-Chlorophenol	1.2624	1.3840 1.1636	1.5145 1.1235	1.4536 1.0807	1.3362	Ave		1.2898			0.8000	12.3		20.0			
n-Decane	2.0706	2.5174 1.8976	2.4155 1.8758	2.3385 1.7283	2.1864	Ave		2.1288				13.3		20.0			
1,3-Dichlorobenzene	1.4456	1.6121 1.4183	1.5968 1.3864	1.5837 1.3307	1.4966	Ave		1.4838				7.1		20.0			
1,4-Dichlorobenzene	1.4723	1.6115 1.4467	1.5879 1.4150	1.6089 1.3494	1.5510	Ave		1.5054				6.5		20.0			
Benzyl alcohol	0.9331	0.8726 1.0579	0.9867 1.0230	0.9120 0.9666	0.8484	Ave		0.9500				7.6		20.0			
1,2-Dichlorobenzene	1.3979	1.5708 1.3468	1.5733 1.3007	1.5365 1.2507	1.4918	Ave		1.4336				8.8		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2-Methylphenol	1.1479	1.3755 1.3256	1.4223 1.2992	1.3719 1.2314	1.2029	Ave		1.2971			0.7000	7.4		20.0			
bis (2-chloroisopropyl) ether	2.7474	3.0429 2.7390	3.1309 2.6303	3.1563 2.4525	3.0429	Ave		2.8678				9.1		20.0			
Indene	2.2941	2.7479 2.2336	2.7417 2.0526	2.7217 1.8545	2.5886	Ave		2.4043				14.4		20.0			
3 & 4 Methylphenol	1.1611	1.3293 1.4489	1.3860 1.4324	1.1922 1.3566	1.0227	Ave		1.2911				11.6		20.0			
N-Nitrosodi-n-propylamine	1.1225	1.1803 1.1327	1.1841 1.0913	1.2455 1.0442	1.2553	Ave		1.1570			0.5000	6.3		20.0			
Acetophenone	2.0652	2.2631 2.0738	2.3007 1.9651	2.2112 1.8508	2.2474	Ave		2.1222			0.0100	7.5		20.0			
Hexachloroethane	0.5892	0.5956 0.5799	0.6281 0.5686	0.6266 0.5372	0.6160	Ave		0.5927			0.3000	5.3		20.0			
Nitrobenzene	0.3655	0.3558 0.3642	0.3730 0.3525	0.3854 0.3480	0.3702	Ave		0.3643			0.2000	3.3		20.0			
Isophorone	0.6914	0.7385 0.6819	0.7131 0.6689	0.7707 0.6515	0.7386	Ave		0.7068			0.4000	5.7		20.0			
2,4-Dimethylphenol	0.3222	0.3103 0.3263	0.3175 0.3066	0.2814 0.2960	0.2890	Ave		0.3062			0.2000	5.3		20.0			
2-Nitrophenol	0.1507	0.1160 0.1497	0.1268 0.1445	0.1415 0.1340	0.1507	Ave		0.1392			0.1000	9.1		20.0			
Benzoic acid	0.1409	0.0505 0.1456	0.0622 0.1388	0.1002 0.1283	0.1155	Lin1	-11.59	0.1389							0.9950		0.9900
Bis(2-chloroethoxy)methane	0.4061	0.4628 0.3853	0.4477 0.3684	0.4662 0.3629	0.4312	Ave		0.4163			0.3000	10.0		20.0			
2,4-Dichlorophenol	0.2310	0.2242 0.2604	0.2263 0.2521	0.2096 0.2494	0.1933	Ave		0.2308			0.2000	9.8		20.0			
1,2,4-Trichlorobenzene	0.2636	0.2971 0.2666	0.2868 0.2592	0.2937 0.2512	0.2710	Ave		0.2737				6.2		20.0			
Naphthalene	1.1640 0.9899	1.1009 0.9606	1.0921 0.9430	1.1265 0.8935	1.0566	Ave		1.0363			0.7000	9.0		20.0			
4-Chloroaniline	0.4535	0.3570 0.4396	0.4504 0.4310	0.4545 0.3853	0.4728	Ave		0.4305			0.0100	9.1		20.0			
2,6-Dichlorophenol	0.2581	0.2415 0.2568	0.2499 0.2498	0.2398 0.2446	0.2552	Ave		0.2495				2.8		20.0			
Hexachlorobutadiene	0.1470	0.1614 0.1482	0.1565 0.1470	0.1643 0.1408	0.1529	Ave		0.1522			0.0100	5.3		20.0			
Caprolactam	0.1096 0.1096	0.1079 0.1115	0.1108 0.1099	0.1230 0.1102	0.1144	Ave		0.1119			0.0100	4.1		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
4-Chloro-3-methylphenol	0.2913	0.2081 0.2885	0.2257 0.2824	0.2913 0.2749	0.3048	Ave		0.2709			0.2000	12.8		20.0			
2-Methylnaphthalene	0.7819 0.6499	0.7143 0.6232	0.7091 0.6011	0.7394 0.5744	0.6948	Ave		0.6765			0.4000	10.1		20.0			
1-Methylnaphthalene	0.7328 0.5959	0.6606 0.5846	0.6609 0.5602	0.6866 0.5405	0.6415	Ave		0.6293				10.0		20.0			
Hexachlorocyclopentadiene	0.3208	0.2317 0.3234	0.2622 0.3230	0.2788 0.3134	0.3040	Ave		0.2947			0.0500	11.5		20.0			
1,2,4,5-Tetrachlorobenzene	0.4895	0.5112 0.4702	0.5206 0.4653	0.4869 0.4428	0.4980	Ave		0.4855			0.0100	5.2		20.0			
2,4,6-Trichlorophenol	0.3564	0.2534 0.3525	0.2696 0.3374	0.3334 0.3329	0.3567	Ave		0.3240			0.2000	12.4		20.0			
2,4,5-Trichlorophenol	0.3770	0.1933 0.3684	0.2187 0.3596	0.3478 0.3553	0.3597	Lin1	-9.295	0.3684			0.2000				0.9990		0.9900
1,1'-Biphenyl	1.6113 1.4414	1.5792 1.3836	1.6035 1.3408	1.5881 1.2599	1.5050	Ave		1.4792			0.0100	8.7		20.0			
2-Chloronaphthalene	1.2723 1.1557	1.2244 1.1189	1.2223 1.1043	1.2505 1.0416	1.2260	Ave		1.1795			0.8000	6.6		20.0			
2-Nitroaniline	0.4283	0.2719 0.4216	0.3209 0.4251	0.3920 0.4059	0.4220	Ave		0.3860			0.0100	15.0		20.0			
Dimethyl phthalate	1.3082	1.3797 1.2723	1.3841 1.2493	1.3984 1.1926	1.3561	Ave		1.3176			0.0100	5.6		20.0			
1,3-Dinitrobenzene	0.2029	0.1027 0.2068	0.1294 0.2074	0.1701 0.2027	0.1901	Lin1	-6.368	0.2080							1.0000		0.9900
2,6-Dinitrotoluene	0.2982	0.2131 0.2946	0.2502 0.2893	0.2869 0.2804	0.3053	Ave		0.2772				11.1		20.0			
Acenaphthylene	1.8853 1.7918	1.8948 1.7166	1.9018 1.7009	1.9631 1.5888	1.8890	Ave		1.8147			0.9000	6.8		20.0			
3-Nitroaniline	0.3092	0.2029 0.2978	0.2738 0.2874	0.3138 0.2766	0.3495	Ave		0.2889			0.0100	14.7		20.0			
2,4-Dinitrophenol	0.1080	0.0365 0.1136	0.0466 0.1179	0.0603 0.1111	0.0859	Lin1	-12.09	0.1149			0.0100				0.9950		0.9900
Acenaphthene	1.3479 1.0702	1.2419 1.0218	1.2315 0.9984	1.1967 0.9162	1.1516	Ave		1.1307			0.9000	12.3		20.0			
4-Nitrophenol	0.1757	0.1056 0.1856	0.1383 0.1875	0.1578 0.1828	0.1834	Ave		0.1646				17.8		20.0			
2,4-Dinitrotoluene	0.3847	0.2322 0.3913	0.2957 0.3892	0.3540 0.3749	0.3885	Ave		0.3513			0.2000	16.4		20.0			
Dibenzofuran	1.8883 1.6278	1.8287 1.5847	1.8071 1.5372	1.8251 1.4496	1.7408	Ave		1.6988			0.8000	9.0		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
2,3,4,6-Tetrachlorophenol	0.2587	0.2046 0.2550	0.2212 0.2574	0.2495 0.2485	0.2564	Ave		0.2439			0.0100	8.2		20.0			
Hexadecane	1.1264	1.3142 1.0281	1.4012 0.9371	1.3830 0.8557	1.2785	Ave		1.1655				17.9		20.0			
Diethyl phthalate	1.1466	1.4227 1.0786	1.3188 1.0086	1.3389 0.9480	1.2644	Ave		1.1908			0.0100	14.3		20.0			
4-Chlorophenyl phenyl ether	0.6124	0.6896 0.6040	0.6731 0.5834	0.6636 0.5454	0.6494	Ave		0.6276			0.4000	7.9		20.0			
p-Nitroaniline	0.2760	0.2639 0.2393	0.3045 0.2113	0.3381 0.1974	0.3224	Ave		0.2691			0.0100	19.0		20.0			
Fluorene	1.5272 1.2846	1.4552 1.2511	1.4833 1.2084	1.4724 1.1248	1.3951	Ave		1.3558			0.9000	10.5		20.0			
4,6-Dinitro-2-methylphenol	0.0868	0.0305 0.0929	0.0426 0.0930	0.0566 0.0905	0.0761	Lin1	-8.781	0.0928			0.0100				0.9970		0.9900
Diphenylamine	0.6453	0.6975 0.6225	0.6988 0.6195	0.6959 0.5979	0.6823	Ave		0.6575				6.2		20.0			
N-Nitrosodiphenylamine	0.5485	0.5929 0.5291	0.5940 0.5266	0.5916 0.5082	0.5799	Ave		0.5588			0.0100	6.2		20.0			
Azobenzene	0.8454	0.8781 0.8239	0.8735 0.7898	0.9009 0.7550	0.8923	Ave		0.8448				6.1		20.0			
4-Bromophenyl phenyl ether	0.1851	0.1912 0.1813	0.1909 0.1785	0.1893 0.1713	0.1886	Ave		0.1845			0.1000	3.8		20.0			
Atrazine	0.1729 0.1791	0.1909 0.1584	0.1951 0.1492	0.1965 0.1407	0.1870	Ave		0.1744			0.0100	11.8		20.0			
Hexachlorobenzene	0.2355 0.1894	0.2094 0.1817	0.2035 0.1808	0.2040 0.1758	0.1957	Ave		0.1973			0.1000	9.4		20.0			
n-Octadecane	0.7239	0.7093 0.6837	0.7709 0.6409	0.8071 0.5973	0.7892	Ave		0.7153				10.2		20.0			
Pentachlorophenol	0.0978	0.0529 0.1048	0.0647 0.1044	0.0799 0.1011	0.0914	Lin1	-6.715	0.1037			0.0500				0.9990		0.9900
Phenanthrene	1.2452 1.0195	1.1614 0.9864	1.1547 0.9622	1.1585 0.9213	1.0993	Ave		1.0787			0.7000	10.2		20.0			
Anthracene	1.1446 1.0549	1.1578 1.0201	1.1456 0.9892	1.1665 0.9524	1.1339	Ave		1.0850			0.7000	7.5		20.0			
Carbazole	0.9869	1.1203 0.9650	1.0927 0.9206	1.0874 0.8942	1.0579	Ave		1.0156			0.0100	8.4		20.0			
Di-n-butyl phthalate	1.2207	1.2262 1.1893	1.2488 1.1246	1.3143 1.0913	1.2939	Ave		1.2136			0.0100	6.3		20.0			
Fluoranthene	1.2090 1.1285	1.1896 1.1061	1.1664 1.0722	1.1746 1.0295	1.1695	Ave		1.1384			0.6000	5.2		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
CURVE EVALUATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	RRF					CURVE TYPE	COEFFICIENT			#	MIN RRF	%RSD	#	MAX %RSD	R^2 OR COD	#	MIN R^2 OR COD
	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5		B	M1	M2								
Benzidine	0.5176	0.1773 0.5808	0.3434 0.5314	0.4151 0.5249	0.5146	Lin1	-39.57	0.5485							0.9980		0.9900
Pyrene	1.3057 1.2116	1.3460 1.1845	1.3222 1.1725	1.3284 1.1393	1.2783	Ave		1.2543			0.6000	6.2		20.0			
Butyl benzyl phthalate	0.5835	0.4591 0.5912	0.5298 0.5782	0.5678 0.5676	0.5984	Ave		0.5595			0.0100	8.1		20.0			
Bis(2-ethylhexyl) phthalate	0.7755	0.6376 0.7827	0.6858 0.7645	0.7795 0.7563	0.8074	Ave		0.7487			0.0100	7.6		20.0			
3,3'-Dichlorobenzidine	0.4059	0.3087 0.4080	0.3794 0.3913	0.4369 0.3893	0.4454	Ave		0.3956			0.0100	10.6		20.0			
Benzo[a]anthracene	1.1788 1.1843	1.1501 1.1978	1.1759 1.1818	1.2465 1.1646	1.2319	Ave		1.1902			0.8000	2.6		20.0			
Chrysene	1.3104 1.1425	1.2192 1.1403	1.2088 1.1302	1.2301 1.1131	1.1852	Ave		1.1866			0.7000	5.3		20.0			
Di-n-octyl phthalate	1.4631	0.8564 1.5049	1.0712 1.4820	1.3003 1.4189	1.4650	Ave		1.3202			0.0100	17.9		20.0			
Benzo[b]fluoranthene	1.0437 1.1519	1.1427 1.2103	1.1487 1.1750	1.1835 1.1801	1.2152	Ave		1.1612			0.7000	4.4		20.0			
Benzo[k]fluoranthene	1.1784 1.2916	1.2369 1.2865	1.1905 1.2852	1.2999 1.2265	1.2979	Ave		1.2548			0.7000	3.8		20.0			
Benzo[a]pyrene	0.9155 1.1577	1.0893 1.1826	1.0791 1.1921	1.1439 1.1586	1.1820	Ave		1.1223			0.7000	7.8		20.0			
Indeno[1,2,3-cd]pyrene	0.9582 1.2026	0.9830 1.2047	1.0415 1.2227	1.1331 1.2120	1.1886	Ave		1.1274			0.5000	9.3		20.0			
Dibenz(a,h)anthracene	0.7477 1.0077	0.8008 1.0288	0.8855 1.0496	0.9470 1.0251	1.0203	Ave		0.9458			0.4000	11.7		20.0			
Benzo[g,h,i]perylene	0.9230 1.0266	0.8421 1.0143	0.9323 1.0494	0.9681 1.0398	1.0042	Ave		0.9777			0.5000	7.0		20.0			
2-Fluorophenol (Surr)	1.0282	1.0412 0.8565	1.0345 0.9889	1.0313 1.0410	0.9490	Ave		0.9963				6.5		20.0			
Phenol-d5 (Surr)	1.2574	1.5851 1.1758	1.6319 1.2383	1.5135 1.2927	1.2729	Ave		1.3709				12.9		20.0			
Nitrobenzene-d5 (Surr)	0.3412 0.3607	0.3339 0.3624	0.3554 0.3562	0.3736 0.3483	0.3626	Ave		0.3549				3.4		20.0			
2-Fluorobiphenyl (Surr)	1.3970 1.2504	1.3313 1.2011	1.3662 1.1755	1.3540 1.1112	1.3111	Ave		1.2775				7.7		20.0			
2,4,6-Tribromophenol (Surr)	0.1347	0.1037 0.1333	0.1135 0.1351	0.1189 0.1324	0.1312	Ave		0.1253				9.4		20.0			
Terphenyl-d14 (Surr)	0.8025 0.7078	0.7129 0.7144	0.7419 0.7052	0.7627 0.6967	0.7256	Ave		0.7300				4.7		20.0			

Note: The M1 coefficient is the same as Ave RRF for an Ave curve type.

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

Calibration Files:

LEVEL:	LAB SAMPLE ID:	LAB FILE ID:
Level 1	STD1 240-375192/10	90408010.D
Level 2	STD2 240-375192/9	90408009.D
Level 3	STD3 240-375192/8	90408008.D
Level 4	STD4 240-375192/7	90408007.D
Level 5	STD5 240-375192/6	90408006.D
Level 6	STD6 240-375192/5	90408005.D
Level 7	STD7 240-375192/4	90408004.D
Level 8	STD8 240-375192/3	90408003.D
Level 9	STD9 240-375192/2	90408002.D

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1,4-Dioxane	DCBd 4	Ave	172240	9371 240118	17597 366036	32122 508614	79180	1000	50.0 1500	100 2000	200 2500	500
N-Nitrosodimethylamine	DCBd 4	Ave	473928	22953 702573	45062 961145	90671 1211169	211381	1000	50.0 1500	100 2000	200 2500	500
Pyridine	DCBd 4	Ave	7117 989045	47045 1312269	94888 2080800	170876 2744210	410212	20.0 2000	100 3000	200 4000	400 5000	1000
Benzaldehyde	DCBd 4	Qua	+++++ 731831	57317 920431	114491 +++++	217687 +++++	455300	+++++ 2000	100 3000	200 +++++	400 +++++	1000
Phenol	DCBd 4	Ave	702529	42307 989551	90367 1378212	166886 1789711	333527	1000	50.0 1500	100 2000	200 2500	500
Aniline	DCBd 4	Ave	1099034	56182 1714807	121653 2357844	247905 2760530	544872	1000	50.0 1500	100 2000	200 2500	500
Bis(2-chloroethyl)ether	DCBd 4	Ave	756873	40424 1188145	82088 1422736	162801 1703227	381213	1000	50.0 1500	100 2000	200 2500	500
2-Chlorophenol	DCBd 4	Ave	621705	33193 853011	72370 1109699	138423 1338471	305859	1000	50.0 1500	100 2000	200 2500	500
n-Decane	DCBd 4	Ave	1019730	60376 1391070	115428 1852684	222692 2140453	500457	1000	50.0 1500	100 2000	200 2500	500
1,3-Dichlorobenzene	DCBd 4	Ave	711910	38664 1039709	76302 1369316	150817 1648077	342560	1000	50.0 1500	100 2000	200 2500	500
1,4-Dichlorobenzene	DCBd 4	Ave	725065	38650 1060560	75880 1397581	153211 1671260	355027	1000	50.0 1500	100 2000	200 2500	500
Benzyl alcohol	DCBd 4	Ave	459505	20928 775542	47151 1010446	86849 1197123	194191	1000	50.0 1500	100 2000	200 2500	500
1,2-Dichlorobenzene	DCBd 4	Ave	688408	37673 987287	75181 1284721	146319 1549013	341472	1000	50.0 1500	100 2000	200 2500	500
2-Methylphenol	DCBd 4	Ave	565316	32989 971749	67964 1283211	130646 1525085	275346	1000	50.0 1500	100 2000	200 2500	500

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
bis (2-chloroisopropyl) ether	DCBd 4	Ave	1353047	72980 2007942	149610 2597907	300570 3037348	696521	1000	50.0 1500	100 2000	200 2500	500
Indene	DCBd 4	Ave	2259612	131810 3274765	262024 4054627	518376 4593389	1185028	2000	100 3000	200 4000	400 5000	1000
3 & 4 Methylphenol	DCBd 4	Ave	571795	31881 1062139	66230 1414732	113537 1680149	234098	1000	50.0 1500	100 2000	200 2500	500
N-Nitrosodi-n-propylamine	DCBd 4	Ave	552809	28307 830380	56583 1077836	118608 1293239	287346	1000	50.0 1500	100 2000	200 2500	500
Acetophenone	DCBd 4	Ave	1017066	54276 1520272	109940 1940849	210577 2292184	514415	1000	50.0 1500	100 2000	200 2500	500
Hexachloroethane	DCBd 4	Ave	290166	14284 425122	30014 561549	59675 665345	141003	1000	50.0 1500	100 2000	200 2500	500
Nitrobenzene	NPT	Ave	791021	36822 1208022	80211 1559972	160970 1881547	388293	1000	50.0 1500	100 2000	200 2500	500
Isophorone	NPT	Ave	1496461	76426 2261932	153353 2960327	321913 3522191	774781	1000	50.0 1500	100 2000	200 2500	500
2,4-Dimethylphenol	NPT	Ave	697417	32112 1082215	68288 1356763	117563 1600132	303166	1000	50.0 1500	100 2000	200 2500	500
2-Nitrophenol	NPT	Ave	326088	12008 496697	27280 639520	59121 724448	158032	1000	50.0 1500	100 2000	200 2500	500
Benzoic acid	NPT	Lin1	609859	10456 965671	26763 1228781	83703 1387161	242411	2000	100 3000	200 4000	400 5000	1000
Bis(2-chloroethoxy)methane	NPT	Ave	878984	47892 1278037	96275 1630492	194744 1961932	452254	1000	50.0 1500	100 2000	200 2500	500
2,4-Dichlorophenol	NPT	Ave	500048	23204 863775	48667 1115812	87540 1348082	202732	1000	50.0 1500	100 2000	200 2500	500
1,2,4-Trichlorobenzene	NPT	Ave	570657	30746 884159	61673 1147182	122682 1358280	284296	1000	50.0 1500	100 2000	200 2500	500
Naphthalene	NPT	Ave	22885 2142613	113929 3186442	234863 4173206	470544 4830450	1108273	10.0 1000	50.0 1500	100 2000	200 2500	500
4-Chloroaniline	NPT	Ave	981521	36943 1458172	96870 1907229	189844 2083114	495967	1000	50.0 1500	100 2000	200 2500	500
2,6-Dichlorophenol	NPT	Ave	558638	24987 851965	53748 1105411	100151 1322580	267669	1000	50.0 1500	100 2000	200 2500	500
Hexachlorobutadiene	NPT	Ave	318092	16704 491593	33651 650621	68609 760984	160387	1000	50.0 1500	100 2000	200 2500	500
Caprolactam	NPT	Ave	4308 474562	22323 739881	47649 972545	102779 1191187	239920	20.0 2000	100 3000	200 4000	400 5000	1000
4-Chloro-3-methylphenol	NPT	Ave	630553	21537 956899	48531 1249897	121689 1486014	319693	1000	50.0 1500	100 2000	200 2500	500
2-Methylnaphthalene	NPT	Ave	15373 1406630	73918 2067255	152491 2660200	308852 3105588	728829	10.0 1000	50.0 1500	100 2000	200 2500	500

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
1-Methylnaphthalene	NPT	Ave	14408 1289868	68366 1939204	142127 2479370	286780 2922334	672910	10.0 1000	50.0 1500	100 2000	200 2500	500
Hexachlorocyclopentadiene	ANT	Ave	 355095	12792 556445	29217 729574	62293 890157	165974	 1000	50.0 1500	100 2000	200 2500	500
1,2,4,5-Tetrachlorobenzene	ANT	Ave	 541802	28218 808934	58017 1051256	108790 1257447	271906	 1000	50.0 1500	100 2000	200 2500	500
2,4,6-Trichlorophenol	ANT	Ave	 394547	13990 606535	30040 762113	74495 945444	194762	 1000	50.0 1500	100 2000	200 2500	500
2,4,5-Trichlorophenol	ANT	Lin1	 417341	10672 633758	24370 812332	77710 1008961	196407	 1000	50.0 1500	100 2000	200 2500	500
1,1'-Biphenyl	ANT	Ave	16604 1595487	87177 2380510	178699 3028975	354860 3578128	821789	10.0 1000	50.0 1500	100 2000	200 2500	500
2-Chloronaphthalene	ANT	Ave	13111 1279277	67595 1924975	136215 2494763	279419 2958121	669404	10.0 1000	50.0 1500	100 2000	200 2500	500
2-Nitroaniline	ANT	Ave	 474123	15011 725309	35767 960332	87590 1152806	230419	 1000	50.0 1500	100 2000	200 2500	500
Dimethyl phthalate	ANT	Ave	 1448092	76168 2189033	154243 2822344	312471 3386984	740460	 1000	50.0 1500	100 2000	200 2500	500
1,3-Dinitrobenzene	ANT	Lin1	 224577	5669 355735	14417 468611	38005 575737	103793	 1000	50.0 1500	100 2000	200 2500	500
2,6-Dinitrotoluene	ANT	Ave	 330103	11763 506796	27888 653645	64102 796334	166681	 1000	50.0 1500	100 2000	200 2500	500
Acenaphthylene	ANT	Ave	19428 1983373	104602 2953428	211936 3842507	438663 4512346	1031459	10.0 1000	50.0 1500	100 2000	200 2500	500
3-Nitroaniline	ANT	Ave	 342299	11200 512337	30510 649193	70127 785505	190841	 1000	50.0 1500	100 2000	200 2500	500
2,4-Dinitrophenol	ANT	Lin1	 239165	4029 390838	10380 532901	26929 631039	93780	 2000	100 3000	200 4000	400 5000	1000
Acenaphthene	ANT	Ave	13890 1184655	68559 1758073	137239 2255461	267401 2602102	628794	10.0 1000	50.0 1500	100 2000	200 2500	500
4-Nitrophenol	ANT	Ave	 388957	11655 638697	30820 847093	70522 1038232	200253	 2000	100 3000	200 4000	400 5000	1000
2,4-Dinitrotoluene	ANT	Ave	 425824	12821 673251	32954 879156	79110 1064810	212113	 1000	50.0 1500	100 2000	200 2500	500
Dibenzofuran	ANT	Ave	19459 1801798	100952 2726463	201387 3472746	407835 4116943	950551	10.0 1000	50.0 1500	100 2000	200 2500	500
2,3,4,6-Tetrachlorophenol	ANT	Ave	 286339	11295 438793	24656 581444	55750 705672	140003	 1000	50.0 1500	100 2000	200 2500	500
Hexadecane	ANT	Ave	 1246823	72552 1768887	156156 2116906	309029 2430265	698092	 1000	50.0 1500	100 2000	200 2500	500
Diethyl phthalate	ANT	Ave	 1269233	78540 1855699	146974 2278623	299183 2692263	690410	 1000	50.0 1500	100 2000	200 2500	500

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
4-Chlorophenyl phenyl ether	ANT	Ave	677861	38068 1039154	75007 1317909	148289 1548832	354575	1000	50.0 1500	100 2000	200 2500	500
p-Nitroaniline	ANT	Ave	305552	14566 411630	33932 477426	75552 560676	176063	1000	50.0 1500	100 2000	200 2500	500
Fluorene	ANT	Ave	15738 1421942	80332 2152518	165305 2729945	329014 3194532	761744	10.0 1000	50.0 1500	100 2000	200 2500	500
4,6-Dinitro-2-methylphenol	PHN	Lin1	337621	6054 564238	17037 735628	45849 893151	147479	2000	100 3000	200 4000	400 5000	1000
Diphenylamine	PHN	Ave	1066821	58876 1606225	118866 2082586	239408 2506340	562146	850	42.5 1275	85.0 1700	170 2125	425
N-Nitrosodiphenylamine	PHN	Ave	1066821	58876 1606225	118866 2082586	239408 2506340	562146	1000	50.0 1500	100 2000	200 2500	500
Azobenzene	PHN	Ave	1644169	87204 2501047	174809 3123593	364589 3723898	864902	1000	50.0 1500	100 2000	200 2500	500
4-Bromophenyl phenyl ether	PHN	Ave	360092	18992 550389	38209 705827	76620 845033	182806	1000	50.0 1500	100 2000	200 2500	500
Atrazine	PHN	Ave	6513 696835	37911 961819	78098 1179952	159064 1388104	362522	20.0 2000	100 3000	200 4000	400 5000	1000
Hexachlorobenzene	PHN	Ave	4436 368271	20791 551457	40729 715014	82565 867292	189676	10.0 1000	50.0 1500	100 2000	200 2500	500
n-Octadecane	PHN	Ave	1407954	70438 2075492	154274 2534716	326640 2946071	764982	1000	50.0 1500	100 2000	200 2500	500
Pentachlorophenol	PHN	Lin1	380558	10508 636557	25891 826139	64677 997315	177186	2000	100 3000	200 4000	400 5000	1000
Phenanthrene	PHN	Ave	23460 1982753	115336 2994425	231079 3805335	468842 4543785	1065631	10.0 1000	50.0 1500	100 2000	200 2500	500
Anthracene	PHN	Ave	21563 2051689	114977 3096795	229273 3912280	472085 4697330	1099117	10.0 1000	50.0 1500	100 2000	200 2500	500
Carbazole	PHN	Ave	1919351	111250 2929653	218686 3640858	440085 4410314	1025477	1000	50.0 1500	100 2000	200 2500	500
Di-n-butyl phthalate	PHN	Ave	2374177	121770 3610458	249923 4447523	531894 5382095	1254209	1000	50.0 1500	100 2000	200 2500	500
Fluoranthene	PHN	Ave	22777 2194841	118138 3357816	233422 4240520	475365 5077640	1133625	10.0 1000	50.0 1500	100 2000	200 2500	500
Benzidine	CRY	Lin1	1928877	31780 3426580	125154 3991998	312648 4848365	947068	2000	100 3000	200 4000	400 5000	1000
Pyrene	CRY	Ave	21808 2257493	120606 3493748	240943 4404174	500282 5261745	1176396	10.0 1000	50.0 1500	100 2000	200 2500	500
Butyl benzyl phthalate	CRY	Ave	1087237	41137 1743980	96546 2172091	213825 2621510	550642	1000	50.0 1500	100 2000	200 2500	500
Bis(2-ethylhexyl) phthalate	CRY	Ave	1444895	57135 2308626	124974 2871741	293551 3492873	742999	1000	50.0 1500	100 2000	200 2500	500

FORM VI
GC/MS SEMI VOA BY INTERNAL STANDARD - INITIAL CALIBRATION DATA
RESPONSE AND CONCENTRATION

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2 Analy Batch No.: 375192

SDG No.:

Instrument ID: A4AG2 GC Column: RXI-5SILMS/ ID: 0.25(mm) Heated Purge: (Y/N) N

Calibration Start Date: 04/08/2019 09:39 Calibration End Date: 04/08/2019 12:54 Calibration ID: 50444

ANALYTE	IS REF	CURVE TYPE	RESPONSE					CONCENTRATION (NG/ML)				
			LVL 1 LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5	LVL 6	LVL 2 LVL 7	LVL 3 LVL 8	LVL 4 LVL 9	LVL 5
3,3'-Dichlorobenzidine	CRY	Ave	1512579	55314 2406990	138281 2940025	329088 3595796	819799	2000	100 3000	200 4000	400 5000	1000
Benzo[a]anthracene	CRY	Ave	19688 2206566	103055 3533018	214276 4439270	469427 5378942	1133656	10.0 1000	50.0 1500	100 2000	200 2500	500
Chrysene	CRY	Ave	21886 2128809	109248 3363587	220265 4245631	463249 5140969	1090653	10.0 1000	50.0 1500	100 2000	200 2500	500
Di-n-octyl phthalate	PRY	Ave	2605475	68184 4279962	180720 5434258	461805 6572961	1300095	1000	50.0 1500	100 2000	200 2500	500
Benzo[b]fluoranthene	PRY	Ave	16013 2051308	90977 3442066	193783 4308387	420316 5467053	1078431	10.0 1000	50.0 1500	100 2000	200 2500	500
Benzo[k]fluoranthene	PRY	Ave	18079 2299990	98481 3658678	200850 4712633	461683 5681967	1151768	10.0 1000	50.0 1500	100 2000	200 2500	500
Benzo[a]pyrene	PRY	Ave	14045 2061499	86723 3363318	182048 4371316	406274 5367353	1048958	10.0 1000	50.0 1500	100 2000	200 2500	500
Indeno[1,2,3-cd]pyrene	PRY	Ave	14700 2141546	78262 3426223	175699 4483505	402412 5614412	1054849	10.0 1000	50.0 1500	100 2000	200 2500	500
Dibenz(a,h)anthracene	PRY	Ave	11472 1794462	63759 2925829	149380 3848646	336326 4748930	905440	10.0 1000	50.0 1500	100 2000	200 2500	500
Benzo[g,h,i]perylene	PRY	Ave	14160 1828071	67048 2884528	157282 3847856	343822 4816830	891129	10.0 1000	50.0 1500	100 2000	200 2500	500
2-Fluorophenol (Surr)	DCBd 4	Ave	506382	24972 627874	49434 976724	98213 1289229	217219	1000	50.0 1500	100 2000	200 2500	500
Phenol-d5 (Surr)	DCBd 4	Ave	619227	38017 861936	77981 1223074	144130 1600923	291368	1000	50.0 1500	100 2000	200 2500	500
Nitrobenzene-d5 (Surr)	NPT	Ave	6709 780759	34551 1202241	76424 1576275	156049 1883089	380366	10.0 1000	50.0 1500	100 2000	200 2500	500
2-Fluorobiphenyl (Surr)	ANT	Ave	14396 1384107	73496 2066391	152247 2655600	302555 3155947	715897	10.0 1000	50.0 1500	100 2000	200 2500	500
2,4,6-Tribromophenol (Surr)	ANT	Ave	149103	5726 229259	12649 305157	26572 375922	71662	1000	50.0 1500	100 2000	200 2500	500
Terphenyl-d14 (Surr)	CRY	Ave	13403 1318844	63877 2107094	135188 2648844	287237 3217904	667766	10.0 1000	50.0 1500	100 2000	200 2500	500

Curve Type Legend:

Ave = Average ISTD
Lin1 = Linear 1/conc ISTD
Qua = Quadratic ISTD

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408002.D
Lims ID: std9 l1lvi
Client ID:
Sample Type: IC Calib Level: 9
Inject. Date: 08-Apr-2019 09:39:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-002
Misc. Info.: STD9 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:02:41 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 10:06:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.641	6.641	0.000	97	198156	400.0	400.0	
* 2 Naphthalene-d8	136	7.694	7.694	0.000	99	865010	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.188	0.000	95	454403	400.0	400.0	
* 4 Phenanthrene-d10	188	10.476	10.476	0.000	97	789125	400.0	400.0	
* 5 Chrysene-d12	240	13.370	13.370	0.000	96	738967	400.0	400.0	
* 6 Perylene-d12	264	15.717	15.717	0.000	97	741207	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	1289229	2500.0	2612.0	
$ 8 Phenol-d5	99	6.294	6.294	0.000	0	1600923	2500.0	2357.2	
$ 9 Nitrobenzene-d5	82	7.082	7.082	0.000	94	1883089	2500.0	2453.4	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	100	3155947	2500.0	2174.6	
$ 11 2,4,6-Tribromophenol	330	9.870	9.870	0.000	91	375922	2500.0	2640.0	
$ 12 Terphenyl-d14	244	11.946	11.946	0.000	100	3217904	2500.0	2386.2	
26 1,4-Dioxane	88	4.270	4.270	0.000	92	508614	2500.0	2831.5	a
27 N-Nitrosodimethylamine	74	4.511	4.511	0.000	90	1211169	2500.0	2557.6	
28 Pyridine	79	4.564	4.564	0.000	83	2744210	5000.0	5748.4	a
42 Benzaldehyde	77		6.282				ND	ND	U
43 Phenol	94	6.305	6.305	0.000	98	1789711	2500.0	2315.6	
44 Aniline	93	6.364	6.364	0.000	96	2760530	2500.0	2339.0	
45 Bis(2-chloroethyl)ether	93	6.388	6.388	0.000	92	1703227	2500.0	2157.0	
47 2-Chlorophenol	128	6.470	6.470	0.000	95	1338471	2500.0	2094.8	
244 n-Decane	57	6.476	6.476	0.000	89	2140453	2500.0	2029.7	
48 1,3-Dichlorobenzene	146	6.600	6.600	0.000	96	1648077	2500.0	2242.1	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	91	1671260	2500.0	2241.1	
50 Benzyl alcohol	108	6.723	6.723	0.000	91	1197123	2500.0	2543.6	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	1549013	2500.0	2181.2	
52 2-Methylphenol	108	6.794	6.794	0.000	96	1525085	2500.0	2373.4	
54 2,2'-oxybis[1-chloropropan	45	6.823	6.823	0.000	93	3037348	2500.0	2138.0	
53 Indene	115	6.858	6.858	0.000	91	4593389	5000.0	3856.5	
55 3 & 4 Methylphenol	108	6.917	6.917	0.000	95	1680149	2500.0	2626.8	
57 N-Nitrosodi-n-propylamine	70	6.929	6.929	0.000	89	1293239	2500.0	2256.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.947	6.947	0.000	94	2292184	2500.0	2180.3	
61 Hexachloroethane	117	7.070	7.070	0.000	96	665345	2500.0	2266.2	
62 Nitrobenzene	77	7.099	7.099	0.000	93	1881547	2500.0	2388.3	
64 Isophorone	82	7.282	7.282	0.000	98	3522191	2500.0	2304.3	
66 2,4-Dimethylphenol	107	7.358	7.358	0.000	90	1600132	2500.0	2416.8	
65 2-Nitrophenol	139	7.364	7.364	0.000	94	724448	2500.0	2405.8	
69 Bis(2-chloroethoxy)methane	93	7.435	7.435	0.000	96	1961932	2500.0	2179.2	
70 Benzoic acid	122	7.447	7.447	0.000	93	1387161	5000.0	4700.8	
72 2,4-Dichlorophenol	162	7.558	7.558	0.000	97	1348082	2500.0	2701.1	
73 1,2,4-Trichlorobenzene	180	7.641	7.641	0.000	93	1358280	2500.0	2295.2	
74 Naphthalene	128	7.717	7.717	0.000	98	4830450	2500.0	2155.4	
75 4-Chloroaniline	127	7.729	7.729	0.000	94	2083114	2500.0	2237.5	M
76 2,6-Dichlorophenol	162	7.747	7.747	0.000	95	1322580	2500.0	2451.7	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	98	760984	2500.0	2311.3	
83 Caprolactam	113	8.023	8.023	0.000	81	1191187	5000.0	4924.1	M
85 4-Chloro-3-methylphenol	107	8.117	8.117	0.000	97	1486014	2500.0	2536.9	
86 2-Methylnaphthalene	142	8.294	8.294	0.000	93	3105588	2500.0	2123.0	
87 1-Methylnaphthalene	142	8.382	8.382	0.000	93	2922334	2500.0	2147.4	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	96	890157	2500.0	2659.3	
90 1,2,4,5-Tetrachlorobenzene	216	8.441	8.441	0.000	98	1257447	2500.0	2279.7	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	94	945444	2500.0	2568.4	
94 2,4,5-Trichlorophenol	196	8.558	8.558	0.000	94	1008961	2500.0	2435.9	
99 1,1'-Biphenyl	154	8.676	8.676	0.000	95	3578128	2500.0	2129.4	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	98	2958121	2500.0	2207.6	
101 2-Nitroaniline	65	8.776	8.776	0.000	80	1152806	2500.0	2629.2	
104 Dimethyl phthalate	163	8.905	8.905	0.000	98	3386984	2500.0	2262.8	
103 1,3-Dinitrobenzene	168	8.946	8.946	0.000	84	575737	2500.0	2467.2	
106 2,6-Dinitrotoluene	165	8.964	8.964	0.000	91	796334	2500.0	2528.4	
108 Acenaphthylene	152	9.076	9.076	0.000	98	4512346	2500.0	2188.9	
109 3-Nitroaniline	138	9.129	9.129	0.000	90	785505	2500.0	2393.7	
110 2,4-Dinitrophenol	184	9.211	9.211	0.000	84	631039	5000.0	4940.2	
111 Acenaphthene	153	9.223	9.223	0.000	93	2602102	2500.0	2025.8	
112 4-Nitrophenol	109	9.241	9.241	0.000	94	1038232	5000.0	5553.3	
113 2,4-Dinitrotoluene	165	9.317	9.317	0.000	89	1064810	2500.0	2668.0	
115 Dibenzofuran	168	9.364	9.364	0.000	96	4116943	2500.0	2133.3	
118 2,3,4,6-Tetrachlorophenol	232	9.464	9.464	0.000	76	705672	2500.0	2546.7	
248 Hexadecane	57	9.493	9.493	0.000	88	2430265	2500.0	1835.5	
120 Diethyl phthalate	149	9.499	9.499	0.000	98	2692263	2500.0	1990.1	
122 4-Chlorophenyl phenyl ethe	204	9.629	9.629	0.000	96	1548832	2500.0	2172.4	
124 Fluorene	166	9.658	9.658	0.000	94	3194532	2500.0	2074.1	
125 4-Nitroaniline	138	9.658	9.658	0.000	83	560676	2500.0	1834.0	
127 4,6-Dinitro-2-methylphenol	198	9.676	9.676	0.000	79	893151	5000.0	4970.8	
128 N-Nitrosodiphenylamine	169	9.723	9.723	0.000	99	2506340	2500.0	2273.4	
129 Diphenylamine	169	9.723	9.723	0.000	95	2506340	2125.0	1932.4	
131 Azobenzene	77	9.770	9.770	0.000	98	3723898	2500.0	2234.3	
138 4-Bromophenyl phenyl ether	248	10.052	10.052	0.000	71	845033	2500.0	2321.1	
140 Hexachlorobenzene	284	10.152	10.152	0.000	94	867292	2500.0	2228.2	
141 Atrazine	200	10.158	10.158	0.000	92	1388104	5000.0	4033.9	
245 n-Octadecane	57	10.276	10.276	0.000	89	2946071	2500.0	2087.8	
143 Pentachlorophenol	266	10.305	10.305	0.000	91	997315	5000.0	4937.5	
148 Phenanthrene	178	10.499	10.499	0.000	98	4543785	2500.0	2135.1	
149 Anthracene	178	10.540	10.540	0.000	96	4697330	2500.0	2194.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.658	10.658	0.000	96	4410314	2500.0	2201.1	
154 Di-n-butyl phthalate	149	10.893	10.893	0.000	100	5382095	2500.0	2247.9	
159 Fluoranthene	202	11.593	11.593	0.000	98	5077640	2500.0	2261.0	
160 Benzidine	184	11.682	11.682	0.000	98	4848365	5000.0	4857.0	
161 Pyrene	202	11.840	11.840	0.000	97	5261745	2500.0	2270.8	
169 Butyl benzyl phthalate	149	12.481	12.481	0.000	98	2621510	2500.0	2536.4	
174 Bis(2-ethylhexyl) phthalat	149	13.246	13.246	0.000	96	3492873	2500.0	2525.4	
177 3,3'-Dichlorobenzidine	252	13.270	13.270	0.000	73	3595796	5000.0	4919.9	
178 Benzo[a]anthracene	228	13.352	13.352	0.000	97	5378942	2500.0	2446.4	
179 Chrysene	228	13.411	13.411	0.000	96	5140969	2500.0	2345.1	
181 Di-n-octyl phthalate	149	14.264	14.264	0.000	99	6572961	2500.0	2686.8	
183 Benzo[b]fluoranthene	252	15.075	15.075	0.000	97	5467053	2500.0	2540.7	
184 Benzo[k]fluoranthene	252	15.117	15.117	0.000	98	5681967	2500.0	2443.6	
185 Benzo[a]pyrene	252	15.628	15.628	0.000	77	5367353	2500.0	2580.9	
190 Indeno[1,2,3-cd]pyrene	276	17.805	17.805	0.000	97	5614412	2500.0	2687.6	
189 Dibenz(a,h)anthracene	278	17.816	17.816	0.000	91	4748930	2500.0	2709.6	
191 Benzo[g,h,i]perylene	276	18.422	18.422	0.000	97	4816830	2500.0	2658.6	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

SMLIST1 L9 W_00012 Amount Added: 0.10 Units: mL

Report Date: 09-Apr-2019 05:02:43 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408002.D

Injection Date: 08-Apr-2019 09:39:30 Instrument ID: A4AG2 Operator ID:

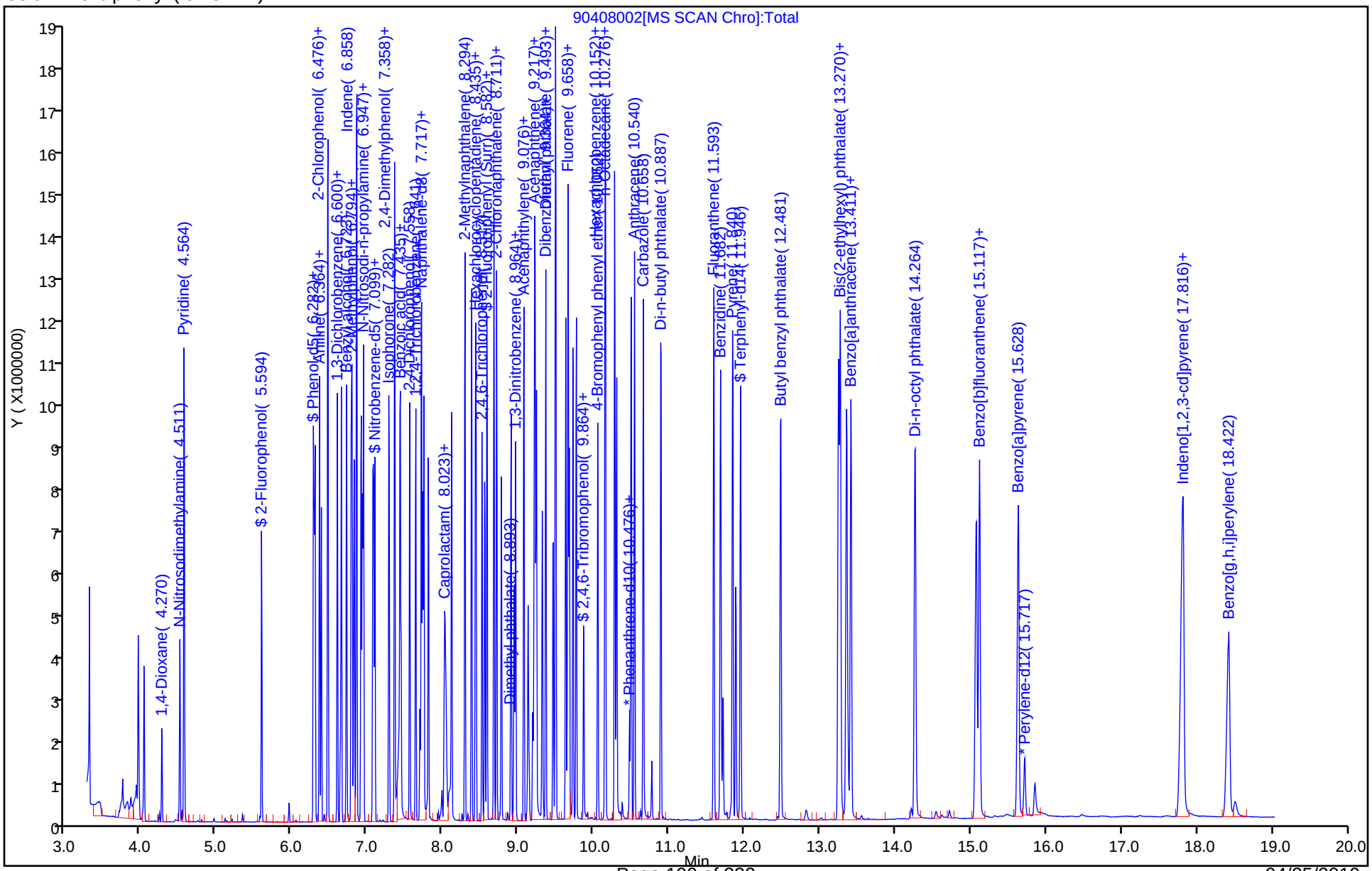
Lims ID: std9 l1lvi Worklist Smp#: 2

Client ID:

Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 2

Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

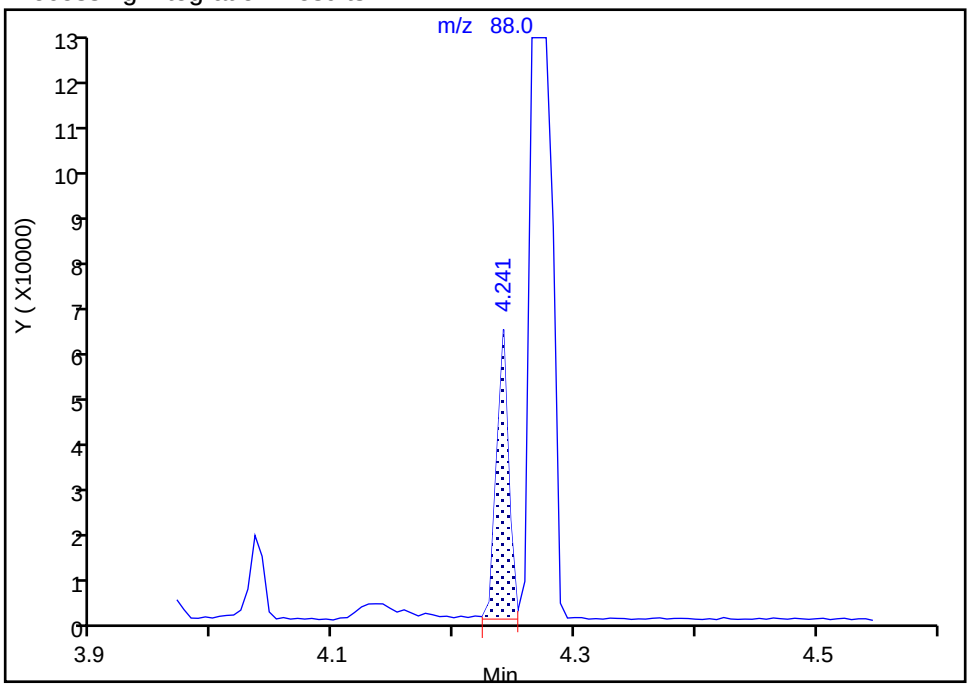
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Injection Date: 08-Apr-2019 09:39:30 Instrument ID: A4AG2
Lims ID: std9 l1lvi
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

26 1,4-Dioxane, CAS: 123-91-1

Signal: 1

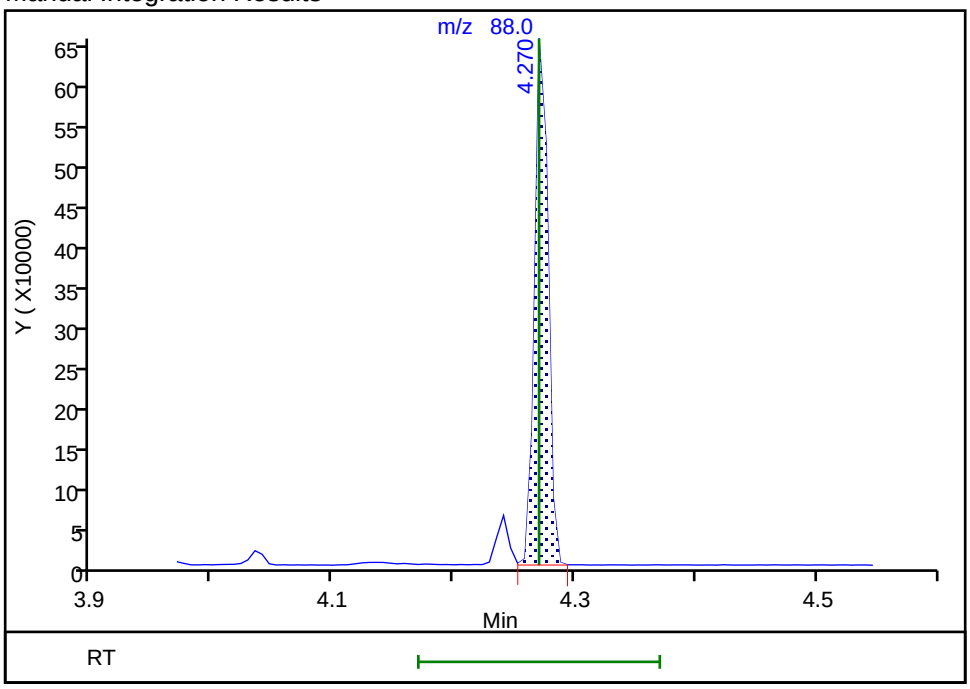
Processing Integration Results

RT: 4.24
Area: 43049
Amount: 2500.0000
Amount Units: ng/ml



Manual Integration Results

RT: 4.27
Area: 508614
Amount: 2831.5006
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:03:47
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

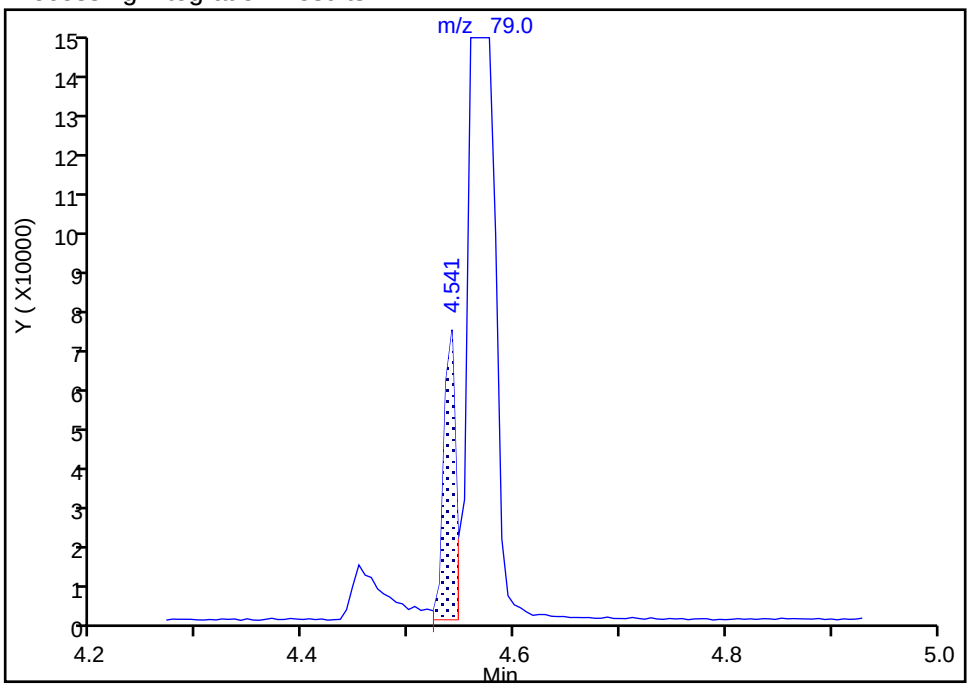
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Injection Date:	08-Apr-2019 09:39:30	Instrument ID:	A4AG2		
Lims ID:	std9 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

28 Pyridine, CAS: 110-86-1

Signal: 1

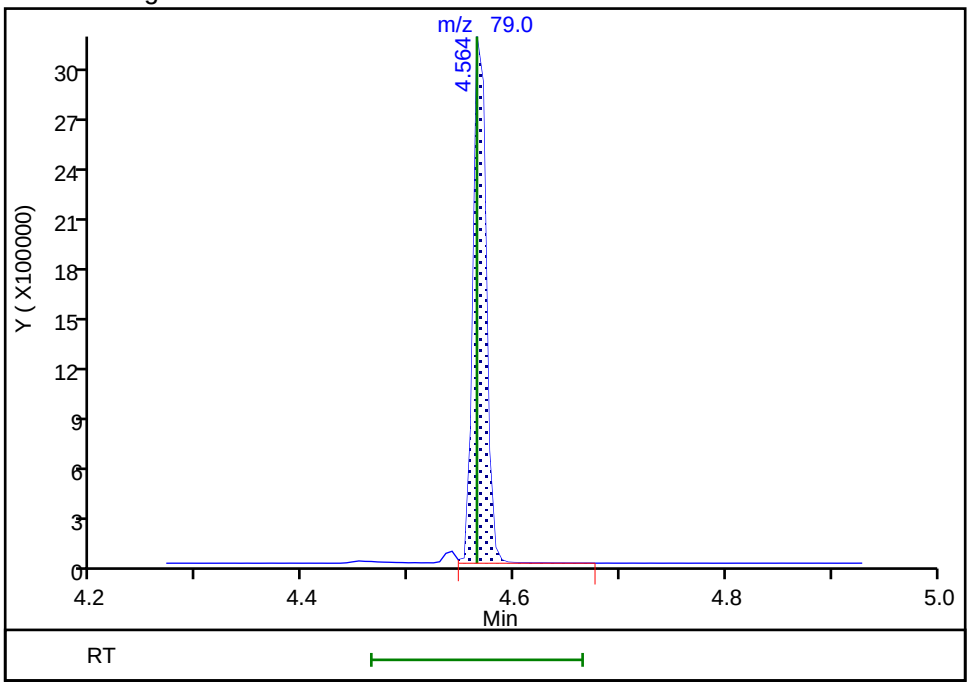
Processing Integration Results

RT: 4.54
Area: 57616
Amount: 5000.0000
Amount Units: ng/ml



Manual Integration Results

RT: 4.56
Area: 2744210
Amount: 5748.3669
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:05:51

Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

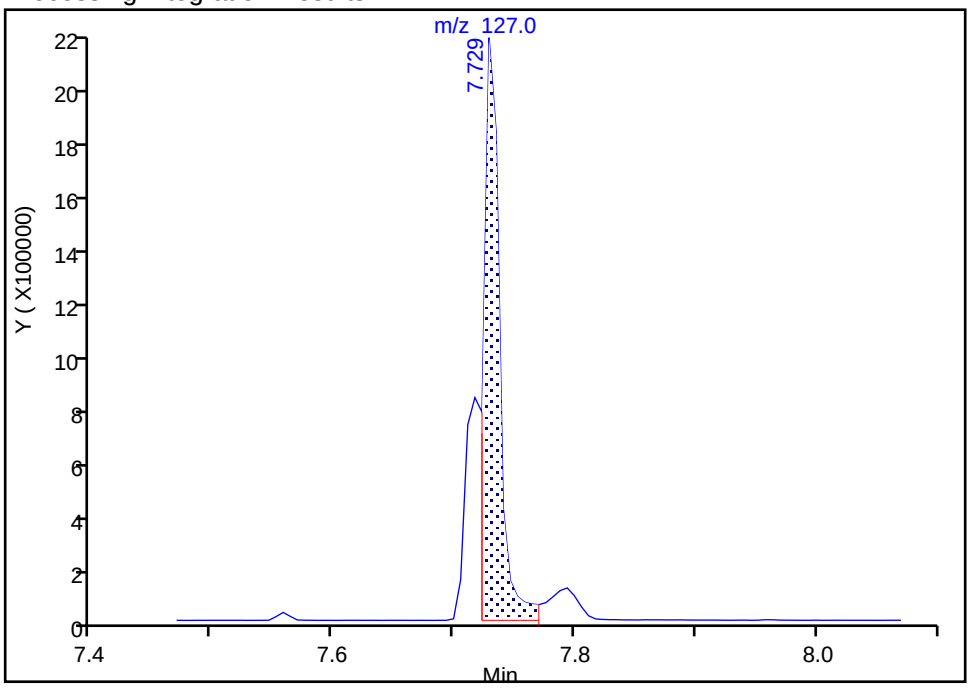
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Injection Date: 08-Apr-2019 09:39:30 Instrument ID: A4AG2
Lims ID: std9 l1lvi
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

75 4-Chloroaniline, CAS: 106-47-8

Signal: 1

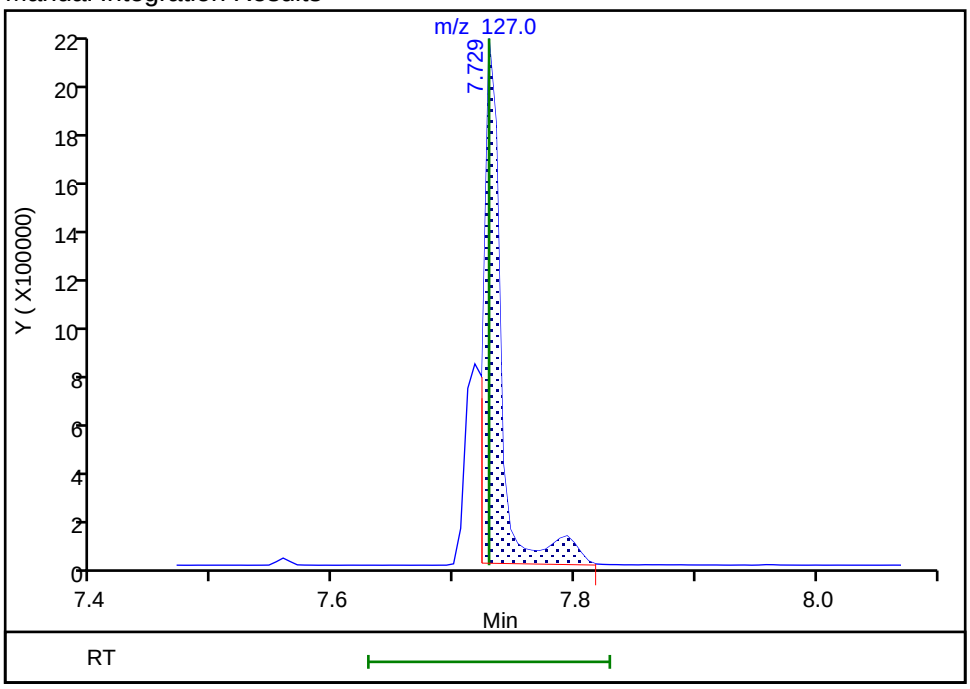
Processing Integration Results

RT: 7.73
Area: 1920915
Amount: 2500.0000
Amount Units: ng/ml



Manual Integration Results

RT: 7.73
Area: 2083114
Amount: 2237.5300
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:06:11
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

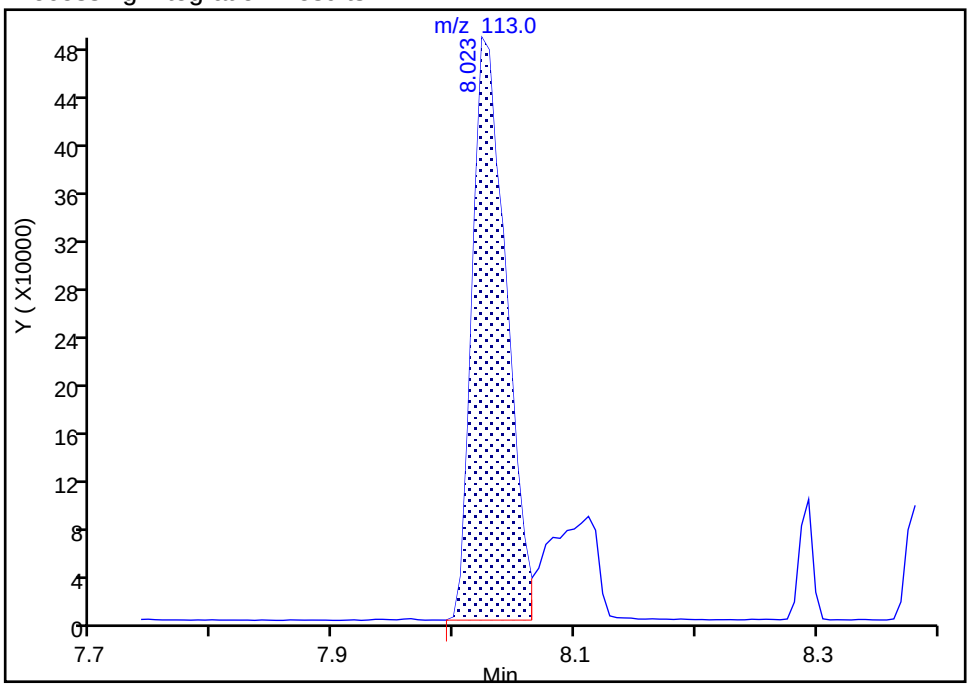
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Injection Date: 08-Apr-2019 09:39:30 Instrument ID: A4AG2
Lims ID: std9 l1lvi
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

83 Caprolactam, CAS: 105-60-2

Signal: 1

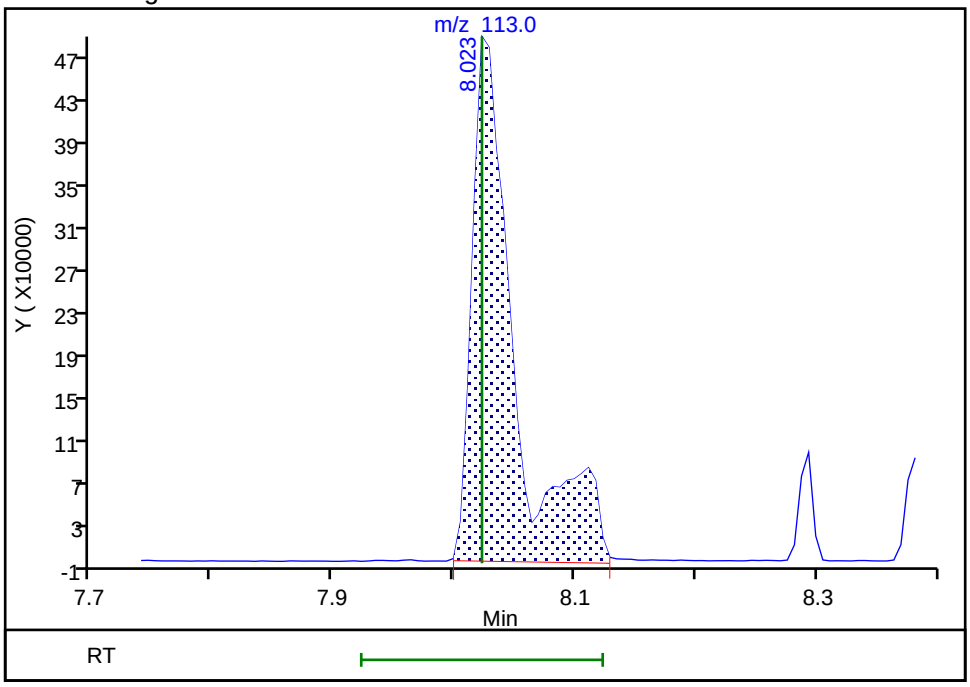
Processing Integration Results

RT: 8.02
Area: 949762
Amount: 5000.0000
Amount Units: ng/ml



Manual Integration Results

RT: 8.02
Area: 1191187
Amount: 4924.1003
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:06:24
Audit Action: Manually Integrated Audit Reason: Poor chromatography

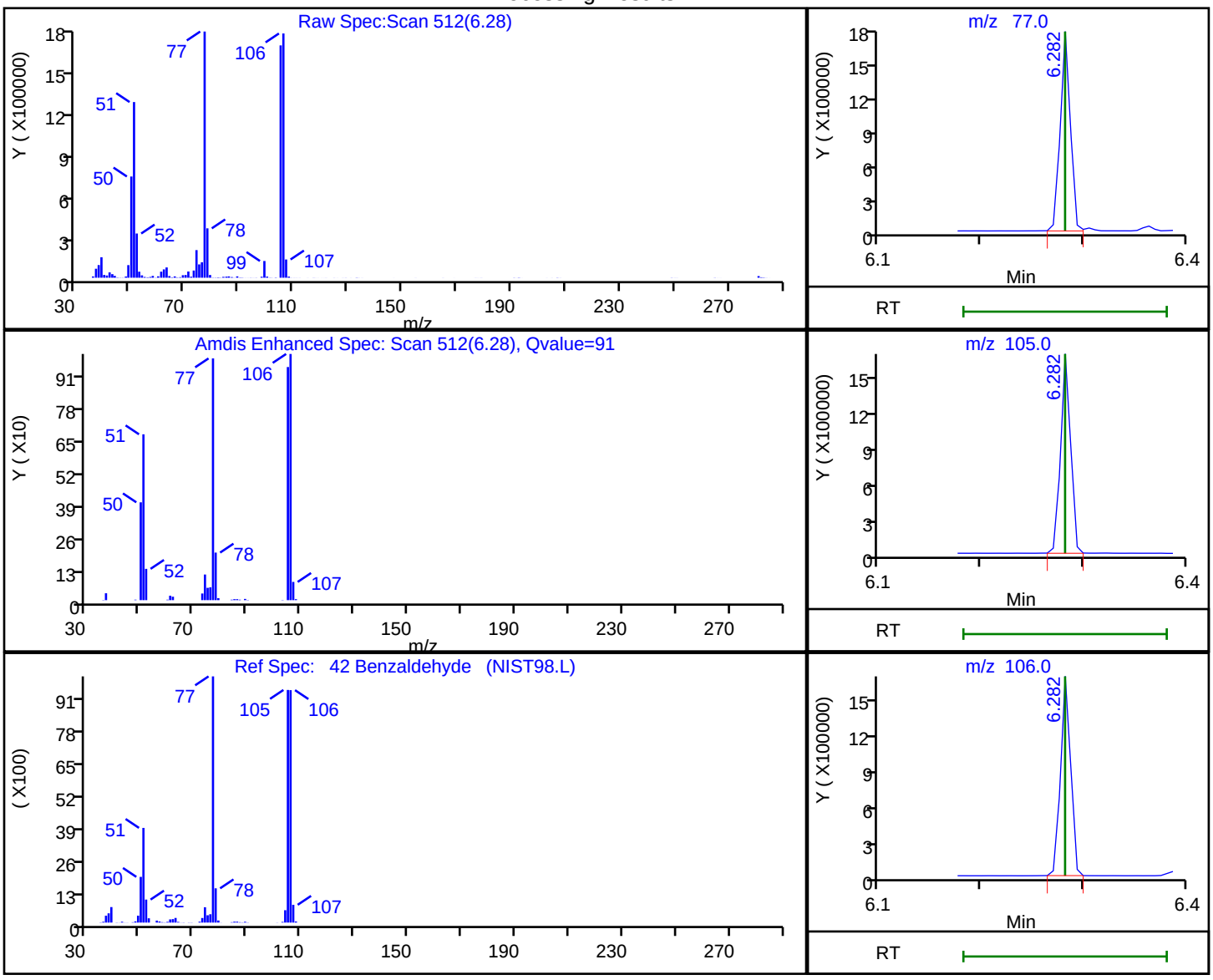
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File:	\\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408002.D				
Injection Date:	08-Apr-2019 09:39:30	Instrument ID:	A4AG2		
Lims ID:	std9 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	2	Worklist Smp#:	2
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

42 Benzaldehyde, CAS: 100-52-7

Processing Results



RT	Mass	Response	Amount
6.28	77.00	1175052	NaN
6.28	105.00	1099847	
6.28	106.00	1165781	

Reviewer: hulat, 08-Apr-2019 13:24:50

Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408003.D
Lims ID: std8 l1lvi
Client ID:
Sample Type: IC Calib Level: 8
Inject. Date: 08-Apr-2019 10:05:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-003
Misc. Info.: STD8 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:02:48 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 10:29:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.641	-0.006	97	197536	400.0	400.0	
* 2 Naphthalene-d8	136	7.694	7.694	0.000	99	885107	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.188	0.000	96	451818	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.476	-0.006	95	790985	400.0	400.0	
* 5 Chrysene-d12	240	13.370	13.370	0.000	96	751276	400.0	400.0	
* 6 Perylene-d12	264	15.711	15.717	-0.006	98	733362	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	976724	2000.0	1985.1	
$ 8 Phenol-d5	99	6.294	6.294	0.000	0	1223074	2000.0	1806.5	
$ 9 Nitrobenzene-d5	82	7.082	7.082	0.000	96	1576275	2000.0	2007.1	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	100	2655600	2000.0	1840.3	
$ 11 2,4,6-Tribromophenol	330	9.864	9.870	-0.006	87	305157	2000.0	2155.3	
$ 12 Terphenyl-d14	244	11.946	11.946	0.000	100	2648844	2000.0	1932.0	
26 1,4-Dioxane	88	4.264	4.270	-0.006	92	366036	2000.0	2044.2	
27 N-Nitrosodimethylamine	74	4.506	4.511	-0.005	90	961145	2000.0	2036.0	
28 Pyridine	79	4.558	4.564	-0.006	83	2080800	4000.0	4372.4	
42 Benzaldehyde	77		6.282				ND	ND	U
43 Phenol	94	6.305	6.305	0.000	98	1378212	2000.0	1788.8	
44 Aniline	93	6.364	6.364	0.000	97	2357844	2000.0	2004.1	
45 Bis(2-chloroethyl)ether	93	6.388	6.388	0.000	91	1422736	2000.0	1807.4	
47 2-Chlorophenol	128	6.470	6.470	0.000	96	1109699	2000.0	1742.2	
244 n-Decane	57	6.476	6.476	0.000	88	1852684	2000.0	1762.3	
48 1,3-Dichlorobenzene	146	6.599	6.600	-0.001	96	1369316	2000.0	1868.8	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	91	1397581	2000.0	1880.0	
50 Benzyl alcohol	108	6.723	6.723	0.000	92	1010446	2000.0	2153.7	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	1284721	2000.0	1814.7	
52 2-Methylphenol	108	6.794	6.794	0.000	96	1283211	2000.0	2003.3	
54 2,2'-oxybis[1-chloropropan	45	6.823	6.823	0.000	93	2597907	2000.0	1834.4	
53 Indene	115	6.852	6.858	-0.006	92	4054627	4000.0	3414.8	
55 3 & 4 Methylphenol	108	6.911	6.917	-0.006	95	1414732	2000.0	2218.8	
57 N-Nitrosodi-n-propylamine	70	6.929	6.929	0.000	92	1077836	2000.0	1886.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.947	6.947	0.000	94	1940849	2000.0	1851.9	
61 Hexachloroethane	117	7.070	7.070	0.000	96	561549	2000.0	1918.7	
62 Nitrobenzene	77	7.094	7.099	-0.005	93	1559972	2000.0	1935.1	
64 Isophorone	82	7.282	7.282	0.000	98	2960327	2000.0	1892.7	
66 2,4-Dimethylphenol	107	7.358	7.358	0.000	93	1356763	2000.0	2002.7	
65 2-Nitrophenol	139	7.364	7.364	0.000	93	639520	2000.0	2075.5	
69 Bis(2-chloroethoxy)methane	93	7.429	7.435	-0.006	96	1630492	2000.0	1769.9	
70 Benzoic acid	122	7.435	7.447	-0.012	93	1228781	4000.0	4080.8	
72 2,4-Dichlorophenol	162	7.558	7.558	0.000	97	1115812	2000.0	2185.0	
73 1,2,4-Trichlorobenzene	180	7.641	7.641	0.000	94	1147182	2000.0	1894.5	
74 Naphthalene	128	7.711	7.717	-0.006	98	4173206	2000.0	1819.8	
75 4-Chloroaniline	127	7.729	7.729	0.000	95	1907229	2000.0	2002.1	M
76 2,6-Dichlorophenol	162	7.746	7.747	0.000	95	1105411	2000.0	2002.6	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	650621	2000.0	1931.3	
83 Caprolactam	113	8.017	8.023	-0.006	74	972545	4000.0	3929.0	M
85 4-Chloro-3-methylphenol	107	8.111	8.117	-0.006	97	1249897	2000.0	2085.3	
86 2-Methylnaphthalene	142	8.293	8.294	-0.001	92	2660200	2000.0	1777.2	
87 1-Methylnaphthalene	142	8.382	8.382	0.000	93	2479370	2000.0	1780.5	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	96	729574	2000.0	2192.1	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.441	-0.006	98	1051256	2000.0	1916.8	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	94	762113	2000.0	2082.2	
94 2,4,5-Trichlorophenol	196	8.552	8.558	-0.006	93	812332	2000.0	1977.2	
99 1,1'-Biphenyl	154	8.676	8.676	0.000	95	3028975	2000.0	1812.9	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	97	2494763	2000.0	1872.4	
101 2-Nitroaniline	65	8.776	8.776	0.000	80	960332	2000.0	2202.8	
104 Dimethyl phthalate	163	8.899	8.905	-0.006	98	2822344	2000.0	1896.4	
103 1,3-Dinitrobenzene	168	8.941	8.946	-0.006	84	468611	2000.0	2025.2	
106 2,6-Dinitrotoluene	165	8.964	8.964	0.000	93	653645	2000.0	2087.2	
108 Acenaphthylene	152	9.070	9.076	-0.006	98	3842507	2000.0	1874.6	
109 3-Nitroaniline	138	9.123	9.129	-0.006	90	649193	2000.0	1989.6	
110 2,4-Dinitrophenol	184	9.211	9.211	0.000	79	532901	4000.0	4211.6	
111 Acenaphthene	153	9.217	9.223	-0.006	94	2255461	2000.0	1766.0	
112 4-Nitrophenol	109	9.235	9.241	-0.006	95	847093	4000.0	4556.9	
113 2,4-Dinitrotoluene	165	9.317	9.317	0.000	90	879156	2000.0	2215.4	
115 Dibenzofuran	168	9.364	9.364	0.000	96	3472746	2000.0	1809.8	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.464	-0.006	76	581444	2000.0	2110.4	
248 Hexadecane	57	9.488	9.493	-0.005	88	2116906	2000.0	1608.0	
120 Diethyl phthalate	149	9.493	9.499	-0.006	98	2278623	2000.0	1694.0	
122 4-Chlorophenyl phenyl ethe	204	9.629	9.629	0.000	95	1317909	2000.0	1859.1	
125 4-Nitroaniline	138	9.652	9.658	-0.006	84	477426	2000.0	1570.6	
124 Fluorene	166	9.658	9.658	0.000	96	2729945	2000.0	1782.6	
127 4,6-Dinitro-2-methylphenol	198	9.676	9.676	0.000	80	735628	4000.0	4101.3	
128 N-Nitrosodiphenylamine	169	9.723	9.723	0.000	98	2082586	2000.0	1884.6	
129 Diphenylamine	169	9.723	9.723	0.000	95	2082586	1700.0	1601.9	
131 Azobenzene	77	9.764	9.770	-0.006	98	3123593	2000.0	1869.7	
138 4-Bromophenyl phenyl ether	248	10.052	10.052	0.000	72	705827	2000.0	1934.2	
140 Hexachlorobenzene	284	10.146	10.152	-0.006	93	715014	2000.0	1832.7	
141 Atrazine	200	10.152	10.158	-0.006	92	1179952	4000.0	3421.0	
245 n-Octadecane	57	10.276	10.276	0.000	89	2534716	2000.0	1792.0	
143 Pentachlorophenol	266	10.299	10.305	-0.006	90	826139	4000.0	4091.7	
148 Phenanthrene	178	10.493	10.499	-0.006	98	3805335	2000.0	1783.9	
149 Anthracene	178	10.540	10.540	0.000	96	3912280	2000.0	1823.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.658	10.658	0.000	96	3640858	2000.0	1812.8	
154 Di-n-butyl phthalate	149	10.887	10.893	-0.006	100	4447523	2000.0	1853.2	
159 Fluoranthene	202	11.593	11.593	0.000	98	4240520	2000.0	1883.8	
160 Benzidine	184	11.676	11.682	-0.006	98	3991998	4000.0	3947.3	
161 Pyrene	202	11.840	11.840	0.000	97	4404174	2000.0	1869.5	
169 Butyl benzyl phthalate	149	12.476	12.481	-0.005	98	2172091	2000.0	2067.1	
174 Bis(2-ethylhexyl) phthalat	149	13.246	13.246	0.000	96	2871741	2000.0	2042.3	
177 3,3'-Dichlorobenzidine	252	13.264	13.270	-0.006	74	2940025	4000.0	3956.7	
178 Benzo[a]anthracene	228	13.352	13.352	0.000	97	4439270	2000.0	1985.9	
179 Chrysene	228	13.411	13.411	0.000	97	4245631	2000.0	1904.9	
181 Di-n-octyl phthalate	149	14.258	14.264	-0.006	99	5434258	2000.0	2245.1	
183 Benzo[b]fluoranthene	252	15.070	15.075	-0.005	97	4308387	2000.0	2023.7	
184 Benzo[k]fluoranthene	252	15.111	15.117	-0.006	98	4712633	2000.0	2048.4	
185 Benzo[a]pyrene	252	15.628	15.628	0.000	77	4371316	2000.0	2124.4	
190 Indeno[1,2,3-cd]pyrene	276	17.793	17.805	-0.012	95	4483505	2000.0	2169.2	
189 Dibenz(a,h)anthracene	278	17.811	17.816	-0.005	92	3848646	2000.0	2219.4	
191 Benzo[g,h,i]perylene	276	18.410	18.422	-0.012	96	3847856	2000.0	2146.5	
S 193 Methyl Phenols,Total	100				0			4222.1	
S 246 Total Cresols	100				0			4222.1	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

SMLIST1 L8 W_00012 Amount Added: 0.10 Units: mL

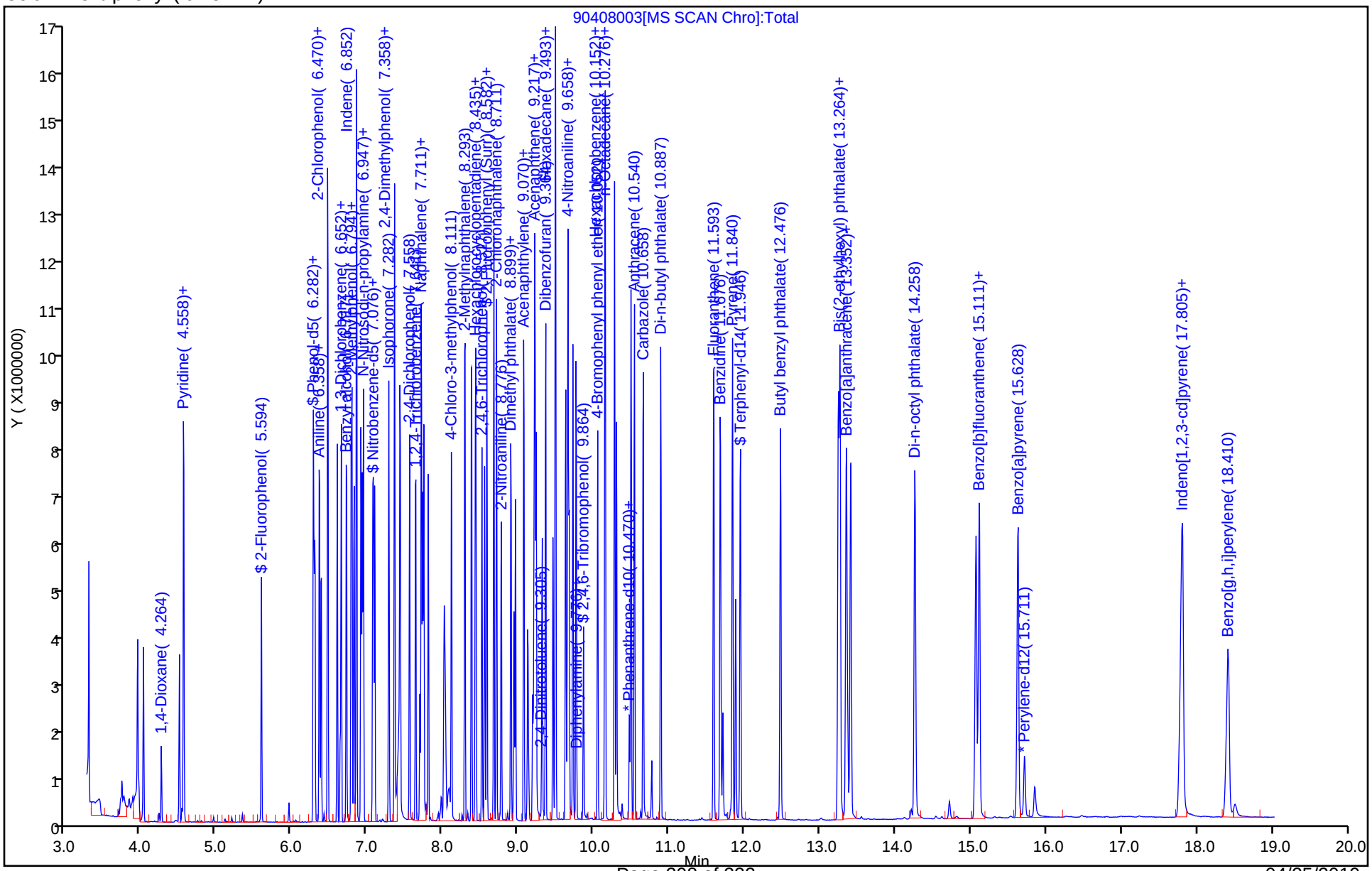
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Eurofins TestAmerica, Canton

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Injection Date:	08-Apr-2019 10:05:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std8 l1lvi			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

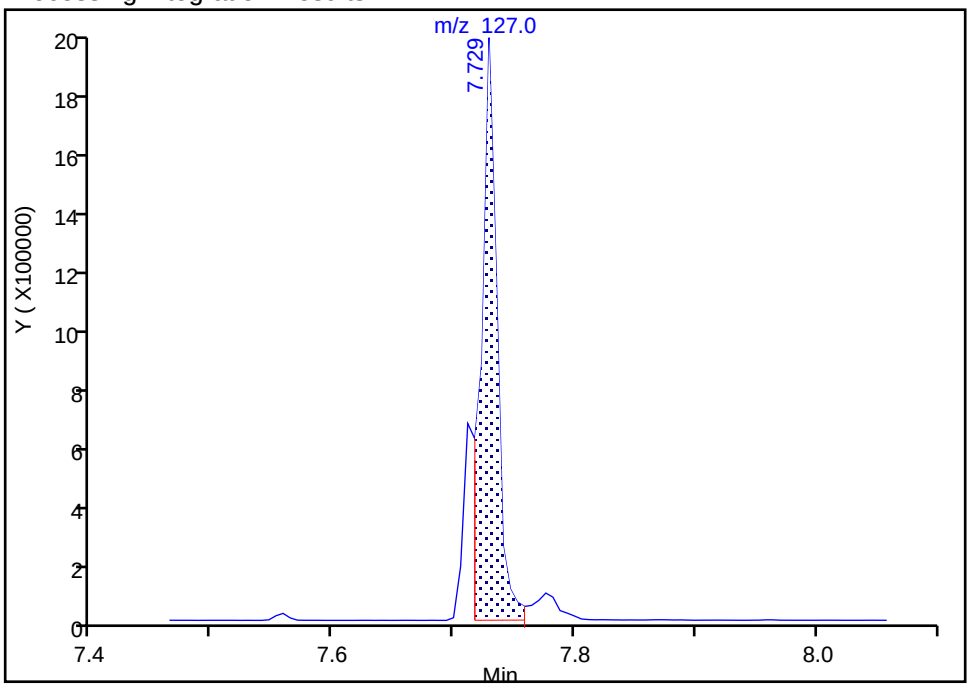
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Injection Date: 08-Apr-2019 10:05:30 Instrument ID: A4AG2
Lims ID: std8 l1lvi
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

75 4-Chloroaniline, CAS: 106-47-8

Signal: 1

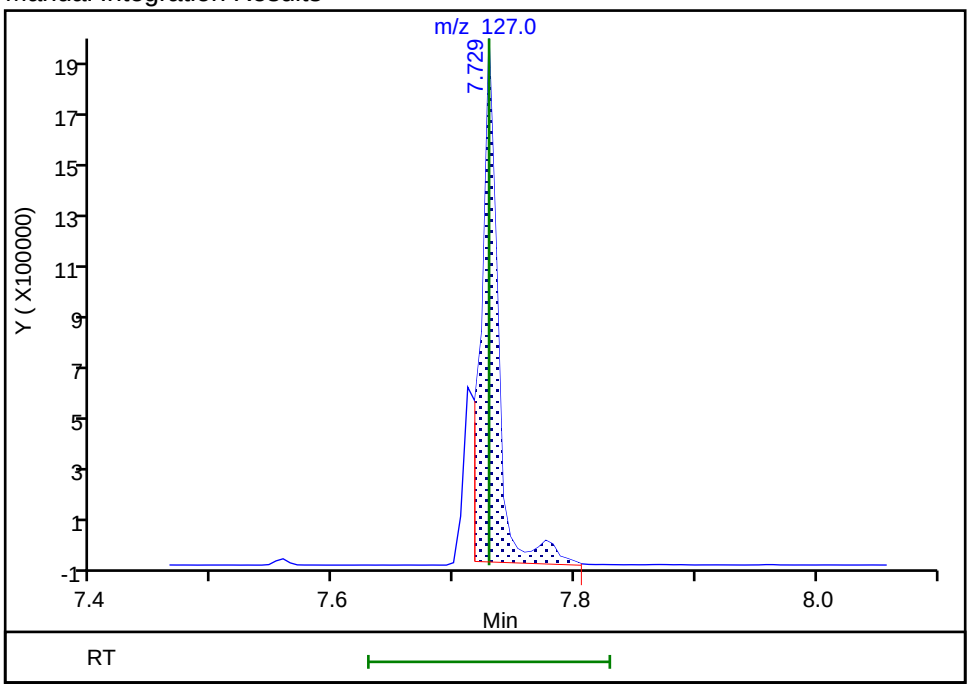
Processing Integration Results

RT: 7.73
Area: 1812380
Amount: 2060.9342
Amount Units: ng/ml



Manual Integration Results

RT: 7.73
Area: 1907229
Amount: 2002.0919
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:29:09
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

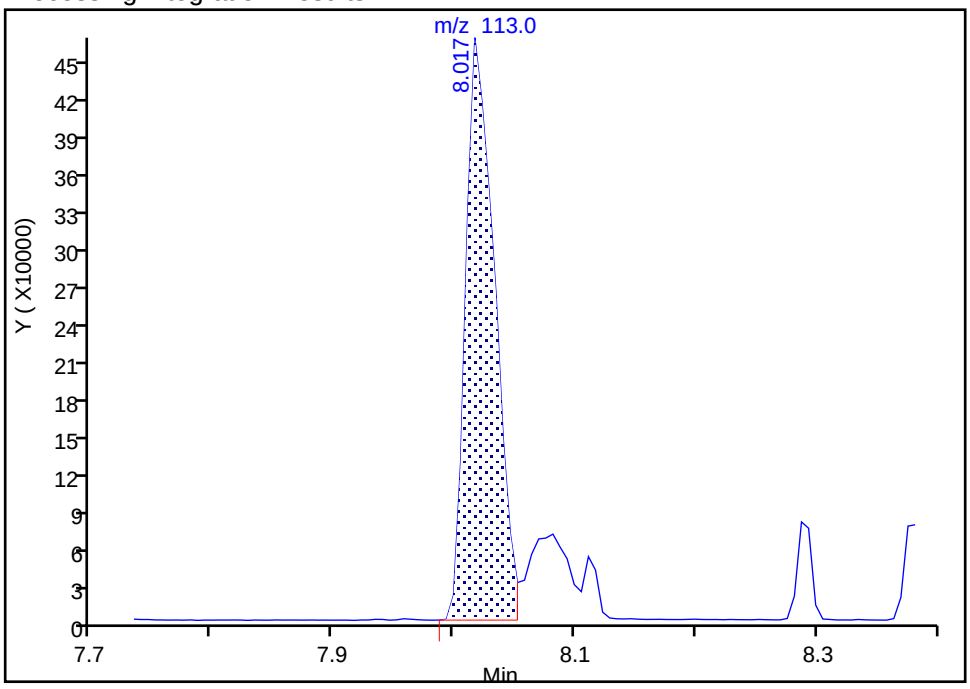
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Injection Date: 08-Apr-2019 10:05:30 Instrument ID: A4AG2
Lims ID: std8 l1lvi
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

83 Caprolactam, CAS: 105-60-2

Signal: 1

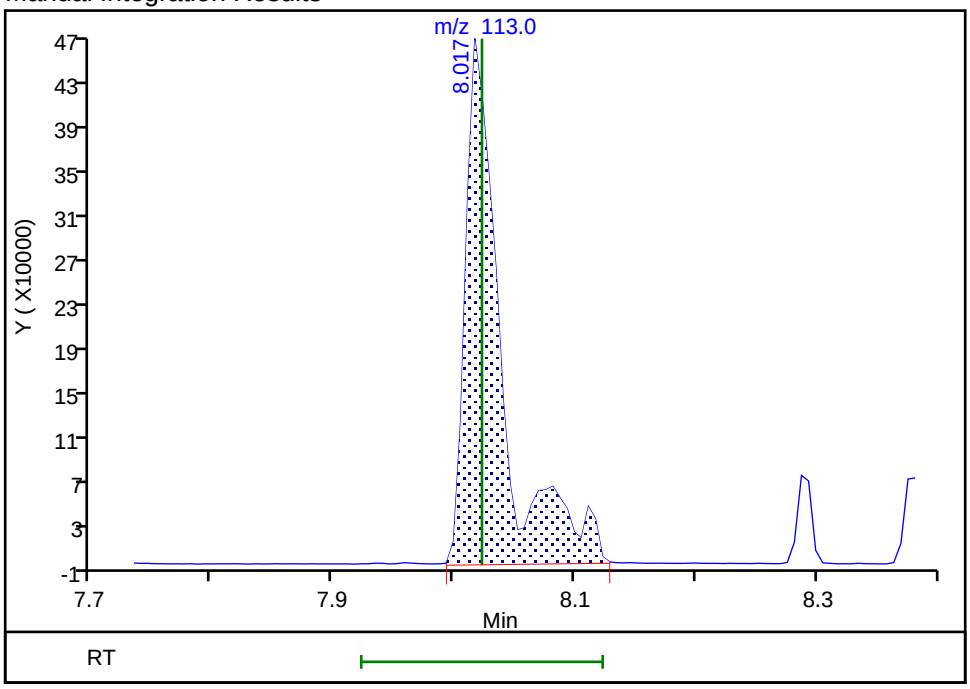
Processing Integration Results

RT: 8.02
Area: 778547
Amount: 3551.6911
Amount Units: ng/ml



Manual Integration Results

RT: 8.02
Area: 972545
Amount: 3928.9998
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:29:25
Audit Action: Manually Integrated Audit Reason: Poor chromatography

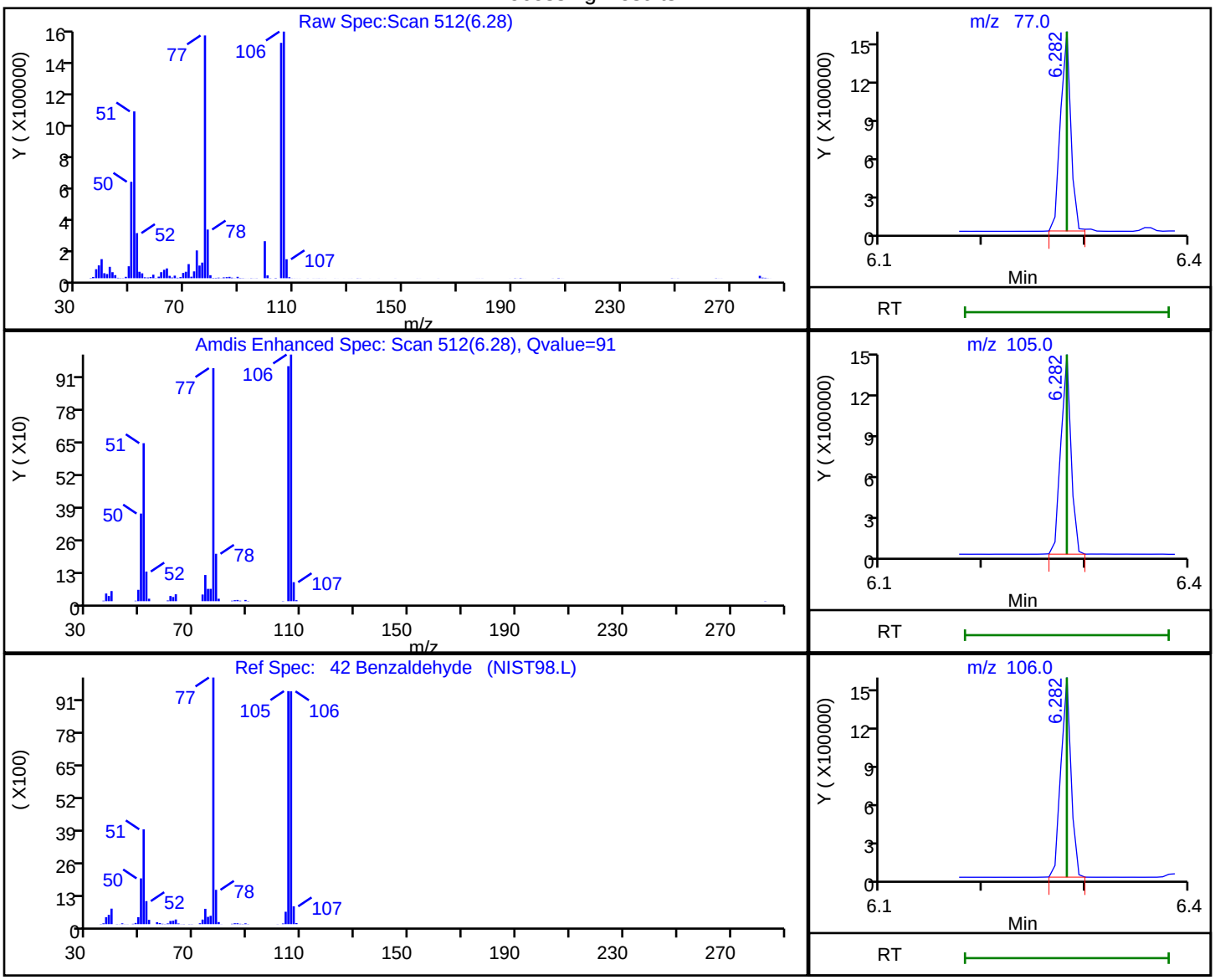
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408003.D
Injection Date: 08-Apr-2019 10:05:30 Instrument ID: A4AG2
Lims ID: std8 l1lvi
Client ID:
Operator ID: ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

42 Benzaldehyde, CAS: 100-52-7

Processing Results



RT	Mass	Response	Amount
6.28	77.00	1071807	NaN
6.28	105.00	1023698	
6.28	106.00	1071458	

Reviewer: hulat, 08-Apr-2019 13:25:02
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408004.D
Lims ID: std7 l1lvi
Client ID:
Sample Type: IC Calib Level: 7
Inject. Date: 08-Apr-2019 10:29:30 ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-004
Misc. Info.: STD7 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:02:56 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 10:53:42

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.641	-0.006	95	195488	400.0	400.0	
* 2 Naphthalene-d8	136	7.694	7.694	0.000	100	884544	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.188	0.000	94	458795	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.476	-0.006	97	809538	400.0	400.0	
* 5 Chrysene-d12	240	13.364	13.370	-0.006	99	786577	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.717	-0.012	97	758386	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	627874	1500.0	1289.5	
$ 8 Phenol-d5	99	6.288	6.294	-0.006	0	861936	1500.0	1286.5	
$ 9 Nitrobenzene-d5	82	7.076	7.082	-0.006	96	1202241	1500.0	1531.8	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	99	2066391	1500.0	1410.2	
$ 11 2,4,6-Tribromophenol	330	9.864	9.870	-0.006	91	229259	1500.0	1594.6	
$ 12 Terphenyl-d14	244	11.940	11.946	-0.006	99	2107094	1500.0	1467.9	
26 1,4-Dioxane	88	4.264	4.270	-0.006	92	240118	1500.0	1355.0	
27 N-Nitrosodimethylamine	74	4.505	4.511	-0.006	90	702573	1500.0	1503.8	
28 Pyridine	79	4.564	4.564	0.000	83	1312269	3000.0	2786.4	
42 Benzaldehyde	77	6.282	6.282	0.000	91	920431	3000.0	3128.2	
43 Phenol	94	6.299	6.305	-0.006	98	989551	1500.0	1297.8	
44 Aniline	93	6.358	6.364	-0.006	95	1714807	1500.0	1472.8	
45 Bis(2-chloroethyl)ether	93	6.382	6.388	-0.006	90	1188145	1500.0	1525.2	
47 2-Chlorophenol	128	6.470	6.470	0.000	96	853011	1500.0	1353.2	
244 n-Decane	57	6.476	6.476	0.000	88	1391070	1500.0	1337.1	
48 1,3-Dichlorobenzene	146	6.599	6.600	-0.001	96	1039709	1500.0	1433.8	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	92	1060560	1500.0	1441.6	
50 Benzyl alcohol	108	6.717	6.723	-0.006	92	775542	1500.0	1670.3	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	987287	1500.0	1409.2	
52 2-Methylphenol	108	6.794	6.794	0.000	96	971749	1500.0	1532.9	
54 2,2'-oxybis[1-chloropropan	45	6.823	6.823	0.000	93	2007942	1500.0	1432.7	
53 Indene	115	6.852	6.858	-0.006	90	3274765	3000.0	2786.9	
55 3 & 4 Methylphenol	108	6.911	6.917	-0.006	95	1062139	1500.0	1683.2	
57 N-Nitrosodi-n-propylamine	70	6.929	6.929	0.000	90	830380	1500.0	1468.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.946	6.947	-0.001	94	1520272	1500.0	1465.8	
61 Hexachloroethane	117	7.070	7.070	0.000	96	425122	1500.0	1467.8	
62 Nitrobenzene	77	7.094	7.099	-0.005	94	1208022	1500.0	1499.5	
64 Isophorone	82	7.282	7.282	0.000	98	2261932	1500.0	1447.1	
66 2,4-Dimethylphenol	107	7.358	7.358	0.000	94	1082215	1500.0	1598.4	
65 2-Nitrophenol	139	7.358	7.364	-0.006	85	496697	1500.0	1613.0	
69 Bis(2-chloroethoxy)methane	93	7.429	7.435	-0.006	96	1278037	1500.0	1388.2	
70 Benzoic acid	122	7.423	7.447	-0.024	92	965671	3000.0	3226.8	
72 2,4-Dichlorophenol	162	7.558	7.558	0.000	97	863775	1500.0	1692.5	
73 1,2,4-Trichlorobenzene	180	7.635	7.641	-0.006	93	884159	1500.0	1461.0	
74 Naphthalene	128	7.711	7.717	-0.006	95	3186442	1500.0	1390.4	a
75 4-Chloroaniline	127	7.729	7.729	0.000	96	1458172	1500.0	1531.7	M
76 2,6-Dichlorophenol	162	7.746	7.747	0.000	95	851965	1500.0	1544.4	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	491593	1500.0	1460.1	
83 Caprolactam	113	8.011	8.023	-0.012	74	739881	3000.0	2991.0	M
85 4-Chloro-3-methylphenol	107	8.111	8.117	-0.006	98	956899	1500.0	1597.5	
86 2-Methylnaphthalene	142	8.288	8.294	-0.006	95	2067255	1500.0	1382.0	
87 1-Methylnaphthalene	142	8.376	8.382	-0.006	94	1939204	1500.0	1393.5	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	96	556445	1500.0	1646.5	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.441	-0.006	98	808934	1500.0	1452.5	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	606535	1500.0	1631.9	
94 2,4,5-Trichlorophenol	196	8.552	8.558	-0.006	93	633758	1500.0	1524.9	
99 1,1'-Biphenyl	154	8.676	8.676	0.000	95	2380510	1500.0	1403.1	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	98	1924975	1500.0	1422.8	
101 2-Nitroaniline	65	8.770	8.776	-0.006	80	725309	1500.0	1638.4	
104 Dimethyl phthalate	163	8.899	8.905	-0.006	98	2189033	1500.0	1448.5	
103 1,3-Dinitrobenzene	168	8.940	8.946	-0.006	85	355735	1500.0	1521.7	
106 2,6-Dinitrotoluene	165	8.958	8.964	-0.006	90	506796	1500.0	1593.7	
108 Acenaphthylene	152	9.070	9.076	-0.006	98	2953428	1500.0	1418.9	
109 3-Nitroaniline	138	9.123	9.129	-0.006	90	512337	1500.0	1546.3	
110 2,4-Dinitrophenol	184	9.205	9.211	-0.006	81	390838	3000.0	3071.1	
111 Acenaphthene	153	9.217	9.223	-0.006	94	1758073	1500.0	1355.6	
112 4-Nitrophenol	109	9.229	9.241	-0.012	95	638697	3000.0	3383.6	
113 2,4-Dinitrotoluene	165	9.311	9.317	-0.006	89	673251	1500.0	1670.8	
115 Dibenzofuran	168	9.358	9.364	-0.006	96	2726463	1500.0	1399.2	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.464	-0.006	76	438793	1500.0	1568.4	
248 Hexadecane	57	9.488	9.493	-0.005	87	1768887	1500.0	1323.2	
120 Diethyl phthalate	149	9.493	9.499	-0.006	97	1855699	1500.0	1358.6	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.629	-0.006	96	1039154	1500.0	1443.6	
124 Fluorene	166	9.658	9.658	0.000	95	2152518	1500.0	1384.2	
125 4-Nitroaniline	138	9.646	9.658	-0.012	83	411630	1500.0	1333.5	
127 4,6-Dinitro-2-methylphenol	198	9.670	9.676	-0.006	80	564238	3000.0	3097.4	
128 N-Nitrosodiphenylamine	169	9.723	9.723	0.000	99	1606225	1500.0	1420.2	
129 Diphenylamine	169	9.723	9.723	0.000	95	1606225	1275.0	1207.2	
131 Azobenzene	77	9.764	9.770	-0.006	98	2501047	1500.0	1462.7	
138 4-Bromophenyl phenyl ether	248	10.052	10.052	0.000	71	550389	1500.0	1473.7	
140 Hexachlorobenzene	284	10.146	10.152	-0.006	92	551457	1500.0	1381.1	
141 Atrazine	200	10.152	10.158	-0.006	91	961819	3000.0	2724.6	
245 n-Octadecane	57	10.270	10.276	-0.006	88	2075492	1500.0	1433.7	
143 Pentachlorophenol	266	10.299	10.305	-0.006	90	636557	3000.0	3096.4	
148 Phenanthrene	178	10.493	10.499	-0.006	98	2994425	1500.0	1371.6	
149 Anthracene	178	10.534	10.540	-0.006	96	3096795	1500.0	1410.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.652	10.658	-0.006	96	2929653	1500.0	1425.3	
154 Di-n-butyl phthalate	149	10.887	10.893	-0.006	100	3610458	1500.0	1469.9	
159 Fluoranthene	202	11.587	11.593	-0.006	98	3357816	1500.0	1457.5	
160 Benzidine	184	11.670	11.682	-0.012	98	3426580	3000.0	3249.1	
161 Pyrene	202	11.834	11.840	-0.006	97	3493748	1500.0	1416.5	
169 Butyl benzyl phthalate	149	12.470	12.481	-0.011	98	1743980	1500.0	1585.2	
174 Bis(2-ethylhexyl) phthalat	149	13.240	13.246	-0.006	96	2308626	1500.0	1568.2	
177 3,3'-Dichlorobenzidine	252	13.258	13.270	-0.012	74	2406990	3000.0	3094.0	
178 Benzo[a]anthracene	228	13.346	13.352	-0.006	97	3533018	1500.0	1509.6	
179 Chrysene	228	13.399	13.411	-0.012	97	3363587	1500.0	1441.5	
181 Di-n-octyl phthalate	149	14.252	14.264	-0.012	99	4279962	1500.0	1709.9	
183 Benzo[b]fluoranthene	252	15.064	15.075	-0.011	97	3442066	1500.0	1563.4	
184 Benzo[k]fluoranthene	252	15.105	15.117	-0.012	98	3658678	1500.0	1537.8	
185 Benzo[a]pyrene	252	15.617	15.628	-0.012	77	3363318	1500.0	1580.6	
190 Indeno[1,2,3-cd]pyrene	276	17.781	17.805	-0.024	95	3426223	1500.0	1602.9	
189 Dibenz(a,h)anthracene	278	17.799	17.816	-0.017	92	2925829	1500.0	1631.6	
191 Benzo[g,h,i]perylene	276	18.399	18.422	-0.023	97	2884528	1500.0	1556.0	
S 193 Methyl Phenols,Total	100				0			3216.2	
S 246 Total Cresols	100				0			3216.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SMLIST1 L7 W_00012 Amount Added: 0.10 Units: mL

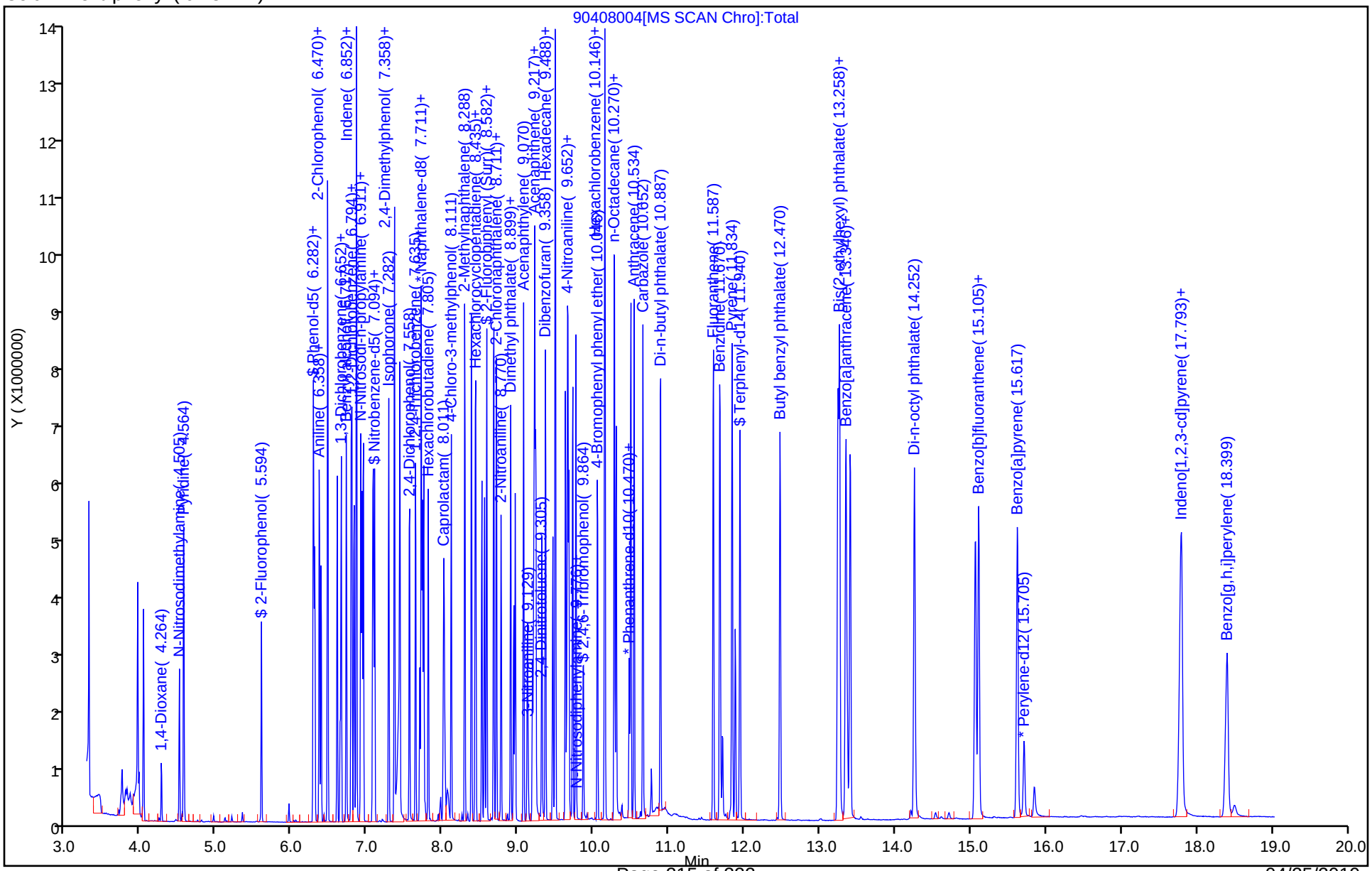
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Eurofins TestAmerica, Canton

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Injection Date:	08-Apr-2019 10:29:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std7 l1lvi			Worklist Smp#:	4
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	4
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

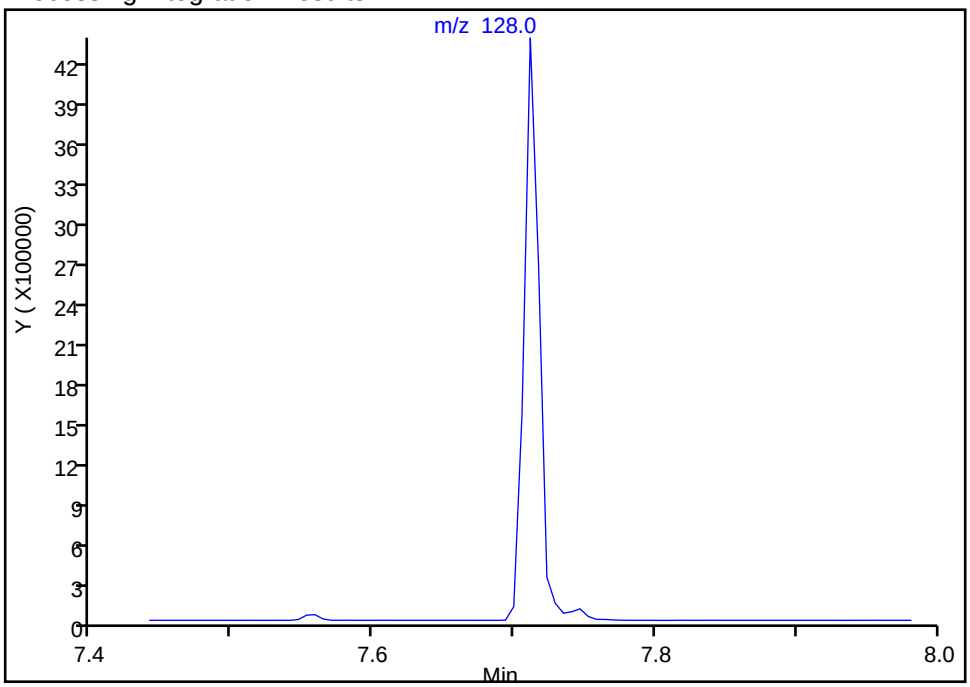
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Injection Date: 08-Apr-2019 10:29:30 Instrument ID: A4AG2
Lims ID: std7 l1lvi
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

74 Naphthalene, CAS: 91-20-3

Signal: 1

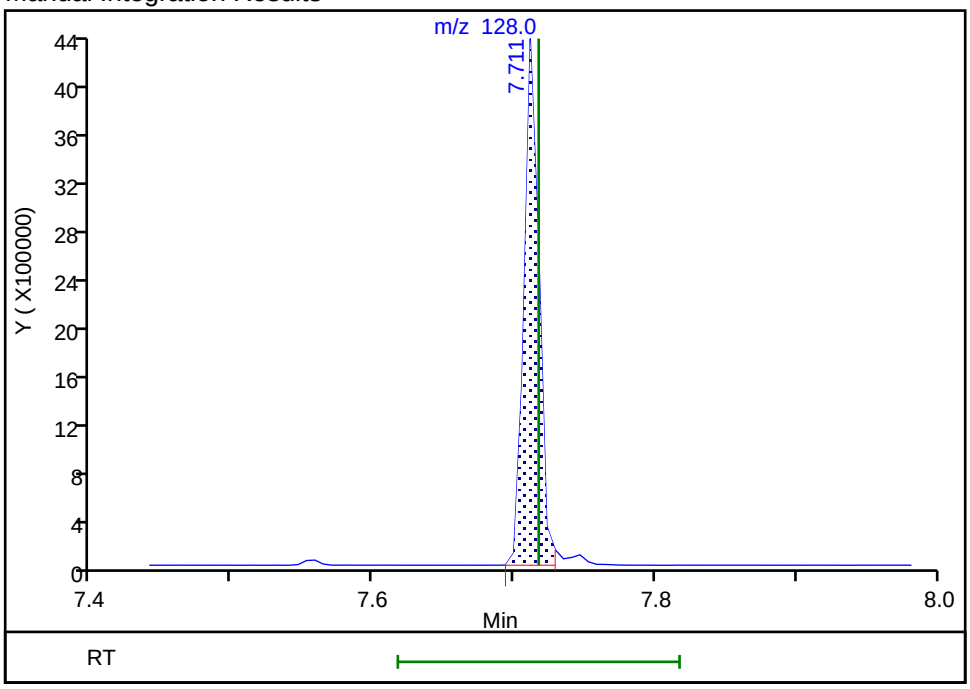
Not Detected
Expected RT: 7.72

Processing Integration Results



Manual Integration Results

RT: 7.71
Area: 3186442
Amount: 1390.4223
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:52:51
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

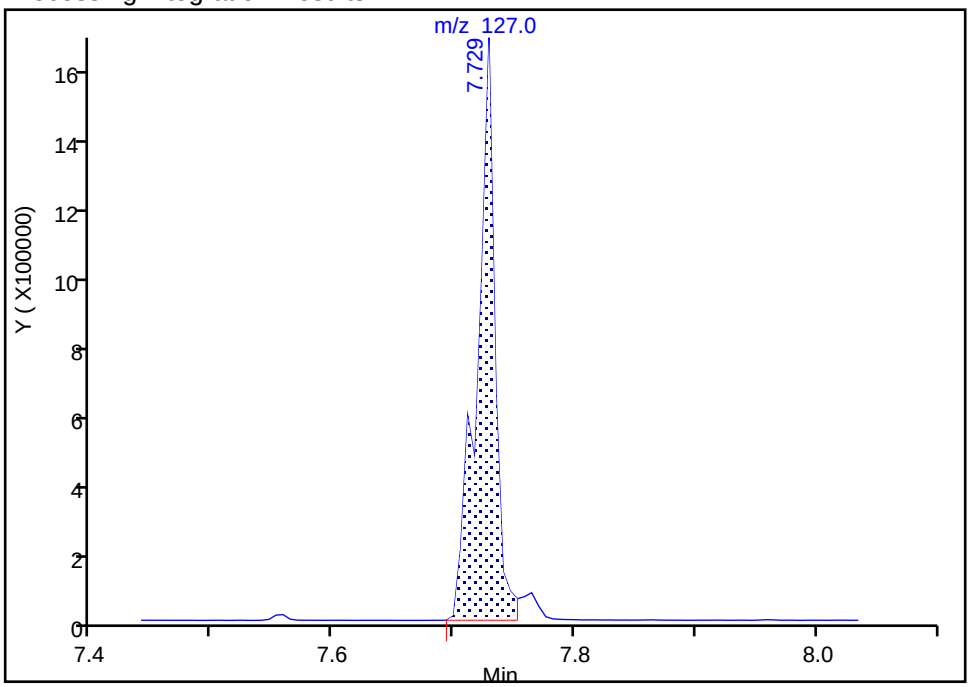
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Lims ID: std7 l1lvi
Client ID:
Operator ID: ALS Bottle#: 4 Worklist Smp#: 4
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

75 4-Chloroaniline, CAS: 106-47-8

Signal: 1

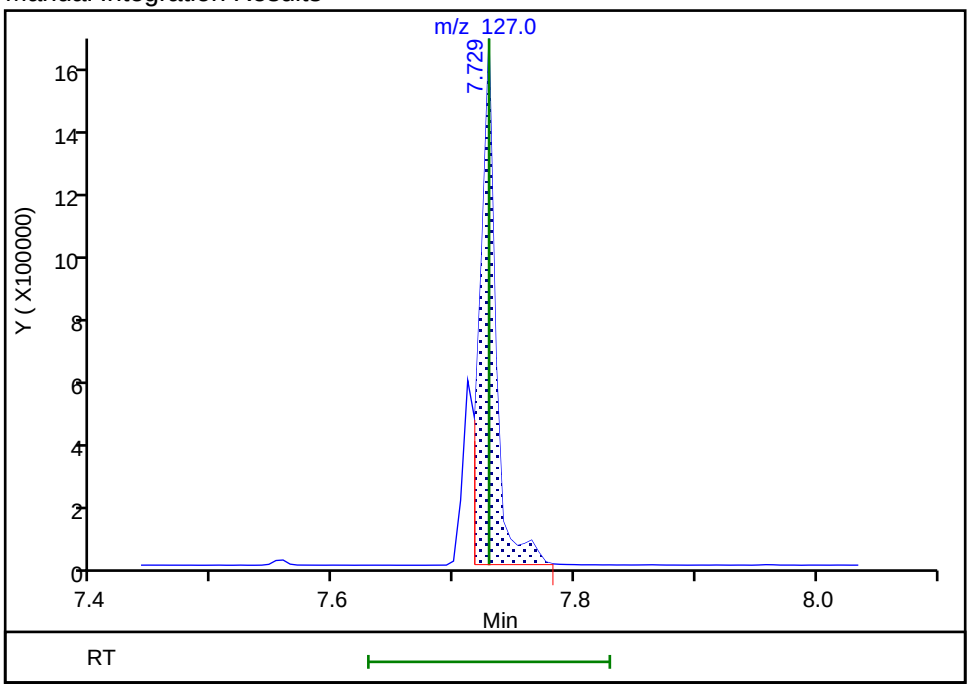
Processing Integration Results

RT: 7.73
Area: 1671428
Amount: 1717.5996
Amount Units: ng/ml



Manual Integration Results

RT: 7.73
Area: 1458172
Amount: 1531.6737
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:53:08
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

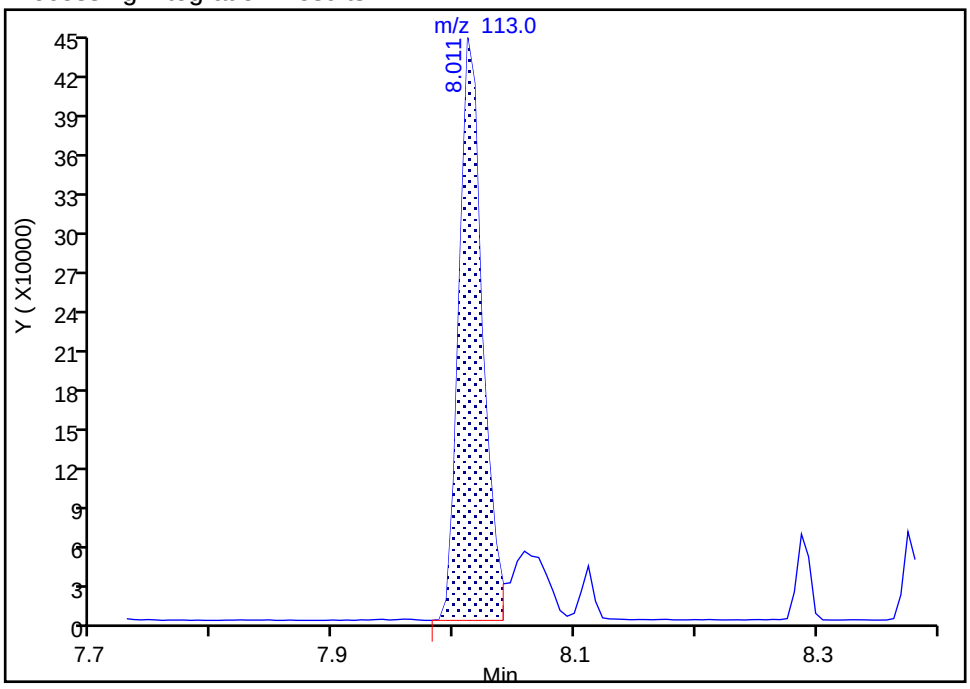
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Lims ID:	std7 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	4	Worklist Smp#:	4
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

83 Caprolactam, CAS: 105-60-2

Signal: 1

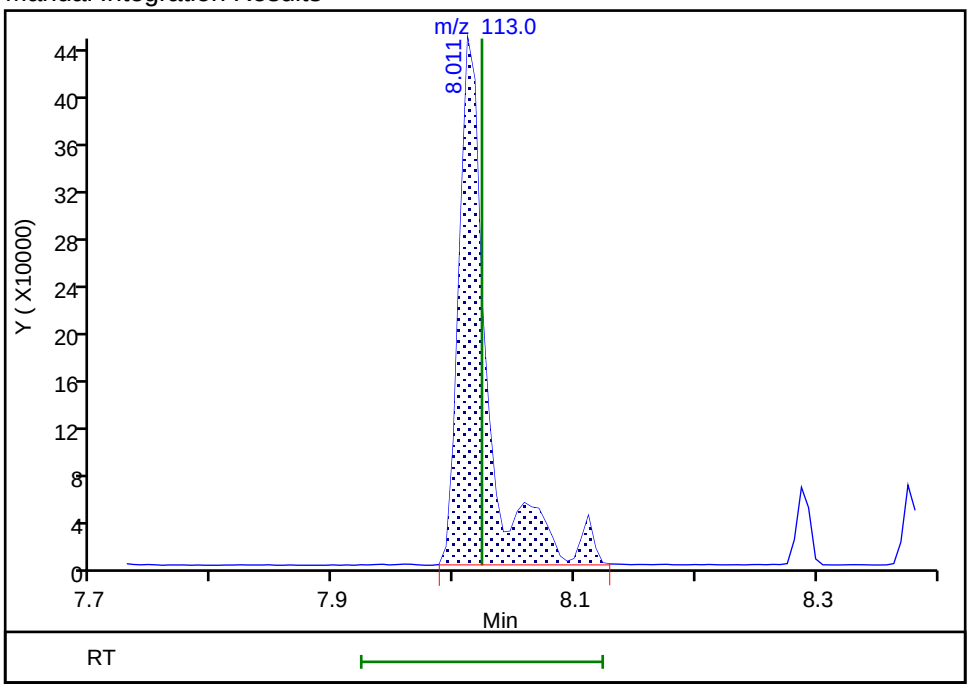
Processing Integration Results

RT: 8.01
Area: 606997
Amount: 2643.2113
Amount Units: ng/ml



Manual Integration Results

RT: 8.01
Area: 739881
Amount: 2990.9593
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 10:53:25

Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408005.D
Lims ID: std6 l1lvi
Client ID:
Sample Type: ICIS Calib Level: 6
Inject. Date: 08-Apr-2019 10:54:30 ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-005
Misc. Info.: STD6 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:06 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 11:21:05

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	97	196990	400.0	400.0	
* 2 Naphthalene-d8	136	7.693	7.693	0.000	100	865781	400.0	400.0	
* 3 Acenaphthene-d10	164	9.187	9.187	0.000	94	442766	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	97	777962	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	99	745304	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	712301	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	506382	1000.0	1032.0	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	619227	1000.0	917.2	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	96	780759	1000.0	1016.3	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	99	1384107	1000.0	978.8	
$ 11 2,4,6-Tribromophenol	330	9.864	9.864	0.000	91	149103	1000.0	1074.6	
$ 12 Terphenyl-d14	244	11.940	11.940	0.000	99	1318844	1000.0	969.7	
26 1,4-Dioxane	88	4.264	4.264	0.000	92	172240	1000.0	964.6	
27 N-Nitrosodimethylamine	74	4.505	4.505	0.000	90	473928	1000.0	1006.7	
28 Pyridine	79	4.558	4.558	0.000	82	989045	2000.0	2084.0	
42 Benzaldehyde	77	6.282	6.282	0.000	92	731831	2000.0	1876.3	
43 Phenol	94	6.299	6.299	0.000	98	702529	1000.0	914.3	
44 Aniline	93	6.358	6.358	0.000	96	1099034	1000.0	936.7	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	91	756873	1000.0	964.2	
47 2-Chlorophenol	128	6.470	6.470	0.000	95	621705	1000.0	978.7	
244 n-Decane	57	6.470	6.470	0.000	88	1019730	1000.0	972.7	
48 1,3-Dichlorobenzene	146	6.599	6.599	0.000	96	711910	1000.0	974.3	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	92	725065	1000.0	978.0	
50 Benzyl alcohol	108	6.717	6.717	0.000	92	459505	1000.0	982.1	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	688408	1000.0	975.1	
52 2-Methylphenol	108	6.793	6.793	0.000	96	565316	1000.0	885.0	
54 2,2'-oxybis[1-chloropropan	45	6.817	6.817	0.000	93	1353047	1000.0	958.0	
53 Indene	115	6.852	6.852	0.000	91	2259612	2000.0	1908.3	
55 3 & 4 Methylphenol	108	6.911	6.911	0.000	95	571795	1000.0	899.2	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	92	552809	1000.0	970.2	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.940	6.940	0.000	94	1017066	1000.0	973.2	
61 Hexachloroethane	117	7.070	7.070	0.000	95	290166	1000.0	994.2	
62 Nitrobenzene	77	7.093	7.093	0.000	94	791021	1000.0	1003.2	
64 Isophorone	82	7.282	7.282	0.000	98	1496461	1000.0	978.2	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	92	697417	1000.0	1052.4	
65 2-Nitrophenol	139	7.358	7.358	0.000	89	326088	1000.0	1081.9	
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	95	878984	1000.0	975.5	
70 Benzoic acid	122	7.411	7.411	0.000	96	609859	2000.0	2111.6	
72 2,4-Dichlorophenol	162	7.552	7.552	0.000	97	500048	1000.0	1001.1	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	0.000	93	570657	1000.0	963.4	
74 Naphthalene	128	7.711	7.711	0.000	95	2142613	1000.0	955.2	a
75 4-Chloroaniline	127	7.729	7.729	0.000	96	981521	1000.0	1053.3	M
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	96	558638	1000.0	1034.6	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	318092	1000.0	965.3	
83 Caprolactam	113	8.005	8.005	0.000	74	474562	2000.0	1960.0	M
85 4-Chloro-3-methylphenol	107	8.105	8.105	0.000	97	630553	1000.0	1075.5	
86 2-Methylnaphthalene	142	8.287	8.287	0.000	93	1406630	1000.0	960.7	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	93	1289868	1000.0	947.0	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	97	355095	1000.0	1088.7	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.435	0.000	98	541802	1000.0	1008.1	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	94	394547	1000.0	1100.0	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	95	417341	1000.0	1048.6	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	96	1595487	1000.0	974.4	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	97	1279277	1000.0	979.8	
101 2-Nitroaniline	65	8.770	8.770	0.000	80	474123	1000.0	1109.7	
104 Dimethyl phthalate	163	8.899	8.899	0.000	99	1448092	1000.0	992.9	
103 1,3-Dinitrobenzene	168	8.934	8.934	0.000	84	224577	1000.0	1006.0	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	91	330103	1000.0	1075.6	
108 Acenaphthylene	152	9.070	9.070	0.000	98	1983373	1000.0	987.4	
109 3-Nitroaniline	138	9.117	9.117	0.000	96	342299	1000.0	1070.5	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	77	239165	2000.0	1985.9	a
111 Acenaphthene	153	9.217	9.217	0.000	94	1184655	1000.0	946.5	
112 4-Nitrophenol	109	9.229	9.229	0.000	94	388957	2000.0	2135.1	
113 2,4-Dinitrotoluene	165	9.311	9.311	0.000	89	425824	1000.0	1095.0	
115 Dibenzofuran	168	9.358	9.358	0.000	96	1801798	1000.0	958.2	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.458	0.000	76	286339	1000.0	1060.5	
248 Hexadecane	57	9.487	9.487	0.000	86	1246823	1000.0	966.4	
120 Diethyl phthalate	149	9.493	9.493	0.000	98	1269233	1000.0	962.9	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	97	677861	1000.0	975.8	
125 4-Nitroaniline	138	9.640	9.640	0.000	84	305552	1000.0	1025.7	
124 Fluorene	166	9.652	9.652	0.000	95	1421942	1000.0	947.5	
127 4,6-Dinitro-2-methylphenol	198	9.670	9.670	0.000	80	337621	2000.0	1964.3	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	1066821	1000.0	981.5	
129 Diphenylamine	169	9.717	9.717	0.000	94	1066821	850.0	834.3	
131 Azobenzene	77	9.764	9.764	0.000	98	1644169	1000.0	1000.6	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	74	360092	1000.0	1003.3	
140 Hexachlorobenzene	284	10.146	10.146	0.000	93	368271	1000.0	959.7	
141 Atrazine	200	10.146	10.146	0.000	91	696835	2000.0	2054.1	
245 n-Octadecane	57	10.270	10.270	0.000	88	1407954	1000.0	1012.1	
143 Pentachlorophenol	266	10.299	10.299	0.000	91	380558	2000.0	1950.8	
148 Phenanthrene	178	10.487	10.487	0.000	98	1982753	1000.0	945.1	
149 Anthracene	178	10.534	10.534	0.000	96	2051689	1000.0	972.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.652	10.652	0.000	96	1919351	1000.0	971.7	
154 Di-n-butyl phthalate	149	10.881	10.881	0.000	100	2374177	1000.0	1005.8	
159 Fluoranthene	202	11.581	11.581	0.000	98	2194841	1000.0	991.3	
160 Benzidine	184	11.670	11.670	0.000	99	1928877	2000.0	1959.6	
161 Pyrene	202	11.834	11.834	0.000	97	2257493	1000.0	966.0	
169 Butyl benzyl phthalate	149	12.470	12.470	0.000	98	1087237	1000.0	1043.0	
174 Bis(2-ethylhexyl) phthalat	149	13.240	13.240	0.000	96	1444895	1000.0	1035.8	
177 3,3'-Dichlorobenzidine	252	13.258	13.258	0.000	75	1512579	2000.0	2052.0	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	2206566	1000.0	995.0	
179 Chrysene	228	13.399	13.399	0.000	97	2128809	1000.0	962.8	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	99	2605475	1000.0	1108.2	
183 Benzo[b]fluoranthene	252	15.058	15.058	0.000	97	2051308	1000.0	992.0	
184 Benzo[k]fluoranthene	252	15.099	15.099	0.000	98	2299990	1000.0	1029.3	
185 Benzo[a]pyrene	252	15.616	15.616	0.000	77	2061499	1000.0	1031.5	
190 Indeno[1,2,3-cd]pyrene	276	17.769	17.769	0.000	95	2141546	1000.0	1066.7	
189 Dibenz(a,h)anthracene	278	17.787	17.787	0.000	91	1794462	1000.0	1065.4	
191 Benzo[g,h,i]perylene	276	18.393	18.393	0.000	97	1828071	1000.0	1049.9	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SMLIST1 L6 W_00012 Amount Added: 0.10 Units: mL

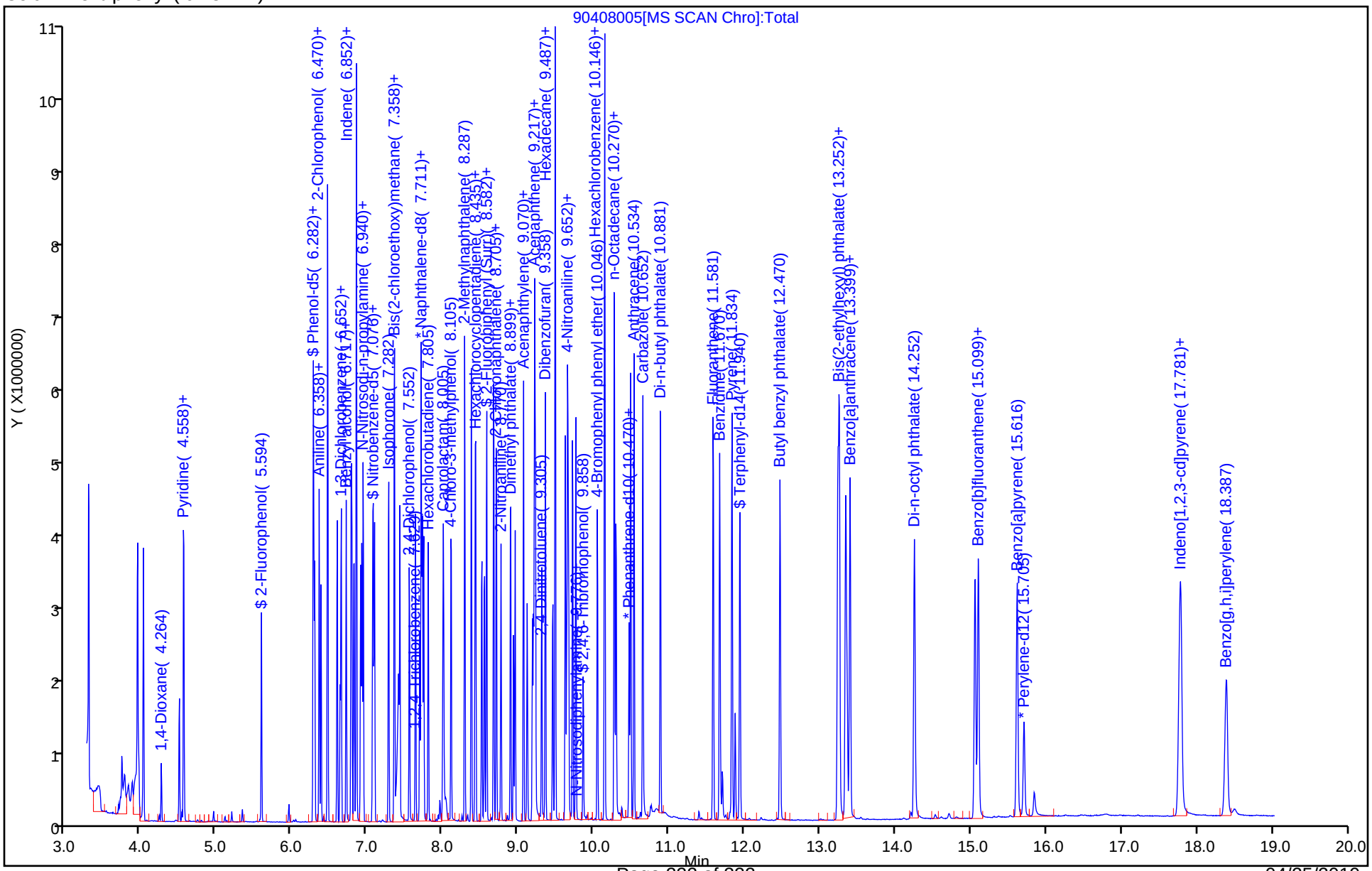
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Eurofins TestAmerica, Canton

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Injection Date:	08-Apr-2019 10:54:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std6 l1lvi			Worklist Smp#:	5
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	5
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

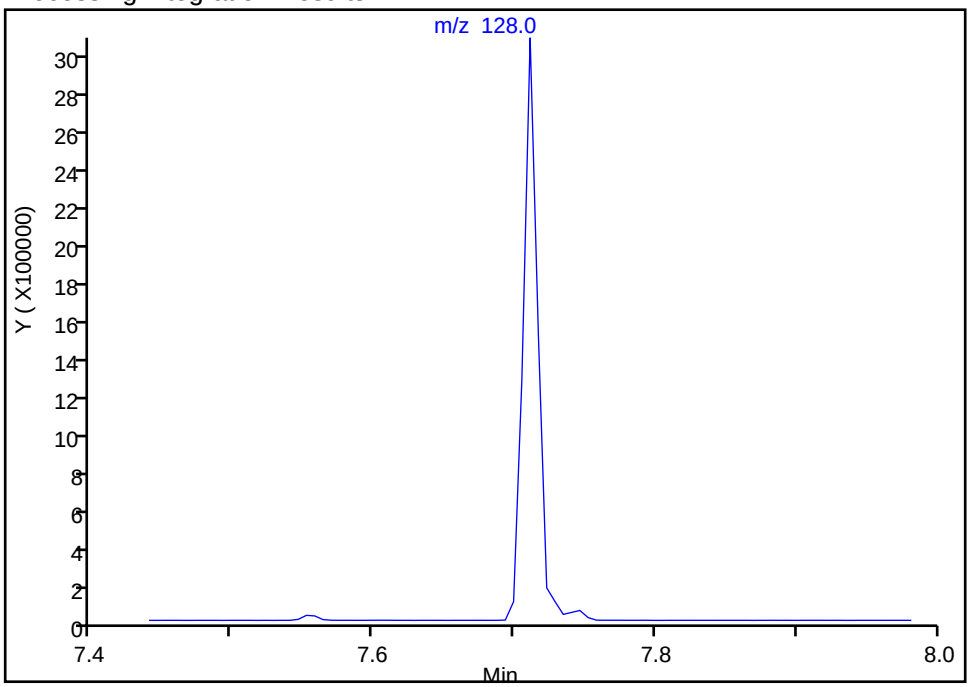
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Lims ID:	std6 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

74 Naphthalene, CAS: 91-20-3

Signal: 1

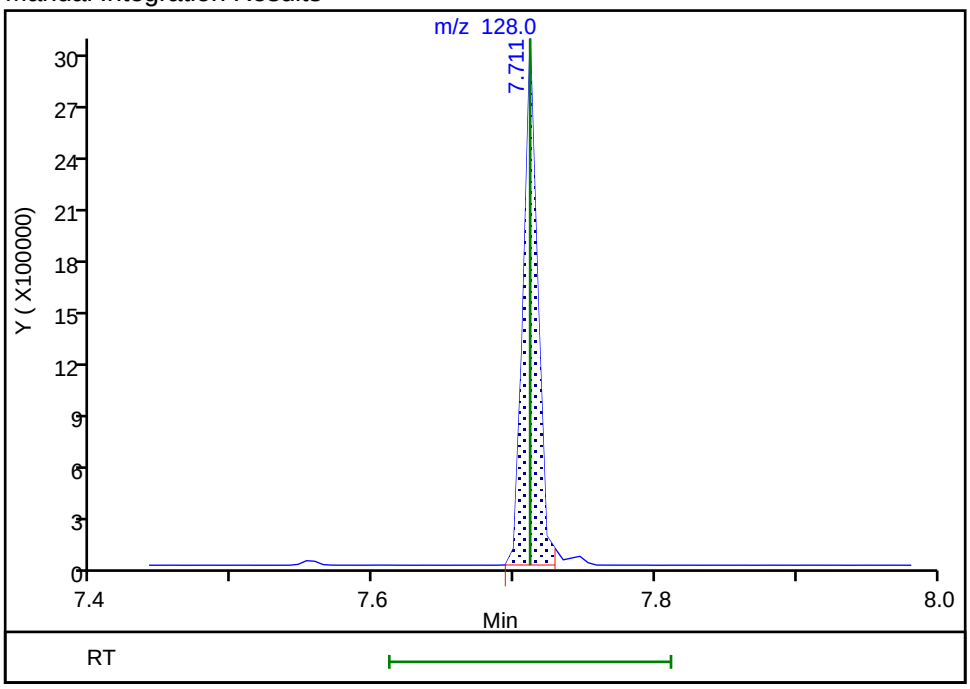
Not Detected
Expected RT: 7.71

Processing Integration Results



Manual Integration Results

RT: 7.71
Area: 2142613
Amount: 955.2033
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 11:19:54
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

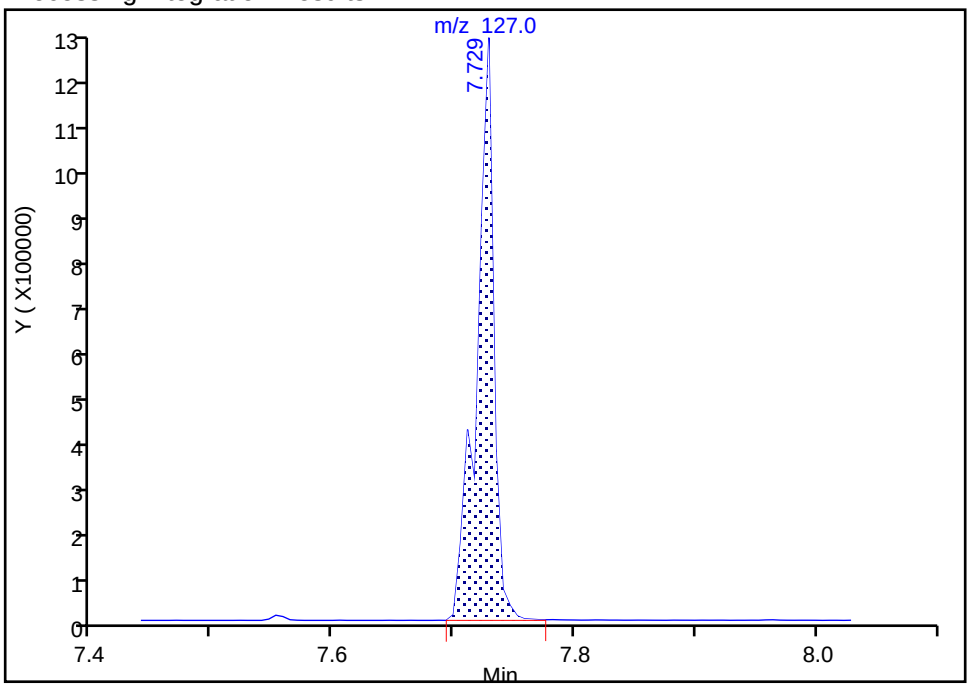
Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408005.D
Injection Date: 08-Apr-2019 10:54:30 Instrument ID: A4AG2
Lims ID: std6 l1lvi
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

75 4-Chloroaniline, CAS: 106-47-8

Signal: 1

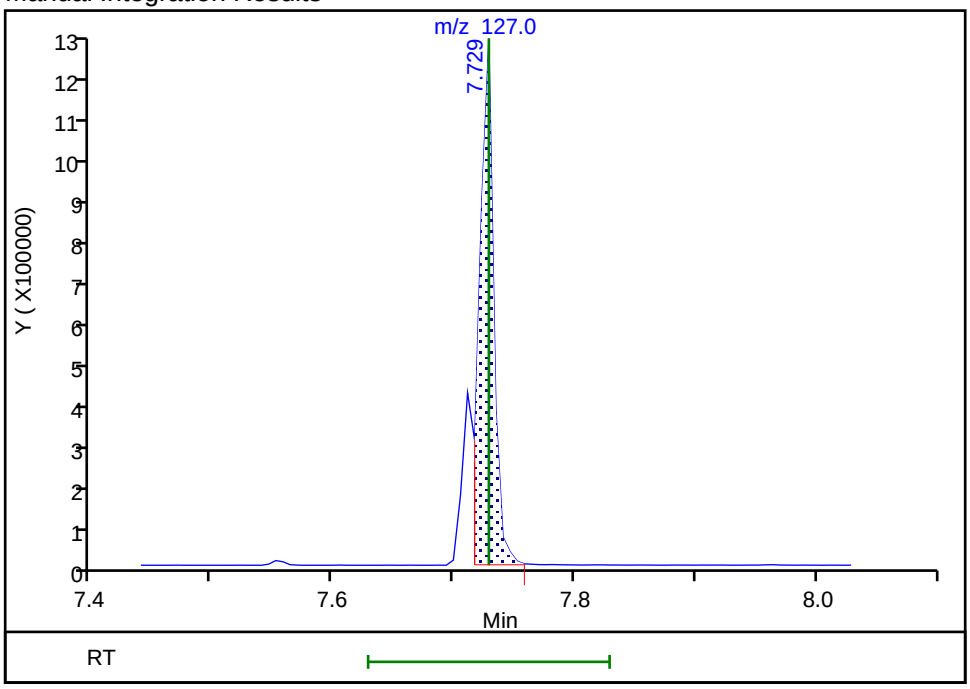
Processing Integration Results

RT: 7.73
Area: 1186124
Amount: 1215.1668
Amount Units: ng/ml



Manual Integration Results

RT: 7.73
Area: 981521
Amount: 1053.3398
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 11:20:32
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton

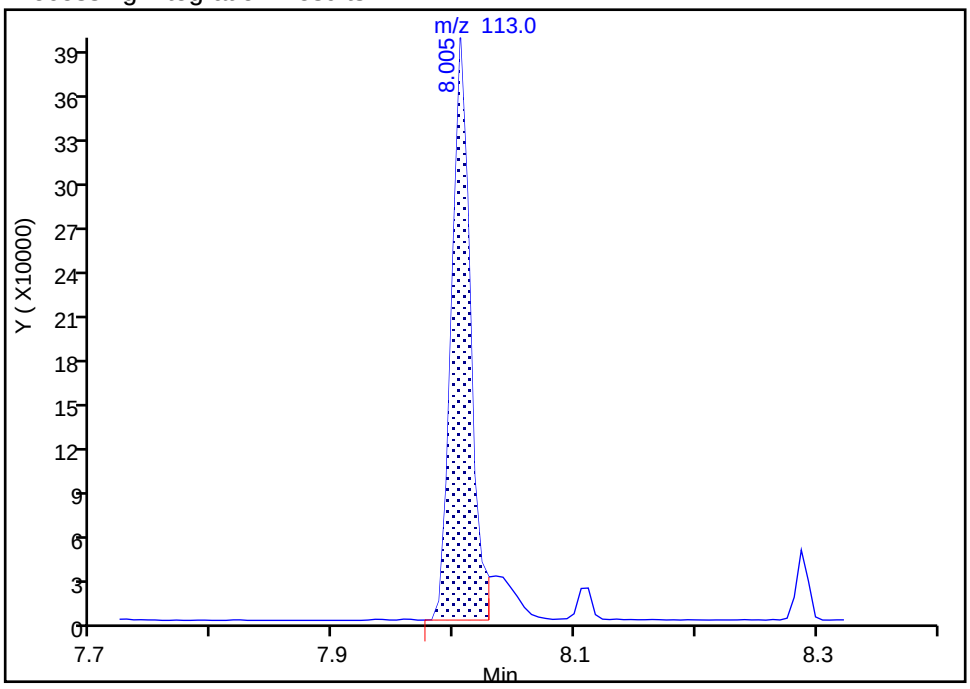
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Injection Date:	08-Apr-2019 10:54:30	Instrument ID:	A4AG2		
Lims ID:	std6 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	5	Worklist Smp#:	5
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

83 Caprolactam, CAS: 105-60-2

Signal: 1

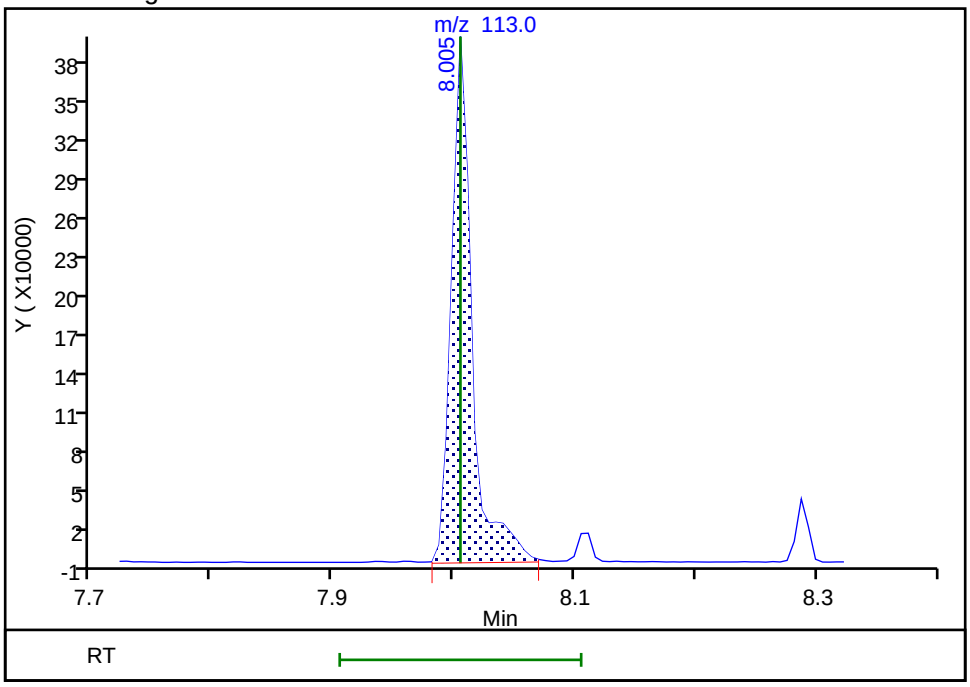
Processing Integration Results

RT: 8.01
Area: 432308
Amount: 1851.7696
Amount Units: ng/ml



Manual Integration Results

RT: 8.01
Area: 474562
Amount: 1959.9861
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 11:20:45
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

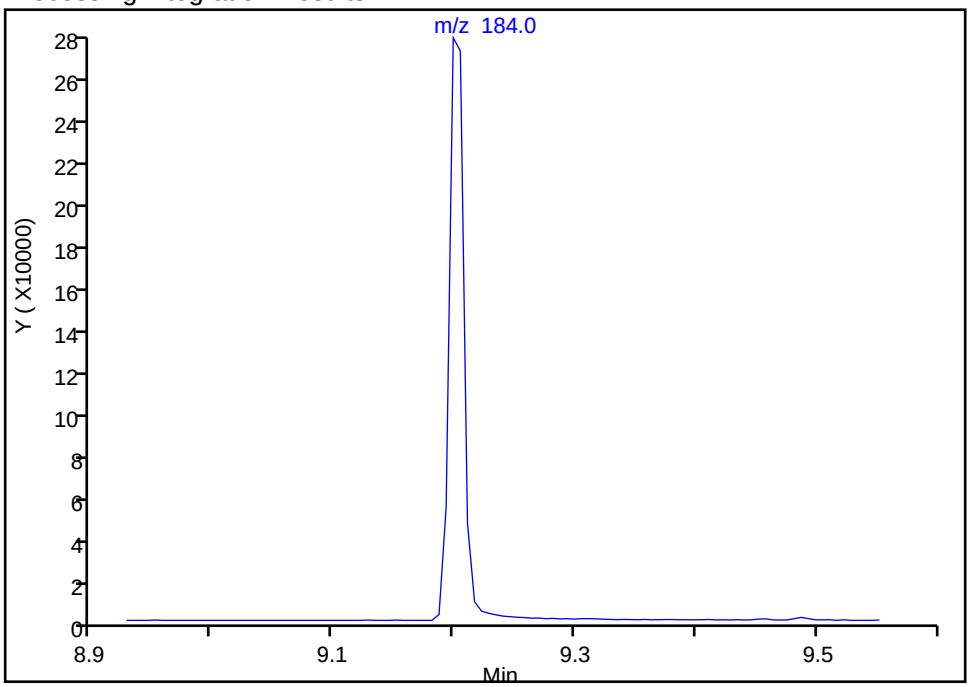
Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408005.D
Injection Date: 08-Apr-2019 10:54:30 Instrument ID: A4AG2
Lims ID: std6 l1lvi
Client ID:
Operator ID: ALS Bottle#: 5 Worklist Smp#: 5
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

110 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

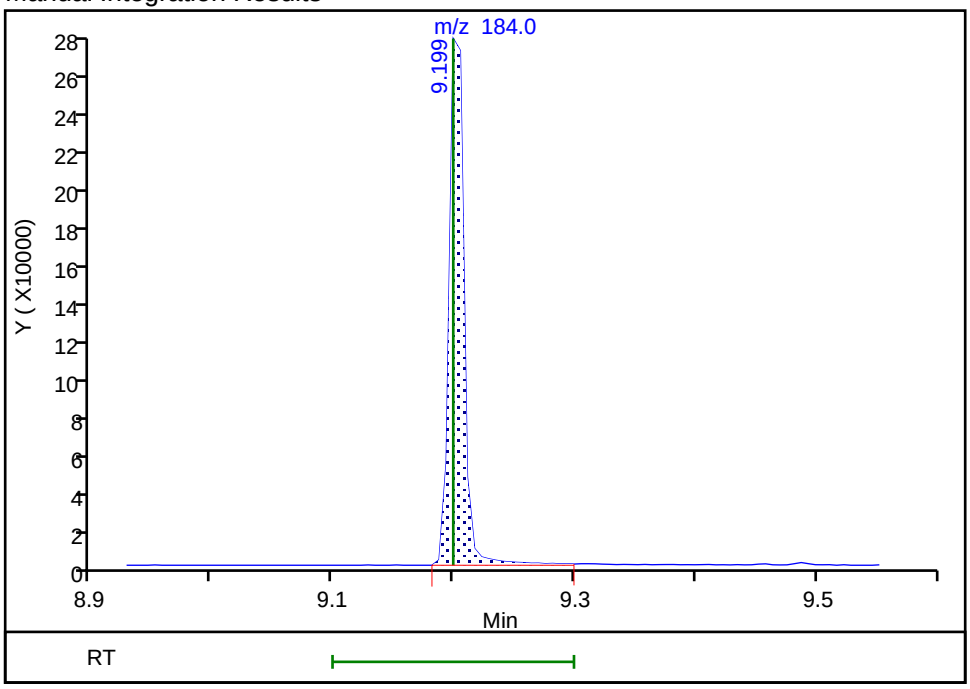
Not Detected
Expected RT: 9.20

Processing Integration Results



Manual Integration Results

RT: 9.20
Area: 239165
Amount: 1985.8772
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 11:20:54
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408006.D
Lims ID: std5 l1lvi
Client ID:
Sample Type: IC Calib Level: 5
Inject. Date: 08-Apr-2019 11:18:30 ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-006
Misc. Info.: STD5 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:14 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 11:57:03

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	96	183118	400.0	400.0	
* 2 Naphthalene-d8	136	7.693	7.693	0.000	100	839158	400.0	400.0	
* 3 Acenaphthene-d10	164	9.187	9.187	0.000	95	436822	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	96	775477	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	99	736211	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	709949	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	217219	500.0	476.2	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	291368	500.0	464.2	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	95	380366	500.0	510.8	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	99	715897	500.0	513.1	
$ 11 2,4,6-Tribromophenol	330	9.858	9.864	-0.006	86	71662	500.0	523.5	
$ 12 Terphenyl-d14	244	11.934	11.940	-0.006	99	667766	500.0	497.0	
26 1,4-Dioxane	88	4.270	4.264	0.006	93	79180	500.0	477.0	
27 N-Nitrosodimethylamine	74	4.505	4.505	0.000	91	211381	500.0	483.0	
28 Pyridine	79	4.564	4.558	0.006	82	410212	1000.0	929.8	
42 Benzaldehyde	77	6.282	6.282	0.000	91	455300	1000.0	1074.7	
43 Phenol	94	6.299	6.299	0.000	98	333527	500.0	467.0	
44 Aniline	93	6.358	6.358	0.000	96	544872	500.0	499.6	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	91	381213	500.0	522.4	
47 2-Chlorophenol	128	6.470	6.470	0.000	97	305859	500.0	518.0	
244 n-Decane	57	6.470	6.470	0.000	88	500457	500.0	513.5	
48 1,3-Dichlorobenzene	146	6.599	6.599	0.000	96	342560	500.0	504.3	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	92	355027	500.0	515.2	
50 Benzyl alcohol	108	6.717	6.717	0.000	92	194191	500.0	446.5	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	341472	500.0	520.3	
52 2-Methylphenol	108	6.788	6.793	-0.005	95	275346	500.0	463.7	
54 2,2'-oxybis[1-chloropropan	45	6.817	6.817	0.000	93	696521	500.0	530.5	
53 Indene	115	6.852	6.852	0.000	91	1185028	1000.0	1076.6	
55 3 & 4 Methylphenol	108	6.911	6.911	0.000	95	234098	500.0	396.1	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	93	287346	500.0	542.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.941	6.940	0.000	95	514415	500.0	529.5	
61 Hexachloroethane	117	7.070	7.070	0.000	95	141003	500.0	519.7	
62 Nitrobenzene	77	7.093	7.093	0.000	94	388293	500.0	508.0	
64 Isophorone	82	7.276	7.282	-0.006	98	774781	500.0	522.5	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	92	303166	500.0	472.0	
65 2-Nitrophenol	139	7.358	7.358	0.000	86	158032	500.0	541.0	
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	95	452254	500.0	517.8	
70 Benzoic acid	122	7.393	7.411	-0.018	92	242411	1000.0	915.2	
72 2,4-Dichlorophenol	162	7.552	7.552	0.000	98	202732	500.0	418.7	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	0.000	93	284296	500.0	495.2	
74 Naphthalene	128	7.711	7.711	0.000	97	1108273	500.0	509.8	
75 4-Chloroaniline	127	7.729	7.729	0.000	95	495967	500.0	549.1	
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	96	267669	500.0	511.5	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	160387	500.0	502.2	
83 Caprolactam	113	7.999	8.005	-0.006	74	239920	1000.0	1022.3	
85 4-Chloro-3-methylphenol	107	8.105	8.105	0.000	98	319693	500.0	562.6	
86 2-Methylnaphthalene	142	8.287	8.287	0.000	93	728829	500.0	513.6	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	93	672910	500.0	509.7	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	97	165974	500.0	515.8	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.435	0.001	98	271906	500.0	512.8	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	194762	500.0	550.4	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	94	196407	500.0	513.4	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	96	821789	500.0	508.7	
100 2-Chloronaphthalene	162	8.705	8.711	-0.006	98	669404	500.0	519.7	
101 2-Nitroaniline	65	8.770	8.770	0.000	80	230419	500.0	546.7	
104 Dimethyl phthalate	163	8.893	8.899	-0.006	98	740460	500.0	514.6	
103 1,3-Dinitrobenzene	168	8.934	8.934	0.000	84	103793	500.0	487.6	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	93	166681	500.0	550.5	
108 Acenaphthylene	152	9.070	9.070	0.000	98	1031459	500.0	520.5	
109 3-Nitroaniline	138	9.117	9.117	0.000	91	190841	500.0	605.0	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	78	93780	1000.0	852.7	a
111 Acenaphthene	153	9.217	9.217	0.000	95	628794	500.0	509.2	
112 4-Nitrophenol	109	9.223	9.229	-0.006	95	200253	1000.0	1114.2	
113 2,4-Dinitrotoluene	165	9.311	9.311	0.000	90	212113	500.0	552.9	
115 Dibenzofuran	168	9.358	9.358	0.000	96	950551	500.0	512.4	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.458	0.000	78	140003	500.0	525.6	
248 Hexadecane	57	9.487	9.487	0.000	85	698092	500.0	548.5	
120 Diethyl phthalate	149	9.487	9.493	-0.006	97	690410	500.0	530.9	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	96	354575	500.0	517.4	
124 Fluorene	166	9.652	9.652	0.000	95	761744	500.0	514.5	
125 4-Nitroaniline	138	9.640	9.640	0.000	85	176063	500.0	599.1	
127 4,6-Dinitro-2-methylphenol	198	9.664	9.670	-0.006	77	147479	1000.0	913.9	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	562146	500.0	518.9	
129 Diphenylamine	169	9.717	9.717	0.000	95	562146	425.0	441.0	
131 Azobenzene	77	9.764	9.764	0.000	98	864902	500.0	528.1	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	75	182806	500.0	511.0	
140 Hexachlorobenzene	284	10.146	10.146	0.000	76	189676	500.0	495.9	
141 Atrazine	200	10.146	10.146	0.000	89	362522	1000.0	1072.1	
245 n-Octadecane	57	10.270	10.270	0.000	88	764982	500.0	551.7	
143 Pentachlorophenol	266	10.293	10.299	-0.006	90	177186	1000.0	945.7	
148 Phenanthrene	178	10.487	10.487	0.000	98	1065631	500.0	509.6	
149 Anthracene	178	10.534	10.534	0.000	97	1099117	500.0	522.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.652	10.652	0.000	96	1025477	500.0	520.8	
154 Di-n-butyl phthalate	149	10.881	10.881	0.000	100	1254209	500.0	533.1	
159 Fluoranthene	202	11.581	11.581	0.000	98	1133625	500.0	513.7	
160 Benzidine	184	11.670	11.670	0.000	99	947068	1000.0	1010.3	
161 Pyrene	202	11.834	11.834	0.000	97	1176396	500.0	509.6	
169 Butyl benzyl phthalate	149	12.470	12.470	0.000	98	550642	500.0	534.8	
174 Bis(2-ethylhexyl) phthalat	149	13.234	13.240	-0.006	96	742999	500.0	539.2	
177 3,3'-Dichlorobenzidine	252	13.252	13.258	-0.006	74	819799	1000.0	1125.9	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	1133656	500.0	517.5	
179 Chrysene	228	13.393	13.399	-0.006	97	1090653	500.0	499.4	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	99	1300095	500.0	554.8	
183 Benzo[b]fluoranthene	252	15.052	15.058	-0.006	97	1078431	500.0	523.2	
184 Benzo[k]fluoranthene	252	15.099	15.099	0.000	98	1151768	500.0	517.1	
185 Benzo[a]pyrene	252	15.611	15.616	-0.005	78	1048958	500.0	526.6	
190 Indeno[1,2,3-cd]pyrene	276	17.763	17.769	-0.006	95	1054849	500.0	527.2	
189 Dibenz(a,h)anthracene	278	17.781	17.787	-0.006	91	905440	500.0	539.4	
191 Benzo[g,h,i]perylene	276	18.381	18.393	-0.012	96	891129	500.0	513.5	
S 193 Methyl Phenols,Total	100				0			859.8	
S 246 Total Cresols	100				0			859.8	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

SMLIST1 L5 W_00012 Amount Added: 0.10 Units: mL

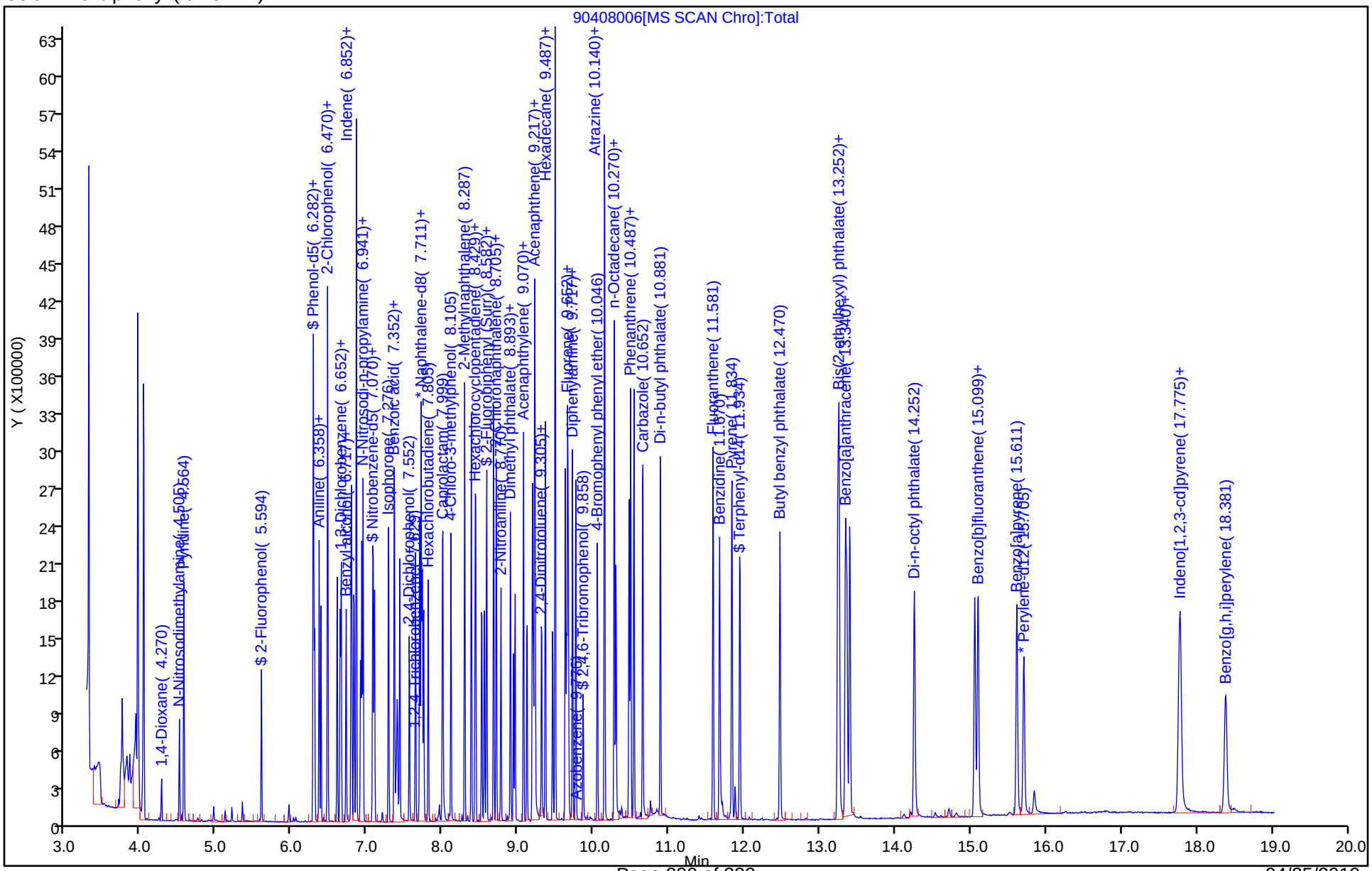
Report Date: 09-Apr-2019 05:03:16 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408006.D

Injection Date:	08-Apr-2019 11:18:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std5 l1lvi			Worklist Smp#:	6
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	6
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

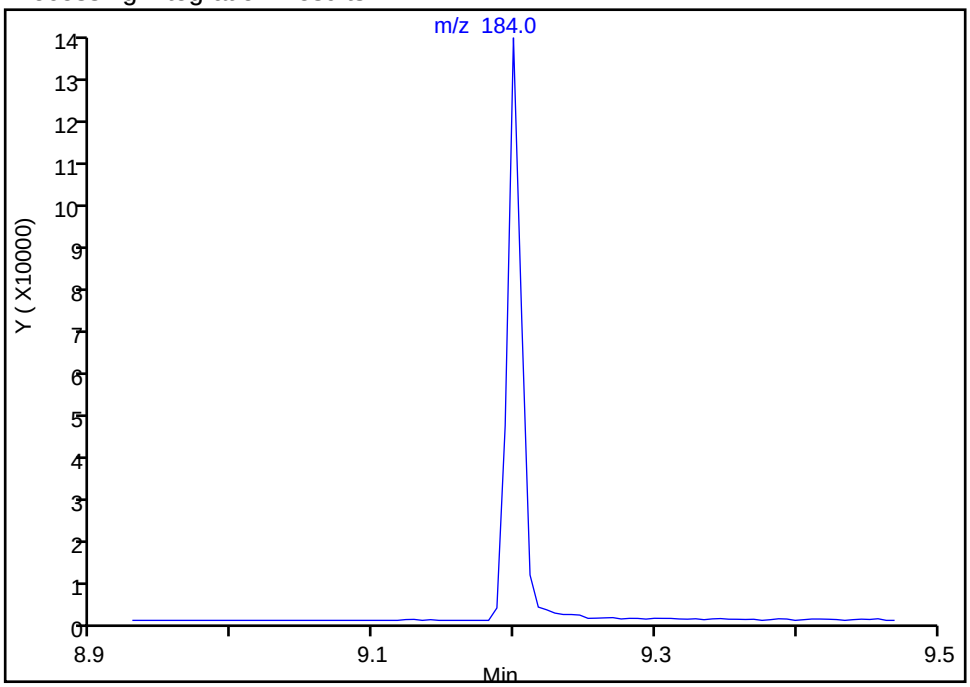
Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408006.D
Injection Date: 08-Apr-2019 11:18:30 Instrument ID: A4AG2
Lims ID: std5 l1lvi
Client ID:
Operator ID: ALS Bottle#: 6 Worklist Smp#: 6
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

110 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

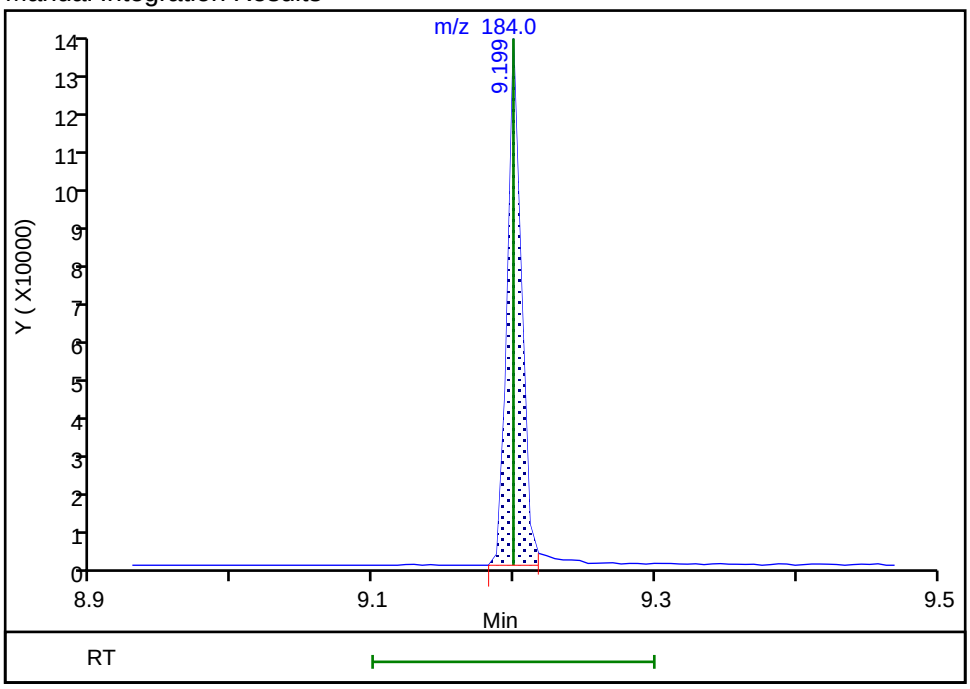
Not Detected
Expected RT: 9.20

Processing Integration Results



Manual Integration Results

RT: 9.20
Area: 93780
Amount: 852.7178
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 11:56:52
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408007.D
Lims ID: std4 l1lvi
Client ID:
Sample Type: IC Calib Level: 4
Inject. Date: 08-Apr-2019 11:42:30 ALS Bottle#: 7 Worklist Smp#: 7
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-007
Misc. Info.: STD4 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:21 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 12:05:23

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	96	190460	400.0	400.0	
* 2 Naphthalene-d8	136	7.693	7.693	0.000	100	835415	400.0	400.0	
* 3 Acenaphthene-d10	164	9.187	9.187	0.000	96	446909	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	97	809424	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	98	753195	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	710316	400.0	400.0	
$ 7 2-Fluorophenol	112	5.593	5.594	-0.001	94	98213	200.0	207.0	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	144130	200.0	220.8	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	96	156049	200.0	210.5	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	99	302555	200.0	212.0	
$ 11 2,4,6-Tribromophenol	330	9.858	9.864	-0.006	83	26572	200.0	189.7	
$ 12 Terphenyl-d14	244	11.934	11.940	-0.006	99	287237	200.0	209.0	
26 1,4-Dioxane	88	4.264	4.264	0.000	92	32122	200.0	186.1	
27 N-Nitrosodimethylamine	74	4.499	4.505	-0.006	91	90671	200.0	199.2	
28 Pyridine	79	4.558	4.558	0.000	81	170876	400.0	372.4	
42 Benzaldehyde	77	6.282	6.282	0.000	91	217687	400.0	421.5	
43 Phenol	94	6.299	6.299	0.000	98	166886	200.0	224.6	
44 Aniline	93	6.358	6.358	0.000	97	247905	200.0	218.5	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	90	162801	200.0	214.5	
47 2-Chlorophenol	128	6.470	6.470	0.000	96	138423	200.0	225.4	
244 n-Decane	57	6.470	6.470	0.000	88	222692	200.0	219.7	
48 1,3-Dichlorobenzene	146	6.599	6.599	0.000	96	150817	200.0	213.5	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	93	153211	200.0	213.8	
50 Benzyl alcohol	108	6.717	6.717	0.000	93	86849	200.0	192.0	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	94	146319	200.0	214.4	
52 2-Methylphenol	108	6.788	6.793	-0.005	95	130646	200.0	211.5	
54 2,2'-oxybis[1-chloropropan	45	6.817	6.817	0.000	93	300570	200.0	220.1	
53 Indene	115	6.852	6.852	0.000	91	518376	400.0	452.8	
55 3 & 4 Methylphenol	108	6.905	6.911	-0.006	96	113537	200.0	184.7	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	92	118608	200.0	215.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.940	6.940	0.000	93	210577	200.0	208.4	
61 Hexachloroethane	117	7.070	7.070	0.000	95	59675	200.0	211.5	
62 Nitrobenzene	77	7.093	7.093	0.000	95	160970	200.0	211.6	
64 Isophorone	82	7.276	7.282	-0.006	98	321913	200.0	218.1	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	92	117563	200.0	183.9	
65 2-Nitrophenol	139	7.358	7.358	0.000	92	59121	200.0	203.3	
70 Benzoic acid	122	7.382	7.411	-0.029	93	83703	400.0	371.9	
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	96	194744	200.0	224.0	
72 2,4-Dichlorophenol	162	7.552	7.552	0.000	98	87540	200.0	181.6	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	-0.001	93	122682	200.0	214.6	
74 Naphthalene	128	7.711	7.711	0.000	95	470544	200.0	217.4	
75 4-Chloroaniline	127	7.729	7.729	0.000	96	189844	200.0	211.1	
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	95	100151	200.0	192.2	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	98	68609	200.0	215.8	
83 Caprolactam	113	7.993	8.005	-0.012	75	102779	400.0	439.9	
85 4-Chloro-3-methylphenol	107	8.105	8.105	0.000	97	121689	200.0	215.1	
86 2-Methylnaphthalene	142	8.287	8.287	0.000	93	308852	200.0	218.6	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	94	286780	200.0	218.2	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	96	62293	200.0	189.2	
90 1,2,4,5-Tetrachlorobenzene	216	8.434	8.435	0.000	98	108790	200.0	200.5	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	74495	200.0	205.8	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	95	77710	200.0	214.0	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	96	354860	200.0	214.7	
100 2-Chloronaphthalene	162	8.705	8.711	-0.006	98	279419	200.0	212.0	
101 2-Nitroaniline	65	8.770	8.770	0.000	80	87590	200.0	203.1	
104 Dimethyl phthalate	163	8.893	8.899	-0.006	98	312471	200.0	212.3	
103 1,3-Dinitrobenzene	168	8.934	8.934	0.000	84	38005	200.0	194.2	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	91	64102	200.0	206.9	
108 Acenaphthylene	152	9.070	9.070	0.000	98	438663	200.0	216.4	
109 3-Nitroaniline	138	9.111	9.117	-0.006	90	70127	200.0	217.3	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	74	26929	400.0	315.1	a
111 Acenaphthene	153	9.217	9.217	0.000	94	267401	200.0	211.7	
112 4-Nitrophenol	109	9.223	9.229	-0.006	94	70522	400.0	383.5	
113 2,4-Dinitrotoluene	165	9.305	9.311	-0.006	89	79110	200.0	201.5	
115 Dibenzofuran	168	9.358	9.358	0.000	96	407835	200.0	214.9	
118 2,3,4,6-Tetrachlorophenol	232	9.452	9.458	-0.006	78	55750	200.0	204.6	
248 Hexadecane	57	9.487	9.487	0.000	85	309029	200.0	237.3	
120 Diethyl phthalate	149	9.487	9.493	-0.006	97	299183	200.0	224.9	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	97	148289	200.0	211.5	
125 4-Nitroaniline	138	9.640	9.640	0.000	84	75552	200.0	251.3	
124 Fluorene	166	9.652	9.652	0.000	95	329014	200.0	217.2	
127 4,6-Dinitro-2-methylphenol	198	9.664	9.670	-0.006	78	45849	400.0	338.6	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	239408	200.0	211.7	
129 Diphenylamine	169	9.717	9.717	0.000	94	239408	170.0	180.0	
131 Azobenzene	77	9.764	9.764	0.000	98	364589	200.0	213.3	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	75	76620	200.0	205.2	
140 Hexachlorobenzene	284	10.146	10.146	0.000	76	82565	200.0	206.8	
141 Atrazine	200	10.140	10.146	-0.006	89	159064	400.0	450.7	
245 n-Octadecane	57	10.270	10.270	0.000	88	326640	200.0	225.7	
143 Pentachlorophenol	266	10.293	10.299	-0.006	89	64677	400.0	372.8	
148 Phenanthrene	178	10.487	10.487	0.000	97	468842	200.0	214.8	
149 Anthracene	178	10.534	10.534	0.000	96	472085	200.0	215.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.652	10.652	0.000	96	440085	200.0	214.1	
154 Di-n-butyl phthalate	149	10.881	10.881	0.000	100	531894	200.0	216.6	
159 Fluoranthene	202	11.581	11.581	0.000	98	475365	200.0	206.4	
160 Benzidine	184	11.670	11.670	0.000	100	312648	400.0	374.9	
161 Pyrene	202	11.834	11.834	0.000	97	500282	200.0	211.8	
169 Butyl benzyl phthalate	149	12.469	12.470	-0.001	98	213825	200.0	203.0	
174 Bis(2-ethylhexyl) phthalat	149	13.234	13.240	-0.006	96	293551	200.0	208.2	
177 3,3'-Dichlorobenzidine	252	13.252	13.258	-0.006	75	329088	400.0	441.8	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	99	469427	200.0	209.5	
179 Chrysene	228	13.393	13.399	-0.006	97	463249	200.0	207.3	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	99	461805	200.0	197.0	
183 Benzo[b]fluoranthene	252	15.052	15.058	-0.006	98	420316	200.0	203.8	
184 Benzo[k]fluoranthene	252	15.099	15.099	0.000	98	461683	200.0	207.2	
185 Benzo[a]pyrene	252	15.610	15.616	-0.006	78	406274	200.0	203.9	
190 Indeno[1,2,3-cd]pyrene	276	17.763	17.769	-0.006	95	402412	200.0	201.0	
189 Dibenz(a,h)anthracene	278	17.781	17.787	-0.006	90	336326	200.0	200.2	
191 Benzo[g,h,i]perylene	276	18.375	18.393	-0.018	95	343822	200.0	198.0	
S 193 Methyl Phenols,Total	100				0			396.2	
S 246 Total Cresols	100				0			396.2	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

SMLIST1 L4 W_00012 Amount Added: 0.10 Units: mL

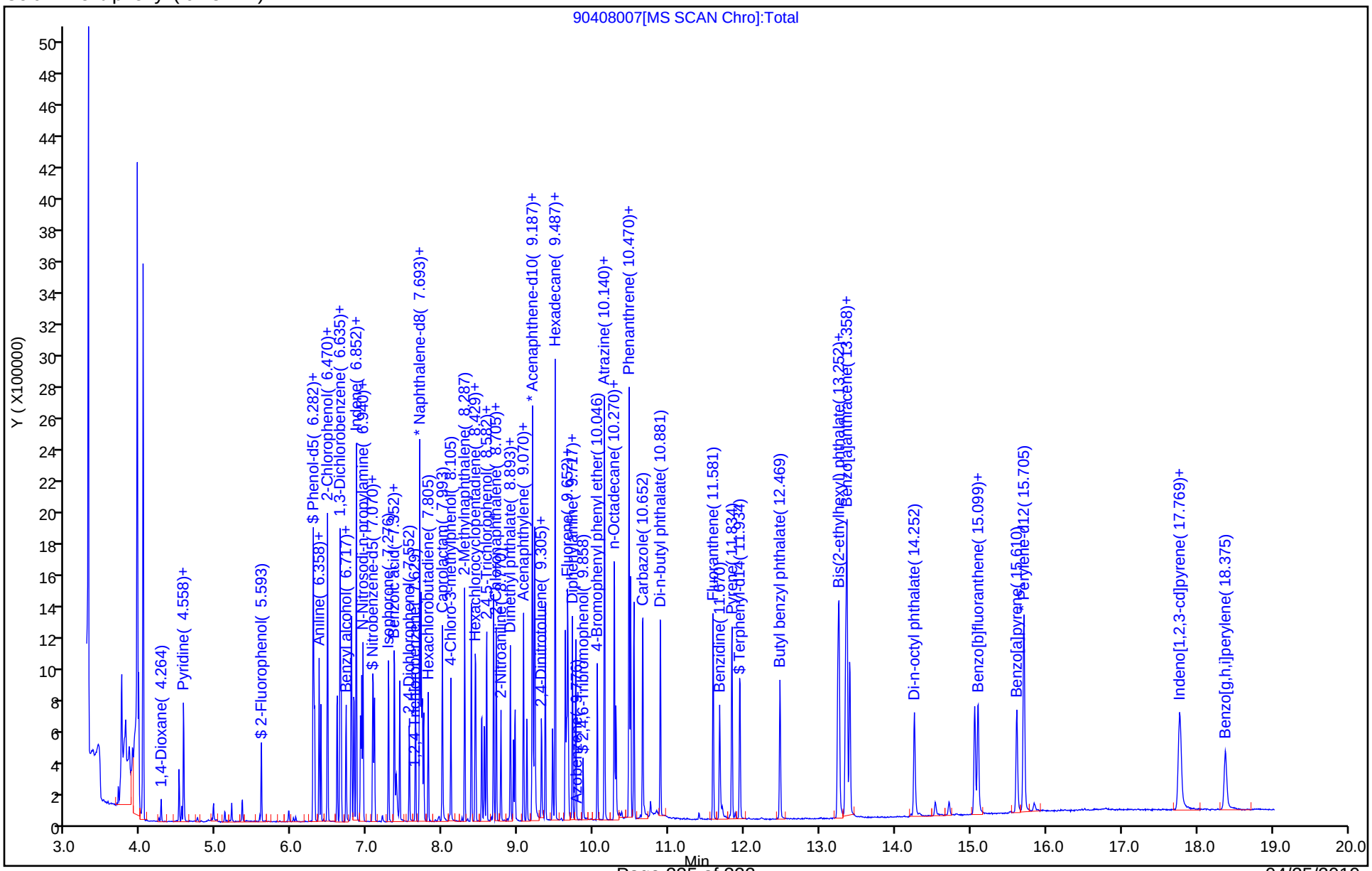
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408007.D

Injection Date:	08-Apr-2019 11:42:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std4 l1lvi			Worklist Smp#:	7
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	7
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton

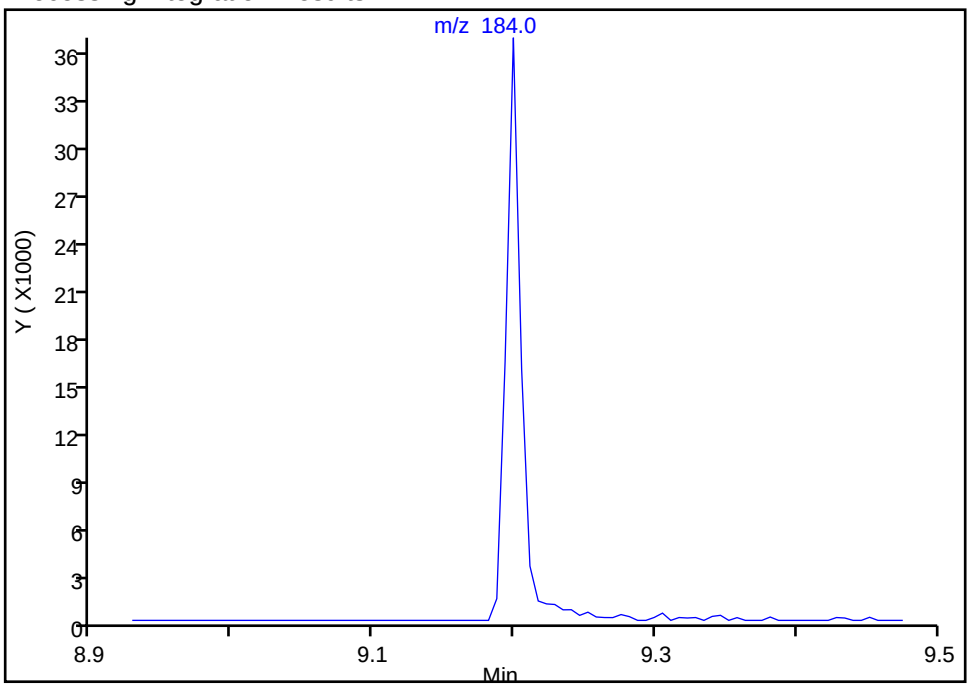
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Injection Date:	08-Apr-2019 11:42:30	Instrument ID:	A4AG2		
Lims ID:	std4 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	7	Worklist Smp#:	7
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

110 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

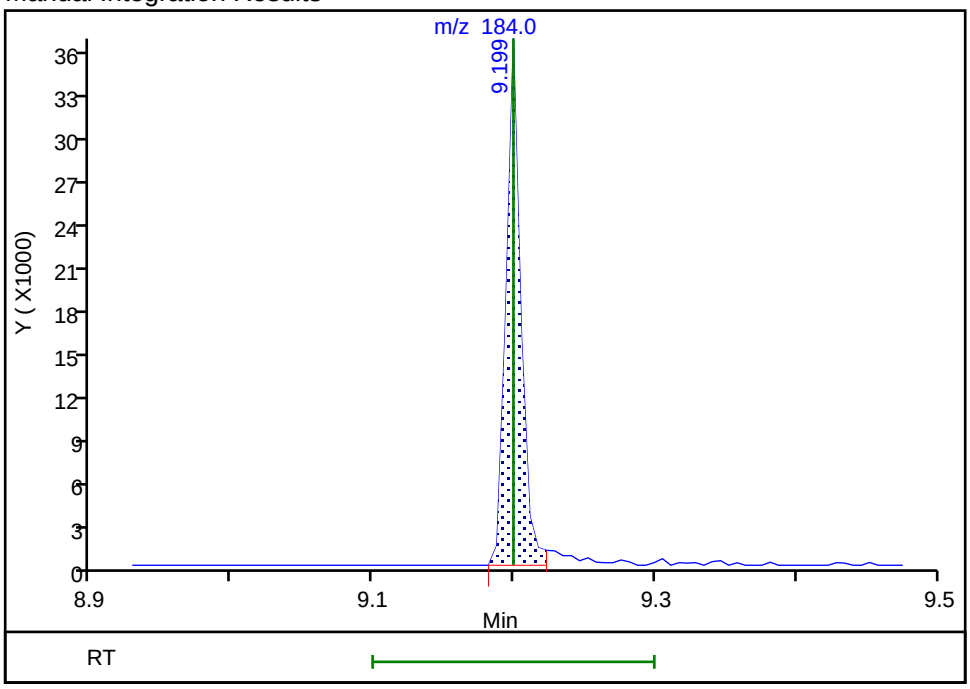
Not Detected
Expected RT: 9.20

Processing Integration Results



Manual Integration Results

RT: 9.20
Area: 26929
Amount: 315.0567
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 12:05:11
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408008.D
Lims ID: std3 l1lvi
Client ID:
Sample Type: IC Calib Level: 3
Inject. Date: 08-Apr-2019 12:06:30 ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-008
Misc. Info.: STD3 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:30 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 12:32:40

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	96	191142	400.0	400.0	
* 2 Naphthalene-d8	136	7.693	7.693	0.000	100	860245	400.0	400.0	
* 3 Acenaphthene-d10	164	9.187	9.187	0.000	97	445766	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	97	800511	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	98	728899	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	674817	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	49434	100.0	103.8	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	77981	100.0	119.0	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	95	76424	100.0	100.1	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	99	152247	100.0	106.9	
$ 11 2,4,6-Tribromophenol	330	9.858	9.864	-0.006	86	12649	100.0	90.6	
$ 12 Terphenyl-d14	244	11.934	11.940	-0.006	99	135188	100.0	101.6	
26 1,4-Dioxane	88	4.270	4.264	0.006	90	17597	100.0	101.6	
27 N-Nitrosodimethylamine	74	4.505	4.505	0.000	91	45062	100.0	98.6	
28 Pyridine	79	4.564	4.558	0.006	82	94888	200.0	206.1	
42 Benzaldehyde	77	6.282	6.282	0.000	90	114491	200.0	192.4	
43 Phenol	94	6.299	6.299	0.000	98	90367	100.0	121.2	
44 Aniline	93	6.358	6.358	0.000	95	121653	100.0	106.9	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	90	82088	100.0	107.8	
47 2-Chlorophenol	128	6.470	6.470	0.000	97	72370	100.0	117.4	
244 n-Decane	57	6.470	6.470	0.000	88	115428	100.0	113.5	
48 1,3-Dichlorobenzene	146	6.599	6.599	0.000	97	76302	100.0	107.6	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	94	75880	100.0	105.5	
50 Benzyl alcohol	108	6.717	6.717	0.000	94	47151	100.0	103.9	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	75181	100.0	109.7	
52 2-Methylphenol	108	6.788	6.793	-0.005	96	67964	100.0	109.7	
54 2,2'-oxybis[1-chloropropan	45	6.817	6.817	0.000	93	149610	100.0	109.2	
53 Indene	115	6.852	6.852	0.000	90	262024	200.0	228.1	
55 3 & 4 Methylphenol	108	6.905	6.911	-0.006	96	66230	100.0	107.3	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	93	56583	100.0	102.3	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.941	6.940	0.000	95	109940	100.0	108.4	
61 Hexachloroethane	117	7.070	7.070	0.000	94	30014	100.0	106.0	
62 Nitrobenzene	77	7.093	7.093	0.000	94	80211	100.0	102.4	
64 Isophorone	82	7.276	7.282	-0.006	98	153353	100.0	100.9	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	93	68288	100.0	103.7	
65 2-Nitrophenol	139	7.358	7.358	0.000	92	27280	100.0	91.1	
70 Benzoic acid	122	7.376	7.411	-0.035	96	26763	200.0	173.0	
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	96	96275	100.0	107.5	
72 2,4-Dichlorophenol	162	7.552	7.552	0.000	97	48667	100.0	98.1	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	0.000	92	61673	100.0	104.8	
74 Naphthalene	128	7.711	7.711	0.000	95	234863	100.0	105.4	
75 4-Chloroaniline	127	7.729	7.729	0.000	96	96870	100.0	104.6	
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	96	53748	100.0	100.2	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	33651	100.0	102.8	
83 Caprolactam	113	7.987	8.005	-0.018	75	47649	200.0	198.1	
85 4-Chloro-3-methylphenol	107	8.105	8.105	0.000	97	48531	100.0	83.3	
86 2-Methylnaphthalene	142	8.287	8.287	0.000	93	152491	100.0	104.8	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	94	142127	100.0	105.0	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	95	29217	100.0	89.0	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.435	0.001	98	58017	100.0	107.2	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	30040	100.0	83.2	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	95	24370	100.0	84.6	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	96	178699	100.0	108.4	
100 2-Chloronaphthalene	162	8.705	8.711	-0.006	98	136215	100.0	103.6	
101 2-Nitroaniline	65	8.770	8.770	0.000	79	35767	100.0	83.2	
104 Dimethyl phthalate	163	8.893	8.899	-0.006	98	154243	100.0	105.0	
103 1,3-Dinitrobenzene	168	8.934	8.934	0.000	84	14417	100.0	92.8	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	91	27888	100.0	90.3	
108 Acenaphthylene	152	9.070	9.070	0.000	98	211936	100.0	104.8	
109 3-Nitroaniline	138	9.111	9.117	-0.006	90	30510	100.0	94.8	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	68	10380	200.0	186.3	a
111 Acenaphthene	153	9.217	9.217	0.000	95	137239	100.0	108.9	
112 4-Nitrophenol	109	9.223	9.229	-0.006	94	30820	200.0	168.0	
113 2,4-Dinitrotoluene	165	9.305	9.311	-0.006	87	32954	100.0	84.2	
115 Dibenzofuran	168	9.358	9.358	0.000	96	201387	100.0	106.4	
118 2,3,4,6-Tetrachlorophenol	232	9.452	9.458	-0.006	77	24656	100.0	90.7	
248 Hexadecane	57	9.487	9.487	0.000	86	156156	100.0	120.2	
120 Diethyl phthalate	149	9.487	9.493	-0.006	96	146974	100.0	110.7	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	96	75007	100.0	107.2	
125 4-Nitroaniline	138	9.640	9.640	0.000	81	33932	100.0	113.1	
124 Fluorene	166	9.652	9.652	0.000	95	165305	100.0	109.4	
127 4,6-Dinitro-2-methylphenol	198	9.664	9.670	-0.006	81	17037	200.0	186.3	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	118866	100.0	106.3	
129 Diphenylamine	169	9.717	9.717	0.000	95	118866	85.0	90.3	
131 Azobenzene	77	9.758	9.764	-0.006	98	174809	100.0	103.4	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	75	38209	100.0	103.5	
140 Hexachlorobenzene	284	10.140	10.146	-0.006	75	40729	100.0	103.2	
141 Atrazine	200	10.140	10.146	-0.006	87	78098	200.0	223.7	
245 n-Octadecane	57	10.270	10.270	0.000	88	154274	100.0	107.8	
143 Pentachlorophenol	266	10.293	10.299	-0.006	90	25891	200.0	189.4	
148 Phenanthrene	178	10.487	10.487	0.000	97	231079	100.0	107.0	
149 Anthracene	178	10.534	10.534	0.000	97	229273	100.0	105.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.646	10.652	-0.006	96	218686	100.0	107.6	
154 Di-n-butyl phthalate	149	10.881	10.881	0.000	99	249923	100.0	102.9	
159 Fluoranthene	202	11.581	11.581	0.000	98	233422	100.0	102.5	
160 Benzidine	184	11.670	11.670	0.000	99	125154	200.0	197.4	
161 Pyrene	202	11.828	11.834	-0.006	97	240943	100.0	105.4	
169 Butyl benzyl phthalate	149	12.470	12.470	0.000	98	96546	100.0	94.7	
174 Bis(2-ethylhexyl) phthalat	149	13.240	13.240	0.000	96	124974	100.0	91.6	
177 3,3'-Dichlorobenzidine	252	13.252	13.258	-0.006	75	138281	200.0	191.8	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	214276	100.0	98.8	
179 Chrysene	228	13.393	13.399	-0.006	98	220265	100.0	101.9	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	99	180720	100.0	81.1	
183 Benzo[b]fluoranthene	252	15.052	15.058	-0.006	98	193783	100.0	98.9	
184 Benzo[k]fluoranthene	252	15.093	15.099	-0.006	98	200850	100.0	94.9	
185 Benzo[a]pyrene	252	15.611	15.616	-0.005	78	182048	100.0	96.1	
190 Indeno[1,2,3-cd]pyrene	276	17.763	17.769	-0.006	97	175699	100.0	92.4	
189 Dibenz(a,h)anthracene	278	17.781	17.787	-0.006	92	149380	100.0	93.6	
191 Benzo[g,h,i]perylene	276	18.375	18.393	-0.018	96	157282	100.0	95.4	
S 193 Methyl Phenols,Total	100				0			217.0	
S 246 Total Cresols	100				0			217.0	

QC Flag Legend

Review Flags

a - User Assigned ID

Reagents:

SMLIST1 L3 W_00012 Amount Added: 0.10 Units: mL

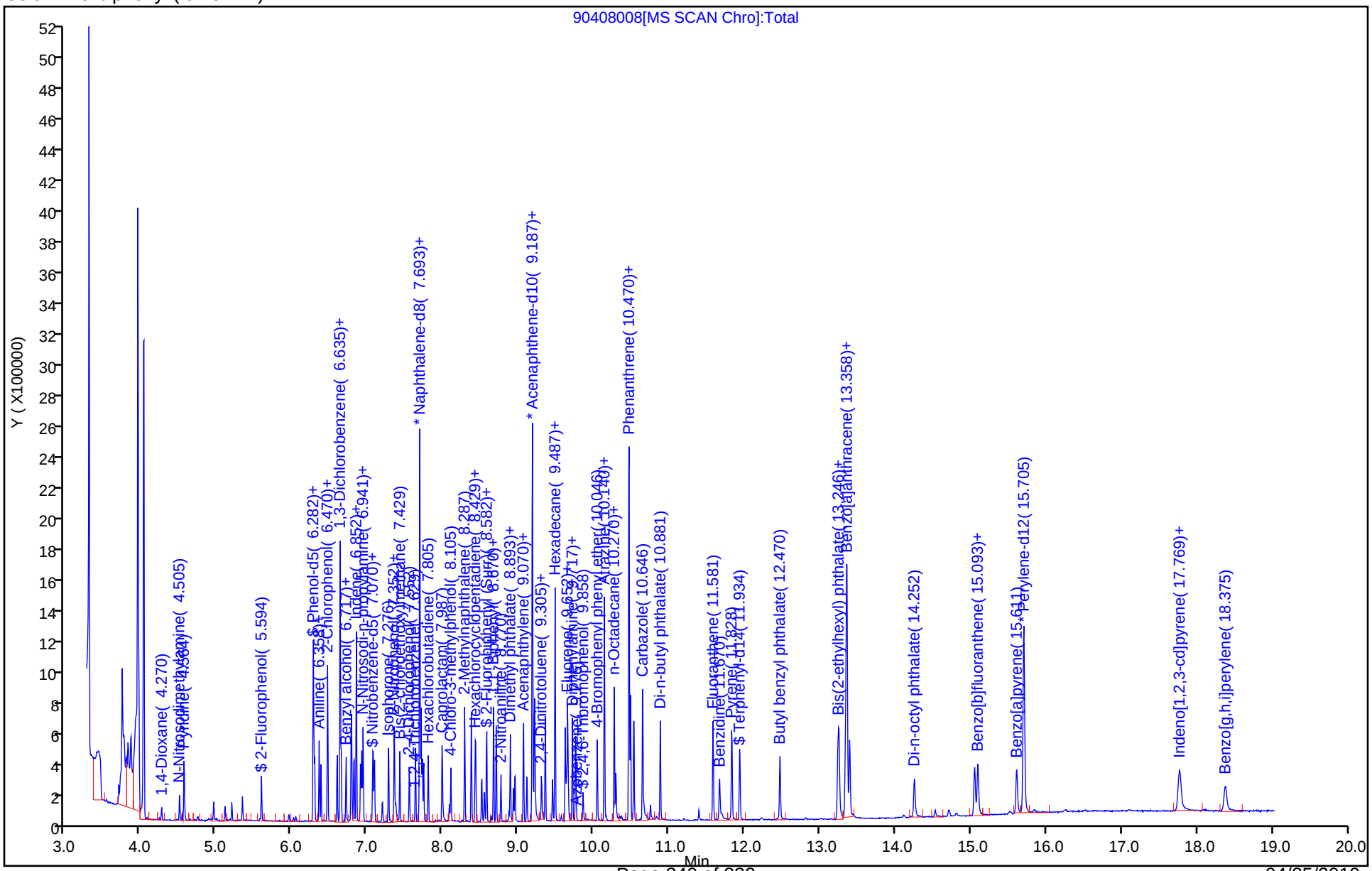
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Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408008.D

Injection Date:	08-Apr-2019 12:06:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std3 l1lvi			Worklist Smp#:	8
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	8
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

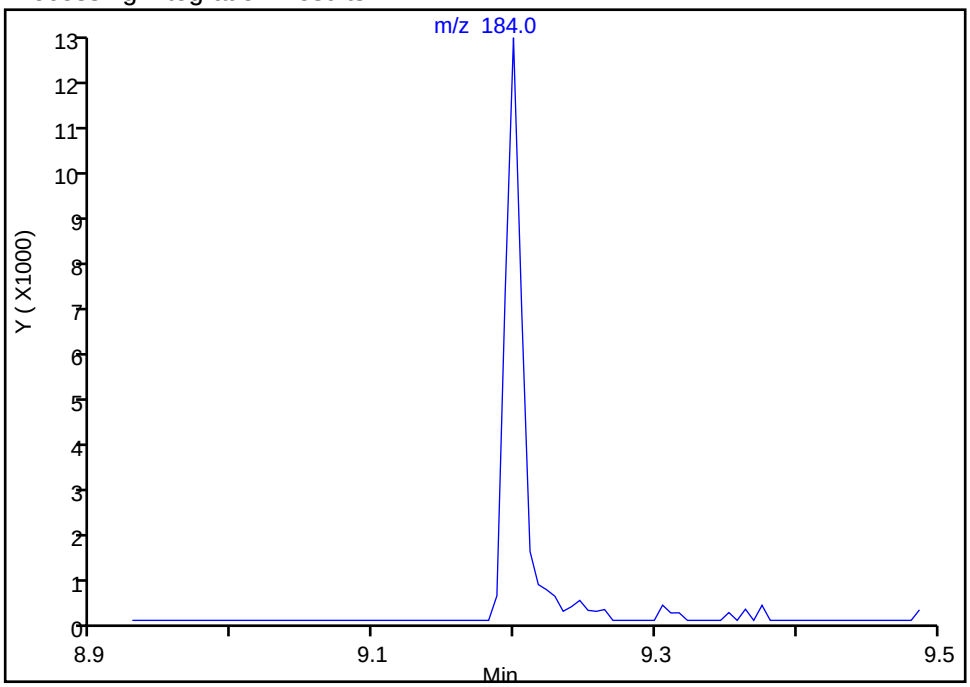
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Lims ID: std3 l1lvi
Client ID:
Operator ID: ALS Bottle#: 8 Worklist Smp#: 8
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

110 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

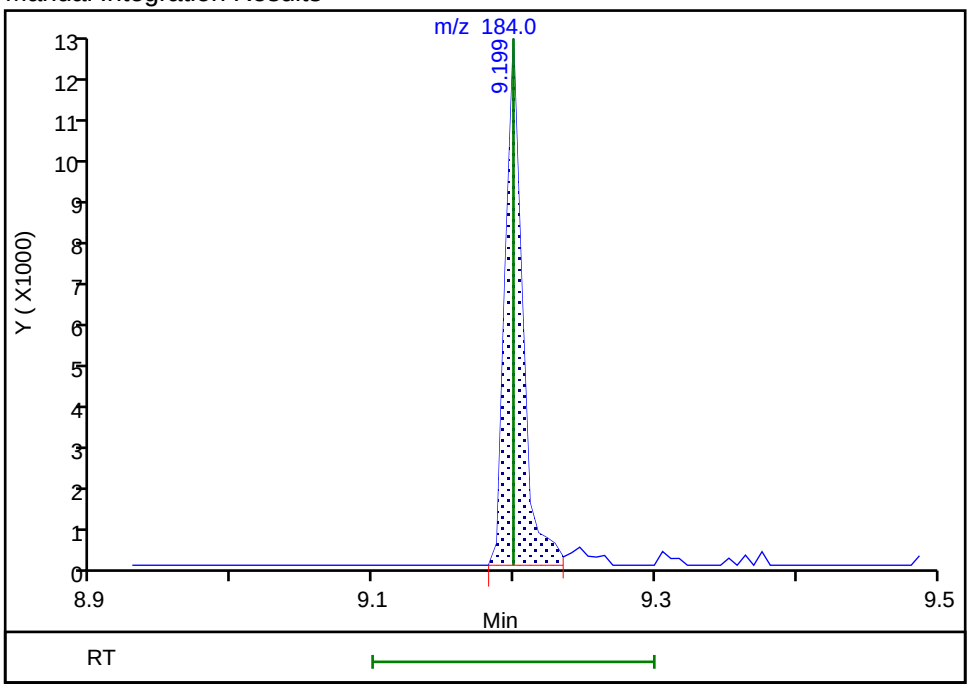
Not Detected
Expected RT: 9.20

Processing Integration Results



Manual Integration Results

RT: 9.20
Area: 10380
Amount: 186.3420
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 12:32:28
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408009.D
Lims ID: std2 l1lvi
Client ID:
Sample Type: IC Calib Level: 2
Inject. Date: 08-Apr-2019 12:30:30 ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-009
Misc. Info.: STD2 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:39 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 12:53:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	97	191867	400.0	400.0	
* 2 Naphthalene-d8	136	7.694	7.693	0.001	100	827878	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.187	0.001	93	441637	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	97	794457	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	99	716828	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	636929	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	93	24972	50.0	52.3	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	38017	50.0	57.8	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	97	34551	50.0	47.0	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	99	73496	50.0	52.1	
$ 11 2,4,6-Tribromophenol	330	9.864	9.864	0.000	85	5726	50.0	41.4	
$ 12 Terphenyl-d14	244	11.934	11.940	-0.006	99	63877	50.0	48.8	
26 1,4-Dioxane	88	4.270	4.264	0.006	90	9371	50.0	53.9	
27 N-Nitrosodimethylamine	74	4.506	4.505	0.001	92	22953	50.0	50.1	
28 Pyridine	79	4.564	4.558	0.006	82	47045	100.0	101.8	
42 Benzaldehyde	77	6.282	6.282	0.000	90	57317	100.0	72.3	
43 Phenol	94	6.300	6.299	0.001	97	42307	50.0	56.5	
44 Aniline	93	6.358	6.358	0.000	96	56182	50.0	49.2	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	90	40424	50.0	52.9	
47 2-Chlorophenol	128	6.470	6.470	0.000	96	33193	50.0	53.7	
244 n-Decane	57	6.470	6.470	0.000	89	60376	50.0	59.1	
48 1,3-Dichlorobenzene	146	6.600	6.599	0.001	95	38664	50.0	54.3	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	95	38650	50.0	53.5	
50 Benzyl alcohol	108	6.717	6.717	0.000	91	20928	50.0	45.9	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	94	37673	50.0	54.8	
52 2-Methylphenol	108	6.788	6.793	-0.005	94	32989	50.0	53.0	
54 2,2'-oxybis[1-chloropropan	45	6.823	6.817	0.006	93	72980	50.0	53.1	
53 Indene	115	6.852	6.852	0.000	90	131810	100.0	114.3	
55 3 & 4 Methylphenol	108	6.905	6.911	-0.006	96	31881	50.0	51.5	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	93	28307	50.0	51.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.941	6.940	0.001	94	54276	50.0	53.3	
61 Hexachloroethane	117	7.070	7.070	0.000	93	14284	50.0	50.2	
62 Nitrobenzene	77	7.094	7.093	0.001	94	36822	50.0	48.8	
64 Isophorone	82	7.276	7.282	-0.006	99	76426	50.0	52.2	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	94	32112	50.0	50.7	
65 2-Nitrophenol	139	7.358	7.358	0.000	93	12008	50.0	41.7	
70 Benzoic acid	122	7.370	7.411	-0.041	90	10456	100.0	119.8	M
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	95	47892	50.0	55.6	
72 2,4-Dichlorophenol	162	7.552	7.552	0.000	97	23204	50.0	48.6	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	0.000	93	30746	50.0	54.3	
74 Naphthalene	128	7.711	7.711	0.000	97	113929	50.0	53.1	
75 4-Chloroaniline	127	7.729	7.729	0.000	95	36943	50.0	41.5	
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	96	24987	50.0	48.4	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	96	16704	50.0	53.0	
83 Caprolactam	113	7.994	8.005	-0.011	75	22323	100.0	96.4	
85 4-Chloro-3-methylphenol	107	8.105	8.105	0.000	97	21537	50.0	38.4	
86 2-Methylnaphthalene	142	8.288	8.287	0.001	92	73918	50.0	52.8	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	92	68366	50.0	52.5	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	95	12792	50.0	39.3	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.435	0.001	97	28218	50.0	52.6	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	13990	50.0	39.1	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	91	10672	50.0	51.5	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	96	87177	50.0	53.4	
100 2-Chloronaphthalene	162	8.705	8.711	-0.006	98	67595	50.0	51.9	
101 2-Nitroaniline	65	8.770	8.770	0.000	81	15011	50.0	35.2	
104 Dimethyl phthalate	163	8.893	8.899	-0.006	97	76168	50.0	52.4	
103 1,3-Dinitrobenzene	168	8.935	8.934	0.001	82	5669	50.0	55.3	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	90	11763	50.0	38.4	
108 Acenaphthylene	152	9.070	9.070	0.000	98	104602	50.0	52.2	
109 3-Nitroaniline	138	9.117	9.117	0.000	90	11200	50.0	35.1	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	72	4029	100.0	137.0	a
111 Acenaphthene	153	9.217	9.217	0.000	94	68559	50.0	54.9	
112 4-Nitrophenol	109	9.223	9.229	-0.006	96	11655	100.0	64.1	
113 2,4-Dinitrotoluene	165	9.311	9.311	0.000	87	12821	50.0	33.1	
115 Dibenzofuran	168	9.358	9.358	0.000	96	100952	50.0	53.8	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.458	0.000	76	11295	50.0	41.9	
248 Hexadecane	57	9.488	9.487	0.001	87	72552	50.0	56.4	
120 Diethyl phthalate	149	9.488	9.493	-0.005	97	78540	50.0	59.7	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	96	38068	50.0	54.9	
125 4-Nitroaniline	138	9.640	9.640	0.000	83	14566	50.0	49.0	
124 Fluorene	166	9.652	9.652	0.000	95	80332	50.0	53.7	
127 4,6-Dinitro-2-methylphenol	198	9.664	9.670	-0.006	79	6054	100.0	127.4	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	58876	50.0	53.0	
129 Diphenylamine	169	9.717	9.717	0.000	95	58876	42.5	45.1	
131 Azobenzene	77	9.764	9.764	0.000	98	87204	50.0	52.0	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	74	18992	50.0	51.8	
140 Hexachlorobenzene	284	10.146	10.146	0.000	79	20791	50.0	53.1	
141 Atrazine	200	10.140	10.146	-0.006	86	37911	100.0	109.4	
245 n-Octadecane	57	10.270	10.270	0.000	88	70438	50.0	49.6	
143 Pentachlorophenol	266	10.293	10.299	-0.006	89	10508	100.0	115.7	
148 Phenanthrene	178	10.487	10.487	0.000	97	115336	50.0	53.8	
149 Anthracene	178	10.535	10.534	0.001	96	114977	50.0	53.4	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.652	10.652	0.000	95	111250	50.0	55.2	
154 Di-n-butyl phthalate	149	10.882	10.881	0.001	100	121770	50.0	50.5	
159 Fluoranthene	202	11.582	11.581	0.001	98	118138	50.0	52.3	
160 Benzidine	184	11.670	11.670	0.000	98	31780	100.0	104.5	
161 Pyrene	202	11.834	11.834	0.000	97	120606	50.0	53.7	
169 Butyl benzyl phthalate	149	12.470	12.470	0.000	97	41137	50.0	41.0	
174 Bis(2-ethylhexyl) phthalat	149	13.234	13.240	-0.006	94	57135	50.0	42.6	
177 3,3'-Dichlorobenzidine	252	13.252	13.258	-0.006	75	55314	100.0	78.0	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	103055	50.0	48.3	
179 Chrysene	228	13.393	13.399	-0.006	97	109248	50.0	51.4	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	98	68184	50.0	32.4	
183 Benzo[b]fluoranthene	252	15.052	15.058	-0.006	98	90977	50.0	49.2	
184 Benzo[k]fluoranthene	252	15.093	15.099	-0.006	98	98481	50.0	49.3	
185 Benzo[a]pyrene	252	15.611	15.616	-0.005	78	86723	50.0	48.5	
190 Indeno[1,2,3-cd]pyrene	276	17.769	17.769	0.000	94	78262	50.0	43.6	
189 Dibenz(a,h)anthracene	278	17.781	17.787	-0.006	91	63759	50.0	42.3	
191 Benzo[g,h,i]perylene	276	18.375	18.393	-0.018	96	67048	50.0	43.1	
S 193 Methyl Phenols,Total	100				0			104.5	
S 246 Total Cresols	100				0			104.5	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SMLIST1 L2 W_00012 Amount Added: 0.10 Units: mL

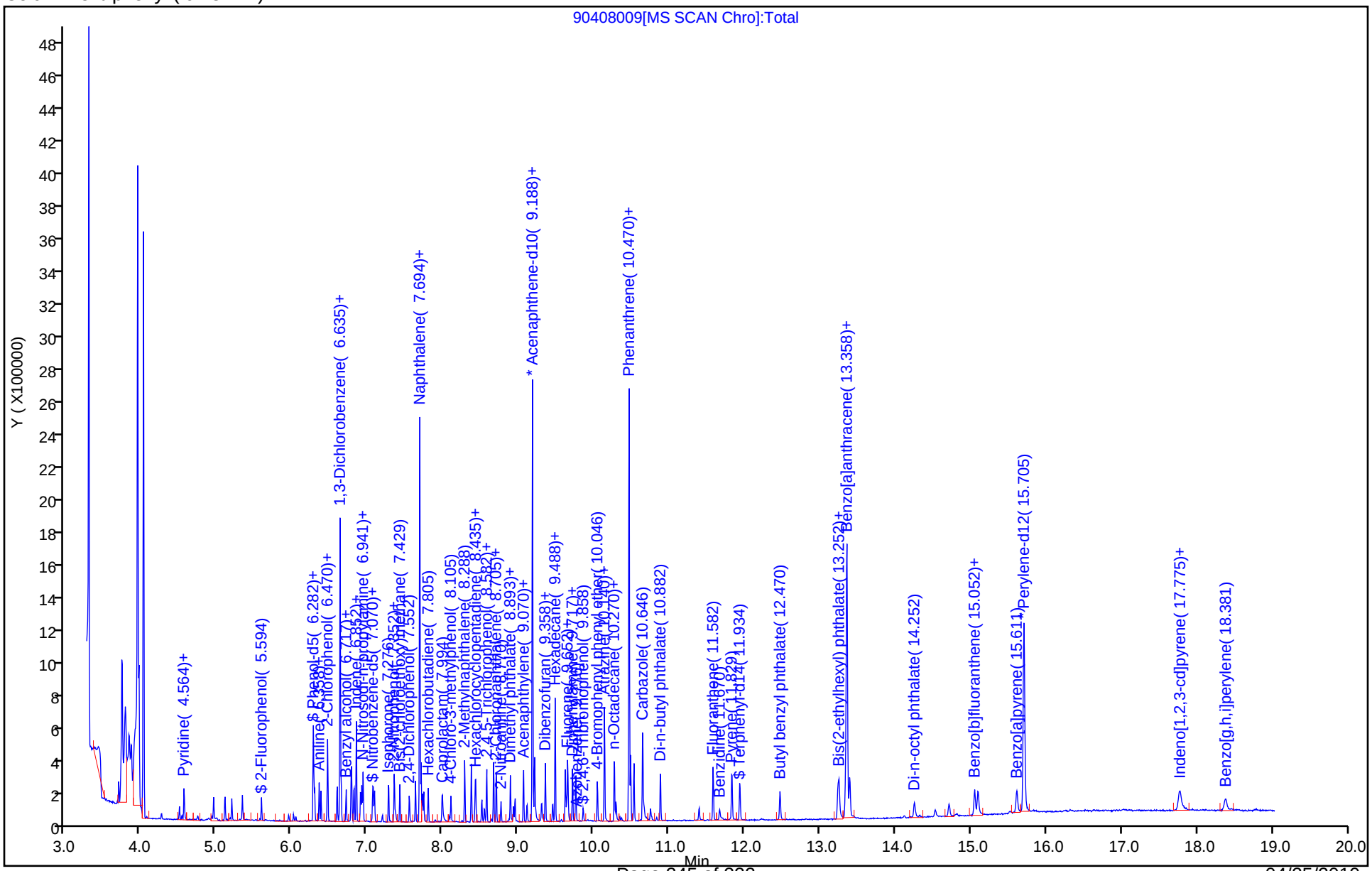
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Eurofins TestAmerica, Canton

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Injection Date:	08-Apr-2019 12:30:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std2 l1lvi			Worklist Smp#:	9
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	9
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton

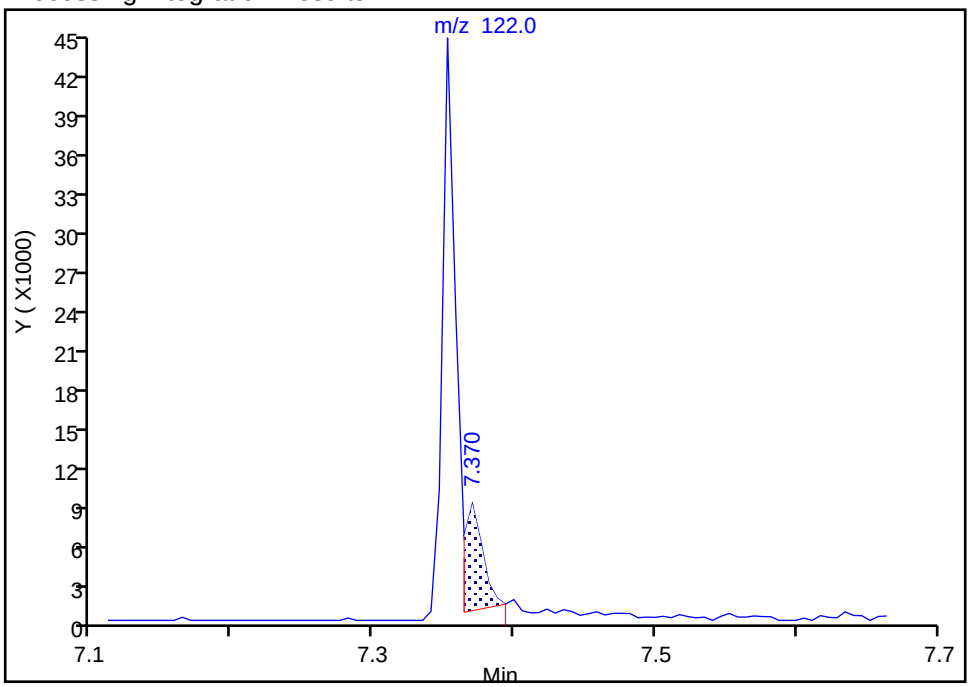
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Injection Date: 08-Apr-2019 12:30:30 Instrument ID: A4AG2
Lims ID: std2 l1lvi
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

70 Benzoic acid, CAS: 65-85-0

Signal: 1

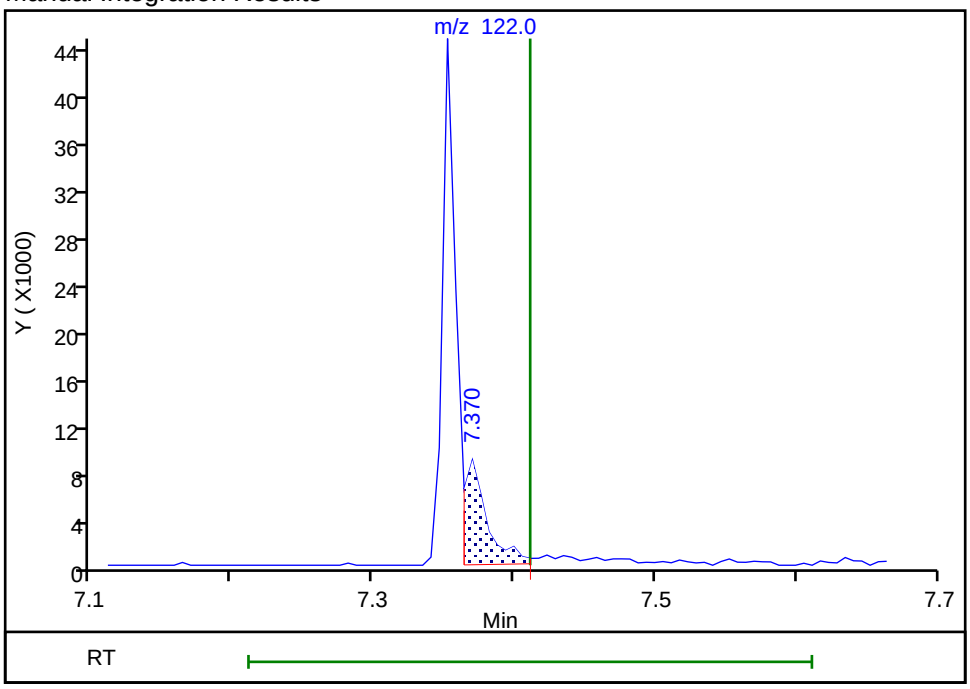
Processing Integration Results

RT: 7.37
Area: 7680
Amount: 115.7144
Amount Units: ng/ml



Manual Integration Results

RT: 7.37
Area: 10456
Amount: 119.8084
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 12:52:54
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

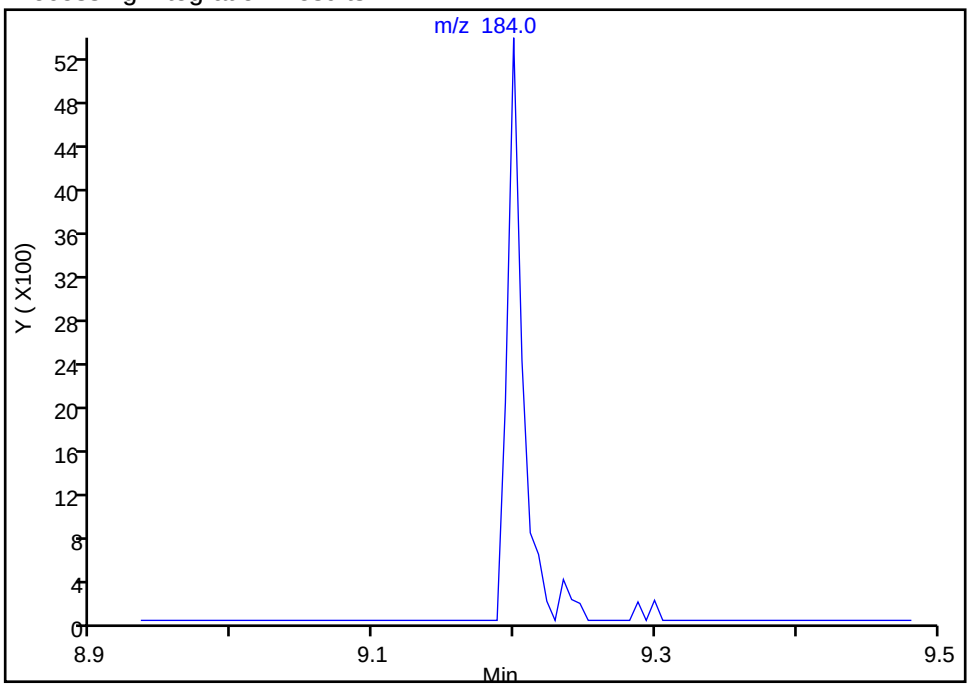
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Injection Date: 08-Apr-2019 12:30:30 Instrument ID: A4AG2
Lims ID: std2 l1lvi
Client ID:
Operator ID: ALS Bottle#: 9 Worklist Smp#: 9
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

110 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

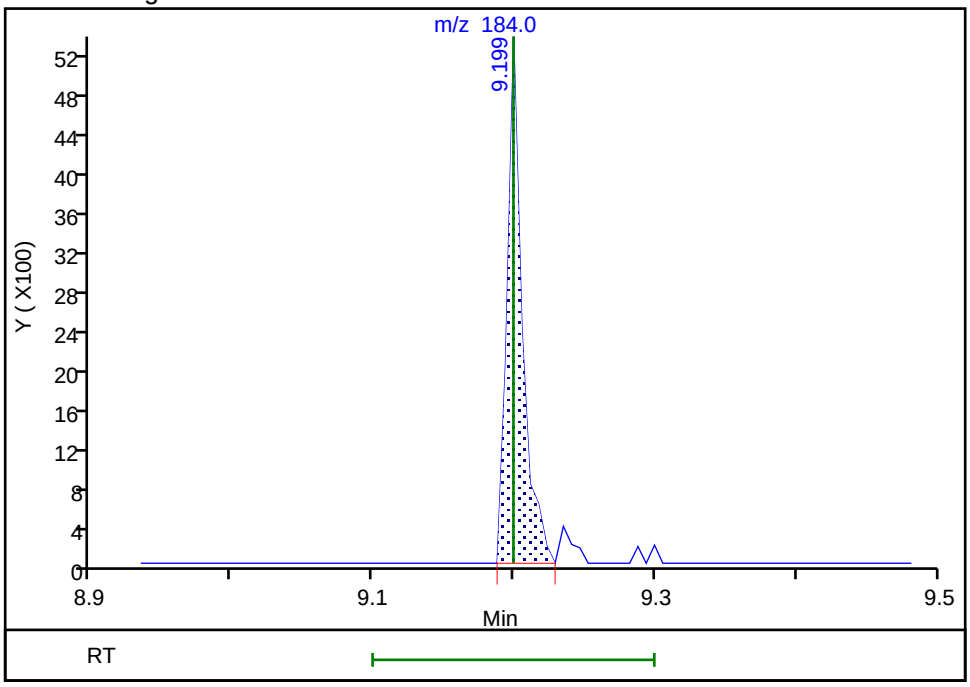
Not Detected
Expected RT: 9.20

Processing Integration Results



Manual Integration Results

RT: 9.20
Area: 4029
Amount: 137.0330
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 12:53:04
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408010.D
Lims ID: std1 l1lvi
Client ID:
Sample Type: IC Calib Level: 1
Inject. Date: 08-Apr-2019 12:54:30 ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-010
Misc. Info.: STD1 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:46 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 13:24:41

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	97	168324	400.0	400.0	
* 2 Naphthalene-d8	136	7.693	7.693	0.000	100	786457	400.0	400.0	
* 3 Acenaphthene-d10	164	9.187	9.187	0.000	96	412197	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	97	753586	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	98	668082	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	613682	400.0	400.0	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	94	6709	10.0	9.61	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	98	14396	10.0	10.9	
$ 12 Terphenyl-d14	244	11.940	11.940	0.000	98	13403	10.0	11.0	
28 Pyridine	79	4.570	4.558	0.012	79	7117	20.0	17.6	
42 Benzaldehyde	77		6.282				ND	ND	U
74 Naphthalene	128	7.711	7.711	0.000	94	22885	10.0	11.2	
83 Caprolactam	113	8.005	8.005	0.000	74	4308	20.0	19.6	M
86 2-Methylnaphthalene	142	8.288	8.287	0.001	96	15373	10.0	11.6	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	97	14408	10.0	11.6	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	96	16604	10.0	10.9	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	96	13111	10.0	10.8	
108 Acenaphthylene	152	9.070	9.070	0.000	98	19428	10.0	10.4	
111 Acenaphthene	153	9.217	9.217	0.000	93	13890	10.0	11.9	
115 Dibenzofuran	168	9.358	9.358	0.000	95	19459	10.0	11.1	
124 Fluorene	166	9.652	9.652	0.000	97	15738	10.0	11.3	
140 Hexachlorobenzene	284	10.146	10.146	0.000	82	4436	10.0	11.9	
141 Atrazine	200	10.140	10.146	-0.006	86	6513	20.0	19.8	
148 Phenanthrene	178	10.487	10.487	0.000	97	23460	10.0	11.5	
149 Anthracene	178	10.534	10.534	0.000	96	21563	10.0	10.5	
159 Fluoranthene	202	11.581	11.581	0.000	97	22777	10.0	10.6	
161 Pyrene	202	11.834	11.834	0.000	97	21808	10.0	10.4	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	19688	10.0	9.90	
179 Chrysene	228	13.393	13.399	-0.006	97	21886	10.0	11.0	
183 Benzo[b]fluoranthene	252	15.052	15.058	-0.006	98	16013	10.0	8.99	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
184 Benzo[k]fluoranthene	252	15.093	15.099	-0.006	97	18079	10.0	9.39	
185 Benzo[a]pyrene	252	15.611	15.616	-0.005	78	14045	10.0	8.16	
190 Indeno[1,2,3-cd]pyrene	276	17.763	17.769	-0.006	90	14700	10.0	8.50	M
189 Dibenz(a,h)anthracene	278	17.787	17.787	0.000	0	11472	10.0	7.91	M
191 Benzo[g,h,i]perylene	276	18.381	18.393	-0.012	29	14160	10.0	9.44	M

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

Reagents:

SMLIST1 L1+ W_00006 Amount Added: 0.10 Units: mL

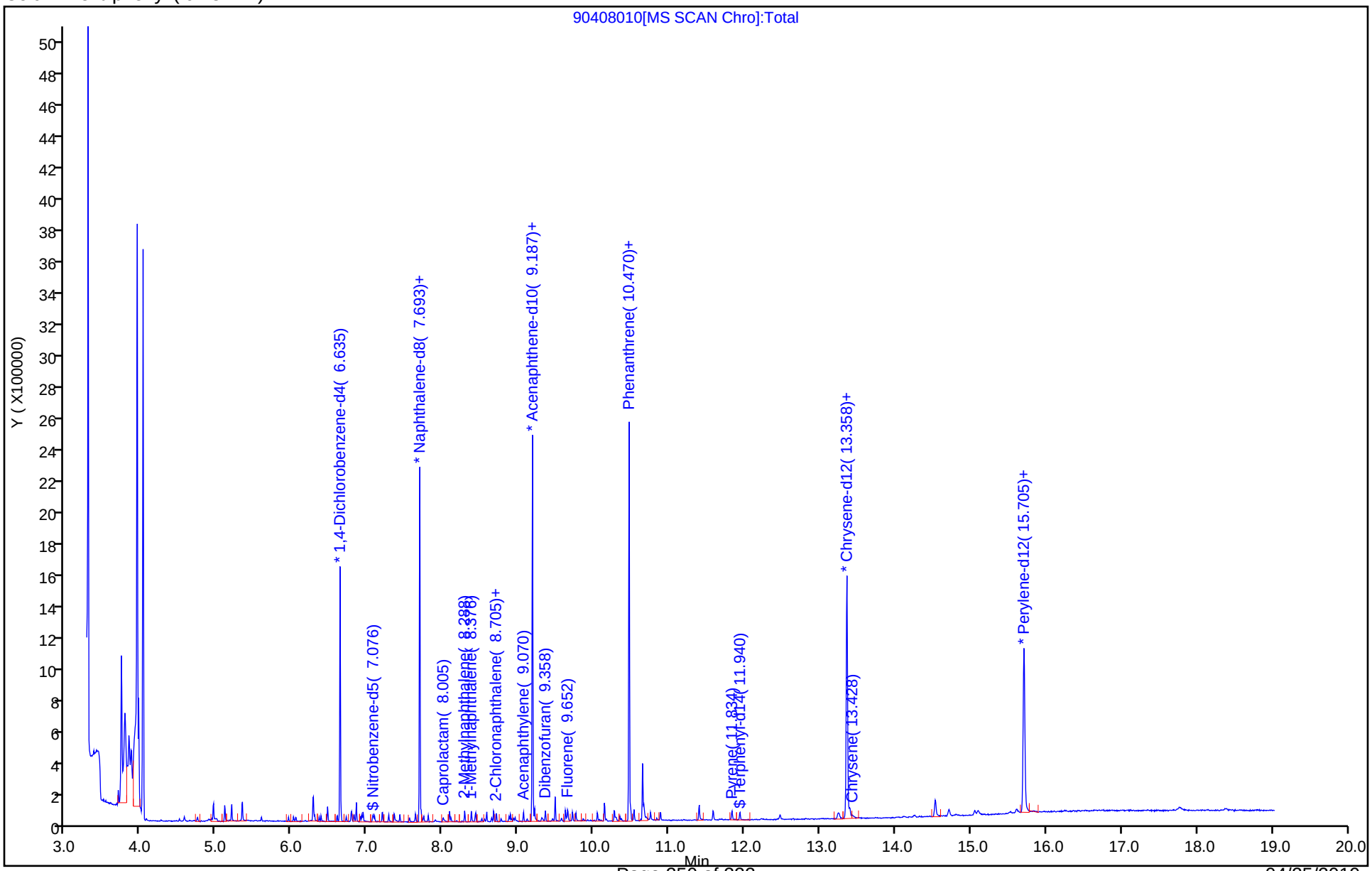
Report Date: 09-Apr-2019 05:03:48 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408010.D

Injection Date:	08-Apr-2019 12:54:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std1 l1lvi			Worklist Smp#:	10
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	10
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton

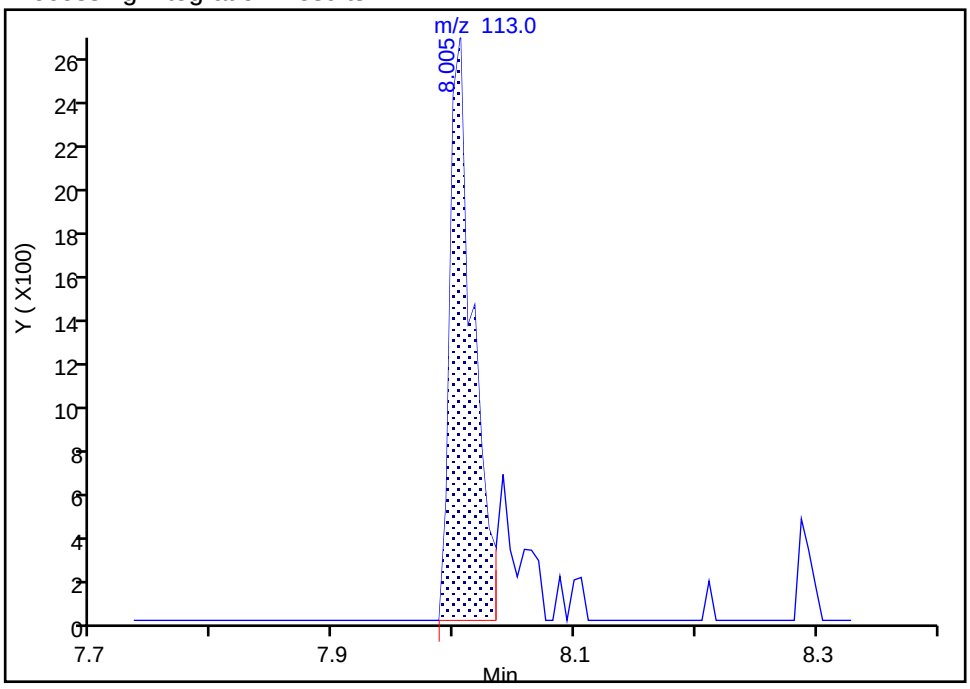
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Injection Date: 08-Apr-2019 12:54:30 Instrument ID: A4AG2
Lims ID: std1 l1lvi
Client ID:
Operator ID: ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

83 Caprolactam, CAS: 105-60-2

Signal: 1

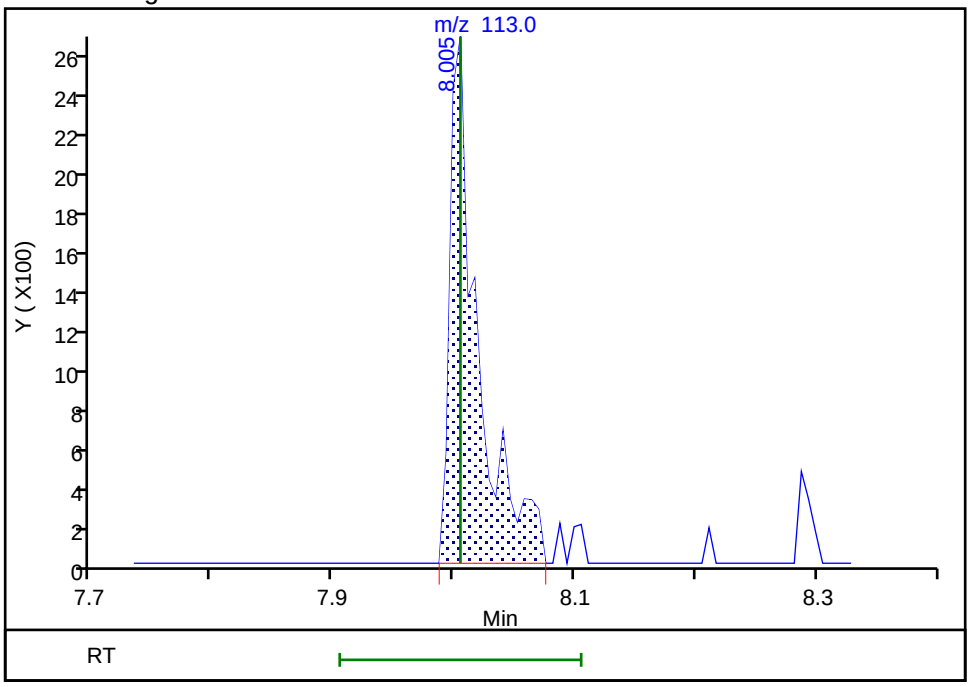
Processing Integration Results

RT: 8.01
Area: 3553
Amount: 16.468370
Amount Units: ng/ml



Manual Integration Results

RT: 8.01
Area: 4308
Amount: 19.587039
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:20:15
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton

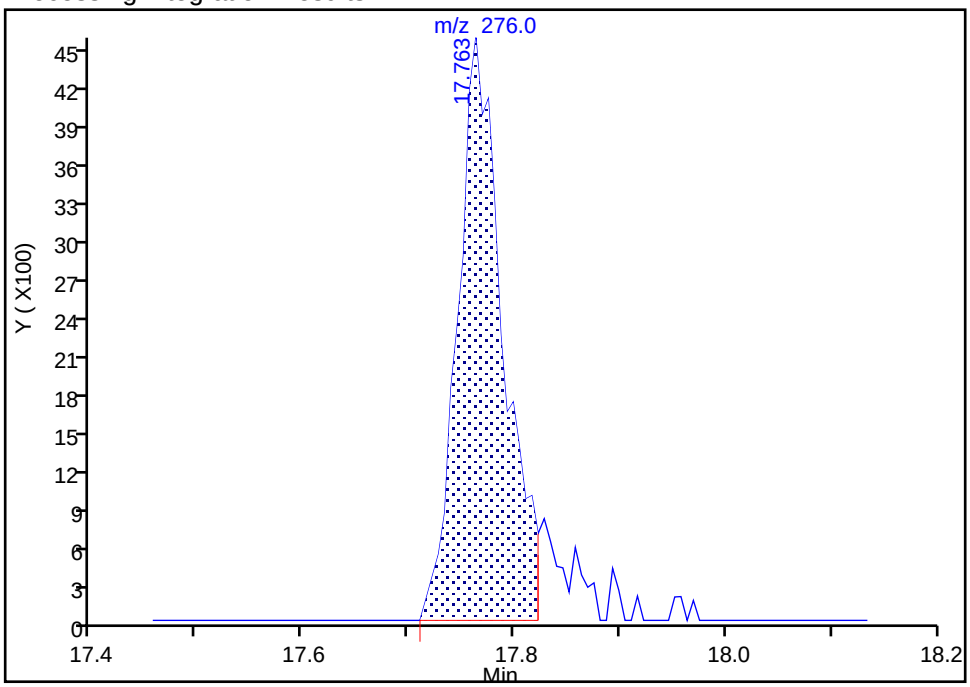
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Injection Date:	08-Apr-2019 12:54:30	Instrument ID:	A4AG2		
Lims ID:	std1 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

190 Indeno[1,2,3-cd]pyrene, CAS: 193-39-5

Signal: 1

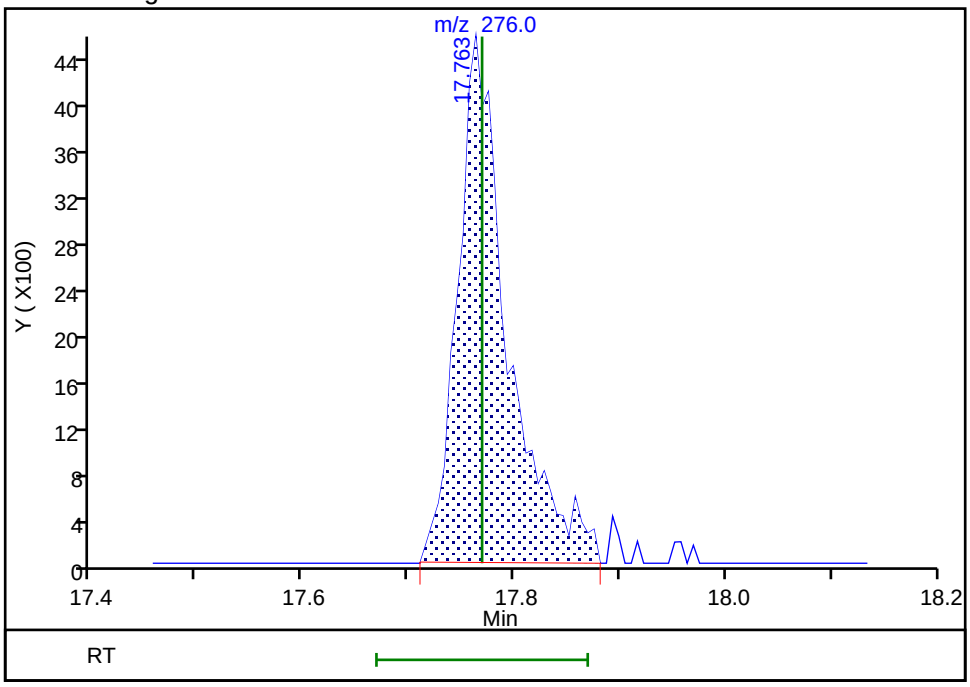
Processing Integration Results

RT: 17.76
Area: 13375
Amount: 7.799315
Amount Units: ng/ml



Manual Integration Results

RT: 17.76
Area: 14700
Amount: 8.498994
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:20:01
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton

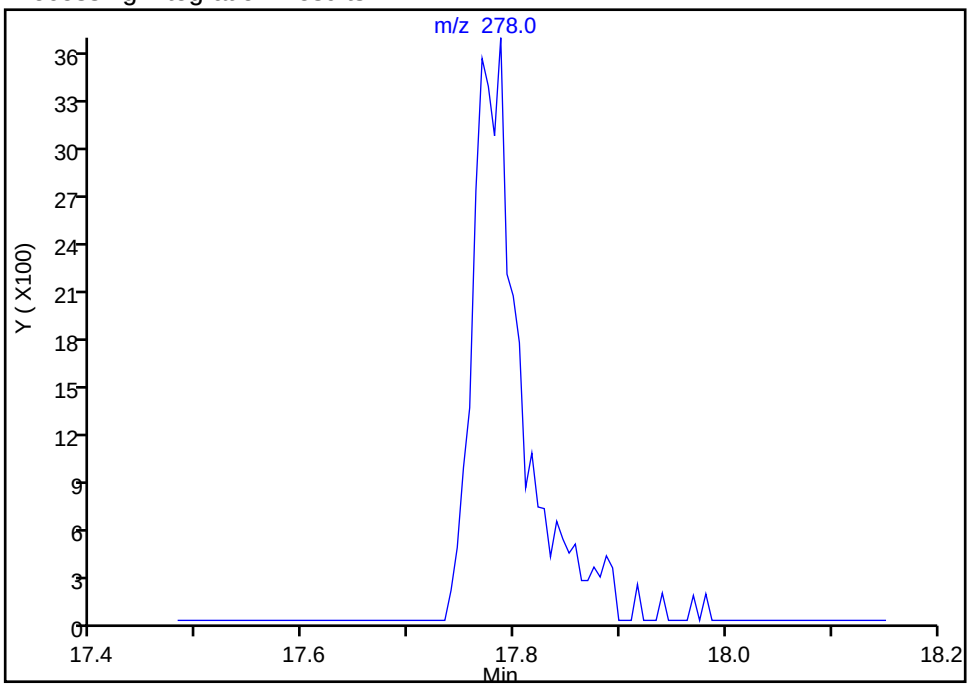
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Injection Date:	08-Apr-2019 12:54:30	Instrument ID:	A4AG2		
Lims ID:	std1 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

189 Dibenz(a,h)anthracene, CAS: 53-70-3

Signal: 1

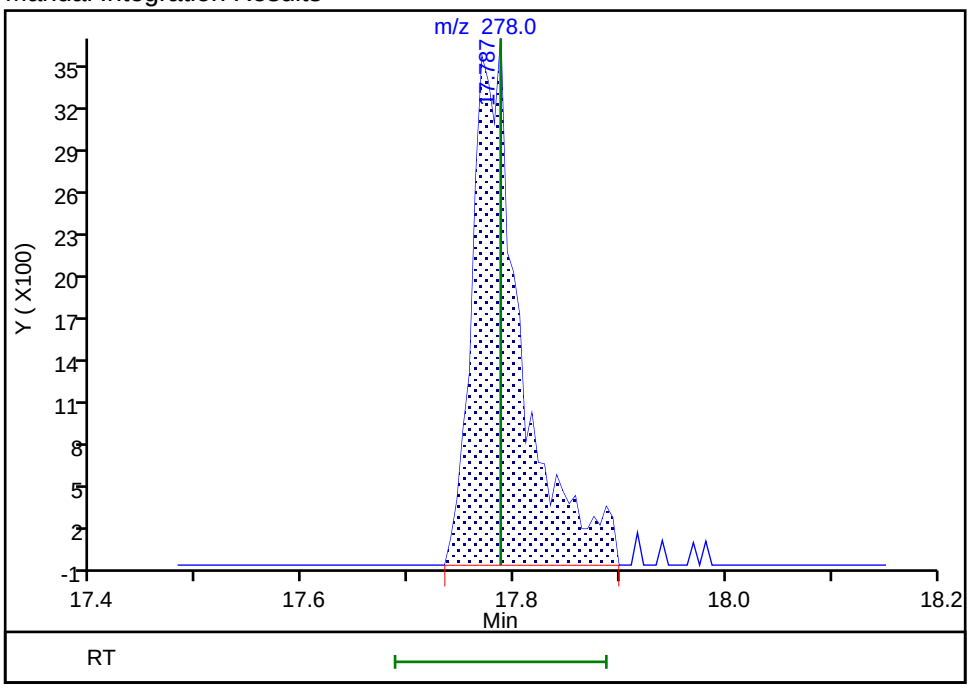
Not Detected
Expected RT: 17.79

Processing Integration Results



Manual Integration Results

RT: 17.79
Area: 11472
Amount: 7.905714
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:19:36
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

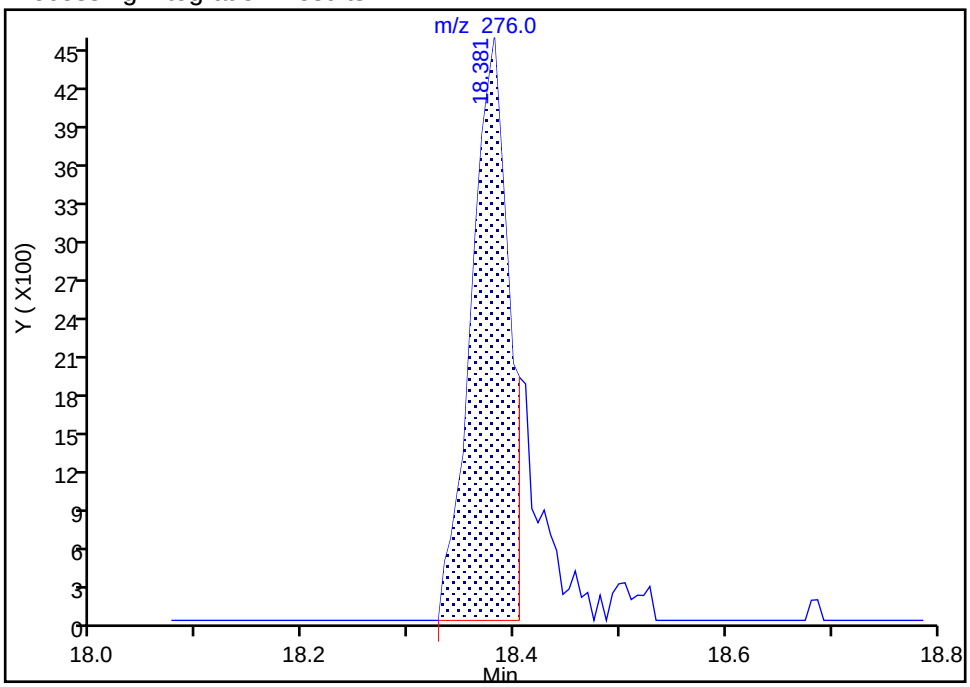
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Injection Date:	08-Apr-2019 12:54:30	Instrument ID:	A4AG2		
Lims ID:	std1 l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	10	Worklist Smp#:	10
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

191 Benzo[g,h,i]perylene, CAS: 191-24-2

Signal: 1

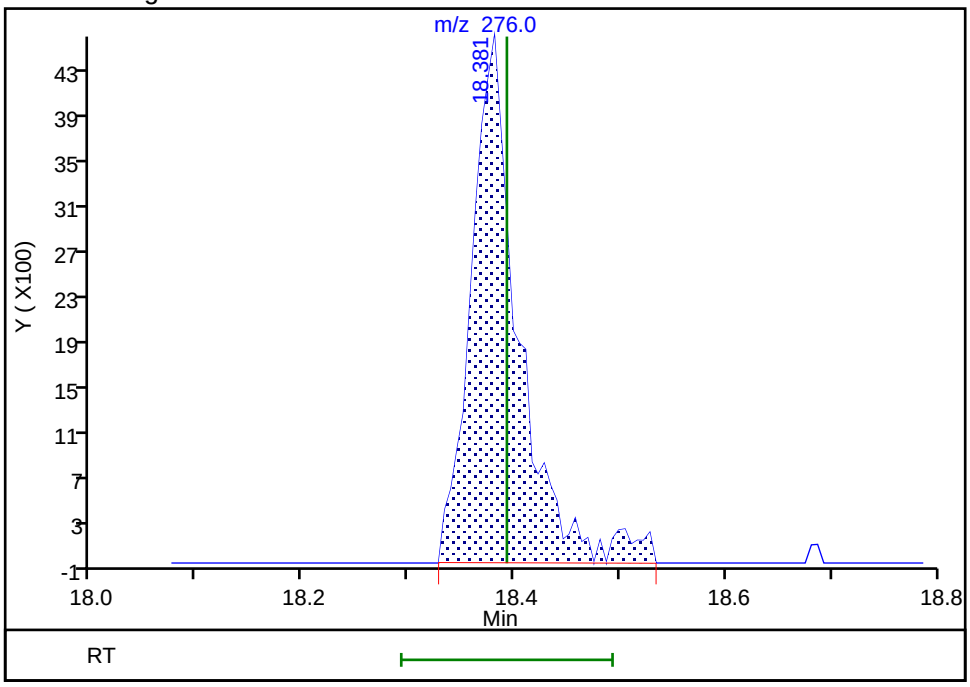
Processing Integration Results

RT: 18.38
Area: 11159
Amount: 7.608217
Amount Units: ng/ml



Manual Integration Results

RT: 18.38
Area: 14160
Amount: 9.439697
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:19:49

Audit Action: Manually Integrated Audit Reason: Poor chromatography

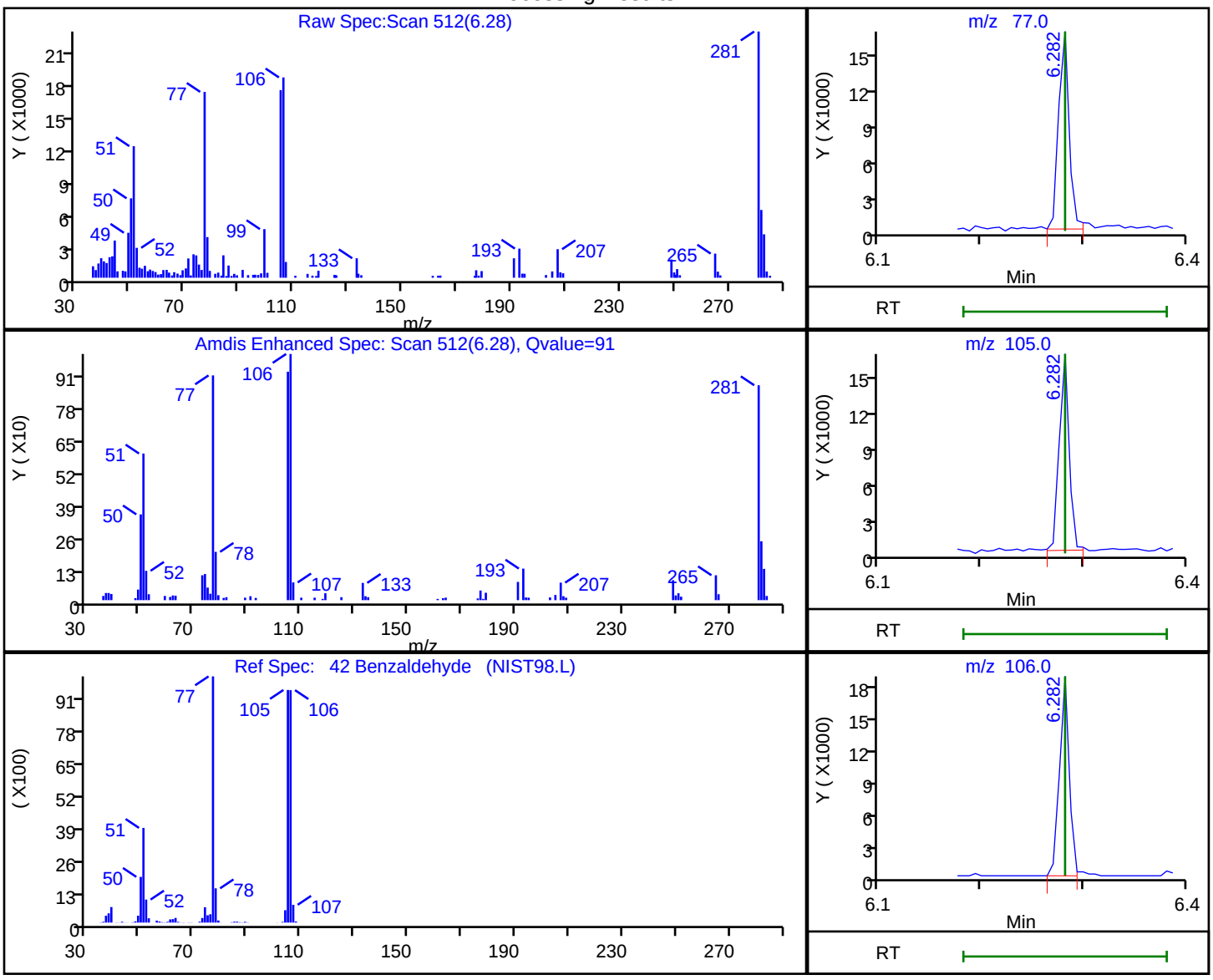
User Disabled Compound Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408010.D
Injection Date: 08-Apr-2019 12:54:30 Instrument ID: A4AG2
Lims ID: std1 l1lvi
Client ID:
Operator ID: ALS Bottle#: 10 Worklist Smp#: 10
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

42 Benzaldehyde, CAS: 100-52-7

Processing Results



RT	Mass	Response	Amount
6.28	77.00	12039	30.841194
6.28	105.00	11273	
6.28	106.00	12056	

Reviewer: hulat, 08-Apr-2019 13:24:34
Audit Action: Marked Compound Undetected Audit Reason: Invalid Compound ID

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: ICV 240-375192/11 Calibration Date: 04/08/2019 13:19

Instrument ID: A4AG2 Calib Start Date: 01/14/2019 11:47

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 01/14/2019 14:58

Lab File ID: 90408011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9034	0.8413		0.996	1.00	-6.9	30.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408011.D
Lims ID: icv l1lvi
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2019 13:19:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-011
Misc. Info.: ICV L1LVI
Operator ID: Instrument ID: A4AG2
Sublist:

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:46 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 13:44:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	97	216332	400.0	400.0	
* 2 Naphthalene-d8	136	7.694	7.693	0.001	100	931246	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.187	0.001	95	476782	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	95	853356	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	99	827626	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	792875	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	577602	1000.0	1071.9	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	776703	1000.0	1047.5	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	96	865127	1000.0	1047.0	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	100	1541550	1000.0	1012.3	
$ 11 2,4,6-Tribromophenol	330	9.864	9.864	0.000	89	164425	1000.0	1100.5	
$ 12 Terphenyl-d14	244	11.940	11.940	0.000	99	1531971	1000.0	1014.3	
26 1,4-Dioxane	88	4.270	4.264	0.006	93	211454	1000.0	1078.3	
27 N-Nitrosodimethylamine	74	4.506	4.505	0.001	92	513851	1000.0	993.9	
28 Pyridine	79	4.564	4.558	0.006	82	1159904	2000.0	2225.5	
42 Benzaldehyde	77	6.282	6.282	0.000	91	708733	2000.0	1553.7	
43 Phenol	94	6.300	6.299	0.001	98	850829	1000.0	1008.3	
44 Aniline	93	6.358	6.358	0.000	96	1195938	1000.0	928.2	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	92	811072	1000.0	940.8	
47 2-Chlorophenol	128	6.470	6.470	0.000	96	668484	1000.0	958.3	
244 n-Decane	57	6.470	6.470	0.000	88	1096269	1000.0	952.2	
48 1,3-Dichlorobenzene	146	6.599	6.599	0.000	96	759725	1000.0	946.7	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	92	788081	1000.0	968.0	
50 Benzyl alcohol	108	6.717	6.717	0.000	91	493469	1000.0	960.4	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	726584	1000.0	937.1	
52 2-Methylphenol	108	6.794	6.793	0.001	96	648816	1000.0	924.9	
54 2,2'-oxybis[1-chloropropan	45	6.823	6.817	0.006	93	1344052	1000.0	866.6	
53 Indene	115	6.852	6.852	0.000	91	2450769	2000.0	1884.7	
55 3 & 4 Methylphenol	108	6.911	6.911	0.000	96	628451	1000.0	900.0	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	92	581029	1000.0	928.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.941	6.940	0.001	94	1056235	1000.0	920.3	
61 Hexachloroethane	117	7.070	7.070	0.000	95	304994	1000.0	951.5	
62 Nitrobenzene	77	7.094	7.093	0.001	94	837087	1000.0	986.9	
64 Isophorone	82	7.282	7.282	0.000	98	1556146	1000.0	945.7	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	93	722497	1000.0	1013.6	
65 2-Nitrophenol	139	7.358	7.358	0.000	87	336079	1000.0	1036.7	
70 Benzoic acid	122	7.417	7.411	0.006	91	604063	2000.0	1951.1	
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	95	915460	1000.0	944.5	
72 2,4-Dichlorophenol	162	7.558	7.552	0.006	97	529492	1000.0	985.5	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	0.000	93	595621	1000.0	934.9	
74 Naphthalene	128	7.711	7.711	0.000	95	2241166	1000.0	928.9	a
75 4-Chloroaniline	127	7.729	7.729	0.000	95	969645	1000.0	967.4	M
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	96	588892	1000.0	1014.0	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	348644	1000.0	983.6	
83 Caprolactam	113	8.005	8.005	0.000	76	508869	2000.0	1953.9	Ma
85 4-Chloro-3-methylphenol	107	8.111	8.105	0.006	97	667907	1000.0	1059.1	
86 2-Methylnaphthalene	142	8.288	8.287	0.001	93	1462223	1000.0	928.5	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	94	1333540	1000.0	910.2	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	95	355001	1000.0	1010.8	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.435	0.001	98	567327	1000.0	980.3	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	409647	1000.0	1060.6	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	93	424793	1000.0	992.5	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	95	1696138	1000.0	962.0	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	97	1361286	1000.0	968.2	
101 2-Nitroaniline	65	8.770	8.770	0.000	80	498831	1000.0	1084.3	
104 Dimethyl phthalate	163	8.899	8.899	0.000	99	1532106	1000.0	975.5	
103 1,3-Dinitrobenzene	168	8.935	8.934	0.001	84	239906	1000.0	998.3	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	91	356735	1000.0	1079.5	
108 Acenaphthylene	152	9.070	9.070	0.000	98	2096413	1000.0	969.2	
109 3-Nitroaniline	138	9.117	9.117	0.000	89	334703	1000.0	972.1	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	77	249259	2000.0	1925.4	a
111 Acenaphthene	153	9.217	9.217	0.000	94	1246291	1000.0	924.7	
112 4-Nitrophenol	109	9.229	9.229	0.000	94	429770	2000.0	2190.9	
113 2,4-Dinitrotoluene	165	9.311	9.311	0.000	89	463144	1000.0	1106.0	
115 Dibenzofuran	168	9.358	9.358	0.000	96	1888021	1000.0	932.4	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.458	0.000	76	298605	1000.0	1027.1	
248 Hexadecane	57	9.488	9.487	0.001	88	1278305	1000.0	920.1	
120 Diethyl phthalate	149	9.493	9.493	0.000	98	1362093	1000.0	959.6	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	97	726663	1000.0	971.4	
125 4-Nitroaniline	138	9.646	9.640	0.006	84	274947	1000.0	857.1	
124 Fluorene	166	9.652	9.652	0.000	95	1534618	1000.0	949.6	
127 4,6-Dinitro-2-methylphenol	198	9.670	9.670	0.000	86	409801	2000.0	2163.5	
130 1,2-Diphenylhydrazine	77	9.764	9.714	0.050	95	1794828	1000.0	995.8	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	1128303	1000.0	946.4	
129 Diphenylamine	169	9.717	9.717	0.000	94	1128303	853.0	804.4	
131 Azobenzene	77	9.764	9.764	0.000	99	1794091	1000.0	995.4	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	74	379183	1000.0	963.1	
140 Hexachlorobenzene	284	10.146	10.146	0.000	93	388629	1000.0	923.3	
141 Atrazine	200	10.146	10.146	0.000	90	716197	2000.0	1924.7	
245 n-Octadecane	57	10.270	10.270	0.000	88	1485287	1000.0	973.3	
143 Pentachlorophenol	266	10.299	10.299	0.000	90	445845	2000.0	2079.1	
148 Phenanthrene	178	10.487	10.487	0.000	98	2119163	1000.0	920.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
149 Anthracene	178	10.535	10.534	0.001	96	2147130	1000.0	927.6	
150 Carbazole	167	10.652	10.652	0.000	96	2102415	1000.0	970.3	
154 Di-n-butyl phthalate	149	10.882	10.881	0.001	100	2566875	1000.0	991.4	
159 Fluoranthene	202	11.582	11.581	0.001	98	2369046	1000.0	975.5	
160 Benzidine	184	11.670	11.670	0.000	99	2144259	2000.0	1961.6	
161 Pyrene	202	11.834	11.834	0.000	97	2415725	1000.0	930.9	
169 Butyl benzyl phthalate	149	12.470	12.470	0.000	98	1207120	1000.0	1042.8	
174 Bis(2-ethylhexyl) phthalat	149	13.234	13.240	-0.006	97	1581063	1000.0	1020.7	
177 3,3'-Dichlorobenzidine	252	13.258	13.258	0.000	75	1722883	2000.0	2104.8	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	2397508	1000.0	973.6	
179 Chrysene	228	13.399	13.399	0.000	97	2380550	1000.0	969.6	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	99	2807585	1000.0	1072.8	
183 Benzo[b]fluoranthene	252	15.058	15.058	0.000	97	2376793	1000.0	1032.6	
184 Benzo[k]fluoranthene	252	15.099	15.099	0.000	99	2442344	1000.0	981.9	
185 Benzo[a]pyrene	252	15.617	15.616	0.001	77	2258386	1000.0	1015.2	
190 Indeno[1,2,3-cd]pyrene	276	17.775	17.769	0.006	96	2225814	1000.0	996.0	
189 Dibenz(a,h)anthracene	278	17.793	17.787	0.006	91	1900990	1000.0	1014.0	
191 Benzo[g,h,i]perylene	276	18.393	18.393	0.000	96	1872473	1000.0	966.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SMLIST1 SS W_00011 Amount Added: 0.10 Units: mL

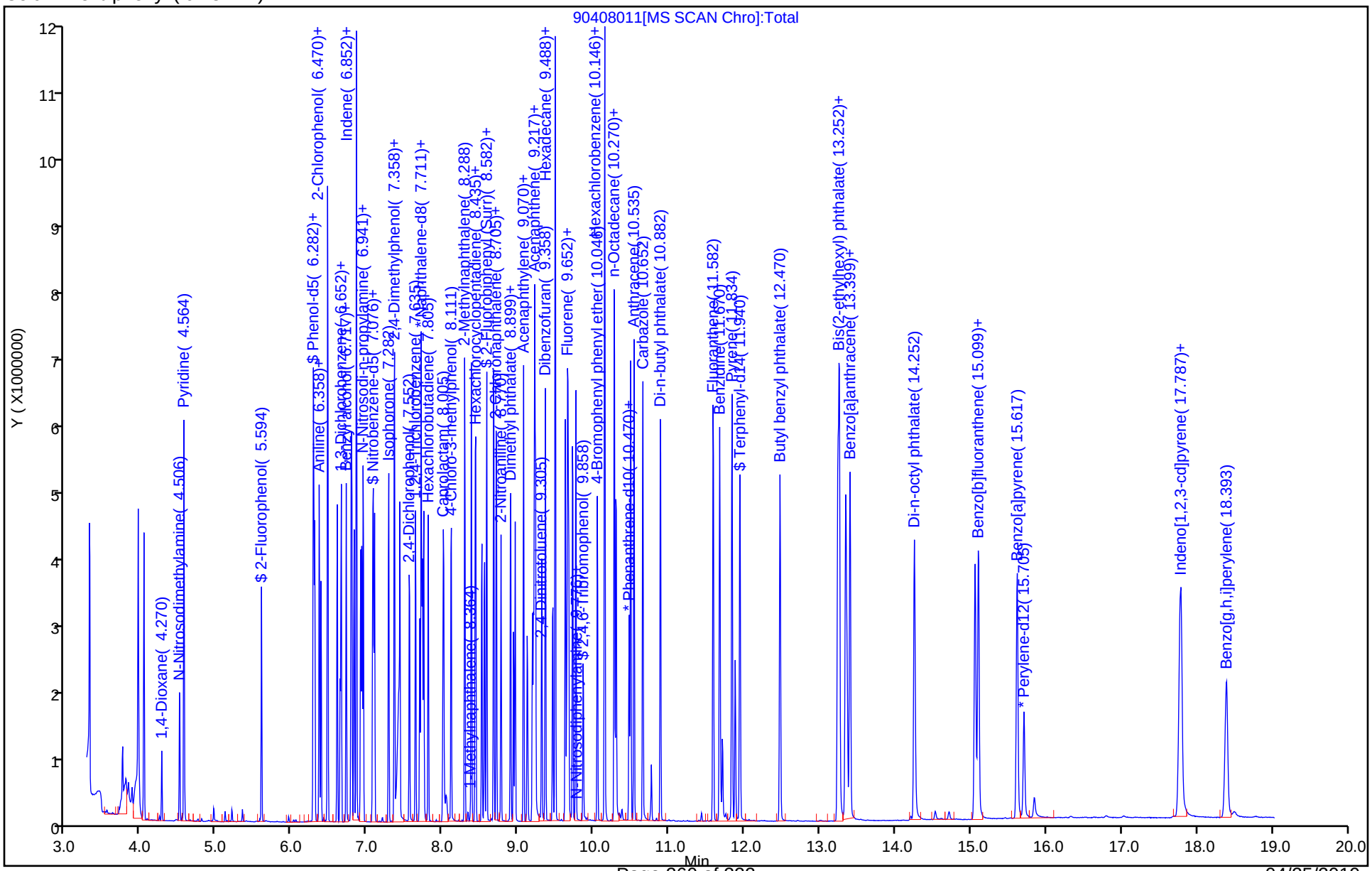
Report Date: 09-Apr-2019 05:03:56 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408011.D

Injection Date:	08-Apr-2019 13:19:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	icv l1lvi			Worklist Smp#:	11
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	11
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: ICV 240-375192/11 Calibration Date: 04/08/2019 13:19

Instrument ID: A4AG2 Calib Start Date: 04/08/2019 09:39

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 04/08/2019 12:54

Lab File ID: 90408011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.3626	0.3910		1.08	1.00	7.8	30.0
N-Nitrosodimethylamine	Ave	0.9559	0.9501		0.994	1.00	-0.6	30.0
Pyridine	Ave	0.9637	1.072		2.23	2.00	11.3	30.0
Benzaldehyde	Qua		0.6552	0.0100	1.55	2.00	-22.3	30.0
Phenol	Ave	1.560	1.573	0.8000	1.01	1.00	0.8	30.0
Aniline	Ave	2.382	2.211		0.928	1.00	-7.2	30.0
Bis(2-chloroethyl)ether	Ave	1.594	1.500	0.7000	0.941	1.00	-5.9	30.0
2-Chlorophenol	Ave	1.290	1.236	0.8000	0.958	1.00	-4.2	30.0
n-Decane	Ave	2.129	2.027		0.952	1.00	-4.8	30.0
1,3-Dichlorobenzene	Ave	1.484	1.405		0.947	1.00	-5.3	30.0
1,4-Dichlorobenzene	Ave	1.505	1.457		0.968	1.00	-3.2	30.0
Benzyl alcohol	Ave	0.9500	0.9124		0.960	1.00	-4.0	30.0
1,2-Dichlorobenzene	Ave	1.434	1.343		0.937	1.00	-6.3	30.0
2-Methylphenol	Ave	1.297	1.200	0.7000	0.925	1.00	-7.5	30.0
bis (2-chloroisopropyl) ether	Ave	2.868	2.485		0.867	1.00	-13.3	30.0
Indene	Ave	2.404	2.266		1.88	2.00	-5.8	30.0
3 & 4 Methylphenol	Ave	1.291	1.162		0.900	1.00	-10.0	30.0
N-Nitrosodi-n-propylamine	Ave	1.157	1.074	0.5000	0.929	1.00	-7.1	30.0
Acetophenone	Ave	2.122	1.953	0.0100	0.920	1.00	-8.0	30.0
Hexachloroethane	Ave	0.5927	0.5639	0.3000	0.952	1.00	-4.8	30.0
Nitrobenzene	Ave	0.3643	0.3596	0.2000	0.987	1.00	-1.3	30.0
Isophorone	Ave	0.7068	0.6684	0.4000	0.946	1.00	-5.4	30.0
2,4-Dimethylphenol	Ave	0.3062	0.3103	0.2000	1.01	1.00	1.4	30.0
2-Nitrophenol	Ave	0.1392	0.1444	0.1000	1.04	1.00	3.7	30.0
Benzoic acid	Lin1		0.1297		1.95	2.00	-2.4	30.0
Bis(2-chloroethoxy)methane	Ave	0.4163	0.3932	0.3000	0.945	1.00	-5.5	30.0
2,4-Dichlorophenol	Ave	0.2308	0.2274	0.2000	0.985	1.00	-1.5	30.0
1,2,4-Trichlorobenzene	Ave	0.2737	0.2558		0.935	1.00	-6.5	30.0
Naphthalene	Ave	1.036	0.9627	0.7000	0.929	1.00	-7.1	30.0
4-Chloroaniline	Ave	0.4305	0.4165	0.0100	0.967	1.00	-3.3	30.0
2,6-Dichlorophenol	Ave	0.2495	0.2530		1.01	1.00	1.4	30.0
Hexachlorobutadiene	Ave	0.1522	0.1498	0.0100	0.984	1.00	-1.6	30.0
Caprolactam	Ave	0.1119	0.1093	0.0100	1.95	2.00	-2.3	30.0
4-Chloro-3-methylphenol	Ave	0.2709	0.2869	0.2000	1.06	1.00	5.9	30.0
2-Methylnaphthalene	Ave	0.6765	0.6281	0.4000	0.928	1.00	-7.2	30.0
1-Methylnaphthalene	Ave	0.6293	0.5728		0.910	1.00	-9.0	30.0
Hexachlorocyclopentadiene	Ave	0.2947	0.2978	0.0500	1.01	1.00	1.1	30.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4855	0.4760	0.0100	0.980	1.00	-2.0	30.0
2,4,6-Trichlorophenol	Ave	0.3240	0.3437	0.2000	1.06	1.00	6.1	30.0
2,4,5-Trichlorophenol	Lin1		0.3564	0.2000	0.993	1.00	-0.7	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: ICV 240-375192/11 Calibration Date: 04/08/2019 13:19

Instrument ID: A4AG2 Calib Start Date: 04/08/2019 09:39

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 04/08/2019 12:54

Lab File ID: 90408011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.479	1.423	0.0100	0.962	1.00	-3.8	30.0
2-Chloronaphthalene	Ave	1.180	1.142	0.8000	0.968	1.00	-3.2	30.0
2-Nitroaniline	Ave	0.3860	0.4185	0.0100	1.08	1.00	8.4	30.0
Dimethyl phthalate	Ave	1.318	1.285	0.0100	0.976	1.00	-2.4	30.0
1,3-Dinitrobenzene	Lin1		0.2013		0.998	1.00	-0.2	30.0
2,6-Dinitrotoluene	Ave	0.2772	0.2993		1.08	1.00	7.9	30.0
Acenaphthylene	Ave	1.815	1.759	0.9000	0.969	1.00	-3.1	30.0
3-Nitroaniline	Ave	0.2889	0.2808	0.0100	0.972	1.00	-2.8	30.0
2,4-Dinitrophenol	Lin1		0.1046	0.0100	1.93	2.00	-3.7	30.0
Acenaphthene	Ave	1.131	1.046	0.9000	0.925	1.00	-7.5	30.0
4-Nitrophenol	Ave	0.1646	0.1803		2.19	2.00	9.5	30.0
2,4-Dinitrotoluene	Ave	0.3513	0.3886	0.2000	1.11	1.00	10.6	30.0
Dibenzofuran	Ave	1.699	1.584	0.8000	0.932	1.00	-6.8	30.0
2,3,4,6-Tetrachlorophenol	Ave	0.2439	0.2505	0.0100	1.03	1.00	2.7	30.0
Hexadecane	Ave	1.166	1.072		0.920	1.00	-8.0	30.0
Diethyl phthalate	Ave	1.191	1.143	0.0100	0.960	1.00	-4.0	30.0
4-Chlorophenyl phenyl ether	Ave	0.6276	0.6096	0.4000	0.971	1.00	-2.9	30.0
p-Nitroaniline	Ave	0.2691	0.2307	0.0100	0.857	1.00	-14.3	30.0
Fluorene	Ave	1.356	1.287	0.9000	0.950	1.00	-5.0	30.0
4,6-Dinitro-2-methylphenol	Lin1		0.0960	0.0100	2.16	2.00	8.2	30.0
Diphenylamine	Ave	0.6575	0.6200		0.804	0.853	-5.7	30.0
N-Nitrosodiphenylamine	Ave	0.5588	0.5289	0.0100	0.946	1.00	-5.4	30.0
Azobenzene	Ave	0.8448	0.8410		0.995	1.00	-0.5	30.0
4-Bromophenyl phenyl ether	Ave	0.1845	0.1777	0.1000	0.963	1.00	-3.7	30.0
Atrazine	Ave	0.1744	0.1679	0.0100	1.92	2.00	-3.8	30.0
Hexachlorobenzene	Ave	0.1973	0.1822	0.1000	0.923	1.00	-7.7	30.0
n-Octadecane	Ave	0.7153	0.6962		0.973	1.00	-2.7	30.0
Pentachlorophenol	Lin1		0.1045	0.0500	2.08	2.00	4.0	30.0
Phenanthrene	Ave	1.079	0.9933	0.7000	0.921	1.00	-7.9	30.0
Anthracene	Ave	1.085	1.006	0.7000	0.928	1.00	-7.2	30.0
Carbazole	Ave	1.016	0.9855	0.0100	0.970	1.00	-3.0	30.0
Di-n-butyl phthalate	Ave	1.214	1.203	0.0100	0.991	1.00	-0.9	30.0
Fluoranthene	Ave	1.138	1.110	0.6000	0.975	1.00	-2.5	30.0
Benzidine	Lin1		0.5182		1.96	2.00	-1.9	30.0
Pyrene	Ave	1.254	1.168	0.6000	0.931	1.00	-6.9	30.0
Butyl benzyl phthalate	Ave	0.5595	0.5834	0.0100	1.04	1.00	4.3	30.0
Bis(2-ethylhexyl) phthalate	Ave	0.7487	0.7641	0.0100	1.02	1.00	2.1	30.0
3,3'-Dichlorobenzidine	Ave	0.3956	0.4163	0.0100	2.10	2.00	5.2	30.0
Benzo[a]anthracene	Ave	1.190	1.159	0.8000	0.974	1.00	-2.6	30.0
Chrysene	Ave	1.187	1.151	0.7000	0.970	1.00	-3.0	30.0
Di-n-octyl phthalate	Ave	1.320	1.416	0.0100	1.07	1.00	7.3	30.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: ICV 240-375192/11 Calibration Date: 04/08/2019 13:19

Instrument ID: A4AG2 Calib Start Date: 04/08/2019 09:39

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 04/08/2019 12:54

Lab File ID: 90408011.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.161	1.199	0.7000	1.03	1.00	3.3	30.0
Benzo[k]fluoranthene	Ave	1.255	1.232	0.7000	0.982	1.00	-1.8	30.0
Benzo[a]pyrene	Ave	1.122	1.139	0.7000	1.02	1.00	1.5	30.0
Indeno[1,2,3-cd]pyrene	Ave	1.127	1.123	0.5000	0.996	1.00	-0.4	30.0
Dibenz(a,h)anthracene	Ave	0.9458	0.9590	0.4000	1.01	1.00	1.4	30.0
Benzo[g,h,i]perylene	Ave	0.9777	0.9447	0.5000	0.966	1.00	-3.4	30.0
2-Fluorophenol (Surr)	Ave	0.996	1.068		1.07	1.00	7.2	30.0
Phenol-d5 (Surr)	Ave	1.371	1.436		1.05	1.00	4.8	30.0
Nitrobenzene-d5 (Surr)	Ave	0.3549	0.3716		1.05	1.00	4.7	30.0
2-Fluorobiphenyl (Surr)	Ave	1.278	1.293		1.01	1.00	1.2	30.0
2,4,6-Tribromophenol (Surr)	Ave	0.1253	0.1380		1.10	1.00	10.1	30.0
Terphenyl-d14 (Surr)	Ave	0.7300	0.7404		1.01	1.00	1.4	30.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408011.D
Lims ID: icv l1lvi
Client ID:
Sample Type: ICV
Inject. Date: 08-Apr-2019 13:19:30 ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0085902-011
Misc. Info.: ICV L1LVI
Operator ID: Instrument ID: A4AG2
Sublist:

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:03:46 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 13:44:17

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.635	6.635	0.000	97	216332	400.0	400.0	
* 2 Naphthalene-d8	136	7.694	7.693	0.001	100	931246	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.187	0.001	95	476782	400.0	400.0	
* 4 Phenanthrene-d10	188	10.470	10.470	0.000	95	853356	400.0	400.0	
* 5 Chrysene-d12	240	13.358	13.358	0.000	99	827626	400.0	400.0	
* 6 Perylene-d12	264	15.705	15.705	0.000	97	792875	400.0	400.0	
$ 7 2-Fluorophenol	112	5.594	5.594	0.000	95	577602	1000.0	1071.9	
$ 8 Phenol-d5	99	6.288	6.288	0.000	0	776703	1000.0	1047.5	
$ 9 Nitrobenzene-d5	82	7.076	7.076	0.000	96	865127	1000.0	1047.0	
$ 10 2-Fluorobiphenyl (Surr)	172	8.582	8.582	0.000	100	1541550	1000.0	1012.3	
$ 11 2,4,6-Tribromophenol	330	9.864	9.864	0.000	89	164425	1000.0	1100.5	
$ 12 Terphenyl-d14	244	11.940	11.940	0.000	99	1531971	1000.0	1014.3	
26 1,4-Dioxane	88	4.270	4.264	0.006	93	211454	1000.0	1078.3	
27 N-Nitrosodimethylamine	74	4.506	4.505	0.001	92	513851	1000.0	993.9	
28 Pyridine	79	4.564	4.558	0.006	82	1159904	2000.0	2225.5	
42 Benzaldehyde	77	6.282	6.282	0.000	91	708733	2000.0	1553.7	
43 Phenol	94	6.300	6.299	0.001	98	850829	1000.0	1008.3	
44 Aniline	93	6.358	6.358	0.000	96	1195938	1000.0	928.2	
45 Bis(2-chloroethyl)ether	93	6.382	6.382	0.000	92	811072	1000.0	940.8	
47 2-Chlorophenol	128	6.470	6.470	0.000	96	668484	1000.0	958.3	
244 n-Decane	57	6.470	6.470	0.000	88	1096269	1000.0	952.2	
48 1,3-Dichlorobenzene	146	6.599	6.599	0.000	96	759725	1000.0	946.7	
49 1,4-Dichlorobenzene	146	6.652	6.652	0.000	92	788081	1000.0	968.0	
50 Benzyl alcohol	108	6.717	6.717	0.000	91	493469	1000.0	960.4	
51 1,2-Dichlorobenzene	146	6.782	6.782	0.000	95	726584	1000.0	937.1	
52 2-Methylphenol	108	6.794	6.793	0.001	96	648816	1000.0	924.9	
54 2,2'-oxybis[1-chloropropan	45	6.823	6.817	0.006	93	1344052	1000.0	866.6	
53 Indene	115	6.852	6.852	0.000	91	2450769	2000.0	1884.7	
55 3 & 4 Methylphenol	108	6.911	6.911	0.000	96	628451	1000.0	900.0	
57 N-Nitrosodi-n-propylamine	70	6.923	6.923	0.000	92	581029	1000.0	928.6	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.941	6.940	0.001	94	1056235	1000.0	920.3	
61 Hexachloroethane	117	7.070	7.070	0.000	95	304994	1000.0	951.5	
62 Nitrobenzene	77	7.094	7.093	0.001	94	837087	1000.0	986.9	
64 Isophorone	82	7.282	7.282	0.000	98	1556146	1000.0	945.7	
66 2,4-Dimethylphenol	107	7.352	7.352	0.000	93	722497	1000.0	1013.6	
65 2-Nitrophenol	139	7.358	7.358	0.000	87	336079	1000.0	1036.7	
70 Benzoic acid	122	7.417	7.411	0.006	91	604063	2000.0	1951.1	
69 Bis(2-chloroethoxy)methane	93	7.429	7.429	0.000	95	915460	1000.0	944.5	
72 2,4-Dichlorophenol	162	7.558	7.552	0.006	97	529492	1000.0	985.5	
73 1,2,4-Trichlorobenzene	180	7.635	7.635	0.000	93	595621	1000.0	934.9	
74 Naphthalene	128	7.711	7.711	0.000	95	2241166	1000.0	928.9	a
75 4-Chloroaniline	127	7.729	7.729	0.000	95	969645	1000.0	967.4	M
76 2,6-Dichlorophenol	162	7.746	7.746	0.000	96	588892	1000.0	1014.0	
78 Hexachlorobutadiene	225	7.805	7.805	0.000	97	348644	1000.0	983.6	
83 Caprolactam	113	8.005	8.005	0.000	76	508869	2000.0	1953.9	Ma
85 4-Chloro-3-methylphenol	107	8.111	8.105	0.006	97	667907	1000.0	1059.1	
86 2-Methylnaphthalene	142	8.288	8.287	0.001	93	1462223	1000.0	928.5	
87 1-Methylnaphthalene	142	8.376	8.376	0.000	94	1333540	1000.0	910.2	
89 Hexachlorocyclopentadiene	237	8.429	8.429	0.000	95	355001	1000.0	1010.8	
90 1,2,4,5-Tetrachlorobenzene	216	8.435	8.435	0.001	98	567327	1000.0	980.3	
93 2,4,6-Trichlorophenol	196	8.517	8.517	0.000	95	409647	1000.0	1060.6	
94 2,4,5-Trichlorophenol	196	8.552	8.552	0.000	93	424793	1000.0	992.5	
99 1,1'-Biphenyl	154	8.670	8.670	0.000	95	1696138	1000.0	962.0	
100 2-Chloronaphthalene	162	8.711	8.711	0.000	97	1361286	1000.0	968.2	
101 2-Nitroaniline	65	8.770	8.770	0.000	80	498831	1000.0	1084.3	
104 Dimethyl phthalate	163	8.899	8.899	0.000	99	1532106	1000.0	975.5	
103 1,3-Dinitrobenzene	168	8.935	8.934	0.001	84	239906	1000.0	998.3	
106 2,6-Dinitrotoluene	165	8.958	8.958	0.000	91	356735	1000.0	1079.5	
108 Acenaphthylene	152	9.070	9.070	0.000	98	2096413	1000.0	969.2	
109 3-Nitroaniline	138	9.117	9.117	0.000	89	334703	1000.0	972.1	
110 2,4-Dinitrophenol	184	9.199	9.199	0.000	77	249259	2000.0	1925.4	a
111 Acenaphthene	153	9.217	9.217	0.000	94	1246291	1000.0	924.7	
112 4-Nitrophenol	109	9.229	9.229	0.000	94	429770	2000.0	2190.9	
113 2,4-Dinitrotoluene	165	9.311	9.311	0.000	89	463144	1000.0	1106.0	
115 Dibenzofuran	168	9.358	9.358	0.000	96	1888021	1000.0	932.4	
118 2,3,4,6-Tetrachlorophenol	232	9.458	9.458	0.000	76	298605	1000.0	1027.1	
248 Hexadecane	57	9.488	9.487	0.001	88	1278305	1000.0	920.1	
120 Diethyl phthalate	149	9.493	9.493	0.000	98	1362093	1000.0	959.6	
122 4-Chlorophenyl phenyl ethe	204	9.623	9.623	0.000	97	726663	1000.0	971.4	
125 4-Nitroaniline	138	9.646	9.640	0.006	84	274947	1000.0	857.1	
124 Fluorene	166	9.652	9.652	0.000	95	1534618	1000.0	949.6	
127 4,6-Dinitro-2-methylphenol	198	9.670	9.670	0.000	86	409801	2000.0	2163.5	
130 1,2-Diphenylhydrazine	77	9.764	9.714	0.050	95	1794828	1000.0	995.8	
128 N-Nitrosodiphenylamine	169	9.717	9.717	0.000	99	1128303	1000.0	946.4	
129 Diphenylamine	169	9.717	9.717	0.000	94	1128303	853.0	804.4	
131 Azobenzene	77	9.764	9.764	0.000	99	1794091	1000.0	995.4	
138 4-Bromophenyl phenyl ether	248	10.046	10.046	0.000	74	379183	1000.0	963.1	
140 Hexachlorobenzene	284	10.146	10.146	0.000	93	388629	1000.0	923.3	
141 Atrazine	200	10.146	10.146	0.000	90	716197	2000.0	1924.7	
245 n-Octadecane	57	10.270	10.270	0.000	88	1485287	1000.0	973.3	
143 Pentachlorophenol	266	10.299	10.299	0.000	90	445845	2000.0	2079.1	
148 Phenanthrene	178	10.487	10.487	0.000	98	2119163	1000.0	920.9	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
149 Anthracene	178	10.535	10.534	0.001	96	2147130	1000.0	927.6	
150 Carbazole	167	10.652	10.652	0.000	96	2102415	1000.0	970.3	
154 Di-n-butyl phthalate	149	10.882	10.881	0.001	100	2566875	1000.0	991.4	
159 Fluoranthene	202	11.582	11.581	0.001	98	2369046	1000.0	975.5	
160 Benzidine	184	11.670	11.670	0.000	99	2144259	2000.0	1961.6	
161 Pyrene	202	11.834	11.834	0.000	97	2415725	1000.0	930.9	
169 Butyl benzyl phthalate	149	12.470	12.470	0.000	98	1207120	1000.0	1042.8	
174 Bis(2-ethylhexyl) phthalat	149	13.234	13.240	-0.006	97	1581063	1000.0	1020.7	
177 3,3'-Dichlorobenzidine	252	13.258	13.258	0.000	75	1722883	2000.0	2104.8	
178 Benzo[a]anthracene	228	13.340	13.340	0.000	98	2397508	1000.0	973.6	
179 Chrysene	228	13.399	13.399	0.000	97	2380550	1000.0	969.6	
181 Di-n-octyl phthalate	149	14.252	14.252	0.000	99	2807585	1000.0	1072.8	
183 Benzo[b]fluoranthene	252	15.058	15.058	0.000	97	2376793	1000.0	1032.6	
184 Benzo[k]fluoranthene	252	15.099	15.099	0.000	99	2442344	1000.0	981.9	
185 Benzo[a]pyrene	252	15.617	15.616	0.001	77	2258386	1000.0	1015.2	
190 Indeno[1,2,3-cd]pyrene	276	17.775	17.769	0.006	96	2225814	1000.0	996.0	
189 Dibenz(a,h)anthracene	278	17.793	17.787	0.006	91	1900990	1000.0	1014.0	
191 Benzo[g,h,i]perylene	276	18.393	18.393	0.000	96	1872473	1000.0	966.2	

QC Flag Legend

Review Flags

M - Manually Integrated

a - User Assigned ID

Reagents:

SMLIST1 SS W_00011 Amount Added: 0.10 Units: mL

Report Date: 09-Apr-2019 05:03:56 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408011.D

Injection Date: 08-Apr-2019 13:19:30 Instrument ID: A4AG2 Operator ID:

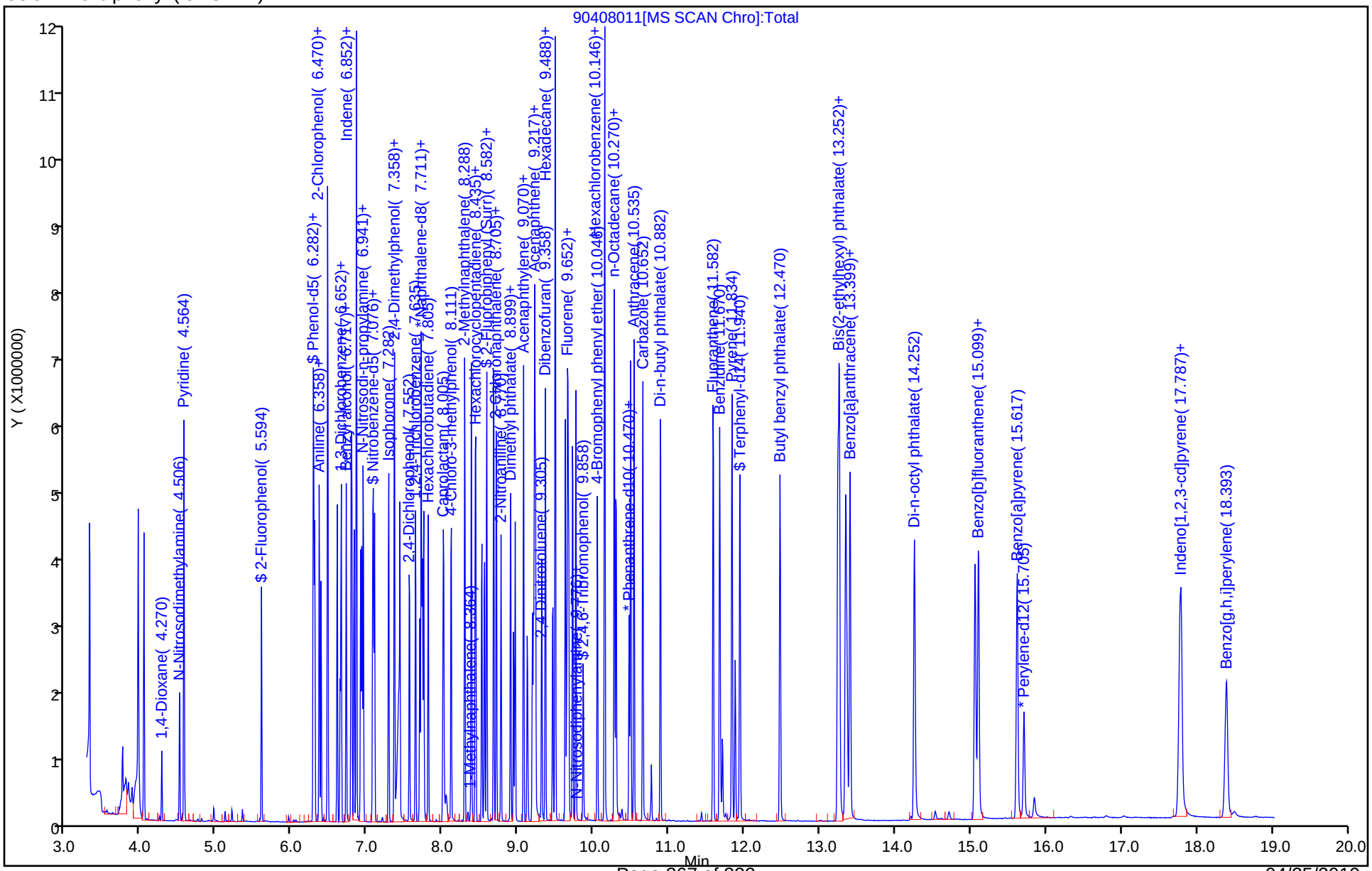
Lims ID: icv l1lvi Worklist Smp#: 11

Client ID:

Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 11

Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton

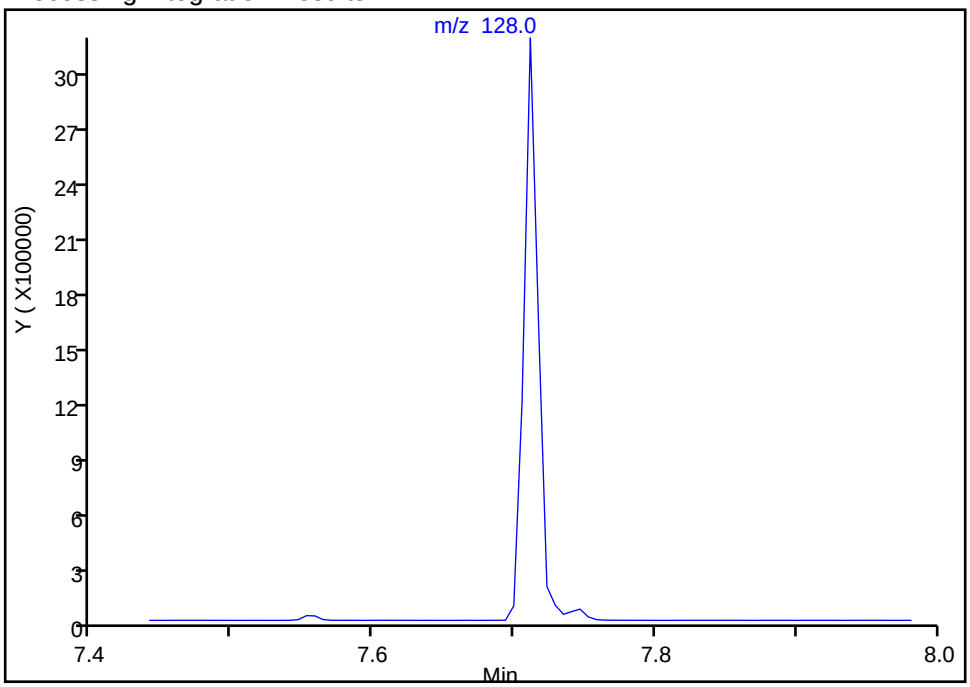
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Injection Date:	08-Apr-2019 13:19:30	Instrument ID:	A4AG2		
Lims ID:	icv l1lvi				
Client ID:					
Operator ID:		ALS Bottle#:	11	Worklist Smp#:	11
Injection Vol:	5.0 ul	Dil. Factor:	1.0000		
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		
Column:	5% phenyl (0.18 mm)	Detector	MS SCAN		

74 Naphthalene, CAS: 91-20-3

Signal: 1

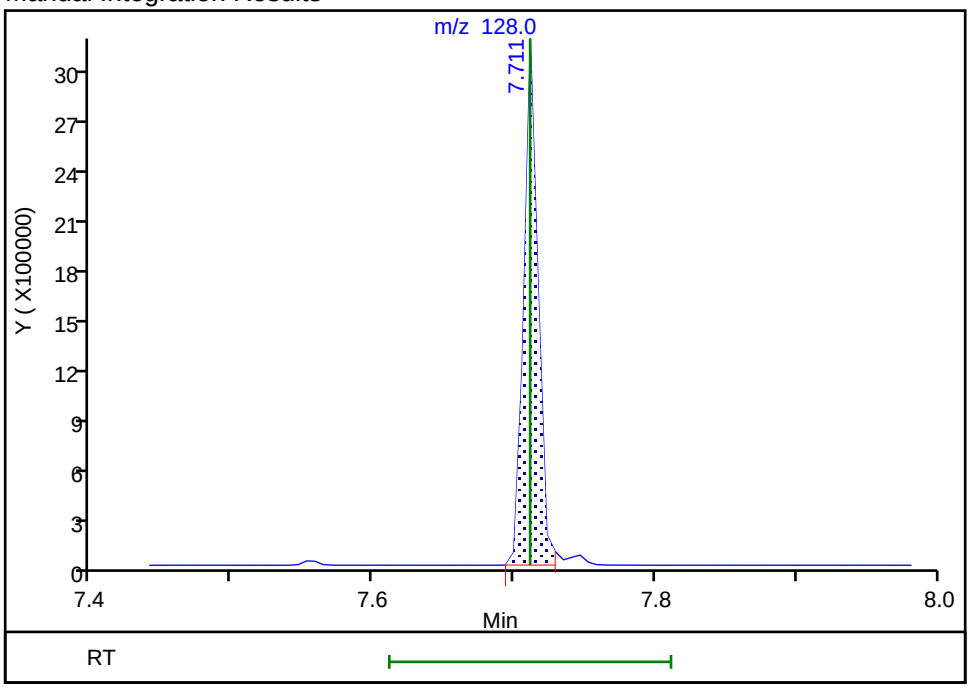
Not Detected
Expected RT: 7.71

Processing Integration Results



Manual Integration Results

RT: 7.71
Area: 2241166
Amount: 928.9017
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:42:26
Audit Action: Assigned Compound ID Audit Reason: Peak assignment corrected

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

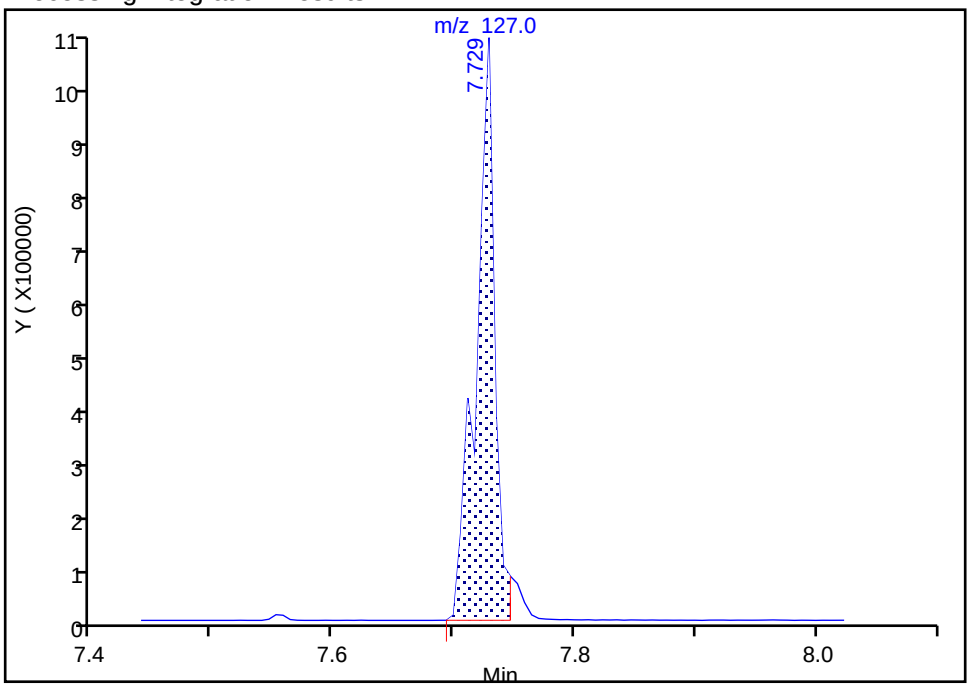
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Injection Date: 08-Apr-2019 13:19:30 Instrument ID: A4AG2
Lims ID: icv l1lvi
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

75 4-Chloroaniline, CAS: 106-47-8

Signal: 1

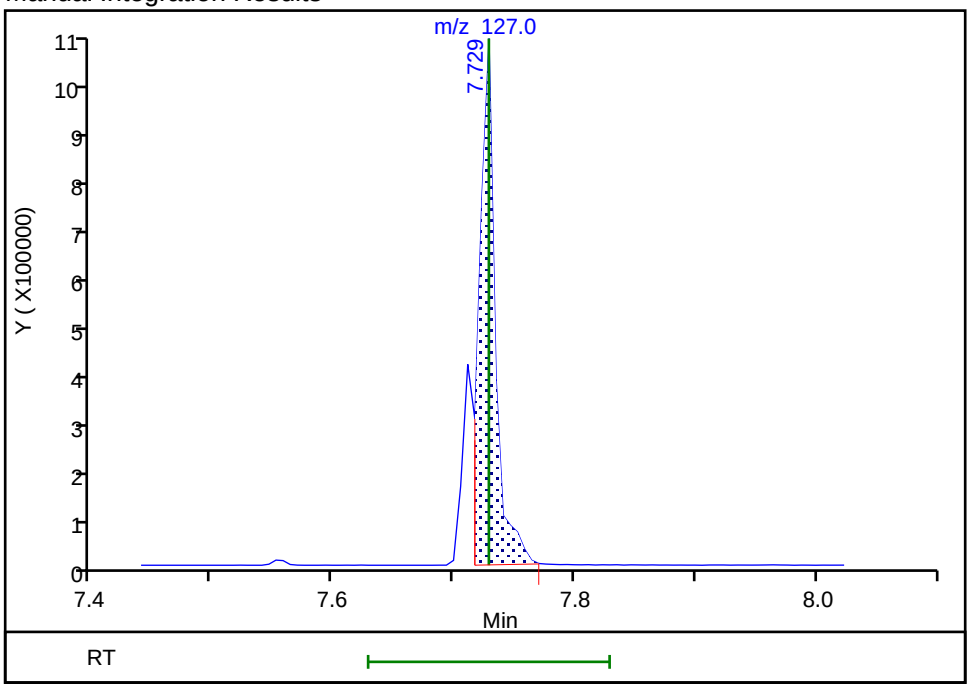
Processing Integration Results

RT: 7.73
Area: 1135974
Amount: 1133.3940
Amount Units: ng/ml



Manual Integration Results

RT: 7.73
Area: 969645
Amount: 967.4428
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:43:28
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

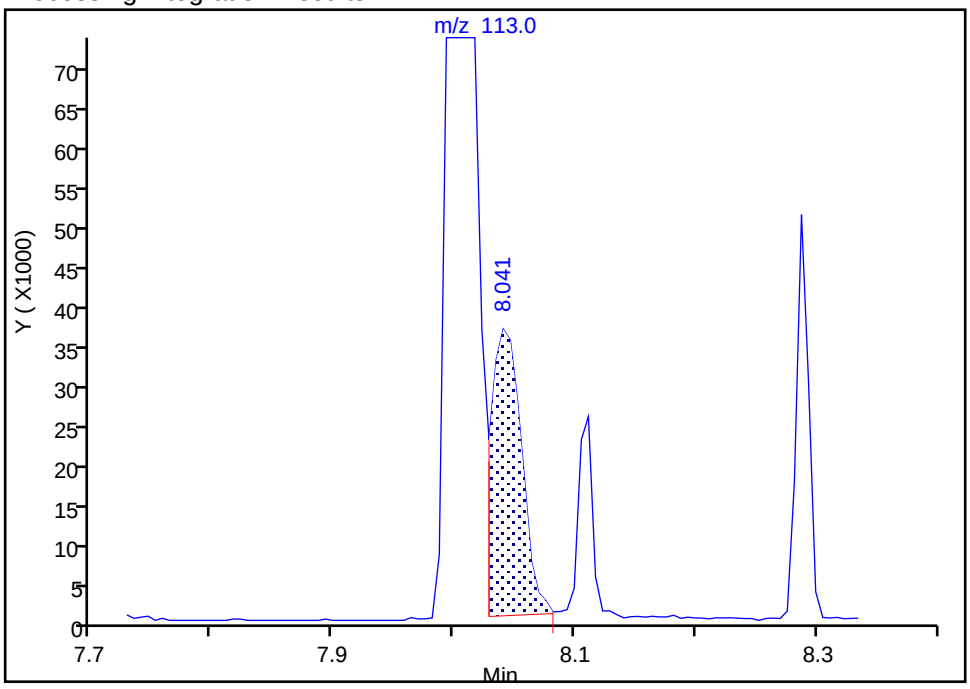
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Injection Date: 08-Apr-2019 13:19:30 Instrument ID: A4AG2
Lims ID: icv l1lvi
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

83 Caprolactam, CAS: 105-60-2

Signal: 1

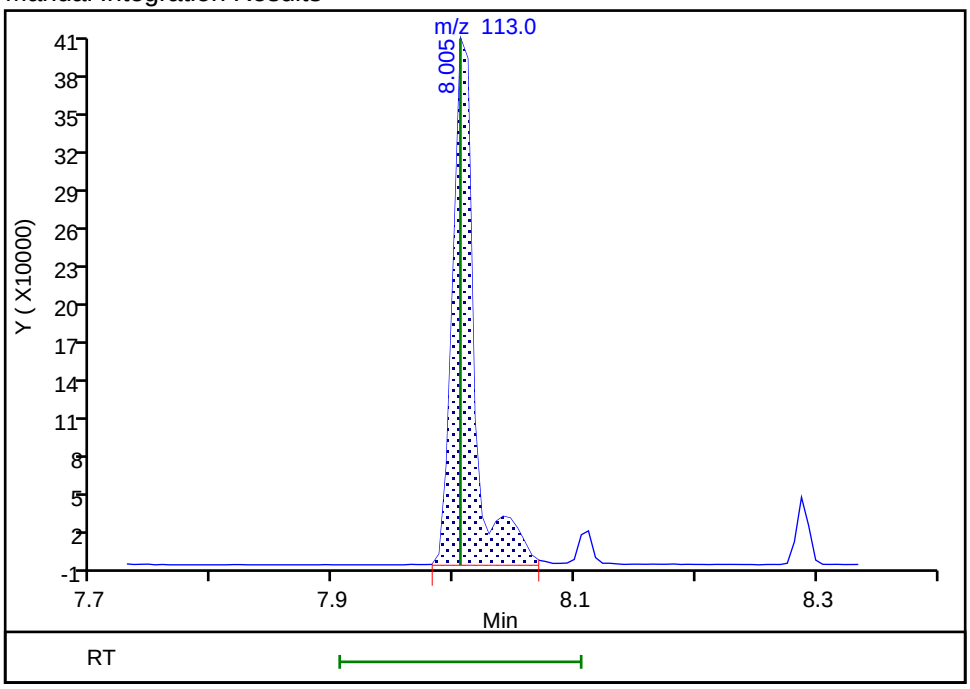
Processing Integration Results

RT: 8.04
Area: 64256
Amount: 246.7274
Amount Units: ng/ml



Manual Integration Results

RT: 8.01
Area: 508869
Amount: 1953.9329
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:43:45
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

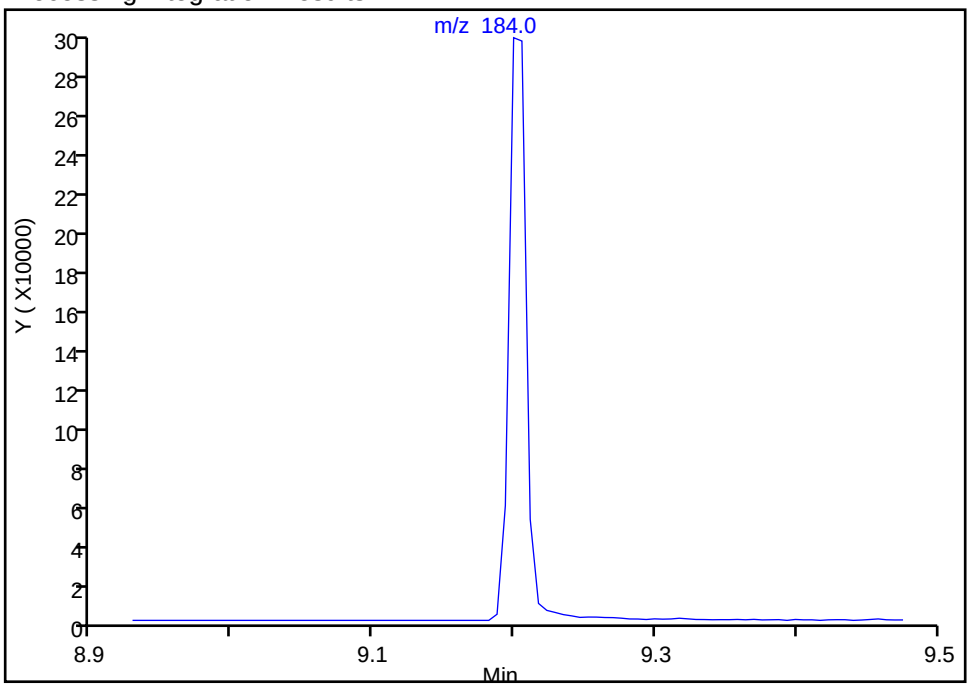
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Injection Date: 08-Apr-2019 13:19:30 Instrument ID: A4AG2
Lims ID: icv l1lvi
Client ID:
Operator ID: ALS Bottle#: 11 Worklist Smp#: 11
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

110 2,4-Dinitrophenol, CAS: 51-28-5

Signal: 1

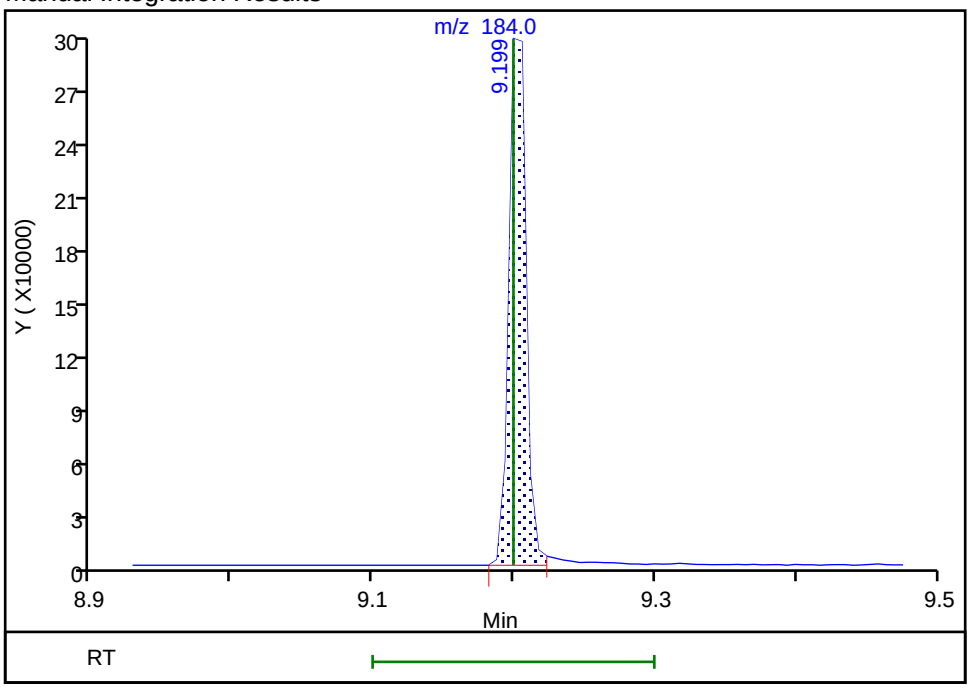
Not Detected
Expected RT: 9.20

Processing Integration Results



Manual Integration Results

RT: 9.20
Area: 249259
Amount: 1925.4140
Amount Units: ng/ml



Reviewer: hulat, 08-Apr-2019 13:43:58
Audit Action: Assigned Compound ID Audit Reason: Poor chromatography

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: STD6 240-376614/2 Calibration Date: 04/16/2019 05:54

Instrument ID: A4AG2 Calib Start Date: 01/14/2019 11:47

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 01/14/2019 14:58

Lab File ID: 90416002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,2-Diphenylhydrazine(as Azobenzene)	Ave	0.9034	0.8296		0.982	1.00	-8.2	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416002.D
Lims ID: std6 l1lvi
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Apr-2019 05:54:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-002
Misc. Info.: STD6 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 09:32:03 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 06:18:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.636	6.636	0.000	94	203261	400.0	400.0	
* 2 Naphthalene-d8	136	7.689	7.689	0.000	100	863270	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.188	0.000	95	439598	400.0	400.0	
* 4 Phenanthrene-d10	188	10.471	10.471	0.000	97	780954	400.0	400.0	
* 5 Chrysene-d12	240	13.359	13.359	0.000	97	647213	400.0	400.0	
* 6 Perylene-d12	264	15.706	15.706	0.000	97	630986	400.0	400.0	
$ 7 2-Fluorophenol	112	5.589	5.589	0.000	95	511720	1000.0	1010.7	
$ 8 Phenol-d5	99	6.289	6.289	0.000	0	694243	1000.0	996.5	
$ 9 Nitrobenzene-d5	82	7.077	7.077	0.000	94	807560	1000.0	1054.3	
$ 10 2-Fluorobiphenyl (Surr)	172	8.577	8.577	0.000	99	1411683	1000.0	1005.5	
$ 11 2,4,6-Tribromophenol	330	9.865	9.865	0.000	90	149605	1000.0	1086.0	
$ 12 Terphenyl-d14	244	11.941	11.941	0.000	99	1196682	1000.0	1013.2	
26 1,4-Dioxane	88	4.230	4.230	0.000	93	192222	1000.0	1043.2	
27 N-Nitrosodimethylamine	74	4.477	4.477	0.000	89	454378	1000.0	935.4	
28 Pyridine	79	4.536	4.536	0.000	85	1063195	2000.0	2171.2	
42 Benzaldehyde	77	6.277	6.277	0.000	91	684106	2000.0	1615.2	
43 Phenol	94	6.300	6.300	0.000	97	755725	1000.0	953.2	
44 Aniline	93	6.353	6.353	0.000	95	1118360	1000.0	923.8	
45 Bis(2-chloroethyl)ether	93	6.377	6.377	0.000	91	766771	1000.0	946.7	
47 2-Chlorophenol	128	6.465	6.465	0.000	96	602595	1000.0	919.4	
244 n-Decane	57	6.465	6.465	0.000	88	953328	1000.0	881.3	
48 1,3-Dichlorobenzene	146	6.594	6.594	0.000	95	736270	1000.0	976.5	
49 1,4-Dichlorobenzene	146	6.647	6.647	0.000	91	747587	1000.0	977.3	
50 Benzyl alcohol	108	6.718	6.718	0.000	91	206010	1000.0	426.7	
51 1,2-Dichlorobenzene	146	6.777	6.777	0.000	95	700166	1000.0	961.1	
52 2-Methylphenol	108	6.794	6.794	0.000	96	715558	1000.0	1085.6	
54 2,2'-oxybis[1-chloropropan	45	6.818	6.818	0.000	93	1113311	1000.0	764.0	
53 Indene	115	6.847	6.847	0.000	90	2286809	2000.0	1871.7	
55 3 & 4 Methylphenol	108	6.912	6.912	0.000	95	673108	1000.0	1025.9	
57 N-Nitrosodi-n-propylamine	70	6.924	6.924	0.000	90	527092	1000.0	896.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.942	6.942	0.000	95	1007218	1000.0	934.0	
61 Hexachloroethane	117	7.065	7.065	0.000	94	299083	1000.0	993.1	
62 Nitrobenzene	77	7.089	7.089	0.000	92	786349	1000.0	1000.1	
64 Isophorone	82	7.277	7.277	0.000	98	1464629	1000.0	960.1	
66 2,4-Dimethylphenol	107	7.353	7.353	0.000	95	636344	1000.0	963.0	
65 2-Nitrophenol	139	7.359	7.359	0.000	91	357208	1000.0	1188.6	
70 Benzoic acid	122	7.418	7.418	0.000	93	743767	2000.0	2564.2	
69 Bis(2-chloroethoxy)methane	93	7.424	7.424	0.000	97	840379	1000.0	935.3	
72 2,4-Dichlorophenol	162	7.559	7.559	0.000	98	555752	1000.0	1115.8	
73 1,2,4-Trichlorobenzene	180	7.636	7.636	0.000	93	600399	1000.0	1016.6	
74 Naphthalene	128	7.712	7.712	0.000	97	2159246	1000.0	965.4	
75 4-Chloroaniline	127	7.724	7.724	0.000	94	913217	1000.0	982.9	
76 2,6-Dichlorophenol	162	7.741	7.741	0.000	95	555759	1000.0	1032.3	
78 Hexachlorobutadiene	225	7.806	7.806	0.000	97	354090	1000.0	1077.6	
83 Caprolactam	113	8.006	8.006	0.000	76	450806	2000.0	1867.3	M
85 4-Chloro-3-methylphenol	107	8.112	8.112	0.000	97	629015	1000.0	1076.0	
86 2-Methylnaphthalene	142	8.288	8.288	0.000	92	1391749	1000.0	953.3	
87 1-Methylnaphthalene	142	8.377	8.377	0.000	93	1290570	1000.0	950.2	
89 Hexachlorocyclopentadiene	237	8.424	8.424	0.000	97	305327	1000.0	942.9	
90 1,2,4,5-Tetrachlorobenzene	216	8.436	8.436	0.000	98	554638	1000.0	1039.4	
93 2,4,6-Trichlorophenol	196	8.518	8.518	0.000	95	397726	1000.0	1116.9	
94 2,4,5-Trichlorophenol	196	8.553	8.553	0.000	93	450170	1000.0	1137.0	
99 1,1'-Biphenyl	154	8.671	8.671	0.000	95	1603641	1000.0	986.5	
100 2-Chloronaphthalene	162	8.706	8.706	0.000	99	1288670	1000.0	994.1	
101 2-Nitroaniline	65	8.771	8.771	0.000	80	489653	1000.0	1154.4	
104 Dimethyl phthalate	163	8.894	8.894	0.000	98	1481197	1000.0	1022.9	
103 1,3-Dinitrobenzene	168	8.936	8.936	0.000	81	238664	1000.0	1074.7	
106 2,6-Dinitrotoluene	165	8.959	8.959	0.000	91	338459	1000.0	1110.8	
108 Acenaphthylene	152	9.071	9.071	0.000	98	1972050	1000.0	988.8	
109 3-Nitroaniline	138	9.118	9.118	0.000	90	315243	1000.0	993.0	
110 2,4-Dinitrophenol	184	9.206	9.206	0.000	84	373629	2000.0	3064.4	
111 Acenaphthene	153	9.218	9.218	0.000	93	1210042	1000.0	973.8	
112 4-Nitrophenol	109	9.235	9.235	0.000	93	445374	2000.0	2462.4	
113 2,4-Dinitrotoluene	165	9.312	9.312	0.000	89	439655	1000.0	1138.7	
115 Dibenzofuran	168	9.359	9.359	0.000	95	1796675	1000.0	962.3	
118 2,3,4,6-Tetrachlorophenol	232	9.459	9.459	0.000	76	275869	1000.0	1029.1	
120 Diethyl phthalate	149	9.488	9.488	0.000	97	1290166	1000.0	985.8	
248 Hexadecane	57	9.488	9.488	0.000	87	1127835	1000.0	880.5	
122 4-Chlorophenyl phenyl ethe	204	9.624	9.624	0.000	95	681017	1000.0	987.4	
125 4-Nitroaniline	138	9.641	9.641	0.000	81	315414	1000.0	1066.5	
124 Fluorene	166	9.653	9.653	0.000	94	1417955	1000.0	951.6	
127 4,6-Dinitro-2-methylphenol	198	9.671	9.671	0.000	80	411636	2000.0	2365.4	
129 Diphenylamine	169	9.718	9.718	0.000	94	1065603	850.0	830.2	
128 N-Nitrosodiphenylamine	169	9.718	9.718	0.000	98	1065603	1000.0	976.7	
131 Azobenzene	77	9.765	9.765	0.000	98	1618743	1000.0	981.4	
130 1,2-Diphenylhydrazine	77	9.765	9.765	0.000	95	1619760	1000.0	982.0	
138 4-Bromophenyl phenyl ether	248	10.047	10.047	0.000	72	373094	1000.0	1035.5	
140 Hexachlorobenzene	284	10.147	10.147	0.000	92	380322	1000.0	987.3	
141 Atrazine	200	10.147	10.147	0.000	92	712657	2000.0	2092.7	
245 n-Octadecane	57	10.271	10.271	0.000	89	1270179	1000.0	909.5	
143 Pentachlorophenol	266	10.300	10.300	0.000	90	467896	2000.0	2374.7	
148 Phenanthrene	178	10.494	10.494	0.000	96	1994082	1000.0	946.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
149 Anthracene	178	10.535	10.535	0.000	96	2074886	1000.0	979.5	
150 Carbazole	167	10.653	10.653	0.000	96	1922617	1000.0	969.6	
154 Di-n-butyl phthalate	149	10.882	10.882	0.000	100	2434576	1000.0	1027.5	
159 Fluoranthene	202	11.588	11.588	0.000	98	2004043	1000.0	901.7	
160 Benzidine	184	11.671	11.671	0.000	99	1638942	2000.0	1918.9	
161 Pyrene	202	11.835	11.835	0.000	97	2047779	1000.0	1009.0	
169 Butyl benzyl phthalate	149	12.471	12.471	0.000	98	1030463	1000.0	1138.4	
174 Bis(2-ethylhexyl) phthalat	149	13.235	13.235	0.000	96	1438120	1000.0	1187.2	
177 3,3'-Dichlorobenzidine	252	13.259	13.259	0.000	74	1381114	2000.0	2157.6	
178 Benzo[a]anthracene	228	13.341	13.341	0.000	98	1973610	1000.0	1024.9	
179 Chrysene	228	13.400	13.400	0.000	97	1887291	1000.0	982.9	
181 Di-n-octyl phthalate	149	14.247	14.247	0.000	99	2527176	1000.0	1213.5	
183 Benzo[b]fluoranthene	252	15.059	15.059	0.000	97	1939992	1000.0	1059.1	
184 Benzo[k]fluoranthene	252	15.100	15.100	0.000	98	1921986	1000.0	971.0	
185 Benzo[a]pyrene	252	15.617	15.617	0.000	77	1858158	1000.0	1049.6	
190 Indeno[1,2,3-cd]pyrene	276	17.782	17.782	0.000	97	1929380	1000.0	1084.9	
189 Dibenz(a,h)anthracene	278	17.794	17.794	0.000	92	1626155	1000.0	1089.9	
191 Benzo[g,h,i]perylene	276	18.400	18.400	0.000	96	1618564	1000.0	1049.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L6 W_00012 Amount Added: 0.10 Units: mL

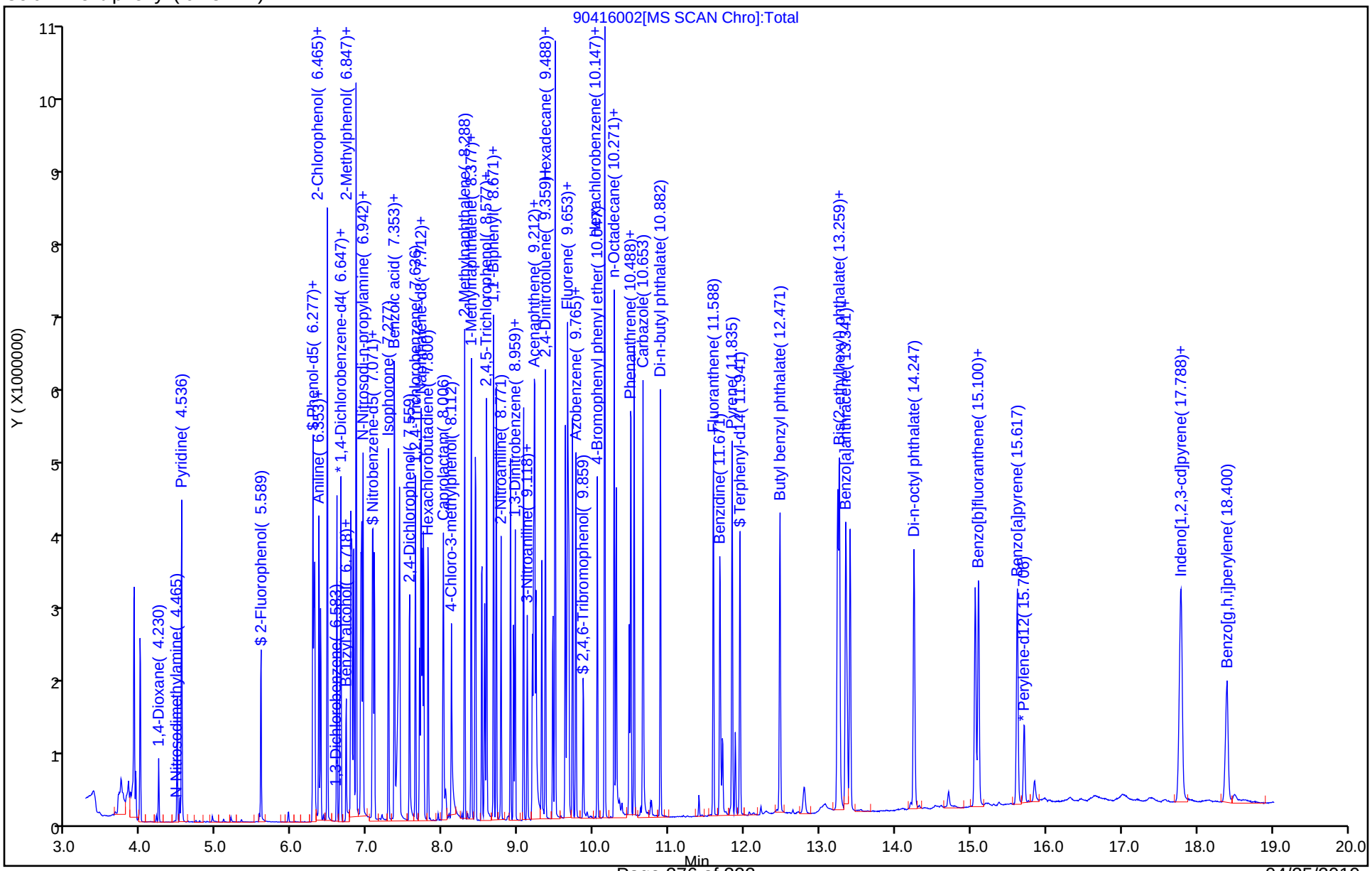
Report Date: 16-Apr-2019 09:32:05 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416002.D

Injection Date:	16-Apr-2019 05:54:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std6 l1lvi			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: STD6 240-376614/2 Calibration Date: 04/16/2019 05:54

Instrument ID: A4AG2 Calib Start Date: 04/08/2019 09:39

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 04/08/2019 12:54

Lab File ID: 90416002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,4-Dioxane	Ave	0.3626	0.3783		1.04	1.00	4.3	20.0
N-Nitrosodimethylamine	Ave	0.9559	0.8942		0.935	1.00	-6.5	20.0
Pyridine	Ave	0.9637	1.046		2.17	2.00	8.6	20.0
Benzaldehyde	Qua		0.6731	0.0100	1.62	2.00	-19.2	20.0
Phenol	Ave	1.560	1.487	0.8000	0.953	1.00	-4.7	20.0
Aniline	Ave	2.382	2.201		0.924	1.00	-7.6	20.0
Bis(2-chloroethyl)ether	Ave	1.594	1.509	0.7000	0.947	1.00	-5.3	20.0
2-Chlorophenol	Ave	1.290	1.186	0.8000	0.919	1.00	-8.1	20.0
n-Decane	Ave	2.129	1.876		0.881	1.00	-11.9	20.0
1,3-Dichlorobenzene	Ave	1.484	1.449		0.977	1.00	-2.3	20.0
1,4-Dichlorobenzene	Ave	1.505	1.471		0.977	1.00	-2.3	20.0
Benzyl alcohol	Ave	0.9500	0.4054		0.427	1.00	-57.3*	20.0
1,2-Dichlorobenzene	Ave	1.434	1.378		0.961	1.00	-3.9	20.0
2-Methylphenol	Ave	1.297	1.408	0.7000	1.09	1.00	8.6	20.0
bis (2-chloroisopropyl) ether	Ave	2.868	2.191		0.764	1.00	-23.6*	20.0
Indene	Ave	2.404	2.250		1.87	2.00	-6.4	20.0
3 & 4 Methylphenol	Ave	1.291	1.325		1.03	1.00	2.6	20.0
N-Nitrosodi-n-propylamine	Ave	1.157	1.037	0.5000	0.897	1.00	-10.3	20.0
Acetophenone	Ave	2.122	1.982	0.0100	0.934	1.00	-6.6	20.0
Hexachloroethane	Ave	0.5927	0.5886	0.3000	0.993	1.00	-0.7	20.0
Nitrobenzene	Ave	0.3643	0.3644	0.2000	1.00	1.00	0.0	20.0
Isophorone	Ave	0.7068	0.6786	0.4000	0.960	1.00	-4.0	20.0
2,4-Dimethylphenol	Ave	0.3062	0.2949	0.2000	0.963	1.00	-3.7	20.0
2-Nitrophenol	Ave	0.1392	0.1655	0.1000	1.19	1.00	18.9	20.0
Benzoic acid	Lin1		0.1723		2.56	2.00	28.2*	20.0
Bis(2-chloroethoxy)methane	Ave	0.4163	0.3894	0.3000	0.935	1.00	-6.5	20.0
2,4-Dichlorophenol	Ave	0.2308	0.2575	0.2000	1.12	1.00	11.6	20.0
1,2,4-Trichlorobenzene	Ave	0.2737	0.2782		1.02	1.00	1.7	20.0
Naphthalene	Ave	1.036	1.001	0.7000	0.965	1.00	-3.5	20.0
4-Chloroaniline	Ave	0.4305	0.4231	0.0100	0.983	1.00	-1.7	20.0
2,6-Dichlorophenol	Ave	0.2495	0.2575		1.03	1.00	3.2	20.0
Hexachlorobutadiene	Ave	0.1522	0.1641	0.0100	1.08	1.00	7.8	20.0
Caprolactam	Ave	0.1119	0.1044	0.0100	1.87	2.00	-6.6	20.0
4-Chloro-3-methylphenol	Ave	0.2709	0.2915	0.2000	1.08	1.00	7.6	20.0
2-Methylnaphthalene	Ave	0.6765	0.6449	0.4000	0.953	1.00	-4.7	20.0
1-Methylnaphthalene	Ave	0.6293	0.5980		0.950	1.00	-5.0	20.0
Hexachlorocyclopentadiene	Ave	0.2947	0.2778	0.0500	0.943	1.00	-5.7	20.0
1,2,4,5-Tetrachlorobenzene	Ave	0.4855	0.5047	0.0100	1.04	1.00	3.9	20.0
2,4,6-Trichlorophenol	Ave	0.3240	0.3619	0.2000	1.12	1.00	11.7	20.0
2,4,5-Trichlorophenol	Lin1		0.4096	0.2000	1.14	1.00	13.7	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: STD6 240-376614/2 Calibration Date: 04/16/2019 05:54

Instrument ID: A4AG2 Calib Start Date: 04/08/2019 09:39

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 04/08/2019 12:54

Lab File ID: 90416002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
1,1'-Biphenyl	Ave	1.479	1.459	0.0100	0.986	1.00	-1.4	20.0
2-Chloronaphthalene	Ave	1.180	1.173	0.8000	0.994	1.00	-0.6	20.0
2-Nitroaniline	Ave	0.3860	0.4456	0.0100	1.15	1.00	15.4	20.0
Dimethyl phthalate	Ave	1.318	1.348	0.0100	1.02	1.00	2.3	20.0
1,3-Dinitrobenzene	Lin1		0.2172		1.07	1.00	7.5	20.0
2,6-Dinitrotoluene	Ave	0.2772	0.3080		1.11	1.00	11.1	20.0
Acenaphthylene	Ave	1.815	1.794	0.9000	0.989	1.00	-1.1	20.0
3-Nitroaniline	Ave	0.2889	0.2869	0.0100	0.993	1.00	-0.7	20.0
2,4-Dinitrophenol	Lin1		0.1700	0.0100	3.06	2.00	53.2*	20.0
Acenaphthene	Ave	1.131	1.101	0.9000	0.974	1.00	-2.6	20.0
4-Nitrophenol	Ave	0.1646	0.2026		2.46	2.00	23.1*	20.0
2,4-Dinitrotoluene	Ave	0.3513	0.4001	0.2000	1.14	1.00	13.9	20.0
Dibenzofuran	Ave	1.699	1.635	0.8000	0.962	1.00	-3.8	20.0
2,3,4,6-Tetrachlorophenol	Ave	0.2439	0.2510	0.0100	1.03	1.00	2.9	20.0
Diethyl phthalate	Ave	1.191	1.174	0.0100	0.986	1.00	-1.4	20.0
Hexadecane	Ave	1.166	1.026		0.880	1.00	-12.0	20.0
4-Chlorophenyl phenyl ether	Ave	0.6276	0.6197	0.4000	0.987	1.00	-1.3	20.0
p-Nitroaniline	Ave	0.2691	0.2870	0.0100	1.07	1.00	6.6	20.0
Fluorene	Ave	1.356	1.290	0.9000	0.952	1.00	-4.8	20.0
4,6-Dinitro-2-methylphenol	Lin1		0.1054	0.0100	2.37	2.00	18.3	20.0
Diphenylamine	Ave	0.6575	0.6421		0.830	0.850	-2.3	20.0
N-Nitrosodiphenylamine	Ave	0.5588	0.5458	0.0100	0.977	1.00	-2.3	20.0
Azobenzene	Ave	0.8448	0.8291		0.981	1.00	-1.9	20.0
4-Bromophenyl phenyl ether	Ave	0.1845	0.1911	0.1000	1.04	1.00	3.6	20.0
Atrazine	Ave	0.1744	0.1825	0.0100	2.09	2.00	4.6	20.0
Hexachlorobenzene	Ave	0.1973	0.1948	0.1000	0.987	1.00	-1.3	20.0
n-Octadecane	Ave	0.7153	0.6506		0.910	1.00	-9.0	20.0
Pentachlorophenol	Lin1		0.1198	0.0500	2.37	2.00	18.7	20.0
Phenanthrene	Ave	1.079	1.021	0.7000	0.947	1.00	-5.3	20.0
Anthracene	Ave	1.085	1.063	0.7000	0.979	1.00	-2.1	20.0
Carbazole	Ave	1.016	0.9848	0.0100	0.970	1.00	-3.0	20.0
Di-n-butyl phthalate	Ave	1.214	1.247	0.0100	1.03	1.00	2.7	20.0
Fluoranthene	Ave	1.138	1.026	0.6000	0.902	1.00	-9.8	20.0
Benzidine	Lin1		0.5065		1.92	2.00	-4.1	20.0
Pyrene	Ave	1.254	1.266	0.6000	1.01	1.00	0.9	20.0
Butyl benzyl phthalate	Ave	0.5595	0.6369	0.0100	1.14	1.00	13.8	20.0
Bis(2-ethylhexyl) phthalate	Ave	0.7487	0.8888	0.0100	1.19	1.00	18.7	20.0
3,3'-Dichlorobenzidine	Ave	0.3956	0.4268	0.0100	2.16	2.00	7.9	20.0
Benzo[a]anthracene	Ave	1.190	1.220	0.8000	1.02	1.00	2.5	20.0
Chrysene	Ave	1.187	1.166	0.7000	0.983	1.00	-1.7	20.0
Di-n-octyl phthalate	Ave	1.320	1.602	0.0100	1.21	1.00	21.3*	20.0

FORM VII
GC/MS SEMI VOA CONTINUING CALIBRATION DATA

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Lab Sample ID: STD6 240-376614/2 Calibration Date: 04/16/2019 05:54

Instrument ID: A4AG2 Calib Start Date: 04/08/2019 09:39

GC Column: RXI-5SILMS/IIG ID: 0.25(mm) Calib End Date: 04/08/2019 12:54

Lab File ID: 90416002.D Conc. Units: ng/uL

ANALYTE	CURVE TYPE	AVE RRF	RRF	MIN RRF	CALC AMOUNT	SPIKE AMOUNT	%D	MAX %D
Benzo[b]fluoranthene	Ave	1.161	1.230	0.7000	1.06	1.00	5.9	20.0
Benzo[k]fluoranthene	Ave	1.255	1.218	0.7000	0.971	1.00	-2.9	20.0
Benzo[a]pyrene	Ave	1.122	1.178	0.7000	1.05	1.00	5.0	20.0
Indeno[1,2,3-cd]pyrene	Ave	1.127	1.223	0.5000	1.08	1.00	8.5	20.0
Dibenz(a,h)anthracene	Ave	0.9458	1.031	0.4000	1.09	1.00	9.0	20.0
Benzo[g,h,i]perylene	Ave	0.9777	1.026	0.5000	1.05	1.00	4.9	20.0
2-Fluorophenol (Surr)	Ave	0.996	1.007		1.01	1.00	1.1	20.0
Phenol-d5 (Surr)	Ave	1.371	1.366		0.997	1.00	-0.3	20.0
Nitrobenzene-d5 (Surr)	Ave	0.3549	0.3742		1.05	1.00	5.4	20.0
2-Fluorobiphenyl (Surr)	Ave	1.278	1.285		1.01	1.00	0.5	20.0
2,4,6-Tribromophenol (Surr)	Ave	0.1253	0.1361		1.09	1.00	8.6	20.0
Terphenyl-d14 (Surr)	Ave	0.7300	0.7396		1.01	1.00	1.3	20.0

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416002.D
Lims ID: std6 l1lvi
Client ID:
Sample Type: CCVIS
Inject. Date: 16-Apr-2019 05:54:30 ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-002
Misc. Info.: STD6 L1LVI
Operator ID: Instrument ID: A4AG2
Sublist: chrom-LVI AG2 8270*sub20

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 09:32:03 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 06:18:59

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.636	6.636	0.000	94	203261	400.0	400.0	
* 2 Naphthalene-d8	136	7.689	7.689	0.000	100	863270	400.0	400.0	
* 3 Acenaphthene-d10	164	9.188	9.188	0.000	95	439598	400.0	400.0	
* 4 Phenanthrene-d10	188	10.471	10.471	0.000	97	780954	400.0	400.0	
* 5 Chrysene-d12	240	13.359	13.359	0.000	97	647213	400.0	400.0	
* 6 Perylene-d12	264	15.706	15.706	0.000	97	630986	400.0	400.0	
$ 7 2-Fluorophenol	112	5.589	5.589	0.000	95	511720	1000.0	1010.7	
$ 8 Phenol-d5	99	6.289	6.289	0.000	0	694243	1000.0	996.5	
$ 9 Nitrobenzene-d5	82	7.077	7.077	0.000	94	807560	1000.0	1054.3	
$ 10 2-Fluorobiphenyl (Surr)	172	8.577	8.577	0.000	99	1411683	1000.0	1005.5	
$ 11 2,4,6-Tribromophenol	330	9.865	9.865	0.000	90	149605	1000.0	1086.0	
$ 12 Terphenyl-d14	244	11.941	11.941	0.000	99	1196682	1000.0	1013.2	
26 1,4-Dioxane	88	4.230	4.230	0.000	93	192222	1000.0	1043.2	
27 N-Nitrosodimethylamine	74	4.477	4.477	0.000	89	454378	1000.0	935.4	
28 Pyridine	79	4.536	4.536	0.000	85	1063195	2000.0	2171.2	
42 Benzaldehyde	77	6.277	6.277	0.000	91	684106	2000.0	1615.2	
43 Phenol	94	6.300	6.300	0.000	97	755725	1000.0	953.2	
44 Aniline	93	6.353	6.353	0.000	95	1118360	1000.0	923.8	
45 Bis(2-chloroethyl)ether	93	6.377	6.377	0.000	91	766771	1000.0	946.7	
47 2-Chlorophenol	128	6.465	6.465	0.000	96	602595	1000.0	919.4	
244 n-Decane	57	6.465	6.465	0.000	88	953328	1000.0	881.3	
48 1,3-Dichlorobenzene	146	6.594	6.594	0.000	95	736270	1000.0	976.5	
49 1,4-Dichlorobenzene	146	6.647	6.647	0.000	91	747587	1000.0	977.3	
50 Benzyl alcohol	108	6.718	6.718	0.000	91	206010	1000.0	426.7	
51 1,2-Dichlorobenzene	146	6.777	6.777	0.000	95	700166	1000.0	961.1	
52 2-Methylphenol	108	6.794	6.794	0.000	96	715558	1000.0	1085.6	
54 2,2'-oxybis[1-chloropropan	45	6.818	6.818	0.000	93	1113311	1000.0	764.0	
53 Indene	115	6.847	6.847	0.000	90	2286809	2000.0	1871.7	
55 3 & 4 Methylphenol	108	6.912	6.912	0.000	95	673108	1000.0	1025.9	
57 N-Nitrosodi-n-propylamine	70	6.924	6.924	0.000	90	527092	1000.0	896.5	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
58 Acetophenone	105	6.942	6.942	0.000	95	1007218	1000.0	934.0	
61 Hexachloroethane	117	7.065	7.065	0.000	94	299083	1000.0	993.1	
62 Nitrobenzene	77	7.089	7.089	0.000	92	786349	1000.0	1000.1	
64 Isophorone	82	7.277	7.277	0.000	98	1464629	1000.0	960.1	
66 2,4-Dimethylphenol	107	7.353	7.353	0.000	95	636344	1000.0	963.0	
65 2-Nitrophenol	139	7.359	7.359	0.000	91	357208	1000.0	1188.6	
70 Benzoic acid	122	7.418	7.418	0.000	93	743767	2000.0	2564.2	
69 Bis(2-chloroethoxy)methane	93	7.424	7.424	0.000	97	840379	1000.0	935.3	
72 2,4-Dichlorophenol	162	7.559	7.559	0.000	98	555752	1000.0	1115.8	
73 1,2,4-Trichlorobenzene	180	7.636	7.636	0.000	93	600399	1000.0	1016.6	
74 Naphthalene	128	7.712	7.712	0.000	97	2159246	1000.0	965.4	
75 4-Chloroaniline	127	7.724	7.724	0.000	94	913217	1000.0	982.9	
76 2,6-Dichlorophenol	162	7.741	7.741	0.000	95	555759	1000.0	1032.3	
78 Hexachlorobutadiene	225	7.806	7.806	0.000	97	354090	1000.0	1077.6	
83 Caprolactam	113	8.006	8.006	0.000	76	450806	2000.0	1867.3	M
85 4-Chloro-3-methylphenol	107	8.112	8.112	0.000	97	629015	1000.0	1076.0	
86 2-Methylnaphthalene	142	8.288	8.288	0.000	92	1391749	1000.0	953.3	
87 1-Methylnaphthalene	142	8.377	8.377	0.000	93	1290570	1000.0	950.2	
89 Hexachlorocyclopentadiene	237	8.424	8.424	0.000	97	305327	1000.0	942.9	
90 1,2,4,5-Tetrachlorobenzene	216	8.436	8.436	0.000	98	554638	1000.0	1039.4	
93 2,4,6-Trichlorophenol	196	8.518	8.518	0.000	95	397726	1000.0	1116.9	
94 2,4,5-Trichlorophenol	196	8.553	8.553	0.000	93	450170	1000.0	1137.0	
99 1,1'-Biphenyl	154	8.671	8.671	0.000	95	1603641	1000.0	986.5	
100 2-Chloronaphthalene	162	8.706	8.706	0.000	99	1288670	1000.0	994.1	
101 2-Nitroaniline	65	8.771	8.771	0.000	80	489653	1000.0	1154.4	
104 Dimethyl phthalate	163	8.894	8.894	0.000	98	1481197	1000.0	1022.9	
103 1,3-Dinitrobenzene	168	8.936	8.936	0.000	81	238664	1000.0	1074.7	
106 2,6-Dinitrotoluene	165	8.959	8.959	0.000	91	338459	1000.0	1110.8	
108 Acenaphthylene	152	9.071	9.071	0.000	98	1972050	1000.0	988.8	
109 3-Nitroaniline	138	9.118	9.118	0.000	90	315243	1000.0	993.0	
110 2,4-Dinitrophenol	184	9.206	9.206	0.000	84	373629	2000.0	3064.4	
111 Acenaphthene	153	9.218	9.218	0.000	93	1210042	1000.0	973.8	
112 4-Nitrophenol	109	9.235	9.235	0.000	93	445374	2000.0	2462.4	
113 2,4-Dinitrotoluene	165	9.312	9.312	0.000	89	439655	1000.0	1138.7	
115 Dibenzofuran	168	9.359	9.359	0.000	95	1796675	1000.0	962.3	
118 2,3,4,6-Tetrachlorophenol	232	9.459	9.459	0.000	76	275869	1000.0	1029.1	
120 Diethyl phthalate	149	9.488	9.488	0.000	97	1290166	1000.0	985.8	
248 Hexadecane	57	9.488	9.488	0.000	87	1127835	1000.0	880.5	
122 4-Chlorophenyl phenyl ethe	204	9.624	9.624	0.000	95	681017	1000.0	987.4	
125 4-Nitroaniline	138	9.641	9.641	0.000	81	315414	1000.0	1066.5	
124 Fluorene	166	9.653	9.653	0.000	94	1417955	1000.0	951.6	
127 4,6-Dinitro-2-methylphenol	198	9.671	9.671	0.000	80	411636	2000.0	2365.4	
129 Diphenylamine	169	9.718	9.718	0.000	94	1065603	850.0	830.2	
128 N-Nitrosodiphenylamine	169	9.718	9.718	0.000	98	1065603	1000.0	976.7	
131 Azobenzene	77	9.765	9.765	0.000	98	1618743	1000.0	981.4	
130 1,2-Diphenylhydrazine	77	9.765	9.765	0.000	95	1619760	1000.0	982.0	
138 4-Bromophenyl phenyl ether	248	10.047	10.047	0.000	72	373094	1000.0	1035.5	
140 Hexachlorobenzene	284	10.147	10.147	0.000	92	380322	1000.0	987.3	
141 Atrazine	200	10.147	10.147	0.000	92	712657	2000.0	2092.7	
245 n-Octadecane	57	10.271	10.271	0.000	89	1270179	1000.0	909.5	
143 Pentachlorophenol	266	10.300	10.300	0.000	90	467896	2000.0	2374.7	
148 Phenanthrene	178	10.494	10.494	0.000	96	1994082	1000.0	946.8	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
149 Anthracene	178	10.535	10.535	0.000	96	2074886	1000.0	979.5	
150 Carbazole	167	10.653	10.653	0.000	96	1922617	1000.0	969.6	
154 Di-n-butyl phthalate	149	10.882	10.882	0.000	100	2434576	1000.0	1027.5	
159 Fluoranthene	202	11.588	11.588	0.000	98	2004043	1000.0	901.7	
160 Benzidine	184	11.671	11.671	0.000	99	1638942	2000.0	1918.9	
161 Pyrene	202	11.835	11.835	0.000	97	2047779	1000.0	1009.0	
169 Butyl benzyl phthalate	149	12.471	12.471	0.000	98	1030463	1000.0	1138.4	
174 Bis(2-ethylhexyl) phthalat	149	13.235	13.235	0.000	96	1438120	1000.0	1187.2	
177 3,3'-Dichlorobenzidine	252	13.259	13.259	0.000	74	1381114	2000.0	2157.6	
178 Benzo[a]anthracene	228	13.341	13.341	0.000	98	1973610	1000.0	1024.9	
179 Chrysene	228	13.400	13.400	0.000	97	1887291	1000.0	982.9	
181 Di-n-octyl phthalate	149	14.247	14.247	0.000	99	2527176	1000.0	1213.5	
183 Benzo[b]fluoranthene	252	15.059	15.059	0.000	97	1939992	1000.0	1059.1	
184 Benzo[k]fluoranthene	252	15.100	15.100	0.000	98	1921986	1000.0	971.0	
185 Benzo[a]pyrene	252	15.617	15.617	0.000	77	1858158	1000.0	1049.6	
190 Indeno[1,2,3-cd]pyrene	276	17.782	17.782	0.000	97	1929380	1000.0	1084.9	
189 Dibenz(a,h)anthracene	278	17.794	17.794	0.000	92	1626155	1000.0	1089.9	
191 Benzo[g,h,i]perylene	276	18.400	18.400	0.000	96	1618564	1000.0	1049.4	

QC Flag Legend

Review Flags

M - Manually Integrated

Reagents:

SMLIST1 L6 W_00012 Amount Added: 0.10 Units: mL

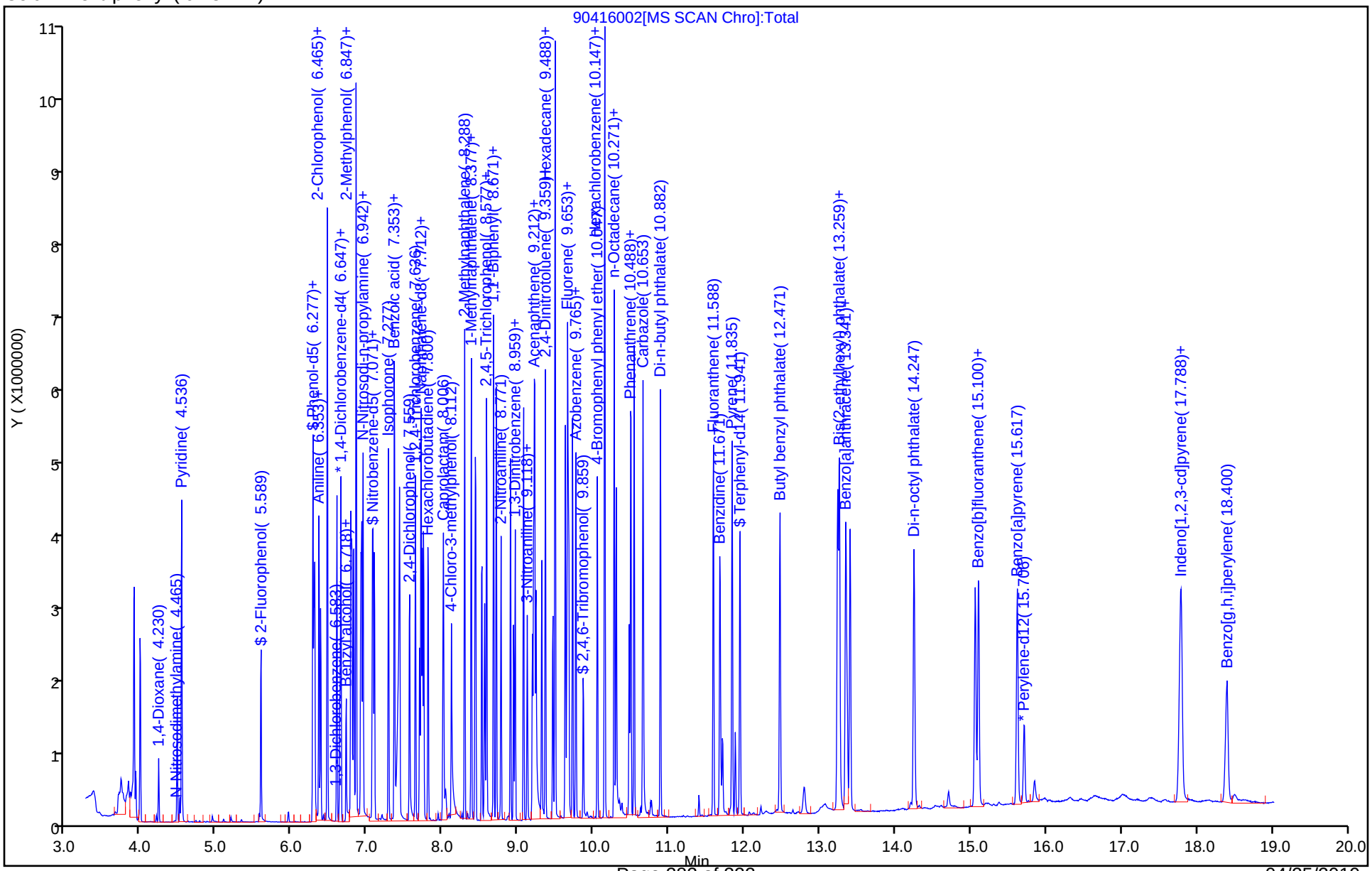
Report Date: 16-Apr-2019 09:32:05 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416002.D

Injection Date:	16-Apr-2019 05:54:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	std6 l1lvi			Worklist Smp#:	2
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	2
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Manual Integration/User Assign Peak Report

Eurofins TestAmerica, Canton

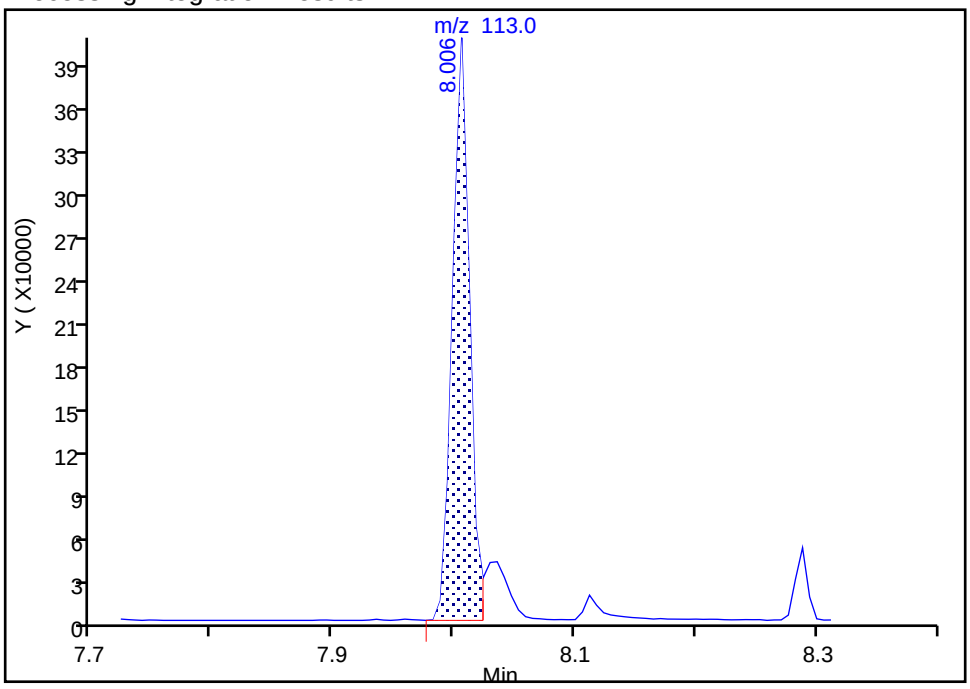
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Injection Date: 16-Apr-2019 05:54:30 Instrument ID: A4AG2
Lims ID: std6 l1lvi
Client ID:
Operator ID: ALS Bottle#: 2 Worklist Smp#: 2
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Column: 5% phenyl (0.18 mm) Detector MS SCAN

83 Caprolactam, CAS: 105-60-2

Signal: 1

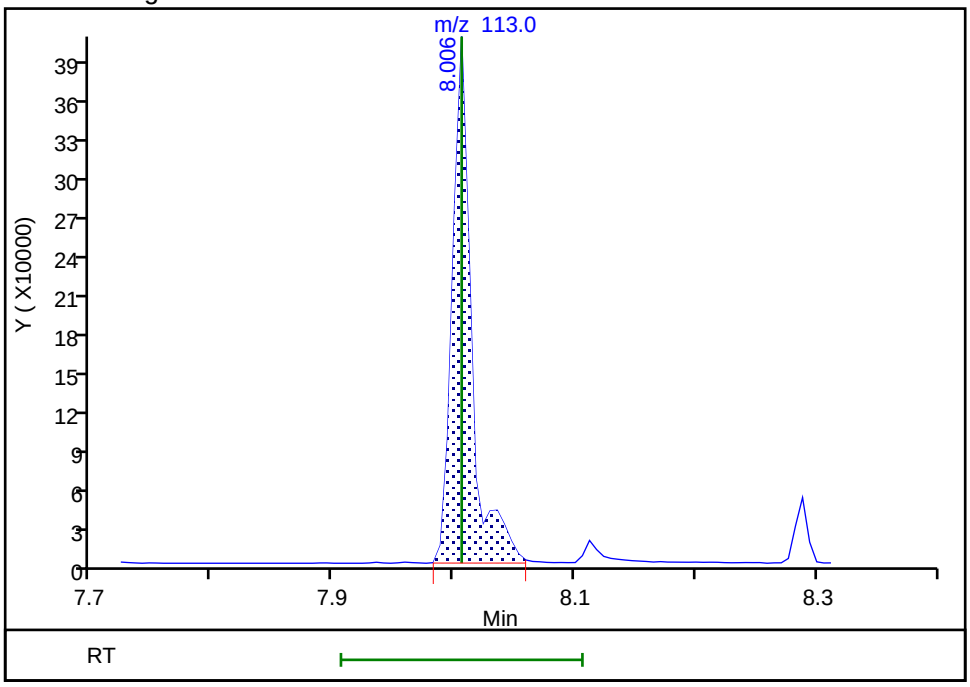
Processing Integration Results

RT: 8.01
Area: 402538
Amount: 1667.3559
Amount Units: ng/ml



Manual Integration Results

RT: 8.01
Area: 450806
Amount: 1867.2872
Amount Units: ng/ml



Reviewer: hulat, 16-Apr-2019 06:22:41
Audit Action: Manually Integrated Audit Reason: Poor chromatography

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D
Lims ID: dftpp
Client ID:
Sample Type: DFTPP
Inject. Date: 08-Apr-2019 09:22:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: primer
Misc. Info.: PRIMER
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 09-Apr-2019 05:02:37 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0335

First Level Reviewer: hulat Date: 08-Apr-2019 10:54:27

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
143 Pentachlorophenol	266	10.305	10.305	0.000	91	735554	NR	NR	
160 Benzidine	184	11.681	11.681	0.000	98	5327652	NR	NR	
151 DFTPP									
167 4,4'-DDE	246	11.887	11.887	0.000	89	3350		NR	
166 4,4'-DDD	235	12.270	12.270	0.000	93	7531		NR	
171 4,4'-DDT	235	12.658	12.658	0.000	97	2387604	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

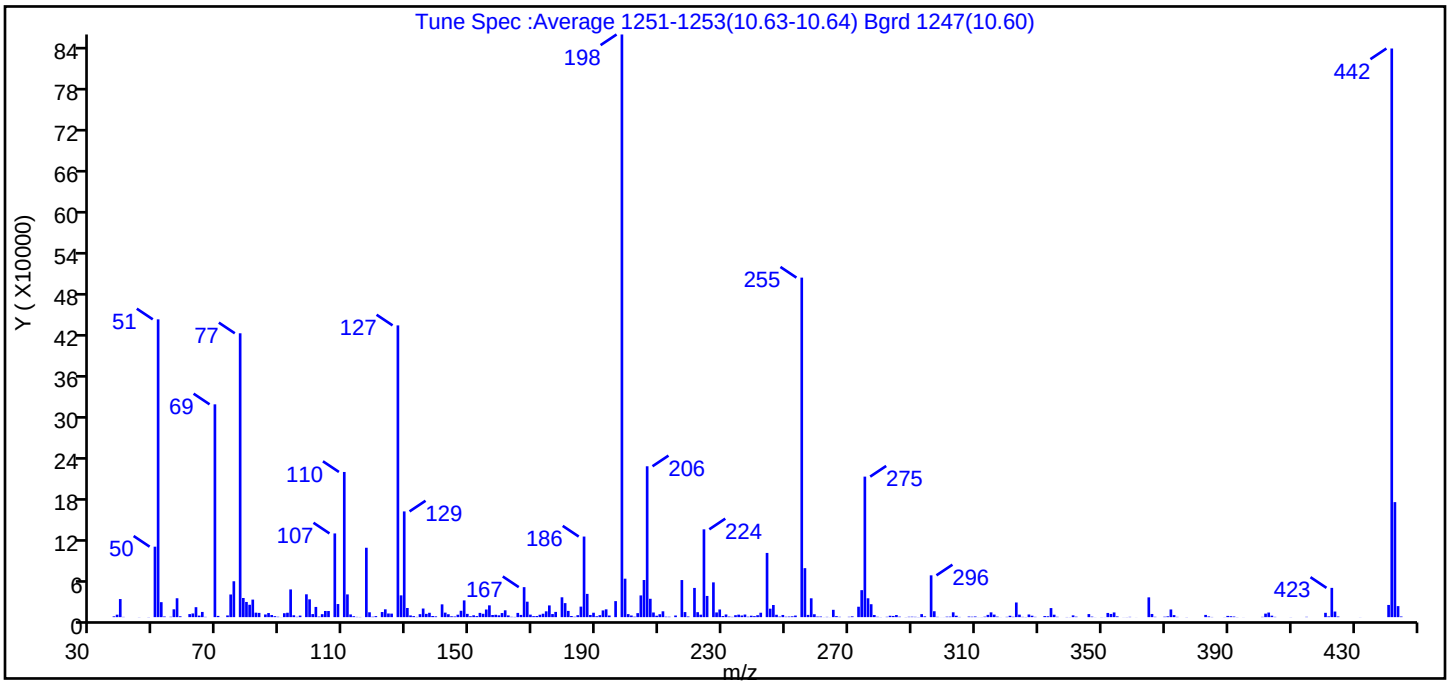
SMDFTPPW_00017 Amount Added: 0.10 Units: mL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D
Injection Date: 08-Apr-2019 09:22:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Tune Method: DFTPP Method CLP OLM4.2

151 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100 percent relative abundance	100
51	30.0 - 80.0 percent of mass 198	51.1
68	Less than 2.0 percent of mass 69	0.0 (0.0)
69	Present	36.5
70	Less than 2.0 percent of mass 69	0.2 (0.6)
127	25.0 - 75.0 percent of mass 198	50.1
197	Less than 1.0 percent of mass 198	0.0
199	5.0 - 9.0 percent of mass 198	6.6
275	10.0 - 30.0 percent of mass 198	24.1
365	Greater than 0.75 percent of mass 198	3.4
441	Present but less than mass 443	2.1 (10.6)
442	40.0 - 110.0 percent of mass 198	97.6
443	15.0 - 24.0 percent of mass 442	19.7 (20.2)

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D\LVI AG2 8270.rslt\spectra.d
Injection Date: 08-Apr-2019 09:22:30
Spectrum: Tune Spec :Average 1251-1253(10.63-10.64) Bgrd 1247(10.60)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
37.00	1180	135.00	12586	219.00	961	309.00	645
38.00	3598	136.00	4789	221.00	42656	310.00	962
39.00	26416	137.00	6388	222.00	7247	311.00	106
40.00	365	138.00	1694	223.00	3582	312.00	153
45.00	161	139.00	1149	224.00	128216	313.00	696
48.00	213	141.00	18688	225.00	30944	314.00	3307
50.00	102880	142.00	6585	227.00	50776	315.00	7000
51.00	434816	143.00	4237	228.00	6886	316.00	3695
52.00	21872	144.00	1264	229.00	11179	317.00	781
53.00	953	145.00	941	230.00	1588	318.00	84
55.00	551	146.00	3569	231.00	3898	320.00	420
56.00	11444	147.00	9303	232.00	851	321.00	2018
57.00	27584	148.00	24448	233.00	412	322.00	531
58.00	1229	149.00	4787	234.00	2817	323.00	21408
60.00	9	150.00	1335	235.00	3627	324.00	3655
61.00	4435	151.00	2683	236.00	2415	325.00	434
62.00	5388	152.00	1504	237.00	3804	326.00	226
63.00	14549	153.00	6211	238.00	660	327.00	3899
64.00	2255	154.00	4897	239.00	2094	328.00	2059
65.00	7602	155.00	11140	240.00	1467	329.00	440
66.00	404	156.00	17240	241.00	2816	332.00	1536
69.00	310720	157.00	3131	242.00	6445	333.00	1276
70.00	1813	158.00	3468	244.00	93760	334.00	13245
71.00	44	159.00	2623	245.00	12340	335.00	3533
73.00	2498	160.00	5981	246.00	17720	336.00	538
74.00	33096	161.00	9980	247.00	3465	339.00	235
75.00	52400	162.00	2535	248.00	795	340.00	136
77.00	414464	163.00	505	249.00	3183	341.00	2605
78.00	27960	164.00	325	250.00	604	342.00	685
79.00	22168	165.00	6179	251.00	870	346.00	4469
80.00	18048	166.00	3241	252.00	1180	347.00	769
81.00	25616	167.00	43800	253.00	2312	348.00	106
82.00	6533	168.00	22568	255.00	495744	350.00	160

Report Date: 09-Apr-2019 05:02:38 Chrom Revision: 2.3 24-Mar-2019 20:11:04
Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D\LVI AG2 8270.rslt\spectra.d
Injection Date: 08-Apr-2019 09:22:30
Spectrum: Tune Spec :Average 1251-1253(10.63-10.64) Bgrd 1247(10.60)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
83.00	6204	169.00	3663	256.00	71528	351.00	82
85.00	3899	170.00	1455	257.00	3275	352.00	6122
86.00	5993	171.00	1618	258.00	27536	353.00	4669
87.00	3078	172.00	3516	259.00	4230	354.00	6852
88.00	1412	173.00	4970	260.00	841	355.00	1106
89.00	577	174.00	8520	261.00	892	357.00	106
90.00	114	175.00	17128	262.00	100	358.00	158
91.00	5724	176.00	4515	263.00	416	359.00	415
92.00	6427	177.00	7660	264.00	97	361.00	72
93.00	40464	179.00	28992	265.00	10713	365.00	28904
94.00	2722	180.00	20464	266.00	1440	366.00	4623
95.00	490	181.00	9120	267.00	473	367.00	488
96.00	2287	182.00	1671	270.00	512	370.00	655
98.00	33360	183.00	554	271.00	1143	371.00	1191
99.00	25992	184.00	2868	273.00	15189	372.00	11225
100.00	4478	185.00	15362	274.00	39416	373.00	2934
101.00	14909	186.00	117672	275.00	205184	374.00	405
102.00	804	187.00	33960	276.00	27552	377.00	182
103.00	4339	188.00	3154	277.00	18880	383.00	3258
104.00	8995	189.00	6446	278.00	3082	384.00	1042
105.00	8935	190.00	1270	279.00	564	385.00	286
107.00	122224	191.00	2850	280.00	175	389.00	132
108.00	19136	192.00	9825	282.00	499	390.00	1811
110.00	211968	193.00	11410	283.00	2034	391.00	1323
111.00	33216	194.00	2393	284.00	1752	392.00	904
112.00	3951	196.00	23384	285.00	3082	393.00	171
113.00	1337	198.00	850752	286.00	716	395.00	88
114.00	387	199.00	56160	288.00	175	401.00	421
115.00	264	200.00	4439	289.00	562	402.00	5135
117.00	101320	201.00	2380	290.00	635	403.00	6712
118.00	7086	202.00	693	291.00	472	404.00	2137
119.00	634	203.00	5860	292.00	213	405.00	408
120.00	1496	204.00	31728	293.00	4417	410.00	153
122.00	7461	205.00	54208	294.00	1147	415.00	465

Report Date: 09-Apr-2019 05:02:38 Chrom Revision: 2.3 24-Mar-2019 20:11:04
Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D\LVI AG2 8270.rslt\spectra.d
Injection Date: 08-Apr-2019 09:22:30
Spectrum: Tune Spec :Average 1251-1253(10.63-10.64) Bgrd 1247(10.60)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 312

m/z	Y	m/z	Y	m/z	Y	m/z	Y
123.00	11422	206.00	220288	296.00	61040	421.00	6303
124.00	5328	207.00	26808	297.00	8619	422.00	1075
125.00	5142	208.00	6803	298.00	474	423.00	42744
127.00	425984	209.00	2059	299.00	68	424.00	8176
128.00	31792	210.00	4232	300.00	81	425.00	912
129.00	154368	211.00	8539	301.00	692	432.00	113
130.00	13362	212.00	665	302.00	708	441.00	17808
131.00	2507	213.00	594	303.00	7078	442.00	830272
132.00	1506	215.00	2381	304.00	2034	443.00	167936
133.00	392	217.00	54160	305.00	313	444.00	16106
134.00	4373	218.00	7387	308.00	889	445.00	934

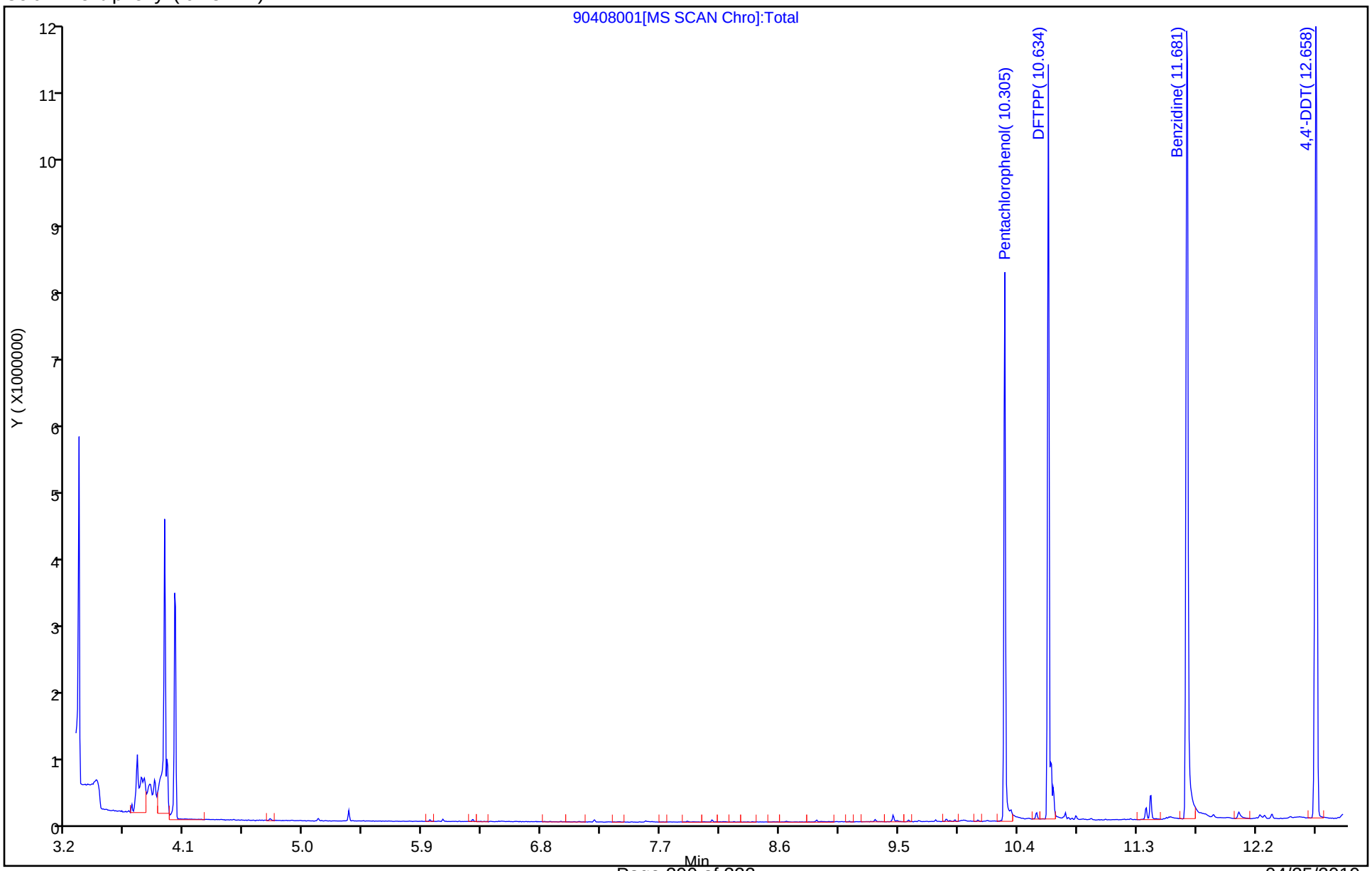
Report Date: 09-Apr-2019 05:02:38 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D

Injection Date:	08-Apr-2019 09:22:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	dftpp			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)

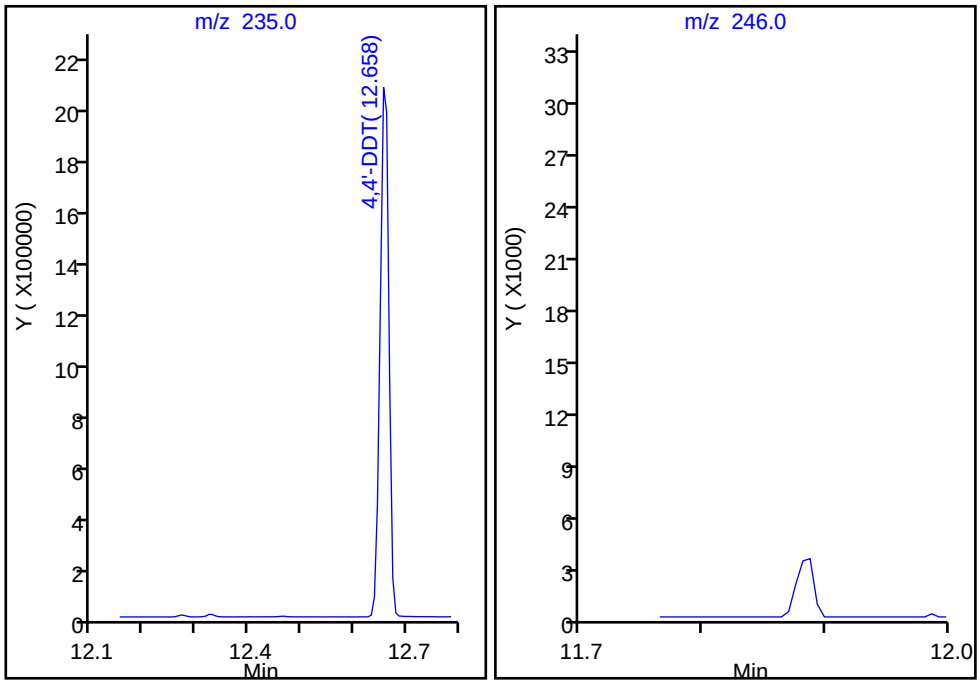


Breakdown Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408001.D
Injection Date: 08-Apr-2019 09:22:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

171 4,4'-DDT, Detector: MS SCAN



SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

171 4,4'-DDT, Area = 2387604
166 4,4'-DDD, Area = 7531
167 4,4'-DDE, Area = 3350

%Breakdown: 0.45%, <= 20.00%
Passed

Peak Tailing Report

Eurofins TestAmerica, Canton

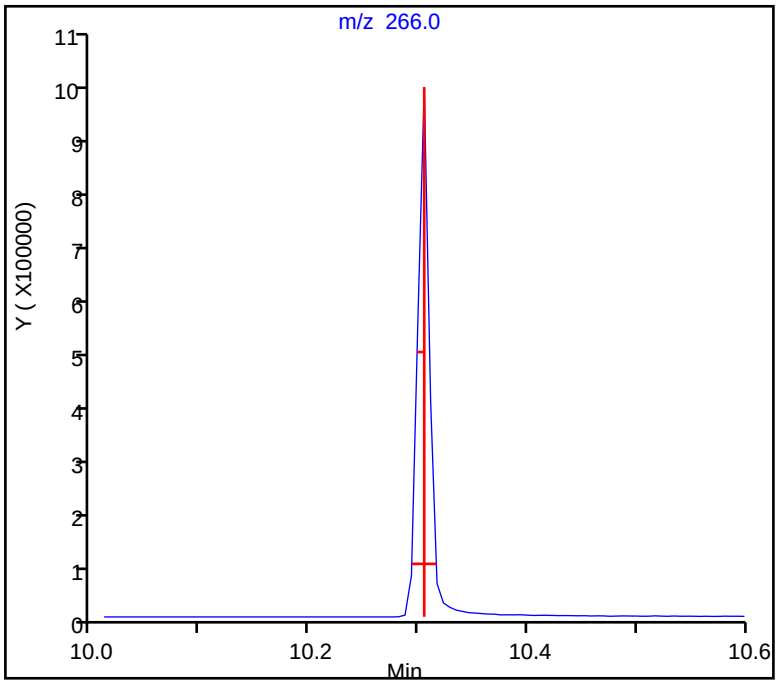
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Injection Date: 08-Apr-2019 09:22:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

143 Pentachlorophenol, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)
Front Width = 0.011 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

Eurofins TestAmerica, Canton

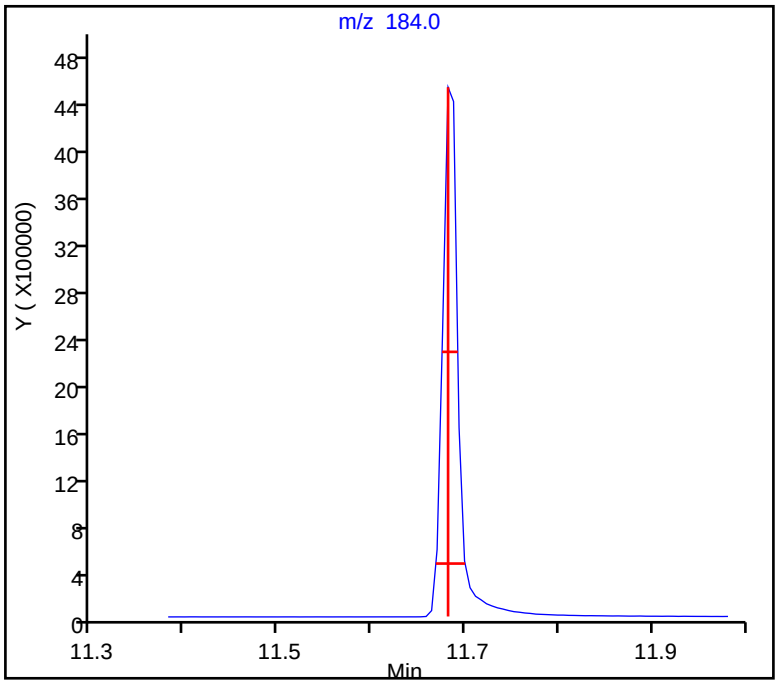
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Injection Date: 08-Apr-2019 09:22:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

160 Benzidine, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.018 (min.)
Front Width = 0.013 (min.)

Tailing Factor = 1.4, Max. Tailing < 2.00
Passed



Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D
Lims ID: dftpp
Client ID:
Sample Type: DFTPP
Inject. Date: 16-Apr-2019 05:36:30 ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: primer
Misc. Info.: PRIMER
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 09:31:53 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 05:52:15

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
143 Pentachlorophenol	266	10.300	10.300	0.000	90	840290	NR	NR	
160 Benzidine	184	11.671	11.671	0.000	98	5589556	NR	NR	
151 DFTPP									
167 4,4'-DDE	246	11.871	11.871	0.000	87	4614		NR	
166 4,4'-DDD	235	12.259	12.259	0.000	94	23802		NR	
171 4,4'-DDT	235	12.647	12.647	0.000	97	2805082	NR	NR	

QC Flag Legend

Processing Flags
NR - Missing Quant Standard

Reagents:

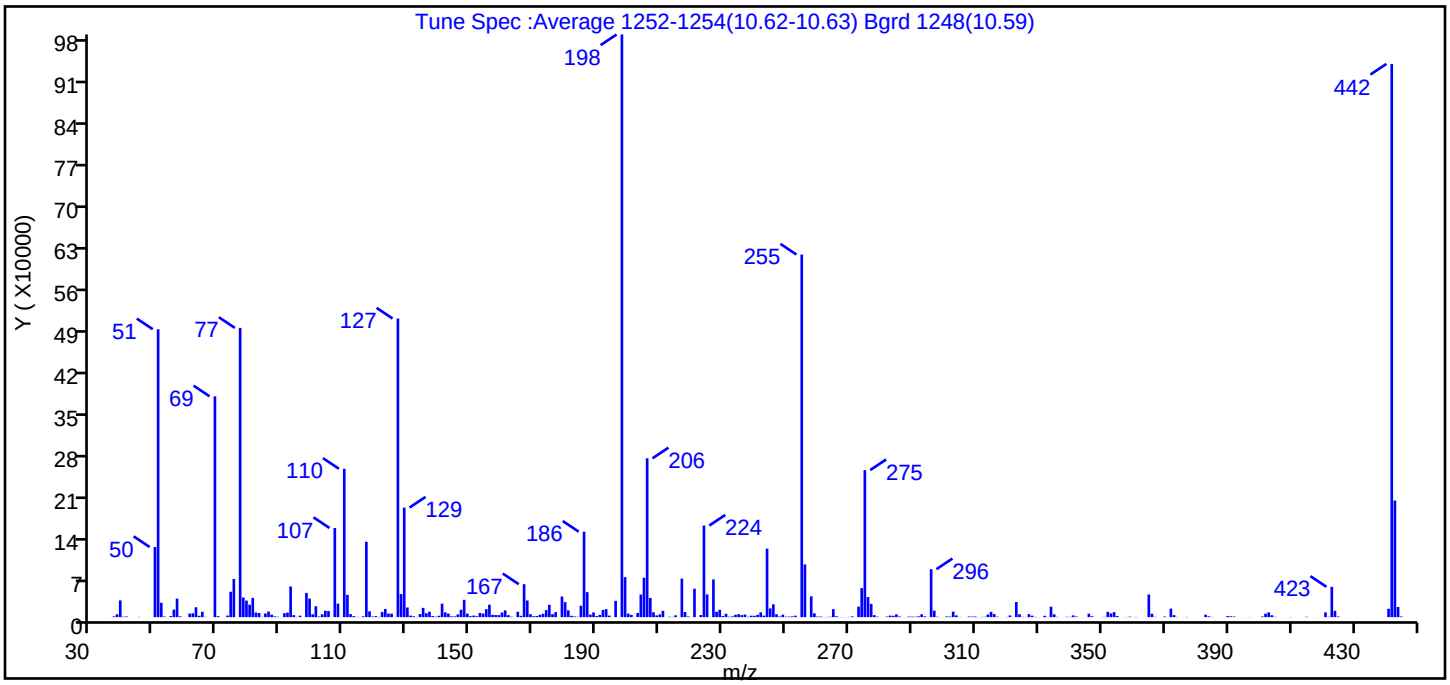
SMDFTPPW_00017 Amount Added: 0.10 Units: mL

MS Tune Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D
Injection Date: 16-Apr-2019 05:36:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL
Tune Method: DFTPP Method CLP OLM4.2

151 DFTPP



m/z	Ion Abundance Criteria	% Relative Abundance
198	Base peak, 100 percent relative abundance	100
51	30.0 - 80.0 percent of mass 198	49.4
68	Less than 2.0 percent of mass 69	0.0 (0.0)
69	Present	37.9
70	Less than 2.0 percent of mass 69	0.2 (0.5)
127	25.0 - 75.0 percent of mass 198	51.2
197	Less than 1.0 percent of mass 198	0.0
199	5.0 - 9.0 percent of mass 198	6.9
275	10.0 - 30.0 percent of mass 198	25.2
365	Greater than 0.75 percent of mass 198	3.9
441	Present but less than mass 443	1.4 (7.2)
442	40.0 - 110.0 percent of mass 198	94.9
443	15.0 - 24.0 percent of mass 442	20.0 (21.1)

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D\LVI AG2 8270.rslt\spectra.d
Injection Date: 16-Apr-2019 05:36:30
Spectrum: Tune Spec :Average 1252-1254(10.62-10.63) Bgrd 1248(10.59)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 337

m/z	Y	m/z	Y	m/z	Y	m/z	Y
35.00	105	138.00	1877	233.00	1263	324.00	4905
37.00	1431	139.00	783	234.00	4007	325.00	512
38.00	4758	140.00	2294	235.00	4941	326.00	288
39.00	28312	141.00	22824	236.00	3383	327.00	5105
40.00	793	142.00	8069	237.00	4453	328.00	2516
41.00	1028	143.00	5938	238.00	590	329.00	479
45.00	360	144.00	1330	239.00	2438	330.00	148
48.00	133	145.00	1280	240.00	2262	331.00	88
50.00	118648	146.00	4578	241.00	3859	332.00	2289
51.00	487104	147.00	12541	242.00	8152	333.00	462
52.00	24288	148.00	29328	243.00	2587	334.00	17616
53.00	1006	149.00	5952	244.00	116056	335.00	4774
54.00	127	150.00	1680	245.00	14783	336.00	512
55.00	1819	151.00	2649	246.00	21744	338.00	74
56.00	12774	152.00	1587	247.00	4944	339.00	577
57.00	31384	153.00	7236	248.00	1132	340.00	460
58.00	1352	154.00	6060	249.00	4201	341.00	3058
61.00	6039	155.00	13513	250.00	870	342.00	1070
62.00	6528	156.00	21136	251.00	928	343.00	54
63.00	16752	157.00	3896	252.00	1365	344.00	103
64.00	2284	158.00	3578	253.00	2448	345.00	87
65.00	9107	159.00	3417	255.00	613440	346.00	5870
66.00	507	160.00	7860	256.00	89192	347.00	1513
69.00	373568	161.00	11446	258.00	35264	350.00	171
70.00	1717	162.00	3408	259.00	6369	351.00	382
73.00	2623	163.00	786	260.00	1011	352.00	9012
74.00	42920	165.00	9025	261.00	951	353.00	6234
75.00	64560	166.00	2221	262.00	306	354.00	8499
77.00	489408	167.00	55728	263.00	343	355.00	1882
78.00	33216	168.00	28232	264.00	732	356.00	54
79.00	27968	169.00	4970	265.00	13575	357.00	152
80.00	21024	170.00	1576	266.00	1531	358.00	225
81.00	32584	171.00	1945	267.00	237	359.00	841

Report Date: 16-Apr-2019 09:31:55 Chrom Revision: 2.3 24-Mar-2019 20:11:04
Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D\LVI AG2 8270.rslt\spectra.d
Injection Date: 16-Apr-2019 05:36:30
Spectrum: Tune Spec :Average 1252-1254(10.62-10.63) Bgrd 1248(10.59)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 337

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	7852	172.00	4077	268.00	248	360.00	148
83.00	6962	173.00	5646	269.00	235	361.00	348
84.00	473	174.00	11912	270.00	335	362.00	59
85.00	6198	175.00	20792	271.00	1327	363.00	64
86.00	9462	176.00	5053	273.00	17832	365.00	38304
87.00	4174	177.00	8532	274.00	49112	366.00	5789
88.00	1346	179.00	34984	275.00	248768	367.00	508
89.00	621	180.00	25400	276.00	34000	370.00	1058
90.00	95	181.00	11532	277.00	22472	371.00	194
91.00	6639	182.00	2190	278.00	3305	372.00	14481
92.00	7693	183.00	1156	279.00	858	373.00	3390
93.00	51904	184.00	587	281.00	53	374.00	395
94.00	3360	185.00	19296	282.00	1006	376.00	69
95.00	396	186.00	144576	283.00	2629	377.00	326
96.00	2493	187.00	42280	284.00	2338	383.00	4135
98.00	40960	188.00	4356	285.00	4796	384.00	1376
99.00	31496	189.00	7952	286.00	1120	385.00	450
100.00	4883	190.00	1814	287.00	165	389.00	138
101.00	18432	191.00	3884	288.00	241	390.00	1789
102.00	1026	192.00	12217	289.00	997	391.00	1412
103.00	4778	193.00	13568	290.00	929	392.00	1025
104.00	10717	194.00	2693	291.00	692	395.00	160
105.00	10339	196.00	27528	292.00	1435	396.00	71
107.00	150848	198.00	985792	293.00	4898	397.00	269
108.00	22928	199.00	67728	294.00	1436	401.00	1091
110.00	251008	200.00	6017	295.00	321	402.00	5762
111.00	37664	201.00	3718	296.00	81144	403.00	8071
112.00	5091	203.00	7128	297.00	11029	404.00	3233
113.00	1776	204.00	38224	298.00	770	405.00	516
114.00	456	205.00	66664	299.00	180	409.00	79
115.00	278	206.00	268736	300.00	77	410.00	244
116.00	1429	207.00	32448	301.00	1280	414.00	50
117.00	127488	208.00	8277	302.00	1024	415.00	637
118.00	9855	209.00	3008	303.00	9297	418.00	59

Report Date: 16-Apr-2019 09:31:55 Chrom Revision: 2.3 24-Mar-2019 20:11:04
Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D\LVI AG2 8270.rslt\spectra.d
Injection Date: 16-Apr-2019 05:36:30
Spectrum: Tune Spec :Average 1252-1254(10.62-10.63) Bgrd 1248(10.59)
Base Peak: 198.00
Minimum % Base Peak: 0
Number of Points: 337

m/z	Y	m/z	Y	m/z	Y	m/z	Y
119.00	988	210.00	4745	304.00	2910	419.00	131
120.00	1710	211.00	10731	305.00	360	420.00	70
121.00	507	213.00	704	306.00	137	421.00	8002
122.00	8523	214.00	487	308.00	1095	422.00	656
123.00	13796	215.00	3101	309.00	985	423.00	51256
124.00	5999	217.00	65168	310.00	1047	424.00	10651
125.00	5872	218.00	8739	311.00	193	425.00	1087
127.00	505216	219.00	1173	312.00	308	426.00	69
128.00	39056	221.00	48128	313.00	582	427.00	80
129.00	185408	223.00	3584	314.00	4510	431.00	91
130.00	16325	224.00	154944	315.00	8979	441.00	14165
131.00	2588	225.00	38376	316.00	5143	442.00	936000
132.00	1424	227.00	63848	317.00	786	443.00	197312
133.00	269	228.00	9090	318.00	116	444.00	17208
134.00	5290	229.00	12313	319.00	76	445.00	1096
135.00	15667	230.00	1876	320.00	347		
136.00	6630	231.00	5723	321.00	2894		
137.00	9229	232.00	788	323.00	25600		

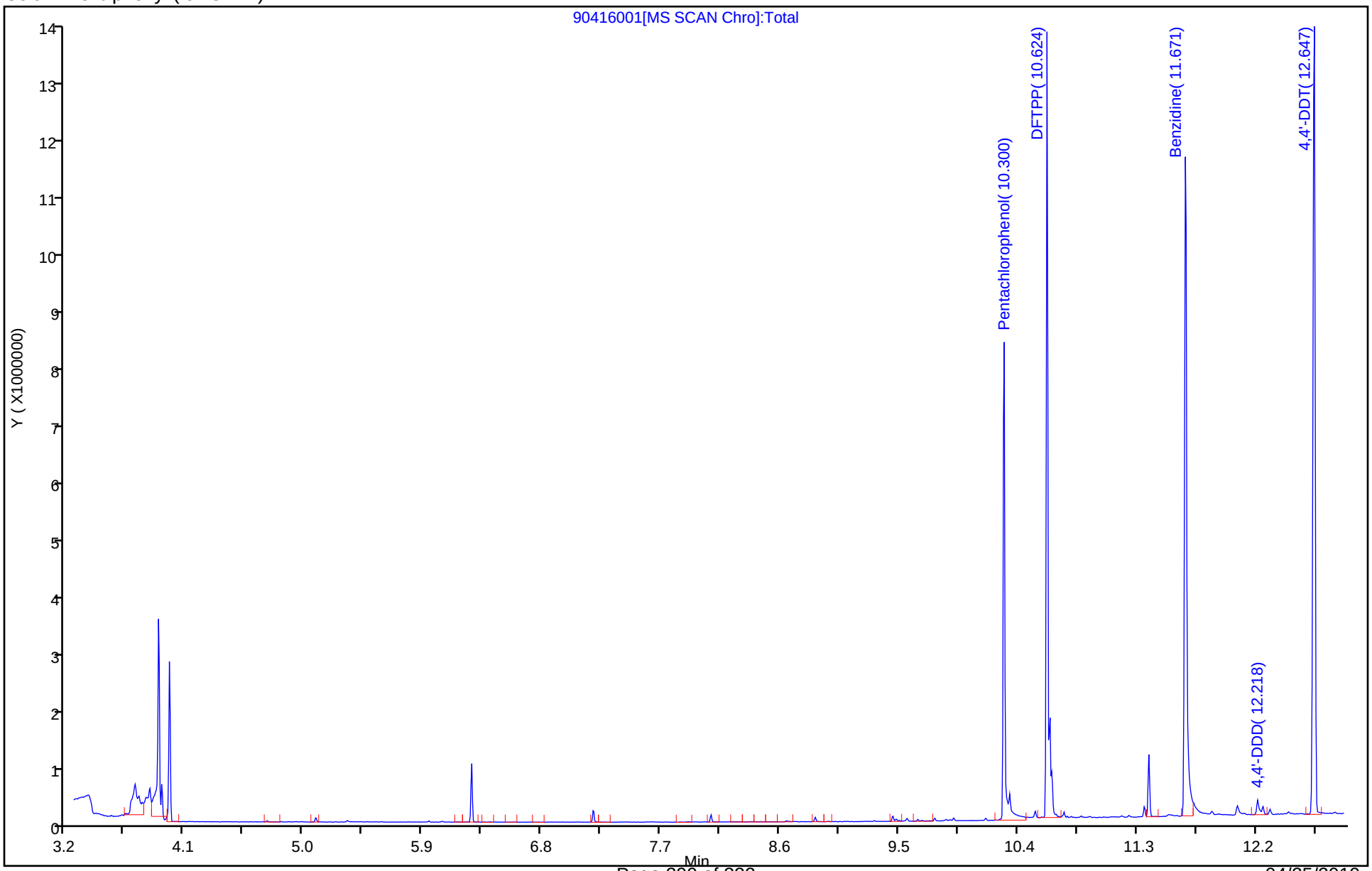
Report Date: 16-Apr-2019 09:31:56 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D

Injection Date:	16-Apr-2019 05:36:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	dftpp			Worklist Smp#:	1
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	1
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Breakdown Report

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D
Injection Date: 16-Apr-2019 05:36:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

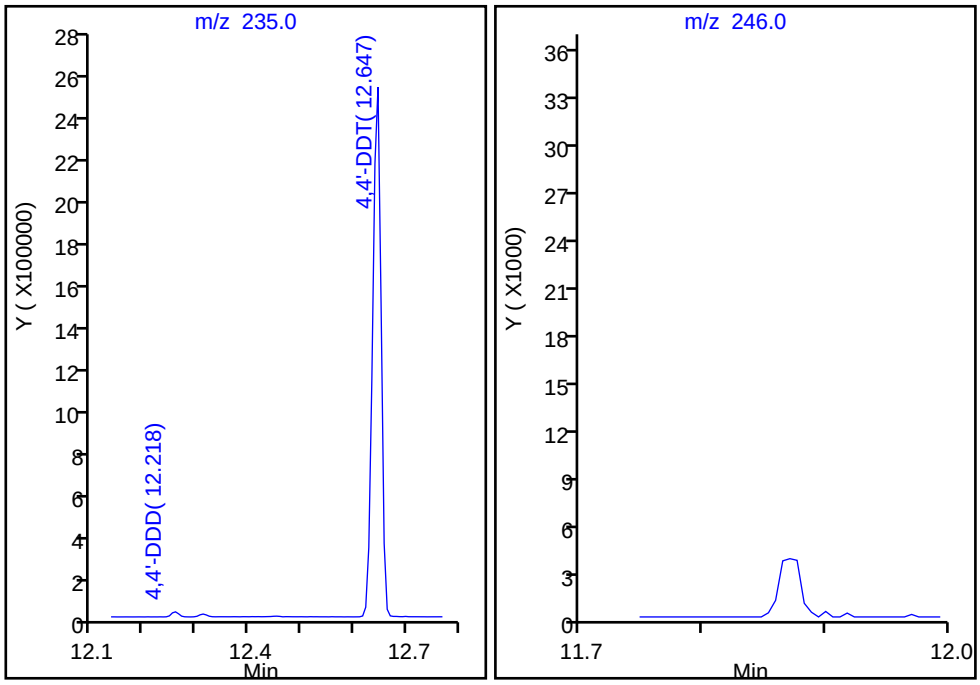
171 4,4'-DDT, Detector: MS SCAN

SW-846 Method

%Breakdown =
(Area Breakdown Cpnds/
Total Area Breakdown Cpnds) * 100

171 4,4'-DDT, Area = 2805082
166 4,4'-DDD, Area = 23802
167 4,4'-DDE, Area = 4614

%Breakdown: 1.00%, <= 20.00%
Passed



Peak Tailing Report

Eurofins TestAmerica, Canton

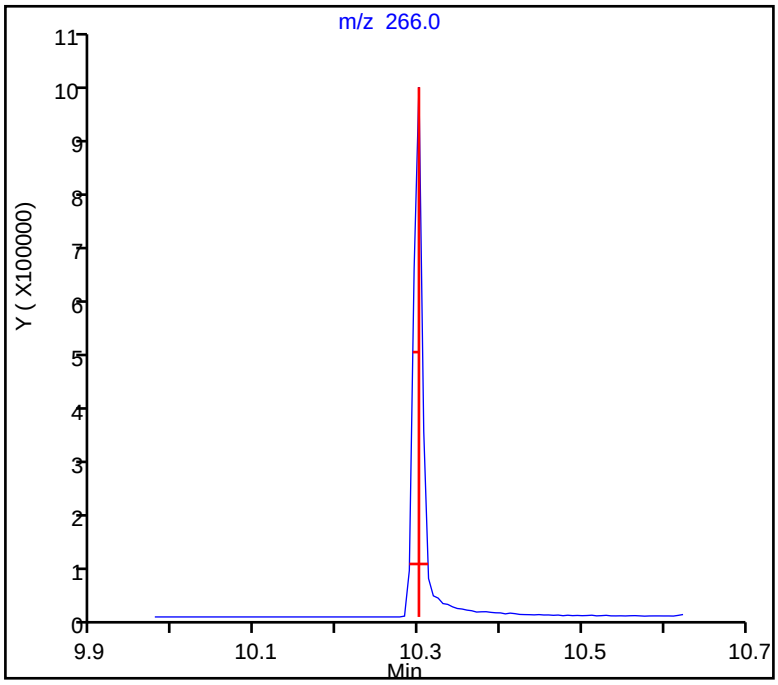
Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D
Injection Date: 16-Apr-2019 05:36:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

143 Pentachlorophenol, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.011 (min.)
Front Width = 0.012 (min.)

Tailing Factor = 1.0, Max. Tailing < 2.00
Passed



Peak Tailing Report

Eurofins TestAmerica, Canton

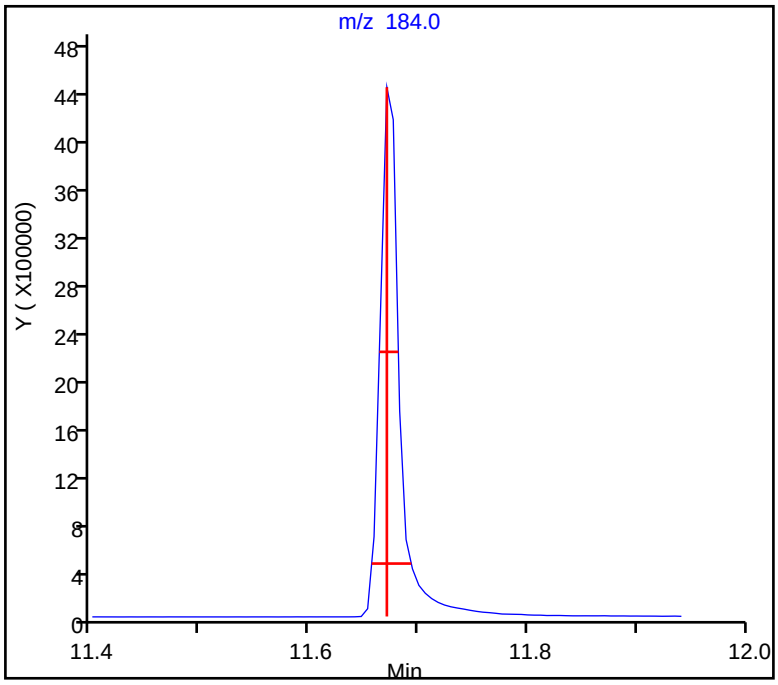
Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416001.D
Injection Date: 16-Apr-2019 05:36:30 Instrument ID: A4AG2
Lims ID: dftpp
Client ID:
Operator ID: ALS Bottle#: 1 Worklist Smp#: 1
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

160 Benzidine, Detector: MS SCAN

Peak Tailing Factor =
BackWidth/FrontWidth @ 10% Peak Height

Back Width = 0.022 (min.)
Front Width = 0.014 (min.)

Tailing Factor = 1.6, Max. Tailing < 2.00
Passed



FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Client Sample ID: Lab Sample ID: MB 240-376039/14-A

Matrix: Water Lab File ID: 90416003.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 04/11/2019 10:44

Sample wt/vol: 250(mL) Date Analyzed: 04/16/2019 06:22

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 5(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 376614 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-01-6	p-Nitroaniline	2.0	U	2.0	0.92

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	95		28-128
4165-62-2	Phenol-d5 (Surr)	51		15-120
4165-60-0	Nitrobenzene-d5 (Surr)	85		35-120
367-12-4	2-Fluorophenol (Surr)	68		17-120
321-60-8	2-Fluorobiphenyl (Surr)	79		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	78		33-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416003.D
Lims ID: MB 240-376039/14-A
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2019 06:22:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-003
Misc. Info.: MB 240-376039/14-A
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 09:32:03 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 07:27:48

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.636	6.636	0.000	96	178130	400.0	400.0	
* 2 Naphthalene-d8	136	7.689	7.689	0.000	100	715286	400.0	400.0	
* 3 Acenaphthene-d10	164	9.189	9.188	0.001	94	442805	400.0	400.0	
* 4 Phenanthrene-d10	188	10.471	10.471	0.000	98	725380	400.0	400.0	
* 5 Chrysene-d12	240	13.359	13.359	0.000	98	630297	400.0	400.0	
* 6 Perylene-d12	264	15.712	15.706	0.006	97	592507	400.0	400.0	
$ 7 2-Fluorophenol	112	5.589	5.589	0.000	94	481319	1600.0	1084.8	
$ 8 Phenol-d5	99	6.289	6.289	0.000	0	495397	1600.0	811.4	
$ 9 Nitrobenzene-d5	82	7.077	7.077	0.000	95	863069	1600.0	1359.8	
$ 10 2-Fluorobiphenyl (Surr)	172	8.583	8.577	0.006	99	1780314	1600.0	1258.8	
$ 11 2,4,6-Tribromophenol	330	9.865	9.865	0.000	88	173291	1600.0	1248.8	
$ 12 Terphenyl-d14	244	11.941	11.941	0.000	99	1750975	1600.0	1522.3	
26 1,4-Dioxane	88		4.230					ND	
27 N-Nitrosodimethylamine	74		4.477					ND	
28 Pyridine	79		4.536					ND	
22 Dimethylformamide	73		4.817					ND	
29 Ethyl methacrylate	69		4.888					ND	U
31 2-Picoline	93		5.152					ND	
32 N-Nitrosomethylethylamine	88		5.217					ND	
14 Acrylamide	71		5.382					ND	
34 Methyl methanesulfonate	80		5.435					ND	
233 n,n'-Dimethylacetamide	44		5.505					ND	
36 N-Nitrosodiethylamine	102		5.764					ND	
37 Ethyl methanesulfonate	79		5.970					ND	
42 Benzaldehyde	77		6.277					ND	
43 Phenol	94		6.300					ND	
44 Aniline	93		6.353					ND	
45 Bis(2-chloroethyl)ether	93		6.377					ND	
46 Pentachloroethane	167		6.417					ND	
47 2-Chlorophenol	128		6.465					ND	
244 n-Decane	57		6.465					ND	U

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
286 4-Methyl-1-cyclohexanemeth	55		6.490					ND	
41 Phenylmercaptan	110		6.526					ND	
48 1,3-Dichlorobenzene	146		6.594					ND	
287 4-Methyl-1-cyclohexanemeth	55	6.636	6.624	0.012	0	1604		NC	
49 1,4-Dichlorobenzene	146		6.647					ND	
232 1-Methyl-2-pyrrilidinone	99		6.717					ND	
50 Benzyl alcohol	108		6.718					ND	
51 1,2-Dichlorobenzene	146		6.777					ND	U
52 2-Methylphenol	108		6.794					ND	
54 2,2'-oxybis[1-chloropropan	45		6.818					ND	U
53 Indene	115		6.847					ND	
56 N-Nitrosopyrrolidine	100		6.911					ND	
55 3 & 4 Methylphenol	108		6.912					ND	
57 N-Nitrosodi-n-propylamine	70		6.924					ND	
59 N-Nitrosomorpholine	56		6.935					ND	
58 Acetophenone	105		6.942					ND	U
60 2-Toluidine	106		6.976					ND	
61 Hexachloroethane	117		7.065					ND	
62 Nitrobenzene	77		7.089					ND	
63 N-Nitrosopiperidine	114		7.211					ND	
64 Isophorone	82		7.277					ND	
255 2-Chloroaniline	127		7.323					ND	U
66 2,4-Dimethylphenol	107		7.353					ND	
65 2-Nitrophenol	139		7.359					ND	U
67 1,3,5-Trichlorobenzene	180		7.376					ND	
68 o,o',o''-Triethylphosphoro	198		7.399					ND	
70 Benzoic acid	122		7.418					ND	
69 Bis(2-chloroethoxy)methane	93		7.424					ND	
71 alpha,alpha-Dimethyl phene	58		7.517					ND	
72 2,4-Dichlorophenol	162		7.559					ND	
308 3 & 4 Chlorophenol	128		7.605					ND	U
73 1,2,4-Trichlorobenzene	180		7.636					ND	
74 Naphthalene	128		7.712					ND	
75 4-Chloroaniline	127		7.724					ND	
76 2,6-Dichlorophenol	162		7.741					ND	
77 Hexachloropropene	213		7.788					ND	
78 Hexachlorobutadiene	225		7.806					ND	
79 1,2,3-Trichlorobenzene	180		7.829					ND	
80 Benzothiazole	135		7.917					ND	
81 Quinoline	129		7.982					ND	
82 N-Nitrosodi-n-butylamine	84		7.988					ND	
83 Caprolactam	113		8.006					ND	
84 p-Phenylene diamine	108		8.017					ND	
85 4-Chloro-3-methylphenol	107		8.112					ND	
252 4-tert-Butylphenol	135		8.129					ND	U
92 Safrole, Total	162		8.187					ND	
86 2-Methylnaphthalene	142		8.288					ND	
87 1-Methylnaphthalene	142		8.377					ND	
88 1,2,3,5-Tetrachlorobenzene	216		8.423					ND	
89 Hexachlorocyclopentadiene	237		8.424					ND	
95 Isosafrole Peak 1	162		8.435					ND	U
90 1,2,4,5-Tetrachlorobenzene	216		8.436					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
93 2,4,6-Trichlorophenol	196		8.518					ND	
94 2,4,5-Trichlorophenol	196		8.553					ND	
91 Isosafrole Peak 2	162		8.623					ND	
97 2,4-Toluene diamine	121		8.646					ND	
99 1,1'-Biphenyl	154		8.671					ND	
98 1,2,3,4 -Tetrachlorobenzen	216		8.682					ND	
96 3,4-Dichloronitrobenzene	109		8.699					ND	U
100 2-Chloronaphthalene	162		8.706					ND	
247 1-Chloronaphthalene	162		8.735					ND	U
192 Phenyl ether	170		8.752					ND	
101 2-Nitroaniline	65		8.771					ND	
102 1,4-Naphthoquinone	158		8.840					ND	
105 1,4-Dinitrobenzene	168		8.864					ND	
104 Dimethyl phthalate	163		8.894					ND	
103 1,3-Dinitrobenzene	168		8.936					ND	
106 2,6-Dinitrotoluene	165		8.959					ND	U
108 Acenaphthylene	152		9.071					ND	
109 3-Nitroaniline	138		9.118					ND	
110 2,4-Dinitrophenol	184		9.206					ND	
111 Acenaphthene	153		9.218					ND	
112 4-Nitrophenol	109		9.235					ND	
260 o-Phenylphenol	170		9.282					ND	U
113 2,4-Dinitrotoluene	165		9.312					ND	
114 Pentachlorobenzene	250		9.334					ND	
115 Dibenzofuran	168		9.359					ND	
117 1-Naphthylamine	143		9.417					ND	
116 2,3,5,6-Tetrachlorophenol	232		9.423					ND	
118 2,3,4,6-Tetrachlorophenol	232		9.459					ND	
119 2-Naphthylamine	143		9.482					ND	
120 Diethyl phthalate	149		9.488					ND	U
248 Hexadecane	57		9.488					ND	U
121 Thionazin	97		9.564					ND	
122 4-Chlorophenyl phenyl ethe	204		9.624					ND	
123 N-Nitro-o-toluidine	152		9.640					ND	
125 4-Nitroaniline	138		9.641					ND	
126 Tributyl phosphate	99	9.641	9.646	-0.005	97	79441		57.2	
124 Fluorene	166		9.653					ND	
127 4,6-Dinitro-2-methylphenol	198		9.671					ND	
129 Diphenylamine	169		9.718					ND	
128 N-Nitrosodiphenylamine	169		9.718					ND	
131 Azobenzene	77		9.765					ND	
130 1,2-Diphenylhydrazine	77		9.765					ND	
132 Sulfotepp	202		9.817					ND	
133 1,3,5-Trinitrobenzene	213		9.905					ND	
135 Phenacetin	108		9.952					ND	
134 Diallate Peak 1	86		9.952					ND	
136 Phorate	121		9.964					ND	
137 Diallate Peak 2	86		10.034					ND	
138 4-Bromophenyl phenyl ether	248		10.047					ND	
274 3 & 4 Phenoxyphenol	186		10.105					ND	
139 Dimethoate	87		10.111					ND	
140 Hexachlorobenzene	284		10.147					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
141 Atrazine	200		10.147					ND	
142 4-Aminobiphenyl	169		10.270					ND	
245 n-Octadecane	57		10.271					ND	U
144 Pronamide	173		10.293					ND	
143 Pentachlorophenol	266		10.300					ND	
145 Pentachloronitrobenzene	237		10.311					ND	
146 Disulfoton	88		10.411					ND	
147 Dinoseb	211		10.417					ND	
148 Phenanthrene	178		10.494					ND	
149 Anthracene	178		10.535					ND	U
150 Carbazole	167		10.653					ND	
152 Methyl parathion	109		10.740					ND	
154 Di-n-butyl phthalate	149		10.882					ND	U
153 Diphenylsulfone	125		10.929					ND	
280 Chlorpyrifos	97		11.017					ND	
155 Ethyl Parathion	97		11.070					ND	
156 4-Nitroquinoline-1-oxide	190		11.146					ND	
157 Methapyrilene	58		11.187					ND	
158 Isodrin	66		11.440					ND	
159 Fluoranthene	202		11.588					ND	U
160 Benzidine	184		11.671					ND	
161 Pyrene	202		11.835					ND	
162 Aramite Peak 1	185		11.858					ND	U
163 Aramite Peak 2	185		11.940					ND	
164 p-Dimethylamino azobenzene	225		12.093					ND	
165 Chlorobenzilate	139		12.123					ND	
168 Famphur	218		12.423					ND	
169 Butyl benzyl phthalate	149		12.471					ND	
170 3,3'-Dimethylbenzidine	212		12.493					ND	
172 2-Acetylaminofluorene	181		12.840					ND	
173 3,3'-Dimethoxybenzidine	244		13.187					ND	
174 Bis(2-ethylhexyl) phthalat	149		13.235					ND	U
175 4,4'-Methylene bis(2-chlor	231		13.240					ND	
177 3,3'-Dichlorobenzidine	252		13.259					ND	
178 Benzo[a]anthracene	228		13.341					ND	
179 Chrysene	228		13.400					ND	
180 6-Methylchrysene	242		14.093					ND	
181 Di-n-octyl phthalate	149		14.247					ND	U
182 7,12-Dimethylbenz(a)anthra	256		15.028					ND	
183 Benzo[b]fluoranthene	252		15.059					ND	
184 Benzo[k]fluoranthene	252		15.100					ND	
185 Benzo[a]pyrene	252		15.617					ND	
186 3-Methylcholanthrene	268		16.211					ND	
188 Dibenz[a,h]acridine	279		17.252					ND	
187 Dibenz[a,j]acridine	279		17.352					ND	
190 Indeno[1,2,3-cd]pyrene	276		17.782					ND	
189 Dibenz(a,h)anthracene	278		17.794					ND	
191 Benzo[g,h,i]perylene	276		18.400					ND	
292 Benzophenone	1		0.000					ND	
307 3-Methylcyclohexanone	1		0.000					ND	
300 2-Chloroaniline TIC	1		0.000					ND	
285 Chlorobenzene TIC	1		0.000					ND	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
303 Diisobutyl phthalate TIC	1		0.000					ND	
304 Hexabromobenzene	1		0.000					ND	
306 2-Methylcyclohexanone	1		0.000					ND	
282 Kepone	272		0.000					ND	
305 4-Methylcyclohexanone	1		0.000					ND	
302 3,3'-Dimethoxybenzidine TI	1		0.000					ND	
272 Dibenzo[a,e]pyrene	1		0.000					ND	
290 1-Phenoxy-2-propanol	1		0.000					ND	
309 1,2,4,5-Tetrachlorobenzene	1		0.000					ND	
S 194 Isosafrole	162		5.181					ND	
S 195 Diallate	86		6.385					ND	
S 196 Aramite, Total	185		7.898					ND	
S 246 Total Cresols	100		0.000					ND	
S 193 Methyl Phenols,Total	100		0.000					ND	
S 288 4-Methyl-1-cyclohexanemeth	1		0.000					ND	

QC Flag Legend

Processing Flags

NC - Not Calibrated

Review Flags

U - Marked Undetected

Reagents:

SMIS80PPMW_00019 Amount Added: 5.00 Units: uL Run Reagent

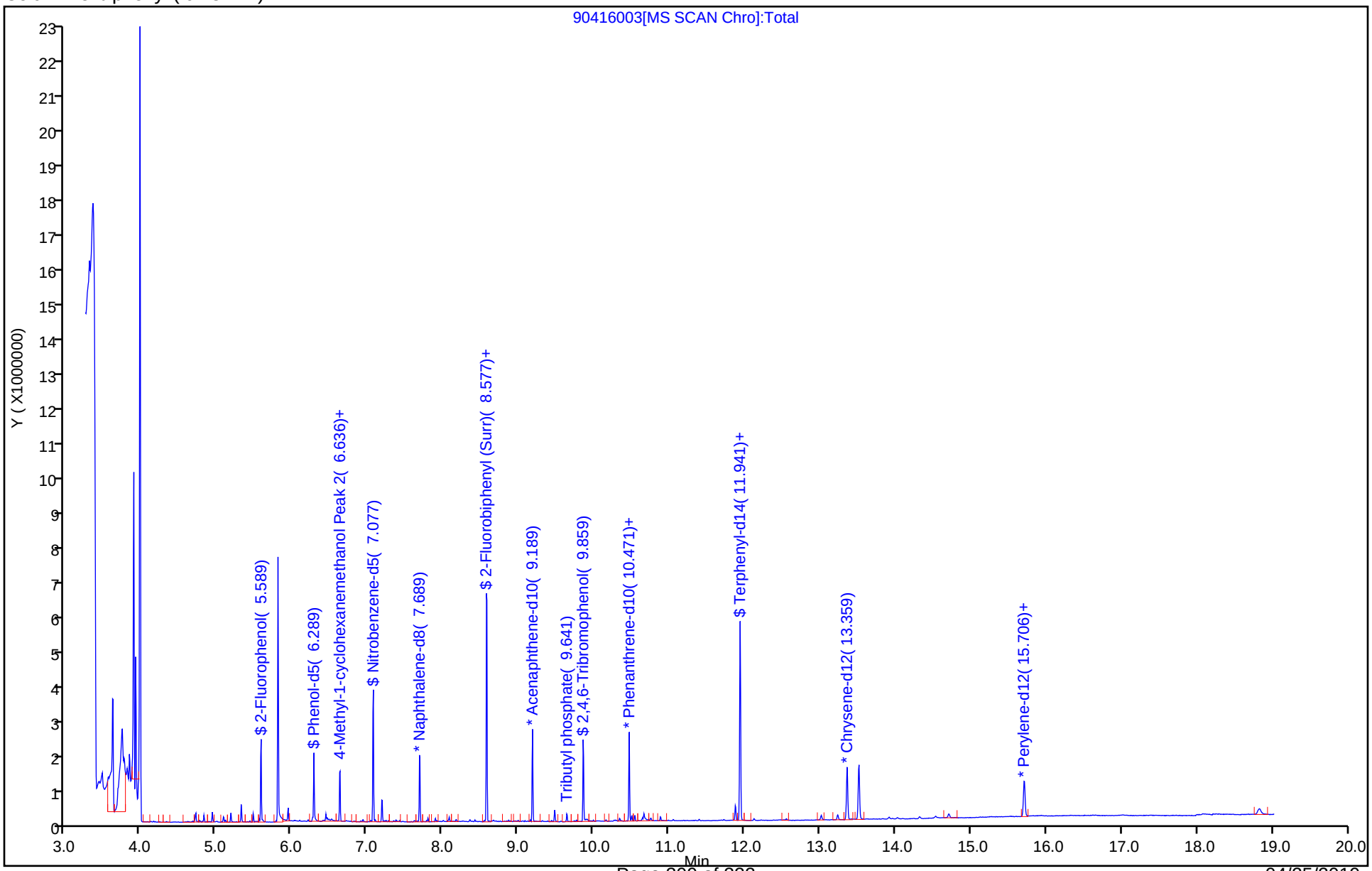
Report Date: 16-Apr-2019 09:32:19 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416003.D

Injection Date:	16-Apr-2019 06:22:30	Instrument ID:	A4AG2	Operator ID:	
Lims ID:	MB 240-376039/14-A			Worklist Smp#:	3
Client ID:					
Injection Vol:	5.0 ul	Dil. Factor:	1.0000	ALS Bottle#:	3
Method:	LVI AG2 8270	Limit Group:	MSS 8270D ICAL		

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416003.D
Lims ID: MB 240-376039/14-A
Client ID:
Sample Type: MB
Inject. Date: 16-Apr-2019 06:22:30 ALS Bottle#: 3 Worklist Smp#: 3
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-003
Misc. Info.: MB 240-376039/14-A
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 09:32:03 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 07:27:48

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	1600.0	1084.8	67.80
$ 8 Phenol-d5	1600.0	811.4	50.71
$ 9 Nitrobenzene-d5	1600.0	1359.8	84.99
$ 10 2-Fluorobiphenyl (Surr)	1600.0	1258.8	78.68
$ 11 2,4,6-Tribromophenol	1600.0	1248.8	78.05
$ 12 Terphenyl-d14	1600.0	1522.3	95.14

FORM I
GC/MS SEMI VOA ORGANICS ANALYSIS DATA SHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Client Sample ID: Lab Sample ID: LCS 240-376039/15-A

Matrix: Water Lab File ID: 90416033.D

Analysis Method: 8270D Date Collected:

Extract. Method: 3510C Date Extracted: 04/11/2019 10:44

Sample wt/vol: 250(mL) Date Analyzed: 04/16/2019 08:22

Con. Extract Vol.: 5(mL) Dilution Factor: 1

Injection Volume: 5(uL) Level: (low/med) Low

% Moisture: GPC Cleanup:(Y/N) N

Analysis Batch No.: 376614 Units: ug/L

CAS NO.	COMPOUND NAME	RESULT	Q	RL	MDL
100-01-6	p-Nitroaniline	29.0		2.0	0.92

CAS NO.	SURROGATE	%REC	Q	LIMITS
1718-51-0	Terphenyl-d14 (Surr)	88		28-128
4165-62-2	Phenol-d5 (Surr)	57		15-120
4165-60-0	Nitrobenzene-d5 (Surr)	87		35-120
367-12-4	2-Fluorophenol (Surr)	84		17-120
321-60-8	2-Fluorobiphenyl (Surr)	78		32-120
118-79-6	2,4,6-Tribromophenol (Surr)	88		33-120

Eurofins TestAmerica, Canton
Target Compound Quantitation Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416033.D
Lims ID: LCS 240-376039/15-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2019 08:22:30 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-033
Misc. Info.: LCS 240-376039/15-A
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 07:32:31 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 09:29:56

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
* 1 1,4-Dichlorobenzene-d4	152	6.636	6.636	0.000	97	177476	400.0	400.0	
* 2 Naphthalene-d8	136	7.689	7.689	0.000	100	800795	400.0	400.0	
* 3 Acenaphthene-d10	164	9.183	9.188	-0.005	94	417649	400.0	400.0	
* 4 Phenanthrene-d10	188	10.465	10.471	-0.006	95	665114	400.0	400.0	
* 5 Chrysene-d12	240	13.359	13.359	0.000	98	631910	400.0	400.0	
* 6 Perylene-d12	264	15.706	15.706	0.000	97	587477	400.0	400.0	
$ 7 2-Fluorophenol	112	5.589	5.584	0.000	94	595170	1600.0	1346.4	
$ 8 Phenol-d5	99	6.289	6.283	0.000	0	551854	1600.0	907.2	
$ 9 Nitrobenzene-d5	82	7.077	7.077	0.000	94	986048	1600.0	1387.7	
$ 10 2-Fluorobiphenyl (Surr)	172	8.577	8.571	0.000	100	1666866	1600.0	1249.6	
$ 11 2,4,6-Tribromophenol	330	9.859	9.858	-0.006	86	183493	1600.0	1402.0	
$ 12 Terphenyl-d14	244	11.935	11.936	-0.006	98	1620521	1600.0	1405.3	
26 1,4-Dioxane	88	4.242	4.226	0.012	93	116743	1600.0	725.6	
27 N-Nitrosodimethylamine	74	4.489	4.473	0.012	89	267518	1600.0	630.7	
28 Pyridine	79		4.536				ND	ND	U
42 Benzaldehyde	77	6.277	6.271	0.000	91	664813	1600.0	1901.3	
43 Phenol	94	6.301	6.295	0.001	97	575604	1600.0	831.5	
44 Aniline	93	6.359	6.348	0.006	88	65622	1600.0	62.1	
45 Bis(2-chloroethyl)ether	93	6.383	6.371	0.006	94	823597	1600.0	1164.5	
47 2-Chlorophenol	128	6.465	6.459	0.000	88	745752	1600.0	1303.1	
244 n-Decane	57	6.471	6.459	0.006	86	970401	1600.0	1027.4	
48 1,3-Dichlorobenzene	146	6.595	6.589	0.001	96	770202	1600.0	1169.9	
49 1,4-Dichlorobenzene	146	6.648	6.641	0.001	91	784489	1600.0	1174.5	
50 Benzyl alcohol	108	6.718	6.712	0.000	91	183515	1600.0	435.4	
51 1,2-Dichlorobenzene	146	6.783	6.771	0.006	94	739460	1600.0	1162.6	
52 2-Methylphenol	108	6.795	6.788	0.001	97	679619	1600.0	1180.9	
54 2,2'-oxybis[1-chloropropan	45	6.818	6.812	0.000	93	1241961	1600.0	976.1	
53 Indene	115	6.848	6.841	0.001	91	2473977	3200.0	2319.1	
55 3 & 4 Methylphenol	108	6.912	6.906	0.000	95	681656	1600.0	1189.9	
57 N-Nitrosodi-n-propylamine	70	6.924	6.918	0.000	90	626020	1600.0	1219.5	
58 Acetophenone	105	6.942	6.935	0.000	95	1188280	1600.0	1262.0	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
61 Hexachloroethane	117	7.065	7.059	0.000	94	313829	1600.0	1193.5	
62 Nitrobenzene	77	7.095	7.089	0.006	93	934383	1600.0	1281.1	
64 Isophorone	82	7.277	7.277	0.000	98	1706803	1600.0	1206.2	
66 2,4-Dimethylphenol	107	7.353	7.353	0.000	94	710856	1600.0	1159.7	
65 2-Nitrophenol	139	7.359	7.359	0.000	91	419380	1600.0	1504.4	
70 Benzoic acid	122	7.383	7.418	-0.035	94	120441	3200.0	516.5	
69 Bis(2-chloroethoxy)methane	93	7.424	7.424	0.000	96	998445	1600.0	1197.9	
72 2,4-Dichlorophenol	162	7.553	7.559	-0.006	97	666892	1600.0	1443.4	
73 1,2,4-Trichlorobenzene	180	7.636	7.636	0.000	93	648920	1600.0	1184.5	
74 Naphthalene	128	7.712	7.712	0.000	97	2423813	1600.0	1168.3	
75 4-Chloroaniline	127	7.724	7.724	0.000	94	561315	1600.0	651.3	
76 2,6-Dichlorophenol	162	7.742	7.741	0.001	94	656878	1600.0	1315.3	
78 Hexachlorobutadiene	225	7.800	7.806	-0.006	97	371614	1600.0	1219.2	
83 Caprolactam	113	8.006	8.006	0.000	75	62933	1600.0	281.0	M
85 4-Chloro-3-methylphenol	107	8.106	8.112	-0.006	97	739931	1600.0	1364.5	
86 2-Methylnaphthalene	142	8.289	8.288	0.001	93	1602324	1600.0	1183.2	
87 1-Methylnaphthalene	142	8.377	8.377	0.000	93	1479126	1600.0	1174.0	
89 Hexachlorocyclopentadiene	237	8.424	8.418	0.000	97	365599	1600.0	1188.3	
90 1,2,4,5-Tetrachlorobenzene	216	8.436	8.430	0.000	98	621825	1600.0	1226.6	
93 2,4,6-Trichlorophenol	196	8.512	8.512	-0.006	95	453703	1600.0	1341.0	
94 2,4,5-Trichlorophenol	196	8.547	8.548	-0.006	92	483450	1600.0	1282.0	
99 1,1'-Biphenyl	154	8.671	8.665	0.000	95	1832179	1600.0	1186.3	
100 2-Chloronaphthalene	162	8.706	8.700	0.000	98	1455730	1600.0	1182.0	
101 2-Nitroaniline	65	8.771	8.765	0.000	79	562622	1600.0	1396.1	
104 Dimethyl phthalate	163	8.894	8.889	0.000	98	1702692	1600.0	1237.7	
103 1,3-Dinitrobenzene	168	8.936	8.930	0.000	83	282636	1600.0	1332.0	
106 2,6-Dinitrotoluene	165	8.959	8.953	0.000	92	401059	1600.0	1385.4	
108 Acenaphthylene	152	9.065	9.065	-0.006	98	2270103	1600.0	1198.1	
109 3-Nitroaniline	138	9.118	9.112	0.000	91	402732	1600.0	1335.2	
110 2,4-Dinitrophenol	184	9.200	9.200	-0.006	78	271145	3200.0	2365.6	
111 Acenaphthene	153	9.212	9.212	-0.006	94	1403855	1600.0	1189.1	
112 4-Nitrophenol	109	9.230	9.230	-0.005	95	315143	3200.0	1834.0	
113 2,4-Dinitrotoluene	165	9.306	9.306	-0.006	88	510180	1600.0	1390.8	
115 Dibenzofuran	168	9.359	9.353	0.000	95	2042782	1600.0	1151.7	
118 2,3,4,6-Tetrachlorophenol	232	9.453	9.453	-0.006	77	328549	1600.0	1290.1	
120 Diethyl phthalate	149	9.489	9.482	0.001	98	1519798	1600.0	1222.3	
248 Hexadecane	57	9.483	9.482	-0.005	92	1288503	1600.0	1058.8	
122 4-Chlorophenyl phenyl ethe	204	9.624	9.617	0.000	96	739693	1600.0	1128.8	
125 4-Nitroaniline	138	9.641	9.635	0.000	82	407467	1600.0	1450.1	
124 Fluorene	166	9.653	9.647	0.000	95	1532842	1600.0	1082.8	
127 4,6-Dinitro-2-methylphenol	198	9.665	9.665	-0.006	83	495289	3200.0	3302.8	
129 Diphenylamine	169	9.718	9.712	0.000	94	1138282	1368.0	1041.2	
128 N-Nitrosodiphenylamine	169	9.718	9.712	0.000	98	1138282	1600.0	1225.0	
131 Azobenzene	77	9.759	9.759	-0.006	98	1704537	1600.0	1213.4	
130 1,2-Diphenylhydrazine	77	9.759	9.759	-0.006	37	1704537	1600.0	1213.4	a
138 4-Bromophenyl phenyl ether	248	10.047	10.042	0.000	71	389737	1600.0	1270.1	
140 Hexachlorobenzene	284	10.141	10.141	-0.006	90	416815	1600.0	1270.5	
141 Atrazine	200	10.141	10.141	-0.006	89	407889	1600.0	1406.4	
245 n-Octadecane	57	10.271	10.265	0.000	89	1392422	1600.0	1170.7	
143 Pentachlorophenol	266	10.294	10.294	-0.006	89	389078	3200.0	2320.2	
148 Phenanthrene	178	10.488	10.488	-0.006	96	2129394	1600.0	1187.2	
149 Anthracene	178	10.530	10.529	-0.005	96	2189596	1600.0	1213.7	

Compound	Sig	RT (min.)	Adj RT (min.)	Dlt RT (min.)	Q	Response	Cal Amt ng/ml	OnCol Amt ng/ml	Flags
150 Carbazole	167	10.647	10.647	-0.006	96	2112503	1600.0	1250.9	
154 Di-n-butyl phthalate	149	10.883	10.876	0.001	100	2690025	1600.0	1333.0	
159 Fluoranthene	202	11.583	11.582	-0.005	98	2372586	1600.0	1253.4	
160 Benzidine	184		11.671				ND	ND	
161 Pyrene	202	11.830	11.830	-0.005	98	2475034	1600.0	1249.1	
169 Butyl benzyl phthalate	149	12.465	12.465	-0.006	98	1198112	1600.0	1355.6	
174 Bis(2-ethylhexyl) phthalat	149	13.229	13.229	-0.006	96	1723725	1600.0	1457.4	
177 3,3'-Dichlorobenzidine	252	13.253	13.253	-0.006	74	1633233	3200.0	2613.2	
178 Benzo[a]anthracene	228	13.341	13.335	0.000	97	2336719	1600.0	1242.8	
179 Chrysene	228	13.394	13.394	-0.006	97	2321018	1600.0	1238.1	
181 Di-n-octyl phthalate	149	14.241	14.247	-0.006	99	2892802	1600.0	1491.9	
183 Benzo[b]fluoranthene	252	15.059	15.059	0.000	97	2275548	1600.0	1334.2	
184 Benzo[k]fluoranthene	252	15.100	15.100	0.000	99	2430002	1600.0	1318.5	
185 Benzo[a]pyrene	252	15.612	15.617	-0.005	77	2128006	1600.0	1291.0	
190 Indeno[1,2,3-cd]pyrene	276	17.776	17.782	-0.006	96	2639136	1600.0	1593.9	
189 Dibenz(a,h)anthracene	278	17.788	17.794	-0.006	91	2231269	1600.0	1606.2	
191 Benzo[g,h,i]perylene	276	18.394	18.400	-0.006	97	2353472	1600.0	1638.9	

QC Flag Legend

Processing Flags

ND - Not Detected or Marked ND

Review Flags

M - Manually Integrated

U - Marked Undetected

a - User Assigned ID

Reagents:

SMIS80PPMW_00019 Amount Added: 5.00 Units: uL Run Reagent

Report Date: 16-Apr-2019 09:33:03 Chrom Revision: 2.3 24-Mar-2019 20:11:04

Eurofins TestAmerica, Canton

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416033.D

Injection Date: 16-Apr-2019 08:22:30 Instrument ID: A4AG2 Operator ID:

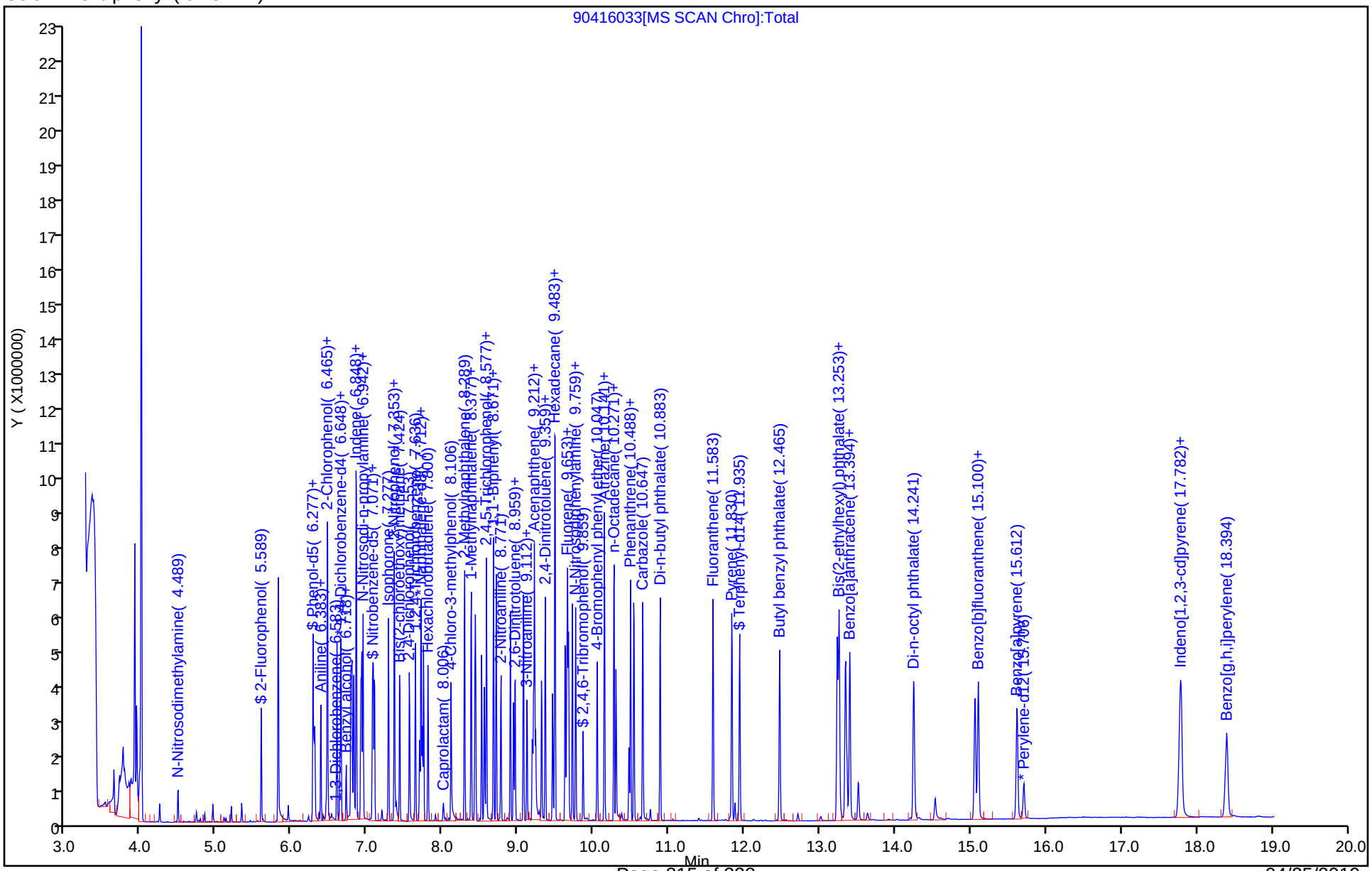
Lims ID: LCS 240-376039/15-A Worklist Smp#: 33

Client ID:

Injection Vol: 5.0 ul Dil. Factor: 1.0000 ALS Bottle#: 33

Method: LVI AG2 8270 Limit Group: MSS 8270D ICAL

Column: 5% phenyl (0.18 mm)



Eurofins TestAmerica, Canton
Recovery Report

Data File: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\90416033.D
Lims ID: LCS 240-376039/15-A
Client ID:
Sample Type: LCS
Inject. Date: 16-Apr-2019 08:22:30 ALS Bottle#: 33 Worklist Smp#: 33
Injection Vol: 5.0 ul Dil. Factor: 1.0000
Sample Info: 240-0086175-033
Misc. Info.: LCS 240-376039/15-A
Operator ID: Instrument ID: A4AG2

Method: \\chromna\Canton\ChromData\A4AG2\20190416-86175.b\LVI AG2 8270.m
Limit Group: MSS 8270D ICAL
Last Update: 16-Apr-2019 07:32:31 Calib Date: 08-Apr-2019 20:11:30
Integrator: RTE ID Type: Deconvolution ID
Quant Method: Internal Standard Quant By: Initial Calibration
Last ICal File: \\chromna\Canton\ChromData\A4AG2\20190408-85902.b\90408028.D

Column 1 : 5% phenyl (0.18 mm) Det: MS SCAN
Process Host: CTX0336

First Level Reviewer: hulat Date: 16-Apr-2019 09:29:56

Compound	Amount Added	Amount Recovered	% Rec.
$ 7 2-Fluorophenol	1600.0	1346.4	84.15
$ 8 Phenol-d5	1600.0	907.2	56.70
$ 9 Nitrobenzene-d5	1600.0	1387.7	86.73
$ 10 2-Fluorobiphenyl (Surr)	1600.0	1249.6	78.10
$ 11 2,4,6-Tribromophenol	1600.0	1402.0	87.63
$ 12 Terphenyl-d14	1600.0	1405.3	87.83

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Instrument ID: A4AG2 Start Date: 04/08/2019 09:22

Analysis Batch Number: 375192 End Date: 04/08/2019 20:35

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-375192/1		04/08/2019 09:22	1	90408001.D	RXI-5SILMS/IIG 0.25(mm)
STD9 240-375192/2 IC		04/08/2019 09:39	1	90408002.D	RXI-5SILMS/IIG 0.25(mm)
STD8 240-375192/3 IC		04/08/2019 10:05	1	90408003.D	RXI-5SILMS/IIG 0.25(mm)
STD7 240-375192/4 IC		04/08/2019 10:29	1	90408004.D	RXI-5SILMS/IIG 0.25(mm)
STD6 240-375192/5 ICIS		04/08/2019 10:54	1	90408005.D	RXI-5SILMS/IIG 0.25(mm)
STD5 240-375192/6 IC		04/08/2019 11:18	1	90408006.D	RXI-5SILMS/IIG 0.25(mm)
STD4 240-375192/7 IC		04/08/2019 11:42	1	90408007.D	RXI-5SILMS/IIG 0.25(mm)
STD3 240-375192/8 IC		04/08/2019 12:06	1	90408008.D	RXI-5SILMS/IIG 0.25(mm)
STD2 240-375192/9 IC		04/08/2019 12:30	1	90408009.D	RXI-5SILMS/IIG 0.25(mm)
STD1 240-375192/10 IC		04/08/2019 12:54	1	90408010.D	RXI-5SILMS/IIG 0.25(mm)
ICV 240-375192/11		04/08/2019 13:19	1	90408011.D	RXI-5SILMS/IIG 0.25(mm)
STD9 240-375192/12 IC		04/08/2019 13:43	1		RXI-5SILMS/IIG 0.25(mm)
STD8 240-375192/13 IC		04/08/2019 14:07	1		RXI-5SILMS/IIG 0.25(mm)
STD7 240-375192/14 IC		04/08/2019 14:31	1		RXI-5SILMS/IIG 0.25(mm)
STD6 240-375192/15 IC		04/08/2019 14:56	1		RXI-5SILMS/IIG 0.25(mm)
STD5 240-375192/16 IC		04/08/2019 15:20	1		RXI-5SILMS/IIG 0.25(mm)
STD4 240-375192/17 IC		04/08/2019 15:44	1		RXI-5SILMS/IIG 0.25(mm)
STD3 240-375192/18 IC		04/08/2019 16:09	1		RXI-5SILMS/IIG 0.25(mm)
STD2 240-375192/19 IC		04/08/2019 16:33	1		RXI-5SILMS/IIG 0.25(mm)
ICV 240-375192/20		04/08/2019 16:57	1		RXI-5SILMS/IIG 0.25(mm)
STD9 240-375192/21 IC		04/08/2019 17:21	1		RXI-5SILMS/IIG 0.25(mm)
STD8 240-375192/22 IC		04/08/2019 17:46	1		RXI-5SILMS/IIG 0.25(mm)
STD7 240-375192/23 IC		04/08/2019 18:10	1		RXI-5SILMS/IIG 0.25(mm)
STD6 240-375192/24 IC		04/08/2019 18:34	1		RXI-5SILMS/IIG 0.25(mm)
STD5 240-375192/25 IC		04/08/2019 18:58	1		RXI-5SILMS/IIG 0.25(mm)
STD4 240-375192/26 IC		04/08/2019 19:22	1		RXI-5SILMS/IIG 0.25(mm)
STD3 240-375192/27 IC		04/08/2019 19:47	1		RXI-5SILMS/IIG 0.25(mm)
STD2 240-375192/28 IC		04/08/2019 20:11	1		RXI-5SILMS/IIG 0.25(mm)
ICV 240-375192/29		04/08/2019 20:35	1		RXI-5SILMS/IIG 0.25(mm)

GC/MS SEMI VOA ANALYSIS RUN LOG

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Instrument ID: A4AG2 Start Date: 04/16/2019 05:36

Analysis Batch Number: 376614 End Date: 04/16/2019 16:26

LAB SAMPLE ID	CLIENT SAMPLE ID	DATE ANALYZED	DILUTION FACTOR	LAB FILE ID	COLUMN ID
DFTPP 240-376614/1		04/16/2019 05:36	1	90416001.D	RXI-5SILMS/IIG 0.25(mm)
STD6 240-376614/2 CCVIS		04/16/2019 05:54	1	90416002.D	RXI-5SILMS/IIG 0.25(mm)
MB 240-376039/14-A		04/16/2019 06:22	1	90416003.D	RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 07:10	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 07:34	1		RXI-5SILMS/IIG 0.25(mm)
LODV 240-376614/32		04/16/2019 07:58	1		RXI-5SILMS/IIG 0.25(mm)
LCS 240-376039/15-A		04/16/2019 08:22	1	90416033.D	RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 10:47	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 11:11	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 11:35	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 11:59	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 12:23	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 12:48	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 13:12	1		RXI-5SILMS/IIG 0.25(mm)
240-110743-6		04/16/2019 13:36	1	90416019.D	RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 14:00	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 14:24	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 14:49	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 15:13	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 15:37	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 16:02	1		RXI-5SILMS/IIG 0.25(mm)
ZZZZZ		04/16/2019 16:26	1		RXI-5SILMS/IIG 0.25(mm)

GC/MS SEMI VOA BATCH WORKSHEET

Lab Name: Eurofins TestAmerica, Canton Job No.: 240-110743-2

SDG No.:

Batch Number: 376039 Batch Start Date: 04/11/19 10:44 Batch Analyst: Strelecki, Alyssa C

Batch Method: 3510C Batch End Date:

Lab Sample ID	Client Sample ID	Method Chain	Basis	InitialAmount	FinalAmount	ReceivedpH	FirstAdjustpH	exBENZALDEHYD 00066	exBNASPIKE 00101
240-110743-B-6	5WC23	3510C, 8270D	T	280 mL	5 mL	7 SU	2 SU		
MB 240-376039/14		3510C, 8270D		250 mL	5 mL	7 SU	2 SU		
LCS 240-376039/15		3510C, 8270D		250 mL	5 mL	7 SU	2 SU	0.2 mL	0.4 mL

Lab Sample ID	Client Sample ID	Method Chain	Basis	exBNASURR W 00071					
240-110743-B-6	5WC23	3510C, 8270D	T	0.4 mL					
MB 240-376039/14		3510C, 8270D		0.4 mL					
LCS 240-376039/15		3510C, 8270D		0.4 mL					

Batch Notes	
Acid Used for pH Adjustment ID	4040092
Base Used to Adjust pH ID	4030178
Analyst ID - Concentration	JESSICA.TRUSHEL STEVE.EARLE
Analyst ID - Extraction	ALYSSA.STRELECKI
Na2SO4 ID	2548156
pH Indicator ID	3734947 2794738
Pipette/Syringe/Dispenser ID	6
Prep Solvent ID	4076421
Analyst ID - Spike Analyst	ALYSSA.STRELECKI

Basis	Basis Description
T	Total/NA

The pound sign (#) in the amount added field denotes that the reagent was used undiluted. All calculations are performed using the stated concentration for this reagent.

Shipping and Receiving Documents

4.6 | C4.4

CHAIN OF CUSTODY RECORD

OK JLK 3/13/19

Laboratory: Test America/ELLE, 4101 Shuffel Drive NW, North Canton, OH, 44720 / Opal Johnson, Project Manager/1-800-966-9387

Client: Draper Aden Associates Attn: 0 Address: 0 0 0 Phone: Fax: 0 Fax: 0	**Consultant:** Draper Aden Associates Attn: Janet C. Frazier Address: 2206 South Main Street Blacksburg, Virginia 24060 Phone: (540) 552-0444 Fax: (540) 552-0291	**Sample Site:** RFAAP, Radford, Virginia Location: HWMU5 Event: 2nd Quarter 2019 Groundwater Corrective Action Monitoring Event DAA JN: B03204-19A Lab JN:	**Project Specific (PS) or Batch (B) QC:** Sample Collection for Project Complete? YES UPS Carrier: 1Z 237 301 01 9905 2113 Tracking Number:		

Box 1: Matrix		Box 2: Preservative		Box 3: Filtered/Unfiltered	Box 4: Sample Type	Invoice
SW Surface Water	T Trip Blank	A HCL	E NaOH	F Filtered	G Grab	Copy to Consultant: YES
GW Groundwater	E Equipment Blank	B HNO_3	F ZnAc	U Unfiltered	C Composite	Bill: CLIENT OTHER
L Leachate	P Product	C H_2SO_4	G Other (Specify)	**Box 5: Sample Container Type**		Preserved and shipped on ice: YES
S Soil	O Other	D $Na_2S_2O_3$	H None	P Plastic V VOA AG Amber Glass CG Clear Glass		

Box 4 - Sample Type					G								
Box 3 - Filtered/Unfiltered					U								
Required pH of Sample													
Box 2 - Preservative					H								
Box 5 - Sample Container Type					2-250mL AG								
Sample ID	Date: 2019	Time	Box 1: Matrix	Number of Bottles	8270D- Low Level								
5W8B			GW	0									
5W5B	4/09	1200	GW	2	X								
5W7B	4/09	1100	GW	6	X								
5WC21	4/09	1415	GW	2	X								
5WDUP	4/09	1425	GW	0									
5WC22	4/09	1250	GW	2	X								
5WC23	4/09	1330	GW	2	X								
5W12A			GW	0									

240-110743 Chain of Custody

GENERAL NOTES:

1. Report results to at or above QL/RL.
2. Extract and hold.

~~Nitrobenzene~~ and p-nitroaniline only.

JLK 3/13/19

✓ Full deliverable (QL = 2 ug/L

✓ Extract + HOLD

✓ VELAP required.

OK JLK 3.19.19

NOT SAMPLED - TA

NOT SAMPLED - TA

Clients Special Instructions: level 4 with edd.

Received by lab in Good Condition ____ Yes ____ No Custody Seal Intact ____ Yes ____ No Temperature upon arrival ____ Received on Ice ____ Yes ____ No

Describe problems, if any:

Sampler Name (Print): Ken Coddington	Date: 4/9/19	#1 Relinquished by (Signature):	Date: 4/9/19	#2 Relinquished by (Signature):	Date:	Sample Storage Time Requested:
Sampler Signature:	Time: 0800	Company Name: DAA	Time: 1700	Company Name:	Time:	
Sampler Name (Print): Graham Snyder	Date: 4/9/19	#1 Received by (Signature):	Date: 4-10-19	#2 Received by (Signature):	Date:	30 DYS ORG/6 MTHS INORG
Sampler Signature:	Time: 0800	Company Name: TA	Time: 1010	Company Name:	Time:	

Extract + HOLD JLK 3.19.19

1/1

TestAmerica Canton Sample Receipt Form/Narrative **Login # :** 110743
Canton Facility

Client Draper Aden Assoc. Site Name _____ Cooler unpacked by: Ryan Cribler

Cooler Received on 4-10-19 Opened on 4-10-19 1010

FedEx: 1st Grd Exp (UPS) FAS Clipper Client Drop Off TestAmerica Courier Other _____

Receipt After-hours: Drop-off Date/Time _____ Storage Location _____

TestAmerica Cooler # TA Foam Box Client Cooler Box Other _____

Packing material used: (Bubble Wrap) Foam (Plastic Bag) None Other _____

COOLANT: (Wet Ice) Blue Ice Dry Ice Water None

1. Cooler temperature upon receipt ☐ See Multiple Cooler Form
   IR GUN# IR-8 (CF **-0.2** °C) Observed Cooler Temp. 4.6 °C Corrected Cooler Temp. 4.4 °C
   IR GUN #36 (CF **+0.7**°C) Observed Cooler Temp. _____ °C Corrected Cooler Temp. _____ °C
2. Were tamper/custody seals on the outside of the cooler(s)? If Yes Quantity 2 (Yes) No
   -Were the seals on the outside of the cooler(s) signed & dated? (Yes) No NA
   -Were tamper/custody seals on the bottle(s) or bottle kits (LLHg/MeHg)? Yes (No)
   -Were tamper/custody seals intact and uncompromised? (Yes) No NA
3. Shippers' packing slip attached to the cooler(s)? (Yes) No
4. Did custody papers accompany the sample(s)? (Yes) No
5. Were the custody papers relinquished & signed in the appropriate place? (Yes) No
6. Was/were the person(s) who collected the samples clearly identified on the COC? Yes (No)
7. Did all bottles arrive in good condition (Unbroken)? (Yes) No
8. Could all bottle labels be reconciled with the COC? (Yes) No
9. Were correct bottle(s) used for the test(s) indicated? (Yes) No
10. Sufficient quantity received to perform indicated analyses? (Yes) No
11. Are these work share samples? Yes (No)
    If yes, Questions 12-16 have been checked at the originating laboratory.
12. Were all preserved sample(s) at the correct pH upon receipt? Yes No (NA) pH Strip Lot# **HC861525**
13. Were VOAs on the COC? Yes (No)
14. Were air bubbles >6 mm in any VOA vials? ● ⬅ Larger than this. Yes No (NA)
15. Was a VOA trip blank present in the cooler(s)? Trip Blank Lot # _____ Yes (No)
16. Was a LL Hg or Me Hg trip blank present? _____ Yes (No)

Tests that are not checked for pH by Receiving:
VOAs
Oil and Grease
TOC

Contacted PM _____ Date _____ by _____ via Verbal Voice Mail Other

Concerning _____

17. CHAIN OF CUSTODY & SAMPLE DISCREPANCIES Samples processed by:

18. SAMPLE CONDITION

Sample(s) _____ were received after the recommended holding time had expired.
Sample(s) _____ were received in a broken container.
Sample(s) _____ were received with bubble >6 mm in diameter. (Notify PM)

19. SAMPLE PRESERVATION

Sample(s) _____ were further preserved in the laboratory.
Time preserved: _____ Preservative(s) added/Lot number(s): _____

VOA Sample Preservation - Date/Time VOAs Frozen: _____

SHEALY ENVIRONMENTAL SERVICES, INC.

Report of Analysis

Draper Aden Associates
2206 South Main Street
Blacksburg, VA 24060
Attention: Janet Frazier

Project Name: RAAP HWMU5

Project Number: B03204-19A

Lot Number:**UD10056**

Date Completed:05/06/2019

05/06/2019 11:25 AM
Approved and released by:
Project Manager: Cathy S. Dover

The electronic signature above is the equivalent of a handwritten signature.
This report shall not be reproduced, except in its entirety, without the written approval of Shealy Environmental Services, Inc.

Shealy Environmental Services, Inc.
106 Vantage Point Drive West Columbia, SC 29172 (803) 791-9700 Fax (803) 791-9111 www.shealylab.com

Case Narrative
Draper Aden Associates
Lot Number: UD10056

This Report of Analysis contains the analytical result(s) for the sample(s) listed on the Sample Summary following this Case Narrative. The sample receiving date is documented in the header information associated with each sample.

All results listed in this report relate only to the samples that are contained within this report.

Sample receipt, sample analysis, and data review have been performed in accordance with the most current approved NELAC standards, the Shealy Environmental Services, Inc. ("Shealy") Quality Assurance Management Plan (QAMP), standard operating procedures (SOPs), and Shealy policies. Any exceptions to the NELAC standards, the QAMP, SOPs or policies are qualified on the results page or discussed below.

If you have any questions regarding this report please contact the Shealy Project Manager listed on the cover page.

Sample Summary
Draper Aden Associates
Lot Number: UD10056
Project Name: RAAP HWMU5
Project Number: B03204-19A

Sample Number	Sample ID	Matrix	Date Sampled	Date Received
001	5W8B	Aqueous	04/09/2019 0925	04/10/2019
002	5W5B	Aqueous	04/09/2019 1200	04/10/2019
003	5W7B	Aqueous	04/09/2019 1100	04/10/2019
004	5WC21	Aqueous	04/09/2019 1415	04/10/2019
005	5WDUP	Aqueous	04/09/2019 1425	04/10/2019
006	5WC22	Aqueous	04/09/2019 1250	04/10/2019
007	5WC23	Aqueous	04/09/2019 1330	04/10/2019
008	5W12A	Aqueous	04/09/2019 1015	04/10/2019

(8 samples)

Detection Summary
Draper Aden Associates
Lot Number: UD10056
Project Name: RAAP HWMU5
Project Number: B03204-19A

Sample	Sample ID	Matrix	Parameter	Method	Result	Q	Units	Page
002	5W5B	Aqueous	Barium	6020B	22		ug/L	7
003	5W7B	Aqueous	Barium	6020B	25		ug/L	9
003	5W7B	Aqueous	Chromium	6020B	1.7	J	ug/L	9
003	5W7B	Aqueous	Cobalt	6020B	2.4	J	ug/L	9
003	5W7B	Aqueous	Nickel	6020B	2.8	J	ug/L	9
003	5W7B	Aqueous	Zinc	6020B	10	J	ug/L	9
004	5WC21	Aqueous	Barium	6020B	14		ug/L	11
004	5WC21	Aqueous	Beryllium	6020B	0.27	J	ug/L	11
004	5WC21	Aqueous	Cadmium	6020B	0.25	J	ug/L	11
004	5WC21	Aqueous	Chromium	6020B	2.1	J	ug/L	11
004	5WC21	Aqueous	Cobalt	6020B	32		ug/L	11
004	5WC21	Aqueous	Nickel	6020B	17		ug/L	11
004	5WC21	Aqueous	Zinc	6020B	15	J	ug/L	11
005	5WDUP	Aqueous	Barium	6020B	14		ug/L	13
005	5WDUP	Aqueous	Beryllium	6020B	0.25	J	ug/L	13
005	5WDUP	Aqueous	Cadmium	6020B	0.25	J	ug/L	13
005	5WDUP	Aqueous	Chromium	6020B	2.0	J	ug/L	13
005	5WDUP	Aqueous	Cobalt	6020B	32		ug/L	13
005	5WDUP	Aqueous	Nickel	6020B	16		ug/L	13
005	5WDUP	Aqueous	Zinc	6020B	15	J	ug/L	13
006	5WC22	Aqueous	Barium	6020B	28		ug/L	15
006	5WC22	Aqueous	Cadmium	6020B	0.20	J	ug/L	15
006	5WC22	Aqueous	Cobalt	6020B	4.8	J	ug/L	15
006	5WC22	Aqueous	Nickel	6020B	4.6	J	ug/L	15
007	5WC23	Aqueous	Barium	6020B	21		ug/L	17
007	5WC23	Aqueous	Cobalt	6020B	1.7	J	ug/L	17
007	5WC23	Aqueous	Nickel	6020B	3.1	J	ug/L	17

(27 detections)

ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-001**

Description: **5W8B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 0925** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1817	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: Draper Aden Associates
Laboratory ID: UD10056-002
Description: 5W5B
Matrix: Aqueous
Date Sampled: 04/09/2019 1200
Project Name: RAAP HWMU5
Date Received: 04/10/2019
Project Number: B03204-19A

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	04/18/2019 0225	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-002**

Description: **5W5B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1200** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1823	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**22**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	0.20	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	1.3	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	2.0	ug/L	1
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	7.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: Draper Aden Associates
Laboratory ID: UD10056-003
Description: 5W7B
Matrix: Aqueous
Date Sampled: 04/09/2019 1100
Project Name: RAAP HWMU5
Date Received: 04/10/2019
Project Number: B03204-19A

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	04/18/2019 0227	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-003**

Description: **5W7B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1100** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1829	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**25**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	0.20	ug/L	1
Chromium	**7440-47-3**	**6020B**	**1.7**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Cobalt	**7440-48-4**	**6020B**	**2.4**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**2.8**	**J**	**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	**7440-66-6**	**6020B**	**10**	**J**	**30**	**7.3**	**ug/L**	**1**

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: Draper Aden Associates
Laboratory ID: UD10056-004
Description: 5WC21
Matrix: Aqueous
Date Sampled: 04/09/2019 1415
Project Name: RAAP HWMU5
Date Received: 04/10/2019
Project Number: B03204-19A

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	04/18/2019 0235	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-004**

Description: **5WC21** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1415** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1909	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**14**		**10**	**1.3**	**ug/L**	**1**
Beryllium	**7440-41-7**	**6020B**	**0.27**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Cadmium	**7440-43-9**	**6020B**	**0.25**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Chromium	**7440-47-3**	**6020B**	**2.1**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Cobalt	**7440-48-4**	**6020B**	**32**		**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**17**		**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	**7440-66-6**	**6020B**	**15**	**J**	**30**	**7.3**	**ug/L**	**1**

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: Draper Aden Associates
Laboratory ID: UD10056-005
Description: 5WDUP
Matrix: Aqueous
Date Sampled: 04/09/2019 1425
Project Name: RAAP HWMU5
Date Received: 04/10/2019
Project Number: B03204-19A

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	04/18/2019 0242	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-005**

Description: **5WDUP** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1425** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1915	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**14**		**10**	**1.3**	**ug/L**	**1**
Beryllium	**7440-41-7**	**6020B**	**0.25**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Cadmium	**7440-43-9**	**6020B**	**0.25**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Chromium	**7440-47-3**	**6020B**	**2.0**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Cobalt	**7440-48-4**	**6020B**	**32**		**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**16**		**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	**7440-66-6**	**6020B**	**15**	**J**	**30**	**7.3**	**ug/L**	**1**

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: Draper Aden Associates
Laboratory ID: UD10056-006
Description: 5WC22
Matrix: Aqueous
Date Sampled: 04/09/2019 1250
Project Name: RAAP HWMU5
Date Received: 04/10/2019
Project Number: B03204-19A

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	04/18/2019 0245	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-006**

Description: **5WC22** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1250** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1920	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**28**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	**7440-43-9**	**6020B**	**0.20**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Chromium	7440-47-3	6020B	5.0	U	5.0	1.3	ug/L	1
Cobalt	**7440-48-4**	**6020B**	**4.8**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**4.6**	**J**	**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	7.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: Draper Aden Associates
Laboratory ID: UD10056-007
Description: 5WC23
Matrix: Aqueous
Date Sampled: 04/09/2019 1330
Project Name: RAAP HWMU5
Date Received: 04/10/2019
Project Number: B03204-19A

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1		7470A	1	04/18/2019 0247	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-007**

Description: **5WC23** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1330** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1926	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**21**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	0.20	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	1.3	ug/L	1
Cobalt	**7440-48-4**	**6020B**	**1.7**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**3.1**	**J**	**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	7.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-008**

Description: **5W12A** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1015** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1932	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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QC Summary

ICP-MS - MB

Sample ID: UQ13657-001
Batch: 13657
Analytical Method: 6020B
Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Antimony	2.0	U	1	2.0	0.50	ug/L	04/25/2019 1806
Arsenic	10	U	1	10	2.0	ug/L	04/25/2019 1806
Barium	10	U	1	10	1.3	ug/L	04/25/2019 1806
Beryllium	1.0	U	1	1.0	0.20	ug/L	04/25/2019 1806
Cadmium	1.0	U	1	1.0	0.20	ug/L	04/25/2019 1806
Chromium	5.0	U	1	5.0	1.3	ug/L	04/25/2019 1806
Cobalt	5.0	U	1	5.0	1.3	ug/L	04/25/2019 1806
Copper	40	U	1	40	10	ug/L	04/25/2019 1806
Lead	3.0	U	1	3.0	1.0	ug/L	04/25/2019 1806
Nickel	10	U	1	10	2.0	ug/L	04/25/2019 1806
Selenium	10	U	1	10	3.0	ug/L	04/25/2019 1806
Silver	2.0	U	1	2.0	0.30	ug/L	04/25/2019 1806
Thallium	1.0	U	1	1.0	0.20	ug/L	04/25/2019 1806
Vanadium	10	U	1	10	2.5	ug/L	04/25/2019 1806
Zinc	30	U	1	30	7.3	ug/L	04/25/2019 1806

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - LCS

Sample ID: UQ13657-002
Batch: 13657
Analytical Method: 6020B
Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	100	100		1	100	80-120	04/25/2019 1811
Arsenic	100	99		1	99	80-120	04/25/2019 1811
Barium	100	100		1	101	80-120	04/25/2019 1811
Beryllium	100	100		1	100	80-120	04/25/2019 1811
Cadmium	100	100		1	100	80-120	04/25/2019 1811
Chromium	100	100		1	101	80-120	04/25/2019 1811
Cobalt	100	100		1	101	80-120	04/25/2019 1811
Copper	100	100		1	101	80-120	04/25/2019 1811
Lead	100	100		1	100	80-120	04/25/2019 1811
Nickel	100	100		1	103	80-120	04/25/2019 1811
Selenium	100	110		1	107	80-120	04/25/2019 1811
Silver	100	100		1	101	80-120	04/25/2019 1811
Thallium	100	100		1	100	80-120	04/25/2019 1811
Vanadium	100	100		1	104	80-120	04/25/2019 1811
Zinc	100	110		1	106	80-120	04/25/2019 1811

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MS

Sample ID: UD10056-003MS
Batch: 13657
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	0.0	100	99		1	99	70-130	04/25/2019 1834
Arsenic	0.0	100	97		1	97	70-130	04/25/2019 1834
Barium	25	100	120		1	100	70-130	04/25/2019 1834
Beryllium	0.0	100	72		1	72	70-130	04/25/2019 1834
Cadmium	0.0	100	97		1	97	70-130	04/25/2019 1834
Chromium	1.7	100	98		1	96	70-130	04/25/2019 1834
Cobalt	2.4	100	98		1	96	70-130	04/25/2019 1834
Copper	0.0	100	100		1	100	70-130	04/25/2019 1834
Lead	0.0	100	98		1	98	70-130	04/25/2019 1834
Nickel	2.8	100	99		1	97	70-130	04/25/2019 1834
Selenium	0.0	100	100		1	104	70-130	04/25/2019 1834
Silver	0.0	100	97		1	97	70-130	04/25/2019 1834
Thallium	0.0	100	98		1	98	70-130	04/25/2019 1834
Vanadium	0.0	100	100		1	101	70-130	04/25/2019 1834
Zinc	10	100	110		1	101	70-130	04/25/2019 1834

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MSD

Sample ID: UD10056-003MD
Batch: 13657
Analytical Method: 6020B
Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	0.0	100	100		1	101	2.0	70-130	20	04/25/2019 1852
Arsenic	0.0	100	98		1	98	1.3	70-130	20	04/25/2019 1852
Barium	25	100	130		1	101	1.2	70-130	20	04/25/2019 1852
Beryllium	0.0	100	71		1	71	1.4	70-130	20	04/25/2019 1852
Cadmium	0.0	100	99		1	99	1.4	70-130	20	04/25/2019 1852
Chromium	1.7	100	100		1	98	2.3	70-130	20	04/25/2019 1852
Cobalt	2.4	100	100		1	98	1.8	70-130	20	04/25/2019 1852
Copper	0.0	100	100		1	101	0.94	70-130	20	04/25/2019 1852
Lead	0.0	100	99		1	99	0.93	70-130	20	04/25/2019 1852
Nickel	2.8	100	100		1	98	1.7	70-130	20	04/25/2019 1852
Selenium	0.0	100	110		1	106	1.5	70-130	20	04/25/2019 1852
Silver	0.0	100	99		1	99	1.7	70-130	20	04/25/2019 1852
Thallium	0.0	100	99		1	99	0.76	70-130	20	04/25/2019 1852
Vanadium	0.0	100	100		1	102	1.5	70-130	20	04/25/2019 1852
Zinc	10	100	110		1	102	0.81	70-130	20	04/25/2019 1852

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MB

Sample ID: UQ13499-001
Batch: 13499
Analytical Method: 7470A
Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Mercury	0.20	U	1	0.20	0.12	ug/L	04/18/2019 0220

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - LCS

Sample ID: UQ13499-002
Batch: 13499
Analytical Method: 7470A
Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	2.0	1.9		1	96	80-120	04/18/2019 0222

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MS

Sample ID: UD10056-003MS
Batch: 13499
Analytical Method: 7470A
Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0	2.0	1.9		1	96	85-115	04/18/2019 0230

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MSD

Sample ID: UD10056-003MD
Batch: 13499
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0	2.0	2.0		1	98	2.5	85-115	20	04/18/2019 0232

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Chain of Custody
and
Miscellaneous Documents

CHAIN OF CUSTODY RECORD

22022

Laboratory: Shealy Environmental Services, Inc. - 106 Vantage Point Drive, West Columbia, SC 29172 - (803)791-9700 lab, (919)618-1180 cell -Cathy Dover, PM

Client:	Draper Aden Associates	Consultant:	Draper Aden Associates	Sample Site:	RFAAP, Radford, Virginia
Attn:	0	Attn:	Jared C. Frazier	Location:	HWMUS
Address:	0	Address:	2206 South Main Street, Blacksburg, Virginia 24060	Event:	2Qtr 2019 Corrective Action Annual Monitoring Event
	0	Phone:	(540) 552-0444	DAA JN:	003201-13A
Phone:	0	Fax:	(540) 552-0291	Lab JN:	
Fax:	0				
Fax:	0				

Project Specific (PS) or Batch (B) QC:
Sample Collection for Project Complete? YES
WS: 13-237-30-01-9802-9721
Carrier:
Tracking Number:

Box 1: Matrix
GW Surface Water
GW Groundwater
L Leachate
S Soil
T Trip Blank
E Equipment Blank
P Product
O Other

Box 2: Preservative
A HCL
B HNO_3
C H_2SO_4
D $Na_2S_2O_3$
E NaOH
F ZnAc
G Other (Specify)
H None

Box 3: Filtered/Unfiltered
F Filtered
U Unfiltered

Box 4: Sample Type
G Grab
C Composite

Box 5: Sample Container Type
P Plastic
V VOA
AG Amber Glass
CG Clear Glass

Invoice
Copy to Consultant: YES
Bill: CLIENT OTHER
Preserved and shipped on ice: YES

Box 4 - Sample Type				G	G						
Box 3 - Filtered/Unfiltered				U	U						
Required pH of Sample				<2	<2						
Box 2 - Preservative				B	B						
Box 5 - Sample Container Type				1-500ml P	1-500ml P						
Sample ID	Date: 2019	Time	Box 1: Matrix	Number of Bottles			(Metals-Total) 6020B(3005A)/ 7470A	Cobalt only-Total 6020B/3005A	Metals PH		
5W6B	4/09	0925	GW	1				X	<2		
5W5B	4/09	1200	GW	1			X		<2		
5W7B	4/09	1100	GW	3			X		<2		
5WC21	4/09	1415	GW	1			X		<2		
5WDUP	4/09	1425	GW	1			X		<2		
5WC22	4/09	1250	GW	1			X		<2		
5WC23	4/09	1330	GW	1			X		<2		
5W12A	4/09	1015	GW	1				X			

GENERAL NOTES
1. See attached analyte list. JLC
2. Report permit required LOQ/MDL or lab MDL if higher than permit MDL. Report Results to MDL with "J" Flags. 3/19/19
3. VELAP accreditation required.
4. Project specific MDL/QLs attached.

EDIS DELIVERABLE - due 3/9/19

UD10056

Upgradient monitorin, OSD

USE FOR QC

plume well

Client's Special Instructions: level 1 with edd.

Received by lab in Good Condition ✓ Yes ___ No Custody Seal Intact ✓ Yes ___ No Temperature upon arrival 3.6°C Received on Ice ✓ Yes ___ No

Describe problems, if any:

T = 3.6°C

Sampler Name (Print): Ken Coddington	Date: 4/9/19	#1 Relinquished by (Signature):	Date: 4/9/19	#2 Relinquished by (Signature):	Date:	Sample Storage Time Requested:
Sampler Signature:	Time: 0800	Company Name: AAA	Time: 1700	Company Name:	Time:	
Sampler Name (Print): Graham Snyder	Date: 4/9/19	#1 Received by (Signature):	Date: 4/10/19	#2 Received by (Signature):	Date:	30 DYS ORSB WITH NORG
Sampler Signature:	Time: 0800	Company Name: Shealy Env. / EDI	Time: 0947	Company Name:	Time:	

JLC 3/19/19 1/2

HWMU5 - Appendix K
Radford Army Ammunition Plant (RFAAP)
Groundwater Corrective Action Annual Monitoring Event
DAA JN: B03204-19A

ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: SEE BELOW
CLASS: TOTAL

Method SW 846-6020A (ICP/MS)/3020A

No.	ANALYTE	CAS RN	Required QL (µg/l)	Required MDL (µg/l)
1.	Antimony	7440-36-0	2	~~0.4~~ 0.5
2.	Arsenic	7440-38-2	10	2
3.	Barium	7440-39-3	10	1
4.	Beryllium	7440-41-7	1	0.2
5.	Cadmium	7440-43-9	1	0.2
6.	Chromium	7440-47-3	5	1
7.	Cobalt	7440-48-4	5	1
8.	Copper	7440-50-8	~~5~~ 40	~~1~~ 10
9.	Lead	7440-92-1	~~2~~ 3	0.2 1
10.	Nickel	7440-02-0	10	2
11.	Selenium	7782-49-2	10	3
12.	Silver	7440-22-4	2	~~0.2~~ 0.3
13.	Thallium	7440-28-0	1	0.2
14.	Vanadium	7440-62-2	10	~~1~~ 2.5
15.	Zinc	7440-66-6	30	7.3

Method SW 7470A/CVAA

16.	Mercury	7439-97-6	2	0.2

Final Report must list the project required MDLs listed above. Report results between the project required QL noted above and MDL above as estimated value. Report lab's current MDL, if higher than listed above.

. Note: # 6 added on Jan 2004 due To 4Q2003 detection.

Reviewed:
Revised and updated 1/15/2004 JCF.
Revised and updated 10/1/06.
Reviewed -3/19/2019 1:39 PM
10/9/2007 JCF – 2007 switched to semiannual monitoring 2/4 Q.
Revised and updated 2/12/2010 kfc
QLs and MDLs noted above reflect permit modification data Nov 5, 2009. JCF
Revised 4/2017 due to class 1 permit mod dec 2016.
J:\environmental\bbg\databases\raap\sample event set up\semi-annual events\hwmu-5\hwmu5 - coc rev 2010\hwmu 5 - appendix k cap target analtye list - rev 2017.docx

Prepared based as of 3-19-2019.

Shealy Environmental Services, Inc.
Document Number: ME0018C-14

Page 1 of 1
Effective Date: 8/2/2018

Sample Receipt Checklist (SRC)

Client: Draper Cooler Inspected by/date: CSD / 4/10/19 Lot #: VD10056

Means of receipt: ☐ SESI ☐ Client ☑ UPS ☐ FedEx ☐ Other: _____

☑ Yes	☐ No		1. Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	2. If custody seals were present, were they intact and unbroken?

pH Strip ID: 18-2225 Chlorine Strip ID: N/A Tested by: CSD

Original temperature upon receipt / Derived (Corrected) temperature upon receipt: %Solid Snap-Cup ID: N/A

3.6 / 3.6 °C ___ / ___ °C ___ / ___ °C ___ / ___ °C CSD 4/10/19

Method: ☑ Temperature Blank ☐ Against Bottles IR Gun ID: 5 IR Gun Correction Factor: 0 °C

Method of coolant: ☑ Wet Ice ☐ Ice Packs ☐ Dry Ice ☐ None

☐ Yes	☐ No	☑ NA	3. If temperature of any cooler exceeded 6.0°C, was Project Manager Notified? PM was Notified by: phone / email / face-to-face (circle one).
☑ Yes	☐ No	☐ NA	4. Is the commercial courier's packing slip attached to this form?
☑ Yes	☐ No		5. Were proper custody procedures (relinquished/received) followed?
☑ Yes	☐ No		6. Were sample IDs listed on the COC?
☑ Yes	☐ No		7. Were sample IDs listed on all sample containers?
☑ Yes	☐ No		8. Was collection date & time listed on the COC?
☑ Yes	☐ No		9. Was collection date & time listed on all sample containers?
☑ Yes	☐ No		10. Did all container label information (ID, date, time) agree with the COC?
☑ Yes	☐ No		11. Were tests to be performed listed on the COC?
☑ Yes	☐ No		12. Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)? _____
☑ Yes	☐ No		13. Was adequate sample volume available?
☑ Yes	☐ No		14. Were all samples received within ½ the holding time or 48 hours, whichever comes first?
☐ Yes	☑ No		15. Were any samples containers missing/excess (circle one) samples Not listed on COC?
☐ Yes	☐ No	☑ NA	16. For VOA and RSK-175 samples, were bubbles present >"pea-size" (¼"or 6mm in diameter) in any of the VOA vials?
☑ Yes	☐ No	☐ NA	17. Were all DRO/metals/nutrient samples received at a pH of < 2?
☐ Yes	☐ No	☑ NA	18. Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?
☐ Yes	☐ No	☑ NA	19. Were all applicable NH_3/TKN/cyanide/phenol/625 (< 0.5mg/L) samples free of residual chlorine?
☐ Yes	☐ No	☑ NA	20. Were client remarks/requests (i.e. requested dilutions, MS/MSD designations, etc…) correctly transcribed from the COC into the comment section in LIMS?
☐ Yes	☑ No		21. Was the quote number listed on the container label? If yes, Quote # _____

Sample Preservation (Must be completed for any sample(s) incorrectly preserved or with headspace.)

Sample(s) N/A were received incorrectly preserved and were adjusted accordingly in sample receiving with N/A ml of circle one: H_2SO_4, HNO_3, HCl, NaOH using SR # N/A.
Time of preservation N/A. If more than one preservative is needed, please note in the comments below.

Sample(s) N/A were received with bubbles >6 mm in diameter.

Samples(s) N/A were received with TRC > 0.5 mg/L (If #19 is ***no***) and were adjusted accordingly in sample receiving with sodium thiosulfate ($Na_2S_2O_3$) with Shealy ID: N/A.

SR barcode labels applied by: LKH Date: 4/10/19

Comments:

Metals

ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-001**

Description: **5W8B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 0925** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1817	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Mercury

Client: **Draper Aden Associates** Laboratory ID: **UD10056-002**

Description: **5W5B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1200** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	245.1	7470A	1	04/18/2019 0225	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-002**

Description: **5W5B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1200** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1823	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**22**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	0.20	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	1.3	ug/L	1
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	7440-02-0	6020B	10	U	10	2.0	ug/L	1
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	7.3	ug/L	1

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
U = Not detected at or above the DL
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
H = Out of holding time
W = Reported on wet weight basis

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Mercury

Client: **Draper Aden Associates** Laboratory ID: **UD10056-003**

Description: **5W7B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1100** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	245.1	7470A	1	04/18/2019 0227	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-003**

Description: **5W7B** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1100** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1829	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**25**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	0.20	ug/L	1
Chromium	**7440-47-3**	**6020B**	**1.7**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Cobalt	**7440-48-4**	**6020B**	**2.4**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**2.8**	**J**	**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	**7440-66-6**	**6020B**	**10**	**J**	**30**	**7.3**	**ug/L**	**1**

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
U = Not detected at or above the DL
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
H = Out of holding time
W = Reported on wet weight basis

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Mercury

Client: **Draper Aden Associates** Laboratory ID: **UD10056-004**

Description: **5WC21** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1415** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	245.1	7470A	1	04/18/2019 0235	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-004**

Description: **5WC21** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1415** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1909	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**14**		**10**	**1.3**	**ug/L**	**1**
Beryllium	**7440-41-7**	**6020B**	**0.27**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Cadmium	**7440-43-9**	**6020B**	**0.25**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Chromium	**7440-47-3**	**6020B**	**2.1**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Cobalt	**7440-48-4**	**6020B**	**32**		**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**17**		**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	**7440-66-6**	**6020B**	**15**	**J**	**30**	**7.3**	**ug/L**	**1**

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
U = Not detected at or above the DL
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
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H = Out of holding time
W = Reported on wet weight basis

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Mercury

Client: **Draper Aden Associates** Laboratory ID: **UD10056-005**

Description: **5WDUP** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1425** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	245.1	7470A	1	04/18/2019 0242	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-005**

Description: **5WDUP** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1425** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1915	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**14**		**10**	**1.3**	**ug/L**	**1**
Beryllium	**7440-41-7**	**6020B**	**0.25**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Cadmium	**7440-43-9**	**6020B**	**0.25**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Chromium	**7440-47-3**	**6020B**	**2.0**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Cobalt	**7440-48-4**	**6020B**	**32**		**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**16**		**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	**7440-66-6**	**6020B**	**15**	**J**	**30**	**7.3**	**ug/L**	**1**

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
U = Not detected at or above the DL
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
H = Out of holding time
W = Reported on wet weight basis

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Mercury

Client: **Draper Aden Associates** Laboratory ID: **UD10056-006**

Description: **5WC22** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1250** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	245.1	7470A	1	04/18/2019 0245	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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Client: **Draper Aden Associates** Laboratory ID: **UD10056-006**

Description: **5WC22** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1250** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1920	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**28**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	**7440-43-9**	**6020B**	**0.20**	**J**	**1.0**	**0.20**	**ug/L**	**1**
Chromium	7440-47-3	6020B	5.0	U	5.0	1.3	ug/L	1
Cobalt	**7440-48-4**	**6020B**	**4.8**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**4.6**	**J**	**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	7.3	ug/L	1

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
U = Not detected at or above the DL
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
H = Out of holding time
W = Reported on wet weight basis

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Mercury

Client: **Draper Aden Associates** Laboratory ID: **UD10056-007**

Description: **5WC23** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1330** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	245.1	7470A	1	04/18/2019 0247	JMH	04/17/2019 1556	13499

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Mercury	7439-97-6	7470A	0.20	U	0.20	0.12	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-007**

Description: **5WC23** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1330** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1926	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Antimony	7440-36-0	6020B	2.0	U	2.0	0.50	ug/L	1
Arsenic	7440-38-2	6020B	10	U	10	2.0	ug/L	1
Barium	**7440-39-3**	**6020B**	**21**		**10**	**1.3**	**ug/L**	**1**
Beryllium	7440-41-7	6020B	1.0	U	1.0	0.20	ug/L	1
Cadmium	7440-43-9	6020B	1.0	U	1.0	0.20	ug/L	1
Chromium	7440-47-3	6020B	5.0	U	5.0	1.3	ug/L	1
Cobalt	**7440-48-4**	**6020B**	**1.7**	**J**	**5.0**	**1.3**	**ug/L**	**1**
Copper	7440-50-8	6020B	40	U	40	10	ug/L	1
Lead	7439-92-1	6020B	3.0	U	3.0	1.0	ug/L	1
Nickel	**7440-02-0**	**6020B**	**3.1**	**J**	**10**	**2.0**	**ug/L**	**1**
Selenium	7782-49-2	6020B	10	U	10	3.0	ug/L	1
Silver	7440-22-4	6020B	2.0	U	2.0	0.30	ug/L	1
Thallium	7440-28-0	6020B	1.0	U	1.0	0.20	ug/L	1
Vanadium	7440-62-2	6020B	10	U	10	2.5	ug/L	1
Zinc	7440-66-6	6020B	30	U	30	7.3	ug/L	1

LOQ = Limit of Quantitation
B = Detected in the method blank
E = Quantitation of compound exceeded the calibration range
DL = Detection Limit
U = Not detected at or above the DL
N = Recovery is out of criteria
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
H = Out of holding time
W = Reported on wet weight basis

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ICP-MS

Client: **Draper Aden Associates** Laboratory ID: **UD10056-008**

Description: **5W12A** Matrix: **Aqueous**

Date Sampled: **04/09/2019 1015** Project Name: **RAAP HWMU5**

Date Received: **04/10/2019** Project Number: **B03204-19A**

Run	Prep Method	Analytical Method	Dilution	Analysis Date	Analyst	Prep Date	Batch
1	3005A	6020B	1	04/25/2019 1932	BNW	04/17/2019 1825	13657

Parameter	CAS Number	Analytical Method	Result	Q	LOQ	DL	Units	Run
Cobalt	7440-48-4	6020B	5.0	U	5.0	1.3	ug/L	1

LOQ = Limit of Quantitation
U = Not detected at or above the DL
H = Out of holding time
B = Detected in the method blank
N = Recovery is out of criteria
W = Reported on wet weight basis
E = Quantitation of compound exceeded the calibration range
P = The RPD between two GC columns exceeds 40%
DL = Detection Limit
J = Estimated result < LOQ and ≥ DL

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QC Summary

ICP-MS - MB

Sample ID: UQ13657-001
Batch: 13657
Analytical Method: 6020B
Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Antimony	2.0	U	1	2.0	0.50	ug/L	04/25/2019 1806
Arsenic	10	U	1	10	2.0	ug/L	04/25/2019 1806
Barium	10	U	1	10	1.3	ug/L	04/25/2019 1806
Beryllium	1.0	U	1	1.0	0.20	ug/L	04/25/2019 1806
Cadmium	1.0	U	1	1.0	0.20	ug/L	04/25/2019 1806
Chromium	5.0	U	1	5.0	1.3	ug/L	04/25/2019 1806
Cobalt	5.0	U	1	5.0	1.3	ug/L	04/25/2019 1806
Copper	40	U	1	40	10	ug/L	04/25/2019 1806
Lead	3.0	U	1	3.0	1.0	ug/L	04/25/2019 1806
Nickel	10	U	1	10	2.0	ug/L	04/25/2019 1806
Selenium	10	U	1	10	3.0	ug/L	04/25/2019 1806
Silver	2.0	U	1	2.0	0.30	ug/L	04/25/2019 1806
Thallium	1.0	U	1	1.0	0.20	ug/L	04/25/2019 1806
Vanadium	10	U	1	10	2.5	ug/L	04/25/2019 1806
Zinc	30	U	1	30	7.3	ug/L	04/25/2019 1806

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - LCS

Sample ID: UQ13657-002
Batch: 13657
Analytical Method: 6020B
Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	100	100		1	100	80-120	04/25/2019 1811
Arsenic	100	99		1	99	80-120	04/25/2019 1811
Barium	100	100		1	101	80-120	04/25/2019 1811
Beryllium	100	100		1	100	80-120	04/25/2019 1811
Cadmium	100	100		1	100	80-120	04/25/2019 1811
Chromium	100	100		1	101	80-120	04/25/2019 1811
Cobalt	100	100		1	101	80-120	04/25/2019 1811
Copper	100	100		1	101	80-120	04/25/2019 1811
Lead	100	100		1	100	80-120	04/25/2019 1811
Nickel	100	100		1	103	80-120	04/25/2019 1811
Selenium	100	110		1	107	80-120	04/25/2019 1811
Silver	100	100		1	101	80-120	04/25/2019 1811
Thallium	100	100		1	100	80-120	04/25/2019 1811
Vanadium	100	100		1	104	80-120	04/25/2019 1811
Zinc	100	110		1	106	80-120	04/25/2019 1811

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MS

Sample ID: UD10056-003MS
Batch: 13657
Analytical Method: 6020B
Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Antimony	0.0	100	99		1	99	70-130	04/25/2019 1834
Arsenic	0.0	100	97		1	97	70-130	04/25/2019 1834
Barium	25	100	120		1	100	70-130	04/25/2019 1834
Beryllium	0.0	100	72		1	72	70-130	04/25/2019 1834
Cadmium	0.0	100	97		1	97	70-130	04/25/2019 1834
Chromium	1.7	100	98		1	96	70-130	04/25/2019 1834
Cobalt	2.4	100	98		1	96	70-130	04/25/2019 1834
Copper	0.0	100	100		1	100	70-130	04/25/2019 1834
Lead	0.0	100	98		1	98	70-130	04/25/2019 1834
Nickel	2.8	100	99		1	97	70-130	04/25/2019 1834
Selenium	0.0	100	100		1	104	70-130	04/25/2019 1834
Silver	0.0	100	97		1	97	70-130	04/25/2019 1834
Thallium	0.0	100	98		1	98	70-130	04/25/2019 1834
Vanadium	0.0	100	100		1	101	70-130	04/25/2019 1834
Zinc	10	100	110		1	101	70-130	04/25/2019 1834

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS - MSD

Sample ID: UD10056-003MD
Batch: 13657
Analytical Method: 6020B

Matrix: Aqueous
Prep Method: 3005A
Prep Date: 04/17/2019 1825

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Antimony	0.0	100	100		1	101	2.0	70-130	20	04/25/2019 1852
Arsenic	0.0	100	98		1	98	1.3	70-130	20	04/25/2019 1852
Barium	25	100	130		1	101	1.2	70-130	20	04/25/2019 1852
Beryllium	0.0	100	71		1	71	1.4	70-130	20	04/25/2019 1852
Cadmium	0.0	100	99		1	99	1.4	70-130	20	04/25/2019 1852
Chromium	1.7	100	100		1	98	2.3	70-130	20	04/25/2019 1852
Cobalt	2.4	100	100		1	98	1.8	70-130	20	04/25/2019 1852
Copper	0.0	100	100		1	101	0.94	70-130	20	04/25/2019 1852
Lead	0.0	100	99		1	99	0.93	70-130	20	04/25/2019 1852
Nickel	2.8	100	100		1	98	1.7	70-130	20	04/25/2019 1852
Selenium	0.0	100	110		1	106	1.5	70-130	20	04/25/2019 1852
Silver	0.0	100	99		1	99	1.7	70-130	20	04/25/2019 1852
Thallium	0.0	100	99		1	99	0.76	70-130	20	04/25/2019 1852
Vanadium	0.0	100	100		1	102	1.5	70-130	20	04/25/2019 1852
Zinc	10	100	110		1	102	0.81	70-130	20	04/25/2019 1852

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MB

Sample ID: UQ13499-001
Batch: 13499
Analytical Method: 7470A
Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Result	Q	Dil	LOQ	DL	Units	Analysis Date
Mercury	0.20	U	1	0.20	0.12	ug/L	04/18/2019 0220

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - LCS

Sample ID: UQ13499-002
Batch: 13499
Analytical Method: 7470A
Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	2.0	1.9		1	96	80-120	04/18/2019 0222

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MS

Sample ID: UD10056-003MS
Batch: 13499
Analytical Method: 7470A

Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% Rec Limit	Analysis Date
Mercury	0.0	2.0	1.9		1	96	85-115	04/18/2019 0230

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection

P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit

N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

Mercury - MSD

Sample ID: UD10056-003MD
Batch: 13499
Analytical Method: 7470A
Matrix: Aqueous
Prep Method: 245.1
Prep Date: 04/17/2019 1556

Parameter	Sample Amount (ug/L)	Spike Amount (ug/L)	Result (ug/L)	Q	Dil	% Rec	% RPD	% Rec Limit	% RPD Limit	Analysis Date
Mercury	0.0	2.0	2.0		1	98	2.5	85-115	20	04/18/2019 0232

LOQ = Limit of Quantitation
DL = Detection Limit
LOD = Limit of Detection
P = The RPD between two GC columns exceeds 40%
J = Estimated result < LOQ and ≥ DL
U = Not detected at or above the detection limit
N = Recovery is out of criteria
+ = RPD is out of criteria

Note: Calculations are performed before rounding to avoid round-off errors in calculated results

ICP-MS Metals

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Draper Aden Associates

SDG No.: UD10056 **Method Type:** ICP-MS **SOW No.:**

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Lab Sample ID	Client Sample ID	QC Description
UD10056-001	5W8B	
UD10056-002	5W5B	
UD10056-003	5W7B	
UD10056-003S	5W7BS	Matrix Spike
UD10056-003SD	5W7BSD	Matrix Spike Duplicate
UD10056-004	5WC21	
UD10056-005	5WDUP	
UD10056-006	5WC22	
UD10056-007	5WC23	
UD10056-008	5W12A	

Were ICP interelement corrections applied?	Yes/No	Yes	
Were ICP background corrections applied?	Yes/No	Yes	
If yes - were raw data generated before applications of background corrections?	Yes/No	No	

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1									
	Antimony	200.23	200.0	100	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Arsenic	200.93	200.0	100	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Barium	206.50	200.0	103	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Beryllium	204.73	200.0	102	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Cadmium	199.57	200.0	100	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Chromium	204.93	200.0	102	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Cobalt	198.03	200.0	99	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Copper	191.83	200.0	96	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Lead	193.67	200.0	97	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Nickel	195.80	200.0	98	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Selenium	202.20	200.0	101	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Silver	181.57	200.0	91	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Thallium	198.03	200.0	99	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Vanadium	212.57	200.0	106	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
	Zinc	200.63	200.0	100	90.0 - 110.0	MS	4/25/2019	09:10	MS2042519A 6020B 200.8, g
CCV1									
	Antimony	300.83	300.0	100	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Arsenic	296.63	300.0	99	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Barium	308.77	300.0	103	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Beryllium	307.47	300.0	102	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Cadmium	296.87	300.0	99	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Chromium	300.70	300.0	100	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Cobalt	298.23	300.0	99	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Copper	279.90	300.0	93	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Lead	286.23	300.0	95	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Nickel	290.60	300.0	97	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Selenium	295.33	300.0	98	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Silver	289.33	300.0	96	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Thallium	296.03	300.0	99	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Vanadium	318.50	300.0	106	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g
	Zinc	294.43	300.0	98	90.0 - 110.0	MS	4/25/2019	09:27	MS2042519A 6020B 200.8, g

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV2									
	Antimony	304.87	300.0	102	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Arsenic	280.67	300.0	94	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Barium	310.53	300.0	104	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Beryllium	297.60	300.0	99	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Cadmium	296.17	300.0	99	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Chromium	299.80	300.0	100	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Cobalt	293.43	300.0	98	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Copper	271.00	300.0	90	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Lead	291.83	300.0	97	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Nickel	288.67	300.0	96	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Selenium	301.97	300.0	101	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Silver	293.57	300.0	98	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Thallium	301.83	300.0	101	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Vanadium	320.53	300.0	107	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
	Zinc	298.57	300.0	100	90.0 - 110.0	MS	4/25/2019	17:31	MS2042519A 6020B 200.8, g
CCV3									
	Antimony	305.57	300.0	102	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Arsenic	278.67	300.0	93	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Barium	308.43	300.0	103	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Beryllium	299.87	300.0	100	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Cadmium	297.13	300.0	99	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Chromium	297.67	300.0	99	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Cobalt	290.77	300.0	97	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Copper	272.60	300.0	91	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Lead	287.77	300.0	96	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Nickel	285.70	300.0	95	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Selenium	305.87	300.0	102	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Silver	293.37	300.0	98	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Thallium	296.57	300.0	99	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Vanadium	316.53	300.0	106	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g
	Zinc	307.33	300.0	102	90.0 - 110.0	MS	4/25/2019	18:40	MS2042519A 6020B 200.8, g

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
CCV4									
	Antimony	308.43	300.0	103	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Arsenic	278.37	300.0	93	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Barium	312.60	300.0	104	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Beryllium	299.37	300.0	100	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Cadmium	298.90	300.0	100	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Chromium	303.53	300.0	101	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Cobalt	292.77	300.0	98	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Copper	274.03	300.0	91	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Lead	291.30	300.0	97	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Nickel	288.13	300.0	96	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Selenium	306.60	300.0	102	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Silver	294.10	300.0	98	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Thallium	301.57	300.0	101	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Vanadium	321.60	300.0	107	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g
	Zinc	312.57	300.0	104	90.0 - 110.0	MS	4/25/2019	19:49	MS2042519A 6020B 200.8, g

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	DL	½ LOQ	M	Analysis Date	Analysis Time	Run
ICB1										
	Antimony	0.046	+/-1.000	U	0.500	1.000	MS	4/25/2019	09:15	MS2042519A 6
	Arsenic	0.061	+/-1.000	U	1.250	1.000	MS	4/25/2019	09:15	MS2042519A 6
	Barium	0.008	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Beryllium	0.018	+/-0.200	U	0.150	0.200	MS	4/25/2019	09:15	MS2042519A 6
	Cadmium	0.006	+/-0.250	U	0.125	0.250	MS	4/25/2019	09:15	MS2042519A 6
	Chromium	0.017	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Cobalt	0.010	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Copper	0.002	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Lead	0.011	+/-0.500	U	0.250	0.500	MS	4/25/2019	09:15	MS2042519A 6
	Nickel	-0.002	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Selenium	0.486	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Silver	0.154	+/-0.500	U	0.250	0.500	MS	4/25/2019	09:15	MS2042519A 6
	Thallium	0.008	+/-0.250	U	0.150	0.250	MS	4/25/2019	09:15	MS2042519A 6
	Vanadium	0.005	+/-2.500	U	2.500	2.500	MS	4/25/2019	09:15	MS2042519A 6
	Zinc	-0.011	+/-5.000	U	2.500	5.000	MS	4/25/2019	09:15	MS2042519A 6
CCB1										
	Antimony	0.149	+/-1.000	U	0.500	1.000	MS	4/25/2019	09:33	MS2042519A 6
	Arsenic	0.017	+/-1.000	U	1.250	1.000	MS	4/25/2019	09:33	MS2042519A 6
	Barium	0.006	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Beryllium	0.029	+/-0.200	U	0.150	0.200	MS	4/25/2019	09:33	MS2042519A 6
	Cadmium	0.016	+/-0.250	U	0.125	0.250	MS	4/25/2019	09:33	MS2042519A 6
	Chromium	0.027	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Cobalt	0.018	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Copper	0.018	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Lead	0.015	+/-0.500	U	0.250	0.500	MS	4/25/2019	09:33	MS2042519A 6
	Nickel	-0.003	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Selenium	0.217	+/-2.500	U	1.250	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Silver	0.075	+/-0.500	U	0.250	0.500	MS	4/25/2019	09:33	MS2042519A 6
	Thallium	0.016	+/-0.250	U	0.150	0.250	MS	4/25/2019	09:33	MS2042519A 6
	Vanadium	0.013	+/-2.500	U	2.500	2.500	MS	4/25/2019	09:33	MS2042519A 6
	Zinc	-0.015	+/-5.000	U	2.500	5.000	MS	4/25/2019	09:33	MS2042519A 6

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	DL	½ LOQ	M	Analysis Date	Analysis Time	Run
CCB2										
	Antimony	0.161	+/-1.000	U	0.500	1.000	MS	4/25/2019	17:37	MS2042519A 6
	Arsenic	-0.054	+/-1.000	U	1.250	1.000	MS	4/25/2019	17:37	MS2042519A 6
	Barium	0.012	+/-2.500	U	1.250	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Beryllium	0.004	+/-0.200	U	0.150	0.200	MS	4/25/2019	17:37	MS2042519A 6
	Cadmium	0.014	+/-0.250	U	0.125	0.250	MS	4/25/2019	17:37	MS2042519A 6
	Chromium	0.032	+/-2.500	U	1.250	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Cobalt	-0.015	+/-2.500	U	1.250	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Copper	-0.001	+/-2.500	U	1.250	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Lead	0.022	+/-0.500	U	0.250	0.500	MS	4/25/2019	17:37	MS2042519A 6
	Nickel	0.004	+/-2.500	U	1.250	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Selenium	0.109	+/-2.500	U	1.250	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Silver	0.020	+/-0.500	U	0.250	0.500	MS	4/25/2019	17:37	MS2042519A 6
	Thallium	0.006	+/-0.250	U	0.150	0.250	MS	4/25/2019	17:37	MS2042519A 6
	Vanadium	0.020	+/-2.500	U	2.500	2.500	MS	4/25/2019	17:37	MS2042519A 6
	Zinc	-0.021	+/-5.000	U	2.500	5.000	MS	4/25/2019	17:37	MS2042519A 6
CCB3										
	Antimony	0.165	+/-1.000	U	0.500	1.000	MS	4/25/2019	18:46	MS2042519A 6
	Arsenic	-0.035	+/-1.000	U	1.250	1.000	MS	4/25/2019	18:46	MS2042519A 6
	Barium	0.012	+/-2.500	U	1.250	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Beryllium	0.017	+/-0.200	U	0.150	0.200	MS	4/25/2019	18:46	MS2042519A 6
	Cadmium	0.020	+/-0.250	U	0.125	0.250	MS	4/25/2019	18:46	MS2042519A 6
	Chromium	0.050	+/-2.500	U	1.250	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Cobalt	-0.013	+/-2.500	U	1.250	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Copper	0.004	+/-2.500	U	1.250	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Lead	0.022	+/-0.500	U	0.250	0.500	MS	4/25/2019	18:46	MS2042519A 6
	Nickel	-0.007	+/-2.500	U	1.250	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Selenium	0.076	+/-2.500	U	1.250	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Silver	0.026	+/-0.500	U	0.250	0.500	MS	4/25/2019	18:46	MS2042519A 6
	Thallium	0.014	+/-0.250	U	0.150	0.250	MS	4/25/2019	18:46	MS2042519A 6
	Vanadium	0.008	+/-2.500	U	2.500	2.500	MS	4/25/2019	18:46	MS2042519A 6
	Zinc	0.026	+/-5.000	U	2.500	5.000	MS	4/25/2019	18:46	MS2042519A 6

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	DL	½ LOQ	M	Analysis Date	Analysis Time	Run
CCB4										
	Antimony	0.174	+/-1.000	U	0.500	1.000	MS	4/25/2019	19:55	MS2042519A 6
	Arsenic	-0.030	+/-1.000	U	1.250	1.000	MS	4/25/2019	19:55	MS2042519A 6
	Barium	0.054	+/-2.500	U	1.250	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Beryllium	0.031	+/-0.200	U	0.150	0.200	MS	4/25/2019	19:55	MS2042519A 6
	Cadmium	0.025	+/-0.250	U	0.125	0.250	MS	4/25/2019	19:55	MS2042519A 6
	Chromium	0.057	+/-2.500	U	1.250	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Cobalt	-0.013	+/-2.500	U	1.250	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Copper	0.009	+/-2.500	U	1.250	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Lead	0.042	+/-0.500	U	0.250	0.500	MS	4/25/2019	19:55	MS2042519A 6
	Nickel	0.048	+/-2.500	U	1.250	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Selenium	0.384	+/-2.500	U	1.250	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Silver	0.027	+/-0.500	U	0.250	0.500	MS	4/25/2019	19:55	MS2042519A 6
	Thallium	0.011	+/-0.250	U	0.150	0.250	MS	4/25/2019	19:55	MS2042519A 6
	Vanadium	0.022	+/-2.500	U	2.500	2.500	MS	4/25/2019	19:55	MS2042519A 6
	Zinc	0.113	+/-5.000	U	2.500	5.000	MS	4/25/2019	19:55	MS2042519A 6

- 4 -

INTERFERENCE CHECK SAMPLE

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

ICS Source: Inorganic Ventures **Instrument ID:** ICPMS2

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window	Analysis Date	Analysis Time	Run Number
ICSA								
	Antimony	0.20			-4.00 to 4.00	4/25/2019	09:21	MS2042519A 6
	Arsenic	0.20			-4.00 to 4.00	4/25/2019	09:21	MS2042519A 6
	Barium	0.22			-10.00 to 10.00	4/25/2019	09:21	MS2042519A 6
	Beryllium	-0.0023			-0.8000 to 0.8000	4/25/2019	09:21	MS2042519A 6
	Cadmium	0.021			-1.000 to 1.000	4/25/2019	09:21	MS2042519A 6
	Chromium	-1.7			-10.0 to 10.0	4/25/2019	09:21	MS2042519A 6
	Cobalt	0.47			-10.00 to 10.00	4/25/2019	09:21	MS2042519A 6
	Copper	0.50			-10.00 to 10.00	4/25/2019	09:21	MS2042519A 6
	Lead	0.060			-2.000 to 2.000	4/25/2019	09:21	MS2042519A 6
	Nickel	1.3			-10.0 to 10.0	4/25/2019	09:21	MS2042519A 6
	Selenium	0.57			-10.00 to 10.00	4/25/2019	09:21	MS2042519A 6
	Silver	0.020			-2.000 to 2.000	4/25/2019	09:21	MS2042519A 6
	Thallium	-0.012			-1.000 to 1.000	4/25/2019	09:21	MS2042519A 6
	Vanadium	-0.86			-10.00 to 10.00	4/25/2019	09:21	MS2042519A 6
	Zinc	1.8			-20.0 to 20.0	4/25/2019	09:21	MS2042519A 6

- 9 -

SERIAL DILUTION SAMPLE SUMMARY

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Matrix: WATER **Level:** **Client ID:** 5W7BL

Sample ID: **UD10056-003** **Serial Dilution ID:** **UD10056-003L**

Batch Number: 13657

Analyte	Initial Result ug/L	C	Serial Result ug/L	C	% Difference	Qual	Acceptance Limits	M
Antimony	0.50	U	2.50	U			10.00 %	MS
Arsenic	1.25	U	6.25	U			10.00 %	MS
Barium	24.73		24.59		0.6		10.00 %	MS
Beryllium	0.15	U	0.75	U			10.00 %	MS
Cadmium	0.13	U	0.63	U			10.00 %	MS
Chromium	1.70	J	6.25	U	100.0		10.00 %	MS
Cobalt	2.38	J	6.25	U	100.0		10.00 %	MS
Copper	2.67		6.25	U	100.0		10.00 %	MS
Lead	0.85		1.25	U	100.0		10.00 %	MS
Nickel	2.78		6.25	U	100.0		10.00 %	MS
Selenium	1.25	U	6.25	U			10.00 %	MS
Silver	0.25	U	1.25	U			10.00 %	MS
Thallium	0.15	U	0.75	U			10.00 %	MS
Vanadium	2.50	U	12.50	U			10.00 %	MS
Zinc	9.95		12.50	U	100.0		10.00 %	MS

9-IN

METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Shealy Environmental Services, I Contract: RAAP HWMU5

Lab Code: Shealy Case No.: Mod. Ref. No.: SDG No.: UD10056

Instrument Type: MS Instrument ID: ICPMS2

Preparation Method: 3005A

Concentration Units (ug/L, mg/kg, or ug): UG/L

Analyte	Wavelength/Mass	MDL
Antimony	123.00	0.500
Arsenic	75.00	1.25
Barium	135.00	1.3
Beryllium	9.00	0.150
Cadmium	114.00	0.13
Chromium	52.00	1.25
Cobalt	59.00	1.250
Copper	65.00	1.25
Lead	208.00	0.25
Nickel	60.00	1.250
Selenium	82.00	1.25
Silver	107.00	0.250
Thallium	205.00	0.150
Vanadium	51.00	2.500
Zinc	66.00	2.50

Comments:

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	0812																										
BLANK	1.00	0817			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
MW10971	1.00	0823																										
MW10956	1.00	0829																										
CAL1	1.00	0835			X	X	X	X			X	X	X		X				X		X	X		X	X	X	
CAL2	1.00	0840			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CAL3	1.00	0846			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CAL4	1.00	0852			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CAL5	1.00	0858																										
CAL6	1.00	0904																										
ICV1	1.00	0910			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
ICB1	1.00	0915			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
ICSA	1.00	0921			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CCV1	1.00	0927			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CCB1	1.00	0933			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1.00	0939																										
ZZZZZZ	1.00	0944																										
ZZZZZZ	1.00	0950																										
ZZZZZZ	1.00	0956																										
ZZZZZZ	1.00	1002																										
ZZZZZZ	1.00	1007																										
ZZZZZZ	5.00	1013																										
ZZZZZZ	1.00	1019																										
ZZZZZZ	1.00	1025																										
ZZZZZZ	1.00	1030																										
ZZZZZZ	1.00	1036																										
ZZZZZZ	1.00	1042																										
ZZZZZZ	1.00	1048																										
ZZZZZZ	1.00	1053																										
ZZZZZZ	1.00	1059																										
ZZZZZZ	1.00	1105																										
ZZZZZZ	1.00	1111																										
ZZZZZZ	1.00	1116																										
ZZZZZZ	1.00	1122																										
ZZZZZZ	1.00	1128																										
ZZZZZZ	1.00	1134																										

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1139																								
ZZZZZZ	1.00	1145																								
ZZZZZZ	1.00	1151																								
ZZZZZZ	1.00	1157																								
ZZZZZZ	1.00	1202																								
ZZZZZZ	1.00	1208																								
ZZZZZZ	1.00	1214																								
ZZZZZZ	1.00	1220																								
ZZZZZZ	1.00	1225																								
ZZZZZZ	1.00	1231																								
ZZZZZZ	1.00	1237																								
ZZZZZZ	5.00	1243																								
ZZZZZZ	1.00	1248																								
ZZZZZZ	1.00	1254																								
ZZZZZZ	1.00	1300																								
ZZZZZZ	1.00	1306																								
ZZZZZZ	1.00	1311																								
ZZZZZZ	1.00	1317																								
ZZZZZZ	1.00	1323																								
ZZZZZZ	1.00	1329																								
ZZZZZZ	1.00	1334																								
ZZZZZZ	1.00	1340																								
ZZZZZZ	1.00	1346																								
ZZZZZZ	1.00	1352																								
ZZZZZZ	1.00	1357																								
ZZZZZZ	1.00	1403																								
ZZZZZZ	1.00	1409																								
ZZZZZZ	1.00	1415																								
ZZZZZZ	5.00	1420																								
ZZZZZZ	1.00	1426																								
ZZZZZZ	1.00	1432																								
ZZZZZZ	1.00	1438																								
ZZZZZZ	1.00	1443																								
ZZZZZZ	1.00	1449																								
ZZZZZZ	1.00	1455																								
ZZZZZZ	1.00	1501																								

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																							
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	1507																									
ZZZZZZ	1.00	1512																									
ZZZZZZ	1.00	1518																									
ZZZZZZ	1.00	1524																									
ZZZZZZ	1.00	1530																									
ZZZZZZ	1.00	1535																									
ZZZZZZ	1.00	1541																									
ZZZZZZ	1.00	1547																									
ZZZZZZ	1.00	1553																									
ZZZZZZ	1.00	1558																									
ZZZZZZ	1.00	1604																									
ZZZZZZ	1.00	1610																									
ZZZZZZ	1.00	1616																									
ZZZZZZ	1.00	1622																									
ZZZZZZ	1.00	1627																									
ZZZZZZ	1.00	1633																									
ZZZZZZ	1.00	1639																									
ZZZZZZ	1.00	1645																									
ZZZZZZ	1.00	1650																									
ZZZZZZ	1.00	1656																									
ZZZZZZ	5.00	1702																									
ZZZZZZ	1.00	1708																									
ZZZZZZ	1.00	1714																									
ZZZZZZ	1.00	1719																									
ZZZZZZ	1.00	1725																									
CCV2	1.00	1731			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CCB2	1.00	1737			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1.00	1742																									
ZZZZZZ	1.00	1748																									
ZZZZZZ	1.00	1754																									
ZZZZZZ	1.00	1800																									
UO13657-001	1.00	1806			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UO13657-002	1.00	1811			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-001	1.00	1817										X															
UD10056-002	1.00	1823			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-003	1.00	1829			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
UD10056-003S	1.00	1834			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CCV3	1.00	1840			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CCB3	1.00	1846			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-003SD	1.00	1852			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-003L	5.00	1857			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1.00	1903																									
UD10056-004	1.00	1909			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-005	1.00	1915			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-006	1.00	1920			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-007	1.00	1926			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
UD10056-008	1.00	1932										X															
ZZZZZZ	1.00	1938																									
ZZZZZZ	10.00	1944																									
CCV4	1.00	1949			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
CCB4	1.00	1955			X	X	X	X	X		X	X	X		X				X		X	X		X	X	X	
ZZZZZZ	1.00	2001																									
ZZZZZZ	1.00	2007																									
ZZZZZZ	1.00	2013																									
ZZZZZZ	1.00	2018																									
ZZZZZZ	1.00	2024																									
ZZZZZZ	1.00	2030																									
ZZZZZZ	1.00	2036																									
ZZZZZZ	1.00	2041																									
ZZZZZZ	1.00	2047																									
ZZZZZZ	1.00	2053																									
ZZZZZZ	1.00	2059																									
ZZZZZZ	1.00	2105																									
ZZZZZZ	1.00	2110																									
ZZZZZZ	1.00	2116																									
ZZZZZZ	1.00	2122																									
ZZZZZZ	5.00	2128																									
ZZZZZZ	1.00	2134																									
ZZZZZZ	1.00	2139																									
ZZZZZZ	1.00	2145																									
ZZZZZZ	1.00	2151																									
ZZZZZZ	1.00	2157																									

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2203																								
ZZZZZZ	1.00	2208																								
ZZZZZZ	1.00	2214																								
ZZZZZZ	1.00	2220																								
ZZZZZZ	5.00	2226																								
ZZZZZZ	1.00	2231																								
ZZZZZZ	1.00	2237																								
ZZZZZZ	1.00	2243																								
ZZZZZZ	1.00	2249																								
ZZZZZZ	1.00	2255																								
ZZZZZZ	1.00	2301																								
ZZZZZZ	1.00	2306																								
ZZZZZZ	1.00	2312																								
ZZZZZZ	1.00	2318																								
ZZZZZZ	1.00	2324																								
ZZZZZZ	1.00	2329																								
ZZZZZZ	1.00	2335																								
ZZZZZZ	1.00	2341																								
ZZZZZZ	1.00	2347																								
ZZZZZZ	1.00	2353																								
ZZZZZZ	1.00	2358																								
ZZZZZZ	1.00	0004																								
ZZZZZZ	1.00	0010																								
ZZZZZZ	1.00	0016																								
ZZZZZZ	1.00	0022																								
ZZZZZZ	1.00	0028																								
ZZZZZZ	1.00	0033																								
ZZZZZZ	1.00	0039																								
ZZZZZZ	1.00	0045																								
ZZZZZZ	1.00	0051																								
ZZZZZZ	1.00	0057																								
ZZZZZZ	1.00	0102																								
ZZZZZZ	1.00	0108																								
ZZZZZZ	5.00	0114																								
ZZZZZZ	1.00	0120																								
ZZZZZZ	1.00	0126																								

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	0131																								
ZZZZZZ	1.00	0137																								
ZZZZZZ	1.00	0143																								
ZZZZZZ	1.00	0149																								
ZZZZZZ	1.00	0155																								
ZZZZZZ	1.00	0200																								
ZZZZZZ	1.00	0206																								
ZZZZZZ	1.00	0212																								
ZZZZZZ	1.00	0218																								
ZZZZZZ	1.00	0224																								
ZZZZZZ	1.00	0230																								
ZZZZZZ	1.00	0235																								
ZZZZZZ	1.00	0241																								
ZZZZZZ	1.00	0247																								
ZZZZZZ	1.00	0253																								
ZZZZZZ	1.00	0259																								
ZZZZZZ	1.00	0304																								
ZZZZZZ	1.00	0310																								
ZZZZZZ	1.00	0316																								
ZZZZZZ	1.00	0322																								
ZZZZZZ	1.00	0328																								
ZZZZZZ	5.00	0334																								
ZZZZZZ	5.00	0339																								
ZZZZZZ	1.00	0345																								
ZZZZZZ	1.00	0351																								
ZZZZZZ	1.00	0357																								
ZZZZZZ	1.00	0403																								
ZZZZZZ	1.00	0408																								
ZZZZZZ	1.00	0414																								
ZZZZZZ	5.00	0420																								
ZZZZZZ	1.00	0426																								
ZZZZZZ	1.00	0432																								
ZZZZZZ	1.00	0437																								
ZZZZZZ	1.00	0443																								
ZZZZZZ	1.00	0449																								
ZZZZZZ	1.00	0455																								

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: ICPMS2 Run Number: MS2042519A 6020B 200.8, generate

Start Date: 4/25/2019 End Date: 4/26/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	5.00	0501																								
ZZZZZZ	1.00	0507																								
ZZZZZZ	1.00	0512																								
ZZZZZZ	1.00	0518																								
ZZZZZZ	1.00	0524																								
ZZZZZZ	1.00	0530																								
ZZZZZZ	5.00	0536																								
ZZZZZZ	1.00	0542																								
ZZZZZZ	1.00	0547																								
ZZZZZZ	1.00	0553																								
ZZZZZZ	1.00	0559																								
ZZZZZZ	2.00	0605																								
ZZZZZZ	1.00	0611																								
ZZZZZZ	1.00	0616																								
ZZZZZZ	1.00	0622																								
ZZZZZZ	5.00	0628																								
ZZZZZZ	1.00	0634																								
ZZZZZZ	1.00	0640																								
ZZZZZZ	1.00	0646																								
ZZZZZZ	1.00	0651																								
ZZZZZZ	1.00	0657																								
ZZZZZZ	1.00	0703																								
ZZZZZZ	1.00	0709																								
ZZZZZZ	1.00	0715																								
ZZZZZZ	1.00	0721																								
ZZZZZZ	1.00	0726																								
ZZZZZZ	1.00	0732																								
ZZZZZZ	1.00	0738																								
ZZZZZZ	1.00	0744																								
ZZZZZZ	5.00	0750																								

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
TUNE	ZZZZZZ	0812	0											
BLANK	BLANK IM9353-01	0817	100		100		100		100		100		100	
MW10971	MW10971	0823	102		100		100		99		100		101	
MW10956	MW10956	0829	103		102		100		102		102		103	
CAL1	CAL1 MW-10957	0835	99		98		101		100		99		99	
CAL2	CAL2 MW-10958	0840	102		100		100		102		102		101	
CAL3	CAL3 MW-10931	0846	96		96		99		98		97		97	
CAL4	CAL4 MW-10932	0852	99		99		99		102		100		101	
CAL5	CAL5 MW-10933	0858	90		91		93		97		95		95	
CAL6	CAL6 MW-10934	0904	83		86		89		94		89		89	
ICV1	ICV1	0910	89		91		94		96		94		93	
ICB1	ICB1	0915	95		95		98		97		95		96	
ICSA	ICSA	0921	88		92		94		95		95		94	
CCV1	CCV1	0927	90		93		93		98		96		96	
CCB1	CCB1	0933	95		97		98		99		97		98	
LR	ZZZZZZ	0939	0											
UQ14125-001	ZZZZZZ	0944	0											
UQ14125-002	ZZZZZZ	0950	0											
UD10040-001	ZZZZZZ	0956	0											
UD10040-001	ZZZZZZ	1002	0											
UD10040-001	ZZZZZZ	1007	0											
UD10040-001	ZZZZZZ	1013	0											
UD18070-001	ZZZZZZ	1019	0											
UD18070-002	ZZZZZZ	1025	0											
UD18070-003	ZZZZZZ	1030	0											
CCV	ZZZZZZ	1036	0											
CCB	ZZZZZZ	1042	0											
UD12064-006	ZZZZZZ	1048	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UD12064-008	ZZZZZZ	1053	0											
UD12064-009	ZZZZZZ	1059	0											
UQ13852-001	ZZZZZZ	1105	0											
UQ13852-002	ZZZZZZ	1111	0											
UD12075-001	ZZZZZZ	1116	0											
UQ14099-001	ZZZZZZ	1122	0											
UQ14099-002	ZZZZZZ	1128	0											
UD09105-001	ZZZZZZ	1134	0											
UD09105-002	ZZZZZZ	1139	0											
CCV	ZZZZZZ	1145	0											
CCB	ZZZZZZ	1151	0											
UD09105-003	ZZZZZZ	1157	0											
UD09105-004	ZZZZZZ	1202	0											
UD09105-007	ZZZZZZ	1208	0											
UD09105-008	ZZZZZZ	1214	0											
UD09105-009	ZZZZZZ	1220	0											
UD10100-001	ZZZZZZ	1225	0											
UD10100-001	ZZZZZZ	1231	0											
UD10100-001	ZZZZZZ	1237	0											
UD10100-001	ZZZZZZ	1243	0											
UD10100-001	ZZZZZZ	1248	0											
CCV	ZZZZZZ	1254	0											
CCB	ZZZZZZ	1300	0											
UD10100-002	ZZZZZZ	1306	0											
UD10100-003	ZZZZZZ	1311	0											
UD10100-004	ZZZZZZ	1317	0											
UD10100-005	ZZZZZZ	1323	0											
UD10100-006	ZZZZZZ	1329	0											
UD10100-007	ZZZZZZ	1334	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UQ14100-001	ZZZZZZ	1340	0											
UQ14100-002	ZZZZZZ	1346	0											
UD10113-001	ZZZZZZ	1352	0											
UD10113-001	ZZZZZZ	1357	0											
CCV	ZZZZZZ	1403	0											
CCB	ZZZZZZ	1409	0											
UD10113-001	ZZZZZZ	1415	0											
UD10113-001	ZZZZZZ	1420	0											
UD10113-001	ZZZZZZ	1426	0											
UD10113-002	ZZZZZZ	1432	0											
UD10113-003	ZZZZZZ	1438	0											
UD10113-004	ZZZZZZ	1443	0											
UD10113-005	ZZZZZZ	1449	0											
UD10113-008	ZZZZZZ	1455	0											
UD10113-009	ZZZZZZ	1501	0											
UD10113-010	ZZZZZZ	1507	0											
CCV	ZZZZZZ	1512	0											
CCB	ZZZZZZ	1518	0											
UD10113-011	ZZZZZZ	1524	0											
UD11082-011	ZZZZZZ	1530	0											
UD11082-012	ZZZZZZ	1535	0											
UD11082-013	ZZZZZZ	1541	0											
UQ13656-001	ZZZZZZ	1547	0											
UQ13656-002	ZZZZZZ	1553	0											
UD09114-001	ZZZZZZ	1558	0											
UD09114-004	ZZZZZZ	1604	0											
UD09114-006	ZZZZZZ	1610	0											
UD09114-008	ZZZZZZ	1616	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
CCV	ZZZZZZ	1622	0											
CCB	ZZZZZZ	1627	0											
UD11011-001	ZZZZZZ	1633	0											
UD11011-002	ZZZZZZ	1639	0											
UD11011-003	ZZZZZZ	1645	0											
UD11011-003	ZZZZZZ	1650	0											
UD11011-003	ZZZZZZ	1656	0											
UD11011-003	ZZZZZZ	1702	0											
UD11011-003	ZZZZZZ	1708	0											
UD11011-004	ZZZZZZ	1714	0											
UD11011-005	ZZZZZZ	1719	0											
UD11011-006	ZZZZZZ	1725	0											
CCV2	CCV2	1731	75		78		91		89		79		81	
CCB2	CCB2	1737	83		84		98		93		83		86	
UD11011-007	ZZZZZZ	1742	0											
UD11011-008	ZZZZZZ	1748	0											
UD11011-009	ZZZZZZ	1754	0											
UD11011-010	ZZZZZZ	1800	0											
UQ13657-001	UQ13657-001MB	1806	85		87		103		95		86		90	
UQ13657-002	LCS	1811	85		87		104		95		86		90	
UD10056-001	5W8B	1817	85		87		105		95		86		91	
UD10056-002	5W5B	1823	84		87		102		96		87		92	
UD10056-003	5W7B	1829	87		89		107		97		88		93	
UD10056-003	5W7BS	1834	87		89		107		98		89		94	
CCV3	CCV3	1840	75		79		93		92		80		82	
CCB3	CCB3	1846	79		81		98		93		80		84	
UD10056-003	5W7BSD	1852	83		87		103		96		86		91	
UD10056-003	5W7BL	1857	82		84		101		95		82		88	
UD10056-003	ZZZZZZ	1903	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UD10056-004	5WC21	1909	83		87		100		96		88		108	
UD10056-005	5WDUP	1915	82		86		100		96		87		108	
UD10056-006	5WC22	1920	78		83		98		92		84		96	
UD10056-007	5WC23	1926	79		83		101		93		84		91	
UD10056-008	5W12A	1932	82		86		98		93		85		90	
UD12100-001	ZZZZZZ	1938	0											
UD09114-001	ZZZZZZ	1944	0											
CCV4	CCV4	1949	73		76		95		90		77		81	
CCB4	CCB4	1955	79		82		101		94		80		84	
ICSA	ZZZZZZ	2001	0											
UD12100-002	ZZZZZZ	2007	0											
UD12100-003	ZZZZZZ	2013	0											
UD12100-004	ZZZZZZ	2018	0											
UD12100-005	ZZZZZZ	2024	0											
UD12100-006	ZZZZZZ	2030	0											
UD12100-007	ZZZZZZ	2036	0											
UD12100-008	ZZZZZZ	2041	0											
UD12100-009	ZZZZZZ	2047	0											
UD12100-010	ZZZZZZ	2053	0											
CCV	ZZZZZZ	2059	0											
CCB	ZZZZZZ	2105	0											
UD12100-013	ZZZZZZ	2110	0											
UD12100-013	ZZZZZZ	2116	0											
UD12100-013	ZZZZZZ	2122	0											
UD12100-013	ZZZZZZ	2128	0											
UD12100-013	ZZZZZZ	2134	0											
UQ13221-001	ZZZZZZ	2139	0											
UQ13221-002	ZZZZZZ	2145	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UC27001-040	ZZZZZZ	2151	0											
UC27001-041	ZZZZZZ	2157	0											
UC27001-041	ZZZZZZ	2203	0											
CCV	ZZZZZZ	2208	0											
CCB	ZZZZZZ	2214	0											
UC27001-041	ZZZZZZ	2220	0											
UC27001-041	ZZZZZZ	2226	0											
UC27001-041	ZZZZZZ	2231	0											
UC27001-042	ZZZZZZ	2237	0											
UC27001-043	ZZZZZZ	2243	0											
UC27001-044	ZZZZZZ	2249	0											
UC27001-045	ZZZZZZ	2255	0											
UC27001-046	ZZZZZZ	2301	0											
UC27001-047	ZZZZZZ	2306	0											
UC27001-048	ZZZZZZ	2312	0											
CCV	ZZZZZZ	2318	0											
CCB	ZZZZZZ	2324	0											
UC27001-049	ZZZZZZ	2329	0											
UC27001-050	ZZZZZZ	2335	0											
UC27001-051	ZZZZZZ	2341	0											
UC27001-052	ZZZZZZ	2347	0											
UC27001-053	ZZZZZZ	2353	0											
UC27001-054	ZZZZZZ	2358	0											
UC27026-002	ZZZZZZ	0004	0											
UC27026-013	ZZZZZZ	0010	0											
UC27096-002	ZZZZZZ	0016	0											
UC27096-006	ZZZZZZ	0022	0											
CCV	ZZZZZZ	0028	0											
CCB	ZZZZZZ	0033	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UC27096-007	ZZZZZZ	0039	0											
UQ13629-001	ZZZZZZ	0045	0											
UQ13629-002	ZZZZZZ	0051	0											
UC27026-001	ZZZZZZ	0057	0											
UC27026-001	ZZZZZZ	0102	0											
UC27026-001	ZZZZZZ	0108	0											
UC27026-001	ZZZZZZ	0114	0											
UC27026-001	ZZZZZZ	0120	0											
UC27026-003	ZZZZZZ	0126	0											
UC27026-004	ZZZZZZ	0131	0											
CCV	ZZZZZZ	0137	0											
CCB	ZZZZZZ	0143	0											
UC27026-005	ZZZZZZ	0149	0											
UC27026-006	ZZZZZZ	0155	0											
UC27026-007	ZZZZZZ	0200	0											
UC27026-008	ZZZZZZ	0206	0											
UC27026-009	ZZZZZZ	0212	0											
UC27026-010	ZZZZZZ	0218	0											
UC27026-011	ZZZZZZ	0224	0											
UC27026-012	ZZZZZZ	0230	0											
UC27096-002	ZZZZZZ	0235	0											
UC27096-006	ZZZZZZ	0241	0											
CCV	ZZZZZZ	0247	0											
CCB	ZZZZZZ	0253	0											
UC27096-007	ZZZZZZ	0259	0											
UC27096-008	ZZZZZZ	0304	0											
UC27096-011	ZZZZZZ	0310	0											
UC27096-012	ZZZZZZ	0316	0											

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: NRAS No.: SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UC27096-013	ZZZZZZ	0322	0											
UD16072-001	ZZZZZZ	0328	0											
UD16072-001	ZZZZZZ	0334	0											
UD17042-001	ZZZZZZ	0339	0											
UD18057-003	ZZZZZZ	0345	0											
UD18061-001	ZZZZZZ	0351	0											
CCV	ZZZZZZ	0357	0											
CCB	ZZZZZZ	0403	0											
UD18061-001	ZZZZZZ	0408	0											
UD18061-001	ZZZZZZ	0414	0											
UD18061-001	ZZZZZZ	0420	0											
UQ14094-001	ZZZZZZ	0426	0											
UQ14094-002	ZZZZZZ	0432	0											
UD12091-001	ZZZZZZ	0437	0											
UD15036-001	ZZZZZZ	0443	0											
UD16061-002	ZZZZZZ	0449	0											
UD15018-001	ZZZZZZ	0455	0											
UD15018-001	ZZZZZZ	0501	0											
CCV	ZZZZZZ	0507	0											
CCB	ZZZZZZ	0512	0											
UD15030-001	ZZZZZZ	0518	0											
UD15030-001	ZZZZZZ	0524	0											
UD15030-001	ZZZZZZ	0530	0											
UD15030-001	ZZZZZZ	0536	0											
UD15030-002	ZZZZZZ	0542	0											
UD15030-002	ZZZZZZ	0547	0											
UD15046-001	ZZZZZZ	0553	0											
UD16038-003	ZZZZZZ	0559	0											
UD16067-001	ZZZZZZ	0605	0											

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: Shealy Environmental Services, In Contract: RAAP HWMU5

Lab Code: Shealy Case No.: _____ NRAS No.: _____ SDG NO.: UD10056

ICP-MS Instrument ID: ICPMS2 Start Date: 04/25/2019 End Date: 04/25/2019

EPA Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Bi	Q	Element In	Q	Element Li	Q	Element Sc	Q	Element Tb	Q	Element Y	Q
UD16075-001	ZZZZZZ	0611	0											
CCV	ZZZZZZ	0616	0											
CCB	ZZZZZZ	0622	0											
UD15029-001	ZZZZZZ	0628	0											
UD16039-001	ZZZZZZ	0634	0											
UD16054-002	ZZZZZZ	0640	0											
UD16074-001	ZZZZZZ	0646	0											
UD17043-001	ZZZZZZ	0651	0											
UD17044-003	ZZZZZZ	0657	0											
UD17055-001	ZZZZZZ	0703	0											
UD17057-001	ZZZZZZ	0709	0											
UD17103-003	ZZZZZZ	0715	0											
UD16047-001	ZZZZZZ	0721	0											
CCV	ZZZZZZ	0726	0											
CCB	ZZZZZZ	0732	0											
UQ14280-001	ZZZZZZ	0738	0											
UQ14280-002	ZZZZZZ	0744	0											
UD18064-001	ZZZZZZ	0750	0											

FORM XV-IN

FORM 15-IN

INITIAL CALIBRATION

Lab Name: Shealy Environmental Services, Inc. **Contract:** RAAP HWMU5

Lab Code: Shealy **Case No.:** **MA No.:** **SDG No.:** UD10056

Instrument ID: ICPMS2 **Start Date:** 4/25/2019

Analytical Method: ICP-MS **Run Batch:** MS2042519A 6020B 200.8, generated 0

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	0.00	0	0	2.00	2.0	-1	10.0	10	0
Arsenic	0.00	0	0	2.00	1.8	-11	10.0	9.6	-4
Barium	0.00	0	0	5.00	4.9	-3	25.0	25	-1
Beryllium	0.00	0	0	0.400	0.42	4	2.00	2.0	-2
Cadmium	0.00	0	0			0	0.500	0.54	9
Chromium	0.00	0	0	5.00	4.9	-1	25.0	25	1
Cobalt	0.00	0	0	1.00	0.99	-1	5.00	5.0	0
Copper	0.00	0	0	5.00	5.0	-1	25.0	24	-2
Lead	0.00	0	0	1.00	1.00	0	5.00	4.9	-2
Nickel	0.00	0	0	5.00	4.9	-3	25.0	25	0
Selenium	0.00	0	0	5.00	4.9	-2	25.0	24	-2
Silver	0.00	0	0	1.00	0.94	-6	5.00	4.8	-4
Thallium	0.00	0	0	0.500	0.52	4	2.50	2.5	-1
Vanadium	0.00	0	0	5.00	5.0	1	25.0	26	2
Zinc	0.00	0	0	10.0	10.0	0	50.0	50	-1

FORM 15-IN

INITIAL CALIBRATION

Lab Name: Shealy Environmental Services, **Contract:** RAAP HWMU5

Lab Code: Shealy **Case No.:** _____ **MA No.:** _____ **SDG No.:** UD10056

Instrument ID: ICPMS2 **Start Date:** 4/25/2019

Analytical Method: ICP-MS **Run Batch:** MS2042519A 6020B 200.8, generat

Concentration Units: ug/L

Analyte	True	Found	%D	True	Found	%D	True	Found	%D
Antimony	250	248	-1	500	501	0			
Arsenic	250	248	-1	500	500	0			
Barium	250	252	1	500	501	0			
Beryllium	250	249	-1	500	502	0			
Cadmium	250	248	-1	500	501	0			
Chromium	250	255	2	500	497	-1			
Cobalt	250	254	2	500	498	0			
Copper	250	248	-1	500	502	0			
Lead	250	249	0	500	501	0			
Nickel	250	255	2	500	508	2			
Selenium	250	250	0	500	500	0			
Silver	250	247	-1	500	503	1			
Thallium	250	255	2	500	498	0			
Vanadium	250	259	4	500	500	0			
Zinc	250	246	-1	500	502	0			

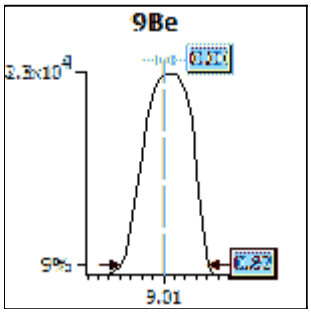
Raw Sample Data

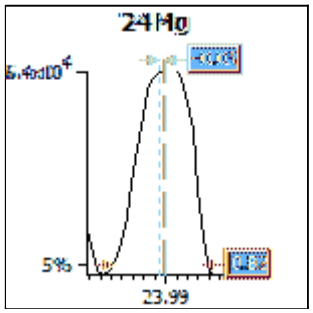
Performance Report

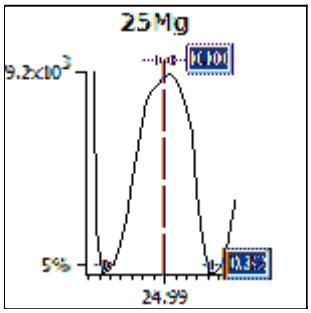
Sample details
Acquired at : 04/25/2019 07:58:48
Report name : Shealy Performance Report ICPMS2 [04/04/2019 12:35:02]

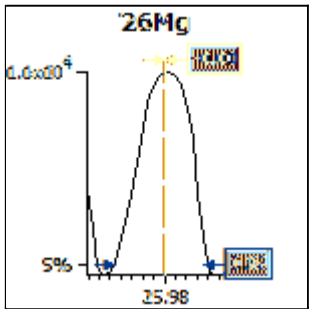
Mass Calibration verification

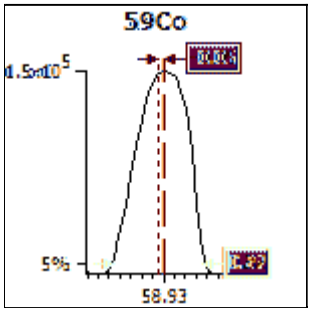
Acquisition parameters
Sweeps : 25
Dwell : 10.0 mSecs
Point spacing : 0.05 amu
Peak width measured at 5% of the peak maximum

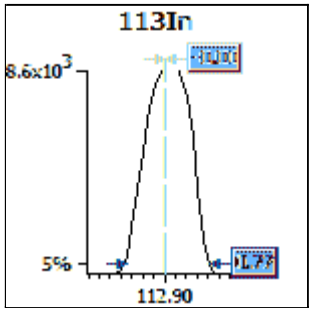


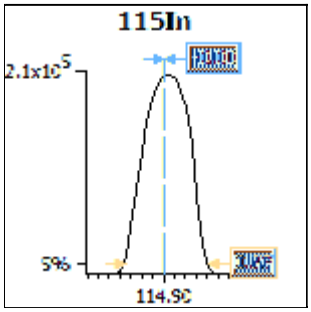


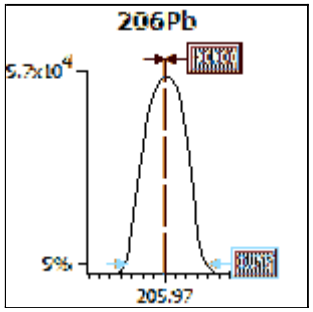


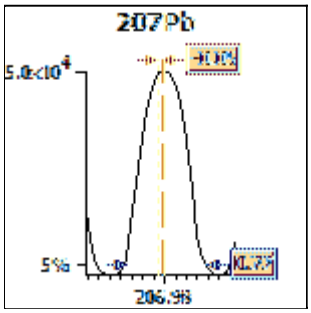


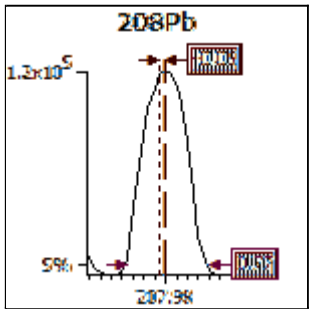












Analyte	Limits			Results	
	Max. width	Min. width	Max. error	Peak width	Peak error
9Be	0.85	0.65	0.10	0.82	0.00
24Mg	0.85	0.65	0.10	0.82	-0.05
25Mg	0.85	0.65	0.10	0.82	0.00
26Mg	0.85	0.65	0.10	0.82	-0.00
59Co	0.85	0.65	0.10	0.82	-0.05
113In	0.85	0.65	0.10	0.77	-0.00
115In	0.85	0.65	0.10	0.77	-0.00
206Pb	0.85	0.65	0.10	0.77	-0.00
207Pb	0.85	0.65	0.10	0.77	-0.05
208Pb	0.85	0.65	0.10	0.77	-0.05

Sample details
Acquired at : 04/25/2019 07:58:48
Report name : Shealy Performance Report ICPMS2 [04/04/2019 12:35:02]

Tune conditions

Major	
Extraction	-86.3
Lens 1	-1004
Lens 2	-83.1
Focus	16.9
D1	-40.0
D2	-146
Pole Bias	-1.0
Hexapole Bias	-4.0
Nebuliser	0.79

Minor	
Lens 3	-196.1
Forward power	1404
Horizontal	61
Vertical	641
DA	-58.0
Cool	13.0
Auxiliary	1.00
Sampling Depth	100

Global	
Standard resolution	110
High resolution	105
Analogue Detector	2127
PC Detector	3353

Add. Gases

Sensitivity and stability results

Acquisition parameters
Sweeps : 130

Run	Time	5Bkg	9Be	24Mg	25Mg	26Mg	56Ar O	59Co	136Ba++	101Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	-	5.0%	5.0%	5.0%	5.0%	-	5.0%	-	-
	Countrate	-	>5000	>1000	>1000	>1000	-	>10000	-	-
1	08:00:12	0.000	21456.830	65559.389	8915.138	10660.093	415518.51	148296.69	1638.609	2.308
2	08:00:44	0.769	21229.374	64732.727	8900.509	10708.611	412838.13	147491.44	1631.685	3.846
3	08:01:16	0.769	21127.599	64709.486	8864.320	10425.975	412740.78	146219.61	1560.134	0.769
4	08:01:48	0.000	21917.928	65142.562	8933.618	10737.106	412849.39	148578.94	1692.465	0.000
5	08:02:20	1.538	21472.251	65474.162	8856.620	10588.470	412117.27	147999.60	1639.379	0.000
x		0.615	21440.797	65123.665	8894.041	10624.051	413212.82	147717.26	1632.454	1.385
σ		0.64	304.83	399.20	32.93	124.23	1323.98	928.97	47.22	1.67
%RSD		104.583	1.422	0.613	0.370	1.169	0.320	0.629	2.892	120.442

Run	Time	113In	115In	138Ba	140Ce	156Ce O	206Pb	207Pb	208Pb	220Bkg
Dwell (mSecs)		10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
Limits	%RSD	5.0%	5.0%	-	-	-	5.0%	5.0%	5.0%	-
	Countrate	>1000	>10000	-	-	-	>10000	>10000	>10000	<2
1	08:00:12	8955.948	209723.85	167198.14	218601.66	3874.672	58327.285	51377.850	124422.59	0.769
2	08:00:44	9095.317	210322.83	166084.15	218414.94	4023.198	58615.282	51148.099	124729.05	0.000
3	08:01:16	8874.329	206470.64	163706.22	215814.71	3916.998	57887.565	50498.328	122900.56	0.769
4	08:01:48	9077.607	215720.98	171218.09	224321.57	4092.459	60591.251	53655.567	128950.42	1.538
5	08:02:20	9404.092	212613.67	169366.97	222257.96	4011.654	60175.426	52613.348	127949.50	0.769
x		9081.459	210970.39	167514.71	219882.17	3983.796	59119.362	51858.638	125790.42	0.769
σ		201.84	3445.63	2906.77	3379.70	87.33	1191.69	1263.43	2549.31	0.54
%RSD		2.223	1.633	1.735	1.537	2.192	2.016	2.436	2.027	70.711

Ratio results

Run	Time	56Ar O/59Co	136Ba++/138Ba	115In/101Bkg	156Ce O/140Ce
Ratio limits		-	-	-	-
1	08:00:12	2.802	0.010	90880.322	0.018
2	08:00:44	2.799	0.010	54683.925	0.018
3	08:01:16	2.823	0.010	268411.82	0.018
4	08:01:48	2.779	0.010	INF	0.018
5	08:02:20	2.785	0.010	INF	0.018
x		2.7974	0.0097	137992.02	0.0181
σ		0.02	0.00	110701.44	0.00
%RSD		0.6144	1.4461	80.2231	1.4268

Result : The performance report passed.

FORM 11-IN

ICP-MS INTERNAL STANDARD ASSOCIATION

Lab Name: Shealy Environmental Services, I **Contract:**

Lab Code: Shealy **Case No.:** **MA No.:** **SDG No.:**

Instrument ID: ICPMS2

Run Batch: MS2042519A 6020B 200.8, gen **Date:** 4/25/2019

Analyte	Assoc. Internal Standard 1	Assoc. Internal Standard 2
Aluminum	6Li	
Antimony	159Tb	
Arsenic	45Sc	
Barium	115In	
Beryllium	6Li	45Sc
Boron	6Li	45Sc
Cadmium	115In	
Calcium	6Li	
Chromium	45Sc	
Cobalt	45Sc	
Copper	45Sc	
Iron	45Sc	
Lead	159Tb	
Magnesium	6Li	45Sc
Manganese	45Sc	
Molybdenum	89Y	
Nickel	45Sc	
Potassium	6Li	
Selenium	115In	
Silicon	45Sc	
Silver	115In	
Sodium	45Sc	
Thallium	159Tb	
Tin	115In	159Tb
Titanium	45Sc	
Vanadium	45Sc	
Zinc	115In	

Experiment Details

Description	PlasmaLab Template BlankExperiment
Template Filename	C:\Program Files\Thermo Fisher\PlasmaLab\data\MS2042319C 6020B 200.8.tee
Created By User	DemoX
Analyte Database	200_8.tea
Creation Timestamp	12/01/2004 11:33:01
Last Edited By	eqi.im
Last Edit Timestamp	04/26/2019 10:47:55
Instrument Detector	Simultaneous
Database Version	3.51
Acquisition Mode	Unknown

Numerical Results report key (text indicates meaning)

Blue text indicates that cell is a statistic.
Underlining indicates that a data warning flag is set.

Column headings
- No flag
- Semi Quant
- Standard Addition
- Multi Element

Result cells
- Internal Standard
- Excluded
- QC Warning
- QC Failure

Transient TRA only:
- Peak Not Found
- Manually Edited
- Merged Peak

Data warning flags
I - Invalid calibration
T - Tripped
F - Interference correction failed
M - Result over max
V - Valley integration failed
D - Different method used

Fully Quantitative Concentrations

Id	Label	9Be	10B	11B	23Na	24Mg	25Mg	26Mg	27Al	28Si	39K
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
3	MW10971										
4	MW10956			25.000				50.000			200.000
5	cal1 MW-10957	0.400	50.000	50.000	400.000	400.000	400.000	400.000	40.000	100.000	400.000
6	cal2 MW-10958	2.000			2000.000	2000.000	2000.000	2000.000	200.000		2000.000
7	cal3 MW-10931	250.000	250.000	250.000					250.000	250.000	
8	cal4 MW-10932	500.000	500.000	500.000					500.000	500.000	
9	cal5 MW-10933				50000.000	50000.000	50000.000	50000.000		5000.000	50000.000
10	cal6 MW-10934				100000.000	100000.000	100000.000	100000.000		10000.000	100000.000

Id	Label	43Ca	44Ca	47Ti	51V	52Cr	55Mn	54Fe	56Fe	57Fe	59Co
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
3	MW10971										
4	MW10956									20.000	
5	cal1 MW-10957	400.000	400.000	5.000	5.000	5.000	5.000	50.000	50.000	50.000	1.000
6	cal2 MW-10958	2000.000	2000.000	25.000	25.000	25.000	25.000				5.000
7	cal3 MW-10931			250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
8	cal4 MW-10932			500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
9	cal5 MW-10933	50000.000	50000.000					50000.000	50000.000	50000.000	
10	cal6 MW-10934	100000.000	100000.000					100000.000	100000.000	100000.000	

Id	Label	60Ni	62Ni	63Cu	65Cu	66Zn	67Zn	68Zn	75As	78Se	82Se
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
3	MW10971	2.000									
4	MW10956				1.000						
5	cal1 MW-10957	5.000	5.000	5.000	5.000	10.000	10.000	10.000	2.000	5.000	5.000
6	cal2 MW-10958	25.000	25.000	25.000	25.000	50.000	50.000	50.000	10.000	25.000	25.000
7	cal3 MW-10931	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
8	cal4 MW-10932	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
9	cal5 MW-10933										
10	cal6 MW-10934										

Id	Label	88Sr	95Mo	97Mo	98Mo	107Ag	109Ag	106Cd	111Cd	114Cd	116Sn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
3	MW10971										
4	MW10956										
5	cal1 MW-10957	10.000	10.000	10.000	10.000	1.000	1.000	0.100	0.100	0.100	20.000
6	cal2 MW-10958	50.000	50.000	50.000	50.000	5.000	5.000	0.500	0.500	0.500	100.000
7	cal3 MW-10931	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000
8	cal4 MW-10932	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
9	cal5 MW-10933										
10	cal6 MW-10934										

Id	Label	118Sn	121Sb	123Sb	135Ba	137Ba	203Tl	205Tl	206Pb	207Pb	208Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
3	MW10971										
4	MW10956	5.000									
5	cal1 MW-10957	20.000	2.000	2.000	5.000	5.000	0.500	0.500	1.000	1.000	1.000
6	cal2 MW-10958	100.000	10.000	10.000	25.000	25.000	2.500	2.500	5.000	5.000	5.000
7	cal3 MW-10931	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000	250.000

8	cal4 MW-10932	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000	500.000
9	cal5 MW-10933									
10	cal6 MW-10934									

Id	Label	232Th	238U
		ppb	ppb
3	MW10971		
4	MW10956		
5	cal1 MW-10957		50.000
6	cal2 MW-10958		250.000
7	cal3 MW-10931		
8	cal4 MW-10932		500.000
9	cal5 MW-10933		
10	cal6 MW-10934		

Sample List

No	Label	Type	Weight	Rack	Row	Col	Height		
1	TUNE MW10939	Unknown	1.000	0	1	6	144		
2	BLANK IM9353-01	Blank	1.000	0	1	1	144		
3	MW10971	Fully Quant Standard	1.000	4	5	1	144		
4	MW10956	Fully Quant Standard	1.000	4	5	2	144		
5	cal1 MW-10957	Fully Quant Standard	1.000	4	5	3	144		
6	cal2 MW-10958	Fully Quant Standard	1.000	4	5	4	144		
7	cal3 MW-10931	Fully Quant Standard	1.000	4	5	5	144		
8	cal4 MW-10932	Fully Quant Standard	1.000	4	5	6	144		
9	cal5 MW-10933	Fully Quant Standard	1.000	4	5	7	144		
10	cal6 MW-10934	Fully Quant Standard	1.000	4	5	8	144		
11	ICV MW11007 PREP 4/25/19	QC Sample	1.000	4	5	11	144		
12	ICB IM9370-01	QC Sample	1.000	0	1	1	144		
13	ICSA MW10984	QC Sample	1.000	4	5	12	144		
14	CCV MW10994	QC Sample	1.000	0	1	8	144		
15	CCB IM9370-01	QC Sample	1.000	0	1	1	144		
16	LR ~~MW10763~~	QC Sample	1.000	4	5	10	144	MW10963	njt 5-7-19
17	UQ14125-001	QC Sample	1.000	1	1	1	144		
18	UQ14125-002	Unknown	1.000	1	1	2	144		
19	UD10040-001	Unknown	1.000	1	1	3	144		
20	UD10040-001S	Unknown	1.000	1	1	4	144		
21	UD10040-001SD	Unknown	1.000	1	1	5	144		
22	UD10040-001L(5)	Unknown	1.000	1	1	6	144		
23	UD18070-001	Unknown	1.000	1	1	7	144		
24	UD18070-002	Unknown	1.000	1	1	8	144		
25	UD18070-003	Unknown	1.000	1	1	9	144		
26	CCV MW10994	QC Sample	1.000	0	1	8	144		
27	CCB IM9370-01	QC Sample	1.000	0	1	1	144		
28	UD12064-006	Unknown	1.000	1	2	1	144		
29	UD12064-008	Unknown	1.000	1	2	2	144		
30	UD12064-009	Unknown	1.000	1	2	3	144		
31	UQ13852-001	QC Sample	1.000	1	2	4	144		
32	UQ13852-002	Unknown	1.000	1	2	5	144		
33	UD12075-001	Unknown	1.000	1	2	6	144		
34	UQ14099-001	QC Sample	1.000	1	2	7	144		
35	UQ14099-002	QC Sample	1.000	1	2	8	144		
36	UD09105-001DIS	Unknown	1.000	1	2	9	144		
37	UD09105-002DIS	Unknown	1.000	1	2	10	144		
38	CCV MW10994	QC Sample	1.000	0	1	8	144		
39	CCB IM9370-01	QC Sample	1.000	0	1	1	144		
40	UD09105-003DIS	Unknown	1.000	1	3	1	144		
41	UD09105-004DIS	Unknown	1.000	1	3	2	144		
42	UD09105-007DIS	Unknown	1.000	1	3	3	144		
43	UD09105-008DIS	Unknown	1.000	1	3	4	144		
44	UD09105-009DIS	Unknown	1.000	1	3	5	144		
45	UD10100-001	Unknown	1.000	1	3	6	144		
46	UD10100-001S	Unknown	1.000	1	3	7	144		
47	UD10100-001SD	Unknown	1.000	1	3	8	144		
48	UD10100-001L(5)	Unknown	1.000	1	3	9	144		
49	UD10100-001A	Unknown	1.000	1	3	10	144		
50	CCV MW10994	QC Sample	1.000	0	1	8	144		
51	CCB IM9370-01	QC Sample	1.000	0	1	1	144		
52	UD10100-002	Unknown	1.000	1	4	1	144		
53	UD10100-003	Unknown	1.000	1	4	2	144		
54	UD10100-004	Unknown	1.000	1	4	3	144		
55	UD10100-005	Unknown	1.000	1	4	4	144		
56	UD10100-006	Unknown	1.000	1	4	5	144		
57	UD10100-007	Unknown	1.000	1	4	6	144		
58	UQ14100-001	QC Sample	1.000	1	4	7	144		
59	UQ14100-002	QC Sample	1.000	1	4	8	144		
60	UD10113-001DIS	Unknown	1.000	1	4	9	144		
61	UD10113-001SDIS	Unknown	1.000	1	4	10	144		
62	CCV MW10994	QC Sample	1.000	0	1	8	144		
63	CCB IM9370-01	QC Sample	1.000	0	1	1	144		
64	UD10113-001L(5)DIS	Unknown	1.000	1	5	1	144		
65	UD10113-001ADIS	Unknown	1.000	1	5	2	144		
66	UD10113-001SDDIS	Unknown	1.000	1	5	3	144		

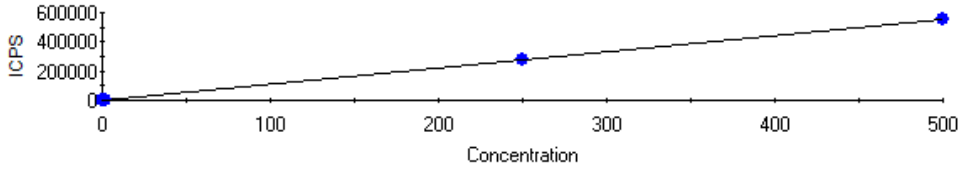
67	UD10113-002DIS	Unknown	1.000	1	5	4	144
68	UD10113-003DIS	Unknown	1.000	1	5	5	144
69	UD10113-004DIS	Unknown	1.000	1	5	6	144
70	UD10113-005DIS	Unknown	1.000	1	5	7	144
71	UD10113-008DIS	Unknown	1.000	1	5	8	144
72	UD10113-009DIS	Unknown	1.000	1	5	9	144
73	UD10113-010DIS	Unknown	1.000	1	5	10	144
74	CCV MW10994	QC Sample	1.000	0	1	8	144
75	CCB IM9370-01	QC Sample	1.000	0	1	1	144
76	UD10113-011DIS	Unknown	1.000	2	1	1	144
77	UD11082-011	Unknown	1.000	2	1	2	144
78	UD11082-012	Unknown	1.000	2	1	3	144
79	UD11082-013	Unknown	1.000	2	1	4	144
80	UQ13656-001	QC Sample	1.000	2	1	5	144
81	UQ13656-002	Unknown	1.000	2	1	6	144
82	UD09114-001	Unknown	1.000	2	1	7	144
83	UD09114-004	Unknown	1.000	2	1	8	144
84	UD09114-006	Unknown	1.000	2	1	9	144
85	UD09114-008	Unknown	1.000	2	1	10	144
86	CCV MW10994	QC Sample	1.000	0	1	8	144
87	CCB IM9370-01	QC Sample	1.000	0	1	1	144
88	UD11011-001DIS	Unknown	1.000	2	2	1	144
89	UD11011-002DIS	Unknown	1.000	2	2	2	144
90	UD11011-003DIS	Unknown	1.000	2	2	3	144
91	UD11011-003SDIS	Unknown	1.000	2	2	4	144
92	UD11011-003SDDIS	Unknown	1.000	2	2	5	144
93	UD11011-003L(5)DIS	Unknown	1.000	2	2	6	144
94	UD11011-003ADIS	Unknown	1.000	2	2	7	144
95	UD11011-004DIS	Unknown	1.000	2	2	8	144
96	UD11011-005DIS	Unknown	1.000	2	2	9	144
97	UD11011-006DIS	Unknown	1.000	2	2	10	144
98	CCV MW10994	QC Sample	1.000	0	1	8	144
99	CCB IM9370-01	QC Sample	1.000	0	1	1	144
100	UD11011-007DIS	Unknown	1.000	2	3	1	144
101	UD11011-008DIS	Unknown	1.000	2	3	2	144
102	UD11011-009DIS	Unknown	1.000	2	3	3	144
103	UD11011-010DIS	Unknown	1.000	2	3	4	144
104	UQ13657-001	Unknown	1.000	2	3	5	144
105	UQ13657-002	Unknown	1.000	2	3	6	144
106	UD10056-001	Unknown	1.000	2	3	7	144
107	UD10056-002	Unknown	1.000	2	3	8	144
108	UD10056-003	Unknown	1.000	2	3	9	144
109	UD10056-003S	Unknown	1.000	2	3	10	144
110	CCV MW10994	QC Sample	1.000	0	1	8	144
111	CCB IM9370-01	QC Sample	1.000	0	1	1	144
112	UD10056-003SD	Unknown	1.000	2	4	1	144
113	UD10056-003L(5)	Unknown	1.000	2	4	2	144
114	UD10056-003A	Unknown	1.000	2	4	3	144
115	UD10056-004	Unknown	1.000	2	4	4	144
116	UD10056-005	Unknown	1.000	2	4	5	144
117	UD10056-006	Unknown	1.000	2	4	6	144
118	UD10056-007	Unknown	1.000	2	4	7	144
119	UD10056-008	Unknown	1.000	2	4	8	144
120	UD12100-001	Unknown	1.000	2	4	10	144
121	UD09114-001(10)	Unknown	1.000	1	1	12	144
122	CCV MW10994	QC Sample	1.000	0	1	8	144
123	CCB IM9370-01	QC Sample	1.000	0	1	1	144
124	ICSA MW10984	Unknown	1.000	2	4	9	144
125	UD12100-002	Unknown	1.000	2	5	1	144
126	UD12100-003	Unknown	1.000	2	5	2	144
127	UD12100-004	Unknown	1.000	2	5	3	144
128	UD12100-005	Unknown	1.000	2	5	4	144
129	UD12100-006	Unknown	1.000	2	5	5	144
130	UD12100-007	Unknown	1.000	2	5	6	144
131	UD12100-008	Unknown	1.000	2	5	7	144
132	UD12100-009	Unknown	1.000	2	5	8	144
133	UD12100-010	Unknown	1.000	2	5	9	144
134	CCV MW10994	QC Sample	1.000	0	1	8	144
135	CCB IM9370-01	QC Sample	1.000	0	1	1	144
136	UD12100-013	Unknown	1.000	2	5	10	144
137	UD12100-013S	Unknown	1.000	3	1	1	144
138	UD12100-013SD	Unknown	1.000	3	1	2	144
139	UD12100-013L(5)	Unknown	1.000	3	1	3	144
140	UD12100-013A	Unknown	1.000	3	1	4	144
141	UQ13221-001TC	Unknown	1.000	3	1	5	144
142	UQ13221-002TC	Unknown	1.000	3	1	6	144
143	UC27001-040TC	Unknown	1.000	3	1	7	144
144	UC27001-041TC	Unknown	1.000	3	1	8	144
145	UC27001-041STC	Unknown	1.000	3	1	9	144
146	CCV MW10994	QC Sample	1.000	0	1	8	144
147	CCB IM9370-01	QC Sample	1.000	0	1	1	144
148	UC27001-041SDTC	Unknown	1.000	3	1	10	144
149	UC27001-041L(5)TC	Unknown	1.000	3	2	1	144
150	UC27001-041ATC	Unknown	1.000	3	2	2	144

	UC27001-042TC	Unknown	1.000	3	2	3	144
152	UC27001-043TC	Unknown	1.000	3	2	4	144
153	UC27001-044TC	Unknown	1.000	3	2	5	144
154	UC27001-045TC	Unknown	1.000	3	2	6	144
155	UC27001-046TC	Unknown	1.000	3	2	7	144
156	UC27001-047TC	Unknown	1.000	3	2	8	144
157	UC27001-048TC	Unknown	1.000	3	2	9	144
158	CCV MW10994	QC Sample	1.000	0	1	8	144
159	CCB IM9370-01	QC Sample	1.000	0	1	1	144
160	UC27001-049TC	Unknown	1.000	3	2	10	144
161	UC27001-050TC	Unknown	1.000	3	3	1	144
162	UC27001-051TC	Unknown	1.000	3	3	2	144
163	UC27001-052TC	Unknown	1.000	3	3	3	144
164	UC27001-053TC	Unknown	1.000	3	3	4	144
165	UC27001-054TC	Unknown	1.000	3	3	5	144
166	UC27026-002TC	Unknown	1.000	3	3	6	144
167	UC27026-013TC	Unknown	1.000	3	3	7	144
168	UC27096-002TC	Unknown	1.000	3	3	8	144
169	UC27096-006TC	Unknown	1.000	3	3	9	144
170	CCV MW10994	QC Sample	1.000	0	1	8	144
171	CCB IM9370-01	QC Sample	1.000	0	1	1	144
172	UC27096-007TC	Unknown	1.000	3	3	10	144
173	UQ13629-001	Unknown	1.000	3	4	1	144
174	UQ13629-002	Unknown	1.000	3	4	2	144
175	UC27026-001	Unknown	1.000	3	4	3	144
176	UC27026-001S	Unknown	1.000	3	4	4	144
177	UC27026-001SD	Unknown	1.000	3	4	5	144
178	UC27026-001L(5)	Unknown	1.000	3	4	6	144
179	UC27026-001A	Unknown	1.000	3	4	7	144
180	UC27026-003	Unknown	1.000	3	4	8	144
181	UC27026-004	Unknown	1.000	3	4	9	144
182	CCV MW10994	QC Sample	1.000	0	1	8	144
183	CCB IM9370-01	QC Sample	1.000	0	1	1	144
184	UC27026-005	Unknown	1.000	3	4	10	144
185	UC27026-006	Unknown	1.000	3	5	1	144
186	UC27026-007	Unknown	1.000	3	5	2	144
187	UC27026-008	Unknown	1.000	3	5	3	144
188	UC27026-009	Unknown	1.000	3	5	4	144
189	UC27026-010	Unknown	1.000	3	5	5	144
190	UC27026-011	Unknown	1.000	3	5	6	144
191	UC27026-012	Unknown	1.000	3	5	7	144
192	UC27096-002	Unknown	1.000	3	5	8	144
193	UC27096-006	Unknown	1.000	3	5	9	144
194	CCV MW10994	QC Sample	1.000	0	1	8	144
195	CCB IM9370-01	QC Sample	1.000	0	1	1	144
196	UC27096-007	Unknown	1.000	3	5	10	144
197	UC27096-008	Unknown	1.000	4	1	1	144
198	UC27096-011	Unknown	1.000	4	1	2	144
199	UC27096-012	Unknown	1.000	4	1	3	144
200	UC27096-013	Unknown	1.000	4	1	4	144
201	UD16072-001	Unknown	1.000	4	1	5	144
202	UD16072-001(5)	Unknown	1.000	4	1	6	144
203	UD17042-001(5)	Unknown	1.000	4	1	7	144
204	UD18057-003	Unknown	1.000	4	1	8	144
205	UD18061-001	Unknown	1.000	4	1	9	144
206	CCV MW10994	QC Sample	1.000	0	1	8	144
207	CCB IM9370-01	QC Sample	1.000	0	1	1	144
208	UD18061-001S	Unknown	1.000	4	1	10	144
209	UD18061-001SD	Unknown	1.000	4	2	1	144
210	UD18061-001L(5)	Unknown	1.000	4	2	2	144
211	UQ14094-001	Unknown	1.000	4	2	3	144
212	UQ14094-002	Unknown	1.000	4	2	4	144
213	UD12091-001	Unknown	1.000	4	2	5	144
214	UD15036-001	Unknown	1.000	4	2	6	144
215	UD16061-002	Unknown	1.000	4	2	7	144
216	UD15018-001	Unknown	1.000	4	2	8	144
217	UD15018-001(5)	Unknown	1.000	4	2	9	144
218	CCV MW10994	QC Sample	1.000	0	1	7	144
219	CCB IM9370-01	QC Sample	1.000	0	1	2	144
220	UD15030-001	Unknown	1.000	4	2	10	144
221	UD15030-001S	Unknown	1.000	4	3	1	144
222	UD15030-001SD	Unknown	1.000	4	3	2	144
223	UD15030-001L(5)	Unknown	1.000	4	3	3	144
224	UD15030-002	Unknown	1.000	4	3	4	144
225	UD15030-002S	Unknown	1.000	4	3	5	144
226	UD15046-001	Unknown	1.000	4	3	6	144
227	UD16038-003	Unknown	1.000	4	3	7	144
228	UD16067-001(2)	Unknown	1.000	4	3	8	144
229	UD16075-001	Unknown	1.000	4	3	9	144
230	CCV MW10994	QC Sample	1.000	0	1	7	144
231	CCB IM9370-01	QC Sample	1.000	0	1	2	144
232	UD15029-001(5)	Unknown	1.000	4	3	10	144
233	UD16039-001	Unknown	1.000	4	4	1	144
234	UD16054-002	Unknown	1.000	4	4	2	144

	UD16074-001	Unknown	1.000	4	4	3	144
236	UD17043-001	Unknown	1.000	4	4	4	144
237	UD17044-003	Unknown	1.000	4	4	5	144
238	UD17055-001	Unknown	1.000	4	4	6	144
239	UD17057-001	Unknown	1.000	4	4	7	144
240	UD17103-003	Unknown	1.000	4	4	8	144
241	UD16047-001	Unknown	1.000	4	4	9	144
242	CCV MW10994	QC Sample	1.000	0	1	7	144
243	CCB IM9370-01	QC Sample	1.000	0	1	2	144
244	UQ14280-001	Unknown	1.000	1	1	1	144
245	UQ14280-002	Unknown	1.000	1	1	2	144
246	UD18064-001(5)	Unknown	1.000	1	1	3	144
247	UD18086-003	Unknown	1.000	1	1	4	144
248	UD16036-001	Unknown	1.000	1	1	5	144
249	UD16045-001	Unknown	1.000	1	1	6	144
250	UD16046-001	Unknown	1.000	1	1	7	144
251	UD17045-001	Unknown	1.000	1	1	8	144
252	CCV MW10994	QC Sample	1.000	0	1	7	144
253	CCB IM9370-01	QC Sample	1.000	0	1	2	144
254	IS MW10943	Unknown	1.000	0	1	5	144
255	RINSE	Unknown	1.000	0	1	6	144
256	RINSE	Unknown	1.000	0	1	5	144

Fully Quant Calibration

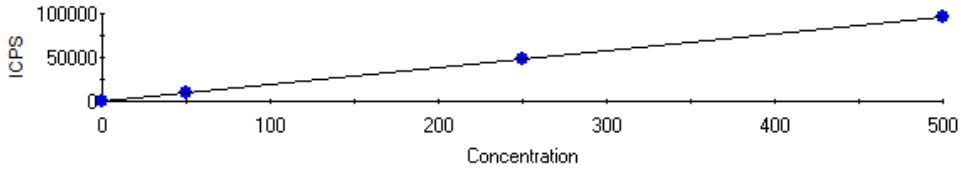
9Be FQ Block 1



Intercept CPS=47.972024 Intercept Conc=0.043697
Sensitivity=1097.835966 Correlation Coeff=0.999989

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	47.97	0.00
cal1 MW-10957	0.400	0.417	0.017	505.26	4.13
cal2 MW-10958	2.000	1.955	0.045	2193.79	2.27
cal3 MW-10931	250.000	248.547	1.453	272911.90	0.58
cal4 MW-10932	500.000	501.953	1.953	551110.01	0.39

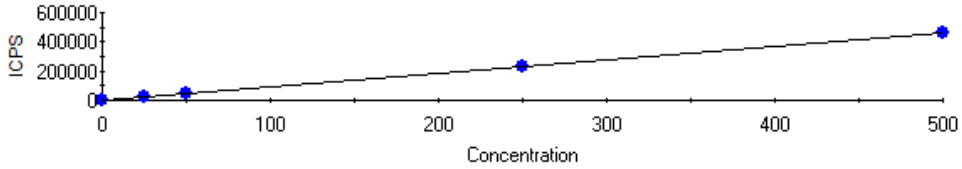
10B FQ Block 1



Intercept CPS=145.612609 Intercept Conc=0.752954
Sensitivity=193.388442 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	145.61	0.00
cal1 MW-10957	50.000	50.207	0.207	9855.09	0.41
cal3 MW-10931	250.000	248.596	1.404	48221.17	0.56
cal4 MW-10932	500.000	500.681	0.681	96971.60	0.14

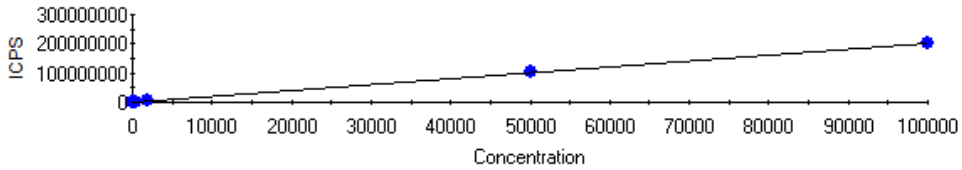
11B FQ Block 1



Intercept CPS=697.226378 Intercept Conc=0.762583
Sensitivity=914.296245 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	697.23	0.00
MW10956	25.000	25.607	0.607	24109.88	2.43
cal1 MW-10957	50.000	50.075	0.075	46480.43	0.15
cal3 MW-10931	250.000	250.303	0.303	229548.52	0.12
cal4 MW-10932	500.000	499.811	0.189	457672.13	0.04

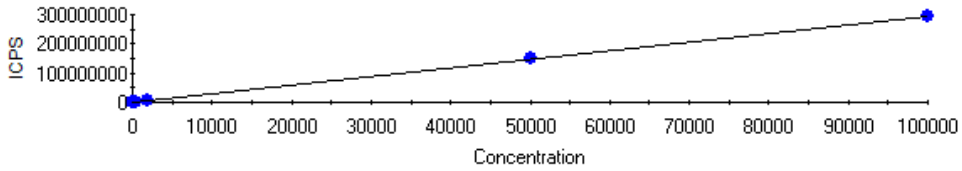
23Na FQ Block 1



Intercept CPS=8235.987525 Intercept Conc=4.038737
Sensitivity=2039.248436 Correlation Coeff=0.999962

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	8235.99	0.00
cal1 MW-10957	400.000	427.391	27.391	879792.03	6.85
cal2 MW-10958	2000.000	2076.001	76.001	4241716.80	3.80
cal5 MW-10933	50000.000	50804.829	804.829	103611903.42	1.61
cal6 MW-10934	100000.000	99791.124	208.876	203507129.49	0.21

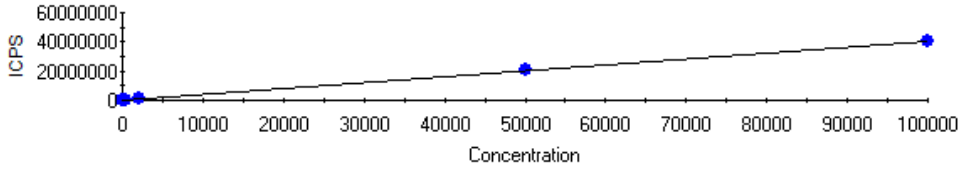
24Mg FQ Block 1



Intercept CPS=964.178669 Intercept Conc=0.327177
Sensitivity=2946.965528 Correlation Coeff=0.999888

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	964.18	0.00
cal1 MW-10957	400.000	431.962	31.962	1273941.38	7.99
cal2 MW-10958	2000.000	2052.700	52.700	6050201.20	2.64
cal5 MW-10933	50000.000	51233.839	1233.839	150985322.53	2.47
cal6 MW-10934	100000.000	99381.898	618.102	292875993.08	0.62

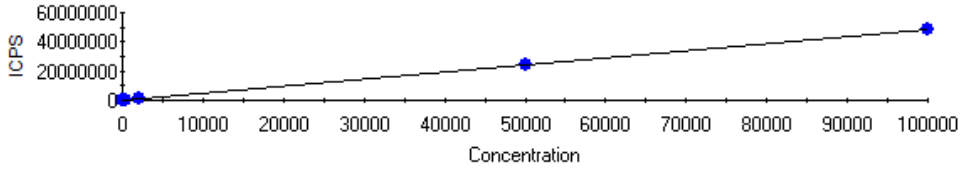
25Mg FQ Block 1



Intercept CPS=109.379953 Intercept Conc=0.267144
Sensitivity=409.442166 Correlation Coeff=0.999929

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	109.38	0.00
cal1 MW-10957	400.000	417.043	17.043	170864.17	4.26
cal2 MW-10958	2000.000	2086.884	86.884	854567.82	4.34
cal5 MW-10933	50000.000	50983.603	983.603	20874946.10	1.97
cal6 MW-10934	100000.000	99506.393	493.607	40742222.41	0.49

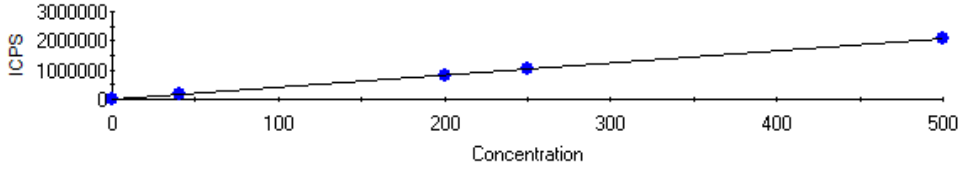
26Mg FQ Block 1



Intercept CPS=252.045881 Intercept Conc=0.520855
Sensitivity=483.907743 Correlation Coeff=0.999940

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	252.05	0.00
MW10956	50.000	53.158	3.158	25975.43	6.32
cal1 MW-10957	400.000	415.555	15.555	201342.41	3.89
cal2 MW-10958	2000.000	2085.899	85.899	1009634.88	4.29
cal5 MW-10933	50000.000	50724.542	724.542	24546250.84	1.45
cal6 MW-10934	100000.000	99111.614	888.386	47961129.44	0.89

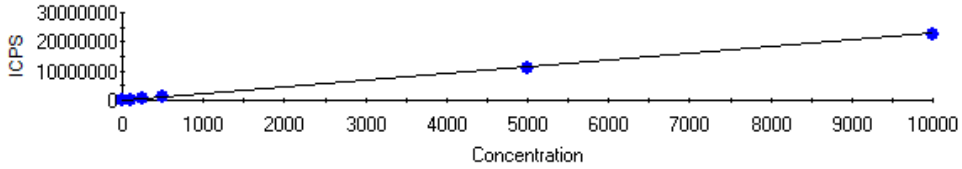
27Al FQ Block 1



Intercept CPS=590.907948 Intercept Conc=0.142487
Sensitivity=4147.109891 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	590.91	0.00
cal1 MW-10957	40.000	39.603	0.397	164830.12	0.99
cal2 MW-10958	200.000	200.710	0.710	832955.61	0.35
cal3 MW-10931	250.000	252.041	2.041	1045831.30	0.82
cal4 MW-10932	500.000	499.829	0.171	2073435.75	0.03

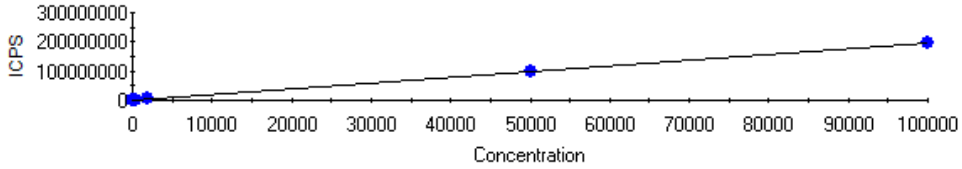
28Si FQ Block 1



Intercept CPS=0.000000 Intercept Conc=0.000000
Sensitivity=2301.123420 Correlation Coeff=0.999986

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	12.456	12.456	28663.85	0.00
cal1 MW-10957	100.000	112.275	12.275	258357.89	12.27
cal3 MW-10931	250.000	268.255	18.255	617286.91	7.30
cal4 MW-10932	500.000	515.074	15.074	1185249.98	3.01
cal5 MW-10933	5000.000	4797.441	202.559	11039504.40	4.05
cal6 MW-10934	10000.000	9673.659	326.341	22260282.80	3.26

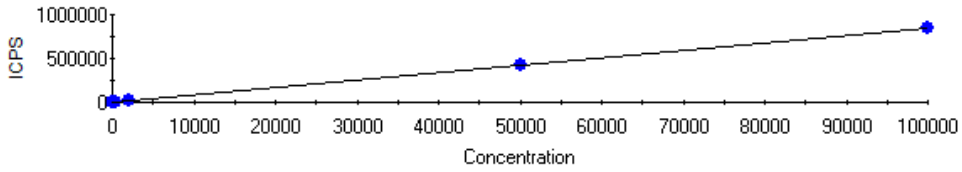
39K FQ Block 1



Intercept CPS=233557.524793 Intercept Conc=118.203445
Sensitivity=1975.894401 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	233557.52	0.00
MW10956	200.000	202.450	2.450	633577.81	1.23
cal1 MW-10957	400.000	405.858	5.858	1035489.80	1.46
cal2 MW-10958	2000.000	1999.451	0.549	4184261.76	0.03
cal5 MW-10933	50000.000	49371.794	628.206	97787009.64	1.26
cal6 MW-10934	100000.000	99593.072	406.928	197018950.90	0.41

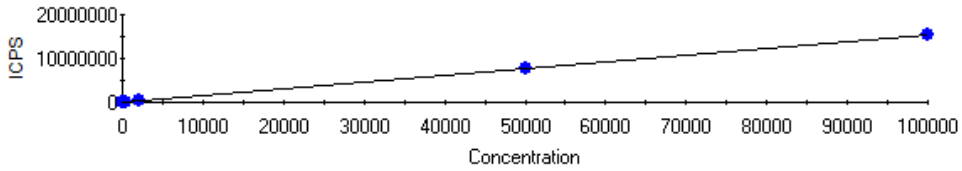
43Ca FQ Block 1



Intercept CPS=25.335192 Intercept Conc=2.984670
Sensitivity=8.488441 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	25.34	0.00
cal1 MW-10957	400.000	422.972	22.972	3615.71	5.74
cal2 MW-10958	2000.000	2079.263	79.263	17675.04	3.96
cal5 MW-10933	50000.000	50093.561	93.561	425241.55	0.19
cal6 MW-10934	100000.000	99951.542	48.458	848458.06	0.05

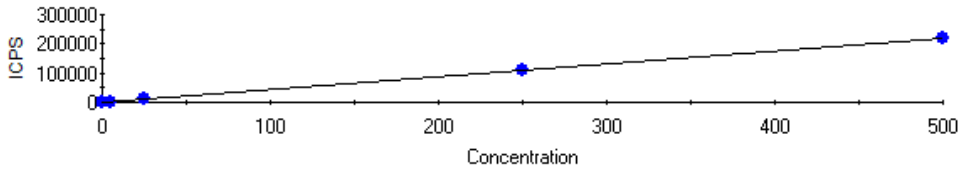
44Ca FQ Block 1



Intercept CPS=314.629251 Intercept Conc=2.050552
Sensitivity=153.436375 Correlation Coeff=1.000000

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	314.63	0.00
cal1 MW-10957	400.000	374.573	25.427	57787.76	6.36
cal2 MW-10958	2000.000	1927.256	72.744	296025.83	3.64
cal5 MW-10933	50000.000	50009.942	9.942	7673658.82	0.02
cal6 MW-10934	100000.000	99996.586	3.414	15343428.28	0.00

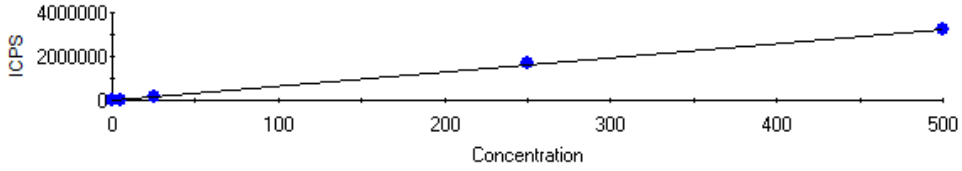
47Ti FQ Block 1



Intercept CPS=201.190397 Intercept Conc=0.462088
Sensitivity=435.394097 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	201.19	0.00
cal1 MW-10957	5.000	5.256	0.256	2489.44	5.11
cal2 MW-10958	25.000	25.011	0.011	11090.81	0.04
cal3 MW-10931	250.000	249.133	0.867	108672.26	0.35
cal4 MW-10932	500.000	499.564	0.436	217708.57	0.09

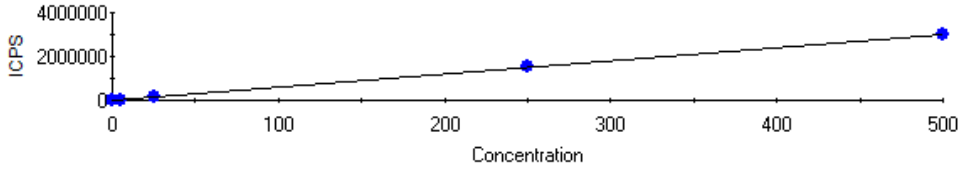
51V FQ Block 1



Intercept CPS=418.476614 Intercept Conc=0.065463
Sensitivity=6392.587619 Correlation Coeff=0.999829

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	418.48	0.00
cal1 MW-10957	5.000	5.026	0.026	32549.84	0.53
cal2 MW-10958	25.000	25.549	0.549	163739.59	2.19
cal3 MW-10931	250.000	259.205	9.205	1657411.34	3.68
cal4 MW-10932	500.000	499.518	0.482	3193628.21	0.10

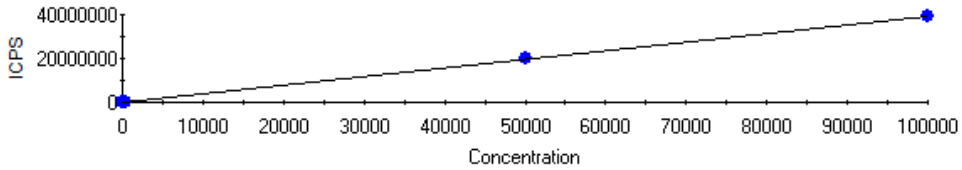
52Cr FQ Block 1



Intercept CPS=1648.189364 Intercept Conc=0.273206
Sensitivity=6032.769637 Correlation Coeff=0.999913

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	1648.19	0.00
cal1 MW-10957	5.000	4.933	0.067	31410.86	1.33
cal2 MW-10958	25.000	25.131	0.131	153256.67	0.52
cal3 MW-10931	250.000	255.341	5.341	1542059.83	2.14
cal4 MW-10932	500.000	497.324	2.676	3001887.94	0.54

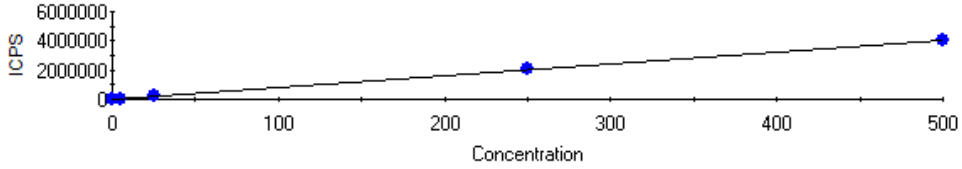
54Fe FQ Block 1



Intercept CPS=12006.006977 Intercept Conc=30.323766
Sensitivity=395.927312 Correlation Coeff=0.999959

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	12006.01	0.00
cal1 MW-10957	50.000	53.925	3.925	33356.34	7.85
cal3 MW-10931	250.000	382.983	132.983	163639.61	53.19
cal4 MW-10932	500.000	768.189	268.189	316153.17	53.64
cal5 MW-10933	50000.000	50787.849	787.849	20120302.56	1.58
cal6 MW-10934	100000.000	99604.400	395.600	39448108.43	0.40

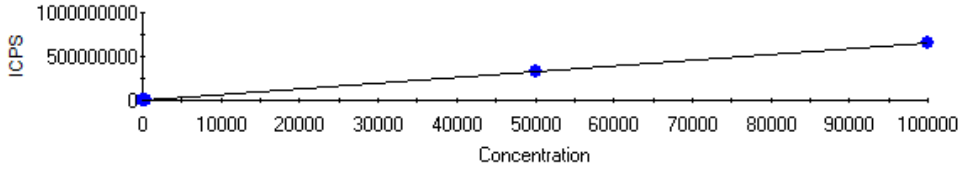
55Mn FQ Block 1



Intercept CPS=1588.917732 Intercept Conc=0.195326
Sensitivity=8134.691435 Correlation Coeff=0.999905

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	1588.92	0.00
cal1 MW-10957	5.000	4.971	0.029	42022.55	0.59
cal2 MW-10958	25.000	24.943	0.057	204494.62	0.23
cal3 MW-10931	250.000	255.559	5.559	2080479.14	2.22
cal4 MW-10932	500.000	497.224	2.776	4046351.43	0.56

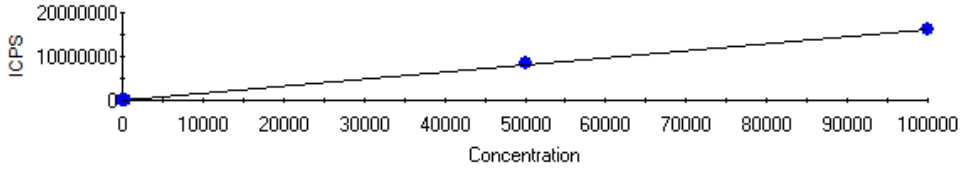
56Fe FQ Block 1



Intercept CPS=423144.228341 Intercept Conc=64.708745
Sensitivity=6539.212411 Correlation Coeff=0.999923

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	423144.23	0.00
cal1 MW-10957	50.000	56.539	6.539	792863.71	13.08
cal3 MW-10931	250.000	287.227	37.227	2301384.82	14.89
cal4 MW-10932	500.000	542.782	42.782	3972508.79	8.56
cal5 MW-10933	50000.000	51068.735	1068.735	334372447.64	2.14
cal6 MW-10934	100000.000	99465.322	534.678	650848015.13	0.53

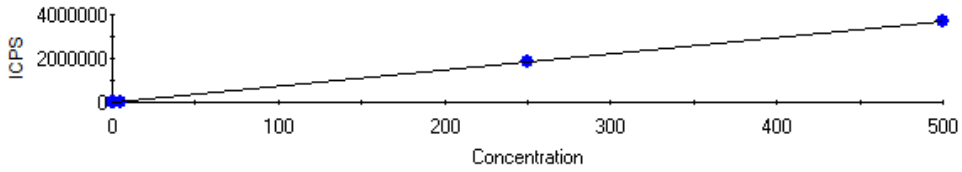
57Fe FQ Block 1



Intercept CPS=15441.310645 Intercept Conc=95.557294
Sensitivity=161.592172 Correlation Coeff=0.999878

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	15441.31	0.00
MW10956	20.000	19.938	0.062	18663.19	0.31
cal1 MW-10957	50.000	54.431	4.431	24236.96	8.86
cal3 MW-10931	250.000	273.455	23.455	59629.50	9.38
cal4 MW-10932	500.000	532.663	32.663	101515.47	6.53
cal5 MW-10933	50000.000	51306.971	1306.971	8306246.23	2.61
cal6 MW-10934	100000.000	99188.715	811.285	16043561.19	0.81

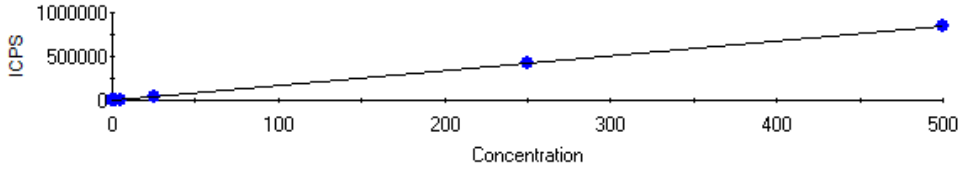
59Co FQ Block 1



Intercept CPS=488.787089 Intercept Conc=0.066047
Sensitivity=7400.609183 Correlation Coeff=0.999947

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	488.79	0.00
cal1 MW-10957	1.000	0.991	0.009	7820.95	0.92
cal2 MW-10958	5.000	5.000	0.000	37491.99	0.00
cal3 MW-10931	250.000	254.223	4.223	1881895.37	1.69
cal4 MW-10932	500.000	497.888	2.112	3685166.37	0.42

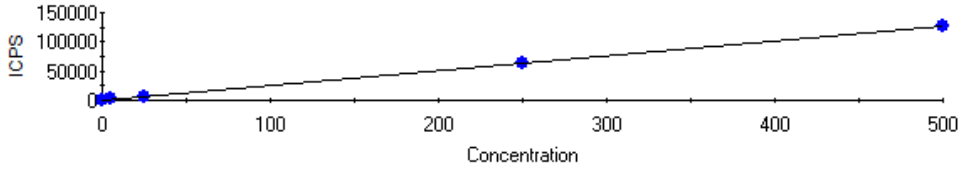
60Ni FQ Block 1



Intercept CPS=145.290769 Intercept Conc=0.086803
Sensitivity=1673.807287 Correlation Coeff=0.999995

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	145.29	0.00
MW10971	2.000	1.973	0.027	3447.03	1.37
cal1 MW-10957	5.000	4.863	0.137	8285.65	2.73
cal2 MW-10958	25.000	25.106	0.106	42168.67	0.43
cal3 MW-10931	250.000	255.268	5.268	427414.63	2.11
cal4 MW-10932	500.000	507.497	7.497	849597.02	1.50

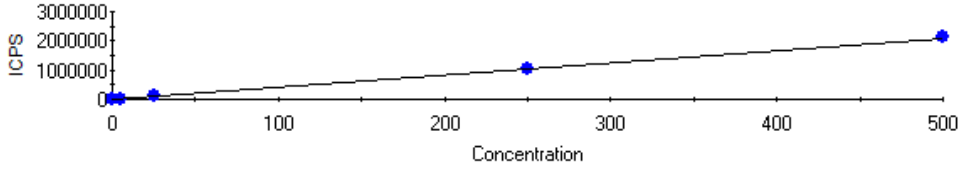
62Ni FQ Block 1



Intercept CPS=521.485553 Intercept Conc=2.072011
Sensitivity=251.680857 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	521.49	0.00
cal1 MW-10957	5.000	4.999	0.001	1779.74	0.01
cal2 MW-10958	25.000	25.264	0.264	6879.88	1.05
cal3 MW-10931	250.000	251.618	1.618	63849.00	0.65
cal4 MW-10932	500.000	499.178	0.822	126154.95	0.16

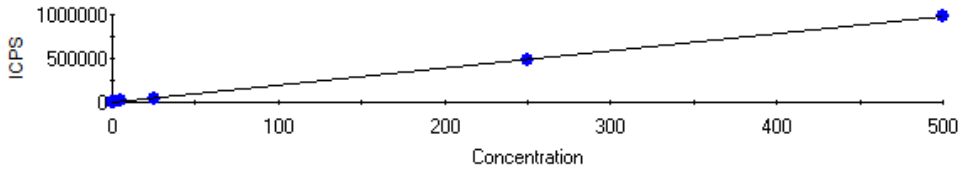
63Cu FQ Block 1



Intercept CPS=636.454757 Intercept Conc=0.152087
Sensitivity=4184.809802 Correlation Coeff=0.999977

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	636.45	0.00
cal1 MW-10957	5.000	4.850	0.150	20932.67	3.00
cal2 MW-10958	25.000	24.608	0.392	103616.00	1.57
cal3 MW-10931	250.000	248.560	1.440	1040812.55	0.58
cal4 MW-10932	500.000	504.144	4.144	2110384.78	0.83

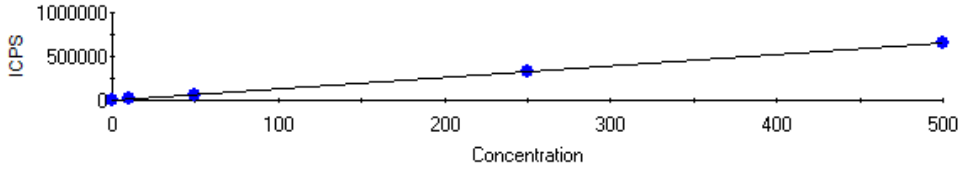
65Cu FQ Block 1



Intercept CPS=147.334200 Intercept Conc=0.075477
Sensitivity=1952.045635 Correlation Coeff=0.999989

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	147.33	0.00
MW10956	1.000	1.023	0.023	2143.88	2.28
cal1 MW-10957	5.000	4.955	0.045	9819.92	0.90
cal2 MW-10958	25.000	24.491	0.509	47955.69	2.03
cal3 MW-10931	250.000	248.355	1.645	484948.40	0.66
cal4 MW-10932	500.000	501.694	1.694	979476.52	0.34

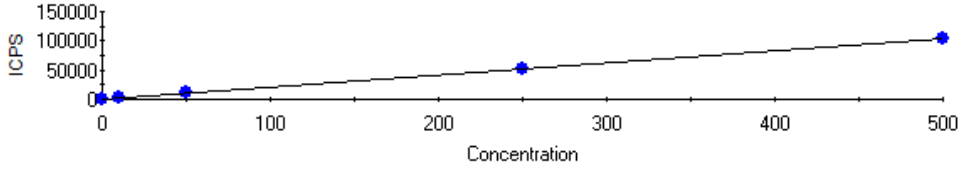
66Zn FQ Block 1



Intercept CPS=78.525681 Intercept Conc=0.059862
Sensitivity=1311.777648 Correlation Coeff=0.999960

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	78.53	0.00
cal1 MW-10957	10.000	9.974	0.026	13162.26	0.26
cal2 MW-10958	50.000	49.694	0.306	65265.42	0.61
cal3 MW-10931	250.000	246.412	3.588	323316.04	1.44
cal4 MW-10932	500.000	501.825	1.825	658361.68	0.37

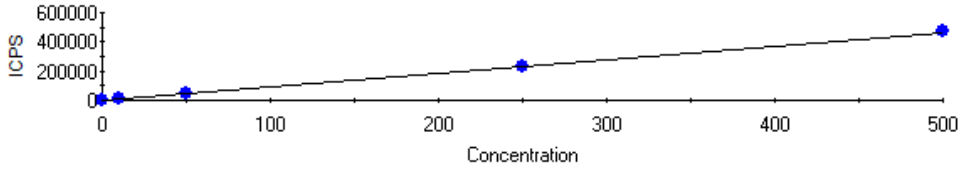
67Zn FQ Block 1



Intercept CPS=97.442616 Intercept Conc=0.466038
Sensitivity=209.087439 Correlation Coeff=0.999993

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	97.44	0.00
cal1 MW-10957	10.000	9.367	0.633	2055.98	6.33
cal2 MW-10958	50.000	48.164	1.836	10167.92	3.67
cal3 MW-10931	250.000	249.134	0.866	52188.30	0.35
cal4 MW-10932	500.000	500.629	0.629	104772.70	0.13

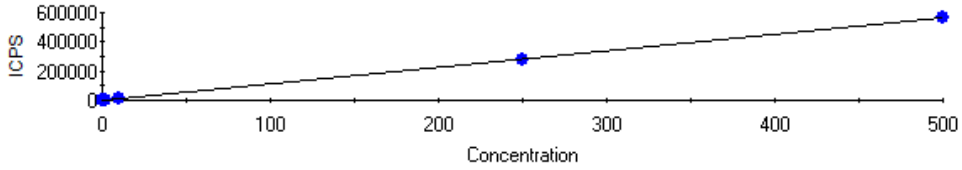
68Zn FQ Block 1



Intercept CPS=70.557264 Intercept Conc=0.075568
Sensitivity=933.693448 Correlation Coeff=0.999986

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	70.56	0.00
cal1 MW-10957	10.000	9.541	0.459	8979.18	4.59
cal2 MW-10958	50.000	48.254	1.746	45125.19	3.49
cal3 MW-10931	250.000	248.064	1.936	231686.01	0.77
cal4 MW-10932	500.000	501.164	1.164	468004.27	0.23

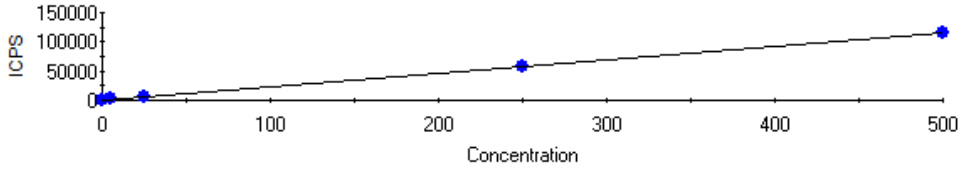
75As FQ Block 1



Intercept CPS=292.322696 Intercept Conc=0.257665
Sensitivity=1134.508596 Correlation Coeff=0.999988

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	292.32	0.00
cal1 MW-10957	2.000	1.788	0.212	2321.07	10.59
cal2 MW-10958	10.000	9.574	0.426	11153.60	4.26
cal3 MW-10931	250.000	247.475	2.525	281054.98	1.01
cal4 MW-10932	500.000	500.042	0.042	567593.96	0.01

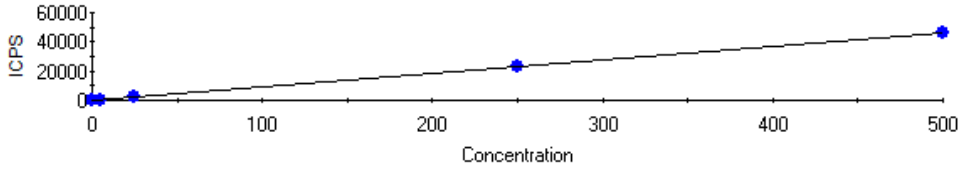
78Se FQ Block 1



Intercept CPS=950.763287 Intercept Conc=4.104504
Sensitivity=231.639036 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	950.76	0.00
cal1 MW-10957	5.000	5.606	0.606	2249.26	12.11
cal2 MW-10958	25.000	25.151	0.151	6776.74	0.60
cal3 MW-10931	250.000	250.245	0.245	58917.38	0.10
cal4 MW-10932	500.000	497.814	2.186	116263.98	0.44

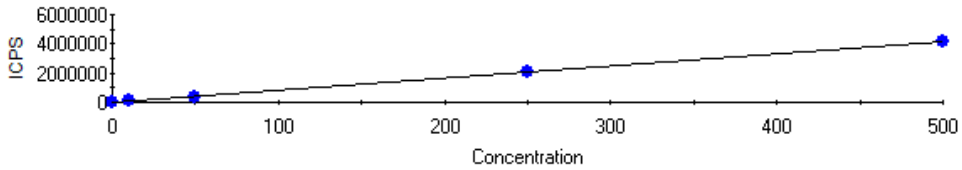
82Se FQ Block 1



Intercept CPS=94.156612 Intercept Conc=1.013663
Sensitivity=92.887524 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	94.16	0.00
cal1 MW-10957	5.000	4.880	0.120	547.43	2.40
cal2 MW-10958	25.000	24.394	0.606	2360.06	2.42
cal3 MW-10931	250.000	250.105	0.105	23325.83	0.04
cal4 MW-10932	500.000	499.979	0.021	46535.95	0.00

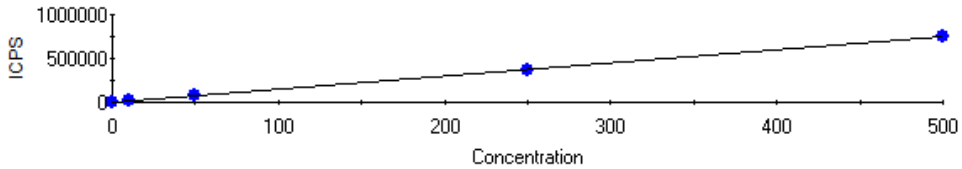
88Sr FQ Block 1



Intercept CPS=50.714461 Intercept Conc=0.006179
Sensitivity=8207.199279 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	50.71	0.00
cal1 MW-10957	10.000	9.722	0.278	79841.87	2.78
cal2 MW-10958	50.000	48.803	1.197	400589.37	2.39
cal3 MW-10931	250.000	250.395	0.395	2055093.09	0.16
cal4 MW-10932	500.000	499.928	0.072	4103056.82	0.01

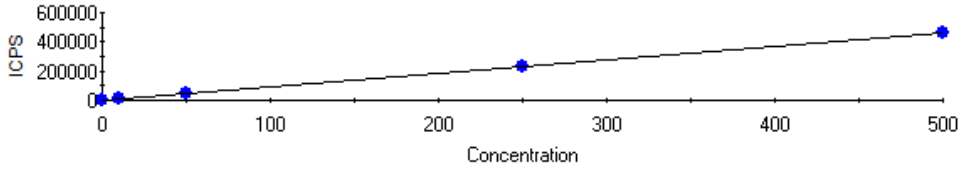
95Mo FQ Block 1



Intercept CPS=33.333349 Intercept Conc=0.022108
Sensitivity=1507.778149 Correlation Coeff=0.999980

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	33.33	0.00
cal1 MW-10957	10.000	9.666	0.334	14607.14	3.34
cal2 MW-10958	50.000	49.706	0.294	74978.71	0.59
cal3 MW-10931	250.000	247.401	2.599	373058.53	1.04
cal4 MW-10932	500.000	501.336	1.336	755936.51	0.27

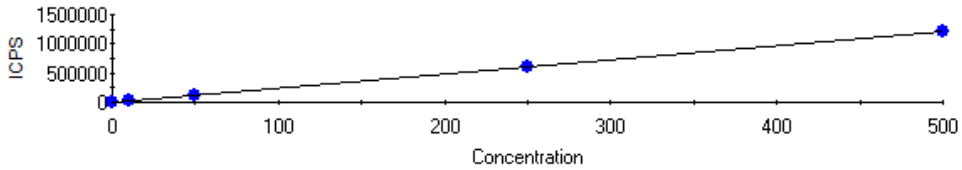
97Mo FQ Block 1



Intercept CPS=18.783986 Intercept Conc=0.020180
Sensitivity=930.819821 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	18.78	0.00
cal1 MW-10957	10.000	9.949	0.051	9279.29	0.51
cal2 MW-10958	50.000	50.224	0.224	46768.25	0.45
cal3 MW-10931	250.000	248.353	1.647	231190.46	0.66
cal4 MW-10932	500.000	500.150	0.150	465568.48	0.03

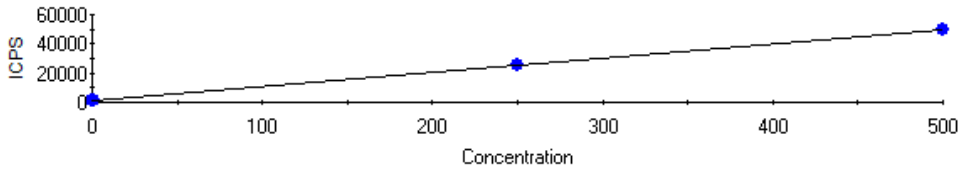
98Mo FQ Block 1



Intercept CPS=79.814683 Intercept Conc=0.032788
Sensitivity=2434.291496 Correlation Coeff=0.999981

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	79.81	0.00
cal1 MW-10957	10.000	9.583	0.417	23407.20	4.17
cal2 MW-10958	50.000	49.394	0.606	120319.88	1.21
cal3 MW-10931	250.000	247.489	2.511	602539.05	1.00
cal4 MW-10932	500.000	501.325	1.325	1220450.14	0.26

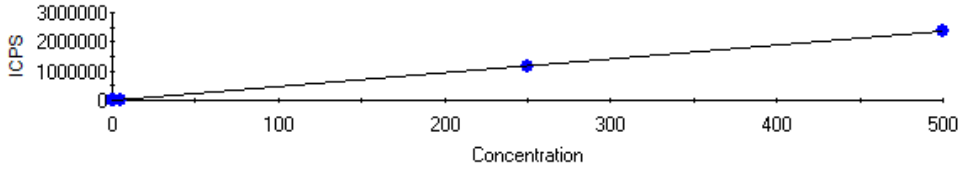
106Cd FQ Block 1



Intercept CPS=607.671314 Intercept Conc=6.235484
Sensitivity=97.453746 Correlation Coeff=0.999987

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	607.67	0.00
cal1 MW-10957	0.100	0.209	0.109	628.02	108.80
cal2 MW-10958	0.500	2.253	1.753	827.26	350.65
cal3 MW-10931	250.000	251.944	1.944	25160.52	0.78
cal4 MW-10932	500.000	499.026	0.974	49239.67	0.19

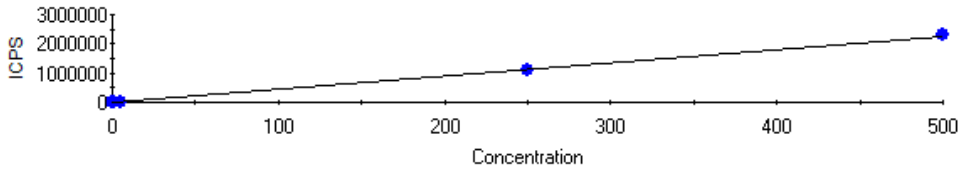
107Ag FQ Block 1



Intercept CPS=13.355734 Intercept Conc=0.002813
Sensitivity=4748.590272 Correlation Coeff=0.999962

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	13.36	0.00
cal1 MW-10957	1.000	0.939	0.061	4471.83	6.11
cal2 MW-10958	5.000	4.777	0.223	22697.66	4.46
cal3 MW-10931	250.000	246.904	3.096	1172458.27	1.24
cal4 MW-10932	500.000	502.853	2.853	2387857.50	0.57

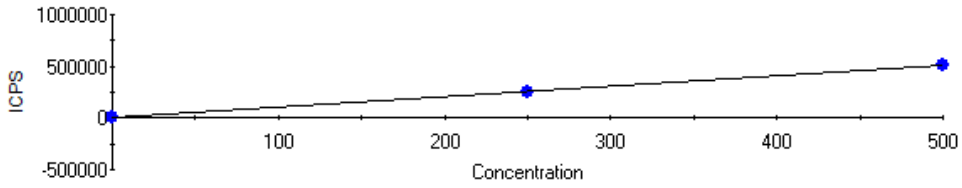
109Ag FQ Block 1



Intercept CPS=3.992213 Intercept Conc=0.000877
Sensitivity=4553.820062 Correlation Coeff=0.999972

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	3.99	0.00
cal1 MW-10957	1.000	0.967	0.033	4409.74	3.25
cal2 MW-10958	5.000	4.821	0.179	21956.98	3.58
cal3 MW-10931	250.000	246.913	3.087	1124401.13	1.23
cal4 MW-10932	500.000	501.545	1.545	2283951.42	0.31

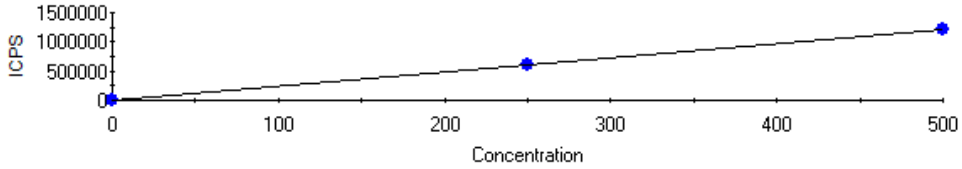
111Cd FQ Block 1



Intercept CPS=5.155080 Intercept Conc=0.005075
Sensitivity=1015.832084 Correlation Coeff=0.999997

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	5.16	0.00
cal1 MW-10957	0.100	0.050	0.050	55.89	50.06
cal2 MW-10958	0.500	0.374	0.126	385.33	25.15
cal3 MW-10931	250.000	248.911	1.089	252856.88	0.44
cal4 MW-10932	500.000	500.545	0.545	508474.48	0.11

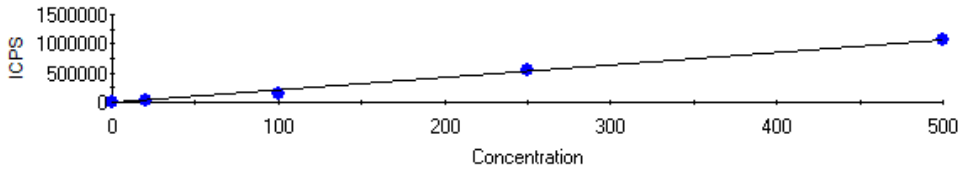
114Cd FQ Block 1



Intercept CPS=16.642622 Intercept Conc=0.006892
Sensitivity=2414.607412 Correlation Coeff=0.999981

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	16.64	0.00
cal1 MW-10957	0.100	0.062	0.038	165.47	38.36
cal2 MW-10958	0.500	0.543	0.043	1327.14	8.55
cal3 MW-10931	250.000	247.465	2.535	597547.78	1.01
cal4 MW-10932	500.000	501.267	1.267	1210380.62	0.25

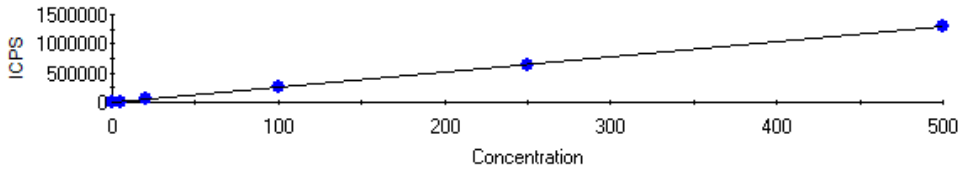
116Sn FQ Block 1



Intercept CPS=27.962699 Intercept Conc=0.013129
Sensitivity=2129.812113 Correlation Coeff=0.998163

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	27.96	0.00
cal1 MW-10957	20.000	13.750	6.250	29312.77	31.25
cal2 MW-10958	100.000	69.668	30.332	148408.60	30.33
cal3 MW-10931	250.000	252.115	2.115	536986.33	0.85
cal4 MW-10932	500.000	505.259	5.259	1076133.92	1.05

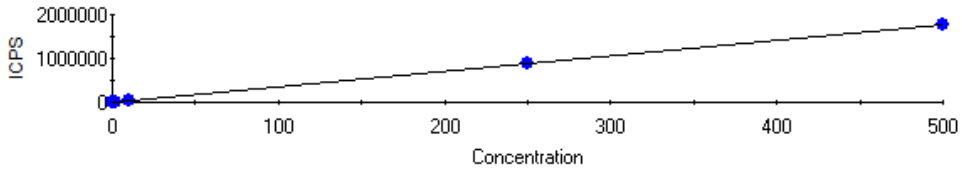
118Sn FQ Block 1



Intercept CPS=22.664006 Intercept Conc=0.008782
Sensitivity=2580.701472 Correlation Coeff=0.999989

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	22.66	0.00
MW10956	5.000	5.188	0.188	13412.45	3.77
cal1 MW-10957	20.000	19.536	0.464	50438.31	2.32
cal2 MW-10958	100.000	98.555	1.445	254363.70	1.45
cal3 MW-10931	250.000	248.491	1.509	641303.81	0.60
cal4 MW-10932	500.000	501.060	1.060	1293109.40	0.21

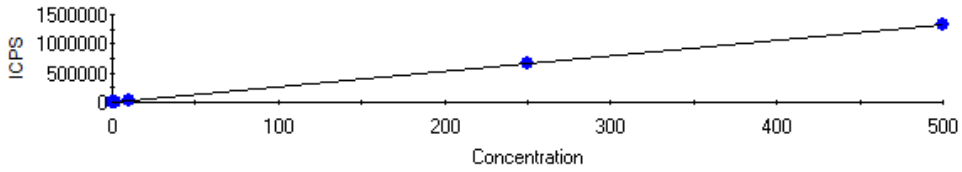
121Sb FQ Block 1



Intercept CPS=101.396989 Intercept Conc=0.028671
Sensitivity=3536.516011 Correlation Coeff=0.999965

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	101.40	0.00
cal1 MW-10957	2.000	1.978	0.022	7097.31	1.09
cal2 MW-10958	10.000	9.917	0.083	35173.85	0.83
cal3 MW-10931	250.000	246.531	3.469	871963.06	1.39
cal4 MW-10932	500.000	501.736	1.736	1774499.24	0.35

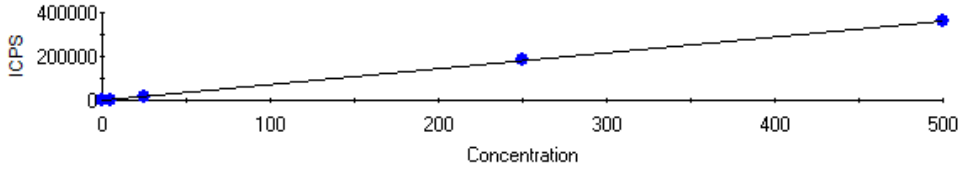
123Sb FQ Block 1



Intercept CPS=65.421405 Intercept Conc=0.024452
Sensitivity=2675.496807 Correlation Coeff=0.999985

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	65.42	0.00
cal1 MW-10957	2.000	1.977	0.023	5354.47	1.16
cal2 MW-10958	10.000	10.037	0.037	26918.15	0.37
cal3 MW-10931	250.000	247.745	2.255	662905.76	0.90
cal4 MW-10932	500.000	501.127	1.127	1340829.05	0.23

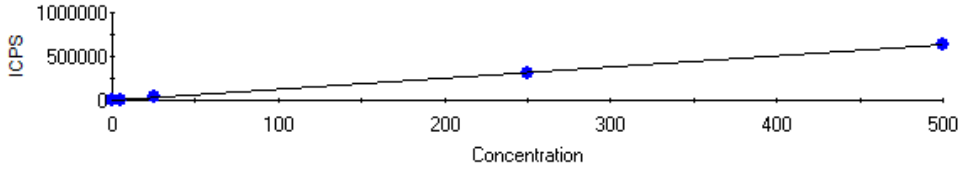
135Ba FQ Block 1



Intercept CPS=36.027809 Intercept Conc=0.050067
Sensitivity=719.584906 Correlation Coeff=0.999994

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	36.03	0.00
cal1 MW-10957	5.000	4.851	0.149	3526.53	2.99
cal2 MW-10958	25.000	24.804	0.196	17884.61	0.78
cal3 MW-10931	250.000	252.353	2.353	181625.10	0.94
cal4 MW-10932	500.000	501.258	1.258	360733.45	0.25

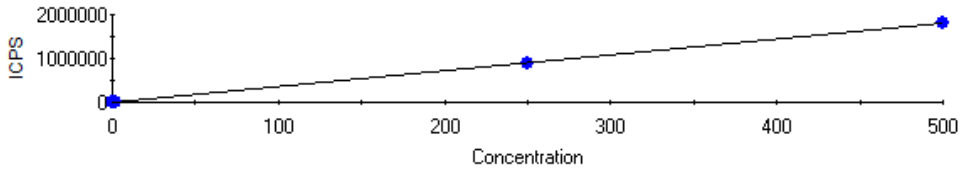
137Ba FQ Block 1



Intercept CPS=65.409336 Intercept Conc=0.051971
Sensitivity=1258.561941 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	65.41	0.00
cal1 MW-10957	5.000	4.951	0.049	6296.30	0.98
cal2 MW-10958	25.000	24.562	0.438	30978.59	1.75
cal3 MW-10931	250.000	250.667	0.667	315544.74	0.27
cal4 MW-10932	500.000	499.689	0.311	628955.12	0.06

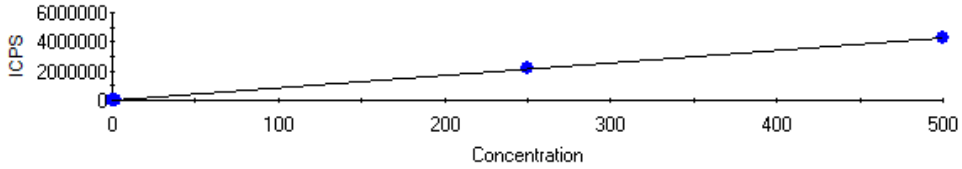
203Tl FQ Block 1



Intercept CPS=64.148660 Intercept Conc=0.017802
Sensitivity=3603.374557 Correlation Coeff=0.999992

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	64.15	0.00
cal1 MW-10957	0.500	0.506	0.006	1889.00	1.29
cal2 MW-10958	2.500	2.462	0.038	8935.15	1.53
cal3 MW-10931	250.000	248.045	1.955	893864.14	0.78
cal4 MW-10932	500.000	500.243	0.243	1802626.64	0.05

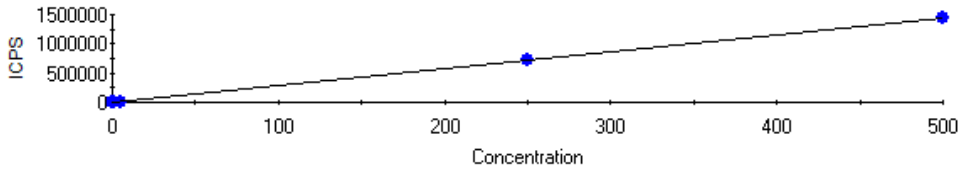
205Tl FQ Block 1



Intercept CPS=204.267645 Intercept Conc=0.023748
Sensitivity=8601.439639 Correlation Coeff=0.999938

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	204.27	0.00
cal1 MW-10957	0.500	0.522	0.022	4695.43	4.43
cal2 MW-10958	2.500	2.478	0.022	21514.44	0.90
cal3 MW-10931	250.000	254.933	4.933	2192992.00	1.97
cal4 MW-10932	500.000	498.437	1.563	4287475.93	0.31

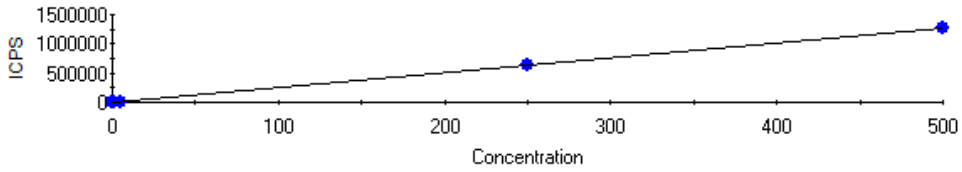
206Pb FQ Block 1



Intercept CPS=23.955475 Intercept Conc=0.008238
Sensitivity=2907.893660 Correlation Coeff=0.999998

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	23.96	0.00
cal1 MW-10957	1.000	1.027	0.027	3009.48	2.67
cal2 MW-10958	5.000	4.814	0.186	14021.82	3.73
cal3 MW-10931	250.000	249.088	0.912	724344.10	0.36
cal4 MW-10932	500.000	500.458	0.458	1455302.68	0.09

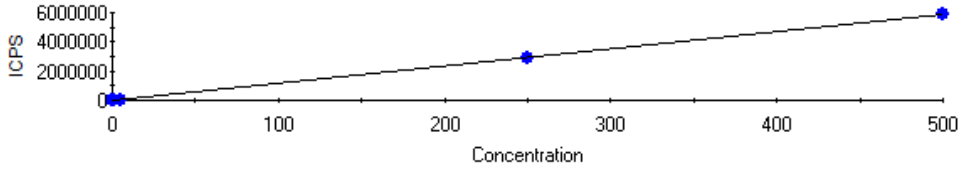
207Pb FQ Block 1



Intercept CPS=25.315924 Intercept Conc=0.009908
Sensitivity=2555.063590 Correlation Coeff=0.999999

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	-0.000	0.000	25.32	0.00
cal1 MW-10957	1.000	0.999	0.001	2577.69	0.11
cal2 MW-10958	5.000	5.023	0.023	12860.32	0.47
cal3 MW-10931	250.000	249.304	0.696	637013.89	0.28
cal4 MW-10932	500.000	500.348	0.348	1278445.18	0.07

208Pb FQ Block 1



Intercept CPS=121.234607 Intercept Conc=0.010288
Sensitivity=11783.548146 Correlation Coeff=0.999996

Label	Defined	Measured	Error	Mean CPS	% Error
BLANK IM9353-01	0.000	0.000	0.000	121.23	0.00
cal1 MW-10957	1.000	0.998	0.002	11882.00	0.19
cal2 MW-10958	5.000	4.882	0.118	57648.22	2.36
cal3 MW-10931	250.000	248.877	1.123	2932773.90	0.45
cal4 MW-10932	500.000	500.563	0.563	5898526.45	0.11

Dilution Corrected Concentrations

TUNE MW10939 04/25/2019 08:12:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:12:28	101.1%	-0.004	2.224	2.034	186.400	9.107	3.797	3.601	3.535	6.356
2	08:12:55	99.1%	0.011	1.934	1.898	198.200	9.072	3.766	3.477	3.329	6.466
3	08:13:22	99.8%	-0.011	1.772	1.892	192.000	10.680	3.710	3.563	3.901	6.239
x		100.0%	-0.001	1.977	1.942	192.200	9.618	3.758	3.547	3.588	6.354
σ		1.0%	0.011	0.229	0.080	5.940	0.916	0.044	0.063	0.290	0.114
%RSD		1.0	863.400	11.570	4.142	3.090	9.527	1.171	1.789	8.086	1.786

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:12:28	16.320	1062.000	0.304	34.810	36.230	102.4%	-0.238	0.049	0.521	-25.180
2	08:12:55	16.700	1051.000	2.094	56.500	38.070	100.6%	-0.261	0.038	0.517	-21.350
3	08:13:22	17.610	1080.000	5.424	41.650	35.610	97.0%	-0.254	0.006	0.476	4.343
x		16.880	1064.000	2.608	44.320	36.640	100.0%	-0.251	0.031	0.505	-14.060
σ		0.665	14.470	2.598	11.090	1.283	2.7%	0.012	0.022	0.025	16.050
%RSD		3.939	1.360	99.640	25.020	3.501	2.7	4.771	72.160	4.954	114.200

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:12:28	14.020	0.246	9.082	0.174	0.009	0.562	0.559	0.234	0.301	1.226
2	08:12:55	14.900	0.217	9.024	3.426	0.005	0.619	0.696	0.211	0.348	1.327
3	08:13:22	17.120	0.222	13.400	13.490	0.009	0.583	0.751	0.210	0.258	1.308
x		15.350	0.228	10.500	5.695	0.008	0.588	0.669	0.218	0.302	1.287
σ		1.596	0.015	2.512	6.940	0.002	0.029	0.099	0.013	0.045	0.053
%RSD		10.400	6.706	23.920	121.900	31.820	4.870	14.740	6.136	14.900	4.150

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:12:28	1.016	1.218	0.036	-0.514	1.064	4.609	7.045	0.457	6.268	0.042
2	08:12:55	0.536	1.253	-0.005	-0.094	1.475	4.571	7.424	0.475	8.486	0.048
3	08:13:22	0.740	1.146	0.007	-0.061	1.477	4.569	5.854	0.167	6.403	0.049
x		0.764	1.206	0.013	-0.223	1.339	4.583	6.774	0.366	7.052	0.047
σ		0.241	0.055	0.021	0.253	0.238	0.022	0.819	0.173	1.243	0.004
%RSD		31.540	4.536	166.100	113.200	17.780	0.491	12.090	47.100	17.630	7.904

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:12:28	101.6%	0.056	0.047	0.034	-0.314	0.016	0.011	0.014	0.009	101.0%
2	08:12:55	101.8%	0.059	0.056	0.037	-0.783	0.010	0.012	0.006	0.010	102.1%
3	08:13:22	96.6%	0.027	0.024	0.027	-0.682	0.012	0.013	-0.001	0.009	96.9%
x		100.0%	0.047	0.043	0.033	-0.593	0.013	0.012	0.006	0.009	100.0%
σ		3.0%	0.017	0.016	0.005	0.247	0.003	0.001	0.008	0.000	2.7%
%RSD		3.0	36.830	38.360	16.610	41.600	24.010	5.889	121.400	3.318	2.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:12:28	0.123	0.185	0.051	0.046	0.132	0.143	101.6%	0.017	0.014	0.030
2	08:12:55	0.118	0.155	0.047	0.053	0.097	0.082	101.4%	0.014	-0.001	0.050
3	08:13:22	0.117	0.153	0.035	0.034	0.122	0.115	97.0%	0.014	0.007	0.016
x		0.119	0.164	0.044	0.045	0.117	0.113	100.0%	0.015	0.007	0.032
σ		0.003	0.018	0.008	0.010	0.018	0.031	2.6%	0.002	0.007	0.017
%RSD		2.691	10.760	17.870	21.900	15.270	27.010	2.6	11.760	110.200	53.970

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:12:28	0.030	0.028	101.5%
2	08:12:55	0.023	0.033	101.6%
3	08:13:22	0.029	0.028	96.8%
x		0.027	0.030	100.0%
σ		0.004	0.003	2.7%
%RSD		15.060	9.656	2.7

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User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:18:13	99.6%	-0.003	-0.001	-0.052	-0.919	-0.389	0.009	0.026	0.025	0.012
2	08:18:40	99.7%	0.003	-0.164	0.021	5.823	0.556	-0.003	-0.034	-0.019	0.003
3	08:19:06	100.7%	0.000	0.165	0.031	-4.905	-0.167	-0.005	0.008	-0.006	-0.015
x		100.0%	-0.000	0.000	0.000	-0.000	0.000	0.000	-0.000	0.000	-0.000
σ		0.6%	0.003	0.164	0.045	5.423	0.495	0.008	0.031	0.023	0.014
%RSD		0.6	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:18:13	12.200	5.028	-1.673	-0.183	-0.297	101.0%	0.029	-0.004	-0.002	5.317
2	08:18:40	12.850	-3.541	3.174	-0.131	0.250	98.9%	-0.063	0.005	0.015	-5.699
3	08:19:06	12.310	-1.488	-1.501	0.314	0.047	100.1%	0.034	-0.001	-0.013	0.382
x		12.460	0.000	-0.000	0.000	-0.000	100.0%	-0.000	0.000	0.000	0.000
σ		0.350	4.474	2.750	0.273	0.276	1.1%	0.054	0.005	0.014	5.518
%RSD		2.807	0.000	0.000	0.000	0.000	1.1	0.000	0.000	0.000	0.000

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:18:13	-0.939	0.008	0.165	-2.641	0.010	0.005	-0.106	0.010	0.009	0.015
2	08:18:40	1.463	-0.011	0.129	2.429	-0.011	-0.002	0.049	-0.011	-0.003	-0.007
3	08:19:06	-0.524	0.004	-0.294	0.213	0.001	-0.003	0.057	0.001	-0.006	-0.008
x		0.000	0.000	0.000	-0.000	-0.000	-0.000	0.000	-0.000	-0.000	0.000
σ		1.284	0.010	0.255	2.542	0.011	0.005	0.092	0.011	0.008	0.013
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:18:13	-0.050	0.013	-0.072	-0.018	0.049	0.128	-2.002	-0.403	-2.486	-0.001
2	08:18:40	0.095	-0.019	0.069	0.047	-0.112	0.221	2.079	0.409	2.815	0.001
3	08:19:06	-0.045	0.006	0.003	-0.030	0.062	-0.349	-0.077	-0.006	-0.330	0.000
x		0.000	0.000	-0.000	0.000	0.000	-0.000	0.000	-0.000	-0.000	0.000
σ		0.082	0.017	0.071	0.042	0.097	0.306	2.042	0.406	2.666	0.001
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:18:13	101.1%	0.001	-0.016	0.013	-0.327	-0.001	-0.000	0.002	0.003	101.4%
2	08:18:40	98.9%	0.002	0.019	-0.006	0.231	-0.001	-0.001	-0.005	0.003	99.0%
3	08:19:06	100.0%	-0.004	-0.003	-0.006	0.096	0.002	0.001	0.003	-0.005	99.6%
x		100.0%	-0.000	0.000	0.000	-0.000	0.000	0.000	0.000	0.000	100.0%
σ		1.1%	0.003	0.018	0.011	0.291	0.002	0.001	0.005	0.005	1.3%
%RSD		1.1	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:18:13	0.002	0.000	-0.002	-0.004	-0.006	-0.011	101.0%	-0.009	-0.006	0.001
2	08:18:40	-0.004	0.001	0.003	0.007	0.000	-0.004	99.1%	0.002	0.003	-0.004
3	08:19:06	0.002	-0.001	-0.001	-0.003	0.006	0.015	99.9%	0.007	0.004	0.003
x		0.000	-0.000	-0.000	-0.000	0.000	-0.000	100.0%	0.000	-0.000	-0.000
σ		0.003	0.001	0.003	0.006	0.006	0.014	1.0%	0.008	0.005	0.004
%RSD		0.000	0.000	0.000	0.000	0.000	0.000	1.0	0.000	0.000	0.000

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:18:13	0.002	0.002	100.4%
2	08:18:40	0.001	-0.000	98.7%
3	08:19:06	-0.004	-0.002	100.8%
x		-0.000	0.000	100.0%
σ		0.003	0.002	1.1%
%RSD		0.000	0.000	1.1

MW10971 04/25/2019 08:23:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:23:59	100.4%	0.162	19.880	20.190	12.030	173.400	171.800	163.500	165.200	15.910
2	08:24:27	99.5%	0.118	18.390	19.700	21.340	171.500	172.300	171.300	167.600	16.420
3	08:24:55	99.5%	0.178	20.280	20.690	7.941	170.900	174.700	164.000	162.800	16.280
x		99.8%	0.153	19.520	20.190	13.770	171.900	172.900	166.300	165.200	16.210
σ		0.5%	0.031	0.996	0.495	6.868	1.320	1.553	4.381	2.390	0.261
%RSD		0.5	20.360	5.105	2.453	49.870	0.767	0.898	2.635	1.446	1.613
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:23:59	52.590	-17.810	168.000	160.100	150.400	98.4%	1.910	1.973	2.015	75.050
2	08:24:27	53.410	-8.585	170.300	162.100	153.500	98.4%	2.058	2.014	1.984	32.030
3	08:24:55	51.270	-44.230	165.000	177.400	155.800	100.4%	2.054	1.963	2.003	49.210
x		52.420	-23.540	167.800	166.600	153.200	99.1%	2.007	1.983	2.001	52.100
σ		1.081	18.500	2.646	9.452	2.706	1.2%	0.085	0.027	0.016	21.650
%RSD		2.062	78.590	1.577	5.675	1.766	1.2	4.210	1.352	0.789	41.570
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:23:59	21.020	1.991	23.460	25.470	0.394	1.964	2.163	2.021	1.981	3.667
2	08:24:27	22.020	2.043	23.230	22.700	0.398	1.958	2.403	2.048	1.999	3.923
3	08:24:55	20.910	2.040	19.940	14.940	0.417	1.996	2.303	1.940	2.050	3.839
x		21.320	2.025	22.210	21.040	0.403	1.973	2.290	2.003	2.010	3.810
σ		0.613	0.029	1.966	5.456	0.013	0.020	0.121	0.056	0.036	0.131
%RSD		2.873	1.445	8.852	25.940	3.144	1.038	5.274	2.812	1.768	3.427
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:23:59	3.658	3.827	0.550	1.954	0.004	-0.820	5.682	1.362	-2.319	3.898
2	08:24:27	4.101	4.174	0.704	2.135	-0.166	-0.686	8.992	2.081	0.989	3.878
3	08:24:55	4.164	3.990	0.753	2.143	-0.212	-0.439	10.650	2.520	-3.153	3.942
x		3.974	3.997	0.669	2.077	-0.125	-0.648	8.440	1.988	-1.494	3.906
σ		0.276	0.174	0.106	0.107	0.114	0.193	2.528	0.584	2.191	0.033
%RSD		6.936	4.343	15.850	5.135	91.030	29.760	29.950	29.400	146.600	0.834
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:23:59	99.2%	3.990	4.060	3.857	0.233	0.390	0.396	0.057	0.052	98.6%
2	08:24:27	100.2%	3.783	3.842	3.938	0.438	0.330	0.364	0.017	0.049	98.3%
3	08:24:55	102.9%	3.893	3.773	3.949	-0.077	0.389	0.388	-0.004	0.043	102.0%
x		100.8%	3.889	3.891	3.915	0.198	0.370	0.383	0.023	0.048	99.6%
σ		1.9%	0.103	0.150	0.050	0.260	0.034	0.017	0.031	0.005	2.1%
%RSD		1.9	2.657	3.857	1.281	131.200	9.306	4.423	133.700	9.620	2.1
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:23:59	5.617	7.968	0.788	0.738	2.041	1.969	99.3%	0.192	0.185	0.395
2	08:24:27	5.695	7.684	0.807	0.853	1.930	1.905	99.3%	0.205	0.210	0.381
3	08:24:55	5.430	8.022	0.792	0.849	2.026	2.008	102.7%	0.189	0.203	0.393
x		5.581	7.891	0.796	0.813	1.999	1.961	100.4%	0.195	0.199	0.390
σ		0.136	0.181	0.010	0.066	0.060	0.052	1.9%	0.008	0.013	0.007
%RSD		2.434	2.299	1.236	8.081	3.017	2.643	1.9	4.261	6.654	1.911
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	08:23:59	0.451	0.399	100.6%							
2	08:24:27	0.417	0.413	100.5%							
3	08:24:55	0.405	0.398	103.7%							
x		0.424	0.403	101.6%							
σ		0.024	0.008	1.8%							
%RSD		5.554	2.039	1.8							

MW10956 04/25/2019 08:29:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:49	98.8%	0.387	26.580	26.390	23.490	216.600	55.910	55.860	53.780	42.070
2	08:30:16	100.5%	0.418	26.060	24.540	17.990	213.000	54.280	53.420	52.720	40.040
3	08:30:43	100.7%	0.408	25.950	25.880	20.020	213.600	55.580	54.510	52.970	40.030
x		100.0%	0.404	26.200	25.610	20.500	214.400	55.260	54.590	53.160	40.710
σ		1.1%	0.016	0.333	0.955	2.779	1.950	0.858	1.219	0.556	1.177
%RSD		1.1	3.899	1.272	3.731	13.550	0.910	1.553	2.233	1.047	2.890
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:49	111.100	-51.730	205.700	217.200	193.900	100.6%	4.644	5.089	1.019	-0.635
2	08:30:16	108.300	-83.590	201.600	212.600	193.100	103.3%	4.334	5.123	1.033	-33.040
3	08:30:43	108.000	-67.530	200.100	206.700	193.600	101.5%	5.098	4.946	0.988	36.360
x		109.100	-67.620	202.500	212.100	193.500	101.8%	4.692	5.053	1.014	0.896
σ		1.729	15.930	2.891	5.267	0.360	1.4%	0.385	0.094	0.023	34.720
%RSD		1.584	23.560	1.428	2.483	0.186	1.3	8.195	1.863	2.263	3876.000
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:49	19.790	4.999	22.080	21.140	5.090	5.145	4.638	0.963	1.015	10.180
2	08:30:16	19.660	5.098	21.610	17.910	4.935	5.053	4.906	0.967	0.995	10.120
3	08:30:43	20.760	5.044	21.300	20.760	5.015	5.095	4.648	0.984	1.058	9.779
x		20.070	5.047	21.660	19.940	5.013	5.098	4.731	0.972	1.023	10.020
σ		0.602	0.049	0.395	1.763	0.077	0.046	0.152	0.011	0.032	0.215
%RSD		3.001	0.978	1.824	8.842	1.546	0.902	3.215	1.181	3.146	2.143
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:49	10.430	9.855	1.221	0.996	-0.411	-0.371	7.419	1.757	-1.259	0.015
2	08:30:16	9.909	10.030	0.956	0.386	-0.134	-0.524	6.288	1.513	-1.601	0.014
3	08:30:43	9.773	9.853	0.937	0.901	-0.285	-0.482	3.787	0.867	0.627	0.015
x		10.040	9.912	1.038	0.761	-0.277	-0.459	5.832	1.379	-0.744	0.015
σ		0.347	0.101	0.159	0.328	0.139	0.079	1.858	0.460	1.200	0.001
%RSD		3.456	1.019	15.300	43.160	50.110	17.200	31.870	33.350	161.200	4.370
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:49	102.1%	9.590	10.070	9.897	-0.184	0.962	0.935	0.071	0.075	100.6%
2	08:30:16	103.6%	10.080	10.140	9.930	-0.322	0.924	0.941	0.049	0.102	101.9%
3	08:30:43	103.3%	9.912	9.802	10.030	-0.792	0.954	0.974	0.034	0.096	102.1%
x		103.0%	9.861	10.010	9.952	-0.433	0.947	0.950	0.051	0.091	101.5%
σ		0.8%	0.249	0.179	0.068	0.319	0.020	0.021	0.019	0.014	0.9%
%RSD		0.8	2.527	1.789	0.686	73.570	2.109	2.196	36.290	15.570	0.8
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:29:49	3.654	5.204	0.931	0.950	4.920	4.906	101.7%	0.444	0.485	0.963
2	08:30:16	3.621	5.228	0.950	0.913	5.160	5.192	103.7%	0.535	0.519	1.048
3	08:30:43	3.749	5.133	0.862	0.920	5.116	5.119	101.8%	0.500	0.489	1.028
x		3.675	5.188	0.914	0.928	5.065	5.072	102.4%	0.493	0.498	1.013
σ		0.067	0.049	0.046	0.020	0.127	0.149	1.1%	0.046	0.019	0.045
%RSD		1.816	0.951	5.052	2.137	2.515	2.934	1.1	9.299	3.746	4.393
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	08:29:49	0.988	0.976	101.2%							
2	08:30:16	0.999	1.005	104.2%							
3	08:30:43	1.022	0.999	102.3%							
x		1.003	0.993	102.5%							
σ		0.018	0.015	1.5%							
%RSD		1.748	1.526	1.5							

cal1 MW-10957 04/25/2019 08:35:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:35:37	100.2%	0.411	50.930	49.670	16.310	428.100	433.600	423.200	415.600	39.840
2	08:36:05	102.6%	0.365	48.810	49.440	26.390	428.400	428.000	412.300	419.900	38.950
3	08:36:32	100.4%	0.474	50.870	51.120	20.650	425.700	434.300	415.700	411.100	40.020
x		101.0%	0.417	50.210	50.070	21.120	427.400	432.000	417.000	415.600	39.600
σ		1.4%	0.055	1.207	0.909	5.056	1.445	3.443	5.580	4.373	0.570
%RSD		1.4	13.210	2.405	1.815	23.940	0.338	0.797	1.338	1.052	1.438

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:35:37	111.600	-49.340	412.300	408.500	378.000	99.6%	5.470	4.846	4.829	136.200
2	08:36:05	113.200	-56.690	398.100	434.600	368.800	99.0%	5.264	5.250	4.985	-49.880
3	08:36:32	112.000	-65.050	407.200	425.900	376.900	101.8%	5.033	4.983	4.986	-48.270
x		112.300	-57.020	405.900	423.000	374.600	100.1%	5.256	5.026	4.933	12.680
σ		0.833	7.861	7.235	13.300	5.053	1.5%	0.219	0.205	0.090	107.000
%RSD		0.742	13.780	1.783	3.144	1.349	1.5	4.162	4.087	1.834	843.700

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:35:37	54.060	5.043	57.730	55.580	0.998	4.695	4.666	4.870	4.970	9.939
2	08:36:05	55.070	5.035	57.500	57.870	1.000	4.951	5.009	4.895	4.951	10.020
3	08:36:32	52.640	4.833	54.390	49.850	0.975	4.944	5.323	4.785	4.944	9.962
x		53.920	4.971	56.540	54.430	0.991	4.863	4.999	4.850	4.955	9.974
σ		1.219	0.119	1.866	4.133	0.014	0.146	0.328	0.058	0.014	0.042
%RSD		2.260	2.389	3.300	7.594	1.363	3.001	6.563	1.194	0.273	0.423

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:35:37	9.643	9.613	1.890	5.194	0.085	-0.597	21.600	5.028	-1.447	9.768
2	08:36:05	9.440	9.915	1.659	5.458	-0.575	-0.107	20.310	4.705	-1.501	9.743
3	08:36:32	9.018	9.096	1.816	6.165	-0.060	0.466	21.090	4.906	-1.878	9.655
x		9.367	9.541	1.788	5.606	-0.183	-0.079	21.000	4.880	-1.609	9.722
σ		0.319	0.414	0.118	0.502	0.347	0.532	0.653	0.163	0.235	0.060
%RSD		3.403	4.339	6.612	8.960	189.200	670.800	3.109	3.339	14.590	0.612

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:35:37	97.6%	9.750	10.100	9.607	0.505	0.924	1.002	0.048	0.050	97.0%
2	08:36:05	98.4%	9.558	9.751	9.606	1.243	0.977	0.944	0.067	0.029	97.9%
3	08:36:32	100.3%	9.689	9.992	9.535	-1.121	0.916	0.956	0.034	0.106	99.7%
x		98.8%	9.666	9.949	9.583	0.209	0.939	0.968	0.050	0.062	98.2%
σ		1.4%	0.098	0.180	0.041	1.209	0.033	0.031	0.017	0.039	1.4%
%RSD		1.4	1.016	1.809	0.430	579.100	3.505	3.177	33.580	64.000	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:35:37	13.760	19.440	2.001	1.974	4.784	5.152	97.9%	0.515	0.486	1.060
2	08:36:05	13.960	19.400	1.937	2.006	4.795	4.836	98.4%	0.523	0.518	1.016
3	08:36:32	13.530	19.760	1.997	1.950	4.973	4.864	100.2%	0.481	0.563	1.004
x		13.750	19.540	1.978	1.977	4.851	4.951	98.8%	0.506	0.522	1.027
σ		0.213	0.198	0.035	0.029	0.106	0.175	1.2%	0.022	0.039	0.030
%RSD		1.551	1.011	1.793	1.442	2.191	3.537	1.2	4.405	7.415	2.886

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:35:37	1.014	1.017	98.2%
2	08:36:05	0.944	0.961	98.7%
3	08:36:32	1.039	1.016	100.5%
x		0.999	0.998	99.1%
σ		0.050	0.032	1.2%
%RSD		4.959	3.209	1.2

cal2 MW-10958 04/25/2019 08:40:59

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:41:26	100.7%	1.804	249.900	254.600	33.050	T 2082.000	T 2077.000	2104.000	2117.000	198.300
2	08:41:52	99.3%	1.933	247.800	247.700	21.390	T 2057.000	T 2056.000	2096.000	2049.000	203.000
3	08:42:20	99.2%	2.127	251.100	254.100	21.090	T 2089.000	T 2025.000	2060.000	2092.000	200.800
x		99.8%	1.955	249.600	252.100	25.180	T 2076.000	T 2053.000	2087.000	2086.000	200.700
σ		0.8%	0.163	1.660	3.864	6.821	T 17.130	T 25.980	23.300	34.400	2.329
%RSD		0.8	8.339	0.665	1.532	27.090	T 0.825	T 1.266	1.117	1.649	1.160

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:41:26	531.000	-24.490	T 1976.000	2106.000	1872.000	98.8%	24.730	25.610	25.390	282.500
2	08:41:52	503.200	-60.610	T 2010.000	2079.000	1964.000	103.8%	25.510	25.190	24.480	199.500
3	08:42:20	501.500	-51.960	T 2012.000	2053.000	1946.000	102.4%	24.790	25.840	25.530	180.000
x		511.900	-45.690	T 1999.000	2079.000	1927.000	101.7%	25.010	25.550	25.130	220.700
σ		16.570	18.860	T 20.180	26.870	48.670	2.6%	0.433	0.333	0.569	54.430
%RSD		3.236	41.290	T 1.009	1.292	2.526	2.5	1.732	1.305	2.266	24.670

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:41:26	280.900	25.020	289.200	293.600	5.017	25.410	25.800	24.820	24.650	50.010
2	08:41:52	276.700	24.470	279.000	270.500	4.909	24.270	25.150	24.070	23.590	48.300
3	08:42:20	280.600	25.340	287.000	278.000	5.074	25.640	24.840	24.930	25.240	50.770
x		279.400	24.940	285.000	280.700	5.000	25.110	25.260	24.610	24.490	49.690
σ		2.323	0.439	5.366	11.780	0.084	0.730	0.489	0.466	0.837	1.265
%RSD		0.832	1.760	1.883	4.196	1.674	2.909	1.934	1.892	3.416	2.545

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:41:26	48.130	47.900	9.959	24.820	-0.214	-0.364	114.200	26.490	0.155	48.960
2	08:41:52	48.250	47.760	9.385	24.870	-0.108	-0.927	99.110	22.950	-2.464	48.410
3	08:42:20	48.110	49.110	9.376	25.770	-0.159	-0.142	102.800	23.740	-0.737	49.030
x		48.160	48.250	9.574	25.150	-0.160	-0.478	105.400	24.390	-1.016	48.800
σ		0.073	0.743	0.334	0.534	0.053	0.405	7.893	1.860	1.331	0.341
%RSD		0.151	1.539	3.490	2.122	33.230	84.770	7.491	7.626	131.100	0.698

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:41:26	97.0%	49.850	50.700	49.300	4.961	4.895	4.982	0.343	0.573	95.9%
2	08:41:52	103.0%	50.000	49.430	49.530	1.443	4.757	4.757	0.351	0.522	102.0%
3	08:42:20	104.3%	49.270	50.540	49.360	0.355	4.679	4.724	0.429	0.534	102.9%
x		101.4%	49.710	50.220	49.390	2.253	4.777	4.821	0.374	0.543	100.2%
σ		3.9%	0.388	0.691	0.122	2.408	0.110	0.141	0.048	0.027	3.8%
%RSD		3.8	0.781	1.375	0.247	106.900	2.294	2.913	12.780	4.913	3.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:41:26	70.030	99.150	9.936	9.777	25.180	24.610	97.8%	2.388	2.544	4.703
2	08:41:52	70.240	98.600	9.937	10.090	24.680	24.310	103.2%	2.424	2.430	4.784
3	08:42:20	68.740	97.910	9.879	10.250	24.560	24.770	103.8%	2.574	2.458	4.954
x		69.670	98.550	9.917	10.040	24.800	24.560	101.6%	2.462	2.478	4.814
σ		0.811	0.620	0.033	0.239	0.328	0.235	3.3%	0.099	0.060	0.128
%RSD		1.163	0.629	0.333	2.381	1.324	0.955	3.2	4.021	2.406	2.664

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:41:26	5.012	4.805	97.1%
2	08:41:52	5.009	4.927	104.4%
3	08:42:20	5.049	4.914	103.8%
x		5.023	4.882	101.8%
σ		0.022	0.067	4.1%
%RSD		0.439	1.374	4.0

cal3 MW-10931 04/25/2019 08:46:49

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:47:16	98.3%	246.300	241.100	246.900	31.660	271.700	268.600	255.400	257.200	247.800
2	08:47:43	100.9%	243.600	244.400	245.100	19.870	262.200	263.900	259.600	259.800	246.600
3	08:48:10	97.7%	255.700	260.300	258.900	23.500	275.000	274.000	265.400	273.400	261.700
x		99.0%	248.500	248.600	250.300	25.010	269.600	268.800	260.100	263.400	252.000
σ		1.7%	6.366	10.290	7.539	6.037	6.648	5.058	5.037	8.686	8.374
%RSD		1.7	2.561	4.140	3.012	24.130	2.466	1.882	1.936	3.297	3.322

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:47:16	265.000	-37.780	261.400	566.200	387.300	97.5%	247.300	257.300	257.600	-269.500
2	08:47:43	264.200	-62.800	254.200	573.900	388.400	99.7%	243.800	252.600	247.000	1547.000
3	08:48:10	275.600	-21.870	267.600	590.300	394.300	97.4%	256.300	267.700	261.400	427.100
x		268.300	-40.820	261.000	576.800	390.000	98.2%	249.100	259.200	255.300	568.300
σ		6.398	20.630	6.730	12.270	3.745	1.3%	6.422	7.725	7.473	916.600
%RSD		2.385	50.550	2.578	2.128	0.960	1.3	2.578	2.980	2.927	161.300

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:47:16	383.200	254.900	286.500	271.200	255.400	255.900	251.600	246.100	245.900	245.100
2	08:47:43	379.200	249.400	279.500	266.200	249.900	250.300	247.500	247.000	246.300	248.300
3	08:48:10	386.500	262.400	295.700	283.000	257.400	259.500	255.800	252.500	252.800	245.900
x		383.000	255.600	287.200	273.500	254.200	255.300	251.600	248.600	248.400	246.400
σ		3.658	6.551	8.151	8.632	3.905	4.646	4.127	3.482	3.840	1.665
%RSD		0.955	2.563	2.838	3.157	1.536	1.820	1.640	1.401	1.546	0.675

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:47:16	248.300	247.500	246.500	251.700	-0.214	-0.133	1077.000	250.000	6.682	249.200
2	08:47:43	245.800	244.300	244.200	247.900	0.109	0.150	1064.000	247.700	3.737	247.100
3	08:48:10	253.300	252.400	251.700	251.200	0.101	0.058	1108.000	252.600	4.478	254.800
x		249.100	248.100	247.500	250.200	-0.002	0.025	1083.000	250.100	4.966	250.400
σ		3.816	4.106	3.841	2.092	0.184	0.144	22.770	2.493	1.532	3.984
%RSD		1.532	1.655	1.552	0.836	12040.000	578.300	2.103	0.997	30.850	1.591

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:47:16	97.4%	246.100	245.800	246.300	251.900	246.300	247.200	248.100	246.300	95.7%
2	08:47:43	97.5%	243.300	243.500	243.300	249.900	242.700	243.100	244.900	245.100	96.0%
3	08:48:10	96.7%	252.800	255.700	252.900	254.100	251.600	250.400	253.700	250.900	96.9%
x		97.2%	247.400	248.400	247.500	251.900	246.900	246.900	248.900	247.500	96.2%
σ		0.5%	4.916	6.468	4.932	2.092	4.469	3.663	4.484	3.044	0.6%
%RSD		0.5	1.987	2.604	1.993	0.830	1.810	1.483	1.801	1.230	0.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:47:16	252.700	246.700	243.900	243.100	248.200	250.600	96.7%	245.700	252.800	245.200
2	08:47:43	249.000	246.500	244.400	247.500	252.100	248.400	96.1%	247.700	254.000	250.200
3	08:48:10	254.700	252.300	251.300	252.600	256.700	253.000	97.8%	250.700	258.100	251.900
x		252.100	248.500	246.500	247.700	252.400	250.700	96.8%	248.000	254.900	249.100
σ		2.905	3.261	4.127	4.765	4.239	2.309	0.9%	2.532	2.768	3.445
%RSD		1.152	1.312	1.674	1.923	1.680	0.921	0.9	1.021	1.086	1.383

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:47:16	246.200	245.600	95.5%
2	08:47:43	250.700	249.900	96.7%
3	08:48:10	251.000	251.100	96.6%
x		249.300	248.900	96.3%
σ		2.686	2.881	0.6%
%RSD		1.077	1.158	0.7

cal4 MW-10932 04/25/2019 08:52:37

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:03	98.8%	490.800	494.600	M 503.600	31.950	T 537.600	542.100	531.200	526.700	TM 500.700
2	08:53:31	98.4%	M 509.000	M 505.100	M 504.000	24.930	T 535.700	545.300	525.000	517.200	TM 503.200
3	08:53:58	99.4%	M 506.100	M 502.300	491.800	25.550	T 527.700	T 529.100	520.900	518.500	T 495.600
x		98.9%	M 502.000	M 500.700	M 499.800	27.480	T 533.700	T 538.800	525.700	520.800	TM 499.800
σ		0.5%	M 9.786	M 5.433	M 6.955	3.884	T 5.223	T 8.570	5.172	5.165	TM 3.853
%RSD		0.5	M 1.950	M 1.085	M 1.392	14.130	T 0.979	T 1.590	0.984	0.992	TM 0.771

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:03	528.700	-33.250	519.800	1169.000	793.200	99.0%	M 503.100	T 499.100	TM 501.700	4479.000
2	08:53:31	511.300	-48.180	521.200	1121.000	804.600	102.4%	497.800	TM 500.900	T 493.800	4473.000
3	08:53:58	505.200	-49.920	519.500	1158.000	800.100	104.2%	497.700	T 498.500	T 496.400	3009.000
x		515.100	-43.780	520.100	1149.000	799.300	101.9%	M 499.600	TM 499.500	TM 497.300	3987.000
σ		12.200	9.163	0.893	25.470	5.722	2.6%	M 3.083	TM 1.209	TM 4.020	847.100
%RSD		2.369	20.930	0.172	2.216	0.716	2.6	M 0.617	TM 0.242	TM 0.808	21.250

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:03	774.500	T 499.300	T 550.000	538.400	TM 503.900	M 514.600	M 512.500	M 504.100	M 502.200	499.800
2	08:53:31	766.200	T 499.900	T 538.500	530.100	T 495.500	M 504.900	490.700	M 506.800	M 502.200	499.200
3	08:53:58	763.900	T 492.500	T 539.900	529.500	T 494.300	M 503.000	494.400	M 501.600	M 500.700	M 506.600
x		768.200	T 497.200	T 542.800	532.700	TM 497.900	M 507.500	M 499.200	M 504.100	M 501.700	M 501.800
σ		5.607	T 4.088	T 6.281	4.981	TM 5.215	M 6.225	M 11.660	M 2.634	M 0.823	M 4.119
%RSD		0.730	T 0.822	T 1.157	0.935	TM 1.047	M 1.227	M 2.336	M 0.522	M 0.164	M 0.821

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:03	496.900	499.700	499.600	M 502.100	-0.026	-0.320	2179.000	M 504.000	6.504	TM 500.600
2	08:53:31	498.500	M 500.900	M 500.200	491.900	-0.008	-0.695	2162.000	M 500.400	7.719	T 498.500
3	08:53:58	M 506.400	M 502.900	M 500.400	499.400	-0.151	-0.655	2133.000	495.500	5.213	TM 500.700
x		M 500.600	M 501.200	M 500.000	M 497.800	-0.062	-0.557	2158.000	M 500.000	6.479	TM 499.900
σ		M 5.082	M 1.650	M 0.433	M 5.274	0.078	0.206	23.200	M 4.251	1.253	TM 1.209
%RSD		M 1.015	M 0.329	M 0.087	M 1.059	126.600	37.010	1.075	M 0.850	19.340	TM 0.242

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:03	97.1%	M 500.400	496.700	499.100	M 504.200	M 500.900	M 503.300	499.700	499.300	96.1%
2	08:53:31	102.0%	M 500.000	496.900	499.200	499.800	M 501.700	497.200	497.600	498.600	100.7%
3	08:53:58	102.6%	M 503.500	M 506.900	M 505.700	493.100	M 506.000	M 504.200	M 504.300	M 506.000	101.1%
x		100.6%	M 501.300	M 500.200	M 501.300	M 499.000	M 502.900	M 501.500	M 500.500	M 501.300	99.3%
σ		3.0%	M 1.916	M 5.856	M 3.748	M 5.613	M 2.755	M 3.824	M 3.403	M 4.109	2.8%
%RSD		3.0	M 0.382	M 1.171	M 0.748	M 1.125	M 0.548	M 0.762	M 0.680	M 0.820	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:53:03	M 507.100	M 501.300	496.700	496.600	M 500.900	M 501.700	96.8%	498.400	T 496.500	495.400
2	08:53:31	M 502.200	M 501.200	M 501.700	M 502.100	498.700	494.700	101.0%	499.100	T 497.900	M 500.600
3	08:53:58	M 506.500	M 500.600	M 506.800	M 504.700	M 504.300	M 502.700	102.2%	M 503.200	TM 500.900	M 505.400
x		M 505.300	M 501.100	M 501.700	M 501.100	M 501.300	M 499.700	100.0%	M 500.200	TM 498.400	M 500.500
σ		M 2.687	M 0.383	M 5.071	M 4.151	M 2.825	M 4.374	2.9%	M 2.546	TM 2.264	M 5.021
%RSD		M 0.532	M 0.077	M 1.011	M 0.828	M 0.564	M 0.875	2.8	M 0.509	TM 0.454	M 1.003

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:53:03	498.200	499.200	94.4%
2	08:53:31	497.600	M 502.600	100.4%
3	08:53:58	M 505.300	T 499.900	103.1%
x		M 500.300	TM 500.600	99.3%
σ		M 4.289	TM 1.810	4.4%
%RSD		M 0.857	TM 0.362	4.4

cal5 MW-10933 04/25/2019 08:58:24

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:51	91.8%	0.043	4.490	3.970	41.490	T51360.000	T51270.000	T50950.000	T50800.000	1.039
2	08:59:18	93.2%	0.181	3.283	3.739	32.980	T51050.000	T51850.000	T51410.000	T50610.000	1.104
3	08:59:49	93.9%	0.018	3.832	3.190	38.420	T50010.000	T50580.000	T50590.000	T50760.000	1.030
x		93.0%	0.080	3.868	3.633	37.630	T50800.000	T51230.000	T50980.000	T50720.000	1.058
σ		1.1%	0.088	0.605	0.401	4.309	T707.700	T635.800	T409.200	T102.400	0.041
%RSD		1.2	108.900	15.630	11.030	11.450	T1.393	T1.241	T0.803	T0.202	3.834

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:51	T4929.000	17.540	T49850.000	50870.000	T49360.000	93.9%	0.712	-0.006	0.266	29.050
2	08:59:18	T4834.000	3.670	T49590.000	49940.000	T50150.000	97.0%	1.035	0.002	0.264	75.790
3	08:59:49	T4630.000	-25.920	T48680.000	49470.000	T50520.000	99.2%	0.770	-0.033	0.198	49.390
x		T4797.000	-1.569	T49370.000	50090.000	T50010.000	96.7%	0.839	-0.012	0.243	51.410
σ		T152.700	22.200	T613.400	712.700	T593.600	2.7%	0.172	0.018	0.039	23.440
%RSD		T3.184	1415.000	T1.242	1.423	T1.187	2.8	20.500	147.300	15.920	45.590

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:51	T51230.000	0.861	T51120.000	T50940.000	2.484	2.391	2.063	0.312	0.284	1.025
2	08:59:18	T50700.000	0.938	T51010.000	T51580.000	2.518	2.546	2.129	0.408	0.393	1.238
3	08:59:49	T50430.000	0.787	T51080.000	T51400.000	2.470	2.369	1.493	0.312	0.345	1.289
x		T50790.000	0.862	T51070.000	T51310.000	2.490	2.435	1.895	0.344	0.341	1.184
σ		T406.600	0.075	T53.200	T326.600	0.025	0.096	0.350	0.056	0.054	0.140
%RSD		T0.801	8.723	T0.104	T0.637	0.989	3.959	18.450	16.160	16.000	11.810

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:51	0.668	0.946	0.397	0.645	0.711	-0.520	0.190	0.118	-1.661	0.433
2	08:59:18	0.931	1.186	0.286	0.051	0.193	0.298	0.006	0.074	-1.363	0.484
3	08:59:49	0.857	1.206	0.450	0.686	0.535	0.085	3.327	0.900	-2.390	0.430
x		0.819	1.112	0.378	0.461	0.480	-0.046	1.174	0.364	-1.804	0.449
σ		0.136	0.145	0.084	0.356	0.263	0.424	1.867	0.465	0.528	0.031
%RSD		16.560	13.020	22.190	77.190	54.900	930.800	158.900	127.600	29.270	6.856

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:51	91.7%	0.292	0.359	0.245	-1.551	0.018	0.035	0.033	0.016	89.1%
2	08:59:18	94.8%	0.334	0.343	0.343	-0.252	0.131	0.121	0.177	0.101	91.4%
3	08:59:49	97.5%	0.234	0.231	0.203	0.692	0.038	0.041	0.073	0.014	93.4%
x		94.7%	0.287	0.311	0.264	-0.371	0.062	0.066	0.095	0.043	91.3%
σ		2.9%	0.050	0.070	0.072	1.126	0.060	0.048	0.074	0.050	2.1%
%RSD		3.1	17.560	22.430	27.150	303.900	96.840	73.160	78.550	114.600	2.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	08:58:51	0.185	0.243	0.530	0.499	0.056	0.048	92.3%	0.034	0.031	0.077
2	08:59:18	0.295	0.348	0.644	0.616	0.065	0.122	95.5%	0.125	0.120	0.146
3	08:59:49	0.144	0.208	0.463	0.475	0.045	0.033	96.9%	0.027	0.027	0.093
x		0.208	0.266	0.546	0.530	0.056	0.068	94.9%	0.062	0.059	0.105
σ		0.078	0.073	0.092	0.075	0.010	0.048	2.4%	0.055	0.053	0.036
%RSD		37.580	27.320	16.770	14.210	18.250	70.270	2.5	88.450	89.480	34.490

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	08:58:51	0.080	0.067	87.0%
2	08:59:18	0.143	0.145	90.3%
3	08:59:49	0.102	0.084	93.2%
x		0.108	0.099	90.1%
σ		0.032	0.041	3.1%
%RSD		29.410	41.560	3.4

cal6 MW-10934 04/25/2019 09:04:16

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:04:44	87.6%	0.004	2.163	2.036	44.080	T 98810.000	T 99090.000	TM 100300.000	T 98830.000	1.326
2	09:05:11	90.3%	-0.001	1.932	2.026	50.230	TM 100800.000	TM 100400.000	T 99190.000	T 99450.000	1.364
3	09:05:37	90.3%	-0.001	1.849	1.863	44.970	T 99770.000	T 98650.000	T 99060.000	T 99060.000	1.302
x		89.4%	0.001	1.981	1.975	46.430	TM 99790.000	TM 99380.000	TM 99510.000	T 99110.000	1.331
σ		1.6%	0.003	0.163	0.097	3.322	TM 993.700	TM 918.800	TM 668.900	T 313.400	0.031
%RSD		1.8	326.300	8.222	4.911	7.156	TM 0.996	TM 0.925	TM 0.672	T 0.316	2.320

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:04:44	T 9700.000	43.460	TM 101300.000	M 100700.000	TM 102100.000	93.0%	1.612	-0.109	0.422	70.850
2	09:05:11	T 9626.000	18.430	T 98470.000	99710.000	T 99110.000	93.3%	1.822	-0.113	0.457	84.110
3	09:05:37	T 9695.000	32.430	T 98970.000	99410.000	T 98750.000	94.2%	1.898	-0.135	0.457	94.840
x		T 9674.000	31.440	TM 99590.000	M 99950.000	TM 100000.000	93.5%	1.778	-0.119	0.445	83.260
σ		T 41.590	12.540	TM 1538.000	M 700.500	TM 1855.000	0.6%	0.148	0.014	0.020	12.020
%RSD		T 0.430	39.890	TM 1.544	M 0.701	TM 1.856	0.7	8.330	11.700	4.563	14.430

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:04:44	T 98920.000	1.650	T 98650.000	T 99210.000	4.626	4.599	3.841	0.574	0.582	3.062
2	09:05:11	TM 100300.000	1.645	T 99560.000	T 98930.000	4.577	4.451	4.435	0.562	0.518	3.310
3	09:05:37	T 99590.000	1.657	TM 100200.000	T 99420.000	4.626	4.609	3.411	0.490	0.541	3.091
x		TM 99600.000	1.651	TM 99470.000	T 99190.000	4.610	4.553	3.896	0.542	0.547	3.154
σ		TM 697.900	0.006	TM 775.500	T 244.100	0.028	0.089	0.514	0.045	0.032	0.135
%RSD		TM 0.701	0.347	TM 0.780	T 0.246	0.610	1.945	13.190	8.328	5.911	4.288

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:04:44	2.311	2.830	0.545	1.150	1.528	-0.142	1.191	0.384	-1.612	0.787
2	09:05:11	2.631	3.024	0.521	0.823	2.028	-0.405	0.376	0.246	-4.305	0.840
3	09:05:37	2.467	2.676	0.489	0.684	1.602	-0.159	0.913	0.339	-3.366	0.807
x		2.470	2.843	0.518	0.886	1.719	-0.235	0.826	0.323	-3.094	0.811
σ		0.160	0.174	0.028	0.239	0.270	0.147	0.415	0.070	1.367	0.027
%RSD		6.481	6.130	5.486	27.040	15.690	62.630	50.150	21.670	44.180	3.301

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:04:44	88.9%	0.207	0.115	0.164	0.219	0.013	0.006	0.026	0.000	84.8%
2	09:05:11	88.4%	0.275	0.150	0.203	-0.088	0.014	0.012	0.035	0.010	84.8%
3	09:05:37	89.8%	0.213	0.171	0.183	-0.138	0.008	0.005	0.025	0.002	86.9%
x		89.1%	0.232	0.145	0.183	-0.002	0.012	0.008	0.029	0.004	85.5%
σ		0.7%	0.038	0.028	0.020	0.194	0.003	0.003	0.005	0.005	1.2%
%RSD		0.8	16.190	19.460	10.680	8449.000	28.670	43.930	18.890	128.500	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:04:44	0.049	0.084	0.511	0.507	-0.004	0.038	88.2%	0.002	0.000	0.109
2	09:05:11	0.062	0.079	0.500	0.546	0.068	0.038	89.0%	0.007	0.009	0.075
3	09:05:37	0.069	0.073	0.520	0.445	0.039	0.058	90.8%	0.013	0.004	0.086
x		0.060	0.079	0.510	0.500	0.034	0.045	89.4%	0.007	0.004	0.090
σ		0.010	0.006	0.010	0.051	0.036	0.011	1.3%	0.005	0.004	0.017
%RSD		17.020	7.117	1.952	10.280	105.600	25.590	1.5	70.490	94.100	19.080

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:04:44	0.102	0.095	82.0%
2	09:05:11	0.099	0.092	83.7%
3	09:05:37	0.078	0.078	84.0%
x		0.093	0.088	83.2%
σ		0.013	0.009	1.0%
%RSD		14.040	10.540	1.3

ICV MW11007 PREP 4/25/19 04/25/2019 09:10:05 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:31	94.3%	211.400	215.000	211.200	14.640	┬41910.000	┬42390.000	┬42520.000	┬41760.000	209.800
2	09:10:59	94.5%	200.100	206.200	206.000	25.820	┬40580.000	┬40390.000	┬40520.000	┬40510.000	203.200
3	09:11:27	92.8%	202.700	210.400	203.500	19.290	┬41560.000	┬41040.000	┬41150.000	┬40850.000	206.200
x		93.9%	102.380%	210.500	103.464%	19.920	┬103.378%	┬41270.000	┬41400.000	┬102.603%	103.197%
σ		0.9%	n/a	4.435	n/a	5.619	┬n/a	┬1021.000	┬1020.000	┬n/a	n/a
%RSD		1.0	2.883	2.107	1.882	28.210	┬1.666	┬2.473	┬2.465	┬1.580	1.608

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:31	┬2091.000	28.500	┬40800.000	41870.000	┬41460.000	97.6%	208.700	216.800	209.400	191.200
2	09:10:59	┬2118.000	30.640	┬39520.000	40540.000	┬39100.000	95.6%	202.400	211.300	201.500	1199.000
3	09:11:27	┬2107.000	32.610	┬40080.000	41080.000	┬40380.000	95.5%	202.800	209.600	203.900	809.700
x		┬105.279%	30.580	┬100.335%	41160.000	┬100.786%	96.2%	102.317%	106.290%	102.463%	733.200
σ		┬n/a	2.055	┬n/a	667.500	┬n/a	1.2%	n/a	n/a	n/a	508.100
%RSD		┬0.644	6.719	┬1.593	1.621	┬2.922	1.2	1.737	1.772	1.981	69.300

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:31	┬42630.000	206.000	┬42510.000	┬42600.000	201.300	199.000	200.000	196.700	195.700	205.300
2	09:10:59	┬41650.000	199.100	┬41100.000	┬41310.000	194.100	193.800	194.700	190.100	187.800	197.400
3	09:11:27	┬41740.000	200.500	┬41610.000	┬41910.000	198.700	194.600	195.900	191.300	192.000	199.200
x		┬42010.000	100.927%	┬104.349%	┬104.851%	99.019%	97.903%	196.900	192.700	95.908%	100.318%
σ		┬539.100	n/a	┬n/a	┬n/a	n/a	n/a	2.783	3.490	n/a	n/a
%RSD		┬1.283	1.807	┬1.708	┬1.537	1.837	1.431	1.414	1.811	2.057	2.075

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:31	202.900	199.000	206.400	203.900	0.558	-0.606	870.700	204.400	0.633	205.900
2	09:10:59	193.000	189.500	195.500	202.000	0.868	-0.133	847.000	200.900	0.694	198.600
3	09:11:27	194.800	192.600	200.900	200.400	0.581	0.631	852.200	201.300	1.580	200.500
x		196.900	193.700	100.458%	202.100	0.669	-0.036	856.600	101.116%	0.969	100.838%
σ		5.282	4.854	n/a	1.784	0.173	0.624	12.450	n/a	0.530	n/a
%RSD		2.683	2.506	2.721	0.883	25.860	1731.000	1.453	0.948	54.680	1.883

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:31	94.4%	210.000	209.900	209.500	197.700	184.500	185.300	205.200	204.000	92.3%
2	09:10:59	92.3%	205.100	204.400	202.700	203.000	179.200	179.700	201.800	197.100	89.3%
3	09:11:27	93.4%	206.000	203.000	202.800	200.800	181.000	179.200	198.800	197.600	90.6%
x		93.4%	103.509%	102.882%	102.509%	200.500	90.797%	181.400	100.968%	99.782%	90.7%
σ		1.1%	n/a	n/a	n/a	2.667	n/a	3.411	n/a	n/a	1.5%
%RSD		1.2	1.261	1.781	1.906	1.330	1.490	1.881	1.594	1.945	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:10:31	208.200	205.600	210.300	206.200	208.700	209.000	94.4%	197.800	202.300	199.500
2	09:10:59	204.400	201.200	202.900	196.900	206.000	205.500	92.8%	192.800	196.700	193.600
3	09:11:27	203.000	203.000	202.900	197.600	204.800	205.900	94.5%	191.900	195.100	191.800
x		102.596%	101.648%	205.400	100.120%	103.260%	103.398%	93.9%	194.200	99.015%	195.000
σ		n/a	n/a	4.264	n/a	n/a	n/a	1.0%	3.197	n/a	4.044
%RSD		1.321	1.084	2.076	2.598	0.971	0.923	1.0	1.647	1.896	2.074

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:10:31	199.000	198.000	90.7%
2	09:10:59	193.500	192.100	87.5%
3	09:11:27	193.300	190.900	89.3%
x		195.300	96.836%	89.2%
σ		3.247	n/a	1.6%
%RSD		1.663	1.959	1.8

ICB IM9370-01 04/25/2019 09:15:53 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:16:20	96.6%	0.028	1.169	1.017	6.772	4.225	4.934	4.620	4.759	0.028
2	09:16:47	98.2%	0.025	0.884	0.873	10.070	3.435	2.753	3.210	2.900	0.007
3	09:17:14	97.6%	0.001	0.990	0.975	-1.241	2.632	2.151	2.316	1.743	0.042
x		97.5%	0.018	1.014	0.955	5.199	3.431	3.279	3.382	3.134	0.026
σ		0.8%	0.015	0.144	0.074	5.815	0.797	1.464	1.162	1.522	0.018
%RSD		0.8	83.840	14.210	7.776	111.900	23.230	44.640	34.350	48.560	69.300

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:16:20	15.190	-8.718	9.932	4.232	4.669	98.0%	-0.359	0.030	0.039	-12.240
2	09:16:47	15.070	3.586	11.210	-1.524	3.445	96.8%	-0.339	0.006	0.009	-4.360
3	09:17:14	15.580	11.460	10.870	2.387	2.651	96.4%	-0.367	-0.020	0.002	7.548
x		15.280	2.108	10.670	1.698	3.588	97.1%	-0.355	0.005	0.017	-3.019
σ		0.262	10.170	0.661	2.939	1.017	0.8%	0.014	0.025	0.020	9.963
%RSD		1.713	482.400	6.199	173.100	28.330	0.9	4.073	483.600	119.500	330.100

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:16:20	4.813	-0.037	5.102	8.735	0.007	-0.011	0.141	-0.071	0.014	-0.000
2	09:16:47	4.023	-0.012	6.713	13.300	0.015	0.012	0.327	-0.069	0.013	-0.031
3	09:17:14	3.505	-0.004	5.294	13.220	0.007	-0.007	0.576	-0.058	-0.020	-0.002
x		4.113	-0.018	5.703	11.750	0.010	-0.002	0.348	-0.066	0.002	-0.011
σ		0.659	0.017	0.880	2.612	0.005	0.012	0.218	0.007	0.020	0.017
%RSD		16.010	97.180	15.430	22.230	46.590	549.300	62.660	10.820	797.900	158.500

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:16:20	-0.231	-0.001	0.056	-0.071	-0.237	-0.244	2.403	0.635	-3.698	0.018
2	09:16:47	-0.167	-0.004	0.045	0.614	-0.001	-0.685	1.390	0.342	-0.384	0.008
3	09:17:14	0.032	0.014	0.081	0.422	-0.295	0.130	1.747	0.481	-2.599	0.004
x		-0.122	0.003	0.061	0.322	-0.178	-0.266	1.847	0.486	-2.227	0.010
σ		0.137	0.009	0.019	0.353	0.156	0.408	0.514	0.147	1.688	0.007
%RSD		112.800	322.300	30.570	109.700	87.710	153.300	27.830	30.140	75.810	72.880

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:16:20	97.1%	0.068	0.090	0.068	-1.439	0.177	0.174	0.023	0.013	97.2%
2	09:16:47	94.8%	0.076	0.080	0.081	-1.121	0.152	0.137	0.007	0.006	94.1%
3	09:17:14	95.5%	0.048	0.061	0.055	-0.830	0.134	0.157	0.011	-0.001	94.2%
x		95.8%	0.064	0.077	0.068	-1.130	0.154	0.156	0.014	0.006	95.2%
σ		1.2%	0.015	0.015	0.013	0.305	0.021	0.018	0.008	0.007	1.8%
%RSD		1.2	22.980	19.500	19.330	26.970	13.880	11.640	60.190	120.100	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:16:20	0.035	0.053	0.045	0.058	0.007	0.000	98.0%	0.023	0.012	0.023
2	09:16:47	0.023	0.042	0.042	0.039	0.015	-0.015	93.7%	0.012	0.006	0.008
3	09:17:14	0.017	0.031	0.033	0.041	0.003	0.005	94.2%	0.001	0.007	0.012
x		0.025	0.042	0.040	0.046	0.008	-0.003	95.3%	0.012	0.008	0.014
σ		0.009	0.011	0.006	0.010	0.006	0.011	2.3%	0.011	0.003	0.008
%RSD		37.660	26.930	16.060	22.640	72.310	347.100	2.4	91.870	38.320	53.230

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:16:20	0.019	0.017	97.7%
2	09:16:47	0.012	0.008	93.2%
3	09:17:14	0.005	0.007	94.2%
x		0.012	0.011	95.0%
σ		0.007	0.005	2.3%
%RSD		58.050	49.950	2.5

ICSA MW10984 04/25/2019 09:21:40 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:22:07	91.7%	0.006	1.078	1.230	1376.000	TM 105500.000	T 99790.000	TM 100200.000	TM 100300.000	TM 97610.000
2	09:22:35	93.4%	-0.002	1.019	1.014	1352.000	TM 108100.000	TM 102100.000	TM 100900.000	TM 100900.000	TM 96300.000
3	09:23:02	95.6%	-0.011	0.876	1.075	1319.000	TM 104800.000	T 98980.000	T 98600.000	T 98240.000	TM 93980.000
x		93.6%	-1.#IO%	0.991	1.#IO%	1349.000	TM 106.121%	TM 100300.000	TM 99910.000	TM 99.833%	TM 95.963%
σ		1.9%	n/a	0.104	n/a	28.540	TM n/a	TM 1601.000	TM 1176.000	TM n/a	TM n/a
%RSD		2.1	319.200	10.490	10.070	2.116	TM 1.620	TM 1.597	TM 1.178	TM 1.417	TM 1.917

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:22:07	38.710	T 44240.000	TM 100400.000	M 103300.000	T 98660.000	93.0%	M 2256.000	-0.837	-1.715	1463.000
2	09:22:35	36.370	T 43770.000	T 98360.000	M 104800.000	T 99130.000	94.3%	M 2275.000	-0.892	-1.744	1556.000
3	09:23:02	35.120	T 42510.000	T 95850.000	M 101400.000	T 98050.000	96.7%	M 2236.000	-0.841	-1.701	1477.000
x		1.#IO%	T 43510.000	TM 98.192%	M 103200.000	T 98.612%	94.7%	M 112.778%	-1.#IO%	-1.#IO%	1499.000
σ		n/a	T 897.200	TM n/a	M 1681.000	T n/a	1.9%	M n/a	n/a	n/a	50.460
%RSD		4.963	T 2.062	TM 2.301	M 1.629	T 0.552	2.0	M 0.872	3.605	1.272	3.367

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:22:07	TM 102200.000	0.619	TM 101700.000	TM 102400.000	0.494	1.429	6.717	-1.410	0.523	1.860
2	09:22:35	TM 102700.000	0.626	TM 102500.000	TM 104700.000	0.438	1.360	5.801	-1.455	0.508	1.807
3	09:23:02	TM 100400.000	0.590	T 99850.000	TM 100900.000	0.477	1.231	6.758	-1.421	0.481	1.756
x		TM 101700.000	1.#IO%	TM 101300.000	TM 102.637%	1.#IO%	1.#IO%	6.425	-1.429	1.#IO%	1.#IO%
σ		TM 1222.000	n/a	TM 1338.000	TM n/a	n/a	n/a	0.541	0.024	n/a	n/a
%RSD		TM 1.201	3.077	TM 1.321	TM 1.867	6.044	7.513	8.425	1.654	4.182	2.883

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:22:07	3.019	0.161	0.319	0.560	1.999	1.009	5.148	1.211	0.624	0.804
2	09:22:35	2.833	0.156	0.131	0.487	3.073	0.248	1.026	0.219	1.445	0.767
3	09:23:02	2.525	0.139	0.155	0.184	2.551	0.473	0.973	0.275	-1.597	0.817
x		2.792	0.152	1.#IO%	0.411	2.541	0.576	2.382	1.#IO%	0.157	0.796
σ		0.250	0.012	n/a	0.200	0.537	0.391	2.396	n/a	1.574	0.026
%RSD		8.939	7.720	50.650	48.590	21.140	67.830	100.600	98.100	1002.000	3.253

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:22:07	91.4%	TM 2089.000	M 2129.000	TM 2060.000	0.874	0.015	0.027	-5.491	0.050	89.6%
2	09:22:35	94.8%	TM 2088.000	M 2130.000	TM 2044.000	-1.611	0.019	0.024	-5.721	0.052	93.3%
3	09:23:02	95.2%	TM 2087.000	M 2131.000	TM 2047.000	-1.258	0.027	0.026	-5.605	-0.038	94.2%
x		93.8%	TM 2088.000	M 106.490%	TM 2050.000	-0.665	1.#IO%	0.025	-5.606	1.#IO%	92.4%
σ		2.1%	TM 1.218	M n/a	TM 8.067	1.344	n/a	0.002	0.115	n/a	2.4%
%RSD		2.2	TM 0.058	M 0.038	TM 0.393	202.000	29.370	6.311	2.056	239.400	2.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:22:07	1.408	0.062	0.182	0.229	0.248	0.253	91.8%	-0.011	-0.012	0.071
2	09:22:35	1.352	0.061	0.190	0.206	0.218	0.142	94.6%	-0.006	-0.012	0.070
3	09:23:02	1.232	0.067	0.190	0.175	0.180	0.188	97.4%	-0.016	-0.012	0.058
x		1.#IO%	1.#IO%	0.187	1.#IO%	0.215	1.#IO%	94.6%	-0.011	-1.#IO%	0.067
σ		n/a	n/a	0.005	n/a	0.034	n/a	2.8%	0.005	n/a	0.007
%RSD		6.751	4.850	2.697	13.420	15.780	28.690	2.9	44.140	3.691	10.930

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:22:07	0.040	0.058	86.5%
2	09:22:35	0.055	0.060	88.3%
3	09:23:02	0.067	0.062	90.0%
x		0.054	1.#IO%	88.3%
σ		0.014	n/a	1.8%
%RSD		25.790	3.243	2.0

CCV MW10994 04/25/2019 09:27:28 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:56	93.2%	309.400	307.900	298.200	20.260	T61170.000	T60900.000	T61330.000	T61500.000	322.300
2	09:28:23	94.2%	315.700	305.400	307.900	18.630	T62430.000	T62000.000	T62460.000	T62490.000	317.400
3	09:28:50	92.4%	297.300	304.000	307.200	13.020	T60670.000	T60680.000	T61480.000	T60230.000	311.500
x		93.2%	102.501%	101.928%	101.489%	17.300	T102.367%	T61200.000	T61760.000	T102.345%	105.685%
σ		0.9%	n/a	n/a	n/a	3.799	T n/a	T707.700	T613.700	T n/a	n/a
%RSD		1.0	3.036	0.645	1.782	21.950	T1.477	T1.156	T0.994	T1.842	1.702

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:56	T3114.000	210.000	T59980.000	61760.000	T62390.000	99.2%	306.600	321.200	302.100	81.010
2	09:28:23	T3152.000	194.600	T60030.000	61910.000	T62620.000	99.3%	313.400	324.100	306.000	521.800
3	09:28:50	T3127.000	193.700	T59040.000	60230.000	T59370.000	95.1%	303.600	310.200	294.000	2106.000
x		T104.366%	199.400	T99.467%	61300.000	T102.431%	97.8%	102.626%	106.160%	100.230%	902.800
σ		T n/a	9.196	T n/a	932.000	T n/a	2.4%	n/a	n/a	n/a	1065.000
%RSD		T0.615	4.611	T0.935	1.520	T2.949	2.5	1.640	2.308	2.047	117.900

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:56	T61690.000	303.800	T62040.000	T61670.000	298.400	291.700	285.000	282.100	279.000	294.800
2	09:28:23	T62430.000	302.900	T62010.000	T62760.000	302.000	291.900	287.900	286.900	282.400	302.100
3	09:28:50	T60980.000	299.700	T60630.000	T61340.000	294.300	288.200	284.000	278.300	278.300	286.400
x		T61700.000	100.720%	T61560.000	T103.203%	99.416%	96.867%	285.600	282.400	93.307%	98.144%
σ		T725.800	n/a	T805.000	T n/a	n/a	n/a	1.998	4.337	n/a	n/a
%RSD		T1.176	0.708	T1.308	T1.203	1.303	0.728	0.699	1.536	0.786	2.680

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:56	287.400	287.300	297.500	292.300	0.969	-0.454	1248.000	295.900	0.359	299.600
2	09:28:23	289.000	290.700	300.400	297.100	0.963	0.329	1260.000	300.500	1.865	307.300
3	09:28:50	281.500	279.700	292.000	293.400	1.256	-0.603	1221.000	289.600	2.103	298.000
x		286.000	285.900	98.886%	294.300	1.063	-0.243	1243.000	98.429%	1.442	100.541%
σ		3.982	5.628	n/a	2.535	0.168	0.500	19.940	n/a	0.946	n/a
%RSD		1.392	1.968	1.439	0.861	15.780	206.000	1.604	1.853	65.550	1.644

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:56	96.9%	306.400	307.500	308.500	297.300	288.300	289.700	297.000	296.800	93.6%
2	09:28:23	97.2%	317.800	316.000	317.900	305.000	296.400	296.800	307.100	304.100	93.4%
3	09:28:50	94.1%	306.800	304.300	305.600	292.500	283.300	283.300	290.300	289.700	90.7%
x		96.0%	103.456%	103.095%	310.700	298.300	96.447%	289.900	298.100	98.960%	92.6%
σ		1.7%	n/a	n/a	6.437	6.279	n/a	6.736	8.424	n/a	1.6%
%RSD		1.8	2.084	1.945	2.072	2.105	2.297	2.323	2.826	2.423	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:27:56	306.700	304.600	307.400	299.400	307.000	308.800	98.1%	285.000	292.100	283.700
2	09:28:23	314.200	312.000	315.700	307.500	314.700	314.600	97.3%	293.600	302.000	291.200
3	09:28:50	299.800	301.300	298.000	295.600	304.600	301.100	93.0%	288.500	294.000	283.000
x		102.311%	101.993%	307.000	100.282%	102.922%	102.721%	96.1%	289.000	98.670%	95.332%
σ		n/a	n/a	8.865	n/a	n/a	n/a	2.7%	4.290	n/a	n/a
%RSD		2.345	1.799	2.887	2.017	1.713	2.198	2.8	1.484	1.766	1.592

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:27:56	282.700	283.700	92.3%
2	09:28:23	291.500	291.000	90.7%
3	09:28:50	283.700	284.000	88.1%
x		95.320%	95.413%	90.4%
σ		n/a	n/a	2.1%
%RSD		1.689	1.446	2.3

CCB IM9370-01 04/25/2019 09:33:17 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:44	97.9%	0.027	2.118	2.171	14.040	5.282	5.436	5.241	4.944	0.563
2	09:34:11	97.3%	0.024	2.009	1.835	12.830	4.243	3.823	3.929	3.344	0.421
3	09:34:38	98.8%	0.037	1.711	1.488	1.989	4.256	4.532	4.582	4.204	0.458
x		98.0%	0.029	1.946	1.831	9.619	4.593	4.597	4.584	4.164	0.481
σ		0.8%	0.007	0.211	0.341	6.636	0.596	0.809	0.656	0.801	0.074
%RSD		0.8	23.080	10.830	18.650	68.980	12.980	17.590	14.310	19.240	15.330

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:44	T 41.270	63.550	10.320	7.484	5.591	99.1%	-0.267	0.019	0.033	5.241
2	09:34:11	14.310	74.450	10.850	6.217	2.587	97.3%	-0.320	-0.009	0.018	5.843
3	09:34:38	13.470	45.670	7.988	6.314	4.729	101.4%	-0.227	0.029	0.029	-13.180
x		T 23.020	61.220	9.719	6.671	4.302	99.3%	-0.272	0.013	0.027	-0.699
σ		T 15.810	14.530	1.521	0.705	1.547	2.1%	0.047	0.020	0.008	10.810
%RSD		T 68.710	23.740	15.650	10.570	35.950	2.1	17.330	154.400	28.390	1548.000

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:44	6.355	-0.016	6.421	7.749	0.024	-0.014	0.310	-0.057	0.032	0.016
2	09:34:11	5.662	-0.028	6.093	12.900	0.011	-0.016	-0.087	-0.052	0.034	-0.021
3	09:34:38	3.646	-0.024	4.566	2.666	0.020	0.022	0.023	-0.057	-0.013	-0.038
x		5.221	-0.022	5.693	7.772	0.018	-0.003	0.082	-0.055	0.018	-0.015
σ		1.408	0.006	0.990	5.118	0.007	0.021	0.205	0.003	0.027	0.028
%RSD		26.960	25.670	17.390	65.850	35.600	747.900	249.900	5.741	150.700	190.100

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:44	-0.098	0.033	0.025	-0.372	-0.293	-0.772	1.551	0.417	-1.675	0.020
2	09:34:11	-0.169	0.009	-0.020	0.542	-0.110	-0.303	0.324	0.104	-0.518	0.016
3	09:34:38	0.047	0.009	0.047	-0.029	-0.356	-0.066	0.095	0.130	-3.538	0.015
x		-0.073	0.017	0.017	0.047	-0.253	-0.380	0.656	0.217	-1.911	0.017
σ		0.110	0.014	0.034	0.462	0.128	0.359	0.783	0.173	1.524	0.003
%RSD		149.800	81.360	195.000	982.400	50.540	94.360	119.300	79.810	79.750	15.640

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:44	98.2%	0.192	0.107	0.136	0.352	0.071	0.062	0.047	0.011	96.7%
2	09:34:11	96.2%	0.127	0.194	0.106	-0.986	0.070	0.052	-0.002	0.016	94.8%
3	09:34:38	100.1%	0.114	0.173	0.119	0.203	0.084	0.072	0.022	0.021	97.9%
x		98.1%	0.144	0.158	0.120	-0.144	0.075	0.062	0.023	0.016	96.5%
σ		1.9%	0.042	0.046	0.015	0.733	0.008	0.010	0.024	0.005	1.6%
%RSD		2.0	29.000	28.870	12.310	510.100	10.380	16.060	107.500	30.910	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:33:44	0.049	0.070	0.140	0.165	0.013	0.020	97.1%	0.017	0.024	0.034
2	09:34:11	0.054	0.062	0.143	0.150	0.003	-0.002	95.1%	0.018	0.010	0.019
3	09:34:38	0.043	0.072	0.138	0.130	0.001	-0.007	98.6%	0.032	0.015	0.022
x		0.049	0.068	0.140	0.149	0.006	0.004	96.9%	0.022	0.016	0.025
σ		0.006	0.005	0.003	0.017	0.007	0.014	1.8%	0.008	0.007	0.008
%RSD		12.090	8.106	1.991	11.750	116.300	353.100	1.8	37.390	43.920	31.230

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:33:44	0.014	0.019	94.3%
2	09:34:11	0.010	0.011	94.3%
3	09:34:38	0.023	0.016	97.3%
x		0.016	0.015	95.3%
σ		0.007	0.004	1.7%
%RSD		43.690	27.470	1.8

MW10963 njt 5-7-19

LR ~~MW10763~~ 04/25/2019 09:39:04 QC Status: PASS (Initial: WARNING)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:39:30	88.2%	M 1005.000	M 1920.000	TM 2147.000	61.520	TM 122600.000	TM 121400.000	TM 120700.000	TM 120100.000	TM 120200.000
2	09:39:58	87.1%	M 982.200	M 1899.000	TM 2106.000	59.250	TM 121300.000	TM 119200.000	TM 120200.000	TM 119800.000	TM 119500.000
3	09:40:24	89.4%	M 981.600	M 1932.000	TM 2110.000	61.440	TM 122200.000	TM 120600.000	TM 120900.000	TM 120900.000	TM 116700.000
x		88.2%	M 98.951%	M 95.846%	TM 106.051%	60.740	TM 101.684%	TM 120400.000	TM 120600.000	TM 100.218%	TM 98.997%
σ		1.2%	M n/a	M n/a	TM n/a	1.287	TM n/a	TM 1122.000	TM 317.700	TM n/a	TM n/a
%RSD		1.3	M 1.329	M 0.883	TM 1.075	2.119	TM 0.531	TM 0.931	TM 0.263	TM 0.460	TM 1.546
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:39:30	25.500	118.200	TM 118100.000	TM 139900.000	TM 124200.000	92.5%	M 2088.000	TM 2048.000	TM 1941.000	25690.000
2	09:39:58	25.320	125.500	TM 119200.000	TM 138300.000	TM 125100.000	92.2%	M 2044.000	TM 2001.000	TM 1892.000	23790.000
3	09:40:24	26.070	141.900	TM 118200.000	TM 140900.000	TM 120000.000	91.4%	M 2060.000	TM 1998.000	TM 1906.000	27000.000
x		25.630	128.500	TM 98.770%	TM 139700.000	TM 102.589%	92.0%	M 103.198%	TM 100.777%	TM 95.658%	25490.000
σ		0.394	12.130	TM n/a	TM 1286.000	TM n/a	0.6%	M n/a	TM n/a	TM n/a	1613.000
%RSD		1.537	9.437	TM 0.535	TM 0.921	TM 2.212	0.6	M 1.085	TM 1.387	TM 1.328	6.328
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:39:30	TM 123700.000	TM 1949.000	TM 121600.000	TM 122800.000	TM 1903.000	M 1963.000	M 1890.000	TM 1809.000	TM 1846.000	M 1925.000
2	09:39:58	TM 121300.000	TM 1885.000	TM 118500.000	TM 119000.000	TM 1832.000	M 1877.000	M 1813.000	TM 1736.000	TM 1774.000	M 1885.000
3	09:40:24	TM 121500.000	TM 1894.000	TM 118600.000	TM 119700.000	TM 1853.000	M 1918.000	M 1854.000	TM 1768.000	TM 1790.000	M 1889.000
x		TM 122200.000	TM 95.476%	TM 119500.000	TM 100.410%	TM 93.133%	M 95.973%	M 1852.000	TM 1771.000	TM 90.159%	M 94.990%
σ		TM 1379.000	TM n/a	TM 1761.000	TM n/a	TM n/a	M n/a	M 38.770	TM 36.290	TM n/a	M n/a
%RSD		TM 1.129	TM 1.817	TM 1.473	TM 1.666	TM 1.969	M 2.250	M 2.093	TM 2.049	TM 2.088	M 1.167
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:39:30	M 2340.000	M 2247.000	M 2020.000	M 1869.000	2.725	0.147	8013.000	M 1869.000	9.284	TM 2028.000
2	09:39:58	M 2269.000	M 2168.000	M 1930.000	M 1867.000	2.498	0.941	7920.000	M 1876.000	9.560	TM 2019.000
3	09:40:24	M 2286.000	M 2182.000	M 1947.000	M 1866.000	3.303	0.943	7931.000	M 1864.000	16.500	TM 2019.000
x		M 2298.000	M 2199.000	M 98.275%	M 1867.000	2.842	0.677	7955.000	M 93.476%	11.780	TM 101.085%
σ		M 36.970	M 42.150	M n/a	M 1.130	0.415	0.459	51.190	M n/a	4.091	TM n/a
%RSD		M 1.609	M 1.917	M 2.423	M 0.061	14.590	67.820	0.644	M 0.332	34.720	TM 0.260
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:39:30	90.1%	TM 2069.000	M 2125.000	TM 2039.000	M 1953.000	272.500	273.300	M 1980.000	TM 1923.000	88.6%
2	09:39:58	87.7%	TM 2071.000	M 2104.000	TM 2041.000	M 1934.000	272.100	273.800	M 1985.000	TM 1928.000	85.2%
3	09:40:24	87.3%	TM 2059.000	M 2113.000	TM 2021.000	M 1911.000	270.800	270.900	M 1963.000	TM 1905.000	85.4%
x		88.3%	TM 2066.000	M 105.701%	TM 2033.000	M 1933.000	271.800	272.700	M 1976.000	TM 95.938%	86.4%
σ		1.5%	TM 6.590	M n/a	TM 11.020	M 21.080	0.888	1.564	M 11.570	TM n/a	1.9%
%RSD		1.7	TM 0.319	M 0.504	TM 0.542	M 1.091	0.327	0.573	M 0.586	TM 0.615	2.2
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:39:30	TM 1967.000	TM 1962.000	M 1040.000	M 1018.000	TM 10310.000	TM 10150.000	90.9%	M 973.000	TM 941.300	TM 1848.000
2	09:39:58	TM 1982.000	TM 1988.000	M 1039.000	M 1007.000	TM 10490.000	TM 10280.000	88.4%	M 978.300	TM 947.100	TM 1868.000
3	09:40:24	TM 1967.000	TM 1974.000	TM 997.000	M 1001.000	TM 10270.000	TM 10150.000	87.7%	M 974.400	TM 934.700	TM 1848.000
x		TM 1972.000	TM 98.730%	TM 1025.000	M 100.870%	TM 103.556%	TM 10200.000	89.0%	M 975.200	TM 94.104%	TM 1855.000
σ		TM 8.725	TM n/a	TM 24.650	M n/a	TM n/a	TM 76.390	1.7%	M 2.762	TM n/a	TM 11.490
%RSD		TM 0.442	TM 0.647	TM 2.404	M 0.887	TM 1.105	TM 0.749	1.9	M 0.283	TM 0.660	TM 0.619
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	09:39:30	TM 1927.000	TM 1858.000	84.6%							
2	09:39:58	TM 1942.000	TM 1878.000	84.0%							
3	09:40:24	TM 1925.000	TM 1859.000	81.5%							
x		TM 1931.000	TM 93.244%	83.4%							
σ		TM 9.448	TM n/a	1.6%							
%RSD		TM 0.489	TM 0.619	2.0							

UQ14125-001 04/25/2019 09:44:49 QC Status: FAIL (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:16	99.6%	0.129	9.825	9.146	19.770	9.047	10.600	10.460	10.820	9.272
2	09:45:43	99.4%	0.106	8.495	8.294	40.620	8.030	9.121	8.941	9.088	7.577
3	09:46:10	97.9%	0.067	8.445	8.440	37.660	7.201	7.955	8.240	8.232	6.832
x		99.0%	0.101	8.921	8.627	32.680	8.093	9.225	9.214	9.381	7.894
σ		0.9%	0.031	0.783	0.455	11.280	0.925	1.325	1.136	1.320	1.250
%RSD		0.9	31.140	8.771	5.279	34.510	11.420	14.360	12.330	14.070	15.840

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:16	14.160	7.078	14.080	11.010	10.860	101.0%	-0.080	0.144	0.183	-7.186
2	09:45:43	14.720	28.810	13.110	8.778	9.782	100.2%	-0.150	0.109	0.158	10.580
3	09:46:10	14.760	51.050	15.230	7.182	6.817	97.3%	-0.226	0.094	0.108	10.040
x		14.550	28.980	14.140	8.988	9.151	99.5%	-0.152	0.116	0.150	4.478
σ		0.332	21.990	1.061	1.921	2.092	2.0%	0.073	0.026	0.038	10.100
%RSD		2.280	75.870	7.504	21.370	22.860	2.0	47.920	22.150	25.410	225.600

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:16	9.222	0.149	8.384	12.770	0.206	0.190	0.256	0.113	0.119	0.146
2	09:45:43	6.970	0.119	7.036	11.700	0.149	0.171	-0.182	0.070	0.113	0.086
3	09:46:10	6.719	0.087	7.505	11.870	0.105	0.097	0.460	0.023	0.110	0.045
x		7.637	0.119	7.642	12.110	0.153	0.153	0.178	0.069	0.114	0.092
σ		1.378	0.031	0.685	0.575	0.051	0.049	0.328	0.045	0.005	0.051
%RSD		18.050	26.150	8.960	4.746	33.080	31.950	184.400	65.950	4.153	54.950

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:16	0.527	0.177	0.142	0.242	-0.003	0.032	0.326	-0.018	4.808	0.141
2	09:45:43	0.088	0.156	0.049	0.815	-0.376	0.015	0.112	-0.007	2.296	0.091
3	09:46:10	0.228	0.204	0.181	0.032	-0.034	0.328	0.346	0.031	2.062	0.084
x		0.281	0.179	0.124	0.363	-0.138	0.125	0.261	0.002	3.056	0.105
σ		0.224	0.024	0.068	0.405	0.207	0.176	0.130	0.026	1.522	0.031
%RSD		79.770	13.600	54.730	111.600	149.900	140.500	49.650	1316.000	49.820	29.050

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:16	99.3%	0.343	0.374	0.383	0.393	0.046	0.040	0.126	0.157	97.7%
2	09:45:43	99.9%	0.293	0.345	0.316	-0.637	0.032	0.044	0.130	0.108	97.9%
3	09:46:10	95.8%	0.307	0.343	0.344	-0.595	0.025	0.028	0.108	0.132	96.0%
x		98.3%	0.314	0.354	0.348	-0.280	0.034	0.038	0.121	0.132	97.2%
σ		2.2%	0.026	0.017	0.034	0.583	0.011	0.008	0.011	0.024	1.1%
%RSD		2.3	8.190	4.816	9.671	208.500	31.410	21.710	9.453	18.340	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:45:16	0.869	1.077	0.339	0.349	0.735	0.715	99.0%	0.071	0.051	0.120
2	09:45:43	0.735	0.919	0.334	0.349	0.580	0.607	98.0%	0.057	0.053	0.124
3	09:46:10	0.658	0.859	0.335	0.325	0.523	0.412	95.1%	0.046	0.058	0.102
x		0.754	0.951	0.336	0.341	0.613	0.578	97.4%	0.058	0.054	0.115
σ		0.107	0.113	0.003	0.014	0.110	0.154	2.0%	0.012	0.004	0.012
%RSD		14.140	11.840	0.770	4.116	17.880	26.650	2.1	21.100	6.742	10.170

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:45:16	0.148	0.135	97.4%
2	09:45:43	0.091	0.110	97.0%
3	09:46:10	0.082	0.100	94.4%
x		0.107	0.115	96.3%
σ		0.036	0.018	1.6%
%RSD		33.550	15.670	1.7

UQ14125-002 04/25/2019 09:50:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:51:01	97.9%	98.790	107.100	102.100	29.820	T 1032.000	T 1041.000	1047.000	1033.000	100.100
2	09:51:28	97.7%	97.800	101.200	102.000	37.970	T 1025.000	T 1023.000	1027.000	1041.000	101.300
3	09:51:55	99.6%	99.470	102.600	105.000	43.100	T 1027.000	T 1063.000	1051.000	1054.000	100.400
x		98.4%	98.690	103.600	103.000	36.970	T 1028.000	T 1043.000	1041.000	1043.000	100.600
σ		1.0%	0.839	3.075	1.724	6.696	T 3.870	T 19.840	13.050	10.160	0.633
%RSD		1.1	0.850	2.967	1.674	18.110	T 0.377	T 1.903	1.253	0.974	0.629

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:51:01	T 978.400	29.590	T 1002.000	1158.000	979.300	96.8%	98.910	100.000	97.580	925.400
2	09:51:28	T 945.300	-1.915	T 1001.000	1113.000	1013.000	101.1%	99.360	101.100	98.280	510.400
3	09:51:55	T 935.500	20.310	T 996.500	1197.000	1007.000	101.5%	100.100	102.100	101.300	420.500
x		T 953.100	15.990	T 999.700	1156.000	999.700	99.8%	99.460	101.100	99.050	618.800
σ		T 22.490	16.190	T 2.849	41.910	17.860	2.6%	0.610	1.033	1.969	269.300
%RSD		T 2.359	101.200	T 0.285	3.625	1.787	2.6	0.613	1.022	1.988	43.520

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:51:01	1124.000	100.200	T 1055.000	1064.000	97.410	98.320	102.600	99.700	98.070	97.290
2	09:51:28	1105.000	98.910	T 1040.000	1073.000	98.080	98.930	96.140	97.220	96.640	98.230
3	09:51:55	1116.000	101.600	T 1060.000	1064.000	99.280	100.200	97.280	97.840	99.680	99.510
x		1115.000	100.300	T 1052.000	1067.000	98.260	99.150	98.680	98.250	98.130	98.340
σ		9.339	1.363	T 9.966	5.539	0.950	0.952	3.458	1.293	1.523	1.113
%RSD		0.838	1.360	T 0.948	0.519	0.967	0.961	3.504	1.316	1.552	1.132

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:51:01	99.730	97.780	97.000	100.400	-0.184	0.275	425.900	98.480	1.342	98.250
2	09:51:28	95.690	96.640	97.140	98.620	0.006	-0.360	406.200	94.990	-2.653	95.320
3	09:51:55	98.320	100.500	101.000	97.650	-0.018	-0.138	413.300	95.900	-0.429	97.110
x		97.910	98.320	98.380	98.880	-0.065	-0.074	415.100	96.460	-0.580	96.890
σ		2.052	2.003	2.275	1.386	0.103	0.322	9.997	1.812	2.002	1.472
%RSD		2.096	2.037	2.313	1.401	158.200	433.200	2.408	1.878	345.100	1.519

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:51:01	93.5%	95.880	96.920	95.520	100.200	94.980	95.220	97.810	96.240	92.8%
2	09:51:28	100.8%	94.630	95.070	94.630	99.730	94.890	95.060	98.190	95.210	98.6%
3	09:51:55	100.8%	96.940	96.900	96.750	99.870	95.210	96.730	97.080	96.540	99.4%
x		98.4%	95.820	96.300	95.630	99.940	95.030	95.670	97.690	95.990	96.9%
σ		4.2%	1.156	1.064	1.062	0.251	0.166	0.921	0.563	0.695	3.6%
%RSD		4.3	1.206	1.105	1.110	0.251	0.175	0.962	0.576	0.724	3.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:51:01	99.320	97.240	94.700	95.220	98.880	99.270	93.0%	96.980	97.280	97.100
2	09:51:28	98.200	96.970	96.780	96.970	97.680	97.670	99.3%	94.700	96.300	95.920
3	09:51:55	98.940	98.740	96.620	98.670	98.960	98.720	99.6%	96.450	98.070	98.190
x		98.820	97.650	96.030	96.950	98.510	98.550	97.3%	96.040	97.220	97.070
σ		0.569	0.956	1.159	1.726	0.715	0.809	3.7%	1.193	0.885	1.135
%RSD		0.576	0.979	1.207	1.780	0.726	0.821	3.8	1.242	0.910	1.169

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:51:01	97.170	96.730	91.6%
2	09:51:28	95.900	95.480	97.1%
3	09:51:55	98.400	97.290	98.2%
x		97.160	96.500	95.6%
σ		1.253	0.929	3.6%
%RSD		1.290	0.963	3.7

UD10040-001 04/25/2019 09:56:19

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:46	92.2%	0.056	M 1848.000	TM 2081.000	6906.000	TM 262100.000	T 1226.000	1252.000	1259.000	7.998
2	09:57:13	94.0%	0.007	M 1843.000	TM 2085.000	6825.000	TM 263200.000	T 1229.000	1235.000	1256.000	6.035
3	09:57:40	93.3%	-0.010	M 1834.000	TM 2105.000	6783.000	TM 269700.000	T 1238.000	1263.000	1254.000	6.113
x		93.2%	0.018	M 1842.000	TM 2090.000	6838.000	TM 265000.000	T 1231.000	1250.000	1256.000	6.715
σ		0.9%	0.034	M 7.158	TM 12.710	62.080	TM 4125.000	T 6.071	14.330	2.103	1.111
%RSD		1.0	192.100	M 0.389	TM 0.608	0.908	TM 1.557	T 0.493	1.146	0.167	16.550

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:46	T 8814.000	1347.000	T 8850.000	2505.000	2526.000	99.6%	1.880	0.790	2.564	-475.700
2	09:57:13	T 8585.000	1318.000	T 8758.000	2412.000	2547.000	101.7%	1.743	0.789	2.545	-514.600
3	09:57:40	T 8980.000	1411.000	T 8849.000	2456.000	2489.000	98.1%	1.795	0.772	2.491	-493.800
x		T 8793.000	1359.000	T 8819.000	2458.000	2521.000	99.8%	1.806	0.784	2.533	-494.700
σ		T 198.200	47.580	T 52.840	46.450	29.330	1.8%	0.069	0.010	0.038	19.470
%RSD		T 2.254	3.502	T 0.599	1.890	1.163	1.8	3.831	1.256	1.503	3.936

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:46	16.490	0.496	24.160	47.360	0.118	0.357	0.432	24.090	23.130	37.060
2	09:57:13	12.770	0.469	21.040	41.340	0.061	0.334	0.160	24.170	23.200	37.340
3	09:57:40	15.580	0.435	21.590	53.610	0.068	0.337	0.675	24.080	23.170	36.860
x		14.950	0.467	22.260	47.440	0.082	0.343	0.422	24.110	23.170	37.090
σ		1.940	0.031	1.668	6.135	0.031	0.012	0.258	0.049	0.035	0.243
%RSD		12.980	6.595	7.493	12.930	37.740	3.635	61.090	0.204	0.149	0.654

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:46	32.850	33.500	0.071	0.495	197.200	192.700	2.542	0.493	-1.210	105.900
2	09:57:13	31.620	34.890	0.010	-0.235	191.900	188.500	0.837	0.048	-0.434	107.000
3	09:57:40	31.140	33.400	0.103	0.830	190.200	191.700	2.909	0.585	-1.213	104.700
x		31.870	33.930	0.061	0.364	193.100	191.000	2.096	0.375	-0.952	105.900
σ		0.883	0.833	0.048	0.544	3.688	2.165	1.105	0.287	0.449	1.167
%RSD		2.769	2.455	77.630	149.700	1.910	1.133	52.740	76.420	47.120	1.102

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:46	94.9%	5.242	4.892	4.834	4.268	0.037	0.022	0.094	0.123	89.7%
2	09:57:13	96.7%	5.084	5.250	5.035	3.615	0.006	0.003	0.047	0.030	92.8%
3	09:57:40	92.9%	4.853	5.001	4.851	6.257	0.006	0.007	0.088	0.044	87.8%
x		94.8%	5.060	5.047	4.907	4.713	0.016	0.011	0.076	0.066	90.1%
σ		1.9%	0.196	0.184	0.112	1.376	0.018	0.010	0.025	0.050	2.5%
%RSD		2.0	3.863	3.638	2.276	29.200	108.800	93.070	33.230	76.770	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	09:56:46	5.350	7.716	0.176	0.179	7.237	6.996	93.5%	0.052	0.027	0.602
2	09:57:13	5.459	7.569	0.131	0.182	6.575	6.899	96.4%	0.008	0.003	0.652
3	09:57:40	5.234	7.576	0.117	0.165	7.084	7.571	91.8%	0.006	0.007	0.527
x		5.347	7.620	0.141	0.175	6.965	7.156	93.9%	0.022	0.012	0.594
σ		0.113	0.083	0.030	0.009	0.347	0.363	2.3%	0.026	0.013	0.063
%RSD		2.107	1.088	21.550	5.247	4.974	5.081	2.5	118.600	104.300	10.640

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	09:56:46	0.576	0.568	84.5%
2	09:57:13	0.568	0.568	88.8%
3	09:57:40	0.505	0.526	84.4%
x		0.550	0.554	85.9%
σ		0.039	0.024	2.5%
%RSD		7.048	4.340	2.9

UD10040-001S 04/25/2019 10:02:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:31	93.8%	64.840	M 1923.000	TM 2172.000	T 17050.000	TM 269100.000	T 2054.000	2112.000	2127.000	T 122.800
2	10:02:59	94.7%	64.370	M 1915.000	TM 2166.000	T 16800.000	TM 266400.000	T 2023.000	2082.000	2103.000	108.400
3	10:03:26	95.8%	64.580	M 1942.000	TM 2202.000	T 17250.000	TM 266300.000	T 2067.000	2094.000	2098.000	105.400
x		94.8%	64.600	M 1927.000	TM 2180.000	T 17030.000	TM 267300.000	T 2048.000	2096.000	2109.000	T 112.200
σ		1.0%	0.235	M 13.920	TM 18.990	T 224.600	TM 1580.000	T 22.690	15.210	15.520	T 9.295
%RSD		1.1	0.364	M 0.722	TM 0.871	T 1.318	TM 0.591	T 1.108	0.726	0.736	T 8.282

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:31	TM 10250.000	1403.000	T 9669.000	3552.000	3492.000	96.6%	103.300	104.300	103.200	-305.600
2	10:02:59	T 9748.000	1317.000	T 9710.000	3487.000	3520.000	99.9%	101.700	102.500	100.700	41.560
3	10:03:26	T 9847.000	1362.000	T 9570.000	3513.000	3433.000	99.3%	99.020	103.100	100.800	-842.000
x		TM 9947.000	1361.000	T 9650.000	3517.000	3482.000	98.6%	101.300	103.300	101.600	-368.700
σ		TM 263.200	42.870	T 72.030	32.960	44.220	1.7%	2.160	0.888	1.385	445.200
%RSD		TM 2.647	3.150	T 0.746	0.937	1.270	1.8	2.132	0.859	1.364	120.700

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:31	1111.000	96.500	T 1064.000	1078.000	95.190	95.560	97.300	119.100	116.000	135.800
2	10:02:59	1090.000	95.410	T 1055.000	1071.000	93.950	93.400	92.970	116.900	114.400	136.500
3	10:03:26	1080.000	95.780	T 1051.000	1055.000	93.660	93.250	92.400	116.900	115.000	133.100
x		1094.000	95.900	T 1057.000	1068.000	94.260	94.070	94.220	117.600	115.100	135.100
σ		15.560	0.558	T 6.644	11.630	0.813	1.296	2.680	1.258	0.829	1.796
%RSD		1.422	0.581	T 0.629	1.089	0.862	1.378	2.844	1.069	0.720	1.329

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:31	130.400	126.800	119.300	142.600	185.900	188.600	598.700	144.000	0.366	207.300
2	10:02:59	127.500	128.400	117.200	145.600	185.200	186.300	595.600	144.500	1.327	203.600
3	10:03:26	126.900	127.500	118.400	144.800	187.900	184.800	585.500	140.800	-2.061	203.300
x		128.300	127.600	118.300	144.300	186.300	186.600	593.200	143.100	-0.123	204.700
σ		1.853	0.772	1.066	1.563	1.437	1.905	6.911	2.001	1.746	2.243
%RSD		1.445	0.605	0.901	1.083	0.772	1.021	1.165	1.398	1424.000	1.096

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:31	91.4%	104.700	103.100	104.100	110.400	81.040	80.860	97.640	98.620	87.4%
2	10:02:59	95.0%	104.000	101.700	103.400	102.500	77.250	77.660	97.280	97.270	89.9%
3	10:03:26	95.7%	100.900	102.700	103.700	101.600	78.480	80.570	96.930	97.220	91.3%
x		94.0%	103.200	102.500	103.700	104.800	78.920	79.700	97.280	97.700	89.6%
σ		2.3%	2.034	0.696	0.335	4.823	1.931	1.773	0.357	0.792	2.0%
%RSD		2.5	1.971	0.679	0.323	4.601	2.447	2.225	0.367	0.810	2.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:02:31	106.400	108.900	101.300	98.810	110.900	110.200	91.0%	93.320	94.630	94.220
2	10:02:59	106.100	106.800	100.700	98.380	111.500	108.800	93.8%	91.630	93.530	93.340
3	10:03:26	106.700	107.700	100.300	98.230	107.800	107.900	94.4%	91.660	93.230	92.580
x		106.400	107.800	100.800	98.480	110.100	109.000	93.1%	92.200	93.800	93.380
σ		0.314	1.077	0.514	0.303	1.958	1.151	1.8%	0.970	0.739	0.817
%RSD		0.295	0.999	0.510	0.308	1.779	1.056	2.0	1.053	0.788	0.875

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:02:31	93.990	93.470	82.0%
2	10:02:59	94.860	93.250	85.6%
3	10:03:26	93.700	92.150	86.1%
x		94.180	92.960	84.6%
σ		0.606	0.708	2.2%
%RSD		0.644	0.761	2.6

UD10040-001SD 04/25/2019 10:07:50

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:08:17	94.8%	65.270	M 1919.000	TM 2139.000	T 14520.000	TM 260600.000	T 2047.000	2097.000	2124.000	107.800
2	10:08:44	93.8%	65.740	M 1950.000	TM 2205.000	T 14860.000	TM 265300.000	T 2068.000	2095.000	2104.000	112.200
3	10:09:12	92.6%	65.890	M 1978.000	TM 2232.000	T 15060.000	TM 270300.000	T 2090.000	2124.000	2139.000	108.100
x		93.7%	65.630	M 1949.000	TM 2192.000	T 14810.000	TM 265400.000	T 2068.000	2105.000	2122.000	109.300
σ		1.1%	0.326	M 29.880	TM 47.980	T 274.500	TM 4872.000	T 21.410	16.250	17.260	2.448
%RSD		1.2	0.496	M 1.533	TM 2.189	T 1.854	TM 1.836	T 1.035	0.772	0.813	2.239

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:08:17	T 9473.000	1292.000	T 9510.000	3400.000	3567.000	102.4%	102.100	101.400	99.640	218.400
2	10:08:44	T 9666.000	1313.000	T 9782.000	3522.000	3612.000	102.6%	103.400	102.400	101.800	-125.400
3	10:09:12	T 9962.000	1419.000	T 9849.000	3526.000	3565.000	97.8%	102.700	103.400	102.700	56.460
x		T 9700.000	1342.000	T 9714.000	3483.000	3582.000	100.9%	102.700	102.400	101.400	49.830
σ		T 246.300	68.150	T 179.600	71.780	26.820	2.7%	0.629	0.996	1.588	172.000
%RSD		T 2.539	5.080	T 1.849	2.061	0.749	2.7	0.613	0.972	1.566	345.200

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:08:17	1096.000	97.130	T 1056.000	1050.000	93.890	93.620	95.190	118.500	115.500	138.400
2	10:08:44	1089.000	96.760	T 1055.000	1066.000	94.670	95.020	94.430	117.500	114.000	138.800
3	10:09:12	1107.000	98.060	T 1079.000	1078.000	95.970	95.790	93.600	120.200	117.800	136.800
x		1097.000	97.320	T 1063.000	1065.000	94.840	94.810	94.410	118.700	115.800	138.000
σ		9.112	0.671	T 14.040	13.810	1.052	1.103	0.797	1.333	1.881	1.058
%RSD		0.830	0.689	T 1.320	1.297	1.109	1.163	0.845	1.123	1.624	0.767

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:08:17	127.500	130.100	116.700	137.500	186.600	185.900	573.600	138.900	-1.651	203.800
2	10:08:44	132.100	130.200	117.800	138.300	190.100	188.600	586.100	142.200	-1.155	203.500
3	10:09:12	129.900	129.300	115.900	140.600	191.800	191.300	566.400	134.900	-3.626	209.700
x		129.800	129.900	116.800	138.800	189.500	188.600	575.400	138.700	-2.144	205.700
σ		2.333	0.501	0.979	1.589	2.666	2.712	9.978	3.678	1.307	3.518
%RSD		1.797	0.386	0.838	1.145	1.407	1.438	1.734	2.652	60.960	1.711

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:08:17	97.4%	103.300	102.700	102.900	101.600	78.560	80.850	99.160	97.820	92.5%
2	10:08:44	98.2%	104.700	103.200	104.000	101.000	77.850	78.070	97.070	98.350	93.0%
3	10:09:12	93.1%	106.000	107.000	105.900	105.400	77.530	79.890	98.470	98.580	89.9%
x		96.2%	104.600	104.300	104.200	102.700	77.980	79.600	98.230	98.250	91.8%
σ		2.8%	1.337	2.394	1.515	2.413	0.525	1.411	1.065	0.388	1.7%
%RSD		2.9	1.278	2.295	1.453	2.350	0.674	1.773	1.084	0.395	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:08:17	105.900	106.400	101.200	96.830	108.200	108.800	97.1%	91.070	92.380	91.930
2	10:08:44	106.700	107.900	101.500	99.870	109.500	109.600	96.7%	91.570	93.400	93.420
3	10:09:12	107.800	109.600	101.500	100.900	109.200	110.100	92.1%	93.810	94.860	95.510
x		106.800	108.000	101.400	99.220	108.900	109.500	95.3%	92.150	93.550	93.620
σ		0.932	1.599	0.179	2.133	0.695	0.681	2.8%	1.460	1.243	1.801
%RSD		0.873	1.481	0.176	2.149	0.638	0.622	2.9	1.584	1.328	1.923

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:08:17	92.760	92.010	86.3%
2	10:08:44	93.890	93.180	88.0%
3	10:09:12	95.230	94.810	84.4%
x		93.960	93.340	86.3%
σ		1.238	1.406	1.8%
%RSD		1.318	1.507	2.1

UD10040-001L(5) 04/25/2019 10:13:36

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:14:03	94.6%	-0.010	M 516.400	M 537.300	1481.000	T 53450.000	300.200	293.300	297.300	2.326
2	10:14:31	95.8%	0.007	M 527.300	M 548.500	1530.000	T 54450.000	307.500	292.600	294.400	2.200
3	10:14:59	95.8%	0.000	M 527.500	M 546.500	1480.000	T 53600.000	299.200	290.300	291.400	2.230
x		95.4%	-0.001	M 523.700	M 544.100	1497.000	T 53840.000	302.300	292.100	294.300	2.252
σ		0.7%	0.009	M 6.356	M 5.967	28.800	T 538.600	4.542	1.530	2.954	0.066
%RSD		0.8	969.500	M 1.214	M 1.097	1.924	T 1.000	1.502	0.524	1.003	2.928

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:14:03	T 1727.000	288.400	T 1750.000	477.600	494.800	99.9%	0.108	0.124	0.435	-90.800
2	10:14:31	T 1719.000	291.900	T 1729.000	508.600	485.400	99.5%	0.111	0.105	0.420	-73.830
3	10:14:59	T 1758.000	337.300	T 1728.000	512.400	479.100	97.1%	0.058	0.129	0.436	-78.820
x		T 1734.000	305.800	T 1736.000	499.500	486.400	98.8%	0.092	0.120	0.430	-81.150
σ		T 20.610	27.270	T 12.450	19.090	7.926	1.5%	0.030	0.013	0.009	8.723
%RSD		T 1.188	8.916	T 0.717	3.821	1.629	1.5	32.150	10.830	2.080	10.750

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:14:03	0.687	0.050	3.422	12.530	0.014	0.097	0.109	5.029	4.756	7.360
2	10:14:31	1.464	0.053	2.123	12.840	0.024	0.127	-0.012	5.068	5.005	7.333
3	10:14:59	1.604	0.049	4.464	12.590	0.014	0.073	-0.037	5.067	4.991	7.175
x		1.251	0.051	3.336	12.650	0.017	0.099	0.020	5.055	4.918	7.289
σ		0.494	0.002	1.173	0.162	0.006	0.027	0.078	0.022	0.140	0.100
%RSD		39.490	3.885	35.160	1.281	33.470	27.230	388.800	0.434	2.847	1.376

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:14:03	6.215	7.085	0.042	0.296	36.310	36.950	1.087	0.295	-2.095	20.960
2	10:14:31	5.897	7.155	0.068	0.549	35.140	37.780	2.599	0.635	-0.850	20.550
3	10:14:59	6.726	6.748	0.045	1.040	36.200	36.490	0.418	0.182	-3.711	20.880
x		6.279	6.996	0.052	0.629	35.880	37.070	1.368	0.371	-2.219	20.800
σ		0.418	0.217	0.014	0.378	0.650	0.653	1.117	0.236	1.434	0.217
%RSD		6.656	3.106	27.920	60.180	1.812	1.761	81.670	63.670	64.650	1.045

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:14:03	96.1%	1.144	1.022	1.076	1.754	0.110	0.078	0.032	0.012	93.8%
2	10:14:31	99.6%	0.946	1.076	1.055	1.178	0.097	0.103	0.010	0.008	95.7%
3	10:14:59	94.4%	1.030	1.186	1.041	1.955	0.097	0.078	0.007	0.011	91.6%
x		96.7%	1.040	1.095	1.057	1.629	0.102	0.086	0.016	0.010	93.7%
σ		2.6%	0.100	0.083	0.018	0.404	0.007	0.014	0.013	0.002	2.1%
%RSD		2.7	9.569	7.622	1.668	24.770	7.331	16.790	81.670	18.320	2.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:14:03	1.232	1.735	0.121	0.129	1.450	1.338	95.5%	0.005	0.004	0.111
2	10:14:31	1.163	1.630	0.115	0.124	1.506	1.196	98.7%	0.024	-0.004	0.119
3	10:14:59	1.120	1.572	0.076	0.088	1.333	1.446	93.9%	0.016	0.000	0.121
x		1.172	1.646	0.104	0.114	1.430	1.327	96.0%	0.015	-0.000	0.117
σ		0.057	0.082	0.024	0.022	0.088	0.125	2.4%	0.009	0.004	0.005
%RSD		4.833	5.006	23.410	19.420	6.171	9.452	2.5	60.690	3164.000	4.243

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:14:03	0.115	0.118	89.8%
2	10:14:31	0.127	0.120	93.4%
3	10:14:59	0.122	0.115	89.6%
x		0.121	0.118	90.9%
σ		0.006	0.002	2.1%
%RSD		4.954	1.952	2.3

UD18070-001 04/25/2019 10:19:23

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:51	95.4%	-0.003	21.950	23.380	1123.000	┬8477.000	┬948.500	933.200	941.200	11.280
2	10:20:18	95.4%	-0.011	21.730	22.070	1124.000	┬8597.000	┬942.600	939.800	942.600	11.330
3	10:20:45	95.5%	-0.000	22.070	22.160	1117.000	┬8606.000	┬942.800	946.900	940.400	11.090
x		95.4%	-0.005	21.910	22.540	1121.000	┬8560.000	┬944.600	940.000	941.400	11.230
σ		0.1%	0.006	0.173	0.731	3.883	┬72.180	┬3.376	6.855	1.128	0.128
%RSD		0.1	119.300	0.787	3.244	0.346	┬0.843	┬0.357	0.729	0.120	1.136

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:51	┬5067.000	368.600	┬1218.000	3015.000	2893.000	98.1%	1.026	0.258	0.404	-62.480
2	10:20:18	┬5112.000	363.300	┬1212.000	2983.000	2883.000	98.1%	1.139	0.252	0.416	-60.940
3	10:20:45	┬5097.000	372.700	┬1201.000	2982.000	2874.000	97.7%	1.258	0.213	0.329	-42.530
x		┬5092.000	368.200	┬1210.000	2993.000	2883.000	98.0%	1.141	0.241	0.383	-55.320
σ		┬22.800	4.756	┬8.484	18.700	9.180	0.2%	0.116	0.024	0.048	11.100
%RSD		┬0.448	1.292	┬0.701	0.625	0.318	0.2	10.150	10.040	12.400	20.070

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:51	1.516	0.218	9.412	43.920	0.025	1.793	1.619	54.530	55.340	10.180
2	10:20:18	1.572	0.223	8.567	43.830	0.023	1.737	1.515	54.200	54.710	9.780
3	10:20:45	1.185	0.216	8.904	44.960	0.015	1.725	2.070	54.040	54.390	9.776
x		1.424	0.219	8.961	44.230	0.021	1.752	1.734	54.260	54.810	9.911
σ		0.209	0.004	0.425	0.629	0.005	0.036	0.295	0.252	0.485	0.230
%RSD		14.700	1.762	4.747	1.422	24.040	2.076	16.990	0.464	0.886	2.317

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:51	10.120	10.060	0.167	0.100	222.000	217.300	3.540	0.682	-3.953	19.190
2	10:20:18	9.702	9.912	-0.012	-0.248	214.000	215.100	1.474	0.178	-2.492	19.050
3	10:20:45	9.219	10.360	0.065	-0.004	213.600	213.500	2.800	0.494	-2.918	19.410
x		9.679	10.110	0.073	-0.051	216.500	215.300	2.605	0.451	-3.121	19.210
σ		0.450	0.227	0.090	0.179	4.722	1.899	1.047	0.255	0.752	0.180
%RSD		4.648	2.242	122.000	352.400	2.181	0.882	40.200	56.510	24.080	0.939

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:51	95.0%	0.176	0.269	0.215	1.310	0.148	0.144	0.002	0.001	94.5%
2	10:20:18	96.4%	0.163	0.252	0.174	-0.188	0.131	0.134	0.006	0.006	95.4%
3	10:20:45	97.0%	0.214	0.259	0.219	-0.969	0.123	0.128	0.002	-0.004	96.0%
x		96.2%	0.184	0.260	0.202	0.051	0.134	0.135	0.003	0.001	95.3%
σ		1.1%	0.026	0.009	0.025	1.158	0.013	0.008	0.002	0.005	0.8%
%RSD		1.1	14.290	3.436	12.240	2260.000	9.655	6.033	71.410	542.700	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:19:51	0.110	0.157	0.515	0.460	12.870	13.360	94.4%	-0.006	-0.004	0.431
2	10:20:18	0.109	0.155	0.474	0.525	13.530	13.400	95.8%	-0.009	-0.011	0.441
3	10:20:45	0.126	0.186	0.450	0.457	12.600	13.700	97.0%	0.004	-0.004	0.431
x		0.115	0.166	0.480	0.481	13.000	13.490	95.7%	-0.004	-0.006	0.435
σ		0.009	0.018	0.033	0.039	0.481	0.187	1.3%	0.007	0.004	0.006
%RSD		8.151	10.540	6.840	8.016	3.698	1.383	1.4	186.500	68.780	1.370

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:19:51	0.393	0.402	88.9%
2	10:20:18	0.373	0.398	91.3%
3	10:20:45	0.345	0.397	93.0%
x		0.370	0.399	91.1%
σ		0.024	0.003	2.1%
%RSD		6.505	0.782	2.3

UD18070-002 04/25/2019 10:25:08

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:25:36	97.4%	-0.011	17.360	16.690	1141.000	T 8642.000	T 931.700	937.300	932.400	69.430
2	10:26:03	98.4%	-0.004	16.160	16.290	1145.000	T 8728.000	T 934.400	938.100	948.100	68.640
3	10:26:29	97.9%	0.014	15.980	16.130	1146.000	T 8619.000	T 945.000	959.200	943.200	68.560
x		97.9%	-0.000	16.500	16.370	1144.000	T 8663.000	T 937.000	944.900	941.200	68.880
σ		0.5%	0.013	0.750	0.288	2.598	T 57.610	T 6.997	12.410	8.005	0.481
%RSD		0.6	2756.000	4.547	1.761	0.227	T 0.665	T 0.747	1.313	0.851	0.699

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:25:36	T 4715.000	386.000	T 1207.000	3015.000	2915.000	98.9%	0.736	0.343	0.607	-95.350
2	10:26:03	T 4629.000	369.500	T 1194.000	3108.000	2968.000	100.6%	0.771	0.275	0.573	-67.270
3	10:26:29	T 4654.000	375.400	T 1210.000	3142.000	2975.000	100.7%	0.970	0.237	0.593	-39.510
x		T 4666.000	377.000	T 1204.000	3089.000	2953.000	100.1%	0.826	0.285	0.591	-67.380
σ		T 44.150	8.343	T 8.469	65.840	33.080	1.0%	0.126	0.054	0.017	27.920
%RSD		T 0.946	2.213	T 0.703	2.132	1.120	1.0	15.290	18.790	2.904	41.440

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:25:36	-0.011	0.715	7.526	38.590	0.041	5.960	5.576	166.700	168.100	90.730
2	10:26:03	-1.496	0.659	5.878	37.790	0.021	6.314	6.126	165.900	169.000	92.860
3	10:26:29	0.168	0.713	6.055	33.150	0.037	5.885	5.949	166.200	168.900	92.640
x		-0.446	0.696	6.486	36.510	0.033	6.053	5.884	166.300	168.700	92.070
σ		0.914	0.032	0.905	2.941	0.010	0.229	0.281	0.421	0.487	1.171
%RSD		204.700	4.565	13.950	8.055	31.710	3.786	4.767	0.253	0.289	1.272

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:25:36	88.570	89.410	0.158	-0.024	196.800	196.800	5.077	1.026	-3.100	18.960
2	10:26:03	88.380	91.470	0.068	-0.063	201.000	199.400	1.699	0.259	-3.630	19.030
3	10:26:29	88.290	90.170	0.101	-0.112	206.100	202.200	3.410	0.704	-5.081	18.880
x		88.410	90.350	0.109	-0.066	201.300	199.500	3.396	0.663	-3.937	18.960
σ		0.144	1.043	0.046	0.044	4.658	2.708	1.689	0.385	1.026	0.075
%RSD		0.162	1.155	41.870	66.710	2.314	1.358	49.740	58.060	26.050	0.397

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:25:36	99.5%	0.202	0.179	0.174	1.181	0.079	0.077	0.328	0.271	99.0%
2	10:26:03	101.7%	0.203	0.174	0.210	1.694	0.066	0.072	0.340	0.289	101.3%
3	10:26:29	101.1%	0.199	0.188	0.168	0.910	0.076	0.087	0.294	0.318	99.5%
x		100.8%	0.201	0.180	0.184	1.262	0.074	0.079	0.321	0.293	99.9%
σ		1.1%	0.002	0.007	0.023	0.398	0.007	0.008	0.024	0.024	1.2%
%RSD		1.1	0.924	3.921	12.380	31.540	8.964	9.955	7.382	8.191	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:25:36	0.148	0.110	0.524	0.480	12.910	12.800	99.5%	-0.001	-0.004	0.213
2	10:26:03	0.176	0.124	0.469	0.513	12.030	12.240	101.5%	-0.000	-0.006	0.188
3	10:26:29	0.202	0.094	0.479	0.457	12.550	12.140	100.0%	0.008	-0.003	0.146
x		0.175	0.110	0.491	0.483	12.490	12.390	100.4%	0.002	-0.004	0.182
σ		0.027	0.015	0.029	0.028	0.442	0.354	1.0%	0.005	0.002	0.034
%RSD		15.400	13.870	5.907	5.830	3.535	2.856	1.0	230.500	38.420	18.600

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:25:36	0.176	0.182	94.7%
2	10:26:03	0.191	0.183	98.9%
3	10:26:29	0.206	0.180	97.7%
x		0.191	0.182	97.1%
σ		0.015	0.001	2.2%
%RSD		7.988	0.689	2.2

UD18070-003 04/25/2019 10:30:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:22	98.4%	-0.011	13.730	14.130	1128.000	T 8878.000	T 964.600	969.400	967.500	2.203
2	10:31:49	97.3%	0.015	14.140	14.330	1163.000	T 8908.000	T 983.000	974.900	979.300	2.172
3	10:32:16	96.2%	-0.015	12.970	14.160	1187.000	T 9109.000	T 989.400	999.600	987.600	2.286
x		97.3%	-0.004	13.610	14.210	1160.000	T 8965.000	T 979.000	981.300	978.100	2.220
σ		1.1%	0.016	0.596	0.112	29.630	T 125.800	T 12.850	16.070	10.070	0.059
%RSD		1.1	425.300	4.375	0.786	2.555	T 1.403	T 1.312	1.638	1.030	2.653

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:22	T 4881.000	313.900	T 1205.000	3162.000	2947.000	98.4%	0.939	0.256	0.344	-70.530
2	10:31:49	T 4756.000	308.100	T 1224.000	3070.000	3024.000	99.9%	0.724	0.190	0.381	-33.360
3	10:32:16	T 4852.000	314.500	T 1262.000	3349.000	3153.000	100.2%	0.830	0.223	0.361	-39.960
x		T 4830.000	312.200	T 1230.000	3194.000	3041.000	99.5%	0.831	0.223	0.362	-47.950
σ		T 65.060	3.530	T 29.190	142.000	104.500	1.0%	0.107	0.033	0.019	19.830
%RSD		T 1.347	1.131	T 2.372	4.447	3.435	1.0	12.920	14.750	5.141	41.360

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:22	23.890	0.771	32.190	67.970	0.028	0.866	1.378	200.500	200.700	15.730
2	10:31:49	24.210	0.867	30.670	64.010	0.021	0.782	0.542	199.000	201.300	15.540
3	10:32:16	24.880	0.831	31.870	56.880	0.010	0.881	0.972	204.100	207.900	16.490
x		24.330	0.823	31.570	62.950	0.020	0.843	0.964	201.200	203.300	15.920
σ		0.506	0.048	0.801	5.618	0.009	0.054	0.418	2.590	4.007	0.501
%RSD		2.080	5.882	2.537	8.925	47.140	6.363	43.400	1.287	1.971	3.148

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:22	15.850	15.760	0.146	0.050	192.100	188.900	3.412	0.613	-1.341	19.720
2	10:31:49	16.180	15.280	0.100	-0.058	193.500	190.800	1.934	0.310	-3.396	19.440
3	10:32:16	14.800	16.410	0.038	0.276	204.900	202.600	0.151	-0.079	-4.075	19.830
x		15.610	15.820	0.095	0.089	196.800	194.100	1.832	0.281	-2.937	19.660
σ		0.719	0.571	0.054	0.171	7.029	7.422	1.633	0.347	1.424	0.198
%RSD		4.608	3.612	56.790	190.800	3.571	3.823	89.110	123.300	48.470	1.009

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:22	96.6%	0.195	0.149	0.168	0.546	0.045	0.057	-0.002	0.007	96.4%
2	10:31:49	101.0%	0.177	0.218	0.136	0.557	0.043	0.047	0.010	-0.000	101.1%
3	10:32:16	103.1%	0.172	0.184	0.173	1.100	0.045	0.055	0.006	0.001	101.3%
x		100.2%	0.181	0.184	0.159	0.735	0.045	0.053	0.004	0.003	99.6%
σ		3.3%	0.012	0.035	0.020	0.317	0.001	0.005	0.006	0.004	2.8%
%RSD		3.3	6.695	18.810	12.420	43.140	3.023	9.973	131.800	155.700	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:31:22	0.030	0.030	0.377	0.404	10.400	10.230	96.4%	-0.001	-0.006	0.172
2	10:31:49	0.030	0.045	0.341	0.449	10.150	10.660	100.7%	0.003	-0.008	0.137
3	10:32:16	0.033	0.055	0.438	0.387	10.520	10.410	102.0%	-0.003	-0.009	0.162
x		0.031	0.043	0.385	0.413	10.350	10.430	99.7%	0.000	-0.008	0.157
σ		0.002	0.013	0.049	0.032	0.188	0.215	2.9%	0.003	0.001	0.018
%RSD		6.668	29.730	12.720	7.732	1.812	2.060	3.0	18470.000	15.390	11.560

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:31:22	0.118	0.143	91.9%
2	10:31:49	0.141	0.144	96.6%
3	10:32:16	0.150	0.150	100.2%
x		0.136	0.145	96.2%
σ		0.016	0.004	4.2%
%RSD		11.830	2.678	4.4

CCV MW10994 04/25/2019 10:36:42 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:10	92.0%	291.800	293.000	301.100	48.710	T59830.000	T60570.000	T60120.000	T59190.000	304.600
2	10:37:37	90.8%	309.000	304.500	304.900	69.590	T61090.000	T62650.000	T61250.000	T60720.000	312.200
3	10:38:04	90.5%	299.400	302.500	304.900	59.310	T59870.000	T60960.000	T61360.000	T60310.000	311.600
x		91.1%	100.018%	99.998%	101.214%	59.200	T100.438%	T61390.000	T60910.000	T100.126%	103.154%
σ		0.8%	n/a	n/a	n/a	10.440	Tn/a	T1106.000	T684.900	Tn/a	n/a
%RSD		0.8	2.877	2.040	0.724	17.630	T1.188	T1.802	T1.124	T1.325	1.364

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:10	T3173.000	-35.740	T57930.000	60400.000	T58660.000	94.5%	306.100	312.900	301.200	1852.000
2	10:37:37	T3081.000	-35.210	T60670.000	61000.000	T61840.000	97.2%	301.400	315.300	301.800	1079.000
3	10:38:04	T3085.000	-26.860	T60990.000	59950.000	T62390.000	98.3%	298.900	315.100	302.700	451.000
x		T103.765%	-32.600	T99.773%	60450.000	T101.604%	96.7%	100.715%	104.799%	100.635%	1127.000
σ		Tn/a	4.982	Tn/a	525.400	Tn/a	2.0%	n/a	n/a	n/a	701.800
%RSD		T1.675	15.280	T2.811	0.869	T3.307	2.1	1.217	0.424	0.238	62.250

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:10	T61350.000	298.000	T60770.000	T60960.000	295.700	292.000	284.900	280.400	281.500	288.300
2	10:37:37	T61170.000	299.300	T61440.000	T62380.000	297.000	289.400	283.400	280.700	278.600	291.700
3	10:38:04	T61360.000	302.200	T61640.000	T61940.000	297.900	287.500	281.100	278.400	280.800	293.600
x		T61290.000	99.944%	T61290.000	T102.936%	98.954%	96.538%	283.200	279.800	93.434%	97.067%
σ		T106.500	n/a	T456.800	Tn/a	n/a	n/a	1.913	1.270	n/a	n/a
%RSD		T0.174	0.731	T0.745	T1.174	0.375	0.775	0.675	0.454	0.528	0.913

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:10	288.500	284.100	294.800	291.300	13.140	13.060	1244.000	292.300	-0.137	299.000
2	10:37:37	290.300	286.800	299.700	291.500	13.160	13.210	1247.000	295.200	1.517	300.500
3	10:38:04	288.600	286.400	300.800	296.600	12.630	11.470	1239.000	295.400	-2.258	302.200
x		289.100	285.800	99.479%	293.200	12.980	12.580	1243.000	98.092%	-0.293	100.192%
σ		1.042	1.471	n/a	3.008	0.301	0.966	3.832	n/a	1.893	n/a
%RSD		0.360	0.515	1.057	1.026	2.320	7.682	0.308	0.585	647.100	0.545

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:10	92.7%	305.500	308.900	309.400	297.500	286.100	285.100	293.900	293.500	90.3%
2	10:37:37	97.2%	306.100	304.400	304.800	285.200	285.000	284.500	292.500	295.300	93.7%
3	10:38:04	98.4%	307.800	304.200	305.800	293.100	286.100	286.700	292.700	293.400	94.3%
x		96.1%	102.149%	101.945%	306.700	292.000	95.247%	285.400	293.100	98.019%	92.8%
σ		3.0%	n/a	n/a	2.423	6.240	n/a	1.145	0.737	n/a	2.2%
%RSD		3.1	0.402	0.867	0.790	2.137	0.231	0.401	0.251	0.373	2.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:37:10	302.300	301.100	301.700	292.200	306.300	302.400	93.8%	282.800	289.800	280.100
2	10:37:37	303.200	302.000	306.200	301.300	307.500	306.100	97.1%	285.600	293.100	283.900
3	10:38:04	302.700	301.500	306.300	298.400	305.000	303.400	98.0%	284.200	292.200	284.300
x		100.911%	100.509%	304.700	99.099%	102.088%	101.314%	96.3%	284.200	97.227%	94.248%
σ		n/a	n/a	2.646	n/a	n/a	n/a	2.2%	1.388	n/a	n/a
%RSD		0.154	0.145	0.868	1.553	0.420	0.623	2.3	0.489	0.579	0.815

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:37:10	283.400	281.100	87.4%
2	10:37:37	285.200	284.300	91.4%
3	10:38:04	283.700	283.700	92.7%
x		94.703%	94.354%	90.5%
σ		n/a	n/a	2.8%
%RSD		0.328	0.598	3.0

CCB IM9370-01 04/25/2019 10:42:29 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:56	95.0%	0.029	5.961	6.437	34.280	4.489	4.377	4.446	4.431	0.030
2	10:43:24	95.8%	0.022	5.874	6.110	43.440	3.937	3.476	3.462	3.738	-0.005
3	10:43:51	96.7%	0.027	5.499	5.911	38.270	2.421	2.812	3.072	2.662	0.020
x		95.8%	0.026	5.778	6.153	38.660	3.616	3.555	3.660	3.610	0.015
σ		0.8%	0.004	0.246	0.266	4.595	1.071	0.786	0.708	0.891	0.018
%RSD		0.9	15.130	4.248	4.318	11.880	29.630	22.100	19.350	24.680	117.400

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:56	14.110	-69.880	10.320	4.800	4.178	97.0%	-0.443	0.016	0.047	-19.040
2	10:43:24	14.380	-66.970	8.446	4.336	3.853	96.7%	-0.396	0.028	0.024	-13.410
3	10:43:51	13.440	-88.500	4.641	3.634	2.991	99.8%	-0.379	0.026	0.013	-20.620
x		13.980	-75.120	7.802	4.257	3.674	97.8%	-0.406	0.023	0.028	-17.690
σ		0.485	11.680	2.894	0.587	0.613	1.7%	0.033	0.006	0.017	3.787
%RSD		3.467	15.550	37.090	13.800	16.690	1.8	8.181	27.340	63.130	21.410

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:56	2.420	-0.042	3.809	8.688	0.018	0.004	0.566	-0.074	0.017	0.020
2	10:43:24	2.612	-0.046	3.300	10.460	0.006	-0.015	0.272	-0.080	-0.012	-0.009
3	10:43:51	0.425	-0.046	1.798	1.389	0.001	-0.003	-0.153	-0.085	-0.016	-0.019
x		1.819	-0.045	2.969	6.846	0.008	-0.005	0.228	-0.080	-0.003	-0.003
σ		1.211	0.003	1.045	4.809	0.009	0.010	0.362	0.006	0.018	0.020
%RSD		66.570	6.059	35.210	70.230	106.700	215.700	158.500	6.997	527.100	676.900

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:56	-0.308	-0.009	-0.062	0.710	5.583	5.563	-0.298	0.010	-3.102	0.015
2	10:43:24	-0.328	-0.014	-0.009	0.407	5.448	5.980	0.461	0.158	-2.163	0.013
3	10:43:51	-0.199	0.006	-0.000	-0.092	6.001	6.084	0.441	0.173	-2.091	0.005
x		-0.279	-0.006	-0.024	0.342	5.678	5.876	0.201	0.114	-2.452	0.011
σ		0.069	0.010	0.033	0.405	0.288	0.276	0.433	0.090	0.564	0.005
%RSD		24.910	172.200	139.700	118.700	5.078	4.693	215.000	79.280	23.000	46.330

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:56	97.0%	0.074	0.099	0.102	0.165	0.046	0.047	0.023	0.012	95.8%
2	10:43:24	97.4%	0.084	0.103	0.096	0.543	0.046	0.048	0.007	0.018	96.5%
3	10:43:51	101.0%	0.073	0.086	0.070	-0.154	0.038	0.046	0.026	0.014	98.1%
x		98.5%	0.077	0.096	0.089	0.185	0.043	0.047	0.019	0.015	96.8%
σ		2.2%	0.006	0.009	0.017	0.349	0.005	0.001	0.011	0.003	1.2%
%RSD		2.2	8.131	9.309	18.510	188.900	11.140	2.808	56.870	20.930	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:42:56	0.059	0.111	0.164	0.208	-0.004	0.004	96.4%	0.019	0.021	0.029
2	10:43:24	0.057	0.068	0.171	0.169	0.002	0.001	96.3%	0.032	0.018	0.009
3	10:43:51	0.060	0.080	0.151	0.193	0.029	-0.007	99.8%	0.027	0.014	0.004
x		0.059	0.086	0.162	0.190	0.009	-0.000	97.5%	0.026	0.018	0.014
σ		0.001	0.022	0.010	0.020	0.018	0.006	2.0%	0.006	0.003	0.013
%RSD		2.494	25.580	6.271	10.290	192.900	1172.000	2.1	24.760	17.560	93.810

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:42:56	0.024	0.025	95.5%
2	10:43:24	0.010	0.010	94.7%
3	10:43:51	0.010	0.009	99.0%
x		0.015	0.015	96.4%
σ		0.008	0.009	2.3%
%RSD		55.490	60.070	2.4

UD12064-006 04/25/2019 10:48:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:40	99.3%	0.172	4.271	4.448	154.300	32.620	427.000	408.900	412.700	™11850.000
2	10:49:07	97.5%	0.157	4.388	4.467	144.000	33.060	405.800	390.100	394.200	™11690.000
3	10:49:35	97.5%	0.179	4.489	4.500	136.600	34.910	400.700	388.900	391.500	™11620.000
x		98.1%	0.169	4.383	4.472	144.900	33.530	411.200	396.000	399.500	™11720.000
σ		1.0%	0.011	0.109	0.026	8.898	1.215	13.990	11.240	11.500	™122.500
%RSD		1.1	6.708	2.489	0.590	6.140	3.622	3.402	2.839	2.880	™1.045

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:40	₸1154.000	₸269900.000	348.200	133.000	66.640	96.9%	241.200	18.810	18.890	6610.000
2	10:49:07	₸1105.000	₸260100.000	339.600	97.270	68.570	98.6%	241.200	19.220	18.260	5638.000
3	10:49:35	₸1104.000	₸268400.000	334.900	125.500	67.720	97.1%	237.700	18.770	18.380	6277.000
x		₸1121.000	₸266100.000	340.900	118.600	67.640	97.5%	240.000	18.940	18.510	6175.000
σ		₸28.880	₸5246.000	6.727	18.830	0.964	0.9%	1.983	0.251	0.336	493.900
%RSD		₸2.576	₸1.971	1.973	15.880	1.425	1.0	0.826	1.325	1.816	7.999

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:40	₸9748.000	52.670	₸9581.000	10320.000	2.037	6.424	6.238	4.279	4.864	19.690
2	10:49:07	₸9705.000	52.700	₸9433.000	10210.000	1.975	6.103	5.959	4.378	4.922	20.430
3	10:49:35	₸9556.000	51.260	₸9399.000	10040.000	1.889	5.974	5.888	4.292	4.775	19.060
x		₸9670.000	52.210	₸9471.000	10190.000	1.967	6.167	6.029	4.316	4.854	19.730
σ		₸100.900	0.824	₸96.730	142.900	0.074	0.232	0.185	0.054	0.074	0.687
%RSD		₸1.043	1.578	₸1.021	1.402	3.777	3.764	3.070	1.252	1.526	3.480

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:40	19.690	18.350	2.678	0.802	8.816	7.894	0.582	0.378	-3.542	3.851
2	10:49:07	19.320	18.660	2.809	0.847	8.332	6.465	2.034	0.790	-4.491	3.813
3	10:49:35	18.210	17.250	3.432	1.221	6.857	7.031	6.679	1.980	-3.667	3.689
x		19.070	18.080	2.973	0.957	8.002	7.130	3.099	1.049	-3.900	3.784
σ		0.770	0.740	0.403	0.230	1.021	0.720	3.185	0.832	0.516	0.085
%RSD		4.037	4.094	13.570	24.070	12.760	10.090	102.800	79.290	13.220	2.241

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:40	110.0%	0.754	0.745	0.667	4.137	0.137	0.118	0.008	0.017	94.3%
2	10:49:07	114.9%	0.771	0.743	0.775	1.248	0.109	0.095	0.003	-0.006	97.7%
3	10:49:35	112.2%	0.757	0.730	0.654	2.635	0.107	0.095	0.012	0.011	95.7%
x		112.4%	0.761	0.740	0.698	2.673	0.118	0.103	0.007	0.007	95.9%
σ		2.4%	0.009	0.008	0.067	1.445	0.017	0.013	0.004	0.012	1.7%
%RSD		2.2	1.178	1.096	9.524	54.050	14.490	13.100	60.210	167.400	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:48:40	5.426	5.830	0.327	0.240	21.240	20.630	98.6%	0.073	0.058	6.416
2	10:49:07	5.147	5.563	0.293	0.296	20.280	20.250	102.0%	0.046	0.058	6.307
3	10:49:35	5.012	5.679	0.274	0.274	20.320	20.070	98.6%	0.077	0.067	6.189
x		5.195	5.691	0.298	0.270	20.610	20.320	99.7%	0.066	0.061	6.304
σ		0.211	0.134	0.027	0.029	0.545	0.285	2.0%	0.017	0.005	0.114
%RSD		4.061	2.349	8.956	10.580	2.645	1.401	2.0	25.410	8.237	1.803

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:48:40	5.767	6.182	95.5%
2	10:49:07	5.553	6.041	98.9%
3	10:49:35	5.441	5.820	94.6%
x		5.587	6.014	96.3%
σ		0.166	0.182	2.3%
%RSD		2.965	3.029	2.3

UD12064-008 04/25/2019 10:53:58

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:54:25	99.3%	0.186	3.743	3.591	62.610	43.320	T 527.900	528.400	536.600	TM 19380.000
2	10:54:53	98.7%	0.156	4.059	3.872	72.690	43.590	T 519.800	520.400	537.700	TM 19780.000
3	10:55:20	97.8%	0.200	3.526	3.606	69.410	40.150	T 525.900	519.800	515.000	TM 19330.000
x		98.6%	0.181	3.776	3.690	68.230	42.350	T 524.500	522.800	529.800	TM 19500.000
σ		0.7%	0.023	0.268	0.158	5.140	1.915	T 4.236	4.797	12.810	TM 248.400
%RSD		0.7	12.520	7.093	4.288	7.533	4.522	T 0.808	0.918	2.417	TM 1.274

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:54:25	T 1554.000	T 273600.000	386.100	244.600	140.300	94.6%	327.900	30.550	23.740	7026.000
2	10:54:53	T 1493.000	T 273500.000	387.700	239.200	143.700	96.3%	325.800	30.200	23.090	7116.000
3	10:55:20	T 1472.000	T 265600.000	377.700	240.900	143.900	97.7%	329.800	29.750	22.930	6404.000
x		T 1506.000	T 270900.000	383.800	241.500	142.700	96.2%	327.900	30.170	23.250	6849.000
σ		T 42.390	T 4587.000	5.359	2.798	2.029	1.6%	1.990	0.401	0.431	388.100
%RSD		T 2.814	T 1.694	1.396	1.158	1.422	1.6	0.607	1.330	1.854	5.667

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:54:25	T 13590.000	75.360	T 13670.000	14690.000	13.560	8.869	9.581	6.190	6.814	39.640
2	10:54:53	T 13270.000	73.690	T 13550.000	14480.000	13.290	8.692	8.379	5.988	6.633	38.690
3	10:55:20	T 13570.000	73.750	T 13500.000	14460.000	12.940	8.735	8.687	6.042	6.702	39.490
x		T 13480.000	74.270	T 13570.000	14540.000	13.260	8.765	8.882	6.073	6.717	39.270
σ		T 178.600	0.949	T 86.940	124.100	0.309	0.092	0.624	0.104	0.091	0.510
%RSD		T 1.325	1.277	T 0.641	0.853	2.330	1.054	7.026	1.720	1.362	1.299

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:54:25	36.050	36.140	3.480	0.720	5.672	6.024	1.111	0.479	-1.734	5.271
2	10:54:53	35.680	35.790	3.226	1.334	5.849	4.516	4.402	1.299	-0.066	5.176
3	10:55:20	37.460	36.350	3.882	1.057	6.413	5.809	6.611	1.914	-2.795	5.342
x		36.400	36.090	3.529	1.037	5.978	5.449	4.041	1.231	-1.532	5.263
σ		0.936	0.285	0.331	0.308	0.387	0.816	2.767	0.720	1.376	0.083
%RSD		2.572	0.789	9.367	29.660	6.472	14.970	68.480	58.500	89.800	1.576

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:54:25	107.0%	1.213	1.153	1.217	3.386	0.064	0.052	0.052	0.054	91.3%
2	10:54:53	105.9%	1.226	1.302	1.239	4.363	0.057	0.041	0.027	0.042	90.8%
3	10:55:20	109.0%	1.254	1.391	1.267	3.284	0.041	0.048	0.062	-0.005	94.3%
x		107.3%	1.231	1.282	1.241	3.678	0.054	0.047	0.047	0.030	92.1%
σ		1.6%	0.021	0.121	0.025	0.595	0.012	0.006	0.018	0.031	1.9%
%RSD		1.5	1.685	9.401	2.002	16.190	21.630	12.310	38.670	103.000	2.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	10:54:25	5.008	6.120	0.706	0.714	28.450	29.200	94.9%	0.102	0.092	9.045
2	10:54:53	4.830	5.934	0.650	0.680	28.010	28.640	93.2%	0.095	0.099	9.111
3	10:55:20	5.310	6.025	0.674	0.719	28.710	28.550	96.3%	0.093	0.119	8.876
x		5.049	6.026	0.677	0.704	28.390	28.800	94.8%	0.097	0.103	9.010
σ		0.243	0.093	0.028	0.021	0.354	0.352	1.6%	0.004	0.014	0.121
%RSD		4.808	1.548	4.128	2.996	1.247	1.222	1.7	4.586	13.690	1.343

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	10:54:25	8.167	8.544	90.4%
2	10:54:53	8.459	8.767	90.9%
3	10:55:20	8.241	8.555	94.3%
x		8.289	8.622	91.9%
σ		0.152	0.126	2.1%
%RSD		1.833	1.460	2.3

UD12064-009 04/25/2019 10:59:43

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:10	96.1%	0.212	3.315	3.314	61.770	45.800	T 626.000	632.300	627.700	TM 21260.000
2	11:00:37	96.0%	0.195	3.460	3.117	54.060	43.160	T 588.900	599.300	623.200	TM 21290.000
3	11:01:04	98.2%	0.209	3.298	3.349	59.180	48.670	T 605.500	599.800	596.300	TM 19750.000
x		96.8%	0.205	3.358	3.260	58.340	45.880	T 606.800	610.500	615.800	TM 20770.000
σ		1.3%	0.010	0.089	0.125	3.925	2.754	T 18.610	18.900	16.970	TM 882.000
%RSD		1.3	4.661	2.648	3.836	6.728	6.004	T 3.067	3.095	2.756	TM 4.247

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:10	T 1468.000	T 230800.000	606.800	384.300	315.500	97.5%	351.000	33.510	19.800	5680.000
2	11:00:37	T 1420.000	T 225900.000	597.700	380.800	309.200	99.5%	342.300	33.880	19.130	5287.000
3	11:01:04	T 1464.000	T 235300.000	573.300	425.000	287.000	94.2%	329.400	32.160	19.180	6627.000
x		T 1451.000	T 230600.000	592.600	396.700	303.900	97.1%	340.900	33.180	19.370	5865.000
σ		T 26.270	T 4675.000	17.280	24.580	14.970	2.7%	10.840	0.902	0.372	688.700
%RSD		T 1.811	T 2.027	2.917	6.196	4.924	2.8	3.180	2.717	1.921	11.740

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:10	T 14020.000	72.340	T 13900.000	14690.000	9.583	10.700	10.230	6.808	7.178	32.690
2	11:00:37	T 13360.000	69.510	T 13480.000	14320.000	9.524	10.270	9.177	6.396	6.989	31.160
3	11:01:04	T 13500.000	69.460	T 13570.000	14060.000	9.439	10.020	10.610	6.542	7.092	30.640
x		T 13620.000	70.440	T 13650.000	14350.000	9.515	10.330	10.000	6.582	7.086	31.500
σ		T 346.200	1.645	T 223.200	316.700	0.072	0.347	0.741	0.209	0.095	1.064
%RSD		T 2.541	2.336	T 1.635	2.207	0.759	3.361	7.409	3.167	1.334	3.378

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:10	30.460	29.950	3.724	1.472	3.675	4.269	3.385	1.062	-2.509	4.649
2	11:00:37	29.860	29.990	3.940	0.705	4.830	4.069	2.346	0.831	-3.531	4.641
3	11:01:04	29.640	28.760	3.715	0.829	4.187	4.579	3.501	1.178	-5.406	4.496
x		29.990	29.570	3.793	1.002	4.231	4.306	3.077	1.023	-3.816	4.595
σ		0.427	0.702	0.128	0.412	0.579	0.257	0.636	0.177	1.469	0.086
%RSD		1.422	2.375	3.370	41.090	13.680	5.964	20.680	17.250	38.510	1.878

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:10	104.7%	0.753	0.752	0.857	5.020	0.038	0.023	0.016	-0.007	91.7%
2	11:00:37	106.3%	0.732	0.696	0.747	2.726	0.048	0.050	0.016	-0.008	92.6%
3	11:01:04	101.2%	0.672	0.655	0.679	5.652	0.061	0.038	0.031	0.058	88.2%
x		104.1%	0.719	0.701	0.761	4.466	0.049	0.037	0.021	0.014	90.8%
σ		2.6%	0.042	0.049	0.089	1.539	0.012	0.014	0.009	0.038	2.3%
%RSD		2.5	5.857	6.953	11.750	34.470	24.100	36.750	40.890	265.800	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:00:10	4.840	5.753	0.542	0.526	41.300	41.070	94.0%	0.159	0.129	9.476
2	11:00:37	4.602	5.346	0.559	0.489	40.240	39.930	95.2%	0.146	0.153	9.460
3	11:01:04	4.525	5.332	0.478	0.501	39.670	38.810	89.9%	0.133	0.122	9.312
x		4.656	5.477	0.526	0.505	40.400	39.940	93.0%	0.146	0.135	9.416
σ		0.164	0.239	0.043	0.019	0.827	1.129	2.8%	0.013	0.016	0.090
%RSD		3.532	4.371	8.121	3.713	2.048	2.828	3.0	9.064	12.030	0.961

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:00:10	8.946	9.259	92.6%
2	11:00:37	8.714	9.048	92.8%
3	11:01:04	8.486	8.820	88.4%
x		8.715	9.043	91.3%
σ		0.230	0.220	2.5%
%RSD		2.637	2.428	2.7

UQ13852-001 04/25/2019 11:05:25 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:52	97.1%	0.006	3.497	3.554	77.720	25.430	2.580	2.356	2.340	6.087
2	11:06:19	98.4%	0.015	3.602	3.612	79.470	26.320	2.496	2.472	2.252	4.499
3	11:06:46	96.6%	0.032	3.850	3.583	82.540	20.890	2.534	2.282	2.043	4.576
x		97.4%	0.018	3.650	3.583	79.910	24.210	2.537	2.370	2.212	5.054
σ		0.9%	0.013	0.181	0.029	2.441	2.912	0.042	0.096	0.152	0.896
%RSD		1.0	73.440	4.961	0.806	3.055	12.030	1.661	4.049	6.891	17.720

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:52	20.040	T 363400.000	8.524	0.475	3.748	95.3%	-0.144	-0.722	1.084	8368.000
2	11:06:19	21.050	T 365000.000	6.155	1.092	2.532	92.2%	-0.113	-0.361	1.129	8994.000
3	11:06:46	19.830	T 354400.000	6.363	4.964	3.966	94.8%	-0.142	-0.677	0.846	7842.000
x		20.310	T 361000.000	7.014	2.177	3.415	94.1%	-0.133	-0.587	1.019	8401.000
σ		0.653	T 5718.000	1.312	2.433	0.773	1.7%	0.017	0.197	0.152	576.400
%RSD		3.216	T 1.584	18.700	111.800	22.630	1.8	13.010	33.530	14.920	6.861

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:52	24.220	0.070	14.580	-4.845	-0.021	0.272	-0.343	0.054	0.066	0.896
2	11:06:19	24.610	0.073	14.110	4.533	-0.013	0.276	-0.137	0.049	0.020	0.856
3	11:06:46	24.380	0.043	8.997	-5.569	-0.026	0.254	0.005	0.028	0.058	0.853
x		24.410	0.062	12.560	-1.960	-0.020	0.267	-0.158	0.044	0.048	0.868
σ		0.198	0.017	3.095	5.635	0.006	0.012	0.175	0.013	0.025	0.024
%RSD		0.810	26.680	24.640	287.400	32.240	4.465	110.600	30.740	51.430	2.736

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:52	0.580	0.747	-0.177	0.858	8.028	7.940	1.835	0.574	-4.710	0.008
2	11:06:19	0.481	0.816	-0.373	-0.133	7.469	7.320	2.623	0.702	-2.288	0.006
3	11:06:46	0.899	0.997	0.115	-0.197	8.103	8.276	0.310	0.148	-1.994	0.003
x		0.653	0.853	-0.145	0.176	7.867	7.845	1.589	0.475	-2.997	0.006
σ		0.218	0.129	0.246	0.592	0.347	0.485	1.176	0.290	1.491	0.002
%RSD		33.400	15.110	169.400	335.700	4.406	6.185	73.980	61.190	49.740	43.310

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:52	91.4%	0.104	0.074	0.051	-0.282	0.017	0.013	-0.005	0.017	88.7%
2	11:06:19	89.6%	0.046	0.100	0.073	-0.361	0.012	0.015	-0.006	-0.015	87.0%
3	11:06:46	93.1%	0.055	0.049	0.060	-0.972	0.005	0.012	-0.006	-0.001	90.2%
x		91.4%	0.068	0.074	0.061	-0.538	0.011	0.013	-0.006	0.000	88.6%
σ		1.7%	0.031	0.025	0.011	0.378	0.006	0.002	0.000	0.016	1.6%
%RSD		1.9	44.900	34.120	17.830	70.160	55.950	13.320	0.916	4423.000	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:05:52	3.950	5.440	0.085	0.118	0.075	0.023	88.9%	-0.014	-0.020	0.018
2	11:06:19	4.176	5.630	0.082	0.121	0.046	0.032	87.3%	-0.015	-0.019	0.015
3	11:06:46	3.976	5.549	0.100	0.093	-0.001	0.061	91.6%	-0.017	-0.017	0.010
x		4.034	5.540	0.089	0.111	0.040	0.039	89.3%	-0.015	-0.019	0.014
σ		0.124	0.095	0.010	0.015	0.038	0.020	2.2%	0.001	0.002	0.004
%RSD		3.065	1.718	11.140	13.790	95.520	50.750	2.4	8.278	8.211	29.310

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:05:52	0.008	0.011	87.8%
2	11:06:19	0.010	0.008	86.3%
3	11:06:46	0.009	0.009	91.6%
x		0.009	0.009	88.6%
σ		0.001	0.001	2.7%
%RSD		12.130	12.890	3.1

UQ13852-002 04/25/2019 11:11:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:37	95.5%	200.600	203.100	197.600	63.520	┬2073.000	┬1978.000	1996.000	2036.000	197.000
2	11:12:04	97.9%	196.300	208.300	200.900	59.350	┬2130.000	┬2011.000	2018.000	2065.000	193.500
3	11:12:31	100.4%	191.500	202.900	200.300	65.480	┬2096.000	┬1964.000	2014.000	1998.000	188.800
x		97.9%	196.200	204.700	199.600	62.780	┬2099.000	┬1984.000	2009.000	2033.000	193.100
σ		2.4%	4.561	3.058	1.727	3.131	┬28.950	┬24.030	12.000	33.650	4.141
%RSD		2.5	2.325	1.494	0.865	4.987	┬1.379	┬1.211	0.597	1.655	2.144

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:37	65.690	┬346000.000	┬1910.000	2228.000	1963.000	95.4%	201.000	205.700	202.400	7916.000
2	11:12:04	70.480	┬362000.000	┬1868.000	2269.000	1878.000	91.8%	206.400	209.300	204.700	10290.000
3	11:12:31	69.030	┬355500.000	┬1854.000	2240.000	1890.000	95.0%	201.000	207.400	200.900	7930.000
x		68.400	┬354500.000	┬1877.000	2246.000	1910.000	94.1%	202.800	207.400	202.700	8713.000
σ		2.457	┬8042.000	┬29.080	20.950	45.950	2.0%	3.145	1.792	1.915	1369.000
%RSD		3.592	┬2.269	┬1.549	0.933	2.405	2.1	1.551	0.864	0.945	15.710

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:37	2284.000	202.400	┬2102.000	2097.000	195.900	196.500	195.700	196.700	195.800	200.100
2	11:12:04	2280.000	202.900	┬2125.000	2121.000	201.900	203.000	200.900	199.600	198.200	199.900
3	11:12:31	2272.000	200.300	┬2139.000	2136.000	199.600	201.300	198.300	199.000	196.000	199.700
x		2279.000	201.900	┬2122.000	2118.000	199.100	200.300	198.300	198.400	196.700	199.900
σ		5.884	1.420	┬18.800	19.460	2.989	3.366	2.615	1.493	1.351	0.186
%RSD		0.258	0.703	┬0.886	0.919	1.501	1.681	1.319	0.752	0.687	0.093

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:37	192.100	192.300	192.800	194.400	8.008	8.183	786.400	187.900	1.586	198.700
2	11:12:04	190.000	188.700	190.900	197.600	8.371	7.995	809.200	195.800	-0.166	197.900
3	11:12:31	190.600	191.600	189.500	198.800	9.568	8.929	829.800	200.200	-0.920	199.100
x		190.900	190.900	191.000	197.000	8.649	8.369	808.500	194.700	0.167	198.600
σ		1.097	1.934	1.663	2.318	0.817	0.494	21.690	6.226	1.286	0.630
%RSD		0.575	1.013	0.870	1.177	9.441	5.902	2.683	3.198	771.600	0.317

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:37	91.6%	200.100	198.800	200.300	194.700	199.800	199.200	197.600	198.100	88.1%
2	11:12:04	89.3%	199.200	197.000	195.900	196.100	201.100	200.000	196.400	196.000	84.7%
3	11:12:31	90.2%	200.500	197.400	199.100	194.100	202.700	201.700	196.000	195.800	86.1%
x		90.4%	199.900	197.700	198.500	195.000	201.200	200.300	196.700	196.600	86.3%
σ		1.1%	0.683	0.949	2.301	1.024	1.481	1.303	0.862	1.309	1.7%
%RSD		1.3	0.341	0.480	1.159	0.525	0.736	0.650	0.438	0.666	2.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:11:37	205.000	205.100	196.800	195.200	201.000	200.800	89.9%	196.500	199.100	198.200
2	11:12:04	207.100	207.700	194.900	191.900	203.800	201.600	87.0%	195.600	202.000	199.300
3	11:12:31	205.500	207.600	194.100	190.300	203.000	202.000	88.1%	197.900	201.300	199.700
x		205.900	206.800	195.300	192.500	202.600	201.500	88.3%	196.700	200.800	199.100
σ		1.119	1.476	1.358	2.470	1.417	0.626	1.5%	1.136	1.505	0.793
%RSD		0.543	0.714	0.696	1.283	0.699	0.311	1.7	0.578	0.749	0.398

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:11:37	198.500	197.800	88.7%
2	11:12:04	199.800	198.600	85.6%
3	11:12:31	199.200	198.800	86.0%
x		199.200	198.400	86.7%
σ		0.623	0.546	1.7%
%RSD		0.313	0.275	1.9

UD12075-001 04/25/2019 11:16:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:21	101.4%	0.740	1.421	1.575	3.260	126.000	T 892.700	935.500	971.900	TM 51390.000
2	11:17:48	100.1%	0.736	1.365	1.757	4.931	123.700	T 876.800	918.200	957.600	TM 52910.000
3	11:18:15	98.1%	0.776	1.576	1.590	0.058	122.200	T 871.300	910.000	956.800	TM 54420.000
x		99.9%	0.751	1.454	1.641	2.750	124.000	T 880.300	921.300	962.100	TM 52910.000
σ		1.6%	0.022	0.109	0.101	2.477	1.918	T 11.120	13.010	8.498	TM 1514.000
%RSD		1.6	2.889	7.488	6.182	90.070	1.548	T 1.263	1.412	0.883	TM 2.862

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:21	T 2644.000	T 246500.000	T 2043.000	2453.000	2014.000	97.1%	M 712.500	93.100	120.500	8000.000
2	11:17:48	T 2602.000	T 245600.000	T 2121.000	2451.000	2140.000	98.9%	M 694.900	96.040	121.600	8075.000
3	11:18:15	T 2515.000	T 246100.000	T 2190.000	2394.000	2219.000	100.6%	M 717.300	96.910	122.700	6391.000
x		T 2587.000	T 246100.000	T 2118.000	2433.000	2124.000	98.9%	M 708.200	95.350	121.600	7489.000
σ		T 65.680	T 452.000	T 73.750	33.760	103.500	1.8%	M 11.810	1.993	1.101	951.200
%RSD		T 2.539	T 0.184	T 3.482	1.388	4.875	1.8	M 1.667	2.090	0.905	12.700

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:21	T 42460.000	119.000	T 41860.000	T 43540.000	17.410	40.670	39.430	361.500	386.600	M 917.600
2	11:17:48	T 42610.000	119.200	T 42050.000	T 43790.000	17.210	40.380	37.170	359.000	392.400	M 940.600
3	11:18:15	T 43250.000	119.900	T 42660.000	T 45110.000	17.570	40.630	38.470	357.000	390.600	M 946.000
x		T 42770.000	119.400	T 42190.000	T 44150.000	17.400	40.560	38.360	359.200	389.900	M 934.800
σ		T 416.700	0.500	T 417.900	T 841.100	0.183	0.158	1.135	2.298	2.932	M 15.070
%RSD		T 0.974	0.419	T 0.990	T 1.905	1.051	0.390	2.960	0.640	0.752	M 1.612

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:21	M 684.200	M 714.900	15.940	3.072	3.716	3.191	9.086	3.135	-1.398	36.680
2	11:17:48	M 702.000	M 729.600	16.780	3.138	4.523	3.228	13.170	4.398	0.877	36.210
3	11:18:15	M 719.700	M 755.000	16.910	3.690	4.552	3.412	10.340	3.595	-2.365	37.620
x		M 701.900	M 733.200	16.540	3.300	4.264	3.277	10.860	3.709	-0.962	36.840
σ		M 17.760	M 20.300	0.529	0.340	0.474	0.119	2.093	0.640	1.664	0.717
%RSD		M 2.530	M 2.768	3.198	10.290	11.120	3.619	19.270	17.240	173.000	1.946

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:21	118.8%	1.754	1.746	1.800	12.780	0.279	0.266	2.551	2.826	86.2%
2	11:17:48	122.3%	1.909	1.684	1.805	12.570	0.257	0.311	2.584	2.955	87.0%
3	11:18:15	126.0%	1.807	1.822	1.938	13.150	0.283	0.269	2.784	2.971	90.0%
x		122.4%	1.823	1.751	1.848	12.840	0.273	0.282	2.640	2.918	87.7%
σ		3.6%	0.079	0.069	0.078	0.291	0.014	0.025	0.127	0.079	2.0%
%RSD		2.9	4.324	3.959	4.239	2.267	5.182	8.924	4.793	2.718	2.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:17:21	13.520	16.200	0.423	0.440	210.100	209.000	88.2%	1.146	1.154	140.700
2	11:17:48	13.950	16.180	0.435	0.401	214.700	213.400	90.7%	1.152	1.154	143.700
3	11:18:15	14.290	17.060	0.490	0.465	217.200	217.400	92.5%	1.203	1.205	147.500
x		13.920	16.480	0.449	0.435	214.000	213.300	90.5%	1.167	1.171	144.000
σ		0.389	0.503	0.036	0.032	3.629	4.212	2.2%	0.031	0.029	3.444
%RSD		2.794	3.052	7.941	7.381	1.696	1.975	2.4	2.675	2.505	2.392

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:17:21	133.000	135.900	85.4%
2	11:17:48	134.000	137.000	88.2%
3	11:18:15	138.900	141.800	90.1%
x		135.300	138.200	87.9%
σ		3.149	3.156	2.3%
%RSD		2.327	2.283	2.7

UQ14099-001 04/25/2019 11:22:39 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:07	98.2%	0.021	2.581	2.831	33.900	12.580	0.815	0.800	0.682	5.219
2	11:23:34	97.8%	0.049	2.918	3.147	31.960	11.410	0.895	0.965	0.761	4.190
3	11:24:00	97.0%	-0.003	2.940	2.666	21.340	7.510	0.860	0.927	0.816	3.792
x		97.7%	0.022	2.813	2.881	29.070	10.500	0.857	0.897	0.753	4.401
σ		0.6%	0.026	0.202	0.245	6.758	2.656	0.040	0.086	0.067	0.736
%RSD		0.6	114.600	7.163	8.486	23.250	25.300	4.650	9.588	8.939	16.730

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:07	15.870	T 99030.000	-6.814	2.604	4.424	92.6%	-0.254	-0.275	0.276	2502.000
2	11:23:34	16.290	T 98610.000	-7.583	7.734	4.771	92.2%	-0.333	0.067	0.358	2332.000
3	11:24:00	14.940	T 94460.000	-8.289	5.897	3.914	95.4%	-0.270	-0.100	0.254	2076.000
x		15.700	T 97370.000	-7.562	5.412	4.370	93.4%	-0.285	-0.103	0.296	2304.000
σ		0.693	T 2527.000	0.738	2.599	0.431	1.7%	0.042	0.171	0.054	214.300
%RSD		4.413	T 2.595	9.758	48.030	9.857	1.9	14.620	166.700	18.400	9.303

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:07	5.330	0.027	5.868	-9.435	-0.029	0.029	0.204	0.022	0.059	1.402
2	11:23:34	2.666	0.015	4.911	-5.970	-0.033	0.035	-0.084	-0.003	0.038	1.260
3	11:24:00	1.938	0.052	1.132	-12.250	-0.039	0.021	-0.340	-0.012	0.008	1.536
x		3.312	0.031	3.970	-9.217	-0.034	0.028	-0.073	0.002	0.035	1.399
σ		1.786	0.019	2.504	3.144	0.005	0.007	0.272	0.018	0.026	0.138
%RSD		53.930	61.030	63.080	34.110	15.060	24.950	371.400	759.400	73.200	9.832

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:07	1.332	1.187	0.045	0.601	2.485	3.004	2.013	0.509	-0.939	0.007
2	11:23:34	0.684	1.085	-0.274	-0.245	2.269	2.572	-0.417	0.012	-3.386	0.004
3	11:24:00	1.302	1.118	-0.002	0.258	2.249	2.804	-0.601	-0.069	-2.012	0.003
x		1.106	1.130	-0.077	0.205	2.334	2.793	0.331	0.151	-2.112	0.005
σ		0.366	0.052	0.172	0.425	0.131	0.217	1.459	0.313	1.227	0.002
%RSD		33.050	4.600	223.400	208.000	5.600	7.751	440.200	207.700	58.070	45.950

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:07	86.4%	0.009	-0.000	0.007	0.310	0.001	0.009	-0.005	0.003	85.5%
2	11:23:34	87.5%	0.008	-0.001	0.003	-1.289	0.007	0.001	-0.005	-0.004	85.5%
3	11:24:00	90.8%	0.013	0.051	0.009	-1.612	0.002	0.004	-0.005	0.002	89.1%
x		88.2%	0.010	0.017	0.006	-0.864	0.003	0.005	-0.005	0.000	86.7%
σ		2.3%	0.003	0.030	0.003	1.029	0.003	0.004	0.000	0.004	2.1%
%RSD		2.6	26.360	177.500	50.390	119.200	95.540	85.500	0.273	1762.000	2.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:23:07	0.453	0.773	-0.001	0.002	0.028	0.041	85.0%	0.021	0.009	0.010
2	11:23:34	0.519	0.757	0.006	0.035	0.028	0.037	85.8%	0.027	0.013	0.021
3	11:24:00	0.531	0.785	0.017	0.011	0.012	0.027	89.4%	0.012	0.009	0.012
x		0.501	0.771	0.007	0.016	0.023	0.035	86.7%	0.020	0.010	0.014
σ		0.042	0.014	0.009	0.017	0.009	0.007	2.3%	0.008	0.002	0.006
%RSD		8.417	1.832	124.200	108.600	39.640	21.460	2.7	38.440	19.890	41.880

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:23:07	0.020	0.011	83.9%
2	11:23:34	0.016	0.011	84.7%
3	11:24:00	0.004	0.010	87.8%
x		0.013	0.011	85.5%
σ		0.008	0.001	2.1%
%RSD		61.320	7.703	2.4

UQ14099-002 04/25/2019 11:28:23 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:51	98.2%	97.490	101.800	98.320	61.610	┬1051.000	┬1009.000	1025.000	1033.000	96.550
2	11:29:17	97.2%	100.200	101.500	99.430	55.260	┬1046.000	┬1028.000	1038.000	1043.000	97.070
3	11:29:44	96.8%	100.900	101.900	96.460	44.970	┬1037.000	┬1017.000	1008.000	992.200	95.000
x		97.4%	99.553%	101.700	98.072%	53.950	┬104.449%	┬1018.000	1024.000	102.287%	96.206%
σ		0.8%	n/a	0.206	n/a	8.397	┬n/a	┬9.702	14.840	n/a	n/a
%RSD		0.8	1.825	0.203	1.530	15.570	┬0.671	┬0.953	1.450	2.637	1.120

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:51	┬981.000	┬93570.000	┬956.000	1090.000	963.600	93.5%	99.670	100.500	100.500	2955.000
2	11:29:17	┬948.700	┬93250.000	┬945.700	1138.000	974.900	94.5%	101.300	100.800	99.790	2704.000
3	11:29:44	┬937.300	┬88740.000	┬942.600	1149.000	980.300	95.7%	101.000	102.000	99.600	2285.000
x		┬95.569%	┬91850.000	┬94.810%	1125.000	97.295%	94.5%	100.675%	101.073%	99.979%	2648.000
σ		┬n/a	┬2701.000	┬n/a	31.100	n/a	1.1%	n/a	n/a	n/a	338.600
%RSD		┬2.373	┬2.941	┬0.743	2.763	0.874	1.2	0.883	0.795	0.497	12.790

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:51	1118.000	99.080	┬1065.000	1053.000	98.590	99.600	100.700	99.010	98.640	102.600
2	11:29:17	1115.000	99.730	┬1070.000	1053.000	98.860	98.590	97.480	98.670	98.480	102.700
3	11:29:44	1120.000	99.110	┬1057.000	1050.000	99.000	97.470	98.660	99.030	97.980	103.300
x		1118.000	99.306%	┬1064.000	105.170%	98.820%	98.551%	98.940	98.900	98.367%	102.872%
σ		2.259	n/a	┬6.468	n/a	n/a	n/a	1.614	0.205	n/a	n/a
%RSD		0.202	0.370	┬0.608	0.153	0.209	1.085	1.631	0.208	0.346	0.355

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:51	100.600	98.590	94.160	104.200	1.989	2.172	434.200	103.600	-1.314	97.820
2	11:29:17	96.490	98.680	97.740	101.200	2.155	2.545	423.100	100.600	-3.377	97.990
3	11:29:44	102.600	99.860	97.980	97.340	2.101	2.600	435.000	102.400	-2.154	97.550
x		99.870	99.040	96.626%	100.900	2.081	2.439	430.800	102.194%	-2.281	97.790
σ		3.098	0.707	n/a	3.457	0.085	0.233	6.681	n/a	1.037	0.219
%RSD		3.102	0.714	2.217	3.425	4.076	9.550	1.551	1.479	45.470	0.224

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:51	87.9%	97.030	95.920	96.510	99.480	99.780	98.220	98.260	97.480	85.0%
2	11:29:17	89.9%	98.350	97.270	97.730	97.800	98.360	98.540	98.650	98.680	87.1%
3	11:29:44	92.5%	97.130	96.810	96.690	98.480	98.060	97.740	97.540	98.100	90.3%
x		90.1%	97.500	96.664%	96.980	98.590	98.733%	98.170	98.150	98.086%	87.5%
σ		2.3%	0.732	n/a	0.656	0.844	n/a	0.402	0.561	n/a	2.7%
%RSD		2.5	0.751	0.710	0.676	0.856	0.928	0.410	0.571	0.615	3.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:28:51	100.500	99.380	97.590	96.220	100.400	98.880	86.0%	97.850	98.400	98.620
2	11:29:17	100.800	99.730	97.860	98.640	99.680	98.790	88.1%	97.360	99.630	99.080
3	11:29:44	100.300	99.030	97.510	98.820	99.630	98.030	90.2%	98.250	99.560	99.010
x		100.500	99.382%	97.650	97.893%	99.916%	98.570	88.1%	97.820	99.198%	98.910
σ		0.277	n/a	0.182	n/a	n/a	0.467	2.1%	0.444	n/a	0.250
%RSD		0.276	0.353	0.186	1.483	0.459	0.474	2.3	0.454	0.699	0.253

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:28:51	99.240	98.230	85.4%
2	11:29:17	99.970	98.600	87.4%
3	11:29:44	98.910	98.690	89.7%
x		99.370	98.510%	87.5%
σ		0.542	n/a	2.2%
%RSD		0.545	0.247	2.5

UD09105-001DIS 04/25/2019 11:34:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:36	95.2%	0.014	8.486	8.181	83.000	T 28950.000	T 7764.000	T 7615.000	T 7634.000	1.692
2	11:35:02	96.4%	0.034	7.847	8.414	79.580	T 28680.000	T 7570.000	T 7545.000	T 7491.000	1.755
3	11:35:29	95.5%	0.012	8.353	8.418	76.120	T 29340.000	T 7851.000	T 7846.000	T 7736.000	1.739
x		95.7%	0.020	8.228	8.338	79.570	T 28990.000	T 7728.000	T 7669.000	T 7620.000	1.729
σ		0.6%	0.012	0.337	0.136	3.436	T 329.500	T 144.000	T 157.800	T 123.200	0.033
%RSD		0.6	61.840	4.094	1.627	4.319	T 1.136	T 1.863	T 2.058	T 1.617	1.881
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:36	589.600	T 97170.000	T 2048.000	9324.000	8564.000	93.8%	-0.276	-0.218	0.540	2389.000
2	11:35:02	593.800	T 97210.000	T 2002.000	9361.000	8431.000	93.8%	-0.198	-0.165	0.499	2375.000
3	11:35:29	571.600	T 97760.000	T 2048.000	9469.000	8606.000	94.6%	-0.190	-0.098	0.470	2046.000
x		585.000	T 97380.000	T 2033.000	9385.000	8534.000	94.1%	-0.221	-0.161	0.503	2270.000
σ		11.780	T 330.500	T 26.600	75.550	91.410	0.5%	0.048	0.060	0.035	194.200
%RSD		2.013	T 0.339	T 1.308	0.805	1.071	0.5	21.500	37.350	6.923	8.556
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:36	T 31050.000	33.860	T 31200.000	T 30830.000	1.150	0.341	-0.027	0.139	0.136	2.221
2	11:35:02	T 30950.000	33.840	T 30960.000	T 30670.000	1.170	0.374	0.079	0.110	0.145	2.155
3	11:35:29	T 30760.000	34.040	T 30860.000	T 31020.000	1.195	0.333	0.236	0.149	0.122	1.994
x		T 30920.000	33.910	T 31010.000	T 30840.000	1.172	0.349	0.096	0.133	0.134	2.123
σ		T 147.600	0.107	T 177.500	T 176.400	0.023	0.022	0.132	0.020	0.012	0.117
%RSD		T 0.477	0.314	T 0.572	T 0.572	1.939	6.331	137.600	15.290	8.876	5.508
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:36	5.435	4.630	0.145	0.484	39.430	40.960	2.687	0.715	-3.056	61.550
2	11:35:02	5.526	4.815	0.276	0.563	42.150	40.070	-0.048	0.045	-2.200	61.120
3	11:35:29	5.599	4.668	0.237	-0.113	39.770	41.120	-0.453	-0.021	-4.346	61.240
x		5.520	4.704	0.219	0.312	40.450	40.720	0.729	0.246	-3.201	61.300
σ		0.082	0.098	0.067	0.370	1.481	0.567	1.708	0.407	1.080	0.220
%RSD		1.484	2.076	30.780	118.700	3.662	1.393	234.400	165.300	33.750	0.359
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:36	88.5%	0.063	0.072	0.050	1.427	0.004	0.012	0.013	0.003	85.4%
2	11:35:02	88.4%	0.084	0.058	0.044	2.505	0.011	0.010	0.004	-0.013	85.1%
3	11:35:29	92.2%	0.079	0.096	0.062	2.320	0.006	0.008	-0.006	-0.005	90.0%
x		89.7%	0.075	0.075	0.052	2.084	0.007	0.010	0.004	-0.005	86.8%
σ		2.2%	0.011	0.020	0.009	0.576	0.004	0.002	0.009	0.008	2.7%
%RSD		2.4	14.960	25.980	17.380	27.640	52.880	22.310	247.700	153.800	3.2
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:34:36	0.763	1.218	0.180	0.143	65.580	64.400	86.8%	0.049	0.025	0.011
2	11:35:02	0.890	1.108	0.168	0.170	64.190	63.640	85.5%	0.028	0.026	0.011
3	11:35:29	0.809	1.096	0.168	0.187	64.690	63.570	91.3%	0.031	0.027	0.010
x		0.820	1.141	0.172	0.166	64.820	63.870	87.9%	0.036	0.026	0.011
σ		0.064	0.068	0.007	0.022	0.704	0.458	3.1%	0.011	0.001	0.001
%RSD		7.829	5.920	4.019	13.300	1.086	0.717	3.5	31.840	3.301	6.083
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	11:34:36	0.008	0.005	84.4%							
2	11:35:02	-0.003	0.002	83.3%							
3	11:35:29	0.012	0.006	88.5%							
x		0.006	0.005	85.4%							
σ		0.008	0.002	2.7%							
%RSD		129.100	44.240	3.2							

UD09105-002DIS 04/25/2019 11:39:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:20	99.3%	0.054	12.870	12.360	30.070	T 2274.000	T 617.000	610.000	617.200	113.400
2	11:40:47	99.0%	0.050	12.180	13.090	25.250	T 2255.000	T 609.700	601.000	612.700	T 123.600
3	11:41:15	99.1%	0.054	11.120	12.550	28.370	T 2286.000	T 628.200	622.400	620.100	T 122.100
x		99.1%	0.053	12.050	12.660	27.900	T 2271.000	T 618.300	611.100	616.700	T 119.700
σ		0.1%	0.002	0.879	0.378	2.449	T 15.520	T 9.335	10.710	3.699	T 5.528
%RSD		0.1	4.423	7.293	2.982	8.780	T 0.683	T 1.510	1.753	0.600	T 4.619

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:20	T 1603.000	T 94780.000	299.500	1646.000	1464.000	94.9%	-0.036	0.287	0.540	2115.000
2	11:40:47	T 1607.000	T 95660.000	300.000	1668.000	1447.000	94.9%	-0.046	0.255	0.455	2185.000
3	11:41:15	T 1618.000	T 97430.000	301.200	1720.000	1472.000	94.7%	-0.064	0.141	0.482	2342.000
x		T 1610.000	T 95960.000	300.200	1678.000	1461.000	94.8%	-0.049	0.228	0.493	2214.000
σ		T 7.899	T 1352.000	0.871	38.270	12.760	0.1%	0.014	0.077	0.044	116.300
%RSD		T 0.491	T 1.409	0.290	2.280	0.874	0.1	29.410	33.670	8.831	5.252

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:20	68.910	142.200	72.000	69.270	0.234	0.384	0.196	0.181	0.220	22.580
2	11:40:47	68.810	142.300	69.740	64.900	0.209	0.321	0.289	0.180	0.220	22.040
3	11:41:15	68.330	145.000	72.700	68.610	0.213	0.345	0.578	0.206	0.258	22.410
x		68.680	143.200	71.480	67.590	0.218	0.350	0.355	0.189	0.233	22.350
σ		0.309	1.596	1.549	2.355	0.013	0.032	0.199	0.014	0.022	0.273
%RSD		0.450	1.115	2.166	3.483	6.096	9.070	56.240	7.658	9.283	1.223

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:20	20.280	22.050	-0.160	0.076	6.310	7.808	2.305	0.687	-4.046	18.790
2	11:40:47	20.260	21.800	0.173	0.303	6.737	8.865	2.775	0.758	-3.377	19.200
3	11:41:15	21.060	21.510	0.148	0.839	8.102	8.148	2.954	0.827	-4.435	19.070
x		20.530	21.790	0.054	0.406	7.049	8.274	2.678	0.757	-3.952	19.020
σ		0.458	0.268	0.185	0.392	0.936	0.540	0.335	0.070	0.535	0.212
%RSD		2.229	1.228	345.400	96.460	13.280	6.526	12.510	9.196	13.540	1.115

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:20	90.6%	0.078	0.056	0.064	1.005	0.001	0.004	0.012	0.024	87.2%
2	11:40:47	89.9%	0.055	0.042	0.052	-0.144	0.002	0.002	0.053	0.030	87.8%
3	11:41:15	90.3%	0.099	0.032	0.055	1.413	0.002	-0.001	0.017	0.020	88.0%
x		90.3%	0.077	0.043	0.057	0.758	0.002	0.002	0.027	0.024	87.7%
σ		0.4%	0.022	0.012	0.007	0.807	0.001	0.003	0.022	0.005	0.4%
%RSD		0.4	28.420	27.300	11.490	106.500	32.010	140.500	80.840	20.710	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:40:20	0.538	0.686	0.131	0.125	26.530	25.810	87.8%	0.007	0.010	0.181
2	11:40:47	0.546	0.668	0.142	0.143	26.110	25.450	86.8%	0.006	-0.001	0.182
3	11:41:15	0.529	0.755	0.142	0.169	25.340	25.340	88.1%	0.009	0.000	0.181
x		0.538	0.703	0.138	0.146	25.990	25.530	87.6%	0.008	0.003	0.181
σ		0.008	0.046	0.006	0.022	0.602	0.247	0.7%	0.001	0.006	0.001
%RSD		1.573	6.539	4.663	15.070	2.317	0.969	0.8	14.360	193.200	0.338

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:40:20	0.186	0.182	86.3%
2	11:40:47	0.190	0.186	86.1%
3	11:41:15	0.152	0.174	87.0%
x		0.176	0.181	86.5%
σ		0.021	0.006	0.4%
%RSD		12.010	3.390	0.5

CCV MW10994 04/25/2019 11:45:41 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:09	90.5%	295.500	293.800	298.600	30.490	T 61980.000	T 61410.000	T 60490.000	T 59420.000	293.200
2	11:46:36	89.9%	303.900	302.100	288.000	16.750	T 60390.000	T 59520.000	T 58850.000	T 58730.000	293.900
3	11:47:02	90.1%	300.700	296.300	289.100	16.210	T 60870.000	T 59700.000	T 60270.000	T 58510.000	287.900
x		90.2%	100.002%	99.139%	97.313%	21.150	T 101.801%	T 60210.000	T 59870.000	T 98.144%	97.215%
σ		0.3%	n/a	n/a	n/a	8.097	T n/a	T 1043.000	T 891.700	T n/a	n/a
%RSD		0.4	1.415	1.444	1.999	38.280	T 1.329	T 1.733	T 1.489	T 0.807	1.122

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:09	T 3224.000	1705.000	T 57110.000	62060.000	T 56450.000	87.8%	311.000	311.600	304.400	1055.000
2	11:46:36	T 3030.000	1568.000	T 58130.000	61230.000	T 60050.000	92.5%	307.400	313.600	293.300	788.100
3	11:47:02	T 2987.000	1518.000	T 58180.000	61370.000	T 60360.000	93.1%	304.900	312.300	296.800	1149.000
x		T 102.680%	1597.000	T 96.349%	61550.000	T 98.256%	91.1%	102.593%	104.170%	99.382%	997.500
σ		T n/a	96.950	T n/a	444.200	T n/a	2.9%	n/a	n/a	n/a	187.400
%RSD		T 4.111	6.070	T 1.042	0.722	T 3.681	3.2	1.004	0.329	1.897	18.790

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:09	T 61580.000	296.100	T 61540.000	T 61080.000	294.500	291.900	288.300	281.900	275.300	302.900
2	11:46:36	T 61300.000	298.500	T 61490.000	T 60960.000	288.600	278.700	287.500	281.900	273.600	303.400
3	11:47:02	T 61610.000	292.700	T 60940.000	T 60950.000	291.900	284.200	283.800	278.700	273.800	303.900
x		T 61500.000	98.590%	T 61320.000	T 101.655%	97.215%	94.971%	286.500	280.800	91.401%	101.137%
σ		T 172.300	n/a	T 330.000	T n/a	n/a	n/a	2.396	1.853	n/a	n/a
%RSD		T 0.280	0.979	T 0.538	T 0.116	1.019	2.325	0.836	0.660	0.333	0.166

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:09	286.200	282.900	282.900	304.400	1.954	0.910	1241.000	301.200	1.609	300.300
2	11:46:36	282.400	285.100	285.900	296.100	1.919	0.870	1235.000	297.600	-2.062	298.900
3	11:47:02	281.900	283.900	285.200	299.900	1.914	0.896	1212.000	293.300	-1.307	297.100
x		283.500	284.000	94.899%	300.100	1.929	0.892	1229.000	99.129%	-0.587	99.590%
σ		2.398	1.117	n/a	4.146	0.022	0.020	15.180	n/a	1.938	n/a
%RSD		0.846	0.393	0.559	1.381	1.120	2.246	1.235	1.330	330.500	0.541

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:09	82.2%	309.700	306.900	309.200	302.200	289.500	289.300	295.100	295.500	78.1%
2	11:46:36	86.9%	308.800	306.500	308.000	290.200	288.900	289.400	295.300	296.000	83.2%
3	11:47:02	87.9%	308.000	306.800	307.900	293.000	291.400	289.500	293.800	293.600	83.7%
x		85.7%	102.938%	102.251%	308.400	295.100	96.640%	289.400	294.700	98.348%	81.7%
σ		3.1%	n/a	n/a	0.724	6.281	n/a	0.075	0.854	n/a	3.1%
%RSD		3.6	0.266	0.062	0.235	2.128	0.441	0.026	0.290	0.438	3.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:46:09	307.300	302.700	302.000	295.000	304.700	303.300	80.5%	288.000	294.100	285.900
2	11:46:36	302.800	302.000	305.700	298.600	302.100	301.200	86.0%	288.800	295.900	286.600
3	11:47:02	304.300	302.800	303.900	295.200	302.200	303.600	87.1%	284.400	292.800	285.400
x		101.601%	100.835%	303.900	98.742%	101.004%	100.907%	84.5%	287.100	98.087%	95.320%
σ		n/a	n/a	1.818	n/a	n/a	n/a	3.6%	2.295	n/a	n/a
%RSD		0.755	0.152	0.598	0.680	0.497	0.440	4.2	0.799	0.524	0.199

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:46:09	288.200	285.600	76.4%
2	11:46:36	287.300	286.000	81.4%
3	11:47:02	286.900	285.500	81.9%
x		95.826%	95.241%	79.9%
σ		n/a	n/a	3.1%
%RSD		0.224	0.095	3.8

CCB IM9370-01 04/25/2019 11:51:28 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:56	96.5%	0.028	4.179	3.583	6.240	6.548	4.711	4.609	4.922	0.037
2	11:52:23	96.4%	0.075	3.751	3.398	3.441	6.166	6.091	5.985	6.066	0.035
3	11:52:50	96.3%	0.013	2.932	3.133	-2.255	3.853	3.567	3.476	3.651	0.012
x		96.4%	0.039	3.621	3.371	2.476	5.522	4.790	4.690	4.880	0.028
σ		0.1%	0.032	0.634	0.226	4.329	1.458	1.264	1.257	1.208	0.014
%RSD		0.1	82.810	17.500	6.711	174.900	26.410	26.390	26.790	24.750	50.270

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:56	13.790	979.600	-2.205	5.784	4.595	96.8%	-0.415	0.041	0.051	27.100
2	11:52:23	12.950	929.900	-0.890	7.128	5.468	98.0%	-0.387	0.047	0.035	8.547
3	11:52:50	12.860	909.200	-4.281	6.645	4.069	98.0%	-0.359	0.004	0.016	39.640
x		13.200	939.600	-2.459	6.519	4.711	97.6%	-0.387	0.031	0.034	25.100
σ		0.516	36.200	1.710	0.681	0.706	0.7%	0.028	0.023	0.017	15.640
%RSD		3.910	3.853	69.550	10.440	14.990	0.7	7.193	75.080	51.010	62.330

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:56	3.658	-0.057	7.845	-9.351	-0.000	0.010	-0.736	-0.047	-0.001	0.049
2	11:52:23	4.808	-0.047	6.772	-12.320	0.021	0.006	-0.265	-0.067	-0.023	-0.007
3	11:52:50	2.346	-0.069	4.824	-17.800	-0.005	-0.006	-0.184	-0.063	0.014	0.028
x		3.604	-0.058	6.480	-13.160	0.005	0.003	-0.395	-0.059	-0.003	0.023
σ		1.232	0.011	1.531	4.286	0.014	0.008	0.298	0.011	0.019	0.028
%RSD		34.180	19.650	23.630	32.570	269.500	274.600	75.420	18.660	552.900	121.600

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:56	-0.163	-0.021	0.057	0.758	0.315	0.187	1.529	0.437	-3.187	0.020
2	11:52:23	-0.326	-0.004	0.003	1.337	0.237	0.006	0.101	0.125	-4.005	0.023
3	11:52:50	-0.367	0.036	-0.059	0.080	0.453	-0.219	-1.002	-0.173	-1.591	0.016
x		-0.285	0.004	0.000	0.725	0.335	-0.009	0.209	0.130	-2.928	0.020
σ		0.108	0.029	0.058	0.630	0.109	0.203	1.269	0.305	1.228	0.003
%RSD		37.820	806.000	18670.000	86.830	32.590	2272.000	606.100	235.400	41.940	16.090

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:56	92.7%	0.147	0.100	0.092	0.069	0.028	0.037	0.046	0.021	92.3%
2	11:52:23	92.7%	0.124	0.133	0.109	-0.743	0.044	0.027	0.020	0.032	92.7%
3	11:52:50	95.0%	0.070	0.102	0.092	-0.692	0.016	0.020	0.028	0.022	93.3%
x		93.4%	0.114	0.112	0.098	-0.455	0.030	0.028	0.031	0.025	92.8%
σ		1.3%	0.039	0.018	0.010	0.455	0.014	0.009	0.013	0.006	0.5%
%RSD		1.4	34.480	16.350	10.160	99.900	47.980	31.340	42.240	23.420	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:51:56	0.058	0.072	0.146	0.158	0.028	-0.014	90.2%	0.023	0.017	0.036
2	11:52:23	0.072	0.080	0.145	0.152	0.022	0.023	91.4%	0.030	0.016	0.037
3	11:52:50	0.043	0.039	0.121	0.138	-0.002	0.006	93.2%	0.016	0.009	0.017
x		0.058	0.064	0.137	0.149	0.016	0.005	91.6%	0.023	0.014	0.030
σ		0.014	0.021	0.014	0.010	0.016	0.019	1.5%	0.007	0.004	0.011
%RSD		24.900	33.670	10.500	7.025	101.600	368.200	1.7	30.910	30.640	37.840

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:51:56	0.034	0.028	91.1%
2	11:52:23	0.023	0.028	93.0%
3	11:52:50	0.022	0.014	94.7%
x		0.026	0.024	92.9%
σ		0.006	0.008	1.8%
%RSD		24.810	33.270	1.9

UD09105-003DIS 04/25/2019 11:57:13

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:39	97.5%	0.066	6.423	7.187	37.240	T2032.000	288.800	285.000	283.700	29.990
2	11:58:06	101.2%	0.062	6.668	6.748	30.210	T2025.000	284.200	281.400	278.600	28.620
3	11:58:34	101.8%	0.049	6.926	6.354	24.930	T2004.000	288.400	276.200	279.800	T36.270
x		100.1%	0.059	6.672	6.763	30.790	T2020.000	287.100	280.900	280.700	T31.630
σ		2.3%	0.009	0.252	0.417	6.172	T14.590	2.546	4.408	2.658	T4.080
%RSD		2.3	14.960	3.773	6.160	20.040	T0.722	0.887	1.570	0.947	T12.900

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:39	T1906.000	T92920.000	292.200	207.700	213.700	98.3%	0.099	0.130	0.343	1654.000
2	11:58:06	T1845.000	T91680.000	280.500	217.900	217.900	99.6%	-0.010	-0.302	0.294	1862.000
3	11:58:34	T1868.000	T93270.000	281.400	222.600	208.800	98.6%	-0.006	-0.039	0.282	1907.000
x		T1873.000	T92620.000	284.700	216.100	213.500	98.8%	0.028	-0.070	0.306	1808.000
σ		T30.410	T837.000	6.532	7.639	4.545	0.7%	0.062	0.218	0.033	134.900
%RSD		T1.624	T0.904	2.294	3.536	2.129	0.7	222.900	309.300	10.690	7.463

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:39	1.936	1.403	4.718	-13.600	0.194	0.212	0.149	0.269	0.339	2.645
2	11:58:06	3.970	1.530	3.954	-16.870	0.172	0.204	-0.271	0.306	0.311	2.796
3	11:58:34	2.554	1.469	4.578	-15.380	0.176	0.170	-0.134	0.319	0.309	2.658
x		2.820	1.467	4.417	-15.280	0.180	0.195	-0.085	0.298	0.320	2.700
σ		1.043	0.064	0.407	1.641	0.012	0.022	0.215	0.026	0.017	0.083
%RSD		36.980	4.331	9.212	10.740	6.442	11.390	252.000	8.699	5.276	3.091

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:39	2.729	2.916	-0.061	0.612	4.221	4.510	0.338	0.218	-4.587	1.900
2	11:58:06	3.278	2.971	-0.110	0.181	4.899	4.442	0.421	0.201	-2.599	1.883
3	11:58:34	2.681	2.962	-0.217	0.606	5.068	4.869	-2.024	-0.406	-1.485	1.911
x		2.896	2.950	-0.130	0.466	4.729	4.607	-0.422	0.004	-2.890	1.898
σ		0.332	0.029	0.080	0.247	0.448	0.229	1.388	0.356	1.572	0.014
%RSD		11.450	0.992	61.730	52.910	9.477	4.973	329.200	8318.000	54.370	0.740

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:39	95.7%	0.137	0.119	0.085	-0.340	0.019	0.010	0.007	0.004	93.0%
2	11:58:06	97.7%	0.131	0.094	0.087	0.874	0.014	0.012	0.032	0.014	93.9%
3	11:58:34	95.9%	0.084	0.096	0.077	-0.962	0.008	0.016	0.011	0.016	92.0%
x		96.4%	0.117	0.103	0.083	-0.143	0.014	0.013	0.017	0.011	93.0%
σ		1.1%	0.029	0.014	0.005	0.934	0.005	0.003	0.013	0.006	0.9%
%RSD		1.1	24.770	13.310	6.451	654.400	39.130	26.960	79.080	56.670	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	11:57:39	0.516	0.714	0.235	0.281	9.773	9.707	94.0%	-0.007	-0.010	0.055
2	11:58:06	0.475	0.724	0.224	0.263	10.080	9.687	94.6%	-0.006	-0.007	0.059
3	11:58:34	0.536	0.763	0.242	0.261	10.080	9.946	91.8%	-0.003	-0.008	0.061
x		0.509	0.734	0.234	0.268	9.976	9.780	93.4%	-0.006	-0.008	0.058
σ		0.031	0.026	0.009	0.011	0.176	0.144	1.5%	0.002	0.001	0.003
%RSD		6.106	3.513	3.826	4.139	1.763	1.471	1.6	36.310	17.450	5.251

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	11:57:39	0.052	0.047	93.0%
2	11:58:06	0.035	0.048	94.7%
3	11:58:34	0.046	0.049	91.8%
x		0.044	0.048	93.2%
σ		0.009	0.001	1.4%
%RSD		19.550	1.929	1.5

UD09105-004DIS 04/25/2019 12:02:57

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:24	96.7%	0.031	8.176	8.565	37.110	T 1316.000	T 954.000	952.300	961.800	7.897
2	12:03:51	99.5%	0.016	8.401	8.936	41.760	T 1351.000	T 967.500	962.700	967.500	7.440
3	12:04:18	99.9%	0.010	8.495	8.168	33.410	T 1359.000	T 952.400	954.600	933.700	7.349
x		98.7%	0.019	8.357	8.556	37.420	T 1342.000	T 958.000	956.500	954.300	7.562
σ		1.7%	0.011	0.164	0.384	4.183	T 22.640	T 8.328	5.494	18.080	0.294
%RSD		1.8	55.420	1.962	4.487	11.180	T 1.687	T 0.869	0.574	1.895	3.886
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:24	T 1217.000	T 90180.000	340.900	1122.000	1037.000	98.0%	0.053	-0.094	0.321	1850.000
2	12:03:51	T 1243.000	T 93620.000	338.600	1127.000	990.600	95.1%	-0.182	-0.132	0.334	2248.000
3	12:04:18	T 1226.000	T 93470.000	333.300	1131.000	999.000	95.4%	-0.183	-0.092	0.376	2012.000
x		T 1229.000	T 92420.000	337.600	1127.000	1009.000	96.2%	-0.104	-0.106	0.344	2037.000
σ		T 13.530	T 1940.000	3.910	4.675	24.810	1.6%	0.136	0.023	0.029	200.100
%RSD		T 1.101	T 2.099	1.158	0.415	2.459	1.7	131.100	21.310	8.344	9.826
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:24	2848.000	156.700	T 2792.000	2734.000	0.345	0.159	0.165	0.068	0.121	2.243
2	12:03:51	2870.000	156.600	T 2813.000	2764.000	0.386	0.217	0.455	0.042	0.159	2.430
3	12:04:18	2952.000	159.100	T 2835.000	2819.000	0.402	0.189	0.131	0.054	0.180	2.289
x		2890.000	157.500	T 2813.000	2772.000	0.377	0.188	0.251	0.055	0.153	2.321
σ		54.860	1.423	T 21.850	43.350	0.029	0.029	0.178	0.013	0.030	0.098
%RSD		1.898	0.904	T 0.777	1.564	7.757	15.310	70.990	23.680	19.630	4.202
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:24	2.795	2.965	0.338	0.395	3.628	4.803	2.196	0.638	-2.535	9.137
2	12:03:51	3.254	3.077	0.123	0.992	4.649	3.740	0.712	0.342	-4.004	9.008
3	12:04:18	3.412	3.032	0.107	0.665	4.128	6.340	1.919	0.547	-0.796	8.990
x		3.154	3.024	0.189	0.684	4.135	4.961	1.609	0.509	-2.445	9.045
σ		0.320	0.056	0.129	0.299	0.511	1.307	0.789	0.151	1.606	0.080
%RSD		10.150	1.866	68.240	43.730	12.350	26.340	49.030	29.760	65.670	0.889
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:24	94.4%	0.040	0.016	0.026	0.215	0.001	0.000	0.029	0.013	90.2%
2	12:03:51	93.1%	0.056	0.063	0.020	-0.307	0.006	0.005	0.013	0.011	87.1%
3	12:04:18	93.1%	0.039	0.017	0.037	0.429	0.003	0.003	0.017	0.011	87.6%
x		93.5%	0.045	0.032	0.027	0.113	0.003	0.003	0.020	0.012	88.3%
σ		0.8%	0.010	0.027	0.009	0.379	0.002	0.003	0.009	0.001	1.7%
%RSD		0.8	21.370	83.890	32.580	336.400	76.710	91.200	44.420	8.846	1.9
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:03:24	0.512	0.761	0.209	0.199	20.710	20.830	90.8%	-0.002	-0.007	-0.004
2	12:03:51	0.537	0.744	0.218	0.204	20.840	20.880	87.7%	-0.004	-0.008	-0.000
3	12:04:18	0.491	0.725	0.192	0.188	21.180	20.660	88.6%	-0.000	-0.011	0.012
x		0.513	0.743	0.206	0.197	20.910	20.790	89.0%	-0.002	-0.008	0.003
σ		0.023	0.018	0.013	0.008	0.242	0.118	1.6%	0.002	0.002	0.008
%RSD		4.516	2.419	6.456	4.097	1.159	0.568	1.8	89.950	23.170	314.900
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	12:03:24	0.006	-0.001	90.9%							
2	12:03:51	0.012	0.005	86.5%							
3	12:04:18	-0.001	0.003	87.5%							
x		0.005	0.002	88.3%							
σ		0.006	0.003	2.3%							
%RSD		117.700	117.800	2.6							

UD09105-007DIS 04/25/2019 12:08:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:07	97.7%	0.053	8.248	8.808	64.530	T 18170.000	258.500	255.400	256.000	28.480
2	12:09:34	96.0%	0.043	8.301	8.513	71.140	T 18250.000	261.800	260.100	257.700	T 40.640
3	12:10:01	96.1%	0.046	8.452	8.804	71.190	T 18170.000	259.500	255.300	250.900	28.150
x		96.6%	0.048	8.334	8.708	68.950	T 18200.000	259.900	256.900	254.900	T 32.420
σ		1.0%	0.005	0.106	0.169	3.832	T 47.330	1.694	2.750	3.524	T 7.116
%RSD		1.0	11.170	1.269	1.941	5.557	T 0.260	0.652	1.070	1.383	T 21.950

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:07	T 2618.000	T 96240.000	196.100	310.400	296.200	93.7%	5.507	0.208	0.505	2091.000
2	12:09:34	T 2664.000	T 96790.000	200.700	282.400	299.900	94.3%	5.073	0.126	0.464	2187.000
3	12:10:01	T 2539.000	T 94370.000	203.000	286.300	302.700	95.7%	4.907	0.319	0.452	1887.000
x		T 2607.000	T 95800.000	199.900	293.000	299.600	94.6%	5.162	0.218	0.473	2055.000
σ		T 63.380	T 1273.000	3.522	15.190	3.260	1.0%	0.310	0.097	0.028	152.900
%RSD		T 2.431	T 1.329	1.762	5.182	1.088	1.0	6.002	44.350	5.903	7.442

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:07	108.200	3.752	115.000	94.470	0.207	0.798	0.319	4.029	3.929	15.350
2	12:09:34	107.000	3.628	113.000	90.680	0.214	0.813	0.976	3.978	3.865	15.180
3	12:10:01	104.300	3.628	113.300	90.690	0.201	0.735	0.879	3.985	3.841	15.030
x		106.500	3.669	113.700	91.950	0.208	0.782	0.724	3.997	3.878	15.190
σ		1.978	0.071	1.069	2.187	0.007	0.041	0.355	0.028	0.046	0.164
%RSD		1.858	1.943	0.940	2.379	3.146	5.277	48.950	0.691	1.180	1.079

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:07	13.170	13.710	-0.026	0.654	5.794	5.976	0.892	0.432	-6.031	2.939
2	12:09:34	13.610	13.320	-0.006	0.196	5.940	6.277	0.789	0.358	-4.733	2.914
3	12:10:01	12.830	14.050	0.124	0.539	5.602	6.729	-0.185	0.089	-3.525	3.010
x		13.210	13.700	0.031	0.463	5.779	6.327	0.499	0.293	-4.763	2.954
σ		0.392	0.364	0.081	0.238	0.169	0.379	0.594	0.181	1.253	0.050
%RSD		2.970	2.655	264.800	51.380	2.928	5.990	119.200	61.620	26.310	1.679

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:07	93.7%	0.093	0.085	0.087	-0.069	0.004	0.005	0.146	0.200	87.5%
2	12:09:34	91.9%	0.083	0.101	0.080	-0.592	0.003	0.001	0.147	0.196	87.1%
3	12:10:01	94.8%	0.111	0.052	0.098	1.292	0.005	0.007	0.185	0.194	90.0%
x		93.5%	0.096	0.080	0.088	0.211	0.004	0.004	0.159	0.197	88.2%
σ		1.5%	0.014	0.025	0.009	0.972	0.001	0.003	0.023	0.003	1.6%
%RSD		1.6	14.770	31.400	10.080	461.700	21.880	67.320	14.130	1.660	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:09:07	7.553	10.170	2.158	2.214	6.192	6.542	87.8%	-0.011	-0.013	1.367
2	12:09:34	9.735	13.960	2.214	2.282	6.670	6.666	87.1%	0.001	-0.015	1.362
3	12:10:01	10.330	14.790	2.251	2.191	6.592	6.265	90.3%	-0.007	-0.016	1.483
x		9.205	12.970	2.208	2.229	6.485	6.491	88.4%	-0.006	-0.015	1.404
σ		1.462	2.466	0.047	0.047	0.256	0.205	1.7%	0.006	0.001	0.069
%RSD		15.880	19.010	2.133	2.117	3.948	3.162	1.9	114.600	9.970	4.890

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:09:07	1.373	1.355	86.5%
2	12:09:34	1.318	1.365	86.3%
3	12:10:01	1.346	1.430	89.5%
x		1.346	1.383	87.4%
σ		0.028	0.041	1.8%
%RSD		2.058	2.953	2.0

UD09105-008DIS 04/25/2019 12:14:24

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:51	T 110.0%	0.024	7.046	6.510	46.280	T 6506.000	195.400	185.000	183.400	T 46.810
2	12:15:19	96.2%	0.047	5.942	7.021	41.140	T 6391.000	189.500	185.900	185.600	T 50.540
3	12:15:46	96.5%	0.035	6.975	6.916	36.770	T 6534.000	190.800	187.000	188.900	40.280
x		T 100.9%	0.035	6.654	6.816	41.400	T 6477.000	191.900	186.000	185.900	T 45.880
σ		T 7.9%	0.012	0.618	0.270	4.759	T 75.490	3.127	0.998	2.743	T 5.192
%RSD		T 7.8	33.140	9.289	3.960	11.500	T 1.166	1.630	0.536	1.475	T 11.320

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:51	T 2491.000	T 99450.000	91.350	175.700	164.100	94.8%	1.854	0.157	0.477	2324.000
2	12:15:19	T 2427.000	T 97440.000	120.100	164.500	191.500	96.3%	1.552	0.663	0.452	1964.000
3	12:15:46	T 2461.000	T 99450.000	118.200	187.100	187.300	94.6%	1.063	0.250	0.424	2181.000
x		T 2460.000	T 98780.000	109.900	175.700	181.000	95.2%	1.489	0.356	0.451	2157.000
σ		T 31.980	T 1158.000	16.070	11.310	14.720	0.9%	0.399	0.270	0.027	181.300
%RSD		T 1.300	T 1.172	14.630	6.434	8.136	0.9	26.790	75.620	5.923	8.409

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:51	2142.000	1.294	T 2075.000	2060.000	0.092	0.329	0.484	1.019	1.079	5.185
2	12:15:19	2141.000	1.240	T 2112.000	2083.000	0.098	0.315	0.197	1.097	1.005	5.272
3	12:15:46	2159.000	1.267	T 2092.000	2110.000	0.114	0.353	0.052	1.053	1.094	5.227
x		2147.000	1.267	T 2093.000	2085.000	0.101	0.332	0.245	1.056	1.059	5.228
σ		9.957	0.027	T 18.510	25.010	0.011	0.019	0.220	0.039	0.048	0.044
%RSD		0.464	2.126	T 0.884	1.200	11.040	5.698	89.910	3.707	4.501	0.834

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:51	4.378	5.369	5.206	1.303	4.788	3.877	0.226	0.133	-1.394	1.512
2	12:15:19	4.263	5.329	5.679	0.674	3.655	4.204	1.160	0.404	-3.574	1.569
3	12:15:46	5.466	5.256	5.778	0.061	3.907	3.571	-1.401	-0.176	-4.945	1.490
x		4.703	5.318	5.554	0.680	4.117	3.884	-0.005	0.120	-3.305	1.524
σ		0.663	0.058	0.306	0.621	0.595	0.317	1.296	0.290	1.791	0.041
%RSD		14.110	1.082	5.507	91.380	14.450	8.149	25300.000	241.400	54.190	2.694

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:51	90.9%	0.087	0.046	0.047	-0.823	0.003	0.003	0.062	0.032	87.2%
2	12:15:19	95.5%	0.051	0.052	0.062	-0.350	-0.000	0.002	0.050	0.024	91.4%
3	12:15:46	95.7%	0.082	0.065	0.072	0.514	0.001	0.001	0.020	0.009	91.6%
x		94.0%	0.073	0.054	0.060	-0.220	0.001	0.002	0.044	0.022	90.1%
σ		2.7%	0.019	0.010	0.012	0.678	0.002	0.001	0.022	0.012	2.5%
%RSD		2.9	26.610	18.030	20.430	308.700	122.800	51.170	49.000	54.180	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:14:51	0.538	0.723	0.688	0.639	4.962	4.988	88.1%	-0.006	-0.013	0.220
2	12:15:19	0.556	0.723	0.670	0.657	4.736	4.924	92.2%	-0.002	-0.012	0.225
3	12:15:46	0.532	0.744	0.653	0.631	4.932	5.160	92.4%	0.000	-0.014	0.203
x		0.542	0.730	0.670	0.642	4.877	5.024	90.9%	-0.003	-0.013	0.216
σ		0.012	0.012	0.017	0.013	0.123	0.122	2.4%	0.003	0.001	0.011
%RSD		2.274	1.618	2.573	2.039	2.520	2.431	2.7	121.100	9.976	5.193

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:14:51	0.196	0.211	86.7%
2	12:15:19	0.213	0.214	91.6%
3	12:15:46	0.180	0.188	90.9%
x		0.196	0.205	89.7%
σ		0.016	0.014	2.7%
%RSD		8.333	7.008	3.0

UD09105-009DIS 04/25/2019 12:20:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:37	95.9%	0.029	8.969	9.221	113.600	T 39720.000	211.900	208.900	203.200	26.920
2	12:21:05	97.0%	0.044	9.040	8.889	108.100	T 39400.000	207.400	202.200	199.800	26.850
3	12:21:32	96.0%	0.025	8.275	9.275	116.300	T 40870.000	210.100	195.800	194.800	26.010
x		96.3%	0.033	8.761	9.128	112.700	T 40000.000	209.800	202.300	199.300	26.590
σ		0.6%	0.010	0.423	0.209	4.215	T 772.900	2.234	6.531	4.208	0.504
%RSD		0.6	30.530	4.824	2.294	3.740	T 1.932	1.065	3.229	2.112	1.894

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:37	T 2393.000	T 97770.000	164.500	223.600	223.200	92.4%	19.340	-0.133	0.441	2225.000
2	12:21:05	T 2265.000	T 94510.000	158.300	214.700	228.200	96.6%	18.420	0.032	0.350	1847.000
3	12:21:32	T 2359.000	T 96650.000	162.400	239.400	221.700	92.2%	18.020	-0.016	0.491	2063.000
x		T 2339.000	T 96310.000	161.700	225.900	224.400	93.7%	18.590	-0.039	0.427	2045.000
σ		T 66.530	T 1656.000	3.152	12.510	3.399	2.5%	0.680	0.085	0.071	189.400
%RSD		T 2.844	T 1.720	1.949	5.540	1.515	2.7	3.660	218.700	16.640	9.262

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:37	27.310	1.491	31.800	17.070	0.116	0.392	-0.083	1.542	1.468	5.895
2	12:21:05	29.210	1.409	27.300	5.959	0.124	0.443	0.125	1.619	1.410	5.562
3	12:21:32	27.990	1.447	30.680	14.830	0.138	0.367	0.076	1.601	1.507	5.533
x		28.170	1.449	29.920	12.620	0.126	0.400	0.039	1.587	1.462	5.663
σ		0.963	0.041	2.342	5.876	0.011	0.039	0.109	0.040	0.049	0.201
%RSD		3.419	2.806	7.828	46.560	8.973	9.639	275.600	2.547	3.335	3.556

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:37	5.568	5.354	0.081	0.077	5.535	6.060	1.826	0.604	-5.592	1.625
2	12:21:05	5.204	5.797	-0.089	0.271	5.770	5.413	0.861	0.256	-0.872	1.566
3	12:21:32	4.898	5.817	0.066	0.477	6.323	6.091	2.508	0.699	-3.233	1.620
x		5.223	5.656	0.019	0.275	5.876	5.854	1.731	0.520	-3.232	1.604
σ		0.335	0.262	0.094	0.200	0.405	0.383	0.828	0.233	2.360	0.033
%RSD		6.415	4.628	483.800	72.840	6.892	6.541	47.800	44.800	73.020	2.048

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:37	89.0%	0.089	0.081	0.070	1.361	0.028	0.018	0.086	0.057	85.9%
2	12:21:05	93.7%	0.089	0.182	0.089	-1.289	0.022	0.012	0.076	0.065	90.8%
3	12:21:32	91.2%	0.122	0.121	0.057	-0.023	0.018	0.029	0.074	0.061	88.2%
x		91.3%	0.100	0.128	0.072	0.016	0.023	0.019	0.079	0.061	88.3%
σ		2.4%	0.019	0.050	0.016	1.326	0.005	0.009	0.006	0.004	2.4%
%RSD		2.6	18.780	39.450	22.620	8287.000	20.760	45.350	7.575	6.978	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:20:37	1.010	1.360	0.900	0.802	6.623	6.303	86.5%	-0.009	-0.018	0.270
2	12:21:05	0.918	1.385	0.829	0.839	6.791	6.613	92.3%	-0.006	-0.009	0.198
3	12:21:32	0.986	1.309	0.804	0.847	6.494	6.650	89.1%	-0.008	-0.016	0.200
x		0.971	1.351	0.844	0.829	6.636	6.522	89.3%	-0.007	-0.014	0.223
σ		0.048	0.039	0.050	0.024	0.149	0.191	2.9%	0.002	0.005	0.041
%RSD		4.930	2.880	5.911	2.870	2.248	2.923	3.3	20.780	31.970	18.500

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:20:37	0.251	0.245	84.1%
2	12:21:05	0.272	0.228	89.3%
3	12:21:32	0.247	0.216	86.5%
x		0.256	0.230	86.6%
σ		0.013	0.015	2.6%
%RSD		5.243	6.472	3.0

UD10100-001 04/25/2019 12:25:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:22	98.2%	0.066	16.100	15.880	30.400	T 10880.000	T 671.400	671.500	671.900	73.990
2	12:26:49	100.1%	0.055	15.210	15.760	32.710	T 11020.000	T 669.500	661.200	671.500	72.320
3	12:27:17	100.9%	0.066	16.140	16.330	31.360	T 11050.000	T 675.900	669.700	680.700	T 79.560
x		99.7%	0.062	15.810	15.990	31.490	T 10980.000	T 672.200	667.500	674.700	T 75.290
σ		1.4%	0.006	0.527	0.301	1.158	T 93.710	T 3.282	5.486	5.200	T 3.791
%RSD		1.4	10.160	3.332	1.883	3.677	T 0.853	T 0.488	0.822	0.771	T 5.035

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:22	T 3245.000	T 95260.000	88.770	520.000	486.400	95.8%	0.612	0.140	0.465	2096.000
2	12:26:49	T 3196.000	T 95280.000	87.450	529.300	484.600	95.3%	0.511	0.117	0.500	2172.000
3	12:27:17	T 3270.000	T 97700.000	84.940	509.200	474.400	95.1%	0.514	0.108	0.418	2339.000
x		T 3237.000	T 96080.000	87.060	519.500	481.800	95.4%	0.546	0.122	0.461	2202.000
σ		T 37.630	T 1403.000	1.945	10.060	6.481	0.4%	0.058	0.017	0.041	124.500
%RSD		T 1.163	T 1.460	2.234	1.937	1.345	0.4	10.530	13.780	8.901	5.654

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:22	3453.000	3.137	T 3313.000	3342.000	0.297	0.335	0.351	0.067	0.076	2.305
2	12:26:49	3461.000	3.110	T 3311.000	3316.000	0.294	0.352	0.354	0.078	0.059	2.396
3	12:27:17	3454.000	3.123	T 3333.000	3343.000	0.316	0.361	0.276	0.061	0.070	2.107
x		3456.000	3.123	T 3319.000	3333.000	0.302	0.349	0.327	0.069	0.069	2.269
σ		4.072	0.013	T 12.560	15.190	0.012	0.013	0.044	0.009	0.008	0.148
%RSD		0.118	0.426	T 0.378	0.456	3.976	3.751	13.600	12.440	12.210	6.527

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:22	2.605	2.559	0.697	0.257	17.880	18.390	2.164	0.583	-2.756	5.086
2	12:26:49	2.158	2.687	0.463	0.512	16.080	17.870	0.523	0.291	-6.001	5.131
3	12:27:17	2.368	2.758	0.585	0.182	17.340	19.240	0.538	0.210	-3.366	5.061
x		2.377	2.668	0.582	0.317	17.100	18.500	1.075	0.361	-4.041	5.093
σ		0.224	0.101	0.117	0.173	0.921	0.694	0.943	0.196	1.725	0.035
%RSD		9.406	3.769	20.090	54.660	5.387	3.753	87.730	54.350	42.690	0.690

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:22	92.4%	0.010	0.031	0.010	-0.251	-0.001	0.002	0.008	0.018	90.3%
2	12:26:49	92.8%	-0.002	0.008	0.016	-0.177	0.002	0.000	-0.001	-0.003	89.4%
3	12:27:17	92.6%	0.018	0.017	-0.005	-1.403	0.002	0.000	0.003	-0.002	90.7%
x		92.6%	0.009	0.019	0.007	-0.610	0.001	0.001	0.003	0.004	90.1%
σ		0.2%	0.010	0.012	0.011	0.687	0.002	0.001	0.004	0.012	0.6%
%RSD		0.2	116.900	63.570	152.400	112.600	174.900	150.200	126.500	287.100	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:26:22	0.453	0.707	0.026	0.042	12.760	12.690	90.4%	-0.003	-0.003	0.089
2	12:26:49	0.447	0.677	0.048	0.035	13.250	12.920	90.8%	0.008	-0.004	0.092
3	12:27:17	0.416	0.574	0.055	0.038	13.060	12.550	91.1%	0.003	-0.002	0.082
x		0.439	0.653	0.043	0.038	13.020	12.720	90.8%	0.003	-0.003	0.088
σ		0.020	0.070	0.015	0.004	0.245	0.183	0.3%	0.005	0.001	0.005
%RSD		4.552	10.690	34.450	9.297	1.881	1.440	0.4	213.000	30.510	5.509

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:26:22	0.065	0.069	91.2%
2	12:26:49	0.063	0.071	89.0%
3	12:27:17	0.078	0.077	89.5%
x		0.068	0.072	89.9%
σ		0.008	0.004	1.1%
%RSD		12.130	6.011	1.3

UD10100-001S 04/25/2019 12:31:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:07	99.0%	99.860	119.100	114.000	37.970	T 11850.000	T 1688.000	1691.000	1698.000	220.100
2	12:32:34	97.6%	104.500	118.300	114.100	38.180	T 11460.000	T 1669.000	1673.000	1678.000	216.700
3	12:33:01	99.1%	99.710	115.500	114.200	34.200	T 11780.000	T 1617.000	1656.000	1672.000	221.900
x		98.6%	101.300	117.700	114.100	36.780	T 11700.000	T 1658.000	1673.000	1683.000	219.600
σ		0.8%	2.700	1.903	0.114	2.242	T 205.600	T 36.440	17.600	13.980	2.653
%RSD		0.8	2.664	1.617	0.100	6.094	T 1.757	T 2.198	1.052	0.831	1.209

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:07	T 4215.000	T 96850.000	T 1072.000	1676.000	1458.000	96.1%	101.800	101.600	100.100	2744.000
2	12:32:34	T 3877.000	T 93040.000	T 1071.000	1662.000	1510.000	99.9%	102.600	101.500	97.130	2204.000
3	12:33:01	T 4336.000	T 97150.000	T 1062.000	1633.000	1468.000	95.7%	102.900	102.900	101.000	2512.000
x		T 4143.000	T 95680.000	T 1069.000	1657.000	1479.000	97.2%	102.400	102.000	99.420	2487.000
σ		T 238.200	T 2292.000	T 5.318	22.140	27.750	2.3%	0.585	0.753	2.031	270.900
%RSD		T 5.750	T 2.395	T 0.498	1.336	1.876	2.4	0.571	0.739	2.043	10.890

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:07	4551.000	103.000	T 4333.000	4362.000	99.310	102.300	99.950	100.600	99.090	104.300
2	12:32:34	4556.000	103.200	T 4302.000	4224.000	95.880	97.390	97.590	100.500	100.200	104.700
3	12:33:01	4559.000	103.100	T 4270.000	4329.000	98.750	99.730	100.600	100.900	100.500	104.300
x		4556.000	103.100	T 4302.000	4305.000	97.980	99.790	99.390	100.600	99.940	104.400
σ		4.109	0.118	T 31.650	72.200	1.839	2.430	1.595	0.234	0.757	0.234
%RSD		0.090	0.114	T 0.736	1.677	1.877	2.435	1.604	0.233	0.758	0.224

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:07	97.920	98.880	98.680	104.700	16.720	16.640	427.300	103.400	-1.942	104.100
2	12:32:34	101.400	102.500	99.320	100.300	16.390	16.330	418.000	99.380	-2.533	103.200
3	12:33:01	100.900	99.960	99.380	101.200	15.900	15.500	424.900	101.500	-3.411	104.400
x		100.100	100.400	99.130	102.100	16.340	16.160	423.400	101.400	-2.629	103.900
σ		1.876	1.835	0.391	2.352	0.413	0.587	4.866	2.003	0.739	0.647
%RSD		1.875	1.827	0.394	2.305	2.529	3.633	1.149	1.975	28.110	0.622

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:07	92.3%	100.200	98.530	98.290	99.300	99.840	99.160	99.480	99.650	87.7%
2	12:32:34	96.7%	99.280	98.540	97.870	99.470	99.330	99.340	100.200	99.260	93.4%
3	12:33:01	93.1%	99.650	97.630	99.030	99.890	100.500	99.560	99.240	98.560	89.5%
x		94.1%	99.700	98.230	98.400	99.550	99.880	99.350	99.640	99.160	90.2%
σ		2.4%	0.451	0.524	0.584	0.303	0.583	0.200	0.497	0.555	2.9%
%RSD		2.5	0.453	0.533	0.593	0.305	0.583	0.202	0.499	0.560	3.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:32:07	101.500	100.900	97.830	98.830	113.600	112.800	88.2%	100.000	100.500	100.500
2	12:32:34	101.300	101.600	99.910	100.100	112.700	112.200	94.2%	97.940	99.340	99.030
3	12:33:01	102.000	101.300	98.750	99.220	113.000	113.100	89.8%	98.760	100.200	99.780
x		101.600	101.300	98.830	99.390	113.100	112.700	90.7%	98.910	100.000	99.770
σ		0.357	0.338	1.041	0.656	0.433	0.435	3.1%	1.049	0.613	0.731
%RSD		0.351	0.334	1.054	0.660	0.383	0.386	3.4	1.061	0.613	0.732

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:32:07	101.300	100.100	87.2%
2	12:32:34	101.300	99.160	92.5%
3	12:33:01	101.700	99.820	89.2%
x		101.400	99.690	89.6%
σ		0.211	0.475	2.7%
%RSD		0.208	0.477	3.0

UD10100-001SD 04/25/2019 12:37:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:52	99.3%	100.100	114.600	112.100	38.560	T 11680.000	T 1647.000	1680.000	1666.000	216.100
2	12:38:19	100.1%	104.400	117.200	113.900	39.520	T 11650.000	T 1673.000	1684.000	1676.000	211.600
3	12:38:46	100.4%	95.990	110.800	110.600	33.500	T 11800.000	T 1608.000	1642.000	1641.000	213.800
x		99.9%	100.200	114.200	112.200	37.190	T 11710.000	T 1642.000	1669.000	1661.000	213.800
σ		0.5%	4.194	3.237	1.648	3.234	T 79.950	T 32.550	23.070	17.990	2.249
%RSD		0.5	4.187	2.835	1.468	8.696	T 0.683	T 1.982	1.383	1.083	1.052

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:52	T 4084.000	T 96980.000	T 1075.000	1594.000	1480.000	98.5%	99.940	101.100	99.010	3051.000
2	12:38:19	T 4079.000	T 97350.000	T 1053.000	1655.000	1450.000	97.7%	105.800	102.900	99.090	2824.000
3	12:38:46	T 4099.000	T 98330.000	T 1070.000	1631.000	1450.000	97.3%	101.200	100.400	99.970	3228.000
x		T 4087.000	T 97550.000	T 1066.000	1627.000	1460.000	97.8%	102.300	101.400	99.360	3034.000
σ		T 10.070	T 697.300	T 11.560	30.820	17.060	0.6%	3.072	1.290	0.535	202.900
%RSD		T 0.247	T 0.715	T 1.085	1.895	1.168	0.6	3.003	1.272	0.539	6.688

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:52	4423.000	102.700	T 4256.000	4315.000	98.990	99.190	101.100	99.380	100.800	103.300
2	12:38:19	4512.000	105.200	T 4266.000	4377.000	99.870	99.380	99.320	100.300	101.500	102.700
3	12:38:46	4471.000	104.500	T 4271.000	4342.000	100.200	100.200	103.100	101.400	102.200	101.600
x		4469.000	104.100	T 4265.000	4344.000	99.670	99.600	101.200	100.300	101.500	102.500
σ		44.760	1.317	T 7.811	30.730	0.613	0.559	1.877	1.009	0.717	0.867
%RSD		1.002	1.264	T 0.183	0.707	0.615	0.561	1.855	1.006	0.707	0.846

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:52	100.700	101.000	99.360	99.210	20.140	19.140	433.400	101.200	-1.019	104.800
2	12:38:19	101.600	102.700	102.800	99.700	19.480	18.470	430.200	100.500	-0.079	104.300
3	12:38:46	101.800	101.800	101.800	99.880	19.090	21.000	444.000	104.300	-1.996	105.900
x		101.400	101.800	101.300	99.600	19.570	19.540	435.800	102.000	-1.031	105.000
σ		0.582	0.884	1.780	0.346	0.530	1.314	7.215	2.027	0.959	0.825
%RSD		0.574	0.868	1.757	0.348	2.709	6.724	1.655	1.987	92.980	0.786

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:52	95.1%	99.660	100.400	99.070	100.500	99.080	98.100	101.200	98.950	93.5%
2	12:38:19	97.6%	98.720	100.500	99.830	104.400	98.840	98.470	99.300	99.290	95.4%
3	12:38:46	95.2%	99.600	100.000	100.300	99.770	100.600	99.590	100.800	99.150	92.9%
x		96.0%	99.330	100.300	99.740	101.500	99.520	98.720	100.400	99.130	93.9%
σ		1.4%	0.526	0.260	0.629	2.465	0.970	0.778	1.013	0.173	1.3%
%RSD		1.5	0.530	0.259	0.631	2.428	0.975	0.788	1.008	0.175	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:37:52	101.400	100.800	98.300	99.550	112.100	113.300	93.8%	98.760	100.300	100.500
2	12:38:19	101.400	101.300	99.430	98.990	113.000	111.500	95.6%	99.220	101.100	101.000
3	12:38:46	101.700	102.200	99.170	98.680	113.700	113.100	94.2%	99.930	101.500	100.900
x		101.500	101.400	98.970	99.080	113.000	112.600	94.5%	99.300	101.000	100.800
σ		0.168	0.707	0.593	0.437	0.766	0.962	0.9%	0.593	0.589	0.221
%RSD		0.165	0.698	0.599	0.441	0.678	0.854	1.0	0.597	0.584	0.219

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:37:52	100.000	99.600	92.7%
2	12:38:19	101.100	100.200	94.7%
3	12:38:46	100.500	100.000	93.2%
x		100.600	99.930	93.5%
σ		0.554	0.291	1.1%
%RSD		0.551	0.291	1.1

UD10100-001L(5) 04/25/2019 12:43:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:37	100.5%	0.019	5.241	4.987	17.900	T 2391.000	147.800	145.400	143.400	17.630
2	12:44:04	102.6%	0.028	4.290	4.614	3.012	T 2354.000	145.200	140.700	138.400	16.860
3	12:44:31	T 109.6%	0.021	4.632	4.851	10.600	T 2333.000	144.100	143.800	140.200	15.780
x		T 104.2%	0.023	4.721	4.817	10.500	T 2359.000	145.700	143.300	140.600	16.760
σ		T 4.7%	0.005	0.482	0.189	7.443	T 29.120	1.885	2.362	2.517	0.925
%RSD		T 4.5	20.250	10.200	3.917	70.860	T 1.234	1.294	1.648	1.790	5.523

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:37	T 712.600	T 21030.000	9.891	109.700	103.800	96.9%	-0.121	0.097	0.151	433.700
2	12:44:04	T 720.700	T 21330.000	9.171	110.400	99.330	97.0%	-0.102	0.114	0.125	405.100
3	12:44:31	T 698.800	T 20840.000	0.886	94.440	93.720	99.0%	-0.193	0.091	0.087	422.300
x		T 710.700	T 21070.000	6.649	104.900	98.940	97.6%	-0.139	0.101	0.121	420.300
σ		T 11.090	T 248.700	5.004	9.025	5.035	1.2%	0.048	0.012	0.032	14.400
%RSD		T 1.561	T 1.181	75.260	8.607	5.089	1.2	34.640	11.680	26.530	3.426

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:37	715.300	0.595	T 717.600	688.600	0.050	0.150	0.156	-0.018	0.045	0.426
2	12:44:04	725.100	0.597	T 707.600	682.300	0.038	0.036	-0.046	0.029	0.036	0.487
3	12:44:31	717.600	0.517	T 712.200	673.400	0.029	0.046	0.031	-0.013	0.028	0.461
x		719.300	0.569	T 712.500	681.400	0.039	0.077	0.047	-0.001	0.036	0.458
σ		5.115	0.046	T 5.011	7.628	0.010	0.063	0.102	0.026	0.009	0.030
%RSD		0.711	7.998	T 0.703	1.119	26.480	81.370	217.200	2990.000	23.480	6.646

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:37	0.338	0.577	0.189	-0.089	3.797	4.189	0.467	0.238	-5.247	1.069
2	12:44:04	0.328	0.609	0.141	0.034	3.015	4.224	0.352	0.174	-3.401	1.077
3	12:44:31	0.061	0.519	0.078	0.332	3.945	3.913	-0.897	-0.128	-2.738	1.074
x		0.242	0.569	0.136	0.092	3.585	4.109	-0.026	0.094	-3.795	1.073
σ		0.157	0.046	0.056	0.217	0.500	0.170	0.756	0.196	1.300	0.004
%RSD		64.860	8.053	41.120	234.700	13.940	4.143	2917.000	207.200	34.260	0.406

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:37	93.6%	0.032	0.044	0.029	-0.027	0.010	0.010	0.024	0.003	92.9%
2	12:44:04	95.7%	0.056	0.047	0.038	-0.790	0.009	0.006	0.003	0.003	94.3%
3	12:44:31	97.0%	0.019	0.046	0.026	-0.647	0.007	0.005	0.007	0.009	95.4%
x		95.4%	0.036	0.046	0.031	-0.488	0.009	0.007	0.011	0.005	94.2%
σ		1.7%	0.019	0.002	0.006	0.405	0.002	0.003	0.011	0.003	1.2%
%RSD		1.8	52.380	3.415	19.600	83.020	17.680	39.000	99.350	70.410	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:43:37	0.100	0.162	0.001	0.008	2.715	2.751	92.6%	0.022	0.025	0.019
2	12:44:04	0.122	0.144	-0.005	0.003	2.697	2.604	93.6%	0.017	0.017	0.021
3	12:44:31	0.103	0.183	-0.011	-0.004	2.830	2.781	94.9%	0.009	0.017	0.041
x		0.109	0.163	-0.005	0.002	2.747	2.712	93.7%	0.016	0.020	0.027
σ		0.012	0.020	0.006	0.006	0.072	0.095	1.1%	0.006	0.005	0.012
%RSD		11.110	11.980	114.700	273.600	2.626	3.497	1.2	40.210	23.520	45.800

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:43:37	0.026	0.020	92.6%
2	12:44:04	0.015	0.021	94.6%
3	12:44:31	0.023	0.024	95.0%
x		0.021	0.022	94.1%
σ		0.005	0.002	1.3%
%RSD		25.520	9.981	1.4

UD10100-001A 04/25/2019 12:48:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:21	101.0%	100.300	115.100	109.900	34.140	T11760.000	T1663.000	1676.000	1629.000	T189.900
2	12:49:48	98.9%	102.000	117.000	113.400	27.860	T11960.000	T1622.000	1619.000	1646.000	T196.800
3	12:50:15	100.4%	101.200	116.100	110.200	42.680	T12100.000	T1684.000	1691.000	1670.000	T193.300
x		100.1%	101.200	116.000	111.200	34.890	T11940.000	T1656.000	1662.000	1648.000	T193.300
σ		1.1%	0.839	0.957	1.908	7.442	T168.100	T31.700	37.650	20.620	T3.480
%RSD		1.1	0.829	0.825	1.716	21.330	T1.408	T1.914	2.265	1.251	T1.800

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:21	T3984.000	T91820.000	T1035.000	1671.000	1480.000	100.9%	100.200	100.200	98.230	2314.000
2	12:49:48	T4188.000	T93740.000	T1064.000	1664.000	1488.000	99.5%	103.200	102.800	98.720	3000.000
3	12:50:15	T4062.000	T93110.000	T1066.000	1656.000	1466.000	98.8%	103.900	103.800	100.200	2477.000
x		T4078.000	T92890.000	T1055.000	1664.000	1478.000	99.7%	102.400	102.200	99.030	2597.000
σ		T102.600	T980.000	T17.290	7.714	11.090	1.0%	1.929	1.863	1.005	358.700
%RSD		T2.517	T1.055	T1.639	0.464	0.751	1.1	1.883	1.822	1.015	13.810

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:21	4561.000	103.400	T4279.000	4297.000	96.770	97.090	95.630	98.040	99.640	101.900
2	12:49:48	4490.000	104.500	T4330.000	4388.000	99.970	101.200	97.140	97.450	99.790	102.400
3	12:50:15	4534.000	103.800	T4382.000	4410.000	101.300	101.100	99.990	98.450	100.500	103.000
x		4528.000	103.900	T4331.000	4365.000	99.350	99.810	97.590	97.980	99.960	102.400
σ		35.570	0.517	T51.500	60.000	2.325	2.354	2.218	0.501	0.444	0.520
%RSD		0.786	0.497	T1.189	1.374	2.340	2.359	2.273	0.511	0.444	0.508

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:21	99.090	100.100	101.200	96.440	15.730	18.110	431.500	102.200	-1.916	102.000
2	12:49:48	99.200	103.400	101.500	101.700	18.930	18.770	416.700	98.450	-2.963	102.200
3	12:50:15	98.360	101.900	104.000	98.570	17.730	17.130	434.500	102.900	-1.457	103.000
x		98.880	101.800	102.300	98.900	17.460	18.000	427.500	101.200	-2.112	102.400
σ		0.460	1.642	1.502	2.641	1.615	0.825	9.519	2.400	0.772	0.502
%RSD		0.465	1.613	1.469	2.670	9.250	4.580	2.227	2.372	36.550	0.491

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:21	101.0%	97.230	98.730	97.250	99.370	97.590	97.620	100.600	98.010	97.4%
2	12:49:48	100.2%	97.520	97.300	97.740	98.790	97.530	97.650	99.220	98.730	96.8%
3	12:50:15	100.2%	98.110	98.680	96.790	100.100	98.100	98.460	99.870	99.360	96.4%
x		100.4%	97.620	98.240	97.260	99.440	97.740	97.910	99.900	98.700	96.8%
σ		0.5%	0.447	0.813	0.477	0.678	0.312	0.477	0.682	0.677	0.5%
%RSD		0.5	0.458	0.827	0.491	0.682	0.320	0.488	0.683	0.686	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:49:21	101.000	99.540	95.220	95.200	111.900	111.100	97.6%	97.820	99.620	99.320
2	12:49:48	100.800	100.400	96.940	95.670	111.800	112.500	98.7%	97.640	99.400	98.550
3	12:50:15	100.900	100.700	95.390	96.600	111.700	111.300	96.7%	97.880	100.300	99.440
x		100.900	100.200	95.850	95.820	111.800	111.600	97.7%	97.780	99.770	99.100
σ		0.097	0.604	0.945	0.715	0.117	0.776	1.0%	0.122	0.459	0.483
%RSD		0.096	0.603	0.986	0.746	0.105	0.695	1.0	0.124	0.460	0.488

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:49:21	99.560	98.760	96.4%
2	12:49:48	99.400	98.080	98.0%
3	12:50:15	100.700	99.100	96.2%
x		99.900	98.650	96.9%
σ		0.734	0.523	1.0%
%RSD		0.735	0.530	1.0

CCV MW10994 04/25/2019 12:54:40 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:07	88.2%	307.900	299.900	294.500	24.020	T 61400.000	T 60890.000	T 60210.000	T 59480.000	307.200
2	12:55:34	90.2%	301.100	296.300	295.700	14.850	T 61750.000	T 60960.000	T 60680.000	T 59770.000	297.200
3	12:56:02	91.3%	294.700	285.500	288.500	5.492	T 60490.000	T 59080.000	T 59650.000	T 59700.000	295.700
x		89.9%	100.409%	97.968%	97.628%	14.790	T 102.020%	T 60310.000	T 60180.000	T 99.421%	100.018%
σ		1.6%	n/a	n/a	n/a	9.262	T n/a	T 1063.000	T 516.800	T n/a	n/a
%RSD		1.7	2.196	2.557	1.323	62.640	T 1.059	T 1.763	T 0.859	T 0.254	2.082

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:07	T 3066.000	863.100	T 60210.000	61690.000	T 61640.000	93.6%	307.100	309.300	294.800	2072.000
2	12:55:34	T 3048.000	830.200	T 59510.000	61620.000	T 61770.000	94.3%	305.700	T 312.200	295.200	1877.000
3	12:56:02	T 3010.000	802.000	T 57780.000	60340.000	T 59300.000	93.2%	305.200	T 307.600	287.100	2483.000
x		T 101.378%	831.800	T 98.614%	61220.000	T 101.510%	93.7%	101.997%	T 103.235%	97.458%	2144.000
σ		T n/a	30.570	T n/a	755.800	T n/a	0.5%	n/a	T n/a	n/a	309.200
%RSD		T 0.947	3.675	T 2.116	1.235	T 2.278	0.6	0.317	T 0.754	1.557	14.420

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:07	T 62120.000	301.300	T 61920.000	T 60620.000	288.100	282.600	287.800	280.900	274.100	300.700
2	12:55:34	T 61730.000	294.900	T 61460.000	T 60900.000	292.000	281.500	279.400	279.200	271.100	304.300
3	12:56:02	T 61690.000	297.000	T 61560.000	T 60080.000	285.200	281.100	279.000	279.200	271.900	299.200
x		T 61850.000	99.235%	T 61650.000	T 100.895%	96.157%	93.912%	282.100	279.800	90.780%	100.467%
σ		T 237.500	n/a	T 239.300	T n/a	n/a	n/a	4.983	0.965	n/a	n/a
%RSD		T 0.384	1.092	T 0.388	T 0.689	1.184	0.285	1.767	0.345	0.569	0.864

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:07	283.800	283.600	283.500	302.000	1.407	0.841	1215.000	294.000	0.230	299.100
2	12:55:34	283.800	285.700	282.000	294.300	1.586	0.837	1221.000	296.600	5.755	300.900
3	12:56:02	284.500	279.400	279.800	302.200	1.328	1.492	1184.000	285.000	0.997	301.600
x		284.000	282.900	93.931%	299.500	1.440	1.057	1207.000	97.286%	2.327	100.176%
σ		0.428	3.245	n/a	4.497	0.132	0.377	19.890	n/a	2.993	n/a
%RSD		0.151	1.147	0.652	1.502	9.177	35.680	1.649	2.092	128.600	0.430

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:07	87.3%	308.400	307.500	308.300	290.600	289.700	290.000	296.000	295.800	83.3%
2	12:55:34	87.3%	308.900	308.600	312.900	309.400	292.900	291.700	298.900	296.300	83.0%
3	12:56:02	86.3%	308.900	309.000	306.700	293.700	287.000	286.800	292.500	292.200	82.9%
x		87.0%	102.909%	102.789%	309.300	297.900	96.616%	289.500	295.800	98.254%	83.1%
σ		0.6%	n/a	n/a	3.191	10.050	n/a	2.504	3.174	n/a	0.2%
%RSD		0.7	0.086	0.252	1.032	3.375	1.009	0.865	1.073	0.759	0.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	12:55:07	304.100	303.100	304.900	300.800	305.100	304.000	85.5%	291.000	297.900	288.500
2	12:55:34	305.700	304.900	306.800	298.700	309.000	307.300	86.7%	289.700	298.100	288.900
3	12:56:02	304.400	303.800	304.000	298.000	305.200	305.500	85.8%	286.600	293.500	286.000
x		101.569%	101.315%	305.200	99.723%	102.143%	101.870%	86.0%	289.100	98.840%	95.932%
σ		n/a	n/a	1.459	n/a	n/a	n/a	0.6%	2.210	n/a	n/a
%RSD		0.277	0.291	0.478	0.494	0.732	0.540	0.7	0.765	0.869	0.537

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	12:55:07	287.800	287.900	82.1%
2	12:55:34	290.200	288.800	82.9%
3	12:56:02	286.400	286.100	80.4%
x		96.043%	95.865%	81.8%
σ		n/a	n/a	1.2%
%RSD		0.677	0.479	1.5

CCB IM9370-01 04/25/2019 13:00:27 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:00:55	97.6%	0.008	2.461	2.507	8.146	9.009	5.159	5.030	5.270	0.042
2	13:01:22	98.1%	0.054	2.421	2.246	7.127	4.206	3.352	3.311	3.199	0.054
3	13:01:49	98.2%	0.013	2.442	2.287	5.299	6.858	2.955	3.309	2.704	0.030
x		97.9%	0.025	2.441	2.347	6.857	6.691	3.822	3.883	3.724	0.042
σ		0.3%	0.025	0.020	0.140	1.442	2.406	1.175	0.993	1.361	0.012
%RSD		0.3	100.500	0.819	5.969	21.030	35.960	30.740	25.570	36.550	28.130

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:00:55	14.480	489.800	-1.451	5.060	4.096	93.5%	-0.354	0.025	0.059	21.460
2	13:01:22	13.690	459.000	-6.574	2.466	2.282	95.0%	-0.327	0.045	0.044	-5.717
3	13:01:49	13.970	496.300	-5.484	0.973	2.144	95.2%	-0.404	0.015	-0.005	7.204
x		14.040	481.700	-4.503	2.833	2.841	94.6%	-0.362	0.028	0.032	7.648
σ		0.401	19.910	2.699	2.068	1.089	0.9%	0.039	0.015	0.033	13.590
%RSD		2.855	4.134	59.930	72.990	38.340	1.0	10.860	54.120	102.800	177.700

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:00:55	4.853	-0.042	8.761	-3.897	0.001	0.028	0.340	-0.044	-0.003	0.032
2	13:01:22	2.311	-0.054	7.169	-11.030	-0.003	-0.001	-0.094	-0.063	-0.004	-0.004
3	13:01:49	1.819	-0.080	7.728	-11.910	-0.018	-0.027	0.152	-0.059	0.004	0.014
x		2.994	-0.059	7.886	-8.946	-0.007	0.000	0.133	-0.055	-0.001	0.014
σ		1.629	0.019	0.807	4.394	0.010	0.027	0.218	0.010	0.005	0.018
%RSD		54.390	33.160	10.240	49.120	151.900	20190.000	164.100	18.260	401.500	129.800

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:00:55	-0.233	0.043	0.001	0.473	0.137	-0.026	-0.409	-0.022	-2.091	0.023
2	13:01:22	-0.384	0.031	0.029	0.207	0.272	0.286	1.072	0.371	-3.214	0.013
3	13:01:49	-0.340	-0.000	-0.044	0.108	-0.030	0.856	-1.516	-0.238	-3.860	0.016
x		-0.319	0.025	-0.005	0.262	0.126	0.372	-0.284	0.037	-3.055	0.017
σ		0.078	0.023	0.037	0.189	0.152	0.447	1.299	0.308	0.895	0.006
%RSD		24.350	91.570	794.700	71.850	120.200	120.100	457.100	833.300	29.290	31.770

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:00:55	87.1%	0.121	0.098	0.092	-0.217	0.034	0.027	0.049	0.015	86.0%
2	13:01:22	90.5%	0.102	0.061	0.110	-1.004	0.016	0.022	0.017	0.008	87.7%
3	13:01:49	87.8%	0.111	0.078	0.065	0.374	0.019	0.008	0.008	0.006	86.5%
x		88.5%	0.112	0.079	0.089	-0.283	0.023	0.019	0.025	0.010	86.7%
σ		1.8%	0.010	0.019	0.023	0.691	0.010	0.010	0.022	0.005	0.9%
%RSD		2.0	8.735	23.900	25.610	244.600	42.440	50.440	88.040	52.380	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:00:55	0.050	0.085	0.178	0.161	0.015	0.011	84.8%	0.011	0.018	0.011
2	13:01:22	0.040	0.071	0.154	0.137	-0.012	0.028	88.2%	0.028	0.003	0.025
3	13:01:49	0.052	0.083	0.164	0.150	-0.012	-0.012	85.5%	0.016	0.006	0.014
x		0.048	0.079	0.165	0.149	-0.003	0.009	86.2%	0.018	0.009	0.017
σ		0.006	0.008	0.012	0.012	0.015	0.020	1.8%	0.008	0.008	0.007
%RSD		13.160	9.655	7.257	8.066	506.400	218.900	2.1	46.720	87.600	41.770

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:00:55	0.023	0.023	84.7%
2	13:01:22	0.017	0.013	87.8%
3	13:01:49	0.007	0.014	85.4%
x		0.016	0.017	86.0%
σ		0.008	0.006	1.6%
%RSD		54.280	33.580	1.9

UD10100-002 04/25/2019 13:06:12

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:06:38	95.5%	0.013	11.990	12.410	17.890	┬3817.000	┬1059.000	1079.000	1081.000	┬363.200
2	13:07:05	96.1%	0.031	12.110	13.070	15.680	┬3962.000	┬1068.000	1071.000	1082.000	┬354.700
3	13:07:32	95.8%	0.011	11.830	12.300	18.080	┬3736.000	┬1029.000	1024.000	1036.000	┬349.400
x		95.8%	0.019	11.980	12.590	17.210	┬3838.000	┬1052.000	1058.000	1066.000	┬355.800
σ		0.3%	0.011	0.138	0.419	1.336	┬114.300	┬20.270	29.800	26.480	┬6.940
%RSD		0.3	58.750	1.153	3.329	7.758	┬2.978	┬1.927	2.816	2.483	┬1.951

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:06:38	┬4174.000	┬92430.000	645.000	23280.000	┬22670.000	95.3%	4.530	1.956	1.975	1844.000
2	13:07:05	┬4412.000	┬96910.000	663.200	23920.000	┬22320.000	92.6%	4.321	1.780	2.038	2150.000
3	13:07:32	┬4097.000	┬91450.000	648.800	23020.000	┬22880.000	97.9%	4.214	1.943	1.842	1796.000
x		┬4228.000	┬93600.000	652.400	23410.000	┬22620.000	95.3%	4.355	1.893	1.952	1930.000
σ		┬164.200	┬2910.000	9.605	465.000	┬284.000	2.6%	0.161	0.098	0.100	192.100
%RSD		┬3.884	┬3.109	1.472	1.987	┬1.255	2.8	3.692	5.168	5.132	9.953

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:06:38	959.200	0.556	┬951.100	1125.000	0.056	0.457	0.529	0.550	0.624	1.921
2	13:07:05	995.300	0.582	┬986.700	1151.000	0.086	0.476	0.101	0.556	0.601	1.864
3	13:07:32	954.700	0.553	┬936.600	1096.000	0.059	0.424	0.139	0.498	0.617	1.895
x		969.700	0.564	┬958.200	1124.000	0.067	0.452	0.257	0.535	0.614	1.893
σ		22.250	0.016	┬25.800	27.750	0.016	0.026	0.237	0.032	0.012	0.028
%RSD		2.295	2.839	┬2.693	2.469	24.470	5.849	92.340	5.987	1.941	1.503

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:06:38	3.095	2.772	1.322	0.585	6.826	7.218	1.469	0.470	-4.054	67.480
2	13:07:05	3.063	2.914	1.243	0.593	7.259	7.821	0.945	0.409	-6.248	69.600
3	13:07:32	2.826	2.434	0.902	0.889	6.320	8.137	1.631	0.511	-3.887	67.370
x		2.995	2.707	1.155	0.689	6.802	7.725	1.349	0.463	-4.730	68.150
σ		0.147	0.247	0.223	0.173	0.470	0.466	0.359	0.052	1.318	1.261
%RSD		4.901	9.122	19.320	25.140	6.911	6.038	26.590	11.170	27.860	1.850

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:06:38	90.7%	0.260	0.226	0.263	3.265	0.011	0.014	0.029	0.019	88.4%
2	13:07:05	89.6%	0.265	0.248	0.232	0.020	0.015	0.008	0.007	0.008	86.4%
3	13:07:32	94.0%	0.299	0.204	0.240	3.129	0.005	0.009	0.002	0.023	91.0%
x		91.4%	0.275	0.226	0.245	2.138	0.010	0.010	0.013	0.016	88.6%
σ		2.3%	0.021	0.022	0.016	1.835	0.005	0.003	0.014	0.008	2.3%
%RSD		2.5	7.766	9.856	6.657	85.840	51.180	30.760	110.500	47.550	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:06:38	0.435	0.639	0.262	0.257	19.170	18.900	88.3%	0.016	0.008	0.356
2	13:07:05	0.498	0.651	0.253	0.249	19.390	19.830	86.7%	0.013	0.004	0.385
3	13:07:32	0.509	0.639	0.228	0.212	19.180	19.140	91.8%	0.008	0.005	0.366
x		0.481	0.643	0.248	0.239	19.250	19.290	88.9%	0.012	0.005	0.369
σ		0.040	0.007	0.017	0.024	0.127	0.483	2.6%	0.004	0.002	0.015
%RSD		8.276	1.159	6.977	10.070	0.661	2.502	2.9	35.300	41.240	3.986

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:06:38	0.306	0.330	87.2%
2	13:07:05	0.286	0.342	85.0%
3	13:07:32	0.336	0.342	90.0%
x		0.310	0.338	87.4%
σ		0.025	0.007	2.5%
%RSD		8.160	1.992	2.9

UD10100-003 04/25/2019 13:11:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:23	102.6%	0.068	13.730	13.850	-3.248	┬4545.000	299.700	291.400	291.100	┬196.500
2	13:12:51	97.2%	0.058	13.800	14.330	-1.274	┬4577.000	302.100	294.900	298.200	┬207.000
3	13:13:19	99.1%	0.040	14.160	14.270	-6.175	┬4576.000	┬297.900	295.000	296.400	┬194.600
x		99.6%	0.055	13.900	14.150	-3.566	┬4566.000	┬299.900	293.800	295.300	┬199.400
σ		2.7%	0.014	0.233	0.265	2.466	┬18.100	┬2.145	2.058	3.674	┬6.708
%RSD		2.7	25.830	1.673	1.873	69.150	┬0.396	┬0.715	0.701	1.244	┬3.365
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:23	┬7355.000	┬94740.000	374.400	1877.000	1663.000	93.6%	3.024	0.727	0.800	2156.000
2	13:12:51	┬6886.000	┬91530.000	391.600	1869.000	1787.000	96.7%	2.824	0.458	0.726	2044.000
3	13:13:19	┬6850.000	┬91150.000	381.600	1863.000	1774.000	96.3%	2.974	0.403	0.721	2014.000
x		┬7030.000	┬92470.000	382.500	1870.000	1742.000	95.5%	2.941	0.529	0.749	2071.000
σ		┬281.400	┬1973.000	8.663	7.206	67.950	1.7%	0.104	0.173	0.044	74.580
%RSD		┬4.003	┬2.134	2.265	0.385	3.902	1.8	3.524	32.760	5.934	3.600
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:23	258.900	2.604	276.000	258.700	0.178	0.424	0.185	0.122	0.229	2.069
2	13:12:51	256.800	2.541	┬266.400	243.800	0.157	0.360	0.124	0.104	0.162	2.040
3	13:13:19	251.500	2.610	267.000	249.100	0.157	0.395	-0.041	0.126	0.182	1.751
x		255.700	2.585	┬269.800	250.500	0.164	0.393	0.089	0.117	0.191	1.953
σ		3.796	0.038	┬5.356	7.509	0.012	0.032	0.117	0.012	0.034	0.176
%RSD		1.484	1.475	┬1.985	2.997	7.339	8.099	130.700	10.060	18.020	8.991
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:23	1.721	2.198	0.088	0.513	17.530	18.610	-0.350	-0.011	-2.352	8.120
2	13:12:51	1.664	2.240	0.184	0.421	16.510	17.040	-0.540	-0.029	-3.061	8.038
3	13:13:19	2.146	2.175	-0.058	0.114	18.160	17.060	1.436	0.445	-4.284	8.035
x		1.844	2.204	0.072	0.349	17.400	17.570	0.182	0.135	-3.232	8.064
σ		0.263	0.033	0.122	0.209	0.831	0.906	1.090	0.269	0.977	0.048
%RSD		14.270	1.485	170.500	59.730	4.778	5.154	599.400	198.500	30.240	0.598
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:23	90.2%	0.123	0.104	0.085	1.082	0.000	0.005	-0.001	0.017	87.5%
2	13:12:51	93.7%	0.064	0.072	0.077	-1.404	0.004	0.003	0.007	-0.013	90.1%
3	13:13:19	94.2%	0.100	0.108	0.060	0.365	0.002	0.002	-0.001	0.010	92.1%
x		92.7%	0.095	0.094	0.074	0.014	0.002	0.003	0.002	0.005	89.9%
σ		2.2%	0.030	0.020	0.013	1.280	0.002	0.002	0.005	0.016	2.3%
%RSD		2.4	31.350	20.960	17.420	8856.000	98.660	47.590	295.100	339.700	2.6
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:12:23	0.431	0.709	0.133	0.112	6.919	7.400	86.4%	0.003	-0.009	0.126
2	13:12:51	0.481	0.626	0.152	0.114	7.544	7.508	90.5%	0.001	-0.006	0.164
3	13:13:19	0.434	0.718	0.145	0.122	7.339	7.519	92.2%	-0.001	-0.008	0.163
x		0.449	0.685	0.143	0.116	7.268	7.476	89.7%	0.001	-0.007	0.151
σ		0.028	0.051	0.010	0.005	0.319	0.066	3.0%	0.002	0.001	0.022
%RSD		6.281	7.412	6.649	4.174	4.384	0.883	3.3	231.500	20.170	14.550
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	13:12:23	0.108	0.128	86.0%							
2	13:12:51	0.101	0.135	89.6%							
3	13:13:19	0.107	0.122	91.9%							
x		0.105	0.128	89.2%							
σ		0.004	0.006	3.0%							
%RSD		3.668	4.972	3.3							

UD10100-004 04/25/2019 13:17:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:09	96.6%	0.076	20.220	20.610	20.450	T 14910.000	356.100	342.100	348.800	110.600
2	13:18:36	99.5%	0.078	19.350	19.350	12.730	T 14780.000	344.100	335.600	335.800	T 108.100
3	13:19:02	100.5%	0.079	18.650	19.250	12.460	T 15230.000	347.300	334.000	344.900	T 107.300
x		98.9%	0.078	19.410	19.730	15.210	T 14970.000	349.100	337.200	343.200	T 108.700
σ		2.0%	0.002	0.785	0.756	4.537	T 228.800	6.231	4.326	6.631	T 1.706
%RSD		2.0	2.180	4.044	3.828	29.830	T 1.528	1.785	1.283	1.932	T 1.570
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:09	T 4872.000	T 97270.000	389.500	883.100	846.200	95.8%	4.229	0.204	0.585	2028.000
2	13:18:36	T 4966.000	T 96460.000	T 375.800	875.300	820.900	94.5%	1.861	0.121	0.585	2290.000
3	13:19:02	T 4858.000	T 98050.000	379.100	885.500	802.400	94.0%	1.209	0.055	0.533	2211.000
x		T 4899.000	T 97260.000	T 381.500	881.300	823.200	94.8%	2.433	0.126	0.568	2176.000
σ		T 58.500	T 797.800	T 7.190	5.335	21.960	0.9%	1.589	0.075	0.030	134.400
%RSD		T 1.194	T 0.820	T 1.885	0.605	2.668	1.0	65.320	59.100	5.259	6.176
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:09	243.500	2.961	261.400	227.100	0.244	0.395	-0.013	0.385	0.362	3.792
2	13:18:36	242.600	2.971	T 256.300	230.100	0.245	0.394	0.011	0.392	0.344	3.513
3	13:19:02	243.100	3.018	258.200	232.000	0.247	0.373	0.216	0.375	0.457	3.673
x		243.100	2.983	T 258.600	229.700	0.245	0.387	0.071	0.384	0.388	3.659
σ		0.435	0.030	T 2.539	2.486	0.001	0.012	0.126	0.008	0.061	0.140
%RSD		0.179	1.011	T 0.982	1.082	0.586	3.138	176.200	2.148	15.730	3.835
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:09	4.443	4.307	0.375	-0.416	15.430	16.360	3.284	0.927	-5.642	7.257
2	13:18:36	4.478	4.259	0.170	0.308	15.950	17.190	1.140	0.358	-3.375	7.185
3	13:19:02	3.904	4.151	-0.031	-0.015	15.100	17.450	0.305	0.148	-2.806	7.288
x		4.275	4.239	0.171	-0.041	15.490	17.000	1.576	0.478	-3.941	7.243
σ		0.322	0.080	0.203	0.362	0.426	0.572	1.537	0.403	1.500	0.053
%RSD		7.532	1.886	118.600	889.100	2.752	3.361	97.500	84.290	38.060	0.735
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:09	93.6%	0.041	0.049	0.035	0.149	0.011	0.002	0.021	0.009	90.8%
2	13:18:36	92.8%	0.050	0.059	0.022	-0.454	0.002	0.003	0.012	0.009	90.4%
3	13:19:02	93.4%	0.032	0.058	0.022	-0.194	-0.000	0.002	0.008	0.020	90.8%
x		93.3%	0.041	0.055	0.026	-0.166	0.004	0.002	0.013	0.013	90.7%
σ		0.4%	0.009	0.006	0.007	0.302	0.006	0.001	0.007	0.006	0.2%
%RSD		0.5	21.460	10.120	26.920	181.800	138.400	24.140	48.910	47.520	0.2
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:18:09	0.485	0.672	0.103	0.122	17.650	17.350	91.9%	-0.006	-0.002	0.171
2	13:18:36	0.427	0.562	0.104	0.092	18.300	17.420	91.1%	0.005	-0.005	0.128
3	13:19:02	0.407	0.703	0.106	0.106	17.760	17.780	91.9%	0.002	-0.010	0.150
x		0.440	0.645	0.104	0.107	17.900	17.520	91.6%	0.000	-0.006	0.150
σ		0.041	0.074	0.001	0.015	0.346	0.229	0.5%	0.006	0.004	0.022
%RSD		9.249	11.470	1.262	14.040	1.935	1.307	0.5	1474.000	63.840	14.590
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	13:18:09	0.121	0.147	92.0%							
2	13:18:36	0.116	0.129	89.9%							
3	13:19:02	0.149	0.140	91.0%							
x		0.128	0.139	91.0%							
σ		0.018	0.009	1.1%							
%RSD		13.730	6.651	1.2							

UD10100-005 04/25/2019 13:23:24

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:52	97.2%	0.091	10.840	11.070	42.920	T 5235.000	333.700	321.700	313.700	TM 748.300
2	13:24:19	T 113.9%	0.101	10.350	10.330	36.150	T 5282.000	328.100	313.300	314.100	TM 665.400
3	13:24:46	100.9%	0.073	10.150	11.020	44.650	T 5362.000	332.200	321.400	321.600	TM 748.000
x		T 104.0%	0.088	10.450	10.810	41.240	T 5293.000	331.300	318.800	316.500	TM 720.600
σ		T 8.7%	0.014	0.352	0.412	4.490	T 64.190	2.856	4.766	4.433	TM 47.760
%RSD		T 8.4	16.270	3.368	3.812	10.890	T 1.213	0.862	1.495	1.401	TM 6.628
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:52	T 6273.000	T 90960.000	639.100	1883.000	1751.000	98.8%	7.594	1.812	1.650	1830.000
2	13:24:19	T 6573.000	T 89920.000	T 522.000	1824.000	1508.000	97.9%	9.554	1.703	1.674	2290.000
3	13:24:46	T 6580.000	T 91570.000	631.600	1882.000	1743.000	97.5%	9.267	1.857	1.688	2025.000
x		T 6475.000	T 90820.000	T 597.600	1863.000	1667.000	98.0%	8.805	1.791	1.671	2048.000
σ		T 175.100	T 832.600	T 65.550	33.620	138.100	0.7%	1.059	0.079	0.019	230.700
%RSD		T 2.704	T 0.917	T 10.970	1.805	8.282	0.7	12.030	4.433	1.126	11.260
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:52	502.800	3.013	T 507.800	493.600	0.121	0.322	0.362	0.497	0.546	3.420
2	13:24:19	503.400	2.958	T 514.700	499.300	0.128	0.331	0.173	0.518	0.496	3.825
3	13:24:46	515.500	3.026	T 515.500	487.600	0.145	0.271	0.247	0.499	0.553	3.813
x		507.200	2.999	T 512.700	493.500	0.131	0.308	0.261	0.504	0.532	3.686
σ		7.151	0.036	T 4.216	5.812	0.012	0.032	0.096	0.012	0.031	0.231
%RSD		1.410	1.206	T 0.822	1.178	9.272	10.440	36.660	2.381	5.869	6.253
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:52	3.689	4.139	0.344	0.070	18.250	17.580	0.972	0.299	-2.825	9.450
2	13:24:19	4.042	3.766	0.054	0.728	15.010	18.770	-0.046	0.143	-6.142	9.487
3	13:24:46	4.550	3.943	0.066	0.455	16.770	16.850	4.163	1.024	-2.143	9.599
x		4.094	3.949	0.155	0.418	16.680	17.740	1.696	0.489	-3.703	9.512
σ		0.433	0.187	0.164	0.331	1.621	0.969	2.196	0.470	2.139	0.078
%RSD		10.570	4.723	105.900	79.170	9.718	5.461	129.500	96.220	57.770	0.819
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:52	98.3%	0.035	0.045	0.028	0.410	0.002	0.006	-0.001	-0.007	96.0%
2	13:24:19	95.6%	0.048	0.047	0.042	0.555	0.002	0.001	0.003	0.012	93.3%
3	13:24:46	97.0%	0.044	0.086	0.018	1.706	0.003	0.000	-0.001	-0.006	95.1%
x		97.0%	0.042	0.060	0.029	0.890	0.002	0.002	0.000	-0.000	94.8%
σ		1.3%	0.007	0.023	0.012	0.710	0.001	0.003	0.002	0.011	1.4%
%RSD		1.4	15.540	38.590	40.040	79.770	26.120	133.400	1341.000	3656.000	1.4
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:23:52	0.427	0.626	0.055	0.067	11.320	11.480	96.9%	0.010	-0.006	0.495
2	13:24:19	0.486	0.609	0.078	0.078	11.620	11.760	93.5%	0.004	0.002	0.527
3	13:24:46	0.414	0.616	0.075	0.061	11.090	11.540	94.9%	-0.003	0.006	0.488
x		0.442	0.617	0.069	0.068	11.340	11.590	95.1%	0.004	0.000	0.503
σ		0.039	0.008	0.013	0.009	0.265	0.151	1.7%	0.006	0.006	0.021
%RSD		8.726	1.325	18.100	12.800	2.338	1.305	1.8	173.000	1491.000	4.203
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	13:23:52	0.452	0.483	98.2%							
2	13:24:19	0.455	0.487	93.9%							
3	13:24:46	0.490	0.486	95.1%							
x		0.466	0.485	95.7%							
σ		0.021	0.002	2.2%							
%RSD		4.473	0.362	2.3							

UD10100-006 04/25/2019 13:29:08

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:36	98.1%	0.025	10.350	11.240	16.190	T 3700.000	T 1015.000	1011.000	1001.000	TM 716.100
2	13:30:02	100.3%	0.005	9.942	11.310	16.840	T 3734.000	T 994.800	979.600	964.000	TM 705.700
3	13:30:29	99.3%	0.020	11.220	11.200	7.695	T 3639.000	T 985.700	995.600	1009.000	TM 735.400
x		99.3%	0.017	10.500	11.250	13.570	T 3691.000	T 998.600	995.600	991.300	TM 719.100
σ		1.1%	0.010	0.652	0.052	5.101	T 48.350	T 15.100	15.910	23.960	TM 15.080
%RSD		1.1	62.360	6.210	0.460	37.580	T 1.310	T 1.512	1.598	2.416	TM 2.098

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:36	T 4462.000	T 89390.000	T 637.000	22560.000	T 21910.000	98.9%	7.414	3.457	3.320	1790.000
2	13:30:02	T 4541.000	T 90560.000	637.400	22610.000	T 21120.000	97.6%	8.981	3.334	3.154	2056.000
3	13:30:29	T 4579.000	T 90400.000	636.100	21920.000	T 21180.000	98.0%	7.910	3.535	3.295	2000.000
x		T 4528.000	T 90110.000	T 636.800	22360.000	T 21400.000	98.2%	8.102	3.442	3.257	1949.000
σ		T 59.770	T 633.300	T 0.652	383.000	T 440.200	0.7%	0.801	0.101	0.089	139.900
%RSD		T 1.320	T 0.703	T 0.102	1.713	T 2.057	0.7	9.881	2.935	2.747	7.179

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:36	2262.000	0.836	T 2208.000	2375.000	0.101	0.452	-0.061	0.692	0.719	2.421
2	13:30:02	2264.000	0.791	T 2209.000	2390.000	0.093	0.459	0.143	0.673	0.662	2.421
3	13:30:29	2280.000	0.855	T 2245.000	2433.000	0.092	0.462	-0.455	0.603	0.699	2.501
x		2269.000	0.827	T 2220.000	2400.000	0.095	0.458	-0.124	0.656	0.693	2.448
σ		9.841	0.033	T 21.350	29.920	0.005	0.005	0.304	0.047	0.029	0.046
%RSD		0.434	3.988	T 0.962	1.247	5.404	1.127	244.400	7.111	4.200	1.876

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:36	2.983	3.184	2.152	0.952	5.591	7.208	0.383	0.212	-3.985	65.720
2	13:30:02	3.314	3.157	2.083	0.616	6.984	7.316	1.326	0.438	-4.191	66.340
3	13:30:29	3.218	3.438	2.012	0.517	6.469	6.083	2.271	0.685	-4.612	65.860
x		3.172	3.260	2.082	0.695	6.348	6.869	1.326	0.445	-4.263	65.970
σ		0.170	0.155	0.070	0.228	0.705	0.683	0.944	0.237	0.319	0.327
%RSD		5.369	4.761	3.361	32.820	11.100	9.944	71.170	53.150	7.490	0.496

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:36	98.5%	0.211	0.185	0.217	2.737	0.001	0.006	0.010	0.018	95.3%
2	13:30:02	95.8%	0.229	0.231	0.226	2.700	-0.000	0.008	-0.002	0.005	92.9%
3	13:30:29	96.2%	0.142	0.194	0.218	2.664	0.005	0.008	0.023	-0.006	92.7%
x		96.8%	0.194	0.203	0.220	2.701	0.002	0.007	0.011	0.006	93.6%
σ		1.5%	0.046	0.025	0.005	0.037	0.003	0.001	0.013	0.012	1.4%
%RSD		1.5	23.690	12.050	2.428	1.355	147.300	17.150	120.900	220.100	1.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:29:36	0.487	0.534	0.118	0.123	20.710	20.760	97.3%	0.006	-0.001	0.637
2	13:30:02	0.480	0.682	0.138	0.156	20.840	20.640	92.5%	0.004	0.007	0.637
3	13:30:29	0.459	0.622	0.101	0.139	20.910	20.830	93.2%	0.011	0.006	0.644
x		0.476	0.613	0.119	0.139	20.820	20.740	94.3%	0.007	0.004	0.639
σ		0.015	0.075	0.019	0.016	0.102	0.091	2.6%	0.004	0.004	0.004
%RSD		3.090	12.170	15.810	11.820	0.490	0.441	2.7	51.290	105.700	0.638

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:29:36	0.589	0.618	95.5%
2	13:30:02	0.649	0.641	91.4%
3	13:30:29	0.585	0.615	93.0%
x		0.607	0.625	93.3%
σ		0.036	0.014	2.1%
%RSD		5.901	2.299	2.2

UD10100-007 04/25/2019 13:34:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:20	101.2%	0.030	13.000	13.710	88.420	T 1631.000	T 621.400	616.900	626.200	TM 1277.000
2	13:35:46	100.6%	0.043	14.020	13.640	86.680	T 1622.000	T 628.500	621.100	613.700	TM 1232.000
3	13:36:13	99.0%	0.059	14.880	14.210	94.220	T 1641.000	T 628.500	617.200	625.700	TM 1261.000
x		100.3%	0.044	13.970	13.850	89.780	T 1632.000	T 626.100	618.400	621.800	TM 1256.000
σ		1.1%	0.015	0.941	0.312	3.949	T 9.459	T 4.101	2.366	7.060	TM 22.830
%RSD		1.1	33.510	6.739	2.252	4.399	T 0.580	T 0.655	0.383	1.135	TM 1.817

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:20	T 2545.000	T 96170.000	T 1813.000	3046.000	2749.000	97.5%	12.130	2.604	2.334	2228.000
2	13:35:46	T 2412.000	T 94010.000	T 1788.000	3041.000	2819.000	99.3%	11.570	2.519	2.184	1972.000
3	13:36:13	T 2443.000	T 96270.000	T 1804.000	3054.000	2849.000	97.5%	10.680	2.345	2.312	2119.000
x		T 2467.000	T 95480.000	T 1802.000	3047.000	2806.000	98.1%	11.460	2.489	2.277	2106.000
σ		T 69.590	T 1279.000	T 13.010	6.346	51.690	1.0%	0.732	0.132	0.081	128.000
%RSD		T 2.821	T 1.339	T 0.722	0.208	1.842	1.0	6.382	5.315	3.572	6.079

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:20	1257.000	3.266	T 1233.000	1221.000	0.138	0.754	0.149	4.746	4.807	6.505
2	13:35:46	1218.000	3.389	T 1223.000	1224.000	0.126	0.744	-0.072	4.765	4.467	6.866
3	13:36:13	1243.000	3.362	T 1218.000	1226.000	0.159	0.683	0.526	4.694	4.960	6.650
x		1239.000	3.339	T 1225.000	1224.000	0.141	0.727	0.201	4.735	4.745	6.674
σ		19.470	0.065	T 7.576	2.036	0.017	0.038	0.302	0.037	0.253	0.182
%RSD		1.571	1.941	T 0.619	0.166	11.990	5.245	150.300	0.776	5.323	2.722

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:20	6.169	6.306	0.371	0.337	10.390	10.070	0.468	0.276	-4.846	9.988
2	13:35:46	6.074	6.912	0.611	0.507	10.100	9.505	0.054	0.162	-4.685	9.929
3	13:36:13	6.912	6.634	0.545	0.876	10.090	11.280	1.160	0.399	-3.594	9.993
x		6.385	6.617	0.509	0.573	10.190	10.290	0.561	0.279	-4.375	9.970
σ		0.459	0.303	0.124	0.275	0.171	0.909	0.559	0.118	0.681	0.035
%RSD		7.186	4.580	24.300	48.040	1.676	8.838	99.630	42.360	15.570	0.354

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:20	93.4%	0.081	0.053	0.093	-0.750	0.006	0.008	0.021	0.024	89.0%
2	13:35:46	97.3%	0.055	0.103	0.089	0.173	0.007	0.009	0.053	0.057	93.3%
3	13:36:13	98.6%	0.089	0.093	0.067	-1.057	0.005	0.009	0.040	0.052	94.0%
x		96.5%	0.075	0.083	0.083	-0.545	0.006	0.009	0.038	0.044	92.1%
σ		2.7%	0.018	0.026	0.014	0.640	0.001	0.001	0.016	0.018	2.7%
%RSD		2.8	23.950	31.700	17.120	117.500	16.190	8.180	42.950	39.420	2.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:35:20	0.616	0.834	0.484	0.382	6.551	6.776	89.2%	0.003	-0.010	1.600
2	13:35:46	0.563	0.729	0.443	0.440	6.801	6.924	94.1%	0.005	-0.005	1.541
3	13:36:13	0.596	0.741	0.437	0.415	6.878	6.837	95.6%	0.004	-0.004	1.533
x		0.592	0.768	0.455	0.412	6.743	6.846	93.0%	0.004	-0.006	1.558
σ		0.027	0.057	0.026	0.029	0.171	0.075	3.3%	0.001	0.003	0.037
%RSD		4.506	7.478	5.680	6.978	2.540	1.089	3.6	16.080	49.830	2.364

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:35:20	1.480	1.488	89.0%
2	13:35:46	1.355	1.455	93.0%
3	13:36:13	1.346	1.428	93.7%
x		1.394	1.457	91.9%
σ		0.075	0.030	2.5%
%RSD		5.378	2.057	2.7

UQ14100-001 04/25/2019 13:40:37 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:04	98.2%	0.020	1.297	1.138	16.460	4.996	2.510	2.497	2.200	4.637
2	13:41:31	99.8%	0.003	1.120	1.412	16.770	8.284	2.500	2.206	2.420	4.739
3	13:41:58	101.4%	0.019	1.244	1.184	12.170	8.564	2.310	2.228	2.168	4.654
x		99.8%	0.014	1.220	1.244	15.130	7.281	2.440	2.310	2.262	4.676
σ		1.6%	0.009	0.091	0.147	2.573	1.984	0.113	0.162	0.137	0.055
%RSD		1.6	65.600	7.455	11.800	17.010	27.240	4.628	7.019	6.073	1.177

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:04	15.280	T 80320.000	-6.024	5.260	5.275	97.1%	-0.263	-0.033	0.226	1692.000
2	13:41:31	16.080	T 84030.000	-6.168	6.268	4.869	96.5%	-0.272	-0.035	0.221	1957.000
3	13:41:58	15.970	T 85520.000	-8.190	10.260	4.734	95.9%	-0.299	-0.063	0.225	1949.000
x		15.780	T 83290.000	-6.794	7.263	4.959	96.5%	-0.278	-0.044	0.224	1866.000
σ		0.434	T 2682.000	1.211	2.644	0.281	0.6%	0.019	0.017	0.003	150.500
%RSD		2.753	T 3.220	17.830	36.410	5.675	0.6	6.723	39.610	1.141	8.063

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:04	-3.192	-0.024	0.766	-21.670	-0.035	0.004	-0.508	0.121	0.169	1.398
2	13:41:31	-2.243	-0.051	2.078	-17.100	-0.041	0.025	-0.329	0.086	0.115	1.431
3	13:41:58	-1.843	-0.042	2.045	-19.280	-0.043	0.020	-0.014	0.081	0.104	1.549
x		-2.426	-0.039	1.630	-19.350	-0.040	0.016	-0.284	0.096	0.130	1.459
σ		0.693	0.014	0.748	2.286	0.004	0.011	0.250	0.022	0.035	0.079
%RSD		28.570	35.550	45.920	11.810	9.736	65.450	88.070	22.510	26.870	5.428

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:04	1.063	1.442	-0.160	0.480	1.553	1.928	-0.035	0.072	-2.022	0.005
2	13:41:31	1.016	1.231	0.023	0.523	1.483	2.976	0.819	0.312	-3.313	0.010
3	13:41:58	1.028	1.417	-0.062	0.373	2.019	2.867	-0.732	-0.034	-4.247	0.005
x		1.036	1.363	-0.066	0.459	1.685	2.590	0.017	0.117	-3.194	0.007
σ		0.024	0.116	0.091	0.077	0.291	0.576	0.777	0.177	1.117	0.003
%RSD		2.347	8.471	137.900	16.890	17.280	22.240	4537.000	152.100	34.970	40.140

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:04	95.6%	-0.005	0.016	-0.012	-0.323	0.002	0.001	-0.005	0.002	92.7%
2	13:41:31	94.5%	-0.005	-0.002	-0.006	-0.319	-0.002	0.001	-0.005	-0.015	91.0%
3	13:41:58	93.7%	-0.014	-0.011	0.001	-1.662	-0.002	-0.001	0.003	-0.003	90.3%
x		94.6%	-0.008	0.001	-0.006	-0.768	-0.001	0.000	-0.002	-0.005	91.3%
σ		1.0%	0.005	0.014	0.006	0.775	0.002	0.001	0.005	0.008	1.2%
%RSD		1.0	60.060	1461.000	107.600	100.900	307.800	277.200	216.000	153.500	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:41:04	0.267	0.338	0.026	0.018	-0.014	-0.014	92.5%	-0.015	-0.020	0.013
2	13:41:31	0.226	0.347	0.021	0.028	-0.020	0.000	90.5%	-0.013	-0.021	0.030
3	13:41:58	0.299	0.409	0.008	0.019	-0.038	-0.010	90.3%	-0.012	-0.019	0.005
x		0.264	0.364	0.018	0.022	-0.024	-0.008	91.1%	-0.013	-0.020	0.016
σ		0.036	0.039	0.010	0.006	0.012	0.007	1.2%	0.002	0.001	0.012
%RSD		13.820	10.570	52.350	27.750	52.100	95.350	1.3	14.310	3.940	78.330

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:41:04	0.005	0.012	93.2%
2	13:41:31	0.007	0.014	89.8%
3	13:41:58	0.026	0.013	89.7%
x		0.013	0.013	90.9%
σ		0.012	0.001	2.0%
%RSD		89.290	6.784	2.2

UQ14100-002 04/25/2019 13:46:21 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:47	100.8%	101.200	101.400	97.970	25.240	┬1069.000	┬1010.000	1025.000	1009.000	96.400
2	13:47:15	101.1%	99.760	100.200	98.460	32.590	┬1063.000	┬1007.000	1027.000	1031.000	94.510
3	13:47:43	101.6%	98.700	103.600	97.730	22.930	┬1085.000	┬1027.000	1029.000	1027.000	95.370
x		101.1%	99.899%	101.800	98.054%	26.920	┬107.234%	┬1015.000	1027.000	102.246%	95.426%
σ		0.4%	n/a	1.749	n/a	5.047	┬n/a	┬10.590	1.992	n/a	n/a
%RSD		0.4	1.276	1.719	0.378	18.750	┬1.044	┬1.043	0.194	1.114	0.996

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:47	┬960.000	┬84570.000	┬958.400	1112.000	978.200	97.6%	101.200	100.800	99.090	2661.000
2	13:47:15	┬937.700	┬85010.000	┬972.700	1089.000	989.500	98.9%	98.710	99.920	99.560	2306.000
3	13:47:43	┬983.300	┬86580.000	┬950.600	1162.000	952.500	95.5%	100.000	101.400	99.970	2295.000
x		┬96.035%	┬85390.000	┬96.059%	1121.000	97.341%	97.3%	99.996%	100.713%	99.541%	2421.000
σ		┬n/a	┬1055.000	┬n/a	37.440	n/a	1.7%	n/a	n/a	n/a	208.600
%RSD		┬2.376	┬1.236	┬1.169	3.340	1.945	1.8	1.267	0.736	0.443	8.617

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:47	1121.000	99.690	┬1063.000	1049.000	99.350	100.700	100.600	99.450	100.000	102.600
2	13:47:15	1133.000	99.350	┬1069.000	1031.000	97.670	99.310	98.330	99.910	99.180	104.300
3	13:47:43	1104.000	99.570	┬1064.000	1046.000	101.400	101.800	100.100	98.510	100.700	103.000
x		1119.000	99.536%	┬1065.000	104.204%	99.472%	100.591%	99.670	99.290	99.957%	103.276%
σ		14.550	n/a	┬3.463	n/a	n/a	n/a	1.194	0.713	n/a	n/a
%RSD		1.300	0.173	┬0.325	0.916	1.878	1.234	1.198	0.718	0.753	0.848

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:47	100.000	99.960	99.520	100.900	1.819	1.028	449.600	104.400	0.247	98.240
2	13:47:15	99.600	100.700	97.890	105.800	1.790	1.577	424.400	100.200	-1.848	98.650
3	13:47:43	99.330	100.000	100.700	103.300	1.245	1.663	446.700	106.100	2.038	98.040
x		99.650	100.200	99.375%	103.300	1.618	1.422	440.200	103.557%	0.146	98.310
σ		0.353	0.411	n/a	2.442	0.324	0.344	13.770	n/a	1.945	0.312
%RSD		0.355	0.410	1.431	2.364	20.010	24.210	3.128	2.947	1337.000	0.317

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:47	94.3%	97.360	98.660	97.060	94.790	98.010	98.710	99.720	98.150	93.3%
2	13:47:15	93.2%	99.500	99.000	98.350	100.400	99.960	99.190	99.580	97.910	91.0%
3	13:47:43	94.6%	97.640	97.400	97.700	99.300	99.720	98.370	100.200	98.450	91.0%
x		94.0%	98.170	98.353%	97.700	98.180	99.229%	98.760	99.840	98.170%	91.8%
σ		0.8%	1.168	n/a	0.641	2.992	n/a	0.415	0.338	n/a	1.3%
%RSD		0.8	1.190	0.854	0.656	3.048	1.068	0.420	0.338	0.279	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:46:47	101.000	99.680	97.690	98.730	99.330	98.870	92.3%	98.730	100.200	100.500
2	13:47:15	101.200	99.200	97.560	97.570	99.450	98.500	91.4%	98.290	100.600	99.810
3	13:47:43	100.500	99.290	97.190	98.050	99.710	99.580	91.3%	98.690	100.300	101.000
x		100.900	99.390%	97.480	98.115%	99.499%	98.980	91.7%	98.570	100.378%	100.400
σ		0.344	n/a	0.259	n/a	n/a	0.548	0.5%	0.242	n/a	0.601
%RSD		0.341	0.255	0.266	0.592	0.194	0.553	0.6	0.245	0.189	0.599

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:46:47	100.200	99.620	92.4%
2	13:47:15	100.700	99.510	90.9%
3	13:47:43	100.200	99.690	90.8%
x		100.400	99.607%	91.4%
σ		0.286	n/a	0.9%
%RSD		0.285	0.087	0.9

UD10113-001DIS 04/25/2019 13:52:07

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:34	102.4%	0.064	6.824	7.284	38.740	┬2441.000	┬1112.000	1136.000	1137.000	14.060
2	13:53:01	99.0%	0.101	7.692	7.590	42.970	┬2451.000	┬1117.000	1118.000	1117.000	14.590
3	13:53:28	101.2%	0.057	8.626	7.512	34.980	┬2427.000	┬1091.000	1114.000	1109.000	14.520
x		100.8%	0.074	7.714	7.462	38.900	┬2440.000	┬1107.000	1123.000	1121.000	14.390
σ		1.7%	0.024	0.901	0.159	3.999	┬12.230	┬13.540	12.020	14.720	0.288
%RSD		1.7	32.150	11.680	2.133	10.280	┬0.501	┬1.223	1.071	1.313	2.000

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:34	┬2544.000	┬83280.000	399.100	1005.000	892.200	95.9%	0.199	0.208	0.376	1802.000
2	13:53:01	┬2475.000	┬82690.000	427.600	1012.000	931.300	98.2%	0.137	0.096	0.281	1666.000
3	13:53:28	┬2483.000	┬83870.000	415.600	1020.000	895.300	98.0%	0.194	0.224	0.339	1693.000
x		┬2501.000	┬83280.000	414.100	1012.000	906.300	97.4%	0.177	0.176	0.332	1720.000
σ		┬37.960	┬587.200	14.310	7.837	21.760	1.3%	0.035	0.070	0.048	72.160
%RSD		┬1.518	┬0.705	3.456	0.774	2.401	1.3	19.640	39.860	14.470	4.195

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:34	┬24090.000	5.536	┬24380.000	┬24420.000	0.528	0.384	0.016	0.029	0.084	5.178
2	13:53:01	┬24240.000	5.575	┬23970.000	┬23970.000	0.533	0.410	0.181	-0.012	0.074	5.371
3	13:53:28	┬23850.000	5.390	┬24070.000	┬24130.000	0.508	0.376	-0.294	0.003	0.058	4.976
x		┬24060.000	5.500	┬24140.000	┬24170.000	0.523	0.390	-0.032	0.006	0.072	5.175
σ		┬196.900	0.098	┬209.700	┬229.400	0.013	0.017	0.241	0.021	0.013	0.197
%RSD		┬0.818	1.777	┬0.869	┬0.949	2.526	4.458	743.800	325.600	18.580	3.813

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:34	6.820	6.055	20.890	0.895	7.418	8.237	1.987	0.689	-4.690	11.470
2	13:53:01	6.450	6.138	21.430	0.607	7.595	8.298	0.053	0.161	-2.672	11.440
3	13:53:28	5.210	5.749	21.220	0.613	6.828	7.892	2.861	0.893	-4.184	11.640
x		6.160	5.981	21.180	0.705	7.280	8.143	1.634	0.581	-3.849	11.510
σ		0.843	0.205	0.272	0.165	0.402	0.219	1.437	0.378	1.050	0.109
%RSD		13.690	3.428	1.284	23.370	5.519	2.686	87.950	65.090	27.270	0.942

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:34	98.0%	0.097	0.072	0.068	0.755	0.006	0.004	0.007	0.005	89.8%
2	13:53:01	101.6%	0.077	0.073	0.047	-0.709	-0.001	0.007	0.015	-0.003	92.7%
3	13:53:28	98.8%	0.082	0.110	0.040	0.283	0.009	0.006	-0.005	0.003	90.8%
x		99.5%	0.085	0.085	0.052	0.110	0.005	0.006	0.006	0.002	91.1%
σ		1.9%	0.010	0.022	0.014	0.747	0.005	0.001	0.011	0.004	1.5%
%RSD		1.9	12.240	25.720	27.300	681.800	112.300	24.910	180.800	245.200	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:52:34	0.290	0.428	0.275	0.329	32.580	31.600	90.0%	0.027	0.011	0.027
2	13:53:01	0.277	0.384	0.342	0.296	30.960	32.010	92.8%	0.001	0.006	0.039
3	13:53:28	0.339	0.355	0.294	0.307	31.350	31.460	91.2%	0.009	-0.002	0.025
x		0.302	0.389	0.304	0.311	31.630	31.690	91.4%	0.012	0.005	0.030
σ		0.033	0.037	0.035	0.017	0.845	0.285	1.4%	0.013	0.006	0.008
%RSD		10.810	9.456	11.430	5.422	2.672	0.900	1.5	105.300	125.600	25.430

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:52:34	0.027	0.027	89.1%
2	13:53:01	0.026	0.031	93.7%
3	13:53:28	0.026	0.030	91.2%
x		0.026	0.029	91.3%
σ		0.001	0.002	2.3%
%RSD		2.118	6.799	2.5

UD10113-001SDIS 04/25/2019 13:57:52

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:19	100.9%	94.970	107.100	103.200	50.700	T 3493.000	T 2087.000	2118.000	2116.000	106.900
2	13:58:46	T 114.1%	96.480	106.100	106.600	48.450	T 3475.000	T 2080.000	2117.000	2120.000	94.680
3	13:59:14	99.2%	100.900	103.900	102.300	40.750	T 3458.000	T 2072.000	2160.000	2115.000	107.800
x		T 104.7%	97.450	105.700	104.000	46.630	T 3475.000	T 2080.000	2132.000	2117.000	103.100
σ		T 8.2%	3.089	1.588	2.278	5.223	T 17.060	T 7.492	24.310	2.294	7.313
%RSD		T 7.8	3.170	1.503	2.189	11.200	T 0.491	T 0.360	1.140	0.108	7.093

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:19	T 3549.000	T 86740.000	T 1372.000	2109.000	1809.000	95.2%	103.600	101.100	100.800	2707.000
2	13:58:46	T 3450.000	T 84480.000	T 1184.000	2135.000	1611.000	96.3%	101.600	103.200	98.670	2109.000
3	13:59:14	T 3410.000	T 83930.000	T 1372.000	2059.000	1910.000	97.5%	103.000	103.900	99.290	1934.000
x		T 3470.000	T 85050.000	T 1310.000	2101.000	1777.000	96.3%	102.800	102.700	99.600	2250.000
σ		T 71.210	T 1486.000	T 108.500	38.430	151.900	1.1%	1.014	1.430	1.107	405.700
%RSD		T 2.052	T 1.748	T 8.288	1.829	8.549	1.2	0.987	1.392	1.111	18.030

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:19	T 24750.000	104.800	T 24790.000	T 24550.000	99.250	100.200	98.980	99.310	99.500	107.800
2	13:58:46	T 24410.000	104.600	T 24870.000	T 24780.000	99.440	100.200	97.420	95.930	98.110	105.700
3	13:59:14	T 24500.000	104.900	T 24660.000	T 24490.000	98.550	99.440	96.450	96.900	100.100	107.700
x		T 24550.000	104.700	T 24780.000	T 24610.000	99.080	99.920	97.620	97.380	99.240	107.000
σ		T 172.400	0.179	T 108.700	T 151.700	0.467	0.415	1.274	1.744	1.027	1.165
%RSD		T 0.702	0.171	T 0.439	T 0.616	0.471	0.416	1.305	1.790	1.035	1.088

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:19	102.600	101.700	116.900	103.700	6.867	6.491	409.900	101.700	-0.959	104.800
2	13:58:46	99.830	99.810	117.100	103.700	7.477	7.461	415.000	103.900	-1.929	105.000
3	13:59:14	101.900	102.700	121.900	102.700	6.544	7.608	413.700	103.400	0.137	104.400
x		101.400	101.400	118.700	103.300	6.962	7.187	412.900	103.000	-0.917	104.800
σ		1.451	1.450	2.838	0.545	0.474	0.607	2.651	1.137	1.033	0.307
%RSD		1.430	1.430	2.391	0.527	6.804	8.444	0.642	1.104	112.700	0.293

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:19	94.9%	95.270	93.740	93.920	95.030	98.780	99.160	98.190	98.340	87.4%
2	13:58:46	97.0%	94.720	92.630	95.550	97.340	99.920	99.670	99.360	99.490	88.4%
3	13:59:14	101.4%	94.640	93.020	94.350	101.000	99.920	99.370	100.400	99.240	92.1%
x		97.8%	94.880	93.130	94.610	97.770	99.540	99.400	99.310	99.020	89.3%
σ		3.3%	0.343	0.563	0.846	2.984	0.659	0.255	1.090	0.608	2.5%
%RSD		3.4	0.361	0.605	0.894	3.052	0.662	0.256	1.098	0.614	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	13:58:19	100.300	99.210	97.530	99.350	131.500	130.700	87.5%	99.110	101.000	99.340
2	13:58:46	101.400	101.400	98.840	99.410	132.700	130.400	88.8%	98.770	100.900	100.000
3	13:59:14	103.900	101.700	100.800	100.800	133.300	131.300	94.3%	99.310	100.400	100.500
x		101.900	100.800	99.070	99.840	132.500	130.800	90.2%	99.060	100.800	99.960
σ		1.844	1.360	1.668	0.795	0.931	0.421	3.6%	0.273	0.357	0.595
%RSD		1.810	1.350	1.684	0.796	0.703	0.322	4.0	0.276	0.354	0.595

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	13:58:19	100.600	99.270	87.2%
2	13:58:46	99.790	99.340	88.0%
3	13:59:14	100.300	99.650	93.9%
x		100.200	99.420	89.7%
σ		0.432	0.204	3.7%
%RSD		0.431	0.205	4.1

CCV MW10994 04/25/2019 14:03:38 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:05	90.7%	285.700	290.900	293.300	15.540	T 63100.000	T 59580.000	T 59200.000	T 59290.000	291.100
2	14:04:33	92.1%	295.300	299.700	289.300	7.810	T 61210.000	T 58910.000	T 59550.000	T 60110.000	300.300
3	14:05:01	90.3%	298.400	293.500	291.300	16.110	T 62160.000	T 59160.000	T 60190.000	T 59830.000	298.800
x		91.1%	97.710%	98.226%	97.099%	13.160	T 103.593%	T 59210.000	T 59650.000	T 99.571%	98.908%
σ		0.9%	n/a	n/a	n/a	4.638	T n/a	T 338.000	T 502.400	T n/a	n/a
%RSD		1.0	2.257	1.532	0.689	35.260	T 1.522	T 0.571	T 0.842	T 0.691	1.655

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:05	T 3232.000	1043.000	T 60040.000	61320.000	T 56710.000	89.2%	308.100	312.700	299.600	178.000
2	14:04:33	T 3165.000	968.200	T 58890.000	60580.000	T 58050.000	91.9%	310.400	320.900	296.800	-73.970
3	14:05:01	T 3089.000	939.600	T 61100.000	61880.000	T 59910.000	92.6%	311.300	T 310.500	296.900	1836.000
x		T 105.391%	983.700	T 100.015%	61260.000	T 97.036%	91.2%	103.310%	T 104.896%	99.264%	646.700
σ		T n/a	53.490	T n/a	649.800	T n/a	1.8%	n/a	T n/a	n/a	1038.000
%RSD		T 2.268	5.438	T 1.845	1.061	T 2.761	1.9	0.535	T 1.736	0.540	160.500

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:05	T 61320.000	299.200	T 61440.000	T 60730.000	292.800	290.800	286.600	282.400	273.000	294.900
2	14:04:33	T 62040.000	295.200	T 62050.000	T 60610.000	291.000	284.900	284.600	278.100	272.500	294.800
3	14:05:01	T 61830.000	299.600	T 61590.000	T 61020.000	291.900	283.600	284.500	280.400	274.500	296.800
x		T 61730.000	99.325%	T 61700.000	T 101.312%	97.303%	95.483%	285.200	280.300	91.107%	98.495%
σ		T 368.100	n/a	T 317.300	T n/a	n/a	n/a	1.186	2.168	n/a	n/a
%RSD		T 0.596	0.819	T 0.514	T 0.348	0.305	1.349	0.416	0.773	0.368	0.373

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:05	282.500	277.500	281.300	300.300	1.419	-0.027	1245.000	300.600	-0.800	300.700
2	14:04:33	280.200	278.600	279.800	293.600	1.174	1.461	1198.000	285.900	-2.335	300.300
3	14:05:01	278.700	285.500	288.800	292.600	1.324	0.900	1204.000	290.200	-2.242	300.000
x		280.500	280.500	94.440%	295.500	1.306	0.778	1216.000	97.406%	-1.792	100.103%
σ		1.924	4.313	n/a	4.179	0.124	0.751	25.610	n/a	0.861	n/a
%RSD		0.686	1.537	1.698	1.414	9.471	96.560	2.107	2.595	48.030	0.126

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:05	83.3%	309.500	306.000	307.500	296.800	291.200	290.100	295.000	292.800	79.7%
2	14:04:33	85.2%	308.000	307.500	306.600	294.400	288.900	288.200	293.300	294.100	82.5%
3	14:05:01	89.0%	311.900	308.000	309.300	293.500	289.400	287.700	293.900	294.600	84.9%
x		85.9%	103.260%	102.396%	307.800	294.900	96.615%	288.700	294.100	97.951%	82.3%
σ		2.9%	n/a	n/a	1.405	1.669	n/a	1.248	0.888	n/a	2.6%
%RSD		3.4	0.629	0.335	0.457	0.566	0.426	0.432	0.302	0.313	3.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:04:05	303.100	301.700	299.000	296.100	306.600	304.600	81.7%	291.000	298.800	289.700
2	14:04:33	302.300	303.100	303.700	300.600	304.500	300.600	84.4%	291.600	300.500	289.600
3	14:05:01	303.900	303.300	304.700	300.400	300.700	298.400	86.5%	292.400	300.700	292.700
x		101.041%	100.891%	302.400	99.671%	101.309%	100.401%	84.2%	291.600	100.003%	96.880%
σ		n/a	n/a	3.026	n/a	n/a	n/a	2.4%	0.718	n/a	n/a
%RSD		0.268	0.294	1.000	0.852	0.992	1.048	2.9	0.246	0.354	0.600

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:04:05	291.200	290.400	78.0%
2	14:04:33	289.100	289.500	81.4%
3	14:05:01	291.800	290.800	83.4%
x		96.897%	96.736%	80.9%
σ		n/a	n/a	2.7%
%RSD		0.495	0.222	3.4

CCB IM9370-01 04/25/2019 14:09:28 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:55	98.9%	0.037	2.440	2.013	4.710	7.551	5.056	4.855	4.612	0.027
2	14:10:22	97.7%	0.028	2.257	2.051	3.226	5.765	5.532	5.362	5.136	0.068
3	14:10:50	99.0%	-0.003	2.326	1.888	-0.777	4.746	4.075	4.331	4.126	0.044
x		98.5%	0.021	2.341	1.984	2.386	6.021	4.888	4.849	4.625	0.046
σ		0.7%	0.021	0.093	0.085	2.838	1.420	0.743	0.515	0.505	0.020
%RSD		0.7	100.600	3.952	4.300	118.900	23.580	15.200	10.630	10.920	44.080

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:55	14.190	516.400	-2.643	6.428	4.067	95.1%	-0.346	0.087	0.037	-17.340
2	14:10:22	13.610	459.000	-0.878	4.255	5.047	97.7%	-0.349	0.023	0.064	13.110
3	14:10:50	13.500	432.300	-3.630	4.800	4.086	96.8%	-0.386	0.034	0.037	-1.090
x		13.770	469.200	-2.384	5.161	4.400	96.5%	-0.361	0.048	0.046	-1.773
σ		0.368	42.950	1.394	1.130	0.560	1.3%	0.022	0.034	0.016	15.230
%RSD		2.672	9.154	58.490	21.900	12.730	1.4	6.166	71.200	33.790	859.300

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:55	4.231	-0.068	8.752	-8.258	0.000	-0.016	0.060	-0.075	-0.017	0.013
2	14:10:22	2.135	-0.061	8.568	-15.380	0.008	-0.021	-0.120	-0.036	0.002	0.007
3	14:10:50	1.840	-0.065	8.085	-12.010	-0.000	-0.013	-0.184	-0.073	0.022	0.003
x		2.735	-0.065	8.468	-11.880	0.003	-0.017	-0.081	-0.061	0.002	0.008
σ		1.303	0.004	0.345	3.563	0.004	0.004	0.126	0.022	0.020	0.005
%RSD		47.650	5.571	4.072	29.990	163.600	24.220	155.100	36.190	902.000	66.160

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:55	-0.280	0.026	0.096	0.738	-0.230	0.142	2.946	0.825	-3.410	0.024
2	14:10:22	-0.366	-0.004	0.095	0.378	-0.162	0.364	3.065	0.860	-4.853	0.026
3	14:10:50	-0.163	0.011	0.000	-0.094	-0.202	0.139	1.732	0.503	-3.588	0.009
x		-0.270	0.011	0.064	0.341	-0.198	0.215	2.581	0.729	-3.950	0.020
σ		0.102	0.015	0.055	0.417	0.035	0.129	0.738	0.197	0.787	0.009
%RSD		37.800	136.700	86.070	122.500	17.470	60.070	28.580	26.990	19.910	47.110

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:55	90.3%	0.096	0.084	0.098	-0.441	0.028	0.038	0.008	0.018	87.4%
2	14:10:22	93.5%	0.083	0.067	0.106	-1.670	0.026	0.032	0.024	0.023	91.7%
3	14:10:50	92.6%	0.090	0.082	0.077	-0.582	0.023	0.020	0.012	0.020	91.7%
x		92.2%	0.090	0.078	0.094	-0.897	0.026	0.030	0.015	0.020	90.3%
σ		1.7%	0.006	0.009	0.015	0.672	0.003	0.009	0.009	0.003	2.5%
%RSD		1.8	7.216	12.030	15.930	74.930	10.070	30.520	59.390	12.640	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:09:55	0.054	0.107	0.179	0.120	-0.018	-0.016	87.2%	0.015	0.011	0.015
2	14:10:22	0.046	0.074	0.146	0.196	0.011	0.035	90.3%	0.030	0.026	0.022
3	14:10:50	0.028	0.079	0.129	0.130	0.023	-0.014	91.0%	0.013	0.014	0.034
x		0.043	0.087	0.151	0.148	0.005	0.002	89.5%	0.019	0.017	0.024
σ		0.013	0.017	0.025	0.041	0.021	0.029	2.0%	0.009	0.008	0.009
%RSD		31.130	20.150	16.570	27.730	421.400	1635.000	2.3	48.530	45.420	39.480

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:09:55	0.010	0.018	88.2%
2	14:10:22	0.016	0.026	92.2%
3	14:10:50	0.019	0.027	92.1%
x		0.015	0.023	90.8%
σ		0.005	0.005	2.3%
%RSD		31.950	20.970	2.6

UD10113-001L(5)DIS 04/25/2019 14:15:13

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:15:40	99.0%	0.001	2.747	2.431	17.220	496.100	235.100	228.500	226.200	3.676
2	14:16:08	101.5%	0.004	2.381	2.499	17.860	504.700	233.600	227.100	223.400	3.535
3	14:16:35	98.5%	0.028	2.520	2.172	10.890	490.200	232.600	223.900	223.000	3.525
x		99.7%	0.011	2.549	2.367	15.320	497.000	233.800	226.500	224.200	3.579
σ		1.6%	0.015	0.185	0.172	3.855	7.270	1.269	2.367	1.762	0.084
%RSD		1.6	132.800	7.244	7.279	25.160	1.463	0.543	1.045	0.786	2.356

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:15:40	524.800	T 16410.000	82.000	200.400	186.900	99.0%	-0.267	0.047	0.077	301.800
2	14:16:08	551.200	T 17080.000	77.910	211.900	177.100	95.2%	-0.288	-0.021	0.104	351.900
3	14:16:35	523.200	T 16520.000	80.150	184.800	183.300	99.6%	-0.315	0.031	0.058	278.900
x		533.100	T 16670.000	80.020	199.000	182.500	97.9%	-0.290	0.019	0.080	310.900
σ		15.730	T 359.700	2.046	13.620	4.971	2.4%	0.024	0.036	0.023	37.350
%RSD		2.951	T 2.158	2.557	6.844	2.724	2.4	8.146	189.400	28.950	12.010

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:15:40	5061.000	1.032	T 4796.000	4833.000	0.112	0.065	-0.249	-0.051	0.001	0.928
2	14:16:08	5154.000	1.065	T 4960.000	4967.000	0.075	0.061	-0.102	-0.050	-0.000	1.059
3	14:16:35	5098.000	1.043	T 4874.000	4891.000	0.081	0.009	-0.264	-0.048	-0.004	1.041
x		5104.000	1.047	T 4877.000	4897.000	0.089	0.045	-0.205	-0.050	-0.001	1.009
σ		46.720	0.017	T 82.250	67.000	0.020	0.031	0.090	0.002	0.002	0.071
%RSD		0.915	1.581	T 1.687	1.368	21.970	69.120	43.720	3.155	245.700	6.990

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:15:40	1.305	1.129	4.328	1.062	1.517	2.096	2.058	0.604	-4.457	2.444
2	14:16:08	0.808	1.200	4.023	0.482	1.616	2.317	-0.613	-0.013	-4.285	2.401
3	14:16:35	0.997	1.227	4.303	0.509	1.207	1.633	-0.110	0.126	-4.458	2.317
x		1.037	1.185	4.218	0.684	1.447	2.016	0.445	0.239	-4.400	2.387
σ		0.251	0.050	0.169	0.328	0.214	0.349	1.419	0.324	0.099	0.064
%RSD		24.220	4.244	4.017	47.890	14.760	17.310	319.100	135.500	2.256	2.699

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:15:40	93.4%	0.032	0.040	0.047	-0.343	0.014	0.011	0.007	0.017	92.3%
2	14:16:08	91.1%	0.039	0.022	0.023	0.341	0.010	0.006	0.008	0.007	88.9%
3	14:16:35	96.7%	0.011	0.073	0.030	-0.410	0.007	0.007	-0.005	0.002	92.8%
x		93.7%	0.028	0.045	0.033	-0.137	0.010	0.008	0.003	0.009	91.3%
σ		2.8%	0.015	0.026	0.012	0.415	0.003	0.002	0.008	0.008	2.1%
%RSD		3.0	53.270	57.450	36.420	302.700	32.350	31.390	227.900	89.230	2.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:15:40	0.089	0.090	0.086	0.103	6.073	6.324	91.3%	0.011	-0.000	0.019
2	14:16:08	0.061	0.115	0.104	0.113	6.319	6.263	88.3%	0.001	0.002	0.006
3	14:16:35	0.060	0.113	0.099	0.098	6.220	6.208	92.7%	-0.003	0.001	0.017
x		0.070	0.106	0.096	0.105	6.204	6.265	90.8%	0.003	0.001	0.014
σ		0.016	0.014	0.010	0.007	0.124	0.058	2.3%	0.008	0.001	0.007
%RSD		23.530	12.910	9.907	7.073	1.994	0.925	2.5	253.000	136.700	50.980

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:15:40	0.014	0.014	92.4%
2	14:16:08	0.024	0.009	88.4%
3	14:16:35	0.000	0.008	93.7%
x		0.013	0.011	91.5%
σ		0.012	0.003	2.8%
%RSD		93.230	27.910	3.0

UD10113-001ADIS 04/25/2019 14:20:57

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:25	100.0%	91.390	99.260	95.830	35.750	T 3325.000	T 2070.000	2120.000	2074.000	104.200
2	14:21:51	97.1%	95.220	103.600	101.100	48.650	T 3365.000	T 2028.000	2074.000	2079.000	106.200
3	14:22:18	102.3%	92.660	104.200	102.600	48.010	T 3499.000	T 2090.000	2109.000	2113.000	102.900
x		99.8%	93.090	102.300	99.840	44.130	T 3396.000	T 2063.000	2101.000	2089.000	104.400
σ		2.6%	1.951	2.686	3.549	7.271	T 91.430	T 31.880	23.860	20.870	1.675
%RSD		2.6	2.095	2.625	3.554	16.470	T 2.692	T 1.545	1.135	0.999	1.604

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:25	T 3266.000	T 79820.000	T 1309.000	2037.000	1836.000	98.5%	95.760	97.030	94.810	1924.000
2	14:21:51	T 3327.000	T 82100.000	T 1382.000	2071.000	1887.000	97.3%	97.970	98.790	97.300	1716.000
3	14:22:18	T 3525.000	T 85420.000	T 1304.000	2048.000	1734.000	94.2%	100.200	97.910	95.470	2167.000
x		T 3373.000	T 82450.000	T 1332.000	2052.000	1819.000	96.6%	97.970	97.910	95.860	1936.000
σ		T 135.700	T 2820.000	T 43.590	17.440	77.870	2.2%	2.217	0.882	1.289	225.500
%RSD		T 4.024	T 3.421	T 3.274	0.850	4.281	2.3	2.263	0.901	1.344	11.650

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:25	T 24340.000	101.100	T 24610.000	T 24610.000	94.510	93.160	92.060	91.710	94.970	102.200
2	14:21:51	T 25120.000	102.800	T 24980.000	T 25050.000	94.420	96.840	94.760	95.740	96.060	105.000
3	14:22:18	T 24870.000	101.100	T 24930.000	T 24620.000	95.260	95.220	92.890	93.420	93.860	102.100
x		T 24780.000	101.700	T 24840.000	T 24760.000	94.730	95.070	93.240	93.620	94.960	103.100
σ		T 398.100	0.986	T 200.500	T 253.000	0.463	1.848	1.384	2.026	1.099	1.637
%RSD		T 1.607	0.970	T 0.807	T 1.022	0.488	1.944	1.484	2.164	1.157	1.588

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:25	95.740	96.930	114.600	97.980	7.200	8.786	391.300	97.550	-1.390	100.200
2	14:21:51	99.970	100.600	117.200	101.000	7.792	9.001	394.900	99.530	-3.656	101.300
3	14:22:18	98.130	95.300	112.500	97.480	7.913	7.376	406.300	102.100	-3.730	100.600
x		97.940	97.610	114.800	98.820	7.635	8.388	397.500	99.720	-2.925	100.700
σ		2.119	2.715	2.343	1.912	0.381	0.883	7.837	2.263	1.330	0.539
%RSD		2.163	2.782	2.041	1.935	4.995	10.530	1.972	2.269	45.460	0.535

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:25	99.4%	89.930	88.470	90.150	93.750	95.000	94.760	95.170	95.240	91.0%
2	14:21:51	99.6%	90.970	89.550	90.850	94.970	96.050	95.060	96.490	95.950	90.1%
3	14:22:18	95.2%	91.050	89.380	90.960	94.870	95.990	94.880	95.040	96.100	86.5%
x		98.1%	90.650	89.140	90.650	94.530	95.680	94.900	95.570	95.760	89.2%
σ		2.5%	0.626	0.578	0.440	0.677	0.593	0.154	0.805	0.461	2.4%
%RSD		2.6	0.691	0.648	0.485	0.717	0.620	0.162	0.842	0.481	2.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:21:25	97.390	97.140	93.880	93.730	129.600	126.500	92.0%	93.980	95.420	94.960
2	14:21:51	97.920	96.590	93.540	93.900	130.800	128.200	91.2%	94.810	97.120	96.730
3	14:22:18	98.380	97.320	92.260	92.450	129.600	130.100	87.4%	95.300	97.470	96.570
x		97.890	97.020	93.220	93.360	130.000	128.200	90.2%	94.700	96.670	96.090
σ		0.496	0.381	0.856	0.795	0.738	1.815	2.5%	0.665	1.097	0.978
%RSD		0.506	0.392	0.918	0.851	0.568	1.415	2.7	0.702	1.135	1.018

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:21:25	95.430	94.410	90.7%
2	14:21:51	96.710	95.790	91.0%
3	14:22:18	96.820	95.540	86.4%
x		96.320	95.250	89.4%
σ		0.771	0.738	2.5%
%RSD		0.800	0.774	2.8

UD10113-001SDDIS 04/25/2019 14:26:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:08	96.2%	100.100	103.700	100.800	48.180	T 3457.000	T 2080.000	2126.000	2161.000	110.800
2	14:27:34	99.2%	99.560	106.200	105.000	49.610	T 3447.000	T 2088.000	2092.000	2074.000	108.500
3	14:28:02	101.4%	98.800	108.300	104.100	54.020	T 3508.000	T 2107.000	2119.000	2082.000	107.100
x		98.9%	99.490	106.100	103.300	50.600	T 3471.000	T 2091.000	2112.000	2106.000	108.800
σ		2.6%	0.655	2.272	2.228	3.041	T 32.980	T 13.930	18.180	48.200	1.866
%RSD		2.7	0.658	2.142	2.157	6.008	T 0.950	T 0.666	0.861	2.289	1.716

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:08	T 3405.000	T 83960.000	T 1407.000	2186.000	1938.000	95.6%	102.800	102.000	101.300	2584.000
2	14:27:34	T 3424.000	T 85390.000	T 1382.000	2121.000	1882.000	96.9%	103.200	104.100	102.700	2109.000
3	14:28:02	T 3500.000	T 85470.000	T 1356.000	2130.000	1831.000	95.1%	102.300	103.700	100.200	2405.000
x		T 3443.000	T 84940.000	T 1382.000	2145.000	1884.000	95.9%	102.800	103.300	101.400	2366.000
σ		T 50.080	T 853.600	T 25.680	35.720	53.150	0.9%	0.468	1.137	1.248	240.000
%RSD		T 1.455	T 1.005	T 1.859	1.665	2.822	1.0	0.455	1.101	1.231	10.140

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:08	T 25030.000	107.900	T 24820.000	T 24840.000	100.200	101.400	98.530	98.080	100.600	107.600
2	14:27:34	T 23910.000	106.600	T 25060.000	T 24630.000	99.370	100.100	99.630	97.390	100.700	108.200
3	14:28:02	T 24680.000	105.800	T 24550.000	T 24370.000	100.500	100.700	98.990	99.760	99.760	103.100
x		T 24540.000	106.800	T 24810.000	T 24610.000	100.000	100.700	99.050	98.410	100.400	106.300
σ		T 575.700	1.062	T 253.700	T 233.900	0.581	0.647	0.551	1.218	0.519	2.799
%RSD		T 2.346	0.995	T 1.022	T 0.950	0.581	0.642	0.556	1.237	0.518	2.633

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:08	104.000	102.500	121.800	102.800	7.770	7.391	411.100	102.400	-4.118	106.100
2	14:27:34	105.500	103.600	118.600	101.100	8.299	8.401	405.800	100.700	-2.083	105.900
3	14:28:02	101.100	100.100	118.100	103.600	7.988	9.250	405.400	100.400	-0.679	105.200
x		103.500	102.100	119.500	102.500	8.019	8.347	407.400	101.200	-2.293	105.700
σ		2.220	1.751	2.031	1.283	0.266	0.930	3.180	1.089	1.729	0.473
%RSD		2.144	1.716	1.700	1.252	3.315	11.150	0.781	1.076	75.410	0.448

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:08	98.1%	95.190	93.400	95.940	95.360	99.670	99.170	99.900	100.800	89.7%
2	14:27:34	98.9%	95.180	92.760	96.270	97.490	98.930	99.170	100.600	99.780	90.7%
3	14:28:02	96.2%	95.440	93.360	94.950	95.780	99.240	98.770	97.710	99.350	88.6%
x		97.7%	95.270	93.170	95.720	96.210	99.280	99.040	99.400	99.960	89.7%
σ		1.4%	0.147	0.358	0.683	1.130	0.371	0.229	1.502	0.721	1.1%
%RSD		1.4	0.155	0.385	0.714	1.174	0.374	0.232	1.511	0.721	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:27:08	103.000	101.100	100.300	100.200	133.300	133.900	90.9%	98.770	100.700	101.200
2	14:27:34	103.200	100.800	100.100	101.600	132.900	132.800	91.3%	99.300	101.900	101.400
3	14:28:02	100.600	99.870	97.100	101.000	129.800	130.700	87.6%	100.800	102.500	102.000
x		102.300	100.600	99.160	100.900	132.000	132.500	89.9%	99.610	101.700	101.600
σ		1.440	0.628	1.789	0.745	1.903	1.592	2.0%	1.032	0.933	0.406
%RSD		1.409	0.624	1.804	0.738	1.441	1.202	2.2	1.036	0.917	0.399

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:27:08	100.700	100.100	90.3%
2	14:27:34	101.400	100.400	90.6%
3	14:28:02	101.300	100.600	87.5%
x		101.100	100.400	89.5%
σ		0.348	0.245	1.7%
%RSD		0.344	0.244	1.9

UD10113-002DIS 04/25/2019 14:32:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:52	99.8%	0.089	5.793	5.774	34.980	T 2596.000	609.700	587.800	591.200	86.100
2	14:33:21	98.2%	0.056	5.911	6.012	34.950	T 2555.000	T 579.000	575.900	577.900	85.270
3	14:33:48	101.4%	0.112	7.087	6.368	39.810	T 2702.000	T 593.800	575.000	580.800	84.870
x		99.8%	0.085	6.264	6.051	36.580	T 2618.000	T 594.200	579.600	583.300	85.410
σ		1.6%	0.028	0.715	0.299	2.797	T 75.980	T 15.310	7.113	6.976	0.628
%RSD		1.6	33.110	11.420	4.944	7.645	T 2.903	T 2.577	1.227	1.196	0.735
Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:52	T 2445.000	T 86060.000	130.900	101.400	121.100	96.0%	0.064	-0.031	0.343	1837.000
2	14:33:21	T 2298.000	T 83430.000	132.700	105.800	121.100	97.4%	0.057	-0.056	0.274	1677.000
3	14:33:48	T 2454.000	T 86060.000	133.300	115.400	117.000	94.4%	0.112	-0.093	0.364	2046.000
x		T 2399.000	T 85190.000	132.300	107.500	119.700	95.9%	0.078	-0.060	0.327	1853.000
σ		T 87.190	T 1516.000	1.265	7.132	2.347	1.5%	0.030	0.031	0.047	185.500
%RSD		T 3.635	T 1.779	0.956	6.633	1.961	1.5	38.440	51.730	14.280	10.010
Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:52	18.770	5.260	23.840	3.354	0.311	0.399	0.306	0.184	0.206	3.228
2	14:33:21	19.190	5.390	20.560	-3.039	0.320	0.483	0.233	0.166	0.282	3.265
3	14:33:48	19.460	5.260	23.050	4.650	0.334	0.495	0.310	0.165	0.200	3.415
x		19.140	5.303	22.480	1.655	0.322	0.459	0.283	0.172	0.229	3.303
σ		0.349	0.076	1.709	4.117	0.012	0.052	0.043	0.011	0.046	0.099
%RSD		1.823	1.424	7.602	248.800	3.575	11.430	15.270	6.215	19.960	3.011
Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:52	3.841	3.618	0.007	0.749	12.340	12.990	3.108	0.818	-2.822	2.504
2	14:33:21	3.448	3.473	0.053	1.340	12.560	12.830	6.295	1.673	-4.943	2.496
3	14:33:48	3.498	3.828	0.310	0.470	11.300	11.900	5.491	1.471	-4.529	2.370
x		3.596	3.640	0.124	0.853	12.060	12.570	4.965	1.321	-4.098	2.457
σ		0.214	0.179	0.163	0.444	0.673	0.589	1.657	0.447	1.124	0.075
%RSD		5.949	4.908	132.300	52.080	5.582	4.681	33.380	33.820	27.430	3.066
Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:52	93.3%	0.064	0.081	0.017	-0.556	0.013	0.013	0.016	0.015	90.7%
2	14:33:21	95.2%	0.065	0.066	0.065	0.604	0.011	0.010	0.012	0.032	90.7%
3	14:33:48	91.9%	0.051	0.083	0.039	-0.682	0.005	0.012	0.026	0.020	87.6%
x		93.5%	0.060	0.076	0.040	-0.212	0.010	0.012	0.018	0.022	89.7%
σ		1.7%	0.008	0.009	0.024	0.709	0.004	0.002	0.007	0.009	1.8%
%RSD		1.8	13.160	12.410	59.690	335.100	43.880	13.420	40.160	38.100	2.0
Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:32:52	0.258	0.403	0.337	0.381	12.890	12.600	89.2%	0.013	0.008	0.385
2	14:33:21	0.297	0.391	0.395	0.370	12.970	13.100	90.9%	0.021	0.022	0.384
3	14:33:48	0.291	0.451	0.370	0.374	13.060	13.300	88.5%	0.022	0.010	0.343
x		0.282	0.415	0.367	0.375	12.970	13.000	89.5%	0.019	0.013	0.371
σ		0.021	0.032	0.029	0.005	0.083	0.362	1.2%	0.005	0.007	0.024
%RSD		7.484	7.637	7.871	1.435	0.642	2.787	1.4	26.050	54.800	6.433
Run	Time	207Pb	208Pb	209Bi							
		ppb	ppb	ppb							
1	14:32:52	0.334	0.357	88.9%							
2	14:33:21	0.360	0.367	91.5%							
3	14:33:48	0.376	0.357	88.2%							
x		0.357	0.360	89.5%							
σ		0.021	0.005	1.7%							
%RSD		5.923	1.504	1.9							

UD10113-003DIS 04/25/2019 14:38:10

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:37	94.3%	0.011	102.300	102.600	130.700	┬71840.000	┬12720.000	┬12570.000	┬12560.000	1.827
2	14:39:05	96.1%	0.020	98.630	101.800	129.400	┬71630.000	┬12270.000	┬12130.000	┬12230.000	1.803
3	14:39:32	97.7%	0.016	95.250	100.200	130.700	┬71160.000	┬12320.000	┬12330.000	┬11970.000	1.720
x		96.0%	0.016	98.730	101.500	130.300	┬71540.000	┬12440.000	┬12340.000	┬12250.000	1.783
σ		1.7%	0.004	3.525	1.181	0.787	┬346.600	┬244.900	┬219.400	┬299.000	0.056
%RSD		1.8	28.020	3.571	1.163	0.604	┬0.485	┬1.970	┬1.777	┬2.441	3.153

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:37	┬1196.000	┬91450.000	┬17380.000	55740.000	┬51900.000	93.8%	-0.198	-0.026	0.427	1916.000
2	14:39:05	┬1207.000	┬93120.000	┬17150.000	55570.000	┬51140.000	92.3%	-0.054	-0.163	0.399	2219.000
3	14:39:32	┬1188.000	┬93180.000	┬17180.000	55500.000	┬51380.000	94.5%	-0.200	0.107	0.346	2104.000
x		┬1197.000	┬92590.000	┬17240.000	55600.000	┬51470.000	93.6%	-0.150	-0.027	0.391	2080.000
σ		┬9.206	┬981.400	┬123.500	123.900	┬388.400	1.1%	0.083	0.135	0.041	153.200
%RSD		┬0.769	┬1.060	┬0.717	0.223	┬0.755	1.2	55.430	497.200	10.520	7.368

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:37	┬33820.000	32.810	┬34240.000	┬34430.000	0.112	0.723	0.071	0.284	0.215	1.757
2	14:39:05	┬33610.000	32.080	┬33260.000	┬33550.000	0.107	0.816	0.048	0.260	0.171	1.680
3	14:39:32	┬33560.000	32.050	┬33490.000	┬33240.000	0.097	0.788	0.239	0.282	0.159	1.722
x		┬33660.000	32.320	┬33660.000	┬33740.000	0.105	0.776	0.119	0.275	0.181	1.720
σ		┬135.600	0.431	┬513.100	┬618.700	0.008	0.048	0.104	0.013	0.030	0.039
%RSD		┬0.403	1.334	┬1.524	┬1.834	7.291	6.170	87.370	4.803	16.350	2.242

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:37	6.042	5.570	6.205	0.756	223.300	222.800	7.679	1.708	-2.474	190.200
2	14:39:05	6.275	4.920	6.590	0.873	221.600	222.900	5.913	1.363	-4.496	189.800
3	14:39:32	5.661	5.014	6.180	1.349	223.200	222.400	6.252	1.407	-4.119	190.800
x		5.993	5.168	6.325	0.993	222.700	222.700	6.615	1.493	-3.696	190.300
σ		0.310	0.351	0.230	0.314	0.980	0.282	0.937	0.188	1.075	0.461
%RSD		5.171	6.797	3.632	31.610	0.440	0.127	14.170	12.580	29.090	0.242

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:37	89.1%	0.047	0.038	0.040	6.825	-0.001	0.003	0.013	-0.014	85.3%
2	14:39:05	88.2%	0.051	0.087	0.035	10.210	0.000	0.004	-0.001	-0.001	83.3%
3	14:39:32	88.6%	0.017	0.023	0.026	9.560	0.000	0.004	0.004	-0.008	84.9%
x		88.7%	0.038	0.049	0.034	8.863	-0.000	0.004	0.005	-0.008	84.5%
σ		0.4%	0.019	0.033	0.007	1.795	0.001	0.001	0.007	0.006	1.1%
%RSD		0.5	48.120	67.500	22.150	20.250	397.700	16.070	129.300	79.580	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:38:37	1.341	1.909	0.163	0.137	85.270	83.770	86.9%	-0.001	-0.007	0.003
2	14:39:05	1.347	1.866	0.149	0.152	84.610	84.610	85.0%	0.000	-0.013	-0.003
3	14:39:32	1.303	1.997	0.124	0.148	84.530	84.480	87.0%	-0.006	-0.015	0.008
x		1.330	1.924	0.145	0.146	84.800	84.290	86.3%	-0.002	-0.012	0.002
σ		0.024	0.067	0.020	0.007	0.403	0.453	1.1%	0.004	0.004	0.005
%RSD		1.786	3.488	13.610	5.113	0.475	0.537	1.3	151.100	38.320	234.600

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:38:37	0.005	0.001	83.7%
2	14:39:05	0.007	0.001	80.2%
3	14:39:32	0.010	0.006	82.7%
x		0.007	0.003	82.2%
σ		0.003	0.003	1.8%
%RSD		38.550	101.400	2.2

UD10113-004DIS 04/25/2019 14:43:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:23	98.0%	0.023	10.110	9.945	52.690	T2986.000	T2302.000	2293.000	2292.000	2.005
2	14:44:51	100.6%	0.026	9.935	10.530	55.020	T3011.000	T2327.000	2318.000	2316.000	2.015
3	14:45:18	99.2%	0.011	10.210	10.310	55.000	T2980.000	T2244.000	2302.000	2330.000	2.041
x		99.3%	0.020	10.090	10.260	54.240	T2992.000	T2291.000	2304.000	2313.000	2.020
σ		1.3%	0.008	0.138	0.295	1.344	T16.380	T42.770	12.630	19.200	0.019
%RSD		1.3	38.300	1.366	2.873	2.478	T0.547	T1.866	0.548	0.830	0.920

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:23	T1329.000	T85160.000	563.300	1586.000	1451.000	95.6%	-0.241	-0.078	0.381	1695.000
2	14:44:51	T1312.000	T85190.000	560.300	1585.000	1444.000	97.5%	-0.113	0.083	0.277	1537.000
3	14:45:18	T1298.000	T85890.000	575.300	1600.000	1455.000	97.6%	-0.114	-0.102	0.302	1769.000
x		T1313.000	T85410.000	566.300	1590.000	1450.000	96.9%	-0.156	-0.032	0.320	1667.000
σ		T15.510	T414.600	7.924	8.527	5.782	1.1%	0.074	0.101	0.054	118.300
%RSD		T1.182	T0.485	1.399	0.536	0.399	1.2	47.120	309.600	16.940	7.097

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:23	T83170.000	40.760	T81730.000	T82940.000	0.120	0.173	-0.255	0.005	0.083	4.550
2	14:44:51	T82380.000	40.760	T81510.000	T81890.000	0.122	0.171	-0.271	-0.013	0.061	4.462
3	14:45:18	T82130.000	40.490	T81460.000	T82370.000	0.142	0.202	-0.303	-0.013	0.038	4.698
x		T82560.000	40.670	T81570.000	T82400.000	0.128	0.182	-0.276	-0.007	0.061	4.570
σ		T543.400	0.158	T142.800	T524.100	0.012	0.017	0.024	0.010	0.023	0.120
%RSD		T0.658	0.389	T0.175	T0.636	9.581	9.594	8.848	143.400	37.480	2.621

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:23	5.667	5.591	17.280	0.277	24.820	24.180	3.402	1.017	-6.579	15.350
2	14:44:51	5.601	5.625	17.300	0.408	23.470	24.780	2.688	0.793	-3.980	15.330
3	14:45:18	5.039	5.652	17.120	0.730	23.260	26.160	1.171	0.424	-3.964	15.480
x		5.436	5.622	17.230	0.472	23.850	25.040	2.420	0.745	-4.841	15.380
σ		0.345	0.031	0.099	0.233	0.846	1.016	1.139	0.299	1.505	0.081
%RSD		6.348	0.544	0.573	49.480	3.547	4.056	47.080	40.150	31.090	0.530

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:23	97.2%	0.031	0.037	0.038	0.948	-0.001	-0.001	0.003	-0.010	91.4%
2	14:44:51	98.7%	0.030	0.036	0.016	0.637	-0.001	0.000	-0.005	-0.003	92.2%
3	14:45:18	98.4%	0.016	0.041	0.025	-0.673	0.002	0.000	0.003	-0.003	91.8%
x		98.1%	0.026	0.038	0.026	0.304	-0.000	-0.000	0.000	-0.005	91.8%
σ		0.8%	0.008	0.002	0.011	0.861	0.002	0.001	0.005	0.004	0.4%
%RSD		0.8	31.430	6.302	41.320	283.100	2643.000	229.500	1516.000	76.430	0.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:44:23	0.242	0.439	0.210	0.200	29.730	30.050	91.8%	-0.004	-0.013	0.005
2	14:44:51	0.349	0.441	0.202	0.252	30.630	30.550	93.4%	-0.006	-0.015	-0.002
3	14:45:18	0.271	0.384	0.216	0.219	30.560	30.590	93.4%	0.004	-0.014	-0.002
x		0.287	0.421	0.209	0.224	30.310	30.400	92.9%	-0.002	-0.014	0.000
σ		0.056	0.032	0.007	0.026	0.500	0.303	0.9%	0.005	0.001	0.004
%RSD		19.380	7.647	3.462	11.720	1.649	0.999	1.0	224.900	9.658	2370.000

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:44:23	-0.003	0.002	90.7%
2	14:44:51	-0.003	0.001	92.9%
3	14:45:18	0.010	0.001	93.5%
x		0.001	0.001	92.3%
σ		0.008	0.000	1.5%
%RSD		591.100	33.650	1.6

UD10113-005DIS 04/25/2019 14:49:42

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:09	105.2%	0.103	5.059	5.530	18.600	T 912.200	T 858.000	869.500	871.800	36.570
2	14:50:37	99.4%	0.115	5.584	5.678	32.180	T 901.600	T 874.300	878.500	868.900	37.890
3	14:51:04	102.3%	0.139	5.542	5.689	28.410	T 933.100	T 867.600	878.700	890.700	37.200
x		102.3%	0.119	5.395	5.632	26.400	T 915.600	T 866.600	875.500	877.100	37.220
σ		2.9%	0.018	0.291	0.089	7.012	T 16.020	T 8.153	5.262	11.860	0.661
%RSD		2.9	15.540	5.402	1.582	26.560	T 1.750	T 0.941	0.601	1.352	1.775

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:09	T 2264.000	T 86600.000	401.900	491.700	442.900	95.0%	0.128	-0.019	0.406	1934.000
2	14:50:37	T 2164.000	T 84340.000	427.800	478.500	468.900	97.4%	0.123	0.029	0.367	1563.000
3	14:51:04	T 2235.000	T 88380.000	422.700	516.400	443.700	94.9%	-0.046	-0.090	0.407	1924.000
x		T 2221.000	T 86440.000	417.500	495.600	451.900	95.8%	0.068	-0.027	0.393	1807.000
σ		T 51.200	T 2026.000	13.700	19.230	14.790	1.4%	0.099	0.060	0.023	211.100
%RSD		T 2.305	T 2.343	3.282	3.881	3.273	1.5	144.900	222.600	5.786	11.680

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:09	34.170	16.020	37.730	23.880	0.453	0.356	0.499	0.163	0.198	2.908
2	14:50:37	28.480	16.300	31.650	9.898	0.425	0.294	0.231	0.142	0.202	3.142
3	14:51:04	28.130	16.590	31.370	16.340	0.389	0.382	0.058	0.142	0.168	3.154
x		30.260	16.310	33.590	16.710	0.422	0.344	0.263	0.149	0.189	3.068
σ		3.391	0.283	3.593	6.995	0.032	0.045	0.222	0.012	0.018	0.139
%RSD		11.200	1.735	10.700	41.870	7.540	13.180	84.700	8.176	9.740	4.525

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:09	5.069	4.282	0.346	-0.212	4.685	5.237	0.347	0.168	-2.340	6.435
2	14:50:37	4.391	4.073	-0.078	0.433	4.194	5.706	2.018	0.592	-3.696	6.532
3	14:51:04	4.132	4.199	0.024	0.201	3.536	4.320	2.292	0.648	-2.652	6.502
x		4.531	4.185	0.097	0.141	4.138	5.088	1.553	0.469	-2.896	6.490
σ		0.484	0.105	0.221	0.327	0.576	0.705	1.053	0.263	0.710	0.050
%RSD		10.680	2.514	227.600	232.000	13.930	13.850	67.830	55.990	24.520	0.764

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:09	92.4%	0.004	0.012	0.010	-0.449	0.001	0.003	0.012	0.020	89.6%
2	14:50:37	97.2%	-0.006	0.024	-0.011	-0.038	0.003	0.000	0.032	0.022	94.0%
3	14:51:04	96.5%	0.008	0.015	-0.012	0.144	0.001	0.002	0.033	0.021	92.2%
x		95.4%	0.002	0.017	-0.004	-0.114	0.002	0.002	0.026	0.021	92.0%
σ		2.6%	0.007	0.006	0.012	0.303	0.001	0.002	0.012	0.001	2.2%
%RSD		2.7	317.700	34.950	295.300	265.300	84.750	89.350	45.670	4.373	2.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:50:09	0.285	0.367	0.305	0.376	32.400	30.580	88.5%	-0.007	-0.013	0.113
2	14:50:37	0.291	0.433	0.300	0.367	32.160	30.960	93.4%	-0.002	-0.010	0.130
3	14:51:04	0.300	0.351	0.338	0.329	31.850	31.100	91.8%	-0.003	-0.013	0.113
x		0.292	0.384	0.315	0.357	32.140	30.880	91.2%	-0.004	-0.012	0.119
σ		0.008	0.044	0.021	0.025	0.276	0.270	2.5%	0.002	0.002	0.010
%RSD		2.749	11.390	6.581	6.988	0.858	0.876	2.7	53.890	12.830	8.346

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	14:50:09	0.121	0.110	88.4%
2	14:50:37	0.144	0.125	94.9%
3	14:51:04	0.118	0.108	92.3%
x		0.128	0.114	91.8%
σ		0.014	0.009	3.3%
%RSD		11.290	8.264	3.6

UD10113-008DIS 04/25/2019 14:55:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:56	98.4%	0.077	7.232	7.128	30.190	T 4015.000	326.300	317.700	308.800	25.920
2	14:56:23	102.1%	0.032	6.113	6.729	23.300	T 3922.000	310.400	305.900	305.200	26.060
3	14:56:50	101.0%	0.037	6.589	6.770	24.570	T 4022.000	312.800	303.200	305.400	25.950
x		100.5%	0.049	6.645	6.876	26.020	T 3986.000	316.500	308.900	306.500	25.980
σ		1.9%	0.025	0.561	0.220	3.667	T 55.790	8.540	7.721	2.030	0.073
%RSD		1.9	50.750	8.449	3.192	14.100	T 1.400	2.698	2.500	0.662	0.280
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:56	T 2034.000	T 86700.000	260.300	250.900	227.200	96.3%	-0.023	-0.032	0.292	1679.000
2	14:56:23	T 2057.000	T 85710.000	252.700	212.500	223.700	97.8%	-0.049	-0.005	0.306	1813.000
3	14:56:50	T 2128.000	T 87150.000	253.500	220.600	222.100	95.9%	0.026	0.109	0.271	1820.000
x		T 2073.000	T 86520.000	255.500	228.000	224.300	96.7%	-0.015	0.024	0.290	1771.000
σ		T 48.620	T 733.300	4.166	20.240	2.609	1.0%	0.038	0.075	0.018	79.310
%RSD		T 2.346	T 0.848	1.631	8.878	1.163	1.0	249.900	316.200	6.156	4.479
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:56	8.270	3.297	10.400	-10.510	0.119	0.191	0.225	1.499	1.554	2.615
2	14:56:23	8.944	3.186	10.830	-9.202	0.092	0.148	-0.085	1.422	1.549	2.457
3	14:56:50	8.430	3.392	13.060	-8.319	0.134	0.197	0.082	1.478	1.449	2.476
x		8.548	3.292	11.430	-9.343	0.115	0.179	0.074	1.466	1.517	2.516
σ		0.352	0.104	1.428	1.101	0.022	0.027	0.155	0.040	0.059	0.086
%RSD		4.116	3.145	12.490	11.790	18.740	15.040	210.000	2.703	3.894	3.426
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:56	2.479	2.883	-0.496	18.280	11.360	11.750	70.850	16.920	-4.975	2.897
2	14:56:23	2.059	2.880	-0.412	16.600	10.590	11.700	81.750	19.460	-4.641	3.024
3	14:56:50	2.435	2.777	-0.326	17.230	11.600	11.290	75.870	18.000	-4.665	2.981
x		2.324	2.847	-0.411	17.370	11.180	11.580	76.150	18.130	-4.760	2.967
σ		0.231	0.060	0.085	0.851	0.526	0.251	5.457	1.273	0.186	0.065
%RSD		9.940	2.118	20.710	4.896	4.703	2.168	7.165	7.021	3.910	2.180
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:56	96.0%	0.014	0.016	0.017	0.464	0.004	0.002	0.016	-0.006	92.6%
2	14:56:23	93.3%	0.024	0.017	0.013	0.554	0.004	0.001	0.016	0.022	90.8%
3	14:56:50	94.0%	0.029	0.016	0.000	-0.771	-0.001	0.003	0.003	0.005	91.4%
x		94.4%	0.022	0.016	0.010	0.083	0.002	0.002	0.012	0.007	91.6%
σ		1.4%	0.008	0.001	0.009	0.740	0.003	0.001	0.007	0.014	0.9%
%RSD		1.5	33.900	3.293	85.440	896.100	126.800	47.780	62.100	205.600	1.0
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	14:55:56	0.301	0.368	0.151	0.174	9.265	9.514	92.6%	0.003	-0.010	0.045
2	14:56:23	0.264	0.464	0.181	0.206	10.040	9.849	90.9%	-0.004	-0.007	0.060
3	14:56:50	0.305	0.428	0.181	0.252	9.521	9.500	90.4%	0.002	-0.010	0.044
x		0.290	0.420	0.171	0.211	9.608	9.621	91.3%	0.000	-0.009	0.050
σ		0.023	0.049	0.017	0.039	0.394	0.197	1.2%	0.004	0.002	0.009
%RSD		7.849	11.570	10.080	18.520	4.105	2.050	1.3	19210.000	20.320	18.080
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	14:55:56	0.041	0.043	93.2%							
2	14:56:23	0.068	0.052	91.7%							
3	14:56:50	0.044	0.039	90.4%							
x		0.051	0.045	91.8%							
σ		0.015	0.007	1.4%							
%RSD		28.880	15.900	1.6							

UD10113-009DIS 04/25/2019 15:01:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:41	100.8%	0.064	6.906	6.491	20.810	T 3958.000	320.500	311.600	301.300	26.650
2	15:02:08	98.5%	0.090	6.401	6.662	24.130	T 4017.000	318.800	307.800	302.700	27.280
3	15:02:36	105.6%	0.026	5.989	6.306	15.640	T 4092.000	314.700	311.000	304.300	25.030
x		101.7%	0.060	6.432	6.486	20.190	T 4023.000	318.000	310.100	302.800	26.320
σ		3.6%	0.032	0.459	0.178	4.283	T 67.080	2.966	2.071	1.484	1.160
%RSD		3.5	53.960	7.142	2.742	21.210	T 1.668	0.933	0.668	0.490	4.406

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:41	T 2047.000	T 83660.000	253.900	223.400	229.600	98.8%	0.049	0.114	0.273	1636.000
2	15:02:08	T 2123.000	T 85970.000	261.100	216.100	228.400	97.0%	-0.093	0.080	0.268	1649.000
3	15:02:36	T 2103.000	T 85120.000	242.200	241.500	214.700	95.5%	-0.039	-0.009	0.292	1981.000
x		T 2091.000	T 84920.000	252.400	227.000	224.200	97.1%	-0.027	0.062	0.278	1755.000
σ		T 39.480	T 1172.000	9.587	13.090	8.269	1.6%	0.072	0.063	0.012	195.800
%RSD		T 1.888	T 1.381	3.798	5.769	3.687	1.7	262.500	103.100	4.437	11.150

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:41	7.202	3.379	11.630	-11.160	0.097	0.177	0.298	1.869	1.952	2.688
2	15:02:08	6.324	3.450	10.940	-14.670	0.087	0.152	-0.536	1.890	1.853	2.736
3	15:02:36	7.601	3.434	11.360	-7.725	0.106	0.126	0.098	1.837	1.897	2.776
x		7.042	3.421	11.310	-11.190	0.096	0.152	-0.047	1.865	1.900	2.733
σ		0.654	0.037	0.347	3.474	0.009	0.026	0.436	0.027	0.049	0.044
%RSD		9.279	1.083	3.070	31.060	9.799	16.820	933.200	1.421	2.599	1.620

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:41	2.539	2.947	-0.318	18.820	11.980	11.200	82.790	19.820	-4.540	3.059
2	15:02:08	2.343	2.826	-0.375	17.540	12.230	11.450	75.930	18.210	-5.522	3.031
3	15:02:36	2.499	2.728	-0.369	18.000	11.380	10.820	74.280	18.000	-6.008	2.980
x		2.460	2.834	-0.354	18.120	11.860	11.150	77.670	18.680	-5.356	3.023
σ		0.104	0.110	0.032	0.650	0.436	0.320	4.511	0.992	0.748	0.040
%RSD		4.215	3.870	8.934	3.587	3.678	2.871	5.808	5.312	13.960	1.326

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:41	94.8%	0.048	0.061	0.011	0.351	0.002	0.004	0.008	0.015	91.7%
2	15:02:08	95.1%	0.037	0.048	0.042	-0.539	-0.000	0.000	0.003	-0.005	91.6%
3	15:02:36	92.9%	0.044	0.035	0.034	0.032	-0.001	0.004	0.012	0.004	88.8%
x		94.3%	0.043	0.048	0.029	-0.052	0.000	0.003	0.008	0.005	90.7%
σ		1.2%	0.006	0.013	0.016	0.451	0.001	0.002	0.005	0.010	1.6%
%RSD		1.2	13.330	27.110	55.580	863.400	509.600	84.010	59.640	220.400	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:01:41	0.333	0.448	0.191	0.182	9.824	9.577	91.0%	0.004	-0.011	0.063
2	15:02:08	0.335	0.397	0.176	0.184	9.467	9.289	91.7%	-0.007	-0.010	0.068
3	15:02:36	0.291	0.422	0.145	0.182	10.190	9.818	88.4%	-0.004	-0.011	0.049
x		0.320	0.423	0.171	0.183	9.825	9.561	90.4%	-0.002	-0.011	0.060
σ		0.025	0.025	0.024	0.001	0.359	0.265	1.7%	0.006	0.001	0.010
%RSD		7.744	5.998	13.920	0.694	3.656	2.774	1.9	255.300	6.716	16.200

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:01:41	0.068	0.063	92.4%
2	15:02:08	0.064	0.068	92.2%
3	15:02:36	0.064	0.059	88.9%
x		0.065	0.063	91.2%
σ		0.002	0.005	2.0%
%RSD		3.220	7.111	2.2

UD10113-010DIS 04/25/2019 15:07:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:29	97.2%	0.030	6.401	6.713	25.790	T 1566.000	T 688.300	699.400	695.000	29.690
2	15:07:56	103.2%	0.029	6.361	7.323	27.740	T 1648.000	T 695.400	690.500	680.100	28.090
3	15:08:23	98.4%	0.016	6.866	7.179	31.610	T 1591.000	T 689.200	700.400	707.500	28.850
x		99.6%	0.025	6.543	7.072	28.380	T 1602.000	T 691.000	696.800	694.200	28.880
σ		3.2%	0.008	0.281	0.319	2.965	T 41.990	T 3.862	5.461	13.700	0.802
%RSD		3.2	30.490	4.292	4.508	10.450	T 2.622	T 0.559	0.784	1.973	2.776
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:29	T 2429.000	T 85660.000	188.200	895.800	856.100	98.4%	0.098	-0.064	0.200	1745.000
2	15:07:56	T 2561.000	T 88870.000	171.000	934.700	788.200	94.4%	0.209	-0.114	0.273	2136.000
3	15:08:23	T 2467.000	T 87080.000	179.100	876.100	821.600	96.0%	0.055	-0.162	0.218	1822.000
x		T 2485.000	T 87200.000	179.400	902.200	822.000	96.3%	0.121	-0.113	0.231	1901.000
σ		T 67.970	T 1606.000	8.580	29.850	33.980	2.0%	0.080	0.049	0.038	207.100
%RSD		T 2.735	T 1.841	4.782	3.308	4.134	2.1	66.200	43.080	16.460	10.890
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:29	0.583	6.809	4.018	-14.030	0.110	0.081	-0.264	0.137	0.211	2.844
2	15:07:56	3.398	6.877	5.934	-5.893	0.107	0.057	-0.006	0.161	0.211	2.862
3	15:08:23	1.479	6.874	1.655	-7.904	0.095	0.090	-0.258	0.102	0.242	2.704
x		1.820	6.853	3.869	-9.275	0.104	0.076	-0.176	0.133	0.221	2.804
σ		1.438	0.038	2.143	4.236	0.008	0.017	0.147	0.030	0.018	0.086
%RSD		79.030	0.561	55.400	45.670	7.305	22.000	83.590	22.280	8.128	3.078
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:29	3.472	2.988	0.158	0.850	7.107	6.725	1.223	0.455	-4.491	11.660
2	15:07:56	3.558	2.968	0.036	0.790	6.467	7.176	-0.603	0.016	-4.888	11.600
3	15:08:23	2.845	3.215	-0.022	0.395	6.771	7.099	-0.378	0.010	-2.528	11.740
x		3.292	3.057	0.058	0.678	6.782	7.000	0.081	0.160	-3.969	11.670
σ		0.389	0.137	0.092	0.247	0.320	0.241	0.996	0.255	1.263	0.066
%RSD		11.830	4.493	159.500	36.450	4.723	3.444	1236.000	159.100	31.830	0.570
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:29	94.0%	0.064	0.094	0.085	-0.535	0.000	-0.001	0.003	0.014	89.6%
2	15:07:56	91.0%	0.084	0.070	0.068	-0.598	-0.001	0.000	0.003	-0.009	87.2%
3	15:08:23	94.7%	0.046	0.112	0.062	-0.402	-0.003	0.004	0.016	0.010	90.6%
x		93.2%	0.064	0.092	0.071	-0.512	-0.001	0.001	0.008	0.005	89.1%
σ		1.9%	0.019	0.021	0.012	0.100	0.001	0.003	0.007	0.013	1.8%
%RSD		2.1	29.540	23.000	16.330	19.520	117.500	237.900	98.100	260.200	2.0
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:07:29	0.289	0.436	0.274	0.263	11.860	11.350	88.6%	-0.012	-0.014	0.105
2	15:07:56	0.315	0.440	0.320	0.289	11.370	11.730	86.4%	-0.004	-0.015	0.057
3	15:08:23	0.273	0.460	0.246	0.242	11.790	11.300	90.4%	-0.009	-0.013	0.071
x		0.292	0.445	0.280	0.264	11.670	11.460	88.5%	-0.008	-0.014	0.078
σ		0.021	0.013	0.037	0.024	0.264	0.239	2.0%	0.004	0.001	0.025
%RSD		7.161	2.902	13.260	8.921	2.264	2.088	2.3	49.650	4.162	31.870
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	15:07:29	0.052	0.072	90.4%							
2	15:07:56	0.068	0.067	86.8%							
3	15:08:23	0.058	0.063	90.3%							
x		0.059	0.067	89.1%							
σ		0.008	0.005	2.0%							
%RSD		13.760	7.119	2.3							

CCV MW10994 04/25/2019 15:12:49 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:17	89.8%	300.000	285.000	290.400	22.740	T61710.000	T60340.000	T59950.000	T59730.000	306.300
2	15:13:44	90.7%	295.200	294.700	297.600	20.750	T62540.000	T59360.000	T59790.000	T60070.000	295.100
3	15:14:11	92.8%	290.100	292.700	293.300	21.070	T62580.000	T59720.000	T59510.000	T59490.000	290.200
x		91.1%	98.363%	96.923%	97.932%	21.520	T103.794%	T59810.000	T59750.000	T99.605%	99.079%
σ		1.6%	n/a	n/a	n/a	1.070	Tn/a	T495.300	T226.000	Tn/a	n/a
%RSD		1.7	1.683	1.764	1.228	4.969	T0.793	T0.828	T0.378	T0.487	2.780

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:17	T3109.000	877.200	T59210.000	61580.000	T58760.000	90.7%	308.300	318.600	301.400	1026.000
2	15:13:44	T3196.000	885.200	T59660.000	61880.000	T57630.000	89.4%	305.600	316.400	301.500	718.700
3	15:14:11	T3241.000	842.000	T57940.000	61750.000	T56230.000	89.0%	309.400	318.800	301.900	219.400
x		T106.071%	868.100	T98.228%	61740.000	T95.901%	89.7%	102.584%	105.983%	100.531%	654.800
σ		Tn/a	22.950	Tn/a	150.700	Tn/a	0.9%	n/a	n/a	n/a	407.200
%RSD		T2.102	2.644	T1.508	0.244	T2.198	1.0	0.632	0.420	0.085	62.190

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:17	T61300.000	295.800	T61600.000	T60180.000	291.600	289.200	286.900	280.900	273.500	304.200
2	15:13:44	T62170.000	294.000	T61430.000	T60130.000	291.100	286.200	288.300	280.200	273.600	300.300
3	15:14:11	T61170.000	295.500	T61740.000	T60220.000	293.100	289.600	288.300	283.600	274.500	295.800
x		T61550.000	98.372%	T61590.000	T100.295%	97.312%	96.107%	287.800	281.600	91.283%	100.033%
σ		T542.600	n/a	T155.600	Tn/a	n/a	n/a	0.824	1.787	n/a	n/a
%RSD		T0.882	0.328	T0.253	T0.070	0.371	0.646	0.286	0.635	0.198	1.408

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:17	282.700	282.500	283.200	301.500	1.576	1.204	1254.000	304.100	-1.800	300.400
2	15:13:44	279.700	278.600	278.700	298.100	1.232	1.126	1214.000	295.500	-3.817	300.500
3	15:14:11	277.900	279.400	275.700	299.500	2.204	0.917	1220.000	295.100	-2.445	304.100
x		280.100	280.200	93.066%	299.700	1.671	1.082	1229.000	99.408%	-2.687	100.566%
σ		2.451	2.063	n/a	1.709	0.493	0.148	21.690	n/a	1.030	n/a
%RSD		0.875	0.736	1.337	0.570	29.510	13.700	1.765	1.705	38.340	0.699

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:17	84.3%	309.100	306.000	307.800	301.600	291.800	289.400	296.700	296.200	80.3%
2	15:13:44	81.9%	310.400	309.600	309.700	293.100	292.100	291.600	295.200	297.200	77.9%
3	15:14:11	81.8%	311.700	311.400	311.900	303.800	293.100	291.400	295.000	294.400	78.2%
x		82.7%	103.471%	102.993%	309.800	299.500	97.442%	290.800	295.600	98.654%	78.8%
σ		1.4%	n/a	n/a	2.031	5.674	n/a	1.223	0.930	n/a	1.3%
%RSD		1.7	0.422	0.877	0.656	1.894	0.230	0.421	0.314	0.475	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:13:17	307.100	305.600	309.500	302.600	308.600	306.500	82.6%	292.500	301.000	292.900
2	15:13:44	305.800	305.100	303.400	300.800	309.700	307.100	79.8%	292.900	301.200	293.400
3	15:14:11	307.100	306.700	304.600	300.100	309.300	305.600	80.3%	293.800	301.700	292.400
x		102.223%	101.930%	305.800	100.389%	103.070%	102.140%	80.9%	293.000	100.439%	97.632%
σ		n/a	n/a	3.221	n/a	n/a	n/a	1.5%	0.682	n/a	n/a
%RSD		0.254	0.275	1.053	0.424	0.192	0.246	1.8	0.233	0.126	0.177

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:13:17	292.900	291.500	78.7%
2	15:13:44	292.300	291.300	76.0%
3	15:14:11	292.500	292.600	77.1%
x		97.519%	97.259%	77.3%
σ		n/a	n/a	1.4%
%RSD		0.108	0.238	1.8

CCB IM9370-01 04/25/2019 15:18:38 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	96.6%	0.020	1.996	1.841	3.097	10.970	5.387	6.002	5.381	0.001
2	15:19:32	97.9%	0.048	1.880	1.631	3.275	8.175	7.509	7.477	7.587	0.021
3	15:19:58	96.0%	0.013	1.789	1.808	9.736	5.023	4.195	4.213	4.264	-0.009
x		96.8%	0.027	1.888	1.760	5.369	8.056	5.697	5.897	5.744	0.005
σ		1.0%	0.019	0.104	0.113	3.782	2.976	1.678	1.634	1.691	0.015
%RSD		1.0	69.180	5.504	6.407	70.440	36.940	29.460	27.710	29.430	336.500

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	14.130	451.800	4.658	5.125	5.451	92.7%	-0.383	0.067	0.052	-3.225
2	15:19:32	13.950	438.600	1.136	5.502	6.286	94.3%	-0.404	0.066	0.059	-7.553
3	15:19:58	13.530	449.600	-1.940	8.377	3.899	95.4%	-0.375	0.047	0.028	-3.654
x		13.870	446.700	1.285	6.335	5.212	94.1%	-0.387	0.060	0.046	-4.811
σ		0.307	7.077	3.301	1.778	1.211	1.3%	0.015	0.011	0.016	2.385
%RSD		2.213	1.585	257.000	28.070	23.230	1.4	3.786	18.730	35.520	49.570

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	5.068	-0.053	12.060	-5.550	0.003	-0.022	0.314	-0.065	0.013	0.024
2	15:19:32	6.269	-0.067	10.500	-6.497	-0.006	-0.029	-0.085	-0.050	0.011	0.023
3	15:19:58	1.013	-0.083	7.290	-13.240	0.004	-0.022	-0.312	-0.048	-0.005	0.002
x		4.117	-0.068	9.948	-8.428	0.000	-0.024	-0.028	-0.055	0.007	0.016
σ		2.754	0.015	2.431	4.193	0.005	0.004	0.317	0.009	0.010	0.013
%RSD		66.890	21.990	24.430	49.750	1488.000	15.700	1152.000	17.040	148.200	77.330

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	-0.358	-0.003	-0.023	0.223	0.172	1.159	0.188	0.158	-3.800	0.022
2	15:19:32	-0.215	-0.005	-0.075	0.700	0.068	-0.007	0.152	0.170	-5.158	0.038
3	15:19:58	-0.323	0.016	0.077	0.976	0.008	0.088	2.222	0.655	-3.916	0.016
x		-0.298	0.003	-0.007	0.633	0.083	0.413	0.854	0.328	-4.291	0.025
σ		0.075	0.012	0.077	0.381	0.083	0.647	1.185	0.283	0.753	0.011
%RSD		25.000	412.500	1073.000	60.130	100.500	156.700	138.700	86.500	17.540	45.410

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	84.3%	0.098	0.133	0.087	-0.400	0.023	0.032	0.051	0.035	83.4%
2	15:19:32	88.5%	0.107	0.126	0.108	-1.030	0.044	0.034	0.021	0.047	88.1%
3	15:19:58	91.7%	0.097	0.106	0.052	0.381	0.029	0.021	0.012	0.008	89.1%
x		88.1%	0.101	0.122	0.082	-0.350	0.032	0.029	0.028	0.030	86.8%
σ		3.7%	0.005	0.014	0.028	0.707	0.011	0.007	0.020	0.020	3.0%
%RSD		4.2	5.402	11.240	34.260	202.300	32.880	24.480	72.420	66.350	3.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:19:05	0.043	0.071	0.140	0.182	0.010	0.001	81.7%	0.022	0.022	0.046
2	15:19:32	0.051	0.079	0.175	0.157	-0.031	0.024	87.3%	0.036	0.024	0.028
3	15:19:58	0.040	0.050	0.149	0.119	-0.006	-0.016	88.5%	0.020	0.009	0.021
x		0.045	0.067	0.155	0.153	-0.009	0.003	85.8%	0.026	0.018	0.032
σ		0.006	0.015	0.018	0.032	0.021	0.020	3.6%	0.009	0.008	0.013
%RSD		12.920	22.240	11.570	20.870	224.800	675.700	4.2	33.710	44.640	39.690

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:19:05	0.026	0.025	82.8%
2	15:19:32	0.019	0.031	88.1%
3	15:19:58	0.024	0.018	89.4%
x		0.023	0.024	86.8%
σ		0.004	0.007	3.5%
%RSD		16.930	27.100	4.0

UD10113-011DIS 04/25/2019 15:24:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:49	100.5%	0.018	11.490	11.800	44.240	T4707.000	T1471.000	1496.000	1486.000	1.921
2	15:25:16	98.1%	0.036	11.130	11.560	50.620	T4712.000	T1495.000	1523.000	1545.000	1.979
3	15:25:43	100.5%	0.009	11.850	11.680	46.940	T4630.000	T1465.000	1502.000	1492.000	1.935
x		99.7%	0.021	11.490	11.680	47.270	T4683.000	T1477.000	1507.000	1508.000	1.945
σ		1.4%	0.014	0.363	0.123	3.202	T45.650	T15.860	14.070	32.320	0.030
%RSD		1.4	67.070	3.163	1.051	6.774	T0.975	T1.074	0.934	2.143	1.552

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:49	688.700	T86510.000	323.800	1032.000	895.500	93.1%	-0.294	-0.163	0.334	1907.000
2	15:25:16	657.600	T85170.000	323.100	1044.000	917.300	94.9%	-0.259	-0.087	0.274	1577.000
3	15:25:43	655.400	T84350.000	318.400	1006.000	889.700	95.8%	-0.290	-0.286	0.236	1836.000
x		667.300	T85340.000	321.700	1028.000	900.800	94.6%	-0.281	-0.179	0.281	1774.000
σ		18.610	T1092.000	2.931	19.520	14.550	1.4%	0.019	0.101	0.049	173.800
%RSD		2.788	T1.280	0.911	1.899	1.615	1.5	6.832	56.190	17.500	9.800

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:49	T89120.000	15.220	T88820.000	T87500.000	0.125	0.155	0.646	0.025	0.037	2.405
2	15:25:16	T88450.000	15.320	T89920.000	T88180.000	0.124	0.162	0.237	0.021	0.032	2.304
3	15:25:43	T88230.000	14.980	T88040.000	T86320.000	0.112	0.175	0.269	0.006	0.066	2.463
x		T88600.000	15.170	T88930.000	T87340.000	0.120	0.164	0.384	0.017	0.045	2.391
σ		T466.200	0.174	T946.600	T937.500	0.007	0.010	0.227	0.010	0.018	0.080
%RSD		T0.526	1.149	T1.065	T1.073	6.063	6.317	59.190	57.750	40.280	3.360

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:49	4.234	4.327	0.173	0.946	16.220	16.930	-1.474	-0.215	-4.429	9.614
2	15:25:16	3.720	4.120	0.411	0.383	16.720	17.370	-0.553	-0.020	-4.618	9.609
3	15:25:43	4.753	3.887	0.474	0.875	15.870	17.330	0.646	0.297	-4.873	9.439
x		4.235	4.112	0.353	0.735	16.270	17.210	-0.460	0.021	-4.640	9.554
σ		0.517	0.220	0.159	0.306	0.425	0.243	1.063	0.259	0.223	0.100
%RSD		12.200	5.351	45.050	41.690	2.613	1.413	231.100	1246.000	4.798	1.042

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:49	87.1%	0.042	0.039	-0.000	0.597	0.002	0.008	-0.001	0.008	83.8%
2	15:25:16	89.9%	0.040	0.023	0.017	-0.405	0.003	0.007	0.004	0.001	88.9%
3	15:25:43	90.6%	0.016	0.046	-0.005	-0.398	0.007	0.006	-0.005	-0.005	87.4%
x		89.2%	0.033	0.036	0.004	-0.068	0.004	0.007	-0.001	0.001	86.7%
σ		1.8%	0.014	0.012	0.012	0.577	0.002	0.001	0.004	0.007	2.6%
%RSD		2.1	43.910	33.230	307.200	843.000	62.790	9.942	593.500	617.300	3.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:24:49	0.321	0.461	0.144	0.180	41.940	41.600	83.4%	-0.008	-0.015	0.002
2	15:25:16	0.262	0.476	0.193	0.226	41.110	40.420	89.0%	-0.004	-0.020	0.007
3	15:25:43	0.258	0.433	0.175	0.173	41.540	39.940	87.1%	-0.009	-0.016	0.004
x		0.280	0.457	0.171	0.193	41.530	40.660	86.5%	-0.007	-0.017	0.004
σ		0.035	0.022	0.024	0.029	0.415	0.855	2.9%	0.003	0.002	0.003
%RSD		12.670	4.793	14.350	14.850	0.999	2.102	3.3	37.200	13.740	62.780

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:24:49	-0.002	0.004	82.6%
2	15:25:16	0.001	0.000	88.4%
3	15:25:43	-0.003	0.001	86.6%
x		-0.001	0.002	85.9%
σ		0.002	0.002	3.0%
%RSD		124.300	100.800	3.5

UD11082-011 04/25/2019 15:30:08

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	102.3%	0.056	18.660	17.810	93.050	T 5341.000	T 763.500	758.500	753.500	TM 3650.000
2	15:31:03	97.6%	0.091	17.500	18.180	88.300	T 5261.000	T 735.100	752.400	743.100	TM 3776.000
3	15:31:30	97.5%	0.098	19.240	19.090	90.060	T 5325.000	T 748.000	749.200	751.700	TM 3811.000
x		99.1%	0.081	18.470	18.360	90.470	T 5309.000	T 748.900	753.400	749.400	TM 3746.000
σ		2.7%	0.022	0.889	0.660	2.397	T 42.380	T 14.240	4.715	5.546	TM 85.020
%RSD		2.8	27.570	4.811	3.595	2.650	T 0.798	T 1.902	0.626	0.740	TM 2.270

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	T 6634.000	T 83330.000	T 658.700	2292.000	1981.000	95.1%	19.300	12.490	5.652	1836.000
2	15:31:03	T 6374.000	T 81960.000	716.800	2234.000	2137.000	96.5%	18.880	12.480	5.566	1552.000
3	15:31:30	T 6392.000	T 82600.000	718.100	2318.000	2097.000	96.4%	19.940	12.820	5.532	1545.000
x		T 6467.000	T 82630.000	T 697.900	2281.000	2072.000	96.0%	19.370	12.600	5.583	1644.000
σ		T 145.200	T 682.400	T 33.920	43.030	80.630	0.8%	0.532	0.192	0.062	166.000
%RSD		T 2.245	T 0.826	T 4.861	1.887	3.892	0.8	2.744	1.523	1.102	10.090

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	T 8281.000	10.470	T 8277.000	8359.000	0.397	1.526	1.408	5.493	5.496	14.770
2	15:31:03	T 8191.000	10.590	T 8277.000	8661.000	0.383	1.349	1.060	5.528	5.612	15.300
3	15:31:30	T 8250.000	10.450	T 8223.000	8610.000	0.409	1.329	1.454	5.583	5.670	15.120
x		T 8241.000	10.500	T 8259.000	8543.000	0.396	1.401	1.307	5.535	5.593	15.060
σ		T 45.700	0.075	T 30.980	161.600	0.013	0.109	0.215	0.045	0.088	0.266
%RSD		T 0.555	0.715	T 0.375	1.891	3.337	7.759	16.450	0.817	1.579	1.766

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	13.360	14.250	1.920	0.258	16.850	16.730	2.831	0.813	-4.367	13.250
2	15:31:03	14.130	14.340	2.074	0.110	15.710	17.610	3.075	0.873	-3.428	13.070
3	15:31:30	15.020	14.780	2.125	0.627	17.390	14.980	0.177	0.192	-4.748	13.200
x		14.170	14.460	2.040	0.332	16.650	16.440	2.028	0.626	-4.181	13.170
σ		0.829	0.282	0.107	0.266	0.857	1.341	1.608	0.377	0.679	0.093
%RSD		5.854	1.951	5.220	80.140	5.147	8.157	79.280	60.260	16.240	0.703

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	89.1%	0.161	0.110	0.135	0.145	0.040	0.036	0.208	0.221	85.9%
2	15:31:03	96.2%	0.126	0.145	0.063	1.058	0.034	0.032	0.223	0.214	90.5%
3	15:31:30	95.4%	0.166	0.151	0.090	0.764	0.034	0.039	0.197	0.204	90.9%
x		93.6%	0.151	0.135	0.096	0.656	0.036	0.036	0.209	0.213	89.1%
σ		3.9%	0.022	0.022	0.036	0.466	0.003	0.003	0.013	0.008	2.8%
%RSD		4.1	14.430	16.390	37.920	71.100	9.547	9.364	6.315	3.955	3.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:30:35	0.348	0.341	0.462	0.414	25.280	24.760	86.6%	0.044	0.047	10.120
2	15:31:03	0.325	0.347	0.520	0.476	25.090	25.200	91.4%	0.044	0.050	10.160
3	15:31:30	0.291	0.346	0.451	0.462	24.960	24.650	90.7%	0.048	0.040	10.260
x		0.321	0.345	0.478	0.451	25.110	24.870	89.5%	0.045	0.046	10.180
σ		0.029	0.003	0.037	0.033	0.160	0.292	2.6%	0.003	0.005	0.075
%RSD		8.927	0.922	7.829	7.226	0.638	1.173	2.9	5.549	11.410	0.735

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:30:35	9.193	9.534	85.8%
2	15:31:03	9.196	9.540	91.2%
3	15:31:30	9.277	9.579	91.0%
x		9.222	9.551	89.3%
σ		0.048	0.024	3.1%
%RSD		0.517	0.255	3.4

UD11082-012 04/25/2019 15:35:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:20	96.3%	0.072	19.000	18.990	95.390	T 5283.000	T 744.300	737.500	741.200	TM 1645.000
2	15:36:48	99.4%	0.049	18.690	19.730	90.640	T 5296.000	T 740.400	740.200	742.300	TM 1646.000
3	15:37:15	99.2%	0.039	18.950	19.490	90.700	T 5226.000	T 730.200	734.600	747.500	TM 1677.000
x		98.3%	0.053	18.880	19.400	92.240	T 5268.000	T 738.300	737.400	743.700	TM 1656.000
σ		1.7%	0.017	0.165	0.376	2.728	T 37.460	T 7.307	2.821	3.372	TM 17.940
%RSD		1.8	31.820	0.875	1.940	2.957	T 0.711	T 0.990	0.383	0.453	TM 1.083

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:20	T 4476.000	T 84820.000	650.000	2637.000	2481.000	96.1%	9.939	4.595	2.636	1707.000
2	15:36:48	T 4603.000	T 85670.000	626.800	2624.000	2404.000	96.3%	10.930	4.267	2.644	1910.000
3	15:37:15	T 4617.000	T 85650.000	641.100	2642.000	2386.000	97.5%	10.100	4.357	2.477	2112.000
x		T 4565.000	T 85380.000	639.300	2634.000	2424.000	96.6%	10.320	4.406	2.586	1910.000
σ		T 77.630	T 488.600	11.670	9.427	50.450	0.7%	0.532	0.170	0.094	202.500
%RSD		T 1.700	T 0.572	1.825	0.358	2.082	0.7	5.155	3.847	3.628	10.610

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:20	4835.000	10.050	T 4627.000	4612.000	0.291	0.930	0.767	2.638	2.764	10.270
2	15:36:48	4873.000	9.768	T 4683.000	4640.000	0.288	0.926	0.912	2.693	2.594	10.100
3	15:37:15	4894.000	9.841	T 4632.000	4664.000	0.325	1.000	0.962	2.648	2.532	10.170
x		4868.000	9.884	T 4647.000	4639.000	0.301	0.952	0.881	2.660	2.630	10.180
σ		29.890	0.144	T 31.250	25.950	0.021	0.042	0.101	0.029	0.120	0.085
%RSD		0.614	1.455	T 0.672	0.559	6.924	4.362	11.500	1.090	4.573	0.835

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:20	10.120	9.837	1.194	0.695	13.140	13.940	-0.133	0.048	-2.055	14.290
2	15:36:48	9.049	10.260	1.083	0.423	14.560	13.770	0.603	0.212	-2.057	14.090
3	15:37:15	10.460	9.647	1.043	0.997	13.130	13.190	2.569	0.723	-3.359	14.340
x		9.877	9.915	1.106	0.705	13.610	13.630	1.013	0.327	-2.490	14.240
σ		0.737	0.315	0.078	0.287	0.819	0.393	1.397	0.352	0.752	0.130
%RSD		7.459	3.175	7.057	40.690	6.017	2.884	137.900	107.500	30.200	0.914

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:20	93.7%	0.087	0.113	0.075	0.661	0.022	0.009	0.121	0.116	90.0%
2	15:36:48	91.2%	0.127	0.055	0.065	-0.079	0.013	0.015	0.074	0.107	88.9%
3	15:37:15	92.1%	0.094	0.124	0.083	0.583	0.016	0.017	0.091	0.110	89.0%
x		92.3%	0.103	0.097	0.074	0.389	0.017	0.014	0.095	0.111	89.3%
σ		1.2%	0.022	0.037	0.009	0.406	0.004	0.004	0.024	0.004	0.6%
%RSD		1.3	21.070	38.030	11.930	104.600	24.640	30.720	24.780	3.880	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:36:20	0.321	0.365	0.383	0.417	20.620	20.460	89.7%	0.013	0.004	2.594
2	15:36:48	0.306	0.323	0.330	0.374	20.370	20.400	88.9%	0.022	0.007	2.683
3	15:37:15	0.297	0.353	0.361	0.375	20.530	20.770	89.4%	0.012	0.006	2.621
x		0.308	0.347	0.358	0.389	20.510	20.540	89.3%	0.016	0.006	2.633
σ		0.012	0.022	0.026	0.025	0.125	0.198	0.4%	0.006	0.001	0.046
%RSD		3.938	6.330	7.359	6.319	0.611	0.963	0.5	35.320	25.020	1.728

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:36:20	2.461	2.536	90.7%
2	15:36:48	2.517	2.566	88.9%
3	15:37:15	2.409	2.527	88.8%
x		2.462	2.543	89.5%
σ		0.054	0.020	1.1%
%RSD		2.183	0.795	1.2

UD11082-013 04/25/2019 15:41:39

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:06	100.5%	-0.007	1.535	1.661	23.840	30.600	10.240	9.443	10.410	1.931
2	15:42:33	99.3%	-0.003	1.536	1.886	26.250	27.340	10.620	9.980	10.400	2.060
3	15:43:00	99.9%	-0.013	2.113	1.657	28.220	25.260	10.490	10.650	10.140	1.975
x		99.9%	-0.008	1.728	1.735	26.100	27.730	10.450	10.030	10.320	1.989
σ		0.6%	0.005	0.334	0.131	2.192	2.692	0.195	0.607	0.155	0.065
%RSD		0.6	65.060	19.300	7.538	8.398	9.706	1.864	6.053	1.497	3.290
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:06	96.030	T 86740.000	12.250	436.900	359.800	94.6%	-0.365	-0.036	0.392	2022.000
2	15:42:33	94.350	T 84980.000	11.450	418.200	373.700	97.2%	-0.339	-0.142	0.348	1884.000
3	15:43:00	91.190	T 85740.000	9.190	424.700	373.700	97.3%	-0.424	-0.041	0.366	1603.000
x		93.860	T 85820.000	10.960	426.600	369.100	96.4%	-0.376	-0.073	0.369	1837.000
σ		2.459	T 883.100	1.589	9.525	8.011	1.5%	0.044	0.060	0.022	213.300
%RSD		2.620	T 1.029	14.490	2.233	2.171	1.6	11.610	82.160	5.927	11.620
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:06	4.089	-0.039	5.824	-12.720	-0.043	0.050	0.102	0.382	0.366	2.030
2	15:42:33	2.007	-0.059	5.462	-12.480	-0.038	0.041	-0.111	0.309	0.365	1.879
3	15:43:00	1.416	-0.046	4.077	-17.080	-0.040	0.048	0.047	0.305	0.382	1.725
x		2.504	-0.048	5.121	-14.090	-0.040	0.046	0.013	0.332	0.371	1.878
σ		1.404	0.010	0.922	2.591	0.002	0.005	0.111	0.043	0.009	0.153
%RSD		56.070	21.390	18.000	18.390	5.427	9.903	857.000	12.990	2.472	8.131
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:06	1.586	1.690	0.064	0.143	1.011	1.882	1.722	0.517	-2.977	0.535
2	15:42:33	1.241	1.684	-0.054	0.642	0.878	1.273	0.387	0.178	-2.480	0.560
3	15:43:00	1.374	1.736	-0.131	0.527	0.832	1.910	1.434	0.410	-2.101	0.557
x		1.400	1.703	-0.041	0.437	0.907	1.688	1.181	0.368	-2.519	0.550
σ		0.174	0.028	0.098	0.261	0.093	0.360	0.702	0.173	0.440	0.014
%RSD		12.410	1.660	242.000	59.680	10.260	21.300	59.480	46.970	17.450	2.517
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:06	90.1%	0.028	0.047	-0.011	-0.798	0.000	0.000	-0.005	-0.012	87.4%
2	15:42:33	91.3%	0.010	0.003	0.007	-0.184	0.000	0.000	-0.005	-0.005	89.5%
3	15:43:00	94.1%	0.020	0.035	-0.001	0.751	-0.000	0.001	-0.005	-0.009	92.1%
x		91.8%	0.020	0.028	-0.002	-0.077	0.000	0.000	-0.005	-0.009	89.7%
σ		2.0%	0.009	0.022	0.009	0.780	0.000	0.001	0.000	0.004	2.4%
%RSD		2.2	46.860	79.160	523.000	1010.000	1083.000	125.300	0.764	42.760	2.6
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:42:06	0.223	0.390	0.020	0.023	0.630	0.552	87.8%	-0.006	-0.019	0.037
2	15:42:33	0.245	0.390	0.027	0.029	0.484	0.552	89.4%	-0.015	-0.021	0.046
3	15:43:00	0.272	0.350	0.023	0.026	0.578	0.569	91.6%	-0.013	-0.018	0.047
x		0.247	0.377	0.023	0.026	0.564	0.558	89.6%	-0.012	-0.019	0.043
σ		0.025	0.023	0.003	0.003	0.074	0.010	1.9%	0.005	0.001	0.005
%RSD		9.981	6.139	13.920	10.830	13.150	1.811	2.1	39.850	7.796	12.490
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	15:42:06	0.053	0.044	87.2%							
2	15:42:33	0.036	0.039	89.2%							
3	15:43:00	0.026	0.040	91.9%							
x		0.038	0.041	89.4%							
σ		0.013	0.003	2.4%							
%RSD		35.290	6.367	2.6							

UQ13656-001 04/25/2019 15:47:24 QC Status: PASS (Initial: UNKNOWN)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:47:51	99.1%	-0.002	0.941	0.743	29.440	4.705	1.433	1.578	1.109	1.399
2	15:48:18	98.8%	0.023	0.620	0.775	33.780	5.384	1.415	1.189	1.192	1.546
3	15:48:45	100.9%	-0.011	0.971	0.864	25.150	8.148	1.338	1.383	1.200	1.345
x		99.6%	0.003	0.844	0.794	29.460	6.079	1.396	1.383	1.167	1.430
σ		1.2%	0.018	0.195	0.063	4.315	1.824	0.050	0.194	0.051	0.104
%RSD		1.2	546.400	23.060	7.882	14.650	30.000	3.611	14.060	4.332	7.262

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:47:51	15.290	T 114100.000	-6.676	3.378	2.791	96.3%	-0.348	-0.291	0.259	2455.000
2	15:48:18	15.780	T 116500.000	-5.438	1.971	2.645	94.9%	-0.385	-0.226	0.308	2605.000
3	15:48:45	16.540	T 116500.000	-5.591	5.520	2.262	93.8%	-0.354	0.143	0.301	2506.000
x		15.870	T 115700.000	-5.902	3.623	2.566	95.0%	-0.362	-0.124	0.290	2522.000
σ		0.630	T 1392.000	0.675	1.787	0.273	1.2%	0.020	0.234	0.026	76.070
%RSD		3.969	T 1.202	11.430	49.320	10.640	1.3	5.451	188.200	9.140	3.016

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:47:51	-2.559	-0.050	2.751	-19.550	-0.039	0.013	-0.149	0.105	0.174	1.166
2	15:48:18	-1.511	-0.042	4.940	-19.640	-0.039	0.037	-0.267	0.079	0.190	1.305
3	15:48:45	-0.667	-0.035	4.228	-14.740	-0.038	0.010	-0.168	0.081	0.169	1.169
x		-1.579	-0.043	3.973	-17.980	-0.038	0.020	-0.194	0.088	0.178	1.213
σ		0.948	0.008	1.116	2.801	0.000	0.015	0.063	0.014	0.011	0.079
%RSD		60.060	17.970	28.100	15.580	1.233	74.550	32.480	16.380	6.219	6.512

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:47:51	0.944	1.097	0.120	0.394	2.133	2.599	0.607	0.280	-4.502	-0.001
2	15:48:18	0.729	1.005	0.182	0.582	2.477	2.385	1.874	0.578	-4.062	-0.001
3	15:48:45	0.529	1.114	-0.310	0.108	1.783	2.751	0.652	0.305	-4.459	0.001
x		0.734	1.072	-0.002	0.362	2.131	2.578	1.044	0.388	-4.341	-0.000
σ		0.207	0.058	0.268	0.239	0.347	0.184	0.719	0.166	0.242	0.001
%RSD		28.260	5.451	10910.000	66.080	16.280	7.134	68.830	42.690	5.584	1130.000

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:47:51	91.2%	-0.002	-0.001	-0.017	-0.855	-0.001	-0.001	-0.005	-0.013	89.1%
2	15:48:18	90.9%	0.007	-0.006	-0.013	-0.979	0.003	0.001	-0.001	-0.004	88.1%
3	15:48:45	90.8%	0.004	-0.001	-0.002	-0.121	-0.002	0.000	-0.005	0.001	87.3%
x		90.9%	0.003	-0.003	-0.010	-0.652	0.000	0.000	-0.004	-0.005	88.1%
σ		0.2%	0.005	0.003	0.008	0.464	0.003	0.001	0.003	0.007	0.9%
%RSD		0.2	135.300	95.130	76.280	71.160	4810.000	806.900	69.790	133.700	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:47:51	0.474	0.722	0.040	0.058	0.006	-0.045	89.2%	-0.014	-0.020	0.027
2	15:48:18	0.482	0.662	0.038	0.056	-0.031	-0.012	87.5%	-0.018	-0.019	0.040
3	15:48:45	0.546	0.686	0.031	0.030	-0.037	-0.030	87.1%	-0.014	-0.021	0.038
x		0.501	0.690	0.036	0.048	-0.021	-0.029	87.9%	-0.015	-0.020	0.035
σ		0.040	0.030	0.005	0.016	0.024	0.016	1.1%	0.002	0.001	0.007
%RSD		7.912	4.384	13.080	32.540	113.000	56.080	1.3	14.280	5.273	19.880

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:47:51	0.030	0.035	89.2%
2	15:48:18	0.031	0.035	86.6%
3	15:48:45	0.033	0.031	85.8%
x		0.032	0.034	87.2%
σ		0.001	0.003	1.8%
%RSD		4.565	8.148	2.0

UQ13656-002 04/25/2019 15:53:10

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:37	99.6%	99.480	96.520	97.760	36.870	T1070.000	T1003.000	1012.000	1016.000	96.150
2	15:54:04	98.2%	100.500	100.900	95.010	30.590	T1043.000	T988.200	1012.000	998.600	96.970
3	15:54:31	T114.5%	95.300	96.790	96.370	29.860	T1080.000	T991.000	998.000	1014.000	82.140
x		T104.1%	98.440	98.060	96.380	32.440	T1064.000	T994.200	1008.000	1010.000	91.750
σ		T9.0%	2.772	2.430	1.375	3.854	T19.000	T8.070	8.213	9.606	8.334
%RSD		T8.7	2.816	2.478	1.427	11.880	T1.786	T0.812	0.815	0.951	9.084

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:37	T923.700	T114800.000	T961.700	1122.000	982.700	96.1%	101.800	101.600	99.030	2959.000
2	15:54:04	T934.300	T116000.000	T975.700	1097.000	977.200	97.0%	100.700	100.500	99.240	2973.000
3	15:54:31	T968.700	T117900.000	T816.800	1161.000	826.300	94.3%	102.400	99.570	98.700	3513.000
x		T942.200	T116300.000	T918.100	1127.000	928.700	95.8%	101.600	100.600	98.990	3149.000
σ		T23.550	T1562.000	T87.970	32.400	88.750	1.3%	0.853	1.003	0.268	316.100
%RSD		T2.499	T1.343	T9.582	2.876	9.556	1.4	0.839	0.998	0.271	10.040

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:37	1124.000	99.700	T1066.000	1045.000	98.430	98.870	101.300	100.400	98.080	104.400
2	15:54:04	1124.000	99.600	T1064.000	1032.000	98.140	97.500	100.600	100.100	98.380	105.500
3	15:54:31	1126.000	99.240	T1057.000	1048.000	98.820	98.100	102.000	101.100	99.180	103.400
x		1125.000	99.510	T1062.000	1042.000	98.460	98.150	101.300	100.500	98.550	104.400
σ		1.334	0.240	T4.639	8.478	0.340	0.687	0.704	0.482	0.569	1.086
%RSD		0.119	0.242	T0.437	0.814	0.345	0.700	0.695	0.479	0.577	1.040

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:37	99.680	100.700	96.900	106.100	1.594	1.313	444.700	104.500	-3.375	98.930
2	15:54:04	102.400	100.800	98.490	103.000	1.556	2.038	450.700	107.000	-3.198	99.300
3	15:54:31	100.800	99.990	97.550	103.700	1.819	2.449	442.600	104.800	-0.513	99.910
x		101.000	100.500	97.650	104.300	1.656	1.933	446.000	105.400	-2.362	99.380
σ		1.393	0.422	0.798	1.622	0.142	0.575	4.188	1.362	1.603	0.492
%RSD		1.380	0.420	0.817	1.555	8.584	29.750	0.939	1.292	67.880	0.495

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:37	89.7%	99.220	98.080	99.520	98.050	99.400	99.880	100.300	99.700	88.2%
2	15:54:04	90.0%	99.260	99.270	99.840	103.900	100.500	100.300	101.000	99.920	87.6%
3	15:54:31	88.3%	98.110	98.970	97.610	101.200	99.280	100.300	100.200	99.170	86.0%
x		89.3%	98.860	98.780	98.990	101.100	99.710	100.200	100.500	99.600	87.3%
σ		0.9%	0.649	0.618	1.202	2.920	0.651	0.249	0.418	0.385	1.1%
%RSD		1.0	0.657	0.626	1.214	2.890	0.653	0.249	0.416	0.387	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:53:37	101.400	100.500	98.700	99.580	100.300	99.680	87.5%	99.890	101.400	101.100
2	15:54:04	102.200	100.400	99.460	100.400	100.200	101.300	87.5%	100.300	102.400	102.700
3	15:54:31	101.600	100.300	97.030	98.400	100.700	98.590	85.7%	99.870	101.100	101.600
x		101.700	100.400	98.400	99.450	100.400	99.860	86.9%	100.000	101.600	101.800
σ		0.442	0.074	1.240	0.994	0.235	1.378	1.0%	0.216	0.706	0.859
%RSD		0.434	0.073	1.260	0.999	0.234	1.380	1.2	0.216	0.695	0.844

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:53:37	101.200	100.400	88.1%
2	15:54:04	102.600	101.500	88.8%
3	15:54:31	100.900	100.500	85.6%
x		101.600	100.800	87.5%
σ		0.893	0.586	1.6%
%RSD		0.879	0.582	1.9

UD09114-001 04/25/2019 15:58:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:23	94.6%	5.255	1.815	2.247	-40.200	TM 296200.000	TM 145300.000	TM 150800.000	TM 152300.000	TM 22470.000
2	15:59:50	93.4%	5.476	2.215	2.268	-43.460	TM 297800.000	TM 143800.000	TM 150000.000	TM 151400.000	TM 22570.000
3	16:00:17	93.6%	5.197	2.074	2.097	-45.680	TM 296200.000	TM 140000.000	TM 146400.000	TM 150600.000	TM 22250.000
x		93.9%	5.309	2.035	2.204	-43.110	TM 296700.000	TM 143000.000	TM 149000.000	TM 151400.000	TM 22430.000
σ		0.7%	0.147	0.203	0.093	2.757	TM 911.500	TM 2723.000	TM 2347.000	TM 846.400	TM 162.800
%RSD		0.7	2.767	9.954	4.227	6.395	TM 0.307	TM 1.904	TM 1.574	TM 0.559	TM 0.726

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:23	TM 19230.000	T 98850.000	T 24470.000	34410.000	T 34440.000	95.9%	301.700	25.060	7.964	2196.000
2	15:59:50	TM 18970.000	T 98190.000	T 24880.000	34300.000	T 35610.000	98.2%	298.400	25.120	8.079	1907.000
3	16:00:17	TM 17880.000	T 95360.000	T 25140.000	34650.000	T 36230.000	100.6%	296.900	24.270	7.700	1878.000
x		TM 18700.000	T 97470.000	T 24830.000	34450.000	T 35430.000	98.2%	299.000	24.820	7.914	1994.000
σ		TM 717.200	T 1857.000	T 334.900	176.100	T 908.700	2.4%	2.448	0.477	0.195	176.000
%RSD		TM 3.836	T 1.905	T 1.349	0.511	T 2.565	2.4	0.819	1.924	2.458	8.827

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:23	T 7462.000	TM 6052.000	T 7101.000	9745.000	246.900	TM 10400.000	M 6960.000	15.990	30.330	M 1153.000
2	15:59:50	T 7497.000	TM 6133.000	T 7068.000	9396.000	244.800	TM 10410.000	M 7079.000	16.310	29.920	M 1166.000
3	16:00:17	T 7334.000	TM 6000.000	T 6918.000	9448.000	242.600	TM 10320.000	M 7014.000	16.080	29.300	M 1146.000
x		T 7431.000	TM 6062.000	T 7029.000	9530.000	244.800	TM 10380.000	M 7018.000	16.130	29.850	M 1155.000
σ		T 86.190	TM 66.760	T 97.800	188.100	2.129	TM 49.730	M 59.820	0.167	0.520	M 10.200
%RSD		T 1.160	TM 1.101	T 1.391	1.974	0.870	TM 0.479	M 0.852	1.033	1.742	M 0.884

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:23	M 1013.000	M 888.100	4.552	5.792	3.239	0.149	8.584	14.630	-4.522	T 187.700
2	15:59:50	M 1033.000	M 893.000	5.201	6.535	3.158	0.235	9.693	15.420	-2.756	T 188.400
3	16:00:17	M 1033.000	M 897.300	5.524	5.767	3.296	0.541	9.627	14.990	-2.902	T 188.800
x		M 1027.000	M 892.800	5.092	6.031	3.231	0.308	9.301	15.010	-3.393	T 188.300
σ		M 11.850	M 4.618	0.495	0.436	0.070	0.206	0.622	0.398	0.980	T 0.564
%RSD		M 1.154	M 0.517	9.717	7.230	2.155	66.780	6.691	2.652	28.890	T 0.299

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:23	T 1013.7%	0.022	-0.012	0.062	108.000	0.053	0.015	1.862	2.117	78.7%
2	15:59:50	T 1053.4%	0.025	-0.014	0.050	104.100	0.033	0.015	2.006	2.217	82.3%
3	16:00:17	T 1090.7%	0.007	-0.006	0.054	98.320	0.040	0.018	1.887	2.040	86.6%
x		T 1052.6%	0.018	-0.011	0.055	103.500	0.042	0.016	1.918	2.125	82.5%
σ		T 38.5%	0.010	0.005	0.006	4.874	0.010	0.002	0.077	0.089	4.0%
%RSD		T 3.7	55.440	42.820	10.610	4.710	23.990	12.450	4.019	4.177	4.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	15:59:23	1.854	1.371	0.073	0.074	TM 20610.000	TM 20370.000	115.4%	0.489	0.514	8.456
2	15:59:50	1.952	1.348	0.090	0.069	TM 20400.000	TM 20220.000	120.1%	0.503	0.507	8.355
3	16:00:17	1.874	1.405	0.085	0.077	TM 20090.000	TM 19940.000	125.4%	0.500	0.500	8.327
x		1.893	1.375	0.083	0.073	TM 20370.000	TM 20180.000	120.3%	0.497	0.507	8.379
σ		0.052	0.029	0.009	0.004	TM 260.200	TM 220.100	5.0%	0.007	0.007	0.068
%RSD		2.724	2.106	10.410	5.668	TM 1.278	TM 1.091	4.1	1.445	1.354	0.812

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	15:59:23	7.885	8.142	75.0%
2	15:59:50	8.071	8.126	79.2%
3	16:00:17	8.126	8.119	82.1%
x		8.027	8.129	78.8%
σ		0.126	0.012	3.6%
%RSD		1.573	0.144	4.5

UD09114-004 04/25/2019 16:04:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:09	102.6%	0.146	2.148	2.358	29.050	T 1730.000	T 961.100	984.700	980.900	TM 555.900
2	16:05:36	102.7%	0.078	1.839	2.586	30.910	T 1706.000	T 949.600	958.200	940.000	TM 547.300
3	16:06:03	101.7%	0.130	2.439	2.545	28.600	T 1711.000	T 937.300	951.700	964.300	TM 548.900
x		102.3%	0.118	2.142	2.497	29.520	T 1716.000	T 949.300	964.900	961.700	TM 550.700
σ		0.6%	0.035	0.300	0.121	1.229	T 12.530	T 11.870	17.500	20.580	TM 4.551
%RSD		0.5	29.990	14.000	4.863	4.165	T 0.730	T 1.251	1.813	2.140	TM 0.826

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:09	T 3635.000	T 116300.000	T 979.300	607.000	535.100	98.2%	46.290	3.483	2.959	2620.000
2	16:05:36	T 3605.000	T 115700.000	T 984.700	597.400	563.700	99.8%	46.100	3.859	3.022	2385.000
3	16:06:03	T 3660.000	T 117400.000	T 1005.000	561.400	560.000	98.7%	46.690	3.496	2.996	2867.000
x		T 3633.000	T 116500.000	T 989.600	588.600	553.000	98.9%	46.360	3.613	2.992	2624.000
σ		T 27.750	T 874.500	T 13.490	24.040	15.550	0.8%	0.303	0.214	0.032	241.100
%RSD		T 0.764	T 0.751	T 1.363	4.085	2.812	0.8	0.654	5.909	1.064	9.190

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:09	862.800	29.240	T 864.300	847.000	0.536	2.069	2.507	2.965	2.941	4.256
2	16:05:36	863.600	28.920	T 861.000	839.200	0.576	2.070	1.704	2.851	2.929	4.148
3	16:06:03	856.600	28.770	T 845.600	813.200	0.550	1.717	1.912	3.006	2.857	3.894
x		861.000	28.980	T 856.900	833.100	0.554	1.952	2.041	2.941	2.909	4.099
σ		3.810	0.240	T 10.000	17.650	0.020	0.204	0.417	0.080	0.046	0.186
%RSD		0.443	0.826	T 1.167	2.119	3.659	10.430	20.410	2.734	1.566	4.527

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:09	5.862	5.368	-0.131	0.714	1.574	1.681	0.300	0.176	-1.333	6.505
2	16:05:36	5.618	5.296	0.076	-0.069	1.374	1.639	1.256	0.461	-4.644	6.477
3	16:06:03	5.128	5.391	0.062	-0.202	1.427	1.500	1.207	0.444	-3.715	6.411
x		5.536	5.352	0.003	0.148	1.458	1.607	0.921	0.361	-3.231	6.464
σ		0.374	0.050	0.116	0.495	0.104	0.094	0.538	0.160	1.708	0.048
%RSD		6.752	0.925	4274.000	335.500	7.098	5.873	58.420	44.310	52.860	0.747

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:09	96.5%	0.042	0.033	0.025	1.704	0.002	0.001	0.003	0.021	90.3%
2	16:05:36	96.5%	0.036	0.024	0.003	-1.739	0.001	0.003	0.012	0.006	92.4%
3	16:06:03	94.3%	0.026	0.007	0.022	0.047	0.000	-0.001	0.012	0.007	89.4%
x		95.8%	0.035	0.022	0.017	0.004	0.001	0.001	0.009	0.011	90.7%
σ		1.3%	0.008	0.013	0.012	1.722	0.001	0.002	0.005	0.009	1.6%
%RSD		1.4	22.860	61.420	70.390	42230.000	102.300	183.000	55.160	74.430	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:05:09	0.644	0.789	0.033	0.035	34.760	34.330	91.0%	0.032	0.027	0.324
2	16:05:36	0.660	0.789	0.037	0.058	33.750	33.670	92.6%	0.027	0.021	0.316
3	16:06:03	0.609	0.845	0.036	0.053	34.280	33.660	89.1%	0.047	0.020	0.346
x		0.637	0.808	0.035	0.048	34.270	33.890	90.9%	0.035	0.023	0.329
σ		0.026	0.032	0.002	0.012	0.504	0.382	1.8%	0.011	0.004	0.015
%RSD		4.070	3.962	6.908	25.220	1.469	1.126	1.9	29.960	17.690	4.672

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:05:09	0.293	0.305	91.4%
2	16:05:36	0.345	0.314	92.1%
3	16:06:03	0.277	0.309	89.4%
x		0.305	0.309	91.0%
σ		0.036	0.004	1.4%
%RSD		11.770	1.302	1.5

UD09114-006 04/25/2019 16:10:27

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:54	101.9%	0.233	3.444	3.133	23.340	T 2675.000	T 1504.000	1540.000	1533.000	48.830
2	16:11:21	102.0%	0.281	3.638	3.480	22.550	T 2713.000	T 1480.000	1540.000	1541.000	50.120
3	16:11:48	101.9%	0.315	3.472	3.196	23.190	T 2800.000	T 1492.000	1520.000	1520.000	48.640
x		101.9%	0.276	3.518	3.270	23.020	T 2729.000	T 1492.000	1534.000	1531.000	49.200
σ		0.1%	0.042	0.105	0.185	0.421	T 64.540	T 11.780	11.670	10.490	0.805
%RSD		0.1	15.060	2.977	5.657	1.830	T 2.365	T 0.789	0.761	0.685	1.636
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:54	T 5393.000	T 112400.000	T 2094.000	2805.000	2477.000	97.4%	2.253	0.298	2.038	2658.000
2	16:11:21	T 5490.000	T 115000.000	T 2087.000	2748.000	2510.000	96.8%	3.001	0.166	2.117	2754.000
3	16:11:48	T 5442.000	T 113900.000	T 2135.000	2790.000	2517.000	96.0%	2.400	0.121	2.107	2556.000
x		T 5442.000	T 113800.000	T 2106.000	2781.000	2501.000	96.8%	2.552	0.195	2.088	2656.000
σ		T 48.700	T 1314.000	T 26.040	29.740	21.550	0.7%	0.396	0.092	0.043	99.140
%RSD		T 0.895	T 1.155	T 1.237	1.069	0.862	0.8	15.530	47.060	2.045	3.732
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:54	63.910	12.630	70.930	71.110	0.241	0.899	1.115	0.284	0.354	7.943
2	16:11:21	66.360	12.840	70.750	63.380	0.239	0.891	0.048	0.297	0.430	8.130
3	16:11:48	65.520	13.040	68.480	65.490	0.262	0.924	0.865	0.264	0.448	7.934
x		65.260	12.830	70.060	66.660	0.247	0.905	0.676	0.281	0.411	8.002
σ		1.246	0.203	1.364	3.993	0.013	0.017	0.558	0.016	0.050	0.111
%RSD		1.909	1.579	1.947	5.990	5.223	1.928	82.510	5.758	12.160	1.383
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:54	12.640	12.680	-0.014	0.440	5.848	5.386	0.125	0.168	-4.972	22.670
2	16:11:21	13.940	12.350	0.088	0.910	5.860	5.557	2.467	0.718	-3.467	22.820
3	16:11:48	12.230	12.610	0.203	0.492	5.444	5.533	1.734	0.577	-6.405	22.590
x		12.940	12.550	0.092	0.614	5.717	5.492	1.442	0.488	-4.948	22.700
σ		0.894	0.170	0.109	0.258	0.237	0.092	1.198	0.286	1.469	0.117
%RSD		6.908	1.358	117.600	42.010	4.147	1.678	83.070	58.590	29.690	0.516
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:54	88.5%	0.014	0.019	-0.004	0.804	0.004	0.002	0.049	0.036	87.4%
2	16:11:21	90.9%	0.007	0.003	-0.011	-0.160	0.007	0.009	0.022	0.012	87.5%
3	16:11:48	92.7%	0.015	-0.002	-0.008	0.191	0.003	0.004	0.025	0.015	90.9%
x		90.7%	0.012	0.007	-0.008	0.278	0.004	0.005	0.032	0.021	88.6%
σ		2.1%	0.004	0.011	0.004	0.488	0.002	0.004	0.015	0.013	2.0%
%RSD		2.4	34.820	154.800	46.000	175.400	46.540	71.730	46.370	61.840	2.3
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:10:54	0.522	0.786	0.015	0.026	107.800	104.600	86.6%	0.037	0.030	0.049
2	16:11:21	0.573	0.773	0.019	0.053	107.700	108.900	86.4%	0.043	0.043	0.049
3	16:11:48	0.561	0.790	0.050	0.022	106.600	105.400	89.9%	0.030	0.046	0.036
x		0.552	0.783	0.028	0.034	107.400	106.300	87.6%	0.037	0.040	0.045
σ		0.027	0.009	0.019	0.017	0.668	2.295	1.9%	0.006	0.009	0.007
%RSD		4.856	1.100	67.030	51.230	0.622	2.159	2.2	16.660	21.610	16.600
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	16:10:54	0.035	0.033	86.1%							
2	16:11:21	0.077	0.053	86.9%							
3	16:11:48	0.030	0.042	90.4%							
x		0.047	0.043	87.8%							
σ		0.026	0.010	2.3%							
%RSD		54.170	23.710	2.6							

UD09114-008 04/25/2019 16:16:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:41	103.5%	0.090	3.019	3.339	33.330	T2355.000	T860.000	861.400	854.000	T173.500
2	16:17:08	103.6%	0.053	3.771	2.973	22.930	T2321.000	T858.800	853.100	850.200	T180.200
3	16:17:35	101.0%	0.116	3.439	3.365	22.910	T2314.000	T847.400	854.000	861.900	183.600
x		102.7%	0.086	3.410	3.226	26.390	T2330.000	T855.400	856.200	855.400	T179.100
σ		1.4%	0.032	0.377	0.219	6.012	T22.260	T6.962	4.523	5.967	T5.136
%RSD		1.4	37.050	11.040	6.784	22.780	T0.955	T0.814	0.528	0.698	T2.867
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:41	T7919.000	T115700.000	T1258.000	2475.000	2206.000	95.5%	14.270	0.776	1.498	2779.000
2	16:17:08	T7839.000	T112800.000	T1253.000	2533.000	2236.000	98.5%	13.940	0.685	1.419	2636.000
3	16:17:35	T7623.000	T110700.000	T1243.000	2476.000	2293.000	98.9%	13.410	0.877	1.446	2190.000
x		T7794.000	T113100.000	T1251.000	2495.000	2245.000	97.6%	13.870	0.779	1.454	2535.000
σ		T152.800	T2473.000	T7.536	32.870	43.810	1.9%	0.432	0.096	0.040	307.500
%RSD		T1.961	T2.187	T0.602	1.317	1.951	1.9	3.114	12.380	2.762	12.130
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:41	230.500	23.470	244.900	224.500	0.262	0.810	0.573	1.344	1.386	2.738
2	16:17:08	225.000	23.520	241.700	219.000	0.285	0.733	0.543	1.303	1.413	2.769
3	16:17:35	228.200	23.520	240.800	229.200	0.272	0.798	0.712	1.281	1.424	2.903
x		227.900	23.500	242.400	224.200	0.273	0.780	0.609	1.309	1.407	2.804
σ		2.757	0.029	2.132	5.082	0.012	0.041	0.090	0.032	0.020	0.088
%RSD		1.209	0.123	0.879	2.266	4.276	5.275	14.780	2.437	1.407	3.127
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:41	3.828	3.583	-0.254	-0.331	1.111	2.572	-2.303	-0.424	-3.773	20.270
2	16:17:08	4.076	3.559	-0.082	0.117	0.999	2.047	2.527	0.643	0.140	19.940
3	16:17:35	3.966	3.542	-0.019	0.259	1.439	1.293	-1.480	-0.237	-3.512	20.140
x		3.957	3.561	-0.119	0.015	1.183	1.971	-0.419	-0.006	-2.381	20.110
σ		0.124	0.020	0.122	0.308	0.229	0.643	2.584	0.570	2.188	0.166
%RSD		3.138	0.572	102.600	2044.000	19.320	32.620	617.200	9733.000	91.860	0.827
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:41	92.6%	0.007	0.003	-0.013	0.757	-0.000	0.001	0.008	0.031	90.1%
2	16:17:08	95.3%	0.006	0.038	0.011	0.388	0.002	0.000	0.020	0.013	91.6%
3	16:17:35	97.1%	0.025	0.024	-0.007	0.404	-0.000	0.000	0.007	0.003	94.6%
x		95.0%	0.012	0.022	-0.003	0.516	0.001	0.000	0.012	0.016	92.1%
σ		2.3%	0.011	0.018	0.013	0.209	0.001	0.001	0.007	0.014	2.3%
%RSD		2.4	84.760	81.530	393.400	40.400	197.500	144.400	62.480	91.610	2.5
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:16:41	0.514	0.692	0.073	0.100	27.140	26.780	88.5%	-0.003	-0.008	0.189
2	16:17:08	0.450	0.680	0.080	0.117	27.560	27.760	91.0%	-0.001	-0.003	0.176
3	16:17:35	0.585	0.796	0.099	0.100	26.610	27.290	93.9%	-0.002	-0.005	0.175
x		0.516	0.723	0.084	0.106	27.110	27.280	91.1%	-0.002	-0.006	0.180
σ		0.067	0.064	0.014	0.010	0.479	0.491	2.7%	0.001	0.002	0.008
%RSD		13.020	8.840	16.120	9.039	1.768	1.799	3.0	55.040	41.900	4.423
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	16:16:41	0.167	0.187	88.5%							
2	16:17:08	0.166	0.166	90.9%							
3	16:17:35	0.172	0.181	94.2%							
x		0.168	0.178	91.2%							
σ		0.003	0.011	2.9%							
%RSD		1.954	6.032	3.2							

CCV MW10994 04/25/2019 16:22:01 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:29	93.3%	286.500	288.600	290.300	13.370	T 61260.000	T 60240.000	T 60450.000	T 60160.000	289.800
2	16:22:55	91.9%	285.100	286.300	286.400	17.790	T 62030.000	T 59470.000	T 59140.000	T 59330.000	295.900
3	16:23:23	93.0%	288.600	287.000	286.800	13.460	T 61740.000	T 59450.000	T 60470.000	T 59180.000	289.100
x		92.7%	95.576%	95.773%	95.946%	14.870	T 102.792%	T 59720.000	T 60020.000	T 99.256%	97.197%
σ		0.8%	n/a	n/a	n/a	2.525	T n/a	T 449.300	T 762.000	T n/a	n/a
%RSD		0.8	0.627	0.409	0.750	16.980	T 0.633	T 0.752	T 1.270	T 0.887	1.273

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:29	T 3222.000	1115.000	T 58010.000	61730.000	T 56490.000	89.3%	305.600	313.400	299.700	317.600
2	16:22:55	T 3183.000	1047.000	T 59030.000	61560.000	T 58090.000	91.0%	306.300	316.800	299.100	982.400
3	16:23:23	T 3206.000	1017.000	T 58710.000	62590.000	T 57520.000	90.8%	304.900	316.200	299.700	-388.200
x		T 106.789%	1060.000	T 97.639%	61960.000	T 95.606%	90.4%	101.865%	105.150%	99.843%	303.900
σ		T n/a	50.290	T n/a	554.400	T n/a	0.9%	n/a	n/a	n/a	685.400
%RSD		T 0.621	4.744	T 0.887	0.895	T 1.415	1.0	0.230	0.564	0.113	225.500

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:29	T 61120.000	292.500	T 61030.000	T 59410.000	289.700	285.400	287.600	281.800	269.500	296.800
2	16:22:55	T 61700.000	296.600	T 62000.000	T 60480.000	289.500	282.600	288.600	283.000	270.700	300.200
3	16:23:23	T 61150.000	295.400	T 61870.000	T 60080.000	291.400	286.300	288.300	280.600	270.100	297.800
x		T 61330.000	98.289%	T 61630.000	T 99.982%	96.739%	94.925%	288.200	281.800	90.024%	99.421%
σ		T 327.300	n/a	T 526.100	T n/a	n/a	n/a	0.513	1.231	n/a	n/a
%RSD		T 0.534	0.715	T 0.854	T 0.898	0.349	0.677	0.178	0.437	0.224	0.593

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:29	276.700	274.400	273.200	298.900	1.427	0.498	1249.000	304.600	-1.894	301.900
2	16:22:55	282.200	285.900	277.100	298.200	1.416	-0.363	1215.000	290.600	-0.445	302.400
3	16:23:23	279.400	276.300	277.100	297.100	1.352	-0.072	1213.000	293.500	-0.837	299.800
x		279.500	278.900	91.929%	298.100	1.398	0.021	1225.000	98.743%	-1.059	100.464%
σ		2.722	6.161	n/a	0.908	0.040	0.438	20.250	n/a	0.750	n/a
%RSD		0.974	2.209	0.814	0.305	2.893	2064.000	1.652	2.496	70.800	0.454

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:29	80.7%	309.900	307.700	309.600	294.000	290.400	290.000	294.700	295.800	76.8%
2	16:22:55	81.9%	313.000	308.300	312.500	293.900	290.900	290.000	295.700	296.500	79.5%
3	16:23:23	83.5%	310.900	310.900	309.900	294.800	291.500	290.600	297.700	293.800	79.8%
x		82.0%	103.752%	102.989%	310.700	294.200	96.979%	290.200	296.000	98.468%	78.7%
σ		1.4%	n/a	n/a	1.614	0.526	n/a	0.350	1.546	n/a	1.7%
%RSD		1.7	0.506	0.551	0.520	0.179	0.187	0.121	0.522	0.473	2.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:22:29	304.900	306.200	303.300	302.300	305.000	307.300	78.2%	292.900	299.400	290.600
2	16:22:55	307.300	302.400	304.900	303.300	305.800	303.700	80.8%	293.700	298.400	289.700
3	16:23:23	304.900	304.800	303.100	302.600	305.500	304.500	81.5%	290.600	298.300	289.300
x		101.897%	101.480%	303.800	100.917%	101.816%	101.725%	80.2%	292.400	99.566%	96.626%
σ		n/a	n/a	0.976	n/a	n/a	n/a	1.7%	1.588	n/a	n/a
%RSD		0.458	0.638	0.321	0.173	0.147	0.621	2.1	0.543	0.207	0.235

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:22:29	292.600	290.800	74.4%
2	16:22:55	293.400	291.400	77.1%
3	16:23:23	287.100	288.100	77.2%
x		97.009%	96.692%	76.2%
σ		n/a	n/a	1.6%
%RSD		1.189	0.599	2.1

CCB IM9370-01 04/25/2019 16:27:50 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:17	┬111.7%	0.015	1.435	1.358	-1.004	10.500	5.326	5.634	5.467	0.011
2	16:28:44	99.1%	0.012	1.460	1.554	-2.111	6.225	4.129	4.183	4.440	0.024
3	16:29:11	┬109.8%	0.017	1.819	1.326	-3.337	8.599	3.364	3.153	2.852	-0.006
x		┬106.9%	0.014	1.571	1.412	-2.150	8.440	4.273	4.324	4.253	0.010
σ		┬6.8%	0.002	0.215	0.124	1.167	2.140	0.989	1.246	1.317	0.015
%RSD		┬6.4	16.320	13.670	8.741	54.270	25.350	23.140	28.820	30.970	159.100

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:17	14.230	589.000	-12.590	6.195	4.249	92.0%	-0.422	0.047	0.069	3.880
2	16:28:44	13.870	552.300	-0.964	3.974	4.366	94.6%	-0.375	0.037	0.049	3.471
3	16:29:11	14.520	579.600	-12.830	3.183	2.649	91.4%	-0.432	0.005	0.035	27.790
x		14.210	573.600	-8.797	4.451	3.754	92.7%	-0.410	0.030	0.051	11.720
σ		0.324	19.070	6.784	1.561	0.959	1.7%	0.031	0.022	0.017	13.930
%RSD		2.281	3.324	77.120	35.080	25.550	1.8	7.476	73.260	33.400	118.900

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:17	4.543	-0.013	13.520	-2.972	-0.008	0.173	0.088	-0.052	0.005	-0.038
2	16:28:44	2.125	0.012	9.169	-7.864	-0.007	0.141	-0.072	-0.068	-0.011	0.014
3	16:29:11	4.067	-0.031	10.680	-4.924	-0.016	0.075	0.221	-0.081	-0.002	0.024
x		3.578	-0.011	11.120	-5.253	-0.011	0.130	0.079	-0.067	-0.002	0.000
σ		1.281	0.021	2.210	2.463	0.005	0.050	0.147	0.014	0.008	0.033
%RSD		35.790	199.700	19.870	46.880	46.490	38.370	185.500	21.510	310.600	16480.000

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:17	-0.249	0.022	0.046	0.251	-0.231	0.350	1.491	0.478	-3.822	0.023
2	16:28:44	-0.360	-0.004	-0.080	-0.112	-0.253	-0.069	-0.181	-0.003	-0.997	0.024
3	16:29:11	-0.379	-0.002	-0.103	0.058	0.064	0.670	-0.707	-0.053	-3.602	0.010
x		-0.330	0.005	-0.046	0.065	-0.140	0.317	0.201	0.141	-2.807	0.019
σ		0.070	0.015	0.080	0.182	0.177	0.370	1.148	0.293	1.572	0.007
%RSD		21.320	291.200	175.800	277.900	126.100	116.800	570.800	208.500	55.990	38.610

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:17	84.7%	0.088	0.127	0.080	-0.884	0.031	0.029	0.004	0.021	82.9%
2	16:28:44	86.7%	0.070	0.119	0.077	1.018	0.025	0.021	0.054	0.018	86.5%
3	16:29:11	84.7%	0.072	0.061	0.066	-0.389	0.024	0.013	0.013	0.009	83.4%
x		85.4%	0.077	0.102	0.074	-0.085	0.027	0.021	0.024	0.016	84.3%
σ		1.2%	0.010	0.036	0.008	0.987	0.003	0.008	0.026	0.006	2.0%
%RSD		1.4	13.020	35.190	10.380	1165.000	12.570	38.060	111.900	37.580	2.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:28:17	0.064	0.061	0.137	0.189	0.071	0.063	81.1%	0.022	0.022	0.026
2	16:28:44	0.037	0.072	0.166	0.133	0.046	0.058	84.4%	0.018	0.009	0.033
3	16:29:11	0.034	0.047	0.158	0.152	0.077	0.039	82.0%	0.016	0.009	0.012
x		0.045	0.060	0.153	0.158	0.065	0.054	82.5%	0.019	0.013	0.023
σ		0.016	0.012	0.015	0.028	0.016	0.012	1.7%	0.003	0.008	0.011
%RSD		36.640	20.860	9.604	17.950	24.860	23.250	2.1	16.240	57.000	44.970

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:28:17	0.027	0.030	81.2%
2	16:28:44	0.011	0.024	84.3%
3	16:29:11	0.028	0.012	82.6%
x		0.022	0.022	82.7%
σ		0.010	0.009	1.5%
%RSD		45.120	40.720	1.8

UD11011-001DIS 04/25/2019 16:33:36

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:03	98.6%	-0.029	42.780	45.920	-73.820	T 72750.000	T 12010.000	T 12130.000	T 12450.000	6.549
2	16:34:30	96.4%	-0.024	44.580	46.640	-74.000	T 73600.000	T 12230.000	T 12340.000	T 12660.000	6.548
3	16:34:57	99.3%	-0.023	44.780	47.940	-73.720	T 74630.000	T 12220.000	T 12490.000	T 12760.000	T 13.330
x		98.1%	-0.025	44.050	46.830	-73.840	T 73660.000	T 12150.000	T 12320.000	T 12620.000	T 8.808
σ		1.5%	0.003	1.099	1.025	0.143	T 942.200	T 127.200	T 180.200	T 154.700	T 3.912
%RSD		1.5	13.380	2.495	2.189	0.193	T 1.279	T 1.047	T 1.462	T 1.226	T 44.420

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:03	T 9787.000	T 90940.000	T 1512.000	57080.000	T 54640.000	96.2%	1.773	0.828	0.451	2172.000
2	16:34:30	T 9914.000	T 92690.000	T 1528.000	57560.000	T 56330.000	96.2%	1.554	0.893	0.439	2149.000
3	16:34:57	TM 10360.000	T 97020.000	T 1522.000	57840.000	T 53100.000	93.8%	1.810	0.625	0.452	2734.000
x		TM 10020.000	T 93550.000	T 1521.000	57490.000	T 54690.000	95.4%	1.712	0.782	0.447	2352.000
σ		TM 299.200	T 3133.000	T 8.405	385.800	T 1612.000	1.4%	0.139	0.140	0.007	331.500
%RSD		TM 2.986	T 3.349	T 0.553	0.671	T 2.947	1.4	8.095	17.860	1.606	14.100

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:03	24.870	0.502	30.690	529.000	0.088	0.932	0.140	3.913	3.734	5.124
2	16:34:30	24.460	0.512	31.090	492.100	0.081	0.902	-0.113	3.861	3.766	5.169
3	16:34:57	24.240	0.497	32.040	592.800	0.103	0.948	0.346	3.756	3.773	4.715
x		24.530	0.504	31.270	538.000	0.091	0.927	0.124	3.843	3.758	5.003
σ		0.318	0.007	0.697	50.960	0.011	0.023	0.230	0.080	0.021	0.250
%RSD		1.296	1.445	2.229	9.472	12.170	2.480	185.000	2.071	0.556	5.005

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:03	8.892	7.892	0.489	0.878	7.363	7.119	2.178	0.654	-3.347	220.200
2	16:34:30	9.414	8.545	0.165	0.535	7.987	9.617	1.437	0.493	-3.471	219.900
3	16:34:57	8.247	7.800	0.133	0.890	7.216	9.178	-0.442	-0.007	-1.726	219.900
x		8.851	8.079	0.262	0.768	7.522	8.638	1.058	0.380	-2.848	220.000
σ		0.585	0.406	0.197	0.202	0.409	1.334	1.351	0.344	0.974	0.189
%RSD		6.604	5.027	75.210	26.260	5.443	15.440	127.700	90.630	34.200	0.086

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:03	89.3%	0.479	0.500	0.434	10.910	0.010	0.003	0.002	0.002	85.6%
2	16:34:30	91.0%	0.498	0.509	0.477	7.920	0.005	0.005	0.006	0.006	86.0%
3	16:34:57	87.8%	0.395	0.440	0.420	11.820	0.008	0.005	0.012	-0.009	83.0%
x		89.4%	0.457	0.483	0.444	10.220	0.008	0.005	0.007	-0.001	84.9%
σ		1.6%	0.055	0.037	0.030	2.042	0.003	0.001	0.005	0.008	1.6%
%RSD		1.8	12.040	7.701	6.732	19.980	32.430	26.620	74.360	1224.000	1.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:34:03	0.581	0.807	0.160	0.136	85.360	86.330	86.6%	-0.001	-0.012	0.249
2	16:34:30	0.498	0.726	0.139	0.147	88.330	85.630	87.8%	-0.009	-0.016	0.255
3	16:34:57	0.541	0.795	0.149	0.179	87.300	85.740	84.4%	-0.006	-0.014	0.228
x		0.540	0.776	0.150	0.154	87.000	85.900	86.3%	-0.005	-0.014	0.244
σ		0.042	0.044	0.010	0.022	1.506	0.376	1.7%	0.004	0.002	0.014
%RSD		7.731	5.672	6.927	14.520	1.731	0.438	2.0	73.600	13.950	5.759

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:34:03	0.272	0.243	83.4%
2	16:34:30	0.263	0.247	84.4%
3	16:34:57	0.231	0.245	80.3%
x		0.255	0.245	82.7%
σ		0.021	0.002	2.1%
%RSD		8.353	0.841	2.6

UD11011-002DIS 04/25/2019 16:39:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:48	100.7%	-0.016	21.290	22.020	-61.350	T 25870.000	T 18330.000	T 19040.000	T 19210.000	1.958
2	16:40:15	96.9%	-0.025	21.620	22.230	-62.940	T 25450.000	T 18270.000	T 18790.000	T 18680.000	2.114
3	16:40:43	97.1%	-0.023	21.640	22.050	-59.520	T 26030.000	T 18180.000	T 18600.000	T 18800.000	2.018
x		98.2%	-0.021	21.520	22.100	-61.270	T 25780.000	T 18260.000	T 18810.000	T 18900.000	2.030
σ		2.2%	0.005	0.198	0.117	1.712	T 299.700	T 71.950	T 219.400	T 275.000	0.079
%RSD		2.2	22.630	0.922	0.529	2.794	T 1.163	T 0.394	T 1.166	T 1.455	3.894

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:48	T 9445.000	T 101300.000	438.200	79320.000	T 71040.000	92.6%	1.343	0.002	0.438	3011.000
2	16:40:15	T 9096.000	T 100600.000	471.300	79820.000	T 76890.000	95.7%	1.382	-0.098	0.347	2616.000
3	16:40:43	T 9285.000	T 101800.000	458.600	79480.000	T 74970.000	93.5%	1.404	0.126	0.421	2556.000
x		T 9275.000	T 101200.000	456.000	79540.000	T 74300.000	94.0%	1.376	0.010	0.402	2728.000
σ		T 174.900	T 607.800	16.730	255.600	T 2981.000	1.6%	0.031	0.112	0.048	247.300
%RSD		T 1.885	T 0.601	3.669	0.321	T 4.012	1.7	2.249	1135.000	11.980	9.064

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:48	16.910	TM 980.700	28.810	812.100	1.157	1.554	0.913	0.787	0.979	3.441
2	16:40:15	14.630	TM 967.900	23.020	659.600	1.137	1.410	0.761	0.752	1.022	3.446
3	16:40:43	15.210	TM 968.500	23.990	747.800	1.216	1.594	0.500	0.801	1.003	3.417
x		15.580	TM 972.400	25.270	739.900	1.170	1.519	0.725	0.780	1.001	3.435
σ		1.187	TM 7.229	3.104	76.530	0.041	0.097	0.209	0.025	0.022	0.016
%RSD		7.618	TM 0.744	12.280	10.340	3.476	6.397	28.820	3.256	2.186	0.452

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:48	5.794	5.504	0.552	1.156	18.190	17.700	2.252	0.630	-1.771	198.700
2	16:40:15	5.937	5.588	0.132	0.516	20.550	19.140	1.378	0.420	-2.523	197.500
3	16:40:43	5.713	5.498	-0.234	0.827	18.350	19.120	0.920	0.285	-1.075	197.700
x		5.815	5.530	0.150	0.833	19.030	18.650	1.517	0.445	-1.790	198.000
σ		0.113	0.050	0.394	0.320	1.318	0.825	0.677	0.174	0.724	0.673
%RSD		1.950	0.912	262.500	38.430	6.924	4.421	44.630	39.030	40.460	0.340

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:48	86.1%	0.449	0.399	0.367	9.949	0.001	0.003	0.074	0.096	82.1%
2	16:40:15	92.0%	0.342	0.461	0.407	8.402	0.006	0.005	0.104	0.116	88.2%
3	16:40:43	89.8%	0.510	0.353	0.416	9.498	-0.002	0.005	0.066	0.071	85.4%
x		89.3%	0.433	0.404	0.397	9.283	0.002	0.005	0.081	0.095	85.2%
σ		3.0%	0.085	0.054	0.026	0.795	0.004	0.001	0.020	0.022	3.1%
%RSD		3.4	19.620	13.370	6.559	8.569	218.600	22.580	24.470	23.790	3.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:39:48	0.604	0.785	0.105	0.107	59.500	58.150	84.1%	-0.007	-0.015	0.033
2	16:40:15	0.579	0.785	0.106	0.153	57.580	57.920	89.1%	-0.013	-0.013	0.030
3	16:40:43	0.591	0.823	0.094	0.082	58.950	58.040	86.7%	0.000	-0.015	0.027
x		0.591	0.798	0.102	0.114	58.670	58.040	86.6%	-0.007	-0.014	0.030
σ		0.013	0.022	0.006	0.036	0.990	0.113	2.5%	0.006	0.001	0.003
%RSD		2.177	2.760	6.270	31.670	1.688	0.195	2.8	97.680	9.149	10.060

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:39:48	0.024	0.028	80.6%
2	16:40:15	0.036	0.030	87.0%
3	16:40:43	0.044	0.025	84.4%
x		0.035	0.028	84.0%
σ		0.010	0.002	3.2%
%RSD		30.110	8.914	3.8

UD11011-003DIS 04/25/2019 16:45:07

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:34	96.1%	0.011	32.680	30.750	40.940	T 20720.000	T 46190.000	T 46070.000	T 46360.000	3.264
2	16:46:02	95.6%	-0.010	31.360	32.810	42.490	T 20650.000	T 47610.000	T 48010.000	T 47560.000	3.688
3	16:46:29	98.9%	-0.011	31.010	32.250	45.170	T 20910.000	T 47050.000	T 47860.000	T 47520.000	3.140
x		96.9%	-0.003	31.690	31.940	42.870	T 20760.000	T 46950.000	T 47310.000	T 47150.000	3.364
σ		1.7%	0.012	0.880	1.066	2.143	T 135.900	T 716.300	T 1081.000	T 678.000	0.288
%RSD		1.8	409.100	2.778	3.338	5.000	T 0.655	T 1.526	T 2.284	T 1.438	8.552

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:34	T 7452.000	T 118900.000	540.600	M 121000.000	TM 114200.000	94.5%	1.045	0.272	0.420	2566.000
2	16:46:02	T 7437.000	T 120000.000	544.500	TM 128800.000	TM 112600.000	93.1%	1.107	0.244	0.400	2593.000
3	16:46:29	T 7674.000	T 123600.000	526.400	TM 129800.000	TM 109400.000	92.5%	1.178	0.426	0.460	2831.000
x		T 7521.000	T 120800.000	537.200	TM 126500.000	TM 112000.000	93.4%	1.110	0.314	0.427	2663.000
σ		T 132.900	T 2436.000	9.519	TM 4817.000	TM 2457.000	1.1%	0.067	0.098	0.030	146.000
%RSD		T 1.767	T 2.016	1.772	TM 3.806	TM 2.193	1.1	5.997	31.190	7.075	5.481

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:34	25.230	36.360	36.990	1059.000	0.230	1.782	0.643	0.371	0.715	1.688
2	16:46:02	24.270	35.990	36.270	1052.000	0.232	1.772	0.182	0.385	0.738	1.830
3	16:46:29	26.730	35.990	40.750	1195.000	0.271	1.870	0.761	0.373	0.870	1.735
x		25.410	36.110	38.010	1102.000	0.244	1.808	0.529	0.376	0.774	1.751
σ		1.236	0.213	2.402	80.470	0.023	0.054	0.306	0.007	0.084	0.072
%RSD		4.863	0.590	6.319	7.304	9.327	2.994	57.890	1.990	10.810	4.129

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:34	8.070	6.415	0.371	0.582	66.360	66.330	3.236	0.883	-5.420	177.200
2	16:46:02	8.696	6.110	0.243	0.677	65.800	67.150	0.947	0.263	-3.120	177.200
3	16:46:29	8.362	6.261	0.285	-0.080	67.190	67.900	0.457	0.236	-6.563	176.600
x		8.376	6.262	0.300	0.393	66.450	67.130	1.547	0.461	-5.034	177.000
σ		0.313	0.153	0.065	0.413	0.701	0.788	1.484	0.366	1.754	0.337
%RSD		3.738	2.435	21.830	105.000	1.055	1.174	95.930	79.410	34.830	0.191

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:34	89.4%	0.649	0.744	0.821	7.993	0.001	0.002	0.014	0.008	85.9%
2	16:46:02	89.5%	0.746	0.816	0.723	6.345	-0.001	0.000	-0.004	0.007	86.7%
3	16:46:29	87.2%	0.758	0.734	0.710	10.830	-0.002	0.000	0.001	-0.005	84.1%
x		88.7%	0.717	0.765	0.751	8.391	-0.001	0.001	0.003	0.004	85.5%
σ		1.3%	0.060	0.044	0.061	2.271	0.001	0.001	0.009	0.007	1.3%
%RSD		1.5	8.307	5.801	8.076	27.060	285.500	141.500	263.000	208.300	1.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:45:34	0.569	0.830	0.074	0.082	115.800	114.600	87.4%	-0.014	-0.018	0.004
2	16:46:02	0.505	0.780	0.087	0.066	115.200	114.400	87.2%	-0.010	-0.013	0.004
3	16:46:29	0.563	0.840	0.075	0.079	116.300	115.200	85.3%	-0.017	-0.016	0.005
x		0.545	0.817	0.079	0.076	115.700	114.700	86.6%	-0.014	-0.015	0.004
σ		0.035	0.032	0.008	0.008	0.528	0.394	1.2%	0.003	0.003	0.000
%RSD		6.474	3.958	9.654	10.800	0.457	0.343	1.4	23.560	17.510	3.914

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:45:34	-0.003	-0.002	83.8%
2	16:46:02	-0.005	-0.001	83.5%
3	16:46:29	0.003	-0.002	81.8%
x		-0.001	-0.002	83.1%
σ		0.004	0.001	1.1%
%RSD		270.800	58.300	1.3

UD11011-003SDIS 04/25/2019 16:50:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:21	96.9%	95.320	126.800	124.400	48.150	T 22020.000	T 48210.000	T 48370.000	T 48570.000	100.100
2	16:51:49	96.2%	97.640	130.000	125.100	52.580	T 22150.000	T 49000.000	T 48720.000	T 47600.000	98.150
3	16:52:16	T 107.3%	100.300	135.300	132.100	59.570	T 21980.000	T 49180.000	T 49570.000	T 48350.000	88.220
x		T 100.2%	97.750	130.700	127.200	53.440	T 22050.000	T 48800.000	T 48890.000	T 48170.000	95.480
σ		T 6.2%	2.481	4.296	4.249	5.758	T 87.870	T 515.800	T 617.600	T 510.400	6.354
%RSD		T 6.2	2.538	3.288	3.340	10.780	T 0.399	T 1.057	T 1.263	T 1.059	6.655

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:21	T 8644.000	T 122700.000	T 1490.000	M 123300.000	TM 110500.000	91.5%	104.800	103.900	98.990	3719.000
2	16:51:49	T 8540.000	T 121900.000	T 1518.000	M 125500.000	TM 111400.000	92.2%	105.900	105.600	99.170	3342.000
3	16:52:16	T 8548.000	T 123900.000	T 1339.000	M 123600.000	TM 101600.000	93.2%	106.400	104.800	100.000	3595.000
x		T 8577.000	T 122900.000	T 1449.000	M 124100.000	TM 107800.000	92.3%	105.700	104.800	99.390	3552.000
σ		T 57.480	T 982.000	T 96.350	M 1194.000	TM 5430.000	0.8%	0.812	0.851	0.541	192.100
%RSD		T 0.670	T 0.799	T 6.649	M 0.963	TM 5.037	0.9	0.769	0.813	0.544	5.408

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:21	1140.000	135.000	T 1099.000	2323.000	95.400	97.190	97.270	95.480	94.670	99.060
2	16:51:49	1153.000	133.600	T 1091.000	2224.000	96.990	98.590	97.380	94.500	94.370	100.400
3	16:52:16	1133.000	133.900	T 1085.000	2157.000	97.750	97.730	94.740	95.540	95.630	101.300
x		1142.000	134.100	T 1091.000	2235.000	96.710	97.840	96.470	95.170	94.890	100.300
σ		10.150	0.727	T 6.947	83.080	1.198	0.707	1.493	0.579	0.661	1.127
%RSD		0.889	0.542	T 0.637	3.718	1.239	0.723	1.548	0.608	0.696	1.124

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:21	101.400	99.280	98.340	103.400	61.550	61.840	422.600	101.300	-4.956	282.200
2	16:51:49	99.520	98.950	97.430	103.100	58.400	60.360	410.900	99.850	-4.204	278.800
3	16:52:16	104.500	100.100	98.370	102.500	62.400	59.290	438.700	105.000	-2.190	280.800
x		101.800	99.430	98.050	103.000	60.780	60.500	424.100	102.000	-3.783	280.600
σ		2.512	0.568	0.536	0.459	2.107	1.278	13.960	2.657	1.430	1.721
%RSD		2.468	0.572	0.546	0.446	3.466	2.113	3.292	2.604	37.800	0.613

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:21	85.4%	103.000	103.900	102.200	103.400	98.780	98.010	97.280	98.200	82.3%
2	16:51:49	87.0%	103.000	102.100	103.300	111.500	98.450	98.430	97.780	98.680	82.6%
3	16:52:16	88.3%	103.100	103.900	103.300	108.700	98.360	98.190	99.750	100.100	85.0%
x		86.9%	103.100	103.300	102.900	107.900	98.530	98.210	98.270	98.980	83.3%
σ		1.5%	0.021	1.081	0.614	4.079	0.221	0.210	1.304	0.965	1.5%
%RSD		1.7	0.021	1.047	0.596	3.782	0.224	0.214	1.327	0.975	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:51:21	102.900	102.800	100.100	100.300	217.300	217.200	82.3%	98.530	100.100	98.640
2	16:51:49	102.800	103.500	101.400	99.390	220.900	219.400	84.3%	98.400	100.200	97.210
3	16:52:16	102.000	102.800	100.600	100.400	219.500	218.100	86.5%	96.590	99.230	99.050
x		102.600	103.000	100.700	100.000	219.200	218.200	84.4%	97.840	99.850	98.300
σ		0.524	0.371	0.629	0.573	1.795	1.070	2.1%	1.083	0.543	0.965
%RSD		0.511	0.360	0.624	0.572	0.819	0.491	2.5	1.107	0.544	0.982

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:51:21	98.560	97.970	77.8%
2	16:51:49	98.410	97.430	80.4%
3	16:52:16	98.190	97.900	82.3%
x		98.390	97.770	80.2%
σ		0.185	0.292	2.3%
%RSD		0.188	0.298	2.8

UD11011-003SDDIS 04/25/2019 16:56:41

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:08	95.6%	92.930	130.700	122.700	53.840	T 21720.000	T 46420.000	T 46720.000	T 46570.000	99.410
2	16:57:35	96.4%	95.070	126.900	122.100	57.640	T 21930.000	T 47170.000	T 48060.000	T 46760.000	97.840
3	16:58:02	99.1%	96.250	126.000	121.000	60.760	T 22110.000	T 47230.000	T 46690.000	T 46920.000	93.390
x		97.0%	94.750	127.800	121.900	57.410	T 21920.000	T 46940.000	T 47150.000	T 46750.000	96.880
σ		1.8%	1.687	2.491	0.888	3.467	T 196.900	T 451.900	T 781.100	T 176.600	3.123
%RSD		1.9	1.780	1.949	0.728	6.039	T 0.898	T 0.963	T 1.656	T 0.378	3.223

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:08	T 8288.000	T 117800.000	T 1493.000	TM 125600.000	TM 112400.000	93.6%	98.600	102.000	95.750	2688.000
2	16:57:35	T 8441.000	T 119000.000	T 1484.000	TM 126600.000	TM 112900.000	93.8%	100.800	104.100	97.780	2804.000
3	16:58:02	T 7815.000	T 116900.000	T 1446.000	M 119900.000	TM 110100.000	95.9%	100.000	100.300	95.850	2741.000
x		T 8181.000	T 117900.000	T 1475.000	TM 124000.000	TM 111800.000	94.4%	99.790	102.100	96.460	2744.000
σ		T 326.100	T 1043.000	T 24.880	TM 3629.000	TM 1474.000	1.3%	1.096	1.884	1.145	57.760
%RSD		T 3.986	T 0.885	T 1.687	TM 2.926	TM 1.319	1.4	1.098	1.844	1.187	2.105

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:08	1085.000	130.200	T 1064.000	2164.000	94.080	93.740	95.730	91.690	91.490	99.060
2	16:57:35	1093.000	131.600	T 1056.000	2035.000	94.500	95.980	93.580	93.410	93.530	99.500
3	16:58:02	1114.000	132.100	T 1049.000	1968.000	93.080	93.240	94.340	91.840	91.520	98.750
x		1097.000	131.300	T 1056.000	2056.000	93.890	94.320	94.550	92.310	92.180	99.100
σ		14.730	0.996	T 7.382	99.940	0.728	1.464	1.090	0.952	1.171	0.374
%RSD		1.343	0.759	T 0.699	4.861	0.775	1.552	1.153	1.032	1.270	0.378

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:08	100.700	97.280	98.100	101.700	68.400	67.640	443.700	108.300	-3.931	277.800
2	16:57:35	103.600	99.970	98.040	99.590	67.410	70.330	414.300	98.820	-3.597	278.800
3	16:58:02	101.200	100.900	100.600	98.340	67.090	72.010	428.200	102.700	-2.386	277.100
x		101.800	99.390	98.910	99.870	67.630	69.990	428.700	103.300	-3.304	277.900
σ		1.540	1.891	1.454	1.685	0.684	2.206	14.710	4.750	0.813	0.818
%RSD		1.513	1.903	1.470	1.687	1.011	3.151	3.430	4.599	24.600	0.295

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:08	89.1%	101.600	100.900	100.700	107.700	97.040	97.310	98.630	97.280	84.1%
2	16:57:35	90.2%	103.200	99.690	100.800	106.200	95.970	95.110	98.960	97.280	86.9%
3	16:58:02	92.8%	99.180	100.100	100.600	108.800	95.050	95.570	98.100	96.570	88.8%
x		90.7%	101.300	100.200	100.700	107.600	96.020	96.000	98.560	97.040	86.6%
σ		1.9%	2.030	0.637	0.090	1.301	0.998	1.159	0.434	0.410	2.4%
%RSD		2.1	2.003	0.635	0.089	1.209	1.039	1.207	0.441	0.423	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	16:57:08	101.100	100.600	99.550	98.440	215.400	214.400	85.2%	96.860	98.440	96.660
2	16:57:35	102.000	101.700	98.710	99.350	217.300	213.200	88.2%	97.090	98.480	96.400
3	16:58:02	100.700	100.700	99.700	100.100	214.100	212.100	89.7%	95.650	98.900	97.630
x		101.300	101.000	99.320	99.290	215.600	213.200	87.7%	96.530	98.610	96.900
σ		0.695	0.612	0.533	0.829	1.628	1.175	2.3%	0.772	0.256	0.647
%RSD		0.686	0.606	0.537	0.835	0.755	0.551	2.6	0.799	0.259	0.668

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	16:57:08	97.050	95.910	80.4%
2	16:57:35	97.140	96.280	84.6%
3	16:58:02	96.610	95.880	86.3%
x		96.930	96.020	83.8%
σ		0.281	0.227	3.1%
%RSD		0.290	0.236	3.7

UD11011-003L(5)DIS 04/25/2019 17:02:27

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:02:54	96.3%	0.001	7.338	7.736	15.340	┬4176.000	┬9816.000	┬9679.000	┬9678.000	1.391
2	17:03:21	93.4%	0.049	7.302	7.638	16.600	┬4174.000	┬9552.000	┬9521.000	┬9524.000	1.468
3	17:03:49	97.5%	0.032	7.185	7.785	20.160	┬4076.000	┬9752.000	┬9628.000	┬9596.000	1.392
x		95.7%	0.028	7.275	7.720	17.370	┬4142.000	┬9707.000	┬9609.000	┬9600.000	1.417
σ		2.1%	0.024	0.080	0.075	2.499	┬57.050	┬138.000	┬80.820	┬77.340	0.044
%RSD		2.2	87.680	1.100	0.970	14.390	┬1.377	┬1.421	┬0.841	┬0.806	3.137

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:02:54	┬1485.000	┬24310.000	102.800	24460.000	┬22750.000	94.1%	-0.042	0.071	0.074	529.800
2	17:03:21	┬1470.000	┬24140.000	109.200	24590.000	┬23510.000	94.8%	-0.094	0.125	0.098	481.900
3	17:03:49	┬1448.000	┬24270.000	103.000	24350.000	┬23070.000	96.2%	-0.052	0.045	0.098	552.600
x		┬1468.000	┬24240.000	105.000	24470.000	┬23110.000	95.0%	-0.063	0.080	0.090	521.400
σ		┬18.700	┬86.860	3.602	118.800	┬377.400	1.1%	0.027	0.041	0.014	36.070
%RSD		┬1.274	┬0.358	3.431	0.485	┬1.633	1.2	43.820	51.100	15.680	6.918

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:02:54	3.040	7.312	11.310	199.300	0.005	0.325	0.531	0.010	0.177	0.402
2	17:03:21	1.975	7.297	9.783	187.100	0.019	0.292	-0.302	0.019	0.141	0.377
3	17:03:49	3.147	7.004	9.863	194.900	0.012	0.375	-0.324	0.008	0.133	0.439
x		2.721	7.205	10.320	193.800	0.012	0.330	-0.032	0.012	0.150	0.406
σ		0.648	0.174	0.859	6.187	0.007	0.042	0.487	0.006	0.023	0.031
%RSD		23.820	2.411	8.324	3.192	60.470	12.740	1544.000	44.980	15.640	7.710

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:02:54	1.663	1.342	-0.032	0.046	13.600	14.360	-1.778	-0.284	-5.204	34.770
2	17:03:21	1.303	1.253	0.018	0.063	13.880	14.130	-0.205	-0.019	-0.406	34.870
3	17:03:49	1.717	1.246	-0.018	0.008	13.540	15.640	-0.975	-0.122	-4.210	34.550
x		1.561	1.280	-0.011	0.039	13.670	14.710	-0.986	-0.142	-3.274	34.730
σ		0.225	0.054	0.026	0.028	0.182	0.811	0.786	0.133	2.533	0.163
%RSD		14.400	4.220	241.200	73.240	1.332	5.511	79.730	94.260	77.360	0.470

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:02:54	89.3%	0.240	0.216	0.143	1.179	0.014	0.006	0.008	-0.001	87.8%
2	17:03:21	91.3%	0.192	0.135	0.176	2.135	0.013	0.003	-0.006	-0.001	88.7%
3	17:03:49	89.8%	0.168	0.167	0.185	2.506	0.004	0.007	0.016	0.002	88.6%
x		90.1%	0.200	0.172	0.168	1.940	0.011	0.005	0.006	-0.000	88.4%
σ		1.0%	0.037	0.040	0.023	0.685	0.006	0.002	0.011	0.002	0.5%
%RSD		1.1	18.540	23.480	13.380	35.280	55.310	38.280	190.300	1563.000	0.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:02:54	0.128	0.193	-0.007	0.012	22.360	22.640	86.7%	0.049	0.053	0.009
2	17:03:21	0.131	0.178	0.010	0.008	22.670	23.360	87.9%	0.064	0.040	0.011
3	17:03:49	0.101	0.215	0.016	0.006	22.300	21.960	87.1%	0.028	0.032	0.008
x		0.120	0.196	0.006	0.009	22.440	22.650	87.2%	0.047	0.042	0.009
σ		0.016	0.019	0.012	0.003	0.199	0.701	0.6%	0.018	0.011	0.001
%RSD		13.580	9.549	185.700	30.490	0.885	3.094	0.7	38.610	25.560	16.440

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:02:54	0.010	0.005	86.6%
2	17:03:21	0.003	0.006	87.8%
3	17:03:49	0.003	0.004	87.0%
x		0.005	0.005	87.1%
σ		0.004	0.001	0.6%
%RSD		83.600	21.420	0.7

UD11011-003ADIS 04/25/2019 17:08:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:42	94.3%	100.700	131.900	128.800	54.920	T 21330.000	T 47980.000	T 47850.000	T 47930.000	97.510
2	17:09:08	98.7%	92.580	126.000	120.900	49.820	T 21870.000	T 47450.000	T 47660.000	T 46890.000	96.220
3	17:09:35	96.7%	92.750	127.800	125.600	47.210	T 22240.000	T 47650.000	T 46720.000	T 47050.000	97.500
x		96.6%	95.340	128.600	125.100	50.650	T 21810.000	T 47690.000	T 47410.000	T 47290.000	97.080
σ		2.2%	4.643	3.011	3.944	3.920	T 458.500	T 267.200	T 604.600	T 562.700	0.737
%RSD		2.3	4.869	2.342	3.153	7.740	T 2.102	T 0.560	T 1.275	T 1.190	0.759

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:42	T 8172.000	T 116500.000	T 1497.000	M 120800.000	TM 115100.000	95.6%	101.900	101.400	97.530	2578.000
2	17:09:08	T 8428.000	T 119100.000	T 1471.000	M 121600.000	TM 109800.000	93.4%	100.900	101.700	97.600	3568.000
3	17:09:35	T 8580.000	T 120200.000	T 1496.000	TM 132000.000	TM 112000.000	93.0%	102.300	102.800	97.770	3270.000
x		T 8393.000	T 118600.000	T 1488.000	TM 124800.000	TM 112300.000	94.0%	101.700	102.000	97.630	3139.000
σ		T 205.900	T 1922.000	T 15.000	TM 6262.000	TM 2655.000	1.4%	0.749	0.712	0.123	508.000
%RSD		T 2.454	T 1.620	T 1.008	TM 5.017	TM 2.364	1.4	0.737	0.698	0.126	16.180

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:42	1110.000	131.300	T 1066.000	2025.000	94.350	95.580	92.590	94.450	93.630	100.400
2	17:09:08	1116.000	130.700	T 1068.000	2189.000	92.630	96.000	94.570	94.490	91.570	97.840
3	17:09:35	1096.000	130.100	T 1071.000	2197.000	93.240	95.390	95.710	93.070	91.850	99.150
x		1107.000	130.700	T 1068.000	2137.000	93.410	95.660	94.290	94.000	92.350	99.130
σ		9.942	0.613	T 2.589	97.180	0.873	0.315	1.581	0.806	1.118	1.273
%RSD		0.898	0.469	T 0.242	4.547	0.935	0.329	1.676	0.857	1.210	1.284

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:42	103.000	100.900	98.620	102.900	67.230	63.650	424.100	101.400	-2.132	278.800
2	17:09:08	99.680	95.710	94.980	102.200	66.660	65.390	409.000	97.790	-3.107	279.200
3	17:09:35	98.960	97.480	96.660	101.300	67.040	66.380	425.500	102.500	-3.352	279.500
x		100.500	98.020	96.750	102.100	66.980	65.140	419.500	100.600	-2.864	279.100
σ		2.159	2.622	1.820	0.779	0.292	1.386	9.153	2.464	0.645	0.345
%RSD		2.147	2.675	1.881	0.763	0.435	2.127	2.182	2.450	22.530	0.124

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:42	89.8%	102.500	101.100	101.600	105.900	97.020	97.000	99.130	98.120	86.6%
2	17:09:08	86.5%	101.000	101.200	101.400	105.600	95.530	96.200	97.130	98.790	83.6%
3	17:09:35	86.9%	101.300	101.800	101.300	111.500	96.890	96.830	98.780	96.650	83.3%
x		87.7%	101.600	101.400	101.500	107.700	96.480	96.680	98.340	97.850	84.5%
σ		1.8%	0.760	0.355	0.137	3.330	0.824	0.419	1.068	1.091	1.8%
%RSD		2.0	0.748	0.350	0.135	3.093	0.854	0.434	1.086	1.115	2.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:08:42	100.600	100.300	96.800	95.830	217.000	217.400	88.1%	96.550	97.580	96.590
2	17:09:08	101.700	100.600	94.590	95.220	216.800	213.800	84.1%	96.990	98.980	97.450
3	17:09:35	101.000	100.600	94.470	95.320	214.400	215.200	84.6%	97.070	99.060	97.010
x		101.100	100.500	95.290	95.460	216.000	215.500	85.6%	96.870	98.540	97.020
σ		0.526	0.171	1.316	0.329	1.425	1.828	2.2%	0.278	0.830	0.430
%RSD		0.520	0.170	1.381	0.344	0.660	0.849	2.5	0.287	0.843	0.443

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:08:42	96.470	95.810	83.6%
2	17:09:08	97.280	96.510	79.7%
3	17:09:35	97.340	96.910	80.3%
x		97.030	96.410	81.2%
σ		0.486	0.558	2.1%
%RSD		0.501	0.579	2.6

UD11011-004DIS 04/25/2019 17:14:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:14:27	98.1%	-0.011	90.440	91.140	14.220	T 39640.000	T 52750.000	T 52410.000	T 51590.000	21.700
2	17:14:54	96.5%	-0.008	88.460	92.110	14.140	T 39770.000	T 52450.000	T 53320.000	T 52750.000	21.500
3	17:15:21	97.5%	-0.008	91.660	93.970	14.570	T 38990.000	T 51210.000	T 52080.000	T 52790.000	21.700
x		97.4%	-0.009	90.180	92.410	14.310	T 39460.000	T 52140.000	T 52600.000	T 52380.000	21.630
σ		0.8%	0.001	1.615	1.437	0.228	T 415.800	T 815.200	T 643.000	T 686.000	0.116
%RSD		0.9	16.040	1.791	1.556	1.592	T 1.054	T 1.564	T 1.222	T 1.310	0.538

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:14:27	T 6173.000	T 112100.000	267.500	M 108500.000	T 96080.000	92.0%	1.146	0.198	1.074	2816.000
2	17:14:54	T 6132.000	T 111800.000	275.300	M 109000.000	T 98690.000	92.2%	1.232	0.236	0.997	2830.000
3	17:15:21	T 6083.000	T 111600.000	271.200	M 105500.000	T 99720.000	95.0%	1.278	0.144	0.918	2722.000
x		T 6129.000	T 111800.000	271.300	M 107700.000	T 98160.000	93.1%	1.219	0.193	0.996	2789.000
σ		T 45.200	T 255.500	3.943	M 1865.000	T 1872.000	1.7%	0.067	0.046	0.078	58.570
%RSD		T 0.738	T 0.229	1.453	M 1.732	T 1.907	1.8	5.496	23.970	7.788	2.100

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:14:27	37.140	8.763	51.920	1089.000	0.264	1.698	0.642	1.002	1.508	4.417
2	17:14:54	39.320	8.892	49.050	1029.000	0.235	1.886	0.849	1.043	1.463	4.460
3	17:15:21	35.400	8.719	48.580	949.100	0.225	1.679	0.621	1.030	1.427	4.351
x		37.290	8.791	49.850	1023.000	0.241	1.754	0.704	1.025	1.466	4.409
σ		1.969	0.090	1.808	70.400	0.021	0.114	0.126	0.021	0.041	0.055
%RSD		5.280	1.021	3.627	6.885	8.541	6.506	17.910	2.064	2.772	1.242

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:14:27	6.871	6.976	-0.111	0.641	88.680	89.510	4.864	1.172	-1.330	169.800
2	17:14:54	7.014	6.500	0.438	1.389	89.070	91.480	3.650	0.944	-3.807	170.600
3	17:15:21	6.772	6.718	0.020	0.780	91.330	90.630	4.301	1.086	-3.531	170.600
x		6.886	6.731	0.116	0.937	89.690	90.540	4.272	1.067	-2.889	170.300
σ		0.122	0.238	0.287	0.398	1.431	0.990	0.608	0.115	1.358	0.466
%RSD		1.766	3.537	246.900	42.500	1.595	1.094	14.230	10.770	46.990	0.274

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:14:27	86.1%	0.567	0.544	0.666	10.130	0.015	0.014	0.039	0.033	81.9%
2	17:14:54	87.5%	0.660	0.638	0.620	8.256	0.006	0.001	0.025	0.019	82.7%
3	17:15:21	89.1%	0.583	0.718	0.588	5.569	0.007	0.009	0.010	0.031	84.8%
x		87.5%	0.604	0.633	0.625	7.985	0.009	0.008	0.025	0.028	83.1%
σ		1.5%	0.050	0.087	0.039	2.293	0.005	0.007	0.014	0.008	1.5%
%RSD		1.8	8.238	13.710	6.292	28.720	49.020	78.760	58.050	28.190	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:14:27	0.514	0.804	0.298	0.270	72.180	71.230	83.1%	0.008	0.010	0.065
2	17:14:54	0.605	0.948	0.269	0.264	73.200	72.710	84.5%	0.016	0.003	0.050
3	17:15:21	0.586	0.801	0.269	0.286	72.470	72.640	87.5%	0.014	0.002	0.074
x		0.568	0.851	0.279	0.273	72.620	72.190	85.1%	0.013	0.005	0.063
σ		0.048	0.084	0.017	0.012	0.525	0.837	2.2%	0.005	0.004	0.012
%RSD		8.400	9.863	6.080	4.314	0.723	1.160	2.6	35.950	80.250	18.630

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:14:27	0.064	0.061	77.7%
2	17:14:54	0.057	0.053	78.2%
3	17:15:21	0.060	0.051	81.2%
x		0.060	0.055	79.0%
σ		0.003	0.006	1.9%
%RSD		5.639	10.140	2.4

UD11011-005DIS 04/25/2019 17:19:46

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:13	106.5%	0.014	2.291	2.393	38.660	13.280	7.570	7.162	7.736	9.564
2	17:20:40	102.7%	0.017	2.310	2.277	29.370	10.070	6.425	6.474	5.979	9.786
3	17:21:07	101.3%	0.011	1.909	2.197	38.930	9.899	6.796	7.009	6.417	9.839
x		103.5%	0.014	2.170	2.289	35.650	11.080	6.930	6.882	6.710	9.730
σ		2.7%	0.003	0.226	0.099	5.440	1.904	0.584	0.362	0.915	0.146
%RSD		2.6	23.420	10.420	4.304	15.260	17.180	8.432	5.254	13.630	1.497

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:13	40.980	T 119500.000	-12.030	30.930	24.610	95.6%	-0.193	-0.214	0.399	2925.000
2	17:20:40	38.940	T 116200.000	-9.362	35.650	22.810	97.4%	-0.339	0.045	0.340	2617.000
3	17:21:07	40.230	T 118900.000	-6.404	24.890	26.860	96.1%	-0.252	-0.251	0.380	2758.000
x		40.050	T 118200.000	-9.265	30.490	24.760	96.4%	-0.261	-0.140	0.373	2766.000
σ		1.030	T 1770.000	2.813	5.392	2.032	0.9%	0.074	0.161	0.030	154.300
%RSD		2.572	T 1.498	30.370	17.680	8.209	0.9	28.170	115.000	8.083	5.576

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:13	1.873	0.745	8.557	-9.154	-0.023	0.091	0.466	0.338	0.351	1.340
2	17:20:40	2.615	0.770	4.492	-14.910	-0.019	0.107	-0.256	0.312	0.314	1.323
3	17:21:07	3.984	0.760	5.958	-12.250	-0.025	0.132	0.206	0.353	0.385	1.453
x		2.824	0.758	6.335	-12.110	-0.022	0.110	0.139	0.335	0.350	1.372
σ		1.071	0.012	2.058	2.882	0.003	0.021	0.366	0.020	0.036	0.071
%RSD		37.930	1.627	32.490	23.810	13.960	18.920	263.700	6.124	10.150	5.148

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:13	1.617	1.307	-0.105	-0.130	3.037	3.950	-1.331	-0.209	-2.644	1.759
2	17:20:40	1.148	1.449	-0.452	0.495	2.953	3.877	-0.284	0.067	-4.183	1.788
3	17:21:07	1.026	1.404	-0.053	0.425	3.179	3.114	0.603	0.284	-4.098	1.734
x		1.263	1.387	-0.203	0.263	3.056	3.647	-0.337	0.047	-3.642	1.760
σ		0.312	0.072	0.217	0.342	0.114	0.463	0.968	0.247	0.865	0.027
%RSD		24.700	5.211	106.700	129.900	3.744	12.700	287.200	522.400	23.760	1.540

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:13	88.4%	-0.001	0.024	0.018	0.995	0.004	0.004	-0.001	-0.010	85.2%
2	17:20:40	92.4%	0.027	0.026	0.003	-0.805	0.000	0.002	0.003	0.003	89.7%
3	17:21:07	91.3%	0.019	0.041	-0.013	0.165	-0.001	0.002	-0.005	-0.004	88.1%
x		90.7%	0.015	0.030	0.003	0.118	0.001	0.003	-0.001	-0.004	87.7%
σ		2.1%	0.014	0.009	0.015	0.901	0.003	0.001	0.004	0.006	2.3%
%RSD		2.3	95.740	30.980	545.100	764.700	249.200	44.940	545.200	176.800	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:20:13	0.766	1.116	0.100	0.121	1.895	1.878	84.0%	-0.006	-0.007	0.023
2	17:20:40	0.673	1.141	0.115	0.106	1.908	2.169	90.3%	0.002	-0.009	0.030
3	17:21:07	0.817	1.078	0.151	0.140	1.869	2.034	87.2%	0.001	-0.008	0.017
x		0.752	1.112	0.122	0.123	1.891	2.027	87.2%	-0.001	-0.008	0.023
σ		0.073	0.032	0.026	0.017	0.020	0.146	3.2%	0.004	0.001	0.006
%RSD		9.666	2.862	21.480	13.740	1.048	7.187	3.6	473.300	13.330	27.650

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:20:13	0.018	0.021	82.9%
2	17:20:40	0.032	0.025	89.3%
3	17:21:07	0.017	0.020	87.0%
x		0.022	0.022	86.4%
σ		0.008	0.003	3.2%
%RSD		36.780	11.740	3.8

UD11011-006DIS 04/25/2019 17:25:32

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:59	95.9%	0.032	24.620	24.340	28.660	T 35150.000	T 45110.000	T 45340.000	T 44750.000	T 11.030
2	17:26:26	98.0%	-0.011	24.720	24.340	27.190	T 35410.000	T 44360.000	T 44870.000	T 44240.000	2.501
3	17:26:54	96.3%	0.022	25.590	24.460	29.730	T 35370.000	T 44020.000	T 45140.000	T 44500.000	2.613
x		96.7%	0.014	24.980	24.380	28.530	T 35310.000	T 44500.000	T 45120.000	T 44500.000	T 5.381
σ		1.1%	0.023	0.531	0.072	1.278	T 138.800	T 555.100	T 235.100	T 253.100	T 4.892
%RSD		1.2	158.000	2.127	0.293	4.481	T 0.393	T 1.247	T 0.521	T 0.569	T 90.910

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:59	T 8194.000	T 115000.000	526.200	M 126800.000	TM 119700.000	95.3%	1.139	0.612	0.394	2700.000
2	17:26:26	T 8318.000	T 115400.000	512.100	TM 132800.000	TM 115700.000	94.5%	1.279	1.194	0.416	2548.000
3	17:26:54	T 8543.000	T 120600.000	537.800	TM 135700.000	TM 117900.000	94.7%	1.460	0.904	0.488	3000.000
x		T 8352.000	T 117000.000	525.400	TM 131800.000	TM 117800.000	94.8%	1.292	0.903	0.433	2750.000
σ		T 176.800	T 3131.000	12.840	TM 4522.000	TM 1997.000	0.4%	0.161	0.291	0.049	230.100
%RSD		T 2.117	T 2.675	2.444	TM 3.432	TM 1.695	0.4	12.440	32.260	11.410	8.369

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:59	2261.000	TM 908.600	T 2219.000	3242.000	0.784	2.370	0.951	0.205	0.459	2.165
2	17:26:26	2270.000	TM 899.700	T 2207.000	3356.000	0.846	2.512	1.323	0.167	0.431	1.856
3	17:26:54	2234.000	TM 900.000	T 2192.000	3364.000	0.788	2.542	1.229	0.178	0.447	2.123
x		2255.000	TM 902.800	T 2206.000	3321.000	0.806	2.474	1.168	0.183	0.446	2.048
σ		18.350	TM 5.046	T 13.580	68.180	0.035	0.092	0.193	0.020	0.014	0.167
%RSD		0.814	TM 0.559	T 0.616	2.053	4.331	3.717	16.550	10.780	3.163	8.177

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:59	11.710	8.798	3.907	0.473	83.270	84.010	1.532	0.395	-2.334	180.000
2	17:26:26	10.650	8.298	4.137	0.158	83.780	81.700	2.020	0.577	-4.973	181.000
3	17:26:54	9.898	8.261	4.183	0.652	82.960	82.300	0.176	0.062	-1.756	182.500
x		10.750	8.452	4.076	0.427	83.340	82.670	1.243	0.345	-3.021	181.100
σ		0.909	0.300	0.148	0.250	0.416	1.199	0.955	0.261	1.715	1.276
%RSD		8.454	3.551	3.628	58.540	0.499	1.451	76.870	75.690	56.780	0.705

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:59	89.7%	2.022	2.130	1.959	9.215	0.003	0.001	-0.010	0.003	85.3%
2	17:26:26	88.9%	2.007	1.962	2.072	9.339	0.002	0.004	0.004	-0.008	84.7%
3	17:26:54	88.0%	1.965	1.934	1.814	9.277	0.000	-0.001	0.000	0.002	83.1%
x		88.9%	1.998	2.009	1.948	9.277	0.002	0.002	-0.002	-0.001	84.4%
σ		0.9%	0.030	0.106	0.129	0.062	0.001	0.003	0.007	0.006	1.1%
%RSD		1.0	1.484	5.277	6.640	0.673	80.230	169.700	357.500	490.800	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:25:59	0.590	0.705	0.246	0.259	153.300	152.700	86.3%	-0.010	-0.016	-0.002
2	17:26:26	0.515	0.792	0.250	0.244	154.500	152.100	85.6%	-0.011	-0.010	0.001
3	17:26:54	0.565	0.773	0.295	0.281	156.200	153.800	85.1%	-0.009	-0.013	0.005
x		0.557	0.757	0.264	0.262	154.700	152.900	85.7%	-0.010	-0.013	0.001
σ		0.039	0.046	0.028	0.018	1.445	0.872	0.6%	0.001	0.003	0.003
%RSD		6.918	6.057	10.480	7.066	0.934	0.571	0.7	13.210	23.160	232.600

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:25:59	0.006	0.004	81.5%
2	17:26:26	0.010	0.004	81.7%
3	17:26:54	-0.001	0.007	80.2%
x		0.005	0.005	81.1%
σ		0.006	0.001	0.8%
%RSD		104.500	28.430	1.0

CCV MW10994 04/25/2019 17:31:20 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:47	91.0%	310.700	308.700	301.000	19.610	T 62490.000	T 61500.000	T 61080.000	T 61550.000	301.700
2	17:32:14	89.8%	290.600	292.900	288.500	21.930	T 63490.000	T 60810.000	T 60620.000	T 60230.000	299.600
3	17:32:41	91.2%	291.500	296.000	289.400	21.250	T 64250.000	T 60650.000	T 59960.000	T 59440.000	293.200
x		90.7%	99.199%	99.734%	97.653%	20.930	T 105.681%	T 60990.000	T 60550.000	T 100.678%	99.401%
σ		0.8%	n/a	n/a	n/a	1.191	T n/a	T 450.700	T 565.500	T n/a	n/a
%RSD		0.9	3.823	2.800	2.377	5.691	T 1.394	T 0.739	T 0.934	T 1.766	1.484

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:47	T 3160.000	1330.000	T 59800.000	62490.000	T 58280.000	90.7%	312.300	322.500	298.400	1814.000
2	17:32:14	T 3316.000	1340.000	T 61050.000	62960.000	T 58030.000	87.6%	311.500	318.700	302.900	452.400
3	17:32:41	T 3240.000	1268.000	T 59620.000	62830.000	T 57320.000	87.7%	309.300	320.400	298.100	1218.000
x		T 107.953%	1313.000	T 100.261%	62760.000	T 96.462%	88.7%	103.681%	106.844%	99.944%	1161.000
σ		T n/a	39.270	T n/a	240.500	T n/a	1.8%	n/a	n/a	n/a	682.500
%RSD		T 2.404	2.992	T 1.293	0.383	T 0.868	2.0	0.493	0.595	0.900	58.770

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:47	T 61960.000	298.900	T 61920.000	T 61600.000	294.400	290.100	288.900	284.800	273.400	306.000
2	17:32:14	T 61230.000	289.700	T 60490.000	T 60080.000	294.300	286.800	290.400	283.100	268.500	294.600
3	17:32:41	T 61650.000	291.800	T 61650.000	T 59890.000	291.600	289.100	291.700	283.700	271.100	295.100
x		T 61610.000	97.821%	T 61350.000	T 100.873%	97.816%	96.220%	290.300	283.800	90.342%	99.518%
σ		T 364.400	n/a	T 758.000	T n/a	n/a	n/a	1.407	0.860	n/a	n/a
%RSD		T 0.591	1.639	T 1.235	T 1.551	0.532	0.592	0.485	0.303	0.906	2.163

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:47	284.300	281.900	283.200	305.300	2.132	2.363	1250.000	306.800	0.476	301.400
2	17:32:14	276.700	277.200	277.200	298.700	3.246	2.134	1241.000	299.500	-1.309	305.800
3	17:32:41	281.200	281.000	281.600	292.700	2.656	2.229	1262.000	299.600	-3.852	306.100
x		280.700	280.000	93.562%	298.900	2.678	2.242	1251.000	100.655%	-1.562	101.476%
σ		3.821	2.470	n/a	6.314	0.557	0.115	10.550	n/a	2.175	n/a
%RSD		1.361	0.882	1.111	2.112	20.790	5.117	0.844	1.392	139.300	0.866

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:47	83.7%	310.700	308.600	310.900	302.800	296.600	292.600	302.400	298.800	78.8%
2	17:32:14	79.7%	308.600	307.700	310.600	304.500	293.400	290.600	295.600	294.900	76.6%
3	17:32:41	79.6%	315.000	315.300	312.600	299.300	290.700	290.500	297.600	294.800	77.7%
x		81.0%	103.812%	103.518%	311.400	302.200	97.847%	291.200	298.500	98.724%	77.7%
σ		2.3%	n/a	n/a	1.073	2.616	n/a	1.191	3.506	n/a	1.1%
%RSD		2.9	1.042	1.335	0.345	0.866	1.004	0.409	1.175	0.773	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:31:47	308.200	305.100	309.500	305.700	312.200	307.100	80.2%	293.100	301.800	291.600
2	17:32:14	307.400	305.000	303.600	302.300	309.900	309.700	77.8%	293.000	300.900	289.800
3	17:32:41	305.200	306.000	303.600	306.600	309.500	306.900	78.4%	293.900	302.800	293.400
x		102.304%	101.780%	305.600	101.630%	103.515%	102.633%	78.8%	293.300	100.613%	97.200%
σ		n/a	n/a	3.430	n/a	n/a	n/a	1.3%	0.516	n/a	n/a
%RSD		0.508	0.187	1.122	0.743	0.473	0.497	1.6	0.176	0.318	0.621

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:31:47	293.700	292.500	76.8%
2	17:32:14	291.800	290.400	73.3%
3	17:32:41	292.600	292.600	74.6%
x		97.564%	97.277%	74.9%
σ		n/a	n/a	1.8%
%RSD		0.328	0.427	2.4

CCB IM9370-01 04/25/2019 17:37:08 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:36	96.0%	-0.009	1.759	1.872	7.543	6.272	5.624	5.284	5.477	0.011
2	17:38:03	100.0%	0.001	1.450	1.341	-1.493	9.723	4.384	4.473	4.497	0.019
3	17:38:30	98.2%	0.020	1.447	1.716	1.451	6.746	3.609	3.654	3.366	0.010
x		98.1%	0.004	1.552	1.643	2.500	7.580	4.539	4.470	4.447	0.013
σ		2.0%	0.015	0.179	0.273	4.609	1.871	1.017	0.815	1.056	0.005
%RSD		2.0	411.400	11.540	16.610	184.300	24.680	22.400	18.230	23.750	36.170

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:36	14.570	631.200	1.541	8.532	5.578	94.0%	-0.394	0.041	0.036	14.410
2	17:38:03	15.120	632.400	0.031	4.706	4.183	91.5%	-0.342	0.015	0.032	32.950
3	17:38:30	14.400	618.800	-1.508	4.636	3.976	92.5%	-0.363	0.004	0.029	25.170
x		14.690	627.500	0.022	5.958	4.579	92.7%	-0.366	0.020	0.032	24.180
σ		0.375	7.557	1.525	2.229	0.872	1.3%	0.026	0.019	0.004	9.312
%RSD		2.551	1.204	7077.000	37.420	19.030	1.4	7.152	95.310	11.870	38.520

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:36	3.513	-0.035	8.555	-8.195	-0.015	0.012	0.136	-0.069	-0.012	-0.035
2	17:38:03	3.766	-0.043	9.245	-1.267	-0.008	-0.011	0.286	-0.056	0.005	-0.016
3	17:38:30	1.918	-0.055	9.166	-7.574	-0.021	0.011	-0.097	-0.066	0.004	-0.012
x		3.066	-0.045	8.989	-5.678	-0.015	0.004	0.108	-0.064	-0.001	-0.021
σ		1.002	0.010	0.378	3.833	0.007	0.013	0.193	0.007	0.010	0.012
%RSD		32.680	22.180	4.203	67.510	46.420	314.600	178.100	11.260	967.600	57.850

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:36	-0.171	0.024	-0.038	1.373	0.778	0.520	1.059	0.352	-2.557	0.021
2	17:38:03	-0.072	0.013	-0.094	0.521	0.562	1.713	0.014	0.014	0.468	0.014
3	17:38:30	-0.402	-0.008	-0.030	0.370	0.433	0.754	-0.591	-0.038	-2.251	0.015
x		-0.215	0.009	-0.054	0.755	0.591	0.996	0.160	0.109	-1.446	0.017
σ		0.169	0.016	0.035	0.541	0.174	0.632	0.835	0.212	1.665	0.004
%RSD		78.800	174.200	64.720	71.710	29.500	63.490	520.400	193.700	115.100	23.700

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:36	87.5%	0.109	0.088	0.092	-1.140	0.032	0.032	0.022	0.010	85.1%
2	17:38:03	83.6%	0.061	0.108	0.079	-0.269	0.013	0.011	0.013	0.016	82.9%
3	17:38:30	86.7%	0.111	0.059	0.081	-0.073	0.014	0.015	0.018	0.015	83.4%
x		85.9%	0.093	0.085	0.084	-0.494	0.020	0.019	0.018	0.014	83.8%
σ		2.0%	0.029	0.025	0.007	0.568	0.010	0.011	0.004	0.003	1.2%
%RSD		2.4	30.510	28.990	8.134	114.900	52.090	58.750	24.230	21.420	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:37:36	0.073	0.070	0.164	0.174	0.009	0.053	84.4%	0.020	0.016	0.034
2	17:38:03	0.034	0.042	0.157	0.176	0.037	-0.002	81.4%	0.020	0.005	0.022
3	17:38:30	0.027	0.053	0.130	0.134	-0.010	-0.006	82.2%	0.007	-0.003	0.024
x		0.045	0.055	0.151	0.161	0.012	0.015	82.7%	0.016	0.006	0.027
σ		0.024	0.014	0.018	0.024	0.024	0.033	1.6%	0.008	0.009	0.007
%RSD		54.490	25.630	11.880	14.710	199.300	222.700	1.9	50.800	157.600	24.550

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:37:36	0.038	0.027	83.4%
2	17:38:03	0.013	0.021	81.1%
3	17:38:30	0.022	0.017	83.6%
x		0.025	0.022	82.7%
σ		0.013	0.005	1.4%
%RSD		51.560	21.680	1.7

UD11011-007DIS 04/25/2019 17:42:55

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:43:22	93.2%	-0.008	24.450	24.650	-2.531	TM 104000.000	TM 100500.000	TM 103500.000	TM 103400.000	15.560
2	17:43:50	94.2%	-0.008	22.610	24.850	1.047	TM 106300.000	TM 102400.000	TM 103700.000	TM 103900.000	15.390
3	17:44:17	94.8%	-0.016	23.600	25.840	-2.215	TM 105400.000	TM 100200.000	TM 104200.000	TM 104200.000	15.470
x		94.0%	-0.011	23.550	25.110	-1.233	TM 105200.000	TM 101000.000	TM 103800.000	TM 103800.000	15.470
σ		0.8%	0.004	0.920	0.636	1.981	TM 1139.000	TM 1223.000	TM 408.700	TM 421.200	0.083
%RSD		0.9	39.680	3.904	2.532	160.700	TM 1.083	TM 1.211	TM 0.394	TM 0.406	0.533

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:43:22	TM 12820.000	T 121100.000	394.400	TM 311500.000	TM 296700.000	95.7%	2.179	0.701	0.858	2439.000
2	17:43:50	TM 13370.000	T 126300.000	395.600	TM 318200.000	TM 285700.000	91.9%	1.867	0.450	0.843	2915.000
3	17:44:17	TM 13250.000	T 125700.000	388.600	TM 318600.000	TM 286000.000	92.7%	2.669	0.414	0.859	3023.000
x		TM 13150.000	T 124400.000	392.900	TM 316100.000	TM 289500.000	93.4%	2.238	0.522	0.853	2792.000
σ		TM 290.200	T 2821.000	3.752	TM 4017.000	TM 6269.000	2.0%	0.404	0.156	0.009	310.600
%RSD		TM 2.207	T 2.269	0.955	TM 1.271	TM 2.166	2.1	18.070	29.980	1.070	11.120

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:43:22	9.246	0.189	36.020	2428.000	0.710	3.336	0.909	0.941	2.065	3.447
2	17:43:50	11.860	0.163	44.110	2838.000	0.876	4.071	0.608	0.978	2.099	3.258
3	17:44:17	11.200	0.187	42.660	2768.000	0.854	3.994	0.623	1.052	2.243	3.292
x		10.770	0.180	40.930	2678.000	0.813	3.801	0.713	0.990	2.136	3.332
σ		1.360	0.014	4.317	218.800	0.090	0.404	0.170	0.057	0.095	0.101
%RSD		12.630	7.989	10.550	8.172	11.080	10.630	23.770	5.709	4.427	3.024

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:43:22	7.714	6.443	0.373	1.023	436.800	431.200	4.931	0.901	-3.880	288.700
2	17:43:50	8.113	6.500	0.608	0.422	437.600	439.000	5.577	1.011	-2.315	289.900
3	17:44:17	7.437	6.243	0.429	0.475	442.400	447.100	5.782	1.071	-3.944	289.200
x		7.754	6.395	0.470	0.640	438.900	439.100	5.430	0.994	-3.380	289.300
σ		0.340	0.135	0.123	0.333	2.996	7.929	0.444	0.087	0.922	0.647
%RSD		4.384	2.109	26.060	51.990	0.683	1.806	8.175	8.698	27.290	0.224

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:43:22	91.1%	1.042	1.022	1.108	11.230	0.014	0.003	0.017	0.018	84.5%
2	17:43:50	87.5%	1.012	1.026	0.999	16.420	0.009	0.007	0.004	0.042	81.3%
3	17:44:17	89.4%	0.961	1.105	1.045	15.510	0.000	0.010	0.036	0.013	83.7%
x		89.3%	1.005	1.051	1.050	14.380	0.008	0.007	0.019	0.024	83.2%
σ		1.8%	0.041	0.047	0.055	2.772	0.007	0.003	0.016	0.015	1.7%
%RSD		2.0	4.100	4.433	5.215	19.270	91.730	48.570	83.270	64.360	2.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:43:22	0.542	0.853	0.262	0.235	116.700	115.200	87.7%	-0.004	-0.007	0.020
2	17:43:50	0.537	0.793	0.233	0.248	116.500	115.100	83.9%	-0.001	0.003	0.020
3	17:44:17	0.637	0.753	0.210	0.234	116.600	113.300	86.0%	0.011	-0.005	0.014
x		0.572	0.799	0.235	0.239	116.600	114.500	85.9%	0.002	-0.003	0.018
σ		0.057	0.050	0.026	0.008	0.082	1.099	1.9%	0.008	0.006	0.003
%RSD		9.891	6.304	11.080	3.304	0.071	0.960	2.2	372.700	189.500	18.280

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:43:22	0.031	0.021	81.2%
2	17:43:50	0.009	0.014	77.0%
3	17:44:17	0.039	0.017	78.3%
x		0.026	0.017	78.8%
σ		0.016	0.004	2.1%
%RSD		59.870	20.810	2.7

UD11011-008DIS 04/25/2019 17:48:42

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:09	99.0%	-0.005	84.800	86.760	20.200	T 70410.000	T 45370.000	T 45460.000	T 45130.000	24.660
2	17:49:36	97.0%	0.007	87.750	85.480	19.790	T 68320.000	T 44440.000	T 44460.000	T 44450.000	25.090
3	17:50:03	96.1%	-0.008	87.890	83.520	19.500	T 68560.000	T 44050.000	T 43910.000	T 44400.000	T 32.420
x		97.4%	-0.002	86.810	85.260	19.830	T 69100.000	T 44620.000	T 44610.000	T 44660.000	T 27.390
σ		1.5%	0.008	1.750	1.632	0.353	T 1145.000	T 677.400	T 784.600	T 405.500	T 4.363
%RSD		1.5	354.900	2.016	1.914	1.779	T 1.657	T 1.518	T 1.759	T 0.908	T 15.930

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:09	T 6763.000	T 112200.000	251.500	TM 157400.000	TM 132400.000	92.3%	1.687	0.199	0.468	2700.000
2	17:49:36	T 6735.000	T 111400.000	256.000	TM 156100.000	TM 138600.000	95.0%	1.645	0.074	0.384	2621.000
3	17:50:03	T 6387.000	T 109200.000	254.000	TM 158600.000	TM 141600.000	95.8%	1.245	0.197	0.375	2229.000
x		T 6628.000	T 110900.000	253.800	TM 157300.000	TM 137500.000	94.4%	1.526	0.157	0.409	2517.000
σ		T 209.700	T 1505.000	2.269	TM 1254.000	TM 4696.000	1.8%	0.244	0.072	0.051	252.300
%RSD		T 3.163	T 1.357	0.894	TM 0.797	TM 3.415	1.9	16.020	45.750	12.550	10.030

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:09	53.280	20.140	72.390	1496.000	0.356	2.191	0.766	0.505	0.762	1.769
2	17:49:36	52.230	20.100	71.060	1405.000	0.316	1.933	0.297	0.594	0.743	1.808
3	17:50:03	47.390	20.050	64.860	1205.000	0.301	1.727	0.515	0.613	0.687	1.918
x		50.970	20.100	69.430	1369.000	0.324	1.950	0.526	0.570	0.731	1.832
σ		3.141	0.043	4.021	148.900	0.028	0.233	0.235	0.057	0.039	0.077
%RSD		6.163	0.212	5.791	10.880	8.677	11.940	44.640	10.050	5.340	4.199

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:09	9.129	6.865	0.459	0.132	459.000	468.800	4.559	0.735	-3.340	213.100
2	17:49:36	8.550	6.936	0.594	0.575	462.700	470.200	6.838	1.275	-2.890	211.900
3	17:50:03	8.282	6.653	0.298	0.793	472.500	471.800	6.996	1.305	-3.184	213.600
x		8.654	6.818	0.450	0.500	464.700	470.300	6.131	1.105	-3.138	212.900
σ		0.433	0.147	0.148	0.337	6.943	1.501	1.364	0.321	0.229	0.859
%RSD		5.002	2.156	32.940	67.340	1.494	0.319	22.250	29.040	7.289	0.404

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:09	86.9%	0.675	0.667	0.650	13.680	0.000	0.001	0.016	0.009	81.5%
2	17:49:36	88.9%	0.622	0.705	0.650	8.546	0.001	0.002	0.006	0.020	83.8%
3	17:50:03	92.8%	0.648	0.726	0.662	6.544	0.005	0.004	0.010	0.024	87.4%
x		89.5%	0.649	0.699	0.654	9.590	0.002	0.003	0.010	0.018	84.2%
σ		3.0%	0.026	0.030	0.007	3.680	0.002	0.001	0.005	0.008	3.0%
%RSD		3.3	4.080	4.239	1.055	38.380	114.400	56.790	48.730	44.040	3.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:49:09	0.459	0.732	0.135	0.120	128.500	127.400	83.6%	-0.016	-0.008	0.038
2	17:49:36	0.520	0.740	0.121	0.131	126.000	125.000	85.0%	-0.009	-0.007	0.026
3	17:50:03	0.498	0.715	0.117	0.163	125.400	124.200	89.1%	-0.008	-0.010	0.037
x		0.492	0.729	0.124	0.138	126.700	125.500	85.9%	-0.011	-0.008	0.033
σ		0.031	0.013	0.009	0.022	1.628	1.638	2.9%	0.005	0.002	0.007
%RSD		6.313	1.718	7.358	16.230	1.286	1.305	3.4	43.380	20.410	19.860

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	17:49:09	0.016	0.021	77.4%
2	17:49:36	0.032	0.022	79.2%
3	17:50:03	0.038	0.027	83.5%
x		0.029	0.023	80.1%
σ		0.011	0.003	3.1%
%RSD		38.500	14.970	3.9

UD11011-009DIS 04/25/2019 17:54:27

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:54:54	92.9%	-0.013	24.720	24.860	7.843	TM 103300.000	TM 101100.000	TM 102600.000	TM 101900.000	4.400
2	17:55:21	94.8%	0.003	23.270	25.000	15.400	TM 105100.000	TM 100500.000	TM 101700.000	TM 103800.000	4.524
3	17:55:48	95.8%	-0.004	22.870	24.570	9.349	TM 107000.000	TM 105300.000	TM 106400.000	TM 105000.000	4.479
x		94.5%	-0.005	23.620	24.810	10.870	TM 105100.000	TM 102300.000	TM 103600.000	TM 103600.000	4.468
σ		1.5%	0.008	0.977	0.223	4.002	TM 1857.000	TM 2581.000	TM 2479.000	TM 1574.000	0.063
%RSD		1.6	176.500	4.136	0.898	36.830	TM 1.767	TM 2.522	TM 2.394	TM 1.519	1.407
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:54:54	TM 12860.000	T 122600.000	371.200	TM 306500.000	TM 291100.000	95.0%	2.257	0.342	0.733	2632.000
2	17:55:21	TM 13430.000	T 125800.000	371.400	TM 307200.000	TM 281900.000	94.0%	2.441	0.227	0.784	3229.000
3	17:55:48	TM 13370.000	T 125500.000	368.300	TM 317300.000	TM 287800.000	94.1%	2.292	0.432	0.761	3092.000
x		TM 13220.000	T 124600.000	370.300	TM 310300.000	TM 286900.000	94.3%	2.330	0.334	0.759	2984.000
σ		TM 309.800	T 1766.000	1.736	TM 6023.000	TM 4681.000	0.5%	0.098	0.103	0.026	312.600
%RSD		TM 2.343	T 1.417	0.469	TM 1.941	TM 1.631	0.6	4.207	30.870	3.380	10.480
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:54:54	9.157	0.113	34.170	2385.000	0.754	3.606	0.192	0.822	1.939	2.541
2	17:55:21	12.860	0.101	38.940	2743.000	0.808	3.922	0.689	0.894	2.066	2.782
3	17:55:48	13.200	0.083	40.800	2711.000	0.808	3.941	0.609	0.940	2.193	2.864
x		11.740	0.099	37.970	2613.000	0.790	3.823	0.497	0.885	2.066	2.729
σ		2.242	0.015	3.420	198.200	0.031	0.188	0.267	0.060	0.127	0.168
%RSD		19.100	15.320	9.008	7.583	3.955	4.915	53.660	6.752	6.151	6.149
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:54:54	7.898	5.648	0.577	1.255	343.200	345.900	3.780	0.672	-2.159	284.000
2	17:55:21	6.969	5.995	-0.258	0.796	345.800	351.300	2.947	0.423	-0.895	287.800
3	17:55:48	7.353	6.041	0.237	0.443	356.600	349.600	6.104	1.283	-3.792	291.100
x		7.406	5.895	0.185	0.831	348.500	348.900	4.277	0.793	-2.282	287.600
σ		0.467	0.215	0.420	0.407	7.136	2.760	1.636	0.443	1.453	3.574
%RSD		6.303	3.649	226.800	48.990	2.047	0.791	38.260	55.890	63.650	1.242
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:54:54	92.7%	0.938	0.912	0.949	9.483	0.005	0.003	-0.005	0.025	85.7%
2	17:55:21	87.9%	0.815	1.060	1.000	13.210	0.004	0.000	0.014	0.009	82.1%
3	17:55:48	90.0%	1.001	1.044	1.022	14.930	0.000	0.004	0.032	0.019	83.5%
x		90.2%	0.918	1.006	0.991	12.540	0.003	0.003	0.014	0.017	83.8%
σ		2.4%	0.094	0.081	0.037	2.786	0.003	0.002	0.019	0.008	1.8%
%RSD		2.6	10.280	8.089	3.773	22.210	81.570	83.200	137.300	46.820	2.2
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	17:54:54	0.565	0.863	0.129	0.148	113.300	113.900	87.7%	-0.001	-0.005	0.004
2	17:55:21	0.641	0.796	0.122	0.163	114.500	111.800	84.4%	-0.001	-0.011	0.010
3	17:55:48	0.578	0.756	0.152	0.143	113.400	112.600	85.7%	0.003	-0.002	0.009
x		0.595	0.805	0.135	0.151	113.800	112.800	85.9%	0.000	-0.006	0.008
σ		0.040	0.054	0.016	0.011	0.624	1.060	1.7%	0.002	0.004	0.003
%RSD		6.811	6.731	11.600	7.108	0.549	0.940	2.0	780.300	72.490	38.860
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	17:54:54	-0.001	0.003	79.6%							
2	17:55:21	0.009	0.005	77.0%							
3	17:55:48	-0.003	0.002	77.7%							
x		0.002	0.003	78.1%							
σ		0.006	0.002	1.4%							
%RSD		360.000	47.040	1.7							

UD11011-010DIS 04/25/2019 18:00:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:41	99.0%	0.046	2.168	2.027	55.920	19.720	15.820	15.430	15.260	9.764
2	18:01:09	100.4%	-0.000	2.114	1.686	50.520	16.730	12.470	12.950	11.970	9.339
3	18:01:36	100.3%	0.038	2.167	1.872	49.630	15.080	11.080	10.780	11.030	9.488
x		99.9%	0.028	2.150	1.862	52.020	17.170	13.120	13.060	12.760	9.530
σ		0.8%	0.025	0.031	0.171	3.403	2.355	2.434	2.327	2.222	0.215
%RSD		0.8	88.170	1.446	9.162	6.541	13.710	18.550	17.830	17.420	2.260

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:41	41.100	T 115900.000	-4.157	50.390	44.100	98.0%	-0.275	-0.080	0.321	2397.000
2	18:01:09	39.880	T 114600.000	-5.353	39.490	38.250	98.7%	-0.229	-0.070	0.275	2277.000
3	18:01:36	39.880	T 115100.000	-4.129	42.540	36.250	99.4%	-0.222	0.009	0.269	2347.000
x		40.280	T 115200.000	-4.547	44.140	39.530	98.7%	-0.242	-0.047	0.289	2340.000
σ		0.702	T 637.800	0.699	5.625	4.082	0.7%	0.029	0.049	0.028	60.720
%RSD		1.744	T 0.554	15.360	12.740	10.320	0.7	11.810	104.200	9.862	2.595

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:41	0.083	0.570	6.321	-13.730	-0.020	0.050	0.036	0.086	0.144	1.245
2	18:01:09	-0.917	0.536	6.207	-15.690	-0.013	0.085	0.024	0.065	0.143	1.297
3	18:01:36	-0.220	0.530	4.202	-19.330	-0.020	0.065	0.206	0.076	0.151	1.228
x		-0.351	0.546	5.577	-16.250	-0.018	0.067	0.089	0.075	0.146	1.256
σ		0.513	0.022	1.192	2.840	0.004	0.018	0.102	0.011	0.005	0.036
%RSD		146.100	3.973	21.370	17.480	23.400	26.760	114.600	14.000	3.161	2.868

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:41	1.306	1.357	-0.022	0.233	9.868	10.700	2.014	0.505	0.058	1.949
2	18:01:09	1.138	1.350	-0.107	0.784	8.272	10.280	0.989	0.293	-1.174	1.928
3	18:01:36	1.168	1.174	0.107	0.396	9.208	9.278	0.760	0.242	-1.809	2.004
x		1.204	1.293	-0.007	0.471	9.116	10.090	1.255	0.347	-0.975	1.960
σ		0.090	0.104	0.108	0.283	0.802	0.732	0.668	0.139	0.949	0.039
%RSD		7.441	8.039	1518.000	60.100	8.798	7.254	53.220	40.200	97.400	1.993

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:41	94.2%	0.003	0.021	-0.008	-0.730	0.001	0.003	0.008	0.003	91.2%
2	18:01:09	94.6%	0.001	-0.002	0.000	-0.654	0.002	0.001	-0.005	-0.008	91.5%
3	18:01:36	95.0%	0.028	0.007	0.000	-0.325	-0.003	0.001	-0.001	-0.007	92.9%
x		94.6%	0.011	0.009	-0.003	-0.570	-0.000	0.002	0.000	-0.004	91.8%
σ		0.4%	0.015	0.012	0.005	0.215	0.002	0.001	0.007	0.006	0.9%
%RSD		0.4	142.200	133.900	184.600	37.780	5268.000	66.990	1341.000	145.900	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:00:41	0.568	0.786	0.053	0.057	1.956	2.096	89.8%	-0.013	-0.019	0.006
2	18:01:09	0.519	0.727	0.066	0.055	2.210	2.217	89.9%	-0.008	-0.019	0.015
3	18:01:36	0.537	0.716	0.090	0.073	1.920	2.177	92.3%	-0.015	-0.018	0.010
x		0.541	0.743	0.069	0.061	2.029	2.163	90.6%	-0.012	-0.018	0.010
σ		0.025	0.038	0.018	0.010	0.158	0.062	1.4%	0.004	0.001	0.005
%RSD		4.596	5.055	26.520	15.760	7.805	2.851	1.6	31.520	3.807	46.030

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:00:41	0.020	0.009	88.9%
2	18:01:09	0.011	0.012	89.8%
3	18:01:36	0.002	0.004	90.6%
x		0.011	0.009	89.8%
σ		0.009	0.004	0.9%
%RSD		81.520	44.700	1.0

UQ13657-001 04/25/2019 18:06:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:06:28	103.7%	0.015	0.995	0.991	37.850	10.570	3.939	3.960	3.486	1.535
2	18:06:55	103.9%	-0.012	0.996	0.648	32.540	10.130	3.647	3.659	3.153	1.526
3	18:07:23	101.8%	0.013	0.792	0.743	40.450	7.873	2.966	2.962	2.862	1.479
x		103.1%	0.005	0.927	0.794	36.940	9.527	3.517	3.527	3.167	1.513
σ		1.2%	0.015	0.117	0.177	4.031	1.449	0.499	0.512	0.312	0.030
%RSD		1.1	284.700	12.630	22.310	10.910	15.210	14.190	14.510	9.861	1.967

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:06:28	17.670	T 121900.000	-6.300	4.962	6.369	94.6%	-0.229	-0.030	0.579	2958.000
2	18:06:55	17.600	T 119400.000	-8.080	6.962	6.409	94.3%	-0.209	-0.167	0.555	2954.000
3	18:07:23	16.900	T 119100.000	-7.301	9.184	6.606	96.5%	-0.291	-0.035	0.550	2620.000
x		17.390	T 120100.000	-7.227	7.036	6.461	95.1%	-0.243	-0.077	0.561	2844.000
σ		0.425	T 1518.000	0.892	2.112	0.127	1.2%	0.043	0.077	0.015	194.000
%RSD		2.443	T 1.264	12.340	30.020	1.966	1.2	17.560	99.910	2.733	6.823

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:06:28	16.990	0.054	25.260	11.700	-0.045	-0.009	0.013	-0.024	0.037	1.205
2	18:06:55	17.150	0.068	26.020	7.112	-0.043	-0.046	0.339	0.032	0.053	1.172
3	18:07:23	17.130	0.044	24.210	5.258	-0.045	-0.015	-0.409	-0.014	0.069	1.377
x		17.090	0.055	25.160	8.025	-0.044	-0.023	-0.019	-0.002	0.053	1.251
σ		0.087	0.012	0.911	3.318	0.001	0.020	0.375	0.030	0.016	0.110
%RSD		0.507	21.170	3.619	41.350	3.376	86.910	1996.000	1780.000	30.190	8.821

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:06:28	0.746	1.021	-0.297	0.783	5.724	6.024	1.191	0.404	-3.495	0.006
2	18:06:55	1.120	1.220	-0.139	0.271	5.926	6.989	-1.146	-0.157	-3.114	0.007
3	18:07:23	0.917	1.142	-0.286	-0.045	6.183	6.097	1.791	0.566	-4.137	0.001
x		0.927	1.128	-0.241	0.336	5.944	6.370	0.612	0.271	-3.582	0.005
σ		0.187	0.100	0.089	0.418	0.230	0.537	1.552	0.379	0.517	0.003
%RSD		20.170	8.898	36.780	124.300	3.868	8.436	253.600	139.800	14.440	64.520

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:06:28	88.7%	-0.001	-0.010	-0.001	-0.475	0.000	0.000	-0.005	-0.016	85.9%
2	18:06:55	89.2%	0.014	0.004	-0.016	0.002	-0.002	-0.001	-0.005	0.003	85.7%
3	18:07:23	91.8%	0.004	0.031	-0.015	-1.434	-0.001	0.002	-0.001	-0.002	88.5%
x		89.9%	0.006	0.008	-0.011	-0.636	-0.001	0.000	-0.004	-0.005	86.7%
σ		1.7%	0.008	0.021	0.008	0.731	0.001	0.002	0.003	0.010	1.6%
%RSD		1.9	133.500	257.700	79.210	115.100	112.800	331.000	69.460	203.600	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:06:28	0.659	0.906	0.040	0.035	-0.018	-0.000	84.6%	-0.013	-0.020	0.010
2	18:06:55	0.636	0.838	0.036	0.061	0.015	-0.022	85.3%	-0.014	-0.017	0.013
3	18:07:23	0.609	0.931	0.071	0.042	-0.012	0.013	87.6%	-0.004	-0.020	0.017
x		0.635	0.892	0.049	0.046	-0.005	-0.003	85.8%	-0.010	-0.019	0.013
σ		0.025	0.048	0.019	0.013	0.017	0.018	1.6%	0.005	0.001	0.004
%RSD		3.921	5.362	39.210	28.980	343.500	544.500	1.8	53.930	7.715	27.780

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:06:28	0.003	0.007	83.0%
2	18:06:55	0.007	0.010	84.6%
3	18:07:23	0.003	0.013	86.3%
x		0.004	0.010	84.6%
σ		0.002	0.003	1.6%
%RSD		53.820	28.370	1.9

UQ13657-002 04/25/2019 18:11:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:14	104.7%	97.780	102.500	96.900	41.020	T 1119.000	T 1033.000	1035.000	1034.000	93.230
2	18:12:41	103.3%	99.120	101.900	97.200	38.340	T 1102.000	T 1001.000	1027.000	1027.000	93.940
3	18:13:08	102.6%	102.900	102.900	97.120	45.040	T 1105.000	T 1030.000	1047.000	1031.000	95.270
x		103.5%	99.950	102.400	97.070	41.470	T 1109.000	T 1021.000	1036.000	1031.000	94.150
σ		1.1%	2.682	0.461	0.155	3.375	T 9.237	T 17.930	10.100	3.408	1.036
%RSD		1.1	2.683	0.450	0.159	8.139	T 0.833	T 1.755	0.975	0.331	1.100

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:14	T 1000.000	T 120800.000	T 941.600	1188.000	928.700	93.9%	103.200	101.300	102.000	3853.000
2	18:12:41	T 998.200	T 120200.000	T 951.900	1097.000	928.200	95.1%	102.700	104.900	100.600	3254.000
3	18:13:08	T 968.100	T 116900.000	T 940.900	1200.000	966.700	96.9%	103.400	105.700	100.100	2583.000
x		T 988.900	T 119300.000	T 944.800	1162.000	941.200	95.3%	103.100	104.000	100.900	3230.000
σ		T 18.020	T 2083.000	T 6.154	56.830	22.110	1.5%	0.327	2.342	0.970	635.400
%RSD		T 1.822	T 1.747	T 0.651	4.891	2.349	1.6	0.318	2.252	0.961	19.670

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:14	1152.000	101.600	T 1071.000	1051.000	99.880	103.100	102.600	103.300	100.700	105.600
2	18:12:41	1142.000	101.500	T 1090.000	1083.000	101.400	102.800	102.700	102.200	100.200	107.100
3	18:13:08	1132.000	102.300	T 1089.000	1098.000	100.700	102.500	102.500	102.800	102.600	106.200
x		1142.000	101.800	T 1083.000	1077.000	100.600	102.800	102.600	102.800	101.200	106.300
σ		10.050	0.442	T 10.520	23.940	0.741	0.281	0.126	0.562	1.266	0.768
%RSD		0.880	0.434	T 0.971	2.222	0.736	0.274	0.123	0.547	1.251	0.723

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:14	100.100	99.090	98.340	109.200	4.020	5.231	443.900	107.300	-1.226	99.350
2	18:12:41	101.200	101.900	99.520	106.100	4.013	5.020	460.900	109.600	-2.433	100.400
3	18:13:08	103.200	101.400	99.260	107.300	3.276	4.585	428.800	102.700	1.184	99.580
x		101.500	100.800	99.040	107.500	3.770	4.946	444.500	106.500	-0.825	99.770
σ		1.573	1.480	0.618	1.560	0.428	0.329	16.070	3.477	1.842	0.539
%RSD		1.550	1.469	0.624	1.451	11.350	6.660	3.616	3.264	223.200	0.540

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:14	89.2%	99.950	98.310	99.480	101.500	101.000	101.400	99.170	98.790	85.0%
2	18:12:41	88.4%	101.400	100.800	100.500	103.000	100.900	100.400	98.640	99.060	86.0%
3	18:13:08	93.1%	101.400	99.540	99.760	101.200	100.700	101.100	100.100	101.500	89.3%
x		90.3%	100.900	99.560	99.920	101.900	100.900	101.000	99.300	99.790	86.8%
σ		2.5%	0.855	1.259	0.530	0.962	0.135	0.493	0.736	1.514	2.3%
%RSD		2.8	0.847	1.265	0.530	0.944	0.134	0.489	0.741	1.517	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:12:14	101.800	101.400	99.420	100.200	101.700	101.200	84.5%	98.450	99.690	100.700
2	18:12:41	102.100	100.900	98.810	99.880	100.400	100.400	84.9%	98.680	100.600	100.200
3	18:13:08	102.900	103.200	100.100	101.000	100.600	100.100	88.7%	99.310	100.700	100.200
x		102.300	101.800	99.430	100.400	100.900	100.600	86.0%	98.810	100.300	100.400
σ		0.576	1.168	0.634	0.569	0.687	0.560	2.3%	0.442	0.563	0.302
%RSD		0.563	1.147	0.637	0.567	0.680	0.557	2.7	0.448	0.561	0.301

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:12:14	100.300	99.600	83.0%
2	18:12:41	99.690	99.240	82.7%
3	18:13:08	100.900	99.870	87.8%
x		100.300	99.570	84.5%
σ		0.613	0.315	2.9%
%RSD		0.611	0.316	3.4

UD10056-001 04/25/2019 18:17:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:00	98.6%	0.130	8.942	8.799	10.400	T 3988.000	T 1696.000	1734.000	1734.000	160.300
2	18:18:27	T 114.5%	0.087	8.092	8.544	5.678	T 4095.000	T 1740.000	1741.000	1728.000	140.600
3	18:18:54	101.1%	0.122	8.314	8.308	-2.302	T 4136.000	T 1700.000	1737.000	1727.000	157.900
x		T 104.7%	0.113	8.449	8.550	4.592	T 4073.000	T 1712.000	1737.000	1729.000	152.900
σ		T 8.5%	0.023	0.441	0.246	6.420	T 76.460	T 24.520	3.788	4.187	10.740
%RSD		T 8.2	20.020	5.219	2.873	139.800	T 1.877	T 1.432	0.218	0.242	7.020
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:00	T 4442.000	T 111600.000	T 1373.000	2390.000	2170.000	95.8%	1.897	0.333	0.955	2310.000
2	18:18:27	T 4541.000	T 114700.000	T 1235.000	2393.000	1877.000	95.5%	1.779	0.005	0.988	3021.000
3	18:18:54	T 4491.000	T 113300.000	T 1401.000	2417.000	2111.000	94.4%	2.079	-0.159	0.941	3083.000
x		T 4491.000	T 113200.000	T 1336.000	2400.000	2053.000	95.2%	1.918	0.060	0.961	2805.000
σ		T 49.620	T 1589.000	T 88.710	14.600	155.000	0.8%	0.151	0.251	0.024	429.600
%RSD		T 1.105	T 1.404	T 6.639	0.608	7.553	0.8	7.864	419.900	2.509	15.320
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:00	136.000	68.400	150.300	137.300	0.977	1.525	1.344	1.462	1.596	8.398
2	18:18:27	142.000	66.970	152.700	147.200	0.895	1.410	1.800	1.477	1.488	7.844
3	18:18:54	137.300	67.050	148.200	144.400	0.910	1.400	1.342	1.541	1.582	8.198
x		138.400	67.470	150.400	143.000	0.927	1.445	1.495	1.493	1.555	8.147
σ		3.176	0.804	2.238	5.081	0.043	0.069	0.264	0.042	0.059	0.280
%RSD		2.294	1.192	1.488	3.554	4.685	4.806	17.640	2.817	3.792	3.441
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:00	12.030	12.140	0.068	0.819	5.741	5.987	2.576	0.780	-3.962	11.860
2	18:18:27	12.020	11.080	0.090	0.804	5.491	5.994	3.529	0.963	-2.209	11.880
3	18:18:54	11.810	10.890	-0.064	0.701	6.133	6.245	2.888	0.854	-4.282	11.840
x		11.950	11.370	0.031	0.775	5.788	6.075	2.998	0.866	-3.484	11.860
σ		0.123	0.671	0.083	0.064	0.324	0.147	0.486	0.092	1.116	0.022
%RSD		1.029	5.902	265.900	8.300	5.592	2.415	16.220	10.680	32.030	0.185
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:00	92.3%	0.100	0.106	0.085	-0.452	0.018	0.028	0.178	0.167	87.3%
2	18:18:27	90.7%	0.105	0.051	0.098	1.335	0.023	0.017	0.189	0.168	86.2%
3	18:18:54	91.2%	0.078	0.069	0.085	-0.329	0.016	0.022	0.148	0.168	86.6%
x		91.4%	0.094	0.075	0.089	0.185	0.019	0.023	0.172	0.167	86.7%
σ		0.8%	0.014	0.028	0.008	0.998	0.003	0.005	0.021	0.001	0.6%
%RSD		0.9	15.300	36.890	8.678	539.900	18.480	23.830	12.480	0.471	0.7
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:18:00	0.591	0.806	0.275	0.281	82.420	80.560	87.1%	0.046	0.051	0.355
2	18:18:27	0.580	0.722	0.226	0.271	80.340	80.170	85.0%	0.038	0.054	0.333
3	18:18:54	0.555	0.739	0.225	0.243	79.710	80.310	85.1%	0.033	0.048	0.378
x		0.575	0.756	0.242	0.265	80.820	80.350	85.7%	0.039	0.051	0.355
σ		0.018	0.045	0.028	0.020	1.420	0.197	1.2%	0.006	0.003	0.022
%RSD		3.189	5.890	11.600	7.461	1.757	0.245	1.4	16.500	5.971	6.327
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	18:18:00	0.346	0.344	86.7%							
2	18:18:27	0.287	0.322	83.9%							
3	18:18:54	0.325	0.340	84.1%							
x		0.319	0.335	84.9%							
σ		0.030	0.012	1.5%							
%RSD		9.432	3.569	1.8							

UD10056-002 04/25/2019 18:23:17

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:44	102.8%	0.032	4.961	4.846	38.930	┬7430.000	┬14120.000	┬13940.000	┬13750.000	14.910
2	18:24:11	103.5%	0.006	4.773	4.694	32.210	┬7527.000	┬13790.000	┬13780.000	┬13540.000	15.260
3	18:24:38	98.8%	0.022	4.814	5.084	35.320	┬7304.000	┬13510.000	┬13660.000	┬13660.000	15.460
x		101.7%	0.020	4.849	4.875	35.490	┬7420.000	┬13810.000	┬13790.000	┬13650.000	15.210
σ		2.5%	0.013	0.099	0.196	3.366	┬111.900	┬306.500	┬142.600	┬105.300	0.279
%RSD		2.5	64.730	2.036	4.027	9.486	┬1.509	┬2.219	┬1.034	┬0.772	1.834

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:44	┬5463.000	┬118000.000	┬1907.000	34000.000	┬29560.000	94.8%	1.031	-0.007	0.830	2879.000
2	18:24:11	┬5367.000	┬114300.000	┬1842.000	33710.000	┬30290.000	96.0%	0.992	-0.216	0.772	2955.000
3	18:24:38	┬5066.000	┬110900.000	┬1910.000	33290.000	┬31520.000	98.5%	0.862	0.168	0.728	2354.000
x		┬5299.000	┬114400.000	┬1886.000	33670.000	┬30460.000	96.4%	0.962	-0.018	0.776	2729.000
σ		┬207.200	┬3551.000	┬38.520	358.200	┬990.600	1.9%	0.089	0.192	0.051	327.400
%RSD		┬3.910	┬3.103	┬2.042	1.064	┬3.252	2.0	9.212	1051.000	6.596	12.000

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:44	20.040	30.620	28.620	333.900	0.106	0.592	0.484	2.036	2.169	6.472
2	18:24:11	18.160	30.860	25.590	301.200	0.124	0.737	0.058	1.930	2.097	6.515
3	18:24:38	18.250	30.850	22.260	262.700	0.093	0.498	-0.237	1.859	2.129	6.775
x		18.820	30.780	25.490	299.200	0.108	0.609	0.102	1.942	2.131	6.587
σ		1.063	0.133	3.180	35.630	0.016	0.121	0.363	0.089	0.036	0.164
%RSD		5.647	0.433	12.470	11.910	14.780	19.800	356.900	4.599	1.700	2.489

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:44	6.373	6.479	-0.042	2.517	6.182	6.726	4.271	1.155	-3.762	71.220
2	18:24:11	6.229	6.922	-0.070	2.068	5.791	7.048	7.402	1.982	-4.286	71.770
3	18:24:38	6.962	6.910	0.157	2.290	5.758	7.209	4.546	1.165	-0.789	71.740
x		6.521	6.771	0.015	2.292	5.910	6.994	5.406	1.434	-2.945	71.580
σ		0.389	0.253	0.124	0.224	0.236	0.246	1.733	0.474	1.886	0.306
%RSD		5.957	3.729	819.900	9.786	3.994	3.512	32.060	33.080	64.020	0.427

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:44	89.5%	0.017	0.042	0.034	4.102	0.008	0.007	0.026	0.037	86.1%
2	18:24:11	91.0%	0.058	0.070	0.035	2.141	0.002	0.007	0.017	0.019	85.6%
3	18:24:38	94.7%	0.080	0.039	0.025	1.739	-0.000	0.003	0.042	0.003	90.2%
x		91.7%	0.051	0.050	0.032	2.661	0.003	0.006	0.029	0.020	87.3%
σ		2.7%	0.032	0.017	0.005	1.264	0.004	0.002	0.013	0.017	2.5%
%RSD		2.9	62.200	33.550	16.670	47.520	123.100	42.140	43.920	86.200	2.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:23:44	0.594	0.850	0.144	0.160	21.830	21.520	83.9%	0.003	-0.001	0.408
2	18:24:11	0.643	0.839	0.114	0.137	22.300	22.350	85.0%	0.007	-0.007	0.372
3	18:24:38	0.663	0.843	0.112	0.156	22.130	22.650	91.0%	-0.002	-0.011	0.441
x		0.633	0.844	0.123	0.151	22.090	22.170	86.6%	0.003	-0.006	0.407
σ		0.036	0.006	0.018	0.012	0.240	0.584	3.8%	0.005	0.005	0.034
%RSD		5.645	0.655	14.650	8.049	1.088	2.633	4.4	160.200	81.420	8.420

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:23:44	0.346	0.384	81.3%
2	18:24:11	0.372	0.371	83.4%
3	18:24:38	0.400	0.387	87.5%
x		0.373	0.381	84.1%
σ		0.027	0.008	3.2%
%RSD		7.143	2.217	3.8

UD10056-003 04/25/2019 18:29:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:30	104.6%	0.091	3.944	3.994	-18.650	T 6146.000	T 3800.000	T 3907.000	T 3936.000	TM 559.400
2	18:29:57	102.5%	0.080	3.587	4.282	-16.400	T 6072.000	T 3812.000	T 3876.000	T 3796.000	TM 548.700
3	18:30:25	T 114.9%	0.065	4.029	4.064	-19.980	T 6213.000	T 3853.000	T 3866.000	T 3876.000	T 496.600
x		T 107.3%	0.079	3.854	4.114	-18.340	T 6143.000	T 3821.000	T 3883.000	T 3869.000	TM 534.900
σ		T 6.6%	0.013	0.235	0.150	1.814	T 70.520	T 27.680	T 21.440	T 70.510	TM 33.640
%RSD		T 6.2	16.460	6.089	3.656	9.888	T 1.148	T 0.724	T 0.552	T 1.822	TM 6.289

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:30	T 9860.000	T 105600.000	T 894.700	9006.000	8061.000	97.5%	1.940	-0.268	1.688	2951.000
2	18:29:57	T 9407.000	T 103200.000	T 918.400	9311.000	8406.000	98.2%	1.698	-0.270	1.696	2594.000
3	18:30:25	T 9802.000	T 107300.000	T 809.900	9032.000	7290.000	96.4%	1.482	0.053	1.712	2699.000
x		T 9690.000	T 105400.000	T 874.300	9116.000	7919.000	97.4%	1.706	-0.162	1.699	2748.000
σ		T 246.300	T 2044.000	T 57.070	169.000	571.300	0.9%	0.229	0.186	0.012	183.500
%RSD		T 2.542	T 1.939	T 6.527	1.854	7.214	0.9	13.430	114.800	0.702	6.677

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:30	94.700	107.300	102.500	158.800	2.309	2.819	2.248	2.691	2.806	9.812
2	18:29:57	93.370	109.100	99.250	139.200	2.401	2.816	2.036	2.681	2.610	9.965
3	18:30:25	92.140	106.800	102.000	163.800	2.418	2.690	2.345	2.727	2.602	10.070
x		93.400	107.700	101.300	153.900	2.376	2.775	2.210	2.700	2.673	9.950
σ		1.281	1.219	1.752	13.010	0.059	0.074	0.158	0.024	0.116	0.131
%RSD		1.371	1.132	1.731	8.452	2.470	2.665	7.141	0.900	4.325	1.315

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:30	10.060	9.951	0.087	0.988	4.020	4.616	-0.424	-0.021	-1.241	22.950
2	18:29:57	9.854	9.954	0.207	0.283	3.591	4.754	1.738	0.584	-4.564	23.130
3	18:30:25	9.579	10.070	-0.258	0.903	3.088	5.347	2.267	0.676	-2.859	23.250
x		9.830	9.993	0.012	0.725	3.566	4.905	1.194	0.413	-2.888	23.110
σ		0.240	0.069	0.241	0.385	0.466	0.388	1.425	0.379	1.662	0.151
%RSD		2.439	0.694	1991.000	53.070	13.080	7.916	119.400	91.610	57.540	0.653

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:30	91.1%	0.037	0.013	0.002	0.329	0.007	0.004	0.040	0.046	87.2%
2	18:29:57	95.3%	0.020	0.034	0.015	1.627	0.007	0.004	0.077	0.051	90.5%
3	18:30:25	93.7%	0.007	0.021	0.011	0.483	0.007	0.004	0.030	0.053	88.6%
x		93.4%	0.021	0.023	0.009	0.813	0.007	0.004	0.049	0.050	88.8%
σ		2.2%	0.015	0.011	0.007	0.709	0.000	0.000	0.025	0.004	1.7%
%RSD		2.3	71.450	46.900	70.000	87.260	5.502	2.302	50.590	7.743	1.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:29:30	0.528	0.719	0.439	0.498	24.790	24.880	86.6%	0.040	0.035	0.902
2	18:29:57	0.595	0.757	0.524	0.530	24.150	23.910	89.2%	0.059	0.033	0.969
3	18:30:25	0.599	0.742	0.532	0.410	25.240	24.830	88.0%	0.048	0.031	0.877
x		0.574	0.739	0.498	0.480	24.730	24.540	87.9%	0.049	0.033	0.916
σ		0.040	0.019	0.052	0.062	0.550	0.549	1.3%	0.010	0.002	0.048
%RSD		6.990	2.620	10.340	12.980	2.226	2.239	1.5	19.960	7.110	5.229

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:29:30	0.836	0.857	84.8%
2	18:29:57	0.811	0.860	88.5%
3	18:30:25	0.746	0.833	86.2%
x		0.798	0.850	86.5%
σ		0.046	0.015	1.9%
%RSD		5.823	1.768	2.1

UD10056-003S 04/25/2019 18:34:49

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:16	102.0%	73.740	75.570	72.020	2.442	T 7142.000	T 4591.000	T 4676.000	T 4739.000	TM 635.300
2	18:35:43	T 116.6%	71.190	78.470	74.270	-5.330	T 7203.000	T 4703.000	T 4726.000	T 4632.000	TM 566.900
3	18:36:09	103.1%	72.090	76.060	77.260	-2.708	T 7302.000	T 4755.000	T 4807.000	T 4720.000	TM 649.100
x		T 107.2%	72.340	76.700	74.520	-1.865	T 7215.000	T 4683.000	T 4736.000	T 4697.000	TM 617.100
σ		T 8.2%	1.292	1.551	2.625	3.954	T 80.890	T 83.930	T 66.190	T 56.920	TM 43.980
%RSD		T 7.6	1.786	2.022	3.523	212.000	T 1.121	T 1.792	T 1.397	T 1.212	TM 7.127
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:16	T 9976.000	T 103800.000	T 1808.000	9876.000	9354.000	99.6%	101.200	98.970	97.170	3227.000
2	18:35:43	TM 10610.000	T 107400.000	T 1584.000	9807.000	7857.000	96.9%	101.300	102.200	98.500	3755.000
3	18:36:09	TM 10820.000	T 107400.000	T 1831.000	10080.000	9119.000	98.2%	101.200	100.700	97.090	3297.000
x		TM 10470.000	T 106200.000	T 1741.000	9920.000	8777.000	98.2%	101.200	100.600	97.590	3426.000
σ		TM 438.200	T 2083.000	T 136.200	139.900	805.000	1.3%	0.074	1.608	0.790	286.800
%RSD		TM 4.186	T 1.962	T 7.823	1.411	9.172	1.4	0.073	1.598	0.810	8.371
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:16	1150.000	207.000	T 1104.000	1155.000	99.050	99.590	100.300	100.100	100.400	111.500
2	18:35:43	1167.000	203.800	T 1127.000	1161.000	97.540	100.500	101.800	99.940	99.550	110.600
3	18:36:09	1176.000	204.400	T 1125.000	1173.000	98.680	98.060	100.000	99.860	99.580	111.900
x		1164.000	205.100	T 1119.000	1163.000	98.420	99.380	100.700	99.950	99.860	111.300
σ		13.020	1.705	T 12.980	9.169	0.790	1.232	0.975	0.100	0.503	0.664
%RSD		1.119	0.831	T 1.160	0.788	0.803	1.240	0.968	0.101	0.503	0.596
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:16	104.700	106.500	98.760	102.300	4.162	4.638	436.700	105.100	0.087	120.800
2	18:35:43	107.700	104.700	96.300	104.000	3.970	5.673	431.700	104.100	-1.861	120.900
3	18:36:09	105.100	105.100	94.620	103.800	4.156	5.224	421.100	102.400	-3.094	121.700
x		105.900	105.500	96.560	103.400	4.096	5.179	429.800	103.900	-1.623	121.200
σ		1.647	0.933	2.080	0.926	0.109	0.519	7.958	1.347	1.604	0.500
%RSD		1.555	0.885	2.154	0.896	2.671	10.020	1.851	1.297	98.820	0.412
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:16	95.6%	97.530	95.880	96.990	103.000	97.400	97.480	98.580	97.100	91.4%
2	18:35:43	91.2%	98.900	98.350	96.800	100.900	96.930	97.300	98.030	97.710	87.3%
3	18:36:09	94.0%	98.590	97.370	98.080	99.480	97.900	97.230	98.780	97.240	88.9%
x		93.6%	98.340	97.200	97.290	101.100	97.410	97.340	98.460	97.350	89.2%
σ		2.2%	0.722	1.242	0.686	1.799	0.482	0.129	0.385	0.320	2.1%
%RSD		2.4	0.734	1.277	0.705	1.779	0.495	0.132	0.391	0.328	2.3
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:35:16	100.300	99.440	97.590	100.300	123.600	121.800	90.2%	96.170	98.030	98.460
2	18:35:43	100.900	99.420	97.580	98.680	124.300	121.600	86.7%	96.930	99.080	98.490
3	18:36:09	100.600	101.500	97.090	98.450	124.900	122.700	88.9%	96.120	97.870	98.450
x		100.600	100.100	97.420	99.150	124.300	122.000	88.6%	96.410	98.330	98.470
σ		0.294	1.199	0.286	1.017	0.628	0.599	1.8%	0.454	0.659	0.022
%RSD		0.293	1.197	0.293	1.026	0.506	0.491	2.0	0.471	0.670	0.022
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	18:35:16	98.930	97.930	88.4%							
2	18:35:43	99.330	98.330	85.3%							
3	18:36:09	99.060	97.780	86.8%							
x		99.110	98.010	86.8%							
σ		0.204	0.282	1.5%							
%RSD		0.206	0.288	1.8							

CCV MW10994 04/25/2019 18:40:35 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:02	93.2%	294.400	284.600	285.900	16.900	┬62230.000	┬59090.000	┬59720.000	┬60360.000	300.800
2	18:41:29	92.9%	305.100	302.700	297.900	15.000	┬62890.000	┬59950.000	┬60620.000	┬60270.000	295.700
3	18:41:56	92.4%	300.100	303.800	302.200	19.500	┬64060.000	┬61710.000	┬61420.000	┬60110.000	294.900
x		92.8%	99.965%	99.018%	98.448%	17.130	┬105.104%	┬60250.000	┬60590.000	┬100.411%	99.049%
σ		0.4%	n/a	n/a	n/a	2.264	┬n/a	┬1335.000	┬851.000	┬n/a	n/a
%RSD		0.4	1.786	3.627	2.847	13.210	┬1.471	┬2.216	┬1.405	┬0.210	1.082

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:02	┬3148.000	1207.000	┬57660.000	60880.000	┬58980.000	93.5%	307.000	312.200	292.000	2396.000
2	18:41:29	┬3162.000	1230.000	┬58640.000	61960.000	┬58890.000	93.0%	314.000	319.000	299.300	1866.000
3	18:41:56	┬3265.000	1270.000	┬58590.000	62420.000	┬58080.000	89.7%	311.300	318.400	301.700	1959.000
x		┬106.398%	1236.000	┬97.164%	61750.000	┬97.749%	92.1%	103.586%	105.510%	99.215%	2073.000
σ		┬n/a	31.970	┬n/a	794.800	┬n/a	2.0%	n/a	n/a	n/a	283.400
%RSD		┬1.997	2.586	┬0.943	1.287	┬0.846	2.2	1.129	1.201	1.698	13.670

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:02	┬61890.000	294.600	┬62080.000	┬60190.000	291.300	282.800	284.000	283.700	270.500	311.800
2	18:41:29	┬62220.000	298.100	┬61920.000	┬60610.000	290.700	284.500	287.400	285.700	275.800	309.600
3	18:41:56	┬61950.000	295.800	┬62450.000	┬60260.000	290.300	289.800	291.100	284.700	271.500	300.600
x		┬62020.000	98.728%	┬62150.000	┬100.590%	96.919%	95.237%	287.500	284.700	90.860%	102.441%
σ		┬175.300	n/a	┬271.200	┬n/a	n/a	n/a	3.526	1.012	n/a	n/a
%RSD		┬0.283	0.592	┬0.436	┬0.377	0.172	1.260	1.227	0.356	1.029	1.925

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:02	287.100	283.400	275.100	309.300	2.249	1.959	1246.000	304.900	4.111	307.000
2	18:41:29	282.400	285.600	282.100	298.400	1.785	0.880	1252.000	304.900	-0.694	306.100
3	18:41:56	284.000	279.800	278.800	299.400	2.271	1.843	1272.000	307.800	0.890	307.700
x		284.500	282.900	92.884%	302.400	2.102	1.560	1257.000	101.957%	1.436	102.310%
σ		2.381	2.896	n/a	6.027	0.274	0.592	13.950	n/a	2.448	n/a
%RSD		0.837	1.023	1.265	1.993	13.050	37.960	1.110	0.540	170.500	0.252

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:02	82.8%	313.400	312.400	315.000	300.400	294.100	291.300	297.300	299.900	78.6%
2	18:41:29	84.0%	315.200	309.500	311.300	302.100	293.900	293.000	299.400	297.600	80.0%
3	18:41:56	80.4%	316.200	312.000	313.900	299.600	292.100	290.900	295.900	293.900	77.2%
x		82.4%	104.977%	103.769%	313.400	300.700	97.793%	291.700	297.600	99.044%	78.6%
σ		1.8%	n/a	n/a	1.857	1.310	n/a	1.131	1.793	n/a	1.4%
%RSD		2.2	0.438	0.501	0.593	0.436	0.366	0.388	0.603	1.035	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:41:02	308.700	308.200	307.300	303.500	308.100	306.600	80.5%	289.200	296.000	286.400
2	18:41:29	309.100	305.900	308.200	308.000	308.600	306.200	80.8%	293.300	298.400	290.900
3	18:41:56	307.400	308.400	304.800	305.200	308.600	305.000	78.2%	288.800	295.300	287.800
x		102.793%	102.496%	306.800	101.853%	102.813%	101.967%	79.8%	290.400	98.860%	96.126%
σ		n/a	n/a	1.750	n/a	n/a	n/a	1.4%	2.487	n/a	n/a
%RSD		0.287	0.448	0.571	0.751	0.093	0.266	1.8	0.856	0.551	0.797

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:41:02	285.900	285.400	75.6%
2	18:41:29	290.400	290.500	76.6%
3	18:41:56	287.100	287.400	72.3%
x		95.931%	95.928%	74.8%
σ		n/a	n/a	2.2%
%RSD		0.805	0.893	3.0

CCB IM9370-01 04/25/2019 18:46:22 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:50	99.5%	-0.003	2.096	1.837	-2.114	9.488	5.691	5.352	5.294	0.006
2	18:47:17	96.7%	0.036	1.471	1.723	6.426	5.123	4.238	4.330	3.821	0.002
3	18:47:44	97.8%	0.017	1.631	1.717	2.365	7.063	3.123	3.400	3.192	0.003
x		98.0%	0.017	1.733	1.759	2.226	7.224	4.351	4.361	4.102	0.004
σ		1.4%	0.020	0.325	0.068	4.272	2.187	1.288	0.977	1.079	0.002
%RSD		1.4	117.200	18.740	3.852	191.900	30.270	29.600	22.390	26.300	49.990

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:50	15.440	773.100	3.060	7.357	5.157	90.7%	-0.371	0.015	0.052	38.400
2	18:47:17	13.990	684.700	1.145	3.465	4.957	94.9%	-0.356	0.010	0.037	31.070
3	18:47:44	14.910	762.900	1.444	4.698	1.761	91.8%	-0.242	0.001	0.060	53.650
x		14.780	740.200	1.883	5.173	3.959	92.5%	-0.323	0.008	0.050	41.040
σ		0.734	48.340	1.030	1.989	1.905	2.2%	0.071	0.007	0.011	11.520
%RSD		4.969	6.531	54.690	38.450	48.130	2.4	21.860	81.910	22.690	28.060

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:50	4.626	-0.057	14.850	2.368	0.002	0.011	-0.020	-0.036	0.019	0.020
2	18:47:17	0.786	-0.069	7.858	-10.210	-0.022	-0.016	0.337	-0.057	0.004	0.035
3	18:47:44	1.496	-0.074	9.832	-6.167	-0.020	-0.014	0.309	-0.052	-0.013	0.023
x		2.303	-0.067	10.850	-4.670	-0.013	-0.007	0.209	-0.049	0.004	0.026
σ		2.043	0.009	3.607	6.422	0.013	0.015	0.199	0.011	0.016	0.008
%RSD		88.730	12.790	33.250	137.500	98.870	228.700	95.050	22.850	461.700	29.000

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:50	-0.113	-0.016	-0.031	1.223	0.605	1.362	-0.607	0.022	-4.793	0.012
2	18:47:17	-0.147	-0.009	-0.035	-0.211	0.152	0.919	-0.118	0.111	-4.341	0.019
3	18:47:44	-0.202	0.008	-0.040	0.535	0.791	1.351	-0.168	0.094	-3.909	0.008
x		-0.154	-0.006	-0.035	0.516	0.516	1.211	-0.298	0.076	-4.348	0.013
σ		0.045	0.012	0.004	0.717	0.329	0.253	0.269	0.047	0.442	0.006
%RSD		29.410	226.200	12.470	139.100	63.760	20.890	90.310	62.060	10.160	41.880

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:50	82.8%	0.162	0.068	0.112	0.471	0.037	0.023	0.019	0.020	79.7%
2	18:47:17	85.5%	0.068	0.070	0.079	-0.058	0.024	0.025	0.027	0.019	83.8%
3	18:47:44	82.9%	0.113	0.052	0.097	-0.745	0.016	0.012	0.014	0.022	80.8%
x		83.7%	0.115	0.064	0.096	-0.111	0.026	0.020	0.020	0.020	81.4%
σ		1.5%	0.047	0.010	0.016	0.610	0.011	0.007	0.007	0.001	2.1%
%RSD		1.8	40.960	15.300	16.910	551.200	41.630	34.970	34.100	6.909	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:46:50	0.067	0.081	0.196	0.184	0.048	-0.016	78.3%	0.039	0.022	0.029
2	18:47:17	0.038	0.052	0.152	0.150	0.010	-0.010	81.6%	0.028	0.018	0.020
3	18:47:44	0.040	0.068	0.154	0.163	-0.023	0.015	79.0%	-0.001	0.003	0.020
x		0.049	0.067	0.167	0.165	0.012	-0.004	79.6%	0.022	0.014	0.023
σ		0.016	0.014	0.025	0.017	0.035	0.016	1.7%	0.021	0.010	0.005
%RSD		32.820	21.210	14.970	10.360	304.100	431.800	2.2	93.270	71.080	21.770

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:46:50	0.050	0.030	76.9%
2	18:47:17	0.019	0.022	80.8%
3	18:47:44	0.006	0.013	79.4%
x		0.025	0.022	79.0%
σ		0.023	0.009	2.0%
%RSD		90.820	40.110	2.5

UD10056-003SD 04/25/2019 18:52:08

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:35	100.8%	72.730	75.870	75.040	2.143	T 6981.000	T 4608.000	T 4676.000	T 4731.000	TM 649.700
2	18:53:02	101.6%	71.130	76.830	75.580	-0.899	T 7035.000	T 4652.000	T 4731.000	T 4765.000	TM 670.100
3	18:53:28	105.1%	70.110	75.980	75.220	3.736	T 7248.000	T 4754.000	T 4807.000	T 4753.000	TM 629.400
x		102.5%	71.320	76.230	75.280	1.660	T 7088.000	T 4672.000	T 4738.000	T 4750.000	TM 649.700
σ		2.3%	1.321	0.527	0.278	2.355	T 140.900	T 75.020	T 66.080	T 16.960	TM 20.330
%RSD		2.2	1.852	0.692	0.369	141.800	T 1.988	T 1.606	T 1.395	T 0.357	TM 3.129

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:35	TM 10370.000	T 103800.000	T 1812.000	10040.000	9367.000	96.8%	101.100	101.000	99.440	3068.000
2	18:53:02	TM 10520.000	T 105700.000	T 1825.000	10010.000	9211.000	96.5%	104.900	102.700	100.200	2867.000
3	18:53:28	TM 10950.000	T 108800.000	T 1791.000	10100.000	8877.000	94.7%	103.500	102.800	99.980	3166.000
x		TM 10620.000	T 106100.000	T 1809.000	10050.000	9152.000	96.0%	103.200	102.100	99.870	3034.000
σ		TM 302.100	T 2543.000	T 17.370	44.300	250.600	1.1%	1.919	1.008	0.390	152.300
%RSD		TM 2.845	T 2.397	T 0.960	0.441	2.738	1.2	1.860	0.986	0.391	5.020

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:35	1202.000	210.900	T 1155.000	1203.000	100.400	100.800	103.500	101.600	101.000	112.900
2	18:53:02	1192.000	210.600	T 1153.000	1214.000	99.890	100.900	100.400	100.900	100.600	112.900
3	18:53:28	1206.000	209.200	T 1144.000	1203.000	100.300	101.500	102.700	101.500	100.900	110.700
x		1200.000	210.200	T 1150.000	1207.000	100.200	101.100	102.200	101.300	100.800	112.200
σ		7.308	0.909	T 5.854	6.679	0.255	0.385	1.624	0.418	0.217	1.249
%RSD		0.609	0.432	T 0.509	0.553	0.255	0.381	1.589	0.413	0.215	1.113

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:35	110.300	108.800	99.040	105.800	2.999	4.342	453.900	109.600	-1.452	120.800
2	18:53:02	110.000	106.300	97.150	104.100	3.551	4.793	427.400	103.200	-0.017	121.500
3	18:53:28	108.500	106.400	97.250	104.100	4.290	4.457	433.300	103.800	-1.448	123.300
x		109.600	107.200	97.820	104.700	3.613	4.531	438.200	105.500	-0.972	121.900
σ		0.967	1.397	1.062	0.969	0.648	0.234	13.940	3.541	0.827	1.252
%RSD		0.882	1.304	1.085	0.925	17.920	5.175	3.182	3.355	85.090	1.027

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:35	91.2%	99.220	98.130	99.160	97.810	99.670	99.970	100.600	98.430	87.1%
2	18:53:02	91.2%	99.250	97.410	98.780	105.100	98.280	97.670	99.810	98.150	87.0%
3	18:53:28	89.2%	100.600	100.500	98.620	98.710	99.160	97.430	99.690	99.640	85.9%
x		90.5%	99.700	98.670	98.850	100.500	99.040	98.360	100.000	98.740	86.7%
σ		1.2%	0.799	1.601	0.275	3.978	0.703	1.403	0.488	0.793	0.7%
%RSD		1.3	0.801	1.622	0.279	3.956	0.710	1.427	0.488	0.803	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:52:35	101.300	102.000	100.800	101.500	125.800	125.500	86.9%	97.600	98.800	99.210
2	18:53:02	101.700	100.100	98.420	100.900	126.200	124.500	86.3%	97.490	98.970	100.100
3	18:53:28	101.000	101.300	98.970	101.200	125.300	123.900	84.4%	98.510	99.470	100.100
x		101.300	101.100	99.380	101.200	125.800	124.600	85.9%	97.860	99.080	99.810
σ		0.351	0.917	1.221	0.291	0.481	0.809	1.3%	0.559	0.350	0.519
%RSD		0.347	0.906	1.229	0.288	0.382	0.649	1.5	0.572	0.353	0.520

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:52:35	99.120	98.770	84.2%
2	18:53:02	100.300	98.900	83.1%
3	18:53:28	100.400	99.130	81.9%
x		99.950	98.930	83.1%
σ		0.726	0.180	1.2%
%RSD		0.726	0.182	1.4

UD10056-003L(5) 04/25/2019 18:57:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:58:20	101.0%	0.044	2.207	2.049	-2.802	T 1200.000	T 883.600	898.700	897.700	114.600
2	18:58:47	99.7%	0.045	1.981	1.881	3.477	T 1200.000	T 903.800	917.800	896.700	113.700
3	18:59:14	102.3%	0.029	1.724	1.859	-7.016	T 1233.000	T 886.600	904.500	887.700	113.700
x		101.0%	0.040	1.971	1.930	-2.114	T 1211.000	T 891.300	907.000	894.100	114.000
σ		1.3%	0.009	0.241	0.104	5.280	T 19.000	T 10.880	9.796	5.505	0.517
%RSD		1.3	22.740	12.250	5.367	249.800	T 1.570	T 1.220	1.080	0.616	0.453

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:58:20	T 1925.000	T 22400.000	177.600	1825.000	1597.000	95.5%	0.201	-0.016	0.361	562.600
2	18:58:47	T 1918.000	T 22290.000	178.500	1821.000	1671.000	95.6%	0.095	0.032	0.384	463.500
3	18:59:14	T 2024.000	T 23070.000	174.600	1874.000	1548.000	92.5%	0.174	0.050	0.455	521.800
x		T 1956.000	T 22590.000	176.900	1840.000	1605.000	94.5%	0.157	0.022	0.400	516.000
σ		T 59.580	T 421.000	2.028	29.620	62.130	1.8%	0.055	0.034	0.049	49.810
%RSD		T 3.046	T 1.864	1.146	1.610	3.870	1.9	35.050	157.700	12.280	9.653

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:58:20	18.320	21.220	24.780	20.080	0.469	0.491	0.467	0.469	0.508	2.016
2	18:58:47	17.480	21.680	23.230	17.730	0.435	0.603	0.453	0.500	0.522	2.137
3	18:59:14	18.210	21.620	25.850	28.740	0.430	0.689	0.755	0.497	0.598	2.029
x		18.000	21.510	24.620	22.180	0.444	0.594	0.558	0.489	0.542	2.061
σ		0.456	0.251	1.317	5.798	0.021	0.099	0.171	0.017	0.048	0.066
%RSD		2.534	1.167	5.349	26.140	4.786	16.660	30.560	3.492	8.919	3.217

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:58:20	2.098	2.085	-0.042	0.577	1.094	1.566	-0.200	0.137	-5.078	4.638
2	18:58:47	1.913	2.049	0.040	0.555	1.118	1.148	1.749	0.521	-1.493	4.635
3	18:59:14	1.700	1.704	-0.005	0.139	0.861	1.480	0.730	0.258	-2.210	4.680
x		1.904	1.946	-0.002	0.424	1.024	1.398	0.760	0.305	-2.927	4.651
σ		0.200	0.211	0.041	0.247	0.142	0.221	0.975	0.196	1.897	0.025
%RSD		10.480	10.810	1968.000	58.320	13.870	15.790	128.200	64.350	64.810	0.536

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:58:20	86.9%	0.018	0.034	0.044	0.909	0.021	0.014	0.009	0.017	83.0%
2	18:58:47	89.6%	0.068	0.095	0.034	-1.279	0.005	0.016	0.018	0.017	85.2%
3	18:59:14	86.2%	0.034	0.060	0.027	0.951	0.010	0.005	0.004	0.020	84.2%
x		87.6%	0.040	0.063	0.035	0.194	0.012	0.012	0.010	0.018	84.2%
σ		1.8%	0.025	0.031	0.009	1.275	0.008	0.005	0.007	0.002	1.1%
%RSD		2.0	63.980	48.490	24.940	659.000	65.900	47.140	68.420	9.907	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	18:58:20	0.157	0.225	0.122	0.121	4.960	4.621	81.2%	0.052	0.026	0.193
2	18:58:47	0.135	0.181	0.126	0.129	4.972	5.005	84.0%	0.039	0.032	0.188
3	18:59:14	0.177	0.161	0.125	0.139	4.820	4.782	81.7%	0.026	0.023	0.175
x		0.156	0.189	0.124	0.129	4.917	4.803	82.3%	0.039	0.027	0.186
σ		0.021	0.033	0.002	0.009	0.084	0.193	1.5%	0.013	0.005	0.009
%RSD		13.470	17.410	1.696	6.803	1.718	4.018	1.8	33.700	17.300	4.971

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	18:58:20	0.177	0.177	80.4%
2	18:58:47	0.160	0.178	84.2%
3	18:59:14	0.170	0.167	81.3%
x		0.169	0.174	81.9%
σ		0.009	0.006	2.0%
%RSD		5.192	3.624	2.4

UD10056-003A 04/25/2019 19:03:39

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:06	101.6%	69.040	75.910	75.030	-7.453	T 7072.000	T 4684.000	T 4753.000	T 4678.000	TM 631.700
2	19:04:33	T 114.9%	69.180	74.830	75.400	-11.570	T 7052.000	T 4561.000	T 4624.000	T 4702.000	TM 567.800
3	19:05:00	104.8%	68.350	76.300	73.020	-10.490	T 7029.000	T 4609.000	T 4727.000	T 4693.000	TM 611.100
x		T 107.1%	68.860	75.680	74.490	-9.835	T 7051.000	T 4618.000	T 4701.000	T 4691.000	TM 603.500
σ		T 7.0%	0.443	0.760	1.280	2.132	T 21.530	T 61.930	T 68.270	T 12.240	TM 32.630
%RSD		T 6.5	0.643	1.004	1.719	21.680	T 0.305	T 1.341	T 1.452	T 0.261	TM 5.407

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:06	TM 10760.000	T 103600.000	T 1789.000	9951.000	9019.000	94.8%	103.000	100.700	99.540	3515.000
2	19:04:33	TM 10600.000	T 104600.000	T 1596.000	9944.000	7954.000	96.1%	100.600	99.760	97.510	3452.000
3	19:05:00	TM 10500.000	T 102700.000	T 1743.000	10040.000	8765.000	95.9%	101.800	99.950	97.940	3844.000
x		TM 10620.000	T 103600.000	T 1709.000	9977.000	8580.000	95.6%	101.800	100.200	98.330	3603.000
σ		TM 127.400	T 916.100	T 100.500	52.530	556.500	0.7%	1.204	0.520	1.069	210.400
%RSD		TM 1.199	T 0.884	T 5.876	0.527	6.486	0.7	1.183	0.519	1.087	5.839

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:06	1215.000	207.600	T 1170.000	1215.000	99.780	100.300	99.650	102.100	100.800	111.300
2	19:04:33	1211.000	204.800	T 1124.000	1191.000	98.110	99.290	101.400	101.900	97.990	112.000
3	19:05:00	1192.000	204.100	T 1105.000	1180.000	100.300	101.400	98.880	101.800	101.800	109.500
x		1206.000	205.500	T 1133.000	1195.000	99.410	100.300	99.970	101.900	100.200	110.900
σ		12.270	1.880	T 33.370	17.850	1.153	1.082	1.280	0.125	1.974	1.289
%RSD		1.018	0.915	T 2.946	1.494	1.160	1.079	1.280	0.122	1.970	1.162

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:06	106.700	106.900	95.510	104.500	3.668	3.898	439.100	105.900	0.538	120.800
2	19:04:33	104.000	104.600	93.310	103.100	2.684	4.465	439.700	105.700	-2.476	121.200
3	19:05:00	107.100	107.000	96.940	106.200	3.226	3.972	412.500	99.580	0.176	121.700
x		105.900	106.200	95.250	104.600	3.193	4.112	430.400	103.700	-0.588	121.200
σ		1.701	1.351	1.831	1.525	0.493	0.308	15.560	3.589	1.646	0.469
%RSD		1.606	1.272	1.923	1.458	15.430	7.489	3.615	3.460	280.100	0.387

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:06	88.2%	98.010	98.090	97.690	101.900	96.220	96.680	97.820	97.400	84.5%
2	19:04:33	88.8%	97.050	97.280	97.420	106.500	96.880	96.610	98.570	97.030	85.5%
3	19:05:00	91.4%	96.310	98.230	97.220	102.300	96.620	95.350	97.490	96.100	87.1%
x		89.5%	97.120	97.870	97.450	103.600	96.580	96.210	97.960	96.840	85.7%
σ		1.7%	0.849	0.515	0.237	2.523	0.336	0.749	0.554	0.673	1.3%
%RSD		1.9	0.874	0.526	0.243	2.436	0.348	0.779	0.565	0.695	1.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:04:06	100.300	99.840	94.790	95.590	123.200	123.900	84.1%	96.830	97.740	97.990
2	19:04:33	100.300	99.170	95.490	96.810	124.800	124.600	85.2%	96.360	98.500	98.480
3	19:05:00	99.500	99.520	94.990	97.700	123.800	124.100	85.6%	96.700	98.110	98.620
x		100.000	99.510	95.090	96.700	123.900	124.200	85.0%	96.630	98.120	98.360
σ		0.475	0.334	0.358	1.059	0.828	0.327	0.8%	0.243	0.381	0.331
%RSD		0.475	0.336	0.377	1.095	0.668	0.263	0.9	0.252	0.389	0.337

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:04:06	98.640	97.440	81.4%
2	19:04:33	97.990	97.360	82.4%
3	19:05:00	98.600	97.860	83.0%
x		98.410	97.560	82.3%
σ		0.363	0.265	0.8%
%RSD		0.369	0.272	1.0

UD10056-004 04/25/2019 19:09:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:52	98.4%	0.268	7.634	7.804	-43.600	T 22210.000	T 19790.000	T 19910.000	T 19730.000	TM 1681.000
2	19:10:19	98.0%	0.249	8.134	7.781	-38.620	T 21970.000	T 19290.000	T 19760.000	T 19610.000	TM 1654.000
3	19:10:46	102.5%	0.278	7.666	8.194	-38.760	T 22800.000	T 20270.000	T 20480.000	T 20360.000	TM 1640.000
x		99.6%	0.265	7.811	7.926	-40.330	T 22330.000	T 19780.000	T 20050.000	T 19900.000	TM 1658.000
σ		2.5%	0.015	0.280	0.232	2.835	T 425.100	T 494.500	T 382.200	T 403.400	TM 20.780
%RSD		2.5	5.602	3.582	2.928	7.031	T 1.904	T 2.500	T 1.907	T 2.027	TM 1.253

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:52	T 9876.000	T 98670.000	T 2316.000	75000.000	T 71560.000	96.3%	1.560	0.187	2.057	2320.000
2	19:10:19	T 9706.000	T 97710.000	T 2331.000	73140.000	T 70690.000	97.3%	1.728	0.101	2.021	2251.000
3	19:10:46	TM 10360.000	T 104200.000	T 2264.000	76600.000	T 67810.000	93.6%	1.912	-0.229	2.091	2817.000
x		TM 9981.000	T 100200.000	T 2304.000	74910.000	T 70020.000	95.8%	1.734	0.020	2.056	2463.000
σ		TM 340.200	T 3527.000	T 34.860	1733.000	T 1964.000	1.9%	0.177	0.220	0.035	309.000
%RSD		TM 3.409	T 3.519	T 1.513	2.313	T 2.805	2.0	10.180	1113.000	1.701	12.550

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:52	28.380	TM 3245.000	37.830	641.400	32.230	16.700	14.880	1.124	1.727	14.900
2	19:10:19	28.430	TM 3235.000	35.920	654.600	32.270	16.790	14.230	1.146	1.785	15.300
3	19:10:46	30.930	TM 3260.000	38.290	751.700	32.740	17.130	16.060	1.153	1.816	15.100
x		29.250	TM 3247.000	37.350	682.600	32.410	16.870	15.060	1.141	1.776	15.100
σ		1.459	TM 12.980	1.254	60.250	0.283	0.225	0.925	0.015	0.045	0.204
%RSD		4.988	TM 0.400	3.358	8.827	0.874	1.333	6.147	1.297	2.548	1.348

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:52	13.010	12.760	0.368	2.484	7.921	6.449	6.176	2.050	-4.141	65.540
2	19:10:19	12.750	12.820	0.126	1.647	7.014	6.799	6.420	2.122	-5.598	65.780
3	19:10:46	12.780	12.640	0.002	2.059	7.352	6.388	6.993	2.317	-4.527	65.950
x		12.840	12.740	0.166	2.063	7.429	6.546	6.529	2.163	-4.755	65.760
σ		0.142	0.090	0.186	0.418	0.459	0.222	0.419	0.138	0.755	0.209
%RSD		1.105	0.707	112.400	20.280	6.171	3.389	6.423	6.380	15.880	0.317

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:52	108.3%	0.092	0.131	0.077	5.649	0.018	0.010	0.262	0.226	87.0%
2	19:10:19	109.3%	0.111	0.086	0.099	3.860	0.006	0.007	0.287	0.254	88.9%
3	19:10:46	106.0%	0.089	0.093	0.053	3.280	0.013	0.007	0.234	0.280	84.3%
x		107.8%	0.097	0.103	0.076	4.263	0.012	0.008	0.261	0.253	86.7%
σ		1.7%	0.012	0.024	0.023	1.235	0.006	0.002	0.026	0.027	2.3%
%RSD		1.6	12.120	23.150	30.200	28.970	49.170	21.070	10.100	10.590	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:09:52	0.710	0.817	0.270	0.223	14.210	14.560	88.4%	0.080	0.086	0.028
2	19:10:19	0.676	0.774	0.235	0.241	14.150	14.010	88.9%	0.091	0.078	0.034
3	19:10:46	0.673	0.735	0.219	0.252	14.190	14.000	85.3%	0.082	0.084	0.018
x		0.686	0.775	0.241	0.238	14.180	14.190	87.6%	0.084	0.083	0.026
σ		0.021	0.041	0.026	0.015	0.033	0.319	1.9%	0.006	0.004	0.008
%RSD		2.991	5.279	10.740	6.147	0.232	2.248	2.2	6.651	5.371	30.800

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:09:52	0.011	0.020	83.7%
2	19:10:19	0.025	0.024	84.1%
3	19:10:46	0.018	0.019	80.5%
x		0.018	0.021	82.8%
σ		0.007	0.003	2.0%
%RSD		38.640	14.170	2.4

UD10056-005 04/25/2019 19:15:11

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:38	101.0%	0.207	7.274	7.880	-44.010	T 21930.000	T 19310.000	T 19790.000	T 20100.000	TM 1666.000
2	19:16:05	98.8%	0.281	7.458	7.925	-36.830	T 22110.000	T 19650.000	T 20190.000	T 20240.000	TM 1662.000
3	19:16:31	99.4%	0.246	8.294	7.887	-40.390	T 22200.000	T 19570.000	T 19130.000	T 19650.000	TM 1665.000
x		99.7%	0.245	7.675	7.897	-40.410	T 22080.000	T 19510.000	T 19710.000	T 20000.000	TM 1664.000
σ		1.1%	0.037	0.543	0.025	3.588	T 137.700	T 176.300	T 534.000	T 307.900	TM 2.296
%RSD		1.1	15.010	7.077	0.311	8.879	T 0.624	T 0.903	T 2.710	T 1.539	TM 0.138

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:38	TM 10060.000	T 100800.000	T 2260.000	74140.000	T 68880.000	95.8%	1.975	0.024	2.094	2723.000
2	19:16:05	TM 10060.000	T 102500.000	T 2303.000	74250.000	T 70270.000	95.5%	1.799	0.020	2.043	2714.000
3	19:16:31	T 9828.000	T 100100.000	T 2283.000	74680.000	T 70420.000	96.3%	1.915	0.164	1.916	2342.000
x		TM 9983.000	T 101100.000	T 2282.000	74350.000	T 69860.000	95.8%	1.896	0.069	2.018	2593.000
σ		TM 134.900	T 1271.000	T 21.590	284.400	T 848.500	0.4%	0.089	0.082	0.091	217.600
%RSD		TM 1.352	T 1.257	T 0.946	0.383	T 1.215	0.4	4.719	118.200	4.531	8.390

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:38	26.890	TM 3174.000	35.950	708.200	32.230	16.400	14.700	1.208	1.795	14.920
2	19:16:05	29.810	TM 3224.000	37.860	691.100	32.330	16.740	13.700	1.110	1.983	15.200
3	19:16:31	28.790	TM 3241.000	32.100	614.900	32.540	16.340	15.210	1.210	1.918	15.360
x		28.500	TM 3213.000	35.300	671.400	32.370	16.490	14.530	1.176	1.899	15.160
σ		1.483	TM 34.830	2.932	49.680	0.155	0.213	0.770	0.057	0.095	0.226
%RSD		5.204	TM 1.084	8.305	7.399	0.479	1.290	5.299	4.868	5.022	1.493

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:38	12.330	12.600	0.020	0.682	6.931	6.101	4.841	1.691	-4.143	64.890
2	19:16:05	12.490	12.480	-0.168	2.003	6.213	6.338	3.262	1.267	-4.059	65.110
3	19:16:31	14.530	13.080	-0.439	1.906	6.627	5.588	2.843	1.070	-1.825	65.340
x		13.110	12.720	-0.196	1.530	6.591	6.009	3.649	1.343	-3.342	65.120
σ		1.228	0.318	0.231	0.737	0.360	0.383	1.053	0.318	1.315	0.223
%RSD		9.360	2.500	118.100	48.130	5.464	6.374	28.870	23.660	39.340	0.343

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:38	105.1%	0.058	0.041	0.060	5.579	0.002	0.005	0.252	0.260	84.4%
2	19:16:05	106.9%	0.073	0.044	0.039	4.496	0.000	0.007	0.296	0.234	84.8%
3	19:16:31	110.4%	0.077	0.062	0.042	4.259	0.003	0.006	0.216	0.258	87.9%
x		107.5%	0.069	0.049	0.047	4.778	0.002	0.006	0.255	0.250	85.7%
σ		2.7%	0.010	0.011	0.011	0.704	0.001	0.001	0.040	0.014	1.9%
%RSD		2.5	14.520	22.500	24.540	14.730	81.320	16.400	15.720	5.729	2.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:15:38	0.538	0.807	0.126	0.122	14.080	14.760	86.5%	0.059	0.066	0.011
2	19:16:05	0.596	0.771	0.107	0.135	14.210	14.150	86.1%	0.081	0.069	0.037
3	19:16:31	0.610	0.660	0.116	0.116	14.410	13.950	89.5%	0.083	0.075	0.039
x		0.581	0.746	0.117	0.124	14.230	14.290	87.4%	0.074	0.070	0.029
σ		0.038	0.076	0.010	0.010	0.167	0.419	1.9%	0.013	0.005	0.016
%RSD		6.552	10.230	8.217	7.983	1.171	2.936	2.2	17.760	6.959	54.360

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:15:38	0.017	0.021	81.0%
2	19:16:05	0.028	0.024	81.0%
3	19:16:31	0.025	0.027	85.0%
x		0.024	0.024	82.3%
σ		0.006	0.003	2.3%
%RSD		24.150	12.880	2.8

UD10056-006 04/25/2019 19:20:56

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:23	98.8%	-0.004	9.325	9.263	-27.290	T 26070.000	T 30870.000	T 31270.000	T 31420.000	14.210
2	19:21:50	98.2%	-0.000	8.964	9.431	-36.220	T 26340.000	T 30830.000	T 30740.000	T 31150.000	14.330
3	19:22:18	98.1%	0.004	9.448	9.770	-29.240	T 26260.000	T 31060.000	T 32170.000	T 32110.000	14.640
x		98.4%	-0.000	9.246	9.488	-30.910	T 26220.000	T 30920.000	T 31390.000	T 31560.000	14.390
σ		0.4%	0.004	0.251	0.258	4.696	T 139.100	T 127.400	T 722.800	T 495.100	0.223
%RSD		0.4	2727.000	2.718	2.722	15.190	T 0.531	T 0.412	T 2.302	T 1.569	1.548
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:23	T 4603.000	T 106800.000	T 3699.000	TM 154600.000	TM 130800.000	92.2%	0.455	0.090	0.499	2851.000
2	19:21:50	T 4474.000	T 107600.000	T 3764.000	TM 154700.000	TM 133700.000	92.4%	0.552	0.138	0.570	2976.000
3	19:22:18	T 4512.000	T 107100.000	T 3755.000	TM 155400.000	TM 132400.000	92.5%	0.799	0.219	0.493	2908.000
x		T 4530.000	T 107200.000	T 3739.000	TM 154900.000	TM 132300.000	92.4%	0.602	0.149	0.521	2912.000
σ		T 65.820	T 387.200	T 35.120	TM 426.800	TM 1472.000	0.2%	0.178	0.065	0.043	62.720
%RSD		T 1.453	T 0.361	T 0.939	TM 0.276	TM 1.113	0.2	29.490	43.640	8.243	2.154
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:23	11.590	TM 2339.000	28.220	1388.000	4.778	4.417	3.220	0.417	1.205	2.089
2	19:21:50	11.090	TM 2275.000	26.010	1380.000	4.853	4.823	2.712	0.376	1.146	2.027
3	19:22:18	10.920	TM 2338.000	29.510	1426.000	4.905	4.579	2.719	0.350	1.162	2.187
x		11.200	TM 2317.000	27.910	1398.000	4.845	4.606	2.884	0.381	1.171	2.101
σ		0.344	TM 36.670	1.772	24.880	0.064	0.204	0.291	0.034	0.031	0.081
%RSD		3.074	TM 1.583	6.347	1.779	1.313	4.436	10.090	8.866	2.611	3.833
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:23	2.763	2.199	0.129	1.112	7.290	7.940	1.303	0.595	-5.226	113.800
2	19:21:50	2.727	2.282	-0.166	1.088	8.007	7.478	0.594	0.464	-6.503	113.800
3	19:22:18	2.946	2.422	0.162	1.761	6.420	7.747	3.653	1.191	-3.251	114.100
x		2.812	2.301	0.042	1.320	7.239	7.722	1.850	0.750	-4.993	113.900
σ		0.118	0.113	0.181	0.382	0.794	0.232	1.601	0.388	1.639	0.172
%RSD		4.181	4.907	433.700	28.900	10.970	3.007	86.560	51.700	32.820	0.151
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:23	93.9%	0.150	0.145	0.168	8.107	0.003	0.000	0.172	0.151	82.8%
2	19:21:50	95.8%	0.176	0.222	0.135	6.351	-0.001	0.003	0.217	0.230	83.1%
3	19:22:18	97.1%	0.250	0.223	0.164	6.328	0.004	0.002	0.192	0.205	83.6%
x		95.6%	0.192	0.197	0.156	6.929	0.002	0.002	0.194	0.195	83.2%
σ		1.6%	0.052	0.045	0.018	1.020	0.003	0.002	0.023	0.040	0.4%
%RSD		1.7	27.090	22.920	11.670	14.730	118.800	83.110	11.740	20.550	0.5
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:21:23	0.563	0.728	0.085	0.109	27.640	27.150	84.2%	0.056	0.049	0.002
2	19:21:50	0.619	0.740	0.072	0.094	27.500	26.780	84.1%	0.060	0.045	0.011
3	19:22:18	0.622	0.740	0.077	0.078	27.700	26.770	84.5%	0.045	0.043	0.005
x		0.602	0.736	0.078	0.094	27.620	26.900	84.3%	0.054	0.046	0.006
σ		0.033	0.007	0.006	0.015	0.105	0.217	0.2%	0.008	0.003	0.005
%RSD		5.543	0.904	8.225	16.440	0.379	0.807	0.2	14.240	6.361	84.770
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	19:21:23	0.011	0.010	77.7%							
2	19:21:50	0.012	0.011	78.2%							
3	19:22:18	0.001	0.009	79.0%							
x		0.008	0.010	78.3%							
σ		0.006	0.001	0.7%							
%RSD		74.580	10.510	0.8							

UD10056-007 04/25/2019 19:26:43

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:27:10	95.1%	-0.009	7.833	8.289	-41.570	T 30510.000	T 34290.000	T 35010.000	T 35050.000	7.881
2	19:27:37	98.3%	-0.014	8.125	7.888	-44.150	T 30100.000	T 33500.000	T 34710.000	T 34570.000	7.735
3	19:28:04	T 109.5%	-0.013	7.864	8.085	-41.450	T 30900.000	T 34540.000	T 34940.000	T 34870.000	7.169
x		T 101.0%	-0.012	7.941	8.087	-42.390	T 30500.000	T 34110.000	T 34890.000	T 34830.000	7.595
σ		T 7.6%	0.003	0.161	0.200	1.522	T 399.000	T 539.800	T 155.700	T 245.000	0.376
%RSD		T 7.5	23.860	2.022	2.478	3.590	T 1.308	T 1.582	T 0.446	T 0.703	4.954

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:27:10	T 4482.000	T 98750.000	T 3704.000	TM 159900.000	TM 141900.000	92.0%	0.536	0.389	0.481	2438.000
2	19:27:37	T 4385.000	T 99460.000	T 3719.000	TM 158800.000	TM 138700.000	94.7%	0.615	0.164	0.503	2502.000
3	19:28:04	T 4605.000	T 101400.000	T 3339.000	TM 158700.000	TM 122600.000	92.6%	0.809	0.202	0.580	2935.000
x		T 4491.000	T 99880.000	T 3587.000	TM 159100.000	TM 134400.000	93.1%	0.653	0.252	0.521	2625.000
σ		T 110.100	T 1385.000	T 215.200	TM 667.400	TM 10340.000	1.4%	0.140	0.121	0.052	270.300
%RSD		T 2.451	T 1.387	T 5.998	TM 0.419	TM 7.694	1.5	21.460	47.980	9.932	10.300

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:27:10	6.375	TM 1046.000	22.390	1253.000	1.708	3.012	1.982	0.320	0.966	2.584
2	19:27:37	7.713	TM 1031.000	24.630	1284.000	1.698	2.995	1.195	0.317	1.021	2.756
3	19:28:04	9.025	TM 1037.000	27.770	1460.000	1.703	3.392	1.471	0.261	1.002	2.513
x		7.704	TM 1038.000	24.930	1332.000	1.703	3.133	1.549	0.299	0.996	2.618
σ		1.325	TM 7.570	2.703	111.600	0.005	0.225	0.400	0.034	0.028	0.125
%RSD		17.200	TM 0.729	10.840	8.378	0.312	7.166	25.790	11.210	2.801	4.774

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:27:10	2.853	2.477	-0.425	1.173	8.661	8.697	1.262	0.528	-5.497	110.600
2	19:27:37	2.639	2.505	0.375	1.314	8.410	8.910	0.401	0.276	-3.485	111.300
3	19:28:04	2.222	2.660	-0.324	0.209	9.297	9.084	3.130	0.980	-2.819	110.700
x		2.571	2.548	-0.125	0.899	8.790	8.897	1.598	0.594	-3.934	110.800
σ		0.321	0.099	0.436	0.601	0.457	0.194	1.395	0.357	1.394	0.364
%RSD		12.470	3.874	348.900	66.890	5.203	2.177	87.290	59.980	35.450	0.328

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:27:10	91.3%	0.188	0.149	0.203	4.253	0.001	0.002	0.105	0.086	84.1%
2	19:27:37	91.4%	0.150	0.215	0.193	5.109	0.001	0.000	0.105	0.085	83.8%
3	19:28:04	91.1%	0.229	0.188	0.190	7.031	0.003	0.001	0.051	0.078	81.7%
x		91.3%	0.189	0.184	0.195	5.464	0.002	0.001	0.087	0.083	83.2%
σ		0.2%	0.040	0.033	0.006	1.423	0.001	0.001	0.031	0.005	1.3%
%RSD		0.2	21.010	17.890	3.302	26.040	65.230	84.540	35.990	5.470	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:27:10	0.565	0.776	0.045	0.073	20.630	20.260	84.8%	0.053	0.037	0.014
2	19:27:37	0.491	0.697	0.048	0.059	20.790	20.470	85.6%	0.061	0.043	0.008
3	19:28:04	0.520	0.765	0.053	0.053	20.290	20.880	83.0%	0.049	0.043	0.010
x		0.525	0.746	0.049	0.062	20.570	20.530	84.4%	0.054	0.041	0.011
σ		0.037	0.043	0.004	0.010	0.254	0.313	1.3%	0.006	0.004	0.003
%RSD		7.136	5.762	7.941	16.510	1.237	1.526	1.6	11.500	9.065	31.470

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:27:10	0.010	0.007	79.6%
2	19:27:37	0.003	0.006	78.8%
3	19:28:04	-0.000	0.006	77.6%
x		0.004	0.006	78.7%
σ		0.006	0.001	1.1%
%RSD		130.200	12.500	1.3

UD10056-008 04/25/2019 19:32:30

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:58	95.8%	-0.011	6.746	6.974	-14.730	┬8131.000	┬20370.000	┬20140.000	┬20650.000	17.820
2	19:33:25	99.1%	-0.007	7.459	7.069	-12.920	┬8177.000	┬20740.000	┬20450.000	┬20390.000	16.890
3	19:33:52	98.8%	0.005	6.890	7.317	-17.250	┬8213.000	┬20390.000	┬20540.000	┬20570.000	17.190
x		97.9%	-0.004	7.032	7.120	-14.970	┬8174.000	┬20500.000	┬20380.000	┬20540.000	17.300
σ		1.8%	0.008	0.377	0.177	2.174	┬41.300	┬207.900	┬209.100	┬133.300	0.473
%RSD		1.9	194.100	5.361	2.490	14.530	┬0.505	┬1.014	┬1.026	┬0.649	2.735

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:58	┬4557.000	┬107900.000	┬1886.000	58020.000	┬55320.000	94.1%	0.914	0.180	1.453	2479.000
2	19:33:25	┬4673.000	┬110100.000	┬1824.000	58090.000	┬53750.000	93.9%	1.114	0.096	1.466	2887.000
3	19:33:52	┬4842.000	┬111100.000	┬1850.000	59690.000	┬53890.000	92.1%	1.155	0.051	1.388	2981.000
x		┬4691.000	┬109700.000	┬1853.000	58600.000	┬54320.000	93.4%	1.061	0.109	1.436	2782.000
σ		┬143.400	┬1672.000	┬31.160	947.700	┬865.800	1.1%	0.129	0.066	0.042	267.000
%RSD		┬3.058	┬1.524	┬1.681	1.617	┬1.594	1.2	12.130	60.380	2.914	9.597

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:58	27.430	0.570	36.640	506.000	0.116	0.817	-0.265	0.188	0.392	1.957
2	19:33:25	26.760	0.474	┬59.590	539.500	0.127	0.883	0.071	0.179	0.424	2.226
3	19:33:52	27.890	0.479	36.290	561.000	0.127	0.806	0.487	0.141	0.491	2.207
x		27.360	0.508	┬44.170	535.500	0.123	0.836	0.098	0.169	0.435	2.130
σ		0.566	0.054	┬13.350	27.690	0.006	0.042	0.377	0.025	0.051	0.150
%RSD		2.067	10.680	┬30.220	5.171	5.026	4.999	386.300	14.900	11.650	7.035

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:58	4.430	4.212	0.110	1.146	5.644	4.949	3.245	0.896	-3.307	65.440
2	19:33:25	4.515	4.265	-0.314	0.675	4.945	6.176	1.802	0.591	-3.726	64.900
3	19:33:52	4.027	3.939	-0.143	1.091	5.102	5.318	1.650	0.645	-7.883	64.760
x		4.324	4.139	-0.116	0.971	5.230	5.481	2.232	0.711	-4.972	65.030
σ		0.261	0.175	0.213	0.258	0.367	0.630	0.880	0.163	2.530	0.356
%RSD		6.034	4.235	184.600	26.550	7.016	11.490	39.420	22.930	50.880	0.547

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:58	91.9%	0.062	0.069	0.072	2.656	0.002	0.009	0.003	0.009	88.1%
2	19:33:25	89.1%	0.053	0.096	0.076	2.056	0.006	0.018	0.018	-0.000	84.2%
3	19:33:52	88.6%	0.090	0.067	0.065	2.190	0.009	0.013	-0.006	-0.000	84.1%
x		89.8%	0.069	0.077	0.071	2.301	0.006	0.013	0.005	0.003	85.5%
σ		1.8%	0.019	0.016	0.006	0.315	0.004	0.004	0.012	0.005	2.3%
%RSD		2.0	27.900	20.730	7.973	13.690	62.840	33.490	227.600	194.200	2.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:32:58	0.556	0.729	0.064	0.032	52.000	50.620	86.4%	-0.009	-0.018	0.038
2	19:33:25	0.527	0.774	0.057	0.060	54.030	52.400	84.4%	-0.007	-0.013	0.042
3	19:33:52	0.496	0.771	0.049	0.064	53.370	52.140	84.6%	-0.005	-0.013	0.031
x		0.526	0.758	0.057	0.052	53.130	51.720	85.1%	-0.007	-0.015	0.037
σ		0.030	0.025	0.007	0.017	1.038	0.957	1.1%	0.002	0.003	0.006
%RSD		5.707	3.283	12.950	33.200	1.953	1.851	1.3	30.160	20.980	15.710

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:32:58	0.050	0.030	83.3%
2	19:33:25	0.022	0.026	80.4%
3	19:33:52	0.016	0.025	81.1%
x		0.029	0.027	81.6%
σ		0.018	0.003	1.5%
%RSD		62.230	9.775	1.8

UD12100-001 04/25/2019 19:38:17

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:44	98.6%	1.231	90.920	91.950	107.300	T 1346.000	T 15840.000	T 16030.000	T 16440.000	TM 160800.000
2	19:39:11	100.2%	1.079	87.890	87.400	99.770	T 1371.000	T 15760.000	T 16080.000	T 16340.000	TM 160100.000
3	19:39:38	103.2%	1.119	87.190	88.180	97.600	T 1372.000	T 15700.000	T 16050.000	T 15890.000	TM 154000.000
x		100.7%	1.143	88.660	89.180	101.600	T 1363.000	T 15770.000	T 16050.000	T 16220.000	TM 158300.000
σ		2.3%	0.078	1.982	2.435	5.087	T 14.770	T 69.140	T 24.570	T 294.000	TM 3754.000
%RSD		2.3	6.860	2.235	2.730	5.009	T 1.083	T 0.439	T 0.153	T 1.812	TM 2.372

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:44	T 3064.000	T 322600.000	T 3074.000	TM 214700.000	TM 183600.000	92.6%	M 2087.000	T 370.900	T 459.100	10870.000
2	19:39:11	T 3065.000	T 325400.000	T 3086.000	TM 215600.000	TM 181000.000	92.8%	M 2085.000	T 374.100	T 451.600	10300.000
3	19:39:38	T 3081.000	T 327600.000	T 3024.000	TM 217600.000	TM 175900.000	91.9%	TM 2353.000	T 371.000	T 459.500	10950.000
x		T 3070.000	T 325200.000	T 3061.000	TM 216000.000	TM 180200.000	92.5%	TM 2175.000	T 372.000	T 456.700	10710.000
σ		T 9.642	T 2501.000	T 32.860	TM 1470.000	TM 3962.000	0.5%	TM 154.100	T 1.788	T 4.445	350.100
%RSD		T 0.314	T 0.769	T 1.073	TM 0.680	TM 2.199	0.5	TM 7.085	T 0.481	T 0.973	3.271

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:44	TM 553800.000	TM 3743.000	TM 507100.000	TM 571100.000	67.510	387.300	368.900	TM 14170.000	TM 14970.000	TM 44880.000
2	19:39:11	TM 554800.000	TM 3770.000	TM 510400.000	TM 571900.000	67.560	384.500	368.900	TM 14060.000	TM 14900.000	TM 44500.000
3	19:39:38	TM 551700.000	TM 3770.000	TM 508900.000	TM 561200.000	67.670	380.700	369.100	TM 13980.000	TM 14720.000	TM 44010.000
x		TM 553500.000	TM 3761.000	TM 508800.000	TM 568100.000	67.580	384.200	369.000	TM 14070.000	TM 14860.000	TM 44470.000
σ		TM 1567.000	TM 15.130	TM 1658.000	TM 6002.000	0.080	3.318	0.102	TM 94.580	TM 131.300	TM 439.600
%RSD		TM 0.283	TM 0.402	TM 0.326	TM 1.057	0.119	0.864	0.028	TM 0.672	TM 0.884	TM 0.989

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:44	TM 35560.000	TM 36870.000	79.480	2.068	80.260	76.050	19.890	5.575	4.800	TM 508.000
2	19:39:11	TM 35630.000	TM 37030.000	80.780	2.783	80.170	76.720	20.040	5.671	2.419	TM 504.500
3	19:39:38	TM 34920.000	TM 36210.000	80.900	3.396	78.470	79.110	23.100	6.515	2.807	TM 508.100
x		TM 35370.000	TM 36700.000	80.380	2.749	79.630	77.290	21.010	5.920	3.342	TM 506.900
σ		TM 388.500	TM 436.100	0.789	0.665	1.012	1.611	1.810	0.517	1.278	TM 2.023
%RSD		TM 1.098	TM 1.188	0.982	24.180	1.271	2.084	8.615	8.739	38.230	TM 0.399

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:44	100.7%	52.270	49.800	53.610	440.500	45.250	45.090	260.000	266.900	80.9%
2	19:39:11	101.8%	52.180	49.690	52.960	435.600	45.140	45.930	260.500	268.000	81.7%
3	19:39:38	98.6%	51.700	49.070	53.400	434.400	44.740	44.940	258.500	261.900	79.4%
x		100.4%	52.050	49.520	53.320	436.800	45.040	45.320	259.700	265.600	80.7%
σ		1.6%	0.305	0.394	0.330	3.198	0.268	0.532	1.057	3.242	1.2%
%RSD		1.6	0.585	0.795	0.618	0.732	0.595	1.175	0.407	1.221	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:38:44	TM 1110.000	TM 1435.000	334.700	336.300	M 3428.000	TM 3364.000	81.2%	0.198	0.187	TM 8098.000
2	19:39:11	M 1126.000	TM 1430.000	334.400	334.900	M 3425.000	TM 3364.000	82.4%	0.196	0.203	TM 8053.000
3	19:39:38	M 1126.000	M 1488.000	334.700	332.900	M 3436.000	TM 3380.000	80.5%	0.182	0.202	TM 8008.000
x		TM 1121.000	TM 1451.000	334.600	334.700	M 3430.000	TM 3369.000	81.3%	0.192	0.197	TM 8053.000
σ		TM 9.275	TM 31.960	0.157	1.679	M 5.647	TM 9.061	1.0%	0.009	0.009	TM 45.020
%RSD		TM 0.827	TM 2.203	0.047	0.502	M 0.165	TM 0.269	1.2	4.563	4.673	TM 0.559

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:38:44	TM 7863.000	TM 7908.000	121.3%
2	19:39:11	TM 7825.000	TM 7862.000	122.3%
3	19:39:38	TM 7796.000	TM 7836.000	120.1%
x		TM 7828.000	TM 7868.000	121.3%
σ		TM 33.260	TM 36.520	1.1%
%RSD		TM 0.425	TM 0.464	0.9

UD09114-001(10) 04/25/2019 19:44:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:31	105.0%	1.262	0.984	1.234	-11.260	T 37070.000	T 24240.000	T 24420.000	T 24320.000	TM 2418.000
2	19:44:58	99.1%	1.335	1.030	1.275	-5.825	T 35820.000	T 24110.000	T 24320.000	T 24250.000	TM 2548.000
3	19:45:26	99.9%	1.270	1.501	1.156	-8.567	T 35860.000	T 23850.000	T 23610.000	T 23780.000	TM 2472.000
x		101.3%	1.289	1.172	1.222	-8.550	T 36250.000	T 24070.000	T 24120.000	T 24120.000	TM 2479.000
σ		3.2%	0.040	0.286	0.060	2.716	T 707.800	T 201.600	T 442.000	T 290.100	TM 64.940
%RSD		3.2	3.092	24.430	4.939	31.770	T 1.953	T 0.838	T 1.833	T 1.203	TM 2.619

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:31	T 2411.000	T 14850.000	T 2633.000	4366.000	3509.000	92.6%	35.590	3.156	1.056	380.200
2	19:44:58	T 2262.000	T 14240.000	T 2731.000	4266.000	3908.000	96.4%	35.870	3.044	0.905	380.400
3	19:45:26	T 2272.000	T 14500.000	T 2735.000	4275.000	3713.000	95.5%	35.930	2.982	0.980	325.300
x		T 2315.000	T 14530.000	T 2700.000	4303.000	3710.000	94.8%	35.800	3.061	0.980	362.000
σ		T 83.260	T 303.000	T 57.710	55.220	199.500	1.9%	0.183	0.088	0.076	31.780
%RSD		T 3.597	T 2.085	T 2.138	1.283	5.376	2.1	0.511	2.880	7.733	8.779

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:31	1097.000	TM 742.600	T 1040.000	1241.000	30.820	M 1417.000	M 1083.000	4.000	5.680	147.100
2	19:44:58	1064.000	TM 738.300	T 1010.000	1183.000	30.070	M 1377.000	M 1061.000	3.449	4.961	150.500
3	19:45:26	1038.000	TM 724.000	T 1003.000	1161.000	29.540	M 1351.000	M 1062.000	3.153	4.578	141.000
x		1066.000	TM 735.000	T 1018.000	1195.000	30.140	M 1382.000	M 1068.000	3.534	5.073	146.200
σ		29.590	TM 9.691	T 19.630	41.300	0.641	M 33.390	M 12.440	0.430	0.560	4.797
%RSD		2.776	TM 1.319	T 1.929	3.456	2.127	M 2.416	M 1.165	12.160	11.030	3.281

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:31	182.200	162.800	0.438	1.148	1.156	0.189	1.987	2.163	-5.211	100.100
2	19:44:58	185.000	163.500	0.700	1.840	1.451	-0.014	3.118	2.730	-6.337	99.790
3	19:45:26	177.700	156.700	0.513	0.715	1.346	0.256	2.814	2.536	-6.415	98.490
x		181.600	161.000	0.550	1.235	1.318	0.144	2.640	2.476	-5.988	99.450
σ		3.695	3.741	0.135	0.567	0.149	0.141	0.586	0.288	0.674	0.834
%RSD		2.034	2.324	24.530	45.960	11.350	97.620	22.180	11.640	11.250	0.839

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:31	185.9%	0.008	-0.006	-0.002	14.510	0.001	0.007	0.278	0.230	79.9%
2	19:44:58	194.9%	0.001	-0.014	-0.003	10.320	0.007	0.003	0.201	0.278	83.7%
3	19:45:26	187.2%	0.004	-0.013	-0.005	12.040	0.004	0.001	0.261	0.178	82.4%
x		189.3%	0.004	-0.011	-0.003	12.290	0.004	0.004	0.247	0.229	82.0%
σ		4.8%	0.003	0.004	0.002	2.104	0.003	0.003	0.041	0.050	1.9%
%RSD		2.6	82.560	37.200	46.070	17.120	67.490	74.030	16.450	21.830	2.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:44:31	0.424	0.452	0.075	0.072	M 2358.000	M 2350.000	83.7%	0.086	0.070	2.205
2	19:44:58	0.377	0.368	0.030	0.050	M 2348.000	M 2355.000	88.5%	0.062	0.063	1.833
3	19:45:26	0.308	0.359	0.038	0.054	M 2302.000	M 2299.000	85.6%	0.060	0.064	1.737
x		0.370	0.393	0.048	0.059	M 2336.000	M 2335.000	85.9%	0.069	0.065	1.925
σ		0.058	0.051	0.024	0.012	M 29.410	M 31.050	2.4%	0.014	0.004	0.247
%RSD		15.750	13.010	50.140	20.120	M 1.259	M 1.330	2.8	20.410	5.566	12.840

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:44:31	2.074	2.109	76.8%
2	19:44:58	1.754	1.748	80.7%
3	19:45:26	1.598	1.619	78.5%
x		1.809	1.825	78.6%
σ		0.243	0.254	2.0%
%RSD		13.440	13.920	2.5

CCV MW10994 04/25/2019 19:49:54 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:21	95.7%	292.100	293.500	292.600	25.490	┬64670.000	┬59340.000	┬59010.000	┬59810.000	290.500
2	19:50:48	93.0%	299.100	296.400	298.300	19.030	┬64980.000	┬60060.000	┬59680.000	┬59600.000	297.100
3	19:51:15	95.0%	306.900	306.200	298.700	21.120	┬64230.000	┬60660.000	┬60910.000	┬60340.000	289.700
x		94.6%	99.790%	99.567%	98.854%	21.880	┬107.714%	┬60020.000	┬59870.000	┬99.857%	97.475%
σ		1.4%	n/a	n/a	n/a	3.293	┬n/a	┬664.300	┬958.800	┬n/a	n/a
%RSD		1.5	2.473	2.240	1.148	15.050	┬0.590	┬1.107	┬1.602	┬0.634	1.381

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:21	┬3309.000	1318.000	┬57070.000	63200.000	┬55220.000	88.7%	313.900	318.100	301.600	1000.000
2	19:50:48	┬3283.000	1263.000	┬59910.000	63510.000	┬57990.000	90.8%	318.000	323.300	305.200	-50.110
3	19:51:15	┬3232.000	1212.000	┬56880.000	62880.000	┬56670.000	90.8%	313.600	323.400	303.800	800.000
x		┬109.151%	1264.000	┬96.585%	63200.000	┬94.379%	90.1%	105.048%	107.203%	101.182%	583.400
σ		┬n/a	52.790	┬n/a	317.500	┬n/a	1.2%	n/a	n/a	n/a	557.700
%RSD		┬1.189	4.175	┬2.933	0.503	┬2.448	1.4	0.781	0.950	0.598	95.600

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:21	┬61810.000	294.800	┬61490.000	┬59960.000	290.000	286.700	292.500	285.000	271.100	309.900
2	19:50:48	┬61980.000	301.100	┬61940.000	┬60390.000	291.200	287.900	289.100	284.500	274.200	314.700
3	19:51:15	┬62030.000	299.000	┬62190.000	┬60990.000	297.100	289.800	291.300	287.900	276.800	313.100
x		┬61940.000	99.431%	┬61870.000	┬100.742%	97.590%	96.040%	291.000	285.800	91.340%	104.193%
σ		┬116.000	n/a	┬353.000	┬n/a	n/a	n/a	1.695	1.818	n/a	n/a
%RSD		┬0.187	1.067	┬0.571	┬0.854	1.312	0.537	0.583	0.636	1.038	0.783

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:21	280.200	277.600	274.400	307.800	2.350	1.792	1249.000	311.300	-3.365	303.400
2	19:50:48	288.100	285.300	275.500	315.800	2.032	1.235	1254.000	307.500	-1.447	304.900
3	19:51:15	290.600	288.300	285.200	306.800	2.069	1.214	1231.000	301.000	-3.023	305.100
x		286.300	283.800	92.784%	310.100	2.150	1.414	1245.000	102.203%	-2.612	101.480%
σ		5.392	5.505	n/a	4.968	0.174	0.328	11.760	n/a	1.023	n/a
%RSD		1.883	1.940	2.136	1.602	8.089	23.170	0.945	1.710	39.160	0.306

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:21	79.2%	312.300	306.500	311.000	288.700	293.800	292.900	296.700	298.900	73.8%
2	19:50:48	80.7%	312.500	310.600	314.600	301.800	294.200	296.600	301.600	299.300	76.5%
3	19:51:15	83.1%	313.100	311.500	312.800	293.000	294.300	293.700	297.300	298.500	78.7%
x		81.0%	104.216%	103.178%	312.800	294.500	98.044%	294.400	298.600	99.623%	76.3%
σ		2.0%	n/a	n/a	1.834	6.675	n/a	1.934	2.633	n/a	2.4%
%RSD		2.4	0.132	0.862	0.586	2.267	0.092	0.657	0.882	0.134	3.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:50:21	308.500	307.400	306.500	307.800	312.200	310.600	74.1%	293.700	302.900	293.400
2	19:50:48	309.900	310.500	308.500	306.700	313.600	308.700	77.3%	294.400	302.700	293.000
3	19:51:15	308.300	310.000	313.100	310.800	312.000	309.200	80.1%	292.600	299.100	289.500
x		102.961%	103.100%	309.300	102.804%	104.200%	103.167%	77.2%	293.600	100.528%	97.327%
σ		n/a	n/a	3.367	n/a	n/a	n/a	3.0%	0.916	n/a	n/a
%RSD		0.280	0.533	1.089	0.688	0.266	0.331	3.9	0.312	0.703	0.743

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:50:21	294.400	293.300	70.0%
2	19:50:48	294.200	292.300	73.5%
3	19:51:15	289.500	288.300	75.2%
x		97.576%	97.101%	72.9%
σ		n/a	n/a	2.7%
%RSD		0.943	0.910	3.7

CCB IM9370-01 04/25/2019 19:55:42 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:09	99.1%	0.031	1.905	1.953	-3.417	6.942	5.706	5.776	5.975	0.383
2	19:56:36	99.9%	0.024	2.013	1.926	5.144	6.120	4.411	4.934	4.244	0.238
3	19:57:03	102.9%	0.038	1.776	1.400	-6.307	7.727	3.603	3.515	3.504	0.197
x		100.7%	0.031	1.898	1.760	-1.527	6.930	4.574	4.742	4.574	0.273
σ		2.0%	0.007	0.119	0.312	5.955	0.804	1.061	1.142	1.268	0.098
%RSD		2.0	22.400	6.261	17.720	390.100	11.600	23.200	24.090	27.720	35.900

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:09	14.030	710.700	1.863	7.917	5.156	94.9%	-0.346	0.015	0.071	36.370
2	19:56:36	14.440	755.500	0.025	8.715	4.291	92.4%	-0.393	0.041	0.079	-0.372
3	19:57:03	14.270	725.900	-1.094	3.519	3.243	93.7%	-0.335	0.009	0.021	36.440
x		14.250	730.700	0.265	6.717	4.230	93.7%	-0.358	0.022	0.057	24.150
σ		0.207	22.750	1.493	2.798	0.958	1.3%	0.031	0.017	0.032	21.230
%RSD		1.451	3.114	564.600	41.660	22.650	1.3	8.568	77.540	55.260	87.940

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:09	5.881	0.078	15.060	-2.023	-0.006	0.059	0.632	-0.010	0.048	0.174
2	19:56:36	5.245	0.057	15.640	-0.526	-0.014	0.053	-0.100	-0.011	-0.011	0.096
3	19:57:03	4.050	0.054	14.260	-5.524	-0.018	0.030	-0.082	-0.027	-0.010	0.068
x		5.059	0.063	14.980	-2.691	-0.013	0.048	0.150	-0.016	0.009	0.113
σ		0.929	0.013	0.693	2.565	0.006	0.015	0.417	0.009	0.034	0.055
%RSD		18.370	20.470	4.625	95.320	50.390	31.780	277.600	58.690	382.700	48.550

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:09	-0.230	0.170	-0.077	0.342	0.538	0.474	0.165	0.195	-4.701	0.022
2	19:56:36	-0.272	0.128	0.016	0.782	0.110	1.277	0.581	0.278	-3.639	0.012
3	19:57:03	-0.206	0.061	-0.028	1.299	0.450	0.716	2.012	0.678	-6.400	0.012
x		-0.236	0.120	-0.030	0.808	0.366	0.823	0.919	0.384	-4.913	0.015
σ		0.033	0.055	0.047	0.479	0.226	0.412	0.969	0.259	1.393	0.006
%RSD		14.100	46.030	154.900	59.250	61.730	50.110	105.400	67.440	28.360	39.380

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:09	84.3%	0.089	0.072	0.095	0.143	0.040	0.035	0.052	0.038	82.3%
2	19:56:36	85.1%	0.123	0.096	0.110	-0.163	0.021	0.028	0.013	0.026	82.0%
3	19:57:03	83.3%	0.106	0.062	0.039	-0.778	0.019	0.024	0.009	0.009	81.2%
x		84.2%	0.106	0.077	0.081	-0.266	0.027	0.029	0.025	0.025	81.8%
σ		0.9%	0.017	0.017	0.037	0.469	0.012	0.006	0.023	0.015	0.6%
%RSD		1.0	16.050	22.700	46.060	176.600	44.030	19.810	94.740	59.660	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	19:56:09	0.087	0.095	0.163	0.169	0.044	0.029	81.0%	0.033	0.005	0.055
2	19:56:36	0.058	0.113	0.143	0.177	0.052	0.084	79.3%	0.017	0.015	0.047
3	19:57:03	0.049	0.072	0.124	0.175	0.066	0.022	78.6%	0.013	0.014	0.046
x		0.065	0.093	0.143	0.174	0.054	0.045	79.6%	0.021	0.011	0.049
σ		0.020	0.021	0.019	0.004	0.011	0.034	1.2%	0.010	0.005	0.005
%RSD		30.640	22.070	13.560	2.375	20.600	74.610	1.6	49.190	48.530	9.396

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	19:56:09	0.035	0.049	79.2%
2	19:56:36	0.051	0.043	78.6%
3	19:57:03	0.032	0.032	77.6%
x		0.039	0.042	78.5%
σ		0.011	0.008	0.8%
%RSD		26.780	20.380	1.1

ICSA MW10984 04/25/2019 20:01:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:54	93.0%	0.024	1.249	1.135	1304.000	TM 107500.000	T 97810.000	T 96790.000	T 94880.000	TM 91520.000
2	20:02:21	93.0%	0.044	1.212	1.162	1309.000	TM 109000.000	T 97920.000	T 98400.000	T 96980.000	TM 92300.000
3	20:02:48	95.5%	0.002	1.528	1.354	1348.000	TM 111300.000	T 98630.000	T 97450.000	T 97060.000	TM 90510.000
x		93.9%	0.023	1.330	1.217	1320.000	TM 109300.000	T 98120.000	T 97550.000	T 96310.000	TM 91440.000
σ		1.4%	0.021	0.173	0.119	24.290	TM 1929.000	T 447.000	T 810.000	T 1238.000	TM 896.200
%RSD		1.5	90.330	12.980	9.776	1.840	TM 1.765	T 0.456	T 0.830	T 1.286	TM 0.980

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:54	36.300	T 44530.000	T 95710.000	M 103300.000	T 95710.000	90.3%	M 2266.000	-0.717	-1.616	1493.000
2	20:02:21	34.150	T 44130.000	T 96760.000	M 105200.000	T 98600.000	92.2%	M 2291.000	-0.801	-1.699	1445.000
3	20:02:48	37.350	T 45680.000	T 94980.000	M 105100.000	T 93240.000	89.8%	M 2292.000	-0.728	-1.667	1563.000
x		35.930	T 44780.000	T 95820.000	M 104500.000	T 95850.000	90.8%	M 2283.000	-0.748	-1.661	1500.000
σ		1.631	T 807.900	T 893.200	M 1062.000	T 2682.000	1.3%	M 14.480	0.046	0.042	59.170
%RSD		4.538	T 1.804	T 0.932	M 1.016	T 2.798	1.4	M 0.634	6.095	2.501	3.944

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:54	TM 101900.000	0.837	TM 101900.000	T 99720.000	0.395	1.416	5.688	-1.071	0.832	3.514
2	20:02:21	TM 101300.000	0.720	TM 102200.000	TM 101600.000	0.423	1.141	5.979	-1.210	0.396	2.371
3	20:02:48	TM 102100.000	0.769	TM 101300.000	TM 101200.000	0.432	1.271	5.629	-1.241	0.585	2.750
x		TM 101800.000	0.775	TM 101800.000	TM 100800.000	0.417	1.276	5.765	-1.174	0.604	2.878
σ		TM 411.800	0.059	TM 429.300	TM 989.600	0.019	0.137	0.187	0.090	0.219	0.583
%RSD		TM 0.405	7.596	TM 0.422	TM 0.981	4.578	10.770	3.246	7.701	36.190	20.240

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:54	5.104	1.475	0.166	0.732	3.295	1.724	1.945	0.548	-1.783	0.868
2	20:02:21	4.427	0.839	-0.317	0.868	3.492	1.427	0.296	0.168	-1.567	0.826
3	20:02:48	4.036	0.865	-0.214	0.973	2.838	1.490	1.522	0.453	-1.596	0.869
x		4.522	1.060	-0.122	0.858	3.208	1.547	1.254	0.390	-1.649	0.855
σ		0.540	0.360	0.255	0.120	0.336	0.156	0.857	0.198	0.118	0.024
%RSD		11.950	33.950	209.500	14.040	10.470	10.100	68.290	50.860	7.129	2.855

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:54	81.8%	TM 2108.000	M 2166.000	TM 2064.000	-2.482	0.031	0.030	-6.058	-0.126	79.6%
2	20:02:21	86.3%	TM 2100.000	M 2141.000	TM 2073.000	-2.650	0.019	0.036	-5.957	-0.276	82.3%
3	20:02:48	84.6%	TM 2104.000	M 2148.000	TM 2079.000	-2.029	0.020	0.038	-5.922	-0.086	81.3%
x		84.2%	TM 2104.000	M 2152.000	TM 2072.000	-2.387	0.023	0.035	-5.979	-0.162	81.1%
σ		2.2%	TM 3.695	M 13.240	TM 7.561	0.321	0.007	0.004	0.070	0.100	1.4%
%RSD		2.7	TM 0.176	M 0.615	TM 0.365	13.460	29.240	12.190	1.179	61.650	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:01:54	1.232	0.149	0.299	0.251	0.327	0.387	79.8%	0.017	-0.002	0.293
2	20:02:21	1.280	0.115	0.248	0.255	0.274	0.280	83.9%	0.014	-0.010	0.172
3	20:02:48	1.250	0.149	0.285	0.282	0.285	0.273	82.3%	0.002	-0.009	0.172
x		1.254	0.138	0.278	0.263	0.295	0.313	82.0%	0.011	-0.007	0.213
σ		0.024	0.020	0.026	0.017	0.028	0.064	2.1%	0.008	0.005	0.070
%RSD		1.920	14.150	9.528	6.422	9.452	20.460	2.5	68.940	66.500	32.880

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:01:54	0.302	0.280	75.1%
2	20:02:21	0.186	0.158	78.8%
3	20:02:48	0.207	0.180	76.5%
x		0.232	0.206	76.8%
σ		0.062	0.065	1.9%
%RSD		26.650	31.480	2.5

UD12100-002 04/25/2019 20:07:13

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:40	100.5%	1.290	54.360	55.790	320.900	T 1227.000	T 16070.000	T 16500.000	T 16610.000	TM 213600.000
2	20:08:08	99.5%	1.370	56.180	56.630	324.800	T 1241.000	T 16000.000	T 16440.000	T 16570.000	TM 213700.000
3	20:08:36	96.7%	1.349	56.780	56.600	327.100	T 1182.000	T 15180.000	T 15480.000	T 15690.000	TM 219100.000
x		98.9%	1.336	55.780	56.340	324.300	T 1217.000	T 15750.000	T 16140.000	T 16290.000	TM 215500.000
σ		2.0%	0.042	1.261	0.479	3.158	T 30.550	T 499.700	T 575.400	T 522.700	TM 3135.000
%RSD		2.0	3.114	2.261	0.851	0.974	T 2.512	T 3.173	T 3.565	T 3.209	TM 1.455

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:40	T 3803.000	T 280500.000	T 5828.000	TM 148900.000	TM 126100.000	95.1%	TM 2859.000	277.800	361.300	10270.000
2	20:08:08	T 3785.000	T 285000.000	T 5928.000	TM 151700.000	TM 127200.000	94.1%	M 2672.000	280.900	364.600	8456.000
3	20:08:36	T 3515.000	T 267000.000	T 6132.000	TM 144600.000	TM 134300.000	99.2%	M 2588.000	277.300	357.300	6361.000
x		T 3701.000	T 277500.000	T 5963.000	TM 148400.000	TM 129200.000	96.1%	TM 2706.000	278.700	361.100	8362.000
σ		T 161.400	T 9368.000	T 154.800	TM 3553.000	TM 4443.000	2.7%	TM 138.800	1.958	3.614	1956.000
%RSD		T 4.361	T 3.376	T 2.595	TM 2.394	TM 3.438	2.8	TM 5.128	0.703	1.001	23.390

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:40	TM 237600.000	TM 2017.000	TM 229100.000	TM 245500.000	34.940	308.700	292.000	TM 4715.000	TM 5040.000	TM 23190.000
2	20:08:08	TM 236400.000	TM 2038.000	TM 229000.000	TM 245900.000	34.910	307.100	285.900	TM 4702.000	TM 5113.000	TM 23120.000
3	20:08:36	TM 232400.000	TM 2015.000	TM 224600.000	TM 241300.000	34.020	293.300	277.000	TM 4600.000	TM 5031.000	TM 23510.000
x		TM 235400.000	TM 2023.000	TM 227600.000	TM 244200.000	34.620	303.000	285.000	TM 4673.000	TM 5061.000	TM 23270.000
σ		TM 2731.000	TM 12.810	TM 2564.000	TM 2546.000	0.521	8.490	7.541	TM 62.880	TM 44.950	TM 206.000
%RSD		TM 1.160	TM 0.633	TM 1.127	TM 1.043	1.505	2.802	2.646	TM 1.346	TM 0.888	TM 0.885

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:40	TM 17850.000	TM 18380.000	17.840	3.549	76.520	73.760	21.500	6.265	11.260	T 342.800
2	20:08:08	TM 18020.000	TM 18550.000	19.050	3.369	75.920	72.810	18.670	5.391	12.800	T 339.900
3	20:08:36	TM 18210.000	TM 18820.000	18.160	3.821	74.300	73.050	17.430	5.163	8.970	T 336.600
x		TM 18030.000	TM 18580.000	18.350	3.580	75.580	73.210	19.200	5.606	11.010	T 339.800
σ		TM 181.500	TM 218.800	0.626	0.227	1.148	0.494	2.086	0.582	1.929	T 3.081
%RSD		TM 1.007	TM 1.178	3.414	6.354	1.519	0.675	10.870	10.380	17.510	T 0.907

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:40	110.1%	87.640	82.700	89.640	283.100	8.180	8.138	222.100	227.600	82.4%
2	20:08:08	110.5%	86.290	80.770	88.120	282.900	8.127	8.032	224.600	227.400	82.3%
3	20:08:36	117.5%	86.050	80.100	89.190	277.900	8.185	8.104	225.100	232.600	86.9%
x		112.7%	86.660	81.190	88.980	281.300	8.164	8.092	223.900	229.200	83.9%
σ		4.1%	0.858	1.346	0.778	2.911	0.032	0.054	1.625	2.942	2.7%
%RSD		3.7	0.990	1.658	0.875	1.035	0.390	0.667	0.726	1.284	3.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:07:40	265.800	274.500	87.000	90.870	M 3291.000	TM 3228.000	79.1%	0.356	0.376	TM 2698.000
2	20:08:08	265.900	277.900	86.690	90.140	M 3293.000	TM 3217.000	79.8%	0.326	0.361	TM 2710.000
3	20:08:36	267.500	275.600	88.580	91.750	M 3258.000	TM 3172.000	84.3%	0.344	0.349	TM 2679.000
x		266.400	276.000	87.430	90.920	M 3281.000	TM 3206.000	81.1%	0.342	0.362	TM 2696.000
σ		0.941	1.728	1.014	0.806	M 19.350	TM 29.570	2.8%	0.015	0.013	TM 15.930
%RSD		0.353	0.626	1.160	0.887	M 0.590	TM 0.923	3.5	4.361	3.720	TM 0.591

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:07:40	TM 2601.000	TM 2611.000	101.9%
2	20:08:08	TM 2607.000	TM 2622.000	103.7%
3	20:08:36	TM 2574.000	TM 2590.000	108.7%
x		TM 2594.000	TM 2608.000	104.8%
σ		TM 17.350	TM 16.290	3.5%
%RSD		TM 0.669	TM 0.625	3.4

UD12100-003 04/25/2019 20:13:02

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:28	100.9%	0.572	1.433	1.418	-55.630	92.380	T 2197.000	2308.000	T 2316.000	TM 304500.000
2	20:13:55	98.3%	0.549	1.307	1.486	-53.210	86.230	T 2101.000	2196.000	T 2261.000	TM 309500.000
3	20:14:22	102.1%	0.517	1.281	1.477	-53.790	T 118.300	T 2139.000	T 2274.000	T 2337.000	TM 301300.000
x		100.4%	0.546	1.340	1.461	-54.210	T 98.960	T 2146.000	T 2260.000	T 2305.000	TM 305100.000
σ		1.9%	0.027	0.082	0.037	1.263	T 17.000	T 48.540	T 57.540	T 38.880	TM 4145.000
%RSD		1.9	4.995	6.087	2.535	2.329	T 17.180	T 2.262	T 2.547	T 1.687	TM 1.358

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:28	T 3166.000	T 260500.000	T 3594.000	1516.000	302.900	110.0%	M 3595.000	T 372.300	126.000	8853.000
2	20:13:55	T 3090.000	T 257700.000	T 3771.000	1248.000	298.400	111.9%	M 3487.000	T 364.500	124.700	8440.000
3	20:14:22	T 3171.000	T 265700.000	T 3680.000	1927.000	295.700	108.1%	M 3549.000	T 370.900	126.200	9168.000
x		T 3142.000	T 261300.000	T 3681.000	1564.000	299.000	110.0%	M 3544.000	T 369.200	125.700	8821.000
σ		T 45.540	T 4033.000	T 88.460	342.100	3.619	1.9%	M 54.260	T 4.159	0.833	364.800
%RSD		T 1.449	T 1.543	T 2.403	21.880	1.210	1.7	M 1.531	T 1.126	0.663	4.136

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:28	TM 147200.000	TM 563.300	TM 145800.000	TM 146900.000	19.950	71.390	79.770	51.450	54.320	136.700
2	20:13:55	TM 148300.000	TM 559.500	TM 146600.000	TM 146900.000	19.880	70.810	77.540	52.020	54.140	137.800
3	20:14:22	TM 147800.000	TM 555.100	TM 144300.000	TM 146300.000	19.640	70.480	78.760	51.400	53.220	132.600
x		TM 147800.000	TM 559.300	TM 145600.000	TM 146700.000	19.820	70.890	78.690	51.620	53.890	135.700
σ		TM 541.900	TM 4.101	TM 1157.000	TM 352.100	0.164	0.458	1.117	0.344	0.593	2.769
%RSD		TM 0.367	TM 0.733	TM 0.794	TM 0.240	0.826	0.646	1.419	0.666	1.099	2.040

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:28	127.400	108.700	8.964	2.151	6.455	6.459	3.313	1.235	2.818	21.980
2	20:13:55	126.800	109.600	8.614	2.601	7.182	6.445	6.922	2.248	5.646	21.850
3	20:14:22	125.800	105.700	8.760	2.963	6.719	6.786	7.578	2.426	5.222	22.050
x		126.700	108.000	8.779	2.572	6.785	6.563	5.938	1.970	4.562	21.960
σ		0.829	2.045	0.176	0.406	0.368	0.193	2.296	0.643	1.525	0.099
%RSD		0.654	1.893	2.003	15.800	5.423	2.939	38.670	32.620	33.430	0.452

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:28	108.3%	2.115	2.020	2.202	10.930	0.076	0.046	0.030	0.078	82.0%
2	20:13:55	110.1%	2.093	1.864	2.060	11.410	0.084	0.036	0.034	0.025	83.2%
3	20:14:22	106.0%	2.062	1.958	2.101	10.090	0.075	0.024	0.068	0.073	80.9%
x		108.1%	2.090	1.948	2.121	10.810	0.079	0.035	0.044	0.059	82.0%
σ		2.1%	0.026	0.078	0.073	0.668	0.005	0.011	0.021	0.029	1.2%
%RSD		1.9	1.266	4.016	3.450	6.179	6.256	31.270	48.160	49.450	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:13:28	9.941	10.740	0.253	0.268	293.100	290.700	75.7%	0.931	0.991	72.710
2	20:13:55	10.050	10.420	0.268	0.345	290.800	290.700	77.2%	1.062	1.010	72.480
3	20:14:22	9.776	10.210	0.273	0.272	293.200	288.200	73.8%	1.053	0.954	73.060
x		9.923	10.460	0.265	0.295	292.400	289.900	75.6%	1.015	0.985	72.750
σ		0.139	0.267	0.010	0.043	1.362	1.446	1.7%	0.073	0.029	0.289
%RSD		1.398	2.552	3.917	14.630	0.466	0.499	2.2	7.225	2.932	0.397

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:13:28	68.490	70.450	75.8%
2	20:13:55	68.560	70.150	77.1%
3	20:14:22	68.770	70.400	74.2%
x		68.610	70.330	75.7%
σ		0.147	0.159	1.5%
%RSD		0.214	0.226	2.0

UD12100-004 04/25/2019 20:18:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:14	96.8%	0.795	0.800	0.974	-59.690	95.550	T 4071.000	T 4202.000	T 4273.000	TM 294700.000
2	20:19:41	100.0%	0.839	0.777	0.980	-59.400	93.800	T 4020.000	T 4092.000	T 4159.000	TM 287800.000
3	20:20:08	101.8%	0.794	0.888	0.987	-59.730	108.900	T 4088.000	T 4223.000	T 4354.000	TM 281100.000
x		99.6%	0.809	0.822	0.981	-59.610	99.410	T 4060.000	T 4172.000	T 4262.000	TM 287900.000
σ		2.5%	0.026	0.058	0.006	0.181	8.248	T 35.420	T 70.410	T 98.250	TM 6788.000
%RSD		2.5	3.197	7.117	0.650	0.304	8.297	T 0.873	T 1.688	T 2.305	TM 2.358

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:14	T 2753.000	T 252100.000	T 6924.000	1120.000	231.200	120.4%	TM 5506.000	TM 503.700	151.100	7988.000
2	20:19:41	T 2690.000	T 247600.000	T 6646.000	1080.000	224.900	121.5%	TM 5491.000	T 492.800	149.600	8331.000
3	20:20:08	T 2778.000	T 259000.000	T 6542.000	1668.000	219.300	117.3%	TM 5570.000	TM 502.100	150.000	8913.000
x		T 2740.000	T 252900.000	T 6704.000	1289.000	225.100	119.7%	TM 5522.000	TM 499.500	150.200	8411.000
σ		T 45.170	T 5738.000	T 197.900	328.600	5.976	2.2%	TM 42.000	TM 5.859	0.763	467.900
%RSD		T 1.648	T 2.269	T 2.952	25.490	2.654	1.8	TM 0.761	TM 1.173	0.508	5.563

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:14	TM 179300.000	TM 835.000	TM 171800.000	TM 185000.000	23.040	65.670	72.340	34.090	40.900	160.600
2	20:19:41	TM 179700.000	TM 842.300	TM 172700.000	TM 186000.000	22.920	63.980	71.470	34.310	40.880	162.700
3	20:20:08	TM 176600.000	TM 828.200	TM 173100.000	TM 184400.000	22.770	63.680	74.040	33.800	39.830	154.200
x		TM 178500.000	TM 835.200	TM 172600.000	TM 185100.000	22.910	64.440	72.620	34.070	40.540	159.200
σ		TM 1658.000	TM 7.070	TM 634.500	TM 813.100	0.135	1.071	1.309	0.259	0.610	4.433
%RSD		TM 0.929	TM 0.847	TM 0.368	TM 0.439	0.590	1.662	1.802	0.760	1.504	2.785

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:14	124.400	104.300	7.035	2.701	6.624	5.116	4.631	2.395	5.022	4.296
2	20:19:41	123.600	104.000	6.237	2.446	6.618	5.152	4.927	2.500	4.661	4.304
3	20:20:08	122.400	101.100	6.746	2.725	6.013	5.121	5.685	2.691	5.648	4.150
x		123.500	103.100	6.673	2.624	6.418	5.130	5.081	2.529	5.111	4.250
σ		1.030	1.760	0.404	0.155	0.351	0.019	0.544	0.150	0.499	0.087
%RSD		0.834	1.706	6.054	5.891	5.471	0.375	10.700	5.918	9.767	2.046

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:14	143.2%	1.630	1.310	1.694	12.410	0.097	0.036	0.017	0.043	79.4%
2	20:19:41	142.5%	1.524	1.386	1.838	13.340	0.077	0.039	0.053	0.031	79.9%
3	20:20:08	136.0%	1.581	1.373	1.576	10.360	0.090	0.027	0.023	0.017	77.9%
x		140.5%	1.578	1.356	1.703	12.040	0.088	0.034	0.031	0.031	79.1%
σ		3.9%	0.053	0.041	0.131	1.523	0.010	0.006	0.019	0.013	1.0%
%RSD		2.8	3.354	3.002	7.700	12.650	11.270	17.380	61.760	42.350	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:19:14	10.450	11.780	0.228	0.251	391.800	386.100	75.5%	1.158	1.242	65.350
2	20:19:41	9.918	11.460	0.242	0.257	385.800	379.900	75.9%	1.205	1.180	64.510
3	20:20:08	9.918	11.610	0.221	0.243	381.100	376.100	72.6%	1.294	1.232	65.360
x		10.100	11.620	0.230	0.250	386.300	380.700	74.6%	1.219	1.218	65.070
σ		0.309	0.162	0.011	0.007	5.365	5.046	1.8%	0.069	0.033	0.489
%RSD		3.061	1.397	4.768	2.842	1.389	1.325	2.4	5.655	2.735	0.752

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:19:14	61.660	63.030	75.3%
2	20:19:41	61.750	62.250	75.0%
3	20:20:08	60.650	62.420	71.6%
x		61.350	62.570	74.0%
σ		0.610	0.412	2.0%
%RSD		0.995	0.658	2.7

UD12100-005 04/25/2019 20:24:34

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:02	92.2%	0.965	1.758	1.801	-66.550	184.200	T 9313.000	T 9647.000	T 9804.000	TM 442600.000
2	20:25:29	98.7%	0.921	1.583	1.893	-67.120	200.500	T 9416.000	T 9690.000	T 10120.000	TM 410400.000
3	20:25:56	99.4%	0.916	1.670	1.808	-69.290	183.500	T 9241.000	T 9615.000	T 9944.000	TM 406800.000
x		96.8%	0.934	1.670	1.834	-67.660	189.400	T 9323.000	T 9651.000	T 9956.000	TM 419900.000
σ		4.0%	0.027	0.088	0.051	1.446	9.589	T 88.190	T 37.290	T 158.000	TM 19730.000
%RSD		4.1	2.893	5.244	2.780	2.137	5.062	T 0.946	T 0.386	T 1.587	TM 4.699

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:02	T 2799.000	T 258600.000	T 13650.000	3158.000	2384.000	121.5%	TM 6260.000	TM 582.900	258.600	8901.000
2	20:25:29	T 2937.000	T 265600.000	T 12770.000	3969.000	2140.000	117.8%	TM 6311.000	TM 587.500	259.100	9392.000
3	20:25:56	T 2820.000	T 256500.000	T 12460.000	3503.000	2156.000	119.0%	TM 6224.000	TM 579.100	257.100	9086.000
x		T 2852.000	T 260200.000	T 12960.000	3543.000	2227.000	119.4%	TM 6265.000	TM 583.200	258.300	9126.000
σ		T 74.380	T 4740.000	T 616.400	406.800	136.300	1.9%	TM 43.690	TM 4.193	1.025	248.000
%RSD		T 2.608	T 1.822	T 4.757	11.480	6.119	1.6	TM 0.697	TM 0.719	0.397	2.718

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:02	TM 216300.000	TM 742.700	TM 204300.000	TM 213300.000	42.670	108.000	119.900	86.960	94.230	219.100
2	20:25:29	TM 214300.000	TM 734.000	TM 207800.000	TM 215700.000	41.880	106.900	123.700	86.530	92.510	213.400
3	20:25:56	TM 212300.000	TM 731.500	TM 205000.000	TM 214700.000	42.350	108.400	120.200	85.940	93.690	213.300
x		TM 214300.000	TM 736.100	TM 205700.000	TM 214500.000	42.300	107.800	121.300	86.480	93.470	215.300
σ		TM 2007.000	TM 5.865	TM 1859.000	TM 1167.000	0.393	0.751	2.076	0.514	0.880	3.353
%RSD		TM 0.937	TM 0.797	TM 0.904	TM 0.544	0.929	0.697	1.712	0.594	0.942	1.557

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:02	175.500	149.700	8.280	2.598	4.736	3.841	4.391	0.935	36.020	28.120
2	20:25:29	176.700	146.900	8.241	2.055	4.443	4.090	7.717	2.232	33.440	28.250
3	20:25:56	175.400	146.400	8.490	2.926	4.994	3.386	8.198	2.457	33.060	28.270
x		175.900	147.700	8.337	2.526	4.724	3.773	6.769	1.875	34.180	28.210
σ		0.729	1.774	0.134	0.440	0.276	0.357	2.073	0.822	1.611	0.082
%RSD		0.414	1.201	1.609	17.410	5.836	9.466	30.630	43.830	4.713	0.289

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:02	130.6%	2.360	1.846	2.491	18.250	0.140	0.054	0.098	0.060	78.3%
2	20:25:29	123.2%	2.121	1.976	2.351	18.540	0.145	0.099	0.124	0.042	75.4%
3	20:25:56	127.7%	2.176	2.023	2.252	17.580	0.156	0.052	0.044	0.070	77.1%
x		127.2%	2.219	1.948	2.365	18.120	0.147	0.068	0.089	0.057	77.0%
σ		3.7%	0.125	0.092	0.120	0.496	0.008	0.027	0.041	0.014	1.5%
%RSD		2.9	5.644	4.698	5.077	2.736	5.377	39.360	45.850	24.600	1.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:25:02	14.530	15.490	0.274	0.332	M 671.400	M 661.100	71.4%	1.539	1.482	77.030
2	20:25:29	14.760	15.550	0.304	0.346	M 672.800	M 666.200	68.2%	1.413	1.523	78.020
3	20:25:56	14.340	15.480	0.288	0.323	M 659.000	M 646.400	70.5%	1.427	1.487	76.410
x		14.550	15.510	0.289	0.334	M 667.700	M 657.900	70.1%	1.460	1.497	77.150
σ		0.212	0.037	0.015	0.012	M 7.609	M 10.270	1.7%	0.069	0.022	0.810
%RSD		1.454	0.240	5.266	3.459	M 1.140	M 1.562	2.4	4.737	1.499	1.049

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:25:02	71.920	74.120	72.7%
2	20:25:29	71.920	74.090	68.9%
3	20:25:56	71.100	73.480	71.9%
x		71.650	73.900	71.2%
σ		0.472	0.362	2.0%
%RSD		0.659	0.490	2.8

UD12100-006 04/25/2019 20:30:21

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:49	96.1%	0.824	1.452	1.492	-56.820	159.700	T 7299.000	T 7648.000	T 7917.000	TM 317500.000
2	20:31:15	97.2%	0.768	1.366	1.443	-58.090	155.200	T 7258.000	T 7555.000	T 7756.000	TM 307200.000
3	20:31:42	98.3%	0.786	1.132	1.337	-56.370	169.300	T 7297.000	T 7561.000	T 7770.000	TM 304100.000
x		97.2%	0.793	1.317	1.424	-57.090	161.400	T 7285.000	T 7588.000	T 7814.000	TM 309600.000
σ		1.1%	0.028	0.166	0.079	0.892	7.168	T 23.010	T 52.370	T 89.440	TM 6993.000
%RSD		1.1	3.592	12.580	5.537	1.563	4.441	T 0.316	T 0.690	T 1.145	TM 2.259

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:49	T 2893.000	T 252500.000	T 9829.000	2416.000	1371.000	111.6%	M 4425.000	T 427.200	145.700	9173.000
2	20:31:15	T 2815.000	T 249100.000	T 9704.000	2236.000	1350.000	113.2%	M 4313.000	T 419.600	141.700	8874.000
3	20:31:42	T 2863.000	T 251800.000	T 9540.000	2704.000	1315.000	111.1%	M 4314.000	T 420.700	139.400	8989.000
x		T 2857.000	T 251100.000	T 9691.000	2452.000	1345.000	112.0%	M 4351.000	T 422.500	142.300	9012.000
σ		T 39.430	T 1787.000	T 145.000	236.400	28.200	1.1%	M 64.350	T 4.118	3.208	150.700
%RSD		T 1.380	T 0.712	T 1.496	9.640	2.096	1.0	M 1.479	T 0.975	2.255	1.673

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:49	TM 162000.000	TM 792.200	TM 160700.000	TM 164000.000	38.610	83.210	90.370	71.260	76.710	176.000
2	20:31:15	TM 160500.000	TM 765.200	TM 156300.000	TM 162100.000	38.250	82.280	89.180	69.490	75.180	174.000
3	20:31:42	TM 163000.000	TM 770.900	TM 156300.000	TM 162600.000	38.100	81.440	90.900	70.770	76.300	173.200
x		TM 161800.000	TM 776.100	TM 157700.000	TM 162900.000	38.320	82.310	90.150	70.500	76.060	174.400
σ		TM 1283.000	TM 14.210	TM 2545.000	TM 1004.000	0.266	0.883	0.882	0.911	0.793	1.414
%RSD		TM 0.793	TM 1.831	TM 1.614	TM 0.617	0.694	1.072	0.978	1.292	1.042	0.811

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:49	148.100	127.600	6.953	2.141	4.427	4.630	2.621	0.674	22.680	20.360
2	20:31:15	146.400	124.700	6.453	1.511	4.291	2.872	5.219	1.770	17.190	20.540
3	20:31:42	146.100	125.300	6.264	1.459	4.653	3.761	2.951	0.870	20.200	20.550
x		146.900	125.900	6.557	1.704	4.457	3.755	3.597	1.105	20.030	20.480
σ		1.063	1.546	0.356	0.379	0.183	0.879	1.414	0.584	2.745	0.109
%RSD		0.724	1.228	5.431	22.270	4.100	23.420	39.320	52.880	13.710	0.532

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:49	121.8%	1.817	1.557	1.766	11.770	0.108	0.052	0.038	0.067	77.1%
2	20:31:15	122.4%	1.872	1.689	1.792	14.170	0.090	0.056	0.032	0.099	78.4%
3	20:31:42	119.0%	1.750	1.736	1.834	11.780	0.085	0.052	0.072	0.014	76.0%
x		121.1%	1.813	1.661	1.798	12.570	0.094	0.053	0.047	0.060	77.2%
σ		1.9%	0.061	0.093	0.034	1.383	0.012	0.003	0.022	0.043	1.2%
%RSD		1.5	3.374	5.590	1.903	11.000	12.770	4.782	46.080	71.550	1.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:30:49	11.500	12.520	0.201	0.262	481.400	477.100	72.3%	1.281	1.318	67.570
2	20:31:15	11.340	12.340	0.222	0.240	478.800	473.600	73.7%	1.350	1.334	67.270
3	20:31:42	11.450	11.960	0.186	0.204	478.200	474.500	70.5%	1.335	1.297	67.620
x		11.430	12.270	0.203	0.235	479.500	475.100	72.2%	1.322	1.316	67.480
σ		0.080	0.285	0.018	0.030	1.709	1.851	1.6%	0.036	0.018	0.189
%RSD		0.700	2.318	8.745	12.540	0.357	0.390	2.2	2.745	1.400	0.280

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:30:49	63.440	64.870	71.5%
2	20:31:15	63.570	64.740	72.8%
3	20:31:42	62.880	64.760	70.0%
x		63.300	64.790	71.5%
σ		0.369	0.072	1.4%
%RSD		0.583	0.111	2.0

UD12100-007 04/25/2019 20:36:07

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:34	98.1%	1.199	1.897	2.006	-61.520	120.900	T 5126.000	T 5351.000	T 5485.000	TM 223700.000
2	20:37:02	98.7%	1.249	1.989	1.925	-62.490	116.200	T 5188.000	T 5342.000	T 5468.000	TM 213900.000
3	20:37:29	100.1%	1.280	1.832	2.111	-60.870	120.400	T 5246.000	T 5329.000	T 5515.000	TM 214500.000
x		99.0%	1.243	1.906	2.014	-61.630	119.200	T 5187.000	T 5341.000	T 5489.000	TM 217400.000
σ		1.0%	0.041	0.079	0.094	0.817	2.593	T 60.180	T 10.810	T 23.970	TM 5502.000
%RSD		1.0	3.296	4.143	4.647	1.325	2.175	T 1.160	T 0.202	T 0.437	TM 2.531

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:34	T 3348.000	T 250100.000	T 5970.000	1874.000	890.400	105.6%	M 3631.000	T 343.700	80.130	7798.000
2	20:37:02	T 3155.000	T 248300.000	T 5823.000	1697.000	896.000	106.4%	TM 3887.000	T 340.600	77.720	7146.000
3	20:37:29	T 3297.000	T 251900.000	T 5961.000	1897.000	878.400	105.8%	M 3545.000	T 343.400	80.040	7502.000
x		T 3266.000	T 250100.000	T 5918.000	1823.000	888.300	105.9%	TM 3688.000	T 342.600	79.300	7482.000
σ		T 100.000	T 1798.000	T 82.620	109.600	9.026	0.4%	TM 177.700	T 1.717	1.371	326.300
%RSD		T 3.061	T 0.719	T 1.396	6.016	1.016	0.4	TM 4.819	T 0.501	1.729	4.361

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:34	TM 149800.000	TM 2633.000	TM 144700.000	TM 161800.000	51.300	50.490	49.710	34.630	43.550	173.600
2	20:37:02	TM 149100.000	TM 2587.000	TM 142800.000	TM 160300.000	50.730	49.640	49.320	33.370	43.550	175.200
3	20:37:29	TM 149400.000	TM 2631.000	TM 143000.000	TM 158700.000	51.040	50.000	51.020	34.390	44.090	171.600
x		TM 149400.000	TM 2617.000	TM 143500.000	TM 160300.000	51.020	50.050	50.020	34.130	43.730	173.500
σ		TM 300.400	TM 26.150	TM 1059.000	TM 1576.000	0.288	0.427	0.891	0.674	0.315	1.841
%RSD		TM 0.201	TM 0.999	TM 0.738	TM 0.984	0.564	0.854	1.782	1.974	0.721	1.061

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:34	130.400	114.300	7.110	3.055	3.429	1.696	4.446	2.909	3.404	T 39.510
2	20:37:02	127.500	114.600	6.967	1.665	3.475	1.858	4.868	3.161	2.794	34.190
3	20:37:29	128.700	113.000	6.951	2.167	3.284	2.040	5.235	3.057	8.092	33.970
x		128.800	113.900	7.009	2.295	3.396	1.865	4.850	3.042	4.763	T 35.890
σ		1.429	0.835	0.087	0.704	0.100	0.172	0.395	0.127	2.898	T 3.139
%RSD		1.109	0.733	1.248	30.680	2.942	9.241	8.145	4.162	60.850	T 8.745

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:34	169.7%	0.660	0.577	0.721	17.880	0.175	0.117	0.159	0.180	76.7%
2	20:37:02	173.3%	0.653	0.453	0.662	21.120	0.149	0.094	0.181	0.190	77.5%
3	20:37:29	173.4%	0.600	0.537	0.663	19.000	0.169	0.079	0.217	0.159	77.9%
x		172.2%	0.638	0.523	0.682	19.330	0.165	0.097	0.186	0.176	77.4%
σ		2.1%	0.033	0.063	0.034	1.646	0.013	0.019	0.029	0.015	0.6%
%RSD		1.2	5.146	12.100	4.918	8.513	8.203	19.720	15.710	8.780	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:36:34	10.040	10.170	0.164	0.182	M 625.800	M 620.300	77.1%	2.112	2.065	64.960
2	20:37:02	9.862	10.170	0.172	0.183	M 616.100	M 612.100	78.5%	1.932	2.051	64.130
3	20:37:29	9.591	10.200	0.162	0.199	M 617.700	M 608.000	77.4%	2.129	2.105	64.560
x		9.830	10.180	0.166	0.188	M 619.900	M 613.500	77.7%	2.058	2.074	64.550
σ		0.226	0.016	0.006	0.010	M 5.174	M 6.278	0.8%	0.109	0.028	0.416
%RSD		2.295	0.159	3.336	5.159	M 0.835	M 1.023	1.0	5.309	1.347	0.645

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:36:34	60.370	61.660	71.0%
2	20:37:02	59.580	61.040	71.9%
3	20:37:29	59.690	61.300	71.5%
x		59.880	61.330	71.5%
σ		0.430	0.312	0.5%
%RSD		0.718	0.509	0.7

UD12100-008 04/25/2019 20:41:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:21	98.5%	0.764	1.959	2.349	-62.990	140.000	T 3878.000	T 4116.000	T 4163.000	TM 248800.000
2	20:42:48	97.8%	0.749	1.923	2.274	-65.400	124.800	T 3851.000	T 3996.000	T 4148.000	TM 254400.000
3	20:43:15	96.3%	0.795	2.097	2.376	-62.030	126.000	T 3802.000	T 3936.000	T 4036.000	TM 253900.000
x		97.5%	0.769	1.993	2.333	-63.470	130.300	T 3844.000	T 4016.000	T 4116.000	TM 252400.000
σ		1.1%	0.024	0.092	0.053	1.739	8.427	T 38.270	T 91.400	T 69.290	TM 3114.000
%RSD		1.2	3.085	4.623	2.258	2.740	6.470	T 0.996	T 2.276	T 1.684	TM 1.234
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:21	T 3223.000	T 256500.000	T 5712.000	2524.000	1028.000	101.7%	M 2981.000	T 386.500	88.970	9190.000
2	20:42:48	T 3190.000	T 248700.000	T 5665.000	2334.000	1051.000	103.3%	TM 3247.000	T 386.000	90.160	7566.000
3	20:43:15	T 3146.000	T 251300.000	T 5875.000	2186.000	1086.000	103.1%	M 2983.000	T 389.000	88.980	8195.000
x		T 3186.000	T 252200.000	T 5750.000	2348.000	1055.000	102.7%	TM 3070.000	T 387.200	89.370	8317.000
σ		T 38.380	T 4004.000	T 110.600	169.400	29.480	0.8%	TM 153.400	T 1.570	0.684	818.800
%RSD		T 1.205	T 1.588	T 1.923	7.214	2.795	0.8	TM 4.995	T 0.406	0.765	9.845
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:21	TM 172000.000	TM 2305.000	TM 166900.000	TM 171100.000	57.840	61.710	67.690	42.680	46.050	157.400
2	20:42:48	TM 170800.000	TM 2328.000	TM 165800.000	TM 170100.000	57.140	59.270	65.360	41.750	45.070	157.800
3	20:43:15	TM 174000.000	TM 2358.000	TM 167400.000	TM 171600.000	57.360	60.910	65.300	42.940	46.810	159.000
x		TM 172300.000	TM 2330.000	TM 166700.000	TM 170900.000	57.450	60.630	66.120	42.450	45.970	158.100
σ		TM 1574.000	TM 27.050	TM 842.700	TM 728.300	0.354	1.242	1.365	0.626	0.872	0.831
%RSD		TM 0.914	TM 1.161	TM 0.506	TM 0.426	0.617	2.049	2.064	1.474	1.896	0.526
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:21	138.300	120.400	8.953	1.416	4.118	2.872	6.770	2.110	15.260	44.200
2	20:42:48	139.500	122.200	8.652	1.809	3.564	2.789	2.505	0.513	22.190	44.080
3	20:43:15	140.300	122.900	8.753	1.935	4.027	2.965	5.107	1.670	12.410	44.350
x		139.400	121.800	8.786	1.720	3.903	2.875	4.794	1.431	16.620	44.210
σ		1.024	1.307	0.153	0.271	0.297	0.088	2.150	0.825	5.033	0.134
%RSD		0.735	1.073	1.741	15.730	7.610	3.060	44.840	57.640	30.280	0.303
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:21	104.6%	1.646	1.619	1.645	22.750	0.163	0.080	0.093	0.065	73.5%
2	20:42:48	108.6%	1.604	1.412	1.661	17.770	0.172	0.075	0.075	0.097	75.6%
3	20:43:15	109.0%	1.678	1.573	1.690	16.290	0.149	0.074	0.070	0.072	76.1%
x		107.4%	1.643	1.535	1.665	18.940	0.161	0.076	0.079	0.078	75.1%
σ		2.4%	0.037	0.109	0.023	3.386	0.012	0.003	0.012	0.017	1.4%
%RSD		2.3	2.263	7.098	1.396	17.880	7.240	4.527	15.640	21.480	1.8
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:42:21	10.470	11.170	0.231	0.289	388.100	379.500	68.7%	1.910	1.835	74.870
2	20:42:48	10.340	10.890	0.186	0.256	380.900	377.200	71.2%	1.838	1.868	74.060
3	20:43:15	10.480	10.840	0.229	0.254	383.200	381.400	72.0%	1.878	1.906	73.370
x		10.430	10.960	0.215	0.266	384.100	379.300	70.6%	1.876	1.870	74.100
σ		0.077	0.179	0.026	0.020	3.660	2.094	1.7%	0.036	0.036	0.750
%RSD		0.734	1.634	11.930	7.391	0.953	0.552	2.4	1.930	1.917	1.013
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	20:42:21	69.050	71.270	66.8%							
2	20:42:48	68.940	70.690	69.7%							
3	20:43:15	69.060	70.610	69.8%							
x		69.020	70.850	68.8%							
σ		0.067	0.360	1.7%							
%RSD		0.096	0.508	2.5							

UD12100-009 04/25/2019 20:47:39

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:06	96.5%	0.896	1.310	1.590	-57.190	112.500	T 2074.000	2216.000	T 2266.000	TM 286200.000
2	20:48:33	97.4%	0.847	1.545	1.750	-61.960	107.300	T 2072.000	2228.000	T 2283.000	TM 288800.000
3	20:49:00	94.2%	0.869	1.505	1.749	-61.990	97.870	T 2038.000	2196.000	T 2285.000	TM 296900.000
x		96.0%	0.871	1.453	1.696	-60.380	105.900	T 2062.000	2214.000	T 2278.000	TM 290600.000
σ		1.6%	0.024	0.126	0.092	2.764	7.428	T 20.100	16.120	T 10.820	TM 5606.000
%RSD		1.7	2.802	8.660	5.409	4.577	7.014	T 0.975	0.728	T 0.475	TM 1.929

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:06	T 2381.000	T 250000.000	T 4197.000	1859.000	457.100	109.5%	M 4072.000	TM 610.800	102.100	9345.000
2	20:48:33	T 2340.000	T 247400.000	T 4146.000	1848.000	446.400	110.2%	M 4049.000	TM 604.700	100.900	9017.000
3	20:49:00	T 2247.000	T 238500.000	T 4215.000	1326.000	463.200	111.4%	M 4048.000	TM 605.200	99.670	8186.000
x		T 2322.000	T 245300.000	T 4186.000	1678.000	455.600	110.4%	M 4056.000	TM 606.900	100.900	8849.000
σ		T 68.760	T 6054.000	T 35.990	304.800	8.484	0.9%	M 13.450	TM 3.347	1.233	597.300
%RSD		T 2.961	T 2.468	T 0.860	18.170	1.862	0.8	M 0.332	TM 0.551	1.222	6.750

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:06	TM 216000.000	TM 1137.000	TM 209800.000	TM 210500.000	26.040	74.520	86.850	76.860	77.370	160.100
2	20:48:33	TM 215400.000	TM 1134.000	TM 207700.000	TM 206300.000	25.770	72.910	85.750	77.610	76.000	160.600
3	20:49:00	TM 213900.000	TM 1131.000	TM 208500.000	TM 209700.000	25.790	72.430	84.290	75.930	77.020	161.100
x		TM 215100.000	TM 1134.000	TM 208700.000	TM 208800.000	25.860	73.280	85.630	76.800	76.800	160.600
σ		TM 1065.000	TM 2.759	TM 1049.000	TM 2244.000	0.148	1.093	1.285	0.840	0.709	0.512
%RSD		TM 0.495	TM 0.243	TM 0.503	TM 1.074	0.574	1.492	1.500	1.094	0.923	0.319

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:06	138.900	113.200	7.783	3.607	6.848	5.591	13.470	3.977	23.000	48.150
2	20:48:33	139.300	113.400	7.215	2.400	6.330	5.325	8.115	2.335	21.910	47.590
3	20:49:00	135.000	115.100	7.442	3.662	7.255	4.690	10.130	2.956	22.010	47.780
x		137.700	113.900	7.480	3.223	6.811	5.202	10.570	3.090	22.310	47.840
σ		2.404	1.067	0.286	0.713	0.464	0.463	2.702	0.829	0.602	0.285
%RSD		1.746	0.937	3.825	22.130	6.809	8.904	25.560	26.830	2.700	0.596

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:06	100.9%	2.888	2.506	2.868	16.870	0.141	0.066	0.130	0.121	72.8%
2	20:48:33	100.8%	2.601	2.321	2.776	16.980	0.137	0.061	0.069	0.048	72.0%
3	20:49:00	103.5%	2.627	2.480	2.747	16.130	0.115	0.055	0.092	0.061	74.3%
x		101.7%	2.706	2.436	2.797	16.660	0.131	0.061	0.097	0.077	73.0%
σ		1.5%	0.159	0.100	0.064	0.465	0.014	0.005	0.031	0.039	1.2%
%RSD		1.5	5.869	4.105	2.274	2.791	10.480	8.996	31.760	51.290	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:48:06	14.240	14.510	0.199	0.227	257.500	254.700	68.0%	1.693	1.739	66.310
2	20:48:33	14.080	14.470	0.214	0.309	255.300	252.300	67.5%	1.718	1.772	65.940
3	20:49:00	13.960	14.660	0.225	0.278	254.000	253.100	69.1%	1.720	1.797	66.160
x		14.090	14.550	0.213	0.271	255.600	253.300	68.2%	1.710	1.769	66.140
σ		0.143	0.099	0.013	0.042	1.743	1.207	0.8%	0.015	0.029	0.186
%RSD		1.012	0.679	6.218	15.330	0.682	0.477	1.2	0.892	1.645	0.281

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:48:06	61.230	63.040	66.6%
2	20:48:33	61.300	63.350	66.2%
3	20:49:00	60.940	63.100	68.8%
x		61.160	63.160	67.2%
σ		0.191	0.162	1.4%
%RSD		0.313	0.257	2.1

UD12100-010 04/25/2019 20:53:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:53:52	92.7%	0.976	0.866	0.935	-70.920	100.700	T 3844.000	T 3970.000	T 4076.000	TM 298300.000
2	20:54:19	95.8%	0.888	0.856	1.016	-72.470	111.300	T 3883.000	T 3946.000	T 4130.000	TM 287400.000
3	20:54:46	95.8%	0.820	1.106	0.947	-73.540	120.600	T 3875.000	T 3931.000	T 4060.000	TM 284000.000
x		94.8%	0.895	0.943	0.966	-72.310	110.800	T 3867.000	T 3949.000	T 4089.000	TM 289900.000
σ		1.8%	0.078	0.141	0.043	1.315	9.923	T 20.890	T 19.730	T 37.050	TM 7442.000
%RSD		1.9	8.771	14.980	4.488	1.819	8.952	T 0.540	T 0.500	T 0.906	TM 2.567

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:53:52	T 2772.000	T 286700.000	T 6450.000	1410.000	429.700	104.8%	M 3837.000	T 491.700	86.960	9056.000
2	20:54:19	T 2756.000	T 290200.000	T 6381.000	1917.000	413.400	104.0%	M 3834.000	T 493.100	86.070	10150.000
3	20:54:46	T 2777.000	T 293300.000	T 6432.000	1957.000	419.400	103.5%	M 3804.000	T 494.500	86.360	9488.000
x		T 2768.000	T 290000.000	T 6421.000	1761.000	420.800	104.1%	M 3825.000	T 493.100	86.470	9564.000
σ		T 10.710	T 3279.000	T 35.770	304.900	8.216	0.7%	M 18.510	T 1.386	0.455	549.700
%RSD		T 0.387	T 1.130	T 0.557	17.310	1.952	0.7	M 0.484	T 0.281	0.526	5.748

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:53:52	TM 207400.000	TM 3018.000	TM 203000.000	TM 213100.000	44.780	57.860	64.690	56.480	62.930	214.600
2	20:54:19	TM 204400.000	TM 2960.000	TM 200700.000	TM 209300.000	43.920	57.230	64.430	55.210	61.720	213.300
3	20:54:46	TM 205600.000	TM 2918.000	TM 197300.000	TM 206800.000	43.530	57.180	64.890	55.440	61.000	204.300
x		TM 205800.000	TM 2965.000	TM 200300.000	TM 209700.000	44.080	57.420	64.670	55.710	61.880	210.800
σ		TM 1490.000	TM 50.000	TM 2829.000	TM 3165.000	0.640	0.376	0.230	0.677	0.974	5.600
%RSD		TM 0.724	TM 1.686	TM 1.412	TM 1.509	1.452	0.655	0.355	1.215	1.574	2.657

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:53:52	168.700	146.800	7.005	3.134	6.103	5.712	8.158	2.881	19.370	47.920
2	20:54:19	165.300	144.200	7.197	2.270	6.081	5.324	10.200	3.622	21.530	48.340
3	20:54:46	165.200	141.700	7.133	2.996	6.137	4.913	9.095	2.985	25.140	47.950
x		166.400	144.200	7.112	2.800	6.107	5.316	9.152	3.163	22.010	48.070
σ		1.992	2.555	0.098	0.464	0.028	0.400	1.023	0.401	2.913	0.233
%RSD		1.197	1.772	1.373	16.570	0.464	7.515	11.170	12.690	13.230	0.485

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:53:52	119.6%	1.848	1.683	1.715	13.960	0.136	0.081	0.061	0.026	72.8%
2	20:54:19	117.3%	1.828	1.537	1.879	17.550	0.150	0.070	0.078	0.050	70.4%
3	20:54:46	115.4%	1.743	1.372	1.730	15.300	0.127	0.088	0.074	0.057	71.0%
x		117.4%	1.806	1.531	1.775	15.600	0.138	0.080	0.071	0.044	71.4%
σ		2.1%	0.056	0.156	0.091	1.812	0.012	0.009	0.009	0.016	1.2%
%RSD		1.8	3.098	10.170	5.114	11.620	8.698	11.340	12.470	37.030	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:53:52	12.940	12.690	0.191	0.206	399.100	396.900	68.4%	2.071	1.996	77.560
2	20:54:19	13.020	12.920	0.172	0.222	400.700	396.100	66.9%	1.982	2.030	77.730
3	20:54:46	12.780	13.090	0.201	0.210	395.800	389.500	66.4%	1.955	2.020	78.300
x		12.910	12.900	0.188	0.213	398.500	394.200	67.2%	2.003	2.015	77.870
σ		0.121	0.203	0.015	0.008	2.529	4.059	1.0%	0.060	0.017	0.385
%RSD		0.939	1.573	7.921	3.866	0.635	1.030	1.6	3.019	0.856	0.494

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:53:52	72.740	74.200	66.1%
2	20:54:19	71.870	73.990	64.9%
3	20:54:46	71.970	74.300	64.4%
x		72.190	74.160	65.1%
σ		0.475	0.158	0.9%
%RSD		0.658	0.213	1.4

CCV MW10994 04/25/2019 20:59:12 QC Status: PASS (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	89.3%	298.500	301.600	293.500	29.310	┬64340.000	┬59550.000	┬59730.000	┬59520.000	335.000
2	21:00:06	88.0%	316.300	309.600	301.300	33.510	┬64810.000	┬61380.000	┬60850.000	┬60750.000	330.600
3	21:00:34	88.5%	309.600	305.000	296.300	29.440	┬64760.000	┬59390.000	┬59730.000	┬59380.000	318.300
x		88.6%	102.716%	101.798%	99.007%	30.760	┬107.731%	┬60110.000	┬60100.000	┬99.807%	109.318%
σ		0.7%	n/a	n/a	n/a	2.385	┬n/a	┬1101.000	┬642.600	┬n/a	n/a
%RSD		0.8	2.908	1.326	1.336	7.756	┬0.403	┬1.832	┬1.069	┬1.255	2.632

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	┬3406.000	3657.000	┬57700.000	62950.000	┬55820.000	83.8%	319.100	322.300	304.500	-89.180
2	21:00:06	┬3264.000	3457.000	┬59140.000	63420.000	┬59340.000	86.7%	308.600	315.500	303.000	634.200
3	21:00:34	┬3233.000	3329.000	┬58580.000	62290.000	┬57870.000	86.7%	312.800	317.000	297.800	197.600
x		┬110.040%	3481.000	┬97.460%	62890.000	┬96.129%	85.7%	104.504%	106.083%	100.591%	247.500
σ		┬n/a	165.100	┬n/a	567.300	┬n/a	1.7%	n/a	n/a	n/a	364.200
%RSD		┬2.797	4.744	┬1.240	0.902	┬3.060	2.0	1.694	1.115	1.166	147.200

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	┬62490.000	295.500	┬61720.000	┬60460.000	295.900	284.500	297.300	290.300	270.000	313.600
2	21:00:06	┬61760.000	297.200	┬62070.000	┬59500.000	288.500	282.700	291.300	286.400	269.200	318.400
3	21:00:34	┬61020.000	294.500	┬61110.000	┬58960.000	286.400	281.900	290.000	288.100	270.800	318.900
x		┬61760.000	98.581%	┬61630.000	┬99.403%	96.769%	94.341%	292.900	288.300	90.010%	105.647%
σ		┬739.500	n/a	┬487.300	┬n/a	n/a	n/a	3.915	1.954	n/a	n/a
%RSD		┬1.197	0.469	┬0.791	┬1.274	1.722	0.461	1.337	0.678	0.298	0.912

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	286.200	283.800	271.800	316.200	1.852	1.123	1259.000	310.400	7.244	309.200
2	21:00:06	288.600	283.700	273.500	313.300	2.445	1.237	1253.000	308.800	5.537	307.500
3	21:00:34	285.800	284.900	275.400	312.300	2.522	0.366	1228.000	305.800	3.529	307.500
x		286.900	284.100	91.187%	313.900	2.273	0.909	1247.000	102.782%	5.436	102.685%
σ		1.482	0.656	n/a	2.008	0.367	0.474	16.110	n/a	1.860	n/a
%RSD		0.517	0.231	0.670	0.640	16.140	52.090	1.293	0.750	34.210	0.334

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	72.3%	318.000	315.400	317.300	299.800	295.600	293.200	297.900	297.900	68.4%
2	21:00:06	75.4%	315.000	309.300	315.800	303.800	295.600	294.300	298.700	299.100	71.3%
3	21:00:34	75.7%	315.600	310.800	316.600	304.100	299.100	298.700	301.400	300.800	70.9%
x		74.5%	105.393%	103.950%	316.600	302.600	98.929%	295.400	299.300	99.748%	70.2%
σ		1.9%	n/a	n/a	0.746	2.404	n/a	2.951	1.859	n/a	1.6%
%RSD		2.5	0.516	1.017	0.236	0.794	0.677	0.999	0.621	0.494	2.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	20:59:39	308.500	309.500	306.300	309.500	313.200	308.900	67.9%	292.300	297.800	290.000
2	21:00:06	311.900	310.100	311.200	310.600	313.100	309.100	71.7%	291.900	297.200	287.500
3	21:00:34	313.600	312.400	312.500	312.900	312.900	311.600	71.3%	291.000	299.300	291.700
x		103.774%	103.546%	310.000	103.668%	104.352%	103.280%	70.3%	291.700	99.359%	96.576%
σ		n/a	n/a	3.303	n/a	n/a	n/a	2.1%	0.660	n/a	n/a
%RSD		0.842	0.494	1.066	0.554	0.058	0.491	3.0	0.226	0.362	0.717

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	20:59:39	289.700	289.500	62.7%
2	21:00:06	287.900	286.600	65.8%
3	21:00:34	291.500	290.600	65.9%
x		96.562%	96.299%	64.8%
σ		n/a	n/a	1.8%
%RSD		0.616	0.705	2.8

CCB IM9370-01 04/25/2019 21:05:02 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:29	93.8%	0.043	1.694	1.739	11.120	13.870	8.976	9.554	8.645	7.128
2	21:05:56	94.0%	0.014	1.537	1.396	1.524	6.195	5.123	4.914	4.946	4.299
3	21:06:24	95.7%	0.021	1.559	1.496	5.091	13.880	3.967	3.916	4.177	3.071
x		94.5%	0.026	1.597	1.544	5.912	11.320	6.022	6.128	5.922	4.833
σ		1.0%	0.015	0.085	0.176	4.851	4.434	2.623	3.009	2.389	2.080
%RSD		1.1	57.780	5.335	11.410	82.060	39.190	43.550	49.100	40.330	43.050

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:29	15.650	2082.000	14.310	12.530	7.118	87.8%	-0.211	0.025	0.050	101.900
2	21:05:56	15.330	1992.000	10.830	4.853	5.020	90.0%	-0.360	0.028	0.033	90.830
3	21:06:24	15.890	2095.000	14.670	2.345	3.373	88.0%	-0.400	0.030	0.039	93.040
x		15.620	2057.000	13.270	6.577	5.170	88.6%	-0.324	0.028	0.041	95.250
σ		0.279	55.980	2.123	5.309	1.877	1.2%	0.099	0.002	0.009	5.840
%RSD		1.783	2.722	16.000	80.720	36.300	1.3	30.720	7.858	21.170	6.132

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:29	20.830	0.195	28.680	16.380	-0.006	-0.022	0.359	-0.042	0.015	0.073
2	21:05:56	10.230	0.156	20.400	3.899	-0.028	-0.031	0.168	-0.051	-0.009	0.024
3	21:06:24	11.320	0.119	21.630	8.898	-0.034	-0.033	0.186	-0.071	0.004	0.065
x		14.130	0.157	23.570	9.724	-0.023	-0.028	0.237	-0.055	0.003	0.054
σ		5.834	0.038	4.469	6.280	0.015	0.006	0.105	0.015	0.012	0.026
%RSD		41.290	24.150	18.960	64.580	63.990	21.070	44.390	26.860	392.500	48.580

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:29	-0.095	0.065	-0.000	1.209	0.184	0.653	1.349	0.425	-2.298	0.036
2	21:05:56	-0.127	0.051	-0.048	1.738	-0.019	0.582	-0.686	0.020	-4.833	0.021
3	21:06:24	-0.211	0.008	-0.114	0.908	0.386	1.198	-0.314	0.013	-1.584	0.019
x		-0.145	0.041	-0.054	1.285	0.184	0.811	0.117	0.153	-2.905	0.025
σ		0.060	0.030	0.057	0.420	0.202	0.337	1.084	0.236	1.707	0.009
%RSD		41.430	72.500	105.600	32.710	110.000	41.560	928.800	154.400	58.760	37.040

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:29	77.9%	0.149	0.167	0.110	0.256	0.045	0.047	0.036	0.054	75.7%
2	21:05:56	80.0%	0.109	0.087	0.088	0.109	0.027	0.029	0.020	0.021	76.3%
3	21:06:24	77.8%	0.074	0.063	0.073	-0.282	0.023	0.027	0.005	0.004	75.5%
x		78.6%	0.111	0.106	0.091	0.027	0.032	0.034	0.020	0.026	75.8%
σ		1.3%	0.038	0.055	0.018	0.278	0.012	0.011	0.015	0.025	0.4%
%RSD		1.6	34.060	51.820	20.430	1017.000	37.240	31.500	76.530	96.060	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:05:29	0.091	0.071	0.171	0.165	-0.013	0.003	72.8%	0.034	0.031	0.047
2	21:05:56	0.073	0.079	0.153	0.160	-0.006	-0.019	74.3%	0.011	-0.002	0.036
3	21:06:24	0.042	0.063	0.122	0.100	-0.035	-0.014	73.1%	0.003	0.003	0.026
x		0.069	0.071	0.149	0.142	-0.018	-0.010	73.4%	0.016	0.010	0.036
σ		0.025	0.008	0.025	0.036	0.015	0.011	0.8%	0.016	0.018	0.010
%RSD		36.470	10.900	16.740	25.380	82.470	111.300	1.1	99.970	171.300	29.010

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:05:29	0.027	0.041	71.9%
2	21:05:56	0.015	0.021	72.9%
3	21:06:24	0.018	0.015	71.0%
x		0.020	0.026	71.9%
σ		0.006	0.013	1.0%
%RSD		29.650	51.540	1.4

UD12100-013 04/25/2019 21:10:50

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:17	94.8%	1.204	1.713	1.629	95.950	153.500	T 5245.000	T 5358.000	T 5353.000	TM 138900.000
2	21:11:45	95.2%	1.189	1.658	1.903	98.340	150.200	T 5231.000	T 5281.000	T 5447.000	TM 142100.000
3	21:12:13	91.6%	1.318	1.790	1.722	100.300	138.600	T 5140.000	T 5209.000	T 5380.000	TM 144700.000
x		93.9%	1.237	1.721	1.751	98.190	147.400	T 5206.000	T 5283.000	T 5393.000	TM 141900.000
σ		2.0%	0.071	0.066	0.140	2.167	7.827	T 56.770	T 74.490	T 48.470	TM 2932.000
%RSD		2.1	5.709	3.851	7.977	2.207	5.308	T 1.091	T 1.410	T 0.899	TM 2.066

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:17	T 3111.000	T 303000.000	T 7756.000	2056.000	1024.000	94.3%	M 4398.000	281.500	45.640	9651.000
2	21:11:45	T 2998.000	T 298600.000	T 7884.000	1844.000	1009.000	96.0%	M 4301.000	272.200	45.360	9548.000
3	21:12:13	T 2981.000	T 297900.000	T 8034.000	1607.000	1053.000	97.0%	TM 4565.000	276.100	44.560	8148.000
x		T 3030.000	T 299800.000	T 7891.000	1836.000	1029.000	95.8%	TM 4421.000	276.600	45.190	9116.000
σ		T 70.510	T 2754.000	T 139.200	224.600	22.000	1.4%	TM 133.600	4.697	0.561	839.500
%RSD		T 2.327	T 0.919	T 1.764	12.240	2.139	1.4	TM 3.021	1.698	1.241	9.209

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:17	T 88150.000	TM 773.500	T 86700.000	T 94000.000	25.360	26.610	33.470	33.880	42.940	184.800
2	21:11:45	T 89070.000	TM 768.100	T 85590.000	T 93960.000	25.160	26.280	33.940	33.400	42.560	187.800
3	21:12:13	T 87100.000	TM 774.200	T 85910.000	T 95440.000	25.070	26.410	32.380	33.460	42.560	190.300
x		T 88100.000	TM 771.900	T 86070.000	T 94470.000	25.200	26.440	33.260	33.580	42.690	187.600
σ		T 984.600	TM 3.318	T 576.200	T 845.900	0.146	0.168	0.800	0.261	0.219	2.760
%RSD		T 1.118	TM 0.430	T 0.669	T 0.896	0.579	0.635	2.404	0.776	0.513	1.471

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:17	136.000	126.100	3.473	2.690	4.355	2.616	3.972	2.380	4.673	21.050
2	21:11:45	137.600	125.500	3.713	2.376	4.325	3.481	7.937	3.947	9.060	20.810
3	21:12:13	138.200	127.600	4.445	2.228	3.943	2.625	5.024	2.622	9.941	20.940
x		137.300	126.400	3.877	2.431	4.207	2.907	5.644	2.983	7.892	20.930
σ		1.141	1.075	0.506	0.236	0.230	0.497	2.054	0.844	2.822	0.118
%RSD		0.831	0.850	13.060	9.702	5.457	17.090	36.400	28.280	35.760	0.566

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:17	143.9%	1.050	0.778	0.981	11.180	0.213	0.186	0.708	0.714	70.7%
2	21:11:45	145.2%	0.889	0.755	0.957	11.690	0.200	0.218	0.656	0.738	70.6%
3	21:12:13	151.6%	0.958	0.734	1.003	11.390	0.216	0.190	0.624	0.779	73.6%
x		146.9%	0.966	0.755	0.980	11.420	0.210	0.198	0.662	0.744	71.6%
σ		4.1%	0.081	0.022	0.023	0.254	0.008	0.018	0.042	0.033	1.7%
%RSD		2.8	8.348	2.895	2.355	2.222	4.014	8.892	6.393	4.448	2.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:11:17	8.309	8.922	0.344	0.415	480.400	478.600	70.7%	0.957	1.032	55.660
2	21:11:45	8.583	9.164	0.314	0.364	487.100	480.200	70.7%	1.030	1.066	55.550
3	21:12:13	8.318	9.058	0.348	0.357	477.500	473.300	73.8%	1.088	1.035	54.820
x		8.403	9.048	0.335	0.379	481.700	477.400	71.7%	1.025	1.044	55.340
σ		0.155	0.121	0.018	0.031	4.899	3.618	1.8%	0.065	0.019	0.459
%RSD		1.849	1.342	5.511	8.302	1.017	0.758	2.5	6.377	1.848	0.829

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:11:17	51.890	53.180	65.0%
2	21:11:45	52.150	53.130	65.7%
3	21:12:13	51.200	52.580	68.1%
x		51.750	52.960	66.3%
σ		0.489	0.331	1.6%
%RSD		0.945	0.625	2.5

UD12100-013S 04/25/2019 21:16:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:06	89.5%	64.370	66.310	68.810	46.520	T 2305.000	T 7022.000	T 7171.000	T 7312.000	TM 228800.000
2	21:17:33	91.9%	62.310	66.000	67.130	43.130	T 2271.000	T 6889.000	T 7104.000	T 7221.000	TM 223800.000
3	21:18:00	94.7%	60.660	66.500	66.630	40.550	T 2270.000	T 6813.000	T 7131.000	T 7264.000	TM 221200.000
x		92.0%	62.450	66.270	67.520	43.400	T 2282.000	T 6908.000	T 7135.000	T 7266.000	TM 224600.000
σ		2.6%	1.858	0.251	1.138	2.996	T 19.690	T 105.700	T 33.940	T 45.400	TM 3860.000
%RSD		2.8	2.975	0.378	1.686	6.902	T 0.863	T 1.530	T 0.476	T 0.625	TM 1.718

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:06	T 3285.000	T 308900.000	T 12410.000	4261.000	3380.000	96.6%	TM 6220.000	TM 513.000	234.500	9139.000
2	21:17:33	T 3311.000	T 316200.000	T 12070.000	4227.000	3204.000	96.7%	TM 6004.000	TM 501.200	227.600	10410.000
3	21:18:00	T 3311.000	T 312700.000	T 11820.000	4604.000	3131.000	97.0%	TM 6113.000	TM 507.400	227.000	11080.000
x		T 3302.000	T 312600.000	T 12100.000	4364.000	3238.000	96.8%	TM 6113.000	TM 507.200	229.700	10210.000
σ		T 14.820	T 3665.000	T 296.600	208.300	127.900	0.2%	TM 108.000	TM 5.930	4.158	984.200
%RSD		T 0.449	T 1.173	T 2.451	4.773	3.950	0.2	TM 1.768	TM 1.169	1.810	9.641

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:06	TM 106400.000	TM 1404.000	TM 103900.000	TM 114100.000	219.400	212.500	189.000	185.600	222.200	457.700
2	21:17:33	TM 103400.000	TM 1357.000	TM 101600.000	TM 110900.000	214.800	209.300	187.700	182.100	218.900	436.000
3	21:18:00	TM 102300.000	TM 1334.000	TM 101400.000	TM 110700.000	214.200	207.600	186.500	181.300	216.600	434.200
x		TM 104000.000	TM 1365.000	TM 102300.000	TM 111900.000	216.100	209.800	187.700	183.000	219.200	442.600
σ		TM 2134.000	TM 35.560	TM 1398.000	TM 1919.000	2.835	2.493	1.241	2.299	2.856	13.080
%RSD		TM 2.051	TM 2.605	TM 1.366	TM 1.715	1.312	1.188	0.661	1.257	1.303	2.954

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:06	300.000	285.900	164.400	210.800	6.653	5.748	471.100	211.600	20.510	142.600
2	21:17:33	291.000	275.400	161.700	202.300	7.043	5.511	466.400	205.300	20.290	138.900
3	21:18:00	291.900	271.400	156.600	200.600	7.136	5.530	447.900	198.000	22.630	140.900
x		294.300	277.600	160.900	204.500	6.944	5.597	461.800	205.000	21.140	140.800
σ		4.985	7.516	3.954	5.452	0.256	0.132	12.260	6.802	1.291	1.815
%RSD		1.694	2.708	2.457	2.665	3.686	2.356	2.655	3.318	6.109	1.289

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:06	149.9%	96.290	77.060	105.600	195.000	213.400	212.300	198.400	211.500	70.1%
2	21:17:33	149.5%	91.980	73.420	100.800	183.300	204.300	203.300	189.200	202.700	71.4%
3	21:18:00	146.9%	93.930	74.780	100.900	190.200	203.300	203.000	191.000	202.500	70.1%
x		148.8%	94.070	75.090	102.400	189.500	207.000	206.200	192.900	205.600	70.5%
σ		1.6%	2.160	1.837	2.735	5.886	5.576	5.271	4.883	5.172	0.7%
%RSD		1.1	2.296	2.447	2.669	3.106	2.693	2.556	2.532	2.516	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:17:06	204.700	193.800	37.690	38.310	M 820.400	M 812.800	69.5%	207.700	211.500	269.700
2	21:17:33	196.200	186.400	36.170	36.060	M 794.600	M 787.800	70.7%	199.700	203.500	259.800
3	21:18:00	196.600	187.500	35.890	36.540	M 792.700	M 793.000	69.2%	202.200	205.900	261.200
x		199.200	189.200	36.580	36.970	M 802.600	M 797.900	69.8%	203.200	207.000	263.600
σ		4.825	4.032	0.969	1.182	M 15.490	M 13.180	0.8%	4.077	4.090	5.318
%RSD		2.423	2.131	2.649	3.198	M 1.931	M 1.652	1.1	2.007	1.976	2.018

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:17:06	265.500	266.400	64.5%
2	21:17:33	256.400	256.800	65.4%
3	21:18:00	257.500	258.100	64.3%
x		259.800	260.400	64.8%
σ		4.982	5.223	0.6%
%RSD		1.918	2.005	0.9

UD12100-013SD 04/25/2019 21:22:27

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:53	95.2%	67.220	72.100	73.170	69.830	T 2354.000	T 6049.000	T 6215.000	T 6298.000	TM 177200.000
2	21:23:20	93.0%	70.180	75.430	75.730	80.850	T 2442.000	T 6229.000	T 6499.000	T 6598.000	TM 183000.000
3	21:23:47	91.3%	71.250	74.870	76.470	82.520	T 2300.000	T 5892.000	T 5922.000	T 6125.000	TM 176500.000
x		93.2%	69.550	74.130	75.120	77.730	T 2365.000	T 6056.000	T 6212.000	T 6341.000	TM 178900.000
σ		1.9%	2.084	1.780	1.734	6.897	T 71.980	T 168.900	T 288.400	T 239.400	TM 3561.000
%RSD		2.1	2.996	2.401	2.308	8.873	T 3.043	T 2.789	T 4.643	T 3.775	TM 1.991

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:53	T 3562.000	T 322200.000	T 9985.000	4543.000	3022.000	93.8%	M 4877.000	T 447.900	237.700	10680.000
2	21:23:20	T 3544.000	T 323400.000	T 10410.000	4574.000	3225.000	93.6%	TM 5344.000	T 466.700	247.400	10870.000
3	21:23:47	T 3315.000	T 306900.000	T 10130.000	3995.000	3184.000	96.8%	M 4816.000	T 447.700	231.200	9420.000
x		T 3473.000	T 317500.000	T 10170.000	4371.000	3144.000	94.7%	TM 5013.000	T 454.100	238.700	10320.000
σ		T 138.000	T 9228.000	T 215.300	325.900	107.500	1.8%	TM 288.800	T 10.940	8.155	788.700
%RSD		T 3.972	T 2.907	T 2.117	7.456	3.420	1.9	TM 5.762	T 2.409	3.416	7.640

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:53	T 86670.000	TM 930.100	T 83240.000	T 90840.000	212.000	215.400	196.000	185.000	213.100	410.100
2	21:23:20	T 89240.000	TM 976.200	T 86080.000	T 93570.000	220.000	217.300	198.700	191.000	219.500	425.300
3	21:23:47	T 85260.000	TM 952.100	T 83740.000	T 90950.000	211.300	210.200	189.800	184.200	216.300	415.300
x		T 87060.000	TM 952.800	T 84350.000	T 91790.000	214.400	214.300	194.800	186.700	216.300	416.900
σ		T 2021.000	TM 23.040	T 1514.000	T 1544.000	4.802	3.661	4.561	3.695	3.236	7.717
%RSD		T 2.322	TM 2.418	T 1.795	T 1.682	2.239	1.708	2.341	1.978	1.496	1.851

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:53	282.300	264.500	164.600	215.200	6.064	5.187	488.700	205.400	16.140	146.900
2	21:23:20	287.300	270.200	168.400	214.800	6.637	5.168	495.700	210.900	14.480	149.700
3	21:23:47	286.500	270.000	168.000	210.700	6.843	4.815	491.400	204.400	15.950	145.500
x		285.400	268.200	167.000	213.500	6.515	5.057	492.000	206.900	15.520	147.400
σ		2.691	3.244	2.036	2.492	0.404	0.209	3.513	3.502	0.906	2.152
%RSD		0.943	1.210	1.219	1.167	6.202	4.141	0.714	1.693	5.834	1.460

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:53	134.8%	106.800	87.370	115.200	194.000	212.400	210.700	197.000	211.200	68.5%
2	21:23:20	137.0%	108.000	89.140	117.300	197.500	219.700	218.400	203.400	217.200	68.6%
3	21:23:47	142.3%	105.200	86.370	112.500	192.500	208.500	208.000	194.700	207.600	72.7%
x		138.1%	106.600	87.630	115.000	194.700	213.500	212.400	198.400	212.000	69.9%
σ		3.8%	1.364	1.402	2.368	2.575	5.719	5.396	4.497	4.847	2.4%
%RSD		2.8	1.279	1.600	2.059	1.323	2.679	2.541	2.267	2.286	3.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:22:53	205.500	195.900	49.030	49.510	M 711.800	M 710.000	68.8%	204.400	207.800	256.300
2	21:23:20	211.800	204.600	50.830	51.440	M 731.600	M 717.200	67.9%	213.700	218.500	267.500
3	21:23:47	201.600	191.400	48.730	49.510	M 693.000	M 687.600	72.5%	201.300	206.100	256.600
x		206.300	197.300	49.530	50.160	M 712.100	M 704.900	69.7%	206.500	210.800	260.100
σ		5.159	6.734	1.134	1.113	M 19.320	M 15.460	2.5%	6.465	6.753	6.396
%RSD		2.501	3.413	2.290	2.220	M 2.713	M 2.194	3.5	3.131	3.204	2.459

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:22:53	253.300	253.200	62.5%
2	21:23:20	265.200	265.300	61.8%
3	21:23:47	251.700	252.800	67.0%
x		256.700	257.100	63.8%
σ		7.357	7.063	2.8%
%RSD		2.866	2.747	4.4

UD12100-013L(5) 04/25/2019 21:28:13

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:41	93.0%	0.566	1.549	1.727	50.960	38.560	T 1446.000	1476.000	1465.000	TM 28290.000
2	21:29:09	92.6%	0.592	1.393	1.462	64.380	30.270	T 1451.000	1470.000	1486.000	TM 27590.000
3	21:29:36	96.2%	0.443	0.903	1.485	47.210	40.060	T 1408.000	1476.000	1452.000	TM 26440.000
x		93.9%	0.534	1.281	1.558	54.190	36.300	T 1435.000	1474.000	1468.000	TM 27440.000
σ		2.0%	0.080	0.337	0.147	9.029	5.270	T 23.740	3.787	17.300	TM 936.500
%RSD		2.1	14.890	26.300	9.438	16.660	14.520	T 1.655	0.257	1.179	TM 3.413

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:41	T 658.800	T 70920.000	T 1573.000	356.900	202.600	88.5%	M 890.000	55.440	9.525	2156.000
2	21:29:09	T 636.800	T 69660.000	T 1492.000	328.200	192.900	87.0%	M 883.700	56.950	9.412	1728.000
3	21:29:36	T 660.600	T 70610.000	T 1500.000	388.000	186.800	86.4%	M 879.100	55.120	9.432	2322.000
x		T 652.100	T 70390.000	T 1522.000	357.700	194.100	87.3%	M 884.300	55.840	9.456	2068.000
σ		T 13.250	T 658.600	T 44.470	29.900	7.973	1.1%	M 5.515	0.978	0.060	306.000
%RSD		T 2.032	T 0.936	T 2.922	8.360	4.108	1.2	M 0.624	1.751	0.639	14.790

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:41	T 20080.000	167.500	T 20150.000	T 20070.000	5.253	5.628	8.167	8.492	9.381	38.480
2	21:29:09	T 20230.000	168.700	T 20000.000	T 20460.000	5.390	5.663	6.921	8.636	9.335	39.290
3	21:29:36	T 19620.000	164.100	T 19690.000	T 20080.000	5.264	5.574	9.471	8.369	9.180	37.350
x		T 19980.000	166.800	T 19950.000	T 20200.000	5.302	5.622	8.186	8.499	9.299	38.370
σ		T 319.600	2.369	T 232.700	T 224.200	0.076	0.045	1.275	0.134	0.105	0.974
%RSD		T 1.600	1.421	T 1.167	T 1.110	1.433	0.794	15.580	1.576	1.133	2.538

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:41	36.800	34.000	0.769	1.848	1.524	2.051	-1.317	-0.223	3.254	6.560
2	21:29:09	35.700	32.680	0.680	1.375	1.346	0.869	-2.032	-0.325	-0.157	6.557
3	21:29:36	36.340	32.630	1.127	2.094	1.456	2.041	3.142	1.113	0.747	6.516
x		36.280	33.110	0.859	1.773	1.442	1.654	-0.069	0.188	1.281	6.545
σ		0.552	0.775	0.236	0.365	0.090	0.679	2.804	0.803	1.767	0.024
%RSD		1.520	2.341	27.520	20.610	6.213	41.090	4054.000	426.000	137.900	0.374

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:41	89.3%	0.254	0.235	0.268	2.139	0.055	0.053	0.169	0.146	71.7%
2	21:29:09	92.1%	0.241	0.297	0.247	2.059	0.056	0.051	0.160	0.183	73.1%
3	21:29:36	89.5%	0.222	0.282	0.254	1.742	0.064	0.062	0.153	0.120	71.6%
x		90.3%	0.239	0.272	0.256	1.980	0.058	0.055	0.161	0.150	72.1%
σ		1.5%	0.016	0.033	0.011	0.210	0.005	0.006	0.008	0.032	0.9%
%RSD		1.7	6.659	12.000	4.110	10.600	8.849	10.430	4.930	21.250	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:28:41	1.503	1.689	0.032	0.059	93.030	90.810	69.4%	0.349	0.316	11.070
2	21:29:09	1.480	1.694	0.036	0.052	88.900	89.350	72.0%	0.325	0.322	10.810
3	21:29:36	1.475	1.653	0.040	0.027	89.540	88.220	69.5%	0.335	0.323	10.770
x		1.486	1.679	0.036	0.046	90.490	89.460	70.3%	0.336	0.321	10.880
σ		0.015	0.022	0.004	0.017	2.221	1.296	1.5%	0.012	0.004	0.165
%RSD		0.997	1.320	11.180	36.550	2.454	1.449	2.1	3.593	1.179	1.515

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:28:41	10.290	10.490	66.5%
2	21:29:09	9.844	10.310	68.4%
3	21:29:36	9.963	10.270	66.3%
x		10.030	10.350	67.1%
σ		0.230	0.115	1.2%
%RSD		2.296	1.115	1.7

UD12100-013A 04/25/2019 21:34:02

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:29	90.9%	73.230	75.990	76.640	107.800	T 2037.000	T 6013.000	T 6169.000	T 6229.000	TM 133500.000
2	21:34:56	96.4%	70.770	75.860	74.770	103.100	T 2103.000	T 6029.000	T 6145.000	T 6196.000	TM 124500.000
3	21:35:23	94.0%	70.720	74.790	74.360	106.800	T 2113.000	T 6064.000	T 6101.000	T 6113.000	TM 130600.000
x		93.8%	71.570	75.550	75.260	105.900	T 2085.000	T 6035.000	T 6138.000	T 6179.000	TM 129500.000
σ		2.8%	1.436	0.661	1.214	2.442	T 41.260	T 25.980	T 34.170	T 59.790	TM 4612.000
%RSD		3.0	2.007	0.875	1.614	2.305	T 1.979	T 0.430	T 0.557	T 0.968	TM 3.561

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:29	T 4338.000	T 269800.000	T 9282.000	3450.000	2863.000	97.2%	M 4123.000	T 418.900	209.100	8542.000
2	21:34:56	T 4453.000	T 280900.000	T 8907.000	3778.000	2684.000	96.3%	M 4104.000	T 416.700	212.900	8978.000
3	21:35:23	T 4512.000	T 280000.000	T 9141.000	3593.000	2769.000	96.0%	M 4095.000	T 423.000	218.300	8740.000
x		T 4434.000	T 276900.000	T 9110.000	3607.000	2772.000	96.5%	M 4108.000	T 419.500	213.500	8753.000
σ		T 88.470	T 6170.000	T 189.600	164.200	89.760	0.6%	M 14.320	T 3.210	4.645	218.100
%RSD		T 1.995	T 2.228	T 2.081	4.554	3.238	0.6	M 0.349	T 0.765	2.176	2.492

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:29	T 81640.000	TM 858.400	T 80970.000	T 86840.000	186.500	188.900	171.600	170.100	199.700	385.300
2	21:34:56	T 82200.000	TM 865.100	T 80280.000	T 85650.000	188.000	185.700	171.000	173.400	199.900	378.600
3	21:35:23	T 82890.000	TM 874.000	T 80280.000	T 87540.000	195.000	192.700	172.500	171.800	201.800	379.100
x		T 82240.000	TM 865.800	T 80510.000	T 86680.000	189.800	189.100	171.700	171.700	200.400	381.000
σ		T 623.800	TM 7.789	T 397.400	T 952.300	4.492	3.517	0.725	1.638	1.168	3.742
%RSD		T 0.759	TM 0.900	T 0.494	T 1.099	2.366	1.859	0.422	0.954	0.583	0.982

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:29	255.900	244.200	163.700	205.400	3.497	2.543	475.300	203.200	11.320	127.400
2	21:34:56	252.400	241.500	165.100	206.300	3.627	2.804	483.800	206.100	12.470	127.100
3	21:35:23	255.000	244.000	167.000	200.600	3.572	2.562	490.400	207.000	14.480	127.500
x		254.400	243.200	165.300	204.100	3.565	2.636	483.200	205.400	12.760	127.300
σ		1.832	1.518	1.664	3.047	0.066	0.146	7.590	1.986	1.600	0.205
%RSD		0.720	0.624	1.007	1.493	1.837	5.531	1.571	0.967	12.540	0.161

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:29	141.1%	130.800	105.400	140.600	172.600	194.400	193.400	181.500	193.600	70.4%
2	21:34:56	139.2%	129.400	106.300	139.700	175.900	193.200	193.500	180.400	190.400	69.8%
3	21:35:23	140.1%	130.200	107.500	142.100	174.200	195.100	192.900	180.500	191.500	70.7%
x		140.1%	130.100	106.400	140.800	174.200	194.200	193.300	180.800	191.800	70.3%
σ		1.0%	0.742	1.066	1.234	1.658	0.972	0.311	0.603	1.584	0.5%
%RSD		0.7	0.570	1.002	0.877	0.952	0.500	0.161	0.334	0.826	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:34:29	209.500	208.000	197.500	199.200	M 651.400	M 645.000	71.0%	186.200	189.200	236.500
2	21:34:56	205.600	206.700	193.500	194.500	M 647.100	M 636.800	69.7%	185.400	189.400	237.000
3	21:35:23	206.500	206.700	194.100	193.700	M 637.700	M 631.300	70.9%	185.500	188.400	234.600
x		207.200	207.100	195.100	195.800	M 645.400	M 637.700	70.6%	185.700	189.000	236.000
σ		2.037	0.770	2.145	2.975	M 6.988	M 6.927	0.7%	0.419	0.504	1.267
%RSD		0.983	0.372	1.100	1.519	M 1.083	M 1.086	1.0	0.226	0.267	0.537

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:34:29	232.500	233.300	64.3%
2	21:34:56	232.900	233.700	63.2%
3	21:35:23	231.600	231.700	64.7%
x		232.300	232.900	64.1%
σ		0.682	1.059	0.8%
%RSD		0.293	0.455	1.2

UQ13221-001TC 04/25/2019 21:39:51

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:18	98.9%	0.073	15.760	16.340	81.430	T 880.600	13.990	13.040	13.290	18.590
2	21:40:45	100.2%	0.040	18.170	15.510	64.750	T 898.600	13.920	13.920	13.780	17.510
3	21:41:12	T 118.4%	0.023	16.310	16.100	68.190	T 928.300	13.900	12.740	13.430	16.590
x		T 105.8%	0.045	16.750	15.980	71.460	T 902.500	13.940	13.230	13.500	17.570
σ		T 10.9%	0.026	1.264	0.425	8.804	T 24.090	0.049	0.616	0.254	1.003
%RSD		T 10.3	56.160	7.549	2.658	12.320	T 2.669	0.353	4.656	1.881	5.707

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:18	52.310	T 917000.000	17.940	95.910	74.600	89.2%	0.393	0.238	1.834	19560.000
2	21:40:45	T 76.970	T 916000.000	19.160	83.220	76.300	89.1%	0.198	-1.584	1.823	21250.000
3	21:41:12	55.920	T 923400.000	5.284	89.870	64.630	89.6%	0.491	-0.238	2.180	23920.000
x		T 61.730	T 918800.000	14.130	89.660	71.850	89.3%	0.361	-0.528	1.946	21580.000
σ		T 13.320	T 4015.000	7.681	6.348	6.303	0.3%	0.149	0.945	0.203	2196.000
%RSD		T 21.580	T 0.437	54.380	7.079	8.773	0.3	41.430	179.100	10.410	10.180

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:18	65.200	0.433	28.430	2.615	-0.004	0.042	0.218	0.059	0.140	2.457
2	21:40:45	64.270	0.363	27.280	5.701	-0.016	0.079	0.255	0.111	0.131	2.444
3	21:41:12	70.340	0.392	30.670	9.382	-0.012	0.047	0.223	0.081	0.155	2.346
x		66.600	0.396	28.790	5.899	-0.010	0.056	0.232	0.084	0.142	2.416
σ		3.268	0.036	1.728	3.388	0.006	0.021	0.020	0.026	0.012	0.061
%RSD		4.906	8.972	6.003	57.420	59.360	36.690	8.827	31.410	8.465	2.506

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:18	2.836	2.556	-0.443	0.865	116.100	117.200	-0.355	-0.099	-1.420	0.328
2	21:40:45	2.938	2.487	-0.699	0.918	116.500	119.000	2.107	0.594	-4.129	0.319
3	21:41:12	2.108	2.345	-0.104	0.476	117.100	117.100	1.013	0.225	-0.554	0.319
x		2.627	2.463	-0.415	0.753	116.600	117.700	0.922	0.240	-2.034	0.322
σ		0.452	0.108	0.298	0.241	0.498	1.053	1.233	0.347	1.865	0.005
%RSD		17.210	4.376	71.810	32.050	0.427	0.894	133.800	144.600	91.660	1.544

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:18	78.4%	0.246	0.325	0.254	-1.003	0.021	0.024	0.015	-0.024	73.3%
2	21:40:45	80.0%	0.201	0.179	0.185	-0.242	0.020	0.012	-0.001	0.013	73.9%
3	21:41:12	79.0%	0.203	0.236	0.174	-0.082	0.017	0.030	0.015	0.025	73.5%
x		79.1%	0.217	0.247	0.204	-0.442	0.019	0.022	0.010	0.005	73.6%
σ		0.8%	0.025	0.074	0.043	0.492	0.002	0.009	0.009	0.025	0.3%
%RSD		1.0	11.720	30.000	21.290	111.200	12.390	41.280	94.090	537.100	0.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:40:18	4.282	5.857	0.279	0.224	5.379	5.368	71.4%	0.128	0.116	0.021
2	21:40:45	4.094	5.807	0.308	0.272	5.651	5.190	72.1%	0.118	0.124	0.036
3	21:41:12	4.025	5.958	0.287	0.305	5.819	5.133	71.2%	0.101	0.114	0.032
x		4.134	5.874	0.291	0.267	5.616	5.230	71.6%	0.116	0.118	0.030
σ		0.133	0.077	0.015	0.041	0.222	0.123	0.5%	0.014	0.005	0.008
%RSD		3.212	1.312	5.028	15.290	3.947	2.344	0.6	12.030	4.661	26.700

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:40:18	0.025	0.023	67.8%
2	21:40:45	0.034	0.027	68.6%
3	21:41:12	0.047	0.031	66.9%
x		0.035	0.027	67.8%
σ		0.011	0.004	0.9%
%RSD		31.610	14.390	1.3

UQ13221-002TC 04/25/2019 21:45:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:05	99.7%	205.500	218.100	210.200	79.510	┬3114.000	┬2029.000	2081.000	2049.000	204.700
2	21:46:33	┬120.3%	193.400	212.100	205.700	74.220	┬3214.000	┬2039.000	2084.000	2088.000	174.500
3	21:47:00	┬116.7%	199.000	226.300	212.000	77.220	┬3209.000	┬2032.000	2082.000	2094.000	174.400
x		┬112.2%	199.300	218.800	209.300	76.980	┬3179.000	┬2033.000	2083.000	2077.000	184.500
σ		┬11.0%	6.057	7.120	3.243	2.655	┬56.190	┬5.058	1.745	24.410	17.460
%RSD		┬9.8	3.039	3.254	1.550	3.449	┬1.768	┬0.249	0.084	1.175	9.462

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:05	┬2051.000	┬908000.000	┬1835.000	2377.000	1941.000	90.3%	213.500	211.500	201.400	20750.000
2	21:46:33	┬2194.000	┬950200.000	┬1579.000	2443.000	1618.000	88.5%	215.800	215.600	207.500	24490.000
3	21:47:00	┬2143.000	┬955900.000	┬1673.000	2429.000	1680.000	90.2%	208.200	209.000	206.500	23070.000
x		┬2129.000	┬938000.000	┬1696.000	2416.000	1746.000	89.7%	212.500	212.000	205.100	22770.000
σ		┬72.770	┬26180.000	┬129.600	34.630	171.300	1.0%	3.877	3.334	3.281	1890.000
%RSD		┬3.418	┬2.791	┬7.641	1.433	9.807	1.1	1.824	1.572	1.599	8.299

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:05	2384.000	202.200	┬2149.000	2078.000	193.100	192.100	202.600	201.600	189.200	209.400
2	21:46:33	2333.000	197.800	┬2142.000	2101.000	199.600	200.300	202.200	205.900	195.100	203.600
3	21:47:00	2359.000	200.400	┬2160.000	2101.000	197.300	198.500	201.500	204.000	193.600	203.300
x		2359.000	200.100	┬2150.000	2094.000	196.600	197.000	202.100	203.800	192.600	205.400
σ		25.150	2.216	┬9.335	13.300	3.305	4.336	0.533	2.113	3.070	3.418
%RSD		1.066	1.107	┬0.434	0.635	1.681	2.201	0.264	1.037	1.594	1.664

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:05	189.400	186.500	178.900	199.300	113.800	112.800	773.600	192.400	8.535	207.000
2	21:46:33	184.200	182.500	178.700	191.900	115.800	113.900	755.600	189.500	4.889	208.000
3	21:47:00	188.900	181.700	181.000	187.200	111.700	112.900	763.100	189.100	7.125	209.000
x		187.500	183.600	179.500	192.800	113.800	113.200	764.100	190.300	6.849	208.000
σ		2.843	2.573	1.262	6.070	2.043	0.607	9.063	1.805	1.839	1.028
%RSD		1.516	1.401	0.703	3.148	1.796	0.536	1.186	0.948	26.840	0.494

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:05	77.9%	208.900	207.500	208.900	199.400	210.300	210.800	200.100	199.300	73.0%
2	21:46:33	78.7%	206.100	204.000	205.800	196.100	208.300	209.100	195.200	196.400	72.9%
3	21:47:00	79.1%	207.900	204.200	208.300	195.000	209.000	208.900	196.900	195.800	74.2%
x		78.6%	207.600	205.200	207.700	196.800	209.200	209.600	197.400	197.200	73.4%
σ		0.6%	1.402	1.932	1.671	2.293	1.044	1.033	2.521	1.882	0.7%
%RSD		0.7	0.675	0.941	0.805	1.165	0.499	0.493	1.277	0.954	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:46:05	212.500	214.900	202.100	207.300	213.100	211.400	71.9%	196.600	200.100	199.100
2	21:46:33	212.200	213.700	197.900	202.900	215.900	214.200	70.7%	196.800	199.500	198.300
3	21:47:00	211.400	213.800	198.700	203.700	214.600	212.800	72.6%	195.700	200.200	197.300
x		212.100	214.100	199.600	204.600	214.500	212.800	71.7%	196.300	199.900	198.200
σ		0.560	0.687	2.214	2.347	1.358	1.410	0.9%	0.592	0.400	0.895
%RSD		0.264	0.321	1.109	1.147	0.633	0.662	1.3	0.301	0.200	0.452

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:46:05	199.200	198.400	67.2%
2	21:46:33	199.900	197.600	65.9%
3	21:47:00	197.100	196.100	66.9%
x		198.700	197.400	66.7%
σ		1.454	1.148	0.7%
%RSD		0.732	0.582	1.1

UC27001-040TC 04/25/2019 21:51:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:53	T117.5%	0.036	30.250	30.750	64.920	T2685.000	360.700	356.600	357.300	T158.700
2	21:52:20	102.9%	0.019	31.480	30.800	61.080	T2721.000	367.000	353.000	356.400	171.600
3	21:52:48	T116.4%	0.056	30.840	30.780	64.540	T2699.000	358.500	349.600	347.200	T155.300
x		T112.3%	0.037	30.860	30.780	63.510	T2702.000	362.100	353.100	353.600	T161.900
σ		T8.1%	0.018	0.611	0.024	2.117	T18.140	4.380	3.486	5.581	T8.600
%RSD		T7.2	49.480	1.982	0.079	3.333	T0.671	1.210	0.987	1.578	T5.312

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:53	T1173.000	T911800.000	43.170	430.700	309.100	89.6%	0.605	0.094	2.520	23240.000
2	21:52:20	T1113.000	T910000.000	60.490	403.600	364.000	90.9%	0.831	-1.231	2.103	20570.000
3	21:52:48	T1095.000	T899600.000	42.370	425.700	319.900	90.9%	0.619	-0.562	2.216	21230.000
x		T1127.000	T907100.000	48.680	420.000	331.000	90.5%	0.685	-0.567	2.280	21680.000
σ		T40.730	T6582.000	10.240	14.390	29.060	0.8%	0.127	0.662	0.216	1388.000
%RSD		T3.614	T0.726	21.040	3.425	8.781	0.9	18.540	116.900	9.451	6.403

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:53	103.900	1.684	64.240	43.740	0.010	0.175	0.451	0.109	0.157	4.008
2	21:52:20	98.140	1.707	63.060	38.580	-0.001	0.189	0.238	0.106	0.165	4.678
3	21:52:48	97.970	1.697	60.900	35.960	0.001	0.239	0.293	0.108	0.158	4.100
x		99.990	1.696	62.730	39.430	0.003	0.201	0.327	0.108	0.160	4.262
σ		3.354	0.011	1.694	3.960	0.006	0.034	0.111	0.001	0.004	0.363
%RSD		3.354	0.659	2.701	10.040	177.600	16.780	33.840	1.362	2.605	8.526

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:53	4.973	4.518	-0.098	0.871	92.010	96.080	1.132	0.251	0.111	2.644
2	21:52:20	4.460	4.666	-1.041	0.830	92.640	93.970	1.682	0.431	-1.531	2.648
3	21:52:48	4.455	4.626	-0.174	1.002	92.470	93.040	3.402	0.820	-0.311	2.650
x		4.629	4.603	-0.438	0.901	92.370	94.360	2.072	0.501	-0.577	2.647
σ		0.298	0.077	0.524	0.090	0.323	1.556	1.184	0.291	0.853	0.003
%RSD		6.432	1.662	119.700	9.944	0.350	1.649	57.160	58.020	147.800	0.128

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:53	77.4%	0.141	0.180	0.152	0.769	0.021	0.017	0.015	0.014	72.9%
2	21:52:20	79.2%	0.127	0.202	0.137	1.419	0.012	0.014	0.010	-0.003	74.5%
3	21:52:48	80.7%	0.108	0.102	0.105	-1.194	0.035	0.020	0.066	0.055	76.1%
x		79.1%	0.126	0.161	0.131	0.331	0.023	0.017	0.030	0.022	74.5%
σ		1.7%	0.017	0.052	0.024	1.360	0.012	0.003	0.031	0.030	1.6%
%RSD		2.1	13.400	32.490	17.980	410.500	50.730	15.890	101.700	133.400	2.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:51:53	3.869	5.410	0.232	0.221	15.580	15.360	70.6%	0.139	0.123	0.052
2	21:52:20	3.815	5.740	0.217	0.260	15.940	15.560	72.5%	0.125	0.124	0.043
3	21:52:48	3.843	5.571	0.200	0.253	15.900	15.470	74.2%	0.093	0.112	0.051
x		3.842	5.574	0.216	0.245	15.800	15.460	72.5%	0.119	0.120	0.049
σ		0.027	0.165	0.016	0.021	0.198	0.102	1.8%	0.024	0.007	0.005
%RSD		0.702	2.966	7.438	8.538	1.251	0.660	2.5	19.970	5.729	10.270

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:51:53	0.065	0.059	65.4%
2	21:52:20	0.051	0.050	67.9%
3	21:52:48	0.066	0.059	69.2%
x		0.061	0.056	67.5%
σ		0.009	0.005	1.9%
%RSD		14.460	9.260	2.9

UC27001-041TC 04/25/2019 21:57:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:41	102.5%	0.006	66.210	63.470	63.030	501.700	104.400	102.300	98.920	3.482
2	21:58:08	105.5%	0.022	65.340	62.080	57.070	512.900	104.000	104.200	102.100	3.479
3	21:58:35	109.2%	0.017	64.390	61.910	57.090	┬521.300	102.900	103.300	100.800	3.406
x		105.7%	0.015	65.310	62.490	59.070	┬512.000	103.800	103.300	100.600	3.456
σ		3.3%	0.008	0.913	0.852	3.433	┬9.811	0.757	0.957	1.586	0.043
%RSD		3.2	55.430	1.398	1.364	5.812	┬1.916	0.729	0.927	1.576	1.236

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:41	┬432.000	┬917300.000	┬1153.000	584.600	465.600	92.0%	-0.103	0.223	1.569	20480.000
2	21:58:08	421.000	┬930000.000	┬1146.000	557.700	463.900	91.2%	-0.049	-1.124	1.591	20730.000
3	21:58:35	445.500	┬958000.000	┬1133.000	577.600	448.900	91.4%	-0.020	0.682	2.214	23450.000
x		┬432.800	┬935100.000	┬1144.000	573.300	459.500	91.5%	-0.057	-0.073	1.791	21550.000
σ		┬12.260	┬20800.000	┬10.280	13.960	9.171	0.4%	0.042	0.939	0.366	1646.000
%RSD		┬2.832	┬2.224	┬0.899	2.436	1.996	0.5	73.700	1284.000	20.440	7.635

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:41	50.590	33.440	11.390	-4.521	0.124	0.053	-0.077	0.202	0.223	1.945
2	21:58:08	52.970	34.040	14.410	-5.112	0.125	0.044	-0.162	0.183	0.268	2.011
3	21:58:35	55.540	33.600	15.130	2.953	0.098	0.036	0.551	0.205	0.258	1.679
x		53.030	33.690	13.640	-2.226	0.116	0.045	0.104	0.197	0.250	1.878
σ		2.480	0.313	1.986	4.495	0.015	0.009	0.389	0.012	0.024	0.176
%RSD		4.677	0.928	14.560	201.900	13.140	19.400	374.100	6.080	9.572	9.376

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:41	1.550	1.862	-0.911	1.412	109.900	109.600	1.405	0.378	-2.975	14.880
2	21:58:08	2.249	1.769	-0.674	0.665	108.900	111.000	0.460	0.126	-2.079	15.000
3	21:58:35	1.931	1.962	-0.802	1.607	112.700	107.100	3.353	0.842	-2.189	14.980
x		1.910	1.865	-0.796	1.228	110.500	109.200	1.739	0.449	-2.414	14.950
σ		0.350	0.097	0.119	0.497	1.993	1.952	1.475	0.363	0.489	0.066
%RSD		18.310	5.180	14.890	40.510	1.804	1.787	84.820	80.930	20.230	0.438

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:41	79.6%	0.157	0.120	0.104	0.597	0.008	0.008	0.005	-0.038	75.1%
2	21:58:08	80.0%	0.042	0.103	0.087	-0.246	0.005	0.005	0.020	0.002	75.0%
3	21:58:35	78.8%	0.087	0.133	0.069	0.859	0.004	0.003	0.010	0.018	74.4%
x		79.5%	0.095	0.119	0.087	0.403	0.006	0.005	0.012	-0.006	74.8%
σ		0.7%	0.058	0.015	0.018	0.578	0.002	0.003	0.008	0.029	0.4%
%RSD		0.8	60.810	12.390	20.470	143.200	39.640	54.420	67.790	465.900	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	21:57:41	4.044	5.546	0.191	0.180	3.738	3.731	72.4%	0.051	0.049	0.026
2	21:58:08	3.946	5.558	0.199	0.249	4.408	3.909	72.1%	0.055	0.058	0.028
3	21:58:35	3.990	5.230	0.214	0.229	4.225	3.799	72.5%	0.039	0.047	0.028
x		3.993	5.444	0.201	0.219	4.124	3.813	72.3%	0.048	0.052	0.027
σ		0.049	0.186	0.012	0.035	0.346	0.090	0.2%	0.008	0.006	0.001
%RSD		1.229	3.416	5.862	16.200	8.389	2.365	0.3	17.130	11.320	4.181

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	21:57:41	0.018	0.020	68.3%
2	21:58:08	0.012	0.022	68.2%
3	21:58:35	0.012	0.020	67.7%
x		0.014	0.021	68.0%
σ		0.004	0.001	0.3%
%RSD		26.770	6.415	0.5

UC27001-041STC 04/25/2019 22:03:01

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	105.7%	201.600	277.600	253.600	75.200	T 2796.000	T 2149.000	2201.000	2183.000	187.500
2	22:03:55	108.5%	193.500	260.900	254.100	57.650	T 2885.000	T 2117.000	2191.000	2181.000	187.800
3	22:04:22	104.2%	207.700	282.100	256.800	76.820	T 2854.000	T 2147.000	2223.000	2131.000	187.000
x		106.2%	200.900	273.500	254.800	69.890	T 2845.000	T 2138.000	2205.000	2165.000	187.400
σ		2.2%	7.080	11.140	1.721	10.630	T 45.130	T 17.680	16.520	29.230	0.386
%RSD		2.1	3.524	4.071	0.675	15.210	T 1.586	T 0.827	0.749	1.350	0.206

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	T 2485.000	T 949000.000	T 3010.000	2955.000	2320.000	92.6%	212.000	208.900	203.300	22310.000
2	22:03:55	T 2499.000	T 937600.000	T 3003.000	2926.000	2256.000	93.3%	213.100	211.200	205.700	24640.000
3	22:04:22	T 2388.000	T 934800.000	T 3067.000	2954.000	2389.000	92.4%	211.200	213.200	202.200	20560.000
x		T 2457.000	T 940500.000	T 3027.000	2945.000	2321.000	92.8%	212.100	211.100	203.700	22500.000
σ		T 60.190	T 7555.000	T 35.190	16.330	66.500	0.5%	0.968	2.159	1.806	2045.000
%RSD		T 2.449	T 0.803	T 1.163	0.555	2.865	0.5	0.457	1.023	0.887	9.089

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	2359.000	235.600	T 2112.000	2089.000	199.800	197.600	204.300	206.100	191.700	209.800
2	22:03:55	2341.000	237.000	T 2139.000	2102.000	197.000	195.600	206.400	203.000	192.400	207.700
3	22:04:22	2367.000	241.300	T 2152.000	2111.000	199.100	197.700	203.000	205.300	198.400	209.000
x		2356.000	238.000	T 2134.000	2100.000	198.600	196.900	204.600	204.800	194.200	208.800
σ		13.090	2.954	T 20.270	11.050	1.492	1.191	1.733	1.584	3.646	1.049
%RSD		0.556	1.241	T 0.950	0.526	0.751	0.605	0.847	0.773	1.878	0.503

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	186.600	185.400	178.900	203.100	97.610	96.920	771.400	194.900	6.083	225.100
2	22:03:55	185.100	184.100	176.300	194.200	98.170	100.400	794.200	198.200	4.523	226.400
3	22:04:22	191.700	191.000	186.000	197.400	99.840	102.400	769.800	190.300	2.829	226.000
x		187.800	186.800	180.400	198.200	98.540	99.920	778.400	194.400	4.478	225.800
σ		3.437	3.667	5.013	4.512	1.157	2.775	13.650	3.965	1.628	0.629
%RSD		1.830	1.963	2.779	2.277	1.174	2.778	1.753	2.039	36.350	0.279

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	79.3%	210.600	205.100	209.000	202.000	213.600	211.900	200.900	200.800	73.3%
2	22:03:55	80.3%	211.600	209.600	211.300	203.900	211.700	210.300	199.200	198.700	75.1%
3	22:04:22	82.5%	210.600	207.100	210.600	201.000	212.800	211.300	204.000	201.100	77.5%
x		80.7%	210.900	207.300	210.300	202.300	212.700	211.200	201.400	200.200	75.3%
σ		1.6%	0.587	2.282	1.160	1.454	0.970	0.795	2.435	1.332	2.1%
%RSD		2.0	0.278	1.101	0.551	0.719	0.456	0.376	1.209	0.665	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:03:28	215.100	217.300	201.200	206.800	216.800	214.000	72.0%	199.600	202.800	202.000
2	22:03:55	214.400	215.400	201.200	206.500	214.900	212.500	73.3%	199.500	202.400	201.400
3	22:04:22	214.800	218.000	204.000	210.200	212.500	211.800	75.3%	201.200	204.100	202.400
x		214.800	216.900	202.100	207.800	214.800	212.800	73.5%	200.100	203.100	201.900
σ		0.316	1.369	1.620	2.053	2.148	1.121	1.7%	0.982	0.863	0.527
%RSD		0.147	0.631	0.802	0.988	1.000	0.527	2.3	0.491	0.425	0.261

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:03:28	202.700	200.600	66.8%
2	22:03:55	200.800	200.100	67.9%
3	22:04:22	202.800	201.300	70.9%
x		202.100	200.600	68.5%
σ		1.125	0.598	2.1%
%RSD		0.556	0.298	3.1

CCV MW10994 04/25/2019 22:08:49 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:15	90.9%	300.600	293.300	286.900	25.890	┬64640.000	┬59120.000	┬60480.000	┬60610.000	301.900
2	22:09:42	90.0%	312.500	297.600	294.100	24.980	┬64870.000	┬60900.000	┬60330.000	┬60420.000	297.100
3	22:10:09	92.2%	310.400	301.300	296.200	32.810	┬65510.000	┬60890.000	┬61640.000	┬61230.000	287.500
x		91.0%	102.598%	99.124%	97.468%	27.890	┬108.341%	┬60300.000	┬60820.000	┬101.256%	98.503%
σ		1.1%	n/a	n/a	n/a	4.278	┬n/a	┬1026.000	┬714.200	┬n/a	n/a
%RSD		1.2	2.064	1.350	1.673	15.340	┬0.690	┬1.702	┬1.174	┬0.693	2.489

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:15	┬3316.000	┬8143.000	┬57070.000	62920.000	┬57070.000	86.7%	314.000	316.600	296.300	703.300
2	22:09:42	┬3213.000	7249.000	┬58960.000	63440.000	┬58370.000	88.3%	309.400	312.900	294.800	947.600
3	22:10:09	┬3276.000	7098.000	┬57340.000	63060.000	┬57580.000	87.6%	314.200	315.000	298.500	1839.000
x		┬108.946%	┬7497.000	┬96.321%	63140.000	┬96.121%	87.5%	104.177%	104.940%	98.852%	1163.000
σ		┬n/a	┬565.000	┬n/a	268.100	┬n/a	0.8%	n/a	n/a	n/a	597.600
%RSD		┬1.586	┬7.537	┬1.766	0.425	┬1.139	0.9	0.866	0.590	0.630	51.380

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:15	┬62330.000	294.000	┬61520.000	┬57660.000	283.900	279.300	290.900	284.700	264.600	318.900
2	22:09:42	┬61710.000	292.600	┬61390.000	┬58350.000	281.700	277.100	292.600	284.100	262.500	323.500
3	22:10:09	┬62270.000	293.700	┬61910.000	┬59460.000	286.600	278.200	290.600	288.200	266.600	320.900
x		┬62110.000	97.810%	┬61610.000	┬97.486%	94.684%	92.723%	291.400	285.700	88.195%	107.039%
σ		┬342.500	n/a	┬268.000	┬n/a	n/a	n/a	1.090	2.223	n/a	n/a
%RSD		┬0.551	0.257	┬0.435	┬1.550	0.873	0.404	0.374	0.778	0.760	0.729

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:15	278.500	280.700	270.200	316.700	8.015	5.959	1245.000	311.300	3.495	308.800
2	22:09:42	285.900	280.300	268.300	314.900	6.180	6.138	1225.000	307.900	3.983	308.000
3	22:10:09	283.700	283.900	276.000	311.200	6.237	5.922	1267.000	315.200	3.718	310.000
x		282.700	281.600	90.507%	314.300	6.811	6.006	1246.000	103.830%	3.732	102.975%
σ		3.769	1.987	n/a	2.814	1.043	0.115	21.100	n/a	0.244	n/a
%RSD		1.333	0.706	1.485	0.896	15.320	1.922	1.693	1.164	6.538	0.340

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:15	73.0%	313.600	311.300	316.100	305.400	298.000	295.400	300.400	297.600	68.4%
2	22:09:42	74.3%	313.700	314.100	317.400	314.200	297.700	295.900	298.800	298.900	69.2%
3	22:10:09	74.5%	319.400	317.600	318.700	291.000	296.100	296.000	300.400	298.800	70.1%
x		73.9%	105.189%	104.768%	317.400	303.500	99.086%	295.800	299.800	99.476%	69.2%
σ		0.8%	n/a	n/a	1.330	11.720	n/a	0.300	0.922	n/a	0.8%
%RSD		1.1	1.057	1.004	0.419	3.861	0.353	0.101	0.307	0.233	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:09:15	308.800	308.300	307.000	314.900	311.800	307.100	66.8%	288.400	295.000	285.600
2	22:09:42	311.600	310.100	309.600	317.400	308.500	308.900	67.8%	288.500	295.000	286.000
3	22:10:09	310.400	307.600	310.200	316.300	309.000	307.000	68.3%	289.100	295.400	286.100
x		103.427%	102.903%	308.900	105.400%	103.251%	102.556%	67.6%	288.700	98.377%	95.301%
σ		n/a	n/a	1.667	n/a	n/a	n/a	0.8%	0.352	n/a	n/a
%RSD		0.450	0.419	0.540	0.387	0.565	0.347	1.1	0.122	0.080	0.108

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:09:15	286.100	285.600	61.0%
2	22:09:42	286.500	285.500	62.6%
3	22:10:09	286.400	286.200	62.7%
x		95.436%	95.253%	62.1%
σ		n/a	n/a	0.9%
%RSD		0.063	0.138	1.5

CCB IM9370-01 04/25/2019 22:14:37 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:15:04	96.7%	0.053	2.625	2.210	13.160	8.266	5.395	4.864	5.851	0.049
2	22:15:31	97.0%	0.017	1.752	2.007	11.340	6.335	4.091	4.361	4.247	-0.004
3	22:15:59	T 108.7%	0.042	1.757	1.901	10.750	8.862	3.671	3.607	3.339	-0.001
x		T 100.8%	0.037	2.045	2.039	11.750	7.821	4.385	4.277	4.479	0.015
σ		T 6.9%	0.019	0.503	0.157	1.258	1.321	0.899	0.633	1.272	0.030
%RSD		T 6.8	50.570	24.580	7.701	10.710	16.890	20.510	14.790	28.400	201.500

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:15:04	16.090	4559.000	9.165	4.039	4.907	86.9%	-0.388	0.034	0.079	162.200
2	22:15:31	15.300	4301.000	6.519	4.901	2.654	89.2%	-0.328	0.068	0.070	109.500
3	22:15:59	15.580	4480.000	-5.432	0.229	2.361	87.5%	-0.399	0.068	0.086	121.900
x		15.660	4446.000	3.417	3.056	3.307	87.9%	-0.372	0.057	0.078	131.200
σ		0.404	132.100	7.777	2.486	1.393	1.2%	0.038	0.020	0.008	27.560
%RSD		2.581	2.971	227.600	81.360	42.100	1.4	10.250	34.330	10.300	21.000

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:15:04	5.980	0.048	15.340	2.096	-0.014	-0.037	0.041	-0.025	0.033	-0.009
2	22:15:31	4.075	0.038	16.370	-6.990	-0.018	-0.023	-0.281	-0.042	-0.009	0.032
3	22:15:59	5.718	0.014	15.660	-1.103	-0.021	-0.051	0.127	-0.039	0.009	-0.001
x		5.258	0.033	15.790	-1.999	-0.018	-0.037	-0.037	-0.035	0.011	0.007
σ		1.032	0.018	0.525	4.609	0.003	0.014	0.215	0.009	0.021	0.022
%RSD		19.630	53.060	3.322	230.600	18.430	38.820	575.100	26.200	192.600	295.000

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:15:04	-0.087	0.036	0.035	1.125	2.507	3.190	1.810	0.550	-2.028	0.014
2	22:15:31	-0.209	0.056	-0.019	1.119	2.773	2.875	2.493	0.719	-2.081	0.021
3	22:15:59	-0.253	0.057	0.108	1.229	3.090	4.262	3.262	0.939	-3.267	0.013
x		-0.183	0.050	0.041	1.158	2.790	3.442	2.522	0.736	-2.458	0.016
σ		0.086	0.012	0.064	0.062	0.292	0.727	0.726	0.195	0.700	0.005
%RSD		47.240	23.410	153.600	5.356	10.460	21.120	28.810	26.510	28.490	28.610

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:15:04	75.3%	0.117	0.105	0.124	-0.254	0.030	0.038	0.065	0.023	72.3%
2	22:15:31	75.5%	0.134	0.088	0.093	-0.000	0.017	0.038	0.043	0.013	72.7%
3	22:15:59	75.4%	0.081	0.100	0.073	0.095	0.040	0.025	0.022	0.019	72.2%
x		75.4%	0.111	0.098	0.097	-0.053	0.029	0.033	0.043	0.018	72.4%
σ		0.1%	0.027	0.009	0.026	0.180	0.012	0.008	0.022	0.005	0.3%
%RSD		0.2	24.400	9.103	26.350	339.500	40.530	22.780	50.080	25.550	0.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:15:04	0.070	0.073	0.214	0.212	0.004	0.001	69.5%	0.008	0.014	0.021
2	22:15:31	0.044	0.077	0.178	0.193	0.003	-0.043	68.8%	0.006	0.001	0.028
3	22:15:59	0.042	0.049	0.158	0.178	-0.042	-0.012	68.7%	0.008	0.016	0.010
x		0.052	0.066	0.183	0.194	-0.012	-0.018	69.0%	0.007	0.010	0.020
σ		0.016	0.015	0.028	0.017	0.027	0.023	0.5%	0.001	0.008	0.009
%RSD		30.610	22.350	15.470	8.814	226.100	123.600	0.7	11.890	76.350	46.360

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:15:04	0.024	0.023	66.5%
2	22:15:31	0.017	0.018	67.3%
3	22:15:59	0.011	0.012	66.9%
x		0.017	0.018	66.9%
σ		0.007	0.006	0.4%
%RSD		38.360	31.050	0.7

UC27001-041SDTC 04/25/2019 22:20:24

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:20:51	108.9%	190.100	264.500	247.200	64.890	T2757.000	T2068.000	2162.000	2195.000	181.200
2	22:21:18	102.7%	200.100	266.400	256.500	75.990	T2726.000	T2118.000	2155.000	2141.000	183.400
3	22:21:45	T120.4%	198.400	277.400	257.300	73.000	T2803.000	T2065.000	2129.000	2109.000	160.800
x		T110.7%	196.200	269.500	253.700	71.290	T2762.000	T2084.000	2149.000	2148.000	175.100
σ		T9.0%	5.362	6.968	5.590	5.746	T38.630	T29.910	17.610	43.680	12.430
%RSD		T8.1	2.733	2.586	2.204	8.060	T1.398	T1.436	0.820	2.033	7.095

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:20:51	T2451.000	T931100.000	T2863.000	2950.000	2221.000	91.7%	212.300	209.400	205.000	23950.000
2	22:21:18	T2354.000	T894500.000	T2982.000	2899.000	2367.000	92.2%	207.300	209.400	201.300	19440.000
3	22:21:45	T2428.000	T936500.000	T2625.000	2916.000	2028.000	92.1%	213.800	210.700	202.400	22340.000
x		T2411.000	T920700.000	T2823.000	2922.000	2205.000	92.0%	211.100	209.800	202.900	21910.000
σ		T50.690	T22840.000	T181.500	26.240	170.300	0.3%	3.370	0.751	1.882	2287.000
%RSD		T2.102	T2.481	T6.428	0.898	7.723	0.3	1.596	0.358	0.927	10.440

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:20:51	2351.000	234.600	T2109.000	2053.000	195.500	193.600	206.900	204.600	190.600	206.600
2	22:21:18	2354.000	238.700	T2109.000	2065.000	194.700	193.200	205.500	203.300	194.200	211.600
3	22:21:45	2358.000	235.700	T2125.000	2083.000	199.300	193.500	200.700	206.000	191.600	207.100
x		2354.000	236.400	T2114.000	2067.000	196.500	193.400	204.400	204.600	192.100	208.400
σ		3.449	2.117	T8.747	15.430	2.457	0.226	3.246	1.343	1.874	2.741
%RSD		0.147	0.896	T0.414	0.747	1.251	0.117	1.588	0.657	0.976	1.315

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:20:51	185.100	183.200	173.700	199.700	106.300	109.300	778.800	194.600	4.644	224.800
2	22:21:18	187.200	188.500	183.100	191.300	109.100	111.100	797.800	199.000	4.531	221.700
3	22:21:45	186.700	187.400	183.100	194.200	112.700	106.600	761.700	190.400	6.901	221.100
x		186.300	186.400	180.000	195.100	109.300	109.000	779.400	194.700	5.359	222.600
σ		1.106	2.816	5.439	4.250	3.186	2.268	18.070	4.337	1.337	1.990
%RSD		0.594	1.511	3.022	2.179	2.913	2.082	2.319	2.228	24.950	0.894

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:20:51	77.0%	207.700	205.300	209.800	203.200	207.900	206.900	198.400	195.100	72.2%
2	22:21:18	80.3%	207.800	206.800	209.100	197.800	209.000	208.600	198.900	198.700	75.0%
3	22:21:45	81.1%	207.000	204.500	205.400	202.200	208.200	208.700	198.200	198.100	75.5%
x		79.5%	207.500	205.500	208.100	201.100	208.400	208.000	198.500	197.300	74.2%
σ		2.2%	0.450	1.140	2.323	2.900	0.560	1.016	0.356	1.905	1.8%
%RSD		2.7	0.217	0.554	1.116	1.443	0.269	0.488	0.179	0.965	2.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:20:51	211.000	212.700	198.300	204.400	210.900	211.300	70.6%	195.400	197.600	195.700
2	22:21:18	212.200	214.400	203.700	207.900	211.300	211.300	73.8%	195.200	199.100	198.000
3	22:21:45	210.700	214.300	202.300	206.700	213.200	209.400	74.3%	194.900	198.600	198.300
x		211.300	213.800	201.400	206.300	211.800	210.700	72.9%	195.200	198.400	197.300
σ		0.798	0.960	2.822	1.812	1.254	1.089	2.0%	0.263	0.756	1.405
%RSD		0.378	0.449	1.401	0.878	0.592	0.517	2.7	0.135	0.381	0.712

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:20:51	195.900	194.900	65.0%
2	22:21:18	199.000	196.600	68.5%
3	22:21:45	199.300	197.100	68.9%
x		198.000	196.200	67.4%
σ		1.878	1.130	2.1%
%RSD		0.948	0.576	3.2

UC27001-041L(5)TC 04/25/2019 22:26:11

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:39	T114.2%	-0.008	15.760	14.120	21.240	110.900	23.180	22.210	23.170	1.250
2	22:27:06	T110.9%	0.019	16.070	14.140	28.690	104.600	23.120	23.640	22.640	1.394
3	22:27:33	103.0%	0.010	14.900	13.940	19.360	105.400	22.270	22.230	21.710	1.433
x		T109.4%	0.007	15.580	14.070	23.090	107.000	22.860	22.690	22.500	1.359
σ		T5.8%	0.014	0.607	0.106	4.934	3.454	0.508	0.818	0.740	0.096
%RSD		T5.3	191.000	3.895	0.755	21.370	3.229	2.223	3.605	3.288	7.083

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:39	103.400	T201400.000	206.400	129.800	85.240	86.6%	-0.303	-0.034	0.598	4978.000
2	22:27:06	102.400	T198600.000	204.900	127.000	90.110	88.3%	-0.285	0.189	0.467	4335.000
3	22:27:33	102.300	T199400.000	240.700	111.200	96.060	88.4%	-0.296	-0.126	0.488	4796.000
x		102.700	T199800.000	217.300	122.700	90.470	87.8%	-0.295	0.010	0.517	4703.000
σ		0.614	T1458.000	20.260	10.030	5.419	1.0%	0.009	0.162	0.071	331.600
%RSD		0.598	T0.729	9.322	8.174	5.990	1.2	3.039	1672.000	13.650	7.051

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:39	12.300	7.122	13.180	1.600	0.023	0.007	0.417	0.134	0.187	0.630
2	22:27:06	8.763	7.202	11.440	-5.888	0.023	0.027	-0.499	0.170	0.217	0.547
3	22:27:33	11.420	7.032	10.600	-5.098	0.009	0.008	0.445	0.147	0.233	0.672
x		10.830	7.119	11.740	-3.129	0.018	0.014	0.121	0.150	0.212	0.617
σ		1.839	0.085	1.315	4.114	0.009	0.011	0.537	0.018	0.023	0.063
%RSD		16.990	1.195	11.200	131.500	46.450	81.120	442.800	12.180	10.900	10.290

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:39	0.557	0.513	-0.538	1.217	17.020	19.890	-1.363	-0.187	-4.206	3.072
2	22:27:06	0.646	0.408	-0.093	0.762	17.650	18.590	-1.257	-0.147	-4.417	3.060
3	22:27:33	0.304	0.580	0.028	1.400	17.070	19.250	0.736	0.285	-2.879	3.023
x		0.502	0.500	-0.201	1.126	17.250	19.250	-0.628	-0.016	-3.834	3.052
σ		0.177	0.087	0.298	0.328	0.350	0.648	1.182	0.262	0.833	0.025
%RSD		35.270	17.310	148.400	29.150	2.026	3.367	188.200	1621.000	21.740	0.826

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:39	75.0%	0.099	0.031	0.058	-0.306	0.023	0.006	0.038	0.012	72.0%
2	22:27:06	77.6%	0.044	0.052	0.038	0.211	0.009	0.013	-0.005	0.005	73.8%
3	22:27:33	76.4%	0.048	0.070	0.050	-0.367	0.013	0.013	0.032	0.027	73.7%
x		76.3%	0.064	0.051	0.049	-0.154	0.015	0.011	0.021	0.014	73.2%
σ		1.3%	0.031	0.019	0.010	0.318	0.007	0.004	0.023	0.011	1.0%
%RSD		1.7	48.680	37.740	19.910	205.900	49.050	36.310	109.400	77.260	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:26:39	0.788	1.097	0.088	0.094	0.876	0.777	68.3%	0.101	0.093	0.032
2	22:27:06	0.761	1.148	0.065	0.086	0.786	0.684	70.5%	0.105	0.109	0.041
3	22:27:33	0.755	1.002	0.087	0.095	0.757	0.828	70.2%	0.096	0.117	0.017
x		0.768	1.082	0.080	0.091	0.806	0.763	69.7%	0.101	0.106	0.030
σ		0.018	0.074	0.013	0.005	0.062	0.073	1.2%	0.004	0.012	0.012
%RSD		2.317	6.854	16.100	5.269	7.700	9.512	1.7	4.411	11.590	39.350

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:26:39	0.031	0.028	65.2%
2	22:27:06	0.019	0.026	67.5%
3	22:27:33	0.001	0.016	66.6%
x		0.017	0.024	66.4%
σ		0.015	0.007	1.2%
%RSD		88.080	28.730	1.8

UC27001-041ATC 04/25/2019 22:31:58

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:25	103.1%	192.700	258.000	248.800	81.950	┬2576.000	┬1998.000	2031.000	2042.000	176.200
2	22:32:52	┬121.9%	174.800	242.000	229.400	63.990	┬2682.000	┬1938.000	2022.000	1992.000	151.500
3	22:33:20	┬121.2%	179.800	250.100	244.400	62.930	┬2688.000	┬1960.000	2024.000	1986.000	152.200
x		┬115.4%	182.500	250.100	240.900	69.620	┬2649.000	┬1965.000	2026.000	2007.000	160.000
σ		┬10.6%	9.236	8.005	10.190	10.690	┬62.790	┬30.580	4.674	31.150	14.050
%RSD		┬9.2	5.062	3.201	4.231	15.350	┬2.371	┬1.556	0.231	1.552	8.783
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:25	┬2289.000	┬910200.000	┬2790.000	2842.000	2201.000	91.1%	197.100	196.500	191.200	20360.000
2	22:32:52	┬2398.000	┬905700.000	┬2435.000	2744.000	1869.000	90.9%	197.100	201.200	189.400	21880.000
3	22:33:20	┬2467.000	┬941200.000	┬2520.000	2764.000	1892.000	91.3%	199.100	204.300	192.800	23410.000
x		┬2385.000	┬919000.000	┬2582.000	2784.000	1988.000	91.1%	197.800	200.700	191.100	21880.000
σ		┬89.410	┬19330.000	┬185.500	51.960	185.600	0.2%	1.153	3.943	1.682	1523.000
%RSD		┬3.749	┬2.103	┬7.183	1.867	9.337	0.2	0.583	1.965	0.880	6.960
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:25	2228.000	226.000	┬2011.000	1958.000	185.000	185.400	192.600	191.900	182.600	196.500
2	22:32:52	2213.000	221.200	┬2008.000	1975.000	185.000	184.400	191.400	190.100	179.700	190.800
3	22:33:20	2182.000	223.200	┬2035.000	1998.000	189.700	188.400	190.700	191.300	179.100	190.900
x		2207.000	223.400	┬2018.000	1977.000	186.500	186.100	191.500	191.100	180.500	192.700
σ		23.550	2.376	┬15.200	20.270	2.715	2.070	0.967	0.925	1.872	3.295
%RSD		1.067	1.063	┬0.754	1.025	1.455	1.113	0.505	0.484	1.037	1.710
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:25	178.800	177.600	172.100	184.900	110.800	112.100	720.900	180.400	6.446	210.100
2	22:32:52	177.500	171.000	164.500	187.400	110.500	106.700	701.500	174.300	2.711	210.200
3	22:33:20	174.500	172.800	166.200	182.600	110.000	115.000	715.500	178.600	2.324	208.900
x		176.900	173.800	167.600	185.000	110.500	111.300	712.700	177.800	3.827	209.700
σ		2.185	3.406	3.965	2.409	0.396	4.235	10.020	3.145	2.276	0.723
%RSD		1.235	1.960	2.366	1.303	0.358	3.805	1.406	1.769	59.480	0.345
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:25	80.0%	195.900	193.500	195.200	182.800	195.900	195.700	188.400	186.100	74.4%
2	22:32:52	78.8%	193.700	191.900	195.000	185.900	196.300	195.200	183.600	182.900	74.0%
3	22:33:20	79.8%	196.600	191.300	195.200	180.100	196.100	196.300	188.500	185.000	74.5%
x		79.6%	195.400	192.200	195.200	182.900	196.100	195.700	186.800	184.600	74.3%
σ		0.6%	1.514	1.143	0.111	2.873	0.173	0.532	2.765	1.622	0.3%
%RSD		0.8	0.775	0.595	0.057	1.571	0.088	0.272	1.480	0.879	0.4
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:32:25	199.800	202.300	185.700	190.700	199.700	199.500	72.4%	185.000	188.300	186.800
2	22:32:52	197.300	200.800	180.500	189.200	199.100	198.500	71.8%	185.400	188.600	185.800
3	22:33:20	197.800	201.900	182.500	187.900	198.200	200.000	72.4%	187.100	189.900	187.800
x		198.300	201.700	182.900	189.300	199.000	199.300	72.2%	185.800	189.000	186.800
σ		1.330	0.749	2.652	1.418	0.792	0.733	0.4%	1.144	0.849	0.992
%RSD		0.671	0.372	1.450	0.749	0.398	0.368	0.5	0.616	0.449	0.531
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	22:32:25	188.100	185.900	67.9%							
2	22:32:52	186.900	185.500	66.6%							
3	22:33:20	188.300	186.600	67.7%							
x		187.800	186.000	67.4%							
σ		0.758	0.542	0.7%							
%RSD		0.404	0.292	1.0							

UC27001-042TC 04/25/2019 22:37:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:38:14	103.3%	0.021	57.320	53.650	52.870	T 1055.000	192.000	189.100	186.200	9.082
2	22:38:41	104.8%	0.034	54.510	52.060	42.380	T 1061.000	184.400	182.600	186.900	8.793
3	22:39:08	T 123.9%	0.019	53.740	51.220	42.520	T 1090.000	188.100	182.800	180.500	7.780
x		T 110.7%	0.025	55.190	52.310	45.920	T 1069.000	188.100	184.800	184.500	8.551
σ		T 11.5%	0.008	1.885	1.231	6.015	T 18.740	3.839	3.687	3.527	0.683
%RSD		T 10.4	32.760	3.415	2.353	13.100	T 1.753	2.040	1.995	1.911	7.992

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:38:14	525.500	T 888900.000	T 1175.000	1060.000	873.100	91.9%	-0.042	-0.062	1.520	19370.000
2	22:38:41	535.400	T 903900.000	T 1186.000	1093.000	859.900	91.4%	0.091	-0.602	1.580	19910.000
3	22:39:08	T 544.600	T 924500.000	T 1041.000	1104.000	740.300	91.9%	0.158	-0.283	2.101	23760.000
x		T 535.200	T 905700.000	T 1134.000	1086.000	824.400	91.7%	0.069	-0.316	1.734	21010.000
σ		T 9.527	T 17890.000	T 81.180	22.880	73.130	0.3%	0.102	0.272	0.320	2394.000
%RSD		T 1.780	T 1.975	T 7.158	2.107	8.870	0.3	147.800	86.010	18.430	11.390

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:38:14	57.080	102.700	22.380	4.360	1.593	0.199	0.159	8.597	8.041	7.754
2	22:38:41	56.420	103.500	22.460	6.788	1.547	0.175	0.219	8.449	8.502	7.317
3	22:39:08	63.820	99.240	22.530	15.780	1.570	0.119	0.252	8.325	8.131	7.043
x		59.110	101.800	22.460	8.976	1.570	0.164	0.210	8.457	8.225	7.371
σ		4.096	2.276	0.076	6.016	0.023	0.041	0.047	0.136	0.244	0.359
%RSD		6.929	2.235	0.341	67.030	1.447	25.180	22.420	1.612	2.969	4.866

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:38:14	7.183	6.839	0.353	1.251	100.300	102.900	1.378	0.380	-2.315	33.400
2	22:38:41	7.841	6.841	-0.168	1.803	105.400	106.400	0.215	0.086	-3.020	33.570
3	22:39:08	6.403	6.151	0.596	0.907	101.100	101.100	3.779	1.028	-3.576	33.130
x		7.142	6.610	0.260	1.320	102.300	103.500	1.791	0.498	-2.970	33.370
σ		0.720	0.398	0.391	0.452	2.737	2.699	1.818	0.482	0.632	0.221
%RSD		10.080	6.019	150.000	34.220	2.675	2.608	101.500	96.850	21.270	0.663

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:38:14	80.0%	0.123	0.152	0.135	2.100	0.020	0.022	0.031	0.066	74.5%
2	22:38:41	80.3%	0.102	0.119	0.109	0.863	0.014	0.012	-0.001	-0.004	75.7%
3	22:39:08	81.4%	0.157	0.133	0.100	1.319	0.010	0.015	0.005	0.030	75.1%
x		80.6%	0.127	0.135	0.115	1.427	0.014	0.016	0.012	0.030	75.1%
σ		0.7%	0.028	0.016	0.018	0.626	0.005	0.005	0.017	0.035	0.6%
%RSD		0.9	21.950	12.170	15.630	43.830	35.840	29.890	144.600	115.500	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:38:14	4.239	5.932	0.634	0.679	9.885	9.745	72.5%	0.050	0.054	0.823
2	22:38:41	4.206	5.961	0.585	0.636	9.592	9.536	73.4%	0.046	0.056	0.813
3	22:39:08	4.292	5.978	0.552	0.569	9.714	9.578	72.8%	0.055	0.044	0.792
x		4.246	5.957	0.591	0.628	9.730	9.620	72.9%	0.050	0.051	0.809
σ		0.043	0.023	0.041	0.055	0.147	0.110	0.5%	0.005	0.006	0.016
%RSD		1.023	0.386	7.013	8.823	1.513	1.148	0.6	9.688	12.180	2.005

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:38:14	0.844	0.783	68.3%
2	22:38:41	0.765	0.776	69.5%
3	22:39:08	0.711	0.751	67.5%
x		0.773	0.770	68.4%
σ		0.067	0.017	1.0%
%RSD		8.626	2.190	1.4

UC27001-043TC 04/25/2019 22:43:35

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:44:02	108.6%	-0.007	73.820	71.500	30.570	T 6379.000	230.500	225.600	226.900	TM 2925.000
2	22:44:29	T 122.8%	0.005	74.120	71.380	29.730	T 6246.000	236.400	224.600	224.400	TM 2470.000
3	22:44:57	104.8%	0.021	74.100	70.740	33.600	T 6262.000	229.100	224.800	223.300	TM 2876.000
x		T 112.0%	0.006	74.010	71.210	31.300	T 6296.000	232.000	225.000	224.900	TM 2757.000
σ		T 9.5%	0.014	0.169	0.411	2.034	T 72.420	3.909	0.527	1.850	TM 249.600
%RSD		T 8.5	218.700	0.228	0.577	6.499	T 1.150	1.685	0.234	0.823	TM 9.055

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:44:02	T 5536.000	T 878000.000	356.000	1500.000	1213.000	91.8%	40.100	2.020	3.065	22010.000
2	22:44:29	T 5372.000	T 868300.000	298.000	1510.000	1086.000	93.6%	39.080	0.553	2.769	22170.000
3	22:44:57	T 5318.000	T 858200.000	354.500	1489.000	1280.000	94.2%	37.720	1.236	2.160	17930.000
x		T 5409.000	T 868100.000	336.200	1500.000	1193.000	93.2%	38.960	1.269	2.665	20700.000
σ		T 113.500	T 9914.000	33.040	10.700	98.920	1.3%	1.194	0.734	0.462	2404.000
%RSD		T 2.098	T 1.142	9.830	0.714	8.292	1.3	3.064	57.840	17.330	11.610

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:44:02	1789.000	10.810	T 1730.000	1686.000	0.589	4.505	4.248	3.642	3.579	7.789
2	22:44:29	1777.000	10.530	T 1686.000	1651.000	0.659	4.149	4.845	3.668	3.608	7.516
3	22:44:57	1780.000	10.690	T 1700.000	1660.000	0.634	4.106	4.138	3.654	3.506	8.220
x		1782.000	10.680	T 1706.000	1665.000	0.627	4.253	4.410	3.655	3.564	7.841
σ		6.188	0.142	T 22.500	17.900	0.036	0.219	0.381	0.013	0.052	0.355
%RSD		0.347	1.330	T 1.319	1.075	5.683	5.144	8.635	0.351	1.469	4.527

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:44:02	8.164	8.348	-0.255	1.571	94.510	94.890	-0.288	-0.047	-0.119	25.340
2	22:44:29	9.063	7.834	-0.159	0.090	96.440	96.270	3.261	0.979	-4.527	25.700
3	22:44:57	7.857	8.246	-0.113	1.212	92.220	98.800	0.834	0.340	-4.473	25.640
x		8.361	8.143	-0.176	0.958	94.390	96.660	1.269	0.424	-3.040	25.560
σ		0.627	0.272	0.073	0.773	2.110	1.983	1.814	0.518	2.530	0.191
%RSD		7.499	3.344	41.320	80.650	2.235	2.051	143.000	122.300	83.230	0.749

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:44:02	80.9%	0.126	0.139	0.117	2.015	0.008	0.003	-0.000	0.009	72.4%
2	22:44:29	81.8%	0.171	0.169	0.155	0.828	0.007	0.007	0.005	0.015	73.7%
3	22:44:57	84.3%	0.168	0.138	0.149	0.032	0.008	0.006	0.020	0.025	76.0%
x		82.4%	0.155	0.149	0.140	0.958	0.008	0.005	0.008	0.016	74.0%
σ		1.7%	0.025	0.018	0.020	0.998	0.000	0.002	0.010	0.008	1.8%
%RSD		2.1	16.200	11.800	14.370	104.200	5.332	44.480	132.000	50.250	2.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:44:02	3.845	5.481	0.326	0.347	34.550	34.610	70.3%	0.022	0.010	0.307
2	22:44:29	4.008	5.494	0.315	0.306	34.900	35.060	71.4%	0.016	0.011	0.312
3	22:44:57	4.105	5.647	0.331	0.375	34.280	35.610	74.1%	0.029	0.011	0.268
x		3.986	5.541	0.324	0.343	34.570	35.090	71.9%	0.022	0.011	0.296
σ		0.131	0.092	0.008	0.034	0.311	0.502	2.0%	0.006	0.000	0.024
%RSD		3.294	1.664	2.525	10.040	0.900	1.430	2.7	27.590	4.345	8.015

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:44:02	0.262	0.291	64.5%
2	22:44:29	0.275	0.307	66.1%
3	22:44:57	0.263	0.286	69.3%
x		0.267	0.295	66.6%
σ		0.008	0.011	2.4%
%RSD		2.821	3.723	3.6

UC27001-044TC 04/25/2019 22:49:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:52	T 121.8%	0.010	91.750	89.540	58.050	T 6558.000	287.200	280.300	271.400	TM 1562.000
2	22:50:19	104.5%	0.036	92.190	89.790	55.250	T 6522.000	287.800	285.800	275.400	TM 1783.000
3	22:50:46	T 123.1%	0.029	94.320	90.170	54.340	T 6544.000	283.900	277.500	280.200	TM 1617.000
x		T 116.5%	0.025	92.750	89.830	55.880	T 6541.000	286.300	281.200	275.700	TM 1654.000
σ		T 10.3%	0.013	1.374	0.318	1.929	T 18.180	2.093	4.209	4.394	TM 115.400
%RSD		T 8.9	52.950	1.481	0.353	3.452	T 0.278	0.731	1.497	1.594	TM 6.975
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:52	T 4201.000	T 936800.000	215.000	703.500	531.100	92.5%	34.480	1.296	2.992	21850.000
2	22:50:19	T 4030.000	T 912100.000	264.300	734.600	622.100	94.4%	33.350	1.347	2.406	19480.000
3	22:50:46	T 4221.000	T 942300.000	215.700	740.300	531.800	93.0%	34.550	0.273	3.199	23990.000
x		T 4151.000	T 930400.000	231.700	726.200	561.600	93.3%	34.130	0.972	2.866	21770.000
σ		T 104.700	T 16110.000	28.270	19.810	52.320	1.0%	0.671	0.606	0.411	2252.000
%RSD		T 2.523	T 1.732	12.200	2.728	9.316	1.0	1.967	62.320	14.340	10.350
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:52	1750.000	6.271	T 1658.000	1601.000	0.140	1.595	1.873	2.632	2.658	10.010
2	22:50:19	1758.000	6.263	T 1655.000	1604.000	0.139	1.640	1.436	2.628	2.575	10.160
3	22:50:46	1796.000	6.249	T 1667.000	1634.000	0.158	1.499	1.605	2.623	2.574	9.703
x		1768.000	6.261	T 1660.000	1613.000	0.146	1.578	1.638	2.628	2.602	9.957
σ		24.500	0.011	T 6.137	18.710	0.011	0.072	0.220	0.004	0.048	0.233
%RSD		1.386	0.174	T 0.370	1.160	7.564	4.557	13.450	0.163	1.850	2.337
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:52	10.360	9.664	0.618	0.438	94.360	95.040	4.100	1.136	-2.357	3.110
2	22:50:19	9.940	9.457	0.796	0.831	94.530	96.630	0.399	0.146	-1.613	3.069
3	22:50:46	9.603	9.807	0.018	0.715	92.830	96.080	1.865	0.609	-4.564	3.077
x		9.969	9.643	0.477	0.661	93.910	95.920	2.121	0.631	-2.845	3.085
σ		0.381	0.176	0.408	0.202	0.940	0.809	1.864	0.496	1.535	0.022
%RSD		3.826	1.828	85.420	30.550	1.001	0.843	87.860	78.600	53.950	0.706
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:52	80.4%	0.079	0.060	0.036	0.008	0.003	0.008	0.005	-0.010	72.6%
2	22:50:19	84.2%	0.033	0.123	0.072	0.140	0.004	0.005	0.005	-0.011	76.6%
3	22:50:46	82.5%	0.054	0.068	0.059	1.139	0.003	0.004	-0.006	0.035	74.5%
x		82.3%	0.055	0.084	0.056	0.429	0.003	0.005	0.001	0.005	74.6%
σ		1.9%	0.023	0.034	0.018	0.619	0.001	0.002	0.006	0.026	2.0%
%RSD		2.3	42.280	40.710	32.780	144.300	15.850	35.760	418.900	555.600	2.7
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:49:52	4.173	5.578	0.276	0.294	28.490	28.260	70.6%	0.006	-0.001	0.042
2	22:50:19	3.857	5.478	0.283	0.286	28.360	28.160	73.7%	0.011	0.003	0.033
3	22:50:46	3.594	5.519	0.255	0.288	28.120	28.510	72.3%	0.002	-0.001	0.026
x		3.875	5.525	0.271	0.289	28.320	28.310	72.2%	0.006	0.000	0.034
σ		0.290	0.050	0.015	0.005	0.186	0.176	1.6%	0.004	0.003	0.008
%RSD		7.483	0.908	5.420	1.601	0.656	0.623	2.1	69.520	1036.000	24.400
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	22:49:52	0.054	0.043	65.6%							
2	22:50:19	0.037	0.029	68.6%							
3	22:50:46	0.025	0.035	67.4%							
x		0.039	0.036	67.2%							
σ		0.015	0.007	1.5%							
%RSD		38.560	18.760	2.3							

UC27001-045TC 04/25/2019 22:55:12

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:55:39	105.3%	0.177	54.200	49.140	59.860	T 5719.000	T 769.500	750.700	743.200	TM 12070.000
2	22:56:06	T 124.9%	0.087	48.700	48.060	47.460	T 5924.000	T 757.400	734.900	731.700	TM 10230.000
3	22:56:34	111.2%	0.087	51.630	49.110	51.300	T 5874.000	T 768.000	765.400	735.600	TM 11720.000
x		T 113.8%	0.117	51.510	48.770	52.870	T 5839.000	T 765.000	750.300	736.800	TM 11340.000
σ		T 10.0%	0.052	2.752	0.613	6.347	T 107.100	T 6.584	15.220	5.851	TM 976.300
%RSD		T 8.8	44.750	5.343	1.257	12.000	T 1.833	T 0.861	2.028	0.794	TM 8.608

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:55:39	TM 21310.000	T 875100.000	78.730	1240.000	1197.000	97.6%	126.900	3.700	13.650	19350.000
2	22:56:06	TM 22610.000	T 903400.000	54.100	1302.000	1026.000	96.5%	123.400	3.071	14.010	21760.000
3	22:56:34	TM 22750.000	T 920700.000	73.990	1373.000	1180.000	96.3%	124.100	3.079	14.080	21240.000
x		TM 22220.000	T 899700.000	68.940	1305.000	1134.000	96.8%	124.800	3.283	13.910	20780.000
σ		TM 793.400	T 23000.000	13.070	66.570	94.280	0.7%	1.850	0.361	0.228	1267.000
%RSD		TM 3.570	T 2.557	18.960	5.102	8.312	0.7	1.482	10.990	1.641	6.097

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:55:39	T 7653.000	81.610	T 7533.000	7504.000	2.370	7.250	7.718	14.350	14.250	24.740
2	22:56:06	T 7679.000	81.470	T 7707.000	7654.000	2.399	7.220	8.378	14.620	14.210	24.290
3	22:56:34	T 7708.000	82.150	T 7574.000	7661.000	2.411	7.398	8.096	14.350	14.050	23.450
x		T 7680.000	81.750	T 7605.000	7606.000	2.394	7.289	8.064	14.440	14.170	24.160
σ		T 27.420	0.360	T 90.530	88.820	0.021	0.095	0.331	0.154	0.109	0.652
%RSD		T 0.357	0.440	T 1.190	1.168	0.894	1.307	4.110	1.066	0.766	2.700

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:55:39	29.140	25.830	0.020	0.593	87.800	83.570	-1.287	-0.210	-1.916	5.474
2	22:56:06	28.530	25.770	-0.583	0.269	85.960	89.910	0.827	0.371	-2.577	5.444
3	22:56:34	28.090	26.400	0.287	0.926	85.280	86.260	1.105	0.413	-1.103	5.379
x		28.580	26.000	-0.092	0.596	86.350	86.580	0.215	0.191	-1.865	5.432
σ		0.528	0.348	0.446	0.329	1.306	3.180	1.308	0.349	0.738	0.049
%RSD		1.846	1.337	483.900	55.160	1.512	3.674	608.700	182.200	39.580	0.894

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:55:39	87.0%	0.067	0.059	0.033	1.364	0.013	0.005	0.005	0.024	74.3%
2	22:56:06	87.5%	0.066	0.063	0.078	1.105	0.015	0.003	0.010	0.017	74.6%
3	22:56:34	89.7%	0.070	0.080	0.043	2.157	0.006	0.008	0.020	0.001	76.2%
x		88.1%	0.068	0.068	0.051	1.542	0.011	0.005	0.012	0.014	75.0%
σ		1.5%	0.002	0.011	0.024	0.548	0.005	0.003	0.008	0.012	1.0%
%RSD		1.7	3.248	16.820	46.000	35.570	42.080	53.450	65.480	87.690	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	22:55:39	3.886	5.597	0.237	0.270	161.400	159.100	72.2%	0.008	-0.002	0.087
2	22:56:06	4.060	5.511	0.232	0.264	160.000	159.300	72.5%	0.019	-0.005	0.111
3	22:56:34	3.954	5.579	0.249	0.253	163.100	158.900	73.9%	-0.001	-0.004	0.081
x		3.966	5.563	0.239	0.262	161.500	159.100	72.8%	0.009	-0.004	0.093
σ		0.088	0.045	0.009	0.009	1.568	0.170	0.9%	0.010	0.002	0.016
%RSD		2.216	0.817	3.619	3.276	0.971	0.107	1.2	116.600	46.840	17.170

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	22:55:39	0.092	0.083	67.3%
2	22:56:06	0.085	0.099	67.2%
3	22:56:34	0.094	0.088	68.4%
x		0.090	0.090	67.6%
σ		0.005	0.008	0.7%
%RSD		5.123	9.163	1.0

UC27001-046TC 04/25/2019 23:01:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:27	101.6%	-0.025	26.760	25.290	-37.380	T 876.900	316.700	315.800	313.600	6.534
2	23:01:54	T 119.9%	-0.023	25.280	24.380	-41.090	T 888.300	316.600	309.500	322.600	5.310
3	23:02:20	T 121.1%	-0.023	25.380	24.790	-40.600	T 893.800	324.700	315.500	324.700	5.025
x		T 114.2%	-0.024	25.810	24.820	-39.690	T 886.300	319.300	313.600	320.300	5.623
σ		T 10.9%	0.001	0.826	0.454	2.018	T 8.645	4.647	3.583	5.879	0.802
%RSD		T 9.6	5.255	3.202	1.831	5.085	T 0.975	1.455	1.142	1.835	14.260

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:27	T 1904.000	T 774900.000	T 1494.000	2211.000	1926.000	92.2%	0.126	-0.630	1.481	19590.000
2	23:01:54	T 1942.000	T 800500.000	T 1301.000	2311.000	1631.000	92.3%	0.344	-0.934	1.917	22680.000
3	23:02:20	T 1931.000	T 793800.000	T 1285.000	2216.000	1640.000	92.0%	0.297	-0.960	1.834	22730.000
x		T 1926.000	T 789700.000	T 1360.000	2246.000	1732.000	92.1%	0.256	-0.841	1.744	21670.000
σ		T 19.940	T 13310.000	T 116.300	56.100	168.200	0.2%	0.115	0.183	0.231	1797.000
%RSD		T 1.036	T 1.685	T 8.554	2.498	9.710	0.2	44.910	21.790	13.270	8.295

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:27	51.050	10.470	12.770	8.162	0.235	0.095	-0.199	0.161	0.193	2.689
2	23:01:54	52.390	10.800	15.230	13.900	0.256	0.048	0.366	0.148	0.199	2.646
3	23:02:20	52.770	10.540	12.010	17.500	0.259	0.100	0.260	0.197	0.209	2.849
x		52.070	10.600	13.340	13.190	0.250	0.081	0.142	0.169	0.201	2.728
σ		0.902	0.176	1.685	4.710	0.013	0.029	0.300	0.025	0.008	0.107
%RSD		1.733	1.663	12.630	35.720	5.294	35.580	210.900	15.060	4.059	3.921

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:27	3.757	3.219	-0.037	1.706	87.810	87.790	3.383	0.884	-2.385	50.060
2	23:01:54	3.962	3.139	-0.417	1.948	91.050	91.620	2.259	0.634	-3.735	50.080
3	23:02:20	3.721	3.319	-0.271	0.459	90.280	90.360	3.023	0.752	-1.392	49.890
x		3.813	3.226	-0.242	1.371	89.710	89.930	2.888	0.757	-2.504	50.010
σ		0.130	0.090	0.192	0.799	1.692	1.951	0.574	0.125	1.176	0.101
%RSD		3.411	2.795	79.310	58.290	1.887	2.170	19.880	16.570	46.970	0.202

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:27	80.7%	0.198	0.304	0.229	1.953	0.005	0.005	-0.001	0.006	75.8%
2	23:01:54	80.5%	0.259	0.236	0.215	0.143	0.008	0.007	0.004	-0.007	75.6%
3	23:02:20	82.2%	0.230	0.288	0.208	1.091	0.006	0.001	-0.001	-0.005	77.6%
x		81.1%	0.229	0.276	0.217	1.062	0.006	0.005	0.001	-0.002	76.3%
σ		0.9%	0.030	0.036	0.011	0.905	0.002	0.003	0.003	0.007	1.1%
%RSD		1.2	13.300	12.920	4.990	85.230	27.200	65.340	518.600	321.700	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:01:27	3.842	5.399	0.196	0.227	21.330	21.640	73.5%	0.008	0.005	0.033
2	23:01:54	3.878	5.494	0.162	0.208	22.110	22.190	73.1%	0.016	0.007	0.018
3	23:02:20	3.923	5.455	0.203	0.187	21.030	21.050	74.8%	0.016	0.012	0.016
x		3.881	5.450	0.187	0.207	21.490	21.630	73.8%	0.013	0.008	0.022
σ		0.041	0.048	0.022	0.020	0.560	0.567	0.9%	0.005	0.004	0.009
%RSD		1.044	0.876	11.660	9.814	2.605	2.621	1.2	35.250	45.030	42.070

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:01:27	0.024	0.025	69.1%
2	23:01:54	0.029	0.020	67.4%
3	23:02:20	0.028	0.022	69.2%
x		0.027	0.022	68.6%
σ		0.002	0.002	1.0%
%RSD		8.765	11.050	1.4

UC27001-047TC 04/25/2019 23:06:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:13	106.0%	0.000	47.550	45.510	58.140	T 734.300	326.900	320.200	318.100	10.440
2	23:07:40	T 125.7%	-0.002	48.250	44.630	49.490	T 744.900	321.500	318.000	312.600	9.008
3	23:08:07	T 127.9%	-0.012	45.810	45.130	50.100	T 760.300	320.700	312.000	311.600	8.748
x		T 119.9%	-0.004	47.200	45.090	52.580	T 746.500	323.000	316.800	314.100	9.400
σ		T 12.1%	0.007	1.253	0.439	4.824	T 13.090	3.358	4.233	3.515	0.914
%RSD		T 10.1	149.000	2.654	0.974	9.175	T 1.754	1.039	1.336	1.119	9.718

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:13	T 1215.000	T 872700.000	T 1089.000	1615.000	1298.000	92.3%	-0.004	-0.385	1.403	19300.000
2	23:07:40	T 1252.000	T 895900.000	T 935.800	1609.000	1075.000	91.8%	0.158	-0.074	1.961	22080.000
3	23:08:07	T 1268.000	T 893100.000	T 912.700	1624.000	1042.000	90.4%	0.290	-0.408	1.962	22600.000
x		T 1245.000	T 887300.000	T 979.300	1616.000	1138.000	91.5%	0.148	-0.289	1.776	21330.000
σ		T 27.290	T 12660.000	T 95.990	7.474	139.600	1.0%	0.147	0.186	0.322	1771.000
%RSD		T 2.192	T 1.426	T 9.802	0.463	12.260	1.0	99.470	64.400	18.150	8.306

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:13	49.900	129.700	13.380	7.161	0.363	0.097	0.183	0.087	0.131	2.950
2	23:07:40	55.720	129.400	15.600	14.220	0.377	0.062	0.328	0.116	0.116	2.718
3	23:08:07	55.960	130.000	14.580	13.290	0.381	0.096	0.321	0.095	0.130	2.906
x		53.860	129.700	14.520	11.560	0.374	0.085	0.277	0.099	0.126	2.858
σ		3.434	0.298	1.112	3.835	0.009	0.020	0.082	0.015	0.008	0.123
%RSD		6.376	0.230	7.660	33.180	2.529	23.690	29.520	15.310	6.629	4.316

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:13	2.424	2.826	-0.082	0.964	104.800	103.700	2.246	0.617	-3.975	34.940
2	23:07:40	2.919	2.649	0.044	1.510	102.100	106.200	1.401	0.417	-5.058	35.360
3	23:08:07	3.215	2.601	0.171	0.987	103.700	107.200	1.812	0.526	-4.185	35.360
x		2.853	2.692	0.044	1.153	103.500	105.700	1.820	0.520	-4.406	35.220
σ		0.400	0.119	0.126	0.309	1.358	1.822	0.423	0.100	0.574	0.243
%RSD		14.020	4.400	285.000	26.800	1.312	1.724	23.230	19.230	13.040	0.690

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:13	80.6%	0.108	0.161	0.133	1.208	0.005	0.001	-0.006	-0.004	76.0%
2	23:07:40	79.7%	0.113	0.147	0.128	2.302	0.001	0.004	-0.001	-0.004	76.0%
3	23:08:07	80.6%	0.098	0.108	0.153	1.137	0.006	0.000	-0.006	-0.000	75.0%
x		80.3%	0.106	0.139	0.138	1.549	0.004	0.002	-0.004	-0.003	75.6%
σ		0.5%	0.007	0.028	0.013	0.653	0.003	0.002	0.003	0.002	0.6%
%RSD		0.6	6.751	19.900	9.586	42.160	76.790	96.340	72.450	82.670	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:07:13	3.827	5.533	0.194	0.208	5.701	5.044	74.0%	0.021	0.015	0.027
2	23:07:40	3.722	5.190	0.167	0.170	5.226	5.082	73.1%	0.014	0.016	0.014
3	23:08:07	3.726	5.449	0.176	0.167	5.416	5.525	72.4%	0.019	0.019	0.022
x		3.758	5.391	0.179	0.181	5.448	5.217	73.2%	0.018	0.016	0.021
σ		0.059	0.179	0.014	0.023	0.239	0.267	0.8%	0.004	0.002	0.006
%RSD		1.576	3.316	7.559	12.520	4.388	5.120	1.1	20.160	12.920	30.320

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:07:13	0.005	0.024	69.1%
2	23:07:40	0.016	0.018	68.0%
3	23:08:07	0.010	0.016	67.7%
x		0.010	0.019	68.3%
σ		0.005	0.004	0.8%
%RSD		54.170	22.560	1.1

UC27001-048TC 04/25/2019 23:12:32

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	104.4%	0.020	117.200	113.500	67.890	T 2794.000	261.900	257.400	254.800	5.232
2	23:13:28	T 121.6%	0.009	119.000	112.000	55.310	T 2829.000	263.200	257.200	258.500	4.978
3	23:13:55	109.6%	0.011	119.300	112.400	73.930	T 2897.000	269.400	258.900	255.600	5.220
x		T 111.9%	0.013	118.500	112.600	65.710	T 2840.000	264.800	257.800	256.300	5.143
σ		T 8.8%	0.006	1.129	0.757	9.497	T 52.430	4.019	0.952	1.942	0.143
%RSD		T 7.9	41.900	0.953	0.672	14.450	T 1.846	1.518	0.369	0.758	2.782

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	252.900	T 953400.000	T 1357.000	1413.000	1205.000	93.2%	0.011	0.823	1.862	19690.000
2	23:13:28	259.500	T 960800.000	T 1223.000	1530.000	1028.000	92.7%	-0.175	-1.468	2.371	24130.000
3	23:13:55	252.600	T 963400.000	T 1331.000	1511.000	1140.000	91.8%	-0.082	-0.518	1.962	22060.000
x		255.000	T 959200.000	T 1304.000	1485.000	1125.000	92.5%	-0.082	-0.388	2.065	21960.000
σ		3.914	T 5182.000	T 70.890	62.730	89.470	0.7%	0.093	1.151	0.269	2218.000
%RSD		1.535	T 0.540	T 5.437	4.224	7.957	0.8	113.700	296.900	13.040	10.100

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	48.940	135.800	11.250	2.197	-0.013	0.062	-0.313	0.372	0.397	2.135
2	23:13:28	57.540	133.900	12.770	12.500	-0.017	0.052	0.118	0.387	0.420	1.986
3	23:13:55	52.390	135.600	11.570	4.395	-0.023	0.067	-0.127	0.398	0.360	1.855
x		52.950	135.100	11.860	6.363	-0.018	0.060	-0.107	0.386	0.392	1.992
σ		4.328	1.080	0.802	5.424	0.005	0.007	0.216	0.013	0.030	0.140
%RSD		8.174	0.799	6.765	85.250	29.560	12.140	201.500	3.447	7.707	7.042

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	1.683	1.830	-0.267	0.473	102.200	106.600	1.444	0.423	-4.087	29.450
2	23:13:28	2.388	1.748	0.405	1.313	106.900	106.200	2.206	0.678	-6.512	30.110
3	23:13:55	2.307	1.972	0.060	0.527	105.500	107.000	3.790	0.918	-1.979	29.980
x		2.126	1.850	0.066	0.771	104.900	106.600	2.480	0.673	-4.193	29.850
σ		0.386	0.113	0.336	0.471	2.422	0.383	1.197	0.248	2.269	0.351
%RSD		18.160	6.130	507.200	61.050	2.309	0.359	48.250	36.770	54.110	1.175

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	82.0%	0.073	0.032	0.038	-0.377	0.002	-0.001	-0.005	0.037	77.0%
2	23:13:28	81.1%	0.028	0.054	0.013	2.118	0.003	0.005	-0.000	-0.009	75.9%
3	23:13:55	81.3%	0.024	0.059	0.008	2.897	0.004	0.000	-0.005	0.051	77.6%
x		81.5%	0.042	0.048	0.020	1.546	0.003	0.001	-0.004	0.026	76.8%
σ		0.5%	0.027	0.014	0.016	1.710	0.001	0.003	0.003	0.032	0.9%
%RSD		0.6	65.560	29.500	83.420	110.600	40.110	214.500	83.060	120.300	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:13:00	4.202	5.702	0.166	0.223	1.048	0.947	73.8%	-0.004	-0.006	0.020
2	23:13:28	3.960	5.566	0.210	0.204	1.056	0.958	73.2%	0.006	0.002	0.026
3	23:13:55	4.030	5.578	0.156	0.203	0.982	0.973	75.1%	0.003	-0.001	0.043
x		4.064	5.616	0.177	0.210	1.029	0.959	74.0%	0.002	-0.002	0.029
σ		0.124	0.075	0.028	0.011	0.041	0.013	1.0%	0.005	0.004	0.012
%RSD		3.060	1.343	16.050	5.356	3.959	1.313	1.3	321.800	241.300	41.190

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:13:00	0.030	0.019	69.0%
2	23:13:28	0.029	0.026	68.1%
3	23:13:55	0.021	0.020	70.3%
x		0.027	0.021	69.1%
σ		0.005	0.004	1.1%
%RSD		17.850	18.460	1.6

CCV MW10994 04/25/2019 23:18:21 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:48	89.6%	308.200	300.500	292.700	38.310	T66740.000	T62140.000	T62140.000	T62530.000	297.600
2	23:19:14	93.5%	292.600	292.800	289.000	21.580	T66130.000	T59060.000	T59350.000	T59920.000	288.600
3	23:19:42	92.4%	311.300	302.400	300.300	35.190	T67450.000	T63040.000	T62680.000	T62390.000	288.400
x		91.8%	101.343%	99.524%	97.992%	31.690	T111.289%	T61410.000	T61390.000	T102.686%	97.177%
σ		2.0%	n/a	n/a	n/a	8.897	Tn/a	T2087.000	T1792.000	Tn/a	n/a
%RSD		2.2	3.285	1.700	1.955	28.070	T0.988	T3.398	T2.919	T2.386	1.817

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:48	T3352.000	T9438.000	T58020.000	64110.000	T57290.000	84.4%	315.700	323.600	303.100	1458.000
2	23:19:14	T3403.000	T9350.000	T56150.000	64870.000	T53930.000	82.7%	320.000	323.600	300.400	1142.000
3	23:19:42	T3409.000	T9115.000	T57060.000	65190.000	T55650.000	84.0%	322.500	324.100	307.300	1234.000
x		T112.937%	T9301.000	T95.129%	64730.000	T92.704%	83.7%	106.466%	107.925%	101.195%	1278.000
σ		Tn/a	T166.900	Tn/a	555.600	Tn/a	0.9%	n/a	n/a	n/a	162.600
%RSD		T0.931	T1.794	T1.640	0.858	T3.026	1.0	1.074	0.096	1.132	12.720

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:48	T62990.000	296.400	T62960.000	T60000.000	289.900	280.700	298.200	290.500	266.300	330.500
2	23:19:14	T63540.000	295.600	T62050.000	T59540.000	286.600	286.800	295.200	289.300	267.600	318.000
3	23:19:42	T63180.000	297.900	T63240.000	T60430.000	294.500	283.400	290.900	289.800	270.900	326.800
x		T63240.000	98.878%	T62750.000	T99.983%	96.779%	94.539%	294.800	289.800	89.421%	108.364%
σ		T279.700	n/a	T626.600	Tn/a	n/a	n/a	3.701	0.592	n/a	n/a
%RSD		T0.442	0.401	T0.999	T0.740	1.364	1.091	1.256	0.204	0.891	1.969

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:48	289.000	286.500	272.100	326.200	8.839	6.442	1281.000	322.100	0.103	311.600
2	23:19:14	282.400	278.500	270.600	324.800	9.241	7.195	1248.000	314.100	2.325	311.200
3	23:19:42	295.400	288.300	270.200	317.700	8.510	7.284	1230.000	307.300	1.549	313.400
x		288.900	284.400	90.313%	322.900	8.863	6.974	1253.000	104.822%	1.326	104.016%
σ		6.493	5.230	n/a	4.538	0.366	0.462	25.620	n/a	1.128	n/a
%RSD		2.247	1.839	0.372	1.405	4.132	6.629	2.045	2.355	85.070	0.379

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:48	70.4%	322.000	314.500	318.700	296.700	301.200	300.000	302.900	302.600	65.7%
2	23:19:14	69.7%	319.300	312.300	318.900	296.600	300.000	299.000	300.400	299.100	64.9%
3	23:19:42	71.2%	321.500	318.900	323.000	306.600	300.700	300.300	301.400	301.200	66.7%
x		70.4%	106.971%	105.077%	320.200	300.000	100.208%	299.800	301.500	100.324%	65.8%
σ		0.7%	n/a	n/a	2.412	5.783	n/a	0.687	1.234	n/a	0.9%
%RSD		1.0	0.455	1.077	0.753	1.928	0.213	0.229	0.409	0.571	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:18:48	315.800	317.600	313.800	319.300	314.800	317.600	64.8%	291.200	297.800	290.400
2	23:19:14	311.500	313.700	307.600	316.600	314.100	313.600	62.9%	292.900	297.500	289.500
3	23:19:42	314.000	313.800	311.500	316.800	313.600	312.500	65.8%	290.300	296.800	287.400
x		104.582%	105.008%	311.000	105.852%	104.718%	104.860%	64.5%	291.500	99.110%	96.371%
σ		n/a	n/a	3.139	n/a	n/a	n/a	1.5%	1.299	n/a	n/a
%RSD		0.688	0.705	1.009	0.470	0.196	0.865	2.3	0.446	0.167	0.532

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:18:48	289.700	289.000	59.3%
2	23:19:14	289.800	288.200	57.2%
3	23:19:42	288.000	287.500	60.1%
x		96.377%	96.077%	58.9%
σ		n/a	n/a	1.5%
%RSD		0.350	0.264	2.6

CCB IM9370-01 04/25/2019 23:24:10 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:38	95.1%	0.051	2.538	1.853	16.630	8.674	6.351	6.445	6.366	0.031
2	23:25:05	100.9%	0.055	1.318	2.003	14.480	14.870	4.785	4.660	5.107	-0.001
3	23:25:31	95.5%	0.018	1.718	1.844	9.870	7.110	4.042	3.895	3.829	0.006
x		97.2%	0.041	1.858	1.900	13.660	10.220	5.059	5.000	5.101	0.012
σ		3.2%	0.020	0.622	0.090	3.452	4.106	1.179	1.308	1.269	0.017
%RSD		3.3	49.390	33.480	4.717	25.270	40.180	23.300	26.170	24.880	140.400

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:38	15.550	5385.000	9.089	4.136	5.650	85.7%	-0.398	0.059	0.082	185.900
2	23:25:05	16.190	5407.000	5.424	4.123	3.789	85.7%	-0.430	0.001	0.073	193.500
3	23:25:31	14.880	5214.000	5.926	1.880	3.463	86.8%	-0.441	0.033	0.036	170.800
x		15.540	5335.000	6.813	3.379	4.301	86.0%	-0.423	0.031	0.064	183.400
σ		0.655	105.800	1.987	1.299	1.180	0.6%	0.022	0.029	0.024	11.570
%RSD		4.217	1.983	29.160	38.440	27.440	0.7	5.305	95.380	37.990	6.306

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:38	8.495	0.033	21.670	4.517	-0.009	-0.011	0.436	-0.049	0.013	0.011
2	23:25:05	9.468	0.006	20.950	5.596	-0.017	-0.009	0.167	-0.034	0.011	0.035
3	23:25:31	4.671	-0.024	17.230	-0.099	-0.008	-0.010	0.209	-0.059	-0.012	0.002
x		7.545	0.005	19.950	3.338	-0.011	-0.010	0.271	-0.047	0.004	0.016
σ		2.536	0.028	2.384	3.025	0.005	0.001	0.145	0.013	0.014	0.017
%RSD		33.610	558.800	11.950	90.620	41.500	14.220	53.530	27.220	345.000	107.800

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:38	-0.271	0.018	-0.117	1.897	3.449	4.158	-0.443	-0.088	1.902	0.027
2	23:25:05	-0.147	0.068	-0.004	1.301	3.608	4.069	0.885	0.344	-1.588	0.018
3	23:25:31	-0.152	-0.021	-0.050	1.395	3.427	5.003	1.517	0.472	-0.762	0.019
x		-0.190	0.022	-0.057	1.531	3.494	4.410	0.653	0.243	-0.150	0.021
σ		0.070	0.045	0.057	0.321	0.099	0.516	1.000	0.293	1.824	0.005
%RSD		36.890	207.800	99.430	20.940	2.820	11.690	153.200	120.900	1219.000	23.310

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:38	72.0%	0.108	0.111	0.102	0.502	0.040	0.030	0.040	0.034	69.1%
2	23:25:05	71.4%	0.121	0.094	0.082	-0.681	0.040	0.037	0.006	0.017	67.4%
3	23:25:31	72.9%	0.114	0.027	0.094	-0.114	0.017	0.023	0.040	0.017	69.1%
x		72.1%	0.115	0.077	0.092	-0.098	0.032	0.030	0.028	0.023	68.5%
σ		0.7%	0.006	0.044	0.010	0.592	0.013	0.007	0.019	0.010	1.0%
%RSD		1.0	5.672	57.440	10.420	606.600	41.530	22.770	68.390	41.800	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:24:38	0.060	0.068	0.188	0.301	-0.026	-0.001	65.2%	0.015	0.020	0.040
2	23:25:05	0.057	0.088	0.223	0.253	-0.042	-0.005	64.0%	0.013	0.006	0.020
3	23:25:31	0.052	0.061	0.192	0.239	-0.034	-0.038	66.4%	0.011	0.007	0.027
x		0.056	0.072	0.201	0.264	-0.034	-0.015	65.2%	0.013	0.011	0.029
σ		0.004	0.014	0.019	0.032	0.008	0.020	1.2%	0.002	0.008	0.010
%RSD		7.297	19.540	9.645	12.260	23.450	137.600	1.8	15.670	69.730	36.020

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:24:38	0.024	0.027	63.0%
2	23:25:05	0.022	0.016	61.5%
3	23:25:31	0.037	0.020	64.0%
x		0.028	0.021	62.8%
σ		0.008	0.006	1.2%
%RSD		30.430	27.430	2.0

UC27001-049TC 04/25/2019 23:29:59

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:25	109.0%	-0.020	36.670	36.490	59.690	T 917.700	161.300	158.600	152.700	3.065
2	23:30:52	105.9%	0.027	39.960	37.240	63.290	T 908.600	162.300	160.200	155.600	3.188
3	23:31:19	T 122.8%	0.001	36.620	37.280	62.460	T 940.500	159.100	149.800	152.200	2.726
x		T 112.5%	0.003	37.750	37.000	61.810	T 922.300	160.900	156.200	153.500	2.993
σ		T 9.0%	0.023	1.914	0.445	1.886	T 16.430	1.640	5.619	1.843	0.239
%RSD		T 8.0	875.700	5.071	1.203	3.051	T 1.781	1.019	3.597	1.201	7.989

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:25	T 243.100	T 935900.000	T 1258.000	966.000	714.800	91.2%	-0.089	-0.337	2.941	23710.000
2	23:30:52	221.500	T 936000.000	T 1269.000	970.100	738.300	91.3%	-0.030	-0.268	1.891	20050.000
3	23:31:19	223.700	T 965900.000	T 1129.000	939.000	630.800	90.3%	-0.137	-0.353	2.265	23770.000
x		T 229.400	T 945900.000	T 1219.000	958.400	694.600	90.9%	-0.085	-0.319	2.366	22510.000
σ		T 11.880	T 17290.000	T 78.140	16.940	56.520	0.6%	0.054	0.045	0.532	2132.000
%RSD		T 5.177	T 1.828	T 6.412	1.767	8.137	0.6	63.010	14.170	22.500	9.471

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:25	60.490	41.060	15.990	7.308	0.004	0.070	0.183	0.413	0.401	1.839
2	23:30:52	50.810	41.040	13.710	3.700	0.013	0.031	-0.004	0.371	0.398	1.810
3	23:31:19	57.280	41.250	14.690	8.728	-0.003	0.077	0.529	0.316	0.378	1.773
x		56.190	41.120	14.800	6.578	0.005	0.060	0.236	0.367	0.392	1.808
σ		4.931	0.113	1.145	2.592	0.008	0.025	0.271	0.048	0.012	0.033
%RSD		8.775	0.275	7.737	39.400	164.500	41.990	114.700	13.220	3.119	1.831

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:25	1.567	1.722	-0.156	1.321	96.260	96.890	0.504	0.238	-5.518	15.540
2	23:30:52	1.839	1.498	-0.656	0.686	94.130	95.760	3.106	0.835	-2.902	15.570
3	23:31:19	1.805	1.618	-0.744	0.555	96.590	95.030	0.775	0.217	-2.427	15.810
x		1.737	1.613	-0.518	0.854	95.660	95.890	1.461	0.430	-3.616	15.640
σ		0.148	0.112	0.317	0.410	1.335	0.938	1.431	0.351	1.664	0.149
%RSD		8.531	6.938	61.180	47.970	1.395	0.978	97.880	81.610	46.030	0.955

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:25	75.8%	0.421	0.365	0.338	1.366	0.012	0.006	0.010	0.017	71.6%
2	23:30:52	78.9%	0.275	0.350	0.270	0.217	0.013	0.000	0.009	0.005	73.5%
3	23:31:19	78.9%	0.271	0.334	0.279	0.719	0.011	0.009	0.009	0.015	74.9%
x		77.9%	0.322	0.350	0.296	0.768	0.012	0.005	0.009	0.012	73.3%
σ		1.8%	0.086	0.016	0.037	0.576	0.001	0.004	0.000	0.006	1.6%
%RSD		2.3	26.550	4.497	12.520	75.020	10.740	83.600	2.256	52.310	2.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:30:25	3.941	5.582	0.736	0.744	1.269	1.208	68.5%	0.018	-0.001	0.042
2	23:30:52	4.156	5.866	0.725	0.752	1.318	1.387	71.5%	0.007	0.004	0.053
3	23:31:19	3.863	5.820	0.584	0.620	1.294	1.171	71.2%	0.009	0.008	0.023
x		3.987	5.756	0.682	0.705	1.294	1.255	70.4%	0.011	0.004	0.039
σ		0.152	0.152	0.084	0.074	0.024	0.116	1.6%	0.006	0.005	0.016
%RSD		3.806	2.645	12.380	10.500	1.882	9.215	2.3	51.970	129.800	39.460

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:30:25	0.034	0.038	64.4%
2	23:30:52	0.030	0.037	67.3%
3	23:31:19	0.032	0.027	66.2%
x		0.032	0.034	66.0%
σ		0.002	0.006	1.5%
%RSD		6.333	17.180	2.2

UC27001-050TC 04/25/2019 23:35:46

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:13	104.7%	0.030	32.850	33.040	76.820	T 1074.000	181.500	180.500	184.300	5.087
2	23:36:40	T 123.5%	0.013	32.540	32.340	55.400	T 1085.000	187.000	184.200	178.700	4.699
3	23:37:07	T 120.5%	0.001	35.040	33.070	61.080	T 1088.000	186.500	181.000	180.100	4.564
x		T 116.2%	0.015	33.480	32.820	64.440	T 1082.000	185.000	181.900	181.000	4.783
σ		T 10.1%	0.014	1.360	0.413	11.090	T 7.167	3.024	1.981	2.919	0.271
%RSD		T 8.7	97.320	4.061	1.257	17.220	T 0.662	1.634	1.089	1.612	5.673

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:13	278.300	T 955200.000	T 1154.000	929.900	707.800	88.8%	0.096	0.338	1.879	21770.000
2	23:36:40	276.400	T 951400.000	T 1003.000	917.500	607.800	91.3%	-0.100	-0.771	2.223	24670.000
3	23:37:07	273.700	T 946300.000	T 1010.000	867.900	613.900	91.3%	-0.040	-0.342	1.750	20920.000
x		276.100	T 951000.000	T 1056.000	905.100	643.200	90.5%	-0.014	-0.258	1.951	22450.000
σ		2.297	T 4451.000	T 85.480	32.800	56.080	1.4%	0.101	0.559	0.244	1965.000
%RSD		0.832	T 0.468	T 8.096	3.624	8.720	1.6	701.300	216.400	12.520	8.754

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:13	50.820	81.550	14.880	6.196	0.932	0.134	0.217	0.079	0.106	4.723
2	23:36:40	58.390	80.060	16.660	9.880	0.941	0.107	0.179	0.049	0.122	4.226
3	23:37:07	52.570	81.100	13.480	0.011	0.975	0.089	0.817	0.042	0.077	4.330
x		53.930	80.910	15.010	5.362	0.950	0.110	0.404	0.056	0.102	4.426
σ		3.966	0.765	1.596	4.987	0.023	0.023	0.358	0.020	0.023	0.262
%RSD		7.355	0.946	10.630	93.000	2.402	20.770	88.620	35.140	22.450	5.922

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:13	4.229	4.549	0.233	1.007	93.160	93.310	-0.058	0.043	-2.503	11.010
2	23:36:40	4.165	3.520	-0.258	1.451	95.470	94.890	2.764	0.746	-3.014	11.290
3	23:37:07	3.832	3.969	-0.530	1.126	93.560	97.390	0.956	0.327	-4.579	11.210
x		4.075	4.012	-0.185	1.195	94.060	95.190	1.221	0.372	-3.365	11.170
σ		0.213	0.516	0.387	0.230	1.232	2.055	1.430	0.354	1.082	0.145
%RSD		5.234	12.860	209.000	19.240	1.310	2.159	117.100	95.170	32.150	1.294

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:13	77.4%	0.170	0.124	0.128	1.157	0.004	0.006	-0.006	0.003	71.6%
2	23:36:40	77.5%	0.100	0.130	0.126	0.051	0.006	0.002	-0.000	-0.055	72.7%
3	23:37:07	79.5%	0.124	0.131	0.117	1.588	0.003	0.001	-0.001	0.025	74.6%
x		78.1%	0.131	0.128	0.124	0.932	0.005	0.003	-0.002	-0.009	73.0%
σ		1.2%	0.036	0.004	0.006	0.793	0.002	0.003	0.003	0.041	1.5%
%RSD		1.5	27.330	2.838	4.821	85.050	40.470	90.710	135.000	464.900	2.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:36:13	4.031	5.754	0.323	0.460	6.813	7.171	70.0%	0.012	0.005	0.017
2	23:36:40	4.030	5.710	0.333	0.317	6.944	6.592	70.0%	0.014	0.002	0.015
3	23:37:07	4.129	5.790	0.335	0.290	6.827	7.051	72.3%	0.034	0.006	0.020
x		4.064	5.751	0.330	0.356	6.861	6.938	70.8%	0.020	0.005	0.018
σ		0.057	0.040	0.006	0.091	0.072	0.305	1.3%	0.012	0.002	0.003
%RSD		1.397	0.699	1.932	25.630	1.051	4.403	1.8	60.960	48.170	14.180

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:36:13	0.010	0.013	65.8%
2	23:36:40	0.001	0.009	64.7%
3	23:37:07	0.010	0.015	67.2%
x		0.007	0.012	65.9%
σ		0.005	0.003	1.3%
%RSD		71.070	23.420	1.9

UC27001-051TC 04/25/2019 23:41:34

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:01	107.0%	0.005	113.400	108.900	64.950	T 909.200	72.410	68.030	70.740	5.526
2	23:42:28	T 122.3%	0.011	108.700	105.700	56.330	T 937.600	70.670	67.830	68.100	5.159
3	23:42:55	T 126.4%	-0.005	108.700	103.300	54.600	T 938.300	69.650	70.610	69.380	4.927
x		T 118.6%	0.004	110.300	106.000	58.630	T 928.400	70.910	68.820	69.410	5.204
σ		T 10.2%	0.008	2.720	2.804	5.544	T 16.590	1.394	1.553	1.323	0.302
%RSD		T 8.6	226.200	2.466	2.646	9.457	T 1.787	1.966	2.256	1.907	5.800

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:01	T 724.500	T 958000.000	T 811.600	377.000	305.800	89.7%	0.019	-0.530	1.639	21880.000
2	23:42:28	T 747.200	T 973800.000	T 731.300	413.600	268.600	89.8%	0.009	0.892	2.198	24450.000
3	23:42:55	T 748.300	T 983000.000	T 708.900	397.500	271.200	90.0%	0.069	0.834	2.183	24800.000
x		T 740.000	T 971600.000	T 750.600	396.000	281.900	89.8%	0.032	0.399	2.007	23710.000
σ		T 13.420	T 12640.000	T 54.030	18.360	20.740	0.2%	0.032	0.805	0.319	1593.000
%RSD		T 1.813	T 1.301	T 7.199	4.636	7.356	0.2	99.820	201.900	15.880	6.719

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:01	53.310	12.970	14.400	-2.174	0.001	0.017	0.219	0.071	0.130	2.216
2	23:42:28	60.510	12.580	15.550	4.440	-0.020	0.033	0.080	0.083	0.105	2.137
3	23:42:55	59.480	12.400	13.130	3.564	-0.002	0.006	0.222	0.057	0.154	2.429
x		57.770	12.650	14.360	1.944	-0.007	0.019	0.173	0.070	0.129	2.261
σ		3.896	0.296	1.209	3.592	0.011	0.014	0.081	0.013	0.025	0.151
%RSD		6.744	2.342	8.424	184.800	155.400	72.200	46.760	18.470	19.140	6.677

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:01	1.901	2.031	0.562	1.236	92.220	93.840	1.108	0.333	-3.010	9.050
2	23:42:28	2.657	1.744	0.297	0.895	92.170	95.060	2.145	0.573	-3.159	9.251
3	23:42:55	1.860	1.954	0.758	0.340	99.390	96.380	4.494	1.197	-4.393	9.286
x		2.139	1.910	0.539	0.824	94.590	95.090	2.582	0.701	-3.521	9.196
σ		0.449	0.148	0.231	0.453	4.153	1.269	1.735	0.446	0.759	0.128
%RSD		20.980	7.764	42.900	54.940	4.391	1.334	67.180	63.680	21.570	1.388

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:01	77.6%	0.092	0.107	0.082	0.097	0.001	0.003	0.005	0.020	72.8%
2	23:42:28	76.6%	0.129	0.098	0.080	0.654	-0.001	-0.001	-0.006	-0.033	72.9%
3	23:42:55	77.1%	0.093	0.103	0.071	-0.020	0.003	0.000	-0.006	0.018	72.7%
x		77.1%	0.105	0.102	0.078	0.244	0.001	0.001	-0.002	0.002	72.8%
σ		0.5%	0.021	0.005	0.006	0.360	0.002	0.002	0.006	0.030	0.1%
%RSD		0.7	19.750	4.658	7.575	147.800	169.300	251.400	305.600	1775.000	0.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:42:01	4.070	5.738	0.232	0.276	1.707	1.630	70.2%	0.025	0.025	0.009
2	23:42:28	4.015	5.994	0.252	0.276	1.468	1.697	69.7%	0.022	0.035	0.015
3	23:42:55	4.133	5.634	0.296	0.313	1.488	1.606	69.6%	0.036	0.024	0.014
x		4.073	5.789	0.260	0.288	1.554	1.644	69.8%	0.028	0.028	0.013
σ		0.059	0.185	0.032	0.021	0.133	0.047	0.3%	0.008	0.006	0.003
%RSD		1.449	3.200	12.430	7.445	8.553	2.869	0.5	27.510	22.540	24.190

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:42:01	0.017	0.014	65.4%
2	23:42:28	0.019	0.017	64.9%
3	23:42:55	-0.001	0.007	65.1%
x		0.012	0.013	65.1%
σ		0.011	0.005	0.2%
%RSD		93.850	39.000	0.4

UC27001-052TC 04/25/2019 23:47:23

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:47:50	111.3%	0.004	135.200	126.400	63.960	T 782.800	429.400	417.700	423.400	6.017
2	23:48:17	T 122.2%	0.000	127.100	128.000	54.570	T 779.400	432.100	417.500	416.300	5.588
3	23:48:44	107.6%	0.012	132.300	128.700	66.020	T 780.400	428.300	412.200	415.500	5.872
x		T 113.7%	0.006	131.500	127.700	61.520	T 780.900	429.900	415.800	418.400	5.826
σ		T 7.6%	0.006	4.096	1.187	6.105	T 1.774	1.916	3.140	4.358	0.219
%RSD		T 6.7	106.200	3.114	0.929	9.924	T 0.227	0.446	0.755	1.042	3.750

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:47:50	197.100	T 924900.000	T 1262.000	3234.000	2322.000	89.4%	-0.113	-0.218	2.185	23810.000
2	23:48:17	191.900	T 916100.000	T 1148.000	3157.000	2122.000	91.2%	0.011	-0.986	1.914	22950.000
3	23:48:44	185.400	T 911000.000	T 1311.000	3072.000	2417.000	91.1%	-0.129	-0.020	1.458	20020.000
x		191.500	T 917300.000	T 1240.000	3154.000	2287.000	90.6%	-0.077	-0.408	1.852	22260.000
σ		5.837	T 7016.000	T 83.450	81.110	150.700	1.0%	0.077	0.510	0.367	1986.000
%RSD		3.049	T 0.765	T 6.728	2.572	6.589	1.1	100.100	125.000	19.840	8.921

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:47:50	58.190	5.859	15.040	38.360	-0.012	0.033	0.174	0.028	0.094	2.164
2	23:48:17	52.100	5.875	13.110	31.340	-0.022	0.055	0.276	0.031	0.100	2.268
3	23:48:44	47.680	5.933	12.120	18.810	-0.023	0.065	0.582	0.035	0.111	2.447
x		52.660	5.889	13.420	29.500	-0.019	0.051	0.344	0.031	0.102	2.293
σ		5.277	0.039	1.486	9.906	0.006	0.016	0.212	0.004	0.009	0.143
%RSD		10.020	0.660	11.070	33.570	30.430	31.800	61.730	12.090	8.652	6.244

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:47:50	2.313	1.899	-0.226	0.914	92.120	96.920	0.541	0.270	-6.216	97.060
2	23:48:17	2.049	2.165	0.432	0.821	91.080	96.660	3.736	0.986	-2.995	96.700
3	23:48:44	1.810	2.192	0.160	0.590	99.290	95.290	1.425	0.378	-2.490	97.420
x		2.057	2.085	0.122	0.775	94.160	96.290	1.900	0.545	-3.900	97.060
σ		0.252	0.162	0.331	0.167	4.469	0.879	1.650	0.386	2.021	0.359
%RSD		12.250	7.772	271.200	21.540	4.746	0.912	86.820	70.840	51.810	0.370

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:47:50	75.5%	1.900	1.886	1.945	4.188	0.003	0.000	0.002	0.047	70.9%
2	23:48:17	77.3%	1.835	1.797	2.026	3.995	0.003	0.005	-0.004	-0.004	72.6%
3	23:48:44	79.5%	2.069	1.774	1.981	1.857	0.002	0.000	-0.004	0.006	75.4%
x		77.5%	1.934	1.819	1.984	3.347	0.003	0.002	-0.002	0.016	73.0%
σ		2.0%	0.121	0.059	0.041	1.293	0.001	0.003	0.004	0.027	2.3%
%RSD		2.6	6.262	3.240	2.049	38.640	31.410	144.200	179.200	163.800	3.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:47:50	4.027	5.412	0.167	0.186	1.416	1.369	68.0%	0.026	0.018	0.008
2	23:48:17	3.886	5.337	0.191	0.233	1.574	1.332	70.3%	0.033	0.028	0.011
3	23:48:44	3.722	5.424	0.173	0.230	1.461	1.225	72.6%	0.031	0.035	0.005
x		3.878	5.391	0.177	0.216	1.484	1.309	70.3%	0.030	0.027	0.008
σ		0.153	0.047	0.012	0.027	0.081	0.075	2.3%	0.003	0.009	0.003
%RSD		3.938	0.875	6.847	12.300	5.475	5.724	3.3	11.220	31.980	39.030

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:47:50	0.009	0.006	62.9%
2	23:48:17	0.008	0.006	65.3%
3	23:48:44	0.005	0.006	67.3%
x		0.007	0.006	65.2%
σ		0.002	0.000	2.2%
%RSD		24.630	4.107	3.4

UC27001-053TC 04/25/2019 23:53:10

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:36	T125.3%	-0.020	110.000	105.900	55.450	T1062.000	369.800	356.900	352.400	10.340
2	23:54:03	106.0%	0.002	113.700	107.400	68.170	T1043.000	372.600	356.600	351.200	11.640
3	23:54:31	T122.4%	0.017	112.700	109.400	60.430	T1074.000	361.700	359.400	358.100	10.260
x		T117.9%	-0.001	112.100	107.600	61.350	T1060.000	368.000	357.600	353.900	10.740
σ		T10.4%	0.019	1.914	1.758	6.409	T15.610	5.686	1.557	3.654	0.773
%RSD		T8.8	3259.000	1.707	1.635	10.450	T1.473	1.545	0.435	1.033	7.195

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:36	324.600	T966400.000	T1009.000	2526.000	1637.000	90.4%	0.128	-1.349	2.159	24950.000
2	23:54:03	306.400	T932100.000	T1190.000	2523.000	1961.000	92.0%	-0.003	0.198	1.518	20030.000
3	23:54:31	310.500	T959800.000	T1056.000	2536.000	1701.000	91.6%	-0.071	-2.358	1.869	23430.000
x		313.900	T952800.000	T1085.000	2528.000	1766.000	91.3%	0.018	-1.169	1.848	22800.000
σ		9.557	T18200.000	T93.800	6.946	171.400	0.8%	0.101	1.287	0.321	2519.000
%RSD		3.045	T1.910	T8.645	0.275	9.704	0.9	560.200	110.100	17.380	11.050

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:36	59.620	148.600	18.430	27.340	0.051	0.085	0.430	0.076	0.119	3.030
2	23:54:03	51.740	148.100	13.800	15.830	0.083	0.113	-0.341	0.053	0.120	2.894
3	23:54:31	55.280	151.200	15.500	22.040	0.045	0.072	-0.121	0.091	0.128	2.920
x		55.550	149.300	15.910	21.740	0.060	0.090	-0.011	0.073	0.122	2.948
σ		3.950	1.658	2.345	5.762	0.020	0.021	0.397	0.019	0.005	0.072
%RSD		7.110	1.110	14.740	26.510	33.990	23.250	3651.000	25.920	3.851	2.439

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:36	2.493	2.607	-0.908	0.838	109.900	107.900	2.505	0.619	-1.578	81.690
2	23:54:03	2.671	2.922	0.386	0.274	105.800	106.200	1.482	0.446	-4.989	81.250
3	23:54:31	2.530	2.693	-0.085	0.455	108.800	110.100	3.313	0.919	-5.716	81.310
x		2.565	2.741	-0.202	0.523	108.200	108.100	2.433	0.661	-4.095	81.420
σ		0.094	0.163	0.655	0.288	2.110	1.927	0.918	0.239	2.209	0.238
%RSD		3.657	5.937	323.800	55.130	1.950	1.783	37.710	36.150	53.960	0.292

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:36	75.2%	24.970	25.470	24.710	6.569	0.003	0.004	-0.006	-0.005	71.3%
2	23:54:03	78.6%	26.040	24.850	24.990	2.567	0.003	0.005	-0.080	0.042	74.5%
3	23:54:31	79.1%	25.510	25.220	25.230	5.018	0.015	0.003	-0.050	0.001	74.6%
x		77.7%	25.500	25.180	24.980	4.718	0.007	0.004	-0.045	0.013	73.5%
σ		2.1%	0.534	0.310	0.265	2.018	0.007	0.001	0.037	0.026	1.9%
%RSD		2.7	2.093	1.232	1.061	42.770	100.400	30.370	82.550	204.000	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:53:36	4.227	5.612	0.193	0.196	5.730	5.952	68.1%	0.018	0.011	0.026
2	23:54:03	4.210	5.756	0.156	0.254	6.036	5.881	71.7%	0.021	0.023	0.030
3	23:54:31	4.161	5.706	0.192	0.207	5.740	6.127	71.5%	0.015	0.018	0.032
x		4.199	5.691	0.181	0.219	5.835	5.986	70.5%	0.018	0.017	0.029
σ		0.034	0.073	0.021	0.031	0.174	0.126	2.0%	0.003	0.006	0.003
%RSD		0.821	1.283	11.820	14.050	2.983	2.112	2.8	17.070	34.510	10.500

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:53:36	0.031	0.028	63.4%
2	23:54:03	0.032	0.029	66.9%
3	23:54:31	0.016	0.024	66.4%
x		0.026	0.027	65.6%
σ		0.009	0.002	1.9%
%RSD		33.060	8.146	2.9

UC27001-054TC 04/25/2019 23:58:58

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:25	T 125.5%	-0.013	68.450	68.210	83.470	T 885.200	265.300	256.100	253.500	2.979
2	23:59:52	109.9%	-0.003	68.950	69.940	86.950	T 896.100	269.200	260.600	253.500	3.228
3	00:00:19	106.6%	0.012	74.770	69.670	87.920	T 866.600	259.900	251.700	253.500	3.348
x		T 114.0%	-0.001	70.720	69.270	86.110	T 882.600	264.800	256.100	253.500	3.185
σ		T 10.1%	0.013	3.517	0.932	2.344	T 14.910	4.687	4.466	0.033	0.188
%RSD		T 8.9	993.200	4.972	1.346	2.722	T 1.689	1.770	1.744	0.013	5.897

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:25	369.600	T 983700.000	T 811.200	1685.000	1096.000	88.9%	-0.131	0.481	2.514	24770.000
2	23:59:52	363.200	T 981800.000	T 963.200	1765.000	1280.000	90.3%	-0.086	-0.022	2.226	24100.000
3	00:00:19	356.000	T 954000.000	T 953.100	1686.000	1294.000	91.2%	-0.039	-0.548	1.650	20520.000
x		362.900	T 973100.000	T 909.200	1712.000	1223.000	90.1%	-0.085	-0.030	2.130	23130.000
σ		6.785	T 16630.000	T 84.980	46.040	110.700	1.1%	0.046	0.515	0.440	2285.000
%RSD		1.869	T 1.708	T 9.347	2.689	9.049	1.3	54.270	1718.000	20.650	9.879

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:25	61.810	190.000	20.280	20.040	1.498	0.107	0.518	0.253	0.337	2.299
2	23:59:52	61.930	192.100	16.890	12.060	1.518	0.101	0.305	0.268	0.290	2.376
3	00:00:19	53.050	191.400	15.460	10.740	1.530	0.076	-0.451	0.286	0.275	2.338
x		58.930	191.200	17.540	14.280	1.515	0.095	0.124	0.269	0.300	2.338
σ		5.093	1.089	2.477	5.035	0.016	0.017	0.509	0.017	0.032	0.039
%RSD		8.642	0.570	14.120	35.260	1.054	17.490	410.700	6.162	10.790	1.665

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:25	2.451	2.117	-0.371	1.363	104.900	104.600	4.868	1.277	-3.825	52.220
2	23:59:52	2.217	2.326	-0.350	1.324	108.000	104.700	1.585	0.472	-4.430	52.220
3	00:00:19	2.664	2.408	0.177	1.427	110.600	111.000	1.887	0.420	-0.409	52.560
x		2.444	2.283	-0.181	1.371	107.800	106.800	2.780	0.723	-2.888	52.330
σ		0.224	0.150	0.311	0.052	2.854	3.670	1.815	0.481	2.168	0.198
%RSD		9.160	6.586	171.500	3.797	2.646	3.437	65.280	66.490	75.080	0.378

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:25	76.1%	2.768	2.917	2.952	3.169	0.004	0.002	-0.019	0.018	71.4%
2	23:59:52	77.6%	2.686	2.873	2.806	4.862	0.008	0.002	-0.008	0.002	72.9%
3	00:00:19	79.5%	2.777	3.070	2.825	1.325	0.001	0.003	-0.013	0.045	75.6%
x		77.7%	2.744	2.953	2.861	3.119	0.004	0.002	-0.013	0.022	73.3%
σ		1.7%	0.050	0.104	0.080	1.769	0.004	0.001	0.006	0.022	2.1%
%RSD		2.2	1.818	3.511	2.783	56.730	85.510	31.810	42.720	100.100	2.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	23:59:25	3.873	5.693	0.177	0.238	5.028	5.297	68.2%	0.007	0.009	0.014
2	23:59:52	4.016	5.754	0.176	0.230	5.238	5.162	70.1%	0.025	0.013	0.021
3	00:00:19	3.914	5.815	0.215	0.264	5.138	5.220	72.9%	0.020	0.016	0.030
x		3.934	5.754	0.189	0.244	5.135	5.227	70.4%	0.017	0.013	0.022
σ		0.073	0.061	0.022	0.018	0.105	0.068	2.4%	0.010	0.004	0.008
%RSD		1.867	1.056	11.780	7.330	2.046	1.291	3.4	55.070	28.860	36.070

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	23:59:25	0.020	0.015	62.3%
2	23:59:52	0.021	0.019	65.9%
3	00:00:19	0.020	0.020	67.8%
x		0.020	0.018	65.3%
σ		0.001	0.003	2.8%
%RSD		3.698	14.100	4.2

UC27026-002TC 04/26/2019 00:04:45

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:11	105.6%	0.027	6.317	6.388	65.940	655.300	53.490	52.620	53.460	10.760
2	00:05:38	T 124.9%	0.021	5.803	6.055	58.010	T 662.700	54.300	52.880	53.050	9.046
3	00:06:05	T 127.3%	0.036	6.429	6.226	52.930	T 677.900	54.320	52.780	53.130	9.083
x		T 119.3%	0.028	6.183	6.223	58.960	T 665.300	54.040	52.760	53.210	9.630
σ		T 11.9%	0.007	0.334	0.166	6.554	T 11.480	0.471	0.133	0.214	0.979
%RSD		T 9.9	26.700	5.403	2.672	11.120	T 1.725	0.871	0.252	0.403	10.170

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:11	511.000	T 935400.000	753.300	3163.000	2481.000	91.2%	-0.069	-1.854	1.583	21360.000
2	00:05:38	527.200	T 948300.000	T 617.900	3148.000	2143.000	91.3%	0.061	-0.242	2.040	23560.000
3	00:06:05	540.800	T 970500.000	T 609.600	3214.000	2129.000	90.4%	0.015	-0.897	2.251	24880.000
x		526.300	T 951400.000	T 660.300	3175.000	2251.000	91.0%	0.002	-0.998	1.958	23270.000
σ		14.920	T 17720.000	T 80.700	34.670	199.400	0.5%	0.066	0.811	0.341	1776.000
%RSD		2.834	T 1.862	T 12.220	1.092	8.858	0.5	2782.000	81.250	17.430	7.632

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:11	48.930	10.400	13.480	21.710	0.534	0.120	0.086	0.042	0.131	3.166
2	00:05:38	53.920	10.270	14.810	33.220	0.545	0.180	0.335	0.035	0.180	2.826
3	00:06:05	54.030	10.150	15.190	32.340	0.533	0.138	0.162	0.059	0.149	2.857
x		52.290	10.270	14.490	29.090	0.538	0.146	0.195	0.045	0.153	2.950
σ		2.914	0.124	0.896	6.405	0.007	0.031	0.128	0.012	0.025	0.188
%RSD		5.572	1.210	6.181	22.020	1.278	21.090	65.650	27.350	16.220	6.366

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:11	6.147	4.630	-0.549	0.890	110.100	109.300	1.915	0.623	-5.949	4.307
2	00:05:38	5.802	4.467	0.464	0.737	104.800	110.300	1.171	0.362	-3.209	4.409
3	00:06:05	5.979	4.814	0.582	0.796	107.400	107.700	0.471	0.174	-2.757	4.284
x		5.976	4.637	0.165	0.808	107.400	109.100	1.186	0.386	-3.971	4.333
σ		0.172	0.174	0.622	0.077	2.676	1.308	0.722	0.226	1.727	0.067
%RSD		2.884	3.745	376.100	9.538	2.491	1.199	60.910	58.360	43.490	1.538

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:11	79.2%	0.067	0.072	0.016	-1.038	0.001	0.000	0.000	-0.025	72.6%
2	00:05:38	79.8%	0.025	0.023	0.043	-0.202	0.008	0.005	0.005	0.004	73.1%
3	00:06:05	80.0%	0.032	0.017	0.017	-0.339	0.004	0.003	-0.000	-0.012	73.3%
x		79.6%	0.041	0.037	0.026	-0.526	0.004	0.003	0.002	-0.011	73.0%
σ		0.4%	0.022	0.030	0.015	0.448	0.003	0.002	0.003	0.014	0.4%
%RSD		0.5	53.640	80.310	60.150	85.130	83.960	87.950	171.400	128.500	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:05:11	3.813	5.891	0.128	0.159	49.080	48.010	70.6%	0.014	-0.001	0.044
2	00:05:38	4.037	5.547	0.135	0.217	48.690	48.860	70.5%	0.009	0.004	0.039
3	00:06:05	3.877	5.859	0.151	0.180	48.810	47.950	70.2%	-0.008	0.003	0.041
x		3.909	5.766	0.138	0.185	48.860	48.280	70.4%	0.005	0.002	0.041
σ		0.115	0.190	0.012	0.029	0.202	0.509	0.2%	0.012	0.003	0.003
%RSD		2.949	3.298	8.844	15.840	0.414	1.054	0.3	242.800	155.700	7.125

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:05:11	0.039	0.043	66.0%
2	00:05:38	0.028	0.037	65.3%
3	00:06:05	0.035	0.039	65.8%
x		0.034	0.040	65.7%
σ		0.006	0.003	0.4%
%RSD		16.520	7.412	0.6

UC27026-013TC 04/26/2019 00:10:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:01	T 124.6%	0.286	71.360	68.570	51.340	T 5959.000	328.700	326.900	323.100	TM 1876.000
2	00:11:28	109.6%	0.346	70.540	68.890	50.050	T 5965.000	337.100	317.400	321.900	TM 2112.000
3	00:11:55	106.6%	0.290	74.020	71.160	57.090	T 6013.000	333.100	321.300	324.600	TM 2214.000
x		T 113.6%	0.307	71.970	69.540	52.830	T 5979.000	333.000	321.900	323.200	TM 2068.000
σ		T 9.6%	0.034	1.818	1.412	3.748	T 29.110	4.209	4.761	1.330	TM 173.300
%RSD		T 8.5	10.970	2.525	2.030	7.096	T 0.487	1.264	1.479	0.412	TM 8.380
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:01	T 5826.000	T 941500.000	T 873.600	507.000	372.400	91.0%	111.900	4.639	2.864	24190.000
2	00:11:28	T 5619.000	T 914700.000	T 974.600	531.000	431.400	92.2%	110.900	4.209	2.272	21310.000
3	00:11:55	T 5742.000	T 934600.000	T 1025.000	539.500	428.400	92.1%	110.700	4.225	2.161	20100.000
x		T 5729.000	T 930300.000	T 957.600	525.800	410.700	91.8%	111.200	4.358	2.432	21870.000
σ		T 104.500	T 13890.000	T 76.890	16.850	33.250	0.6%	0.614	0.244	0.378	2099.000
%RSD		T 1.824	T 1.493	T 8.029	3.205	8.095	0.7	0.552	5.595	15.550	9.598
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:01	1813.000	24.760	T 1759.000	1679.000	0.249	0.226	0.855	1.516	1.651	6.279
2	00:11:28	1832.000	25.230	T 1761.000	1718.000	0.246	0.191	0.787	1.566	1.620	6.620
3	00:11:55	1856.000	25.940	T 1768.000	1726.000	0.223	0.191	0.025	1.602	1.534	6.918
x		1834.000	25.310	T 1763.000	1708.000	0.239	0.202	0.556	1.562	1.602	6.606
σ		21.380	0.591	T 4.947	25.120	0.014	0.020	0.461	0.043	0.060	0.320
%RSD		1.166	2.335	T 0.281	1.470	5.991	9.967	82.880	2.760	3.769	4.840
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:01	7.832	6.813	0.575	1.009	106.700	110.300	2.195	0.667	-3.813	19.950
2	00:11:28	7.904	7.161	0.097	1.597	107.100	108.000	1.478	0.536	-5.185	19.860
3	00:11:55	7.345	6.947	-0.580	0.475	114.500	112.800	2.227	0.694	-4.414	19.500
x		7.693	6.974	0.030	1.027	109.400	110.300	1.967	0.633	-4.471	19.770
σ		0.304	0.176	0.580	0.561	4.340	2.405	0.424	0.085	0.688	0.237
%RSD		3.954	2.516	1910.000	54.640	3.965	2.180	21.550	13.390	15.390	1.199
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:01	78.7%	0.887	0.843	0.895	2.648	0.015	0.008	-0.004	0.012	70.9%
2	00:11:28	81.7%	0.839	0.800	0.898	2.384	0.006	0.012	0.022	-0.019	72.7%
3	00:11:55	83.7%	0.871	0.868	0.884	0.605	0.010	0.016	0.006	0.046	74.7%
x		81.4%	0.866	0.837	0.892	1.879	0.010	0.012	0.008	0.013	72.8%
σ		2.5%	0.024	0.035	0.008	1.111	0.004	0.004	0.013	0.032	1.9%
%RSD		3.1	2.814	4.127	0.853	59.130	41.750	32.870	164.000	249.200	2.6
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:11:01	4.438	5.977	0.172	0.147	34.180	33.710	68.5%	0.007	-0.006	1.076
2	00:11:28	4.261	5.774	0.141	0.154	35.000	34.490	71.4%	0.006	-0.004	1.038
3	00:11:55	4.323	5.714	0.167	0.188	34.260	33.090	72.8%	0.004	0.008	1.067
x		4.341	5.822	0.160	0.163	34.480	33.760	70.9%	0.005	-0.001	1.060
σ		0.090	0.138	0.016	0.022	0.454	0.703	2.2%	0.002	0.007	0.020
%RSD		2.073	2.376	10.250	13.370	1.316	2.081	3.1	29.010	1037.000	1.884
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	00:11:01	0.998	1.046	62.2%							
2	00:11:28	0.926	1.047	65.6%							
3	00:11:55	0.949	1.040	66.9%							
x		0.958	1.045	64.9%							
σ		0.037	0.004	2.4%							
%RSD		3.817	0.373	3.7							

UC27096-002TC 04/26/2019 00:16:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:16:49	109.0%	0.001	168.400	158.600	61.570	T 939.300	393.700	386.500	385.900	4.394
2	00:17:16	T 125.1%	0.000	171.200	163.400	61.690	T 918.800	401.600	389.300	384.000	3.744
3	00:17:43	106.0%	0.019	171.500	161.300	62.880	T 910.500	389.000	374.800	372.600	4.416
x		T 113.4%	0.007	170.400	161.100	62.050	T 922.900	394.800	383.500	380.900	4.185
σ		T 10.3%	0.010	1.709	2.375	0.724	T 14.820	6.417	7.668	7.185	0.382
%RSD		T 9.1	152.200	1.003	1.474	1.167	T 1.606	1.626	1.999	1.887	9.122

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:16:49	259.700	T 969000.000	T 1599.000	2951.000	2210.000	89.4%	-0.051	0.099	2.170	25020.000
2	00:17:16	259.800	T 994500.000	T 1366.000	2964.000	1940.000	90.8%	-0.037	0.748	2.193	24780.000
3	00:17:43	247.200	T 925600.000	T 1589.000	2923.000	2315.000	92.8%	-0.106	-0.232	1.494	20540.000
x		255.600	T 963000.000	T 1518.000	2946.000	2155.000	91.0%	-0.065	0.205	1.952	23450.000
σ		7.243	T 34810.000	T 132.000	20.820	193.800	1.7%	0.036	0.498	0.397	2519.000
%RSD		2.834	T 3.615	T 8.694	0.707	8.993	1.9	56.130	243.200	20.340	10.740

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:16:49	58.830	7.385	16.570	36.480	-0.027	0.146	0.198	0.076	0.098	4.043
2	00:17:16	58.250	7.215	15.690	30.550	-0.021	0.161	0.469	0.056	0.179	3.972
3	00:17:43	51.190	7.421	10.630	14.970	-0.019	0.099	-0.143	0.077	0.132	4.011
x		56.090	7.341	14.300	27.330	-0.023	0.135	0.175	0.070	0.137	4.008
σ		4.254	0.110	3.208	11.110	0.004	0.032	0.307	0.012	0.041	0.036
%RSD		7.584	1.497	22.440	40.650	19.350	23.970	176.000	16.730	29.760	0.886

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:16:49	4.451	3.447	-1.076	1.277	124.400	130.500	2.763	0.716	-3.759	95.200
2	00:17:16	3.612	3.766	-0.539	1.483	127.100	124.300	2.075	0.597	-5.129	94.560
3	00:17:43	4.056	3.769	0.211	1.294	124.500	129.600	2.069	0.589	-5.308	95.390
x		4.040	3.661	-0.468	1.351	125.300	128.100	2.302	0.634	-4.732	95.050
σ		0.420	0.185	0.646	0.114	1.554	3.334	0.399	0.071	0.847	0.432
%RSD		10.390	5.065	138.000	8.460	1.240	2.602	17.330	11.250	17.900	0.455

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:16:49	75.2%	0.185	0.168	0.214	8.409	0.004	0.003	-0.006	-0.034	70.9%
2	00:17:16	77.3%	0.229	0.186	0.176	7.006	0.001	0.002	-0.006	0.028	72.3%
3	00:17:43	79.9%	0.234	0.233	0.160	3.359	0.003	0.000	-0.001	0.008	74.8%
x		77.5%	0.216	0.196	0.184	6.258	0.003	0.002	-0.004	0.001	72.7%
σ		2.4%	0.027	0.033	0.028	2.607	0.002	0.001	0.003	0.032	2.0%
%RSD		3.0	12.400	17.000	15.210	41.660	70.110	81.330	71.270	3592.000	2.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:16:49	4.115	5.634	0.157	0.187	1.604	1.736	68.4%	-0.011	-0.003	0.016
2	00:17:16	4.072	5.547	0.146	0.217	1.864	1.741	69.3%	0.009	-0.006	0.010
3	00:17:43	4.047	5.720	0.131	0.152	1.628	1.485	72.2%	0.008	-0.004	0.018
x		4.078	5.634	0.145	0.185	1.699	1.654	70.0%	0.002	-0.004	0.015
σ		0.034	0.087	0.013	0.033	0.144	0.146	2.0%	0.012	0.002	0.005
%RSD		0.844	1.539	9.178	17.630	8.452	8.844	2.9	542.600	35.330	30.870

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:16:49	0.015	0.009	62.8%
2	00:17:16	0.001	0.004	64.1%
3	00:17:43	0.007	0.007	66.9%
x		0.008	0.007	64.6%
σ		0.007	0.002	2.1%
%RSD		86.600	36.310	3.2

UC27096-006TC 04/26/2019 00:22:10

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:38	104.3%	0.022	92.340	90.780	62.150	T 756.400	169.300	166.300	163.500	14.400
2	00:23:05	T 130.6%	-0.002	92.080	87.600	50.880	T 766.200	166.300	166.500	165.500	12.220
3	00:23:31	T 125.8%	0.030	94.890	90.830	64.060	T 793.600	170.400	169.600	164.300	13.060
x		T 120.2%	0.017	93.100	89.740	59.030	T 772.000	168.600	167.500	164.400	13.220
σ		T 14.0%	0.017	1.555	1.847	7.123	T 19.260	2.142	1.816	1.038	1.101
%RSD		T 11.7	97.720	1.671	2.058	12.070	T 2.495	1.270	1.085	0.631	8.322

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:38	579.900	T 940100.000	607.900	1796.000	1464.000	91.0%	-0.098	0.780	1.575	20830.000
2	00:23:05	T 583.800	T 962500.000	489.300	1838.000	1203.000	91.6%	-0.071	-0.987	2.195	25170.000
3	00:23:31	604.900	T 990200.000	T 510.900	1851.000	1218.000	89.7%	0.009	1.337	2.238	24510.000
x		T 589.600	T 964300.000	T 536.000	1828.000	1295.000	90.8%	-0.054	0.376	2.003	23510.000
σ		T 13.420	T 25050.000	T 63.180	28.400	146.500	1.0%	0.056	1.213	0.371	2338.000
%RSD		T 2.276	T 2.598	T 11.790	1.553	11.310	1.1	104.200	322.400	18.510	9.948

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:38	55.910	T 409.200	17.750	10.860	1.104	0.229	-0.008	0.230	0.339	2.427
2	00:23:05	61.470	T 399.900	17.710	21.790	1.066	0.208	0.653	0.247	0.287	2.601
3	00:23:31	61.680	T 398.700	18.750	22.960	1.135	0.164	0.196	0.291	0.399	2.500
x		59.690	T 402.600	18.070	18.540	1.102	0.200	0.280	0.256	0.342	2.509
σ		3.271	T 5.719	0.590	6.670	0.034	0.033	0.338	0.031	0.056	0.087
%RSD		5.481	T 1.421	3.265	35.980	3.123	16.600	120.700	12.190	16.510	3.481

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:38	2.632	2.428	0.127	1.670	102.700	107.000	1.071	0.319	-3.288	41.000
2	00:23:05	2.217	2.459	-0.965	0.657	106.900	108.200	0.133	0.129	-5.166	41.120
3	00:23:31	2.652	2.098	0.270	1.437	101.900	104.800	1.083	0.322	-3.276	41.940
x		2.500	2.328	-0.189	1.255	103.900	106.700	0.762	0.257	-3.910	41.350
σ		0.246	0.200	0.675	0.531	2.698	1.705	0.545	0.110	1.087	0.512
%RSD		9.823	8.605	356.500	42.290	2.598	1.599	71.530	42.940	27.810	1.238

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:38	78.0%	0.050	0.046	0.017	2.223	-0.002	0.000	0.000	0.024	73.0%
2	00:23:05	77.8%	0.009	-0.004	0.028	3.442	0.002	0.003	0.005	-0.001	72.9%
3	00:23:31	78.0%	0.019	0.046	0.016	3.264	-0.001	0.000	0.005	0.008	72.9%
x		77.9%	0.026	0.029	0.020	2.976	-0.000	0.001	0.004	0.010	72.9%
σ		0.1%	0.022	0.029	0.006	0.658	0.002	0.001	0.003	0.013	0.0%
%RSD		0.2	81.960	97.210	31.500	22.110	1510.000	123.000	85.760	124.800	0.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:22:38	3.819	5.731	0.130	0.180	5.428	5.128	70.0%	0.088	0.079	0.167
2	00:23:05	4.024	5.744	0.138	0.128	5.029	5.194	70.3%	0.091	0.093	0.182
3	00:23:31	3.847	5.573	0.134	0.197	5.340	5.354	70.0%	0.065	0.067	0.172
x		3.897	5.683	0.134	0.168	5.266	5.226	70.1%	0.081	0.079	0.174
σ		0.111	0.095	0.004	0.036	0.210	0.116	0.1%	0.015	0.013	0.008
%RSD		2.844	1.679	2.946	21.450	3.982	2.222	0.2	17.960	16.550	4.379

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:22:38	0.135	0.144	65.2%
2	00:23:05	0.102	0.143	64.8%
3	00:23:31	0.131	0.149	65.4%
x		0.123	0.145	65.1%
σ		0.018	0.003	0.3%
%RSD		15.020	2.135	0.5

CCV MW10994 04/26/2019 00:28:00 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:26	91.2%	298.300	296.000	287.200	31.720	┬65140.000	┬59930.000	┬61200.000	┬61640.000	286.300
2	00:28:54	90.4%	295.500	291.500	283.800	29.810	┬66040.000	┬60750.000	┬61250.000	┬61200.000	293.000
3	00:29:21	93.8%	290.700	294.300	289.000	27.860	┬66150.000	┬60710.000	┬60900.000	┬60550.000	279.600
x		91.8%	98.268%	97.979%	95.557%	29.790	┬109.631%	┬60460.000	┬61120.000	┬101.884%	95.437%
σ		1.8%	n/a	n/a	n/a	1.929	┬n/a	┬465.300	┬186.300	┬n/a	n/a
%RSD		1.9	1.296	0.765	0.919	6.473	┬0.845	┬0.770	┬0.305	┬0.893	2.333

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:26	┬3413.000	┬10340.000	┬56030.000	63840.000	┬53730.000	81.0%	321.200	323.500	300.000	2524.000
2	00:28:54	┬3519.000	┬10200.000	┬56090.000	63830.000	┬54550.000	80.6%	323.200	326.500	302.500	1733.000
3	00:29:21	┬3478.000	┬9827.000	┬54740.000	64100.000	┬53160.000	81.6%	317.500	319.600	297.100	1746.000
x		┬115.675%	┬10120.000	┬92.699%	63920.000	┬89.691%	81.1%	106.875%	107.732%	99.950%	2001.000
σ		┬n/a	┬262.700	┬n/a	152.000	┬n/a	0.5%	n/a	n/a	n/a	452.800
%RSD		┬1.541	┬2.596	┬1.376	0.238	┬1.300	0.6	0.909	1.060	0.905	22.630

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:26	┬62010.000	291.200	┬62020.000	┬59520.000	285.800	278.800	284.900	284.900	262.600	326.800
2	00:28:54	┬63200.000	293.500	┬62910.000	┬59820.000	287.900	284.500	301.000	292.700	266.600	316.500
3	00:29:21	┬62700.000	288.600	┬61780.000	┬59450.000	285.200	280.800	298.200	289.300	264.100	315.100
x		┬62640.000	97.029%	┬62240.000	┬99.331%	95.434%	93.785%	294.700	288.900	88.147%	106.489%
σ		┬597.200	n/a	┬592.300	┬n/a	n/a	n/a	8.594	3.901	n/a	n/a
%RSD		┬0.953	0.852	┬0.952	┬0.330	0.509	1.029	2.916	1.350	0.767	2.001

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:26	276.200	278.700	265.100	320.800	9.149	9.416	1268.000	325.300	2.542	310.800
2	00:28:54	285.700	283.600	266.000	324.100	9.816	9.286	1251.000	311.100	6.540	319.000
3	00:29:21	277.500	274.400	264.600	319.900	9.344	8.735	1283.000	322.600	-0.695	313.300
x		279.800	278.900	88.412%	321.600	9.436	9.146	1267.000	106.551%	2.796	104.790%
σ		5.133	4.618	n/a	2.215	0.343	0.361	16.000	n/a	3.624	n/a
%RSD		1.834	1.656	0.277	0.689	3.632	3.952	1.262	2.358	129.600	1.335

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:26	67.1%	317.600	314.000	318.500	294.400	304.000	299.700	303.800	304.100	61.4%
2	00:28:54	66.4%	318.700	316.400	321.800	306.000	300.900	300.100	305.600	301.200	62.7%
3	00:29:21	66.7%	320.400	318.500	321.900	308.500	299.100	299.400	300.300	299.700	62.4%
x		66.7%	106.301%	105.435%	320.700	303.000	100.447%	299.700	303.200	100.553%	62.2%
σ		0.4%	n/a	n/a	1.964	7.556	n/a	0.355	2.667	n/a	0.7%
%RSD		0.5	0.439	0.719	0.613	2.494	0.815	0.118	0.880	0.731	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:28:26	318.500	316.100	312.700	319.500	320.500	319.600	60.6%	290.700	297.200	290.800
2	00:28:54	313.400	315.300	310.300	318.700	318.900	317.000	61.3%	292.900	298.800	288.600
3	00:29:21	315.200	314.500	309.500	315.900	319.200	313.700	61.2%	292.000	298.300	289.300
x		105.236%	105.100%	310.800	106.006%	106.510%	105.593%	61.0%	291.900	99.365%	96.521%
σ		n/a	n/a	1.649	n/a	n/a	n/a	0.4%	1.121	n/a	n/a
%RSD		0.822	0.250	0.530	0.600	0.272	0.931	0.6	0.384	0.280	0.388

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:28:26	291.300	288.900	54.8%
2	00:28:54	290.100	289.200	56.0%
3	00:29:21	287.800	287.600	55.0%
x		96.579%	96.185%	55.3%
σ		n/a	n/a	0.6%
%RSD		0.606	0.302	1.1

CCB IM9370-01 04/26/2019 00:33:49 QC Status: PASS (Initial: PASS)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:34:16	93.2%	0.045	2.662	1.861	17.270	7.630	5.715	5.323	5.025	0.029
2	00:34:44	96.9%	0.028	1.663	1.852	16.640	7.434	4.530	4.628	4.913	0.002
3	00:35:11	T 111.3%	0.032	1.759	1.692	6.453	23.640	12.590	11.930	13.030	0.033
x		T 100.5%	0.035	2.028	1.802	13.460	12.900	7.611	7.294	7.656	0.022
σ		T 9.6%	0.009	0.551	0.095	6.073	9.298	4.350	4.031	4.654	0.017
%RSD		T 9.5	26.030	27.180	5.274	45.130	72.080	57.160	55.260	60.800	79.610

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:34:16	15.980	6035.000	9.104	2.052	4.803	83.9%	-0.374	0.071	0.030	172.800
2	00:34:44	15.630	6037.000	2.828	3.182	4.489	83.6%	-0.418	0.002	0.080	207.500
3	00:35:11	17.030	6096.000	0.694	16.880	8.513	82.3%	-0.306	0.038	0.087	217.300
x		16.220	6056.000	4.209	7.372	5.935	83.3%	-0.366	0.037	0.066	199.200
σ		0.727	34.670	4.372	8.255	2.238	0.8%	0.057	0.035	0.031	23.420
%RSD		4.482	0.573	103.900	112.000	37.710	1.0	15.460	93.570	46.880	11.760

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:34:16	5.570	0.003	19.860	6.777	-0.005	0.004	0.346	-0.062	0.027	0.011
2	00:34:44	6.660	0.003	18.780	5.431	-0.019	-0.041	0.217	-0.052	-0.022	0.042
3	00:35:11	16.040	0.075	30.210	21.290	0.020	-0.003	0.479	0.001	0.039	0.030
x		9.423	0.027	22.950	11.170	-0.001	-0.013	0.347	-0.038	0.015	0.027
σ		5.755	0.042	6.310	8.794	0.020	0.024	0.131	0.034	0.032	0.016
%RSD		61.080	153.200	27.500	78.760	1353.000	186.800	37.750	88.820	216.700	57.760

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:34:16	-0.088	0.021	-0.101	2.247	4.473	5.000	0.273	0.228	-2.645	0.027
2	00:34:44	-0.238	0.039	0.069	1.605	4.819	5.897	2.740	0.803	-2.825	0.022
3	00:35:11	-0.106	0.023	-0.038	1.338	3.847	6.409	-0.407	0.072	-4.080	0.057
x		-0.144	0.027	-0.023	1.730	4.380	5.768	0.869	0.368	-3.184	0.035
σ		0.082	0.010	0.086	0.468	0.492	0.713	1.656	0.385	0.782	0.019
%RSD		56.830	35.670	366.600	27.030	11.240	12.360	190.600	104.800	24.550	53.500

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:34:16	69.3%	0.153	0.172	0.115	2.283	0.033	0.034	0.000	0.013	65.0%
2	00:34:44	68.5%	0.068	0.112	0.125	0.154	0.018	0.031	0.018	0.030	65.9%
3	00:35:11	67.7%	0.152	0.132	0.131	-1.208	0.069	0.076	0.091	0.029	64.7%
x		68.5%	0.124	0.139	0.124	0.410	0.040	0.047	0.036	0.024	65.2%
σ		0.8%	0.049	0.031	0.008	1.759	0.026	0.025	0.048	0.010	0.6%
%RSD		1.1	39.360	22.200	6.689	429.400	65.500	53.580	132.200	40.170	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:34:16	0.056	0.106	0.237	0.295	0.001	0.012	62.4%	0.021	0.009	0.023
2	00:34:44	0.058	0.105	0.217	0.229	0.009	-0.033	62.0%	0.025	0.001	0.021
3	00:35:11	0.045	0.095	0.200	0.303	0.070	0.022	61.5%	0.069	0.055	0.048
x		0.053	0.102	0.218	0.276	0.027	0.000	61.9%	0.038	0.022	0.030
σ		0.007	0.006	0.019	0.041	0.038	0.029	0.4%	0.026	0.029	0.015
%RSD		13.450	6.142	8.567	14.790	140.900	14500.000	0.7	68.590	134.200	49.730

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:34:16	0.015	0.018	59.3%
2	00:34:44	0.010	0.018	59.5%
3	00:35:11	0.059	0.048	58.5%
x		0.028	0.028	59.1%
σ		0.027	0.018	0.5%
%RSD		95.050	62.760	0.9

UC27096-007TC 04/26/2019 00:39:39

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:06	105.7%	-0.001	169.300	162.600	67.970	T 841.000	110.200	108.000	108.500	7.160
2	00:40:33	107.9%	-0.003	165.900	159.100	56.180	T 861.300	110.200	108.200	106.700	7.012
3	00:40:59	T 122.2%	-0.000	166.200	156.900	54.890	T 868.000	110.200	107.100	108.300	6.355
x		T 111.9%	-0.002	167.100	159.500	59.680	T 856.800	110.200	107.800	107.800	6.842
σ		T 9.0%	0.001	1.881	2.917	7.207	T 14.070	0.021	0.571	1.011	0.429
%RSD		T 8.0	81.050	1.126	1.829	12.080	T 1.643	0.019	0.530	0.938	6.263

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:06	659.400	T 901500.000	T 842.800	878.400	688.900	88.0%	-0.003	1.167	2.608	20640.000
2	00:40:33	T 646.200	T 899300.000	T 851.000	889.800	676.600	88.6%	0.046	-2.379	2.281	22640.000
3	00:40:59	667.700	T 917400.000	T 762.500	837.400	597.400	88.9%	-0.018	0.381	2.377	23350.000
x		T 657.800	T 906100.000	T 818.800	868.500	654.300	88.5%	0.008	-0.277	2.422	22210.000
σ		T 10.840	T 9858.000	T 48.940	27.570	49.680	0.4%	0.033	1.863	0.168	1406.000
%RSD		T 1.649	T 1.088	T 5.977	3.174	7.593	0.5	390.800	672.500	6.939	6.332

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:06	58.990	154.500	19.630	13.100	0.237	0.141	0.050	0.136	0.164	2.462
2	00:40:33	58.930	153.300	18.500	10.310	0.244	0.153	0.439	0.136	0.197	2.563
3	00:40:59	61.710	152.200	17.820	15.340	0.269	0.134	0.634	0.137	0.164	2.684
x		59.880	153.300	18.650	12.920	0.250	0.143	0.375	0.136	0.175	2.570
σ		1.587	1.124	0.912	2.520	0.017	0.010	0.297	0.001	0.019	0.111
%RSD		2.650	0.733	4.893	19.500	6.665	6.866	79.410	0.617	10.870	4.331

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:06	2.397	2.403	-0.220	1.948	128.500	128.200	0.361	0.168	-4.692	19.730
2	00:40:33	2.543	2.313	-0.229	0.822	129.100	135.200	3.264	0.826	-2.285	20.170
3	00:40:59	1.891	2.245	-0.656	1.393	138.000	137.000	2.081	0.466	-1.010	20.080
x		2.277	2.320	-0.368	1.388	131.800	133.400	1.902	0.487	-2.663	19.990
σ		0.342	0.079	0.249	0.563	5.325	4.624	1.460	0.329	1.870	0.233
%RSD		15.040	3.401	67.660	40.570	4.039	3.465	76.750	67.670	70.230	1.164

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:06	74.8%	0.434	0.428	0.408	2.197	0.007	0.003	-0.002	0.041	69.0%
2	00:40:33	75.2%	0.409	0.386	0.335	1.245	0.013	0.010	0.004	0.000	69.8%
3	00:40:59	74.7%	0.323	0.198	0.301	1.866	0.006	0.005	0.010	-0.027	70.7%
x		74.9%	0.389	0.337	0.348	1.769	0.008	0.006	0.004	0.004	69.8%
σ		0.3%	0.058	0.122	0.055	0.483	0.004	0.004	0.006	0.034	0.8%
%RSD		0.4	14.880	36.220	15.690	27.290	46.160	61.490	134.800	768.500	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:40:06	3.990	5.476	0.699	0.688	2.985	2.904	66.7%	0.042	0.043	0.017
2	00:40:33	3.903	5.592	0.652	0.680	2.883	3.152	67.4%	0.061	0.045	0.031
3	00:40:59	3.916	5.406	0.589	0.601	3.120	3.231	68.0%	0.052	0.055	0.028
x		3.937	5.491	0.647	0.657	2.996	3.095	67.4%	0.052	0.047	0.025
σ		0.047	0.094	0.055	0.048	0.119	0.171	0.7%	0.010	0.007	0.008
%RSD		1.184	1.711	8.515	7.289	3.967	5.521	1.0	18.440	14.040	29.940

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:40:06	0.009	0.011	62.3%
2	00:40:33	0.023	0.024	63.5%
3	00:40:59	0.009	0.021	63.7%
x		0.013	0.019	63.2%
σ		0.008	0.007	0.8%
%RSD		60.300	36.120	1.2

UQ13629-001 04/26/2019 00:45:26

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:53	98.5%	0.007	1.466	1.544	88.840	3.253	4.574	4.625	4.405	2.070
2	00:46:21	98.7%	0.021	1.292	1.355	73.890	1.723	3.504	3.194	2.860	1.943
3	00:46:48	T 118.2%	-0.000	1.266	1.261	61.200	4.344	3.012	3.256	3.063	1.696
x		T 105.2%	0.009	1.341	1.387	74.640	3.107	3.696	3.692	3.443	1.903
σ		T 11.3%	0.011	0.109	0.144	13.830	1.317	0.799	0.809	0.840	0.190
%RSD		T 10.7	118.400	8.116	10.370	18.530	42.390	21.610	21.910	24.400	9.985

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:53	18.640	T 367000.000	2.890	4.158	5.331	85.4%	-0.096	0.073	2.308	8064.000
2	00:46:21	17.960	T 357200.000	0.653	6.178	3.311	87.0%	-0.230	0.021	2.140	7823.000
3	00:46:48	19.580	T 372300.000	-14.980	4.706	2.625	85.0%	-0.073	1.048	2.517	9178.000
x		18.730	T 365500.000	-3.814	5.014	3.755	85.8%	-0.133	0.381	2.322	8355.000
σ		0.816	T 7674.000	9.739	1.045	1.406	1.1%	0.085	0.579	0.189	723.000
%RSD		4.354	T 2.100	255.300	20.840	37.450	1.2	63.600	151.900	8.149	8.653

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:53	23.010	0.485	29.890	9.622	-0.002	1.162	0.975	0.046	0.080	1.017
2	00:46:21	23.030	0.391	28.660	7.947	-0.017	1.204	0.988	0.056	0.063	1.101
3	00:46:48	24.790	0.375	30.200	16.940	-0.011	1.108	1.771	0.055	0.127	1.001
x		23.610	0.417	29.580	11.500	-0.010	1.158	1.245	0.052	0.090	1.040
σ		1.020	0.059	0.816	4.783	0.008	0.048	0.456	0.006	0.033	0.054
%RSD		4.320	14.210	2.758	41.580	74.070	4.177	36.650	10.910	36.400	5.178

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:53	0.706	0.852	-0.006	1.080	12.440	13.190	1.574	0.614	-5.757	0.019
2	00:46:21	0.883	0.959	0.072	1.081	11.590	11.940	2.253	0.700	-3.300	0.011
3	00:46:48	0.787	0.830	-0.037	1.548	10.520	12.750	0.342	0.219	-2.912	0.007
x		0.792	0.880	0.010	1.236	11.520	12.630	1.390	0.511	-3.990	0.012
σ		0.088	0.069	0.056	0.270	0.963	0.633	0.969	0.257	1.543	0.006
%RSD		11.160	7.823	579.100	21.830	8.361	5.013	69.690	50.200	38.680	46.590

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:53	72.4%	0.049	0.063	0.067	-0.618	0.006	0.004	0.012	0.019	67.9%
2	00:46:21	73.0%	0.077	0.062	0.063	-0.149	0.004	0.005	-0.006	-0.030	69.6%
3	00:46:48	71.8%	0.090	0.058	0.065	2.604	0.001	-0.001	0.000	0.013	68.4%
x		72.4%	0.072	0.061	0.065	0.612	0.004	0.003	0.002	0.000	68.7%
σ		0.6%	0.021	0.003	0.002	1.741	0.003	0.003	0.009	0.027	0.9%
%RSD		0.8	29.440	4.772	2.885	284.300	68.850	114.000	414.800	6717.000	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:45:53	3.979	5.429	0.063	0.046	0.015	-0.005	66.1%	-0.006	-0.015	0.013
2	00:46:21	3.972	5.511	0.068	0.056	0.014	0.012	67.0%	-0.013	-0.013	0.002
3	00:46:48	4.041	5.696	0.056	0.019	0.031	-0.001	65.2%	-0.014	-0.017	0.007
x		3.997	5.546	0.062	0.040	0.020	0.002	66.1%	-0.011	-0.015	0.007
σ		0.038	0.137	0.006	0.019	0.010	0.009	0.9%	0.004	0.002	0.005
%RSD		0.949	2.469	9.308	46.990	47.670	455.500	1.4	40.020	13.590	75.070

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:45:53	0.026	0.017	63.1%
2	00:46:21	0.006	0.005	64.1%
3	00:46:48	0.005	0.005	62.1%
x		0.012	0.009	63.1%
σ		0.012	0.007	1.0%
%RSD		95.710	75.260	1.6

UQ13629-002 04/26/2019 00:51:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:41	T 119.2%	182.900	188.000	181.100	58.010	T 2199.000	T 1969.000	1998.000	2031.000	153.800
2	00:52:09	104.1%	182.900	183.700	178.500	54.570	T 2246.000	T 1944.000	1978.000	2018.000	175.600
3	00:52:35	105.3%	182.800	183.800	179.500	57.110	T 2222.000	T 1952.000	2024.000	2033.000	175.100
x		T 109.6%	182.900	185.200	179.700	56.560	T 2222.000	T 1955.000	2000.000	2027.000	168.200
σ		T 8.4%	0.080	2.489	1.290	1.783	T 23.290	T 12.810	23.110	8.481	12.440
%RSD		T 7.7	0.044	1.344	0.718	3.152	T 1.048	T 0.655	1.156	0.418	7.396

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:41	40.570	T 365600.000	T 1499.000	2403.000	1441.000	84.7%	208.600	211.600	201.800	9581.000
2	00:52:09	40.730	T 363100.000	T 1747.000	2364.000	1705.000	85.3%	208.100	209.400	200.300	10360.000
3	00:52:35	41.070	T 358700.000	T 1694.000	2332.000	1687.000	85.9%	209.800	207.000	197.200	10590.000
x		40.790	T 362400.000	T 1647.000	2366.000	1611.000	85.3%	208.800	209.400	199.800	10180.000
σ		0.254	T 3480.000	T 130.700	35.430	147.100	0.6%	0.883	2.336	2.365	530.500
%RSD		0.621	T 0.960	T 7.934	1.497	9.133	0.7	0.423	1.116	1.184	5.212

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:41	2299.000	196.000	T 2142.000	2073.000	194.300	198.000	202.400	200.900	189.500	210.000
2	00:52:09	2300.000	197.600	T 2127.000	2095.000	193.100	192.800	198.400	201.300	187.700	209.600
3	00:52:35	2273.000	194.100	T 2121.000	2061.000	193.500	194.100	198.300	199.400	187.000	209.700
x		2291.000	195.900	T 2130.000	2076.000	193.600	195.000	199.700	200.500	188.100	209.800
σ		15.340	1.792	T 11.090	17.250	0.629	2.674	2.366	0.976	1.300	0.228
%RSD		0.669	0.915	T 0.521	0.831	0.325	1.371	1.185	0.487	0.691	0.108

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:41	181.300	183.800	179.900	211.300	8.056	8.775	830.700	209.200	0.888	203.800
2	00:52:09	187.100	182.500	178.700	208.400	9.551	7.714	824.600	205.200	3.422	203.300
3	00:52:35	182.400	183.800	176.100	211.800	9.002	9.634	813.000	202.800	3.091	203.900
x		183.600	183.400	178.200	210.500	8.870	8.708	822.800	205.700	2.467	203.700
σ		3.079	0.774	1.917	1.843	0.756	0.961	8.989	3.224	1.377	0.313
%RSD		1.677	0.422	1.076	0.876	8.528	11.040	1.093	1.567	55.830	0.154

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:41	72.1%	201.600	197.700	200.000	201.800	204.600	203.000	195.600	196.900	67.0%
2	00:52:09	72.1%	201.300	199.400	200.200	199.800	202.800	201.200	197.700	195.600	67.8%
3	00:52:35	72.5%	202.700	201.200	199.300	201.400	203.400	203.000	197.100	196.300	68.0%
x		72.2%	201.900	199.400	199.800	201.000	203.600	202.400	196.800	196.200	67.6%
σ		0.2%	0.728	1.722	0.463	1.028	0.926	1.036	1.075	0.665	0.6%
%RSD		0.3	0.361	0.863	0.232	0.512	0.455	0.512	0.546	0.339	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:51:41	208.100	211.000	194.000	203.200	205.600	202.900	64.4%	193.300	196.400	193.600
2	00:52:09	207.100	208.000	194.200	204.600	205.800	201.000	64.8%	193.600	197.000	196.300
3	00:52:35	208.200	209.500	195.100	204.200	206.000	204.300	65.2%	196.900	199.200	197.300
x		207.800	209.500	194.400	204.000	205.800	202.700	64.8%	194.600	197.500	195.700
σ		0.619	1.501	0.541	0.705	0.197	1.632	0.4%	1.999	1.453	1.926
%RSD		0.298	0.717	0.278	0.346	0.096	0.805	0.6	1.027	0.736	0.984

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:51:41	192.600	192.900	60.3%
2	00:52:09	197.300	195.200	60.8%
3	00:52:35	195.100	195.400	62.2%
x		195.000	194.500	61.1%
σ		2.360	1.370	1.0%
%RSD		1.210	0.704	1.6

UC27026-001 04/26/2019 00:57:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:30	95.5%	1.245	-0.066	0.121	-78.560	183.100	T 19570.000	T 20080.000	T 20900.000	TM 154000.000
2	00:57:57	94.2%	1.202	0.085	0.083	-79.830	181.200	T 19240.000	T 20030.000	T 20760.000	TM 158200.000
3	00:58:24	93.3%	1.333	-0.022	0.091	-76.890	185.600	T 19570.000	T 20240.000	T 21090.000	TM 160300.000
x		94.3%	1.260	-0.001	0.098	-78.430	183.300	T 19460.000	T 20120.000	T 20910.000	TM 157500.000
σ		1.1%	0.067	0.077	0.020	1.471	2.182	T 190.500	T 107.700	T 164.700	TM 3240.000
%RSD		1.2	5.310	6708.000	20.390	1.875	1.190	T 0.979	T 0.535	T 0.787	TM 2.057

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:30	T 1166.000	T 262600.000	T 45270.000	3187.000	1607.000	89.1%	TM 8508.000	278.200	6.464	8859.000
2	00:57:57	T 1176.000	T 258300.000	T 45640.000	3112.000	1650.000	90.7%	TM 8584.000	280.700	6.123	8947.000
3	00:58:24	T 1201.000	T 262200.000	T 45630.000	3125.000	1652.000	89.1%	TM 8621.000	285.800	6.223	9356.000
x		T 1181.000	T 261000.000	T 45510.000	3141.000	1636.000	89.7%	TM 8571.000	281.600	6.270	9054.000
σ		T 18.090	T 2335.000	T 214.200	40.080	25.620	0.9%	TM 57.550	3.875	0.175	265.000
%RSD		T 1.532	T 0.895	T 0.471	1.276	1.566	1.0	TM 0.671	1.376	2.793	2.927

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:30	TM 113300.000	TM 1754.000	TM 107500.000	TM 125500.000	24.820	13.760	29.900	24.870	39.240	401.500
2	00:57:57	TM 112500.000	TM 1781.000	TM 107300.000	TM 126400.000	24.550	14.240	28.580	24.870	39.370	395.800
3	00:58:24	TM 114500.000	TM 1791.000	TM 108100.000	TM 126900.000	24.670	14.620	27.980	25.630	39.340	410.500
x		TM 113400.000	TM 1775.000	TM 107600.000	TM 126300.000	24.680	14.200	28.820	25.130	39.320	402.600
σ		TM 992.500	TM 19.400	TM 380.000	TM 680.100	0.137	0.432	0.982	0.439	0.066	7.416
%RSD		TM 0.875	TM 1.093	TM 0.353	TM 0.539	0.556	3.039	3.407	1.749	0.168	1.842

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:30	236.200	217.700	1.041	7.193	3.556	1.095	6.351	5.644	4.148	106.500
2	00:57:57	239.900	217.400	0.632	6.347	3.743	1.537	7.023	6.198	1.951	105.800
3	00:58:24	237.200	219.200	0.479	7.077	4.177	1.374	6.224	5.853	1.079	106.000
x		237.700	218.100	0.717	6.872	3.826	1.335	6.533	5.898	2.393	106.100
σ		1.892	0.962	0.291	0.459	0.318	0.223	0.429	0.280	1.582	0.359
%RSD		0.796	0.441	40.510	6.676	8.323	16.730	6.569	4.739	66.100	0.338

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:30	212.9%	0.590	0.370	0.647	34.500	0.131	0.059	0.081	0.126	61.8%
2	00:57:57	218.6%	0.538	0.353	0.600	33.960	0.113	0.072	0.051	0.022	63.5%
3	00:58:24	216.2%	0.501	0.417	0.661	40.300	0.111	0.055	0.081	0.063	61.6%
x		215.9%	0.543	0.380	0.636	36.250	0.118	0.062	0.071	0.070	62.3%
σ		2.9%	0.045	0.033	0.032	3.513	0.011	0.009	0.017	0.052	1.0%
%RSD		1.3	8.260	8.712	5.003	9.690	9.425	15.000	24.240	74.180	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	00:57:30	26.070	9.850	0.076	0.127	M 1338.000	M 1335.000	69.2%	2.738	2.704	87.450
2	00:57:57	25.720	10.010	0.082	0.089	M 1327.000	M 1314.000	70.8%	2.786	2.754	87.150
3	00:58:24	26.780	9.903	0.071	0.104	M 1360.000	M 1352.000	70.4%	2.751	2.629	86.850
x		26.190	9.922	0.076	0.106	M 1342.000	M 1334.000	70.2%	2.758	2.695	87.150
σ		0.539	0.083	0.006	0.019	M 16.590	M 19.190	0.8%	0.025	0.063	0.297
%RSD		2.060	0.833	7.534	17.990	M 1.237	M 1.439	1.2	0.915	2.344	0.341

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	00:57:30	83.310	87.040	55.0%
2	00:57:57	83.140	86.880	55.4%
3	00:58:24	84.250	87.650	55.7%
x		83.570	87.190	55.4%
σ		0.600	0.403	0.4%
%RSD		0.717	0.463	0.7

UC27026-001S 04/26/2019 01:02:51

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:18	88.9%	44.260	43.730	46.500	-75.300	T 2168.000	T 19240.000	T 20240.000	T 21040.000	TM 253200.000
2	01:03:44	94.7%	41.590	42.440	46.870	-78.080	T 2294.000	T 19580.000	T 20430.000	T 20970.000	TM 238400.000
3	01:04:11	92.6%	42.330	42.470	46.970	-77.310	T 2271.000	T 19650.000	T 20470.000	T 21070.000	TM 243600.000
x		92.1%	42.720	42.880	46.780	-76.900	T 2245.000	T 19490.000	T 20380.000	T 21030.000	TM 245100.000
σ		2.9%	1.378	0.734	0.243	1.437	T 67.200	T 218.600	T 119.200	T 53.300	TM 7492.000
%RSD		3.1	3.225	1.711	0.520	1.868	T 2.994	T 1.122	T 0.585	T 0.254	TM 3.057
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:18	T 2017.000	T 249100.000	T 42040.000	5215.000	3206.000	82.5%	TM 8612.000	T 449.300	185.200	8692.000
2	01:03:44	T 2057.000	T 261800.000	T 40870.000	6022.000	2975.000	81.3%	TM 8717.000	T 454.000	188.800	9097.000
3	01:04:11	T 2123.000	T 261600.000	T 41640.000	6444.000	3043.000	80.3%	TM 8594.000	T 450.800	189.900	9957.000
x		T 2066.000	T 257500.000	T 41520.000	5894.000	3075.000	81.4%	TM 8641.000	T 451.400	188.000	9249.000
σ		T 53.700	T 7285.000	T 592.900	624.500	118.800	1.1%	TM 66.260	T 2.412	2.446	645.900
%RSD		T 2.600	T 2.829	T 1.428	10.600	3.865	1.4	TM 0.767	T 0.534	1.301	6.984
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:18	TM 109600.000	TM 1800.000	TM 105200.000	TM 120800.000	195.000	184.900	158.300	150.200	200.200	M 605.400
2	01:03:44	TM 109100.000	TM 1784.000	TM 104300.000	TM 121200.000	196.500	183.300	159.300	148.100	199.600	M 580.000
3	01:04:11	TM 109200.000	TM 1792.000	TM 104800.000	TM 122200.000	198.100	186.900	159.100	149.500	202.000	M 576.100
x		TM 109300.000	TM 1792.000	TM 104800.000	TM 121400.000	196.500	185.000	158.900	149.300	200.600	M 587.100
σ		TM 264.000	TM 7.717	TM 438.600	TM 720.800	1.530	1.806	0.557	1.069	1.274	M 15.890
%RSD		TM 0.241	TM 0.431	TM 0.419	TM 0.594	0.778	0.976	0.351	0.716	0.635	M 2.706
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:18	353.200	332.700	146.300	192.800	3.898	0.419	303.000	184.800	12.520	T 193.300
2	01:03:44	338.500	318.000	141.300	188.600	3.634	1.123	298.400	180.100	15.050	T 193.600
3	01:04:11	341.600	320.800	142.700	190.500	4.103	0.770	309.900	186.600	18.220	T 192.300
x		344.400	323.800	143.400	190.600	3.878	0.771	303.800	183.800	15.260	T 193.000
σ		7.737	7.788	2.586	2.118	0.235	0.352	5.778	3.377	2.855	T 0.693
%RSD		2.246	2.405	1.803	1.111	6.059	45.660	1.902	1.837	18.710	T 0.359
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:18	190.1%	84.120	55.740	96.820	193.500	195.000	194.400	176.900	193.100	59.2%
2	01:03:44	185.6%	83.390	55.800	96.670	192.300	193.300	191.600	173.400	191.100	58.5%
3	01:04:11	187.8%	84.680	56.250	96.850	200.800	194.300	193.400	171.600	190.900	58.9%
x		187.8%	84.060	55.930	96.780	195.500	194.200	193.100	174.000	191.700	58.9%
σ		2.3%	0.643	0.277	0.093	4.593	0.847	1.453	2.689	1.226	0.4%
%RSD		1.2	0.765	0.496	0.096	2.349	0.436	0.752	1.545	0.639	0.6
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:03:18	207.300	184.800	39.470	36.790	M 1495.000	M 1489.000	64.5%	173.900	176.700	266.800
2	01:03:44	205.100	184.100	38.890	37.270	M 1491.000	M 1494.000	63.3%	175.700	178.100	270.200
3	01:04:11	206.800	184.300	38.360	36.620	M 1498.000	M 1489.000	63.2%	176.200	179.200	270.600
x		206.400	184.400	38.910	36.890	M 1495.000	M 1491.000	63.6%	175.300	178.000	269.200
σ		1.125	0.378	0.556	0.341	M 3.371	M 2.604	0.7%	1.224	1.259	2.092
%RSD		0.545	0.205	1.428	0.925	M 0.226	M 0.175	1.1	0.698	0.707	0.777
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	01:03:18	261.800	264.900	53.6%							
2	01:03:44	263.900	267.600	52.3%							
3	01:04:11	266.200	269.900	52.8%							
x		263.900	267.500	52.9%							
σ		2.202	2.498	0.7%							
%RSD		0.834	0.934	1.2							

UC27026-001SD 04/26/2019 01:08:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:05	86.7%	42.540	44.260	46.970	-74.750	T 2163.000	T 18680.000	T 19260.000	T 20170.000	TM 266600.000
2	01:09:32	85.5%	44.820	43.410	46.130	-74.340	T 2168.000	T 18900.000	T 19630.000	T 20100.000	TM 264600.000
3	01:10:00	84.2%	44.830	44.690	46.800	-72.810	T 2160.000	T 18640.000	T 18880.000	T 19980.000	TM 267100.000
x		85.4%	44.060	44.120	46.630	-73.970	T 2164.000	T 18740.000	T 19260.000	T 20080.000	TM 266100.000
σ		1.3%	1.318	0.651	0.439	1.023	T 4.160	T 141.200	T 374.200	T 96.350	TM 1335.000
%RSD		1.5	2.992	1.476	0.941	1.383	T 0.192	T 0.754	T 1.943	T 0.480	TM 0.502
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:05	T 1944.000	T 265200.000	T 42970.000	5898.000	3348.000	83.0%	TM 8588.000	T 458.700	187.000	9577.000
2	01:09:32	T 1810.000	T 259200.000	T 42580.000	5133.000	3368.000	83.4%	TM 8591.000	T 450.000	186.700	8508.000
3	01:10:00	T 1809.000	T 262000.000	T 43170.000	5088.000	3420.000	83.8%	TM 8573.000	T 456.200	185.600	9552.000
x		T 1854.000	T 262100.000	T 42910.000	5373.000	3379.000	83.4%	TM 8584.000	T 455.000	186.400	9212.000
σ		T 77.640	T 3027.000	T 297.500	455.200	37.060	0.4%	TM 9.906	T 4.485	0.698	610.100
%RSD		T 4.187	T 1.155	T 0.693	8.472	1.097	0.5	TM 0.115	T 0.986	0.374	6.623
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:05	TM 112100.000	TM 1794.000	TM 107400.000	TM 123700.000	200.200	187.300	160.600	152.800	203.100	M 575.900
2	01:09:32	TM 110900.000	TM 1803.000	TM 107100.000	TM 125000.000	199.800	186.200	156.700	153.400	205.000	M 589.800
3	01:10:00	TM 112800.000	TM 1811.000	TM 107300.000	TM 123900.000	197.300	185.400	158.600	155.800	206.400	M 592.200
x		TM 111900.000	TM 1803.000	TM 107300.000	TM 124200.000	199.100	186.300	158.600	154.000	204.900	M 586.000
σ		TM 968.300	TM 8.301	TM 140.600	TM 703.000	1.563	0.988	1.934	1.615	1.647	M 8.848
%RSD		TM 0.865	TM 0.461	TM 0.131	TM 0.566	0.785	0.530	1.219	1.049	0.804	M 1.510
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:05	349.400	324.500	146.000	196.400	3.620	1.050	332.000	193.500	16.980	T 196.000
2	01:09:32	358.300	335.300	151.000	196.400	3.652	0.311	321.300	188.100	17.270	T 194.300
3	01:10:00	360.900	335.900	150.900	194.200	3.774	0.815	318.200	185.400	16.460	T 194.600
x		356.200	331.900	149.300	195.700	3.682	0.726	323.800	189.000	16.900	T 194.900
σ		6.012	6.420	2.859	1.293	0.081	0.378	7.200	4.146	0.409	T 0.938
%RSD		1.688	1.935	1.915	0.661	2.211	52.020	2.223	2.193	2.418	T 0.481
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:05	181.9%	87.690	59.170	99.410	189.900	191.900	191.000	174.500	188.800	60.0%
2	01:09:32	188.4%	86.950	59.280	99.660	189.200	192.000	190.100	174.500	191.700	61.4%
3	01:10:00	188.0%	87.200	59.740	100.600	191.300	194.200	193.200	174.400	191.700	61.7%
x		186.1%	87.280	59.400	99.900	190.200	192.700	191.400	174.500	190.700	61.0%
σ		3.7%	0.378	0.302	0.640	1.091	1.282	1.620	0.075	1.634	0.9%
%RSD		2.0	0.433	0.508	0.641	0.574	0.665	0.846	0.043	0.857	1.5
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:09:05	205.500	183.100	38.340	36.900	M 1470.000	M 1460.000	63.9%	173.600	177.200	272.600
2	01:09:32	204.900	180.700	38.550	37.290	M 1447.000	M 1441.000	65.3%	174.000	176.400	271.600
3	01:10:00	206.900	182.500	39.930	37.650	M 1479.000	M 1472.000	66.3%	173.400	176.800	273.400
x		205.800	182.100	38.940	37.280	M 1466.000	M 1458.000	65.2%	173.700	176.800	272.500
σ		1.068	1.265	0.864	0.378	M 16.320	M 15.820	1.2%	0.342	0.408	0.927
%RSD		0.519	0.695	2.218	1.013	M 1.113	M 1.085	1.8	0.197	0.231	0.340
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	01:09:05	267.600	270.100	52.8%							
2	01:09:32	266.700	269.900	54.7%							
3	01:10:00	266.200	270.200	55.4%							
x		266.900	270.100	54.3%							
σ		0.705	0.163	1.4%							
%RSD		0.264	0.060	2.5							

UC27026-001L(5) 04/26/2019 01:14:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:55	85.0%	0.724	0.545	0.585	-38.290	38.150	T 5491.000	T 5616.000	T 5632.000	TM 32720.000
2	01:15:22	T 101.0%	0.686	0.205	0.494	-40.970	46.530	T 5475.000	T 5607.000	T 5564.000	TM 28070.000
3	01:15:50	90.7%	0.644	0.684	0.428	-45.560	48.190	T 5400.000	T 5597.000	T 5609.000	TM 31960.000
x		T 92.2%	0.685	0.478	0.502	-41.610	44.290	T 5455.000	T 5606.000	T 5602.000	TM 30910.000
σ		T 8.1%	0.040	0.246	0.079	3.679	5.384	T 48.940	T 9.136	T 34.540	TM 2492.000
%RSD		T 8.8	5.897	51.530	15.730	8.841	12.160	T 0.897	T 0.163	T 0.617	TM 8.061

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:55	T 264.000	T 61370.000	T 9323.000	603.000	353.500	80.3%	M 1700.000	59.400	1.598	2001.000
2	01:15:22	T 273.800	T 61910.000	T 8037.000	650.100	303.900	80.7%	M 1695.000	59.640	1.435	2079.000
3	01:15:50	T 275.100	T 63550.000	T 9118.000	695.500	330.900	80.1%	M 1742.000	61.320	1.532	2094.000
x		T 271.000	T 62280.000	T 8826.000	649.500	329.400	80.4%	M 1712.000	60.120	1.522	2058.000
σ		T 6.065	T 1135.000	T 691.000	46.250	24.840	0.3%	M 25.720	1.044	0.082	49.940
%RSD		T 2.238	T 1.823	T 7.830	7.120	7.540	0.4	M 1.502	1.737	5.398	2.427

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:55	T 27200.000	T 394.600	T 26700.000	T 27610.000	5.328	2.989	7.917	7.389	8.833	86.180
2	01:15:22	T 27030.000	402.100	T 26360.000	T 27590.000	5.334	3.098	7.994	7.133	9.120	84.190
3	01:15:50	T 27250.000	T 398.000	T 27150.000	T 28210.000	5.457	3.133	8.132	7.260	9.101	85.390
x		T 27160.000	T 398.200	T 26740.000	T 27810.000	5.373	3.073	8.014	7.261	9.018	85.260
σ		T 116.100	T 3.766	T 396.500	T 353.200	0.073	0.075	0.109	0.128	0.161	1.001
%RSD		T 0.428	T 0.946	T 1.483	T 1.270	1.350	2.451	1.363	1.764	1.781	1.174

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:55	71.380	66.440	0.599	2.362	2.216	1.484	4.244	1.916	1.084	44.650
2	01:15:22	73.080	66.560	0.271	1.753	1.972	1.157	1.552	1.021	1.016	44.640
3	01:15:50	71.450	66.610	0.342	2.870	3.249	1.777	1.996	1.165	0.874	45.030
x		71.970	66.540	0.404	2.328	2.479	1.473	2.597	1.367	0.992	44.770
σ		0.958	0.086	0.173	0.559	0.678	0.310	1.443	0.481	0.107	0.223
%RSD		1.331	0.130	42.800	24.020	27.340	21.070	55.570	35.160	10.820	0.497

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:55	95.2%	0.213	0.169	0.176	8.430	0.038	0.028	0.018	0.061	61.7%
2	01:15:22	95.7%	0.206	0.177	0.165	7.520	0.040	0.029	-0.000	0.036	61.3%
3	01:15:50	95.3%	0.216	0.169	0.203	8.903	0.037	0.029	0.012	-0.005	61.4%
x		95.4%	0.212	0.172	0.182	8.284	0.038	0.029	0.010	0.031	61.5%
σ		0.3%	0.005	0.005	0.020	0.703	0.001	0.001	0.009	0.033	0.2%
%RSD		0.3	2.414	2.683	10.840	8.490	3.670	3.183	93.020	107.700	0.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:14:55	5.003	1.962	-0.007	-0.010	257.800	256.100	61.6%	0.693	0.728	19.660
2	01:15:22	5.161	2.001	0.010	0.007	258.400	255.800	61.2%	0.734	0.728	19.350
3	01:15:50	5.034	2.020	-0.001	0.019	258.600	257.200	60.6%	0.680	0.709	19.340
x		5.066	1.994	0.001	0.005	258.300	256.400	61.1%	0.702	0.722	19.450
σ		0.084	0.030	0.009	0.015	0.417	0.705	0.5%	0.028	0.011	0.181
%RSD		1.657	1.493	1059.000	284.100	0.161	0.275	0.8	4.054	1.520	0.931

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:14:55	18.630	19.530	56.5%
2	01:15:22	18.490	19.320	55.6%
3	01:15:50	18.700	19.600	55.5%
x		18.610	19.480	55.9%
σ		0.106	0.148	0.5%
%RSD		0.571	0.759	0.9

UC27026-001A 04/26/2019 01:20:16

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:43	87.6%	39.660	42.450	45.970	-72.960	T 2113.000	T 20360.000	T 20850.000	T 22010.000	TM 158400.000
2	01:21:10	88.4%	40.150	42.510	45.960	-73.670	T 2088.000	T 20130.000	T 20780.000	T 21730.000	TM 154800.000
3	01:21:37	82.6%	41.890	42.140	46.330	-69.740	T 2021.000	T 19870.000	T 20880.000	T 21230.000	TM 161600.000
x		86.2%	40.570	42.370	46.080	-72.120	T 2074.000	T 20120.000	T 20840.000	T 21660.000	TM 158200.000
σ		3.2%	1.172	0.200	0.211	2.097	T 47.470	T 245.500	T 54.840	T 395.800	TM 3369.000
%RSD		3.7	2.890	0.473	0.457	2.908	T 2.289	T 1.220	T 0.263	T 1.828	TM 2.129

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:43	T 3054.000	T 261700.000	T 47050.000	5313.000	3304.000	82.5%	TM 8767.000	T 455.700	181.400	9696.000
2	01:21:10	T 2971.000	T 255800.000	T 46290.000	4943.000	3310.000	85.0%	TM 8566.000	T 451.900	174.400	9137.000
3	01:21:37	T 2784.000	T 248200.000	T 49260.000	4404.000	3671.000	87.3%	TM 8462.000	T 442.200	174.300	8736.000
x		T 2936.000	T 255200.000	T 47530.000	4887.000	3428.000	84.9%	TM 8598.000	T 449.900	176.700	9190.000
σ		T 138.100	T 6796.000	T 1544.000	456.800	210.400	2.4%	TM 154.900	T 6.993	4.055	482.100
%RSD		T 4.702	T 2.663	T 3.247	9.348	6.138	2.8	TM 1.802	T 1.554	2.295	5.246

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:43	TM 114800.000	TM 1932.000	TM 108600.000	TM 126500.000	190.600	177.700	154.700	145.500	194.600	M 597.200
2	01:21:10	TM 112900.000	TM 1889.000	TM 107600.000	TM 125100.000	184.600	172.600	150.300	141.400	190.600	M 600.100
3	01:21:37	TM 112900.000	TM 1905.000	TM 106700.000	TM 125600.000	185.700	175.400	148.200	143.100	192.100	M 612.300
x		TM 113500.000	TM 1909.000	TM 107600.000	TM 125700.000	187.000	175.200	151.100	143.300	192.400	M 603.200
σ		TM 1125.000	TM 21.810	TM 930.500	TM 687.300	3.195	2.560	3.340	2.045	2.034	M 8.016
%RSD		TM 0.991	TM 1.143	TM 0.865	TM 0.546	1.709	1.461	2.211	1.427	1.057	M 1.329

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:43	334.600	318.300	156.500	202.000	3.310	0.693	318.100	206.800	10.430	T 171.500
2	01:21:10	335.400	314.700	153.400	205.700	3.181	0.786	318.600	205.000	10.820	173.200
3	01:21:37	344.000	321.400	156.500	204.400	3.685	0.416	321.700	206.900	9.755	T 170.600
x		338.000	318.100	155.400	204.000	3.392	0.632	319.500	206.200	10.330	T 171.800
σ		5.243	3.353	1.811	1.833	0.262	0.193	1.958	1.066	0.537	T 1.340
%RSD		1.551	1.054	1.165	0.898	7.712	30.500	0.613	0.517	5.201	T 0.780

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:43	198.7%	97.020	62.280	113.600	193.500	192.800	190.200	168.700	188.300	57.3%
2	01:21:10	198.6%	96.170	62.800	112.800	181.000	190.000	190.300	170.600	187.200	58.4%
3	01:21:37	206.3%	95.900	61.420	112.600	177.400	191.500	189.600	171.800	187.600	60.5%
x		201.2%	96.360	62.170	113.000	184.000	191.400	190.100	170.400	187.700	58.8%
σ		4.4%	0.586	0.699	0.542	8.478	1.372	0.388	1.584	0.550	1.6%
%RSD		2.2	0.608	1.125	0.480	4.609	0.717	0.204	0.930	0.293	2.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:20:43	225.800	209.300	189.800	173.400	M 1545.000	M 1526.000	64.1%	164.600	166.500	249.000
2	01:21:10	223.900	206.200	188.900	173.000	M 1535.000	M 1537.000	65.2%	163.400	165.700	248.300
3	01:21:37	222.100	205.700	193.100	175.400	M 1523.000	M 1513.000	67.8%	163.400	166.900	247.100
x		223.900	207.100	190.600	174.000	M 1534.000	M 1526.000	65.7%	163.800	166.400	248.100
σ		1.807	1.944	2.235	1.262	M 10.940	M 12.050	1.9%	0.683	0.633	0.976
%RSD		0.807	0.939	1.172	0.725	M 0.713	M 0.790	2.9	0.417	0.381	0.393

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:20:43	245.300	247.700	51.4%
2	01:21:10	245.100	247.600	51.5%
3	01:21:37	245.500	247.500	54.1%
x		245.300	247.600	52.3%
σ		0.206	0.119	1.5%
%RSD		0.084	0.048	2.9

UC27026-003 04/26/2019 01:26:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:26:32	89.3%	2.365	0.021	0.148	-53.590	143.500	T 18700.000	T 19510.000	T 20100.000	TM 123300.000
2	01:26:59	83.5%	2.510	0.104	0.117	-55.940	123.600	T 18350.000	T 19080.000	T 19770.000	TM 130700.000
3	01:27:26	85.6%	2.432	0.071	0.138	-54.660	133.600	T 18690.000	T 19430.000	T 20020.000	TM 127800.000
x		86.1%	2.436	0.065	0.134	-54.730	133.600	T 18580.000	T 19340.000	T 19960.000	TM 127300.000
σ		2.9%	0.073	0.042	0.016	1.176	9.965	T 200.300	T 229.600	T 171.300	TM 3734.000
%RSD		3.4	2.979	64.040	12.020	2.149	7.460	T 1.078	T 1.187	T 0.858	TM 2.934

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:26:32	T 1037.000	T 287600.000	T 24590.000	4366.000	2551.000	84.4%	M 3736.000	180.700	165.500	8873.000
2	01:26:59	T 965.100	T 278300.000	T 25800.000	3843.000	2794.000	86.8%	M 3755.000	183.800	166.500	7209.000
3	01:27:26	T 988.600	T 280600.000	T 24920.000	4012.000	2695.000	85.9%	M 3744.000	180.300	164.900	8759.000
x		T 996.900	T 282200.000	T 25100.000	4074.000	2680.000	85.7%	M 3745.000	181.600	165.600	8281.000
σ		T 36.670	T 4793.000	T 623.300	267.300	122.100	1.2%	M 9.464	1.911	0.816	929.700
%RSD		T 3.678	T 1.698	T 2.483	6.562	4.557	1.4	M 0.253	1.052	0.493	11.230

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:26:32	T 63620.000	TM 3470.000	T 59680.000	T 74410.000	118.600	140.100	100.800	41.910	65.920	229.200
2	01:26:59	T 63430.000	TM 3502.000	T 59780.000	T 74770.000	117.100	141.300	99.830	41.510	65.110	235.500
3	01:27:26	T 63380.000	TM 3465.000	T 59700.000	T 75190.000	116.100	140.500	100.800	41.770	66.080	235.200
x		T 63470.000	TM 3479.000	T 59720.000	T 74790.000	117.200	140.700	100.500	41.730	65.700	233.300
σ		T 125.200	TM 20.120	T 56.050	T 390.600	1.244	0.615	0.564	0.204	0.523	3.528
%RSD		T 0.197	TM 0.578	T 0.094	T 0.522	1.061	0.437	0.561	0.488	0.796	1.512

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:26:32	210.000	173.400	1.056	8.729	4.272	0.051	6.052	9.620	-0.034	T 171.300
2	01:26:59	210.600	172.200	0.679	9.394	3.176	-0.144	4.439	8.113	-0.904	T 169.000
3	01:27:26	206.300	171.000	0.430	8.052	3.474	0.294	4.763	8.537	-2.027	T 169.300
x		209.000	172.200	0.722	8.725	3.641	0.067	5.085	8.757	-0.988	T 169.900
σ		2.338	1.208	0.315	0.671	0.567	0.219	0.854	0.777	0.999	T 1.273
%RSD		1.119	0.702	43.630	7.693	15.570	326.900	16.790	8.872	101.100	T 0.749

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:26:32	445.1%	0.404	0.170	0.551	82.150	0.132	0.042	0.133	0.126	59.3%
2	01:26:59	462.5%	0.434	0.171	0.603	68.210	0.126	0.051	0.162	0.140	61.0%
3	01:27:26	456.6%	0.421	0.168	0.495	74.110	0.145	0.064	0.193	0.139	60.5%
x		454.8%	0.420	0.170	0.550	74.820	0.134	0.052	0.163	0.135	60.3%
σ		8.8%	0.015	0.002	0.054	6.998	0.010	0.011	0.030	0.008	0.9%
%RSD		1.9	3.617	0.942	9.758	9.353	7.272	21.480	18.320	5.660	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:26:32	17.660	8.927	0.122	0.186	M 3895.000	M 3944.000	73.0%	2.185	2.212	82.670
2	01:26:59	16.980	9.213	0.137	0.151	M 3966.000	M 3973.000	76.7%	2.172	2.261	81.920
3	01:27:26	17.540	9.008	0.111	0.170	M 3971.000	M 3994.000	75.8%	2.148	2.158	82.340
x		17.390	9.049	0.123	0.169	M 3944.000	M 3970.000	75.1%	2.168	2.210	82.310
σ		0.360	0.147	0.013	0.017	M 42.510	M 25.380	1.9%	0.019	0.052	0.373
%RSD		2.067	1.626	10.520	10.200	M 1.078	M 0.639	2.5	0.865	2.332	0.453

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:26:32	76.420	79.520	52.3%
2	01:26:59	76.540	79.520	55.4%
3	01:27:26	77.770	79.940	54.0%
x		76.910	79.660	53.9%
σ		0.745	0.242	1.5%
%RSD		0.969	0.304	2.8

UC27026-004 04/26/2019 01:31:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:21	88.3%	1.050	-0.278	-0.124	-83.930	283.700	T 47280.000	T 49110.000	T 51020.000	TM 185500.000
2	01:32:48	86.7%	1.040	-0.183	-0.189	-83.700	278.800	T 46600.000	T 49200.000	T 51300.000	TM 189200.000
3	01:33:15	82.3%	1.126	-0.122	-0.182	-83.480	259.100	T 45950.000	T 48050.000	T 49640.000	TM 195400.000
x		85.8%	1.072	-0.194	-0.165	-83.700	273.900	T 46610.000	T 48790.000	T 50650.000	TM 190000.000
σ		3.1%	0.047	0.079	0.036	0.222	13.010	T 668.700	T 639.200	T 891.400	TM 4969.000
%RSD		3.7	4.381	40.580	21.780	0.265	4.749	T 1.435	T 1.310	T 1.760	TM 2.615

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:21	T 1030.000	T 252200.000	T 61840.000	3194.000	1636.000	88.9%	TM 7661.000	T 355.800	TM 900.700	18540.000
2	01:32:48	T 1039.000	T 252200.000	T 63260.000	3114.000	1675.000	89.7%	TM 7590.000	T 349.000	TM 901.600	19350.000
3	01:33:15	T 947.000	T 239000.000	T 65390.000	2379.000	1790.000	93.1%	TM 7469.000	T 349.000	TM 883.300	16710.000
x		T 1005.000	T 247800.000	T 63500.000	2896.000	1700.000	90.6%	TM 7573.000	T 351.300	TM 895.200	18200.000
σ		T 50.650	T 7622.000	T 1788.000	449.100	79.900	2.2%	TM 97.200	T 3.939	TM 10.280	1353.000
%RSD		T 5.039	T 3.075	T 2.816	15.510	4.699	2.5	TM 1.283	T 1.121	TM 1.148	7.434

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:21	TM 147600.000	TM 1475.000	TM 137400.000	TM 172700.000	75.090	443.100	308.000	43.460	70.450	M 593.600
2	01:32:48	TM 146400.000	TM 1476.000	TM 136700.000	TM 174300.000	75.040	441.500	305.700	42.920	69.680	M 594.200
3	01:33:15	TM 145300.000	TM 1471.000	TM 137000.000	TM 170400.000	72.760	439.100	304.200	41.710	68.900	M 610.000
x		TM 146400.000	TM 1474.000	TM 137000.000	TM 172500.000	74.290	441.200	306.000	42.700	69.680	M 599.300
σ		TM 1124.000	TM 2.507	TM 338.400	TM 1974.000	1.332	2.038	1.940	0.900	0.777	M 9.289
%RSD		TM 0.768	TM 0.170	TM 0.247	TM 1.145	1.793	0.462	0.634	2.109	1.115	M 1.550

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:21	256.500	236.800	1.366	9.760	3.119	-0.532	6.850	11.330	3.994	18.550
2	01:32:48	255.400	238.500	1.623	9.317	3.169	-0.870	5.808	10.200	3.553	18.550
3	01:33:15	259.800	242.500	1.080	8.415	3.296	-0.367	6.413	11.410	0.607	18.400
x		257.200	239.300	1.356	9.164	3.195	-0.590	6.357	10.980	2.718	18.500
σ		2.274	2.936	0.272	0.685	0.091	0.256	0.523	0.675	1.841	0.087
%RSD		0.884	1.227	20.020	7.477	2.850	43.470	8.234	6.144	67.750	0.470

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:21	471.7%	0.047	-0.003	0.037	56.120	0.220	0.048	0.098	0.058	55.9%
2	01:32:48	475.8%	0.043	-0.001	0.029	55.040	0.204	0.041	0.157	0.078	56.4%
3	01:33:15	494.6%	0.038	0.004	0.051	53.230	0.182	0.058	0.159	0.067	57.8%
x		480.7%	0.043	0.000	0.039	54.790	0.202	0.049	0.138	0.068	56.7%
σ		12.2%	0.004	0.004	0.011	1.462	0.019	0.009	0.035	0.010	1.0%
%RSD		2.5	9.865	16320.000	28.140	2.669	9.384	17.650	25.290	15.100	1.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:32:21	13.490	7.974	0.060	0.076	M 1759.000	M 1754.000	70.7%	2.989	3.067	41.060
2	01:32:48	13.410	8.221	0.057	0.041	M 1765.000	M 1768.000	72.3%	2.939	3.077	40.700
3	01:33:15	13.710	7.939	0.051	0.050	M 1751.000	M 1736.000	73.8%	3.123	3.087	41.000
x		13.540	8.044	0.056	0.056	M 1759.000	M 1753.000	72.3%	3.017	3.077	40.920
σ		0.154	0.154	0.004	0.018	M 6.951	M 16.170	1.6%	0.095	0.010	0.193
%RSD		1.136	1.910	7.900	32.070	M 0.395	M 0.923	2.2	3.146	0.316	0.470

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:32:21	38.350	39.910	49.5%
2	01:32:48	38.080	39.550	50.2%
3	01:33:15	38.310	39.830	51.5%
x		38.250	39.770	50.4%
σ		0.144	0.189	1.0%
%RSD		0.375	0.475	2.0

CCV MW10994 04/26/2019 01:37:44 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:11	78.2%	304.900	299.100	298.400	44.540	T64100.000	T61190.000	T61450.000	T61680.000	333.000
2	01:38:38	79.9%	313.600	306.200	304.200	45.710	T64560.000	T62450.000	T62800.000	T63260.000	321.500
3	01:39:05	82.7%	294.200	290.700	301.300	40.790	T66380.000	T61710.000	T61400.000	T61750.000	312.900
x		80.3%	101.424%	99.558%	100.422%	43.680	T108.356%	T61780.000	T61880.000	T103.713%	107.486%
σ		2.3%	n/a	n/a	n/a	2.571	Tn/a	T631.500	T793.400	Tn/a	n/a
%RSD		2.8	3.194	2.599	0.955	5.886	T1.858	T1.022	T1.282	T1.433	3.116

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:11	T3576.000	5193.000	T59910.000	65270.000	T57780.000	73.6%	327.700	329.800	310.500	950.600
2	01:38:38	T3486.000	4978.000	T59480.000	65880.000	T58340.000	75.8%	326.000	328.800	308.600	1312.000
3	01:39:05	T3619.000	5015.000	T58600.000	66740.000	T55530.000	74.1%	328.500	325.500	308.900	1309.000
x		T118.681%	5062.000	T98.883%	65960.000	T95.359%	74.5%	109.136%	109.345%	103.099%	1191.000
σ		Tn/a	114.900	Tn/a	738.800	Tn/a	1.1%	n/a	n/a	n/a	208.000
%RSD		T1.906	2.269	T1.121	1.120	T2.596	1.5	0.403	0.692	0.330	17.470

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:11	T63960.000	302.700	T63880.000	T60530.000	297.000	294.300	307.900	297.700	274.600	330.600
2	01:38:38	T63790.000	300.100	T63630.000	T60420.000	292.100	289.300	301.000	295.900	273.400	336.200
3	01:39:05	T63210.000	293.400	T62830.000	T60390.000	295.400	288.700	302.200	295.400	270.400	321.100
x		T63650.000	99.574%	T63440.000	T100.747%	98.265%	96.924%	303.700	296.400	90.929%	109.761%
σ		T392.400	n/a	T548.300	Tn/a	n/a	n/a	3.672	1.206	n/a	n/a
%RSD		T0.617	1.608	T0.864	T0.123	0.846	1.053	1.209	0.407	0.789	2.309

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:11	289.800	279.500	276.300	332.900	3.499	2.617	1281.000	329.700	1.973	313.300
2	01:38:38	292.400	288.100	277.600	331.800	4.125	2.443	1263.000	325.500	3.018	316.000
3	01:39:05	284.700	278.700	273.200	328.800	3.821	2.423	1280.000	323.800	-0.194	317.600
x		289.000	282.100	91.903%	331.200	3.815	2.494	1275.000	108.786%	1.599	105.201%
σ		3.877	5.219	n/a	2.129	0.313	0.107	10.320	n/a	1.638	n/a
%RSD		1.342	1.850	0.821	0.643	8.206	4.277	0.810	0.929	102.500	0.690

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:11	61.6%	318.700	314.100	321.200	313.000	303.400	302.600	301.000	305.800	56.1%
2	01:38:38	63.6%	323.100	317.300	321.500	309.900	304.900	302.500	309.000	306.200	57.8%
3	01:39:05	62.0%	319.200	317.800	323.500	298.500	300.100	299.100	299.900	300.400	57.5%
x		62.4%	106.782%	105.468%	322.100	307.100	100.929%	301.400	303.300	101.370%	57.1%
σ		1.0%	n/a	n/a	1.274	7.671	n/a	1.993	4.977	n/a	0.9%
%RSD		1.7	0.755	0.646	0.396	2.498	0.808	0.661	1.641	1.053	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:38:11	318.200	314.900	313.900	323.000	322.700	321.600	54.3%	298.300	305.600	294.200
2	01:38:38	319.600	320.600	318.400	324.300	327.500	325.200	56.7%	296.100	301.100	294.300
3	01:39:05	316.200	316.100	309.000	320.700	322.500	320.600	55.7%	294.900	299.500	292.000
x		106.003%	105.724%	313.800	107.556%	108.072%	107.487%	55.6%	296.400	100.696%	97.838%
σ		n/a	n/a	4.683	n/a	n/a	n/a	1.2%	1.763	n/a	n/a
%RSD		0.536	0.943	1.492	0.561	0.865	0.754	2.1	0.595	1.056	0.453

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:38:11	295.300	293.800	50.0%
2	01:38:38	293.900	292.800	51.7%
3	01:39:05	292.200	290.800	50.7%
x		97.929%	97.486%	50.8%
σ		n/a	n/a	0.9%
%RSD		0.514	0.523	1.7

CCB IM9370-01 04/26/2019 01:43:33 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:44:00	85.0%	0.066	2.306	2.022	23.150	13.900	9.551	9.055	9.478	4.308
2	01:44:27	82.9%	0.028	2.017	1.710	26.150	6.453	6.151	6.213	6.588	2.900
3	01:44:54	83.6%	0.022	1.886	1.574	18.860	5.142	5.562	5.608	5.029	2.491
x		83.8%	0.039	2.069	1.768	22.720	8.499	7.088	6.959	7.031	3.233
σ		1.0%	0.023	0.215	0.230	3.663	4.726	2.153	1.841	2.257	0.953
%RSD		1.2	60.760	10.370	12.990	16.120	55.600	30.380	26.450	32.100	29.490

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:44:00	17.280	3408.000	51.880	5.623	5.744	76.3%	-0.173	0.048	0.141	130.100
2	01:44:27	16.620	3408.000	44.010	5.606	4.080	76.6%	-0.126	0.068	0.142	95.540
3	01:44:54	16.520	3314.000	40.300	4.176	4.340	78.7%	-0.369	0.122	0.081	42.140
x		16.800	3377.000	45.400	5.135	4.721	77.2%	-0.223	0.080	0.122	89.270
σ		0.412	53.910	5.912	0.830	0.895	1.3%	0.129	0.038	0.035	44.330
%RSD		2.452	1.597	13.020	16.170	18.960	1.7	57.790	47.870	28.670	49.660

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:44:00	20.110	0.233	36.940	27.920	0.003	-0.027	-0.282	-0.036	0.037	0.066
2	01:44:27	14.730	0.231	31.840	23.690	-0.000	-0.028	-0.002	-0.027	0.018	-0.000
3	01:44:54	14.260	0.180	27.400	21.370	-0.024	-0.008	0.240	-0.040	0.008	-0.011
x		16.360	0.215	32.060	24.330	-0.007	-0.021	-0.014	-0.035	0.021	0.018
σ		3.251	0.030	4.777	3.321	0.015	0.011	0.261	0.007	0.015	0.041
%RSD		19.860	13.960	14.900	13.650	211.600	53.930	1804.000	18.830	71.240	225.200

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:44:00	0.056	0.079	-0.099	1.439	1.315	1.812	1.920	0.447	4.358	0.045
2	01:44:27	-0.165	0.060	-0.081	1.537	1.608	3.073	0.727	0.237	0.835	0.026
3	01:44:54	-0.037	0.081	0.027	1.176	1.231	2.065	0.928	0.268	1.814	0.026
x		-0.049	0.073	-0.051	1.384	1.385	2.317	1.191	0.317	2.335	0.032
σ		0.111	0.012	0.068	0.187	0.198	0.667	0.639	0.113	1.819	0.011
%RSD		228.800	16.260	134.100	13.490	14.300	28.810	53.630	35.720	77.880	33.370

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:44:00	64.0%	0.087	0.128	0.135	0.802	0.032	0.032	0.033	0.040	60.7%
2	01:44:27	64.5%	0.086	0.086	0.102	1.076	0.014	0.019	0.007	0.021	61.2%
3	01:44:54	65.2%	0.102	0.125	0.082	-1.490	0.026	0.029	0.001	0.013	61.8%
x		64.5%	0.092	0.113	0.106	0.129	0.024	0.027	0.014	0.024	61.3%
σ		0.6%	0.009	0.023	0.026	1.409	0.009	0.007	0.017	0.014	0.5%
%RSD		0.9	9.445	20.360	24.780	1089.000	38.870	25.460	125.600	56.980	0.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:44:00	0.067	0.081	0.148	0.230	0.041	0.016	57.0%	0.027	0.022	0.052
2	01:44:27	0.045	0.060	0.189	0.178	0.041	0.047	57.6%	0.017	0.021	0.016
3	01:44:54	0.029	0.062	0.121	0.124	0.004	0.020	58.3%	0.018	0.008	0.011
x		0.047	0.068	0.153	0.177	0.029	0.028	57.6%	0.021	0.017	0.026
σ		0.019	0.012	0.035	0.053	0.021	0.017	0.7%	0.005	0.008	0.023
%RSD		40.210	17.280	22.610	29.910	74.870	60.380	1.1	26.350	45.450	86.650

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:44:00	0.026	0.034	54.8%
2	01:44:27	0.031	0.021	55.7%
3	01:44:54	0.022	0.015	56.2%
x		0.026	0.023	55.6%
σ		0.004	0.009	0.7%
%RSD		16.250	40.530	1.3

UC27026-005 04/26/2019 01:49:20

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:47	81.9%	2.613	0.002	-0.026	-57.000	102.900	T 10440.000	T 10620.000	T 10960.000	TM 105400.000
2	01:50:14	86.6%	2.608	0.011	0.004	-58.480	114.300	T 10610.000	T 10900.000	T 11250.000	TM 99760.000
3	01:50:40	88.4%	2.447	0.022	0.005	-61.770	123.800	T 10740.000	T 11050.000	T 11160.000	TM 100700.000
x		85.6%	2.556	0.012	-0.006	-59.080	113.700	T 10600.000	T 10860.000	T 11120.000	TM 102000.000
σ		3.4%	0.095	0.010	0.018	2.442	10.460	T 147.800	T 221.000	T 148.500	TM 3015.000
%RSD		4.0	3.705	87.480	301.400	4.134	9.203	T 1.395	T 2.036	T 1.335	TM 2.957

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:47	T 952.400	T 249600.000	T 17910.000	1769.000	1019.000	88.2%	TM 4000.000	240.500	202.700	6761.000
2	01:50:14	T 1027.000	T 264800.000	T 17280.000	2047.000	944.200	85.6%	M 3820.000	247.600	207.300	7557.000
3	01:50:40	T 1064.000	T 261500.000	T 17100.000	2213.000	945.500	86.2%	M 3829.000	245.800	204.300	9192.000
x		T 1014.000	T 258600.000	T 17430.000	2010.000	969.400	86.7%	TM 3883.000	244.600	204.700	7837.000
σ		T 56.680	T 8005.000	T 427.300	224.400	42.540	1.4%	TM 101.000	3.732	2.338	1240.000
%RSD		T 5.589	T 3.095	T 2.452	11.170	4.388	1.6	TM 2.600	1.526	1.142	15.820

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:47	T 88740.000	TM 12810.000	T 84410.000	TM 101300.000	T 453.300	177.500	135.600	16.780	26.240	309.900
2	01:50:14	T 89630.000	TM 12800.000	T 84990.000	TM 102000.000	T 456.800	178.100	138.500	16.820	26.490	301.700
3	01:50:40	T 91000.000	TM 12980.000	T 86510.000	TM 102300.000	T 460.500	179.900	141.600	17.050	26.620	300.300
x		T 89790.000	TM 12860.000	T 85300.000	TM 101900.000	T 456.900	178.500	138.600	16.880	26.450	304.000
σ		T 1139.000	TM 104.000	T 1084.000	TM 559.400	T 3.626	1.210	3.006	0.149	0.197	5.195
%RSD		T 1.268	TM 0.809	T 1.271	TM 0.549	T 0.794	0.678	2.169	0.881	0.746	1.709

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:47	228.800	201.400	1.596	5.513	2.415	-0.248	2.585	4.298	-1.875	T 185.800
2	01:50:14	231.200	199.900	2.533	6.455	2.329	-0.519	3.141	4.594	-2.093	T 187.000
3	01:50:40	229.100	197.400	2.778	5.657	2.594	-0.036	5.001	5.941	-1.164	T 188.700
x		229.700	199.600	2.302	5.875	2.446	-0.268	3.576	4.945	-1.711	T 187.200
σ		1.324	2.020	0.624	0.508	0.136	0.242	1.265	0.876	0.486	T 1.426
%RSD		0.576	1.012	27.090	8.640	5.546	90.390	35.390	17.710	28.380	T 0.762

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:47	248.0%	1.377	0.814	1.556	50.250	0.218	0.143	0.807	0.820	59.4%
2	01:50:14	244.8%	1.332	0.851	1.591	54.340	0.255	0.137	0.681	0.798	59.7%
3	01:50:40	245.2%	1.360	0.805	1.595	55.700	0.259	0.223	0.551	0.730	59.3%
x		246.0%	1.356	0.823	1.580	53.430	0.244	0.168	0.680	0.783	59.5%
σ		1.7%	0.023	0.024	0.021	2.838	0.022	0.048	0.128	0.047	0.2%
%RSD		0.7	1.696	2.925	1.349	5.311	9.199	28.620	18.810	6.053	0.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:49:47	14.660	8.256	0.232	0.304	M 2805.000	M 2796.000	66.8%	5.717	6.109	165.600
2	01:50:14	15.210	8.490	0.278	0.248	M 2788.000	M 2794.000	66.6%	6.222	6.107	164.300
3	01:50:40	15.240	8.210	0.218	0.218	M 2818.000	M 2818.000	66.3%	6.078	6.154	164.700
x		15.040	8.319	0.242	0.257	M 2804.000	M 2803.000	66.5%	6.006	6.123	164.900
σ		0.325	0.150	0.031	0.044	M 15.180	M 13.210	0.3%	0.260	0.027	0.685
%RSD		2.162	1.808	12.930	16.940	M 0.542	M 0.471	0.4	4.334	0.433	0.416

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:49:47	151.800	160.900	53.4%
2	01:50:14	153.100	161.200	53.0%
3	01:50:40	151.700	160.800	53.2%
x		152.200	161.000	53.2%
σ		0.790	0.224	0.2%
%RSD		0.519	0.139	0.4

UC27026-006 04/26/2019 01:55:07

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:34	85.7%	4.331	-0.028	0.098	-33.230	84.260	T 8664.000	T 8815.000	T 8914.000	TM 96560.000
2	01:56:01	86.0%	4.613	0.069	0.153	-34.330	80.840	T 8487.000	T 8751.000	T 8993.000	TM 100400.000
3	01:56:29	89.1%	4.117	-0.071	0.123	-42.460	92.530	T 8408.000	T 8638.000	T 8856.000	TM 96140.000
x		87.0%	4.354	-0.010	0.125	-36.670	85.880	T 8520.000	T 8735.000	T 8921.000	TM 97700.000
σ		1.9%	0.249	0.071	0.028	5.039	6.009	T 130.900	T 89.460	T 68.800	TM 2353.000
%RSD		2.2	5.721	708.800	22.220	13.740	6.998	T 1.537	T 1.024	T 0.771	TM 2.409

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:34	T 938.500	T 241700.000	T 4732.000	1335.000	608.500	93.5%	M 4120.000	217.000	TM 588.000	11610.000
2	01:56:01	T 962.400	T 239300.000	T 4672.000	1321.000	590.100	93.9%	M 4099.000	213.400	TM 578.800	12200.000
3	01:56:29	T 978.700	T 239500.000	T 4627.000	1433.000	585.800	94.7%	M 4020.000	212.700	TM 579.700	12780.000
x		T 959.900	T 240200.000	T 4677.000	1363.000	594.800	94.0%	M 4080.000	214.400	TM 582.200	12200.000
σ		T 20.270	T 1339.000	T 53.080	61.190	12.010	0.6%	M 52.510	2.287	TM 5.053	580.400
%RSD		T 2.111	T 0.557	T 1.135	4.490	2.020	0.6	M 1.287	1.067	TM 0.868	4.759

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:34	TM 104900.000	TM 1969.000	T 99450.000	TM 120800.000	57.650	150.200	116.300	68.790	97.550	238.500
2	01:56:01	TM 104600.000	TM 1985.000	T 98200.000	TM 117700.000	56.440	149.100	115.000	68.570	99.450	237.200
3	01:56:29	TM 103900.000	TM 1952.000	T 97780.000	TM 118400.000	56.570	148.000	113.200	68.350	97.600	234.700
x		TM 104500.000	TM 1969.000	T 98480.000	TM 118900.000	56.890	149.100	114.800	68.570	98.200	236.800
σ		TM 502.000	TM 16.190	T 869.600	TM 1612.000	0.663	1.094	1.601	0.222	1.081	1.896
%RSD		TM 0.480	TM 0.822	T 0.883	TM 1.356	1.166	0.734	1.395	0.324	1.101	0.800

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:34	134.600	119.200	3.536	5.748	1.668	-0.739	4.292	6.462	-0.246	106.000
2	01:56:01	132.800	116.300	3.259	6.562	1.488	-0.927	3.418	5.901	-2.158	104.900
3	01:56:29	132.600	118.000	3.394	5.848	2.391	-0.931	3.324	5.698	-1.169	T 105.300
x		133.300	117.800	3.396	6.052	1.849	-0.866	3.678	6.020	-1.191	T 105.400
σ		1.116	1.463	0.139	0.444	0.478	0.110	0.534	0.396	0.956	T 0.528
%RSD		0.837	1.242	4.087	7.333	25.830	12.680	14.520	6.574	80.290	T 0.501

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:34	292.5%	0.653	0.372	0.854	49.170	0.139	0.058	0.219	0.177	58.2%
2	01:56:01	292.5%	0.719	0.286	0.843	43.400	0.125	0.063	0.142	0.222	58.1%
3	01:56:29	291.3%	0.731	0.375	0.832	47.110	0.137	0.064	0.230	0.197	58.5%
x		292.1%	0.701	0.344	0.843	46.560	0.134	0.061	0.197	0.199	58.3%
σ		0.7%	0.042	0.051	0.011	2.927	0.008	0.003	0.048	0.022	0.2%
%RSD		0.2	5.959	14.800	1.292	6.287	5.788	4.940	24.300	11.210	0.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	01:55:34	16.580	9.983	0.148	0.130	M 1315.000	M 1305.000	64.6%	1.358	1.463	56.530
2	01:56:01	16.740	9.618	0.136	0.147	M 1309.000	M 1314.000	64.9%	1.486	1.414	57.220
3	01:56:29	16.570	9.800	0.115	0.122	M 1308.000	M 1300.000	64.7%	1.470	1.456	57.500
x		16.630	9.800	0.133	0.133	M 1311.000	M 1306.000	64.8%	1.438	1.444	57.080
σ		0.097	0.183	0.017	0.012	M 3.927	M 6.986	0.1%	0.070	0.027	0.498
%RSD		0.586	1.864	12.700	9.361	M 0.300	M 0.535	0.2	4.845	1.836	0.872

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	01:55:34	53.570	55.180	52.2%
2	01:56:01	53.100	55.710	52.4%
3	01:56:29	52.770	55.590	52.1%
x		53.150	55.490	52.2%
σ		0.403	0.274	0.2%
%RSD		0.758	0.493	0.3

UC27026-007 04/26/2019 02:00:57

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:01:25	84.1%	1.543	-0.185	-0.243	-60.740	204.400	T 13600.000	T 14360.000	T 14600.000	TM 123700.000
2	02:01:51	86.3%	1.586	-0.238	-0.300	-59.830	218.000	T 13480.000	T 14050.000	T 14520.000	TM 123400.000
3	02:02:19	87.6%	1.464	-0.323	-0.270	-57.470	214.500	T 13810.000	T 14220.000	T 14910.000	TM 123800.000
x		86.0%	1.531	-0.249	-0.271	-59.350	212.300	T 13630.000	T 14210.000	T 14680.000	TM 123600.000
σ		1.8%	0.062	0.070	0.029	1.687	7.091	T 164.900	T 154.100	T 202.600	TM 207.600
%RSD		2.1	4.049	28.020	10.560	2.842	3.340	T 1.210	T 1.084	T 1.381	TM 0.168

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:01:25	T 1245.000	T 272200.000	T 28230.000	5531.000	3959.000	79.3%	M 4804.000	232.800	26.000	8472.000
2	02:01:51	T 1192.000	T 276100.000	T 28240.000	5687.000	3902.000	80.1%	M 4787.000	231.900	25.190	8130.000
3	02:02:19	T 1264.000	T 285500.000	T 27920.000	5727.000	3781.000	78.6%	M 4856.000	239.500	25.280	9156.000
x		T 1234.000	T 277900.000	T 28130.000	5648.000	3881.000	79.3%	M 4816.000	234.700	25.490	8586.000
σ		T 37.550	T 6873.000	T 184.700	104.000	91.280	0.7%	M 35.990	4.193	0.444	522.100
%RSD		T 3.045	T 2.473	T 0.657	1.840	2.352	0.9	M 0.747	1.786	1.742	6.081

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:01:25	T 93390.000	TM 2522.000	T 89810.000	TM 105200.000	51.060	22.750	27.750	12.830	21.180	351.500
2	02:01:51	T 92980.000	TM 2492.000	T 89220.000	TM 104700.000	50.300	22.630	28.170	12.690	20.460	342.000
3	02:02:19	T 93740.000	TM 2511.000	T 91000.000	TM 105200.000	50.280	22.990	28.830	12.810	20.980	343.200
x		T 93370.000	TM 2509.000	T 90010.000	TM 105100.000	50.550	22.790	28.250	12.780	20.870	345.600
σ		T 383.100	TM 15.200	T 907.100	TM 317.100	0.445	0.185	0.544	0.078	0.374	5.178
%RSD		T 0.410	TM 0.606	T 1.008	TM 0.302	0.881	0.810	1.927	0.608	1.790	1.498

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:01:25	233.100	209.900	0.330	5.617	2.894	0.571	4.273	4.230	4.311	T 249.300
2	02:01:51	233.000	209.700	0.518	6.012	3.415	0.941	3.391	3.703	3.324	T 249.500
3	02:02:19	232.200	211.500	1.173	5.566	3.917	1.108	5.231	4.962	0.889	T 250.700
x		232.800	210.400	0.673	5.732	3.409	0.873	4.298	4.299	2.841	T 249.800
σ		0.463	1.008	0.443	0.244	0.512	0.275	0.921	0.632	1.762	T 0.785
%RSD		0.199	0.479	65.720	4.259	15.010	31.490	21.420	14.710	62.000	T 0.314

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:01:25	190.2%	0.488	0.307	0.607	46.180	0.145	0.103	0.154	0.125	55.8%
2	02:01:51	190.4%	0.505	0.305	0.498	47.400	0.123	0.088	0.172	0.184	56.3%
3	02:02:19	191.2%	0.450	0.317	0.552	48.290	0.117	0.097	0.120	0.075	56.8%
x		190.6%	0.481	0.310	0.552	47.290	0.128	0.096	0.149	0.128	56.3%
σ		0.5%	0.028	0.006	0.055	1.057	0.015	0.008	0.026	0.055	0.5%
%RSD		0.3	5.835	2.056	9.878	2.235	11.480	7.874	17.510	42.770	0.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:01:25	13.290	8.399	0.063	0.096	M 1807.000	M 1797.000	61.1%	2.199	2.240	86.340
2	02:01:51	13.390	8.281	0.073	0.122	M 1817.000	M 1802.000	61.4%	2.202	2.181	86.480
3	02:02:19	13.830	8.532	0.060	0.157	M 1821.000	M 1806.000	61.1%	2.304	2.276	87.060
x		13.510	8.404	0.065	0.125	M 1815.000	M 1802.000	61.2%	2.235	2.232	86.630
σ		0.287	0.125	0.006	0.031	M 7.254	M 4.264	0.2%	0.060	0.048	0.384
%RSD		2.127	1.492	9.865	24.460	M 0.400	M 0.237	0.3	2.670	2.143	0.444

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:01:25	82.230	85.430	49.9%
2	02:01:51	81.500	85.220	49.8%
3	02:02:19	82.770	86.520	50.1%
x		82.170	85.720	49.9%
σ		0.637	0.697	0.2%
%RSD		0.775	0.814	0.4

UC27026-008 04/26/2019 02:06:47

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:07:14	83.5%	1.670	-0.262	-0.285	-72.360	229.800	T 16140.000	T 16790.000	T 17480.000	TM 148700.000
2	02:07:41	83.9%	1.717	-0.415	-0.282	-75.380	210.000	T 16020.000	T 16750.000	T 17040.000	TM 146200.000
3	02:08:08	81.2%	1.757	-0.409	-0.292	-74.980	195.000	T 15550.000	T 16360.000	T 16980.000	TM 148700.000
x		82.9%	1.715	-0.362	-0.287	-74.240	211.600	T 15900.000	T 16630.000	T 17170.000	TM 147900.000
σ		1.4%	0.044	0.087	0.005	1.644	17.470	T 310.300	T 233.700	T 275.300	TM 1444.000
%RSD		1.7	2.539	23.990	1.770	2.214	8.257	T 1.951	T 1.405	T 1.603	TM 0.976
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:07:14	T 1326.000	T 261700.000	T 35800.000	3642.000	1564.000	79.1%	TM 5910.000	271.500	6.800	8624.000
2	02:07:41	T 1194.000	T 255300.000	T 35640.000	3195.000	1553.000	81.4%	TM 5759.000	257.300	6.676	8142.000
3	02:08:08	T 1217.000	T 247500.000	T 35310.000	2750.000	1583.000	81.8%	M 5357.000	255.600	6.759	7175.000
x		T 1246.000	T 254800.000	T 35590.000	3196.000	1567.000	80.7%	TM 5675.000	261.500	6.745	7980.000
σ		T 70.550	T 7116.000	T 251.000	446.100	15.300	1.5%	TM 285.800	8.749	0.063	737.700
%RSD		T 5.664	T 2.793	T 0.705	13.960	0.976	1.8	TM 5.035	3.346	0.941	9.244
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:07:14	TM 106200.000	TM 7132.000	TM 101400.000	TM 121200.000	143.900	26.120	31.280	19.440	32.030	413.900
2	02:07:41	TM 106900.000	TM 7102.000	TM 100500.000	TM 119600.000	141.300	25.660	30.120	19.260	30.870	409.600
3	02:08:08	TM 105100.000	TM 7004.000	TM 100100.000	TM 121000.000	140.300	25.070	29.630	19.230	30.880	417.300
x		TM 106100.000	TM 7079.000	TM 100700.000	TM 120600.000	141.800	25.620	30.340	19.310	31.260	413.600
σ		TM 891.400	TM 67.140	TM 647.100	TM 896.900	1.868	0.528	0.845	0.112	0.665	3.890
%RSD		TM 0.840	TM 0.948	TM 0.643	TM 0.744	1.317	2.061	2.785	0.580	2.128	0.941
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:07:14	261.300	234.200	1.338	8.934	2.879	-0.389	4.696	5.911	1.244	T 193.100
2	02:07:41	256.100	231.800	1.505	7.396	2.973	-0.172	1.990	3.567	4.011	T 191.600
3	02:08:08	262.400	237.400	1.955	7.671	3.217	-0.511	5.212	6.479	-0.333	T 188.900
x		259.900	234.500	1.599	8.000	3.023	-0.357	3.966	5.319	1.640	T 191.200
σ		3.394	2.773	0.319	0.820	0.175	0.172	1.731	1.544	2.199	T 2.139
%RSD		1.306	1.183	19.970	10.250	5.775	48.010	43.630	29.020	134.100	T 1.119
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:07:14	246.0%	1.016	0.516	1.161	54.790	0.424	0.364	0.272	0.407	54.4%
2	02:07:41	249.3%	0.887	0.499	1.065	54.750	0.407	0.422	0.327	0.331	55.9%
3	02:08:08	255.8%	0.939	0.549	1.175	51.980	0.416	0.368	0.380	0.341	56.2%
x		250.3%	0.947	0.522	1.134	53.840	0.416	0.385	0.326	0.360	55.5%
σ		5.0%	0.065	0.026	0.060	1.611	0.008	0.032	0.054	0.041	0.9%
%RSD		2.0	6.819	4.938	5.265	2.993	2.036	8.443	16.570	11.520	1.7
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:07:14	33.160	10.130	0.055	0.086	M 2540.000	M 2546.000	62.9%	4.074	4.082	140.600
2	02:07:41	31.330	9.455	0.051	0.089	M 2493.000	M 2472.000	64.6%	3.921	3.928	136.900
3	02:08:08	30.310	9.820	0.048	0.095	M 2496.000	M 2486.000	65.8%	4.072	4.019	138.200
x		31.600	9.802	0.051	0.090	M 2510.000	M 2501.000	64.4%	4.023	4.010	138.600
σ		1.440	0.338	0.003	0.005	M 26.210	M 39.080	1.5%	0.088	0.077	1.875
%RSD		4.557	3.447	6.547	5.585	M 1.044	M 1.562	2.3	2.187	1.927	1.353
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	02:07:14	133.000	139.000	47.7%							
2	02:07:41	131.800	136.200	48.5%							
3	02:08:08	132.900	137.600	49.6%							
x		132.600	137.600	48.6%							
σ		0.706	1.402	0.9%							
%RSD		0.533	1.019	1.9							

UC27026-009 04/26/2019 02:12:34

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:13:01	86.7%	1.643	-0.239	-0.184	-41.640	192.600	T 11430.000	T 11540.000	T 11880.000	TM 60340.000
2	02:13:29	84.7%	1.675	-0.190	-0.157	-40.130	181.600	T 11160.000	T 11540.000	T 11790.000	TM 63300.000
3	02:13:56	79.7%	1.736	-0.206	-0.253	-41.830	162.400	T 11270.000	T 11560.000	T 11920.000	TM 63650.000
x		83.7%	1.685	-0.212	-0.198	-41.200	178.900	T 11290.000	T 11550.000	T 11860.000	TM 62430.000
σ		3.6%	0.047	0.025	0.049	0.928	15.290	T 138.600	T 9.696	T 63.690	TM 1822.000
%RSD		4.3	2.792	11.630	24.930	2.253	8.545	T 1.228	T 0.084	T 0.537	TM 2.919

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:13:01	T 1003.000	T 298900.000	T 23650.000	1928.000	949.700	75.8%	M 4610.000	271.500	9.572	9787.000
2	02:13:29	T 1010.000	T 305100.000	T 24920.000	1748.000	966.000	76.7%	M 4648.000	270.500	9.509	9203.000
3	02:13:56	T 972.400	T 289100.000	T 24960.000	1643.000	1042.000	77.6%	M 4630.000	269.200	8.726	8254.000
x		T 995.000	T 297700.000	T 24510.000	1773.000	986.000	76.7%	M 4629.000	270.400	9.269	9082.000
σ		T 19.920	T 8068.000	T 745.400	144.200	49.410	0.9%	M 18.590	1.141	0.472	773.500
%RSD		T 2.001	T 2.710	T 3.041	8.133	5.012	1.2	M 0.402	0.422	5.089	8.518

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:13:01	T 95510.000	TM 2046.000	T 91490.000	TM 104300.000	19.800	4.861	17.190	24.440	34.660	221.000
2	02:13:29	T 96170.000	TM 2068.000	T 91830.000	TM 105800.000	19.880	4.914	15.460	24.370	34.730	222.500
3	02:13:56	T 96250.000	TM 2103.000	T 92430.000	TM 104400.000	19.220	4.739	14.800	24.060	34.190	234.300
x		T 95980.000	TM 2073.000	T 91920.000	TM 104800.000	19.640	4.838	15.820	24.290	34.530	225.900
σ		T 407.000	TM 28.940	T 474.200	TM 808.700	0.359	0.090	1.239	0.202	0.294	7.266
%RSD		T 0.424	TM 1.396	T 0.516	TM 0.772	1.828	1.859	7.834	0.833	0.851	3.216

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:13:01	161.400	143.200	0.763	5.073	2.679	1.711	1.881	2.023	6.982	139.500
2	02:13:29	158.400	144.900	0.754	4.948	3.895	1.151	2.324	2.448	4.502	138.300
3	02:13:56	158.200	147.100	0.750	5.521	2.780	1.175	3.265	3.113	2.387	138.400
x		159.300	145.100	0.756	5.181	3.118	1.346	2.490	2.528	4.624	138.700
σ		1.772	1.956	0.006	0.301	0.675	0.317	0.707	0.549	2.300	0.644
%RSD		1.113	1.348	0.837	5.817	21.650	23.520	28.370	21.730	49.730	0.464

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:13:01	153.6%	0.738	0.528	0.763	29.270	0.119	0.094	0.259	0.260	55.3%
2	02:13:29	156.3%	0.676	0.491	0.780	33.030	0.119	0.089	0.226	0.220	55.5%
3	02:13:56	156.7%	0.717	0.452	0.855	27.070	0.122	0.091	0.232	0.288	55.4%
x		155.5%	0.710	0.490	0.799	29.790	0.120	0.092	0.239	0.256	55.4%
σ		1.7%	0.031	0.038	0.049	3.011	0.002	0.003	0.018	0.034	0.1%
%RSD		1.1	4.398	7.825	6.079	10.110	1.454	2.821	7.416	13.340	0.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:13:01	14.570	8.645	0.063	0.090	M 1028.000	M 1022.000	57.6%	2.045	2.087	44.300
2	02:13:29	14.730	8.586	0.052	0.090	M 1046.000	M 1032.000	59.4%	2.098	2.114	44.390
3	02:13:56	14.320	8.736	0.052	0.075	M 1035.000	M 1030.000	59.7%	2.023	2.019	44.660
x		14.540	8.656	0.056	0.085	M 1036.000	M 1028.000	58.9%	2.055	2.073	44.450
σ		0.209	0.076	0.006	0.009	M 8.944	M 5.461	1.2%	0.038	0.049	0.189
%RSD		1.440	0.873	11.120	10.120	M 0.863	M 0.531	2.0	1.872	2.370	0.425

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:13:01	41.370	44.310	47.3%
2	02:13:29	40.510	43.830	48.6%
3	02:13:56	42.110	44.640	49.7%
x		41.330	44.260	48.5%
σ		0.798	0.409	1.2%
%RSD		1.932	0.924	2.5

UC27026-010 04/26/2019 02:18:23

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:51	85.5%	1.047	-0.389	-0.290	-59.180	152.900	T 9381.000	T 9677.000	T 10060.000	TM 58230.000
2	02:19:17	78.1%	1.110	-0.344	-0.247	-53.360	133.800	T 9599.000	T 9781.000	T 10130.000	TM 62020.000
3	02:19:45	79.0%	1.073	-0.282	-0.228	-58.130	132.300	T 9608.000	T 9834.000	T 10300.000	TM 63140.000
x		80.9%	1.077	-0.339	-0.255	-56.890	139.600	T 9529.000	T 9764.000	T 10160.000	TM 61130.000
σ		4.0%	0.032	0.054	0.032	3.102	11.510	T 128.700	T 79.530	T 125.500	TM 2574.000
%RSD		5.0	2.938	15.820	12.480	5.453	8.243	T 1.350	T 0.815	T 1.235	TM 4.211

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:51	T 914.500	T 281300.000	T 21240.000	2217.000	1383.000	77.1%	M 3999.000	210.200	6.510	9060.000
2	02:19:17	T 903.300	T 276600.000	T 21820.000	1905.000	1511.000	76.5%	M 4034.000	211.300	6.216	7762.000
3	02:19:45	T 896.000	T 272000.000	T 21350.000	1989.000	1477.000	77.3%	M 3958.000	206.300	6.064	8017.000
x		T 904.600	T 276600.000	T 21470.000	2037.000	1457.000	77.0%	M 3997.000	209.200	6.263	8280.000
σ		T 9.306	T 4675.000	T 310.400	161.500	66.320	0.4%	M 38.220	2.632	0.227	688.000
%RSD		T 1.029	T 1.690	T 1.446	7.927	4.552	0.5	M 0.956	1.258	3.620	8.309

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:51	T 78250.000	TM 1795.000	T 75750.000	T 84080.000	31.270	4.964	16.450	18.900	25.380	219.100
2	02:19:17	T 79730.000	TM 1841.000	T 76680.000	T 84940.000	30.860	4.799	14.760	18.940	25.160	227.700
3	02:19:45	T 79210.000	TM 1835.000	T 76380.000	T 84770.000	30.570	5.034	14.050	18.710	25.550	227.300
x		T 79060.000	TM 1824.000	T 76270.000	T 84600.000	30.900	4.932	15.090	18.850	25.370	224.700
σ		T 755.600	TM 25.010	T 474.700	T 455.000	0.350	0.121	1.234	0.125	0.196	4.862
%RSD		T 0.956	TM 1.372	T 0.622	T 0.538	1.133	2.447	8.183	0.662	0.772	2.164

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:51	153.700	144.000	0.488	3.605	3.111	1.333	4.118	2.913	4.958	97.850
2	02:19:17	159.100	146.200	-0.317	3.722	3.289	1.396	1.760	1.814	3.812	96.090
3	02:19:45	159.300	146.100	0.202	3.366	3.598	0.757	2.983	2.474	2.263	96.910
x		157.400	145.500	0.124	3.564	3.332	1.162	2.954	2.400	3.678	96.950
σ		3.196	1.237	0.408	0.181	0.246	0.353	1.179	0.553	1.352	0.882
%RSD		2.031	0.850	328.700	5.081	7.389	30.340	39.930	23.050	36.770	0.909

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:51	129.8%	0.629	0.523	0.717	22.250	0.110	0.083	0.213	0.163	54.7%
2	02:19:17	128.8%	0.637	0.500	0.732	21.440	0.100	0.065	0.135	0.162	54.3%
3	02:19:45	129.9%	0.692	0.387	0.775	18.290	0.104	0.093	0.198	0.212	55.0%
x		129.5%	0.653	0.470	0.741	20.660	0.105	0.081	0.182	0.179	54.7%
σ		0.6%	0.034	0.073	0.030	2.091	0.005	0.014	0.041	0.028	0.4%
%RSD		0.5	5.230	15.500	4.074	10.120	4.824	17.460	22.690	15.790	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:18:51	20.350	8.292	0.054	0.030	M 838.500	M 827.900	56.2%	2.172	2.098	46.450
2	02:19:17	20.220	8.322	0.027	0.080	M 847.700	M 839.300	57.3%	2.304	2.183	47.350
3	02:19:45	20.170	8.411	0.035	0.040	M 838.600	M 839.300	57.4%	2.091	2.148	47.180
x		20.250	8.342	0.039	0.050	M 841.600	M 835.500	57.0%	2.189	2.143	46.990
σ		0.092	0.062	0.014	0.026	M 5.272	M 6.575	0.7%	0.107	0.043	0.479
%RSD		0.455	0.739	35.570	52.550	M 0.627	M 0.787	1.2	4.899	2.001	1.020

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:18:51	44.210	46.600	47.2%
2	02:19:17	43.860	46.550	48.8%
3	02:19:45	43.980	46.700	49.4%
x		44.010	46.620	48.4%
σ		0.180	0.075	1.2%
%RSD		0.408	0.160	2.4

UC27026-011 04/26/2019 02:24:12

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:39	84.6%	2.134	-0.357	-0.361	-66.850	299.500	T 18400.000	T 19020.000	T 19680.000	TM 103900.000
2	02:25:06	83.9%	2.283	-0.352	-0.367	-63.860	294.600	T 18230.000	T 18980.000	T 19820.000	TM 105400.000
3	02:25:33	80.5%	2.279	-0.286	-0.364	-67.860	273.900	T 18430.000	T 18970.000	T 19630.000	TM 107600.000
x		83.0%	2.232	-0.331	-0.364	-66.190	289.300	T 18350.000	T 18990.000	T 19710.000	TM 105600.000
σ		2.2%	0.085	0.039	0.003	2.080	13.610	T 112.300	T 23.270	T 97.080	TM 1850.000
%RSD		2.7	3.820	11.870	0.812	3.142	4.702	T 0.612	T 0.123	T 0.493	TM 1.752

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:39	T 983.900	T 274000.000	T 44370.000	3348.000	1896.000	78.5%	TM 8249.000	260.100	1.329	9439.000
2	02:25:06	T 957.500	T 281900.000	T 46050.000	3389.000	1945.000	78.9%	TM 8370.000	261.600	1.189	9696.000
3	02:25:33	T 936.800	T 266700.000	T 45220.000	3058.000	2026.000	79.8%	TM 8223.000	260.800	1.348	8606.000
x		T 959.400	T 274200.000	T 45210.000	3265.000	1956.000	79.1%	TM 8280.000	260.800	1.289	9247.000
σ		T 23.590	T 7610.000	T 841.700	180.400	65.640	0.7%	TM 78.360	0.772	0.087	569.500
%RSD		T 2.459	T 2.775	T 1.862	5.526	3.357	0.9	TM 0.946	0.296	6.753	6.159

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:39	TM 104600.000	TM 3183.000	T 98000.000	TM 115000.000	25.020	6.111	24.800	30.590	47.750	417.200
2	02:25:06	TM 104000.000	TM 3191.000	TM 100300.000	TM 117800.000	25.040	6.230	22.980	30.860	48.820	425.000
3	02:25:33	TM 102700.000	TM 3160.000	T 99250.000	TM 116900.000	25.000	6.117	22.120	30.200	48.380	434.800
x		TM 103800.000	TM 3178.000	TM 99170.000	TM 116600.000	25.020	6.153	23.300	30.550	48.320	425.700
σ		TM 953.200	TM 16.210	TM 1132.000	TM 1443.000	0.019	0.067	1.367	0.331	0.539	8.825
%RSD		TM 0.919	TM 0.510	TM 1.142	TM 1.238	0.075	1.092	5.868	1.082	1.116	2.073

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:39	258.500	235.600	1.385	7.017	2.940	0.682	5.329	5.158	7.104	T 243.100
2	02:25:06	264.300	236.100	0.935	7.389	3.266	0.319	3.990	4.397	6.017	T 245.600
3	02:25:33	261.500	240.000	1.627	7.100	3.216	-0.133	3.074	3.941	3.934	T 243.100
x		261.500	237.200	1.316	7.169	3.141	0.289	4.131	4.499	5.685	T 243.900
σ		2.896	2.373	0.351	0.196	0.176	0.408	1.134	0.615	1.611	T 1.423
%RSD		1.108	1.000	26.700	2.730	5.592	141.100	27.450	13.670	28.340	T 0.584

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:39	198.3%	0.890	0.517	0.935	57.580	0.178	0.135	0.145	0.163	53.1%
2	02:25:06	202.6%	0.861	0.517	0.976	51.530	0.154	0.108	0.315	0.227	53.2%
3	02:25:33	205.0%	0.898	0.546	1.052	51.430	0.153	0.088	0.306	0.287	53.5%
x		202.0%	0.883	0.527	0.988	53.510	0.162	0.110	0.256	0.226	53.3%
σ		3.4%	0.020	0.017	0.060	3.521	0.014	0.024	0.096	0.062	0.2%
%RSD		1.7	2.236	3.184	6.023	6.580	8.739	21.360	37.400	27.580	0.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:24:39	16.930	11.680	0.018	0.074	M 2116.000	M 2095.000	59.1%	2.466	2.439	59.570
2	02:25:06	16.920	11.450	0.043	0.067	M 2121.000	M 2112.000	60.1%	2.411	2.516	59.950
3	02:25:33	16.080	11.500	0.038	0.052	M 2123.000	M 2128.000	62.0%	2.307	2.464	58.600
x		16.640	11.540	0.033	0.064	M 2120.000	M 2112.000	60.4%	2.395	2.473	59.380
σ		0.489	0.124	0.013	0.011	M 3.387	M 16.450	1.5%	0.081	0.040	0.696
%RSD		2.939	1.075	40.670	17.460	M 0.160	M 0.779	2.4	3.378	1.603	1.172

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:24:39	54.830	58.990	45.7%
2	02:25:06	55.270	59.290	46.7%
3	02:25:33	54.970	58.370	47.5%
x		55.020	58.880	46.7%
σ		0.224	0.472	0.9%
%RSD		0.406	0.802	2.0

UC27026-012 04/26/2019 02:30:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:26	85.0%	2.419	-0.358	-0.236	-46.200	347.100	T 15230.000	T 16160.000	T 16420.000	TM 85130.000
2	02:30:54	83.0%	2.383	-0.351	-0.271	-42.380	T 350.200	T 15700.000	T 16300.000	T 16720.000	TM 89830.000
3	02:31:21	81.9%	2.508	-0.207	-0.244	-44.160	333.800	T 15470.000	T 16320.000	T 16740.000	TM 89130.000
x		83.3%	2.437	-0.305	-0.250	-44.240	T 343.700	T 15460.000	T 16260.000	T 16620.000	TM 88030.000
σ		1.5%	0.065	0.085	0.018	1.913	T 8.720	T 235.200	T 88.570	T 178.400	TM 2538.000
%RSD		1.8	2.648	27.900	7.298	4.323	T 2.537	T 1.521	T 0.545	T 1.073	TM 2.883
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:26	T 1276.000	T 287300.000	T 36170.000	9958.000	7359.000	76.4%	TM 7269.000	210.400	2.963	9875.000
2	02:30:54	T 1228.000	T 286000.000	T 36900.000	9550.000	7562.000	76.7%	TM 7375.000	214.600	2.849	9434.000
3	02:31:21	T 1200.000	T 284200.000	T 37140.000	9427.000	7769.000	77.1%	TM 7370.000	213.100	2.768	9488.000
x		T 1235.000	T 285800.000	T 36740.000	9645.000	7563.000	76.7%	TM 7338.000	212.700	2.860	9599.000
σ		T 38.580	T 1581.000	T 503.400	278.000	204.700	0.4%	TM 59.900	2.162	0.098	240.700
%RSD		T 3.125	T 0.553	T 1.370	2.882	2.706	0.5	TM 0.816	1.017	3.417	2.508
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:26	T 85370.000	TM 1740.000	T 82120.000	T 94720.000	16.900	5.603	23.640	17.190	27.770	330.200
2	02:30:54	T 86590.000	TM 1758.000	T 83220.000	T 95440.000	17.190	5.380	20.700	17.000	26.870	332.200
3	02:31:21	T 86840.000	TM 1771.000	T 83130.000	T 95020.000	16.980	5.309	20.880	17.150	27.730	333.400
x		T 86270.000	TM 1756.000	T 82820.000	T 95060.000	17.020	5.431	21.740	17.110	27.460	331.900
σ		T 784.400	TM 15.500	T 610.100	T 363.300	0.149	0.153	1.648	0.102	0.506	1.606
%RSD		T 0.909	TM 0.882	T 0.737	T 0.382	0.875	2.822	7.579	0.598	1.842	0.484
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:26	208.600	194.300	1.405	4.146	3.890	1.238	0.853	1.576	8.264	T 204.900
2	02:30:54	213.800	198.500	0.689	4.175	3.587	1.012	4.535	4.008	3.684	T 205.100
3	02:31:21	216.300	196.800	1.481	5.297	3.617	1.159	1.101	2.060	2.891	T 204.100
x		212.900	196.500	1.191	4.539	3.698	1.136	2.163	2.548	4.946	T 204.700
σ		3.954	2.113	0.437	0.657	0.167	0.115	2.058	1.287	2.900	T 0.511
%RSD		1.857	1.075	36.700	14.460	4.516	10.080	95.150	50.520	58.640	T 0.250
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:26	158.8%	0.408	0.269	0.503	39.080	0.114	0.071	0.152	0.145	52.7%
2	02:30:54	160.3%	0.485	0.296	0.503	41.730	0.086	0.054	0.204	0.169	53.2%
3	02:31:21	163.9%	0.521	0.394	0.572	42.400	0.101	0.112	0.135	0.148	53.8%
x		161.0%	0.471	0.320	0.526	41.070	0.100	0.079	0.163	0.154	53.3%
σ		2.6%	0.058	0.066	0.040	1.756	0.014	0.030	0.036	0.013	0.5%
%RSD		1.6	12.210	20.510	7.549	4.276	13.940	37.950	21.920	8.551	1.0
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:30:26	18.610	9.165	0.031	0.104	M 1366.000	M 1359.000	55.4%	1.645	1.600	42.120
2	02:30:54	19.840	9.403	0.022	0.051	M 1382.000	M 1357.000	57.0%	1.585	1.648	41.040
3	02:31:21	19.590	8.962	0.038	0.073	M 1367.000	M 1368.000	57.4%	1.645	1.745	41.680
x		19.350	9.177	0.030	0.076	M 1372.000	M 1361.000	56.6%	1.625	1.664	41.610
σ		0.652	0.221	0.008	0.027	M 9.103	M 5.851	1.1%	0.035	0.074	0.545
%RSD		3.371	2.405	26.650	35.190	M 0.663	M 0.430	1.9	2.144	4.427	1.309
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	02:30:26	38.600	41.180	45.9%							
2	02:30:54	37.470	40.390	46.4%							
3	02:31:21	38.450	41.080	46.8%							
x		38.170	40.880	46.4%							
σ		0.616	0.429	0.5%							
%RSD		1.614	1.048	1.0							

UC27096-002 04/26/2019 02:35:48

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:36:16	83.7%	1.107	12.990	12.410	-4.161	153.600	T 1775.000	1819.000	1845.000	TM 129600.000
2	02:36:44	84.1%	1.003	12.590	12.800	-5.747	159.300	T 1746.000	1819.000	1858.000	TM 126300.000
3	02:37:11	77.9%	1.089	13.820	13.150	0.460	135.200	T 1810.000	1884.000	1920.000	TM 135900.000
x		81.9%	1.066	13.130	12.790	-3.149	149.400	T 1777.000	1841.000	1874.000	TM 130600.000
σ		3.5%	0.055	0.628	0.369	3.225	12.580	T 32.120	37.870	40.300	TM 4858.000
%RSD		4.2	5.175	4.782	2.889	102.400	8.423	T 1.808	2.058	2.150	TM 3.720

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:36:16	T 837.300	T 247300.000	T 1444.000	3544.000	2753.000	95.7%	M 1128.000	TM 627.700	93.110	8461.000
2	02:36:44	T 806.600	T 249700.000	T 1447.000	3666.000	2754.000	95.1%	M 1143.000	TM 629.200	92.130	8599.000
3	02:37:11	T 814.700	T 247300.000	T 1488.000	3319.000	2881.000	94.4%	M 1152.000	TM 634.000	93.640	7851.000
x		T 819.500	T 248100.000	T 1460.000	3510.000	2796.000	95.1%	M 1141.000	TM 630.300	92.960	8304.000
σ		T 15.900	T 1421.000	T 24.250	176.100	73.880	0.6%	M 12.310	TM 3.276	0.763	398.000
%RSD		T 1.941	T 0.573	T 1.661	5.018	2.642	0.7	M 1.079	TM 0.520	0.821	4.793

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:36:16	TM 196500.000	T 472.900	TM 196800.000	TM 180400.000	19.250	23.910	32.950	198.100	168.000	109.200
2	02:36:44	TM 200000.000	T 478.200	TM 199200.000	TM 181900.000	19.380	23.730	32.400	199.200	170.500	110.200
3	02:37:11	TM 199500.000	T 482.500	TM 199900.000	TM 183700.000	19.740	25.360	32.330	200.600	172.600	112.000
x		TM 198700.000	T 477.900	TM 198600.000	TM 182000.000	19.450	24.340	32.560	199.300	170.300	110.400
σ		TM 1934.000	T 4.825	TM 1664.000	TM 1642.000	0.254	0.893	0.337	1.234	2.305	1.412
%RSD		TM 0.974	T 1.010	TM 0.838	TM 0.902	1.306	3.667	1.035	0.619	1.353	1.279

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:36:16	101.700	73.660	5.299	4.966	4.875	4.733	11.330	2.525	40.670	121.700
2	02:36:44	100.800	72.350	5.226	4.661	4.148	3.893	14.450	3.093	54.560	122.400
3	02:37:11	104.500	74.680	6.348	5.769	3.948	3.556	17.320	4.168	48.530	121.000
x		102.300	73.560	5.624	5.132	4.324	4.060	14.370	3.262	47.920	121.700
σ		1.916	1.168	0.628	0.572	0.488	0.606	2.997	0.835	6.963	0.665
%RSD		1.872	1.588	11.170	11.150	11.280	14.930	20.860	25.590	14.530	0.546

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:36:16	67.1%	4.691	4.621	5.028	13.630	0.062	0.026	0.005	0.005	53.1%
2	02:36:44	67.5%	4.862	4.815	4.843	17.910	0.047	0.036	0.013	0.023	52.8%
3	02:37:11	67.7%	4.530	4.682	5.046	11.000	0.045	0.034	0.034	-0.000	52.8%
x		67.4%	4.694	4.706	4.972	14.180	0.051	0.032	0.017	0.009	52.9%
σ		0.3%	0.166	0.099	0.112	3.486	0.009	0.005	0.015	0.012	0.2%
%RSD		0.5	3.531	2.110	2.253	24.590	18.500	17.100	85.490	129.800	0.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:36:16	6.464	7.842	0.127	0.151	55.540	57.600	48.4%	0.420	0.385	25.110
2	02:36:44	6.618	7.812	0.145	0.118	57.290	57.430	48.8%	0.401	0.383	25.530
3	02:37:11	6.586	7.819	0.135	0.145	58.160	56.840	50.0%	0.375	0.374	24.890
x		6.556	7.824	0.136	0.138	57.000	57.290	49.1%	0.399	0.381	25.170
σ		0.081	0.015	0.009	0.018	1.333	0.400	0.8%	0.023	0.006	0.324
%RSD		1.241	0.196	6.618	12.710	2.339	0.698	1.7	5.671	1.466	1.288

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:36:16	23.550	24.170	46.2%
2	02:36:44	23.830	24.120	46.2%
3	02:37:11	23.280	23.870	47.1%
x		23.550	24.050	46.5%
σ		0.275	0.158	0.5%
%RSD		1.167	0.658	1.2

UC27096-006 04/26/2019 02:41:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:42:05	79.7%	0.621	9.839	9.706	-27.820	88.540	T 960.000	973.400	988.300	TM 91120.000
2	02:42:32	77.5%	0.638	10.160	9.674	-25.150	79.190	T 937.200	989.300	1015.000	TM 94460.000
3	02:42:59	82.6%	0.590	9.784	9.422	-32.070	86.680	T 932.700	963.300	966.400	TM 87720.000
x		79.9%	0.616	9.928	9.601	-28.350	84.800	T 943.300	975.300	990.000	TM 91100.000
σ		2.6%	0.024	0.203	0.156	3.486	4.951	T 14.640	13.090	24.530	TM 3367.000
%RSD		3.2	3.970	2.045	1.621	12.300	5.838	T 1.551	1.342	2.478	TM 3.695

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:42:05	T 1132.000	T 258100.000	T 1141.000	1313.000	710.000	84.7%	M 1014.000	TM 529.600	236.200	7261.000
2	02:42:32	T 1165.000	T 262400.000	T 1170.000	1144.000	701.200	84.5%	M 1032.000	TM 546.700	240.400	8682.000
3	02:42:59	T 1112.000	T 253200.000	T 1109.000	1211.000	682.600	87.5%	M 1017.000	TM 532.300	233.800	7468.000
x		T 1137.000	T 257900.000	T 1140.000	1223.000	697.900	85.6%	M 1021.000	TM 536.200	236.800	7804.000
σ		T 27.010	T 4605.000	T 30.390	84.900	13.990	1.7%	M 9.774	TM 9.195	3.338	767.700
%RSD		T 2.377	T 1.785	T 2.666	6.944	2.004	1.9	M 0.957	TM 1.715	1.410	9.838

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:42:05	TM 160900.000	T 440.100	TM 156600.000	TM 151200.000	39.990	38.720	44.590	148.700	139.200	137.700
2	02:42:32	TM 160400.000	T 444.900	TM 159500.000	TM 153400.000	40.770	40.650	45.440	149.300	142.700	140.800
3	02:42:59	TM 159500.000	T 434.800	TM 158100.000	TM 153100.000	39.900	39.140	44.000	147.900	136.900	139.300
x		TM 160200.000	T 439.900	TM 158100.000	TM 152600.000	40.220	39.500	44.680	148.600	139.600	139.300
σ		TM 721.900	T 5.093	TM 1470.000	TM 1188.000	0.475	1.014	0.727	0.715	2.906	1.580
%RSD		TM 0.451	T 1.158	TM 0.930	TM 0.779	1.181	2.568	1.628	0.481	2.082	1.135

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:42:05	116.100	92.850	6.597	4.313	3.062	2.994	9.313	2.084	40.670	18.850
2	02:42:32	111.400	94.510	6.279	5.292	3.079	2.202	7.605	1.531	40.880	18.710
3	02:42:59	116.500	94.150	6.136	4.133	3.337	2.474	7.740	1.318	48.470	19.050
x		114.700	93.840	6.337	4.579	3.160	2.556	8.219	1.644	43.340	18.870
σ		2.836	0.871	0.236	0.624	0.154	0.402	0.949	0.395	4.443	0.171
%RSD		2.473	0.929	3.727	13.620	4.883	15.740	11.550	24.030	10.250	0.904

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:42:05	73.3%	1.398	1.241	1.361	10.220	0.173	0.172	0.108	0.044	53.3%
2	02:42:32	72.9%	1.321	1.058	1.230	10.470	0.238	0.179	0.031	0.045	53.1%
3	02:42:59	73.3%	1.319	1.264	1.332	8.343	0.227	0.192	0.044	-0.014	53.9%
x		73.2%	1.346	1.188	1.307	9.678	0.213	0.181	0.061	0.025	53.4%
σ		0.2%	0.045	0.113	0.069	1.163	0.035	0.010	0.041	0.033	0.4%
%RSD		0.3	3.340	9.509	5.262	12.020	16.550	5.435	67.730	133.700	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:42:05	8.489	10.740	0.126	0.149	59.360	57.630	49.2%	0.621	0.587	26.290
2	02:42:32	8.633	10.770	0.126	0.158	58.520	58.610	49.5%	0.597	0.633	26.120
3	02:42:59	8.810	11.030	0.156	0.140	58.950	58.600	50.6%	0.588	0.577	26.320
x		8.644	10.850	0.136	0.149	58.940	58.280	49.7%	0.602	0.599	26.240
σ		0.161	0.161	0.017	0.009	0.418	0.562	0.7%	0.017	0.030	0.110
%RSD		1.859	1.484	12.590	5.907	0.710	0.965	1.5	2.804	5.037	0.420

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:42:05	25.030	25.300	46.6%
2	02:42:32	25.130	25.530	47.1%
3	02:42:59	24.470	24.910	46.9%
x		24.880	25.250	46.8%
σ		0.355	0.315	0.2%
%RSD		1.428	1.246	0.5

CCV MW10994 04/26/2019 02:47:26 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:54	75.8%	296.900	302.400	295.700	49.930	┬64600.000	┬61310.000	┬60920.000	┬60940.000	308.100
2	02:48:20	72.2%	304.700	292.600	296.300	58.660	┬65190.000	┬62740.000	┬62660.000	┬61670.000	316.500
3	02:48:47	80.1%	289.800	284.400	292.300	51.240	┬67040.000	┬60900.000	┬60570.000	┬60650.000	293.400
x		76.0%	99.040%	97.708%	98.256%	53.280	┬109.351%	┬61650.000	┬61380.000	┬101.813%	101.991%
σ		3.9%	n/a	n/a	n/a	4.709	┬n/a	┬969.500	┬1118.000	┬n/a	n/a
%RSD		5.2	2.521	3.061	0.737	8.839	┬1.939	┬1.573	┬1.822	┬0.861	3.823

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:54	┬3704.000	4595.000	┬58090.000	66310.000	┬54250.000	67.7%	323.200	324.100	306.600	1047.000
2	02:48:20	┬3709.000	4533.000	┬60240.000	65280.000	┬57650.000	67.4%	332.900	332.400	309.700	990.900
3	02:48:47	┬3680.000	4441.000	┬57260.000	65820.000	┬52700.000	68.8%	324.200	326.800	309.900	647.200
x		┬123.254%	4523.000	┬97.547%	65800.000	┬91.445%	67.9%	108.920%	109.252%	102.910%	895.000
σ		┬n/a	77.490	┬n/a	514.300	┬n/a	0.7%	n/a	n/a	n/a	216.400
%RSD		┬0.428	1.713	┬2.631	0.782	┬4.616	1.0	1.624	1.299	0.592	24.180

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:54	┬63070.000	291.800	┬61790.000	┬58910.000	286.400	288.400	308.900	294.700	263.900	333.000
2	02:48:20	┬63960.000	297.600	┬63510.000	┬59980.000	292.700	292.400	303.500	300.900	272.800	338.700
3	02:48:47	┬63270.000	294.400	┬62920.000	┬59960.000	289.600	291.200	302.300	295.400	266.600	330.400
x		┬63430.000	98.201%	┬62740.000	┬99.362%	96.522%	96.885%	304.900	297.000	89.256%	111.344%
σ		┬470.300	n/a	┬871.200	┬n/a	n/a	n/a	3.508	3.371	n/a	n/a
%RSD		┬0.741	0.982	┬1.389	┬1.035	1.091	0.711	1.150	1.135	1.709	1.273

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:54	284.800	274.000	260.900	349.700	1.975	1.789	1285.000	336.400	2.984	317.000
2	02:48:20	288.700	282.500	274.900	336.400	2.986	2.322	1275.000	330.800	2.484	316.400
3	02:48:47	276.600	271.400	263.100	339.900	3.999	2.076	1199.000	312.900	3.947	315.000
x		283.400	276.000	88.763%	342.000	2.987	2.062	1253.000	108.900%	3.138	105.377%
σ		6.164	5.780	n/a	6.920	1.012	0.267	46.680	n/a	0.744	n/a
%RSD		2.175	2.095	2.826	2.023	33.890	12.940	3.726	3.760	23.700	0.314

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:54	54.1%	319.800	308.600	317.600	308.000	301.500	299.300	299.400	297.200	48.8%
2	02:48:20	54.9%	321.400	314.900	320.500	307.300	303.000	302.100	304.300	300.600	49.8%
3	02:48:47	55.6%	321.600	315.200	321.300	308.200	302.600	299.300	297.600	295.800	50.2%
x		54.9%	106.973%	104.311%	319.800	307.800	100.791%	300.200	300.400	99.287%	49.6%
σ		0.7%	n/a	n/a	1.984	0.460	n/a	1.590	3.456	n/a	0.7%
%RSD		1.3	0.312	1.196	0.620	0.149	0.253	0.529	1.150	0.837	1.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:47:54	314.200	318.500	308.900	321.800	327.900	324.000	46.7%	292.800	296.800	290.600
2	02:48:20	320.100	317.700	316.200	328.800	324.800	323.300	48.1%	292.000	295.000	288.700
3	02:48:47	313.200	315.600	305.800	321.300	324.600	323.600	48.2%	291.000	297.300	285.300
x		105.281%	105.757%	310.300	108.000%	108.581%	107.868%	47.7%	292.000	98.782%	96.074%
σ		n/a	n/a	5.372	n/a	n/a	n/a	0.9%	0.875	n/a	n/a
%RSD		1.177	0.460	1.731	1.290	0.563	0.108	1.8	0.300	0.396	0.929

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:47:54	286.900	288.400	42.0%
2	02:48:20	287.300	286.900	43.5%
3	02:48:47	286.900	286.000	43.1%
x		95.679%	95.696%	42.9%
σ		n/a	n/a	0.8%
%RSD		0.079	0.411	1.8

CCB IM9370-01 04/26/2019 02:53:16 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:53:43	77.8%	-0.001	2.001	1.736	32.340	15.270	1.647	1.660	1.888	2.579
2	02:54:10	76.3%	0.011	1.555	1.468	42.140	7.349	1.367	1.382	1.373	2.624
3	02:54:37	84.2%	-0.004	1.484	1.443	28.560	34.460	1.376	1.469	1.561	1.915
x		79.4%	0.002	1.680	1.549	34.350	19.030	1.463	1.503	1.607	2.373
σ		4.2%	0.008	0.280	0.163	7.012	13.940	0.159	0.142	0.261	0.397
%RSD		5.3	409.000	16.680	10.490	20.420	73.260	10.890	9.458	16.220	16.730

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:53:43	18.010	3316.000	50.710	3.214	1.803	67.9%	-0.286	0.022	0.133	112.500
2	02:54:10	17.470	3231.000	45.760	2.427	1.743	69.4%	-0.396	-0.043	0.118	148.700
3	02:54:37	18.280	3345.000	69.860	2.451	1.788	68.7%	-0.328	0.004	0.092	148.900
x		17.920	3297.000	55.440	2.697	1.778	68.7%	-0.337	-0.006	0.114	136.700
σ		0.412	59.200	12.730	0.448	0.031	0.7%	0.055	0.034	0.020	20.980
%RSD		2.299	1.795	22.950	16.590	1.750	1.1	16.410	588.000	17.880	15.350

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:53:43	15.700	0.224	29.960	41.350	-0.038	-0.045	1.072	-0.027	-0.033	0.033
2	02:54:10	11.570	0.196	27.860	34.370	-0.036	-0.056	0.366	-0.053	-0.008	0.046
3	02:54:37	15.410	0.218	30.730	53.260	-0.040	-0.080	0.605	-0.009	-0.019	0.026
x		14.230	0.212	29.520	43.000	-0.038	-0.060	0.681	-0.029	-0.020	0.035
σ		2.308	0.015	1.489	9.551	0.002	0.018	0.359	0.022	0.013	0.010
%RSD		16.230	6.961	5.045	22.210	4.746	29.970	52.720	75.760	64.520	28.200

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:53:43	-0.091	0.023	-0.069	1.431	0.669	1.909	2.660	0.606	6.211	0.009
2	02:54:10	0.362	0.131	0.023	1.912	0.601	1.423	2.528	0.613	6.261	0.008
3	02:54:37	0.057	0.042	-0.135	2.106	0.877	1.627	-1.018	-0.323	6.607	0.014
x		0.109	0.065	-0.060	1.816	0.716	1.653	1.390	0.298	6.359	0.011
σ		0.231	0.058	0.079	0.347	0.144	0.244	2.086	0.538	0.216	0.003
%RSD		211.500	88.520	131.000	19.120	20.150	14.770	150.100	180.400	3.390	29.750

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:53:43	55.8%	0.098	0.065	0.096	-0.191	0.007	0.006	0.009	0.004	52.4%
2	02:54:10	56.7%	0.102	0.124	0.038	0.805	0.009	0.008	0.002	0.007	52.0%
3	02:54:37	56.7%	0.035	0.056	0.068	0.865	0.013	0.011	0.009	0.008	53.1%
x		56.4%	0.079	0.081	0.068	0.493	0.009	0.008	0.007	0.006	52.5%
σ		0.5%	0.038	0.037	0.029	0.593	0.003	0.002	0.004	0.002	0.6%
%RSD		0.9	48.130	45.600	42.680	120.300	33.910	30.720	60.270	27.300	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:53:43	0.037	0.036	0.102	0.149	0.014	-0.010	48.3%	-0.002	-0.012	0.009
2	02:54:10	0.016	0.054	0.156	0.165	-0.007	0.009	48.1%	0.001	-0.007	0.006
3	02:54:37	0.040	0.029	0.129	0.127	-0.008	-0.010	48.9%	-0.011	-0.008	-0.005
x		0.031	0.040	0.129	0.147	-0.001	-0.003	48.5%	-0.004	-0.009	0.003
σ		0.013	0.013	0.027	0.019	0.012	0.011	0.4%	0.006	0.003	0.008
%RSD		42.590	32.370	20.880	12.940	1948.000	316.700	0.9	153.100	30.350	239.600

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:53:43	-0.000	0.002	45.5%
2	02:54:10	-0.000	0.001	46.5%
3	02:54:37	0.012	0.006	46.0%
x		0.004	0.003	46.0%
σ		0.007	0.003	0.5%
%RSD		180.400	97.310	1.1

UC27096-007 04/26/2019 02:59:03

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:31	82.5%	0.551	11.980	11.670	-40.610	116.600	T 989.100	1032.000	1065.000	TM 95900.000
2	02:59:58	76.6%	0.612	11.340	12.000	-34.830	90.760	T 1036.000	1054.000	1082.000	TM 101600.000
3	03:00:25	75.8%	0.555	12.620	11.970	-34.040	86.320	T 1028.000	1056.000	1092.000	TM 103100.000
x		78.3%	0.573	11.980	11.880	-36.490	97.900	T 1018.000	1048.000	1079.000	TM 100200.000
σ		3.6%	0.034	0.639	0.181	3.585	16.370	T 24.910	13.370	13.540	TM 3785.000
%RSD		4.6	5.935	5.337	1.525	9.822	16.720	T 2.448	1.276	1.255	TM 3.778

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:31	T 865.900	T 270000.000	T 1359.000	2523.000	1425.000	82.7%	M 1009.000	TM 582.600	163.600	9285.000
2	02:59:58	T 839.200	T 269500.000	T 1348.000	2055.000	1501.000	81.5%	M 1011.000	TM 597.400	164.800	7283.000
3	03:00:25	T 829.900	T 262000.000	T 1377.000	2097.000	1568.000	84.0%	M 1015.000	TM 581.900	161.900	9235.000
x		T 845.000	T 267200.000	T 1361.000	2225.000	1498.000	82.7%	M 1012.000	TM 587.300	163.400	8601.000
σ		T 18.690	T 4511.000	T 14.970	258.800	71.710	1.2%	M 2.996	TM 8.746	1.466	1142.000
%RSD		T 2.212	T 1.688	T 1.100	11.630	4.787	1.5	M 0.296	TM 1.489	0.897	13.270

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:31	TM 181800.000	TM 780.500	TM 178600.000	TM 168100.000	22.360	35.580	41.090	145.500	130.200	95.790
2	02:59:58	TM 183800.000	TM 807.700	TM 183900.000	TM 173300.000	22.810	35.510	41.340	146.400	131.900	101.000
3	03:00:25	TM 184000.000	TM 806.500	TM 178700.000	TM 168600.000	22.500	34.520	40.650	144.700	131.500	101.700
x		TM 183200.000	TM 798.200	TM 180400.000	TM 170000.000	22.550	35.200	41.030	145.500	131.200	99.490
σ		TM 1196.000	TM 15.360	TM 3027.000	TM 2884.000	0.230	0.590	0.347	0.825	0.922	3.233
%RSD		TM 0.653	TM 1.924	TM 1.678	TM 1.697	1.017	1.675	0.845	0.567	0.702	3.250

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:31	93.350	68.750	6.829	2.677	3.238	4.018	11.270	3.122	18.240	46.570
2	02:59:58	96.920	72.050	7.702	3.678	3.238	2.114	12.250	3.206	26.130	45.460
3	03:00:25	92.920	69.310	7.463	3.911	2.600	4.299	8.920	2.305	24.620	45.300
x		94.400	70.040	7.331	3.422	3.025	3.477	10.810	2.878	23.000	45.780
σ		2.198	1.765	0.451	0.656	0.368	1.189	1.710	0.498	4.190	0.689
%RSD		2.328	2.520	6.150	19.160	12.170	34.200	15.820	17.290	18.220	1.506

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:31	63.7%	1.720	1.524	1.653	15.590	0.089	0.041	0.054	0.069	50.7%
2	02:59:58	64.6%	1.781	1.364	1.705	14.690	0.077	0.042	0.039	0.018	50.8%
3	03:00:25	66.8%	1.533	1.362	1.546	11.780	0.101	0.031	0.046	0.006	51.7%
x		65.1%	1.678	1.417	1.635	14.020	0.089	0.038	0.046	0.031	51.1%
σ		1.6%	0.129	0.093	0.081	1.990	0.012	0.006	0.008	0.034	0.6%
%RSD		2.5	7.702	6.546	4.959	14.190	13.880	15.480	16.930	107.900	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	02:59:31	5.822	6.870	0.400	0.396	56.450	56.440	47.0%	0.469	0.549	30.520
2	02:59:58	5.590	7.057	0.393	0.434	54.950	57.270	48.5%	0.458	0.510	30.080
3	03:00:25	5.659	6.986	0.335	0.374	57.810	57.220	48.8%	0.458	0.499	30.340
x		5.690	6.971	0.376	0.401	56.400	56.980	48.1%	0.462	0.519	30.310
σ		0.119	0.094	0.035	0.030	1.433	0.468	1.0%	0.006	0.027	0.224
%RSD		2.087	1.355	9.424	7.558	2.540	0.822	2.0	1.363	5.107	0.738

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	02:59:31	28.970	29.680	43.6%
2	02:59:58	28.760	28.900	44.9%
3	03:00:25	28.860	29.410	45.8%
x		28.860	29.330	44.8%
σ		0.106	0.393	1.1%
%RSD		0.367	1.340	2.5

UC27096-008 04/26/2019 03:04:54

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:22	79.3%	0.450	7.578	7.397	18.500	67.450	472.100	455.600	468.600	TM 40800.000
2	03:05:48	82.1%	0.408	8.157	7.480	6.514	72.030	464.800	457.500	466.000	TM 39220.000
3	03:06:15	82.4%	0.393	7.544	7.637	8.562	81.090	471.400	463.900	464.400	TM 39430.000
x		81.2%	0.417	7.760	7.505	11.190	73.520	469.400	459.000	466.300	TM 39820.000
σ		1.7%	0.029	0.344	0.122	6.411	6.940	4.013	4.355	2.099	TM 862.100
%RSD		2.1	7.014	4.437	1.624	57.280	9.439	0.855	0.949	0.450	TM 2.165
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:22	T 1324.000	T 327100.000	T 720.600	1067.000	618.600	75.2%	M 770.400	TM 880.000	173.000	10440.000
2	03:05:48	T 1275.000	T 322300.000	T 704.500	1104.000	602.700	75.7%	M 753.500	TM 879.300	172.800	10160.000
3	03:06:15	T 1367.000	T 339100.000	T 726.800	1102.000	591.400	75.3%	M 766.600	TM 896.800	173.400	10570.000
x		T 1322.000	T 329500.000	T 717.300	1091.000	604.200	75.4%	M 763.500	TM 885.400	173.100	10390.000
σ		T 45.950	T 8690.000	T 11.520	21.080	13.620	0.3%	M 8.897	TM 9.912	0.291	206.300
%RSD		T 3.476	T 2.637	T 1.606	1.933	2.254	0.3	M 1.165	TM 1.120	0.168	1.985
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:22	TM 282200.000	TM 712.500	TM 271400.000	TM 267900.000	44.940	23.880	26.960	73.190	71.570	62.820
2	03:05:48	TM 278900.000	TM 701.300	TM 274200.000	TM 269400.000	44.930	23.720	25.610	73.610	70.810	61.720
3	03:06:15	TM 280500.000	TM 707.800	TM 276600.000	TM 275200.000	45.190	22.650	27.360	74.860	71.620	63.440
x		TM 280500.000	TM 707.200	TM 274100.000	TM 270800.000	45.020	23.420	26.640	73.890	71.330	62.660
σ		TM 1614.000	TM 5.608	TM 2628.000	TM 3899.000	0.145	0.669	0.918	0.870	0.453	0.868
%RSD		TM 0.575	TM 0.793	TM 0.959	TM 1.440	0.322	2.858	3.446	1.177	0.635	1.385
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:22	77.850	44.070	4.949	3.272	3.551	2.747	2.838	0.165	35.790	20.170
2	03:05:48	74.960	43.610	4.239	2.900	3.653	2.868	2.788	-0.159	44.880	20.290
3	03:06:15	78.970	44.620	5.126	2.183	3.432	2.521	0.646	-0.775	43.080	20.500
x		77.260	44.100	4.771	2.785	3.545	2.712	2.091	-0.257	41.250	20.320
σ		2.069	0.505	0.470	0.553	0.111	0.176	1.252	0.477	4.816	0.168
%RSD		2.678	1.144	9.840	19.870	3.120	6.487	59.870	186.000	11.680	0.825
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:22	68.8%	1.028	1.086	1.130	10.110	0.109	0.056	0.042	-0.002	49.6%
2	03:05:48	69.2%	1.175	1.129	1.213	8.229	0.093	0.058	0.018	-0.002	50.8%
3	03:06:15	69.1%	1.166	1.012	1.132	5.463	0.125	0.062	0.019	0.038	50.3%
x		69.0%	1.123	1.076	1.158	7.933	0.109	0.059	0.026	0.011	50.2%
σ		0.2%	0.082	0.059	0.048	2.336	0.016	0.003	0.014	0.023	0.6%
%RSD		0.3	7.329	5.515	4.100	29.450	14.300	5.448	51.630	200.600	1.2
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:05:22	6.094	6.487	0.157	0.173	52.840	52.460	47.9%	0.311	0.282	27.870
2	03:05:48	5.851	6.232	0.144	0.193	53.710	52.120	48.0%	0.294	0.252	28.400
3	03:06:15	6.046	6.281	0.175	0.176	53.270	52.950	49.0%	0.300	0.264	27.380
x		5.997	6.333	0.159	0.181	53.270	52.510	48.3%	0.302	0.266	27.880
σ		0.129	0.135	0.015	0.011	0.435	0.418	0.6%	0.009	0.015	0.509
%RSD		2.151	2.134	9.644	5.908	0.816	0.796	1.2	2.839	5.598	1.826
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	03:05:22	26.330	26.710	43.8%							
2	03:05:48	25.610	26.710	43.6%							
3	03:06:15	25.720	26.420	43.8%							
x		25.890	26.610	43.7%							
σ		0.387	0.164	0.1%							
%RSD		1.495	0.617	0.3							

UC27096-011 04/26/2019 03:10:42

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:11:10	86.4%	0.421	6.225	6.502	-41.960	T 193.100	T 1202.000	1274.000	1314.000	TM 87670.000
2	03:11:37	83.8%	0.494	6.837	7.069	-37.530	163.200	T 1197.000	1242.000	1268.000	TM 90370.000
3	03:12:04	81.3%	0.460	6.819	6.761	-31.020	140.600	T 1205.000	1243.000	1274.000	TM 91640.000
x		83.9%	0.458	6.627	6.777	-36.840	T 165.700	T 1201.000	1253.000	1285.000	TM 89890.000
σ		2.5%	0.036	0.348	0.284	5.507	T 26.330	T 3.822	18.350	25.030	TM 2024.000
%RSD		3.0	7.893	5.257	4.193	14.950	T 15.890	T 0.318	1.464	1.948	TM 2.251

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:11:10	T 1268.000	T 268700.000	T 1518.000	2870.000	1701.000	80.1%	M 939.800	T 416.200	127.500	9414.000
2	03:11:37	T 1310.000	T 276800.000	T 1660.000	2877.000	1740.000	81.6%	M 938.800	T 419.100	128.300	9796.000
3	03:12:04	T 1238.000	T 267800.000	T 1606.000	2651.000	1774.000	81.1%	M 924.100	T 418.400	126.600	8529.000
x		T 1272.000	T 271100.000	T 1595.000	2800.000	1738.000	80.9%	M 934.200	T 417.900	127.500	9247.000
σ		T 36.050	T 4931.000	T 71.740	128.400	36.500	0.8%	M 8.807	T 1.495	0.834	649.700
%RSD		T 2.834	T 1.819	T 4.498	4.587	2.100	1.0	M 0.943	T 0.358	0.654	7.027

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:11:10	TM 132400.000	T 390.700	TM 132800.000	TM 125300.000	14.090	30.940	37.480	111.000	100.500	90.950
2	03:11:37	TM 132500.000	T 382.800	TM 130400.000	TM 126300.000	14.290	30.180	36.670	109.000	98.180	89.260
3	03:12:04	TM 134100.000	T 394.100	TM 131800.000	TM 124900.000	14.130	29.710	36.430	110.000	100.300	91.620
x		TM 133000.000	T 389.200	TM 131700.000	TM 125500.000	14.170	30.280	36.860	110.000	99.680	90.610
σ		TM 981.900	T 5.786	TM 1218.000	TM 733.800	0.107	0.624	0.550	1.019	1.300	1.218
%RSD		TM 0.738	T 1.487	TM 0.925	TM 0.585	0.758	2.061	1.493	0.927	1.304	1.344

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:11:10	83.590	63.450	7.245	5.487	2.676	2.119	8.627	1.756	41.050	74.760
2	03:11:37	81.380	63.230	7.451	5.838	3.134	2.696	8.646	2.029	32.220	74.550
3	03:12:04	84.820	66.260	8.050	4.773	2.480	2.534	11.450	2.517	42.310	74.250
x		83.270	64.310	7.582	5.366	2.763	2.450	9.574	2.101	38.530	74.520
σ		1.744	1.692	0.418	0.543	0.336	0.298	1.624	0.385	5.499	0.256
%RSD		2.094	2.632	5.511	10.120	12.160	12.150	16.960	18.340	14.270	0.344

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:11:10	66.0%	2.059	2.117	2.142	15.380	0.096	0.038	0.059	0.033	50.1%
2	03:11:37	67.2%	2.250	2.124	2.200	15.050	0.088	0.040	0.050	-0.022	51.1%
3	03:12:04	65.6%	2.051	2.134	2.262	17.300	0.065	0.039	0.043	0.044	51.0%
x		66.3%	2.120	2.125	2.201	15.910	0.083	0.039	0.051	0.018	50.7%
σ		0.8%	0.112	0.008	0.060	1.217	0.016	0.001	0.008	0.036	0.6%
%RSD		1.2	5.302	0.399	2.726	7.648	19.620	3.464	16.350	195.700	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:11:10	6.162	7.580	0.175	0.227	78.950	75.800	46.1%	0.538	0.623	32.000
2	03:11:37	6.194	7.168	0.204	0.221	78.950	77.510	47.2%	0.624	0.565	31.730
3	03:12:04	6.002	7.119	0.198	0.240	79.230	77.990	47.5%	0.511	0.541	32.100
x		6.119	7.289	0.192	0.229	79.040	77.100	46.9%	0.558	0.576	31.940
σ		0.103	0.253	0.015	0.010	0.165	1.154	0.7%	0.059	0.042	0.190
%RSD		1.689	3.471	8.051	4.244	0.209	1.497	1.5	10.630	7.331	0.596

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:11:10	30.330	30.670	42.8%
2	03:11:37	29.860	30.470	43.8%
3	03:12:04	30.440	30.610	44.1%
x		30.210	30.580	43.6%
σ		0.309	0.103	0.7%
%RSD		1.024	0.338	1.6

UC27096-012 04/26/2019 03:16:31

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:58	79.1%	0.639	7.432	6.729	-7.279	135.200	T 1599.000	1680.000	1665.000	TM 107400.000
2	03:17:25	77.6%	0.674	6.895	6.649	-5.877	127.600	T 1601.000	1657.000	1674.000	TM 111000.000
3	03:17:52	77.0%	0.776	7.402	7.088	-4.069	131.100	T 1584.000	1647.000	1683.000	TM 113700.000
x		77.9%	0.696	7.243	6.822	-5.741	131.300	T 1595.000	1661.000	1674.000	TM 110700.000
σ		1.0%	0.071	0.302	0.234	1.609	3.825	T 9.498	17.030	9.279	TM 3165.000
%RSD		1.3	10.260	4.170	3.427	28.020	2.912	T 0.596	1.025	0.554	TM 2.859

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:58	T 1163.000	T 267900.000	T 1837.000	3395.000	2648.000	83.9%	M 955.600	T 450.600	142.000	9250.000
2	03:17:25	T 1188.000	T 267300.000	T 1791.000	3255.000	2658.000	83.0%	M 962.100	T 465.300	141.400	7918.000
3	03:17:52	T 1178.000	T 270400.000	T 1843.000	3319.000	2669.000	84.2%	M 947.900	T 464.400	139.300	8441.000
x		T 1176.000	T 268500.000	T 1823.000	3323.000	2658.000	83.7%	M 955.200	T 460.100	140.900	8536.000
σ		T 12.360	T 1660.000	T 28.690	70.180	10.820	0.6%	M 7.143	T 8.230	1.428	671.300
%RSD		T 1.050	T 0.618	T 1.573	2.112	0.407	0.7	M 0.748	T 1.789	1.014	7.864

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:58	TM 172600.000	T 363.100	TM 169700.000	TM 169000.000	13.500	34.610	38.120	123.900	120.700	113.600
2	03:17:25	TM 172200.000	T 360.800	TM 168600.000	TM 168700.000	13.580	34.720	39.980	124.300	119.600	114.600
3	03:17:52	TM 172200.000	T 369.400	TM 169800.000	TM 164900.000	13.210	34.860	38.260	123.600	122.100	118.300
x		TM 172300.000	T 364.400	TM 169400.000	TM 167500.000	13.430	34.730	38.790	123.900	120.800	115.500
σ		TM 230.500	T 4.463	TM 673.400	TM 2271.000	0.195	0.126	1.036	0.358	1.235	2.486
%RSD		TM 0.134	T 1.225	TM 0.398	TM 1.356	1.452	0.363	2.671	0.289	1.022	2.152

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:58	89.070	69.210	7.628	5.239	2.615	1.543	12.990	4.159	30.580	74.780
2	03:17:25	86.910	69.930	7.009	5.100	2.015	1.810	9.770	2.923	35.130	73.790
3	03:17:52	87.850	70.610	7.664	5.560	2.622	1.832	14.840	4.643	40.710	73.990
x		87.940	69.920	7.434	5.299	2.417	1.728	12.530	3.908	35.470	74.190
σ		1.081	0.703	0.368	0.236	0.349	0.161	2.564	0.887	5.075	0.520
%RSD		1.230	1.006	4.957	4.452	14.410	9.315	20.460	22.690	14.310	0.701

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:58	78.6%	1.508	1.397	1.586	12.010	0.074	0.038	0.060	0.024	50.3%
2	03:17:25	79.5%	1.522	1.439	1.656	15.420	0.081	0.035	0.030	0.029	49.5%
3	03:17:52	79.8%	1.470	1.169	1.583	16.770	0.074	0.022	0.038	0.014	49.3%
x		79.3%	1.500	1.335	1.608	14.730	0.076	0.031	0.043	0.022	49.7%
σ		0.7%	0.027	0.145	0.041	2.454	0.004	0.008	0.015	0.008	0.5%
%RSD		0.8	1.779	10.870	2.579	16.650	4.820	25.750	35.720	35.410	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:16:58	6.401	7.302	0.190	0.230	63.020	63.080	46.2%	0.621	0.541	29.350
2	03:17:25	6.702	7.589	0.144	0.217	65.650	66.500	46.8%	0.533	0.574	29.370
3	03:17:52	6.743	7.704	0.184	0.222	64.410	63.740	46.5%	0.526	0.517	28.960
x		6.615	7.532	0.173	0.223	64.360	64.440	46.5%	0.560	0.544	29.220
σ		0.187	0.207	0.025	0.007	1.317	1.813	0.3%	0.053	0.029	0.229
%RSD		2.820	2.751	14.470	3.022	2.047	2.813	0.6	9.457	5.286	0.784

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:16:58	27.590	28.180	43.2%
2	03:17:25	27.770	28.140	42.6%
3	03:17:52	27.110	27.850	43.1%
x		27.490	28.060	43.0%
σ		0.341	0.182	0.3%
%RSD		1.242	0.650	0.8

UC27096-013 04/26/2019 03:22:19

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:22:47	76.7%	1.302	4.906	5.028	135.900	91.760	T 1973.000	1957.000	1998.000	TM 59740.000
2	03:23:14	78.6%	1.344	4.395	4.688	117.800	82.470	T 1843.000	1894.000	1883.000	TM 58830.000
3	03:23:42	T 99.0%	0.994	4.222	4.448	99.810	120.200	T 1762.000	1811.000	1839.000	TM 47570.000
x		T 84.7%	1.214	4.508	4.721	117.800	98.160	T 1859.000	1887.000	1907.000	TM 55380.000
σ		T 12.4%	0.191	0.356	0.292	18.040	19.690	T 106.100	73.320	82.190	TM 6777.000
%RSD		T 14.6	15.750	7.898	6.174	15.310	20.050	T 5.705	3.885	4.310	TM 12.240

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:22:47	T 1111.000	T 316300.000	T 1209.000	613.600	225.100	76.8%	M 684.000	332.800	37.740	7589.000
2	03:23:14	T 1051.000	T 299500.000	T 1143.000	566.300	217.300	80.3%	M 669.000	321.500	35.580	6734.000
3	03:23:42	T 1073.000	T 305200.000	T 1008.000	898.700	180.400	80.6%	M 666.100	321.300	36.270	8789.000
x		T 1078.000	T 307000.000	T 1120.000	692.800	207.600	79.2%	M 673.000	325.200	36.530	7704.000
σ		T 30.190	T 8509.000	T 102.500	179.800	23.880	2.1%	M 9.599	6.608	1.104	1032.000
%RSD		T 2.800	T 2.772	T 9.155	25.950	11.500	2.6	M 1.426	2.032	3.021	13.400

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:22:47	TM 116100.000	191.700	TM 113300.000	TM 114800.000	18.390	13.890	15.630	70.280	71.830	62.130
2	03:23:14	TM 114500.000	188.200	TM 110800.000	TM 110100.000	17.370	13.520	15.270	68.210	68.400	62.800
3	03:23:42	TM 114500.000	189.200	TM 111100.000	TM 110300.000	17.560	13.760	16.150	68.940	70.930	59.690
x		TM 115000.000	189.700	TM 111700.000	TM 111700.000	17.770	13.720	15.690	69.140	70.390	61.540
σ		TM 920.900	1.836	TM 1354.000	TM 2627.000	0.539	0.188	0.443	1.052	1.782	1.639
%RSD		TM 0.801	0.968	TM 1.212	TM 2.351	3.033	1.371	2.824	1.521	2.532	2.663

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:22:47	52.310	38.250	1.269	4.472	1.408	1.321	6.133	1.754	30.450	1.006
2	03:23:14	51.850	38.420	1.534	3.269	2.168	2.236	5.907	1.895	24.900	1.039
3	03:23:42	49.980	36.990	1.855	3.701	2.292	1.765	7.903	2.465	29.030	1.040
x		51.380	37.890	1.553	3.814	1.956	1.774	6.648	2.038	28.130	1.028
σ		1.234	0.778	0.294	0.610	0.478	0.457	1.093	0.376	2.884	0.019
%RSD		2.401	2.055	18.920	15.990	24.450	25.790	16.450	18.470	10.250	1.882

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:22:47	81.5%	0.634	0.602	0.654	4.751	0.026	0.011	0.035	0.023	49.9%
2	03:23:14	82.7%	0.577	0.515	0.734	4.798	0.012	0.020	0.064	0.047	50.6%
3	03:23:42	83.2%	0.708	0.574	0.657	4.227	0.015	0.011	0.063	0.041	51.1%
x		82.5%	0.640	0.564	0.682	4.592	0.018	0.014	0.054	0.037	50.5%
σ		0.8%	0.066	0.044	0.045	0.317	0.007	0.005	0.016	0.012	0.6%
%RSD		1.0	10.280	7.888	6.606	6.903	40.330	35.270	29.930	33.620	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:22:47	5.065	6.174	0.047	0.064	29.230	28.230	47.2%	0.041	0.030	15.860
2	03:23:14	5.261	6.394	0.064	0.055	28.610	28.300	48.5%	0.062	0.029	15.950
3	03:23:42	5.030	6.307	0.065	0.030	28.720	28.450	48.2%	0.040	0.048	15.830
x		5.119	6.292	0.058	0.050	28.850	28.330	48.0%	0.048	0.036	15.880
σ		0.125	0.111	0.010	0.018	0.334	0.114	0.7%	0.013	0.010	0.060
%RSD		2.435	1.765	17.460	35.820	1.156	0.404	1.5	26.480	29.110	0.376

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:22:47	14.780	15.220	43.2%
2	03:23:14	14.740	15.030	43.9%
3	03:23:42	15.040	15.220	43.8%
x		14.850	15.160	43.6%
σ		0.163	0.110	0.4%
%RSD		1.095	0.729	0.9

UD16072-001 04/26/2019 03:28:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:28:36	87.6%	-0.002	103.200	106.700	20.910	T 33440.000	T 1020.000	1039.000	1052.000	T 243.300
2	03:29:04	80.9%	-0.022	101.300	107.900	29.560	T 34380.000	T 1046.000	1085.000	1086.000	T 253.300
3	03:29:31	76.6%	0.017	108.100	113.000	37.740	T 34390.000	T 1063.000	1106.000	1111.000	T 263.500
x		81.7%	-0.002	104.200	109.200	29.410	T 34070.000	T 1043.000	1077.000	1083.000	T 253.400
σ		5.5%	0.020	3.498	3.340	8.416	T 543.400	T 21.650	34.420	29.470	T 10.060
%RSD		6.8	961.900	3.357	3.060	28.620	T 1.595	T 2.076	3.197	2.721	T 3.968

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:28:36	T 2337.000	T 93230.000	T 2952.000	10070.000	8008.000	71.6%	8.746	1.809	10.430	2943.000
2	03:29:04	T 2447.000	T 96090.000	T 3025.000	10470.000	8253.000	67.3%	7.391	1.699	10.980	2829.000
3	03:29:31	T 2384.000	T 94740.000	T 3194.000	10750.000	9110.000	68.5%	7.904	1.324	10.970	2827.000
x		T 2389.000	T 94690.000	T 3057.000	10430.000	8457.000	69.2%	8.014	1.611	10.790	2866.000
σ		T 55.380	T 1433.000	T 124.000	343.800	578.800	2.2%	0.685	0.254	0.317	66.400
%RSD		T 2.318	T 1.513	T 4.058	3.297	6.844	3.3	8.541	15.790	2.938	2.317

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:28:36	802.000	58.230	T 793.700	900.000	12.520	114.300	122.200	TM 2426.000	TM 2214.000	T 298.400
2	03:29:04	806.900	62.970	T 824.800	918.900	13.290	118.800	123.900	TM 2459.000	TM 2285.000	243.300
3	03:29:31	812.300	62.380	T 813.000	891.200	13.040	117.700	123.500	TM 2458.000	TM 2305.000	248.000
x		807.100	61.200	T 810.500	903.400	12.950	117.000	123.200	TM 2448.000	TM 2268.000	T 263.200
σ		5.149	2.583	T 15.690	14.170	0.393	2.335	0.908	TM 18.840	TM 47.610	T 30.560
%RSD		0.638	4.220	T 1.936	1.569	3.032	1.996	0.737	TM 0.770	TM 2.099	T 11.610

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:28:36	181.000	185.900	0.110	2.918	21.110	20.400	1.679	0.065	18.390	34.870
2	03:29:04	188.500	199.100	0.486	2.322	21.520	20.190	3.771	0.755	11.760	33.590
3	03:29:31	187.900	194.800	0.402	2.439	22.370	22.690	2.755	0.457	13.710	34.080
x		185.800	193.300	0.333	2.560	21.670	21.090	2.735	0.425	14.620	34.180
σ		4.157	6.727	0.197	0.316	0.641	1.384	1.046	0.346	3.405	0.650
%RSD		2.237	3.480	59.210	12.350	2.959	6.562	38.240	81.330	23.290	1.901

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:28:36	55.3%	1.377	1.595	1.586	6.967	0.317	0.336	4.091	4.511	50.9%
2	03:29:04	55.0%	1.560	1.581	1.556	7.869	0.352	0.342	4.531	4.346	50.8%
3	03:29:31	55.0%	1.529	1.558	1.644	7.297	0.353	0.325	4.807	4.380	50.4%
x		55.1%	1.489	1.578	1.595	7.378	0.341	0.334	4.476	4.412	50.7%
σ		0.2%	0.098	0.019	0.045	0.457	0.021	0.008	0.361	0.087	0.3%
%RSD		0.3	6.601	1.184	2.809	6.188	6.111	2.515	8.072	1.967	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:28:36	2.098	1.421	1.633	1.781	19.420	19.060	47.3%	0.015	0.006	0.646
2	03:29:04	2.292	1.355	1.671	1.682	18.840	19.550	46.6%	0.018	0.007	0.747
3	03:29:31	2.227	1.330	1.684	1.815	19.730	20.260	46.6%	0.004	0.009	0.747
x		2.205	1.368	1.663	1.759	19.330	19.620	46.9%	0.012	0.007	0.713
σ		0.099	0.047	0.027	0.070	0.453	0.608	0.4%	0.008	0.002	0.058
%RSD		4.485	3.425	1.610	3.955	2.345	3.100	0.9	62.050	23.430	8.203

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:28:36	0.711	0.690	42.9%
2	03:29:04	0.665	0.726	43.3%
3	03:29:31	0.648	0.699	43.9%
x		0.675	0.705	43.3%
σ		0.033	0.019	0.5%
%RSD		4.839	2.660	1.2

UD16072-001(5) 04/26/2019 03:34:00

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:27	T 97.6%	-0.014	31.330	30.520	20.480	T 6836.000	252.400	250.900	249.700	45.340
2	03:34:54	85.1%	0.003	31.080	30.790	23.590	T 7044.000	265.900	263.400	251.700	50.380
3	03:35:21	78.9%	0.006	30.590	32.090	42.020	T 7072.000	266.300	256.300	256.300	52.680
x		T 87.2%	-0.001	31.000	31.130	28.700	T 6984.000	261.500	256.900	252.600	49.470
σ		T 9.5%	0.011	0.376	0.841	11.640	T 129.200	7.892	6.288	3.405	3.752
%RSD		T 10.9	763.700	1.212	2.700	40.570	T 1.850	3.017	2.448	1.348	7.586

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:27	537.100	T 22800.000	T 557.700	2102.000	1407.000	70.4%	1.755	0.366	2.142	644.500
2	03:34:54	539.100	T 23410.000	T 677.800	2244.000	1611.000	68.3%	1.111	0.388	2.240	712.800
3	03:35:21	545.300	T 24050.000	T 715.700	2213.000	1708.000	66.4%	1.169	0.296	2.366	688.000
x		540.500	T 23420.000	T 650.400	2186.000	1576.000	68.4%	1.345	0.350	2.249	681.800
σ		4.281	T 624.300	T 82.490	74.420	153.600	2.0%	0.356	0.048	0.112	34.590
%RSD		0.792	T 2.666	T 12.680	3.404	9.747	2.9	26.490	13.730	4.990	5.074

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:27	175.600	12.090	192.000	239.000	2.499	23.540	25.750	M 517.900	458.700	49.330
2	03:34:54	183.000	12.790	202.500	231.500	2.529	24.470	26.220	M 536.700	481.300	48.750
3	03:35:21	183.000	12.820	200.000	229.900	2.699	25.220	26.770	M 542.700	493.400	47.230
x		180.500	12.570	198.200	233.500	2.576	24.410	26.250	M 532.400	477.800	48.440
σ		4.274	0.413	5.511	4.886	0.108	0.844	0.511	M 12.960	17.600	1.089
%RSD		2.368	3.284	2.781	2.093	4.188	3.456	1.948	M 2.435	3.684	2.247

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:27	37.020	38.110	-0.135	2.286	4.800	5.301	-2.317	-0.871	15.620	6.766
2	03:34:54	38.740	39.550	0.029	1.586	5.184	5.873	-1.884	-0.711	13.450	6.963
3	03:35:21	38.700	41.710	-0.076	2.371	4.669	5.945	-0.184	-0.121	6.903	6.903
x		38.150	39.790	-0.061	2.081	4.884	5.706	-1.462	-0.568	11.990	6.877
σ		0.985	1.811	0.083	0.430	0.267	0.353	1.128	0.395	4.538	0.101
%RSD		2.580	4.553	135.900	20.690	5.475	6.179	77.130	69.550	37.840	1.471

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:27	56.6%	0.427	0.383	0.359	2.511	0.085	0.087	0.797	0.870	50.0%
2	03:34:54	54.9%	0.397	0.497	0.442	3.049	0.067	0.053	0.976	0.839	50.7%
3	03:35:21	54.7%	0.338	0.506	0.363	2.806	0.068	0.089	0.842	0.831	50.9%
x		55.4%	0.387	0.462	0.388	2.789	0.073	0.076	0.872	0.847	50.5%
σ		1.0%	0.045	0.069	0.047	0.269	0.010	0.020	0.093	0.020	0.5%
%RSD		1.9	11.710	14.920	12.000	9.658	13.530	26.560	10.630	2.409	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:34:27	0.397	0.278	0.296	0.368	4.009	4.081	46.5%	-0.003	-0.004	0.169
2	03:34:54	0.395	0.228	0.299	0.353	3.855	3.969	46.7%	0.011	-0.005	0.154
3	03:35:21	0.508	0.267	0.322	0.395	4.021	3.767	46.7%	0.008	-0.004	0.142
x		0.433	0.258	0.306	0.372	3.962	3.939	46.6%	0.005	-0.004	0.155
σ		0.064	0.026	0.014	0.021	0.092	0.159	0.1%	0.008	0.001	0.014
%RSD		14.870	10.150	4.689	5.621	2.329	4.034	0.3	146.100	14.680	8.871

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:34:27	0.142	0.151	43.6%
2	03:34:54	0.175	0.151	43.5%
3	03:35:21	0.175	0.145	43.6%
x		0.164	0.149	43.6%
σ		0.019	0.004	0.1%
%RSD		11.560	2.559	0.2

UD17042-001(5) 04/26/2019 03:39:48

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:16	77.6%	-0.021	478.700	491.400	446.900	TM 220500.000	T 8929.000	T 8920.000	T 8901.000	TM 560.300
2	03:40:43	71.3%	-0.019	M 500.800	M 500.500	456.900	TM 214500.000	T 9059.000	T 9109.000	T 9282.000	TM 604.300
3	03:41:10	75.4%	-0.002	486.100	M 504.200	430.200	TM 221100.000	T 8876.000	T 8886.000	T 9075.000	TM 583.600
x		74.8%	-0.014	M 488.500	M 498.700	444.700	TM 218700.000	T 8955.000	T 8972.000	T 9086.000	TM 582.700
σ		3.2%	0.010	M 11.270	M 6.556	13.510	TM 3640.000	T 93.960	T 120.300	T 190.500	TM 21.970
%RSD		4.2	74.430	M 2.306	M 1.315	3.039	TM 1.664	T 1.049	T 1.341	T 2.097	TM 3.770

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:16	T 1890.000	T 31350.000	T 48430.000	15030.000	12480.000	67.2%	3.162	0.438	13.120	1093.000
2	03:40:43	T 1874.000	T 31030.000	T 50210.000	15030.000	13550.000	67.3%	2.788	0.597	12.890	865.400
3	03:41:10	T 1901.000	T 31460.000	T 50420.000	15540.000	12980.000	67.7%	3.459	0.611	13.480	915.500
x		T 1888.000	T 31280.000	T 49690.000	15200.000	13010.000	67.4%	3.136	0.549	13.160	958.000
σ		T 13.600	T 225.900	T 1090.000	295.700	538.400	0.3%	0.336	0.096	0.297	119.600
%RSD		T 0.720	T 0.722	T 2.195	1.945	4.140	0.4	10.720	17.470	2.260	12.490

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:16	826.600	118.900	T 838.200	1032.000	6.403	18.730	22.150	1.286	0.493	164.100
2	03:40:43	853.500	121.900	T 856.000	962.200	6.442	19.170	21.260	1.420	0.550	173.800
3	03:41:10	823.100	119.600	T 853.200	1021.000	6.629	19.350	22.080	1.224	0.497	164.500
x		834.400	120.100	T 849.200	1005.000	6.491	19.090	21.830	1.310	0.513	167.500
σ		16.620	1.580	T 9.565	37.390	0.121	0.321	0.495	0.100	0.032	5.483
%RSD		1.992	1.316	T 1.126	3.721	1.861	1.683	2.267	7.632	6.221	3.274

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:16	125.400	128.300	6.008	2.002	716.300	702.700	6.828	0.940	6.868	49.880
2	03:40:43	129.500	134.300	6.149	2.573	715.100	711.600	7.919	1.199	7.997	48.580
3	03:41:10	125.700	130.100	6.374	2.153	712.000	702.700	12.500	2.476	6.201	49.200
x		126.900	130.900	6.177	2.243	714.500	705.700	9.082	1.538	7.022	49.220
σ		2.310	3.104	0.185	0.296	2.221	5.140	3.009	0.823	0.908	0.648
%RSD		1.820	2.372	2.987	13.190	0.311	0.728	33.130	53.480	12.930	1.316

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:16	54.7%	1.666	1.472	1.500	9.937	0.020	0.005	0.012	0.029	47.8%
2	03:40:43	54.3%	1.488	1.381	1.332	7.159	0.011	0.007	-0.004	-0.020	47.3%
3	03:41:10	55.9%	1.567	1.549	1.397	7.002	0.011	0.008	-0.004	-0.006	48.8%
x		55.0%	1.574	1.467	1.409	8.032	0.014	0.006	0.001	0.001	48.0%
σ		0.8%	0.089	0.084	0.085	1.651	0.005	0.002	0.009	0.025	0.8%
%RSD		1.5	5.665	5.735	6.018	20.550	36.280	27.070	672.100	3085.000	1.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:40:16	1.549	2.212	3.253	3.393	64.860	64.180	45.3%	-0.010	-0.015	0.077
2	03:40:43	1.627	2.264	3.206	3.345	67.580	64.650	45.5%	-0.001	-0.015	0.052
3	03:41:10	1.638	2.308	3.124	3.237	65.760	65.980	46.8%	-0.008	-0.017	0.039
x		1.605	2.261	3.194	3.325	66.070	64.930	45.9%	-0.007	-0.015	0.056
σ		0.049	0.048	0.066	0.080	1.387	0.933	0.8%	0.005	0.001	0.019
%RSD		3.027	2.138	2.058	2.415	2.099	1.437	1.8	78.490	8.552	34.510

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:40:16	0.063	0.054	39.4%
2	03:40:43	0.062	0.050	40.8%
3	03:41:10	0.040	0.041	40.8%
x		0.055	0.048	40.3%
σ		0.013	0.007	0.8%
%RSD		23.320	13.700	2.0

UD18057-003 04/26/2019 03:45:36

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:03	79.9%	0.037	45.480	47.250	6817.000	TM 321500.000	T 2199.000	2311.000	2360.000	TM 6746.000
2	03:46:31	81.2%	0.035	44.430	45.120	6715.000	TM 323300.000	T 2171.000	2281.000	2318.000	TM 6576.000
3	03:46:58	77.0%	0.068	43.260	47.330	7298.000	TM 333700.000	T 2293.000	2429.000	2457.000	TM 6658.000
x		79.4%	0.046	44.390	46.570	6943.000	TM 326100.000	T 2221.000	2340.000	2378.000	TM 6660.000
σ		2.2%	0.018	1.110	1.251	311.200	TM 6601.000	T 64.090	78.040	71.230	TM 85.150
%RSD		2.7	39.490	2.501	2.686	4.482	TM 2.024	T 2.886	3.334	2.995	TM 1.279

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:03	T 9693.000	T 96300.000	T 18720.000	17110.000	T 15220.000	71.0%	4.392	1.823	5.162	2212.000
2	03:46:31	T 9552.000	T 95850.000	T 18470.000	17290.000	T 15270.000	70.8%	3.730	1.804	4.838	2070.000
3	03:46:58	T 9072.000	T 92740.000	T 18370.000	17090.000	T 15910.000	70.4%	3.468	1.570	4.653	1875.000
x		T 9439.000	T 94960.000	T 18520.000	17160.000	T 15460.000	70.7%	3.863	1.732	4.884	2052.000
σ		T 325.400	T 1936.000	T 181.300	108.800	T 385.700	0.3%	0.476	0.141	0.258	169.300
%RSD		T 3.448	T 2.039	T 0.979	0.634	T 2.494	0.4	12.330	8.112	5.273	8.250

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:03	642.900	101.700	T 650.100	876.400	0.485	4.426	5.022	11.320	9.632	27.250
2	03:46:31	647.800	102.700	T 668.200	884.900	0.479	4.296	4.743	11.410	9.718	28.340
3	03:46:58	662.200	105.700	T 664.700	844.500	0.494	4.313	4.680	11.550	9.962	27.400
x		651.000	103.300	T 661.000	868.600	0.486	4.345	4.815	11.430	9.771	27.660
σ		10.070	2.075	T 9.606	21.340	0.007	0.071	0.182	0.113	0.171	0.589
%RSD		1.547	2.008	T 1.453	2.456	1.537	1.632	3.777	0.992	1.754	2.129

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:03	20.240	20.730	0.780	2.887	68.970	70.370	1.247	0.425	0.157	64.800
2	03:46:31	19.770	20.710	0.642	1.952	70.460	73.080	3.147	0.778	5.571	65.450
3	03:46:58	22.080	21.310	0.395	2.889	70.430	70.590	4.508	1.116	6.732	64.640
x		20.690	20.920	0.606	2.576	69.960	71.340	2.967	0.773	4.153	64.960
σ		1.221	0.338	0.195	0.541	0.851	1.509	1.638	0.345	3.509	0.427
%RSD		5.901	1.618	32.210	20.990	1.216	2.116	55.190	44.640	84.480	0.657

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:03	56.4%	368.100	351.700	368.100	8.705	0.006	0.001	-0.692	0.111	49.4%
2	03:46:31	56.7%	373.400	356.600	371.200	4.425	0.002	0.004	-0.798	0.214	49.9%
3	03:46:58	58.4%	373.300	358.800	370.600	3.904	0.005	0.004	-0.976	0.094	51.1%
x		57.2%	371.600	355.700	369.900	5.678	0.004	0.003	-0.822	0.140	50.1%
σ		1.1%	3.044	3.636	1.642	2.634	0.002	0.002	0.144	0.065	0.9%
%RSD		1.9	0.819	1.022	0.444	46.400	43.040	62.200	17.470	46.300	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:46:03	0.714	0.523	2.645	2.881	1.559	1.421	47.5%	0.045	0.007	1.194
2	03:46:31	0.661	0.430	2.633	2.793	1.532	1.356	48.1%	0.033	0.017	1.095
3	03:46:58	0.630	0.462	2.763	2.977	1.364	1.416	49.6%	0.031	0.016	1.151
x		0.668	0.472	2.680	2.884	1.485	1.398	48.4%	0.037	0.013	1.146
σ		0.042	0.047	0.072	0.092	0.106	0.036	1.1%	0.008	0.006	0.050
%RSD		6.309	9.978	2.683	3.196	7.126	2.605	2.2	20.840	42.910	4.329

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:46:03	1.101	1.097	41.4%
2	03:46:31	1.034	1.048	41.9%
3	03:46:58	1.136	1.091	43.3%
x		1.090	1.079	42.2%
σ		0.052	0.027	1.0%
%RSD		4.735	2.457	2.4

UD18061-001 04/26/2019 03:51:25

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:52	80.3%	0.012	142.500	142.000	1319.000	TM 322600.000	T 2590.000	2664.000	2709.000	TM 684.700
2	03:52:19	74.3%	0.020	148.600	146.000	1397.000	TM 325300.000	T 2596.000	2727.000	2738.000	TM 702.600
3	03:52:46	74.4%	-0.011	148.100	147.700	1406.000	TM 334600.000	T 2667.000	2696.000	2667.000	TM 703.500
x		76.3%	0.007	146.400	145.200	1374.000	TM 327500.000	T 2618.000	2696.000	2705.000	TM 696.900
σ		3.4%	0.016	3.404	2.950	47.570	TM 6276.000	T 42.890	31.560	35.700	TM 10.610
%RSD		4.4	222.700	2.325	2.032	3.462	TM 1.916	T 1.638	1.171	1.320	TM 1.523

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:52	TM 25280.000	T 96800.000	T 25130.000	11390.000	9853.000	72.4%	370.800	0.838	18.720	2904.000
2	03:52:19	TM 24690.000	T 97940.000	T 26420.000	11500.000	10470.000	70.6%	318.600	0.706	19.510	2424.000
3	03:52:46	TM 25150.000	T 97640.000	T 26260.000	11320.000	10430.000	70.1%	316.900	0.393	19.690	2650.000
x		TM 25040.000	T 97460.000	T 25940.000	11400.000	10250.000	71.0%	335.400	0.646	19.310	2659.000
σ		TM 307.300	T 590.900	T 702.500	89.690	344.200	1.2%	30.650	0.229	0.516	240.200
%RSD		TM 1.227	T 0.606	T 2.709	0.787	3.358	1.7	9.137	35.470	2.672	9.033

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:52	6085.000	101.500	T 5910.000	5779.000	1.743	99.970	106.000	368.400	337.700	M 509.900
2	03:52:19	6278.000	99.900	T 5890.000	5961.000	1.743	102.300	108.800	382.300	351.100	M 514.100
3	03:52:46	6383.000	104.100	T 5997.000	6012.000	1.822	103.300	105.200	383.900	357.500	M 515.500
x		6249.000	101.800	T 5932.000	5917.000	1.769	101.900	106.700	378.200	348.800	M 513.200
σ		151.200	2.099	T 57.300	122.300	0.046	1.723	1.916	8.493	10.110	M 2.905
%RSD		2.420	2.061	T 0.966	2.067	2.582	1.691	1.796	2.246	2.898	M 0.566

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:52	384.100	392.200	10.660	6.394	30.040	31.050	18.250	4.799	8.606	45.970
2	03:52:19	397.800	416.400	11.780	6.180	31.040	28.320	13.850	3.541	8.219	46.290
3	03:52:46	406.100	425.400	12.120	5.220	34.230	34.960	13.150	3.314	8.109	46.380
x		396.000	411.300	11.520	5.931	31.770	31.450	15.080	3.885	8.311	46.210
σ		11.110	17.160	0.761	0.625	2.187	3.337	2.763	0.800	0.261	0.217
%RSD		2.805	4.173	6.609	10.540	6.884	10.610	18.320	20.600	3.140	0.470

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:52	59.3%	M 1236.000	M 1181.000	M 1244.000	6.473	4.369	4.372	-0.783	2.694	52.0%
2	03:52:19	59.7%	M 1236.000	M 1187.000	M 1245.000	6.269	4.621	4.485	-0.842	2.613	53.2%
3	03:52:46	61.3%	M 1236.000	M 1210.000	M 1257.000	6.562	4.378	4.444	-1.417	2.393	54.8%
x		60.1%	M 1236.000	M 1192.000	M 1249.000	6.434	4.456	4.433	-1.014	2.567	53.3%
σ		1.1%	M 0.217	M 15.260	M 7.317	0.150	0.143	0.057	0.350	0.156	1.4%
%RSD		1.8	M 0.018	M 1.280	M 0.586	2.333	3.210	1.296	34.530	6.076	2.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:51:52	5.517	5.629	4.659	4.677	43.080	43.870	50.5%	0.028	-0.003	33.140
2	03:52:19	5.532	5.553	4.733	4.989	42.080	42.140	51.6%	0.021	-0.003	33.530
3	03:52:46	5.615	5.569	4.953	5.102	42.640	41.210	53.3%	0.022	0.005	32.900
x		5.555	5.583	4.782	4.923	42.600	42.410	51.8%	0.024	-0.000	33.190
σ		0.053	0.040	0.153	0.220	0.498	1.349	1.4%	0.004	0.005	0.319
%RSD		0.946	0.717	3.194	4.470	1.169	3.182	2.7	17.170	973.800	0.961

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:51:52	30.650	31.000	44.9%
2	03:52:19	30.340	30.970	46.2%
3	03:52:46	30.120	30.870	46.8%
x		30.370	30.950	46.0%
σ		0.269	0.065	1.0%
%RSD		0.885	0.211	2.2

CCV MW10994 04/26/2019 03:57:14 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:42	74.7%	324.200	317.200	309.300	82.510	T66440.000	T63830.000	T61860.000	T63170.000	311.500
2	03:58:09	81.6%	304.900	295.300	298.200	66.910	T65880.000	T62070.000	T61490.000	T62430.000	292.400
3	03:58:36	80.4%	303.500	294.900	299.400	65.660	T65870.000	T62980.000	T62640.000	T61080.000	295.300
x		78.9%	103.625%	100.821%	100.772%	71.690	T110.108%	T62960.000	T62000.000	T103.707%	99.910%
σ		3.7%	n/a	n/a	n/a	9.391	Tn/a	T882.300	T586.500	Tn/a	n/a
%RSD		4.7	3.721	4.226	2.004	13.100	T0.498	T1.401	T0.946	T1.701	3.440

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:42	T3713.000	2941.000	T58560.000	66210.000	T56530.000	68.1%	332.500	335.800	321.200	918.100
2	03:58:09	T3746.000	2962.000	T56950.000	65000.000	T52450.000	70.1%	326.200	330.000	311.800	804.300
3	03:58:36	T3758.000	2838.000	T56740.000	65600.000	T53800.000	69.5%	329.000	336.900	317.000	-628.900
x		T124.634%	2913.000	T95.693%	65600.000	T90.431%	69.2%	109.740%	111.422%	105.551%	364.500
σ		Tn/a	66.230	Tn/a	604.600	Tn/a	1.1%	n/a	n/a	n/a	862.200
%RSD		T0.633	2.273	T1.733	0.922	T3.837	1.5	0.951	1.105	1.496	236.500

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:42	T64770.000	304.600	T64400.000	T61640.000	298.300	300.000	317.600	302.000	279.700	336.300
2	03:58:09	T64000.000	297.600	T64290.000	T61210.000	299.200	296.300	320.400	302.800	275.300	327.000
3	03:58:36	T64120.000	295.700	T64210.000	T61650.000	301.600	295.500	313.300	300.600	274.500	338.100
x		T64300.000	99.766%	T64300.000	T102.501%	99.900%	99.083%	317.100	301.800	92.171%	111.268%
σ		T413.700	n/a	T96.470	Tn/a	n/a	n/a	3.546	1.121	n/a	n/a
%RSD		T0.643	1.581	T0.150	T0.414	0.574	0.799	1.118	0.372	1.006	1.784

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:42	303.900	284.900	284.000	338.600	3.409	3.131	1274.000	325.600	4.956	319.300
2	03:58:09	286.100	277.100	276.800	344.400	2.758	2.751	1313.000	339.900	5.172	321.400
3	03:58:36	286.400	281.500	281.100	347.400	3.171	1.738	1321.000	345.200	1.184	319.800
x		292.100	281.200	93.540%	343.500	3.112	2.540	1303.000	112.300%	3.771	106.732%
σ		10.200	3.881	n/a	4.459	0.329	0.720	24.950	n/a	2.242	n/a
%RSD		3.493	1.380	1.291	1.298	10.580	28.340	1.915	3.005	59.470	0.335

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:42	56.9%	322.400	312.100	319.800	306.600	302.700	295.900	297.800	296.900	52.2%
2	03:58:09	58.4%	319.400	315.000	319.500	311.800	295.400	301.500	297.000	299.100	52.9%
3	03:58:36	58.0%	320.500	314.100	324.400	300.500	302.300	302.700	306.400	301.300	52.0%
x		57.7%	106.923%	104.579%	321.200	306.300	100.041%	300.100	300.400	99.707%	52.4%
σ		0.8%	n/a	n/a	2.748	5.624	n/a	3.625	5.186	n/a	0.5%
%RSD		1.3	0.475	0.468	0.855	1.836	1.368	1.208	1.727	0.728	0.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	03:57:42	313.000	317.200	312.300	328.600	325.100	320.800	49.7%	290.200	293.800	287.200
2	03:58:09	309.800	310.800	308.300	325.300	327.800	324.900	50.2%	291.600	297.000	290.100
3	03:58:36	316.200	319.800	313.000	327.500	330.000	329.300	50.0%	289.900	294.800	288.900
x		104.332%	105.309%	311.200	109.046%	109.217%	108.340%	50.0%	290.600	98.400%	96.242%
σ		n/a	n/a	2.548	n/a	n/a	n/a	0.3%	0.907	n/a	n/a
%RSD		1.017	1.461	0.819	0.513	0.739	1.311	0.5	0.312	0.565	0.502

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	03:57:42	287.700	285.900	44.2%
2	03:58:09	289.800	286.100	44.2%
3	03:58:36	291.100	287.600	44.7%
x		96.518%	95.505%	44.3%
σ		n/a	n/a	0.3%
%RSD		0.590	0.333	0.6

CCB IM9370-01 04/26/2019 04:03:03 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:29	85.0%	0.004	3.004	2.588	38.960	56.440	5.743	5.138	5.767	0.081
2	04:03:56	T 94.2%	0.015	2.463	2.760	45.190	51.120	4.720	5.328	5.303	0.049
3	04:04:23	76.5%	0.062	2.463	2.598	54.910	19.360	4.136	4.484	4.119	0.054
x		T 85.2%	0.027	2.643	2.648	46.350	42.310	4.866	4.983	5.063	0.061
σ		T 8.9%	0.030	0.312	0.097	8.039	20.050	0.813	0.442	0.850	0.017
%RSD		T 10.4	112.200	11.820	3.648	17.340	47.400	16.720	8.877	16.790	27.910

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:29	22.770	2202.000	29.330	9.118	5.218	69.4%	-0.317	0.010	0.133	101.000
2	04:03:56	22.280	2170.000	13.010	3.827	3.376	68.6%	-0.342	0.004	0.123	84.790
3	04:04:23	20.970	2071.000	22.990	0.452	4.053	68.2%	-0.314	0.087	0.123	26.160
x		22.010	2147.000	21.770	4.466	4.215	68.7%	-0.324	0.034	0.126	70.630
σ		0.932	68.590	8.229	4.368	0.932	0.6%	0.015	0.046	0.006	39.350
%RSD		4.237	3.194	37.790	97.820	22.100	0.9	4.728	137.200	4.523	55.710

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:29	15.330	0.153	33.660	58.300	-0.015	-0.008	0.873	0.033	0.004	-0.005
2	04:03:56	16.610	0.135	31.050	56.220	-0.016	-0.014	0.916	0.001	0.008	0.044
3	04:04:23	12.940	0.139	27.790	47.650	-0.006	-0.003	0.516	-0.026	0.042	-0.004
x		14.960	0.143	30.840	54.060	-0.013	-0.008	0.768	0.003	0.018	0.012
σ		1.863	0.009	2.940	5.643	0.006	0.006	0.220	0.029	0.021	0.028
%RSD		12.450	6.645	9.533	10.440	46.880	69.080	28.580	1073.000	115.000	235.900

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:29	-0.019	0.099	0.101	1.945	0.644	1.672	4.033	1.048	2.731	0.042
2	04:03:56	0.163	0.113	-0.172	1.689	0.833	1.267	-1.836	-0.549	7.361	0.017
3	04:04:23	0.083	0.041	0.064	2.567	0.804	1.785	2.065	0.501	4.357	0.031
x		0.076	0.084	-0.002	2.067	0.760	1.575	1.421	0.333	4.816	0.030
σ		0.091	0.038	0.148	0.452	0.102	0.272	2.987	0.811	2.349	0.013
%RSD		120.400	45.200	6182.000	21.850	13.420	17.290	210.300	243.500	48.770	42.360

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:29	59.7%	0.204	0.239	0.153	-0.693	0.029	0.017	0.008	0.033	55.4%
2	04:03:56	59.7%	0.159	0.181	0.172	-0.287	0.023	0.031	0.015	0.027	55.7%
3	04:04:23	58.1%	0.201	0.143	0.132	0.700	0.022	0.031	0.001	0.042	54.4%
x		59.2%	0.188	0.188	0.152	-0.093	0.025	0.026	0.008	0.034	55.2%
σ		0.9%	0.025	0.049	0.020	0.716	0.004	0.008	0.007	0.008	0.7%
%RSD		1.6	13.540	25.870	13.020	767.400	15.780	31.910	83.800	23.080	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:03:29	0.038	0.067	0.145	0.242	0.000	-0.018	51.0%	0.002	0.013	0.027
2	04:03:56	0.024	0.050	0.128	0.140	-0.030	-0.012	49.9%	0.009	0.027	0.028
3	04:04:23	0.060	0.074	0.136	0.150	0.052	0.024	49.6%	0.018	0.009	0.014
x		0.040	0.064	0.136	0.178	0.007	-0.002	50.2%	0.010	0.016	0.023
σ		0.018	0.013	0.008	0.056	0.042	0.023	0.7%	0.008	0.010	0.008
%RSD		44.270	19.590	6.215	31.600	562.700	1221.000	1.4	85.040	59.290	33.630

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:03:29	0.015	0.021	47.4%
2	04:03:56	0.015	0.024	47.0%
3	04:04:23	0.006	0.022	47.9%
x		0.012	0.022	47.4%
σ		0.005	0.001	0.4%
%RSD		43.920	6.186	0.9

UD18061-001S 04/26/2019 04:08:51

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:09:18	80.6%	79.950	222.900	219.900	1326.000	TM 323900.000	T 3511.000	3647.000	T 3611.000	TM 774.100
2	04:09:45	74.7%	84.860	227.700	226.500	1381.000	TM 327300.000	T 3588.000	3686.000	T 3582.000	TM 800.400
3	04:10:13	75.0%	84.010	227.600	226.300	1379.000	TM 333300.000	T 3583.000	3645.000	3647.000	TM 836.300
x		76.8%	82.940	226.100	224.200	1362.000	TM 328200.000	T 3561.000	3659.000	T 3614.000	TM 803.600
σ		3.3%	2.624	2.750	3.745	30.980	TM 4759.000	T 43.060	22.940	T 32.750	TM 31.230
%RSD		4.4	3.164	1.217	1.670	2.275	TM 1.450	T 1.209	0.627	T 0.906	TM 3.886

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:09:18	TM 25890.000	T 95290.000	T 26490.000	12350.000	11040.000	73.7%	452.000	102.700	116.000	4113.000
2	04:09:45	TM 25960.000	T 92390.000	T 26210.000	12430.000	11550.000	71.1%	408.700	106.300	121.400	2586.000
3	04:10:13	TM 27230.000	T 93460.000	T 26860.000	12890.000	11350.000	70.5%	414.800	109.200	121.800	2825.000
x		TM 26360.000	T 93710.000	T 26520.000	12560.000	11310.000	71.8%	425.200	106.100	119.700	3175.000
σ		TM 752.400	T 1469.000	T 325.400	293.300	256.200	1.7%	23.410	3.304	3.246	821.400
%RSD		TM 2.854	T 1.567	T 1.227	2.336	2.264	2.3	5.505	3.114	2.712	25.870

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:09:18	7349.000	196.300	T 6844.000	6807.000	96.180	194.400	203.700	476.900	437.600	M 626.900
2	04:09:45	7395.000	202.000	T 6919.000	6877.000	98.840	199.600	209.400	479.700	454.700	M 642.500
3	04:10:13	7592.000	209.700	T 6994.000	7024.000	100.100	204.900	210.600	492.700	469.700	M 635.100
x		7445.000	202.700	T 6919.000	6903.000	98.360	199.600	207.900	483.100	454.000	M 634.800
σ		129.200	6.738	T 75.030	110.600	1.989	5.225	3.680	8.433	16.070	M 7.822
%RSD		1.735	3.325	T 1.084	1.602	2.022	2.617	1.770	1.746	3.539	M 1.232

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:09:18	477.100	487.100	105.300	123.200	30.740	30.620	445.700	120.600	7.678	152.100
2	04:09:45	M 501.000	M 515.000	112.900	121.300	31.070	32.850	457.100	121.000	10.050	153.100
3	04:10:13	497.400	M 521.100	115.400	124.100	32.690	31.270	453.200	119.000	6.691	152.700
x		M 491.800	M 507.700	111.200	122.900	31.500	31.580	452.000	120.200	8.140	152.600
σ		M 12.910	M 18.110	5.247	1.449	1.044	1.144	5.795	1.014	1.726	0.519
%RSD		M 2.625	M 3.567	4.718	1.179	3.316	3.623	1.282	0.843	21.210	0.340

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:09:18	61.4%	M 1361.000	M 1302.000	M 1367.000	105.500	106.800	106.400	100.100	104.800	53.2%
2	04:09:45	61.7%	M 1366.000	M 1304.000	M 1369.000	107.000	106.800	105.300	101.800	104.100	54.3%
3	04:10:13	63.3%	M 1358.000	M 1308.000	M 1380.000	111.700	106.100	104.800	99.940	104.800	55.9%
x		62.1%	M 1362.000	M 1305.000	M 1372.000	108.000	106.600	105.500	100.600	104.600	54.5%
σ		1.0%	M 4.144	M 2.787	M 7.055	3.223	0.402	0.827	1.054	0.395	1.4%
%RSD		1.7	M 0.304	M 0.214	M 0.514	2.984	0.377	0.783	1.047	0.378	2.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:09:18	112.600	113.300	109.700	113.900	154.800	155.500	51.4%	97.420	98.390	129.400
2	04:09:45	111.800	112.800	112.200	115.500	154.000	153.800	52.7%	98.200	97.100	131.200
3	04:10:13	112.600	113.000	112.300	114.900	156.400	152.500	54.9%	95.870	96.760	129.700
x		112.300	113.000	111.400	114.700	155.100	153.900	53.0%	97.160	97.420	130.100
σ		0.438	0.266	1.479	0.803	1.232	1.527	1.7%	1.183	0.862	0.984
%RSD		0.390	0.235	1.327	0.700	0.794	0.992	3.3	1.218	0.885	0.756

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:09:18	128.300	127.700	45.0%
2	04:09:45	127.000	127.400	46.8%
3	04:10:13	128.100	127.200	48.0%
x		127.800	127.400	46.6%
σ		0.719	0.266	1.5%
%RSD		0.562	0.209	3.3

UD18061-001SD 04/26/2019 04:14:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:07	79.1%	82.790	217.900	214.800	1333.000	TM 318400.000	T 3431.000	3530.000	3535.000	TM 745.600
2	04:15:33	86.2%	78.890	220.200	218.200	1253.000	TM 333800.000	T 3475.000	3534.000	T 3522.000	TM 759.800
3	04:16:00	78.7%	85.300	229.300	226.000	1335.000	TM 324700.000	T 3471.000	3503.000	T 3498.000	TM 739.500
x		81.3%	82.330	222.500	219.700	1307.000	TM 325600.000	T 3459.000	3522.000	T 3518.000	TM 748.300
σ		4.2%	3.233	6.053	5.740	47.000	TM 7714.000	T 24.250	17.070	T 18.750	TM 10.420
%RSD		5.2	3.926	2.721	2.613	3.596	TM 2.369	T 0.701	0.485	T 0.533	TM 1.393

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:07	TM 24420.000	T 88340.000	T 25060.000	12130.000	10610.000	72.9%	404.700	103.500	116.800	2564.000
2	04:15:33	TM 26670.000	T 92300.000	T 25030.000	12480.000	10290.000	73.7%	433.800	108.100	119.900	2983.000
3	04:16:00	TM 24460.000	T 88510.000	T 24800.000	11970.000	10720.000	72.7%	383.500	105.000	115.100	2500.000
x		TM 25180.000	T 89720.000	T 24960.000	12190.000	10540.000	73.1%	407.300	105.500	117.300	2682.000
σ		TM 1285.000	T 2235.000	T 143.100	262.700	220.200	0.5%	25.270	2.377	2.401	262.300
%RSD		TM 5.101	T 2.492	T 0.573	2.154	2.089	0.7	6.204	2.252	2.047	9.781

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:07	7211.000	198.000	T 6911.000	6885.000	95.720	193.700	199.000	470.400	443.000	M 612.300
2	04:15:33	7319.000	202.300	T 6831.000	7113.000	100.000	200.600	203.900	462.000	448.400	M 594.400
3	04:16:00	7251.000	200.200	T 6776.000	6861.000	96.020	196.800	203.600	471.800	452.800	M 613.400
x		7260.000	200.200	T 6839.000	6953.000	97.250	197.000	202.100	468.100	448.100	M 606.700
σ		54.570	2.144	T 67.560	139.100	2.399	3.436	2.750	5.290	4.911	M 10.710
%RSD		0.752	1.071	T 0.988	2.001	2.467	1.744	1.360	1.130	1.096	M 1.765

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:07	493.000	M 508.200	112.900	117.400	31.750	30.380	486.000	126.700	4.471	150.700
2	04:15:33	474.400	485.400	110.200	118.700	31.750	31.370	443.300	118.400	7.597	148.600
3	04:16:00	495.500	M 505.600	115.400	121.700	33.500	31.310	440.900	116.800	8.820	148.500
x		487.600	M 499.700	112.800	119.300	32.330	31.020	456.800	120.600	6.963	149.300
σ		11.510	M 12.450	2.604	2.181	1.011	0.553	25.390	5.296	2.243	1.225
%RSD		2.361	M 2.491	2.308	1.828	3.127	1.783	5.559	4.391	32.220	0.821

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:07	63.8%	M 1329.000	M 1284.000	M 1337.000	106.100	102.300	101.500	98.320	103.200	57.1%
2	04:15:33	67.4%	M 1325.000	M 1260.000	M 1333.000	110.600	103.100	103.200	97.260	101.500	58.4%
3	04:16:00	67.0%	M 1345.000	M 1288.000	M 1347.000	103.200	104.600	104.300	99.810	103.500	58.4%
x		66.1%	M 1333.000	M 1277.000	M 1339.000	106.600	103.300	103.000	98.460	102.700	58.0%
σ		1.9%	M 10.560	M 14.780	M 6.962	3.722	1.163	1.414	1.281	1.067	0.8%
%RSD		2.9	M 0.792	M 1.157	M 0.520	3.490	1.125	1.373	1.301	1.039	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:15:07	108.400	107.600	108.300	110.400	149.400	148.400	55.0%	94.340	94.730	126.700
2	04:15:33	107.600	109.300	105.700	111.400	147.700	147.300	55.7%	94.270	95.450	127.500
3	04:16:00	108.800	110.000	109.400	112.800	149.200	149.600	56.9%	93.650	96.300	128.300
x		108.300	108.900	107.800	111.500	148.800	148.500	55.9%	94.080	95.490	127.500
σ		0.621	1.242	1.886	1.212	0.924	1.145	1.0%	0.377	0.785	0.843
%RSD		0.574	1.140	1.750	1.087	0.621	0.771	1.7	0.400	0.822	0.661

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:15:07	122.500	123.500	48.4%
2	04:15:33	124.900	124.900	48.8%
3	04:16:00	124.300	124.400	50.3%
x		123.900	124.300	49.2%
σ		1.260	0.691	1.0%
%RSD		1.017	0.556	2.0

UD18061-001L(5) 04/26/2019 04:20:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:55	90.0%	-0.012	38.610	36.400	304.900	T 67900.000	T 595.800	589.100	596.400	135.600
2	04:21:22	88.6%	-0.005	36.970	34.020	312.300	T 67530.000	T 579.600	567.000	586.400	130.600
3	04:21:49	80.0%	0.016	37.900	36.370	344.600	T 66260.000	T 590.000	577.100	570.800	134.100
x		86.2%	-0.000	37.820	35.600	320.600	T 67230.000	T 588.400	577.700	584.500	133.500
σ		5.4%	0.015	0.824	1.369	21.140	T 862.800	T 8.218	11.060	12.910	2.586
%RSD		6.3	4626.000	2.178	3.847	6.594	T 1.283	T 1.397	1.914	2.209	1.937

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:55	T 5040.000	T 20050.000	T 4632.000	2303.000	1808.000	74.7%	71.430	0.230	3.952	608.500
2	04:21:22	T 4813.000	T 20180.000	T 4560.000	2207.000	1821.000	74.3%	69.420	0.149	3.861	578.700
3	04:21:49	T 4598.000	T 19730.000	T 4913.000	2247.000	2005.000	73.7%	57.740	0.103	3.799	502.400
x		T 4817.000	T 19980.000	T 4702.000	2252.000	1878.000	74.2%	66.200	0.161	3.871	563.200
σ		T 221.100	T 231.200	T 186.200	48.050	110.000	0.5%	7.391	0.064	0.077	54.690
%RSD		T 4.590	T 1.157	T 3.959	2.134	5.856	0.7	11.170	40.100	1.997	9.712

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:55	1216.000	20.620	T 1206.000	1238.000	0.320	20.740	20.930	76.600	75.640	99.950
2	04:21:22	1250.000	20.900	T 1193.000	1257.000	0.373	21.280	22.420	76.810	73.350	100.700
3	04:21:49	1223.000	20.680	T 1214.000	1207.000	0.358	21.030	19.420	76.200	74.560	101.500
x		1230.000	20.730	T 1205.000	1234.000	0.350	21.020	20.920	76.540	74.520	100.700
σ		18.060	0.150	T 10.590	25.150	0.027	0.271	1.499	0.308	1.146	0.798
%RSD		1.468	0.723	T 0.880	2.038	7.742	1.291	7.163	0.403	1.538	0.792

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:55	81.160	83.260	2.559	2.349	6.629	9.216	2.743	0.783	0.734	9.201
2	04:21:22	78.940	84.200	2.320	1.326	5.866	6.608	5.731	1.646	-1.788	9.007
3	04:21:49	82.430	85.060	2.387	2.550	6.426	7.519	1.044	0.280	3.939	9.199
x		80.840	84.170	2.422	2.075	6.307	7.781	3.173	0.903	0.962	9.136
σ		1.770	0.897	0.123	0.656	0.396	1.324	2.373	0.691	2.871	0.111
%RSD		2.189	1.066	5.079	31.620	6.271	17.020	74.790	76.500	298.600	1.217

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:55	67.2%	236.800	230.900	236.400	1.661	0.938	0.927	-0.187	0.585	61.3%
2	04:21:22	67.6%	236.200	230.100	236.700	2.808	0.878	0.847	-0.139	0.520	60.7%
3	04:21:49	67.8%	238.400	230.600	234.400	2.649	0.951	0.952	-0.051	0.470	61.2%
x		67.5%	237.100	230.600	235.800	2.373	0.922	0.908	-0.126	0.525	61.1%
σ		0.3%	1.130	0.387	1.223	0.621	0.039	0.055	0.069	0.058	0.3%
%RSD		0.5	0.476	0.168	0.519	26.180	4.191	6.029	54.840	11.000	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:20:55	1.184	1.020	0.849	0.977	8.070	8.857	57.5%	0.013	-0.007	6.714
2	04:21:22	1.195	1.086	0.967	1.114	8.097	8.172	57.3%	0.002	-0.001	6.934
3	04:21:49	1.188	1.117	0.864	0.949	8.465	7.838	57.5%	0.005	-0.002	6.459
x		1.189	1.074	0.893	1.013	8.211	8.289	57.4%	0.007	-0.003	6.702
σ		0.005	0.049	0.064	0.088	0.221	0.519	0.1%	0.006	0.003	0.238
%RSD		0.452	4.604	7.188	8.713	2.685	6.264	0.2	87.940	95.620	3.547

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:20:55	6.046	6.118	51.5%
2	04:21:22	6.155	6.337	52.3%
3	04:21:49	6.018	6.246	52.6%
x		6.073	6.234	52.1%
σ		0.073	0.110	0.6%
%RSD		1.196	1.763	1.1

UQ14094-001 04/26/2019 04:26:18

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:45	T 104.7%	-0.000	1.947	1.842	56.530	59.850	1.833	1.684	2.016	1.092
2	04:27:12	T 99.1%	0.002	2.115	2.008	50.170	37.760	1.783	1.920	1.630	1.108
3	04:27:39	85.0%	0.013	2.010	1.980	62.520	39.530	1.778	1.565	2.007	1.218
x		T 96.2%	0.005	2.024	1.944	56.400	45.710	1.798	1.723	1.884	1.139
σ		T 10.2%	0.007	0.085	0.089	6.176	12.270	0.031	0.181	0.220	0.068
%RSD		T 10.6	134.700	4.200	4.575	10.950	26.850	1.702	10.510	11.680	6.003
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:45	23.670	T 94100.000	-12.100	5.262	4.050	73.5%	-0.124	0.191	0.394	2523.000
2	04:27:12	22.730	T 93960.000	-12.670	4.734	4.003	72.6%	-0.171	-0.110	0.335	2452.000
3	04:27:39	22.740	T 94350.000	3.400	9.497	4.179	71.1%	-0.010	-0.084	0.382	2414.000
x		23.050	T 94140.000	-7.121	6.498	4.077	72.4%	-0.102	-0.001	0.370	2463.000
σ		0.537	T 197.900	9.116	2.611	0.091	1.2%	0.083	0.167	0.031	54.940
%RSD		2.332	T 0.210	128.000	40.180	2.229	1.6	81.460	14880.000	8.384	2.231
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:45	14.890	0.310	32.980	43.170	-0.038	0.034	0.522	1.478	1.330	2.256
2	04:27:12	13.550	0.295	29.780	33.740	-0.030	0.048	0.449	1.449	1.491	2.517
3	04:27:39	15.210	0.298	29.740	35.860	-0.033	0.078	0.244	1.402	1.236	2.141
x		14.550	0.301	30.840	37.590	-0.034	0.053	0.405	1.443	1.352	2.305
σ		0.886	0.008	1.859	4.949	0.004	0.023	0.144	0.038	0.129	0.193
%RSD		6.086	2.651	6.029	13.170	11.560	42.430	35.530	2.666	9.563	8.364
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:45	1.227	1.902	0.100	2.258	1.619	2.395	0.406	0.288	-2.481	0.016
2	04:27:12	1.800	2.142	0.009	2.094	1.835	3.477	0.240	0.135	0.966	0.022
3	04:27:39	1.813	1.987	-0.166	1.671	1.629	2.459	-0.057	0.053	1.186	0.017
x		1.614	2.010	-0.019	2.007	1.694	2.777	0.196	0.159	-0.110	0.018
σ		0.335	0.122	0.135	0.303	0.122	0.607	0.235	0.119	2.057	0.003
%RSD		20.740	6.055	703.300	15.090	7.212	21.860	119.700	75.010	1876.000	16.860
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:45	69.0%	0.214	0.248	0.231	0.885	0.012	0.003	-0.006	0.018	62.2%
2	04:27:12	67.7%	0.146	0.151	0.150	1.466	0.003	0.001	-0.006	-0.009	62.1%
3	04:27:39	68.3%	0.236	0.137	0.140	-0.587	0.003	0.006	0.007	0.009	62.5%
x		68.3%	0.199	0.179	0.174	0.588	0.006	0.003	-0.002	0.006	62.3%
σ		0.7%	0.047	0.060	0.050	1.058	0.005	0.003	0.007	0.014	0.2%
%RSD		1.0	23.650	33.620	28.770	180.000	95.200	83.780	382.500	222.000	0.3
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:26:45	0.293	0.332	0.019	0.022	0.013	-0.037	58.1%	-0.004	-0.012	0.049
2	04:27:12	0.266	0.453	0.034	0.035	-0.032	-0.011	57.7%	-0.010	-0.016	0.013
3	04:27:39	0.243	0.383	0.026	0.053	0.021	-0.042	57.8%	-0.008	-0.012	0.049
x		0.267	0.389	0.026	0.037	0.000	-0.030	57.8%	-0.008	-0.014	0.037
σ		0.025	0.061	0.007	0.016	0.029	0.016	0.2%	0.003	0.003	0.021
%RSD		9.329	15.580	28.020	42.820	5931.000	55.200	0.4	38.070	18.820	55.550
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	04:26:45	0.039	0.034	52.8%							
2	04:27:12	0.006	0.015	53.6%							
3	04:27:39	0.042	0.036	53.9%							
x		0.029	0.028	53.4%							
σ		0.020	0.011	0.5%							
%RSD		67.640	40.570	1.0							

UQ14094-002 04/26/2019 04:32:07

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:32:34	87.8%	101.300	103.900	103.700	73.750	┬1205.000	┬1044.000	1051.000	1050.000	94.620
2	04:33:01	82.9%	108.100	101.100	98.770	79.440	┬1188.000	┬1062.000	1042.000	1051.000	91.790
3	04:33:29	89.5%	103.800	103.200	97.820	62.770	┬1217.000	┬1063.000	1068.000	1082.000	95.010
x		86.7%	104.400	102.700	100.100	71.980	┬1203.000	┬1057.000	1054.000	1061.000	93.810
σ		3.4%	3.445	1.457	3.167	8.474	┬14.390	┬10.540	13.090	18.110	1.757
%RSD		3.9	3.300	1.418	3.164	11.770	┬1.196	┬0.997	1.242	1.708	1.872

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:32:34	┬1139.000	┬92840.000	┬908.000	1219.000	875.300	72.2%	108.600	107.000	103.900	3252.000
2	04:33:01	┬1112.000	┬90620.000	┬896.900	1182.000	916.000	70.5%	103.900	105.000	103.400	3025.000
3	04:33:29	┬1181.000	┬95000.000	┬911.000	1183.000	866.200	71.8%	103.500	109.800	106.400	3594.000
x		┬1144.000	┬92820.000	┬905.300	1195.000	885.900	71.5%	105.300	107.300	104.600	3290.000
σ		┬34.560	┬2192.000	┬7.404	20.960	26.520	0.9%	2.872	2.414	1.625	286.600
%RSD		┬3.021	┬2.361	┬0.818	1.754	2.994	1.3	2.727	2.251	1.554	8.711

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:32:34	1197.000	102.400	┬1100.000	1089.000	103.200	106.400	111.300	107.400	104.400	114.500
2	04:33:01	1205.000	106.300	┬1117.000	1106.000	102.400	105.200	103.900	107.600	106.300	117.000
3	04:33:29	1156.000	101.100	┬1126.000	1173.000	106.700	107.900	108.900	107.000	107.200	112.400
x		1186.000	103.200	┬1114.000	1123.000	104.100	106.500	108.000	107.300	105.900	114.600
σ		25.930	2.696	┬13.090	44.460	2.265	1.348	3.801	0.346	1.434	2.328
%RSD		2.186	2.611	┬1.175	3.961	2.177	1.265	3.519	0.322	1.353	2.031

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:32:34	102.700	101.800	101.500	118.500	1.191	3.517	467.300	116.200	3.001	104.200
2	04:33:01	102.300	105.100	107.500	123.500	1.849	2.495	479.000	120.600	1.014	104.900
3	04:33:29	101.300	101.800	103.900	125.200	1.467	3.838	466.500	117.900	4.242	104.800
x		102.100	102.900	104.300	122.400	1.502	3.283	470.900	118.200	2.752	104.600
σ		0.700	1.901	2.995	3.490	0.331	0.701	7.006	2.241	1.628	0.417
%RSD		0.685	1.848	2.872	2.851	21.990	21.360	1.488	1.896	59.170	0.399

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:32:34	65.6%	101.300	99.830	100.700	105.700	102.500	102.700	100.700	101.200	61.1%
2	04:33:01	65.9%	101.300	98.210	102.300	102.800	104.600	103.600	101.800	101.900	60.4%
3	04:33:29	67.9%	102.500	102.400	103.200	104.000	105.000	103.100	101.400	100.200	61.9%
x		66.5%	101.700	100.100	102.100	104.200	104.000	103.200	101.300	101.100	61.1%
σ		1.3%	0.684	2.109	1.294	1.441	1.329	0.464	0.534	0.879	0.8%
%RSD		1.9	0.672	2.106	1.267	1.383	1.278	0.450	0.527	0.869	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:32:34	103.300	103.300	99.550	108.100	103.400	102.900	56.3%	97.700	99.040	98.940
2	04:33:01	104.200	104.600	101.300	107.300	104.900	103.400	56.3%	98.450	98.730	99.100
3	04:33:29	104.300	103.200	98.680	108.400	106.400	103.700	57.1%	98.590	100.000	99.360
x		103.900	103.700	99.850	107.900	104.900	103.300	56.6%	98.250	99.250	99.130
σ		0.540	0.785	1.347	0.572	1.500	0.410	0.5%	0.479	0.662	0.208
%RSD		0.520	0.757	1.349	0.530	1.430	0.397	0.8	0.488	0.667	0.210

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:32:34	98.530	97.820	51.4%
2	04:33:01	98.910	97.970	52.3%
3	04:33:29	99.350	97.650	52.6%
x		98.930	97.810	52.1%
σ		0.409	0.160	0.6%
%RSD		0.413	0.164	1.2

UD12091-001 04/26/2019 04:37:57

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:24	79.3%	0.001	50.960	51.730	1227.000	T 37200.000	T 1249.000	1272.000	1248.000	TM 694.300
2	04:38:51	76.4%	0.014	49.470	49.640	1196.000	T 37100.000	T 1231.000	1255.000	1258.000	TM 706.900
3	04:39:17	73.9%	0.030	51.480	50.650	1233.000	T 37550.000	T 1252.000	1241.000	1234.000	TM 701.200
x		76.5%	0.015	50.640	50.670	1218.000	T 37280.000	T 1244.000	1256.000	1247.000	TM 700.800
σ		2.7%	0.015	1.046	1.044	20.080	T 235.800	T 11.080	15.320	12.090	TM 6.333
%RSD		3.5	96.780	2.066	2.061	1.648	T 0.633	T 0.890	1.220	0.970	TM 0.904

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:24	T 5539.000	T 98880.000	TM 342700.000	13610.000	11590.000	71.5%	364.300	0.361	1.848	2567.000
2	04:38:51	T 5637.000	T 100300.000	TM 351300.000	13890.000	11730.000	69.7%	345.300	0.022	1.781	2595.000
3	04:39:17	T 5368.000	T 97940.000	TM 344900.000	13840.000	11770.000	68.4%	324.100	0.501	1.715	2208.000
x		T 5514.000	T 99050.000	TM 346300.000	13780.000	11700.000	69.8%	344.600	0.295	1.781	2457.000
σ		T 136.200	T 1198.000	TM 4493.000	152.700	95.310	1.6%	20.120	0.247	0.066	215.400
%RSD		T 2.469	T 1.210	TM 1.298	1.108	0.815	2.2	5.840	83.720	3.724	8.768

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:24	663.900	9.346	T 651.200	818.400	0.081	0.926	2.093	46.960	43.760	14.610
2	04:38:51	669.100	10.060	T 669.100	788.200	0.088	0.880	1.240	47.300	46.400	13.400
3	04:39:17	663.300	9.790	T 675.200	801.100	0.099	1.053	1.273	48.110	46.620	15.010
x		665.400	9.731	T 665.200	802.600	0.089	0.953	1.535	47.460	45.590	14.340
σ		3.204	0.360	T 12.490	15.180	0.009	0.089	0.484	0.588	1.590	0.837
%RSD		0.481	3.697	T 1.877	1.892	10.120	9.376	31.500	1.239	3.488	5.835

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:24	11.600	12.070	0.022	2.561	40.610	30.950	1.591	0.425	3.998	35.150
2	04:38:51	12.940	12.600	0.061	3.130	39.730	30.230	1.766	0.543	0.824	35.130
3	04:39:17	13.910	13.260	0.079	3.020	39.040	34.300	-2.038	-0.466	1.107	35.910
x		12.820	12.640	0.054	2.904	39.800	31.830	0.440	0.167	1.976	35.400
σ		1.163	0.596	0.029	0.302	0.789	2.169	2.147	0.551	1.756	0.447
%RSD		9.070	4.712	53.760	10.390	1.983	6.815	488.300	329.400	88.860	1.263

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:24	62.1%	0.835	0.700	0.812	5.242	0.212	0.222	0.166	0.147	55.2%
2	04:38:51	63.6%	0.939	0.791	0.870	4.533	0.183	0.203	0.189	0.117	56.6%
3	04:39:17	63.8%	0.729	0.741	0.781	3.587	0.236	0.219	0.147	0.150	57.2%
x		63.2%	0.835	0.744	0.821	4.454	0.211	0.214	0.167	0.138	56.3%
σ		0.9%	0.105	0.046	0.045	0.830	0.026	0.010	0.021	0.018	1.0%
%RSD		1.5	12.590	6.146	5.489	18.640	12.470	4.853	12.620	13.170	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:38:24	2.987	4.423	0.319	0.338	14.590	14.450	54.0%	0.034	0.012	0.290
2	04:38:51	3.021	4.198	0.357	0.378	14.670	14.550	54.5%	0.031	0.008	0.300
3	04:39:17	3.085	4.284	0.398	0.381	14.220	14.650	55.6%	0.018	0.004	0.284
x		3.031	4.302	0.358	0.366	14.490	14.550	54.7%	0.028	0.008	0.291
σ		0.050	0.113	0.040	0.024	0.243	0.099	0.8%	0.008	0.004	0.008
%RSD		1.642	2.635	11.080	6.618	1.674	0.683	1.5	30.070	49.850	2.801

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:38:24	0.326	0.303	47.0%
2	04:38:51	0.223	0.291	48.4%
3	04:39:17	0.263	0.278	49.3%
x		0.271	0.291	48.2%
σ		0.052	0.013	1.2%
%RSD		19.260	4.387	2.5

UD15036-001 04/26/2019 04:43:45

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:12	T 98.2%	-0.010	18.840	18.100	120.600	T 34170.000	T 3378.000	3523.000	3518.000	28.200
2	04:44:39	T 96.9%	0.019	17.810	19.140	129.100	T 34790.000	T 3296.000	3444.000	T 3378.000	29.220
3	04:45:07	90.5%	-0.003	19.500	18.680	112.200	T 33900.000	T 3354.000	3475.000	3446.000	31.930
x		T 95.2%	0.002	18.720	18.640	120.600	T 34290.000	T 3343.000	3481.000	T 3448.000	29.780
σ		T 4.1%	0.015	0.853	0.523	8.453	T 454.700	T 42.590	39.580	T 69.900	1.926
%RSD		T 4.3	825.900	4.555	2.807	7.007	T 1.326	T 1.274	1.137	T 2.027	6.466

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:12	T 1834.000	T 97760.000	T 2791.000	8561.000	5977.000	73.7%	1.084	-0.117	2.029	2868.000
2	04:44:39	T 1964.000	T 104200.000	T 2967.000	8567.000	5902.000	72.6%	1.043	0.064	2.192	2918.000
3	04:45:07	T 1870.000	T 98980.000	T 3089.000	8480.000	6425.000	73.8%	0.883	0.630	2.084	2453.000
x		T 1889.000	T 100300.000	T 2949.000	8536.000	6101.000	73.4%	1.003	0.192	2.102	2746.000
σ		T 66.760	T 3426.000	T 149.800	48.380	283.100	0.6%	0.107	0.390	0.083	255.400
%RSD		T 3.533	T 3.416	T 5.081	0.567	4.640	0.9	10.610	202.800	3.966	9.298

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:12	3231.000	138.600	T 3050.000	3192.000	0.570	5.550	7.221	10.990	10.200	4.978
2	04:44:39	3232.000	137.400	T 3025.000	3204.000	0.569	5.924	6.909	11.170	10.880	4.699
3	04:45:07	3169.000	138.600	T 3069.000	3178.000	0.526	5.934	6.245	11.010	10.250	4.790
x		3211.000	138.200	T 3048.000	3191.000	0.555	5.803	6.792	11.060	10.440	4.822
σ		36.200	0.709	T 22.050	13.090	0.025	0.219	0.499	0.095	0.379	0.143
%RSD		1.128	0.513	T 0.723	0.410	4.531	3.771	7.344	0.857	3.629	2.954

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:12	4.125	4.642	0.242	2.977	15.960	16.770	-0.812	-0.041	-2.229	68.210
2	04:44:39	3.355	4.261	0.458	1.940	16.700	18.980	2.536	0.776	-1.948	67.370
3	04:45:07	4.692	4.507	0.422	1.557	17.930	16.280	1.686	0.571	-1.962	68.120
x		4.057	4.470	0.374	2.158	16.860	17.340	1.137	0.435	-2.046	67.900
σ		0.671	0.193	0.115	0.735	0.996	1.437	1.740	0.425	0.158	0.461
%RSD		16.540	4.319	30.870	34.040	5.906	8.288	153.100	97.710	7.737	0.678

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:12	66.7%	0.892	0.876	0.825	4.944	0.018	0.008	-0.003	0.025	60.0%
2	04:44:39	66.8%	0.765	0.790	0.833	3.781	0.001	0.011	0.010	-0.011	61.1%
3	04:45:07	66.8%	0.810	0.804	0.862	4.739	0.007	0.008	-0.009	0.019	61.0%
x		66.8%	0.822	0.823	0.840	4.488	0.009	0.009	-0.001	0.011	60.7%
σ		0.1%	0.064	0.046	0.019	0.621	0.009	0.002	0.010	0.019	0.6%
%RSD		0.1	7.833	5.561	2.303	13.830	98.000	18.340	1341.000	171.700	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:44:12	0.382	0.505	0.120	0.094	8.791	8.772	56.7%	-0.000	-0.010	0.040
2	04:44:39	0.368	0.599	0.107	0.078	8.898	8.632	58.0%	0.003	-0.009	0.051
3	04:45:07	0.379	0.504	0.091	0.086	8.517	8.553	57.0%	-0.006	-0.010	0.064
x		0.376	0.536	0.106	0.086	8.736	8.652	57.2%	-0.001	-0.010	0.052
σ		0.007	0.055	0.014	0.008	0.196	0.111	0.7%	0.005	0.000	0.012
%RSD		1.884	10.210	13.450	9.166	2.248	1.282	1.1	465.200	3.226	23.080

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	04:44:12	0.037	0.042	51.1%
2	04:44:39	0.036	0.043	52.0%
3	04:45:07	0.026	0.047	51.9%
x		0.033	0.044	51.7%
σ		0.006	0.003	0.5%
%RSD		18.840	6.281	1.0

UD16061-002 04/26/2019 04:49:35

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:02	80.3%	0.071	5.605	5.530	149.000	567.000	T 3237.000	3399.000	3420.000	TM 2252.000
2	04:50:29	80.1%	0.056	6.239	6.133	183.300	559.000	T 3277.000	3425.000	3442.000	TM 2168.000
3	04:50:57	T 100.8%	0.051	5.576	5.436	149.400	T 582.300	T 3181.000	3337.000	T 3318.000	TM 1821.000
x		T 87.1%	0.059	5.807	5.700	160.600	T 569.400	T 3231.000	3387.000	T 3393.000	TM 2080.000
σ		T 11.9%	0.011	0.375	0.378	19.700	T 11.850	T 48.230	44.810	T 66.160	TM 228.200
%RSD		T 13.7	18.170	6.450	6.633	12.270	T 2.081	T 1.493	1.323	T 1.950	TM 10.970
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:02	T 2825.000	T 89760.000	T 4428.000	19380.000	T 16650.000	70.4%	22.410	3.341	2.410	2162.000
2	04:50:29	T 2869.000	T 95310.000	T 4591.000	19830.000	T 16750.000	69.2%	23.100	3.136	2.463	2336.000
3	04:50:57	T 2882.000	T 92020.000	T 3900.000	19560.000	T 13880.000	73.0%	22.110	3.437	2.523	2777.000
x		T 2859.000	T 92360.000	T 4307.000	19590.000	T 15760.000	70.9%	22.540	3.304	2.465	2425.000
σ		T 30.210	T 2793.000	T 361.000	227.400	T 1627.000	1.9%	0.507	0.154	0.057	317.200
%RSD		T 1.057	T 3.023	T 8.384	1.161	T 10.330	2.7	2.251	4.656	2.294	13.080
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:02	2869.000	29.540	T 2730.000	2987.000	0.403	1.755	2.268	2.113	2.214	9.882
2	04:50:29	2920.000	30.930	T 2785.000	2987.000	0.385	1.820	1.496	2.062	2.131	9.602
3	04:50:57	2872.000	29.240	T 2743.000	2973.000	0.366	1.789	2.070	1.982	2.153	9.504
x		2887.000	29.900	T 2752.000	2982.000	0.384	1.788	1.944	2.053	2.166	9.663
σ		28.630	0.900	T 28.450	8.022	0.019	0.032	0.401	0.066	0.043	0.196
%RSD		0.992	3.010	T 1.033	0.269	4.830	1.802	20.620	3.226	1.987	2.031
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:02	9.202	8.763	3.526	1.498	11.040	11.970	0.848	0.450	-4.468	16.560
2	04:50:29	7.907	8.324	3.658	1.726	10.550	12.140	1.492	0.549	-3.267	16.780
3	04:50:57	8.890	8.691	3.662	2.590	11.050	12.850	2.497	0.831	-4.477	17.010
x		8.666	8.593	3.615	1.938	10.880	12.320	1.613	0.610	-4.071	16.790
σ		0.676	0.236	0.077	0.576	0.287	0.469	0.831	0.198	0.696	0.222
%RSD		7.797	2.742	2.137	29.720	2.635	3.805	51.540	32.450	17.100	1.323
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:02	67.4%	0.456	0.567	0.465	0.130	0.001	0.008	0.005	0.006	60.1%
2	04:50:29	66.6%	0.499	0.516	0.536	1.603	0.010	0.012	-0.001	0.010	60.7%
3	04:50:57	67.1%	0.551	0.466	0.499	2.191	0.016	0.006	0.043	0.014	61.7%
x		67.0%	0.502	0.516	0.500	1.308	0.009	0.009	0.016	0.010	60.8%
σ		0.4%	0.048	0.050	0.035	1.061	0.007	0.003	0.024	0.004	0.8%
%RSD		0.6	9.480	9.723	7.024	81.160	81.920	34.740	152.500	42.090	1.3
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:50:02	0.497	0.639	0.165	0.224	7.775	7.649	56.4%	0.059	0.051	2.340
2	04:50:29	0.446	0.569	0.196	0.189	7.257	7.247	56.1%	0.073	0.053	2.224
3	04:50:57	0.478	0.608	0.174	0.152	7.660	7.590	56.8%	0.051	0.048	2.338
x		0.474	0.605	0.178	0.188	7.564	7.495	56.4%	0.061	0.051	2.301
σ		0.026	0.035	0.016	0.036	0.272	0.217	0.4%	0.011	0.002	0.066
%RSD		5.492	5.790	8.842	19.280	3.594	2.893	0.7	18.820	4.314	2.888
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	04:50:02	1.911	2.047	52.4%							
2	04:50:29	1.953	2.022	52.1%							
3	04:50:57	1.913	2.070	53.0%							
x		1.926	2.046	52.5%							
σ		0.024	0.024	0.4%							
%RSD		1.221	1.169	0.8							

UD15018-001 04/26/2019 04:55:26

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:53	80.8%	0.067	25.550	25.880	1718.000	T M 136100.000	T 10070.000	T 9939.000	T 10190.000	T M 10220.000
2	04:56:21	82.9%	0.064	23.890	25.790	1689.000	T M 135700.000	T 9987.000	T 9990.000	T 10170.000	T M 10260.000
3	04:56:48	78.8%	0.089	24.910	24.990	1699.000	T M 135200.000	T 9742.000	T 9752.000	T 9839.000	T M 10240.000
x		80.9%	0.073	24.780	25.560	1702.000	T M 135700.000	T 9935.000	T 9894.000	T 10070.000	T M 10240.000
σ		2.0%	0.014	0.837	0.493	14.860	T M 453.000	T 172.300	T 125.500	T 197.800	T M 17.530
%RSD		2.5	18.540	3.378	1.927	0.873	T M 0.334	T 1.735	T 1.268	T 1.965	T M 0.171
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:53	T 4613.000	T 83780.000	T 6109.000	T M 661200.000	T M 529400.000	69.1%	9.592	321.100	57.040	2452.000
2	04:56:21	T 4634.000	T 86110.000	T 6387.000	T M 681800.000	T M 520900.000	69.6%	10.110	T 324.900	57.730	3077.000
3	04:56:48	T 4369.000	T 84380.000	T 6396.000	T M 661800.000	T M 550300.000	70.1%	8.685	311.400	55.050	2685.000
x		T 4539.000	T 84760.000	T 6298.000	T M 668300.000	T M 533500.000	69.6%	9.461	T 319.100	56.610	2738.000
σ		T 147.300	T 1207.000	T 163.300	T M 11720.000	T M 15140.000	0.5%	0.720	T 6.947	1.393	315.700
%RSD		T 3.245	T 1.424	T 2.592	T M 1.754	T M 2.839	0.7	7.608	T 2.177	2.460	11.530
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:53	1813.000	220.100	T 1814.000	T 9637.000	7.984	34.510	27.650	T M 2610.000	T M 2789.000	M 682.600
2	04:56:21	1840.000	218.900	T 1841.000	T 10550.000	8.092	35.420	25.460	T M 2630.000	T M 2843.000	M 674.600
3	04:56:48	1830.000	219.100	T 1797.000	T 9702.000	7.886	34.500	27.060	T M 2611.000	T M 2839.000	M 678.200
x		1828.000	219.400	T 1817.000	T 9963.000	7.987	34.810	26.720	T M 2617.000	T M 2824.000	M 678.500
σ		13.990	0.600	T 22.110	T 508.800	0.103	0.527	1.133	T M 11.570	T M 29.880	M 4.016
%RSD		0.766	0.274	T 1.217	T 5.107	1.292	1.513	4.241	T M 0.442	T M 1.058	M 0.592
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:53	M 539.400	M 547.000	13.160	4.052	1731.000	1711.000	25.590	5.306	-0.373	T M 6842.000
2	04:56:21	M 533.800	M 547.300	13.590	3.821	1775.000	1739.000	26.170	5.472	-2.723	T M 6817.000
3	04:56:48	M 536.500	M 551.500	13.370	3.941	1754.000	1734.000	26.910	5.669	-0.670	T M 6827.000
x		M 536.600	M 548.600	13.370	3.938	1753.000	1728.000	26.220	5.482	-1.256	T M 6829.000
σ		M 2.803	M 2.505	0.214	0.116	22.390	14.860	0.664	0.182	1.280	T M 12.610
%RSD		M 0.522	M 0.457	1.602	2.941	1.277	0.860	2.534	3.321	101.900	T M 0.185
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:53	76.4%	T M 2582.000	M 2526.000	T M 2568.000	394.000	0.024	0.014	-6.807	0.808	59.7%
2	04:56:21	77.5%	T M 2580.000	M 2555.000	T M 2607.000	398.800	0.021	0.011	-7.229	0.577	60.8%
3	04:56:48	78.8%	T M 2611.000	M 2545.000	T M 2604.000	372.700	0.019	0.008	-7.084	0.513	61.4%
x		77.6%	T M 2591.000	M 2542.000	T M 2593.000	388.500	0.021	0.011	-7.040	0.633	60.6%
σ		1.2%	T M 17.510	M 14.370	T M 21.380	13.910	0.002	0.003	0.214	0.156	0.9%
%RSD		1.6	T M 0.676	M 0.565	T M 0.825	3.580	11.610	28.520	3.044	24.580	1.4
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	04:55:53	2.355	0.608	0.804	0.771	181.000	179.600	57.3%	0.131	0.049	0.525
2	04:56:21	2.380	0.538	0.792	0.916	182.500	178.700	59.0%	0.120	0.051	0.532
3	04:56:48	2.466	0.535	0.800	0.875	183.900	180.200	60.5%	0.147	0.045	0.458
x		2.400	0.560	0.799	0.854	182.500	179.500	59.0%	0.133	0.049	0.505
σ		0.058	0.042	0.006	0.075	1.451	0.755	1.6%	0.014	0.003	0.041
%RSD		2.432	7.421	0.805	8.723	0.795	0.420	2.7	10.550	5.928	8.096
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	04:55:53	0.484	0.473	50.3%							
2	04:56:21	0.433	0.458	50.4%							
3	04:56:48	0.461	0.442	52.5%							
x		0.460	0.458	51.1%							
σ		0.026	0.016	1.2%							
%RSD		5.604	3.439	2.4							

UD15018-001(5) 04/26/2019 05:01:16

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:44	85.0%	0.065	9.878	9.096	535.200	T 27460.000	T 2602.000	2668.000	2565.000	TM 1943.000
2	05:02:11	83.6%	0.015	9.696	10.560	614.700	T 26030.000	T 2538.000	2677.000	2669.000	TM 2025.000
3	05:02:37	91.6%	0.009	9.078	9.394	548.400	T 28160.000	T 2638.000	2656.000	2667.000	TM 1997.000
x		86.7%	0.030	9.551	9.683	566.100	T 27220.000	T 2592.000	2667.000	2634.000	TM 1988.000
σ		4.3%	0.031	0.419	0.774	42.620	T 1089.000	T 50.610	10.660	59.580	TM 41.470
%RSD		4.9	103.900	4.391	7.991	7.528	T 4.002	T 1.952	0.400	2.262	TM 2.086

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:44	T 934.000	T 18870.000	T 1192.000	M 131300.000	TM 103600.000	70.8%	1.484	64.420	11.710	499.700
2	05:02:11	T 914.500	T 18840.000	T 1241.000	M 131200.000	TM 105200.000	72.1%	1.958	63.100	11.420	575.300
3	05:02:37	T 976.900	T 19830.000	T 1228.000	M 137200.000	T 98430.000	71.4%	1.598	65.200	11.960	571.100
x		T 941.800	T 19180.000	T 1220.000	M 133200.000	TM 102400.000	71.4%	1.680	64.240	11.690	548.700
σ		T 31.900	T 563.800	T 25.070	M 3413.000	TM 3531.000	0.7%	0.248	1.060	0.269	42.520
%RSD		T 3.387	T 2.939	T 2.054	M 2.561	TM 3.448	0.9	14.750	1.649	2.299	7.749

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:44	384.300	44.400	T 421.600	1573.000	1.615	7.499	5.264	M 610.600	M 625.700	149.300
2	05:02:11	389.300	45.370	T 412.200	1508.000	1.456	6.693	5.822	M 602.700	M 620.200	145.900
3	05:02:37	411.500	45.840	T 416.800	1818.000	1.702	7.233	6.072	M 626.500	M 644.100	145.600
x		395.000	45.200	T 416.900	1633.000	1.591	7.141	5.719	M 613.300	M 630.000	147.000
σ		14.460	0.731	T 4.715	163.300	0.125	0.411	0.414	M 12.120	M 12.510	2.071
%RSD		3.661	1.616	T 1.131	10.000	7.833	5.753	7.235	M 1.977	M 1.986	1.409

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:44	126.800	130.600	3.007	2.359	385.600	378.400	8.256	1.881	-2.455	TM 1538.000
2	05:02:11	124.100	127.000	2.839	3.108	375.700	372.400	10.550	2.382	0.592	TM 1538.000
3	05:02:37	124.300	126.500	2.476	2.411	376.600	378.100	6.229	1.331	-1.678	TM 1541.000
x		125.100	128.000	2.774	2.626	379.300	376.300	8.345	1.865	-1.180	TM 1539.000
σ		1.465	2.236	0.271	0.418	5.459	3.361	2.162	0.526	1.583	TM 1.693
%RSD		1.171	1.746	9.781	15.920	1.439	0.893	25.910	28.190	134.100	TM 0.110

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:44	74.4%	M 568.600	M 548.000	M 563.100	73.570	0.001	0.000	-1.682	0.057	64.9%
2	05:02:11	74.1%	M 569.100	M 549.700	M 571.300	65.640	0.004	0.003	-1.679	0.190	65.4%
3	05:02:37	74.1%	M 570.300	M 551.600	M 572.400	82.770	0.002	0.009	-1.562	0.158	64.9%
x		74.2%	M 569.300	M 549.800	M 568.900	74.000	0.002	0.004	-1.641	0.135	65.1%
σ		0.1%	M 0.845	M 1.803	M 5.051	8.573	0.001	0.004	0.069	0.069	0.3%
%RSD		0.2	M 0.148	M 0.328	M 0.888	11.590	54.000	101.500	4.178	51.170	0.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:01:44	0.491	0.130	0.149	0.123	35.140	35.590	61.8%	0.031	0.000	0.079
2	05:02:11	0.459	0.125	0.123	0.178	34.460	35.580	62.1%	0.013	0.002	0.109
3	05:02:37	0.433	0.137	0.161	0.137	35.410	35.770	61.9%	0.025	0.008	0.112
x		0.461	0.131	0.144	0.146	35.000	35.650	61.9%	0.023	0.003	0.100
σ		0.029	0.006	0.019	0.029	0.490	0.108	0.2%	0.009	0.004	0.018
%RSD		6.307	4.921	13.380	19.550	1.401	0.302	0.3	40.770	120.800	18.410

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:01:44	0.086	0.082	57.0%
2	05:02:11	0.078	0.094	56.4%
3	05:02:37	0.109	0.094	56.1%
x		0.091	0.090	56.5%
σ		0.016	0.007	0.5%
%RSD		17.370	7.624	0.8

CCV MW10994 04/26/2019 05:07:04 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:32	80.4%	331.700	318.300	312.400	56.590	T 69040.000	T 62650.000	T 61140.000	T 60830.000	285.900
2	05:08:00	85.0%	310.800	319.400	313.400	59.200	T 70700.000	T 63100.000	T 63250.000	T 61300.000	288.200
3	05:08:27	80.8%	328.900	306.200	306.200	57.710	T 69480.000	T 62860.000	T 62830.000	T 62710.000	284.400
x		82.1%	107.929%	104.871%	103.555%	57.830	T 116.235%	T 62870.000	T 62400.000	T 102.691%	95.386%
σ		2.6%	n/a	n/a	n/a	1.309	T n/a	T 224.900	T 1116.000	T n/a	n/a
%RSD		3.1	3.496	2.329	1.247	2.263	T 1.232	T 0.358	T 1.789	T 1.582	0.665

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:32	T 3563.000	1556.000	T 55730.000	66130.000	T 55160.000	71.1%	338.900	338.000	321.400	2059.000
2	05:08:00	T 3788.000	1629.000	T 55940.000	66710.000	T 53780.000	72.8%	341.900	342.600	321.000	2416.000
3	05:08:27	T 3467.000	1493.000	T 54280.000	64990.000	T 56010.000	71.9%	327.100	336.900	316.100	-540.000
x		T 120.196%	1559.000	T 92.192%	65940.000	T 91.637%	71.9%	111.978%	113.057%	106.499%	1312.000
σ		T n/a	68.010	T n/a	873.800	T n/a	0.8%	n/a	n/a	n/a	1614.000
%RSD		T 4.569	4.361	T 1.628	1.325	T 2.052	1.2	2.325	0.897	0.932	123.000

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:32	T 64260.000	315.300	T 65110.000	T 65170.000	313.200	311.500	313.500	309.900	302.100	335.100
2	05:08:00	T 63590.000	312.200	T 65310.000	T 64460.000	316.200	312.100	312.000	300.300	298.300	333.300
3	05:08:27	T 64080.000	312.800	T 64320.000	T 63350.000	310.700	306.200	315.700	306.700	300.600	340.500
x		T 63970.000	104.482%	T 64910.000	T 107.212%	104.452%	103.307%	313.700	305.600	100.109%	112.099%
σ		T 347.800	n/a	T 525.000	T n/a	n/a	n/a	1.867	4.866	n/a	n/a
%RSD		T 0.544	0.534	T 0.809	T 1.423	0.874	1.052	0.595	1.592	0.643	1.105

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:32	302.700	300.300	318.300	345.400	8.310	7.559	1355.000	347.800	-0.571	326.300
2	05:08:00	296.600	294.200	304.500	354.900	6.867	7.191	1350.000	347.200	1.863	325.600
3	05:08:27	303.500	301.400	315.500	350.600	7.884	5.897	1379.000	348.800	1.633	329.900
x		301.000	298.600	104.253%	350.300	7.687	6.882	1361.000	115.983%	0.975	109.094%
σ		3.763	3.887	n/a	4.745	0.741	0.873	15.650	n/a	1.344	n/a
%RSD		1.250	1.302	2.333	1.355	9.644	12.690	1.150	0.235	137.900	0.706

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:32	67.1%	331.700	317.800	326.700	319.100	314.900	312.300	312.300	316.700	60.3%
2	05:08:00	67.2%	333.300	323.600	329.700	308.600	314.500	311.400	310.700	310.400	60.4%
3	05:08:27	67.1%	331.500	325.100	332.100	305.900	314.200	312.500	314.100	311.500	61.2%
x		67.1%	110.731%	107.390%	329.500	311.200	104.848%	312.000	312.400	104.284%	60.6%
σ		0.1%	n/a	n/a	2.685	6.972	n/a	0.609	1.720	n/a	0.5%
%RSD		0.1	0.291	1.210	0.815	2.240	0.110	0.195	0.551	1.080	0.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:07:32	327.300	327.900	322.900	333.800	332.000	326.500	58.3%	297.100	300.100	294.100
2	05:08:00	328.300	328.200	321.700	328.800	327.800	324.300	58.9%	294.500	298.100	288.300
3	05:08:27	327.200	325.100	325.600	337.900	323.800	321.100	58.9%	299.600	302.800	293.500
x		109.192%	109.022%	323.400	111.166%	109.290%	107.986%	58.7%	297.100	100.115%	97.329%
σ		n/a	n/a	2.019	n/a	n/a	n/a	0.3%	2.587	n/a	n/a
%RSD		0.188	0.527	0.624	1.366	1.238	0.849	0.6	0.871	0.797	1.105

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:07:32	293.900	293.000	52.6%
2	05:08:00	290.500	288.900	52.0%
3	05:08:27	294.800	293.500	53.1%
x		97.684%	97.272%	52.6%
σ		n/a	n/a	0.5%
%RSD		0.769	0.859	1.0

CCB IM9370-01 04/26/2019 05:12:55 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:21	82.0%	-0.003	2.498	2.263	49.380	12.340	6.290	6.272	6.563	0.191
2	05:13:48	82.7%	0.035	2.216	2.225	43.350	9.761	5.399	5.350	4.936	0.107
3	05:14:15	90.1%	0.026	2.491	2.137	38.160	31.900	4.520	3.717	3.898	0.141
x		85.0%	0.019	2.402	2.209	43.630	18.000	5.403	5.113	5.132	0.147
σ		4.5%	0.020	0.161	0.064	5.614	12.110	0.885	1.294	1.343	0.042
%RSD		5.3	103.600	6.701	2.918	12.870	67.270	16.380	25.300	26.170	28.950

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:21	17.530	1179.000	12.140	9.215	7.292	73.0%	-0.311	0.051	0.098	29.670
2	05:13:48	17.200	1148.000	8.365	7.246	8.762	73.2%	-0.337	0.051	0.108	25.000
3	05:14:15	18.560	1231.000	24.460	5.214	6.280	74.0%	-0.264	0.025	0.117	46.130
x		17.760	1186.000	14.990	7.225	7.445	73.4%	-0.304	0.042	0.108	33.600
σ		0.714	41.930	8.415	2.001	1.248	0.6%	0.037	0.015	0.009	11.100
%RSD		4.018	3.534	56.140	27.690	16.760	0.8	12.200	35.470	8.730	33.030

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:21	10.760	0.227	27.600	22.430	0.012	0.008	0.041	0.005	0.054	0.066
2	05:13:48	11.250	0.203	24.500	18.420	-0.008	-0.008	0.107	0.004	0.050	0.043
3	05:14:15	8.772	0.195	26.150	32.490	-0.002	-0.045	0.745	-0.008	0.013	0.046
x		10.260	0.208	26.080	24.450	0.001	-0.015	0.298	0.000	0.039	0.052
σ		1.311	0.016	1.552	7.251	0.010	0.027	0.388	0.007	0.023	0.012
%RSD		12.780	7.814	5.951	29.660	1061.000	180.200	130.500	1551.000	57.960	23.870

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:21	-0.138	0.071	-0.024	2.511	2.382	4.405	0.539	0.265	-2.291	0.070
2	05:13:48	-0.224	0.124	0.010	1.540	2.813	3.653	1.505	0.454	1.589	0.077
3	05:14:15	-0.170	0.142	0.027	1.118	2.305	3.606	1.282	0.375	1.411	0.057
x		-0.177	0.113	0.004	1.723	2.500	3.888	1.109	0.364	0.236	0.068
σ		0.043	0.037	0.026	0.715	0.274	0.448	0.506	0.095	2.191	0.010
%RSD		24.320	32.590	580.300	41.470	10.960	11.530	45.630	26.030	927.300	14.740

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:21	67.3%	0.242	0.152	0.202	-0.195	0.040	0.038	0.037	0.026	63.2%
2	05:13:48	68.9%	0.179	0.142	0.160	0.377	0.027	0.033	0.044	0.026	62.4%
3	05:14:15	68.2%	0.144	0.175	0.168	1.290	0.031	0.034	0.037	0.009	63.2%
x		68.1%	0.188	0.157	0.177	0.491	0.032	0.035	0.039	0.021	62.9%
σ		0.8%	0.049	0.017	0.022	0.749	0.007	0.003	0.004	0.010	0.4%
%RSD		1.1	26.250	10.880	12.610	152.700	20.640	7.827	9.796	47.170	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:13:21	0.049	0.112	0.098	0.164	0.012	-0.002	58.8%	0.020	0.028	0.043
2	05:13:48	0.053	0.041	0.123	0.169	0.030	-0.016	58.7%	0.022	0.014	0.015
3	05:14:15	0.070	0.060	0.109	0.107	0.029	-0.012	59.3%	0.012	0.009	0.017
x		0.058	0.071	0.110	0.146	0.024	-0.010	58.9%	0.018	0.017	0.025
σ		0.011	0.037	0.013	0.034	0.010	0.007	0.4%	0.005	0.010	0.016
%RSD		19.280	51.610	11.470	23.540	44.320	75.740	0.6	28.790	59.430	61.950

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:13:21	0.033	0.038	55.0%
2	05:13:48	0.035	0.021	56.2%
3	05:14:15	0.032	0.021	55.9%
x		0.033	0.027	55.7%
σ		0.002	0.010	0.6%
%RSD		5.098	36.030	1.1

UD15030-001 04/26/2019 05:18:44

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:11	91.6%	-0.023	12.440	13.140	18.510	T 1815.000	T 611.100	643.100	663.900	TM 884.300
2	05:19:38	89.5%	-0.013	13.540	13.590	15.900	T 1819.000	T 627.700	650.500	677.800	TM 918.100
3	05:20:05	82.4%	-0.004	13.380	13.270	15.280	T 1775.000	T 615.100	629.900	644.400	TM 890.700
x		87.8%	-0.014	13.120	13.330	16.570	T 1803.000	T 618.000	641.200	662.000	TM 897.700
σ		4.8%	0.010	0.598	0.233	1.715	T 24.390	T 8.661	10.420	16.770	TM 17.990
%RSD		5.5	71.550	4.554	1.746	10.350	T 1.352	T 1.401	1.625	2.534	TM 2.004

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:11	T 2311.000	T 81530.000	T 1623.000	6410.000	5044.000	74.3%	59.110	6.485	4.005	2554.000
2	05:19:38	T 2270.000	T 82670.000	T 1613.000	6292.000	5147.000	74.0%	64.100	6.551	3.964	2497.000
3	05:20:05	T 2143.000	T 79660.000	T 1624.000	6317.000	5362.000	71.1%	60.750	6.570	3.861	1840.000
x		T 2241.000	T 81290.000	T 1620.000	6340.000	5184.000	73.1%	61.320	6.535	3.943	2297.000
σ		T 87.830	T 1518.000	T 6.065	62.040	162.500	1.8%	2.541	0.045	0.074	396.600
%RSD		T 3.919	T 1.867	T 0.374	0.979	3.135	2.5	4.144	0.682	1.879	17.270

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:11	1885.000	51.360	T 1830.000	1912.000	1.259	3.374	3.191	7.749	8.318	202.000
2	05:19:38	1891.000	52.220	T 1850.000	1857.000	1.235	3.019	3.409	8.031	8.238	206.100
3	05:20:05	1854.000	51.480	T 1800.000	1916.000	1.266	3.152	3.651	8.009	8.255	202.500
x		1876.000	51.690	T 1826.000	1895.000	1.253	3.182	3.417	7.929	8.270	203.600
σ		20.140	0.466	T 25.080	32.820	0.017	0.180	0.230	0.157	0.042	2.222
%RSD		1.073	0.902	T 1.373	1.731	1.319	5.641	6.740	1.981	0.511	1.092

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:11	171.500	172.200	0.351	2.401	15.500	16.340	-1.530	-0.289	-0.168	16.830
2	05:19:38	165.000	173.700	0.480	2.076	16.570	17.370	0.050	0.181	-2.609	16.700
3	05:20:05	175.500	182.100	0.716	1.666	15.210	16.800	1.196	0.380	-0.101	17.400
x		170.700	176.000	0.516	2.048	15.760	16.840	-0.095	0.091	-0.959	16.980
σ		5.308	5.326	0.185	0.368	0.715	0.517	1.369	0.344	1.429	0.371
%RSD		3.110	3.027	35.920	17.970	4.536	3.069	1444.000	377.600	149.000	2.184

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:11	69.7%	2.198	2.106	2.238	3.097	0.031	0.032	0.119	0.187	63.2%
2	05:19:38	70.2%	2.099	1.958	2.272	-0.295	0.025	0.031	0.088	0.170	63.1%
3	05:20:05	69.7%	2.113	2.310	2.109	-0.336	0.022	0.024	0.162	0.179	63.7%
x		69.9%	2.137	2.125	2.206	0.822	0.026	0.029	0.123	0.178	63.4%
σ		0.3%	0.054	0.177	0.086	1.970	0.004	0.005	0.037	0.009	0.3%
%RSD		0.4	2.521	8.332	3.907	239.700	16.030	15.760	29.920	4.807	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:19:11	1.312	1.767	0.847	0.951	62.500	61.730	58.9%	0.007	0.018	1.898
2	05:19:38	1.214	1.821	0.933	0.854	63.190	61.070	59.4%	0.016	0.008	1.911
3	05:20:05	1.294	1.802	1.026	0.942	62.200	60.500	59.7%	0.008	0.002	1.853
x		1.273	1.796	0.935	0.916	62.630	61.100	59.3%	0.010	0.009	1.887
σ		0.052	0.027	0.090	0.053	0.512	0.614	0.4%	0.005	0.008	0.031
%RSD		4.095	1.529	9.613	5.813	0.818	1.004	0.7	47.830	85.900	1.622

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:19:11	1.852	1.867	55.6%
2	05:19:38	1.979	1.879	56.2%
3	05:20:05	1.927	1.910	56.8%
x		1.919	1.885	56.2%
σ		0.064	0.022	0.6%
%RSD		3.341	1.170	1.1

UD15030-001S 04/26/2019 05:24:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:01	T 102.1%	39.730	54.770	57.570	13.560	T 3081.000	T 1403.000	1460.000	1478.000	TM 1297.000
2	05:25:28	T 104.5%	39.860	53.370	57.650	16.710	T 3085.000	T 1396.000	1476.000	1498.000	TM 1246.000
3	05:25:55	87.8%	41.250	55.080	57.080	17.900	T 2986.000	T 1408.000	1458.000	1464.000	TM 1429.000
x		T 98.2%	40.280	54.400	57.430	16.060	T 3051.000	T 1402.000	1465.000	1480.000	TM 1324.000
σ		T 9.0%	0.844	0.909	0.307	2.245	T 55.930	T 5.830	9.624	17.210	TM 94.390
%RSD		T 9.2	2.094	1.671	0.534	13.980	T 1.833	T 0.416	0.657	1.163	TM 7.127

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:01	T 4573.000	T 82520.000	T 2251.000	7789.000	5237.000	73.5%	196.100	118.700	111.200	3774.000
2	05:25:28	T 4632.000	T 82420.000	T 2212.000	7869.000	5281.000	72.6%	196.700	119.400	114.400	3530.000
3	05:25:55	T 4396.000	T 79840.000	T 2515.000	7711.000	6137.000	72.8%	196.300	117.000	111.600	3031.000
x		T 4534.000	T 81590.000	T 2326.000	7790.000	5552.000	73.0%	196.400	118.400	112.400	3445.000
σ		T 122.600	T 1516.000	T 165.100	78.930	507.400	0.5%	0.311	1.214	1.728	379.000
%RSD		T 2.705	T 1.858	T 7.099	1.013	9.140	0.7	0.159	1.026	1.537	11.000

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:01	3304.000	156.200	T 3120.000	3283.000	110.800	114.100	113.200	117.500	114.000	312.400
2	05:25:28	3361.000	163.600	T 3177.000	3310.000	110.300	113.200	117.100	119.100	118.000	318.000
3	05:25:55	3300.000	156.700	T 3118.000	3225.000	107.500	111.200	113.300	117.100	115.600	316.900
x		3322.000	158.800	T 3138.000	3273.000	109.500	112.800	114.500	117.900	115.900	315.800
σ		34.150	4.131	T 33.850	43.380	1.746	1.460	2.203	1.072	2.004	2.972
%RSD		1.028	2.601	T 1.079	1.325	1.594	1.294	1.923	0.909	1.729	0.941

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:01	268.900	275.200	105.200	120.600	15.050	15.030	469.500	118.900	1.161	126.400
2	05:25:28	276.100	276.000	105.800	124.700	15.080	18.710	461.400	117.800	0.784	124.400
3	05:25:55	273.100	279.700	106.700	125.800	15.190	16.920	447.800	114.500	-3.007	126.000
x		272.700	277.000	105.900	123.700	15.100	16.890	459.600	117.100	-0.354	125.600
σ		3.631	2.375	0.740	2.731	0.071	1.840	10.930	2.314	2.305	1.086
%RSD		1.332	0.858	0.699	2.208	0.472	10.900	2.379	1.977	651.000	0.865

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:01	68.1%	105.900	104.800	106.600	105.900	108.500	105.600	104.900	103.400	62.1%
2	05:25:28	68.9%	108.900	106.600	107.400	107.300	106.900	106.800	105.400	103.700	62.2%
3	05:25:55	69.0%	107.300	107.700	107.800	109.700	108.000	107.300	106.800	104.800	62.2%
x		68.7%	107.400	106.400	107.300	107.700	107.800	106.600	105.700	103.900	62.2%
σ		0.5%	1.523	1.426	0.579	1.929	0.820	0.847	1.018	0.705	0.0%
%RSD		0.7	1.418	1.341	0.540	1.792	0.760	0.795	0.963	0.678	0.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:25:01	108.700	106.200	103.500	109.800	171.300	168.700	58.2%	103.800	104.300	105.800
2	05:25:28	107.300	107.500	104.000	109.800	172.000	167.500	58.8%	102.200	103.400	105.100
3	05:25:55	108.000	108.300	106.300	113.100	170.500	169.200	58.4%	103.900	104.800	105.500
x		108.000	107.300	104.600	110.900	171.300	168.500	58.5%	103.300	104.200	105.500
σ		0.723	1.055	1.469	1.892	0.750	0.912	0.3%	0.970	0.690	0.341
%RSD		0.669	0.984	1.404	1.707	0.438	0.542	0.4	0.939	0.663	0.323

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:25:01	103.700	103.400	54.9%
2	05:25:28	104.900	103.500	54.5%
3	05:25:55	104.800	104.400	56.1%
x		104.400	103.800	55.2%
σ		0.646	0.587	0.8%
%RSD		0.619	0.566	1.5

UD15030-001SD 04/26/2019 05:30:23

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:50	86.7%	41.490	52.580	54.890	23.130	T 3052.000	T 1382.000	1458.000	1479.000	TM 1407.000
2	05:31:17	82.5%	42.380	55.310	58.690	23.980	T 2989.000	T 1319.000	1431.000	1488.000	TM 1462.000
3	05:31:45	T 102.2%	40.020	53.100	54.940	18.210	T 3047.000	T 1367.000	1431.000	1468.000	TM 1262.000
x		T 90.5%	41.300	53.660	56.170	21.770	T 3029.000	T 1356.000	1440.000	1478.000	TM 1377.000
σ		T 10.4%	1.188	1.451	2.181	3.118	T 35.260	T 32.960	15.350	9.767	TM 103.300
%RSD		T 11.5	2.877	2.703	3.882	14.320	T 1.164	T 2.431	1.066	0.661	TM 7.501

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:50	T 4300.000	T 79910.000	T 2437.000	7677.000	6046.000	70.6%	195.000	117.400	112.100	3143.000
2	05:31:17	T 4271.000	T 79140.000	T 2513.000	7538.000	6341.000	70.4%	192.100	118.400	110.900	3469.000
3	05:31:45	T 4425.000	T 80460.000	T 2167.000	7581.000	5189.000	73.4%	193.100	115.000	107.300	3606.000
x		T 4332.000	T 79840.000	T 2372.000	7599.000	5859.000	71.5%	193.400	116.900	110.100	3406.000
σ		T 82.070	T 662.300	T 181.700	71.560	598.700	1.6%	1.491	1.763	2.509	238.200
%RSD		T 1.895	T 0.830	T 7.657	0.942	10.220	2.3	0.771	1.508	2.278	6.994

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:50	3309.000	159.200	T 3083.000	3228.000	109.100	111.200	111.300	119.400	116.200	317.700
2	05:31:17	3320.000	160.900	T 3114.000	3269.000	108.500	112.300	115.500	119.200	118.600	322.000
3	05:31:45	3307.000	160.700	T 3158.000	3252.000	108.400	110.400	109.100	117.800	116.400	315.500
x		3312.000	160.300	T 3118.000	3250.000	108.700	111.300	111.900	118.800	117.100	318.400
σ		7.172	0.930	T 37.970	20.650	0.385	0.961	3.248	0.898	1.333	3.331
%RSD		0.217	0.580	T 1.218	0.636	0.354	0.863	2.901	0.756	1.139	1.046

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:50	277.900	287.000	108.400	123.200	14.970	14.410	454.300	114.200	8.723	125.500
2	05:31:17	279.400	287.900	112.100	120.900	14.530	18.710	472.700	119.900	-1.220	125.500
3	05:31:45	273.400	276.700	102.700	119.300	14.940	16.270	428.600	108.900	2.986	126.400
x		276.900	283.900	107.800	121.100	14.810	16.460	451.900	114.300	3.497	125.800
σ		3.113	6.242	4.737	1.919	0.247	2.156	22.130	5.470	4.991	0.539
%RSD		1.124	2.199	4.396	1.584	1.664	13.100	4.897	4.785	142.700	0.428

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:50	66.6%	106.600	105.400	105.800	106.400	105.000	106.700	104.300	105.400	61.0%
2	05:31:17	67.9%	107.900	107.100	106.500	108.800	109.000	106.600	106.400	104.200	61.6%
3	05:31:45	68.6%	107.800	103.800	107.000	109.200	106.600	105.800	102.100	103.000	62.3%
x		67.7%	107.400	105.400	106.500	108.100	106.800	106.400	104.300	104.200	61.6%
σ		1.0%	0.714	1.656	0.604	1.526	2.007	0.482	2.123	1.158	0.6%
%RSD		1.5	0.665	1.571	0.567	1.411	1.879	0.453	2.037	1.112	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:30:50	106.500	106.700	104.300	111.500	172.800	167.800	57.5%	102.000	102.200	104.000
2	05:31:17	107.700	107.000	106.700	110.800	173.800	170.600	58.7%	101.300	101.400	104.200
3	05:31:45	105.700	105.200	103.500	110.500	170.000	167.600	58.2%	101.400	102.200	103.500
x		106.600	106.300	104.800	110.900	172.200	168.700	58.2%	101.600	101.900	103.900
σ		1.035	0.957	1.650	0.493	1.951	1.698	0.6%	0.346	0.461	0.358
%RSD		0.971	0.900	1.574	0.445	1.133	1.007	1.0	0.341	0.452	0.345

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:30:50	103.200	103.300	54.6%
2	05:31:17	102.800	102.800	55.6%
3	05:31:45	103.700	102.900	54.5%
x		103.200	103.000	54.9%
σ		0.469	0.237	0.6%
%RSD		0.454	0.230	1.1

UD15030-001L(5) 04/26/2019 05:36:14

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:41	90.0%	0.004	5.823	6.200	28.580	391.600	169.200	169.500	168.100	183.800
2	05:37:08	82.0%	0.003	5.943	5.661	23.000	374.100	169.400	166.000	167.500	187.000
3	05:37:35	82.9%	0.005	5.319	5.342	19.840	363.400	161.900	159.300	166.000	192.700
x		85.0%	0.004	5.695	5.734	23.810	376.400	166.800	164.900	167.200	187.800
σ		4.4%	0.001	0.331	0.434	4.425	14.280	4.299	5.176	1.071	4.500
%RSD		5.2	21.970	5.819	7.564	18.590	3.793	2.577	3.138	0.641	2.395

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:41	492.800	T 19030.000	341.500	1268.000	982.200	72.3%	11.550	1.396	0.830	510.900
2	05:37:08	474.500	T 18620.000	331.300	1343.000	1031.000	68.6%	11.670	1.322	0.765	441.200
3	05:37:35	461.900	T 17980.000	325.900	1246.000	1027.000	70.3%	12.090	1.218	0.861	479.200
x		476.400	T 18550.000	332.900	1286.000	1014.000	70.4%	11.770	1.312	0.819	477.100
σ		15.560	T 529.100	7.928	50.670	27.230	1.9%	0.285	0.089	0.049	34.850
%RSD		3.266	T 2.853	2.382	3.940	2.687	2.7	2.421	6.822	5.987	7.305

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:41	385.000	10.200	T 413.300	397.900	0.252	0.610	1.663	1.734	1.659	41.440
2	05:37:08	382.900	10.710	421.300	393.900	0.235	0.631	0.007	1.779	1.903	42.930
3	05:37:35	379.900	10.650	415.400	386.100	0.221	0.526	0.765	1.769	1.848	43.750
x		382.600	10.520	T 416.700	392.700	0.236	0.589	0.812	1.761	1.803	42.700
σ		2.612	0.275	T 4.126	6.022	0.015	0.056	0.829	0.023	0.128	1.173
%RSD		0.683	2.617	T 0.990	1.534	6.486	9.464	102.200	1.328	7.092	2.748

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:41	36.150	35.160	-0.019	1.701	3.903	5.489	1.298	0.423	0.252	3.453
2	05:37:08	34.970	36.930	0.078	1.692	4.158	5.345	0.188	0.174	-0.843	3.442
3	05:37:35	34.130	37.570	0.122	2.186	3.734	5.961	0.717	0.354	-2.326	3.501
x		35.090	36.550	0.060	1.860	3.932	5.598	0.734	0.317	-0.972	3.465
σ		1.013	1.248	0.072	0.283	0.214	0.322	0.555	0.129	1.294	0.031
%RSD		2.886	3.413	120.300	15.190	5.433	5.758	75.590	40.620	133.100	0.895

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:41	65.1%	0.535	0.548	0.506	1.432	0.024	0.014	0.038	0.028	59.8%
2	05:37:08	65.3%	0.594	0.434	0.473	0.396	0.009	0.011	0.006	0.025	59.3%
3	05:37:35	65.5%	0.459	0.544	0.484	0.638	0.010	0.020	0.019	0.057	59.3%
x		65.3%	0.529	0.509	0.488	0.822	0.014	0.015	0.021	0.037	59.5%
σ		0.2%	0.068	0.064	0.017	0.542	0.009	0.005	0.016	0.018	0.3%
%RSD		0.4	12.760	12.680	3.463	65.950	60.110	30.490	78.430	48.110	0.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:36:41	0.352	0.418	0.143	0.232	12.360	11.640	56.3%	0.035	0.051	0.348
2	05:37:08	0.209	0.345	0.146	0.187	11.490	12.550	56.5%	0.033	0.026	0.371
3	05:37:35	0.269	0.401	0.162	0.152	12.510	12.410	56.0%	0.032	0.020	0.412
x		0.277	0.388	0.150	0.190	12.120	12.200	56.3%	0.033	0.032	0.377
σ		0.072	0.038	0.010	0.040	0.551	0.490	0.3%	0.002	0.016	0.032
%RSD		25.940	9.793	6.668	21.090	4.544	4.011	0.5	5.418	50.230	8.574

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:36:41	0.368	0.348	52.8%
2	05:37:08	0.383	0.375	53.1%
3	05:37:35	0.348	0.380	53.4%
x		0.366	0.368	53.1%
σ		0.018	0.017	0.3%
%RSD		4.804	4.758	0.6

UD15030-002 04/26/2019 05:42:04

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:42:31	89.7%	0.057	11.480	11.900	17.510	T 5577.000	T 3163.000	T 3398.000	T 3416.000	TM 4908.000
2	05:42:58	80.1%	0.022	11.810	11.920	30.500	T 5589.000	T 3308.000	3456.000	T 3424.000	TM 5001.000
3	05:43:25	83.0%	0.050	11.490	11.690	23.220	T 5576.000	T 3261.000	3417.000	T 3413.000	TM 4816.000
x		84.3%	0.043	11.590	11.840	23.740	T 5581.000	T 3244.000	T 3424.000	T 3418.000	TM 4908.000
σ		4.9%	0.018	0.186	0.128	6.510	T 7.047	T 73.990	T 29.800	T 6.057	TM 92.790
%RSD		5.8	42.280	1.604	1.081	27.420	T 0.126	T 2.281	T 0.871	T 0.177	TM 1.890

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:42:31	TM 12640.000	T 82060.000	T 3071.000	20000.000	T 16710.000	73.7%	324.700	20.480	10.570	2858.000
2	05:42:58	TM 12730.000	T 84960.000	T 3268.000	20420.000	T 17720.000	69.6%	318.800	20.180	10.810	2332.000
3	05:43:25	TM 12150.000	T 81500.000	T 3120.000	20200.000	T 17020.000	69.8%	323.200	20.610	10.740	2293.000
x		TM 12510.000	T 82840.000	T 3153.000	20210.000	T 17150.000	71.0%	322.200	20.420	10.710	2494.000
σ		TM 317.600	T 1856.000	T 102.400	209.500	T 515.400	2.3%	3.083	0.224	0.124	315.100
%RSD		TM 2.539	T 2.241	T 3.248	1.037	T 3.005	3.2	0.957	1.096	1.154	12.630

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:42:31	T 7974.000	232.300	T 7674.000	8069.000	4.116	8.186	9.847	20.960	21.490	237.800
2	05:42:58	8256.000	233.800	T 7655.000	8138.000	4.192	8.293	9.180	21.850	21.870	245.900
3	05:43:25	8235.000	236.000	T 7696.000	8271.000	4.254	8.115	9.156	21.190	21.600	249.200
x		T 8155.000	234.000	T 7675.000	8159.000	4.187	8.198	9.394	21.340	21.650	244.300
σ		T 157.200	1.879	T 20.610	102.800	0.069	0.090	0.392	0.462	0.201	5.875
%RSD		T 1.928	0.803	T 0.269	1.260	1.649	1.094	4.175	2.165	0.926	2.405

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:42:31	195.000	205.800	1.588	2.578	26.800	29.350	-0.399	0.108	-4.358	68.710
2	05:42:58	206.700	214.600	2.005	2.034	29.200	29.230	3.500	1.113	-3.470	69.330
3	05:43:25	204.000	213.600	1.753	1.793	30.050	31.030	4.271	1.312	-4.052	68.210
x		201.900	211.300	1.782	2.135	28.680	29.870	2.458	0.844	-3.960	68.750
σ		6.156	4.838	0.210	0.402	1.687	1.007	2.504	0.646	0.451	0.559
%RSD		3.049	2.289	11.770	18.820	5.883	3.372	101.900	76.480	11.380	0.813

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:42:31	68.9%	1.494	1.358	1.406	4.679	0.049	0.041	0.221	0.235	61.5%
2	05:42:58	68.6%	1.530	1.495	1.468	5.511	0.048	0.049	0.257	0.188	60.2%
3	05:43:25	69.0%	1.472	1.325	1.361	4.215	0.037	0.051	0.198	0.201	60.9%
x		68.9%	1.498	1.393	1.411	4.802	0.045	0.047	0.225	0.208	60.9%
σ		0.2%	0.030	0.090	0.054	0.657	0.006	0.006	0.030	0.024	0.7%
%RSD		0.3	1.971	6.474	3.813	13.680	14.450	11.800	13.300	11.550	1.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:42:31	1.403	1.880	0.896	1.024	102.200	97.170	56.8%	0.064	0.043	5.877
2	05:42:58	1.427	1.990	0.905	0.915	103.700	101.700	57.6%	0.096	0.064	5.877
3	05:43:25	1.543	1.933	0.829	1.013	101.600	100.800	57.7%	0.053	0.051	6.044
x		1.458	1.934	0.877	0.984	102.500	99.880	57.3%	0.071	0.053	5.933
σ		0.075	0.055	0.042	0.060	1.080	2.384	0.5%	0.022	0.011	0.096
%RSD		5.140	2.862	4.772	6.097	1.054	2.387	0.9	30.950	20.640	1.623

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:42:31	5.603	5.707	53.2%
2	05:42:58	5.777	5.800	54.3%
3	05:43:25	5.892	5.794	54.1%
x		5.757	5.767	53.9%
σ		0.145	0.052	0.6%
%RSD		2.524	0.902	1.1

UD15030-002S 04/26/2019 05:47:53

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:21	88.9%	45.110	57.550	60.050	9.312	T 6823.000	T 3971.000	T 4138.000	T 4137.000	TM 9290.000
2	05:48:48	84.1%	48.440	60.450	61.740	22.420	T 6941.000	T 4193.000	T 4365.000	T 4238.000	TM 9291.000
3	05:49:15	90.4%	45.600	57.680	60.150	13.520	T 6795.000	T 4093.000	T 4213.000	T 4244.000	TM 9286.000
x		87.8%	46.390	58.560	60.650	15.080	T 6853.000	T 4086.000	T 4239.000	T 4206.000	TM 9289.000
σ		3.3%	1.799	1.638	0.947	6.692	T 77.790	T 110.800	T 115.600	T 60.090	TM 2.313
%RSD		3.8	3.878	2.797	1.561	44.370	T 1.135	T 2.713	T 2.728	T 1.429	TM 0.025

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:21	TM 21910.000	T 77590.000	T 4242.000	20970.000	T 17870.000	75.5%	M 516.300	130.300	113.600	2694.000
2	05:48:48	TM 21090.000	T 75960.000	T 4345.000	22250.000	T 18950.000	72.0%	M 517.900	134.600	114.500	3050.000
3	05:49:15	TM 21770.000	T 77630.000	T 4064.000	21190.000	T 17600.000	75.0%	M 514.500	132.500	114.100	2987.000
x		TM 21590.000	T 77060.000	T 4217.000	21470.000	T 18140.000	74.2%	M 516.200	132.500	114.100	2910.000
σ		TM 441.900	T 954.200	T 142.200	682.200	T 714.900	1.9%	M 1.727	2.121	0.451	190.100
%RSD		TM 2.047	T 1.238	T 3.372	3.178	T 3.941	2.5	M 0.335	1.601	0.396	6.531

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:21	T 9926.000	T 327.300	T 9551.000	10120.000	105.000	110.700	113.000	126.100	121.500	359.900
2	05:48:48	T 10220.000	T 344.500	T 9979.000	10510.000	109.700	114.200	114.600	126.400	127.700	359.500
3	05:49:15	T 9959.000	T 333.800	T 9951.000	10480.000	107.100	112.500	114.800	123.300	124.300	362.900
x		T 10030.000	T 335.200	T 9827.000	10370.000	107.300	112.500	114.100	125.300	124.500	360.800
σ		T 159.000	T 8.686	T 239.400	215.900	2.346	1.772	0.967	1.691	3.123	1.879
%RSD		T 1.585	T 2.591	T 2.436	2.082	2.186	1.576	0.847	1.350	2.509	0.521

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:21	291.500	295.700	98.660	117.900	26.300	27.210	426.600	116.100	-3.121	173.800
2	05:48:48	303.500	305.200	104.600	117.000	27.360	28.680	449.700	119.700	-0.363	173.000
3	05:49:15	292.900	297.500	101.200	123.000	26.490	27.600	422.700	113.100	-1.814	176.000
x		296.000	299.500	101.500	119.300	26.720	27.830	433.000	116.300	-1.766	174.200
σ		6.546	5.033	2.974	3.215	0.565	0.759	14.630	3.279	1.380	1.548
%RSD		2.212	1.681	2.931	2.695	2.113	2.728	3.378	2.819	78.120	0.888

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:21	69.8%	98.400	95.380	98.150	107.500	105.700	105.900	102.600	103.000	59.4%
2	05:48:48	69.5%	100.600	97.220	99.230	103.000	103.200	104.800	102.400	101.700	60.1%
3	05:49:15	70.1%	100.300	96.600	98.570	110.600	107.100	105.300	101.500	101.500	60.5%
x		69.8%	99.770	96.400	98.650	107.000	105.300	105.400	102.200	102.000	60.0%
σ		0.3%	1.194	0.939	0.549	3.800	1.977	0.542	0.565	0.824	0.6%
%RSD		0.4	1.197	0.974	0.557	3.551	1.877	0.515	0.553	0.808	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:48:21	105.200	104.200	100.600	106.700	216.800	215.300	55.7%	99.350	100.700	106.700
2	05:48:48	104.800	103.900	99.820	106.500	215.200	210.300	56.8%	99.340	99.640	106.300
3	05:49:15	106.900	106.300	101.000	107.100	215.300	213.100	57.5%	99.370	99.830	106.000
x		105.600	104.800	100.400	106.800	215.800	212.900	56.7%	99.360	100.000	106.300
σ		1.152	1.312	0.576	0.323	0.920	2.495	0.9%	0.012	0.550	0.317
%RSD		1.091	1.252	0.574	0.303	0.427	1.172	1.6	0.013	0.550	0.298

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:48:21	107.900	106.600	53.3%
2	05:48:48	105.800	105.100	53.2%
3	05:49:15	105.700	104.500	53.5%
x		106.500	105.400	53.3%
σ		1.221	1.101	0.1%
%RSD		1.147	1.045	0.3

UD15046-001 04/26/2019 05:53:43

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:10	83.6%	0.029	12.610	13.210	39.890	T 862.800	T 768.300	773.900	789.700	TM 608.900
2	05:54:37	T 99.5%	0.026	13.550	12.970	28.030	T 902.100	T 737.300	754.400	755.300	TM 523.000
3	05:55:04	92.0%	-0.007	12.680	12.430	29.040	T 886.300	T 732.600	741.900	739.200	TM 592.500
x		T 91.7%	0.016	12.950	12.870	32.320	T 883.700	T 746.100	756.700	761.400	TM 574.800
σ		T 7.9%	0.020	0.520	0.399	6.578	T 19.760	T 19.390	16.120	25.820	TM 45.630
%RSD		T 8.6	123.700	4.012	3.103	20.350	T 2.236	T 2.599	2.130	3.391	TM 7.938

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:10	T 1139.000	T 84440.000	T 1083.000	6615.000	5273.000	70.5%	27.130	2.310	1.450	2314.000
2	05:54:37	T 1193.000	T 86330.000	T 930.800	6541.000	4525.000	72.2%	28.000	2.272	1.507	2633.000
3	05:55:04	T 1178.000	T 85670.000	T 1023.000	6495.000	4927.000	74.0%	25.600	2.432	1.428	2666.000
x		T 1170.000	T 85480.000	T 1012.000	6550.000	4908.000	72.2%	26.910	2.338	1.461	2538.000
σ		T 27.960	T 958.300	T 76.430	60.400	374.400	1.7%	1.215	0.084	0.041	194.300
%RSD		T 2.390	T 1.121	T 7.552	0.922	7.627	2.4	4.516	3.580	2.785	7.658

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:10	896.900	20.070	T 905.800	952.500	0.471	1.714	2.000	9.533	9.353	24.830
2	05:54:37	896.900	19.370	T 890.800	958.800	0.464	1.600	2.222	9.635	9.071	24.330
3	05:55:04	875.800	19.140	T 898.500	947.700	0.438	1.655	2.416	9.320	9.199	23.950
x		889.900	19.530	T 898.400	953.000	0.458	1.657	2.213	9.496	9.208	24.370
σ		12.140	0.483	T 7.471	5.577	0.017	0.057	0.208	0.161	0.141	0.439
%RSD		1.364	2.474	T 0.832	0.585	3.752	3.438	9.390	1.694	1.532	1.802

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:10	21.960	22.330	0.638	1.176	5.109	7.188	-0.519	0.010	-1.102	14.320
2	05:54:37	20.070	20.680	0.694	2.616	5.777	7.249	-0.897	-0.133	1.148	14.510
3	05:55:04	20.590	20.610	0.835	1.529	5.165	6.034	-0.568	-0.017	-1.187	14.700
x		20.870	21.200	0.722	1.774	5.351	6.823	-0.661	-0.047	-0.380	14.510
σ		0.975	0.974	0.101	0.751	0.371	0.685	0.205	0.076	1.324	0.188
%RSD		4.672	4.592	13.990	42.310	6.928	10.030	31.060	163.100	348.600	1.297

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:10	67.0%	0.896	0.788	0.854	1.700	0.013	0.009	0.049	0.034	60.2%
2	05:54:37	68.4%	0.817	0.898	0.828	3.731	0.010	0.015	0.023	0.068	60.6%
3	05:55:04	67.2%	1.049	0.901	0.828	1.664	0.011	0.019	0.022	0.011	61.9%
x		67.5%	0.921	0.862	0.837	2.365	0.011	0.014	0.031	0.038	60.9%
σ		0.7%	0.118	0.064	0.015	1.183	0.001	0.005	0.015	0.029	0.9%
%RSD		1.1	12.810	7.445	1.805	50.040	13.270	33.530	48.460	75.950	1.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	05:54:10	0.872	1.089	0.226	0.243	10.780	11.040	55.9%	0.074	0.044	0.854
2	05:54:37	0.765	1.041	0.221	0.208	10.920	10.790	57.2%	0.044	0.032	0.971
3	05:55:04	0.795	1.092	0.197	0.175	10.770	11.070	56.9%	0.037	0.037	0.973
x		0.811	1.074	0.215	0.209	10.820	10.970	56.7%	0.052	0.038	0.932
σ		0.055	0.029	0.016	0.034	0.081	0.153	0.7%	0.019	0.006	0.068
%RSD		6.770	2.663	7.283	16.310	0.752	1.398	1.2	37.720	15.200	7.316

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	05:54:10	0.881	0.912	53.9%
2	05:54:37	0.877	0.878	53.9%
3	05:55:04	0.947	0.917	54.1%
x		0.902	0.902	54.0%
σ		0.039	0.021	0.1%
%RSD		4.348	2.335	0.2

UD16038-003 04/26/2019 05:59:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:00	77.7%	0.036	86.190	85.950	4883.000	T 23790.000	T 8608.000	T 8824.000	T 8528.000	434.900
2	06:00:27	79.1%	0.043	90.400	89.620	4792.000	T 24560.000	T 8698.000	T 8679.000	T 8570.000	T 435.500
3	06:00:54	81.2%	0.020	90.600	90.690	4873.000	T 24730.000	T 8478.000	T 8533.000	T 8631.000	T 445.700
x		79.4%	0.033	89.060	88.760	4850.000	T 24360.000	T 8595.000	T 8679.000	T 8576.000	T 438.700
σ		1.8%	0.012	2.490	2.490	49.820	T 504.100	T 110.800	T 145.300	T 52.000	T 6.051
%RSD		2.2	36.090	2.795	2.805	1.027	T 2.069	T 1.289	T 1.674	T 0.606	T 1.379

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:00	T 6210.000	T 97710.000	TM 177000.000	TM 227400.000	TM 179200.000	67.4%	47.840	2.908	9.329	1987.000
2	06:00:27	T 6883.000	T 104600.000	TM 186300.000	TM 240600.000	TM 178500.000	66.2%	51.190	3.093	10.250	2346.000
3	06:00:54	T 6798.000	T 103100.000	TM 184300.000	TM 233700.000	TM 174700.000	68.5%	54.670	3.435	10.910	2136.000
x		T 6631.000	T 101800.000	TM 182600.000	TM 233900.000	TM 177500.000	67.4%	51.230	3.145	10.160	2156.000
σ		T 366.400	T 3626.000	TM 4887.000	TM 6633.000	TM 2381.000	1.1%	3.413	0.268	0.793	180.500
%RSD		T 5.526	T 3.562	TM 2.677	TM 2.836	TM 1.342	1.7	6.661	8.507	7.806	8.373

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:00	738.600	65.860	T 772.400	2647.000	0.765	12.830	11.090	38.130	38.530	206.900
2	06:00:27	763.700	66.540	T 782.600	3012.000	0.774	13.440	11.830	39.220	40.230	194.700
3	06:00:54	767.300	66.530	T 782.600	3227.000	0.787	13.500	11.490	38.140	39.800	197.800
x		756.500	66.310	T 779.200	2962.000	0.775	13.260	11.470	38.490	39.520	199.800
σ		15.640	0.390	T 5.881	293.200	0.011	0.372	0.372	0.629	0.886	6.302
%RSD		2.067	0.588	T 0.755	9.900	1.373	2.804	3.238	1.633	2.241	3.154

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:00	166.800	171.900	-0.035	2.735	81.190	74.760	1.050	0.418	-2.557	133.600
2	06:00:27	165.400	170.300	0.292	2.596	80.800	77.200	1.526	0.431	0.698	132.900
3	06:00:54	156.500	164.800	0.503	3.024	80.080	76.790	5.934	1.748	-4.705	132.500
x		162.900	169.000	0.253	2.785	80.690	76.250	2.836	0.866	-2.188	133.000
σ		5.546	3.733	0.271	0.219	0.565	1.307	2.693	0.764	2.720	0.544
%RSD		3.405	2.209	107.200	7.845	0.700	1.715	94.940	88.260	124.300	0.409

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:00	65.4%	5.108	5.017	5.126	6.963	0.185	0.175	0.597	0.700	56.6%
2	06:00:27	66.8%	5.287	5.163	5.188	8.807	0.166	0.132	0.692	0.573	58.2%
3	06:00:54	67.1%	5.470	5.434	5.111	6.229	0.172	0.156	0.657	0.607	58.4%
x		66.4%	5.288	5.205	5.141	7.333	0.174	0.154	0.649	0.627	57.7%
σ		0.9%	0.181	0.212	0.041	1.328	0.009	0.021	0.048	0.066	1.0%
%RSD		1.3	3.416	4.063	0.792	18.110	5.446	13.920	7.418	10.500	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:00:00	0.562	0.460	0.272	0.270	16.670	17.060	55.8%	0.108	0.103	0.934
2	06:00:27	0.548	0.487	0.262	0.295	16.030	16.490	56.5%	0.145	0.096	0.902
3	06:00:54	0.556	0.549	0.342	0.314	16.420	16.130	57.4%	0.131	0.100	0.940
x		0.555	0.499	0.292	0.293	16.370	16.560	56.6%	0.128	0.100	0.925
σ		0.007	0.046	0.044	0.022	0.326	0.470	0.8%	0.019	0.003	0.021
%RSD		1.203	9.156	14.990	7.560	1.992	2.841	1.5	14.830	3.346	2.228

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:00:00	0.880	0.876	48.9%
2	06:00:27	0.898	0.877	49.4%
3	06:00:54	0.862	0.909	50.0%
x		0.880	0.887	49.5%
σ		0.018	0.019	0.6%
%RSD		2.052	2.130	1.1

UD16067-001(2) 04/26/2019 06:05:22

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:05:49	84.0%	-0.013	59.660	66.940	371.900	TM 240200.000	T 386.400	385.000	410.000	TM 1880.000
2	06:06:16	78.8%	-0.007	60.820	65.340	325.300	TM 234100.000	T 367.000	382.600	383.700	TM 1817.000
3	06:06:43	77.5%	0.005	62.880	68.170	491.800	TM 231800.000	T 409.600	422.300	446.100	TM 2508.000
x		80.1%	-0.005	61.120	66.820	396.300	TM 235400.000	T 387.700	396.600	413.300	TM 2068.000
σ		3.4%	0.009	1.629	1.420	85.900	TM 4362.000	T 21.340	22.250	31.320	TM 382.200
%RSD		4.3	184.100	2.666	2.124	21.670	TM 1.853	T 5.503	5.609	7.579	TM 18.480

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:05:49	TM 11920.000	T 43210.000	T 4123.000	2477.000	2129.000	72.3%	30.090	2.271	6.882	1357.000
2	06:06:16	TM 10760.000	T 41380.000	T 4117.000	2397.000	2179.000	71.0%	28.100	2.083	6.729	1260.000
3	06:06:43	TM 13340.000	T 41370.000	T 4171.000	2383.000	2188.000	70.3%	41.060	2.382	7.276	998.000
x		TM 12010.000	T 41990.000	T 4137.000	2419.000	2165.000	71.2%	33.090	2.245	6.962	1205.000
σ		TM 1293.000	T 1063.000	T 29.790	50.760	31.360	1.0%	6.980	0.151	0.282	185.700
%RSD		TM 10.770	T 2.532	T 0.720	2.098	1.448	1.4	21.100	6.726	4.050	15.410

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:05:49	1207.000	26.420	T 1214.000	1209.000	8.625	22.020	22.430	119.800	117.300	278.400
2	06:06:16	1199.000	27.080	T 1169.000	1177.000	8.871	22.420	22.370	120.500	119.600	289.500
3	06:06:43	1354.000	26.590	T 1425.000	1440.000	8.890	22.340	21.610	120.500	120.600	284.700
x		1253.000	26.700	T 1269.000	1275.000	8.795	22.260	22.140	120.300	119.200	284.200
σ		87.050	0.345	T 136.600	143.800	0.148	0.214	0.459	0.368	1.703	5.567
%RSD		6.945	1.290	T 10.760	11.280	1.680	0.962	2.073	0.306	1.429	1.959

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:05:49	215.200	227.600	1.035	2.761	50.160	48.400	1.088	0.390	0.179	16.300
2	06:06:16	225.100	239.400	1.425	2.484	50.460	48.610	3.292	1.003	-0.935	16.370
3	06:06:43	230.300	236.900	1.268	1.864	54.510	54.200	2.746	0.823	-0.656	16.300
x		223.500	234.600	1.243	2.369	51.710	50.400	2.375	0.739	-0.471	16.320
σ		7.636	6.235	0.196	0.459	2.431	3.291	1.148	0.315	0.580	0.038
%RSD		3.416	2.658	15.810	19.390	4.702	6.529	48.330	42.680	123.100	0.236

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:05:49	67.5%	29.440	29.040	29.410	5.272	0.226	0.236	1.273	1.325	58.6%
2	06:06:16	67.8%	30.090	28.970	30.050	5.499	0.231	0.251	1.280	1.280	58.7%
3	06:06:43	67.8%	30.200	29.470	30.250	6.268	0.229	0.245	1.228	1.372	59.3%
x		67.7%	29.910	29.160	29.900	5.680	0.229	0.244	1.260	1.326	58.9%
σ		0.2%	0.410	0.271	0.435	0.522	0.003	0.007	0.028	0.046	0.4%
%RSD		0.3	1.370	0.929	1.455	9.196	1.173	3.014	2.249	3.496	0.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:05:49	15.670	20.590	15.450	15.720	26.150	25.300	57.0%	-0.002	0.010	11.850
2	06:06:16	15.300	20.760	15.910	15.880	25.040	25.140	57.6%	0.003	0.007	12.110
3	06:06:43	16.300	22.000	16.170	16.410	25.900	26.180	58.4%	0.015	-0.009	11.820
x		15.760	21.120	15.840	16.000	25.690	25.540	57.7%	0.005	0.003	11.930
σ		0.509	0.768	0.361	0.362	0.585	0.560	0.7%	0.009	0.010	0.160
%RSD		3.228	3.638	2.281	2.260	2.275	2.194	1.3	162.600	368.900	1.341

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:05:49	11.530	11.500	51.6%
2	06:06:16	11.340	11.410	52.3%
3	06:06:43	11.720	11.500	52.8%
x		11.530	11.470	52.2%
σ		0.187	0.048	0.6%
%RSD		1.620	0.421	1.2

UD16075-001 04/26/2019 06:11:11

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:11:37	81.2%	0.030	202.700	198.400	1184.000	TM 344700.000	T 3782.000	3838.000	T 3809.000	TM 641.000
2	06:12:04	78.8%	-0.001	201.000	203.500	1208.000	TM 338200.000	T 3627.000	3649.000	3773.000	TM 615.600
3	06:12:31	83.4%	0.003	197.300	192.200	1140.000	TM 334800.000	T 3573.000	3646.000	T 3575.000	TM 630.200
x		81.1%	0.010	200.300	198.000	1177.000	TM 339200.000	T 3661.000	3711.000	T 3719.000	TM 628.900
σ		2.3%	0.017	2.736	5.668	34.370	TM 5048.000	T 108.700	109.800	T 125.800	TM 12.750
%RSD		2.9	161.700	1.366	2.862	2.919	TM 1.488	T 2.970	2.960	T 3.382	TM 2.028

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:11:37	TM 11420.000	T 98830.000	T 21400.000	16640.000	T 13870.000	68.6%	207.800	0.558	18.220	2601.000
2	06:12:04	TM 11040.000	T 95310.000	T 20840.000	15690.000	13000.000	67.0%	182.900	0.975	17.670	2031.000
3	06:12:31	TM 11010.000	T 96180.000	T 20920.000	16180.000	T 13340.000	71.0%	197.600	0.392	17.480	2638.000
x		TM 11160.000	T 96780.000	T 21050.000	16170.000	T 13400.000	68.9%	196.100	0.642	17.790	2423.000
σ		TM 231.700	T 1834.000	T 304.400	474.200	T 442.100	2.0%	12.520	0.300	0.381	340.700
%RSD		TM 2.077	T 1.895	T 1.446	2.932	T 3.298	3.0	6.384	46.800	2.143	14.060

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:11:37	4556.000	T 112.800	T 4393.000	4554.000	1.811	92.430	92.660	338.300	333.900	435.700
2	06:12:04	4407.000	102.100	T 4251.000	4536.000	1.829	92.620	85.270	325.600	331.300	426.700
3	06:12:31	4388.000	98.310	T 4181.000	4368.000	1.716	89.400	91.510	326.500	318.500	400.900
x		4450.000	T 104.400	T 4275.000	4486.000	1.786	91.480	89.810	330.100	327.900	421.100
σ		92.330	T 7.536	T 107.700	102.500	0.061	1.809	3.979	7.062	8.221	18.100
%RSD		2.075	T 7.217	T 2.520	2.284	3.397	1.977	4.431	2.139	2.507	4.297

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:11:37	345.400	363.100	3.880	4.035	33.770	33.840	3.048	1.029	-4.844	58.260
2	06:12:04	351.400	365.900	3.229	2.866	34.860	35.740	1.780	0.617	-2.427	56.640
3	06:12:31	335.700	345.400	3.407	2.268	35.170	34.950	5.189	1.428	-0.970	56.760
x		344.200	358.100	3.505	3.056	34.600	34.850	3.339	1.025	-2.747	57.220
σ		7.899	11.130	0.336	0.899	0.733	0.954	1.723	0.406	1.957	0.903
%RSD		2.295	3.108	9.592	29.410	2.118	2.738	51.610	39.560	71.220	1.578

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:11:37	65.3%	M 1241.000	M 1188.000	M 1249.000	5.797	4.055	3.984	-1.707	1.676	57.5%
2	06:12:04	66.9%	M 1211.000	M 1168.000	M 1220.000	5.866	3.875	3.927	-1.992	1.574	59.0%
3	06:12:31	68.1%	M 1195.000	M 1165.000	M 1210.000	5.250	3.852	3.858	-1.984	1.510	61.2%
x		66.8%	M 1216.000	M 1174.000	M 1226.000	5.637	3.927	3.923	-1.894	1.587	59.2%
σ		1.4%	M 23.690	M 12.650	M 20.540	0.338	0.111	0.063	0.162	0.084	1.9%
%RSD		2.0	M 1.949	M 1.078	M 1.675	5.987	2.826	1.610	8.557	5.298	3.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:11:37	3.448	3.028	2.005	2.144	46.660	46.000	56.5%	0.051	-0.002	29.140
2	06:12:04	3.241	3.063	2.067	2.241	46.440	44.000	58.0%	0.015	0.011	28.560
3	06:12:31	3.078	2.787	1.977	2.170	44.660	43.320	59.3%	0.020	-0.005	28.090
x		3.256	2.959	2.016	2.185	45.920	44.440	58.0%	0.028	0.001	28.600
σ		0.186	0.150	0.046	0.050	1.094	1.394	1.4%	0.020	0.008	0.527
%RSD		5.701	5.082	2.299	2.310	2.383	3.137	2.4	69.080	581.600	1.841

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:11:37	26.260	27.020	49.7%
2	06:12:04	25.640	26.280	50.6%
3	06:12:31	25.440	26.000	51.8%
x		25.780	26.430	50.7%
σ		0.425	0.528	1.0%
%RSD		1.649	1.998	2.1

CCV MW10994 04/26/2019 06:16:59 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:26	80.0%	317.000	311.500	304.000	52.490	┬68790.000	┬61480.000	┬62530.000	┬63100.000	304.500
2	06:17:53	75.8%	328.700	313.600	312.700	65.260	┬67610.000	┬62320.000	┬64090.000	┬62170.000	306.600
3	06:18:21	81.5%	311.900	309.700	305.800	53.220	┬68090.000	┬61980.000	┬62210.000	┬60940.000	297.900
x		79.1%	106.401%	103.874%	102.496%	56.990	┬113.606%	┬61930.000	┬62940.000	┬103.448%	100.989%
σ		2.9%	n/a	n/a	n/a	7.175	┬n/a	┬421.900	┬1005.000	┬n/a	n/a
%RSD		3.7	2.709	0.636	1.493	12.590	┬0.870	┬0.681	┬1.597	┬1.747	1.496
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:26	┬3688.000	1559.000	┬54600.000	64450.000	┬55430.000	70.4%	332.200	342.200	320.500	969.600
2	06:17:53	┬3621.000	1499.000	┬57030.000	64680.000	┬57190.000	69.8%	335.400	339.900	319.300	1921.000
3	06:18:21	┬3795.000	1540.000	┬56360.000	66020.000	┬55340.000	71.5%	324.600	338.500	312.700	1758.000
x		┬123.372%	1533.000	┬93.325%	65050.000	┬93.306%	70.5%	110.242%	113.401%	105.826%	1550.000
σ		┬n/a	30.340	┬n/a	851.500	┬n/a	0.8%	n/a	n/a	n/a	508.800
%RSD		┬2.370	1.979	┬2.237	1.309	┬1.864	1.2	1.686	0.557	1.312	32.840
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:26	┬65410.000	312.900	┬65390.000	┬63780.000	313.600	313.400	324.800	311.600	296.000	346.800
2	06:17:53	┬65160.000	317.200	┬66160.000	┬65060.000	317.900	311.900	317.900	310.200	300.600	350.600
3	06:18:21	┬65250.000	307.600	┬64320.000	┬62900.000	308.800	304.800	315.300	308.100	290.100	336.400
x		┬65270.000	104.186%	┬65290.000	┬106.527%	104.485%	103.338%	319.300	310.000	98.519%	114.866%
σ		┬125.700	n/a	┬922.400	┬n/a	n/a	n/a	4.942	1.807	n/a	n/a
%RSD		┬0.193	1.529	┬1.413	┬1.697	1.444	1.487	1.548	0.583	1.785	2.136
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:26	299.700	301.200	307.200	363.700	2.341	2.271	1380.000	358.800	-1.470	330.100
2	06:17:53	306.400	304.000	307.800	359.900	3.177	1.479	1345.000	346.300	1.206	326.300
3	06:18:21	298.600	293.600	298.700	351.000	3.201	2.801	1336.000	345.500	-1.899	328.800
x		301.500	299.600	101.512%	358.200	2.906	2.184	1353.000	116.737%	-0.721	109.467%
σ		4.217	5.391	n/a	6.528	0.490	0.666	23.230	n/a	1.682	n/a
%RSD		1.399	1.800	1.676	1.822	16.850	30.490	1.716	2.134	233.400	0.595
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:26	63.2%	335.100	329.400	331.300	323.700	319.100	314.000	310.800	309.800	56.4%
2	06:17:53	63.0%	332.000	321.200	331.500	310.600	313.300	310.500	310.100	312.200	56.8%
3	06:18:21	64.2%	330.200	322.100	328.300	322.300	312.900	310.500	308.600	308.100	57.6%
x		63.5%	110.805%	108.080%	330.400	318.900	105.029%	311.700	309.900	103.345%	56.9%
σ		0.6%	n/a	n/a	1.814	7.169	n/a	2.042	1.119	n/a	0.6%
%RSD		1.0	0.744	1.381	0.549	2.248	1.097	0.655	0.361	0.671	1.1
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:17:26	326.000	329.300	321.700	334.100	329.700	327.800	54.6%	294.400	298.900	291.000
2	06:17:53	325.700	325.500	327.000	335.700	331.800	328.200	54.9%	300.100	303.300	295.600
3	06:18:21	325.100	324.400	318.700	333.700	332.900	329.800	55.2%	298.700	301.700	293.500
x		108.535%	108.793%	322.500	111.492%	110.484%	109.537%	54.9%	297.700	100.447%	97.790%
σ		n/a	n/a	4.213	n/a	n/a	n/a	0.3%	3.008	n/a	n/a
%RSD		0.134	0.788	1.306	0.316	0.502	0.310	0.6	1.010	0.739	0.794
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	06:17:26	290.700	289.400	48.0%							
2	06:17:53	294.400	293.200	49.2%							
3	06:18:21	293.900	292.500	49.3%							
x		97.660%	97.233%	48.8%							
σ		n/a	n/a	0.7%							
%RSD		0.675	0.700	1.5							

CCB IM9370-01 04/26/2019 06:22:50 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:18	87.8%	0.026	2.913	2.750	45.300	39.190	7.038	7.393	7.231	0.108
2	06:23:45	82.4%	0.019	2.912	2.463	42.210	19.590	5.174	5.279	5.764	0.082
3	06:24:12	87.0%	0.012	2.719	2.552	45.400	30.710	4.664	4.419	4.581	0.077
x		85.7%	0.019	2.848	2.588	44.300	29.830	5.626	5.697	5.859	0.089
σ		2.9%	0.007	0.112	0.147	1.812	9.830	1.250	1.530	1.327	0.017
%RSD		3.4	37.880	3.924	5.660	4.091	32.950	22.210	26.860	22.660	18.630
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:18	19.370	1066.000	22.090	8.850	6.386	71.1%	-0.346	0.021	0.144	65.190
2	06:23:45	20.390	1096.000	12.500	6.570	4.532	68.4%	-0.301	0.010	0.113	51.790
3	06:24:12	18.880	1075.000	20.070	7.443	3.734	71.6%	-0.321	0.038	0.110	54.280
x		19.550	1079.000	18.220	7.621	4.884	70.4%	-0.323	0.023	0.122	57.090
σ		0.772	15.290	5.056	1.150	1.361	1.7%	0.022	0.014	0.019	7.126
%RSD		3.949	1.417	27.750	15.090	27.860	2.4	6.951	62.420	15.280	12.480
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:18	15.040	0.131	33.110	35.980	0.002	0.004	0.298	0.013	0.011	0.048
2	06:23:45	11.940	0.128	30.350	32.430	0.015	0.014	0.918	-0.017	0.017	0.067
3	06:24:12	10.190	0.166	29.510	22.930	-0.011	-0.030	0.625	-0.013	0.019	0.046
x		12.390	0.142	30.990	30.450	0.002	-0.004	0.614	-0.006	0.016	0.054
σ		2.453	0.021	1.882	6.744	0.013	0.023	0.310	0.016	0.004	0.012
%RSD		19.800	14.970	6.074	22.150	584.300	601.800	50.520	293.000	26.550	21.970
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:18	-0.042	0.083	0.088	0.967	0.390	2.738	3.378	0.984	-1.079	0.032
2	06:23:45	-0.006	0.047	-0.005	2.142	0.117	2.135	1.669	0.594	-3.650	0.034
3	06:24:12	-0.244	0.068	-0.001	1.839	0.593	1.690	0.909	0.412	-3.005	0.020
x		-0.097	0.066	0.028	1.650	0.366	2.188	1.985	0.663	-2.578	0.029
σ		0.128	0.018	0.053	0.610	0.239	0.526	1.265	0.292	1.337	0.008
%RSD		131.800	27.590	191.300	36.970	65.230	24.060	63.700	44.080	51.880	26.430
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:18	64.6%	0.175	0.140	0.156	0.092	0.036	0.045	0.014	0.012	59.2%
2	06:23:45	64.8%	0.241	0.126	0.181	0.492	0.021	0.028	0.013	0.015	60.0%
3	06:24:12	66.4%	0.153	0.213	0.121	-0.338	0.019	0.021	0.045	0.029	60.7%
x		65.3%	0.190	0.159	0.153	0.082	0.025	0.031	0.024	0.019	60.0%
σ		1.0%	0.045	0.047	0.030	0.415	0.009	0.012	0.018	0.009	0.7%
%RSD		1.5	23.940	29.350	19.920	505.800	35.150	39.480	76.090	48.380	1.2
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:23:18	0.104	0.102	0.155	0.166	-0.031	-0.014	55.0%	0.025	0.021	0.029
2	06:23:45	0.065	0.095	0.183	0.157	-0.004	-0.025	56.0%	0.032	0.014	0.024
3	06:24:12	0.071	0.063	0.141	0.184	0.014	-0.026	56.6%	0.014	0.001	0.018
x		0.080	0.087	0.159	0.169	-0.007	-0.022	55.9%	0.023	0.012	0.024
σ		0.021	0.021	0.021	0.014	0.023	0.006	0.8%	0.009	0.010	0.005
%RSD		26.510	23.860	13.440	8.028	325.800	29.590	1.5	39.380	84.730	22.650
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	06:23:18	0.016	0.027	51.8%							
2	06:23:45	0.038	0.027	52.5%							
3	06:24:12	0.032	0.023	53.1%							
x		0.028	0.026	52.5%							
σ		0.011	0.002	0.7%							
%RSD		40.020	8.470	1.3							

UD15029-001(5) 04/26/2019 06:28:40

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:07	78.2%	0.017	9.642	10.390	37.400	TM 799000.000	606.900	587.400	591.600	TM 600.000
2	06:29:35	77.4%	0.033	9.331	10.730	45.530	TM 784900.000	T 593.200	567.700	564.300	TM 557.200
3	06:30:02	75.5%	0.039	9.810	10.150	43.570	TM 773100.000	568.000	549.700	541.500	TM 532.400
x		77.0%	0.030	9.594	10.420	42.170	TM 785700.000	T 589.400	568.300	565.800	TM 563.200
σ		1.4%	0.012	0.243	0.287	4.239	TM 12980.000	T 19.720	18.830	25.080	TM 34.230
%RSD		1.8	39.570	2.533	2.752	10.050	TM 1.653	T 3.347	3.313	4.432	TM 6.077

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:07	T 1496.000	T 29640.000	T 828.800	3598.000	2999.000	68.3%	10.990	1.587	49.740	834.800
2	06:29:35	T 1399.000	T 29110.000	T 816.200	3616.000	2957.000	69.3%	10.420	1.052	48.080	1115.000
3	06:30:02	T 1341.000	T 28810.000	T 799.800	3421.000	2919.000	68.4%	9.576	0.858	47.400	1098.000
x		T 1412.000	T 29180.000	T 815.000	3545.000	2958.000	68.7%	10.330	1.166	48.410	1016.000
σ		T 78.600	T 424.000	T 14.540	107.900	39.650	0.5%	0.713	0.378	1.204	157.200
%RSD		T 5.568	T 1.453	T 1.784	3.044	1.340	0.8	6.907	32.410	2.487	15.470

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:07	4432.000	52.020	T 4206.000	4284.000	0.957	26.060	26.980	20.060	17.850	43.690
2	06:29:35	4226.000	50.080	T 4111.000	4176.000	1.000	24.900	25.050	19.690	17.380	40.590
3	06:30:02	4144.000	49.870	T 3961.000	4066.000	0.964	24.440	24.900	19.480	17.490	40.870
x		4268.000	50.660	T 4093.000	4175.000	0.974	25.130	25.640	19.740	17.570	41.720
σ		148.800	1.183	T 123.700	109.100	0.023	0.833	1.160	0.290	0.250	1.712
%RSD		3.487	2.334	T 3.022	2.612	2.342	3.313	4.522	1.469	1.423	4.105

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:07	32.920	32.550	0.127	2.124	87.360	87.830	1.465	0.384	2.551	22.510
2	06:29:35	33.770	31.960	0.745	2.432	85.120	85.830	2.429	0.729	-1.759	21.930
3	06:30:02	32.730	32.380	0.544	1.471	88.040	85.800	0.993	0.385	-3.193	21.510
x		33.140	32.300	0.472	2.009	86.840	86.490	1.629	0.499	-0.800	21.990
σ		0.551	0.302	0.315	0.491	1.529	1.164	0.732	0.199	2.990	0.504
%RSD		1.664	0.936	66.730	24.420	1.761	1.346	44.930	39.840	373.500	2.291

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:07	63.9%	2.681	2.126	2.523	1.933	0.017	0.026	0.052	0.016	55.2%
2	06:29:35	65.7%	2.535	2.186	2.415	1.970	0.007	0.020	0.043	0.027	57.6%
3	06:30:02	66.0%	2.419	2.273	2.385	2.148	0.016	0.010	0.017	0.026	57.9%
x		65.2%	2.545	2.195	2.441	2.017	0.014	0.019	0.037	0.023	56.9%
σ		1.1%	0.131	0.074	0.072	0.115	0.005	0.008	0.019	0.006	1.5%
%RSD		1.7	5.164	3.380	2.963	5.695	39.190	44.420	49.740	25.200	2.6

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:29:07	0.484	0.562	0.401	0.360	7.487	7.145	54.4%	-0.008	0.001	0.667
2	06:29:35	0.457	0.652	0.362	0.440	6.823	7.146	55.6%	-0.002	-0.005	0.761
3	06:30:02	0.470	0.669	0.298	0.358	7.044	6.820	56.7%	-0.002	-0.004	0.724
x		0.470	0.628	0.354	0.386	7.118	7.037	55.6%	-0.004	-0.003	0.717
σ		0.014	0.058	0.052	0.047	0.338	0.188	1.1%	0.003	0.003	0.048
%RSD		2.888	9.179	14.590	12.210	4.751	2.665	2.1	84.070	122.300	6.645

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:29:07	0.689	0.688	46.2%
2	06:29:35	0.666	0.690	47.4%
3	06:30:02	0.688	0.703	49.2%
x		0.681	0.694	47.6%
σ		0.013	0.008	1.5%
%RSD		1.940	1.119	3.1

UD16039-001 04/26/2019 06:34:31

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:57	76.6%	0.002	28.740	28.620	523.300	TM 422100.000	T 1881.000	1916.000	1908.000	261.100
2	06:35:24	78.8%	-0.021	30.630	30.090	527.800	TM 424400.000	T 1863.000	1902.000	1903.000	267.700
3	06:35:51	79.7%	0.019	30.760	29.310	510.300	TM 428600.000	T 1889.000	1860.000	1907.000	268.300
x		78.4%	0.000	30.040	29.340	520.500	TM 425000.000	T 1878.000	1893.000	1906.000	265.700
σ		1.6%	0.020	1.134	0.735	9.040	TM 3293.000	T 13.000	29.360	2.635	4.001
%RSD		2.0	89280.000	3.773	2.504	1.737	TM 0.775	T 0.692	1.551	0.138	1.506

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:57	TM 11690.000	T 111200.000	TM 156000.000	5531.000	4616.000	68.2%	187.000	3.478	3.286	2336.000
2	06:35:24	TM 12080.000	T 115100.000	TM 159200.000	5480.000	4619.000	70.3%	196.400	3.580	3.237	2511.000
3	06:35:51	TM 12110.000	T 118500.000	TM 158500.000	5527.000	4638.000	70.9%	198.700	3.238	3.187	2857.000
x		TM 11960.000	T 114900.000	TM 157900.000	5513.000	4624.000	69.8%	194.000	3.432	3.236	2568.000
σ		TM 233.400	T 3675.000	TM 1667.000	28.680	11.930	1.4%	6.172	0.176	0.050	264.700
%RSD		TM 1.951	T 3.197	TM 1.056	0.520	0.258	2.0	3.181	5.114	1.530	10.310

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:57	6616.000	51.010	T 6302.000	6572.000	0.468	6.162	6.163	34.410	32.470	75.090
2	06:35:24	6590.000	49.910	T 6200.000	6454.000	0.466	6.013	6.133	34.290	31.370	71.680
3	06:35:51	6585.000	50.750	T 6364.000	6477.000	0.440	5.863	5.498	33.820	32.150	71.640
x		6597.000	50.560	T 6289.000	6501.000	0.458	6.012	5.932	34.170	31.990	72.810
σ		17.120	0.575	T 82.500	62.970	0.016	0.149	0.376	0.316	0.568	1.981
%RSD		0.260	1.138	T 1.312	0.969	3.404	2.487	6.334	0.923	1.774	2.721

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:57	61.050	65.850	10.060	2.059	150.200	150.900	2.409	0.532	0.759	29.030
2	06:35:24	59.720	62.840	9.880	2.770	147.500	147.400	2.516	0.580	1.066	29.000
3	06:35:51	56.490	62.030	10.210	2.737	150.600	147.000	1.584	0.459	-3.737	28.580
x		59.090	63.570	10.050	2.522	149.500	148.400	2.170	0.524	-0.637	28.870
σ		2.345	2.014	0.164	0.401	1.669	2.124	0.510	0.061	2.689	0.250
%RSD		3.969	3.167	1.635	15.910	1.117	1.431	23.520	11.680	421.900	0.866

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:57	66.0%	1.565	1.626	1.422	23.900	0.187	0.033	0.758	0.656	59.4%
2	06:35:24	67.4%	1.717	1.498	1.553	23.340	0.223	0.033	0.809	0.694	59.8%
3	06:35:51	68.4%	1.622	1.545	1.581	22.000	0.219	0.040	0.935	0.577	60.8%
x		67.3%	1.635	1.556	1.518	23.080	0.210	0.035	0.834	0.642	60.0%
σ		1.2%	0.077	0.065	0.085	0.976	0.019	0.004	0.091	0.059	0.7%
%RSD		1.7	4.695	4.178	5.574	4.228	9.266	10.710	10.930	9.258	1.2

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:34:57	1.980	2.366	1.738	1.864	12.870	12.720	57.8%	0.977	1.055	0.492
2	06:35:24	1.876	2.535	1.764	1.777	13.280	12.600	58.2%	0.995	1.009	0.453
3	06:35:51	2.146	2.522	1.757	1.712	12.440	13.060	59.9%	0.908	1.017	0.484
x		2.001	2.474	1.753	1.784	12.860	12.790	58.6%	0.960	1.027	0.476
σ		0.136	0.094	0.014	0.076	0.421	0.238	1.1%	0.046	0.024	0.021
%RSD		6.801	3.807	0.778	4.274	3.272	1.859	1.9	4.810	2.377	4.310

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:34:57	0.337	0.389	50.6%
2	06:35:24	0.396	0.393	51.2%
3	06:35:51	0.393	0.400	51.8%
x		0.375	0.394	51.2%
σ		0.033	0.006	0.6%
%RSD		8.906	1.454	1.2

UD16054-002 04/26/2019 06:40:19

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:40:47	77.9%	-0.015	258.600	260.900	75.290	TM 380200.000	T 1878.000	1967.000	1975.000	TM 1741.000
2	06:41:14	83.5%	-0.014	263.900	262.500	65.920	TM 393400.000	T 1929.000	2042.000	1993.000	TM 1696.000
3	06:41:40	82.7%	-0.014	263.200	263.400	71.100	TM 388700.000	T 1895.000	1957.000	1975.000	TM 1709.000
x		81.3%	-0.015	261.900	262.300	70.770	TM 387400.000	T 1901.000	1989.000	1981.000	TM 1715.000
σ		3.0%	0.000	2.884	1.255	4.696	TM 6708.000	T 26.260	46.340	10.580	TM 23.240
%RSD		3.7	3.424	1.101	0.479	6.636	TM 1.731	T 1.382	2.330	0.534	TM 1.355

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:40:47	T 2995.000	T 92650.000	T 37300.000	50550.000	T 44420.000	70.2%	5.181	3.095	2.613	2256.000
2	06:41:14	T 3123.000	T 98300.000	T 36860.000	51630.000	T 42920.000	71.2%	4.867	2.959	2.761	2838.000
3	06:41:40	T 3066.000	T 97100.000	T 37240.000	51440.000	T 43010.000	71.5%	5.127	3.269	2.681	2504.000
x		T 3062.000	T 96020.000	T 37130.000	51200.000	T 43450.000	71.0%	5.058	3.108	2.685	2533.000
σ		T 64.210	T 2977.000	T 242.700	576.900	T 842.700	0.7%	0.168	0.155	0.074	292.200
%RSD		T 2.097	T 3.100	T 0.654	1.127	T 1.939	1.0	3.321	4.990	2.750	11.540

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:40:47	3056.000	19.010	T 2888.000	3481.000	45.250	16.660	16.040	12.900	11.660	61.950
2	06:41:14	3054.000	19.060	T 2933.000	3572.000	45.690	16.480	16.980	12.880	11.500	60.550
3	06:41:40	3024.000	19.090	T 2867.000	3486.000	44.550	16.950	15.350	12.900	11.940	60.730
x		3045.000	19.050	T 2896.000	3513.000	45.160	16.700	16.130	12.890	11.700	61.080
σ		17.970	0.042	T 33.720	51.330	0.575	0.233	0.817	0.012	0.220	0.760
%RSD		0.590	0.221	T 1.164	1.461	1.273	1.395	5.065	0.092	1.879	1.243

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:40:47	47.210	52.460	0.677	2.020	11.280	12.540	-0.360	0.082	-1.329	76.990
2	06:41:14	46.910	50.370	0.027	1.416	12.250	12.790	0.949	0.476	-3.832	78.380
3	06:41:40	51.760	50.840	0.352	1.856	10.800	12.940	-1.027	-0.060	-2.636	77.840
x		48.630	51.230	0.352	1.764	11.440	12.760	-0.146	0.166	-2.599	77.740
σ		2.718	1.095	0.325	0.313	0.741	0.203	1.005	0.278	1.252	0.700
%RSD		5.590	2.137	92.440	17.720	6.479	1.595	687.700	167.400	48.180	0.900

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:40:47	68.9%	5.992	5.489	6.002	7.006	0.001	0.006	0.101	0.089	59.8%
2	06:41:14	69.4%	5.904	5.163	5.344	5.354	0.011	-0.001	0.102	0.101	61.0%
3	06:41:40	70.8%	5.657	5.260	5.879	5.881	0.005	0.006	0.142	0.140	61.4%
x		69.7%	5.851	5.304	5.742	6.081	0.006	0.004	0.115	0.110	60.7%
σ		1.0%	0.173	0.168	0.350	0.844	0.005	0.004	0.023	0.027	0.9%
%RSD		1.4	2.962	3.160	6.088	13.880	80.980	105.800	20.340	24.160	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:40:47	0.455	0.451	2.116	2.132	4.302	4.505	58.9%	0.003	-0.017	0.169
2	06:41:14	0.397	0.457	1.927	2.083	4.880	4.393	59.6%	0.005	-0.009	0.188
3	06:41:40	0.480	0.459	1.988	2.086	5.001	4.368	59.6%	0.025	-0.010	0.174
x		0.444	0.456	2.010	2.100	4.728	4.422	59.4%	0.011	-0.012	0.177
σ		0.043	0.004	0.097	0.028	0.373	0.073	0.4%	0.012	0.004	0.010
%RSD		9.613	0.967	4.809	1.313	7.898	1.653	0.6	113.800	36.170	5.492

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:40:47	0.104	0.142	50.5%
2	06:41:14	0.087	0.146	50.6%
3	06:41:40	0.164	0.141	50.9%
x		0.118	0.143	50.7%
σ		0.040	0.003	0.2%
%RSD		33.800	2.025	0.4

UD16074-001 04/26/2019 06:46:09

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:36	85.2%	-0.012	49.470	52.050	162.100	TM 125400.000	T 11710.000	T 11860.000	T 11550.000	192.800
2	06:47:03	84.7%	0.024	54.680	55.580	181.900	TM 126300.000	T 12310.000	T 12210.000	T 11730.000	193.400
3	06:47:30	83.7%	0.033	52.030	53.520	172.500	TM 124000.000	T 11680.000	T 11950.000	T 12190.000	198.700
x		84.5%	0.015	52.060	53.720	172.100	TM 125200.000	T 11900.000	T 12010.000	T 11820.000	194.900
σ		0.7%	0.024	2.602	1.774	9.926	TM 1163.000	T 356.200	T 179.100	T 329.000	3.227
%RSD		0.9	159.200	4.998	3.302	5.767	TM 0.928	T 2.993	T 1.491	T 2.783	1.655

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:36	TM 51360.000	T 87920.000	T 14380.000	52650.000	T 45150.000	77.7%	30.500	0.972	12.090	2557.000
2	06:47:03	TM 51920.000	T 90150.000	T 14640.000	50990.000	T 44700.000	77.7%	29.030	0.688	12.070	2660.000
3	06:47:30	TM 51890.000	T 89360.000	T 14400.000	51140.000	T 44880.000	75.9%	29.960	1.313	12.240	2153.000
x		TM 51720.000	T 89140.000	T 14480.000	51590.000	T 44910.000	77.1%	29.830	0.991	12.130	2457.000
σ		TM 316.600	T 1127.000	T 144.400	918.500	T 227.100	1.0%	0.747	0.313	0.094	268.100
%RSD		TM 0.612	T 1.264	T 0.997	1.780	T 0.506	1.3	2.503	31.590	0.778	10.910

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:36	547.400	67.930	T 565.400	1144.000	0.546	2.317	2.057	456.000	433.800	396.600
2	06:47:03	557.300	69.230	T 567.900	1054.000	0.528	2.246	1.331	458.700	443.700	393.900
3	06:47:30	549.300	68.650	T 556.600	1055.000	0.527	2.174	1.761	462.800	456.700	398.900
x		551.300	68.610	T 563.300	1085.000	0.534	2.246	1.716	459.200	444.700	396.400
σ		5.266	0.653	T 5.931	51.750	0.011	0.071	0.365	3.442	11.500	2.501
%RSD		0.955	0.952	T 1.053	4.771	2.055	3.177	21.260	0.750	2.586	0.631

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:36	322.000	338.200	0.456	2.485	84.860	86.690	2.458	0.725	-2.589	311.700
2	06:47:03	331.000	341.700	0.441	2.524	85.350	87.470	1.834	0.522	-1.377	309.100
3	06:47:30	332.100	348.400	1.109	2.186	90.690	88.350	1.393	0.417	-2.058	313.500
x		328.400	342.800	0.669	2.398	86.970	87.500	1.895	0.554	-2.008	311.400
σ		5.544	5.193	0.382	0.185	3.234	0.833	0.535	0.157	0.607	2.215
%RSD		1.688	1.515	57.090	7.710	3.718	0.952	28.230	28.290	30.250	0.711

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:36	69.5%	M 2293.000	M 2215.000	TM 2151.000	13.380	0.015	0.026	-6.120	0.133	62.6%
2	06:47:03	70.5%	M 2298.000	M 2218.000	TM 2162.000	16.130	0.012	0.021	-6.265	-0.077	63.8%
3	06:47:30	69.7%	M 2325.000	M 2255.000	TM 2175.000	14.810	0.014	0.023	-6.596	-0.201	63.4%
x		69.9%	M 2306.000	M 2229.000	TM 2163.000	14.770	0.014	0.023	-6.327	-0.048	63.3%
σ		0.5%	M 17.060	M 22.090	TM 11.870	1.378	0.002	0.002	0.244	0.169	0.6%
%RSD		0.7	M 0.740	M 0.991	TM 0.549	9.328	12.150	10.160	3.855	350.300	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:46:36	2.418	1.608	0.419	0.482	185.400	183.800	60.7%	0.002	-0.001	5.817
2	06:47:03	2.506	1.590	0.471	0.501	179.600	176.700	60.8%	-0.001	-0.008	5.701
3	06:47:30	2.401	1.566	0.443	0.441	181.300	180.300	60.6%	0.008	-0.011	5.910
x		2.441	1.588	0.445	0.475	182.100	180.300	60.7%	0.003	-0.006	5.809
σ		0.057	0.021	0.026	0.030	3.012	3.583	0.1%	0.005	0.005	0.105
%RSD		2.316	1.351	5.814	6.380	1.654	1.988	0.1	158.100	79.720	1.804

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:46:36	5.840	5.601	52.9%
2	06:47:03	5.749	5.647	53.5%
3	06:47:30	5.817	5.743	54.3%
x		5.802	5.664	53.6%
σ		0.047	0.072	0.7%
%RSD		0.813	1.274	1.3

UD17043-001 04/26/2019 06:51:59

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:52:25	82.0%	-0.002	186.100	184.200	958.400	TM 359600.000	T 3084.000	3153.000	3194.000	T 471.700
2	06:52:53	75.3%	-0.011	196.000	184.000	986.200	TM 360500.000	T 3044.000	3165.000	3190.000	486.800
3	06:53:20	76.2%	-0.007	187.700	180.500	961.900	TM 369800.000	T 3101.000	3194.000	3103.000	T 463.300
x		77.8%	-0.007	189.900	182.900	968.800	TM 363300.000	T 3077.000	3171.000	3163.000	T 473.900
σ		3.6%	0.004	5.287	2.100	15.170	TM 5675.000	T 29.290	20.700	51.270	T 11.890
%RSD		4.7	62.390	2.784	1.148	1.566	TM 1.562	T 0.952	0.653	1.621	T 2.508

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:52:25	TM 11120.000	T 93910.000	T 18500.000	12900.000	10360.000	68.7%	231.700	0.923	19.280	2176.000
2	06:52:53	TM 10780.000	T 92800.000	T 18940.000	13190.000	10950.000	65.8%	213.900	0.580	19.270	2166.000
3	06:53:20	TM 10710.000	T 93930.000	T 18870.000	12810.000	10820.000	66.4%	211.300	0.308	18.480	2389.000
x		TM 10870.000	T 93550.000	T 18770.000	12970.000	10710.000	67.0%	219.000	0.604	19.010	2244.000
σ		TM 218.500	T 645.800	T 238.800	196.300	310.000	1.6%	11.110	0.308	0.455	125.700
%RSD		TM 2.010	T 0.690	T 1.272	1.514	2.894	2.3	5.075	51.010	2.393	5.602

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:52:25	3996.000	99.610	T 3857.000	4028.000	1.812	87.710	87.170	310.400	307.000	383.500
2	06:52:53	3926.000	100.300	T 3810.000	3994.000	1.874	92.130	89.000	310.900	319.300	382.200
3	06:53:20	3912.000	100.500	T 3820.000	4074.000	1.733	90.510	90.030	316.400	324.700	385.500
x		3945.000	100.100	T 3829.000	4032.000	1.806	90.120	88.730	312.600	317.000	383.700
σ		45.070	0.477	T 24.880	40.300	0.071	2.237	1.447	3.316	9.092	1.661
%RSD		1.143	0.476	T 0.650	1.000	3.911	2.483	1.631	1.061	2.868	0.433

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:52:25	320.700	331.100	3.765	2.490	32.670	35.620	2.124	0.736	-3.764	49.280
2	06:52:53	323.300	346.000	3.725	2.471	33.070	35.150	3.359	0.976	-1.708	48.560
3	06:53:20	323.200	341.800	3.458	2.858	32.290	31.610	5.427	1.540	-2.112	48.690
x		322.400	339.600	3.649	2.606	32.680	34.130	3.636	1.084	-2.528	48.840
σ		1.482	7.696	0.167	0.219	0.389	2.193	1.669	0.413	1.089	0.386
%RSD		0.460	2.266	4.566	8.386	1.192	6.427	45.890	38.070	43.090	0.791

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:52:25	66.0%	M 1522.000	M 1476.000	M 1537.000	4.662	7.335	7.185	-2.598	1.862	58.7%
2	06:52:53	68.1%	M 1531.000	M 1479.000	M 1553.000	4.926	7.153	7.230	-2.737	1.926	60.7%
3	06:53:20	69.2%	M 1525.000	M 1467.000	M 1539.000	5.164	7.051	7.221	-2.842	1.781	61.0%
x		67.8%	M 1526.000	M 1474.000	M 1543.000	4.917	7.179	7.212	-2.726	1.856	60.1%
σ		1.7%	M 4.740	M 6.130	M 8.351	0.251	0.144	0.024	0.123	0.073	1.3%
%RSD		2.4	M 0.311	M 0.416	M 0.541	5.107	2.006	0.328	4.503	3.931	2.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:52:25	6.504	7.209	2.211	2.323	39.640	38.660	57.8%	0.046	-0.006	34.590
2	06:52:53	6.573	7.005	2.312	2.395	39.780	38.780	59.8%	0.017	-0.010	34.900
3	06:53:20	6.685	7.103	2.200	2.317	38.530	38.420	59.9%	0.036	-0.006	34.920
x		6.588	7.105	2.241	2.345	39.310	38.620	59.1%	0.033	-0.007	34.800
σ		0.091	0.102	0.062	0.044	0.686	0.183	1.2%	0.014	0.002	0.183
%RSD		1.385	1.435	2.756	1.856	1.745	0.473	2.0	43.320	30.310	0.526

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:52:25	30.720	32.120	50.4%
2	06:52:53	31.520	32.360	52.0%
3	06:53:20	31.110	32.340	52.5%
x		31.110	32.270	51.7%
σ		0.399	0.136	1.1%
%RSD		1.283	0.420	2.1

UD17044-003 04/26/2019 06:57:48

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:15	86.3%	-0.007	166.600	165.500	5177.000	┬81340.000	┬1432.000	1449.000	1431.000	┬190.500
2	06:58:43	87.8%	-0.005	167.100	166.700	5064.000	┬79720.000	┬1437.000	1482.000	1457.000	186.200
3	06:59:10	90.0%	-0.005	166.700	158.600	4952.000	┬77280.000	┬1434.000	1464.000	1412.000	┬185.500
x		88.0%	-0.006	166.800	163.600	5064.000	┬79450.000	┬1434.000	1465.000	1433.000	┬187.400
σ		1.8%	0.001	0.275	4.345	112.500	┬2043.000	┬2.659	16.240	22.900	┬2.694
%RSD		2.1	25.700	0.165	2.656	2.222	┬2.571	┬0.185	1.108	1.598	┬1.437

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:15	┬8142.000	┬101300.000	┬3851.000	6133.000	4705.000	71.0%	10.460	1.989	6.173	2260.000
2	06:58:43	┬8027.000	┬104800.000	┬3947.000	6090.000	4654.000	72.1%	12.160	2.124	6.308	2369.000
3	06:59:10	┬7495.000	┬99580.000	┬3894.000	6047.000	4712.000	74.0%	11.360	1.772	5.892	2335.000
x		┬7888.000	┬101900.000	┬3897.000	6090.000	4690.000	72.4%	11.330	1.962	6.124	2321.000
σ		┬345.200	┬2668.000	┬48.400	43.150	31.390	1.5%	0.852	0.178	0.212	55.640
%RSD		┬4.376	┬2.618	┬1.242	0.709	0.669	2.1	7.523	9.051	3.459	2.397

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:15	1233.000	┬379.500	┬1212.000	1280.000	3.466	5.464	5.650	25.380	25.480	128.500
2	06:58:43	1283.000	┬390.400	┬1263.000	1314.000	3.583	5.384	5.601	25.410	25.220	127.500
3	06:59:10	1219.000	┬379.100	┬1200.000	1288.000	3.480	5.243	5.737	25.160	25.560	127.800
x		1245.000	┬383.000	┬1225.000	1294.000	3.510	5.364	5.663	25.320	25.420	128.000
σ		33.390	┬6.446	┬33.780	17.720	0.064	0.112	0.069	0.135	0.178	0.508
%RSD		2.682	┬1.683	┬2.757	1.370	1.813	2.084	1.215	0.532	0.700	0.397

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:15	106.800	115.200	1.231	1.518	2106.000	2104.000	20.060	2.678	-2.159	30.260
2	06:58:43	104.600	111.200	1.265	1.912	2057.000	2058.000	21.330	3.167	-3.233	29.760
3	06:59:10	105.200	113.000	1.178	2.151	2084.000	2077.000	20.020	2.743	-0.868	29.850
x		105.600	113.100	1.225	1.860	2083.000	2080.000	20.470	2.863	-2.087	29.960
σ		1.157	1.987	0.044	0.320	24.850	23.130	0.747	0.265	1.184	0.264
%RSD		1.096	1.757	3.571	17.170	1.193	1.112	3.649	9.268	56.770	0.880

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:15	68.9%	6.165	6.150	5.880	2.306	0.666	0.695	0.121	0.082	63.3%
2	06:58:43	71.5%	5.980	5.760	5.894	1.228	0.636	0.703	0.118	0.122	64.0%
3	06:59:10	71.1%	5.821	5.957	5.734	3.478	0.594	0.627	0.107	0.090	64.0%
x		70.5%	5.989	5.955	5.836	2.337	0.632	0.675	0.115	0.098	63.8%
σ		1.4%	0.172	0.195	0.089	1.125	0.036	0.042	0.007	0.021	0.4%
%RSD		2.0	2.877	3.273	1.517	48.140	5.662	6.157	6.441	21.670	0.7

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	06:58:15	1.952	2.659	13.190	13.530	40.200	39.870	60.3%	0.001	-0.011	1.321
2	06:58:43	1.967	2.618	13.030	13.290	41.950	41.680	61.0%	0.013	-0.005	1.296
3	06:59:10	1.830	2.841	12.660	13.380	40.960	40.730	61.5%	0.007	0.001	1.271
x		1.916	2.706	12.960	13.400	41.030	40.760	60.9%	0.007	-0.005	1.296
σ		0.075	0.119	0.269	0.121	0.878	0.907	0.6%	0.006	0.006	0.025
%RSD		3.901	4.386	2.077	0.905	2.139	2.224	1.0	88.950	127.100	1.944

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	06:58:15	1.249	1.264	53.8%
2	06:58:43	1.259	1.250	54.6%
3	06:59:10	1.298	1.264	54.6%
x		1.269	1.259	54.3%
σ		0.026	0.008	0.5%
%RSD		2.054	0.651	0.9

UD17055-001 04/26/2019 07:03:38

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:04:05	77.1%	-0.023	M 869.200	TM 923.600	533.200	TM 1160000.000	T 898.600	913.100	926.500	TM 22940.000
2	07:04:32	73.0%	-0.018	M 865.100	TM 923.500	541.200	TM 1163000.000	T 864.300	898.900	893.800	TM 22910.000
3	07:04:59	79.3%	-0.038	M 881.600	TM 958.400	550.700	TM 1194000.000	T 901.600	913.800	944.400	TM 23220.000
x		76.5%	-0.026	M 871.900	TM 935.200	541.700	TM 1172000.000	T 888.200	908.600	921.600	TM 23030.000
σ		3.2%	0.011	M 8.610	TM 20.090	8.753	TM 18700.000	T 20.720	8.415	25.630	TM 167.600
%RSD		4.2	40.100	M 0.987	TM 2.148	1.616	TM 1.595	T 2.333	0.926	2.781	TM 0.728

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:04:05	T 5995.000	T 103000.000	TM 126600.000	6972.000	5453.000	66.2%	34.320	8.044	7.394	2566.000
2	07:04:32	T 5620.000	T 100300.000	TM 129300.000	6579.000	5668.000	65.7%	30.790	8.129	7.124	2225.000
3	07:04:59	T 6017.000	T 104500.000	TM 126000.000	7020.000	5443.000	66.9%	34.130	7.898	7.579	2740.000
x		T 5877.000	T 102600.000	TM 127300.000	6857.000	5521.000	66.3%	33.080	8.023	7.366	2510.000
σ		T 223.300	T 2144.000	TM 1756.000	242.000	127.400	0.6%	1.982	0.117	0.229	262.300
%RSD		T 3.800	T 2.089	TM 1.380	3.530	2.308	0.9	5.993	1.455	3.106	10.450

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:04:05	2219.000	40.880	T 2164.000	2273.000	0.937	106.000	101.600	25.170	21.980	216.200
2	07:04:32	2196.000	41.640	T 2150.000	2264.000	0.923	103.000	103.600	25.320	22.430	215.400
3	07:04:59	2231.000	41.700	T 2159.000	2296.000	0.937	103.500	108.200	25.230	22.690	209.200
x		2215.000	41.410	T 2158.000	2278.000	0.932	104.200	104.500	25.240	22.370	213.600
σ		17.870	0.458	T 7.200	16.620	0.008	1.586	3.362	0.077	0.360	3.804
%RSD		0.806	1.105	T 0.334	0.730	0.831	1.523	3.219	0.307	1.610	1.781

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:04:05	176.500	185.200	2.505	2.237	673.100	654.800	8.209	1.524	-2.183	20.220
2	07:04:32	179.900	190.400	2.213	2.931	664.700	660.800	9.189	1.716	-1.891	20.350
3	07:04:59	178.700	183.700	2.441	3.018	682.400	655.000	9.542	1.893	-3.073	20.310
x		178.400	186.400	2.386	2.729	673.400	656.900	8.980	1.711	-2.383	20.290
σ		1.691	3.526	0.154	0.428	8.856	3.401	0.691	0.184	0.616	0.067
%RSD		0.948	1.891	6.439	15.680	1.315	0.518	7.689	10.780	25.840	0.330

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:04:05	67.4%	98.750	94.870	96.780	0.799	0.011	0.008	-0.214	0.073	59.1%
2	07:04:32	69.8%	98.660	96.090	98.130	0.245	0.007	0.009	-0.223	0.019	61.9%
3	07:04:59	70.6%	98.750	94.900	98.840	0.919	0.007	0.012	-0.230	0.063	61.6%
x		69.3%	98.720	95.290	97.920	0.654	0.008	0.010	-0.222	0.052	60.8%
σ		1.7%	0.050	0.693	1.047	0.360	0.003	0.002	0.008	0.029	1.5%
%RSD		2.4	0.051	0.727	1.069	55.010	32.680	20.980	3.569	55.690	2.5

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:04:05	0.995	1.363	2.193	2.346	12.420	12.440	59.0%	0.127	0.121	0.125
2	07:04:32	0.962	1.237	2.196	2.304	12.090	12.560	61.4%	0.143	0.135	0.113
3	07:04:59	0.982	1.360	2.317	2.251	13.390	12.430	60.6%	0.138	0.116	0.117
x		0.979	1.320	2.235	2.301	12.630	12.480	60.3%	0.136	0.124	0.118
σ		0.017	0.072	0.071	0.048	0.681	0.071	1.2%	0.008	0.010	0.006
%RSD		1.688	5.431	3.164	2.067	5.388	0.568	2.0	5.991	8.221	5.177

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:04:05	0.099	0.100	50.3%
2	07:04:32	0.115	0.104	52.0%
3	07:04:59	0.111	0.111	52.1%
x		0.109	0.105	51.5%
σ		0.008	0.006	1.0%
%RSD		7.799	5.272	1.9

UD17057-001 04/26/2019 07:09:28

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:09:55	84.2%	0.009	36.330	36.100	978.600	T 66210.000	T 3157.000	3202.000	T 3185.000	T 393.400
2	07:10:22	87.5%	-0.011	34.960	34.640	977.000	T 67370.000	T 3223.000	3292.000	T 3184.000	T 399.300
3	07:10:49	86.6%	-0.029	34.270	33.280	953.600	T 65410.000	T 3109.000	T 3234.000	T 3164.000	T 406.100
x		86.1%	-0.011	35.190	34.670	969.700	T 66330.000	T 3163.000	T 3242.000	T 3178.000	T 399.600
σ		1.7%	0.019	1.052	1.410	14.020	T 984.600	T 57.000	T 45.440	T 12.170	T 6.363
%RSD		2.0	177.800	2.989	4.066	1.446	T 1.484	T 1.802	T 1.401	T 0.383	T 1.592

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:09:55	T 6284.000	T 97170.000	T 27010.000	14710.000	10850.000	67.5%	40.590	0.582	3.290	2313.000
2	07:10:22	T 6463.000	T 100800.000	T 27960.000	14160.000	T 11180.000	70.4%	40.710	0.670	3.129	2472.000
3	07:10:49	T 6168.000	T 100500.000	T 28070.000	14260.000	T 11460.000	71.1%	42.050	0.666	3.268	2384.000
x		T 6305.000	T 99480.000	T 27680.000	14380.000	T 11160.000	69.7%	41.120	0.640	3.229	2390.000
σ		T 148.500	T 1999.000	T 582.400	293.100	T 309.400	1.9%	0.811	0.050	0.087	79.420
%RSD		T 2.356	T 2.009	T 2.104	2.038	T 2.771	2.7	1.971	7.806	2.707	3.323

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:09:55	1154.000	46.630	T 1156.000	1334.000	4.518	6.632	6.484	74.470	77.770	M 540.600
2	07:10:22	1170.000	46.730	T 1133.000	1317.000	4.538	6.657	5.799	74.740	76.650	M 550.000
3	07:10:49	1146.000	45.740	T 1119.000	1281.000	4.435	6.380	5.766	74.200	75.360	M 533.000
x		1157.000	46.370	T 1136.000	1311.000	4.497	6.556	6.016	74.470	76.590	M 541.200
σ		12.300	0.543	T 18.580	26.770	0.055	0.153	0.405	0.267	1.208	M 8.527
%RSD		1.064	1.172	T 1.636	2.042	1.218	2.335	6.735	0.358	1.577	M 1.576

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:09:55	479.600	M 504.000	0.977	2.041	49.020	47.310	6.184	1.692	-4.624	49.010
2	07:10:22	466.500	493.700	0.494	2.871	47.070	50.010	4.039	1.114	-1.568	50.070
3	07:10:49	460.400	489.200	0.172	3.786	45.900	47.480	3.890	1.104	-3.487	49.070
x		468.800	M 495.600	0.548	2.899	47.330	48.270	4.704	1.303	-3.226	49.380
σ		9.814	M 7.602	0.405	0.873	1.574	1.513	1.284	0.337	1.545	0.597
%RSD		2.093	M 1.534	74.020	30.100	3.326	3.134	27.280	25.850	47.880	1.208

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:09:55	73.3%	2.146	2.037	2.007	2.071	0.071	0.081	0.126	0.098	66.3%
2	07:10:22	73.3%	2.206	1.933	2.039	2.803	0.067	0.053	0.097	0.058	65.6%
3	07:10:49	74.5%	2.104	1.918	1.949	2.635	0.061	0.060	0.118	0.156	67.4%
x		73.7%	2.152	1.963	1.998	2.503	0.066	0.065	0.114	0.104	66.4%
σ		0.7%	0.051	0.065	0.046	0.384	0.005	0.015	0.015	0.050	0.9%
%RSD		0.9	2.360	3.294	2.288	15.330	7.543	22.830	12.940	47.730	1.4

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:09:55	2.363	3.175	0.590	0.615	40.990	40.280	63.1%	-0.004	-0.003	1.407
2	07:10:22	2.262	3.250	0.608	0.604	40.880	40.670	63.0%	-0.000	-0.005	1.387
3	07:10:49	2.288	3.275	0.541	0.639	40.810	39.640	64.2%	0.015	-0.006	1.311
x		2.305	3.233	0.579	0.620	40.890	40.190	63.4%	0.004	-0.005	1.368
σ		0.052	0.052	0.035	0.018	0.090	0.523	0.7%	0.010	0.002	0.051
%RSD		2.277	1.610	5.989	2.840	0.220	1.302	1.1	268.700	35.040	3.717

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:09:55	1.388	1.333	68.3%
2	07:10:22	1.344	1.392	68.0%
3	07:10:49	1.357	1.313	69.3%
x		1.363	1.346	68.5%
σ		0.022	0.041	0.7%
%RSD		1.628	3.042	1.0

UD17103-003 04/26/2019 07:15:17

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:44	77.7%	0.014	95.660	101.400	3496.000	T 37710.000	T 11210.000	T 10700.000	T 10310.000	248.100
2	07:16:11	75.2%	0.019	99.940	97.270	3429.000	T 36730.000	T 10610.000	T 10480.000	T 10430.000	253.600
3	07:16:39	84.0%	-0.015	104.800	96.160	3320.000	T 36090.000	T 10510.000	T 10620.000	T 10390.000	243.900
x		78.9%	0.006	100.100	98.290	3415.000	T 36840.000	T 10780.000	T 10600.000	T 10380.000	248.500
σ		4.6%	0.018	4.582	2.787	89.200	T 816.400	T 375.500	T 113.700	T 59.860	4.863
%RSD		5.8	306.000	4.576	2.835	2.612	T 2.216	T 3.485	T 1.072	T 0.577	1.957
Run	**Time**	**28Si**	**35Cl**	**39K**	**43Ca**	**44Ca**	**45Sc**	**47Ti**	**51V**	**52Cr**	**53Cl O**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:44	T 6552.000	T 103000.000	TM 209600.000	TM 180700.000	TM 130500.000	63.8%	40.530	1.947	7.999	2201.000
2	07:16:11	T 6175.000	T 100600.000	TM 216400.000	TM 181600.000	TM 130900.000	63.3%	40.920	1.727	8.094	2162.000
3	07:16:39	T 6439.000	T 103300.000	TM 208300.000	TM 184400.000	TM 124900.000	66.0%	44.210	2.657	8.530	2376.000
x		T 6389.000	T 102300.000	TM 211400.000	TM 182200.000	TM 128800.000	64.4%	41.890	2.110	8.208	2247.000
σ		T 193.600	T 1502.000	TM 4372.000	TM 1906.000	TM 3322.000	1.5%	2.022	0.486	0.283	113.800
%RSD		T 3.031	T 1.468	TM 2.068	TM 1.046	TM 2.580	2.3	4.828	23.040	3.448	5.064
Run	**Time**	**54Fe**	**55Mn**	**56Fe**	**57Fe**	**59Co**	**60Ni**	**62Ni**	**63Cu**	**65Cu**	**66Zn**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:44	463.100	53.930	T 506.200	2125.000	0.550	10.710	8.407	31.380	33.860	155.500
2	07:16:11	461.000	53.370	T 480.800	1868.000	0.498	10.410	8.757	31.700	33.850	157.300
3	07:16:39	469.800	54.420	T 509.800	2288.000	0.595	11.500	9.093	30.870	33.550	156.300
x		464.600	53.910	T 498.900	2094.000	0.548	10.870	8.752	31.320	33.750	156.400
σ		4.629	0.525	T 15.810	211.700	0.048	0.564	0.343	0.414	0.179	0.868
%RSD		0.996	0.974	T 3.170	10.110	8.854	5.191	3.918	1.322	0.531	0.555
Run	**Time**	**67Zn**	**68Zn**	**75As**	**78Se**	**79Br**	**81Br**	**82Kr**	**82Se**	**83Kr**	**88Sr**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:44	134.500	141.800	0.618	2.619	87.470	81.540	1.770	0.506	-2.450	118.100
2	07:16:11	136.100	142.400	0.390	1.722	89.330	84.560	3.340	0.949	-3.116	116.600
3	07:16:39	134.500	137.600	0.222	2.386	92.190	85.530	1.733	0.586	-3.607	116.800
x		135.000	140.600	0.410	2.242	89.660	83.880	2.281	0.680	-3.058	117.200
σ		0.964	2.604	0.199	0.466	2.378	2.082	0.917	0.236	0.581	0.808
%RSD		0.714	1.852	48.480	20.760	2.652	2.483	40.220	34.750	18.990	0.690
Run	**Time**	**89Y**	**95Mo**	**97Mo**	**98Mo**	**106Cd**	**107Ag**	**109Ag**	**111Cd**	**114Cd**	**115In**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:44	67.7%	2.843	2.959	2.803	4.826	0.055	0.070	0.527	0.441	61.1%
2	07:16:11	68.9%	2.941	3.044	2.898	6.860	0.065	0.080	0.515	0.480	60.8%
3	07:16:39	70.8%	2.803	2.750	2.751	9.331	0.066	0.052	0.429	0.464	61.2%
x		69.1%	2.862	2.918	2.818	7.006	0.062	0.067	0.490	0.461	61.0%
σ		1.6%	0.071	0.151	0.074	2.256	0.006	0.014	0.054	0.020	0.2%
%RSD		2.3	2.481	5.188	2.643	32.200	9.794	20.900	10.960	4.272	0.4
Run	**Time**	**116Sn**	**118Sn**	**121Sb**	**123Sb**	**135Ba**	**137Ba**	**159Tb**	**203Tl**	**205Tl**	**206Pb**
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:15:44	0.457	0.443	0.304	0.360	11.620	11.680	59.4%	0.079	0.059	0.575
2	07:16:11	0.463	0.400	0.344	0.375	11.520	11.550	60.2%	0.097	0.058	0.625
3	07:16:39	0.389	0.468	0.364	0.336	11.770	11.380	60.0%	0.080	0.062	0.583
x		0.436	0.437	0.337	0.357	11.640	11.540	59.9%	0.085	0.060	0.594
σ		0.041	0.035	0.031	0.020	0.128	0.150	0.4%	0.010	0.002	0.027
%RSD		9.421	7.926	9.117	5.525	1.096	1.300	0.6	11.350	3.604	4.495
Run	**Time**	**207Pb**	**208Pb**	**209Bi**							
		ppb	ppb	ppb							
1	07:15:44	0.496	0.532	51.4%							
2	07:16:11	0.458	0.530	53.0%							
3	07:16:39	0.564	0.535	52.5%							
x		0.506	0.532	52.3%							
σ		0.054	0.003	0.8%							
%RSD		10.610	0.487	1.5							

UD16047-001 04/26/2019 07:21:07

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:35	82.0%	-0.015	25.410	23.970	107.300	T38260.000	T2302.000	2334.000	2322.000	44.190
2	07:22:01	T102.5%	0.004	23.780	23.130	86.240	T37070.000	T2187.000	2297.000	2281.000	37.610
3	07:22:28	82.6%	0.004	25.070	23.000	92.790	T37860.000	T2201.000	2236.000	2215.000	T58.820
x		T89.0%	-0.002	24.760	23.370	95.440	T37730.000	T2230.000	2289.000	2273.000	T46.870
σ		T11.7%	0.011	0.862	0.526	10.780	T608.900	T62.490	49.840	54.000	T10.860
%RSD		T13.1	492.200	3.483	2.249	11.290	T1.614	T2.802	2.177	2.376	T23.170

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:35	T4496.000	T94960.000	T2007.000	6782.000	5542.000	70.8%	2.172	0.279	0.817	2153.000
2	07:22:01	T4454.000	T91480.000	T1699.000	6720.000	4650.000	74.8%	2.276	-0.023	0.789	2658.000
3	07:22:28	T4271.000	T91910.000	T2030.000	6633.000	5442.000	71.7%	2.318	-0.054	0.838	2203.000
x		T4407.000	T92780.000	T1912.000	6712.000	5212.000	72.4%	2.255	0.067	0.815	2338.000
σ		T119.800	T1899.000	T184.900	74.670	488.400	2.1%	0.075	0.184	0.025	278.500
%RSD		T2.719	T2.046	T9.669	1.113	9.372	2.9	3.334	274.200	3.035	11.910

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:35	72.030	2.479	84.900	137.600	0.029	1.429	1.795	3.887	4.040	28.900
2	07:22:01	69.060	2.390	79.910	143.100	0.007	1.360	1.486	3.826	3.891	28.490
3	07:22:28	65.610	2.515	79.920	132.900	0.040	1.410	1.100	3.908	3.942	28.830
x		68.900	2.462	81.570	137.900	0.026	1.399	1.460	3.873	3.958	28.740
σ		3.211	0.064	2.881	5.107	0.017	0.036	0.348	0.043	0.075	0.222
%RSD		4.660	2.609	3.532	3.704	66.670	2.546	23.830	1.098	1.903	0.773

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:35	23.880	27.400	0.045	1.829	26.860	26.290	-1.004	-0.099	-3.392	44.780
2	07:22:01	25.260	25.630	0.011	1.525	25.760	26.340	-1.433	-0.267	-0.600	44.390
3	07:22:28	26.730	26.360	-0.332	1.722	26.110	27.680	3.147	0.879	-0.616	45.040
x		25.290	26.460	-0.092	1.692	26.240	26.770	0.237	0.171	-1.536	44.740
σ		1.426	0.889	0.208	0.154	0.558	0.786	2.530	0.619	1.607	0.324
%RSD		5.639	3.358	226.300	9.116	2.127	2.937	1068.000	361.500	104.600	0.724

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:35	70.5%	0.247	0.248	0.196	3.398	0.004	0.003	0.024	0.039	64.3%
2	07:22:01	73.1%	0.246	0.286	0.210	3.960	0.007	0.003	0.017	0.011	66.0%
3	07:22:28	71.6%	0.263	0.280	0.191	4.120	0.006	0.003	0.042	0.013	64.9%
x		71.7%	0.252	0.271	0.199	3.826	0.006	0.003	0.028	0.021	65.1%
σ		1.3%	0.009	0.020	0.010	0.379	0.002	0.000	0.013	0.016	0.8%
%RSD		1.8	3.695	7.513	4.968	9.906	32.370	1.618	45.560	76.400	1.3

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:21:35	0.285	0.465	0.085	0.104	17.350	17.130	60.7%	-0.010	-0.013	0.125
2	07:22:01	0.323	0.350	0.080	0.072	16.740	16.720	61.6%	-0.002	-0.015	0.173
3	07:22:28	0.280	0.399	0.094	0.092	17.550	16.370	61.5%	-0.012	-0.017	0.126
x		0.296	0.405	0.086	0.089	17.210	16.740	61.3%	-0.008	-0.015	0.141
σ		0.024	0.058	0.007	0.016	0.424	0.377	0.5%	0.006	0.002	0.027
%RSD		8.078	14.300	8.178	17.900	2.460	2.251	0.8	70.690	13.180	19.160

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:21:35	0.207	0.156	55.7%
2	07:22:01	0.163	0.153	55.4%
3	07:22:28	0.158	0.153	56.4%
x		0.176	0.154	55.8%
σ		0.027	0.002	0.5%
%RSD		15.180	1.027	0.9

CCV MW10994 04/26/2019 07:26:55 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:27:23	75.2%	333.400	313.700	320.500	73.470	T 69480.000	T 62750.000	T 63190.000	T 60750.000	298.400
2	07:27:50	74.2%	349.400	328.700	320.900	69.510	T 70040.000	T 64410.000	T 63510.000	T 62540.000	306.700
3	07:28:17	79.7%	316.700	303.800	311.100	59.470	T 70690.000	T 63390.000	T 62370.000	T 60470.000	295.100
x		76.4%	111.056%	105.134%	105.833%	67.480	T 116.784%	T 63520.000	T 63030.000	T 102.086%	100.024%
σ		3.0%	n/a	n/a	n/a	7.218	T n/a	T 833.700	T 587.200	T n/a	n/a
%RSD		3.9	4.910	3.965	1.737	10.700	T 0.866	T 1.313	T 0.932	T 1.841	2.004

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:27:23	T 3616.000	1538.000	T 56400.000	66720.000	T 55080.000	67.9%	343.700	344.800	321.100	1396.000
2	07:27:50	T 3558.000	1481.000	T 58130.000	65660.000	T 56510.000	68.5%	332.800	342.400	313.500	3514.000
3	07:28:17	T 3595.000	1487.000	T 56320.000	65700.000	T 55470.000	71.5%	339.400	331.900	309.200	2504.000
x		T 119.648%	1502.000	T 94.917%	66030.000	T 92.812%	69.3%	112.878%	113.234%	104.861%	2471.000
σ		T n/a	31.370	T n/a	604.700	T n/a	1.9%	n/a	n/a	n/a	1059.000
%RSD		T 0.814	2.089	T 1.796	0.916	T 1.327	2.8	1.607	2.029	1.915	42.860

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:27:23	T 63610.000	314.100	T 63770.000	T 63390.000	319.400	314.800	316.300	310.400	308.400	338.700
2	07:27:50	T 64900.000	315.900	T 64800.000	T 64360.000	311.300	312.300	314.900	304.900	303.500	332.000
3	07:28:17	T 63180.000	306.100	T 63680.000	T 64100.000	312.200	314.000	311.200	301.100	295.500	327.900
x		T 63900.000	104.013%	T 64080.000	T 106.583%	104.774%	104.565%	314.100	305.500	100.819%	110.957%
σ		T 894.500	n/a	T 624.300	T n/a	n/a	n/a	2.590	4.666	n/a	n/a
%RSD		T 1.400	1.665	T 0.974	T 0.790	1.418	0.408	0.824	1.528	2.153	1.641

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:27:23	299.600	303.200	328.200	360.300	4.528	3.316	1399.000	361.200	-0.028	321.300
2	07:27:50	304.800	305.400	327.400	347.800	3.580	4.956	1338.000	339.800	-0.973	325.800
3	07:28:17	296.600	291.000	309.900	349.800	3.931	4.049	1357.000	345.400	2.012	329.500
x		300.300	299.900	107.274%	352.600	4.013	4.107	1365.000	116.264%	0.337	108.507%
σ		4.127	7.763	n/a	6.724	0.480	0.821	30.960	n/a	1.525	n/a
%RSD		1.374	2.589	3.221	1.907	11.950	20.000	2.268	3.192	452.600	1.261

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:27:23	65.7%	330.600	320.500	328.700	306.700	315.200	314.300	314.200	313.900	58.4%
2	07:27:50	66.3%	331.700	321.800	330.100	313.800	311.300	310.700	311.700	310.500	59.9%
3	07:28:17	66.5%	330.400	326.100	333.300	324.200	312.800	312.000	309.700	308.700	60.4%
x		66.1%	110.312%	107.606%	330.700	314.900	104.363%	312.300	311.900	103.670%	59.6%
σ		0.4%	n/a	n/a	2.341	8.809	n/a	1.828	2.290	n/a	1.0%
%RSD		0.7	0.210	0.901	0.708	2.797	0.639	0.585	0.734	0.854	1.8

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:27:23	325.900	328.300	326.100	334.700	328.700	326.500	56.8%	297.100	300.800	293.000
2	07:27:50	324.400	324.400	324.100	338.000	328.600	321.800	57.5%	295.300	299.600	292.100
3	07:28:17	322.900	327.600	319.400	335.300	329.000	324.200	57.9%	297.700	300.700	290.600
x		108.137%	108.924%	323.200	112.005%	109.591%	108.049%	57.4%	296.700	100.128%	97.302%
σ		n/a	n/a	3.471	n/a	n/a	n/a	0.6%	1.209	n/a	n/a
%RSD		0.475	0.631	1.074	0.513	0.071	0.726	1.0	0.407	0.219	0.418

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:27:23	290.800	290.900	49.9%
2	07:27:50	290.800	289.800	51.1%
3	07:28:17	290.500	289.900	50.9%
x		96.906%	96.724%	50.6%
σ		n/a	n/a	0.7%
%RSD		0.056	0.214	1.3

CCB IM9370-01 04/26/2019 07:32:47 QC Status: FAIL (Initial: FAIL)

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:33:13	T 99.7%	0.031	3.325	3.713	42.130	27.430	7.114	7.521	6.961	0.068
2	07:34:40	87.7%	0.011	3.714	3.120	42.960	24.380	5.605	6.019	4.909	0.062
3	07:34:07	88.2%	0.005	3.149	3.223	48.110	21.500	5.200	4.974	4.960	0.063
x		T 91.9%	0.016	3.396	3.352	44.400	24.440	5.973	6.171	5.610	0.065
σ		T 6.8%	0.014	0.289	0.317	3.236	2.966	1.009	1.281	1.170	0.003
%RSD		T 7.4	88.360	8.518	9.448	7.288	12.140	16.890	20.750	20.860	5.276

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:33:13	20.350	1050.000	4.081	8.707	6.214	71.8%	-0.360	0.014	0.118	76.740
2	07:34:40	20.410	1040.000	18.840	2.853	4.280	72.0%	-0.334	0.020	0.083	55.870
3	07:34:07	19.280	1053.000	9.161	5.615	4.160	70.7%	-0.384	0.026	0.050	46.460
x		20.010	1048.000	10.690	5.725	4.885	71.5%	-0.359	0.020	0.084	59.690
σ		0.638	6.723	7.497	2.928	1.153	0.7%	0.025	0.006	0.034	15.500
%RSD		3.189	0.642	70.110	51.150	23.600	1.0	6.908	30.440	40.280	25.960

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:33:13	14.260	0.085	27.140	31.250	-0.011	-0.017	0.341	-0.015	0.024	0.008
2	07:34:40	11.170	0.099	28.490	29.090	-0.010	-0.030	0.089	-0.045	0.001	0.070
3	07:34:07	7.981	0.052	27.080	29.290	-0.008	-0.006	0.296	-0.049	0.014	0.021
x		11.140	0.079	27.570	29.880	-0.010	-0.018	0.242	-0.037	0.013	0.033
σ		3.138	0.024	0.798	1.192	0.002	0.012	0.134	0.019	0.012	0.033
%RSD		28.180	30.720	2.895	3.989	17.240	70.130	55.490	51.170	86.440	99.120

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:33:13	-0.193	0.083	-0.055	2.639	1.883	3.191	-0.352	0.037	-1.307	0.037
2	07:34:40	-0.221	0.034	-0.047	0.948	1.580	2.819	-0.632	0.021	-3.766	0.032
3	07:34:07	-0.301	0.048	0.033	1.549	2.162	3.345	2.129	0.690	-4.013	0.018
x		-0.238	0.055	-0.023	1.712	1.875	3.118	0.382	0.249	-3.029	0.029
σ		0.056	0.025	0.049	0.857	0.291	0.271	1.520	0.381	1.496	0.010
%RSD		23.500	46.000	213.100	50.050	15.520	8.675	397.800	152.900	49.410	34.170

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:33:13	68.5%	0.144	0.124	0.112	-0.363	0.036	0.044	0.037	0.035	63.0%
2	07:34:40	68.5%	0.159	0.086	0.113	0.993	0.032	0.046	0.062	0.028	63.6%
3	07:34:07	68.5%	0.147	0.093	0.087	-0.111	0.017	0.022	0.019	0.016	64.1%
x		68.5%	0.150	0.101	0.104	0.173	0.028	0.037	0.039	0.026	63.6%
σ		0.1%	0.008	0.020	0.015	0.721	0.010	0.013	0.022	0.010	0.6%
%RSD		0.1	5.350	20.000	14.000	416.900	35.520	34.890	54.840	36.370	0.9

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:33:13	0.112	0.102	0.178	0.183	0.065	-0.007	59.1%	0.020	0.021	0.034
2	07:34:40	0.123	0.131	0.126	0.155	-0.024	-0.017	58.4%	0.022	0.016	0.034
3	07:34:07	0.066	0.101	0.132	0.193	0.002	-0.032	59.1%	0.029	0.020	0.029
x		0.101	0.111	0.145	0.177	0.014	-0.019	58.9%	0.024	0.019	0.032
σ		0.030	0.017	0.028	0.020	0.046	0.013	0.4%	0.005	0.003	0.003
%RSD		30.120	15.330	19.490	11.280	319.500	69.300	0.6	20.710	14.220	8.758

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:33:13	0.019	0.030	54.6%
2	07:34:40	0.017	0.021	54.6%
3	07:34:07	0.022	0.029	55.6%
x		0.019	0.027	54.9%
σ		0.003	0.005	0.6%
%RSD		12.960	19.040	1.1

UQ14280-001 04/26/2019 07:38:33

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:39:01	86.9%	0.033	2.216	2.462	62.110	19.080	3.547	3.080	3.230	1.838
2	07:39:28	T 102.4%	0.001	2.270	2.397	64.480	27.920	3.371	3.196	3.064	1.680
3	07:39:55	83.1%	-0.021	2.654	2.518	67.210	11.080	3.164	2.741	2.781	1.837
x		T 90.8%	0.004	2.380	2.459	64.600	19.360	3.360	3.006	3.025	1.785
σ		T 10.2%	0.027	0.239	0.061	2.552	8.428	0.192	0.236	0.227	0.091
%RSD		T 11.3	625.900	10.030	2.461	3.951	43.530	5.706	7.862	7.507	5.078

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:39:01	24.380	T 93450.000	5.438	16.330	4.878	70.2%	-0.161	-0.202	0.483	2269.000
2	07:39:28	24.460	T 93430.000	-4.577	6.884	4.948	70.8%	-0.177	0.214	0.464	2269.000
3	07:39:55	22.720	T 89400.000	-1.443	6.568	5.324	68.5%	-0.248	-0.144	0.373	1945.000
x		23.850	T 92090.000	-0.194	9.928	5.050	69.8%	-0.195	-0.044	0.440	2161.000
σ		0.981	T 2331.000	5.123	5.549	0.240	1.2%	0.046	0.225	0.059	187.200
%RSD		4.111	T 2.532	2643.000	55.890	4.750	1.7	23.590	510.600	13.330	8.664

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:39:01	7.889	0.147	26.210	19.390	-0.030	0.029	0.609	0.014	0.021	0.340
2	07:39:28	7.542	0.138	26.160	20.970	-0.029	0.011	-0.228	0.019	0.055	0.439
3	07:39:55	5.008	0.121	19.190	9.473	-0.022	0.049	-0.533	0.002	0.020	0.426
x		6.813	0.135	23.850	16.610	-0.027	0.030	-0.051	0.012	0.032	0.401
σ		1.573	0.013	4.038	6.230	0.004	0.019	0.591	0.009	0.020	0.054
%RSD		23.080	9.761	16.930	37.510	16.120	64.270	1163.000	72.900	62.100	13.460

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:39:01	0.088	0.514	-0.259	1.765	2.383	4.687	-0.307	0.003	-0.680	0.022
2	07:39:28	0.157	0.385	0.080	2.083	2.805	3.649	0.336	0.258	-3.122	0.026
3	07:39:55	0.002	0.393	0.269	2.152	2.807	3.025	2.798	0.948	-6.285	0.024
x		0.082	0.431	0.030	2.000	2.665	3.787	0.942	0.403	-3.362	0.024
σ		0.077	0.072	0.267	0.207	0.244	0.840	1.639	0.489	2.811	0.002
%RSD		93.930	16.700	887.700	10.320	9.163	22.180	174.000	121.200	83.590	8.227

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:39:01	68.0%	0.025	0.062	0.046	-0.727	0.002	0.016	0.007	0.002	64.1%
2	07:39:28	70.5%	0.063	0.041	0.039	-0.420	0.004	0.013	0.013	-0.001	64.2%
3	07:39:55	70.4%	0.067	0.047	0.040	-1.057	0.006	0.011	-0.005	0.004	64.0%
x		69.6%	0.052	0.050	0.042	-0.735	0.004	0.013	0.005	0.002	64.1%
σ		1.4%	0.023	0.011	0.004	0.319	0.002	0.002	0.009	0.003	0.1%
%RSD		2.0	44.170	21.760	8.899	43.360	48.030	15.700	197.700	163.700	0.1

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:39:01	0.277	0.448	0.112	0.081	0.149	0.107	59.4%	-0.008	-0.010	0.013
2	07:39:28	0.382	0.444	0.104	0.125	0.140	0.037	61.1%	-0.001	-0.015	0.019
3	07:39:55	0.319	0.436	0.080	0.115	0.167	0.072	60.0%	-0.005	-0.012	0.008
x		0.326	0.443	0.099	0.107	0.152	0.072	60.2%	-0.005	-0.012	0.013
σ		0.053	0.006	0.017	0.023	0.014	0.035	0.9%	0.003	0.002	0.005
%RSD		16.210	1.359	16.930	21.530	8.872	48.260	1.5	71.100	20.460	42.000

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:39:01	0.003	0.009	56.1%
2	07:39:28	0.013	0.008	57.0%
3	07:39:55	0.006	0.002	57.1%
x		0.007	0.006	56.8%
σ		0.005	0.004	0.5%
%RSD		69.480	56.790	1.0

UQ14280-002 04/26/2019 07:44:19

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:44:46	84.5%	109.100	107.200	103.400	69.190	T1219.000	T1083.000	1094.000	1095.000	98.900
2	07:45:13	T101.9%	101.600	108.200	103.400	60.180	T1282.000	T1098.000	1105.000	1103.000	85.680
3	07:45:40	87.7%	106.500	112.400	106.400	75.140	T1247.000	T1079.000	1117.000	1101.000	95.370
x		T91.4%	105.700	109.200	104.400	68.170	T1249.000	T1087.000	1106.000	1100.000	93.320
σ		T9.2%	3.787	2.784	1.756	7.531	T31.250	T9.998	11.580	4.155	6.849
%RSD		T10.1	3.582	2.549	1.682	11.050	T2.502	T0.920	1.047	0.378	7.339

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:44:46	T1158.000	T91260.000	T902.400	1164.000	894.100	69.8%	111.700	110.500	107.200	2182.000
2	07:45:13	T1197.000	T94610.000	T797.200	1255.000	786.600	71.5%	115.000	111.100	107.900	3614.000
3	07:45:40	T1183.000	T95460.000	T924.900	1265.000	907.500	70.7%	114.000	110.900	109.300	3469.000
x		T1179.000	T93780.000	T874.800	1228.000	862.700	70.7%	113.600	110.800	108.200	3088.000
σ		T19.960	T2217.000	T68.170	55.310	66.270	0.9%	1.687	0.319	1.067	788.400
%RSD		T1.693	T2.364	T7.793	4.504	7.681	1.2	1.485	0.288	0.987	25.530

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:44:46	1210.000	105.700	T1131.000	1136.000	107.100	110.500	107.800	110.600	109.600	113.100
2	07:45:13	1200.000	106.200	T1140.000	1142.000	108.700	109.100	114.500	110.900	112.400	113.300
3	07:45:40	1199.000	106.100	T1125.000	1135.000	107.200	113.000	112.000	108.100	108.800	113.900
x		1203.000	106.000	T1132.000	1138.000	107.600	110.900	111.400	109.900	110.300	113.400
σ		6.079	0.264	T7.626	3.952	0.906	1.988	3.421	1.502	1.903	0.433
%RSD		0.505	0.249	T0.674	0.347	0.842	1.793	3.070	1.367	1.726	0.381

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:44:46	105.100	105.400	111.700	126.500	3.308	4.956	470.300	118.200	-1.192	107.400
2	07:45:13	103.200	104.000	107.900	121.400	3.231	4.990	465.700	117.900	-4.656	106.700
3	07:45:40	103.200	104.900	110.300	121.600	2.930	4.371	505.400	126.900	-2.103	108.000
x		103.800	104.800	110.000	123.200	3.157	4.772	480.500	121.000	-2.650	107.400
σ		1.076	0.724	1.938	2.900	0.200	0.348	21.750	5.095	1.795	0.647
%RSD		1.037	0.691	1.762	2.354	6.328	7.290	4.528	4.212	67.750	0.603

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:44:46	67.8%	105.200	103.600	104.000	103.700	108.000	106.500	103.400	104.600	62.0%
2	07:45:13	69.6%	105.000	101.100	103.200	108.700	107.000	106.500	103.800	103.800	63.1%
3	07:45:40	68.4%	105.400	103.100	103.000	97.120	107.200	108.000	103.900	105.500	62.7%
x		68.6%	105.200	102.600	103.400	103.200	107.400	107.000	103.700	104.600	62.6%
σ		0.9%	0.230	1.295	0.538	5.827	0.528	0.863	0.247	0.858	0.6%
%RSD		1.3	0.218	1.262	0.520	5.647	0.492	0.806	0.238	0.820	1.0

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
1	07:44:46	107.500	107.300	103.200	109.500	106.700	105.700	58.3%	95.900	96.880	100.500
2	07:45:13	108.300	106.400	102.600	110.500	107.400	107.900	58.7%	97.200	98.350	102.000
3	07:45:40	107.400	107.600	104.600	110.500	107.500	106.900	58.6%	97.980	99.570	100.400
x		107.700	107.100	103.500	110.100	107.200	106.800	58.6%	97.030	98.260	101.000
σ		0.503	0.626	1.013	0.561	0.430	1.145	0.2%	1.050	1.348	0.897
%RSD		0.467	0.585	0.979	0.510	0.401	1.071	0.4	1.082	1.372	0.889

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
1	07:44:46	102.000	100.300	53.8%
2	07:45:13	101.000	100.100	53.8%
3	07:45:40	101.800	100.000	53.2%
x		101.600	100.100	53.6%
σ		0.542	0.126	0.3%
%RSD		0.533	0.126	0.6

UD18064-001(5) 04/26/2019 07:50:06

User Pre-dilution: 1.000

Run	Time	6Li	9Be	10B	11B	13C	23Na	24Mg	25Mg	26Mg	27Al
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
x											
σ											
%RSD											

Run	Time	28Si	35Cl	39K	43Ca	44Ca	45Sc	47Ti	51V	52Cr	53Cl O
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
x											
σ											
%RSD											

Run	Time	54Fe	55Mn	56Fe	57Fe	59Co	60Ni	62Ni	63Cu	65Cu	66Zn
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
x											
σ											
%RSD											

Run	Time	67Zn	68Zn	75As	78Se	79Br	81Br	82Kr	82Se	83Kr	88Sr
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
x											
σ											
%RSD											

Run	Time	89Y	95Mo	97Mo	98Mo	106Cd	107Ag	109Ag	111Cd	114Cd	115In
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
x											
σ											
%RSD											

Run	Time	116Sn	118Sn	121Sb	123Sb	135Ba	137Ba	159Tb	203Tl	205Tl	206Pb
		ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb	ppb
x											
σ											
%RSD											

Run	Time	207Pb	208Pb	209Bi
		ppb	ppb	ppb
x				
σ				
%RSD				

Performance Report

Raw Supportive Data

Analyst: JMH **Level 2 Analyst:** NJT

Status: Level 2 review released

Matrix: Aqueous

Printed: 05/07/19 1011

Prep Batch: 13657

3005A - Total Recoverable Acid Digestion (ICP-MS) Linked: 6020A,6020B and

Start Date: 04/17/2019 1825

End Date: 04/17/2019 2325

Digestion Cup ID: 19-651

Ext Solvent: 1:1 HNO3/1:1 HCl

Reagents Vol. (mL): 1.0, 0.5

Chem ID: IM9360-01, IM9361-01

Hot Block ID: Hot Block #4

Thermometer ID: 1136

Start Temperature (°C): 97

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
UQ13657-001	MB	PBW	1	6020B	50		0.0	50			LCS/MS/MSD Pipet ID: 315
UQ13657-002	LCS	LCS	1	6020B	50	19-22K (1/02/20)	0.5	50			
UD10056-002	Sample	5W5B	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-003	Sample	5W7B	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-003MS	MS	5W7BS	1	6020B	50	19-22K (1/02/20)	0.5	50			
UD10056-003MD	MSD	5W7BSD	1	6020B	50	19-22K (1/02/20)	0.5	50			
UD10056-004	Sample	5WC21	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-005	Sample	5WDUP	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-006	Sample	5WC22	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-007	Sample	5WC23	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-001	Sample	5W8B	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	
UD10056-008	Sample	5W12A	1	6020B	50		0.0	50	10/06/2019 2359	04/19/2019	

(end of report) **Total Samples: 8**

Mercury

- COVER PAGE -
INORGANIC ANALYSIS DATA PACKAGE

Client: Draper Aden Associates

SDG No.: UD10056 **Method Type:** CVAA **SOW No.:**

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Lab Sample ID	Client Sample ID	QC Description
UD10056-002	5W5B	
UD10056-003	5W7B	
UD10056-003S	5W7BS	Matrix Spike
UD10056-003SD	5W7BSD	Matrix Spike Duplicate
UD10056-004	5WC21	
UD10056-005	5WDUP	
UD10056-006	5WC22	
UD10056-007	5WC23	

Were ICP interelement corrections applied?	Yes/No	Yes	
Were ICP background corrections applied?	Yes/No	Yes	
If yes - were raw data generated before applications of background corrections?	Yes/No	No	

Comments:

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed above. Release of the data contained in this hardcopy data package and in the computer-readable data submitted on diskette has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Signature: Name:

Date: Title:

- 2a -

INITIAL AND CONTINUING CALIBRATION VERIFICATION

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Initial Calibration Source: VHG

Continuing Calibration Source: Inorganic Ventures

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Acceptance Window (%R)	M	Analysis Date	Analysis Time	Run Number
ICV1	Mercury	2.033000	2.000000	102	90.0 - 110.0	CV	4/17/2019	18:56	HG4041719
CCV1	Mercury	1.936000	2.000000	97	80.0 - 120.0	CV	4/17/2019	19:03	HG4041719
CCV2	Mercury	2.042500	2.000000	102	80.0 - 120.0	CV	4/18/2019	02:07	HG4041719
CCV3	Mercury	2.015300	2.000000	101	80.0 - 120.0	CV	4/18/2019	02:37	HG4041719
CCV4	Mercury	2.039300	2.000000	102	80.0 - 120.0	CV	4/18/2019	03:08	HG4041719

- 2b -
CRDL STANDARD FOR AA & ICP

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No:** **SAS No.:**

AA CRDL Standard Source:

ICP CRDL Standard Source:

Sample ID	Analyte	Result ug/L	True Value ug/L	% Recovery	Advisory Limits (%R)	M	Analysis Date	Analysis Time	Run Number
LLCCV 19HG0567									
	Mercury	0.197700	0.200000	99	50 - 150	CV	4/17/2019	19:01	HG4041719

- 3a -

INITIAL AND CONTINUING CALIBRATION BLANK SUMMARY

Client: Draper Aden Associates **SDG No.:** UD10056

Contract: RAAP HWMU5 **Lab Code:** Shealy **Case No.:** **SAS No.:**

Sample ID	Analyte	Result ug/L	Acceptance Limit	Conc Qual	DL	LOQ	M	Analysis Date	Analysis Time	Run
ICB1	Mercury	-0.004000	+/-0.200000	U	0.120000	0.200000	CV	4/17/2019	18:58	HG4041719
CCB1	Mercury	-0.024100	+/-0.200000	U	0.120000	0.200000	CV	4/17/2019	19:06	HG4041719
CCB2	Mercury	0.008700	+/-0.200000	U	0.120000	0.200000	CV	4/18/2019	02:09	HG4041719
CCB3	Mercury	0.010000	+/-0.200000	U	0.120000	0.200000	CV	4/18/2019	02:40	HG4041719
CCB4	Mercury	-0.004000	+/-0.200000	U	0.120000	0.200000	CV	4/18/2019	03:10	HG4041719

9-IN

METHOD DETECTION LIMITS (MDL) (ANNUALLY)

Lab Name: Shealy Environmental Services, I Contract: RAAP HWMU5

Lab Code: Shealy Case No.: Mod. Ref. No.: SDG No.: UD10056

Instrument Type: CV Instrument ID: Hg4

Preparation Method: 7470A

Concentration Units (ug/L, mg/kg, or ug): UG/L

Analyte	Wavelength/Mass	MDL
Mercury	253.70	0.120000

Comments:

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: Hg4 Run Number: HG4041719

Start Date: 4/17/2019 End Date: 4/18/2019

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
S0 19HG0565	1.00	1841																X									
S01 19HG0566	1.00	1843																X									
S02 19HG0567	1.00	1846																X									
S03 19HG0568	1.00	1848																X									
S04 19HG0569	1.00	1851																X									
S05 19HG0570	1.00	1853																X									
ICV1	1.00	1856																X									
ICB1	1.00	1858																X									
LLCCV 19HG0567	1.00	1901																X									
CCV1	1.00	1903																X									
CCB1	1.00	1906																X									
ZZZZZZ	1.00	1908																									
ZZZZZZ	1.00	1911																									
ZZZZZZ	1.00	1913																									
ZZZZZZ	1.00	1916																									
ZZZZZZ	1.00	1918																									
ZZZZZZ	1.00	1921																									
ZZZZZZ	1.00	1923																									
ZZZZZZ	1.00	1926																									
ZZZZZZ	1.00	1928																									
ZZZZZZ	1.00	1931																									
ZZZZZZ	1.00	1933																									
ZZZZZZ	1.00	1936																									
ZZZZZZ	1.00	1938																									
ZZZZZZ	1.00	1941																									
ZZZZZZ	1.00	1943																									
ZZZZZZ	1.00	1946																									
ZZZZZZ	1.00	1948																									
ZZZZZZ	1.00	1951																									
ZZZZZZ	1.00	1953																									
ZZZZZZ	1.00	1956																									
ZZZZZZ	1.00	1958																									
ZZZZZZ	1.00	2001																									
ZZZZZZ	1.00	2004																									
ZZZZZZ	1.00	2006																									
ZZZZZZ	1.00	2009																									

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: Hg4 Run Number: HG4041719

Start Date: 4/17/2019 End Date: 4/18/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2011																								
ZZZZZZ	1.00	2014																								
ZZZZZZ	1.00	2016																								
ZZZZZZ	1.00	2019																								
ZZZZZZ	1.00	2021																								
ZZZZZZ	1.00	2024																								
ZZZZZZ	1.00	2026																								
ZZZZZZ	1.00	2029																								
ZZZZZZ	1.00	2031																								
ZZZZZZ	1.00	2034																								
ZZZZZZ	1.00	2036																								
ZZZZZZ	1.00	2039																								
ZZZZZZ	1.00	2041																								
ZZZZZZ	1.00	2044																								
ZZZZZZ	1.00	2046																								
ZZZZZZ	1.00	2049																								
ZZZZZZ	1.00	2051																								
ZZZZZZ	1.00	2054																								
ZZZZZZ	1.00	2056																								
ZZZZZZ	1.00	2059																								
ZZZZZZ	1.00	2101																								
ZZZZZZ	1.00	2104																								
ZZZZZZ	1.00	2106																								
ZZZZZZ	1.00	2109																								
ZZZZZZ	1.00	2112																								
ZZZZZZ	1.00	2114																								
ZZZZZZ	1.00	2117																								
ZZZZZZ	1.00	2119																								
ZZZZZZ	1.00	2122																								
ZZZZZZ	1.00	2124																								
ZZZZZZ	1.00	2127																								
ZZZZZZ	1.00	2129																								
ZZZZZZ	1.00	2132																								
ZZZZZZ	1.00	2134																								
ZZZZZZ	1.00	2137																								
ZZZZZZ	1.00	2139																								

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: Hg4 Run Number: HG4041719

Start Date: 4/17/2019 End Date: 4/18/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2142																								
ZZZZZZ	1.00	2144																								
ZZZZZZ	1.00	2147																								
ZZZZZZ	1.00	2149																								
ZZZZZZ	1.00	2152																								
ZZZZZZ	1.00	2154																								
ZZZZZZ	1.00	2157																								
ZZZZZZ	1.00	2200																								
ZZZZZZ	1.00	2202																								
ZZZZZZ	1.00	2205																								
ZZZZZZ	1.00	2207																								
ZZZZZZ	1.00	2210																								
ZZZZZZ	1.00	2212																								
ZZZZZZ	1.00	2215																								
ZZZZZZ	1.00	2217																								
ZZZZZZ	1.00	2220																								
ZZZZZZ	1.00	2222																								
ZZZZZZ	1.00	2225																								
ZZZZZZ	1.00	2227																								
ZZZZZZ	1.00	2230																								
ZZZZZZ	1.00	2232																								
ZZZZZZ	1.00	2235																								
ZZZZZZ	1.00	2237																								
ZZZZZZ	1.00	2240																								
ZZZZZZ	1.00	2242																								
ZZZZZZ	1.00	2245																								
ZZZZZZ	1.00	2247																								
ZZZZZZ	1.00	2250																								
ZZZZZZ	1.00	2252																								
ZZZZZZ	1.00	2255																								
ZZZZZZ	1.00	2257																								
ZZZZZZ	1.00	2300																								
ZZZZZZ	1.00	2303																								
ZZZZZZ	1.00	2305																								
ZZZZZZ	1.00	2308																								
ZZZZZZ	1.00	2310																								

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: Hg4 Run Number: HG4041719

Start Date: 4/17/2019 End Date: 4/18/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	2313																								
ZZZZZZ	1.00	2315																								
ZZZZZZ	1.00	2318																								
ZZZZZZ	1.00	2320																								
ZZZZZZ	1.00	2323																								
ZZZZZZ	1.00	2325																								
ZZZZZZ	1.00	2328																								
ZZZZZZ	1.00	2330																								
ZZZZZZ	1.00	2333																								
ZZZZZZ	1.00	2335																								
ZZZZZZ	1.00	2338																								
ZZZZZZ	1.00	2340																								
ZZZZZZ	1.00	2343																								
ZZZZZZ	1.00	2345																								
ZZZZZZ	1.00	2348																								
ZZZZZZ	1.00	2350																								
ZZZZZZ	1.00	2353																								
ZZZZZZ	1.00	2356																								
ZZZZZZ	1.00	2358																								
ZZZZZZ	1.00	0001																								
ZZZZZZ	1.00	0003																								
ZZZZZZ	1.00	0006																								
ZZZZZZ	1.00	0008																								
ZZZZZZ	1.00	0011																								
ZZZZZZ	1.00	0013																								
ZZZZZZ	1.00	0016																								
ZZZZZZ	1.00	0018																								
ZZZZZZ	1.00	0021																								
ZZZZZZ	1.00	0023																								
ZZZZZZ	1.00	0026																								
ZZZZZZ	1.00	0028																								
ZZZZZZ	1.00	0031																								
ZZZZZZ	1.00	0033																								
ZZZZZZ	1.00	0036																								
ZZZZZZ	1.00	0038																								
ZZZZZZ	1.00	0041																								

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: Hg4 Run Number: HG4041719

Start Date: 4/17/2019 End Date: 4/18/2019

EPA Sample No.	D/F	Time	% R	Analytes																								
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	0043																										
ZZZZZZ	1.00	0046																										
ZZZZZZ	1.00	0048																										
ZZZZZZ	1.00	0051																										
ZZZZZZ	1.00	0054																										
ZZZZZZ	1.00	0056																										
ZZZZZZ	1.00	0059																										
ZZZZZZ	1.00	0101																										
ZZZZZZ	1.00	0104																										
ZZZZZZ	1.00	0106																										
ZZZZZZ	1.00	0109																										
ZZZZZZ	1.00	0111																										
ZZZZZZ	1.00	0114																										
ZZZZZZ	1.00	0116																										
ZZZZZZ	1.00	0119																										
ZZZZZZ	1.00	0121																										
ZZZZZZ	1.00	0124																										
ZZZZZZ	1.00	0126																										
ZZZZZZ	1.00	0129																										
ZZZZZZ	1.00	0131																										
ZZZZZZ	1.00	0134																										
ZZZZZZ	1.00	0137																										
ZZZZZZ	1.00	0139																										
ZZZZZZ	1.00	0142																										
ZZZZZZ	1.00	0144																										
ZZZZZZ	1.00	0147																										
ZZZZZZ	1.00	0149																										
ZZZZZZ	1.00	0152																										
ZZZZZZ	1.00	0154																										
ZZZZZZ	1.00	0157																										
ZZZZZZ	1.00	0159																										
ZZZZZZ	1.00	0202																										
ZZZZZZ	1.00	0204																										
CCV2	1.00	0207																X										
CCB2	1.00	0209																X										
ZZZZZZ	1.00	0212																										

14

ANALYSIS RUN LOG

Client: Draper Aden Associates Contract: RAAP HWMU5

Lab Code: Shealy Case No.: SAS No.: SDG No.: UD10056

Instrument ID Number: Hg4 Run Number: HG4041719

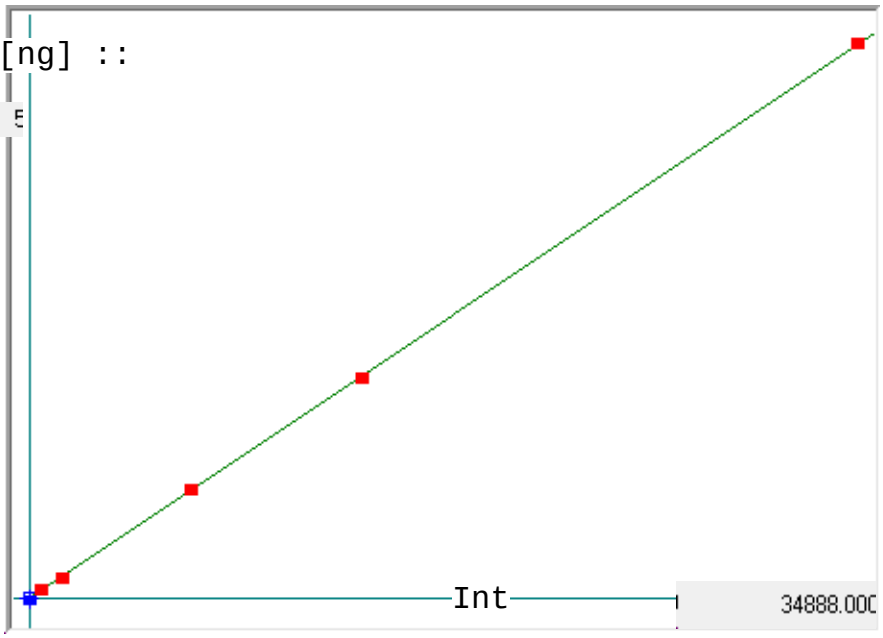
Start Date: 4/17/2019 End Date: 4/18/2019

EPA Sample No.	D/F	Time	% R	Analytes																										
				AL	SB	AS	BA	BE	CD	CA	CR	CO	CU	FE	PB	MG	MN	HG	NI	K	SE	AG	NA	TL	V	ZN	CN
ZZZZZZ	1.00	0215																												
ZZZZZZ	1.00	0217																												
UQ13499-001	1.00	0220																X												
UQ13499-002	1.00	0222																X												
UD10056-002	1.00	0225																X												
UD10056-003	1.00	0227																X												
UD10056-003S	1.00	0230																X												
UD10056-003SD	1.00	0232																X												
UD10056-004	1.00	0235																X												
CCV3	1.00	0237																X												
CCB3	1.00	0240																X												
UD10056-005	1.00	0242																X												
UD10056-006	1.00	0245																X												
UD10056-007	1.00	0247																X												
ZZZZZZ	1.00	0250																												
ZZZZZZ	1.00	0252																												
ZZZZZZ	1.00	0255																												
ZZZZZZ	1.00	0258																												
ZZZZZZ	1.00	0300																												
ZZZZZZ	1.00	0303																												
ZZZZZZ	1.00	0305																												
CCV4	1.00	0308																X												
CCB4	1.00	0310																X												
ZZZZZZ	1.00	0313																												
ZZZZZZ	1.00	0315																												
ZZZZZZ	1.00	0318																												
ZZZZZZ	1.00	0320																												
ZZZZZZ	1.00	0323																												
ZZZZZZ	1.00	0325																												
ZZZZZZ	10.00	0328																												
ZZZZZZ	1.00	0331																												
ZZZZZZ	1.00	0333																												

Raw Sample Data

7470A/245.1

Linear



A= 0.0000e+000

B= 1.4287e-004

C= 1.0441e-002

Rho= 0.9999771

Accept= Accepted

Accepted Date=

04/17/19 18:56

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4
S0 19HG0565 04/18/19	0.000	0.004	0.004	-45	0.000	-45			
S01 19HG0566 04/18/19	0.100	0.081	-0.019	497	0.0 %	497			
S02 19HG0567 04/18/19	0.200	0.211	0.011	1407	0.0 %	1407			
S03 19HG0568 04/18/19	1.000	0.992	-0.008	6870	0.0 %	6870			
S04 19HG0569 04/18/19	2.000	2.016	0.016	14040	0.0 %	14040			
S05 19HG0570 04/18/19	5.000	4.995	-0.005	34888	0.0 %	34888			

HG4041719

Method: 7470A/245.1 Operator: JMH Date of Analysis: 17 Apr 2019 17:26:41

Sample ID	Extended ID	Conc.	Units	µ Abs.	Date
S0 19HG0565 04/18/19 - 1		-	ppb	-45	17 Apr 2019 18:41:00
S01 19HG0566 04/18/19 - 1		-	ppb	497	17 Apr 2019 18:43:32
S02 19HG0567 04/18/19 - 1		-	ppb	1407	17 Apr 2019 18:46:04
S03 19HG0568 04/18/19 - 1		-	ppb	6870	17 Apr 2019 18:48:36
S04 19HG0569 04/18/19 - 1		-	ppb	14040	17 Apr 2019 18:51:06
S05 19HG0570 04/18/19 - 1		-	ppb	34888	17 Apr 2019 18:53:37
ICV 19HG0571 04/18/19 - 1		101.7% 2.0330	ppb	14157	17 Apr 2019 18:56:06
ICB 19HG0565 04/18/19 - 1		-0.0040	ppb	-101	17 Apr 2019 18:58:38
LLCCV 19HG0567 04/18/19 - 1		98.9% 0.1977	ppb	1311	17 Apr 2019 19:01:11
CCV 19HG0569 04/18/19 - 1		96.8% 1.9360	ppb	13478	17 Apr 2019 19:03:43
CCB 19HG0565 04/18/19 - 1		-0.0241	ppb	-242	17 Apr 2019 19:06:13
SnCl2 - 1	IM9372-01	0.0007	ppb	-68	17 Apr 2019 19:08:44
UQ13496001 - 1	PBW	0.0194	ppb	63	17 Apr 2019 19:11:14
UQ13496002 - 1	LCS	1.9790	ppb	13779	17 Apr 2019 19:13:44
UD10008001 - 1	RAS	0.1076	ppb	680	17 Apr 2019 19:16:15
UD10039003 - 1	Zn _ Hg	0.0526	ppb	295	17 Apr 2019 19:18:45
UD11004001 - 1	BFP Filtrate	0.0550	ppb	312	17 Apr 2019 19:21:15
UD11004002 - 1	BFP Filtrate	0.0829	ppb	507	17 Apr 2019 19:23:45
UD11054001 - 1	Waste Water Tank 9 T119-0086	0.0060	ppb	-31	17 Apr 2019 19:26:16
UD11071001 - 1	Effluent	-0.0006	ppb	-77	17 Apr 2019 19:28:47
UD11077001 - 1	2019/0922	19.0078	ppb	132971	17 Apr 2019 19:31:18
CCV 19HG0569 04/18/19 - 1		94.3% 1.8863	ppb	13130	17 Apr 2019 19:33:49
CCB 19HG0565 04/18/19 - 1		-0.0137	ppb	-169	17 Apr 2019 19:36:23
UD11077002 - 1	2019/0923	1.4586	ppb	10136	17 Apr 2019 19:38:54
UD12077001 - 1	POND C	-0.0026	ppb	-91	17 Apr 2019 19:41:26
UD12077002 - 1	POND C OUTLET PIPE	0.0103	ppb	-1	17 Apr 2019 19:43:58
UD12077003 - 1	POND C SEEP	0.0033	ppb	-50	17 Apr 2019 19:46:28
UD12077004 - 1	POND B	-0.0204	ppb	-216	17 Apr 2019 19:48:58
UD12077005 - 1	POND A	-0.0018	ppb	-86	17 Apr 2019 19:51:29
UD12077006 - 1	VENABLE POND	-0.0021	ppb	-88	17 Apr 2019 19:53:59
UD12077007 - 1	COLLINS POND	0.0000	ppb	-73	17 Apr 2019 19:56:29
UD15018001 - 1	Effluent	-0.0038	ppb	-100	17 Apr 2019 19:58:59
UD15018001MS - 1	EffluentS	1.5274	ppb	10618	17 Apr 2019 20:01:30
CCV 19HG0569 04/18/19 - 1		99.2% 1.9845	ppb	13817	17 Apr 2019 20:04:01
CCB 19HG0565 04/18/19 - 1		-0.0168	ppb	-191	17 Apr 2019 20:06:32
UD15018001MD - 1	EffluentSD	1.6096	ppb	11193	17 Apr 2019 20:09:05
UD15029001 - 1	Effluent Pipe 001	-0.0207	ppb	-218	17 Apr 2019 20:11:36
UD15029001MS - 1	Effluent Pipe 001S	2.0372	ppb	14186	17 Apr 2019 20:14:09
UQ13651001 - 1	PBW	-0.0208	ppb	-219	17 Apr 2019 20:16:41
UQ13651002 - 1	LCS	1.9433	ppb	13529	17 Apr 2019 20:19:14
UD09012018 - 1	IDW-027-DECON (04092019)	-0.0316	ppb	-294	17 Apr 2019 20:21:44
UD09012019 - 1	IDW-027-Purge (4092019)	-0.0254	ppb	-251	17 Apr 2019 20:24:15
UD10100001 - 1	43MW01	-0.0303	ppb	-285	17 Apr 2019 20:26:45
UD10100001MS - 1	43MW01S	1.9486	ppb	13566	17 Apr 2019 20:29:15
UD10100001MD - 1	43MW01SD	1.9783	ppb	13774	17 Apr 2019 20:31:46
CCV 19HG0569 04/18/19 - 1		100.9% 2.0173	ppb	14047	17 Apr 2019 20:34:16
CCB 19HG0565 04/18/19 - 1		-0.0196	ppb	-210	17 Apr 2019 20:36:46
UD10100002 - 1	43MW03	-0.0371	ppb	-333	17 Apr 2019 20:39:18
UD10100003 - 1	43MW04	-0.0326	ppb	-301	17 Apr 2019 20:41:48
UD10100004 - 1	43MW05	-0.0278	ppb	-268	17 Apr 2019 20:44:19
UD10100005 - 1	43MW06	-0.0193	ppb	-208	17 Apr 2019 20:46:51
UD10100006 - 1	DUP040919	-0.0403	ppb	-355	17 Apr 2019 20:49:22
UD10100007 - 1	DP01	-0.0133	ppb	-166	17 Apr 2019 20:51:54
UD11082011 - 1	43SW02	-0.0194	ppb	-209	17 Apr 2019 20:54:26
UD11082012 - 1	43SW03	-0.0136	ppb	-168	17 Apr 2019 20:56:57
UD11082013 - 1	EB041019	-0.0421	ppb	-368	17 Apr 2019 20:59:27
UQ14259001TC - 1	PBW	-0.0131	ppb	-165	17 Apr 2019 21:01:58
CCV 19HG0569 04/18/19 - 1		99.7% 1.9945	ppb	13887	17 Apr 2019 21:04:29
CCB 19HG0565 04/18/19 - 1		-0.0088	ppb	-135	17 Apr 2019 21:06:59
UQ14259002TC - 1	LCS	1.9813	ppb	13795	17 Apr 2019 21:09:31
UD03127001TC - 1	WWT SLUDGE	-0.0384	ppb	-342	17 Apr 2019 21:12:02
UD03127002TC - 1	Spent Blast Media	-0.0210	ppb	-220	17 Apr 2019 21:14:33
UD03127002MSTC - 1	Spent Blast MediaS	1.9707	ppb	13721	17 Apr 2019 21:17:03
UD03127002MDTC - 1	Spent Blast MediaSD	1.9729	ppb	13736	17 Apr 2019 21:19:35
UQ13650001 - 1	PBW	-0.0110	ppb	-150	17 Apr 2019 21:22:06
UQ13650002 - 1	LCS	1.9122	ppb	13311	17 Apr 2019 21:24:38
UD11077003 - 1	2019/0924	4.4179	ppb	30850	17 Apr 2019 21:27:09
UD16036001 - 1	EFFLUENT	-0.0574	ppb	-475	17 Apr 2019 21:29:42
UD16036001MS - 1	EFFLUENTS	1.4613	ppb	10155	17 Apr 2019 21:32:14
CCV 19HG0569 04/18/19 - 1		97.9% 1.9576	ppb	13629	17 Apr 2019 21:34:45
CCB 19HG0565 04/18/19 - 1		-0.0013	ppb	-82	17 Apr 2019 21:37:16
UD16036001MD - 1	EFFLUENTSD	1.4826	ppb	10304	17 Apr 2019 21:39:47
UQ13495001TC - 1	PBW	-0.0201	ppb	-214	17 Apr 2019 21:42:18
UQ13495002TC - 1	LCS	2.0032	ppb	13948	17 Apr 2019 21:44:50
UD02100001TC - 1	Waste Water	-0.0258	ppb	-254	17 Apr 2019 21:47:20
UD05064002TC - 1	AWDI-01	-0.0193	ppb	-208	17 Apr 2019 21:49:51
UD05064002MSTC - 1	AWDI-01S	1.5611	ppb	10854	17 Apr 2019 21:52:22
UD05064002MDTC - 1	AWDI-01SD	1.5068	ppb	10474	17 Apr 2019 21:54:53
UQ13493001 - 1	PBW	-0.0268	ppb	-261	17 Apr 2019 21:57:26
UQ13493002 - 1	LCS	1.9429	ppb	13526	17 Apr 2019 22:00:00
UD04007001 - 1	NPDES Permit Renewal #4 Sludge	-0.0191	ppb	-207	17 Apr 2019 22:02:31
CCV 19HG0569 04/18/19 - 1		100.4% 2.0082	ppb	13983	17 Apr 2019 22:05:04
CCB 19HG0565 04/18/19 - 1		-0.0081	ppb	-130	17 Apr 2019 22:07:33
UD05002001 - 1	1801833084	-0.0153	ppb	-180	17 Apr 2019 22:10:06
UD05002002 - 1	1900080495	-0.0230	ppb	-234	17 Apr 2019 22:12:36
UD05002002MS - 1	1900080495S	1.9846	ppb	13818	17 Apr 2019 22:15:07
UD05002002MD - 1	1900080495SD	1.9800	ppb	13786	17 Apr 2019 22:17:38
UD05002003 - 1	Weld Dust 1	-0.0204	ppb	-216	17 Apr 2019 22:20:09
UD05002004 - 1	Weld Dust 2	-0.0107	ppb	-148	17 Apr 2019 22:22:40
UD08007001 - 1	Tote 4	-0.0096	ppb	-140	17 Apr 2019 22:25:12
UD08007002 - 1	Tote 5	-0.0248	ppb	-247	17 Apr 2019 22:27:43
UD08007003 - 1	Tote 6	-0.0316	ppb	-294	17 Apr 2019 22:30:14

HG4041719

Method: 7470A/245.1 Operator: JMH Date of Analysis: 17 Apr 2019 17:26:41

Sample ID	Extended ID	Conc.	Units	µ Abs.	Date
UQ13647001 - 1	PBW	-0.0376	ppb	-336	17 Apr 2019 22:32:45
CCV 19HG0569 04/18/19 - 1		98.5% 1.9703	ppb	13718	17 Apr 2019 22:35:17
CCB 19HG0565 04/18/19 - 1		-0.0107	ppb	-148	17 Apr 2019 22:37:47
UQ13647002 - 1	LCS	2.0675	ppb	14398	17 Apr 2019 22:40:19
UD11087001 - 1	MW-1	-0.0510	ppb	-430	17 Apr 2019 22:42:51
UD11087001MS - 1	MW-1S	2.0103	ppb	13998	17 Apr 2019 22:45:22
UD11087001MD - 1	MW-1SD	1.9987	ppb	13917	17 Apr 2019 22:47:53
UD11087002 - 1	MW-3	-0.0307	ppb	-288	17 Apr 2019 22:50:24
UD11087004 - 1	MW-5	-0.0247	ppb	-246	17 Apr 2019 22:52:56
UD11087005 - 1	MW-6	-0.0243	ppb	-243	17 Apr 2019 22:55:27
UD11087006 - 1	MW-7	-0.0228	ppb	-233	17 Apr 2019 22:57:58
UD11087007 - 1	DMW-3	-0.0280	ppb	-269	17 Apr 2019 23:00:30
UD11087008 - 1	DMW-4	-0.0281	ppb	-270	17 Apr 2019 23:03:01
CCV 19HG0569 04/18/19 - 1		101.6% 2.0316	ppb	14147	17 Apr 2019 23:05:33
CCB 19HG0565 04/18/19 - 1		-0.0101	ppb	-144	17 Apr 2019 23:08:03
UQ13501001TC - 1	PBW	-0.0150	ppb	-178	17 Apr 2019 23:10:34
UQ13501002TC - 1	LCS	1.9799	ppb	13785	17 Apr 2019 23:13:06
UC27001028TC - 1	BC-44 (7-7.5)	-0.0356	ppb	-322	17 Apr 2019 23:15:37
UC27001028MSTC - 1	BC-44 (7-7.5)S	1.9662	ppb	13689	17 Apr 2019 23:18:09
UC27001028MDTC - 1	BC-44 (7-7.5)SD	1.9630	ppb	13667	17 Apr 2019 23:20:41
UC27001029TC - 1	BC-44 (12-12.5)	-0.0313	ppb	-292	17 Apr 2019 23:23:12
UC27001030TC - 1	BC-44 (17-17.5)	-0.0048	ppb	-107	17 Apr 2019 23:25:43
UC27001031TC - 1	BC-8 (0-0.5)	-0.0161	ppb	-186	17 Apr 2019 23:28:14
UC27001032TC - 1	BC-8 (2-2.5)	-0.0226	ppb	-231	17 Apr 2019 23:30:45
UC27001033TC - 1	BC-8 (7-7.5)	-0.0200	ppb	-213	17 Apr 2019 23:33:17
CCV 19HG0569 04/18/19 - 1		100.1% 2.0029	ppb	13946	17 Apr 2019 23:35:48
CCB 19HG0565 04/18/19 - 1		0.0003	ppb	-71	17 Apr 2019 23:38:18
UC27001034TC - 1	BC-8 (12-12.5)	-0.0247	ppb	-246	17 Apr 2019 23:40:50
UC27001035TC - 1	BC-8 (17-17.5)	-0.0230	ppb	-234	17 Apr 2019 23:43:22
UC27001036TC - 1	BC-7 (0-0.5)	-0.0127	ppb	-162	17 Apr 2019 23:45:53
UC27001037TC - 1	BC-7 (2-2.5)	-0.0241	ppb	-242	17 Apr 2019 23:48:25
UC27001038TC - 1	BC-7 (7-7.5)	-0.0171	ppb	-193	17 Apr 2019 23:50:57
UC27001039TC - 1	BC-7 (12-12.5)	-0.0170	ppb	-192	17 Apr 2019 23:53:28
UQ13678001TC - 1	PBW	-0.0036	ppb	-98	17 Apr 2019 23:56:00
UQ13678002TC - 1	LCS	2.0507	ppb	14281	17 Apr 2019 23:58:31
UD09113001TC - 1	2-77 II Tetra	-0.0248	ppb	-247	18 Apr 2019 00:01:03
UD09113001MSTC - 1	2-77 II TetraS	1.8946	ppb	13188	18 Apr 2019 00:03:34
CCV 19HG0569 04/18/19 - 1		99.4% 1.9887	ppb	13847	18 Apr 2019 00:06:06
CCB 19HG0565 04/18/19 - 1		-0.0073	ppb	-124	18 Apr 2019 00:08:36
UD09113001MDTC - 1	2-77 II TetraSD	1.8989	ppb	13218	18 Apr 2019 00:11:07
UQ13500001TC - 1	PBW	-0.0450	ppb	-388	18 Apr 2019 00:13:38
UQ13500002TC - 1	LCS	1.7451	ppb	12142	18 Apr 2019 00:16:10
UC27001008TC - 1	BC-3 (7-7.5)	-0.0310	ppb	-290	18 Apr 2019 00:18:41
UC27001009TC - 1	BC-3 (12-12.5)	-0.0240	ppb	-241	18 Apr 2019 00:21:13
UC27001010TC - 1	BC-3 (17-17.5)	-0.0197	ppb	-211	18 Apr 2019 00:23:44
UC27001011TC - 1	BC-4 (0-0.5)	-0.0117	ppb	-155	18 Apr 2019 00:26:16
UC27001012TC - 1	BC-4 (2-2.5)	-0.0121	ppb	-158	18 Apr 2019 00:28:48
UC27001013TC - 1	BC-4 (7-7.5)	0.0000	ppb	-73	18 Apr 2019 00:31:20
UC27001014TC - 1	BC-4 (12-12.5)	-0.0088	ppb	-135	18 Apr 2019 00:33:51
CCV 19HG0569 04/18/19 - 1		99.9% 1.9977	ppb	13910	18 Apr 2019 00:36:23
CCB 19HG0565 04/18/19 - 1		0.0070	ppb	-24	18 Apr 2019 00:38:53
UC27001015TC - 1	BC-4 (17-17.5)	-0.0134	ppb	-167	18 Apr 2019 00:41:25
UC27001016TC - 1	BC-13 (0-0.5)	-0.0063	ppb	-117	18 Apr 2019 00:43:57
UC27001017TC - 1	BC-13 (2-2.5)	0.0037	ppb	-47	18 Apr 2019 00:46:28
UC27001018TC - 1	BC-13 (7-7.5)	-0.0138	ppb	-170	18 Apr 2019 00:48:59
UC27001019TC - 1	BC-13 (12-12.5)	-0.0136	ppb	-168	18 Apr 2019 00:51:30
UC27001020TC - 1	BC-13 (17-17.5)	-0.0186	ppb	-203	18 Apr 2019 00:54:02
UC27001021TC - 1	BC-17 (0-0.5)	-0.0211	ppb	-221	18 Apr 2019 00:56:33
UC27001021MSTC - 1	BC-17 (0-0.5)S	2.0266	ppb	14112	18 Apr 2019 00:59:05
UC27001021MDTC - 1	BC-17 (0-0.5)SD	2.1372	ppb	14886	18 Apr 2019 01:01:37
UC27001022TC - 1	BC-17 (2-2.5)	-0.0218	ppb	-226	18 Apr 2019 01:04:09
CCV 19HG0569 04/18/19 - 1		98.9% 1.9776	ppb	13769	18 Apr 2019 01:06:41
CCB 19HG0565 04/18/19 - 1		-0.0001	ppb	-74	18 Apr 2019 01:09:10
UC27001023TC - 1	BC-17 (7-7.5)	-0.0091	ppb	-137	18 Apr 2019 01:11:42
UC27001024TC - 1	BC-17 (12-12.5)	-0.0143	ppb	-173	18 Apr 2019 01:14:13
UC27001025TC - 1	BC-17 (17-17.5)	-0.0133	ppb	-166	18 Apr 2019 01:16:45
UC27001026TC - 1	BC-44 (0-0.5)	-0.0134	ppb	-167	18 Apr 2019 01:19:17
UC27001027TC - 1	BC-44 (2-2.5)	0.0290	ppb	130	18 Apr 2019 01:21:49
UQ13498001DIS - 1	PBW	-0.0141	ppb	-172	18 Apr 2019 01:24:22
UQ13498002DIS - 1	LCS	2.0357	ppb	14176	18 Apr 2019 01:26:54
UD02100002 - 1	Waste Water	0.0359	ppb	178	18 Apr 2019 01:29:26
UD12075002 - 1	SWP-1	-0.0011	ppb	-81	18 Apr 2019 01:31:58
UD11011001DIS - 1	WK0219C1904	-0.0080	ppb	-129	18 Apr 2019 01:34:30
CCV 19HG0569 04/18/19 - 1		100.7% 2.0147	ppb	14029	18 Apr 2019 01:37:03
CCB 19HG0565 04/18/19 - 1		-0.0027	ppb	-92	18 Apr 2019 01:39:32
UD11011002DIS - 1	WK0223C1904	-0.0104	ppb	-146	18 Apr 2019 01:42:04
UD11011003DIS - 1	WK0229C1904	0.0032	ppb	-51	18 Apr 2019 01:44:37
UD11011003MSDIS - 1	WK0229C1904S	1.9720	ppb	13730	18 Apr 2019 01:47:09
UD11011003MDDIS - 1	WK0229C1904SD	2.0226	ppb	14084	18 Apr 2019 01:49:41
UD11011004DIS - 1	WK0236C1904	-0.0067	ppb	-120	18 Apr 2019 01:52:13
UD11011005DIS - 1	TripBlank-190410	-0.0037	ppb	-99	18 Apr 2019 01:54:45
UD11011006DIS - 1	WK0227CS1904	-0.0018	ppb	-86	18 Apr 2019 01:57:18
UD11011007DIS - 1	WK0228C1904	0.0050	ppb	-38	18 Apr 2019 01:59:50
UD11011008DIS - 1	WK0235C1904	0.0034	ppb	-49	18 Apr 2019 02:02:22
UD11011009DIS - 1	WK0201C1904	0.0074	ppb	-21	18 Apr 2019 02:04:54
CCV 19HG0569 04/18/19 - 1		102.1% 2.0425	ppb	14223	18 Apr 2019 02:07:26
CCB 19HG0565 04/18/19 - 1		0.0087	ppb	-12	18 Apr 2019 02:09:56
UD11011010DIS - 1	TripBlank-190411	-0.0028	ppb	-93	18 Apr 2019 02:12:28
UD12100011 - 1	GW-1	0.1446	ppb	939	18 Apr 2019 02:15:00
UD12100012 - 1	SW-1	-0.0030	ppb	-94	18 Apr 2019 02:17:32
UQ13499001 - 1	PBW	-0.0031	ppb	-95	18 Apr 2019 02:20:04
UQ13499002 - 1	LCS	1.9230	ppb	13387	18 Apr 2019 02:22:36

373 of 3228

HG4041719

Method: 7470A/245.1 Operator: JMH Date of Analysis: 17 Apr 2019 17:26:41

Sample ID	Extended ID	Conc.	Units	µ Abs.	Date
UD10056002 - 1	5W5B	-0.0167	ppb	-190	18 Apr 2019 02:25:09
UD10056003 - 1	5W7B	-0.0041	ppb	-102	18 Apr 2019 02:27:41
UD10056003MS - 1	5W7BS	1.9119	ppb	13309	18 Apr 2019 02:30:13
UD10056003MD - 1	5W7BSD	1.9594	ppb	13642	18 Apr 2019 02:32:45
UD10056004 - 1	5WC21	-0.0036	ppb	-98	18 Apr 2019 02:35:17
CCV 19HG0569 04/18/19 - 1		100.8% 2.0153	ppb	14033	18 Apr 2019 02:37:49
CCB 19HG0565 04/18/19 - 1		0.0100	ppb	-3	18 Apr 2019 02:40:19
UD10056005 - 1	5WDUP	0.0040	ppb	-45	18 Apr 2019 02:42:51
UD10056006 - 1	5WC22	-0.0226	ppb	-231	18 Apr 2019 02:45:23
UD10056007 - 1	5WC23	-0.0170	ppb	-192	18 Apr 2019 02:47:55
UD13009001 - 1	16C1	-0.0046	ppb	-105	18 Apr 2019 02:50:27
UD13009002 - 1	16MW8	0.0079	ppb	-18	18 Apr 2019 02:52:59
UD13009003 - 1	16MW9	0.0013	ppb	-64	18 Apr 2019 02:55:31
UD13009004 - 1	16WC1A	-0.0077	ppb	-127	18 Apr 2019 02:58:04
UD13009004MS - 1	16WC1AS	1.8473	ppb	12857	18 Apr 2019 03:00:36
UD13009004MD - 1	16WC1ASD	1.8250	ppb	12701	18 Apr 2019 03:03:09
UD13009005 - 1	16WDUP	-0.0224	ppb	-230	18 Apr 2019 03:05:42
CCV 19HG0569 04/18/19 - 1		102.0% 2.0393	ppb	14201	18 Apr 2019 03:08:15
CCB 19HG0565 04/18/19 - 1		-0.0040	ppb	-101	18 Apr 2019 03:10:45
UD13009006 - 1	16WC1B	0.0992	ppb	621	18 Apr 2019 03:13:16
UD13010001 - 1	16-2	-0.0128	ppb	-163	18 Apr 2019 03:15:48
UD13010002 - 1	16-3	-0.0126	ppb	-161	18 Apr 2019 03:18:21
UD13010003 - 1	16-5	-0.0118	ppb	-156	18 Apr 2019 03:20:54
UD13010004 - 1	16WC2B	-0.0038	ppb	-100	18 Apr 2019 03:23:26
UD13010005 - 1	16SPRING	0.0073	ppb	-22	18 Apr 2019 03:25:58
UD11077001(10) - 1	2019/0922	2.1183	ppb	14754	18 Apr 2019 03:28:31
CCV 19HG0569 04/18/19 - 1		100.3% 2.0060	ppb	13968	18 Apr 2019 03:31:03
CCB 19HG0565 04/18/19 - 1		0.0153	ppb	34	18 Apr 2019 03:33:33

Raw Supportive Data

Analyst: JMH **Level 2 Analyst:** NJT

Status: Level 2 review released

Matrix: Aqueous

Printed: 05/07/19 0851

Prep Batch: 13499

7470A-P - Mercury Preparation Linked: 7470A,245.1 and 7470A-P Draper

Start Date: 04/17/2019 1556

End Date: 04/17/2019 1756

Digestion Cup ID: 19-651

Ext Solvent: H2SO4/1:1HNO3/KMnO4/K2S2O8/NaCl-NH2OH-HCl

Reagents Vol. (mL): 2.0, 2.0, 6.0, 3.2, 2.4

Hot Block ID: Hot Block # 9

Chem ID: 19-318, IM9360-01, IM9371-01, IM9351-01, IM9368-01

Start Temperature (°C): 94

Thermometer ID: 326394

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
UQ13499-001	MB	PBW	1	7470A	40.000		0.0	50			LCS/MS/MSD Pipet ID: 315
UQ13499-002	LCS	LCS	1	7470A	40.000	19HG0563 (04/18/19)	0.8	50			
UD10056-002	Sample	5W5B	1	7470A	40.000		0.0	50	05/07/2019 2359	04/19/2019	
UD10056-003	Sample	5W7B	1	7470A	40.000		0.0	50	05/07/2019 2359	04/19/2019	
UD10056-003MS	MS	5W7BS	1	7470A	40.000	19HG0563 (04/18/19)	0.8	50			
UD10056-003MD	MSD	5W7BSD	1	7470A	40.000	19HG0563 (04/18/19)	0.8	50			
UD10056-004	Sample	5WC21	1	7470A	40.000		0.0	50	05/07/2019 2359	04/19/2019	
UD10056-005	Sample	5WDUP	1	7470A	40.000		0.0	50	05/07/2019 2359	04/19/2019	
UD10056-006	Sample	5WC22	1	7470A	40.000		0.0	50	05/07/2019 2359	04/19/2019	
UD10056-007	Sample	5WC23	1	7470A	40.000		0.0	50	05/07/2019 2359	04/19/2019	
UD13009-001	Sample	16C1	1	7470A	40.000		0.0	50	05/09/2019 2359	04/23/2019	
UD13009-002	Sample	16MW8	1	7470A	40.000		0.0	50	05/08/2019 2359	04/23/2019	
UD13009-003	Sample	16MW9	1	7470A	40.000		0.0	50	05/09/2019 2359	04/23/2019	
UD13009-004	Sample	16WC1A	1	7470A	40.000		0.0	50	05/09/2019 2359	04/23/2019	
UD13009-004MS	MS	16WC1AS	1	7470A	40.000	19HG0563 (04/18/19)	0.8	50			
UD13009-004MD	MSD	16WC1ASD	1	7470A	40.000	19HG0563 (04/18/19)	0.8	50			
UD13009-005	Sample	16WDUP	1	7470A	40.000		0.0	50	05/09/2019 2359	04/23/2019	
UD13009-006	Sample	16WC1B	1	7470A	40.000		0.0	50	05/09/2019 2359	04/23/2019	
UD13010-001	Sample	16-2	1	7470A	40.000		0.0	50	05/08/2019 2359	04/29/2019	
UD13010-002	Sample	16-3	1	7470A	40.000		0.0	50	05/08/2019 2359	04/29/2019	
UD13010-003	Sample	16-5	1	7470A	40.000		0.0	50	05/08/2019 2359	04/29/2019	
UD13010-004	Sample	16WC2B	1	7470A	40.000		0.0	50	05/08/2019 2359	04/29/2019	
UD13010-005	Sample	16SPRING	1	7470A	40.000		0.0	50	05/08/2019 2359	04/29/2019	
UQ13499-004	Standard	Conc = 0.0 mg/L	1	7470A	40.000		0.0	50			PB 13633

Analyst: JMH **Level 2 Analyst:** NJT

Status: Level 2 review released

Matrix: Aqueous

Prep Batch: 13499

7470A-P - Mercury Preparation Linked: 7470A,245.1 and 7470A-P Draper

Start Date: 04/17/2019 1556

End Date: 04/17/2019 1756

Digestion Cup ID: 19-651

Ext Solvent: H2SO4/1:1HNO3/KMnO4/K2S2O8/NaCl-NH2OH-HCl

Reagents Vol. (mL): 2.0, 2.0, 6.0, 3.2, 2.4

Hot Block ID: Hot Block # 9

Chem ID: 19-318, IM9360-01, IM9371-01, IM9351-01, IM9368-01

Start Temperature (°C): 94

Thermometer ID: 326394

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments

(end of report) **Total Samples: 17**

Analyst: JMH **Level 2 Analyst:** NJT

Status: Level 2 review released

Matrix: ERROR

Printed: 05/07/19 0852

Prep Batch: 13633

7470A-P - Mercury Preparation Linked: 7470A,245.1 and 7470A-P Draper

Start Date: 04/17/2019 1315

End Date: 04/17/2019 1515

Digestion Cup ID: 19-651

Ext Solvent: H2SO4/1:1HNO3/KMnO4/K2S2O8/NaCl-NH2OH-HCl

Reagents Vol. (mL): 2.0, 2.0, 6.0, 3.2, 2.4

Hot Block ID: Hot Block #4

Chem ID: 19-318, IM9360-01, IM9371-01, IM9351-01, IM9368-01

Start Temperature (°C): 96

Thermometer ID: 1136

Sample ID	QC Code	Client Sample ID	Run	Analysis Method	Initial Vol. (mL)	Spike ID	Spike Vol. (mL)	Final Vol. (mL)	Holding Time Expires	Analytical Due Date	Comments
UQ13633-004	Standard	Conc = 0.0 mg/L	1	245.1	40.000	19HG0565	0.0	50			CAL 0
UQ13633-104	Standard	Conc = 0.0050 mg/L	1	245.1	40.000	19HG0570	0.0	50			4/18/19
UQ13633-204	Standard	Conc = 0.0020 mg/L	1	245.1	40.000	19HG0569	0.0	50			4/18/19
UQ13633-304	Standard	Conc = 0.0010 mg/L	1	245.1	40.000	19HG0568	0.0	50			4/18/19
UQ13633-404	Standard	Conc = 0.00020 mg/L	1	245.1	40.000	19HG0567	0.0	50			4/18/19
UQ13633-504	Standard	Conc = 0.00010 mg/L	1	245.1	40.000	19HG0566	0.0	50			4/18/19
UQ13633-604	Standard	Conc = 0.0 mg/L	1	245.1	40.000	19HG0565	0.0	50			CCB
UQ13633-704	Standard	Conc = 0.0020 mg/L	1	245.1	40.000	19HG0569	0.0	50			CCV
UQ13633-804	Standard	Conc = 0.0 mg/L	1	245.1	40.000	19HG0565	0.0	50			ICB
UQ13633-904	Standard	Conc = 0.0020 mg/L	1	245.1	40.000	19HG0571	0.0	50			ICV

(end of report) **Total Samples: 0**

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES

Certifies that

VA Laboratory ID#: 460182
Eurofins Lancaster Laboratories Environmental, LLC

2425 New Holland Pike
Lancaster, PA 17601

Owner: EUROFINS SCIENTIFIC
Responsible Official: DUANE LUCKENBILL

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: **June 15, 2019**
Expiration Date: **June 14, 2020**
Certificate # 10358

Denise M. Toney

Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP) Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 10358

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

AIR

METHOD	ANALYTE	PRIMARY
EPA 18	TOTAL GASEOUS ORGANIC COMPOUNDS	LA DEQ
EPA TO-14A 2nd Ed.	1,1,1-TRICHLOROETHANE	LA DEQ
EPA TO-14A 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	LA DEQ
EPA TO-14A 2nd Ed.	1,1-DICHLOROETHANE	LA DEQ
EPA TO-14A 2nd Ed.	1,2,4-TRICHLOROBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	LA DEQ
EPA TO-14A 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	LA DEQ
EPA TO-14A 2nd Ed.	1,3,5-TRIMETHYLBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	LA DEQ
EPA TO-14A 2nd Ed.	BENZENE	LA DEQ
EPA TO-14A 2nd Ed.	CARBON TETRACHLORIDE	LA DEQ
EPA TO-14A 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	LA DEQ
EPA TO-14A 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	LA DEQ
EPA TO-14A 2nd Ed.	ETHYLBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	M+P-XYLENE	LA DEQ
EPA TO-14A 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	LA DEQ
EPA TO-14A 2nd Ed.	O-XYLENE	LA DEQ
EPA TO-14A 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	LA DEQ
EPA TO-14A 2nd Ed.	TRANS-1,2-DICHLOROETHENE	LA DEQ
EPA TO-14A 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	LA DEQ
EPA TO-14A 2nd Ed.	VINYL CHLORIDE (CHLOROETHENE)	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	BROMODICHLOROMETHANE	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	LA DEQ
EPA TO-15 2nd Ed.	1,1,1-TRICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	LA DEQ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,2,4-TRICHLOROBENZENE	LA DEQ

METHOD	ANALYTE	PRIMARY
EPA 25	TOTAL GASEOUS NONMETHANE ORGANIC COMPOUNDS (TGNMO)	LA DEQ
EPA TO-14A 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	LA DEQ
EPA TO-14A 2nd Ed.	1,1,2-TRICHLOROETHANE	LA DEQ
EPA TO-14A 2nd Ed.	1,1-DICHLOROETHYLENE	LA DEQ
EPA TO-14A 2nd Ed.	1,2,4-TRIMETHYLBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	LA DEQ
EPA TO-14A 2nd Ed.	1,2-DICHLOROPROPANE	LA DEQ
EPA TO-14A 2nd Ed.	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	LA DEQ
EPA TO-14A 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	LA DEQ
EPA TO-14A 2nd Ed.	BROMOFORM	LA DEQ
EPA TO-14A 2nd Ed.	CHLOROBENZENE	LA DEQ
EPA TO-14A 2nd Ed.	CHLOROFORM	LA DEQ
EPA TO-14A 2nd Ed.	CIS-1,3-DICHLOROPROPENE	LA DEQ
EPA TO-14A 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	LA DEQ
EPA TO-14A 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	LA DEQ
EPA TO-14A 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	LA DEQ
EPA TO-14A 2nd Ed.	STYRENE	LA DEQ
EPA TO-14A 2nd Ed.	TOLUENE	LA DEQ
EPA TO-14A 2nd Ed.	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	LA DEQ
EPA TO-14A 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	CARBON DISULFIDE	LA DEQ
EPA TO-14A 2nd Ed. - EXTENDED	XYLENE (TOTAL)	LA DEQ
EPA TO-15 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1,2-TRICHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHYLENE	LA DEQ
EPA TO-15 2nd Ed.	1,2,4-TRIMETHYLBENZENE	LA DEQ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10358

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

AIR

METHOD	ANALYTE	PRIMARY
EPA TO-15 2nd Ed	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	LA DEQ
EPA TO-15 2nd Ed.	1,3,5-TRIMETHYLBENZENE	LA DEQ
EPA TO-15 2nd Ed.	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	LA DEQ
EPA TO-15 2nd Ed.	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	LA DEQ
EPA TO-15 2nd Ed.	ACROLEIN (PROPENAL)	LA DEQ
EPA TO-15 2nd Ed.	ALLYL CHLORIDE (3-CHLOROPROPENE)	LA DEQ
EPA TO-15 2nd Ed.	BROMODICHLOROMETHANE	LA DEQ
EPA TO-15 2nd Ed.	CARBON DISULFIDE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROBENZENE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROFORM	LA DEQ
EPA TO-15 2nd Ed.	CIS-1,3-DICHLOROPROPENE	LA DEQ
EPA TO-15 2nd Ed.	ETHYL ACRYLATE	LA DEQ
EPA TO-15 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	LA DEQ
EPA TO-15 2nd Ed.	IODOMETHANE (METHYL IODIDE)	LA DEQ
EPA TO-15 2nd Ed.	M+P-XYLENE	LA DEQ
EPA TO-15 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	METHYL TERT-BUTYL ETHER (MTBE)	LA DEQ
EPA TO-15 2nd Ed.	O-XYLENE	LA DEQ
EPA TO-15 2nd Ed.	STYRENE	LA DEQ
EPA TO-15 2nd Ed.	TOLUENE	LA DEQ
EPA TO-15 2nd Ed.	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	LA DEQ
EPA TO-15 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	LA DEQ
EPA TO-15 2nd Ed.	VINYL CHLORIDE (CHLOROETHENE)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	2-CHLOROTOLUENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	4-ETHYLTOLUENE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	CHLORODIFLUOROMETHANE (FREON-22)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	1,2-DICHLOROPROPANE	LA DEQ
EPA TO-15 2nd Ed.	1,3-BUTADIENE	LA DEQ
EPA TO-15 2nd Ed.	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	LA DEQ
EPA TO-15 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	LA DEQ
EPA TO-15 2nd Ed	ACETONITRILE	LA DEQ
EPA TO-15 2nd Ed.	ACRYLONITRILE	LA DEQ
EPA TO-15 2nd Ed.	BENZENE	LA DEQ
EPA TO-15 2nd Ed.	BROMOFORM	LA DEQ
EPA TO-15 2nd Ed	CARBON TETRACHLORIDE	LA DEQ
EPA TO-15 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	LA DEQ
EPA TO-15 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	LA DEQ
EPA TO-15 2nd Ed.	CYCLOHEXANE	LA DEQ
EPA TO-15 2nd Ed.	ETHYLBENZENE	LA DEQ
EPA TO-15 2nd Ed	HEXACHLOROETHANE	LA DEQ
EPA TO-15 2nd Ed.	ISOPROPYLBENZENE	LA DEQ
EPA TO-15 2nd Ed	METHYL BROMIDE (BROMOMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	METHYL METHACRYLATE	LA DEQ
EPA TO-15 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	LA DEQ
EPA TO-15 2nd Ed.	PROPYLENE (PROPENE)	LA DEQ
EPA TO-15 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	LA DEQ
EPA TO-15 2nd Ed.	TRANS-1,2-DICHLOROETHENE	LA DEQ
EPA TO-15 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	LA DEQ
EPA TO-15 2nd Ed.	VINYL ACETATE	LA DEQ
EPA TO-15 2nd Ed	XYLENE (TOTAL)	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	2-HEXANONE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	ACETONE	LA DEQ
EPA TO-15 2nd Ed. - EXTENDED	NAPHTHALENE	LA DEQ



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Scope of Accreditation

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Virginia Laboratory ID: 460182
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Expiration Date: June 14, 2020

AIR

METHOD	ANALYTE	PRIMARY
EPA TO-15 2nd Ed. - EXTENDED	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	LA DEQ

DRINKING WATER

METHOD	ANALYTE	PRIMARY
EPA 200.7 REV 4.4	ALUMINUM	PA
EPA 200.7 REV 4.4	CALCIUM	PA
EPA 200.7 REV 4.4	COPPER	PA
EPA 200.7 REV 4.4	MAGNESIUM	PA
EPA 200.7 REV 4.4	NICKEL	PA
EPA 200.7 REV 4.4	SODIUM	PA
EPA 200.8 REV 5.4	ANTIMONY	PA
EPA 200.8 REV 5.4	BERYLLIUM	PA
EPA 200.8 REV 5.4	CHROMIUM	PA
EPA 200.8 REV 5.4	IRON	PA
EPA 200.8 REV 5.4	MANGANESE	PA
EPA 200.8 REV 5.4	SELENIUM	PA
EPA 200.8 REV 5.4	ZINC	PA
EPA 300.0 REV 2.1	CHLORIDE	PA
EPA 300.0 REV 2.1	NITRATE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA
EPA 353.2 REV 2	NITRATE AS N	PA
EPA 353.2 REV 2	NITRITE AS N	PA
EPA 524.2 REV 4.1	1,1,2-TRICHLOROETHANE	PA
EPA 524.2 REV 4.1	1,2,4-TRICHLOROBENZENE	PA
EPA 524.2 REV 4.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 524.2 REV 4.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 524.2 REV 4.1	BROMODICHLOROMETHANE	PA
EPA 524.2 REV 4.1	CARBON TETRACHLORIDE	PA
EPA 524.2 REV 4.1	CHLORODIBROMOMETHANE	PA
EPA 524.2 REV 4.1	CIS-1,2-DICHLOROETHYLENE	PA
EPA 524.2 REV 4.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 524.2 REV 4.1	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 524.2 REV 4.1	TOTAL TRIHALOMETHANES (TTHMS)	PA
EPA 524.2 REV 4.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA

METHOD	ANALYTE	PRIMARY
EPA 200.7 REV 4.4	BARIUM	PA
EPA 200.7 REV 4.4	CHROMIUM	PA
EPA 200.7 REV 4.4	IRON	PA
EPA 200.7 REV 4.4	MANGANESE	PA
EPA 200.7 REV 4.4	SILVER	PA
EPA 200.7 REV 4.4	ZINC	PA
EPA 200.8 REV 5.4	ARSENIC	PA
EPA 200.8 REV 5.4	CADMIUM	PA
EPA 200.8 REV 5.4	COPPER	PA
EPA 200.8 REV 5.4	LEAD	PA
EPA 200.8 REV 5.4	NICKEL	PA
EPA 200.8 REV 5.4	THALLIUM	PA
EPA 245.1 REV 3	MERCURY	PA
EPA 300.0 REV 2.1	FLUORIDE	PA
EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 335.4 REV 1.0	CYANIDE	PA
EPA 353.2 REV 2	NITRATE/NITRITE	PA
EPA 524.2 REV 4.1	1,1,1-TRICHLOROETHANE	PA
EPA 524.2 REV 4.1	1,1-DICHLOROETHYLENE	PA
EPA 524.2 REV 4.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 524.2 REV 4.1	1,2-DICHLOROPROPANE	PA
EPA 524.2 REV 4.1	BENZENE	PA
EPA 524.2 REV 4.1	BROMOFORM	PA
EPA 524.2 REV 4.1	CHLOROBENZENE	PA
EPA 524.2 REV 4.1	CHLOROFORM	PA
EPA 524.2 REV 4.1	ETHYLBENZENE	PA
EPA 524.2 REV 4.1	STYRENE	PA
EPA 524.2 REV 4.1	TOLUENE	PA
EPA 524.2 REV 4.1	TRANS-1,2-DICHLOROETHENE	PA
EPA 524.2 REV 4.1	VINYL CHLORIDE (CHLOROETHENE)	PA



Commonwealth of Virginia

Department of General Services
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DRINKING WATER

METHOD	ANALYTE	PRIMARY
EPA 524.2 REV 4.1	XYLENE (TOTAL)	PA
EPA 525.2 REV 2	ATRAZINE	PA
EPA 525.2 REV 2	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 525.2 REV 2	ENDRIN	PA
EPA 525.2 REV 2	HEPTACHLOR	PA
EPA 525.2 REV 2	HEXACHLOROBENZENE	PA
EPA 525.2 REV 2	METHOXYCHLOR	PA
EPA 531.1 REV 3.1	CARBOFURAN (FURADEN)	PA
SM 2120 B-2011	COLOR	PA
SM 2320 B-2011	ALKALINITY AS CACO3	PA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	PA
SM 4500-H+ B-2011	PH	PA
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	PA

METHOD	ANALYTE	PRIMARY
EPA 525.2 REV 2	ALACHLOR	PA
EPA 525.2 REV 2	BENZO(A)PYRENE	PA
EPA 525.2 REV 2	BIS(2-ETHYLHEXYL)ADIPATE (DI(2-ETHYLHEXYL)ADIPATE)	PA
EPA 525.2 REV 2	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 525.2 REV 2	HEPTACHLOR EPOXIDE	PA
EPA 525.2 REV 2	HEXACHLOROCYCLOPENTADIENE	PA
EPA 525.2 REV 2	SIMAZINE	PA
EPA 531.1 REV 3.1	OXAMYL	PA
SM 2130 B-2011	TURBIDITY	PA
SM 2510 B-2011	CONDUCTIVITY	PA
SM 4500-F⁻ C-2011	FLUORIDE	PA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	PA
SM 5540 C-2011	SURFACTANTS - MBAS	PA

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 1010	FLASHPOINT	PA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	PA
EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN (OCDD)	PA
EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 1613 B	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (1,2,3,4,7,8-HXCDF)	PA
EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (1,2,3,6,7,8-HXCDF)	PA
EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (1,2,3,7,8,9-HXCDF)	PA
EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZOFURAN (1,2,3,7,8-PECDF)	PA
EPA 1613 B	2,3,4,7,8-PENTACHLORODIBENZOFURAN	PA
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZOFURAN (2,3,7,8-TCDF)	PA
EPA 1664 A	TOTAL PETROLEUM HYDROCARBONS (TPH) (AS NONPOLAR MATERIAL, SGT-HEM)	PA

METHOD	ANALYTE	PRIMARY
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	PA
EPA 160.4	RESIDUE-VOLATILE	PA
EPA 1613 B	1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN (OCDF)	PA
EPA 1613 B	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 1613 B	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 1613 B	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN(1,2,3,6,7,8-HXCDD)	PA
EPA 1613 B	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 1613 B	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 1613 B	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (2,3,4,6,7,8-HXCDF)	PA
EPA 1613 B	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 1664 A	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	PA
EPA 1666 A	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA



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EPA 1666 A	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 1666 A	ISOBUTYRALDEHYDE	PA
EPA 1666 A	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 1666 A	N-AMYL ACETATE	PA
EPA 1666 A	N-BUTYL-ACETATE	PA
EPA 1666 A	N-HEXANE	PA
EPA 1666 A	TETRAHYDROFURAN (THF)	PA
EPA 1668 A	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL (BZ-206)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (BZ-196)	PA
EPA 1668 A	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL BZ-195)	PA
EPA 1668 A	2,2',3,3',4,4',6,6'-OCTACHLOROBIPHENYL (BZ-197)	PA
EPA 1668 A	2,2',3,3',4,4'-HEXACHLOROBIPHENYL (BZ-128)	PA
EPA 1668 A	2,2',3,3',4,5',6,6'-OCTACHLOROBIPHENYL (BZ-201)	PA
EPA 1668 A	2,2',3,3',4,5'-HEXACHLOROBIPHENYL (BZ-130)	PA
EPA 1668 A	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (BZ-208)	PA
EPA 1668 A	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (BZ-172)	PA
EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHENYL (BZ-200)	PA
EPA 1668 A	2,2',3,3',4,5-HEXACHLOROBIPHENYL (BZ-129)	PA
EPA 1668 A	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (BZ-176)	PA
EPA 1668 A	2,2',3,3',4-PENTACHLOROBIPHENYL (BZ-82)	PA
EPA 1668 A	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (BZ-178)	PA
EPA 1668 A	2,2',3,3',5,6'-HEXACHLOROBIPHENYL (BZ-135)	PA
EPA 1668 A	2,2',3,3',5,6-HEXACHLOROBIPHENYL (BZ-134)	PA
EPA 1668 A	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (BZ-136)	PA
EPA 1668 A	2,2',3,3'-TETRACHLOROBIPHENYL (BZ-40)	PA
EPA 1668 A	2,2',3,4',5'-PENTACHLOROBIPHENYL (BZ-97)	PA
EPA 1666 A	ETHYL ACETATE	PA
EPA 1666 A	ISOPROPYL ACETATE	PA
EPA 1666 A	METHYL FORMATE	PA
EPA 1666 A	N-AMYL ALCOHOL	PA
EPA 1666 A	N-HEPTANE	PA
EPA 1666 A	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 1666 A	XYLENE (TOTAL)	PA
EPA 1668 A	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL (BZ-194)	PA
EPA 1668 A	2,2',3,3',4,4',5,6,6'-NONACHLOROBIPHENYL (BZ-207)	PA
EPA 1668 A	2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (BZ-170)	PA
EPA 1668 A	2,2',3,3',4,4',6-HEPTACHLOROBIPHENYL (BZ-171)	PA
EPA 1668 A	2,2',3,3',4,5',6'-HEPTACHLOROBIPHENYL (BZ-177)	PA
EPA 1668 A	2,2',3,3',4,5',6-HEPTACHLOROBIPHENYL (BZ-175)	PA
EPA 1668 A	2,2',3,3',4,5,5',6'-OCTACHLOROBIPHENYL (BZ-199)	PA
EPA 1668 A	2,2',3,3',4,5,5',6-OCTACHLOROBIPHENYL (BZ-198)	PA
EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (BZ-174)	PA
EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHENYL (BZ-173)	PA
EPA 1668 A	2,2',3,3',4,6'-HEXACHLOROBIPHENYL (BZ-132)	PA
EPA 1668 A	2,2',3,3',4,6-HEXACHLOROBIPHENYL (BZ-131)	PA
EPA 1668 A	2,2',3,3',5,5',6,6'-OCTACHLOROBIPHENYL (BZ-202)	PA
EPA 1668 A	2,2',3,3',5,5'-HEXACHLOROBIPHENYL (BZ-133)	PA
EPA 1668 A	2,2',3,3',5,6,6'-HEPTACHLOROBIPHENYL (BZ-179)	PA
EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-83)	PA
EPA 1668 A	2,2',3,3',6-PENTACHLOROBIPHENYL (BZ-84)	PA
EPA 1668 A	2,2',3,4',5',6-HEXACHLOROBIPHENYL (BZ-149)	PA
EPA 1668 A	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL (BZ-187)	PA



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EPA 1668 A	2,2',3,4',5,5'-HEXACHLOROBIPHENYL (BZ-146)	PA
EPA 1668 A	2,2',3,4',5,6,6'-HEPTACHLOROBIPHENYL (BZ-188)	PA
EPA 1668 A	2,2',3,4',5-PENTACHLOROBIPHENYL (BZ-90)	PA
EPA 1668 A	2,2',3,4',6,6'-HEXACHLOROBIPHENYL (BZ-150)	PA
EPA 1668 A	2,2',3,4'-TETRACHLOROBIPHENYL (BZ-42)	PA
EPA 1668 A	2,2',3,4,4',5'-HEXACHLOROBIPHENYL (BZ-138)	PA
EPA 1668 A	2,2',3,4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-180)	PA
EPA 1668 A	2,2',3,4,4',5,6,6'-OCTACHLOROBIPHENYL (BZ-204)	PA
EPA 1668 A	2,2',3,4,4',5-HEXACHLOROBIPHENYL (BZ-137)	PA
EPA 1668 A	2,2',3,4,4',6,6'-HEPTACHLOROBIPHENYL (BZ-184)	PA
EPA 1668 A	2,2',3,4,4'-PENTACHLOROBIPHENYL (BZ-85)	PA
EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-87)	PA
EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-141)	PA
EPA 1668 A	2,2',3,4,5,6,6'-HEPTACHLOROBIPHENYL (BZ-186)	PA
EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-86)	PA
EPA 1668 A	2,2',3,4,6,6'-HEXACHLOROBIPHENYL (BZ-145)	PA
EPA 1668 A	2,2',3,4-TETRACHLOROBIPHENYL (BZ-41)	PA
EPA 1668 A	2,2',3,5'-TETRACHLOROBIPHENYL (BZ-44)	PA
EPA 1668 A	2,2',3,5,5'-PENTACHLOROBIPHENYL (BZ-92)	PA
EPA 1668 A	2,2',3,5,6,6'-HEXACHLOROBIPHENYL (BZ-152)	PA
EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-43)	PA
EPA 1668 A	2,2',3,6,6'-PENTACHLOROBIPHENYL (BZ-96)	PA
EPA 1668 A	2,2',3-TRICHLOROBIPHENYL (BZ-16)	PA
EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (BZ-154)	PA
EPA 1668 A	2,2',4,4',6,6'-HEXACHLOROBIPHENYL (BZ-155)	PA
EPA 1668 A	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (BZ-148)	PA
EPA 1668 A	2,2',3,4',5,6-HEXACHLOROBIPHENYL (BZ-147)	PA
EPA 1668 A	2,2',3,4',6'-PENTACHLOROBIPHENYL (BZ-98)	PA
EPA 1668 A	2,2',3,4',6-PENTACHLOROBIPHENYL (BZ-91)	PA
EPA 1668 A	2,2',3,4,4',5',6-HEPTACHLOROBIPHENYL (BZ-183)	PA
EPA 1668 A	2,2',3,4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-203)	PA
EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (BZ-182)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (BZ-181)	PA
EPA 1668 A	2,2',3,4,4',6'-HEXACHLOROBIPHENYL (BZ-140)	PA
EPA 1668 A	2,2',3,4,4',6-HEXACHLOROBIPHENYL (BZ-139)	PA
EPA 1668 A	2,2',3,4,5',6-HEXACHLOROBIPHENYL (BZ-144)	PA
EPA 1668 A	2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL (BZ-185)	PA
EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-143)	PA
EPA 1668 A	2,2',3,4,5,6-HEXACHLOROBIPHENYL (BZ-142)	PA
EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-89)	PA
EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-88)	PA
EPA 1668 A	2,2',3,5',6-PENTACHLOROBIPHENYL (BZ-95)	PA
EPA 1668 A	2,2',3,5,5',6-HEXACHLOROBIPHENYL (BZ-151)	PA
EPA 1668 A	2,2',3,5,6'-PENTACHLOROBIPHENYL (BZ-94)	PA
EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-93)	PA
EPA 1668 A	2,2',3,6'-TETRACHLOROBIPHENYL (BZ-46)	PA
EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-45)	PA
EPA 1668 A	2,2',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-153)	PA
EPA 1668 A	2,2',4,4',5-PENTACHLOROBIPHENYL (BZ-99)	PA
EPA 1668 A	2,2',4,4',6-PENTACHLOROBIPHENYL (BZ-100)	PA



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METHOD	ANALYTE	PRIMARY
EPA 1668 A	2,2',4,4'-TETRACHLOROBIPHENYL (BZ-47)	PA
EPA 1668 A	2,2',4,5'-TETRACHLOROBIPHENYL (BZ-49)	PA
EPA 1668 A	2,2',4,5,6'-PENTACHLOROBIPHENYL (BZ-102)	PA
EPA 1668 A	2,2',4,6'-TETRACHLOROBIPHENYL (BZ-51)	PA
EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-50)	PA
EPA 1668 A	2,2',5,5'-TETRACHLOROBIPHENYL (BZ-52)	PA
EPA 1668 A	2,2',5-TRICHLOROBIPHENYL (BZ-18)	PA
EPA 1668 A	2,2',6-TRICHLOROBIPHENYL (BZ-19)	PA
EPA 1668 A	2,3',4',5',6-PENTACHLOROBIPHENYL (BZ-125)	PA
EPA 1668 A	2,3',4',5,5'-PENTACHLOROBIPHENYL (BZ-124)	PA
EPA 1668 A	2,3',4',6-TETRACHLOROBIPHENYL (BZ-71)	PA
EPA 1668 A	2,3',4,4',5',6-HEXACHLOROBIPHENYL (BZ-168)	PA
EPA 1668 A	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-167)	PA
EPA 1668 A	2,3',4,4',6-PENTACHLOROBIPHENYL (BZ-119)	PA
EPA 1668 A	2,3',4,5',6-PENTACHLOROBIPHENYL (BZ-121)	PA
EPA 1668 A	2,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-120)	PA
EPA 1668 A	2,3',4,6-TETRACHLOROBIPHENYL (BZ-69)	PA
EPA 1668 A	2,3',5',6-TETRACHLOROBIPHENYL (BZ-73)	PA
EPA 1668 A	2,3',5,5'-TETRACHLOROBIPHENYL (BZ-72)	PA
EPA 1668 A	2,3',6-TRICHLOROBIPHENYL (BZ-27)	PA
EPA 1668 A	2,3,3',4',5',6-HEXACHLOROBIPHENYL (BZ-164)	PA
EPA 1668 A	2,3,3',4',5,5',6-HEPTACHLOROBIPHENYL (BZ-193)	PA
EPA 1668 A	2,3,3',4',5,6-HEXACHLOROBIPHENYL (BZ-163)	PA
EPA 1668 A	2,3,3',4',6-PENTACHLOROBIPHENYL (BZ-110)	PA
EPA 1668 A	2,3,3',4,4',5',6-HEPTACHLOROBIPHENYL (BZ-191)	PA
EPA 1668 A	2,2',4,5',6-PENTACHLOROBIPHENYL (BZ-103)	PA
EPA 1668 A	2,2',4,5,5'-PENTACHLOROBIPHENYL (BZ-101)	PA
EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-48)	PA
EPA 1668 A	2,2',4,6,6'-PENTACHLOROBIPHENYL (BZ-104)	PA
EPA 1668 A	2,2',4-TRICHLOROBIPHENYL (BZ-17)	PA
EPA 1668 A	2,2',5,6'-TETRACHLOROBIPHENYL (BZ-53)	PA
EPA 1668 A	2,2',6,6'-TETRACHLOROBIPHENYL (BZ-54)	PA
EPA 1668 A	2,2'-DICHLOROBIPHENYL (BZ-4)	PA
EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-70)	PA
EPA 1668 A	2,3',4',5-TETRACHLOROBIPHENYL (BZ-70)	PA
EPA 1668 A	2,3',4'-TRICHLOROBIPHENYL (BZ-33)	PA
EPA 1668 A	2,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-123)	PA
EPA 1668 A	2,3',4,4',5-PENTACHLOROBIPHENYL (BZ-118)	PA
EPA 1668 A	2,3',4,4'-TETRACHLOROBIPHENYL (BZ-66)	PA
EPA 1668 A	2,3',4,5'-TETRACHLOROBIPHENYL (BZ-68)	PA
EPA 1668 A	2,3',4,5-TETRACHLOROBIPHENYL (BZ-67)	PA
EPA 1668 A	2,3',4-TRICHLOROBIPHENYL (BZ-25)	PA
EPA 1668 A	2,3',5'-TRICHLOROBIPHENYL (BZ-34)	PA
EPA 1668 A	2,3',5-TRICHLOROBIPHENYL (BZ-26)	PA
EPA 1668 A	2,3'-DICHLOROBIPHENYL (BZ-6)	PA
EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-122)	PA
EPA 1668 A	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (BZ-162)	PA
EPA 1668 A	2,3,3',4',5-PENTACHLOROBIPHENYL (BZ-107)	PA
EPA 1668 A	2,3,3',4'-TETRACHLOROBIPHENYL (BZ-56)	PA
EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-157)	PA



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EPA 1668 A	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-205)	PA
EPA 1668 A	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (BZ-190)	PA
EPA 1668 A	2,3,3',4,4',6-HEXACHLOROBIPHENYL (BZ-158)	PA
EPA 1668 A	2,3,3',4,5',6-HEXACHLOROBIPHENYL (BZ-161)	PA
EPA 1668 A	2,3,3',4,5,5',6-HEPTACHLOROBIPHENYL (BZ-192)	PA
EPA 1668 A	2,3,3',4,5,6-HEXACHLOROBIPHENYL (BZ-160)	PA
EPA 1668 A	2,3,3',4,6-PENTACHLOROBIPHENYL (BZ-109)	PA
EPA 1668 A	2,3,3',5',6-PENTACHLOROBIPHENYL (BZ-113)	PA
EPA 1668 A	2,3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-165)	PA
EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-112)	PA
EPA 1668 A	2,3,3',6-TETRACHLOROBIPHENYL (BZ-59)	PA
EPA 1668 A	2,3,4',5,6-PENTACHLOROBIPHENYL (BZ-117)	PA
EPA 1668 A	2,3,4',6-TETRACHLOROBIPHENYL (BZ-64)	PA
EPA 1668 A	2,3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-166)	PA
EPA 1668 A	2,3,4,4',6-PENTACHLOROBIPHENYL (BZ-115)	PA
EPA 1668 A	2,3,4,5,6-PENTACHLOROBIPHENYL (BZ-116)	PA
EPA 1668 A	2,3,4,6-TETRACHLOROBIPHENYL (BZ-62)	PA
EPA 1668 A	2,3,5,6-TETRACHLOROBIPHENYL (BZ-65)	PA
EPA 1668 A	2,3,6-TRICHLOROBIPHENYL (BZ-24)	PA
EPA 1668 A	2,4',5-TRICHLOROBIPHENYL (BZ-31)	PA
EPA 1668 A	2,4'-DICHLOROBIPHENYL (BZ-8)	PA
EPA 1668 A	2,4,4',6-TETRACHLOROBIPHENYL (BZ-75)	PA
EPA 1668 A	2,4,5-TRICHLOROBIPHENYL (BZ-29)	PA
EPA 1668 A	2,4-DICHLOROBIPHENYL (BZ-7)	PA
EPA 1668 A	2,6-DICHLOROBIPHENYL (BZ-10)	PA
EPA 1668 A	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-169)	PA
EPA 1668 A	3,3',4,4'-TETRACHLOROBIPHENYL (BZ-77)	PA
EPA 1668 A	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-189)	PA
EPA 1668 A	2,3,3',4,4',5-HEXACHLOROBIPHENYL (BZ-156)	PA
EPA 1668 A	2,3,3',4,4'-PENTACHLOROBIPHENYL (BZ-105)	PA
EPA 1668 A	2,3,3',4,5'-PENTACHLOROBIPHENYL (BZ-108)	PA
EPA 1668 A	2,3,3',4,5,5'-HEXACHLOROBIPHENYL (BZ-159)	PA
EPA 1668 A	2,3,3',4,5-PENTACHLOROBIPHENYL (BZ-106)	PA
EPA 1668 A	2,3,3',4-TETRACHLOROBIPHENYL (BZ-55)	PA
EPA 1668 A	2,3,3',5'-TETRACHLOROBIPHENYL (BZ-58)	PA
EPA 1668 A	2,3,3',5,5'-PENTACHLOROBIPHENYL (BZ-111)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-57)	PA
EPA 1668 A	2,3,3'-TRICHLOROBIPHENYL (BZ-20)	PA
EPA 1668 A	2,3,4',5-TETRACHLOROBIPHENYL (BZ-63)	PA
EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-22)	PA
EPA 1668 A	2,3,4,4',5-PENTACHLOROBIPHENYL (BZ-114)	PA
EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-60)	PA
EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-61)	PA
EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-21)	PA
EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-23)	PA
EPA 1668 A	2,3-DICHLOROBIPHENYL (BZ-5)	PA
EPA 1668 A	2,4',6-TRICHLOROBIPHENYL (BZ-32)	PA
EPA 1668 A	2,4,4',5-TETRACHLOROBIPHENYL (BZ-74)	PA
EPA 1668 A	2,4,4'-TRICHLOROBIPHENYL (BZ-28)	PA
EPA 1668 A	2,4,6-TRICHLOROBIPHENYL (BZ-30)	PA
EPA 1668 A	2,5-DICHLOROBIPHENYL (BZ-9)	PA
EPA 1668 A	2-CHLOROBIPHENYL (BZ-1)	PA
EPA 1668 A	3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-126)	PA



Commonwealth of Virginia

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Virginia Laboratory ID: 460182
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 1668 A	3,3',4,5'-TETRACHLOROBIPHENYL (BZ-79)	PA
EPA 1668 A	3,3',4,5-TETRACHLOROBIPHENYL (BZ-78)	PA
EPA 1668 A	3,3',5,5'-TETRACHLOROBIPHENYL (BZ-80)	PA
EPA 1668 A	3,3'-DICHLOROBIPHENYL (BZ-11)	PA
EPA 1668 A	3,4'-DICHLOROBIPHENYL (BZ-13)	PA
EPA 1668 A	3,4,4'-TRICHLOROBIPHENYL (BZ-37)	PA
EPA 1668 A	3,4-DICHLOROBIPHENYL (BZ-12)	PA
EPA 1668 A	3-CHLOROBIPHENYL (BZ-2)	PA
EPA 1668 A	4-CHLOROBIPHENYL (BZ-3)	PA
EPA 1671 A	2-METHOXYETHANOL (METHYL CELLOSOLVE)	PA
EPA 1671 A	DIETHYLAMINE	PA
EPA 1671 A	ETHANOL	PA
EPA 1671 A	N-PROPANOL (1-PROPANOL)	PA
EPA 180.1 REV 2	TURBIDITY	PA
EPA 200.7 REV 4.4	ALUMINUM	PA
EPA 200.7 REV 4.4	ARSENIC	PA
EPA 200.7 REV 4.4	BERYLLIUM	PA
EPA 200.7 REV 4.4	CADMIUM	PA
EPA 200.7 REV 4.4	CHROMIUM	PA
EPA 200.7 REV 4.4	COPPER	PA
EPA 200.7 REV 4.4	LEAD	PA
EPA 200.7 REV 4.4	MANGANESE	PA
EPA 200.7 REV 4.4	NICKEL	PA
EPA 200.7 REV 4.4	SELENIUM	PA
EPA 200.7 REV 4.4	SODIUM	PA
EPA 200.7 REV 4.4	TIN	PA
EPA 200.7 REV 4.4	VANADIUM	PA
EPA 200.8 REV 5.4	ALUMINUM	PA
EPA 200.8 REV 5.4	ARSENIC	PA
EPA 200.8 REV 5.4	BERYLLIUM	PA
EPA 200.8 REV 5.4	CHROMIUM	PA
EPA 200.8 REV 5.4	COPPER	PA
EPA 200.8 REV 5.4	MANGANESE	PA

METHOD	ANALYTE	PRIMARY
EPA 1668 A	3,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-127)	PA
EPA 1668 A	3,3',4-TRICHLOROBIPHENYL (BZ-35)	PA
EPA 1668 A	3,3',5-TRICHLOROBIPHENYL (BZ-36)	PA
EPA 1668 A	3,4',5-TRICHLOROBIPHENYL (BZ-39)	PA
EPA 1668 A	3,4,4',5-TETRACHLOROBIPHENYL (BZ-81)	PA
EPA 1668 A	3,4,5-TRICHLOROBIPHENYL (BZ-38)	PA
EPA 1668 A	3,5-DICHLOROBIPHENYL (BZ-14)	PA
EPA 1668 A	4,4'-DICHLOROBIPHENYL (BZ-15)	PA
EPA 1668 A	DECACHLOROBIPHENYL (BZ-209)	PA
EPA 1671 A	ACETONITRILE	PA
EPA 1671 A	DIMETHYL SULFOXIDE	PA
EPA 1671 A	METHANOL	PA
EPA 1671 A	TRIETHYLAMINE	PA
EPA 200.2 REV 2.8	PREP: SAMPLE PREPARATION PROCEDURE FOR SPECTROCHEMICAL DETERMINATION OF TOTAL RECOVERABLE ELEMENTS	PA
EPA 200.7 REV 4.4	ANTIMONY	PA
EPA 200.7 REV 4.4	BARIUM	PA
EPA 200.7 REV 4.4	BORON	PA
EPA 200.7 REV 4.4	CALCIUM	PA
EPA 200.7 REV 4.4	COBALT	PA
EPA 200.7 REV 4.4	IRON	PA
EPA 200.7 REV 4.4	MAGNESIUM	PA
EPA 200.7 REV 4.4	MOLYBDENUM	PA
EPA 200.7 REV 4.4	POTASSIUM	PA
EPA 200.7 REV 4.4	SILVER	PA
EPA 200.7 REV 4.4	THALLIUM	PA
EPA 200.7 REV 4.4	TITANIUM	PA
EPA 200.7 REV 4.4	ZINC	PA
EPA 200.8 REV 5.4	ANTIMONY	PA
EPA 200.8 REV 5.4	BARIUM	PA
EPA 200.8 REV 5.4	CADMIUM	PA
EPA 200.8 REV 5.4	COBALT	PA
EPA 200.8 REV 5.4	LEAD	PA
EPA 200.8 REV 5.4	MOLYBDENUM	PA



Commonwealth of Virginia

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VELAP Certificate No.: 10358

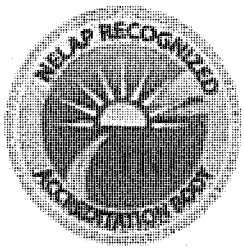
Eurofins Lancaster Laboratories Environmental, LLC
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 200.8 REV 5.4	NICKEL	PA
EPA 200.8 REV 5.4	SILVER	PA
EPA 200.8 REV 5.4	VANADIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	SODIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	PA
EPA 300.0 REV 2.1	BROMIDE	PA
EPA 300.0 REV 2.1	FLUORIDE	PA
EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 3005 A	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	PA
EPA 3020 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	PA
EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	PA
EPA 3511	PREP: ORGANIC EXTRACTION AND SAMPLE PREPARATION	PA
EPA 353.2 REV 2	NITRATE AS N	PA
EPA 353.2 REV 2	NITRITE AS N	PA
EPA 3630 C	PREP: SILICA GEL CLEANUP	PA
EPA 365.3	ORTHOPHOSPHATE AS P	PA
EPA 420.4 REV 1	TOTAL PHENOLICS	PA
EPA 6010 C	ALUMINUM	PA
EPA 6010 C	ARSENIC	PA
EPA 6010 C	BERYLLIUM	PA
EPA 6010 C	CADMIUM	PA
EPA 6010 C	CHROMIUM	PA
EPA 6010 C	COPPER	PA
EPA 6010 C	LEAD	PA
EPA 6010 C	MAGNESIUM	PA
EPA 6010 C	MOLYBDENUM	PA
EPA 6010 C	POTASSIUM	PA
EPA 6010 C	SILVER	PA
EPA 6010 C	STRONTIUM	PA

METHOD	ANALYTE	PRIMARY
EPA 200.8 REV 5.4	SELENIUM	PA
EPA 200.8 REV 5.4	THALLIUM	PA
EPA 200.8 REV 5.4	ZINC	PA
EPA 200.8 REV 5.4 - EXTENDED	IRON	PA
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	PA
EPA 200.8 REV 5.4 - EXTENDED	TIN	PA
EPA 245.1 REV 3	MERCURY	PA
EPA 300.0 REV 2.1	CHLORIDE	PA
EPA 300.0 REV 2.1	NITRATE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	PA
EPA 335.4 REV 1.0	CYANIDE	PA
EPA 3510 C	PREP: LIQUID-LIQUID EXTRACTION	PA
EPA 3520 C	PREP: CONTINUOUS LIQUID-LIQUID EXTRACTION	PA
EPA 353.2 REV 2	NITRATE/NITRITE	PA
EPA 3620 C	PREP: FLORISIL CLEANUP	PA
EPA 365.1 REV 2	PHOSPHORUS, TOTAL	PA
EPA 410.4 REV 2	CHEMICAL OXYGEN DEMAND (COD)	PA
EPA 5030 C	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	PA
EPA 6010 C	ANTIMONY	PA
EPA 6010 C	BARIUM	PA
EPA 6010 C	BORON	PA
EPA 6010 C	CALCIUM	PA
EPA 6010 C	COBALT	PA
EPA 6010 C	IRON	PA
EPA 6010 C	LITHIUM	PA
EPA 6010 C	MANGANESE	PA
EPA 6010 C	NICKEL	PA
EPA 6010 C	SELENIUM	PA
EPA 6010 C	SODIUM	PA
EPA 6010 C	THALLIUM	PA



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METHOD	ANALYTE	PRIMARY
EPA 6010 C	TIN	PA
EPA 6010 C	VANADIUM	PA
EPA 6010 C - EXTENDED	SULFUR	PA
EPA 6010 C - EXTENDED	ZIRCONIUM	PA
EPA 6010 D	ANTIMONY	PA
EPA 6010 D	BARIUM	PA
EPA 6010 D	BORON	PA
EPA 6010 D	CALCIUM	PA
EPA 6010 D	COBALT	PA
EPA 6010 D	IRON	PA
EPA 6010 D	LITHIUM	PA
EPA 6010 D	MANGANESE	PA
EPA 6010 D	NICKEL	PA
EPA 6010 D	SELENIUM	PA
EPA 6010 D	SODIUM	PA
EPA 6010 D	THALLIUM	PA
EPA 6010 D	TITANIUM	PA
EPA 6010 D	ZINC	PA
EPA 6010 D - EXTENDED	THORIUM	PA
EPA 602	BENZENE	PA
EPA 602	TOLUENE	PA
EPA 6020 A	ALUMINUM	PA
EPA 6020 A	ARSENIC	PA
EPA 6020 A	BERYLLIUM	PA
EPA 6020 A	CALCIUM	PA
EPA 6020 A	COBALT	PA
EPA 6020 A	IRON	PA
EPA 6020 A	MAGNESIUM	PA
EPA 6020 A	NICKEL	PA
EPA 6020 A	SELENIUM	PA
EPA 6020 A	SODIUM	PA
EPA 6020 A	VANADIUM	PA
EPA 6020 A - EXTENDED	MOLYBDENUM	PA
EPA 6020 A - EXTENDED	TIN	PA
EPA 6020 A - EXTENDED	URANIUM	PA
EPA 6020 B	ANTIMONY	PA
EPA 6020 B	BARIUM	PA
EPA 6020 B	CADMIUM	PA
EPA 6010 C	TITANIUM	PA
EPA 6010 C	ZINC	PA
EPA 6010 C - EXTENDED	THORIUM	PA
EPA 6010 D	ALUMINUM	PA
EPA 6010 D	ARSENIC	PA
EPA 6010 D	BERYLLIUM	PA
EPA 6010 D	CADMIUM	PA
EPA 6010 D	CHROMIUM	PA
EPA 6010 D	COPPER	PA
EPA 6010 D	LEAD	PA
EPA 6010 D	MAGNESIUM	PA
EPA 6010 D	MOLYBDENUM	PA
EPA 6010 D	POTASSIUM	PA
EPA 6010 D	SILVER	PA
EPA 6010 D	STRONTIUM	PA
EPA 6010 D	TIN	PA
EPA 6010 D	VANADIUM	PA
EPA 6010 D - EXTENDED	SULFUR	PA
EPA 6010 D - EXTENDED	ZIRCONIUM	PA
EPA 602	ETHYLBENZENE	PA
EPA 602	XYLENE (TOTAL)	PA
EPA 6020 A	ANTIMONY	PA
EPA 6020 A	BARIUM	PA
EPA 6020 A	CADMIUM	PA
EPA 6020 A	CHROMIUM	PA
EPA 6020 A	COPPER	PA
EPA 6020 A	LEAD	PA
EPA 6020 A	MANGANESE	PA
EPA 6020 A	POTASSIUM	PA
EPA 6020 A	SILVER	PA
EPA 6020 A	THALLIUM	PA
EPA 6020 A	ZINC	PA
EPA 6020 A - EXTENDED	STRONTIUM	PA
EPA 6020 A - EXTENDED	TITANIUM	PA
EPA 6020 B	ALUMINUM	PA
EPA 6020 B	ARSENIC	PA
EPA 6020 B	BERYLLIUM	PA
EPA 6020 B	CALCIUM	PA



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METHOD	ANALYTE	PRIMARY
EPA 6020 B	CHROMIUM	PA
EPA 6020 B	COPPER	PA
EPA 6020 B	LEAD	PA
EPA 6020 B	MANGANESE	PA
EPA 6020 B	NICKEL	PA
EPA 6020 B	SELENIUM	PA
EPA 6020 B	SODIUM	PA
EPA 6020 B	TIN	PA
EPA 6020 B	ZINC	PA
EPA 6020 B - EXTENDED	TITANIUM	PA
EPA 608.3	4,4'-DDD	PA
EPA 608.3	4,4'-DDT	PA
EPA 608.3	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 608.3	AROCLOR-1221 (PCB-1221)	PA
EPA 608.3	AROCLOR-1242 (PCB-1242)	PA
EPA 608.3	AROCLOR-1254 (PCB-1254)	PA
EPA 608.3	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 608.3	DELTA-BHC	PA
EPA 608.3	ENDOSULFAN I	PA
EPA 608.3	ENDOSULFAN SULFATE	PA
EPA 608.3	ENDRIN ALDEHYDE	PA
EPA 608.3	HEPTACHLOR	PA
EPA 608.3	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 622	BOLSTAR (SULPROFOS)	PA
EPA 622	DEMETON-O	PA
EPA 622	DIAZINON	PA
EPA 622	DISULFOTON	PA
EPA 622	FENSULFOTHION	PA
EPA 622	MERPHOS	PA
EPA 622	MEVINPHOS	PA
EPA 622	PHORATE	PA
EPA 624.1	1,1,1-TRICHLOROETHANE	PA
EPA 624.1	1,1,2-TRICHLOROETHANE	PA
EPA 6020 B	COBALT	PA
EPA 6020 B	IRON	PA
EPA 6020 B	MAGNESIUM	PA
EPA 6020 B	MOLYBDENUM	PA
EPA 6020 B	POTASSIUM	PA
EPA 6020 B	SILVER	PA
EPA 6020 B	THALLIUM	PA
EPA 6020 B	VANADIUM	PA
EPA 6020 B - EXTENDED	STRONTIUM	PA
EPA 6020 B - EXTENDED	URANIUM	PA
EPA 608.3	4,4'-DDE	PA
EPA 608.3	ALDRIN	PA
EPA 608.3	AROCLOR-1016 (PCB-1016)	PA
EPA 608.3	AROCLOR-1232 (PCB-1232)	PA
EPA 608.3	AROCLOR-1248 (PCB-1248)	PA
EPA 608.3	AROCLOR-1260 (PCB-1260)	PA
EPA 608.3	CHLORDANE, TOTAL	PA
EPA 608.3	DIELDRIN	PA
EPA 608.3	ENDOSULFAN II	PA
EPA 608.3	ENDRIN	PA
EPA 608.3	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 608.3	HEPTACHLOR EPOXIDE	PA
EPA 622	AZINPHOS-METHYL (GUTHION)	PA
EPA 622	CHLORPYRIFOS	PA
EPA 622	DEMETON-S	PA
EPA 622	DICHLOROVOS (DDVP, DICHLORVOS)	PA
EPA 622	ETHOPROP	PA
EPA 622	FENTHION	PA
EPA 622	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 622	NALED	PA
EPA 622	STIROFOS (TETRACHLORVINPOS, GARDONA) (MIXED ISOMERS)	PA
EPA 624.1	1,1,2,2-TETRACHLOROETHANE	PA



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EPA 624.1	1,1-DICHLOROETHANE	PA
EPA 624.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 624.1	1,2-DICHLOROPROPANE	PA
EPA 624.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 624.1	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 624.1	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 624.1	ACROLEIN (PROPENAL)	PA
EPA 624.1	BENZENE	PA
EPA 624.1	BROMOFORM	PA
EPA 624.1	CHLOROBENZENE	PA
EPA 624.1	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 624.1	CIS-1,2-DICHLOROETHYLENE	PA
EPA 624.1	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 624.1	ETHYLBENZENE	PA
EPA 624.1	M+P-XYLENE	PA
EPA 624.1	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 624.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 624.1	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 624.1	TRANS-1,2-DICHLOROETHENE	PA
EPA 624.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 624.1	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 624.1 EXTENDED	ISOPROPYL ACETATE	PA
EPA 625.1	1,2,4-TRICHLOROBENZENE	PA
EPA 625.1	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 625.1	2,4,6-TRICHLOROPHENOL	PA
EPA 625.1	2,4-DIMETHYLPHENOL	PA
EPA 625.1	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 625.1	2-CHLORONAPHTHALENE	PA
EPA 625.1	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA

METHOD	ANALYTE	PRIMARY
EPA 624.1	1,1-DICHLOROETHYLENE	PA
EPA 624.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 624.1	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 624.1	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 624.1	2-CHLOROETHYL VINYL ETHER	PA
EPA 624.1	ACETONE	PA
EPA 624.1	ACRYLONITRILE	PA
EPA 624.1	BROMODICHLOROMETHANE	PA
EPA 624.1	CARBON TETRACHLORIDE	PA
EPA 624.1	CHLORODIBROMOMETHANE	PA
EPA 624.1	CHLOROFORM	PA
EPA 624.1	CIS-1,3-DICHLOROPROPENE	PA
EPA 624.1	ETHYL ACETATE	PA
EPA 624.1	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 624.1	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 624.1	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 624.1	O-XYLENE	PA
EPA 624.1	TOLUENE	PA
EPA 624.1	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 624.1	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 624.1	XYLENE (TOTAL)	PA
EPA 624.1 EXTENDED	N-HEXANE	PA
EPA 625.1	1,2-DIPHENYLHYDRAZINE	PA
EPA 625.1	2,3-DICHLOROANILINE	PA
EPA 625.1	2,4-DICHLOROPHENOL	PA
EPA 625.1	2,4-DINITROPHENOL	PA
EPA 625.1	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 625.1	2-CHLOROPHENOL	PA
EPA 625.1	2-METHYLPHENOL (O-CRESOL)	PA



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EPA 625.1	2-NITROPHENOL	PA
EPA 625.1	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 625.1	4-CHLOROPHENYL PHENYLETHER	PA
EPA 625.1	ACENAPHTHENE	PA
EPA 625.1	ACETOPHENONE	PA
EPA 625.1	ANTHRACENE	PA
EPA 625.1	BENZO(A)ANTHRACENE	PA
EPA 625.1	BENZO(B)FLUORANTHENE	PA
EPA 625.1	BENZO(K)FLUORANTHENE	PA
EPA 625.1	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 625.1	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 625.1	CARBAZOLE	PA
EPA 625.1	DI-N-BUTYL PHTHALATE	PA
EPA 625.1	DIBENZO(A,H) ANTHRACENE	PA
EPA 625.1	DIMETHYL PHTHALATE	PA
EPA 625.1	FLUORANTHENE	PA
EPA 625.1	HEXACHLOROBENZENE	PA
EPA 625.1	HEXACHLOROCYCLOPENTADIENE	PA
EPA 625.1	INDENO(1,2,3-CD) PYRENE	PA
EPA 625.1	N-NITROSODI-N-PROPYLAMINE	PA
EPA 625.1	N-NITROSODIPHENYLAMINE	PA
EPA 625.1	NITROBENZENE	PA
EPA 625.1	PHENANTHRENE	PA
EPA 625.1	PYRENE	PA
EPA 625.1 EXTENDED	4-METHYLPHENOL (P-CRESOL)	PA
EPA 625.1 EXTENDED	N-OCTADECANE	PA
EPA 7196 A	CHROMIUM VI	PA
EPA 7470 A	MERCURY	PA
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8015 B	ETHANOL	PA
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 B	METHANOL	PA
EPA 8015 C	ETHANOL	PA

METHOD	ANALYTE	PRIMARY
EPA 625.1	3,3'-DICHLOROBENZIDINE	PA
EPA 625.1	4-CHLORO-3-METHYLPHENOL	PA
EPA 625.1	4-NITROPHENOL	PA
EPA 625.1	ACENAPHTHYLENE	PA
EPA 625.1	ANILINE	PA
EPA 625.1	BENZIDINE	PA
EPA 625.1	BENZO(A)PYRENE	PA
EPA 625.1	BENZO(G,H,I)PERYLENE	PA
EPA 625.1	BENZOIC ACID	PA
EPA 625.1	BIS(2-CHLOROETHYL) ETHER	PA
EPA 625.1	BUTYL BENZYL PHTHALATE	PA
EPA 625.1	CHRYSENE	PA
EPA 625.1	DI-N-OCTYL PHTHALATE	PA
EPA 625.1	DIETHYL PHTHALATE	PA
EPA 625.1	DIPHENYL ETHER (DIPHENYL OXIDE)	PA
EPA 625.1	FLUORENE	PA
EPA 625.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 625.1	HEXACHLOROETHANE	PA
EPA 625.1	ISOPHORONE	PA
EPA 625.1	N-NITROSODIMETHYLAMINE	PA
EPA 625.1	NAPHTHALENE	PA
EPA 625.1	PENTACHLOROPHENOL	PA
EPA 625.1	PHENOL	PA
EPA 625.1	PYRIDINE	PA
EPA 625.1 EXTENDED	N-DECANE	PA
EPA 6850	PERCHLORATE	PA
EPA 7199	CHROMIUM VI	PA
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 B	ETHYLENE GLYCOL	PA
EPA 8015 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 C	ETHYLENE GLYCOL	PA



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10358

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Virginia Laboratory ID: 460182
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Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 C	METHANOL	PA
EPA 8015 C - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8021 B	ETHYLBENZENE	PA
EPA 8021 B	M+P-XYLENE	PA
EPA 8021 B	O-XYLENE	PA
EPA 8021 B	XYLENE (TOTAL)	PA
EPA 8081 A	4,4'-DDD	PA
EPA 8081 A	4,4'-DDT	PA
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 A	DELTA-BHC	PA
EPA 8081 A	ENDOSULFAN I	PA
EPA 8081 A	ENDOSULFAN SULFATE	PA
EPA 8081 A	ENDRIN ALDEHYDE	PA
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 A	HEPTACHLOR	PA
EPA 8081 A	METHOXYCHLOR	PA
EPA 8081 A - EXTENDED	KEPONE	PA
EPA 8081 B	4,4'-DDE	PA
EPA 8081 B	ALDRIN	PA
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 B	CHLORDANE, TOTAL	PA
EPA 8081 B	DIELDRIN	PA
EPA 8081 B	ENDOSULFAN II	PA
EPA 8081 B	ENDRIN	PA
EPA 8081 B	ENDRIN KETONE	PA
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C - EXTENDED	PROPYLENE GLYCOL	PA
EPA 8021 B	BENZENE	PA
EPA 8021 B	ISOPROPYLBENZENE	PA
EPA 8021 B	NAPHTHALENE	PA
EPA 8021 B	TOLUENE	PA
EPA 8021 B - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8081 A	4,4'-DDE	PA
EPA 8081 A	ALDRIN	PA
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 A	CHLORDANE, TOTAL	PA
EPA 8081 A	DIELDRIN	PA
EPA 8081 A	ENDOSULFAN II	PA
EPA 8081 A	ENDRIN	PA
EPA 8081 A	ENDRIN KETONE	PA
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 8081 A	HEPTACHLOR EPOXIDE	PA
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8081 B	4,4'-DDD	PA
EPA 8081 B	4,4'-DDT	PA
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	DELTA-BHC	PA
EPA 8081 B	ENDOSULFAN I	PA
EPA 8081 B	ENDOSULFAN SULFATE	PA
EPA 8081 B	ENDRIN ALDEHYDE	PA
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	HEPTACHLOR	PA

Scope of Accreditation

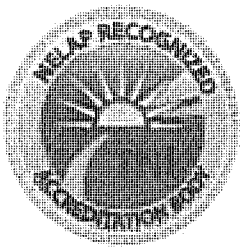
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Lancaster, PA 17601

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8081 B	HEPTACHLOR EPOXIDE	PA
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8082 A	AROCLOR-1016 (PCB-1016)	PA
EPA 8082 A	AROCLOR-1232 (PCB-1232)	PA
EPA 8082 A	AROCLOR-1248 (PCB-1248)	PA
EPA 8082 A	AROCLOR-1260 (PCB-1260)	PA
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	PA
EPA 8141 A	BOLSTAR (SULPROFOS)	PA
EPA 8141 A	COUMAPHOS	PA
EPA 8141 A	DEMETON-S	PA
EPA 8141 A	DICHLOROVOS (DDVP, DICHLORVOS)	PA
EPA 8141 A	ETHION	PA
EPA 8141 A	FAMPHUR	PA
EPA 8141 A	FENTHION	PA
EPA 8141 A	MERPHOS	PA
EPA 8141 A	MEVINPHOS	PA
EPA 8141 A	PARATHION (PARATHION - ETHYL)	PA
EPA 8141 A	RONNEL	PA
EPA 8141 A	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	PA
EPA 8141 A	TRICHLORONATE	PA
EPA 8141 B	AZINPHOS-METHYL (GUTHION)	PA
EPA 8141 B	CHLORPYRIFOS	PA
EPA 8141 B	DEMETON-O	PA
EPA 8141 B	DICHLOROVOS (DDVP, DICHLORVOS)	PA
EPA 8141 B	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	PA
EPA 8141 B	ETHOPROP	PA
EPA 8141 B	FENSULFOTHION	PA
EPA 8141 B	MALATHION	PA
EPA 8141 B	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8141 B	NALED	PA
EPA 8141 B	PHORATE	PA
EPA 8141 B	SIMAZINE	PA
EPA 8141 B	TOKUTHION (PROTHIOPHOS)	PA
EPA 8081 B	METHOXYCHLOR	PA
EPA 8081 B - EXTENDED	KEPONE	PA
EPA 8082 A	AROCLOR-1221 (PCB-1221)	PA
EPA 8082 A	AROCLOR-1242 (PCB-1242)	PA
EPA 8082 A	AROCLOR-1254 (PCB-1254)	PA
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	PA
EPA 8141 A	ATRAZINE	PA
EPA 8141 A	CHLORPYRIFOS	PA
EPA 8141 A	DEMETON-O	PA
EPA 8141 A	DIAZINON	PA
EPA 8141 A	DISULFOTON	PA
EPA 8141 A	ETHOPROP	PA
EPA 8141 A	FENSULFOTHION	PA
EPA 8141 A	MALATHION	PA
EPA 8141 A	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8141 A	NALED	PA
EPA 8141 A	PHORATE	PA
EPA 8141 A	SIMAZINE	PA
EPA 8141 A	TOKUTHION (PROTHIOPHOS)	PA
EPA 8141 B	ATRAZINE	PA
EPA 8141 B	BOLSTAR (SULPROFOS)	PA
EPA 8141 B	COUMAPHOS	PA
EPA 8141 B	DEMETON-S	PA
EPA 8141 B	DISULFOTON	PA
EPA 8141 B	ETHION	PA
EPA 8141 B	FAMPHUR	PA
EPA 8141 B	FENTHION	PA
EPA 8141 B	MERPHOS	PA
EPA 8141 B	MEVINPHOS	PA
EPA 8141 B	PARATHION (PARATHION - ETHYL)	PA
EPA 8141 B	RONNEL	PA
EPA 8141 B	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	PA
EPA 8141 B	TRICHLORONATE	PA



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8151 A	2,4,5-T	PA
EPA 8151 A	2,4-DB	PA
EPA 8151 A	DICAMBA	PA
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8151 A	MCPP	PA
EPA 8151 A	PICLORAM	PA
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 B	1,1-DICHLOROETHANE	PA
EPA 8260 B	1,1-DICHLOROPROPENE	PA
EPA 8260 B	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 B	1,3-DICHLOROPROPANE	PA
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8260 B	2,2-DICHLOROPROPANE	PA
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 B	2-HEXANONE	PA
EPA 8260 B	4-CHLOROTOLUENE	PA
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 B	ACETONITRILE	PA
EPA 8260 B	ACRYLONITRILE	PA
EPA 8260 B	BENZENE	PA
EPA 8260 B	BROMOBENZENE	PA
EPA 8260 B	BROMODICHLOROMETHANE	PA
EPA 8260 B	CARBON DISULFIDE	PA
EPA 8260 B	CHLOROBENZENE	PA
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	PA

METHOD	ANALYTE	PRIMARY
EPA 8151 A	2,4-D	PA
EPA 8151 A	DALAPON	PA
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	PA
EPA 8151 A	MCPA	PA
EPA 8151 A	PENTACHLOROPHENOL	PA
EPA 8151 A	SILVEX (2,4,5-TP)	PA
EPA 8260 B	1,1,1-TRICHLOROETHANE	PA
EPA 8260 B	1,1,2-TRICHLOROETHANE	PA
EPA 8260 B	1,1-DICHLOROETHYLENE	PA
EPA 8260 B	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 B	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 B	1,2-DICHLOROPROPANE	PA
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 B	2-CHLOROTOLUENE	PA
EPA 8260 B	2-NITROPROPANE	PA
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 B	ACETONE	PA
EPA 8260 B	ACROLEIN (PROPENAL)	PA
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 B	BENZYL CHLORIDE	PA
EPA 8260 B	BROMOCHLOROMETHANE	PA
EPA 8260 B	BROMOFORM	PA
EPA 8260 B	CARBON TETRACHLORIDE	PA
EPA 8260 B	CHLORODIBROMOMETHANE	PA
EPA 8260 B	CHLOROFORM	PA



Commonwealth of Virginia

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Scope of Accreditation

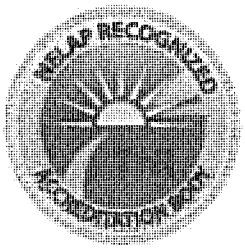
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 B	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	PA
EPA 8260 B	ETHYL ACETATE	PA
EPA 8260 B	ETHYLBENZENE	PA
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 B	M+P-XYLENE	PA
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 B	METHYL METHACRYLATE	PA
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 B	N-PROPYLAMINE	PA
EPA 8260 B	NAPHTHALENE	PA
EPA 8260 B	PENTACHLOROETHANE	PA
EPA 8260 B	SEC-BUTYLBENZENE	PA
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 8260 B - EXTENDED	DHSOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 B - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	PA
EPA 8260 B - EXTENDED	T-AMYL ALCOHOL (TAA)	PA
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 B	DIETHYL ETHER	PA
EPA 8260 B	ETHANOL	PA
EPA 8260 B	ETHYL METHACRYLATE	PA
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 B	ISOPROPYLBENZENE	PA
EPA 8260 B	METHACRYLONITRILE	PA
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 B	N-BUTYLBENZENE	PA
EPA 8260 B	N-PROPYLBENZENE	PA
EPA 8260 B	O-XYLENE	PA
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 B	STYRENE	PA
EPA 8260 B	TERT-BUTYLBENZENE	PA
EPA 8260 B	TOLUENE	PA
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 B	VINYL ACETATE	PA
EPA 8260 B	XYLENE (TOTAL)	PA
EPA 8260 B - EXTENDED	CYCLOHEXANE	PA
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 B - EXTENDED	METHYL ACETATE	PA
EPA 8260 B - EXTENDED	N-HEXANE	PA
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	PA



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8260 C	1,1,1-TRICHLOROETHANE	PA
EPA 8260 C	1,1,2-TRICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHYLENE	PA
EPA 8260 C	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	1,2-DICHLOROPROPANE	PA
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 C	2-CHLOROTOLUENE	PA
EPA 8260 C	2-NITROPROPANE	PA
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 C	ACETONE	PA
EPA 8260 C	ACROLEIN (PROPENAL)	PA
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 C	BENZYL CHLORIDE	PA
EPA 8260 C	BROMOCHLOROMETHANE	PA
EPA 8260 C	BROMOFORM	PA
EPA 8260 C	CARBON TETRACHLORIDE	PA
EPA 8260 C	CHLORODIBROMOMETHANE	PA
EPA 8260 C	CHLOROFORM	PA
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 C	CYCLOHEXANE	PA
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 C	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	PA
EPA 8260 C	ETHYL ACETATE	PA

METHOD	ANALYTE	PRIMARY
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROPROPENE	PA
EPA 8260 C	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 C	1,3-DICHLOROPROPANE	PA
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8260 C	2,2-DICHLOROPROPANE	PA
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 C	2-HEXANONE	PA
EPA 8260 C	4-CHLOROTOLUENE	PA
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 C	ACETONITRILE	PA
EPA 8260 C	ACRYLONITRILE	PA
EPA 8260 C	BENZENE	PA
EPA 8260 C	BROMOBENZENE	PA
EPA 8260 C	BROMODICHLOROMETHANE	PA
EPA 8260 C	CARBON DISULFIDE	PA
EPA 8260 C	CHLOROBENZENE	PA
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 C	DIETHYL ETHER	PA
EPA 8260 C	ETHANOL	PA
EPA 8260 C	ETHYL METHACRYLATE	PA



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10358

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 C	M+P-XYLENE	PA
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 C	METHYL METHACRYLATE	PA
EPA 8260 C	METHYLCYCLOHEXANE	PA
EPA 8260 C	N-BUTYLBENZENE	PA
EPA 8260 C	NAPHTHALENE	PA
EPA 8260 C	PENTACHLOROETHANE	PA
EPA 8260 C	SEC-BUTYLBENZENE	PA
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	PA
EPA 8260 C	TERT-BUTYLBENZENE	PA
EPA 8260 C	TOLUENE	PA
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 C	VINYL ACETATE	PA
EPA 8260 C	XYLENE (TOTAL)	PA
EPA 8260 C - EXTENDED	1,2,3-TRIMETHYLBENZENE	PA
EPA 8260 C - EXTENDED	1,3-BUTADIENE	PA
EPA 8260 C - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 C - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 C - EXTENDED	N-HEXANE	PA
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	ETHYLBENZENE	PA
EPA 8260 C	HEXACHLOROETHANE	PA
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 C	ISOPROPYLBENZENE	PA
EPA 8260 C	METHACRYLONITRILE	PA
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 C	N-PROPYLBENZENE	PA
EPA 8260 C	O-XYLENE	PA
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 C	STYRENE	PA
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 8260 C - EXTENDED	1,3,5-TRICHLOROBENZENE	PA
EPA 8260 C - EXTENDED	CYCLOHEXANONE	PA
EPA 8260 C - EXTENDED	DIMETHYL ETHER	PA
EPA 8260 C - EXTENDED	METHYL ACETATE	PA
EPA 8260 C - EXTENDED	N-HEPTANE	PA
EPA 8260 C - EXTENDED	T-AMYL ALCOHOL (TAA)	PA
EPA 8260 C SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8270 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	PA



Commonwealth of Virginia

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Virginia Laboratory ID: 460182
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 C	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 C	1,4-PHENYLENEDIAMINE	PA
EPA 8270 C	1-NAPHTHYLAMINE	PA
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 C	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 C	2,4-DIMETHYLPHENOL	PA
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 C	2-CHLORONAPHTHALENE	PA
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 C	2-NITROANILINE	PA
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 C	3-METHYLPHENOL (M-CRESOL)	PA
EPA 8270 C	4,4'-METHYLENEBIS-2-CHLOROANILINE	PA
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 C	4-CHLOROANILINE	PA
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 C	4-NITROANILINE	PA
EPA 8270 C	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 C	ACENAPHTHENE	PA
EPA 8270 C	ACETOPHENONE	PA
EPA 8270 C	ANTHRACENE	PA
EPA 8270 C	BENZIDINE	PA
EPA 8270 C	BENZO(A)PYRENE	PA
EPA 8270 C	BENZO(G,H,I)PERYLENE	PA
EPA 8270 C	BENZOIC ACID	PA
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 C	CHLOROBENZILATE	PA
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 C	1,4-NAPHTHOQUINONE	PA
EPA 8270 C	1-CHLORONAPHTHALENE	PA
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 C	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 C	2,4-DICHLOROPHENOL	PA
EPA 8270 C	2,4-DINITROPHENOL	PA
EPA 8270 C	2,6-DICHLOROPHENOL	PA
EPA 8270 C	2-ACETYLAMINOFLUORENE	PA
EPA 8270 C	2-CHLOROPHENOL	PA
EPA 8270 C	2-METHYLNAPHTHALENE	PA
EPA 8270 C	2-NAPHTHYLAMINE	PA
EPA 8270 C	2-NITROPHENOL	PA
EPA 8270 C	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 C	3-METHYLCHOLANTHRENE	PA
EPA 8270 C	3-NITROANILINE	PA
EPA 8270 C	4-AMINOBIPHENYL	PA
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	PA
EPA 8270 C	4-NITROPHENOL	PA
EPA 8270 C	5-NITRO-O-TOLUIDINE	PA
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	PA
EPA 8270 C	ACENAPHTHYLENE	PA
EPA 8270 C	ANILINE	PA
EPA 8270 C	ARAMITE	PA
EPA 8270 C	BENZO(A)ANTHRACENE	PA
EPA 8270 C	BENZO(B)FLUORANTHENE	PA
EPA 8270 C	BENZO(K)FLUORANTHENE	PA
EPA 8270 C	BENZYL ALCOHOL	PA
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 C	BUTYL BENZYL PHTHALATE	PA
EPA 8270 C	CHRYSENE	PA



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Virginia Laboratory ID: 460182
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C	DI-N-BUTYL PHTHALATE	PA
EPA 8270 C	DIALLATE	PA
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 C	DIETHYL PHTHALATE	PA
EPA 8270 C	DIMETHYL PHTHALATE	PA
EPA 8270 C	DISULFOTON	PA
EPA 8270 C	FAMPHUR	PA
EPA 8270 C	FLUORENE	PA
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 C	HEXACHLOROETHANE	PA
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 C	ISOPHORONE	PA
EPA 8270 C	KEPONE	PA
EPA 8270 C	METHYL METHANESULFONATE	PA
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 C	N-NITROSODIETHYLAMINE	PA
EPA 8270 C	N-NITROSODIPHENYLAMINE	PA
EPA 8270 C	N-NITROSOMORPHOLINE	PA
EPA 8270 C	N-NITROSOPYRROLIDINE	PA
EPA 8270 C	NITROBENZENE	PA
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 C	PENTACHLOROBENZENE	PA
EPA 8270 C	PENTACHLOROPHENOL	PA
EPA 8270 C	PHENANTHRENE	PA
EPA 8270 C	PHORATE	PA
EPA 8270 C	PRONAMIDE (KERB)	PA
EPA 8270 C	PYRIDINE	PA
EPA 8270 C	THIONAZIN (ZINOPHOS)	PA
EPA 8270 C	TRIS-(2,3-DIBROMOPROPYL) PHOSPHATE (TRIS-BP)	PA
EPA 8270 C SIM	ACENAPHTHENE	PA
EPA 8270 C SIM	ANTHRACENE	PA
EPA 8270 C SIM	BENZO(A)PYRENE	PA
EPA 8270 C SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 C SIM	CHRYSENE	PA
EPA 8270 C SIM	FLUORANTHENE	PA
EPA 8270 C SIM	INDENO(1,2,3-CD) PYRENE	PA

METHOD	ANALYTE	PRIMARY
EPA 8270 C	DI-N-OCTYL PHTHALATE	PA
EPA 8270 C	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 C	DIBENZOFURAN	PA
EPA 8270 C	DIMETHOATE	PA
EPA 8270 C	DIPHENYLAMINE	PA
EPA 8270 C	ETHYL METHANESULFONATE	PA
EPA 8270 C	FLUORANTHENE	PA
EPA 8270 C	HEXACHLOROBENZENE	PA
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 C	HEXACHLOROPROPENE	PA
EPA 8270 C	ISODRIN	PA
EPA 8270 C	ISOSAFROLE	PA
EPA 8270 C	METHAPYRILENE	PA
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 C	N-NITROSODIMETHYLAMINE	PA
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 C	N-NITROSOPIPERIDINE	PA
EPA 8270 C	NAPHTHALENE	PA
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 C	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 C	PENTACHLORONITROBENZENE	PA
EPA 8270 C	PHENACETIN	PA
EPA 8270 C	PHENOL	PA
EPA 8270 C	PHTHALIC ANHYDRIDE	PA
EPA 8270 C	PYRENE	PA
EPA 8270 C	SAFROLE	PA
EPA 8270 C	THIOPHENOL (BENZENETHIOL)	PA
EPA 8270 C SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 C SIM	ACENAPHTHYLENE	PA
EPA 8270 C SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 C SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 C SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 C SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 C SIM	FLUORENE	PA
EPA 8270 C SIM	NAPHTHALENE	PA

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C SIM	PHENANTHRENE	PA
EPA 8270 C SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 D	1,4-NAPHTHOQUINONE	PA
EPA 8270 D	1-CHLORONAPHTHALENE	PA
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 D	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 D	2,4-DICHLOROPHENOL	PA
EPA 8270 D	2,4-DINITROPHENOL	PA
EPA 8270 D	2,6-DICHLOROPHENOL	PA
EPA 8270 D	2-ACETYLAMINOFLUORENE	PA
EPA 8270 D	2-CHLOROPHENOL	PA
EPA 8270 D	2-METHYLNAPHTHALENE	PA
EPA 8270 D	2-NAPHTHYLAMINE	PA
EPA 8270 D	2-NITROPHENOL	PA
EPA 8270 D	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 D	3-METHYLCHOLANTHRENE	PA
EPA 8270 D	3-NITROANILINE	PA
EPA 8270 D	4-AMINOBIPHENYL	PA
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	PA
EPA 8270 D	4-NITROPHENOL	PA
EPA 8270 D	5-NITRO-O-TOLUIDINE	PA
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	PA
EPA 8270 D	ACENAPHTHYLENE	PA
EPA 8270 D	ANILINE	PA
EPA 8270 D	ARAMITE	PA
EPA 8270 D	BENZO(A)ANTHRACENE	PA
EPA 8270 D	BENZO(B)FLUORANTHENE	PA
EPA 8270 D	BENZO(K)FLUORANTHENE	PA
EPA 8270 C SIM	PYRENE	PA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 D	1,4-PHENYLENEDIAMINE	PA
EPA 8270 D	1-NAPHTHYLAMINE	PA
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 D	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 D	2,4-DIMETHYLPHENOL	PA
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 D	2-CHLORONAPHTHALENE	PA
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 D	2-NITROANILINE	PA
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	PA
EPA 8270 D	4,4'-METHYLENEBIS-2-CHLOROANILINE	PA
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 D	4-CHLOROANILINE	PA
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 D	4-NITROANILINE	PA
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 D	ACENAPHTHENE	PA
EPA 8270 D	ACETOPHENONE	PA
EPA 8270 D	ANTHRACENE	PA
EPA 8270 D	BENZIDINE	PA
EPA 8270 D	BENZO(A)PYRENE	PA
EPA 8270 D	BENZO(G,H,I)PERYLENE	PA



Commonwealth of Virginia

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Scope of Accreditation

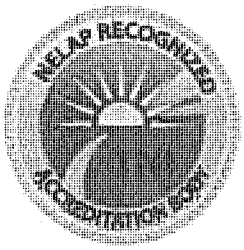
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	BENZOIC ACID	PA
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 D	CHLOROBENZILATE	PA
EPA 8270 D	DI-N-BUTYL PHTHALATE	PA
EPA 8270 D	DIALLATE	PA
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D	DIETHYL PHTHALATE	PA
EPA 8270 D	DIMETHYL PHTHALATE	PA
EPA 8270 D	DIPHENYLAMINE	PA
EPA 8270 D	ETHYL METHANESULFONATE	PA
EPA 8270 D	FLUORANTHENE	PA
EPA 8270 D	HEXACHLOROBENZENE	PA
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 D	HEXACHLOROPROPENE	PA
EPA 8270 D	ISODRIN	PA
EPA 8270 D	ISOSAFROLE	PA
EPA 8270 D	METHAPYRILENE	PA
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 D	N-NITROSODIMETHYLAMINE	PA
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 D	N-NITROSOPIPERIDINE	PA
EPA 8270 D	NAPHTHALENE	PA
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 D	PENTACHLORONITROBENZENE	PA
EPA 8270 D	PHENACETIN	PA
EPA 8270 D	PHENOL	PA
EPA 8270 D	PHTHALIC ANHYDRIDE	PA
EPA 8270 D	PYRENE	PA
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	PA
EPA 8270 D	TRIS-(2,3-DIBROMOPROPYL) PHOSPHATE (TRIS-BP)	PA
EPA 8270 D	BENZYL ALCOHOL	PA
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 D	BUTYL BENZYL PHTHALATE	PA
EPA 8270 D	CHRYSENE	PA
EPA 8270 D	DI-N-OCTYL PHTHALATE	PA
EPA 8270 D	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 D	DIBENZOFURAN	PA
EPA 8270 D	DIMETHOATE	PA
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8270 D	DISULFOTON	PA
EPA 8270 D	FAMPHUR	PA
EPA 8270 D	FLUORENE	PA
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 D	HEXACHLOROETHANE	PA
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D	ISOPHORONE	PA
EPA 8270 D	KEPONE	PA
EPA 8270 D	METHYL METHANESULFONATE	PA
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 D	N-NITROSODIETHYLAMINE	PA
EPA 8270 D	N-NITROSODIPHENYLAMINE	PA
EPA 8270 D	N-NITROSOMORPHOLINE	PA
EPA 8270 D	N-NITROSOPYRROLIDINE	PA
EPA 8270 D	NITROBENZENE	PA
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 D	PENTACHLOROBENZENE	PA
EPA 8270 D	PENTACHLOROPHENOL	PA
EPA 8270 D	PHENANTHRENE	PA
EPA 8270 D	PHORATE	PA
EPA 8270 D	PRONAMIDE (KERB)	PA
EPA 8270 D	SAFROLE	PA
EPA 8270 D	THIONAZIN (ZINOPHOS)	PA
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	PA



Commonwealth of Virginia

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Scope of Accreditation

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Eurofins Lancaster Laboratories Environmental, LLC
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Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	PA
EPA 8270 D - EXTENDED	BENZALDEHYDE	PA
EPA 8270 D - EXTENDED	CARBAZOLE	PA
EPA 8270 D - EXTENDED	N,N-DIMETHYLFORMAMIDE	PA
EPA 8270 D SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 D SIM	ACENAPHTHYLENE	PA
EPA 8270 D SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 D SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 D SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 D SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D SIM	FLUORENE	PA
EPA 8270 D SIM	NAPHTHALENE	PA
EPA 8270 D SIM	PYRENE	PA
EPA 8270 D SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN (OCDF)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN(1,2,3,6,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 8290 A	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (2,3,4,6,7,8-HXCDF)	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA
EPA 8315 A	ACETALDEHYDE	PA
EPA 8315 A	BUTYLALDEHYDE (BUTANAL)	PA
EPA 8315 A	FORMALDEHYDE	PA
EPA 8315 A	ISOVALERALDEHYDE	PA
EPA 8315 A	O-TOLUALDEHYDE (1,2-TOLUALDEHYDE)	PA
EPA 8315 A	PENTANAL (VALERALDEHYDE)	PA

METHOD	ANALYTE	PRIMARY
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D - EXTENDED	ATRAZINE	PA
EPA 8270 D - EXTENDED	CAPROLACTAM	PA
EPA 8270 D - EXTENDED	INDENE	PA
EPA 8270 D - EXTENDED	PYRIDINE	PA
EPA 8270 D SIM	ACENAPHTHENE	PA
EPA 8270 D SIM	ANTHRACENE	PA
EPA 8270 D SIM	BENZO(A)PYRENE	PA
EPA 8270 D SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D SIM	CHRYSENE	PA
EPA 8270 D SIM	FLUORANTHENE	PA
EPA 8270 D SIM	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D SIM	PHENANTHRENE	PA
EPA 8270 D SIM - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN (OCDD)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 8290 A	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (1,2,3,4,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (1,2,3,6,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (1,2,3,7,8,9-HXCDF)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZOFURAN (1,2,3,7,8-PECDF)	PA
EPA 8290 A	2,3,4,7,8-PENTACHLORODIBENZOFURAN	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZOFURAN (2,3,7,8-TCDF)	PA
EPA 8315 A	BENZALDEHYDE	PA
EPA 8315 A	CROTONALDEHYDE	PA
EPA 8315 A	HEXANALDEHYDE (HEXANAL)	PA
EPA 8315 A	M-TOLUALDEHYDE (1,3-TOLUALDEHYDE)	PA
EPA 8315 A	P-TOLUALDEHYDE (1,4-TOLUALDEHYDE)	PA
EPA 8315 A	PROPIONALDEHYDE (PROPANAL)	PA



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8330 A	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 A	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 A	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 A	2-NITROTOLUENE	PA
EPA 8330 A	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA
EPA 8330 A	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	PA
EPA 8330 A	NITROGLYCERIN	PA
EPA 8330 A	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	PA
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA
EPA 8330 B	3,5-DINITROANILINE	PA
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	PA
EPA 8330 B	NITROGLYCERIN	PA
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	PA
EPA 9012 B	TOTAL CYANIDE	PA
EPA 9050 A	CONDUCTIVITY	PA
EPA 9056 A	CHLORIDE	PA
EPA 9056 A	NITRATE AS N	PA
EPA 9056 A	SULFATE	PA
EPA 9066	TOTAL PHENOLICS	PA
OIA-1677-09	FREE CYANIDE	PA
RSK-175	ETHENE (ETHYLENE)	PA
SM 2120 B-2011	COLOR	PA
SM 2320 B-2011	ALKALINITY AS CACO3	PA
SM 2510 B-2011	CONDUCTIVITY	PA
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	PA
SM 2540 F-2011	RESIDUE-SETTLEABLE	PA
SM 3500-FE B-2011	IRON	PA
SM 4500-CN^- G-2011	AMENABLE CYANIDE	PA

METHOD	ANALYTE	PRIMARY
EPA 8330 A	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8330 A	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8330 A	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA
EPA 8330 A	3-NITROTOLUENE	PA
EPA 8330 A	4-NITROTOLUENE	PA
EPA 8330 A	NITROBENZENE	PA
EPA 8330 A	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 B	2-NITROTOLUENE	PA
EPA 8330 B	3-NITROTOLUENE	PA
EPA 8330 B	4-NITROTOLUENE	PA
EPA 8330 B	NITROBENZENE	PA
EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	PA
EPA 9040 C	PH	PA
EPA 9056 A	BROMIDE	PA
EPA 9056 A	FLUORIDE	PA
EPA 9056 A	NITRITE AS N	PA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	PA
OIA-1677-09	AMENABLE CYANIDE	PA
RSK-175	ETHANE	PA
RSK-175	METHANE	PA
SM 2310 B-2011	ACIDITY, AS CACO3	PA
SM 2340 C-2011	TOTAL HARDNESS AS CACO3	PA
SM 2540 B-2011	RESIDUE-TOTAL (TS)	PA
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	PA
SM 3500-CR B-2011	CHROMIUM VI	PA
SM 4500-CL^- C-2011	CHLORIDE	PA
SM 4500-F^- B-2011	FLUORIDE	PA



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
SM 4500-F⁻ C-2011	FLUORIDE	PA
SM 4500-NH3 C-2011	AMMONIA AS N	PA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	PA
SM 4500-S2⁻ D-2011	SULFIDE	PA
SM 4500-SIO2 C-2011	SILICA AS SIO2	PA
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	PA
SM 5540 C-2011	SURFACTANTS - MBAS	PA
SM 4500-NH3 B-2011	AMMONIA AS N	PA
SM 4500-NH3 D-2011	AMMONIA AS N	PA
SM 4500-P F-2011	PHOSPHORUS, TOTAL	PA
SM 4500-S2⁻ F-2011	SULFIDE	PA
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	PA
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	PA

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	PA
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	PA
EPA 1668 A	2,2',3,3',4,4',5,5'-OCTACHLOROBIPHENYL (BZ-194)	PA
EPA 1668 A	2,2',3,3',4,4',5,6,6'-NONACHLOROBIPHENYL (BZ-207)	PA
EPA 1668 A	2,2',3,3',4,4',5-HEPTACHLOROBIPHENYL (BZ-170)	PA
EPA 1668 A	2,2',3,3',4,4',6-HEPTACHLOROBIPHENYL (BZ-171)	PA
EPA 1668 A	2,2',3,3',4,5',6'-HEPTACHLOROBIPHENYL (BZ-177)	PA
EPA 1668 A	2,2',3,3',4,5',6-HEPTACHLOROBIPHENYL (BZ-175)	PA
EPA 1668 A	2,2',3,3',4,5,5',6'-OCTACHLOROBIPHENYL (BZ-199)	PA
EPA 1668 A	2,2',3,3',4,5,5',6-OCTACHLOROBIPHENYL (BZ-198)	PA
EPA 1668 A	2,2',3,3',4,5,6'-HEPTACHLOROBIPHENYL (BZ-174)	PA
EPA 1668 A	2,2',3,3',4,5,6-HEPTACHLOROBIPHENYL (BZ-173)	PA
EPA 1668 A	2,2',3,3',4,6'-HEXACHLOROBIPHENYL (BZ-132)	PA
EPA 1668 A	2,2',3,3',4,6-HEXACHLOROBIPHENYL (BZ-131)	PA
EPA 1668 A	2,2',3,3',5,5',6,6'-OCTACHLOROBIPHENYL (BZ-202)	PA
EPA 1668 A	2,2',3,3',5,5'-HEXACHLOROBIPHENYL (BZ-133)	PA
EPA 1668 A	2,2',3,3',5,6,6'-HEPTACHLOROBIPHENYL (BZ-179)	PA
EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-83)	PA
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	PA
EPA 1668 A	2,2',3,3',4,4',5,5',6-NONACHLOROBIPHENYL (BZ-206)	PA
EPA 1668 A	2,2',3,3',4,4',5,6'-OCTACHLOROBIPHENYL (BZ-196)	PA
EPA 1668 A	2,2',3,3',4,4',5,6-OCTACHLOROBIPHENYL BZ-195)	PA
EPA 1668 A	2,2',3,3',4,4',6,6'-OCTACHLOROBIPHENYL (BZ-197)	PA
EPA 1668 A	2,2',3,3',4,4'-HEXACHLOROBIPHENYL (BZ-128)	PA
EPA 1668 A	2,2',3,3',4,5',6,6'-OCTACHLOROBIPHENYL (BZ-201)	PA
EPA 1668 A	2,2',3,3',4,5'-HEXACHLOROBIPHENYL (BZ-130)	PA
EPA 1668 A	2,2',3,3',4,5,5',6,6'-NONACHLOROBIPHENYL (BZ-208)	PA
EPA 1668 A	2,2',3,3',4,5,5'-HEPTACHLOROBIPHENYL (BZ-172)	PA
EPA 1668 A	2,2',3,3',4,5,6,6'-OCTACHLOROBIPHENYL (BZ-200)	PA
EPA 1668 A	2,2',3,3',4,5-HEXACHLOROBIPHENYL (BZ-129)	PA
EPA 1668 A	2,2',3,3',4,6,6'-HEPTACHLOROBIPHENYL (BZ-176)	PA
EPA 1668 A	2,2',3,3',4-PENTACHLOROBIPHENYL (BZ-82)	PA
EPA 1668 A	2,2',3,3',5,5',6-HEPTACHLOROBIPHENYL (BZ-178)	PA
EPA 1668 A	2,2',3,3',5,6'-HEXACHLOROBIPHENYL (BZ-135)	PA
EPA 1668 A	2,2',3,3',5,6-HEXACHLOROBIPHENYL (BZ-134)	PA
EPA 1668 A	2,2',3,3',6,6'-HEXACHLOROBIPHENYL (BZ-136)	PA



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1668 A	2,2',3,3',5-PENTACHLOROBIPHENYL (BZ-84)	PA
EPA 1668 A	2,2',3,4',5',6-HEXACHLOROBIPHENYL (BZ-149)	PA
EPA 1668 A	2,2',3,4',5,5',6-HEPTACHLOROBIPHENYL (BZ-187)	PA
EPA 1668 A	2,2',3,4',5,6'-HEXACHLOROBIPHENYL (BZ-148)	PA
EPA 1668 A	2,2',3,4',5,6-HEXACHLOROBIPHENYL (BZ-147)	PA
EPA 1668 A	2,2',3,4',6'-PENTACHLOROBIPHENYL (BZ-98)	PA
EPA 1668 A	2,2',3,4',6-PENTACHLOROBIPHENYL (BZ-91)	PA
EPA 1668 A	2,2',3,4,4',5',6-HEPTACHLOROBIPHENYL (BZ-183)	PA
EPA 1668 A	2,2',3,4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-203)	PA
EPA 1668 A	2,2',3,4,4',5,6'-HEPTACHLOROBIPHENYL (BZ-182)	PA
EPA 1668 A	2,2',3,4,4',5,6-HEPTACHLOROBIPHENYL (BZ-181)	PA
EPA 1668 A	2,2',3,4,4',6'-HEXACHLOROBIPHENYL (BZ-140)	PA
EPA 1668 A	2,2',3,4,4',6-HEXACHLOROBIPHENYL (BZ-139)	PA
EPA 1668 A	2,2',3,4,5',6-HEXACHLOROBIPHENYL (BZ-144)	PA
EPA 1668 A	2,2',3,4,5,5',6-HEPTACHLOROBIPHENYL (BZ-185)	PA
EPA 1668 A	2,2',3,4,5,6'-HEXACHLOROBIPHENYL (BZ-143)	PA
EPA 1668 A	2,2',3,4,5,6-HEXACHLOROBIPHENYL (BZ-142)	PA
EPA 1668 A	2,2',3,4,6'-PENTACHLOROBIPHENYL (BZ-89)	PA
EPA 1668 A	2,2',3,4,6-PENTACHLOROBIPHENYL (BZ-88)	PA
EPA 1668 A	2,2',3,5',6-PENTACHLOROBIPHENYL (BZ-95)	PA
EPA 1668 A	2,2',3,5,5',6-HEXACHLOROBIPHENYL (BZ-151)	PA
EPA 1668 A	2,2',3,5,6'-PENTACHLOROBIPHENYL (BZ-94)	PA
EPA 1668 A	2,2',3,5,6-PENTACHLOROBIPHENYL (BZ-93)	PA
EPA 1668 A	2,2',3,6'-TETRACHLOROBIPHENYL (BZ-46)	PA
EPA 1668 A	2,2',3,6-TETRACHLOROBIPHENYL (BZ-45)	PA
EPA 1668 A	2,2',3,3'-TETRACHLOROBIPHENYL (BZ-40)	PA
EPA 1668 A	2,2',3,4',5'-PENTACHLOROBIPHENYL (BZ-97)	PA
EPA 1668 A	2,2',3,4',5,5'-HEXACHLOROBIPHENYL (BZ-146)	PA
EPA 1668 A	2,2',3,4',5,6,6'-HEPTACHLOROBIPHENYL (BZ-188)	PA
EPA 1668 A	2,2',3,4',5-PENTACHLOROBIPHENYL (BZ-90)	PA
EPA 1668 A	2,2',3,4',6,6'-HEXACHLOROBIPHENYL (BZ-150)	PA
EPA 1668 A	2,2',3,4'-TETRACHLOROBIPHENYL (BZ-42)	PA
EPA 1668 A	2,2',3,4,4',5'-HEXACHLOROBIPHENYL (BZ-138)	PA
EPA 1668 A	2,2',3,4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-180)	PA
EPA 1668 A	2,2',3,4,4',5,6,6'-OCTACHLOROBIPHENYL (BZ-204)	PA
EPA 1668 A	2,2',3,4,4',5-HEXACHLOROBIPHENYL (BZ-137)	PA
EPA 1668 A	2,2',3,4,4',6,6'-HEPTACHLOROBIPHENYL (BZ-184)	PA
EPA 1668 A	2,2',3,4,4'-PENTACHLOROBIPHENYL (BZ-85)	PA
EPA 1668 A	2,2',3,4,5'-PENTACHLOROBIPHENYL (BZ-87)	PA
EPA 1668 A	2,2',3,4,5,5'-HEXACHLOROBIPHENYL (BZ-141)	PA
EPA 1668 A	2,2',3,4,5,6,6'-HEPTACHLOROBIPHENYL (BZ-186)	PA
EPA 1668 A	2,2',3,4,5-PENTACHLOROBIPHENYL (BZ-86)	PA
EPA 1668 A	2,2',3,4,6,5'-HEXACHLOROBIPHENYL (BZ-145)	PA
EPA 1668 A	2,2',3,4-TETRACHLOROBIPHENYL (BZ-41)	PA
EPA 1668 A	2,2',3,5'-TETRACHLOROBIPHENYL (BZ-44)	PA
EPA 1668 A	2,2',3,5,5'-PENTACHLOROBIPHENYL (BZ-92)	PA
EPA 1668 A	2,2',3,5,6,6'-HEXACHLOROBIPHENYL (BZ-152)	PA
EPA 1668 A	2,2',3,5-TETRACHLOROBIPHENYL (BZ-43)	PA
EPA 1668 A	2,2',3,6,6'-PENTACHLOROBIPHENYL (BZ-96)	PA
EPA 1668 A	2,2',3-TRICHLOROBIPHENYL (BZ-16)	PA



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EPA 1668 A	2,2',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-153)	PA
EPA 1668 A	2,2',4,4',5-PENTACHLOROBIPHENYL (BZ-99)	PA
EPA 1668 A	2,2',4,4',6-PENTACHLOROBIPHENYL (BZ-100)	PA
EPA 1668 A	2,2',4,5',6-PENTACHLOROBIPHENYL (BZ-103)	PA
EPA 1668 A	2,2',4,5,5'-PENTACHLOROBIPHENYL (BZ-101)	PA
EPA 1668 A	2,2',4,5-TETRACHLOROBIPHENYL (BZ-48)	PA
EPA 1668 A	2,2',4,6,6'-PENTACHLOROBIPHENYL (BZ-104)	PA
EPA 1668 A	2,2',4-TRICHLOROBIPHENYL (BZ-17)	PA
EPA 1668 A	2,2',5,6'-TETRACHLOROBIPHENYL (BZ-53)	PA
EPA 1668 A	2,2',6,6'-TETRACHLOROBIPHENYL (BZ-54)	PA
EPA 1668 A	2,2'-DICHLOROBIPHENYL (BZ-4)	PA
EPA 1668 A	2,3',4',5'-TETRACHLOROBIPHENYL (BZ-76)	PA
EPA 1668 A	2,3',4',5-TETRACHLOROBIPHENYL (BZ-70)	PA
EPA 1668 A	2,3',4'-TRICHLOROBIPHENYL (BZ-33)	PA
EPA 1668 A	2,3',4,4',5'-PENTACHLOROBIPHENYL (BZ-123)	PA
EPA 1668 A	2,3',4,4',5-PENTACHLOROBIPHENYL (BZ-118)	PA
EPA 1668 A	2,3',4,4'-TETRACHLOROBIPHENYL (BZ-66)	PA
EPA 1668 A	2,3',4,5'-TETRACHLOROBIPHENYL (BZ-68)	PA
EPA 1668 A	2,3',4,5-TETRACHLOROBIPHENYL (BZ-67)	PA
EPA 1668 A	2,3',4-TRICHLOROBIPHENYL (BZ-25)	PA
EPA 1668 A	2,3',5'-TRICHLOROBIPHENYL (BZ-34)	PA
EPA 1668 A	2,3',5-TRICHLOROBIPHENYL (BZ-26)	PA
EPA 1668 A	2,3'-DICHLOROBIPHENYL (BZ-6)	PA
EPA 1668 A	2,3,3',4',5'-PENTACHLOROBIPHENYL (BZ-122)	PA
EPA 1668 A	2,3,3',4',5,5'-HEXACHLOROBIPHENYL (BZ-162)	PA
EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (BZ-154)	PA
EPA 1668 A	2,2',4,4',5,6'-HEXACHLOROBIPHENYL (BZ-155)	PA
EPA 1668 A	2,2',4,4'-TETRACHLOROBIPHENYL (BZ-47)	PA
EPA 1668 A	2,2',4,5'-TETRACHLOROBIPHENYL (BZ-49)	PA
EPA 1668 A	2,2',4,5,6'-PENTACHLOROBIPHENYL (BZ-102)	PA
EPA 1668 A	2,2',4,6'-TETRACHLOROBIPHENYL (BZ-51)	PA
EPA 1668 A	2,2',4,6-TETRACHLOROBIPHENYL (BZ-50)	PA
EPA 1668 A	2,2',5,5'-TETRACHLOROBIPHENYL (BZ-52)	PA
EPA 1668 A	2,2',5-TRICHLOROBIPHENYL (BZ-18)	PA
EPA 1668 A	2,2',6-TRICHLOROBIPHENYL (BZ-19)	PA
EPA 1668 A	2,3',4',5',6-PENTACHLOROBIPHENYL (BZ-125)	PA
EPA 1668 A	2,3',4',5,5'-PENTACHLOROBIPHENYL (BZ-124)	PA
EPA 1668 A	2,3',4',6-TETRACHLOROBIPHENYL (BZ-71)	PA
EPA 1668 A	2,3',4,4',5',6-HEXACHLOROBIPHENYL (BZ-168)	PA
EPA 1668 A	2,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-167)	PA
EPA 1668 A	2,3',4,4',6-PENTACHLOROBIPHENYL (BZ-119)	PA
EPA 1668 A	2,3',4,5',6-PENTACHLOROBIPHENYL (BZ-121)	PA
EPA 1668 A	2,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-120)	PA
EPA 1668 A	2,3',4,6-TETRACHLOROBIPHENYL (BZ-69)	PA
EPA 1668 A	2,3',5',6-TETRACHLOROBIPHENYL (BZ-73)	PA
EPA 1668 A	2,3',5,5'-TETRACHLOROBIPHENYL (BZ-72)	PA
EPA 1668 A	2,3',6-TRICHLOROBIPHENYL (BZ-27)	PA
EPA 1668 A	2,3,3',4',5',6-HEXACHLOROBIPHENYL (BZ-164)	PA
EPA 1668 A	2,3,3',4',5,5',6-HEPTACHLOROBIPHENYL (BZ-193)	PA
EPA 1668 A	2,3,3',4',5,6-HEXACHLOROBIPHENYL (BZ-163)	PA

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1668 A	2,3,3',4',5-PENTACHLOROBIPHENYL (BZ-107)	PA
EPA 1668 A	2,3,3',4'-TETRACHLOROBIPHENYL (BZ-56)	PA
EPA 1668 A	2,3,3',4,4',5'-HEXACHLOROBIPHENYL (BZ-157)	PA
EPA 1668 A	2,3,3',4,4',5,5'-HEPTACHLOROBIPHENYL (BZ-189)	PA
EPA 1668 A	2,3,3',4,4',5-HEXACHLOROBIPHENYL (BZ-156)	PA
EPA 1668 A	2,3,3',4,4'-PENTACHLOROBIPHENYL (BZ-105)	PA
EPA 1668 A	2,3,3',4,5'-PENTACHLOROBIPHENYL (BZ-108)	PA
EPA 1668 A	2,3,3',4,5,5'-HEXACHLOROBIPHENYL (BZ-159)	PA
EPA 1668 A	2,3,3',4,5-PENTACHLOROBIPHENYL (BZ-106)	PA
EPA 1668 A	2,3,3',4-TETRACHLOROBIPHENYL (BZ-55)	PA
EPA 1668 A	2,3,3',5'-TETRACHLOROBIPHENYL (BZ-58)	PA
EPA 1668 A	2,3,3',5,5'-PENTACHLOROBIPHENYL (BZ-111)	PA
EPA 1668 A	2,3,3',5-TETRACHLOROBIPHENYL (BZ-57)	PA
EPA 1668 A	2,3,3'-TRICHLOROBIPHENYL (BZ-20)	PA
EPA 1668 A	2,3,4',5-TETRACHLOROBIPHENYL (BZ-63)	PA
EPA 1668 A	2,3,4'-TRICHLOROBIPHENYL (BZ-22)	PA
EPA 1668 A	2,3,4,4',5-PENTACHLOROBIPHENYL (BZ-114)	PA
EPA 1668 A	2,3,4,4'-TETRACHLOROBIPHENYL (BZ-60)	PA
EPA 1668 A	2,3,4,5-TETRACHLOROBIPHENYL (BZ-61)	PA
EPA 1668 A	2,3,4-TRICHLOROBIPHENYL (BZ-21)	PA
EPA 1668 A	2,3,5-TRICHLOROBIPHENYL (BZ-23)	PA
EPA 1668 A	2,3-DICHLOROBIPHENYL (BZ-5)	PA
EPA 1668 A	2,4',6-TRICHLOROBIPHENYL (BZ-32)	PA
EPA 1668 A	2,4,4',5-TETRACHLOROBIPHENYL (BZ-74)	PA
EPA 1668 A	2,4,4'-TRICHLOROBIPHENYL (BZ-28)	PA
EPA 1668 A	2,4,6-TRICHLOROBIPHENYL (BZ-30)	PA
EPA 1668 A	2,5-DICHLOROBIPHENYL (BZ-9)	PA
EPA 1668 A	2,3,3',4',6-PENTACHLOROBIPHENYL (BZ-110)	PA
EPA 1668 A	2,3,3',4,4',5',6-HEPTACHLOROBIPHENYL (BZ-191)	PA
EPA 1668 A	2,3,3',4,4',5,5',6-OCTACHLOROBIPHENYL (BZ-205)	PA
EPA 1668 A	2,3,3',4,4',5,6-HEPTACHLOROBIPHENYL (BZ-190)	PA
EPA 1668 A	2,3,3',4,4',6-HEXACHLOROBIPHENYL (BZ-158)	PA
EPA 1668 A	2,3,3',4,5',6-HEXACHLOROBIPHENYL (BZ-161)	PA
EPA 1668 A	2,3,3',4,5,5',6-HEPTACHLOROBIPHENYL (BZ-192)	PA
EPA 1668 A	2,3,3',4,5,6-HEXACHLOROBIPHENYL (BZ-160)	PA
EPA 1668 A	2,3,3',4,6-PENTACHLOROBIPHENYL (BZ-109)	PA
EPA 1668 A	2,3,3',5',6-PENTACHLOROBIPHENYL (BZ-113)	PA
EPA 1668 A	2,3,3',5,5',6-HEXACHLOROBIPHENYL (BZ-165)	PA
EPA 1668 A	2,3,3',5,6-PENTACHLOROBIPHENYL (BZ-112)	PA
EPA 1668 A	2,3,3',6-TETRACHLOROBIPHENYL (BZ-59)	PA
EPA 1668 A	2,3,4',5,6-PENTACHLOROBIPHENYL (BZ-117)	PA
EPA 1668 A	2,3,4',6-TETRACHLOROBIPHENYL (BZ-64)	PA
EPA 1668 A	2,3,4,4',5,6-HEXACHLOROBIPHENYL (BZ-166)	PA
EPA 1668 A	2,3,4,4',6-PENTACHLOROBIPHENYL (BZ-115)	PA
EPA 1668 A	2,3,4,5,6-PENTACHLOROBIPHENYL (BZ-116)	PA
EPA 1668 A	2,3,4,6-TETRACHLOROBIPHENYL (BZ-62)	PA
EPA 1668 A	2,3,5,6-TETRACHLOROBIPHENYL (BZ-65)	PA
EPA 1668 A	2,3,6-TRICHLOROBIPHENYL (BZ-24)	PA
EPA 1668 A	2,4',5-TRICHLOROBIPHENYL (BZ-31)	PA
EPA 1668 A	2,4'-DICHLOROBIPHENYL (BZ-8)	PA
EPA 1668 A	2,4,4',6-TETRACHLOROBIPHENYL (BZ-75)	PA
EPA 1668 A	2,4,5-TRICHLOROBIPHENYL (BZ-29)	PA
EPA 1668 A	2,4-DICHLOROBIPHENYL (BZ-7)	PA
EPA 1668 A	2,6-DICHLOROBIPHENYL (BZ-10)	PA



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1668 A	2-CHLOROBIPHENYL (BZ-1)	PA
EPA 1668 A	3,3',4,4',5-PENTACHLOROBIPHENYL (BZ-126)	PA
EPA 1668 A	3,3',4,5'-TETRACHLOROBIPHENYL (BZ-79)	PA
EPA 1668 A	3,3',4,5-TETRACHLOROBIPHENYL (BZ-78)	PA
EPA 1668 A	3,3',5,5'-TETRACHLOROBIPHENYL (BZ-80)	PA
EPA 1668 A	3,3'-DICHLOROBIPHENYL (BZ-11)	PA
EPA 1668 A	3,4'-DICHLOROBIPHENYL (BZ-13)	PA
EPA 1668 A	3,4,4'-TRICHLOROBIPHENYL (BZ-37)	PA
EPA 1668 A	3,4-DICHLOROBIPHENYL (BZ-12)	PA
EPA 1668 A	3-CHLOROBIPHENYL (BZ-2)	PA
EPA 1668 A	4-CHLOROBIPHENYL (BZ-3)	PA
EPA 300.0 REV 2.1	BROMIDE	PA
EPA 300.0 REV 2.1	FLUORIDE	PA
EPA 300.0 REV 2.1	NITRITE AS N	PA
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	PA
EPA 3546	PREP: MICROWAVE EXTRACTION	PA
EPA 3620 C	PREP: FLORISIL CLEANUP	PA
EPA 3640 A	PREP: GEL PERMEATION CLEANUP	PA
EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	PA
EPA 5035 A	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	PA
EPA 6010 C	ANTIMONY	PA
EPA 6010 C	BARIUM	PA
EPA 6010 C	BORON	PA
EPA 6010 C	CALCIUM	PA
EPA 6010 C	COBALT	PA
EPA 6010 C	IRON	PA
EPA 6010 C	LITHIUM	PA
EPA 6010 C	MANGANESE	PA
EPA 6010 C	NICKEL	PA
EPA 6010 C	SELENIUM	PA
EPA 6010 C	SODIUM	PA
EPA 6010 C	THALLIUM	PA
EPA 6010 C	TITANIUM	PA
EPA 6010 C	ZINC	PA
EPA 1668 A	3,3',4,4',5,5'-HEXACHLOROBIPHENYL (BZ-169)	PA
EPA 1668 A	3,3',4,4'-TETRACHLOROBIPHENYL (BZ-77)	PA
EPA 1668 A	3,3',4,5,5'-PENTACHLOROBIPHENYL (BZ-127)	PA
EPA 1668 A	3,3',4-TRICHLOROBIPHENYL (BZ-35)	PA
EPA 1668 A	3,3',5-TRICHLOROBIPHENYL (BZ-36)	PA
EPA 1668 A	3,4',5-TRICHLOROBIPHENYL (BZ-39)	PA
EPA 1668 A	3,4,4',5-TETRACHLOROBIPHENYL (BZ-81)	PA
EPA 1668 A	3,4,5-TRICHLOROBIPHENYL (BZ-38)	PA
EPA 1668 A	3,5-DICHLOROBIPHENYL (BZ-14)	PA
EPA 1668 A	4,4'-DICHLOROBIPHENYL (BZ-15)	PA
EPA 1668 A	DECACHLOROBIPHENYL (BZ-209)	PA
EPA 300.0 REV 2.1	CHLORIDE	PA
EPA 300.0 REV 2.1	NITRATE AS N	PA
EPA 300.0 REV 2.1	SULFATE	PA
EPA 3540 C	PREP: SOXHLET EXTRACTION	PA
EPA 3550 C	PREP: ULTRASONIC EXTRACTION	PA
EPA 3630 C	PREP: SILICA GEL CLEANUP	PA
EPA 3660 B	PREP: SULFUR CLEANUP	PA
EPA 5030 B	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	PA
EPA 6010 C	ALUMINUM	PA
EPA 6010 C	ARSENIC	PA
EPA 6010 C	BERYLLIUM	PA
EPA 6010 C	CADMIUM	PA
EPA 6010 C	CHROMIUM	PA
EPA 6010 C	COPPER	PA
EPA 6010 C	LEAD	PA
EPA 6010 C	MAGNESIUM	PA
EPA 6010 C	MOLYBDENUM	PA
EPA 6010 C	POTASSIUM	PA
EPA 6010 C	SILVER	PA
EPA 6010 C	STRONTIUM	PA
EPA 6010 C	TIN	PA
EPA 6010 C	VANADIUM	PA



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 6010 C - EXTENDED	SULFUR	PA
EPA 6010 C - EXTENDED	ZIRCONIUM	PA
EPA 6010 D	ANTIMONY	PA
EPA 6010 D	BARIUM	PA
EPA 6010 D	BORON	PA
EPA 6010 D	CALCIUM	PA
EPA 6010 D	COBALT	PA
EPA 6010 D	IRON	PA
EPA 6010 D	LITHIUM	PA
EPA 6010 D	MANGANESE	PA
EPA 6010 D	NICKEL	PA
EPA 6010 D	SELENIUM	PA
EPA 6010 D	SILVER	PA
EPA 6010 D	STRONTIUM	PA
EPA 6010 D	TIN	PA
EPA 6010 D	VANADIUM	PA
EPA 6010 D - EXTENDED	SULFUR	PA
EPA 6010 D - EXTENDED	ZIRCONIUM	PA
EPA 6020 - EXTENDED	MOLYBDENUM	PA
EPA 6020 A	ALUMINUM	PA
EPA 6020 A	ARSENIC	PA
EPA 6020 A	BERYLLIUM	PA
EPA 6020 A	CALCIUM	PA
EPA 6020 A	COBALT	PA
EPA 6020 A	IRON	PA
EPA 6020 A	MAGNESIUM	PA
EPA 6020 A	NICKEL	PA
EPA 6020 A	SELENIUM	PA
EPA 6020 A	SODIUM	PA
EPA 6020 A	VANADIUM	PA
EPA 6020 A - EXTENDED	MOLYBDENUM	PA
EPA 6020 A - EXTENDED	TIN	PA
EPA 6020 A - EXTENDED	URANIUM	PA
EPA 6020 B	ANTIMONY	PA
EPA 6020 B	BARIUM	PA
EPA 6020 B	CADMIUM	PA
EPA 6020 B	CHROMIUM	PA
EPA 6020 B	COPPER	PA
EPA 6010 C - EXTENDED	THORIUM	PA
EPA 6010 D	ALUMINUM	PA
EPA 6010 D	ARSENIC	PA
EPA 6010 D	BERYLLIUM	PA
EPA 6010 D	CADMIUM	PA
EPA 6010 D	CHROMIUM	PA
EPA 6010 D	COPPER	PA
EPA 6010 D	LEAD	PA
EPA 6010 D	MAGNESIUM	PA
EPA 6010 D	MOLYBDENUM	PA
EPA 6010 D	POTASSIUM	PA
EPA 6010 D	SILICA AS SIO2	PA
EPA 6010 D	SODIUM	PA
EPA 6010 D	THALLIUM	PA
EPA 6010 D	TITANIUM	PA
EPA 6010 D	ZINC	PA
EPA 6010 D - EXTENDED	THORIUM	PA
EPA 6020	BARIUM	PA
EPA 6020 - EXTENDED	URANIUM	PA
EPA 6020 A	ANTIMONY	PA
EPA 6020 A	BARIUM	PA
EPA 6020 A	CADMIUM	PA
EPA 6020 A	CHROMIUM	PA
EPA 6020 A	COPPER	PA
EPA 6020 A	LEAD	PA
EPA 6020 A	MANGANESE	PA
EPA 6020 A	POTASSIUM	PA
EPA 6020 A	SILVER	PA
EPA 6020 A	THALLIUM	PA
EPA 6020 A	ZINC	PA
EPA 6020 A - EXTENDED	STRONTIUM	PA
EPA 6020 A - EXTENDED	TITANIUM	PA
EPA 6020 B	ALUMINUM	PA
EPA 6020 B	ARSENIC	PA
EPA 6020 B	BERYLLIUM	PA
EPA 6020 B	CALCIUM	PA
EPA 6020 B	COBALT	PA
EPA 6020 B	IRON	PA



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EPA 6020 B	LEAD	PA
EPA 6020 B	MANGANESE	PA
EPA 6020 B	NICKEL	PA
EPA 6020 B	SELENIUM	PA
EPA 6020 B	SODIUM	PA
EPA 6020 B	TIN	PA
EPA 6020 B	ZINC	PA
EPA 6020 B - EXTENDED	TITANIUM	PA
EPA 6850	PERCHLORATE	PA
EPA 7199	CHROMIUM VI	PA
EPA 7471 B	MERCURY	PA
EPA 8015 B	ETHANOL	PA
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8015 B	METHANOL	PA
EPA 8015 C	ETHYLENE GLYCOL	PA
EPA 8015 C	METHANOL	PA
EPA 8021 B	BENZENE	PA
EPA 8021 B	ISOPROPYLBENZENE	PA
EPA 8021 B	NAPHTHALENE	PA
EPA 8021 B	TOLUENE	PA
EPA 8021 B - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8081 A	4,4'-DDE	PA
EPA 8081 A	ALDRIN	PA
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 A	CHLORDANE, TOTAL	PA
EPA 8081 A	DIELDRIN	PA
EPA 8081 A	ENDOSULFAN II	PA
EPA 8081 A	ENDRIN	PA
EPA 8081 A	ENDRIN KETONE	PA
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 8081 A	HEPTACHLOR EPOXIDE	PA
EPA 6020 B	MAGNESIUM	PA
EPA 6020 B	MOLYBDENUM	PA
EPA 6020 B	POTASSIUM	PA
EPA 6020 B	SILVER	PA
EPA 6020 B	THALLIUM	PA
EPA 6020 B	VANADIUM	PA
EPA 6020 B - EXTENDED	STRONTIUM	PA
EPA 6020 B - EXTENDED	URANIUM	PA
EPA 7196 A	CHROMIUM VI	PA
EPA 7471 A	MERCURY	PA
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	PA
EPA 8015 B	ETHYLENE GLYCOL	PA
EPA 8015 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C	ETHANOL	PA
EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8015 C - EXTENDED	TRIETHYLENE GLYCOL	PA
EPA 8021 B	ETHYLBENZENE	PA
EPA 8021 B	M+P-XYLENE	PA
EPA 8021 B	O-XYLENE	PA
EPA 8021 B	XYLENE (TOTAL)	PA
EPA 8081 A	4,4'-DDD	PA
EPA 8081 A	4,4'-DDT	PA
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 A	DELTA-BHC	PA
EPA 8081 A	ENDOSULFAN I	PA
EPA 8081 A	ENDOSULFAN SULFATE	PA
EPA 8081 A	ENDRIN ALDEHYDE	PA
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 A	HEPTACHLOR	PA
EPA 8081 A	METHOXYCHLOR	PA

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METHOD	ANALYTE	PRIMARY
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8081 B	4,4'-DDE	PA
EPA 8081 B	ALDRIN	PA
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	PA
EPA 8081 B	CHLORDANE, TOTAL	PA
EPA 8081 B	DIELDRIN	PA
EPA 8081 B	ENDOSULFAN II	PA
EPA 8081 B	ENDRIN	PA
EPA 8081 B	ENDRIN KETONE	PA
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	PA
EPA 8081 B	HEPTACHLOR EPOXIDE	PA
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	PA
EPA 8081 B - EXTENDED	MIREX	PA
EPA 8082 A	AROCLOR-1221 (PCB-1221)	PA
EPA 8082 A	AROCLOR-1242 (PCB-1242)	PA
EPA 8082 A	AROCLOR-1254 (PCB-1254)	PA
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	PA
EPA 8141 A	ATRAZINE	PA
EPA 8141 A	CHLORPYRIFOS	PA
EPA 8141 A	DEMETON-O	PA
EPA 8141 A	DIAZINON	PA
EPA 8141 A	DISULFOTON	PA
EPA 8141 A	ETHION	PA
EPA 8141 A	FAMPHUR	PA
EPA 8141 A	FENTHION	PA
EPA 8141 A	MERPHOS	PA
EPA 8141 A	MEVINPHOS	PA
EPA 8141 A	PARATHION (PARATHION - ETHYL)	PA
EPA 8141 A	RONNEL	PA
EPA 8141 A	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	PA
EPA 8081 B	4,4'-DDD	PA
EPA 8081 B	4,4'-DDT	PA
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	DELTA-BHC	PA
EPA 8081 B	ENDOSULFAN I	PA
EPA 8081 B	ENDOSULFAN SULFATE	PA
EPA 8081 B	ENDRIN ALDEHYDE	PA
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	PA
EPA 8081 B	HEPTACHLOR	PA
EPA 8081 B	METHOXYCHLOR	PA
EPA 8081 B - EXTENDED	KEPONE	PA
EPA 8082 A	AROCLOR-1016 (PCB-1016)	PA
EPA 8082 A	AROCLOR-1232 (PCB-1232)	PA
EPA 8082 A	AROCLOR-1248 (PCB-1248)	PA
EPA 8082 A	AROCLOR-1260 (PCB-1260)	PA
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	PA
EPA 8141 A	BOLSTAR (SULPROFOS)	PA
EPA 8141 A	COUMAPHOS	PA
EPA 8141 A	DEMETON-S	PA
EPA 8141 A	DICHLOROVOS (DDVP, DICHLORVOS)	PA
EPA 8141 A	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	PA
EPA 8141 A	ETHOPROP	PA
EPA 8141 A	FENSULFOTHION	PA
EPA 8141 A	MALATHION	PA
EPA 8141 A	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8141 A	NALED	PA
EPA 8141 A	PHORATE	PA
EPA 8141 A	SIMAZINE	PA



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

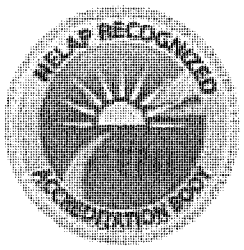
VELAP Certificate No.: 10358

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8141 A	TOKUTHION (PROTHIOPHOS)	PA
EPA 8141 B	ATRAZINE	PA
EPA 8141 B	COUMAPHOS	PA
EPA 8141 B	DEMETON-S	PA
EPA 8141 B	DICHLOROVOS (DDVP, DICHLORVOS)	PA
EPA 8141 B	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	PA
EPA 8141 B	ETHOPROP	PA
EPA 8141 B	FENSULFOTHION	PA
EPA 8141 B	MALATHION	PA
EPA 8141 B	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8141 B	NALED	PA
EPA 8141 B	PHORATE	PA
EPA 8141 B	SIMAZINE	PA
EPA 8141 B	TOKUTHION (PROTHIOPHOS)	PA
EPA 8151 A	2,4,5-T	PA
EPA 8151 A	2,4-DB	PA
EPA 8151 A	DICAMBA	PA
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	PA
EPA 8151 A	MCPP	PA
EPA 8151 A	PICLORAM	PA
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 B	1,1-DICHLOROETHANE	PA
EPA 8260 B	1,1-DICHLOROPROPENE	PA
EPA 8260 B	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 B	1,3-DICHLOROPROPANE	PA
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8141 A	TRICHLORONATE	PA
EPA 8141 B	BOLSTAR (SULPROFOS)	PA
EPA 8141 B	DEMETON-O	PA
EPA 8141 B	DIAZINON	PA
EPA 8141 B	DISULFOTON	PA
EPA 8141 B	ETHION	PA
EPA 8141 B	FAMPHUR	PA
EPA 8141 B	FENTHION	PA
EPA 8141 B	MERPHOS	PA
EPA 8141 B	MEVINPHOS	PA
EPA 8141 B	PARATHION (PARATHION - ETHYL)	PA
EPA 8141 B	RONNEL	PA
EPA 8141 B	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	PA
EPA 8141 B	TRICHLORONATE	PA
EPA 8151 A	2,4-D	PA
EPA 8151 A	DALAPON	PA
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	PA
EPA 8151 A	MCPA	PA
EPA 8151 A	PENTACHLOROPHENOL	PA
EPA 8151 A	SILVEX (2,4,5-TP)	PA
EPA 8260 B	1,1,1-TRICHLOROETHANE	PA
EPA 8260 B	1,1,2-TRICHLOROETHANE	PA
EPA 8260 B	1,1-DICHLOROETHYLENE	PA
EPA 8260 B	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 B	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 B	1,2-DICHLOROPROPANE	PA
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	PA



Commonwealth of Virginia

Department of General Services
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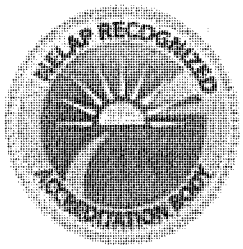
VELAP Certificate No.: 10358

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Lancaster, PA 17601

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 B	2,2-DICHLOROPROPANE	PA
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 B	2-HEXANONE	PA
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 B	ACETONE	PA
EPA 8260 B	ACROLEIN (PROPENAL)	PA
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 B	BENZYL CHLORIDE	PA
EPA 8260 B	BROMOCHLOROMETHANE	PA
EPA 8260 B	BROMOFORM	PA
EPA 8260 B	CARBON TETRACHLORIDE	PA
EPA 8260 B	CHLORODIBROMOMETHANE	PA
EPA 8260 B	CHLOROFORM	PA
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 B	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	PA
EPA 8260 B	ETHYL ACETATE	PA
EPA 8260 B	ETHYLBENZENE	PA
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 B	M+P-XYLENE	PA
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 B	METHYL METHACRYLATE	PA
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 B	N-PROPYLBENZENE	PA
EPA 8260 B	O-XYLENE	PA
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 B	STYRENE	PA
EPA 8260 B	TERT-BUTYLBENZENE	PA
EPA 8260 B	TOLUENE	PA
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 B	2-CHLOROTOLUENE	PA
EPA 8260 B	4-CHLOROTOLUENE	PA
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 B	ACETONITRILE	PA
EPA 8260 B	ACRYLONITRILE	PA
EPA 8260 B	BENZENE	PA
EPA 8260 B	BROMOBENZENE	PA
EPA 8260 B	BROMODICHLOROMETHANE	PA
EPA 8260 B	CARBON DISULFIDE	PA
EPA 8260 B	CHLOROBENZENE	PA
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 B	ETHANOL	PA
EPA 8260 B	ETHYL METHACRYLATE	PA
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 B	ISOPROPYLBENZENE	PA
EPA 8260 B	METHACRYLONITRILE	PA
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 B	N-BUTYLBENZENE	PA
EPA 8260 B	NAPHTHALENE	PA
EPA 8260 B	PENTACHLOROETHANE	PA
EPA 8260 B	SEC-BUTYLBENZENE	PA
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	PA



Commonwealth of Virginia

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Virginia Laboratory ID: 460182
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Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 8260 B - EXTENDED	CYCLOHEXANONE	PA
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 B - EXTENDED	METHYL ACETATE	PA
EPA 8260 B - EXTENDED	T-AMYL ALCOHOL (TAA)	PA
EPA 8260 B - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8260 C	1,1,1-TRICHLOROETHANE	PA
EPA 8260 C	1,1,2-TRICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHYLENE	PA
EPA 8260 C	1,2,3-TRICHLOROBENZENE	PA
EPA 8260 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	PA
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8260 C	1,2-DICHLOROPROPANE	PA
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8260 C	2,2-DICHLOROPROPANE	PA
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	PA
EPA 8260 C	2-HEXANONE	PA
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	PA
EPA 8260 C	ACETONE	PA
EPA 8260 C	ACROLEIN (PROPENAL)	PA
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	PA
EPA 8260 C	BENZYL CHLORIDE	PA
EPA 8260 C	BROMOCHLOROMETHANE	PA
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 B	VINYL ACETATE	PA
EPA 8260 B	XYLENE (TOTAL)	PA
EPA 8260 B - EXTENDED	CYCLOHEXANE	PA
EPA 8260 B - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 B - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	PA
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	PA
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROETHANE	PA
EPA 8260 C	1,1-DICHLOROPROPENE	PA
EPA 8260 C	1,2,3-TRICHLOROPROPANE	PA
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	PA
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	PA
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	PA
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	PA
EPA 8260 C	1,3-DICHLOROPROPANE	PA
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	PA
EPA 8260 C	2-CHLOROTOLUENE	PA
EPA 8260 C	4-CHLOROTOLUENE	PA
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	PA
EPA 8260 C	ACETONITRILE	PA
EPA 8260 C	ACRYLONITRILE	PA
EPA 8260 C	BENZENE	PA
EPA 8260 C	BROMOBENZENE	PA
EPA 8260 C	BROMODICHLOROMETHANE	PA



Commonwealth of Virginia

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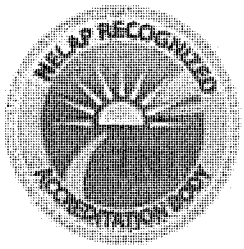
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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 C	BROMOFORM	PA
EPA 8260 C	CARBON TETRACHLORIDE	PA
EPA 8260 C	CHLORODIBROMOMETHANE	PA
EPA 8260 C	CHLOROFORM	PA
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	PA
EPA 8260 C	CYCLOHEXANE	PA
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	PA
EPA 8260 C	ETHANOL	PA
EPA 8260 C	ETHYL METHACRYLATE	PA
EPA 8260 C	ETHYLBENZENE	PA
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	PA
EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	PA
EPA 8260 C	METHACRYLONITRILE	PA
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	PA
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	PA
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	PA
EPA 8260 C	N-PROPYLBENZENE	PA
EPA 8260 C	PENTACHLOROETHANE	PA
EPA 8260 C	SEC-BUTYLBENZENE	PA
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	PA
EPA 8260 C	TERT-BUTYLBENZENE	PA
EPA 8260 C	TOLUENE	PA
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	PA
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	PA
EPA 8260 C	VINYL ACETATE	PA
EPA 8260 C	XYLENE (TOTAL)	PA
EPA 8260 C - EXTENDED	1,2,3-TRIMETHYLBENZENE	PA
EPA 8260 C	CARBON DISULFIDE	PA
EPA 8260 C	CHLOROBENZENE	PA
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	PA
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	PA
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	PA
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	PA
EPA 8260 C	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	PA
EPA 8260 C	ETHYL ACETATE	PA
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	PA
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	PA
EPA 8260 C	ISOPROPYLBENZENE	PA
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	PA
EPA 8260 C	METHYL METHACRYLATE	PA
EPA 8260 C	METHYLCYCLOHEXANE	PA
EPA 8260 C	N-BUTYLBENZENE	PA
EPA 8260 C	NAPHTHALENE	PA
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	PA
EPA 8260 C	STYRENE	PA
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	PA
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	PA
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	PA
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	PA
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	PA
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	PA
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	PA
EPA 8260 C - EXTENDED	CYCLOHEXANONE	PA



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 C - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	PA
EPA 8260 C - EXTENDED	METHYL ACETATE	PA
EPA 8260 C - EXTENDED	N-HEXANE	PA
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	PA
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 C	1,4-NAPHTHOQUINONE	PA
EPA 8270 C	1-CHLORONAPHTHALENE	PA
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 C	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 C	2,4-DICHLOROPHENOL	PA
EPA 8270 C	2,4-DINITROPHENOL	PA
EPA 8270 C	2,6-DICHLOROPHENOL	PA
EPA 8270 C	2-ACETYLAMINOFLUORENE	PA
EPA 8270 C	2-CHLOROPHENOL	PA
EPA 8270 C	2-METHYLNAPHTHALENE	PA
EPA 8270 C	2-NAPHTHYLAMINE	PA
EPA 8270 C	2-NITROPHENOL	PA
EPA 8270 C	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 C	3-METHYLPHENOL (M-CRESOL)	PA
EPA 8270 C	4,4'-METHYLENEBIS-2-CHLOROANILINE	PA
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 C	4-CHLOROANILINE	PA
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	PA
EPA 8270 C	4-NITROANILINE	PA
EPA 8270 C	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 C	ACENAPHTHENE	PA
EPA 8270 C	ACETOPHENONE	PA
EPA 8260 C - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	PA
EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	PA
EPA 8260 C - EXTENDED	T-AMYL ALCOHOL (TAA)	PA
EPA 8260 C SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8270 C	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 C	1,2-DINITROBENZENE (1,2-DNB)	PA
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 C	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 C	1,4-PHENYLENEDIAMINE	PA
EPA 8270 C	1-NAPHTHYLAMINE	PA
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 C	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 C	2,4-DIMETHYLPHENOL	PA
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 C	2-CHLORONAPHTHALENE	PA
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 C	2-NITROANILINE	PA
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 C	3,3'-DIMETHOXYBENZIDINE	PA
EPA 8270 C	3-METHYLCHOLANTHRENE	PA
EPA 8270 C	3-NITROANILINE	PA
EPA 8270 C	4-AMINOBIPHENYL	PA
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	PA
EPA 8270 C	4-NITROPHENOL	PA
EPA 8270 C	5-NITRO-O-TOLUIDINE	PA
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	PA
EPA 8270 C	ACENAPHTHYLENE	PA
EPA 8270 C	ANILINE	PA



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Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	ANTHRACENE	PA
EPA 8270 C	BENZIDINE	PA
EPA 8270 C	BENZO(A)PYRENE	PA
EPA 8270 C	BENZO(G,H,I)PERYLENE	PA
EPA 8270 C	BENZOIC ACID	PA
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 C	CHLOROBENZILATE	PA
EPA 8270 C	DI-N-BUTYL PHTHALATE	PA
EPA 8270 C	DIALLATE	PA
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 C	DIETHYL PHTHALATE	PA
EPA 8270 C	DIMETHYL PHTHALATE	PA
EPA 8270 C	DISULFOTON	PA
EPA 8270 C	FAMPHUR	PA
EPA 8270 C	FLUORENE	PA
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 C	HEXACHLOROETHANE	PA
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 C	ISOPHORONE	PA
EPA 8270 C	KEPONE	PA
EPA 8270 C	METHYL METHANESULFONATE	PA
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 C	N-NITROSODIETHYLAMINE	PA
EPA 8270 C	N-NITROSODIPHENYLAMINE	PA
EPA 8270 C	N-NITROSOMORPHOLINE	PA
EPA 8270 C	N-NITROSOPYRROLIDINE	PA
EPA 8270 C	NITROBENZENE	PA
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 C	PENTACHLOROBENZENE	PA
EPA 8270 C	PENTACHLOROPHENOL	PA
EPA 8270 C	PHENANTHRENE	PA
EPA 8270 C	PHORATE	PA
EPA 8270 C	PRONAMIDE (KERB)	PA
EPA 8270 C	PYRIDINE	PA
EPA 8270 C	THIONAZIN (ZINOPHOS)	PA
EPA 8270 C	ARAMITE	PA
EPA 8270 C	BENZO(A)ANTHRACENE	PA
EPA 8270 C	BENZO(B)FLUORANTHENE	PA
EPA 8270 C	BENZO(K)FLUORANTHENE	PA
EPA 8270 C	BENZYL ALCOHOL	PA
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 C	BUTYL BENZYL PHTHALATE	PA
EPA 8270 C	CHRYSENE	PA
EPA 8270 C	DI-N-OCTYL PHTHALATE	PA
EPA 8270 C	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 C	DIBENZOFURAN	PA
EPA 8270 C	DIMETHOATE	PA
EPA 8270 C	DIPHENYLAMINE	PA
EPA 8270 C	ETHYL METHANESULFONATE	PA
EPA 8270 C	FLUORANTHENE	PA
EPA 8270 C	HEXACHLOROBENZENE	PA
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 C	HEXACHLOROPROPENE	PA
EPA 8270 C	ISODRIN	PA
EPA 8270 C	ISOSAFROLE	PA
EPA 8270 C	METHAPYRILENE	PA
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 C	N-NITROSODIMETHYLAMINE	PA
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 C	N-NITROSOPIPERIDINE	PA
EPA 8270 C	NAPHTHALENE	PA
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 C	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 C	PENTACHLORONITROBENZENE	PA
EPA 8270 C	PHENACETIN	PA
EPA 8270 C	PHENOL	PA
EPA 8270 C	PHTHALIC ANHYDRIDE	PA
EPA 8270 C	PYRENE	PA
EPA 8270 C	SAFROLE	PA



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	TRIS-(2,3-DIBROMOPROPYL) PHOSPHATE (TRIS-BP)	PA
EPA 8270 C SIM	ACENAPHTHENE	PA
EPA 8270 C SIM	ANTHRACENE	PA
EPA 8270 C SIM	BENZO(A)PYRENE	PA
EPA 8270 C SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 C SIM	CHRYSENE	PA
EPA 8270 C SIM	FLUORANTHENE	PA
EPA 8270 C SIM	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 C SIM	PHENANTHRENE	PA
EPA 8270 C SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D	1,2,4-TRICHLOROBENZENE	PA
EPA 8270 D	1,2-DINITROBENZENE (1,2-DNB)	PA
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	PA
EPA 8270 D	1,4-PHENYLENEDIAMINE	PA
EPA 8270 D	1-NAPHTHYLAMINE	PA
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	PA
EPA 8270 D	2,4,6-TRICHLOROPHENOL	PA
EPA 8270 D	2,4-DIMETHYLPHENOL	PA
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8270 D	2-CHLORONAPHTHALENE	PA
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	PA
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	PA
EPA 8270 D	2-NITROANILINE	PA
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	PA
EPA 8270 D	3,3'-DIMETHOXYBENZIDINE	PA
EPA 8270 D	3-METHYLCHOLANTHRENE	PA
EPA 8270 D	3-NITROANILINE	PA
EPA 8270 D	4-AMINOBIPHENYL	PA
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	PA
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	PA
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	PA
EPA 8270 C SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 C SIM	ACENAPHTHYLENE	PA
EPA 8270 C SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 C SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 C SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 C SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 C SIM	FLUORENE	PA
EPA 8270 C SIM	NAPHTHALENE	PA
EPA 8270 C SIM	PYRENE	PA
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	PA
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	PA
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	PA
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	PA
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	PA
EPA 8270 D	1,4-NAPHTHOQUINONE	PA
EPA 8270 D	1-CHLORONAPHTHALENE	PA
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	PA
EPA 8270 D	2,4,5-TRICHLOROPHENOL	PA
EPA 8270 D	2,4-DICHLOROPHENOL	PA
EPA 8270 D	2,4-DINITROPHENOL	PA
EPA 8270 D	2,6-DICHLOROPHENOL	PA
EPA 8270 D	2-ACETYLAMINOFLUORENE	PA
EPA 8270 D	2-CHLOROPHENOL	PA
EPA 8270 D	2-METHYLNAPHTHALENE	PA
EPA 8270 D	2-NAPHTHYLAMINE	PA
EPA 8270 D	2-NITROPHENOL	PA
EPA 8270 D	3,3'-DICHLOROBENZIDINE	PA
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	PA
EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	PA
EPA 8270 D	4,4'-METHYLENEBIS-2-CHLOROANILINE	PA
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	PA
EPA 8270 D	4-CHLOROANILINE	PA
EPA 8270 D	4-DIMETHYLAMINOAZOBENZENE	PA
EPA 8270 D	4-NITROANILINE	PA

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	4-NITROPHENOL	PA
EPA 8270 D	5-NITRO-O-TOLUIDINE	PA
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	PA
EPA 8270 D	ACENAPHTHYLENE	PA
EPA 8270 D	ANILINE	PA
EPA 8270 D	ARAMITE	PA
EPA 8270 D	BENZO(A)ANTHRACENE	PA
EPA 8270 D	BENZO(B)FLUORANTHENE	PA
EPA 8270 D	BENZO(K)FLUORANTHENE	PA
EPA 8270 D	BENZYL ALCOHOL	PA
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	PA
EPA 8270 D	BUTYL BENZYL PHTHALATE	PA
EPA 8270 D	CHRYSENE	PA
EPA 8270 D	DI-N-OCTYL PHTHALATE	PA
EPA 8270 D	DIBENZ(A, J) ACRIDINE	PA
EPA 8270 D	DIBENZOFURAN	PA
EPA 8270 D	DIMETHOATE	PA
EPA 8270 D	DIPHENYLAMINE	PA
EPA 8270 D	ETHYL METHANESULFONATE	PA
EPA 8270 D	FLUORANTHENE	PA
EPA 8270 D	HEXACHLOROBENZENE	PA
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	PA
EPA 8270 D	HEXACHLOROPROPENE	PA
EPA 8270 D	ISODRIN	PA
EPA 8270 D	ISOSAFROLE	PA
EPA 8270 D	METHAPYRILENE	PA
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	PA
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	PA
EPA 8270 D	N-NITROSODIMETHYLAMINE	PA
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	PA
EPA 8270 D	N-NITROSOPIPERIDINE	PA
EPA 8270 D	NAPHTHALENE	PA
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	PA
EPA 8270 D	PARATHION (PARATHION - ETHYL)	PA
EPA 8270 D	PENTACHLORONITROBENZENE	PA
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	PA
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	PA
EPA 8270 D	ACENAPHTHENE	PA
EPA 8270 D	ACETOPHENONE	PA
EPA 8270 D	ANTHRACENE	PA
EPA 8270 D	BENZIDINE	PA
EPA 8270 D	BENZO(A)PYRENE	PA
EPA 8270 D	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D	BENZOIC ACID	PA
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	PA
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	PA
EPA 8270 D	CHLOROBENZILATE	PA
EPA 8270 D	DI-N-BUTYL PHTHALATE	PA
EPA 8270 D	DIALLATE	PA
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D	DIETHYL PHTHALATE	PA
EPA 8270 D	DIMETHYL PHTHALATE	PA
EPA 8270 D	DISULFOTON	PA
EPA 8270 D	FAMPHUR	PA
EPA 8270 D	FLUORENE	PA
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	PA
EPA 8270 D	HEXACHLOROETHANE	PA
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D	ISOPHORONE	PA
EPA 8270 D	KEPONE	PA
EPA 8270 D	METHYL METHANESULFONATE	PA
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	PA
EPA 8270 D	N-NITROSODIETHYLAMINE	PA
EPA 8270 D	N-NITROSODIPHENYLAMINE	PA
EPA 8270 D	N-NITROSOMORPHOLINE	PA
EPA 8270 D	N-NITROSOPYRROLIDINE	PA
EPA 8270 D	NITROBENZENE	PA
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	PA
EPA 8270 D	PENTACHLOROBENZENE	PA
EPA 8270 D	PENTACHLOROPHENOL	PA



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	PHENACETIN	PA
EPA 8270 D	PHENOL	PA
EPA 8270 D	PHTHALIC ANHYDRIDE	PA
EPA 8270 D	PYRENE	PA
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	PA
EPA 8270 D	TRIS-(2,3-DIBROMOPROPYL) PHOSPHATE (TRIS-BP)	PA
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8270 D - EXTENDED	6-METHYLCHRYSENE	PA
EPA 8270 D - EXTENDED	BENZALDEHYDE	PA
EPA 8270 D - EXTENDED	CAPROLACTAM	PA
EPA 8270 D - EXTENDED	DIBENZ(A,H) ACRIDINE	PA
EPA 8270 D - EXTENDED	N,N-DIMETHYLFORMAMIDE	PA
EPA 8270 D - EXTENDED	QUINOLINE	PA
EPA 8270 D SIM	ACENAPHTHENE	PA
EPA 8270 D SIM	ANTHRACENE	PA
EPA 8270 D SIM	BENZO(A)PYRENE	PA
EPA 8270 D SIM	BENZO(G,H,I)PERYLENE	PA
EPA 8270 D SIM	CHRYSENE	PA
EPA 8270 D SIM	FLUORANTHENE	PA
EPA 8270 D SIM	INDENO(1,2,3-CD) PYRENE	PA
EPA 8270 D SIM	PHENANTHRENE	PA
EPA 8270 D SIM - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZO-P-DIOXIN (OCDD)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZO-P-DIOXIN (1,2,3,4,6,7,8-HPCDD)	PA
EPA 8290 A	1,2,3,4,7,8,9-HEPTACHLORODIBENZOFURAN (1,2,3,4,7,8,9-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZOFURAN (1,2,3,4,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZOFURAN (1,2,3,6,7,8-HXCDF)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZOFURAN (1,2,3,7,8,9-HXCDF)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZOFURAN (1,2,3,7,8-PECDF)	PA
EPA 8290 A	2,3,4,7,8-PENTACHLORODIBENZOFURAN	PA
EPA 8270 D	PHENANTHRENE	PA
EPA 8270 D	PHORATE	PA
EPA 8270 D	PRONAMIDE (KERB)	PA
EPA 8270 D	SAFROLE	PA
EPA 8270 D	THIONAZIN (ZINOPHOS)	PA
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	PA
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	PA
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8270 D - EXTENDED	ATRAZINE	PA
EPA 8270 D - EXTENDED	BIS(2-ETHYLHEXYL)ADIPATE (DI(2-ETHYLHEXYL)ADIPATE)	PA
EPA 8270 D - EXTENDED	CARBAZOLE	PA
EPA 8270 D - EXTENDED	INDENE	PA
EPA 8270 D - EXTENDED	PYRIDINE	PA
EPA 8270 D SIM	2-METHYLNAPHTHALENE	PA
EPA 8270 D SIM	ACENAPHTHYLENE	PA
EPA 8270 D SIM	BENZO(A)ANTHRACENE	PA
EPA 8270 D SIM	BENZO(B)FLUORANTHENE	PA
EPA 8270 D SIM	BENZO(K)FLUORANTHENE	PA
EPA 8270 D SIM	DIBENZO(A,H) ANTHRACENE	PA
EPA 8270 D SIM	FLUORENE	PA
EPA 8270 D SIM	NAPHTHALENE	PA
EPA 8270 D SIM	PYRENE	PA
EPA 8270 D SIM - EXTENDED	1-METHYLNAPHTHALENE	PA
EPA 8290 A	1,2,3,4,6,7,8,9-OCTACHLORODIBENZOFURAN (OCDF)	PA
EPA 8290 A	1,2,3,4,6,7,8-HEPTACHLORODIBENZOFURAN (1,2,3,4,6,7,8-HPCDF)	PA
EPA 8290 A	1,2,3,4,7,8-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,4,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,6,7,8-HEXACHLORODIBENZO-P-DIOXIN(1,2,3,6,7,8-HXCDD)	PA
EPA 8290 A	1,2,3,7,8,9-HEXACHLORODIBENZO-P-DIOXIN (1,2,3,7,8,9-HXCDD)	PA
EPA 8290 A	1,2,3,7,8-PENTACHLORODIBENZO-P-DIOXIN (1,2,3,7,8-PECDD)	PA
EPA 8290 A	2,3,4,6,7,8-HEXACHLORODIBENZOFURAN (2,3,4,6,7,8-HXCDF)	PA
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZO-P-DIOXIN (2,3,7,8-TCDD)	PA



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8290 A	2,3,7,8-TETRACHLORODIBENZOFURAN (2,3,7,8-TCDF)	PA
EPA 8315 A	ACETALDEHYDE	PA
EPA 8315 A	BUTYLALDEHYDE (BUTANAL)	PA
EPA 8315 A	FORMALDEHYDE	PA
EPA 8315 A	ISOVALERALDEHYDE	PA
EPA 8315 A	O-TOLUALDEHYDE (1,2-TOLUALDEHYDE)	PA
EPA 8315 A	PENTANAL (VALERALDEHYDE)	PA
EPA 8330	NITROGLYCERIN	PA
EPA 8330 A	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8330 A	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8330 A	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA
EPA 8330 A	3-NITROTOLUENE	PA
EPA 8330 A	4-NITROTOLUENE	PA
EPA 8330 A	NITROBENZENE	PA
EPA 8330 A	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	PA
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	PA
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	PA
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	PA
EPA 8330 B	3,5-DINITROANILINE	PA
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	PA
EPA 8330 B	NITROGLYCERIN	PA
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	PA
EPA 9012 A	CYANIDE	PA
EPA 9045 C	PH	PA
EPA 9050 A	CONDUCTIVITY	PA
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	PA
EPA 9071 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	PA
EPA 9095 B	FREE LIQUID	PA
EPA 8315 A	2,5-DIMETHYLBENZALDEHYDE	PA
EPA 8315 A	BENZALDEHYDE	PA
EPA 8315 A	CROTONALDEHYDE	PA
EPA 8315 A	HEXANALDEHYDE (HEXANAL)	PA
EPA 8315 A	M-TOLUALDEHYDE (1,3-TOLUALDEHYDE)	PA
EPA 8315 A	P-TOLUALDEHYDE (1,4-TOLUALDEHYDE)	PA
EPA 8315 A	PROPIONALDEHYDE (PROPANAL)	PA
EPA 8330 A	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 A	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 A	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 A	2-NITROTOLUENE	PA
EPA 8330 A	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	PA
EPA 8330 A	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	PA
EPA 8330 A	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	PA
EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	PA
EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	PA
EPA 8330 B	2-NITROTOLUENE	PA
EPA 8330 B	3-NITROTOLUENE	PA
EPA 8330 B	4-NITROTOLUENE	PA
EPA 8330 B	NITROBENZENE	PA
EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	PA
EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	PA
EPA 9012 B	TOTAL CYANIDE	PA
EPA 9045 D	PH	PA
EPA 9060	TOTAL ORGANIC CARBON (TOC)	PA
EPA 9066	TOTAL PHENOLICS	PA
EPA 9081	CATION EXCHANGE CAPACITY	PA
SM 2540 G-2011	RESIDUE-TOTAL (TS)	PA

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 10358

Eurofins Lancaster Laboratories Environmental, LLC
2425 New Holland Pike
Lancaster, PA 17601

Virginia Laboratory ID: 460182
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
SM 2540 G-2011	RESIDUE-VOLATILE	PA			

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES

Certifies that

VA Laboratory ID#: 460193
Shealy Environmental Services, Inc.

106 Vantage Point Drive
Columbia, SC 29172

Owner: DAN WRIGHT
Responsible Official: DANIEL J. WRIGHT

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: **September 15, 2018**
Expiration Date: **September 14, 2019**
Certificate # 9920

Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP) Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9920

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Columbia, SC 29172

Virginia Laboratory ID: 460193
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 1010	FLASHPOINT	FL
EPA 1631 E	MERCURY	FL
EPA 180.1 REV 2	TURBIDITY	FL
EPA 200.7 REV 4.4	ANTIMONY	FL
EPA 200.7 REV 4.4	BARIUM	FL
EPA 200.7 REV 4.4	BORON	FL
EPA 200.7 REV 4.4	CALCIUM	FL
EPA 200.7 REV 4.4	COBALT	FL
EPA 200.7 REV 4.4	IRON	FL
EPA 200.7 REV 4.4	MAGNESIUM	FL
EPA 200.7 REV 4.4	MOLYBDENUM	FL
EPA 200.7 REV 4.4	POTASSIUM	FL
EPA 200.7 REV 4.4	SILVER	FL
EPA 200.7 REV 4.4	THALLIUM	FL
EPA 200.7 REV 4.4	VANADIUM	FL
EPA 200.8 REV 5.4	ALUMINUM	FL
EPA 200.8 REV 5.4	ARSENIC	FL
EPA 200.8 REV 5.4	BERYLLIUM	FL
EPA 200.8 REV 5.4	CHROMIUM	FL
EPA 200.8 REV 5.4	COPPER	FL
EPA 200.8 REV 5.4	MANGANESE	FL
EPA 200.8 REV 5.4	NICKEL	FL
EPA 200.8 REV 5.4	SILVER	FL
EPA 200.8 REV 5.4	VANADIUM	FL
EPA 245.1 REV 3	MERCURY	FL
EPA 300.0 REV 2.1	CHLORIDE	FL
EPA 300.0 REV 2.1	NITRATE AS N	FL
EPA 300.0 REV 2.1	SULFATE	FL
EPA 350.1 REV 2	AMMONIA AS N	FL
EPA 353.2 REV 2	NITRATE AS N	FL
EPA 353.2 REV 2	NITRITE AS N	FL
EPA 6010 C	ALUMINUM	FL
EPA 6010 C	ARSENIC	FL
EPA 6010 C	BERYLLIUM	FL
EPA 6010 C	CADMIUM	FL
EPA 6010 C	CHROMIUM	FL
EPA 6010 C	COPPER	FL
EPA 120.1	CONDUCTIVITY	FL
EPA 1664 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	FL
EPA 200.7 REV 4.4	ALUMINUM	FL
EPA 200.7 REV 4.4	ARSENIC	FL
EPA 200.7 REV 4.4	BERYLLIUM	FL
EPA 200.7 REV 4.4	CADMIUM	FL
EPA 200.7 REV 4.4	CHROMIUM	FL
EPA 200.7 REV 4.4	COPPER	FL
EPA 200.7 REV 4.4	LEAD	FL
EPA 200.7 REV 4.4	MANGANESE	FL
EPA 200.7 REV 4.4	NICKEL	FL
EPA 200.7 REV 4.4	SELENIUM	FL
EPA 200.7 REV 4.4	SODIUM	FL
EPA 200.7 REV 4.4	TIN	FL
EPA 200.7 REV 4.4	ZINC	FL
EPA 200.8 REV 5.4	ANTIMONY	FL
EPA 200.8 REV 5.4	BARIUM	FL
EPA 200.8 REV 5.4	CADMIUM	FL
EPA 200.8 REV 5.4	COBALT	FL
EPA 200.8 REV 5.4	LEAD	FL
EPA 200.8 REV 5.4	MOLYBDENUM	FL
EPA 200.8 REV 5.4	SELENIUM	FL
EPA 200.8 REV 5.4	THALLIUM	FL
EPA 200.8 REV 5.4	ZINC	FL
EPA 300.0 REV 2.1	BROMIDE	FL
EPA 300.0 REV 2.1	FLUORIDE	FL
EPA 300.0 REV 2.1	NITRITE AS N	FL
EPA 335.4 REV 1.0	CYANIDE	FL
EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	FL
EPA 353.2 REV 2	NITRATE/NITRITE	FL
EPA 420.4 REV 1	TOTAL PHENOLICS	FL
EPA 6010 C	ANTIMONY	FL
EPA 6010 C	BARIUM	FL
EPA 6010 C	BORON	FL
EPA 6010 C	CALCIUM	FL
EPA 6010 C	COBALT	FL
EPA 6010 C	IRON	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9920

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Columbia, SC 29172

Virginia Laboratory ID: 460193
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6010 C	LEAD	FL	EPA 6010 C	MAGNESIUM	FL
EPA 6010 C	MANGANESE	FL	EPA 6010 C	MOLYBDENUM	FL
EPA 6010 C	NICKEL	FL	EPA 6010 C	POTASSIUM	FL
EPA 6010 C	SELENIUM	FL	EPA 6010 C	SILVER	FL
EPA 6010 C	SODIUM	FL	EPA 6010 C	THALLIUM	FL
EPA 6010 C	TIN	FL	EPA 6010 C	TITANIUM	FL
EPA 6010 C	VANADIUM	FL	EPA 6010 C	ZINC	FL
EPA 6010 D	ALUMINUM	FL	EPA 6010 D	ANTIMONY	FL
EPA 6010 D	ARSENIC	FL	EPA 6010 D	BARIUM	FL
EPA 6010 D	BERYLLIUM	FL	EPA 6010 D	BORON	FL
EPA 6010 D	CADMIUM	FL	EPA 6010 D	CALCIUM	FL
EPA 6010 D	CHROMIUM	FL	EPA 6010 D	COBALT	FL
EPA 6010 D	COPPER	FL	EPA 6010 D	IRON	FL
EPA 6010 D	LEAD	FL	EPA 6010 D	MAGNESIUM	FL
EPA 6010 D	MANGANESE	FL	EPA 6010 D	MOLYBDENUM	FL
EPA 6010 D	NICKEL	FL	EPA 6010 D	POTASSIUM	FL
EPA 6010 D	SELENIUM	FL	EPA 6010 D	SILVER	FL
EPA 6010 D	SODIUM	FL	EPA 6010 D	THALLIUM	FL
EPA 6010 D	TIN	FL	EPA 6010 D	TITANIUM	FL
EPA 6010 D	VANADIUM	FL	EPA 6010 D	ZINC	FL
EPA 6020 A	ALUMINUM	FL	EPA 6020 A	ANTIMONY	FL
EPA 6020 A	ARSENIC	FL	EPA 6020 A	BARIUM	FL
EPA 6020 A	BERYLLIUM	FL	EPA 6020 A	CADMIUM	FL
EPA 6020 A	CALCIUM	FL	EPA 6020 A	CHROMIUM	FL
EPA 6020 A	COBALT	FL	EPA 6020 A	COPPER	FL
EPA 6020 A	IRON	FL	EPA 6020 A	LEAD	FL
EPA 6020 A	MAGNESIUM	FL	EPA 6020 A	MANGANESE	FL
EPA 6020 A	NICKEL	FL	EPA 6020 A	POTASSIUM	FL
EPA 6020 A	SELENIUM	FL	EPA 6020 A	SILVER	FL
EPA 6020 A	SODIUM	FL	EPA 6020 A	THALLIUM	FL
EPA 6020 A	VANADIUM	FL	EPA 6020 A	ZINC	FL
EPA 6020 A - EXTENDED	BORON	FL	EPA 6020 A - EXTENDED	MOLYBDENUM	FL
EPA 6020 A - EXTENDED	TIN	FL	EPA 6020 A - EXTENDED	TITANIUM	FL
EPA 6020 B	ALUMINUM	FL	EPA 6020 B	ANTIMONY	FL
EPA 6020 B	ARSENIC	FL	EPA 6020 B	BARIUM	FL
EPA 6020 B	BERYLLIUM	FL	EPA 6020 B	CADMIUM	FL
EPA 6020 B	CALCIUM	FL	EPA 6020 B	CHROMIUM	FL
EPA 6020 B	COBALT	FL	EPA 6020 B	COPPER	FL



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 6020 B	IRON	FL
EPA 6020 B	MAGNESIUM	FL
EPA 6020 B	NICKEL	FL
EPA 6020 B	SELENIUM	FL
EPA 6020 B	SODIUM	FL
EPA 6020 B	TIN	FL
EPA 6020 B	ZINC	FL
EPA 6020 B - EXTENDED	TITANIUM	FL
EPA 608	4,4'-DDE	FL
EPA 608	ALDRIN	FL
EPA 608	AROCLOR-1016 (PCB-1016)	FL
EPA 608	AROCLOR-1232 (PCB-1232)	FL
EPA 608	AROCLOR-1248 (PCB-1248)	FL
EPA 608	AROCLOR-1260 (PCB-1260)	FL
EPA 608	CHLORDANE (TECH.)	FL
EPA 608	DIELDRIN	FL
EPA 608	ENDOSULFAN II	FL
EPA 608	ENDRIN	FL
EPA 608	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 608	HEPTACHLOR EPOXIDE	FL
EPA 624	1,1,1-TRICHLOROETHANE	FL
EPA 624	1,1,2-TRICHLOROETHANE	FL
EPA 624	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 624	1,2-DICHLOROPROPANE	FL
EPA 624	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 624	BENZENE	FL
EPA 624	BROMOFORM	FL
EPA 624	CHLOROBENZENE	FL
EPA 624	CHLOROFORM	FL
EPA 624	ETHYLBENZENE	FL
EPA 624	METHYL CHLORIDE (CHLOROMETHANE)	FL

METHOD	ANALYTE	PRIMARY
EPA 6020 B	LEAD	FL
EPA 6020 B	MANGANESE	FL
EPA 6020 B	POTASSIUM	FL
EPA 6020 B	SILVER	FL
EPA 6020 B	THALLIUM	FL
EPA 6020 B	VANADIUM	FL
EPA 6020 B - EXTENDED	BORON	FL
EPA 608	4,4'-DDD	FL
EPA 608	4,4'-DDT	FL
EPA 608	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 608	AROCLOR-1221 (PCB-1221)	FL
EPA 608	AROCLOR-1242 (PCB-1242)	FL
EPA 608	AROCLOR-1254 (PCB-1254)	FL
EPA 608	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 608	DELTA-BHC	FL
EPA 608	ENDOSULFAN I	FL
EPA 608	ENDOSULFAN SULFATE	FL
EPA 608	ENDRIN ALDEHYDE	FL
EPA 608	HEPTACHLOR	FL
EPA 608	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 624	1,1,2,2-TETRACHLOROETHANE	FL
EPA 624	1,1-DICHLOROETHANE	FL
EPA 624	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL
EPA 624	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 624	2-CHLOROETHYL VINYL ETHER	FL
EPA 624	BROMODICHLOROMETHANE	FL
EPA 624	CARBON TETRACHLORIDE	FL
EPA 624	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 624	CIS-1,3-DICHLOROPROPENE	FL
EPA 624	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 624	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL



Commonwealth of Virginia

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 624	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 624	TRANS-1,2-DICHLOROETHENE	FL
EPA 624	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 624	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 624 - EXTENDED	XYLENE (TOTAL)	FL
EPA 625	2,4,6-TRICHLOROPHENOL	FL
EPA 625	2,4-DIMETHYLPHENOL	FL
EPA 625	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 625	2-CHLORONAPHTHALENE	FL
EPA 625	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 625	3,3'-DICHLOROBENZIDINE	FL
EPA 625	4-CHLORO-3-METHYLPHENOL	FL
EPA 625	4-NITROPHENOL	FL
EPA 625	ACENAPHTHYLENE	FL
EPA 625	BENZIDINE	FL
EPA 625	BENZO(A)PYRENE	FL
EPA 625	BENZO(G,H,I)PERYLENE	FL
EPA 625	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 625	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 625	CHRYSENE	FL
EPA 625	DI-N-OCTYL PHTHALATE	FL
EPA 625	DIETHYL PHTHALATE	FL
EPA 625	FLUORANTHENE	FL
EPA 625	HEXACHLOROBENZENE	FL
EPA 625	HEXACHLOROCYCLOPENTADIENE	FL
EPA 625	INDENO(1,2,3-CD) PYRENE	FL
EPA 625	N-NITROSODI-N-PROPYLAMINE	FL
EPA 625	N-NITROSODIPHENYLAMINE	FL
EPA 625	NITROBENZENE	FL
EPA 625	PHENANTHRENE	FL
EPA 625	PYRENE	FL
EPA 7470 A	MERCURY	FL
EPA 624	TOLUENE	FL
EPA 624	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 624	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 624 - EXTENDED	1,1-DICHLOROETHYLENE	FL
EPA 625	1,2,4-TRICHLOROBENZENE	FL
EPA 625	2,4-DICHLOROPHENOL	FL
EPA 625	2,4-DINITROPHENOL	FL
EPA 625	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 625	2-CHLOROPHENOL	FL
EPA 625	2-NITROPHENOL	FL
EPA 625	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 625	4-CHLOROPHENYL PHENYLETHER	FL
EPA 625	ACENAPHTHENE	FL
EPA 625	ANTHRACENE	FL
EPA 625	BENZO(A)ANTHRACENE	FL
EPA 625	BENZO(B)FLUORANTHENE	FL
EPA 625	BENZO(K)FLUORANTHENE	FL
EPA 625	BIS(2-CHLOROETHYL) ETHER	FL
EPA 625	BUTYL BENZYL PHTHALATE	FL
EPA 625	DI-N-BUTYL PHTHALATE	FL
EPA 625	DIBENZO(A,H) ANTHRACENE	FL
EPA 625	DIMETHYL PHTHALATE	FL
EPA 625	FLUORENE	FL
EPA 625	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 625	HEXACHLOROETHANE	FL
EPA 625	ISOPHORONE	FL
EPA 625	N-NITROSODIMETHYLAMINE	FL
EPA 625	NAPHTHALENE	FL
EPA 625	PENTACHLOROPHENOL	FL
EPA 625	PHENOL	FL
EPA 7196 A	CHROMIUM VI	FL
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL

Scope of Accreditation

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	FL
EPA 8081 B	4,4'-DDE	FL
EPA 8081 B	ALDRIN	FL
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL
EPA 8081 B	CHLORDANE (TECH.)	FL
EPA 8081 B	DIELDRIN	FL
EPA 8081 B	ENDOSULFAN II	FL
EPA 8081 B	ENDRIN	FL
EPA 8081 B	ENDRIN KETONE	FL
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL
EPA 8081 B	HEPTACHLOR EPOXIDE	FL
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 8082 A	AROCLOR-1221 (PCB-1221)	FL
EPA 8082 A	AROCLOR-1242 (PCB-1242)	FL
EPA 8082 A	AROCLOR-1254 (PCB-1254)	FL
EPA 8151 A	2,4,5-T	FL
EPA 8151 A	2,4-DB	FL
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	FL
EPA 8151 A	PENTACHLOROPHENOL	FL
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	FL
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROPROPENE	FL
EPA 8260 B	1,2,3-TRICHLOROPROPANE	FL
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	FL
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	FL
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8081 B	4,4'-DDD	FL
EPA 8081 B	4,4'-DDT	FL
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	DELTA-BHC	FL
EPA 8081 B	ENDOSULFAN I	FL
EPA 8081 B	ENDOSULFAN SULFATE	FL
EPA 8081 B	ENDRIN ALDEHYDE	FL
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	HEPTACHLOR	FL
EPA 8081 B	METHOXYCHLOR	FL
EPA 8082 A	AROCLOR-1016 (PCB-1016)	FL
EPA 8082 A	AROCLOR-1232 (PCB-1232)	FL
EPA 8082 A	AROCLOR-1248 (PCB-1248)	FL
EPA 8082 A	AROCLOR-1260 (PCB-1260)	FL
EPA 8151 A	2,4-D	FL
EPA 8151 A	DICAMBA	FL
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8151 A	SILVEX (2,4,5-TP)	FL
EPA 8260 B	1,1,1-TRICHLOROETHANE	FL
EPA 8260 B	1,1,2-TRICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHYLENE	FL
EPA 8260 B	1,2,3-TRICHLOROBENZENE	FL
EPA 8260 B	1,2,4-TRICHLOROBENZENE	FL
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8260 B	1,2-DICHLOROPROPANE	FL



Commonwealth of Virginia

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8260 B	2,2-DICHLOROPROPANE	FL
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	FL
EPA 8260 B	2-HEXANONE	FL
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	FL
EPA 8260 B	ACETONITRILE	FL
EPA 8260 B	ACRYLONITRILE	FL
EPA 8260 B	BENZENE	FL
EPA 8260 B	BROMOBENZENE	FL
EPA 8260 B	BROMODICHLOROMETHANE	FL
EPA 8260 B	CARBON DISULFIDE	FL
EPA 8260 B	CHLOROBENZENE	FL
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	FL
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	FL
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	FL
EPA 8260 B	ETHYL METHACRYLATE	FL
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	FL
EPA 8260 B	METHACRYLONITRILE	FL
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	FL
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	FL
EPA 8260 B	N-BUTYLBENZENE	FL
EPA 8260 B	NAPHTHALENE	FL
EPA 8260 B	SEC-BUTYLBENZENE	FL
EPA 8260 B	TERT-BUTYLBENZENE	FL
EPA 8260 B	TOLUENE	FL
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 8260 B	1,3-DICHLOROPROPANE	FL
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	FL
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	FL
EPA 8260 B	2-CHLOROTOLUENE	FL
EPA 8260 B	4-CHLOROTOLUENE	FL
EPA 8260 B	ACETONE	FL
EPA 8260 B	ACROLEIN (PROPENAL)	FL
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	FL
EPA 8260 B	BENZYL CHLORIDE	FL
EPA 8260 B	BROMOCHLOROMETHANE	FL
EPA 8260 B	BROMOFORM	FL
EPA 8260 B	CARBON TETRACHLORIDE	FL
EPA 8260 B	CHLORODIBROMOMETHANE	FL
EPA 8260 B	CHLOROFORM	FL
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	FL
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	FL
EPA 8260 B	DIETHYL ETHER	FL
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	FL
EPA 8260 B	ISOPROPYLBENZENE	FL
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 8260 B	METHYL METHACRYLATE	FL
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL
EPA 8260 B	N-PROPYLBENZENE	FL
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	FL
EPA 8260 B	STYRENE	FL
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	FL
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	FL
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL

Scope of Accreditation

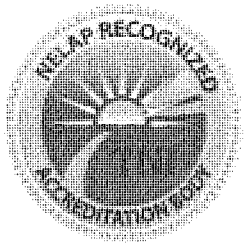
VELAP Certificate No.: 9920

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Columbia, SC 29172

Virginia Laboratory ID: 460193
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8260 B	VINYL ACETATE	FL	EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 8260 B	XYLENE (TOTAL)	FL	EPA 8260 C	ETHYLBENZENE	FL
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	FL	EPA 8270 D	1,2,4-TRICHLOROBENZENE	FL
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL	EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL	EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-NAPHTHOQUINONE	FL	EPA 8270 D	1,4-PHENYLENEDIAMINE	FL
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	FL	EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	FL
EPA 8270 D	2,4,5-TRICHLOROPHENOL	FL	EPA 8270 D	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 D	2,4-DICHLOROPHENOL	FL	EPA 8270 D	2,4-DIMETHYLPHENOL	FL
EPA 8270 D	2,4-DINITROPHENOL	FL	EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8270 D	2,6-DICHLOROPHENOL	FL	EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8270 D	2-ACETYLAMINOFLUORENE	FL	EPA 8270 D	2-CHLORONAPHTHALENE	FL
EPA 8270 D	2-CHLOROPHENOL	FL	EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 8270 D	2-METHYLNAPHTHALENE	FL	EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	FL
EPA 8270 D	2-NITROANILINE	FL	EPA 8270 D	2-NITROPHENOL	FL
EPA 8270 D	3,3'-DICHLOROBENZIDINE	FL	EPA 8270 D	3,3'-DIMETHYLBENZIDINE	FL
EPA 8270 D	3-NITROANILINE	FL	EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	FL	EPA 8270 D	4-CHLOROANILINE	FL
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	FL	EPA 8270 D	4-NITROANILINE	FL
EPA 8270 D	4-NITROPHENOL	FL	EPA 8270 D	5-NITRO-O-TOLUIDINE	FL
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL	EPA 8270 D	ACENAPHTHENE	FL
EPA 8270 D	ACENAPHTHYLENE	FL	EPA 8270 D	ACETOPHENONE	FL
EPA 8270 D	ANILINE	FL	EPA 8270 D	ANTHRACENE	FL
EPA 8270 D	BENZIDINE	FL	EPA 8270 D	BENZO(A)ANTHRACENE	FL
EPA 8270 D	BENZO(A)PYRENE	FL	EPA 8270 D	BENZO(B)FLUORANTHENE	FL
EPA 8270 D	BENZO(G,H,I)PERYLENE	FL	EPA 8270 D	BENZO(K)FLUORANTHENE	FL
EPA 8270 D	BENZOIC ACID	FL	EPA 8270 D	BENZYL ALCOHOL	FL
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	FL	EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	FL
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL	EPA 8270 D	BUTYL BENZYL PHTHALATE	FL
EPA 8270 D	CHLOROBENZILATE	FL	EPA 8270 D	CHRYSENE	FL
EPA 8270 D	DI-N-BUTYL PHTHALATE	FL	EPA 8270 D	DI-N-OCTYL PHTHALATE	FL
EPA 8270 D	DIALLATE	FL	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 D	DIBENZOFURAN	FL	EPA 8270 D	DIETHYL PHTHALATE	FL
EPA 8270 D	DIMETHYL PHTHALATE	FL	EPA 8270 D	ETHYL METHANESULFONATE	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9920

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Virginia Laboratory ID: 460193
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Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	FLUORANTHENE	FL
EPA 8270 D	HEXACHLOROBENZENE	FL
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 D	HEXACHLOROPROPENE	FL
EPA 8270 D	ISODRIN	FL
EPA 8270 D	ISOSAFROLE	FL
EPA 8270 D	METHYL METHANESULFONATE	FL
EPA 8270 D	N-NITROSODIMETHYLAMINE	FL
EPA 8270 D	NAPHTHALENE	FL
EPA 8270 D	PENTACHLOROBENZENE	FL
EPA 8270 D	PENTACHLOROPHENOL	FL
EPA 8270 D	PHENANTHRENE	FL
EPA 8270 D	PRONAMIDE (KERB)	FL
EPA 8270 D	SAFROLE	FL
EPA 8270 D - EXTENDED	CAPROLACTAM	FL
EPA 8270 D - EXTENDED	PYRIDINE	FL
EPA 9040 C	PH	FL
EPA 9056 A	CHLORIDE	FL
EPA 9056 A	NITRATE AS N	FL
EPA 9056 A	SULFATE	FL
SM 2120 B-2011	COLOR	FL
SM 2340 C-2011	TOTAL HARDNESS AS CACO3	FL
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	FL
SM 3500-CR B-2011	CHROMIUM VI	FL
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	FL
SM 5220 D-2011	CHEMICAL OXYGEN DEMAND (COD)	FL
EPA 8270 D	FLUORENE	FL
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 D	HEXACHLOROETHANE	FL
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 D	ISOPHORONE	FL
EPA 8270 D	KEPONE	FL
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 D	N-NITROSODIPHENYLAMINE	FL
EPA 8270 D	NITROBENZENE	FL
EPA 8270 D	PENTACHLORONITROBENZENE	FL
EPA 8270 D	PHENACETIN	FL
EPA 8270 D	PHENOL	FL
EPA 8270 D	PYRENE	FL
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	FL
EPA 8270 D - EXTENDED	CARBAZOLE	FL
EPA 9012 B	TOTAL CYANIDE	FL
EPA 9056 A	BROMIDE	FL
EPA 9056 A	FLUORIDE	FL
EPA 9056 A	NITRITE AS N	FL
EPA 9065	TOTAL PHENOLICS	FL
SM 2320 B-2011	ALKALINITY AS CACO3	FL
SM 2540 B-2011	RESIDUE-TOTAL (TS)	FL
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	FL
SM 4500-$S2^-$ F-2011	SULFIDE	FL
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	FL
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	FL

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	FL
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	FL
EPA 6010 C	ANTIMONY	FL
EPA 6010 C	BARIUM	FL
EPA 6010 C	BORON	FL
EPA 6010 C	CALCIUM	FL
EPA 6010 C	COBALT	FL
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	FL
EPA 6010 C	ALUMINUM	FL
EPA 6010 C	ARSENIC	FL
EPA 6010 C	BERYLLIUM	FL
EPA 6010 C	CADMIUM	FL
EPA 6010 C	CHROMIUM	FL

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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6010 C	COPPER	FL	EPA 6010 C	IRON	FL
EPA 6010 C	LEAD	FL	EPA 6010 C	MAGNESIUM	FL
EPA 6010 C	MANGANESE	FL	EPA 6010 C	MOLYBDENUM	FL
EPA 6010 C	NICKEL	FL	EPA 6010 C	POTASSIUM	FL
EPA 6010 C	SELENIUM	FL	EPA 6010 C	SILVER	FL
EPA 6010 C	SODIUM	FL	EPA 6010 C	THALLIUM	FL
EPA 6010 C	TIN	FL	EPA 6010 C	TITANIUM	FL
EPA 6010 C	VANADIUM	FL	EPA 6010 C	ZINC	FL
EPA 6010 D	ALUMINUM	FL	EPA 6010 D	ANTIMONY	FL
EPA 6010 D	ARSENIC	FL	EPA 6010 D	BARIUM	FL
EPA 6010 D	BERYLLIUM	FL	EPA 6010 D	BORON	FL
EPA 6010 D	CADMIUM	FL	EPA 6010 D	CALCIUM	FL
EPA 6010 D	CHROMIUM	FL	EPA 6010 D	COBALT	FL
EPA 6010 D	COPPER	FL	EPA 6010 D	IRON	FL
EPA 6010 D	LEAD	FL	EPA 6010 D	MAGNESIUM	FL
EPA 6010 D	MANGANESE	FL	EPA 6010 D	MOLYBDENUM	FL
EPA 6010 D	NICKEL	FL	EPA 6010 D	POTASSIUM	FL
EPA 6010 D	SELENIUM	FL	EPA 6010 D	SILVER	FL
EPA 6010 D	SODIUM	FL	EPA 6010 D	THALLIUM	FL
EPA 6010 D	TIN	FL	EPA 6010 D	TITANIUM	FL
EPA 6010 D	VANADIUM	FL	EPA 6010 D	ZINC	FL
EPA 6020 B	ALUMINUM	FL	EPA 6020 B	ANTIMONY	FL
EPA 6020 B	ARSENIC	FL	EPA 6020 B	BARIUM	FL
EPA 6020 B	BERYLLIUM	FL	EPA 6020 B	CADMIUM	FL
EPA 6020 B	CALCIUM	FL	EPA 6020 B	CHROMIUM	FL
EPA 6020 B	COBALT	FL	EPA 6020 B	COPPER	FL
EPA 6020 B	IRON	FL	EPA 6020 B	LEAD	FL
EPA 6020 B	MAGNESIUM	FL	EPA 6020 B	MANGANESE	FL
EPA 6020 B	NICKEL	FL	EPA 6020 B	POTASSIUM	FL
EPA 6020 B	SELENIUM	FL	EPA 6020 B	SILVER	FL
EPA 6020 B	SODIUM	FL	EPA 6020 B	THALLIUM	FL
EPA 6020 B	VANADIUM	FL	EPA 6020 B	ZINC	FL
EPA 7196 A	CHROMIUM VI	FL	EPA 7471 B	MERCURY	FL
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	FL	EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	FL
EPA 8081 B	4,4'-DDD	FL	EPA 8081 B	4,4'-DDE	FL
EPA 8081 B	4,4'-DDT	FL	EPA 8081 B	ALDRIN	FL
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL	EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



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METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL	EPA 8081 B	CHLORDANE (TECH.)	FL
EPA 8081 B	DELTA-BHC	FL	EPA 8081 B	DIELDRIN	FL
EPA 8081 B	ENDOSULFAN I	FL	EPA 8081 B	ENDOSULFAN II	FL
EPA 8081 B	ENDOSULFAN SULFATE	FL	EPA 8081 B	ENDRIN	FL
EPA 8081 B	ENDRIN ALDEHYDE	FL	EPA 8081 B	ENDRIN KETONE	FL
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL	EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL
EPA 8081 B	HEPTACHLOR	FL	EPA 8081 B	HEPTACHLOR EPOXIDE	FL
EPA 8081 B	METHOXYCHLOR	FL	EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 8082 A	AROCLOR-1016 (PCB-1016)	FL	EPA 8082 A	AROCLOR-1221 (PCB-1221)	FL
EPA 8082 A	AROCLOR-1232 (PCB-1232)	FL	EPA 8082 A	AROCLOR-1242 (PCB-1242)	FL
EPA 8082 A	AROCLOR-1248 (PCB-1248)	FL	EPA 8082 A	AROCLOR-1254 (PCB-1254)	FL
EPA 8082 A	AROCLOR-1260 (PCB-1260)	FL	EPA 8151 A	2,4,5-T	FL
EPA 8151 A	2,4-D	FL	EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8151 A	PENTACHLOROPHENOL	FL	EPA 8151 A	SILVEX (2,4,5-TP)	FL
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	FL	EPA 8260 B	1,1,1-TRICHLOROETHANE	FL
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	FL	EPA 8260 B	1,1,2-TRICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHANE	FL	EPA 8260 B	1,1-DICHLOROETHYLENE	FL
EPA 8260 B	1,1-DICHLOROPROPENE	FL	EPA 8260 B	1,2,3-TRICHLOROBENZENE	FL
EPA 8260 B	1,2,3-TRICHLOROPROPANE	FL	EPA 8260 B	1,2,4-TRICHLOROBENZENE	FL
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	FL	EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL	EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL	EPA 8260 B	1,2-DICHLOROPROPANE	FL
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	FL	EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8260 B	1,3-DICHLOROPROPANE	FL	EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8260 B	2,2-DICHLOROPROPANE	FL	EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	FL
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	FL	EPA 8260 B	2-CHLOROTOLUENE	FL
EPA 8260 B	2-HEXANONE	FL	EPA 8260 B	4-CHLOROTOLUENE	FL
EPA 8260 B	ACETONE	FL	EPA 8260 B	ACETONITRILE	FL
EPA 8260 B	ACROLEIN (PROPENAL)	FL	EPA 8260 B	ACRYLONITRILE	FL
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	FL	EPA 8260 B	BENZENE	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

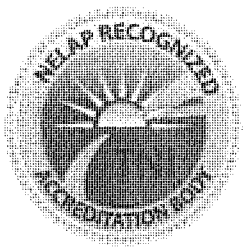
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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 B	BENZYL CHLORIDE	FL
EPA 8260 B	BROMOCHLOROMETHANE	FL
EPA 8260 B	BROMOFORM	FL
EPA 8260 B	CARBON TETRACHLORIDE	FL
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	FL
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	FL
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	FL
EPA 8260 B	ETHYL METHACRYLATE	FL
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	FL
EPA 8260 B	ISOPROPYLBENZENE	FL
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 8260 B	METHYL METHACRYLATE	FL
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL
EPA 8260 B	N-PROPYLBENZENE	FL
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	FL
EPA 8260 B	STYRENE	FL
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	FL
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	FL
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	FL
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-PHENYLENEDIAMINE	FL
EPA 8270 D	2,4,5-TRICHLOROPHENOL	FL
EPA 8270 D	2,4-DICHLOROPHENOL	FL
EPA 8270 D	2,4-DINITROPHENOL	FL
EPA 8260 B	BROMOBENZENE	FL
EPA 8260 B	BROMODICHLOROMETHANE	FL
EPA 8260 B	CARBON DISULFIDE	FL
EPA 8260 B	CHLOROBENZENE	FL
EPA 8260 B	CHLOROFORM	FL
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	FL
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	FL
EPA 8260 B	DIETHYL ETHER	FL
EPA 8260 B	ETHYLBENZENE	FL
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	FL
EPA 8260 B	METHACRYLONITRILE	FL
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	FL
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	FL
EPA 8260 B	N-BUTYLBENZENE	FL
EPA 8260 B	NAPHTHALENE	FL
EPA 8260 B	SEC-BUTYLBENZENE	FL
EPA 8260 B	TERT-BUTYLBENZENE	FL
EPA 8260 B	TOLUENE	FL
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 8260 B	VINYL ACETATE	FL
EPA 8260 B	XYLENE (TOTAL)	FL
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-NAPHTHOQUINONE	FL
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 8270 D	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 D	2,4-DIMETHYLPHENOL	FL
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	FL



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	2,6-DICHLOROPHENOL	FL
EPA 8270 D	2-ACETYLAMINOFLUORENE	FL
EPA 8270 D	2-CHLOROPHENOL	FL
EPA 8270 D	2-METHYLNAPHTHALENE	FL
EPA 8270 D	2-NITROANILINE	FL
EPA 8270 D	3,3'-DICHLOROBENZIDINE	FL
EPA 8270 D	3-NITROANILINE	FL
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	FL
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	FL
EPA 8270 D	4-NITROPHENOL	FL
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL
EPA 8270 D	ACENAPHTHYLENE	FL
EPA 8270 D	ANTHRACENE	FL
EPA 8270 D	BENZO(A)ANTHRACENE	FL
EPA 8270 D	BENZO(B)FLUORANTHENE	FL
EPA 8270 D	BENZO(K)FLUORANTHENE	FL
EPA 8270 D	BENZYL ALCOHOL	FL
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	FL
EPA 8270 D	BUTYL BENZYL PHTHALATE	FL
EPA 8270 D	CHRYSENE	FL
EPA 8270 D	DI-N-OCTYL PHTHALATE	FL
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 D	DIETHYL PHTHALATE	FL
EPA 8270 D	ETHYL METHANESULFONATE	FL
EPA 8270 D	FLUORENE	FL
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 D	HEXACHLOROETHANE	FL
EPA 8270 D	ISODRIN	FL
EPA 8270 D	ISOSAFROLE	FL
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 D	NITROBENZENE	FL
EPA 8270 D	PENTACHLORONITROBENZENE	FL
EPA 8270 D	PHENACETIN	FL
EPA 8270 D	PHENOL	FL
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8270 D	2-CHLORONAPHTHALENE	FL
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	FL
EPA 8270 D	2-NITROPHENOL	FL
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	FL
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 8270 D	4-CHLOROANILINE	FL
EPA 8270 D	4-NITROANILINE	FL
EPA 8270 D	5-NITRO-O-TOLUIDINE	FL
EPA 8270 D	ACENAPHTHENE	FL
EPA 8270 D	ACETOPHENONE	FL
EPA 8270 D	BENZIDINE	FL
EPA 8270 D	BENZO(A)PYRENE	FL
EPA 8270 D	BENZO(G,H,I)PERYLENE	FL
EPA 8270 D	BENZOIC ACID	FL
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 8270 D	CHLOROBENZILATE	FL
EPA 8270 D	DI-N-BUTYL PHTHALATE	FL
EPA 8270 D	DIALLATE	FL
EPA 8270 D	DIBENZOFURAN	FL
EPA 8270 D	DIMETHYL PHTHALATE	FL
EPA 8270 D	FLUORANTHENE	FL
EPA 8270 D	HEXACHLOROBENZENE	FL
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 D	ISOPHORONE	FL
EPA 8270 D	METHYL METHANESULFONATE	FL
EPA 8270 D	N-NITROSODIPHENYLAMINE	FL
EPA 8270 D	NAPHTHALENE	FL
EPA 8270 D	PENTACHLOROBENZENE	FL
EPA 8270 D	PENTACHLOROPHENOL	FL
EPA 8270 D	PHENANTHRENE	FL
EPA 8270 D	PRONAMIDE (KERB)	FL

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 9920

Shealy Environmental Services, Inc.
106 Vantage Point Drive
Columbia, SC 29172

Virginia Laboratory ID: 460193
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	PYRENE	FL
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	FL
EPA 8270 D - EXTENDED	CARBAZOLE	FL
EPA 9045 C	PH	FL
EPA 9071 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	FL
EPA 8270 D	SAFROLE	FL
EPA 8270 D - EXTENDED	CAPROLACTAM	FL
EPA 8270 D - EXTENDED	PYRIDINE	FL
EPA 9045 D	PH	FL

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES

Certifies that

VA Laboratory ID#: 460175
Testamerica Laboratories, Inc. - Canton

4101 Shuffel Street N.W.
North Canton, OH 44720

Owner: TESTAMERICA LABORATORIES, INC.
Operator: RACHEL BRYDON JANNETTA
Responsible Official: RAYMOND RISDEN

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: **September 15, 2018**
Expiration Date: **September 14, 2019**
Certificate # 9940

Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP) Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
ASTM D3987-06	PREP: SHAKE EXTRACTION OF SOLID WASTE WITH WATER	OR
EPA 1010 A	FLASHPOINT	OR
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	OR
EPA 1630	METHYL MERCURY	OR
EPA 1664 A	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	OR
EPA 180.1 (AS HACH 8195)	TURBIDITY	OR
EPA 200.7 REV 4.4	ANTIMONY	OR
EPA 200.7 REV 4.4	BARIUM	OR
EPA 200.7 REV 4.4	BORON	OR
EPA 200.7 REV 4.4	CALCIUM	OR
EPA 200.7 REV 4.4	COBALT	OR
EPA 200.7 REV 4.4	IRON	OR
EPA 200.7 REV 4.4	MAGNESIUM	OR
EPA 200.7 REV 4.4	MOLYBDENUM	OR
EPA 200.7 REV 4.4	POTASSIUM	OR
EPA 200.7 REV 4.4	SILICA AS SIO2	OR
EPA 200.7 REV 4.4	SODIUM	OR
EPA 200.7 REV 4.4	TIN	OR
EPA 200.7 REV 4.4	VANADIUM	OR
EPA 200.8 REV 5.4	ALUMINUM	OR
EPA 200.8 REV 5.4	ARSENIC	OR
EPA 200.8 REV 5.4	BERYLLIUM	OR
EPA 200.8 REV 5.4	CHROMIUM	OR
EPA 200.8 REV 5.4	COPPER	OR
EPA 200.8 REV 5.4	MANGANESE	OR
EPA 200.8 REV 5.4	NICKEL	OR
EPA 200.8 REV 5.4	SILVER	OR
EPA 200.8 REV 5.4	VANADIUM	OR
EPA 200.8 REV 5.4 - EXTENDED	BORON	OR
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	OR
EPA 200.8 REV 5.4 - EXTENDED	TIN	OR
EPA 245.1 REV 3	MERCURY	OR
EPA 300.0 REV 2.1	CHLORIDE	OR
EPA 1010	FLASHPOINT	OR
EPA 120.1	CONDUCTIVITY	OR
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	OR
EPA 1631 E	MERCURY	OR
EPA 1664 A	TOTAL PETROLEUM HYDROCARBONS (TPH) (AS NONPOLAR MATERIAL, SGT-HEM)	OR
EPA 200.7 REV 4.4	ALUMINUM	OR
EPA 200.7 REV 4.4	ARSENIC	OR
EPA 200.7 REV 4.4	BERYLLIUM	OR
EPA 200.7 REV 4.4	CADMIUM	OR
EPA 200.7 REV 4.4	CHROMIUM	OR
EPA 200.7 REV 4.4	COPPER	OR
EPA 200.7 REV 4.4	LEAD	OR
EPA 200.7 REV 4.4	MANGANESE	OR
EPA 200.7 REV 4.4	NICKEL	OR
EPA 200.7 REV 4.4	SELENIUM	OR
EPA 200.7 REV 4.4	SILVER	OR
EPA 200.7 REV 4.4	THALLIUM	OR
EPA 200.7 REV 4.4	TITANIUM	OR
EPA 200.7 REV 4.4	ZINC	OR
EPA 200.8 REV 5.4	ANTIMONY	OR
EPA 200.8 REV 5.4	BARIUM	OR
EPA 200.8 REV 5.4	CADMIUM	OR
EPA 200.8 REV 5.4	COBALT	OR
EPA 200.8 REV 5.4	LEAD	OR
EPA 200.8 REV 5.4	MOLYBDENUM	OR
EPA 200.8 REV 5.4	SELENIUM	OR
EPA 200.8 REV 5.4	THALLIUM	OR
EPA 200.8 REV 5.4	ZINC	OR
EPA 200.8 REV 5.4 - EXTENDED	IRON	OR
EPA 200.8 REV 5.4 - EXTENDED	SODIUM	OR
EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	OR
EPA 300.0 REV 2.1	BROMIDE	OR
EPA 300.0 REV 2.1	FLUORIDE	OR



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 300.0 REV 2.1	NITRATE AS N	OR
EPA 300.0 REV 2.1	SULFATE	OR
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	OR
EPA 3510 C	PREP: LIQUID-LIQUID EXTRACTION	OR
EPA 353.2 REV 2	NITRATE/NITRITE	OR
EPA 365.3	ORTHOPHOSPHATE AS P	OR
EPA 3650 B	PREP: ACID BASE PARTITION CLEANUP	OR
EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	OR
EPA 420.1 (AS HACH 8047)	TOTAL PHENOLICS	OR
EPA 5030 C	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	OR
EPA 6010 B	ANTIMONY	OR
EPA 6010 B	BARIUM	OR
EPA 6010 B	BORON	OR
EPA 6010 B	CALCIUM	OR
EPA 6010 B	COBALT	OR
EPA 6010 B	IRON	OR
EPA 6010 B	LITHIUM	OR
EPA 6010 B	MANGANESE	OR
EPA 6010 B	NICKEL	OR
EPA 6010 B	SELENIUM	OR
EPA 6010 B	SILVER	OR
EPA 6010 B	STRONTIUM	OR
EPA 6010 B	TIN	OR
EPA 6010 B	VANADIUM	OR
EPA 6010 B - EXTENDED	SILICON	OR
EPA 6010 C	ANTIMONY	OR
EPA 6010 C	BARIUM	OR
EPA 6010 C	BORON	OR
EPA 6010 C	CALCIUM	OR
EPA 6010 C	COBALT	OR
EPA 6010 C	IRON	OR
EPA 6010 C	LITHIUM	OR
EPA 6010 C	MANGANESE	OR
EPA 300.0 REV 2.1	NITRITE AS N	OR
EPA 3005 A	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	OR
EPA 335.4 REV 1.0	CYANIDE	OR
EPA 3520 C	PREP: CONTINUOUS LIQUID-LIQUID EXTRACTION	OR
EPA 3620 B	PREP: FLORISIL CLEANUP	OR
EPA 365.3	PHOSPHORUS, TOTAL	OR
EPA 3660 B	PREP: SULFUR CLEANUP	OR
EPA 410.4 REV 2	CHEMICAL OXYGEN DEMAND (COD)	OR
EPA 5030 B	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	OR
EPA 6010 B	ALUMINUM	OR
EPA 6010 B	ARSENIC	OR
EPA 6010 B	BERYLLIUM	OR
EPA 6010 B	CADMIUM	OR
EPA 6010 B	CHROMIUM	OR
EPA 6010 B	COPPER	OR
EPA 6010 B	LEAD	OR
EPA 6010 B	MAGNESIUM	OR
EPA 6010 B	MOLYBDENUM	OR
EPA 6010 B	POTASSIUM	OR
EPA 6010 B	SILICA AS SIO2	OR
EPA 6010 B	SODIUM	OR
EPA 6010 B	THALLIUM	OR
EPA 6010 B	TITANIUM	OR
EPA 6010 B	ZINC	OR
EPA 6010 C	ALUMINUM	OR
EPA 6010 C	ARSENIC	OR
EPA 6010 C	BERYLLIUM	OR
EPA 6010 C	CADMIUM	OR
EPA 6010 C	CHROMIUM	OR
EPA 6010 C	COPPER	OR
EPA 6010 C	LEAD	OR
EPA 6010 C	MAGNESIUM	OR



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6010 C	MOLYBDENUM	OR	EPA 6010 C	NICKEL	OR
EPA 6010 C	POTASSIUM	OR	EPA 6010 C	SELENIUM	OR
EPA 6010 C	SILICA AS SIO2	OR	EPA 6010 C	SILVER	OR
EPA 6010 C	SODIUM	OR	EPA 6010 C	STRONTIUM	OR
EPA 6010 C	THALLIUM	OR	EPA 6010 C	TIN	OR
EPA 6010 C	TITANIUM	OR	EPA 6010 C	VANADIUM	OR
EPA 6010 C	ZINC	OR	EPA 6010 C - EXTENDED	SILICON	OR
EPA 6010 D	ALUMINUM	VA	EPA 6010 D	ANTIMONY	OR
EPA 6010 D	ARSENIC	OR	EPA 6010 D	BARIUM	OR
EPA 6010 D	BERYLLIUM	OR	EPA 6010 D	BORON	OR
EPA 6010 D	CADMIUM	OR	EPA 6010 D	CALCIUM	OR
EPA 6010 D	CHROMIUM	OR	EPA 6010 D	COBALT	OR
EPA 6010 D	COPPER	OR	EPA 6010 D	IRON	OR
EPA 6010 D	LEAD	OR	EPA 6010 D	LITHIUM	OR
EPA 6010 D	MAGNESIUM	OR	EPA 6010 D	MANGANESE	OR
EPA 6010 D	MOLYBDENUM	OR	EPA 6010 D	NICKEL	OR
EPA 6010 D	POTASSIUM	OR	EPA 6010 D	SELENIUM	OR
EPA 6010 D	SILICA AS SIO2	OR	EPA 6010 D	SILVER	OR
EPA 6010 D	SODIUM	OR	EPA 6010 D	STRONTIUM	VA
EPA 6010 D	THALLIUM	VA	EPA 6010 D	TIN	VA
EPA 6010 D	TITANIUM	VA	EPA 6010 D	VANADIUM	VA
EPA 6010 D	ZINC	VA	EPA 6010 D - EXTENDED	SILICON	OR
EPA 6020	ALUMINUM	OR	EPA 6020	ANTIMONY	OR
EPA 6020	ARSENIC	OR	EPA 6020	BARIUM	OR
EPA 6020	BERYLLIUM	OR	EPA 6020	CADMIUM	OR
EPA 6020	CHROMIUM	OR	EPA 6020	COBALT	OR
EPA 6020	COPPER	OR	EPA 6020	LEAD	OR
EPA 6020	MANGANESE	OR	EPA 6020	NICKEL	OR
EPA 6020	SILVER	OR	EPA 6020	THALLIUM	OR
EPA 6020	ZINC	OR	EPA 6020 - EXTENDED	BORON	OR
EPA 6020 - EXTENDED	CALCIUM	OR	EPA 6020 - EXTENDED	IRON	OR
EPA 6020 - EXTENDED	LITHIUM	OR	EPA 6020 - EXTENDED	MAGNESIUM	OR
EPA 6020 - EXTENDED	MOLYBDENUM	OR	EPA 6020 - EXTENDED	POTASSIUM	OR
EPA 6020 - EXTENDED	SELENIUM	OR	EPA 6020 - EXTENDED	SODIUM	OR
EPA 6020 - EXTENDED	STRONTIUM	OR	EPA 6020 - EXTENDED	TIN	OR
EPA 6020 - EXTENDED	TITANIUM	OR	EPA 6020 - EXTENDED	VANADIUM	OR
EPA 6020 A	ALUMINUM	OR	EPA 6020 A	ANTIMONY	OR
EPA 6020 A	ARSENIC	OR	EPA 6020 A	BARIUM	OR



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6020 A	BERYLLIUM	OR	EPA 6020 A	CADMIUM	OR
EPA 6020 A	CALCIUM	OR	EPA 6020 A	CHROMIUM	OR
EPA 6020 A	COBALT	OR	EPA 6020 A	COPPER	OR
EPA 6020 A	IRON	OR	EPA 6020 A	LEAD	OR
EPA 6020 A	MAGNESIUM	OR	EPA 6020 A	MANGANESE	OR
EPA 6020 A	NICKEL	OR	EPA 6020 A	POTASSIUM	OR
EPA 6020 A	SELENIUM	OR	EPA 6020 A	SILVER	OR
EPA 6020 A	SODIUM	OR	EPA 6020 A	THALLIUM	OR
EPA 6020 A	VANADIUM	OR	EPA 6020 A	ZINC	OR
EPA 6020 A - EXTENDED	BORON	OR	EPA 6020 A - EXTENDED	LITHIUM	OR
EPA 6020 A - EXTENDED	MOLYBDENUM	OR	EPA 6020 A - EXTENDED	STRONTIUM	OR
EPA 6020 A - EXTENDED	TIN	OR	EPA 6020 A - EXTENDED	TITANIUM	OR
EPA 6020 B	ALUMINUM	OR	EPA 6020 B	ANTIMONY	OR
EPA 6020 B	ARSENIC	OR	EPA 6020 B	BARIUM	OR
EPA 6020 B	BERYLLIUM	OR	EPA 6020 B	CADMIUM	OR
EPA 6020 B	CALCIUM	OR	EPA 6020 B	CHROMIUM	OR
EPA 6020 B	COBALT	OR	EPA 6020 B	COPPER	OR
EPA 6020 B	IRON	OR	EPA 6020 B	LEAD	OR
EPA 6020 B	MAGNESIUM	OR	EPA 6020 B	MANGANESE	OR
EPA 6020 B	MOLYBDENUM	OR	EPA 6020 B	NICKEL	OR
EPA 6020 B	POTASSIUM	OR	EPA 6020 B	SELENIUM	OR
EPA 6020 B	SILVER	OR	EPA 6020 B	SODIUM	OR
EPA 6020 B	THALLIUM	OR	EPA 6020 B	TIN	OR
EPA 6020 B	VANADIUM	OR	EPA 6020 B	ZINC	OR
EPA 6020 B - EXTENDED	BORON	OR	EPA 6020 B - EXTENDED	LITHIUM	OR
EPA 6020 B - EXTENDED	STRONTIUM	OR	EPA 6020 B - EXTENDED	TITANIUM	OR
EPA 608	4,4'-DDD	OR	EPA 608	4,4'-DDE	OR
EPA 608	4,4'-DDT	OR	EPA 608	ALDRIN	OR
EPA 608	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	OR	EPA 608	AROCLOR-1016 (PCB-1016)	OR
EPA 608	AROCLOR-1221 (PCB-1221)	OR	EPA 608	AROCLOR-1232 (PCB-1232)	OR
EPA 608	AROCLOR-1242 (PCB-1242)	OR	EPA 608	AROCLOR-1248 (PCB-1248)	OR
EPA 608	AROCLOR-1254 (PCB-1254)	OR	EPA 608	AROCLOR-1260 (PCB-1260)	OR
EPA 608	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	OR	EPA 608	CHLORDANE (TECH.)	OR
EPA 608	DELTA-BHC	OR	EPA 608	DIELDRIN	OR
EPA 608	ENDOSULFAN I	OR	EPA 608	ENDOSULFAN II	OR
EPA 608	ENDOSULFAN SULFATE	OR	EPA 608	ENDRIN	OR

Scope of Accreditation

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 608	ENDRIN ALDEHYDE	OR
EPA 608	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	OR
EPA 608	HEPTACHLOR	OR
EPA 608	HEPTACHLOR EPOXIDE	OR
EPA 608	TOXAPHENE (CHLORINATED CAMPHENE)	OR
EPA 624	1,1,1-TRICHLOROETHANE	OR
EPA 624	1,1,2,2-TETRACHLOROETHANE	OR
EPA 624	1,1,2-TRICHLOROETHANE	OR
EPA 624	1,1-DICHLOROETHANE	OR
EPA 624	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 624	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	OR
EPA 624	1,2-DICHLOROPROPANE	OR
EPA 624	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 624	1,3-DICHLOROPROPENE	OR
EPA 624	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 624	2-CHLOROETHYL VINYL ETHER	OR
EPA 624	ACROLEIN (PROPENAL)	OR
EPA 624	ACRYLONITRILE	OR
EPA 624	BENZENE	OR
EPA 624	BROMODICHLOROMETHANE	OR
EPA 624	BROMOFORM	OR
EPA 624	CARBON TETRACHLORIDE	OR
EPA 624	CHLOROBENZENE	OR
EPA 624	CHLORODIBROMOMETHANE	OR
EPA 624	CHLOROETHANE (ETHYL CHLORIDE)	OR
EPA 624	CHLOROFORM	OR
EPA 624	CIS-1,3-DICHLOROPROPENE	OR
EPA 624	ETHYLBENZENE	OR
EPA 624	METHYL BROMIDE (BROMOMETHANE)	OR
EPA 624	METHYL CHLORIDE (CHLOROMETHANE)	OR
EPA 624	METHYLENE CHLORIDE (DICHLOROMETHANE)	OR
EPA 624	TETRACHLOROETHENE (PERCHLOROETHENE)	OR
EPA 624	TOLUENE	OR
EPA 624	TRANS-1,2-DICHLOROETHENE	OR
EPA 624	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	OR
EPA 624	TRICHLOROETHENE (TRICHLOROETHYLENE)	OR
EPA 624	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	OR
EPA 624	VINYL CHLORIDE (CHLOROETHENE)	OR
EPA 624 - EXTENDED	1,1-DICHLOROETHYLENE	OR
EPA 624 - EXTENDED	2-BUTANONE (METHYL ETHYL KETONE, MEK)	OR
EPA 624 - EXTENDED	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	OR
EPA 624 - EXTENDED	ACETONE	OR
EPA 624 - EXTENDED	CIS-1,2-DICHLOROETHYLENE	OR
EPA 624 - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	OR
EPA 624 - EXTENDED	N-HEXANE	OR
EPA 624 - EXTENDED	XYLENE (TOTAL)	OR
EPA 625	1,2,4-TRICHLOROBENZENE	OR
EPA 625	2,2'-OXYBIS(1-CHLOROPROPANE)	OR
EPA 625	2,4,6-TRICHLOROPHENOL	OR
EPA 625	2,4-DICHLOROPHENOL	OR
EPA 625	2,4-DIMETHYLPHENOL	OR
EPA 625	2,4-DINITROPHENOL	OR
EPA 625	2,4-DINITROTOLUENE (2,4-DNT)	OR
EPA 625	2,6-DINITROTOLUENE (2,6-DNT)	OR
EPA 625	2-CHLORONAPHTHALENE	OR
EPA 625	2-CHLOROPHENOL	OR
EPA 625	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	OR
EPA 625	2-METHYLPHENOL (O-CRESOL)	OR



Commonwealth of Virginia

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 625	2-NITROPHENOL	OR
EPA 625	4-BROMOPHENYL PHENYL ETHER (BDE-3)	OR
EPA 625	4-CHLOROPHENYL PHENYLETHER	OR
EPA 625	ACENAPHTHENE	OR
EPA 625	ANTHRACENE	OR
EPA 625	BENZO(A)ANTHRACENE	OR
EPA 625	BENZO(B)FLUORANTHENE	OR
EPA 625	BENZO(K)FLUORANTHENE	OR
EPA 625	BIS(2-CHLOROETHYL) ETHER	OR
EPA 625	BUTYL BENZYL PHTHALATE	OR
EPA 625	DI-N-BUTYL PHTHALATE	OR
EPA 625	DIBENZO(A,H) ANTHRACENE	OR
EPA 625	DIMETHYL PHTHALATE	OR
EPA 625	FLUORENE	OR
EPA 625	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 625	HEXACHLOROETHANE	OR
EPA 625	ISOPHORONE	OR
EPA 625	N-NITROSODIMETHYLAMINE	OR
EPA 625	NAPHTHALENE	OR
EPA 625	PENTACHLOROPHENOL	OR
EPA 625	PHENOL	OR
EPA 625 - EXTENDED	1,2-DIPHENYLHYDRAZINE	OR
EPA 625 - EXTENDED	ANILINE	OR
EPA 625 - EXTENDED	CARBAZOLE	OR
EPA 625 - EXTENDED	N-OCTADECANE	OR
EPA 7196 A	CHROMIUM VI	OR
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	OR
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	OR
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	OR
EPA 8081 A	4,4'-DDD	OR
EPA 8081 A	4,4'-DDT	OR
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	OR

METHOD	ANALYTE	PRIMARY
EPA 625	3,3'-DICHLOROBENZIDINE	OR
EPA 625	4-CHLORO-3-METHYLPHENOL	OR
EPA 625	4-NITROPHENOL	OR
EPA 625	ACENAPHTHYLENE	OR
EPA 625	BENZIDINE	OR
EPA 625	BENZO(A)PYRENE	OR
EPA 625	BENZO(G,H,I)PERYLENE	OR
EPA 625	BIS(2-CHLOROETHOXY)METHANE	OR
EPA 625	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	OR
EPA 625	CHRYSENE	OR
EPA 625	DI-N-OCTYL PHTHALATE	OR
EPA 625	DIETHYL PHTHALATE	OR
EPA 625	FLUORANTHENE	OR
EPA 625	HEXACHLOROBENZENE	OR
EPA 625	HEXACHLOROCYCLOPENTADIENE	OR
EPA 625	INDENO(1,2,3-CD) PYRENE	OR
EPA 625	N-NITROSODI-N-PROPYLAMINE	OR
EPA 625	N-NITROSODIPHENYLAMINE	OR
EPA 625	NITROBENZENE	OR
EPA 625	PHENANTHRENE	OR
EPA 625	PYRENE	OR
EPA 625 - EXTENDED	ACETOPHENONE	OR
EPA 625 - EXTENDED	BENZOIC ACID	OR
EPA 625 - EXTENDED	N-DECANE	OR
EPA 625 - EXTENDED	PYRIDINE	OR
EPA 7470 A	MERCURY	OR
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	OR
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	OR
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	OR
EPA 8081 A	4,4'-DDE	OR
EPA 8081 A	ALDRIN	OR
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	OR

Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 A	CHLOROBENZILATE	OR
EPA 8081 A	DIALLATE	OR
EPA 8081 A	ENDOSULFAN I	OR
EPA 8081 A	ENDOSULFAN SULFATE	OR
EPA 8081 A	ENDRIN ALDEHYDE	OR
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 A	HEPTACHLOR	OR
EPA 8081 A	HEXACHLOROBENZENE	OR
EPA 8081 A	METHOXYCHLOR	OR
EPA 8081 A - EXTENDED	KEPONE	OR
EPA 8081 B	4,4'-DDD	OR
EPA 8081 B	4,4'-DDT	OR
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 B	CHLOROBENZILATE	OR
EPA 8081 B	DIALLATE	OR
EPA 8081 B	ENDOSULFAN I	OR
EPA 8081 B	ENDOSULFAN SULFATE	OR
EPA 8081 B	ENDRIN ALDEHYDE	OR
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 B	HEPTACHLOR	OR
EPA 8081 B	HEXACHLOROBENZENE	OR
EPA 8081 B	METHOXYCHLOR	OR
EPA 8081 B - EXTENDED	KEPONE	OR
EPA 8082	AROCLOR-1016 (PCB-1016)	OR
EPA 8082	AROCLOR-1232 (PCB-1232)	OR
EPA 8082	AROCLOR-1248 (PCB-1248)	OR
EPA 8082	AROCLOR-1260 (PCB-1260)	OR
EPA 8082 - EXTENDED	AROCLOR-1268 (PCB-1268)	OR
EPA 8082 A	AROCLOR-1221 (PCB-1221)	OR
EPA 8081 A	CHLORDANE (TECH.)	OR
EPA 8081 A	DELTA-BHC	OR
EPA 8081 A	DIELDRIN	OR
EPA 8081 A	ENDOSULFAN II	OR
EPA 8081 A	ENDRIN	OR
EPA 8081 A	ENDRIN KETONE	OR
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	OR
EPA 8081 A	HEPTACHLOR EPOXIDE	OR
EPA 8081 A	ISODRIN	OR
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	OR
EPA 8081 A - EXTENDED	MIREX	OR
EPA 8081 B	4,4'-DDE	OR
EPA 8081 B	ALDRIN	OR
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	OR
EPA 8081 B	CHLORDANE (TECH.)	OR
EPA 8081 B	DELTA-BHC	OR
EPA 8081 B	DIELDRIN	OR
EPA 8081 B	ENDOSULFAN II	OR
EPA 8081 B	ENDRIN	OR
EPA 8081 B	ENDRIN KETONE	OR
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	OR
EPA 8081 B	HEPTACHLOR EPOXIDE	OR
EPA 8081 B	ISODRIN	OR
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	OR
EPA 8081 B - EXTENDED	MIREX	OR
EPA 8082	AROCLOR-1221 (PCB-1221)	OR
EPA 8082	AROCLOR-1242 (PCB-1242)	OR
EPA 8082	AROCLOR-1254 (PCB-1254)	OR
EPA 8082 - EXTENDED	AROCLOR-1262 (PCB-1262)	OR
EPA 8082 A	AROCLOR-1016 (PCB-1016)	OR
EPA 8082 A	AROCLOR-1232 (PCB-1232)	OR

Scope of Accreditation

VELAP Certificate No.: 9940

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Virginia Laboratory ID: 460175
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Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8082 A	AROCLOR-1242 (PCB-1242)	OR	EPA 8082 A	AROCLOR-1248 (PCB-1248)	OR
EPA 8082 A	AROCLOR-1254 (PCB-1254)	OR	EPA 8082 A	AROCLOR-1260 (PCB-1260)	OR
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	OR	EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	OR
EPA 8151 A	2,4,5-T	OR	EPA 8151 A	2,4-D	OR
EPA 8151 A	2,4-DB	OR	EPA 8151 A	DALAPON	OR
EPA 8151 A	DICAMBA	OR	EPA 8151 A	DICHLOROPROP (DICHLORPROP)	OR
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	OR	EPA 8151 A	MCPA	OR
EPA 8151 A	MCPP	OR	EPA 8151 A	PENTACHLOROPHENOL	OR
EPA 8151 A	SILVEX (2,4,5-TP)	OR	EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	OR
EPA 8260 B	1,1,1-TRICHLOROETHANE	OR	EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	OR
EPA 8260 B	1,1,2-TRICHLOROETHANE	OR	EPA 8260 B	1,1-DICHLOROETHANE	OR
EPA 8260 B	1,1-DICHLOROETHYLENE	OR	EPA 8260 B	1,1-DICHLOROPROPENE	OR
EPA 8260 B	1,2,3-TRICHLOROBENZENE	OR	EPA 8260 B	1,2,3-TRICHLOROPROPANE	OR
EPA 8260 B	1,2,4-TRICHLOROBENZENE	OR	EPA 8260 B	1,2,4-TRIMETHYLBENZENE	OR
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	OR	EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	OR
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR	EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	OR
EPA 8260 B	1,2-DICHLOROPROPANE	OR	EPA 8260 B	1,3,5-TRIMETHYLBENZENE	OR
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR	EPA 8260 B	1,3-DICHLOROPROPANE	OR
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR	EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	OR	EPA 8260 B	1-CHLOROHEXANE	OR
EPA 8260 B	2,2-DICHLOROPROPANE	OR	EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	OR
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	OR	EPA 8260 B	2-CHLOROTOLUENE	OR
EPA 8260 B	2-HEXANONE	OR	EPA 8260 B	2-NITROPROPANE	OR
EPA 8260 B	4-CHLOROTOLUENE	OR	EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	OR
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	OR	EPA 8260 B	ACETONE	OR
EPA 8260 B	ACETONITRILE	OR	EPA 8260 B	ACROLEIN (PROPENAL)	OR
EPA 8260 B	ACRYLONITRILE	OR	EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	OR
EPA 8260 B	BENZENE	OR	EPA 8260 B	BENZYL CHLORIDE	OR
EPA 8260 B	BROMOBENZENE	OR	EPA 8260 B	BROMOCHLOROMETHANE	OR
EPA 8260 B	BROMODICHLOROMETHANE	OR	EPA 8260 B	BROMOFORM	OR
EPA 8260 B	CARBON DISULFIDE	OR	EPA 8260 B	CARBON TETRACHLORIDE	OR
EPA 8260 B	CHLOROBENZENE	OR			

Scope of Accreditation

VELAP Certificate No.: 9940

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B	CHLORODIBROMOMETHANE	OR
EPA 8260 B	CHLOROFORM	OR
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	OR
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	OR
EPA 8260 B	DIETHYL ETHER	OR
EPA 8260 B	ETHYL ACETATE	OR
EPA 8260 B	ETHYLBENZENE	OR
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	OR
EPA 8260 B	ISOPROPYLBENZENE	OR
EPA 8260 B	METHACRYLONITRILE	OR
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	OR
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	OR
EPA 8260 B	N-BUTYLBENZENE	OR
EPA 8260 B	NAPHTHALENE	OR
EPA 8260 B	PENTACHLOROETHANE	OR
EPA 8260 B	SEC-BUTYLBENZENE	OR
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	OR
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	OR
EPA 8260 B	TOTAL TRIHALOMETHANES (TTHMS)	OR
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	OR
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	OR
EPA 8260 B	VINYL ACETATE	OR
EPA 8260 B	XYLENE (TOTAL)	OR
EPA 8260 B - EXTENDED	1,2,3-TRIMETHYLBENZENE	OR
EPA 8260 B - EXTENDED	1,3-BUTADIENE	OR
EPA 8260 B - EXTENDED	CYCLOHEXANE	OR
EPA 8260 B - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	OR
EPA 8260 B - EXTENDED	ETHYL ACRYLATE	OR
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	OR
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	OR
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	OR
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	OR
EPA 8260 B	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	OR
EPA 8260 B	ETHYL METHACRYLATE	OR
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	OR
EPA 8260 B	M+P-XYLENE	OR
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	OR
EPA 8260 B	METHYL METHACRYLATE	OR
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	OR
EPA 8260 B	N-PROPYLBENZENE	OR
EPA 8260 B	O-XYLENE	OR
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	OR
EPA 8260 B	STYRENE	OR
EPA 8260 B	TERT-BUTYLBENZENE	OR
EPA 8260 B	TOLUENE	OR
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	OR
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	OR
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	OR
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	OR
EPA 8260 B - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8260 B - EXTENDED	2-METHYLNAPHTHALENE	OR
EPA 8260 B - EXTENDED	CYCLOHEXANONE	OR
EPA 8260 B - EXTENDED	DICHLOROFLUOROMETHANE (FREON 21)	OR

Scope of Accreditation

VELAP Certificate No.: 9940

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Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	OR
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	OR
EPA 8260 B - EXTENDED	N-HEPTANE	OR
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	OR
EPA 8260 B SIM	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	OR
EPA 8260 B SIM	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8260 C	1,1,1-TRICHLOROETHANE	OR
EPA 8260 C	1,1,2-TRICHLOROETHANE	OR
EPA 8260 C	1,1-DICHLOROETHYLENE	OR
EPA 8260 C	1,2,3-TRICHLOROBENZENE	OR
EPA 8260 C	1,2,4-TRICHLOROBENZENE	OR
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	OR
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8260 C	1,2-DICHLOROPROPANE	OR
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	OR
EPA 8260 C	2,2-DICHLOROPROPANE	OR
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	OR
EPA 8260 C	2-HEXANONE	OR
EPA 8260 C	4-CHLOROTOLUENE	OR
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	OR
EPA 8260 C	ACETONITRILE	OR
EPA 8260 C	ACRYLONITRILE	OR
EPA 8260 C	BENZENE	OR
EPA 8260 C	BROMOBENZENE	OR
EPA 8260 C	BROMODICHLOROMETHANE	OR
EPA 8260 C	CARBON DISULFIDE	OR
EPA 8260 C	CHLOROBENZENE	OR
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	OR
EPA 8260 C	METHYL ACETATE	OR
EPA 8260 B - EXTENDED	N-BUTYL-ACETATE	OR
EPA 8260 B - EXTENDED	N-HEXANE	OR
EPA 8260 B - EXTENDED	TETRAHYDROFURAN (THF)	OR
EPA 8260 B SIM	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	OR
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	OR
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	OR
EPA 8260 C	1,1-DICHLOROETHANE	OR
EPA 8260 C	1,1-DICHLOROPROPENE	OR
EPA 8260 C	1,2,3-TRICHLOROPROPANE	OR
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	OR
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	OR
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	OR
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	OR
EPA 8260 C	1,3-DICHLOROPROPANE	OR
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8260 C	1-CHLOROHEXANE	OR
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	OR
EPA 8260 C	2-CHLOROTOLUENE	OR
EPA 8260 C	2-NITROPROPANE	OR
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	OR
EPA 8260 C	ACETONE	OR
EPA 8260 C	ACROLEIN (PROPENAL)	OR
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	OR
EPA 8260 C	BENZYL CHLORIDE	OR
EPA 8260 C	BROMOCHLOROMETHANE	OR
EPA 8260 C	BROMOFORM	OR
EPA 8260 C	CARBON TETRACHLORIDE	OR
EPA 8260 C	CHLORODIBROMOMETHANE	OR
EPA 8260 C	CHLOROFORM	OR

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	OR
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	OR
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	OR
EPA 8260 C	DIETHYL ETHER	OR
EPA 8260 C	ETHYL ACETATE	OR
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	OR
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	OR
EPA 8260 C	M+P-XYLENE	OR
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	OR
EPA 8260 C	METHYL METHACRYLATE	OR
EPA 8260 C	METHYLCYCLOHEXANE	OR
EPA 8260 C	N-BUTYLBENZENE	OR
EPA 8260 C	NAPHTHALENE	OR
EPA 8260 C	PENTACHLOROETHANE	OR
EPA 8260 C	SEC-BUTYLBENZENE	OR
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	OR
EPA 8260 C	TERT-BUTYLBENZENE	OR
EPA 8260 C	TOLUENE	OR
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	OR
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	OR
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	OR
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	OR
EPA 8260 C - EXTENDED	1,3-BUTADIENE	OR
EPA 8260 C - EXTENDED	CIS & TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 C - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	OR
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	OR
EPA 8260 C	CYCLOHEXANE	OR
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	OR
EPA 8260 C	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	OR
EPA 8260 C	ETHYL METHACRYLATE	OR
EPA 8260 C	ETHYLBENZENE	OR
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	OR
EPA 8260 C	ISOPROPYLBENZENE	OR
EPA 8260 C	METHACRYLONITRILE	OR
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	OR
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	OR
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	OR
EPA 8260 C	N-PROPYLBENZENE	OR
EPA 8260 C	O-XYLENE	OR
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	OR
EPA 8260 C	STYRENE	OR
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	OR
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	OR
EPA 8260 C	TOTAL TRIHALOMETHANES (TTHMS)	OR
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	OR
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	OR
EPA 8260 C	VINYL ACETATE	OR
EPA 8260 C	XYLENE (TOTAL)	OR
EPA 8260 C - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8260 C - EXTENDED	2-METHYLNAPHTHALENE	OR
EPA 8260 C - EXTENDED	CYCLOHEXANONE	OR
EPA 8260 C - EXTENDED	DICHLOROFLUOROMETHANE (FREON 21)	OR

Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
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Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 C - EXTENDED	ETHYL ACRYLATE	OR
EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	OR
EPA 8260 C - EXTENDED	N-HEXANE	OR
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	OR
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	OR
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	OR
EPA 8270 C	1,4-DINITROBENZENE (1,4-DNB)	OR
EPA 8270 C	1,4-PHENYLENEDIAMINE	OR
EPA 8270 C	1-NAPHTHYLAMINE	OR
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	OR
EPA 8270 C	2,4,6-TRICHLOROPHENOL	OR
EPA 8270 C	2,4-DIMETHYLPHENOL	OR
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	OR
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	OR
EPA 8270 C	2-CHLOROANILINE	OR
EPA 8270 C	2-CHLOROPHENOL	OR
EPA 8270 C	2-METHYLNAPHTHALENE	OR
EPA 8270 C	2-NAPHTHYLAMINE	OR
EPA 8270 C	2-NITROPHENOL	OR
EPA 8270 C	3,3'-DICHLOROBENZIDINE	OR
EPA 8270 C	3-METHYLCHOLANTHRENE	OR
EPA 8270 C	3-NITROANILINE	OR
EPA 8270 C	4-AMINOBIPHENYL	OR
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	OR
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	OR
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	VA
EPA 8270 C	4-NITROPHENOL	OR
EPA 8270 C	5-NITRO-O-TOLUIDINE	OR
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	OR
EPA 8270 C	ACENAPHTHYLENE	OR
EPA 8270 C	ANILINE	OR
EPA 8270 C	ARAMITE	OR
EPA 8270 C	BENZO(A)ANTHRACENE	OR
EPA 8270 C	BENZO(B)FLUORANTHENE	OR
EPA 8260 C - EXTENDED	METHYL ACETATE	OR
EPA 8260 C - EXTENDED	N-HEPTANE	OR
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	OR
EPA 8270 C	1,2,4-TRICHLOROBENZENE	OR
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	OR
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8270 C	1,4-NAPHTHOQUINONE	OR
EPA 8270 C	1-CHLORONAPHTHALENE	OR
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	OR
EPA 8270 C	2,4,5-TRICHLOROPHENOL	OR
EPA 8270 C	2,4-DICHLOROPHENOL	OR
EPA 8270 C	2,4-DINITROPHENOL	OR
EPA 8270 C	2,6-DICHLOROPHENOL	OR
EPA 8270 C	2-ACETYLAMINOFLUORENE	OR
EPA 8270 C	2-CHLORONAPHTHALENE	OR
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	OR
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	OR
EPA 8270 C	2-NITROANILINE	OR
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	OR
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	OR
EPA 8270 C	3-METHYLPHENOL (M-CRESOL)	VA
EPA 8270 C	4,4'-METHYLENEBIS(2-CHLOROANILINE)	OR
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	OR
EPA 8270 C	4-CHLOROANILINE	OR
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	OR
EPA 8270 C	4-NITROANILINE	OR
EPA 8270 C	4-NITROQUINOLINE-1-OXIDE	OR
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	OR
EPA 8270 C	ACENAPHTHENE	OR
EPA 8270 C	ACETOPHENONE	OR
EPA 8270 C	ANTHRACENE	OR
EPA 8270 C	BENZIDINE	OR
EPA 8270 C	BENZO(A)PYRENE	OR
EPA 8270 C	BENZO(G,H,I)PERYLENE	OR

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C	BENZO(K)FLUORANTHENE	OR
EPA 8270 C	BENZYL ALCOHOL	OR
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	OR
EPA 8270 C	BUTYL BENZYL PHTHALATE	OR
EPA 8270 C	CHRYSENE	OR
EPA 8270 C	DI-N-BUTYL PHTHALATE	OR
EPA 8270 C	DIALLATE	OR
EPA 8270 C	DIBENZO(A,E) PYRENE	OR
EPA 8270 C	DIBENZOFURAN	OR
EPA 8270 C	DIMETHOATE	OR
EPA 8270 C	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	OR
EPA 8270 C	DISULFOTON	OR
EPA 8270 C	FAMPHUR	OR
EPA 8270 C	FLUORENE	OR
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8270 C	HEXACHLOROETHANE	OR
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	OR
EPA 8270 C	ISOPHORONE	OR
EPA 8270 C	KEPONE	OR
EPA 8270 C	METHYL METHANESULFONATE	OR
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	OR
EPA 8270 C	N-NITROSODIETHYLAMINE	OR
EPA 8270 C	N-NITROSODIPHENYLAMINE	OR
EPA 8270 C	N-NITROSOMORPHOLINE	OR
EPA 8270 C	N-NITROSOPYRROLIDINE	OR
EPA 8270 C	NITROBENZENE	OR
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	OR
EPA 8270 C	PENTACHLOROBENZENE	OR
EPA 8270 C	PENTACHLOROPHENOL	OR
EPA 8270 C	PHENANTHRENE	OR
EPA 8270 C	PHORATE	OR
EPA 8270 C	PYRENE	OR
EPA 8270 C	SAFROLE	OR
EPA 8270 C	THIONAZIN (ZINOPHOS)	OR

METHOD	ANALYTE	PRIMARY
EPA 8270 C	BENZOIC ACID	OR
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	OR
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	OR
EPA 8270 C	CHLOROBENZILATE	OR
EPA 8270 C	CRESOLS, TOTAL	OR
EPA 8270 C	DI-N-OCTYL PHTHALATE	OR
EPA 8270 C	DIBENZ(A, J) ACRIDINE	OR
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	OR
EPA 8270 C	DIETHYL PHTHALATE	OR
EPA 8270 C	DIMETHYL PHTHALATE	OR
EPA 8270 C	DIPHENYLAMINE	OR
EPA 8270 C	ETHYL METHANESULFONATE	OR
EPA 8270 C	FLUORANTHENE	OR
EPA 8270 C	HEXACHLOROBENZENE	OR
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	OR
EPA 8270 C	HEXACHLOROPROPENE	OR
EPA 8270 C	ISODRIN	OR
EPA 8270 C	ISOSAFROLE	OR
EPA 8270 C	METHAPYRILENE	OR
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	OR
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	OR
EPA 8270 C	N-NITROSODIMETHYLAMINE	OR
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	OR
EPA 8270 C	N-NITROSOPIPERIDINE	OR
EPA 8270 C	NAPHTHALENE	OR
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	OR
EPA 8270 C	PARATHION (PARATHION - ETHYL)	OR
EPA 8270 C	PENTACHLORONITROBENZENE	OR
EPA 8270 C	PHENACETIN	OR
EPA 8270 C	PHENOL	OR
EPA 8270 C	PRONAMIDE (KERB)	OR
EPA 8270 C	PYRIDINE	OR
EPA 8270 C	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	OR
EPA 8270 C	THIOPHENOL (BENZENETHIOL)	OR



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9940

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Virginia Laboratory ID: 460175
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Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C - EXTENDED	1,1'-BIPHENYL (BZ-0)	OR
EPA 8270 C - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1-METHYLNAPHTHALENE	OR
EPA 8270 C - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	OR
EPA 8270 C - EXTENDED	ACRYLAMIDE	OR
EPA 8270 C - EXTENDED	AZOBENZENE	OR
EPA 8270 C - EXTENDED	CAPROLACTAM	OR
EPA 8270 C - EXTENDED	DIBENZ(A,H) ACRIDINE	OR
EPA 8270 C - EXTENDED	INDENE	OR
EPA 8270 C - EXTENDED	N-HEXADECANE	OR
EPA 8270 C - EXTENDED	PENTACHLOROETHANE	OR
EPA 8270 C - EXTENDED	TRIBUTYL PHOSPHATE	OR
EPA 8270 D	1,2,4-TRICHLOROBENZENE	OR
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	OR
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8270 D	1,4-NAPHTHOQUINONE	OR
EPA 8270 D	1-CHLORONAPHTHALENE	OR
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	OR
EPA 8270 D	2,4,5-TRICHLOROPHENOL	OR
EPA 8270 D	2,4-DICHLOROPHENOL	OR
EPA 8270 D	2,4-DINITROPHENOL	OR
EPA 8270 D	2,6-DICHLOROPHENOL	OR
EPA 8270 D	2-ACETYLAMINOFLUORENE	OR
EPA 8270 D	2-CHLORONAPHTHALENE	OR
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	OR
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	OR
EPA 8270 D	2-NITROANILINE	OR
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	OR
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	OR
EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	VA
EPA 8270 D	4,4'-METHYLENEBIS(2-CHLOROANILINE)	OR
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	OR
EPA 8270 C - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1,2,3-TRICHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8270 C - EXTENDED	2,3,5,6-TETRACHLOROPHENOL	OR
EPA 8270 C - EXTENDED	6-METHYLCHRYSENE	OR
EPA 8270 C - EXTENDED	ATRAZINE	OR
EPA 8270 C - EXTENDED	BENZALDEHYDE	OR
EPA 8270 C - EXTENDED	CARBAZOLE	OR
EPA 8270 C - EXTENDED	ETHYL METHACRYLATE	OR
EPA 8270 C - EXTENDED	N-DECANE	OR
EPA 8270 C - EXTENDED	N-OCTADECANE	OR
EPA 8270 C - EXTENDED	QUINOLINE	OR
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	OR
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	OR
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	OR
EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	OR
EPA 8270 D	1,4-PHENYLENEDIAMINE	OR
EPA 8270 D	1-NAPHTHYLAMINE	OR
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	OR
EPA 8270 D	2,4,6-TRICHLOROPHENOL	OR
EPA 8270 D	2,4-DIMETHYLPHENOL	OR
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	OR
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	OR
EPA 8270 D	2-CHLOROANILINE	OR
EPA 8270 D	2-CHLOROPHENOL	OR
EPA 8270 D	2-METHYLNAPHTHALENE	OR
EPA 8270 D	2-NAPHTHYLAMINE	OR
EPA 8270 D	2-NITROPHENOL	OR
EPA 8270 D	3,3'-DICHLOROBENZIDINE	OR
EPA 8270 D	3-METHYLCHOLANTHRENE	OR
EPA 8270 D	3-NITROANILINE	OR
EPA 8270 D	4-AMINOBIPHENYL	OR

Scope of Accreditation

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	OR
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	OR
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	VA
EPA 8270 D	4-NITROPHENOL	OR
EPA 8270 D	5-NITRO-O-TOLUIDINE	OR
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	OR
EPA 8270 D	ACENAPHTHYLENE	OR
EPA 8270 D	ANILINE	OR
EPA 8270 D	ARAMITE	OR
EPA 8270 D	BENZO(A)ANTHRACENE	OR
EPA 8270 D	BENZO(B)FLUORANTHENE	OR
EPA 8270 D	BENZO(K)FLUORANTHENE	OR
EPA 8270 D	BENZYL ALCOHOL	OR
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	OR
EPA 8270 D	BUTYL BENZYL PHTHALATE	OR
EPA 8270 D	CHRYSENE	OR
EPA 8270 D	DI-N-BUTYL PHTHALATE	OR
EPA 8270 D	DIALLATE	OR
EPA 8270 D	DIBENZO(A,E) PYRENE	OR
EPA 8270 D	DIBENZOFURAN	OR
EPA 8270 D	DIMETHOATE	OR
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	OR
EPA 8270 D	DISULFOTON	OR
EPA 8270 D	FAMPHUR	OR
EPA 8270 D	FLUORENE	OR
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8270 D	HEXACHLOROETHANE	OR
EPA 8270 D	ISODRIN	OR
EPA 8270 D	ISOSAFROLE	OR
EPA 8270 D	METHAPYRILENE	OR
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	OR
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	OR
EPA 8270 D	N-NITROSODIMETHYLAMINE	OR
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	OR

METHOD	ANALYTE	PRIMARY
EPA 8270 D	4-CHLOROANILINE	OR
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	OR
EPA 8270 D	4-NITROANILINE	OR
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	OR
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	OR
EPA 8270 D	ACENAPHTHENE	OR
EPA 8270 D	ACETOPHENONE	OR
EPA 8270 D	ANTHRACENE	OR
EPA 8270 D	BENZIDINE	OR
EPA 8270 D	BENZO(A)PYRENE	OR
EPA 8270 D	BENZO(G,H,I)PERYLENE	OR
EPA 8270 D	BENZOIC ACID	OR
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	OR
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	OR
EPA 8270 D	CHLOROBENZILATE	OR
EPA 8270 D	CRESOLS, TOTAL	OR
EPA 8270 D	DI-N-OCTYL PHTHALATE	OR
EPA 8270 D	DIBENZ(A, J) ACRIDINE	OR
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	OR
EPA 8270 D	DIETHYL PHTHALATE	OR
EPA 8270 D	DIMETHYL PHTHALATE	OR
EPA 8270 D	DIPHENYLAMINE	OR
EPA 8270 D	ETHYL METHANESULFONATE	OR
EPA 8270 D	FLUORANTHENE	OR
EPA 8270 D	HEXACHLOROBENZENE	OR
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	OR
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	OR
EPA 8270 D	ISOPHORONE	OR
EPA 8270 D	KEPONE	OR
EPA 8270 D	METHYL METHANESULFONATE	OR
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	OR
EPA 8270 D	N-NITROSODIETHYLAMINE	OR
EPA 8270 D	N-NITROSODIPHENYLAMINE	OR
EPA 8270 D	N-NITROSOMORPHOLINE	OR

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	N-NITROSOPIPERIDINE	OR
EPA 8270 D	NAPHTHALENE	OR
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	OR
EPA 8270 D	PARATHION (PARATHION - ETHYL)	OR
EPA 8270 D	PENTACHLORONITROBENZENE	OR
EPA 8270 D	PHENACETIN	OR
EPA 8270 D	PHENOL	OR
EPA 8270 D	PRONAMIDE (KERB)	OR
EPA 8270 D	SAFROLE	OR
EPA 8270 D	THIONAZIN (ZINOPHOS)	OR
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	OR
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	OR
EPA 8270 D - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	OR
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	OR
EPA 8270 D - EXTENDED	ACRYLAMIDE	OR
EPA 8270 D - EXTENDED	AZOBENZENE	OR
EPA 8270 D - EXTENDED	CAPROLACTAM	OR
EPA 8270 D - EXTENDED	DIBENZ(A,H) ACRIDINE	OR
EPA 8270 D - EXTENDED	N-DECANE	OR
EPA 8270 D - EXTENDED	N-OCTADECANE	OR
EPA 8270 D - EXTENDED	PYRIDINE	OR
EPA 8270 D - EXTENDED	TRIBUTYL PHOSPHATE	OR
EPA 9012 A	AMENABLE CYANIDE	OR
EPA 9012 B	AMENABLE CYANIDE	OR
EPA 9030 B	PREP: SULFIDE	OR
EPA 9040 B	PH	OR
EPA 9050 A	CONDUCTIVITY	OR
EPA 9056 A	CHLORIDE	OR
EPA 9056 A	NITRATE AS N	OR
EPA 9056 A	SULFATE	OR
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	OR
EPA 9095 B	FREE LIQUID	OR
RSK-175	ETHENE (ETHYLENE)	OR
SM 2320 B-1997	ALKALINITY AS CACO3	OR
SM 2340 B-1997	TOTAL HARDNESS AS CACO3	OR
EPA 8270 D	N-NITROSOPYRROLIDINE	OR
EPA 8270 D	NITROBENZENE	OR
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	OR
EPA 8270 D	PENTACHLOROBENZENE	OR
EPA 8270 D	PENTACHLOROPHENOL	OR
EPA 8270 D	PHENANTHRENE	OR
EPA 8270 D	PHORATE	OR
EPA 8270 D	PYRENE	OR
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	OR
EPA 8270 D	THIOPHENOL (BENZENETHIOL)	OR
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	OR
EPA 8270 D - EXTENDED	1,2,3-TRICHLOROBENZENE	OR
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8270 D - EXTENDED	2,3,5,6-TETRACHLOROPHENOL	OR
EPA 8270 D - EXTENDED	6-METHYLCHRYSENE	OR
EPA 8270 D - EXTENDED	ATRAZINE	OR
EPA 8270 D - EXTENDED	BENZALDEHYDE	OR
EPA 8270 D - EXTENDED	CARBAZOLE	OR
EPA 8270 D - EXTENDED	INDENE	OR
EPA 8270 D - EXTENDED	N-HEXADECANE	OR
EPA 8270 D - EXTENDED	PENTACHLOROETHANE	OR
EPA 8270 D - EXTENDED	QUINOLINE	OR
EPA 8315 A	FORMALDEHYDE	OR
EPA 9012 A	TOTAL CYANIDE	OR
EPA 9012 B	TOTAL CYANIDE	OR
EPA 9034	TOTAL SULFIDES	OR
EPA 9040 C	PH	OR
EPA 9056 A	BROMIDE	OR
EPA 9056 A	FLUORIDE	OR
EPA 9056 A	NITRITE AS N	OR
EPA 9060	TOTAL ORGANIC CARBON (TOC)	OR
EPA 9065	TOTAL PHENOLICS	OR
RSK-175	ETHANE	OR
RSK-175	METHANE	OR
SM 2320 B-2011	ALKALINITY AS CACO3	VA
SM 2340 B-2011	TOTAL HARDNESS AS CACO3	OR



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
SM 2340 C-2011	TOTAL HARDNESS AS CACO3	OR
SM 2510 B-2011	CONDUCTIVITY	OR
SM 2540 B-2011	RESIDUE-TOTAL (TS)	OR
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	OR
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	OR
SM 2540 F-2011	RESIDUE-SETTLEABLE	OR
SM 3500-CR B-2011	CHROMIUM VI	OR
SM 3500-FE B-2011	IRON	OR
SM 4500-CN^- E-1999	CYANIDE	OR
SM 4500-CN^- G-1999	AMENABLE CYANIDE	OR
SM 4500-NH3 B-1997	AMMONIA AS N	OR
SM 4500-NH3 B-2011	KJELDAHL NITROGEN - TOTAL (TKN)	OR
SM 4500-NH3 C-2011	AMMONIA AS N	OR
SM 4500-NH3 D-1997	AMMONIA AS N	OR
SM 4500-NORG C-1997	KJELDAHL NITROGEN - TOTAL (TKN)	OR
SM 4500-P B 5-2011	PREP: TOTAL PHOSPHORUS	OR
SM 4500-P E-2011	PHOSPHORUS, TOTAL	OR
SM 4500-$S2^-$ F-2011	SULFIDE	OR
SM 5210 B-2001	CARBONACEOUS BOD (CBOD)	OR
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	OR
SM 5220 D-2011	CHEMICAL OXYGEN DEMAND (COD)	OR
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	OR
SM 5540 C-2011	SURFACTANTS - MBAS	OR

METHOD	ANALYTE	PRIMARY
SM 2510 B-1997	CONDUCTIVITY	OR
SM 2540 B-1997	RESIDUE-TOTAL (TS)	OR
SM 2540 C-1997	RESIDUE-FILTERABLE (TDS)	OR
SM 2540 D-1997	RESIDUE-NONFILTERABLE (TSS)	OR
SM 2540 F-1997	RESIDUE-SETTLEABLE	OR
SM 3500-CR B-2009	CHROMIUM VI	OR
SM 3500-FE B-1997	IRON	OR
SM 4500-CN^- C-2011	PREP: CYANIDE DISTILLATION	OR
SM 4500-CN^- E-2011	TOTAL CYANIDE	OR
SM 4500-CN^- G-2011	AMENABLE CYANIDE	OR
SM 4500-NH3 B-2011	AMMONIA AS N	OR
SM 4500-NH3 C-1997	AMMONIA AS N	OR
SM 4500-NH3 C-2011	KJELDAHL NITROGEN - TOTAL (TKN)	OR
SM 4500-NH3 D-2011	AMMONIA AS N	OR
SM 4500-NORG C-2011	KJELDAHL NITROGEN - TOTAL (TKN)	VA
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	OR
SM 4500-$S2^-$ F-2000	SULFIDE	OR
SM 5210 B-2001	BIOCHEMICAL OXYGEN DEMAND (BOD)	OR
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	OR
SM 5220 D-1997	CHEMICAL OXYGEN DEMAND (COD)	OR
SM 5310 C-2000	TOTAL ORGANIC CARBON (TOC)	OR
SM 5540 C-1993	SURFACTANTS - MBAS	OR

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
ASTM D3987-06	PREP: SHAKE EXTRACTION OF SOLID WASTE WITH WATER	OR
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	OR
EPA 1630	METHYL MERCURY	OR
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	OR
EPA 3540 C	PREP: SOXHLET EXTRACTION	OR
EPA 3550 B	PREP: ULTRASONIC EXTRACTION	OR
EPA 3580 A	PREP: WASTE DILUTION	OR

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	OR
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	OR
EPA 1631 E	MERCURY	OR
EPA 3060 A	PREP: HEXAVALENT CHROMIUM	OR
EPA 3546	PREP: MICROWAVE EXTRACTION	OR
EPA 3550 C	PREP: ULTRASONIC EXTRACTION	OR
EPA 3620 B	PREP: FLORISIL CLEANUP	OR



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



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Virginia Laboratory ID: 460175
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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 3650 B	PREP: ACID BASE PARTITION CLEANUP	OR
EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	OR
EPA 5030 C	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	OR
EPA 5035 A	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	OR
EPA 6010 B	ANTIMONY	OR
EPA 6010 B	BARIUM	OR
EPA 6010 B	BORON	OR
EPA 6010 B	CALCIUM	OR
EPA 6010 B	COBALT	OR
EPA 6010 B	IRON	OR
EPA 6010 B	LITHIUM	OR
EPA 6010 B	MANGANESE	OR
EPA 6010 B	NICKEL	OR
EPA 6010 B	SELENIUM	OR
EPA 6010 B	SILVER	OR
EPA 6010 B	STRONTIUM	OR
EPA 6010 B	TIN	OR
EPA 6010 B	VANADIUM	OR
EPA 6010 B - EXTENDED	SILICON	OR
EPA 6010 C	ANTIMONY	OR
EPA 6010 C	BARIUM	OR
EPA 6010 C	BORON	OR
EPA 6010 C	CALCIUM	OR
EPA 6010 C	COBALT	OR
EPA 6010 C	IRON	OR
EPA 6010 C	LITHIUM	OR
EPA 6010 C	MANGANESE	OR
EPA 6010 C	NICKEL	OR
EPA 6010 C	SELENIUM	OR
EPA 6010 C	SILVER	OR
EPA 6010 C	STRONTIUM	OR
EPA 6010 C	TIN	OR
EPA 6010 C	VANADIUM	OR
EPA 6010 C - EXTENDED	SILICON	OR
EPA 6010 D	ANTIMONY	OR
EPA 6010 D	BARIUM	OR
EPA 3660 B	PREP: SULFUR CLEANUP	OR
EPA 5030 B	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	OR
EPA 5035	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	OR
EPA 6010 B	ALUMINUM	OR
EPA 6010 B	ARSENIC	OR
EPA 6010 B	BERYLLIUM	OR
EPA 6010 B	CADMIUM	OR
EPA 6010 B	CHROMIUM	OR
EPA 6010 B	COPPER	OR
EPA 6010 B	LEAD	OR
EPA 6010 B	MAGNESIUM	OR
EPA 6010 B	MOLYBDENUM	OR
EPA 6010 B	POTASSIUM	OR
EPA 6010 B	SILICA AS SIO2	OR
EPA 6010 B	SODIUM	OR
EPA 6010 B	THALLIUM	OR
EPA 6010 B	TITANIUM	OR
EPA 6010 B	ZINC	OR
EPA 6010 C	ALUMINUM	OR
EPA 6010 C	ARSENIC	OR
EPA 6010 C	BERYLLIUM	OR
EPA 6010 C	CADMIUM	OR
EPA 6010 C	CHROMIUM	OR
EPA 6010 C	COPPER	OR
EPA 6010 C	LEAD	OR
EPA 6010 C	MAGNESIUM	OR
EPA 6010 C	MOLYBDENUM	OR
EPA 6010 C	POTASSIUM	OR
EPA 6010 C	SILICA AS SIO2	OR
EPA 6010 C	SODIUM	OR
EPA 6010 C	THALLIUM	OR
EPA 6010 C	TITANIUM	OR
EPA 6010 C	ZINC	OR
EPA 6010 D	ALUMINUM	OR
EPA 6010 D	ARSENIC	OR
EPA 6010 D	BERYLLIUM	OR

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Virginia Laboratory ID: 460175
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METHOD	ANALYTE	PRIMARY
EPA 6010 D	BORON	OR
EPA 6010 D	CALCIUM	OR
EPA 6010 D	COBALT	OR
EPA 6010 D	IRON	OR
EPA 6010 D	LITHIUM	OR
EPA 6010 D	MANGANESE	OR
EPA 6010 D	NICKEL	OR
EPA 6010 D	SELENIUM	OR
EPA 6010 D	SILVER	OR
EPA 6010 D	STRONTIUM	OR
EPA 6010 D	TIN	OR
EPA 6010 D	VANADIUM	OR
EPA 6010 D - EXTENDED	SILICON	OR
EPA 6020	ANTIMONY	OR
EPA 6020	BARIUM	OR
EPA 6020	CADMIUM	OR
EPA 6020	COBALT	OR
EPA 6020	LEAD	OR
EPA 6020	NICKEL	OR
EPA 6020	THALLIUM	OR
EPA 6020 - EXTENDED	BORON	OR
EPA 6020 - EXTENDED	IRON	OR
EPA 6020 - EXTENDED	MAGNESIUM	OR
EPA 6020 - EXTENDED	POTASSIUM	OR
EPA 6020 - EXTENDED	SODIUM	OR
EPA 6020 - EXTENDED	TIN	OR
EPA 6020 - EXTENDED	VANADIUM	OR
EPA 6020 A	ANTIMONY	OR
EPA 6020 A	BARIUM	OR
EPA 6020 A	CADMIUM	OR
EPA 6020 A	CHROMIUM	OR
EPA 6020 A	COPPER	OR
EPA 6020 A	LEAD	OR
EPA 6020 A	MANGANESE	OR
EPA 6020 A	POTASSIUM	OR
EPA 6020 A	SILVER	OR
EPA 6020 A	THALLIUM	OR
EPA 6020 A	ZINC	OR
EPA 6010 D	CADMIUM	OR
EPA 6010 D	CHROMIUM	OR
EPA 6010 D	COPPER	OR
EPA 6010 D	LEAD	OR
EPA 6010 D	MAGNESIUM	OR
EPA 6010 D	MOLYBDENUM	OR
EPA 6010 D	POTASSIUM	OR
EPA 6010 D	SILICA AS SIO2	OR
EPA 6010 D	SODIUM	OR
EPA 6010 D	THALLIUM	OR
EPA 6010 D	TITANIUM	OR
EPA 6010 D	ZINC	OR
EPA 6020	ALUMINUM	OR
EPA 6020	ARSENIC	OR
EPA 6020	BERYLLIUM	OR
EPA 6020	CHROMIUM	OR
EPA 6020	COPPER	OR
EPA 6020	MANGANESE	OR
EPA 6020	SILVER	OR
EPA 6020	ZINC	OR
EPA 6020 - EXTENDED	CALCIUM	OR
EPA 6020 - EXTENDED	LITHIUM	OR
EPA 6020 - EXTENDED	MOLYBDENUM	OR
EPA 6020 - EXTENDED	SELENIUM	OR
EPA 6020 - EXTENDED	STRONTIUM	OR
EPA 6020 - EXTENDED	TITANIUM	OR
EPA 6020 A	ALUMINUM	OR
EPA 6020 A	ARSENIC	OR
EPA 6020 A	BERYLLIUM	OR
EPA 6020 A	CALCIUM	OR
EPA 6020 A	COBALT	OR
EPA 6020 A	IRON	OR
EPA 6020 A	MAGNESIUM	OR
EPA 6020 A	NICKEL	OR
EPA 6020 A	SELENIUM	OR
EPA 6020 A	SODIUM	OR
EPA 6020 A	VANADIUM	OR
EPA 6020 A - EXTENDED	BORON	OR



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 6020 A - EXTENDED	LITHIUM	OR
EPA 6020 A - EXTENDED	STRONTIUM	OR
EPA 6020 A - EXTENDED	TITANIUM	OR
EPA 6020 B	ANTIMONY	OR
EPA 6020 B	BARIUM	OR
EPA 6020 B	CADMIUM	OR
EPA 6020 B	CHROMIUM	OR
EPA 6020 B	COPPER	OR
EPA 6020 B	LEAD	OR
EPA 6020 B	MANGANESE	OR
EPA 6020 B	NICKEL	OR
EPA 6020 B	SELENIUM	OR
EPA 6020 B	SODIUM	OR
EPA 6020 B	TIN	OR
EPA 6020 B	ZINC	OR
EPA 6020 B - EXTENDED	LITHIUM	OR
EPA 6020 B - EXTENDED	TITANIUM	OR
EPA 7470 A	MERCURY	OR
EPA 7471 B	MERCURY	OR
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	OR
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	OR
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	OR
EPA 8081 A	4,4'-DDE	OR
EPA 8081 A	ALDRIN	OR
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	OR
EPA 8081 A	CHLORDANE (TECH.)	OR
EPA 8081 A	DELTA-BHC	OR
EPA 8081 A	DIELDRIN	OR
EPA 8081 A	ENDOSULFAN II	OR
EPA 8081 A	ENDRIN	OR
EPA 8081 A	ENDRIN KETONE	OR
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	OR

METHOD	ANALYTE	PRIMARY
EPA 6020 A - EXTENDED	MOLYBDENUM	OR
EPA 6020 A - EXTENDED	TIN	OR
EPA 6020 B	ALUMINUM	OR
EPA 6020 B	ARSENIC	OR
EPA 6020 B	BERYLLIUM	OR
EPA 6020 B	CALCIUM	OR
EPA 6020 B	COBALT	OR
EPA 6020 B	IRON	OR
EPA 6020 B	MAGNESIUM	OR
EPA 6020 B	MOLYBDENUM	OR
EPA 6020 B	POTASSIUM	OR
EPA 6020 B	SILVER	OR
EPA 6020 B	THALLIUM	OR
EPA 6020 B	VANADIUM	OR
EPA 6020 B - EXTENDED	BORON	OR
EPA 6020 B - EXTENDED	STRONTIUM	OR
EPA 7196 A	CHROMIUM VI	OR
EPA 7471 A	MERCURY	OR
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	OR
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	OR
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	OR
EPA 8081 A	4,4'-DDD	OR
EPA 8081 A	4,4'-DDT	OR
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 A	CHLOROBENZILATE	OR
EPA 8081 A	DIALLATE	OR
EPA 8081 A	ENDOSULFAN I	OR
EPA 8081 A	ENDOSULFAN SULFATE	OR
EPA 8081 A	ENDRIN ALDEHYDE	OR
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 A	HEPTACHLOR	OR

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VELAP Certificate No.: 9940

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Virginia Laboratory ID: 460175
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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8081 A	HEPTACHLOR EPOXIDE	OR
EPA 8081 A	ISODRIN	OR
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	OR
EPA 8081 A - EXTENDED	MIREX	OR
EPA 8081 B	4,4'-DDE	OR
EPA 8081 B	ALDRIN	OR
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	OR
EPA 8081 B	CHLORDANE (TECH.)	OR
EPA 8081 B	DELTA-BHC	OR
EPA 8081 B	DIELDRIN	OR
EPA 8081 B	ENDOSULFAN II	OR
EPA 8081 B	ENDRIN	OR
EPA 8081 B	ENDRIN KETONE	OR
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	OR
EPA 8081 B	HEPTACHLOR EPOXIDE	OR
EPA 8081 B	ISODRIN	OR
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	OR
EPA 8081 B - EXTENDED	MIREX	OR
EPA 8082	AROCLOR-1221 (PCB-1221)	OR
EPA 8082	AROCLOR-1242 (PCB-1242)	OR
EPA 8082	AROCLOR-1254 (PCB-1254)	OR
EPA 8082 - EXTENDED	AROCLOR-1262 (PCB-1262)	OR
EPA 8082 A	AROCLOR-1016 (PCB-1016)	OR
EPA 8082 A	AROCLOR-1232 (PCB-1232)	OR
EPA 8082 A	AROCLOR-1248 (PCB-1248)	OR
EPA 8082 A	AROCLOR-1260 (PCB-1260)	OR
EPA 8082 A - EXTENDED	AROCLOR-1268 (PCB-1268)	OR
EPA 8151 A	2,4-D	OR
EPA 8151 A	DALAPON	OR
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	OR
EPA 8151 A	MCPA	OR
EPA 8081 A	HEXACHLOROBENZENE	OR
EPA 8081 A	METHOXYCHLOR	OR
EPA 8081 A - EXTENDED	KEPONE	OR
EPA 8081 B	4,4'-DDD	OR
EPA 8081 B	4,4'-DDT	OR
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 B	CHLOROBENZILATE	OR
EPA 8081 B	DIALLATE	OR
EPA 8081 B	ENDOSULFAN I	OR
EPA 8081 B	ENDOSULFAN SULFATE	OR
EPA 8081 B	ENDRIN ALDEHYDE	OR
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	OR
EPA 8081 B	HEPTACHLOR	OR
EPA 8081 B	HEXACHLOROBENZENE	OR
EPA 8081 B	METHOXYCHLOR	OR
EPA 8081 B - EXTENDED	KEPONE	OR
EPA 8082	AROCLOR-1016 (PCB-1016)	OR
EPA 8082	AROCLOR-1232 (PCB-1232)	OR
EPA 8082	AROCLOR-1248 (PCB-1248)	OR
EPA 8082	AROCLOR-1260 (PCB-1260)	OR
EPA 8082 - EXTENDED	AROCLOR-1268 (PCB-1268)	OR
EPA 8082 A	AROCLOR-1221 (PCB-1221)	OR
EPA 8082 A	AROCLOR-1242 (PCB-1242)	OR
EPA 8082 A	AROCLOR-1254 (PCB-1254)	OR
EPA 8082 A - EXTENDED	AROCLOR-1262 (PCB-1262)	OR
EPA 8151 A	2,4,5-T	OR
EPA 8151 A	2,4-DB	OR
EPA 8151 A	DICAMBA	OR
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	OR
EPA 8151 A	MCPP	OR

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VELAP Certificate No.: 9940

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Virginia Laboratory ID: 460175
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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8151 A	PENTACHLOROPHENOL	OR
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	OR
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	OR
EPA 8260 B	1,1-DICHLOROETHANE	OR
EPA 8260 B	1,1-DICHLOROPROPENE	OR
EPA 8260 B	1,2,3-TRICHLOROPROPANE	OR
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	OR
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	OR
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	OR
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	OR
EPA 8260 B	1,3-DICHLOROPROPANE	OR
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	OR
EPA 8260 B	2,2-DICHLOROPROPANE	OR
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	OR
EPA 8260 B	2-HEXANONE	OR
EPA 8260 B	4-CHLOROTOLUENE	OR
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	OR
EPA 8260 B	ACETONITRILE	OR
EPA 8260 B	ACRYLONITRILE	OR
EPA 8260 B	BENZENE	OR
EPA 8260 B	BROMOBENZENE	OR
EPA 8260 B	BROMODICHLOROMETHANE	OR
EPA 8260 B	CARBON DISULFIDE	OR
EPA 8260 B	CHLOROBENZENE	OR
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	OR
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	OR
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	OR
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	OR
EPA 8260 B	DIETHYL ETHER	OR
EPA 8260 B	ETHYL ACETATE	OR
EPA 8151 A	SILVEX (2,4,5-TP)	OR
EPA 8260 B	1,1,1-TRICHLOROETHANE	OR
EPA 8260 B	1,1,2-TRICHLOROETHANE	OR
EPA 8260 B	1,1-DICHLOROETHYLENE	OR
EPA 8260 B	1,2,3-TRICHLOROBENZENE	OR
EPA 8260 B	1,2,4-TRICHLOROBENZENE	OR
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	OR
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8260 B	1,2-DICHLOROPROPANE	OR
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8260 B	1-CHLOROHEXANE	OR
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	OR
EPA 8260 B	2-CHLOROTOLUENE	OR
EPA 8260 B	2-NITROPROPANE	OR
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	OR
EPA 8260 B	ACETONE	OR
EPA 8260 B	ACROLEIN (PROPENAL)	OR
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	OR
EPA 8260 B	BENZYL CHLORIDE	OR
EPA 8260 B	BROMOCHLOROMETHANE	OR
EPA 8260 B	BROMOFORM	OR
EPA 8260 B	CARBON TETRACHLORIDE	OR
EPA 8260 B	CHLORODIBROMOMETHANE	OR
EPA 8260 B	CHLOROFORM	OR
EPA 8260 B	CIS & TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	OR
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	OR
EPA 8260 B	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	OR
EPA 8260 B	ETHYL METHACRYLATE	OR

Scope of Accreditation

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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 B	ETHYLBENZENE	OR
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	OR
EPA 8260 B	ISOPROPYLBENZENE	OR
EPA 8260 B	METHACRYLONITRILE	OR
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	OR
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	OR
EPA 8260 B	N-BUTYLBENZENE	OR
EPA 8260 B	NAPHTHALENE	OR
EPA 8260 B	PENTACHLOROETHANE	OR
EPA 8260 B	SEC-BUTYLBENZENE	OR
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	OR
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	OR
EPA 8260 B	TOTAL TRIHALOMETHANES (TTHMS)	OR
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	OR
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	OR
EPA 8260 B	VINYL ACETATE	OR
EPA 8260 B	XYLENE (TOTAL)	OR
EPA 8260 B - EXTENDED	1,2,3-TRIMETHYLBENZENE	OR
EPA 8260 B - EXTENDED	1,3-BUTADIENE	OR
EPA 8260 B - EXTENDED	CYCLOHEXANE	OR
EPA 8260 B - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	OR
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	OR
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	OR
EPA 8260 B - EXTENDED	N-HEPTANE	OR
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	OR
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	OR
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	OR
EPA 8260 C	1,1-DICHLOROETHANE	OR
EPA 8260 C	1,1-DICHLOROPROPENE	OR
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	OR
EPA 8260 B	M+P-XYLENE	OR
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	OR
EPA 8260 B	METHYL METHACRYLATE	OR
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	OR
EPA 8260 B	N-PROPYLBENZENE	OR
EPA 8260 B	O-XYLENE	OR
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	OR
EPA 8260 B	STYRENE	OR
EPA 8260 B	TERT-BUTYLBENZENE	OR
EPA 8260 B	TOLUENE	OR
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	OR
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	OR
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	OR
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	OR
EPA 8260 B - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8260 B - EXTENDED	2-METHYLNAPHTHALENE	OR
EPA 8260 B - EXTENDED	CYCLOHEXANONE	OR
EPA 8260 B - EXTENDED	DICHLOROFLUOROMETHANE (FREON 21)	OR
EPA 8260 B - EXTENDED	METHYL ACETATE	OR
EPA 8260 B - EXTENDED	N-BUTYL-ACETATE	OR
EPA 8260 B - EXTENDED	N-HEXANE	OR
EPA 8260 B - EXTENDED	TETRAHYDROFURAN (THF)	OR
EPA 8260 C	1,1,1-TRICHLOROETHANE	OR
EPA 8260 C	1,1,2-TRICHLOROETHANE	OR
EPA 8260 C	1,1-DICHLOROETHYLENE	OR
EPA 8260 C	1,2,3-TRICHLOROBENZENE	OR

Scope of Accreditation

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Testamerica Laboratories, Inc. - Canton
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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 C	1,2,3-TRICHLOROPROPANE	OR
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	OR
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	OR
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	OR
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	OR
EPA 8260 C	1,3-DICHLOROPROPANE	OR
EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	OR
EPA 8260 C	2,2-DICHLOROPROPANE	OR
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	OR
EPA 8260 C	2-HEXANONE	OR
EPA 8260 C	4-CHLOROTOLUENE	OR
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	OR
EPA 8260 C	ACETONITRILE	OR
EPA 8260 C	ACRYLONITRILE	OR
EPA 8260 C	BENZENE	OR
EPA 8260 C	BROMOBENZENE	OR
EPA 8260 C	BROMODICHLOROMETHANE	OR
EPA 8260 C	CARBON DISULFIDE	OR
EPA 8260 C	CHLOROBENZENE	OR
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	OR
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	OR
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	OR
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	OR
EPA 8260 C	DIETHYL ETHER	OR
EPA 8260 C	ETHYL ACETATE	OR
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	OR
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	OR
EPA 8260 C	1,2,4-TRICHLOROBENZENE	OR
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	OR
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8260 C	1,2-DICHLOROPROPANE	OR
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8260 C	1-CHLOROHEXANE	OR
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	OR
EPA 8260 C	2-CHLOROTOLUENE	OR
EPA 8260 C	2-NITROPROPANE	OR
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	OR
EPA 8260 C	ACETONE	OR
EPA 8260 C	ACROLEIN (PROPENAL)	OR
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	OR
EPA 8260 C	BENZYL CHLORIDE	OR
EPA 8260 C	BROMOCHLOROMETHANE	OR
EPA 8260 C	BROMOFORM	OR
EPA 8260 C	CARBON TETRACHLORIDE	OR
EPA 8260 C	CHLORODIBROMOMETHANE	OR
EPA 8260 C	CHLOROFORM	OR
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	OR
EPA 8260 C	CYCLOHEXANE	OR
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	OR
EPA 8260 C	EPICHLOROHYDRIN (1-CHLORO-2,3-EPOXYPROPANE)	OR
EPA 8260 C	ETHYL METHACRYLATE	OR
EPA 8260 C	ETHYLBENZENE	OR
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	OR
EPA 8260 C	ISOPROPYLBENZENE	OR

Scope of Accreditation

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Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 C	M+P-XYLENE	OR
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	OR
EPA 8260 C	METHYL METHACRYLATE	OR
EPA 8260 C	METHYLCYCLOHEXANE	OR
EPA 8260 C	N-BUTYLBENZENE	OR
EPA 8260 C	NAPHTHALENE	OR
EPA 8260 C	PENTACHLOROETHANE	OR
EPA 8260 C	SEC-BUTYLBENZENE	OR
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	OR
EPA 8260 C	TERT-BUTYLBENZENE	OR
EPA 8260 C	TOLUENE	OR
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	OR
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	OR
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	OR
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	OR
EPA 8260 C - EXTENDED	1,3-BUTADIENE	OR
EPA 8260 C - EXTENDED	CIS & TRANS-1,2-DICHLOROETHENE	OR
EPA 8260 C - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	OR
EPA 8260 C - EXTENDED	METHYL ACETATE	OR
EPA 8260 C - EXTENDED	N-HEPTANE	OR
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	OR
EPA 8270 C	1,2,4-TRICHLOROBENZENE	OR
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	OR
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8270 C	1,4-NAPHTHOQUINONE	OR
EPA 8270 C	1-CHLORONAPHTHALENE	OR
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	OR

METHOD	ANALYTE	PRIMARY
EPA 8260 C	METHACRYLONITRILE	OR
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	OR
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	OR
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	OR
EPA 8260 C	N-PROPYLBENZENE	OR
EPA 8260 C	O-XYLENE	OR
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	OR
EPA 8260 C	STYRENE	OR
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	OR
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	OR
EPA 8260 C	TOTAL TRIHALOMETHANES (TTHMS)	OR
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	OR
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	OR
EPA 8260 C	VINYL ACETATE	OR
EPA 8260 C	XYLENE (TOTAL)	OR
EPA 8260 C - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8260 C - EXTENDED	2-METHYLNAPHTHALENE	OR
EPA 8260 C - EXTENDED	CYCLOHEXANONE	OR
EPA 8260 C - EXTENDED	DICHLOROFLUOROMETHANE (FREON 21)	OR
EPA 8260 C - EXTENDED	N-BUTYL-ACETATE	OR
EPA 8260 C - EXTENDED	N-HEXANE	OR
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	OR
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	OR
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	OR
EPA 8270 C	1,4-DINITROBENZENE (1,4-DNB)	OR
EPA 8270 C	1,4-PHENYLENEDIAMINE	OR
EPA 8270 C	1-NAPHTHYLAMINE	OR

Scope of Accreditation

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	OR
EPA 8270 C	2,4,6-TRICHLOROPHENOL	OR
EPA 8270 C	2,4-DIMETHYLPHENOL	OR
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	OR
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	OR
EPA 8270 C	2-CHLOROANILINE	OR
EPA 8270 C	2-CHLOROPHENOL	OR
EPA 8270 C	2-METHYLNAPHTHALENE	OR
EPA 8270 C	2-NAPHTHYLAMINE	OR
EPA 8270 C	2-NITROPHENOL	OR
EPA 8270 C	3,3'-DICHLOROBENZIDINE	OR
EPA 8270 C	3-METHYLCHOLANTHRENE	OR
EPA 8270 C	3-NITROANILINE	OR
EPA 8270 C	4-AMINOBIPHENYL	OR
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	OR
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	OR
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	VA
EPA 8270 C	4-NITROPHENOL	OR
EPA 8270 C	5-NITRO-O-TOLUIDINE	OR
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	OR
EPA 8270 C	ACENAPHTHYLENE	OR
EPA 8270 C	ANILINE	OR
EPA 8270 C	ARAMITE	OR
EPA 8270 C	BENZO(A)ANTHRACENE	OR
EPA 8270 C	BENZO(B)FLUORANTHENE	OR
EPA 8270 C	BENZO(K)FLUORANTHENE	OR
EPA 8270 C	BENZYL ALCOHOL	OR
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	OR
EPA 8270 C	BUTYL BENZYL PHTHALATE	OR
EPA 8270 C	CHRYSENE	OR
EPA 8270 C	DI-N-BUTYL PHTHALATE	OR
EPA 8270 C	DIALLATE	OR
EPA 8270 C	DIBENZO(A,E) PYRENE	OR
EPA 8270 C	DIBENZOFURAN	OR
EPA 8270 C	DIMETHOATE	OR
EPA 8270 C	2,4,5-TRICHLOROPHENOL	OR
EPA 8270 C	2,4-DICHLOROPHENOL	OR
EPA 8270 C	2,4-DINITROPHENOL	OR
EPA 8270 C	2,6-DICHLOROPHENOL	OR
EPA 8270 C	2-ACETYLAMINOFLUORENE	OR
EPA 8270 C	2-CHLORONAPHTHALENE	OR
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	OR
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	OR
EPA 8270 C	2-NITROANILINE	OR
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	OR
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	OR
EPA 8270 C	3-METHYLPHENOL (M-CRESOL)	VA
EPA 8270 C	4,4'-METHYLENEBIS(2-CHLOROANILINE)	OR
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	OR
EPA 8270 C	4-CHLOROANILINE	OR
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	OR
EPA 8270 C	4-NITROANILINE	OR
EPA 8270 C	4-NITROQUINOLINE-1-OXIDE	OR
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	OR
EPA 8270 C	ACENAPHTHENE	OR
EPA 8270 C	ACETOPHENONE	OR
EPA 8270 C	ANTHRACENE	OR
EPA 8270 C	BENZIDINE	OR
EPA 8270 C	BENZO(A)PYRENE	OR
EPA 8270 C	BENZO(G,H,I)PERYLENE	OR
EPA 8270 C	BENZOIC ACID	OR
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	OR
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	OR
EPA 8270 C	CHLOROBENZILATE	OR
EPA 8270 C	CRESOLS, TOTAL	OR
EPA 8270 C	DI-N-OCTYL PHTHALATE	OR
EPA 8270 C	DIBENZ(A, J) ACRIDINE	OR
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	OR
EPA 8270 C	DIETHYL PHTHALATE	OR
EPA 8270 C	DIMETHYL PHTHALATE	OR

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	OR
EPA 8270 C	DISULFOTON	OR
EPA 8270 C	FAMPHUR	OR
EPA 8270 C	FLUORENE	OR
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	OR
EPA 8270 C	HEXACHLOROETHANE	OR
EPA 8270 C	ISODRIN	OR
EPA 8270 C	ISOSAFROLE	OR
EPA 8270 C	METHAPYRILENE	OR
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	OR
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	OR
EPA 8270 C	N-NITROSODIMETHYLAMINE	OR
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	OR
EPA 8270 C	N-NITROSOPIPERIDINE	OR
EPA 8270 C	NAPHTHALENE	OR
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	OR
EPA 8270 C	PARATHION (PARATHION - ETHYL)	OR
EPA 8270 C	PENTACHLORONITROBENZENE	OR
EPA 8270 C	PHENACETIN	OR
EPA 8270 C	PHENOL	OR
EPA 8270 C	PRONAMIDE (KERB)	OR
EPA 8270 C	PYRIDINE	OR
EPA 8270 C	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	OR
EPA 8270 C	THIOPHENOL (BENZENETHIOL)	OR
EPA 8270 C - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1,2,3-TRICHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8270 C - EXTENDED	2,3,5,6-TETRACHLOROPHENOL	OR
EPA 8270 C - EXTENDED	6-METHYLCHRYSENE	OR
EPA 8270 C - EXTENDED	ATRAZINE	OR
EPA 8270 C - EXTENDED	BENZALDEHYDE	OR
EPA 8270 C - EXTENDED	CARBAZOLE	OR
EPA 8270 C - EXTENDED	ETHYL METHACRYLATE	OR
EPA 8270 C - EXTENDED	N-DECANE	OR
EPA 8270 C	DIPHENYLAMINE	OR
EPA 8270 C	ETHYL METHANESULFONATE	OR
EPA 8270 C	FLUORANTHENE	OR
EPA 8270 C	HEXACHLOROBENZENE	OR
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	OR
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	OR
EPA 8270 C	ISOPHORONE	OR
EPA 8270 C	KEPONE	OR
EPA 8270 C	METHYL METHANESULFONATE	OR
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	OR
EPA 8270 C	N-NITROSODIETHYLAMINE	OR
EPA 8270 C	N-NITROSODIPHENYLAMINE	OR
EPA 8270 C	N-NITROSOMORPHOLINE	OR
EPA 8270 C	N-NITROSOPYRROLIDINE	OR
EPA 8270 C	NITROBENZENE	OR
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	OR
EPA 8270 C	PENTACHLOROBENZENE	OR
EPA 8270 C	PENTACHLOROPHENOL	OR
EPA 8270 C	PHENANTHRENE	OR
EPA 8270 C	PHORATE	OR
EPA 8270 C	PYRENE	OR
EPA 8270 C	SAFROLE	OR
EPA 8270 C	THIONAZIN (ZINOPHOS)	OR
EPA 8270 C - EXTENDED	1,1'-BIPHENYL (BZ-0)	OR
EPA 8270 C - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8270 C - EXTENDED	1-METHYLNAPHTHALENE	OR
EPA 8270 C - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	OR
EPA 8270 C - EXTENDED	ACRYLAMIDE	OR
EPA 8270 C - EXTENDED	AZOBENZENE	OR
EPA 8270 C - EXTENDED	CAPROLACTAM	OR
EPA 8270 C - EXTENDED	DIBENZ(A,H) ACRIDINE	OR
EPA 8270 C - EXTENDED	INDENE	OR
EPA 8270 C - EXTENDED	N-HEXADECANE	OR

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C - EXTENDED	N-OCTADECANE	OR
EPA 8270 C - EXTENDED	QUINOLINE	OR
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	OR
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	OR
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	OR
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	OR
EPA 8270 D	1,4-DINITROBENZENE (1,4-DNB)	OR
EPA 8270 D	1,4-PHENYLENEDIAMINE	OR
EPA 8270 D	1-NAPHTHYLAMINE	OR
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	OR
EPA 8270 D	2,4,6-TRICHLOROPHENOL	OR
EPA 8270 D	2,4-DIMETHYLPHENOL	OR
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	OR
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	OR
EPA 8270 D	2-CHLOROANILINE	OR
EPA 8270 D	2-CHLOROPHENOL	OR
EPA 8270 D	2-METHYLNAPHTHALENE	OR
EPA 8270 D	2-NAPHTHYLAMINE	OR
EPA 8270 D	2-NITROPHENOL	OR
EPA 8270 D	3,3'-DICHLOROBENZIDINE	OR
EPA 8270 D	3-METHYLCHOLANTHRENE	OR
EPA 8270 D	3-NITROANILINE	OR
EPA 8270 D	4-AMINOBIPHENYL	OR
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	OR
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	OR
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	VA
EPA 8270 D	4-NITROPHENOL	OR
EPA 8270 D	5-NITRO-O-TOLUIDINE	OR
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	OR
EPA 8270 D	ACENAPHTHYLENE	OR
EPA 8270 D	ANILINE	OR
EPA 8270 D	ARAMITE	OR
EPA 8270 D	BENZO(A)ANTHRACENE	OR
EPA 8270 D	BENZO(B)FLUORANTHENE	OR
EPA 8270 D	BENZO(K)FLUORANTHENE	OR
EPA 8270 C - EXTENDED	PENTACHLOROETHANE	OR
EPA 8270 C - EXTENDED	TRIBUTYL PHOSPHATE	OR
EPA 8270 D	1,2,4-TRICHLOROBENZENE	OR
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	OR
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	OR
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	OR
EPA 8270 D	1,4-NAPHTHOQUINONE	OR
EPA 8270 D	1-CHLORONAPHTHALENE	OR
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	OR
EPA 8270 D	2,4,5-TRICHLOROPHENOL	OR
EPA 8270 D	2,4-DICHLOROPHENOL	OR
EPA 8270 D	2,4-DINITROPHENOL	OR
EPA 8270 D	2,6-DICHLOROPHENOL	OR
EPA 8270 D	2-ACETYLAMINOFLUORENE	OR
EPA 8270 D	2-CHLORONAPHTHALENE	OR
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	OR
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	OR
EPA 8270 D	2-NITROANILINE	OR
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	OR
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	OR
EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	VA
EPA 8270 D	4,4'-METHYLENEBIS(2-CHLOROANILINE)	OR
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	OR
EPA 8270 D	4-CHLOROANILINE	OR
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	OR
EPA 8270 D	4-NITROANILINE	OR
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	OR
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	OR
EPA 8270 D	ACENAPHTHENE	OR
EPA 8270 D	ACETOPHENONE	OR
EPA 8270 D	ANTHRACENE	OR
EPA 8270 D	BENZIDINE	OR
EPA 8270 D	BENZO(A)PYRENE	OR
EPA 8270 D	BENZO(G,H,I)PERYLENE	OR
EPA 8270 D	BENZOIC ACID	OR

Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	BENZYL ALCOHOL	OR
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	OR
EPA 8270 D	BUTYL BENZYL PHTHALATE	OR
EPA 8270 D	CHRYSENE	OR
EPA 8270 D	DI-N-BUTYL PHTHALATE	OR
EPA 8270 D	DIALLATE	OR
EPA 8270 D	DIBENZO(A,E) PYRENE	OR
EPA 8270 D	DIBENZOFURAN	OR
EPA 8270 D	DIMETHOATE	OR
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	OR
EPA 8270 D	DISULFOTON	OR
EPA 8270 D	FAMPHUR	OR
EPA 8270 D	FLUORENE	OR
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	OR
EPA 8270 D	HEXACHLOROPROPENE	OR
EPA 8270 D	ISODRIN	OR
EPA 8270 D	ISOSAFROLE	OR
EPA 8270 D	METHAPYRILENE	OR
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	OR
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	OR
EPA 8270 D	N-NITROSODIMETHYLAMINE	OR
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	OR
EPA 8270 D	N-NITROSOPIPERIDINE	OR
EPA 8270 D	NAPHTHALENE	OR
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	OR
EPA 8270 D	PARATHION (PARATHION - ETHYL)	OR
EPA 8270 D	PENTACHLORONITROBENZENE	OR
EPA 8270 D	PHENACETIN	OR
EPA 8270 D	PHENOL	OR
EPA 8270 D	PRONAMIDE (KERB)	OR
EPA 8270 D	SAFROLE	OR
EPA 8270 D	THIONAZIN (ZINOPHOS)	OR
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	OR
EPA 8270 D - EXTENDED	1,2,3,5-TETRACHLOROBENZENE	OR
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	OR
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	OR
EPA 8270 D	CHLOROBENZILATE	OR
EPA 8270 D	CRESOLS, TOTAL	OR
EPA 8270 D	DI-N-OCTYL PHTHALATE	OR
EPA 8270 D	DIBENZ(A, J) ACRIDINE	OR
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	OR
EPA 8270 D	DIETHYL PHTHALATE	OR
EPA 8270 D	DIMETHYL PHTHALATE	OR
EPA 8270 D	DIPHENYLAMINE	OR
EPA 8270 D	ETHYL METHANESULFONATE	OR
EPA 8270 D	FLUORANTHENE	OR
EPA 8270 D	HEXACHLOROBENZENE	OR
EPA 8270 D	HEXACHLOROETHANE	OR
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	OR
EPA 8270 D	ISOPHORONE	OR
EPA 8270 D	KEPONE	OR
EPA 8270 D	METHYL METHANESULFONATE	OR
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	OR
EPA 8270 D	N-NITROSODIETHYLAMINE	OR
EPA 8270 D	N-NITROSODIPHENYLAMINE	OR
EPA 8270 D	N-NITROSOMORPHOLINE	OR
EPA 8270 D	N-NITROSOPYRROLIDINE	OR
EPA 8270 D	NITROBENZENE	OR
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	OR
EPA 8270 D	PENTACHLOROBENZENE	OR
EPA 8270 D	PENTACHLOROPHENOL	OR
EPA 8270 D	PHENANTHRENE	OR
EPA 8270 D	PHORATE	OR
EPA 8270 D	PYRENE	OR
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	OR
EPA 8270 D	THIOPHENOL (BENZENETHIOL)	OR
EPA 8270 D - EXTENDED	1,2,3,4-TETRACHLOROBENZENE	OR
EPA 8270 D - EXTENDED	1,2,3-TRICHLOROBENZENE	OR



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9940

Testamerica Laboratories, Inc. - Canton
4101 Shuffel Street N.W.
North Canton, OH 44720

Virginia Laboratory ID: 460175
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D - EXTENDED	1,3,5-TRICHLOROBENZENE	OR
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	OR
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	OR
EPA 8270 D - EXTENDED	ACRYLAMIDE	OR
EPA 8270 D - EXTENDED	AZOBENZENE	OR
EPA 8270 D - EXTENDED	CAPROLACTAM	OR
EPA 8270 D - EXTENDED	DIBENZ(A,H) ACRIDINE	OR
EPA 8270 D - EXTENDED	N-DECANE	OR
EPA 8270 D - EXTENDED	N-OCTADECANE	OR
EPA 8270 D - EXTENDED	PYRIDINE	OR
EPA 8270 D - EXTENDED	TRIBUTYL PHOSPHATE	OR
EPA 9012 A	AMENABLE CYANIDE	OR
EPA 9012 B	AMENABLE CYANIDE	OR
EPA 9023	EXTRACTABLE ORGANIC HALIDES (EOX)	OR
EPA 9034	TOTAL SULFIDES	OR
EPA 9040 C	PH	OR
EPA 9045 D	PH	OR
EPA 9056 A	BROMIDE	OR
EPA 9056 A	FLUORIDE	OR
EPA 9056 A	NITRITE AS N	OR
EPA 9065	TOTAL PHENOLICS	OR
EPA 8270 D - EXTENDED	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	OR
EPA 8270 D - EXTENDED	2,3,5,6-TETRACHLOROPHENOL	OR
EPA 8270 D - EXTENDED	6-METHYLCHRYSENE	OR
EPA 8270 D - EXTENDED	ATRAZINE	OR
EPA 8270 D - EXTENDED	BENZALDEHYDE	OR
EPA 8270 D - EXTENDED	CARBAZOLE	OR
EPA 8270 D - EXTENDED	INDENE	OR
EPA 8270 D - EXTENDED	N-HEXADECANE	OR
EPA 8270 D - EXTENDED	PENTACHLOROETHANE	OR
EPA 8270 D - EXTENDED	QUINOLINE	OR
EPA 8315 A	FORMALDEHYDE	OR
EPA 9012 A	CYANIDE	OR
EPA 9012 B	TOTAL CYANIDE	OR
EPA 9030 B	PREP: SULFIDE	OR
EPA 9040 B	PH	OR
EPA 9045 C	PH	OR
EPA 9050 A	CONDUCTIVITY	OR
EPA 9056 A	CHLORIDE	OR
EPA 9056 A	NITRATE AS N	OR
EPA 9056 A	SULFATE	OR
EPA 9095 B	FREE LIQUID	OR

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES

Certifies that

VA Laboratory ID#: 460187
Microbac Laboratories, Inc. - Marietta OH

158 Starlite Drive
Marietta, OH 45750

Owner: J. TREVOR BOYCE
Operator: LESLIE S. BUCINA
Responsible Official: LESLIE S. BUCINA

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: **September 15, 2018**
Expiration Date: **September 14, 2019**
Certificate # 9947

Angela E. Fritzinger, Ph.D.
DCLS Deputy Director

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP) Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

VELAP Certificate No.: 9947

Microbac Laboratories, Inc. - Marietta OH
158 Starlite Drive
Marietta, OH 45750

Virginia Laboratory ID: 460187
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

DRINKING WATER

METHOD	ANALYTE	PRIMARY
EPA 200.8 REV 5.4	URANIUM	FL

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 1010	FLASHPOINT	FL
EPA 160.4	RESIDUE-VOLATILE	FL
EPA 1664 A	TOTAL PETROLEUM HYDROCARBONS (TPH) (AS NONPOLAR MATERIAL, SGT-HEM)	FL
EPA 200.7 REV 4.4	ALUMINUM	FL
EPA 200.7 REV 4.4	ARSENIC	FL
EPA 200.7 REV 4.4	BERYLLIUM	FL
EPA 200.7 REV 4.4	CADMIUM	FL
EPA 200.7 REV 4.4	CHROMIUM	FL
EPA 200.7 REV 4.4	COPPER	FL
EPA 200.7 REV 4.4	LEAD	FL
EPA 200.7 REV 4.4	MANGANESE	FL
EPA 200.7 REV 4.4	NICKEL	FL
EPA 200.7 REV 4.4	POTASSIUM	FL
EPA 200.7 REV 4.4	SILICA AS SIO2	FL
EPA 200.7 REV 4.4	SODIUM	FL
EPA 200.7 REV 4.4	TIN	FL
EPA 200.7 REV 4.4	TOTAL HARDNESS AS CACO3	FL
EPA 200.7 REV 4.4	ZINC	FL
EPA 200.8 REV 5.4	ARSENIC	FL
EPA 200.8 REV 5.4	CADMIUM	FL
EPA 200.8 REV 5.4	COBALT	FL
EPA 200.8 REV 5.4	LEAD	FL
EPA 200.8 REV 5.4	NICKEL	FL
EPA 200.8 REV 5.4	SILVER	FL
EPA 200.8 REV 5.4	VANADIUM	FL
EPA 245.1 REV 3	MERCURY	FL
EPA 300.0 REV 2.1	CHLORIDE	FL
EPA 300.0 REV 2.1	NITRATE AS N	FL
EPA 300.0 REV 2.1	SULFATE	FL
EPA 350.1 REV 2	AMMONIA AS N	FL
EPA 353.2 REV 2	NITRATE AS N	FL
EPA 365.4	PHOSPHORUS, TOTAL	FL
EPA 120.1	CONDUCTIVITY	FL
EPA 1664 A	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	FL
EPA 180.1 REV 2	TURBIDITY	FL
EPA 200.7 REV 4.4	ANTIMONY	FL
EPA 200.7 REV 4.4	BARIUM	FL
EPA 200.7 REV 4.4	BORON	FL
EPA 200.7 REV 4.4	CALCIUM	FL
EPA 200.7 REV 4.4	COBALT	FL
EPA 200.7 REV 4.4	IRON	FL
EPA 200.7 REV 4.4	MAGNESIUM	FL
EPA 200.7 REV 4.4	MOLYBDENUM	FL
EPA 200.7 REV 4.4	PHOSPHORUS, TOTAL	FL
EPA 200.7 REV 4.4	SELENIUM	FL
EPA 200.7 REV 4.4	SILVER	FL
EPA 200.7 REV 4.4	THALLIUM	FL
EPA 200.7 REV 4.4	TITANIUM	FL
EPA 200.7 REV 4.4	VANADIUM	FL
EPA 200.8 REV 5.4	ANTIMONY	FL
EPA 200.8 REV 5.4	BARIUM	FL
EPA 200.8 REV 5.4	CHROMIUM	FL
EPA 200.8 REV 5.4	COPPER	FL
EPA 200.8 REV 5.4	MANGANESE	FL
EPA 200.8 REV 5.4	SELENIUM	FL
EPA 200.8 REV 5.4	THALLIUM	FL
EPA 200.8 REV 5.4	ZINC	FL
EPA 300.0 REV 2.1	BROMIDE	FL
EPA 300.0 REV 2.1	FLUORIDE	FL
EPA 300.0 REV 2.1	NITRITE AS N	FL
EPA 310.2	ALKALINITY AS CACO3	FL
EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	FL
EPA 353.2 REV 2	NITRATE/NITRITE	FL
EPA 410.4 REV 2	CHEMICAL OXYGEN DEMAND (COD)	FL

This Scope of Accreditation must accompany the Certificate issued by Virginia DCLS with the same Certificate Number indicated above.



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9947

Microbac Laboratories, Inc. - Marietta OH
158 Starlite Drive
Marietta, OH 45750

Virginia Laboratory ID: 460187
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6010 B	ALUMINUM	FL	EPA 6010 B	ANTIMONY	FL
EPA 6010 B	ARSENIC	FL	EPA 6010 B	BARIUM	FL
EPA 6010 B	BERYLLIUM	FL	EPA 6010 B	BORON	FL
EPA 6010 B	CADMIUM	FL	EPA 6010 B	CALCIUM	FL
EPA 6010 B	CHROMIUM	FL	EPA 6010 B	COBALT	FL
EPA 6010 B	COPPER	FL	EPA 6010 B	IRON	FL
EPA 6010 B	LEAD	FL	EPA 6010 B	LITHIUM	FL
EPA 6010 B	MAGNESIUM	FL	EPA 6010 B	MANGANESE	FL
EPA 6010 B	MOLYBDENUM	FL	EPA 6010 B	NICKEL	FL
EPA 6010 B	PHOSPHORUS, TOTAL	FL	EPA 6010 B	POTASSIUM	FL
EPA 6010 B	SELENIUM	FL	EPA 6010 B	SILICA AS SIO2	FL
EPA 6010 B	SILVER	FL	EPA 6010 B	SODIUM	FL
EPA 6010 B	STRONTIUM	FL	EPA 6010 B	THALLIUM	FL
EPA 6010 B	TIN	FL	EPA 6010 B	TITANIUM	FL
EPA 6010 B	VANADIUM	FL	EPA 6010 B	ZINC	FL
EPA 6010 C	ALUMINUM	FL	EPA 6010 C	ANTIMONY	FL
EPA 6010 C	ARSENIC	FL	EPA 6010 C	BARIUM	FL
EPA 6010 C	BERYLLIUM	FL	EPA 6010 C	BORON	FL
EPA 6010 C	CADMIUM	FL	EPA 6010 C	CALCIUM	FL
EPA 6010 C	CHROMIUM	FL	EPA 6010 C	COBALT	FL
EPA 6010 C	COPPER	FL	EPA 6010 C	IRON	FL
EPA 6010 C	LEAD	FL	EPA 6010 C	LITHIUM	FL
EPA 6010 C	MAGNESIUM	FL	EPA 6010 C	MANGANESE	FL
EPA 6010 C	MOLYBDENUM	FL	EPA 6010 C	NICKEL	FL
EPA 6010 C	PHOSPHORUS, TOTAL	FL	EPA 6010 C	POTASSIUM	FL
EPA 6010 C	SELENIUM	FL	EPA 6010 C	SILICA AS SIO2	FL
EPA 6010 C	SILVER	FL	EPA 6010 C	SODIUM	FL
EPA 6010 C	STRONTIUM	FL	EPA 6010 C	THALLIUM	FL
EPA 6010 C	TIN	FL	EPA 6010 C	TITANIUM	FL
EPA 6010 C	VANADIUM	FL	EPA 6010 C	ZINC	FL
EPA 6010 C - EXTENDED	SILICON	FL	EPA 6020	ANTIMONY	FL
EPA 6020	ARSENIC	FL	EPA 6020	BARIUM	FL
EPA 6020	CADMIUM	FL	EPA 6020	CHROMIUM	FL
EPA 6020	COBALT	FL	EPA 6020	COPPER	FL
EPA 6020	LEAD	FL	EPA 6020	MANGANESE	FL
EPA 6020	NICKEL	FL	EPA 6020	SILVER	FL
EPA 6020	THALLIUM	FL	EPA 6020	ZINC	FL
EPA 6020 A	ANTIMONY	FL	EPA 6020 A	ARSENIC	FL
EPA 6020 A	BARIUM	FL	EPA 6020 A	CADMIUM	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9947

Microbac Laboratories, Inc. - Marietta OH
158 Starlite Drive
Marietta, OH 45750

Virginia Laboratory ID: 460187
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 6020 A	CHROMIUM	FL	EPA 6020 A	COBALT	FL
EPA 6020 A	COPPER	FL	EPA 6020 A	LEAD	FL
EPA 6020 A	MANGANESE	FL	EPA 6020 A	NICKEL	FL
EPA 6020 A	SELENIUM	FL	EPA 6020 A	SILVER	FL
EPA 6020 A	THALLIUM	FL	EPA 6020 A	VANADIUM	FL
EPA 6020 A	ZINC	FL	EPA 6020 A - EXTENDED	URANIUM	FL
EPA 608	4,4'-DDD	FL	EPA 608	4,4'-DDE	FL
EPA 608	4,4'-DDT	FL	EPA 608	ALDRIN	FL
EPA 608	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL	EPA 608	AROCLOR-1016 (PCB-1016)	FL
EPA 608	AROCLOR-1221 (PCB-1221)	FL	EPA 608	AROCLOR-1232 (PCB-1232)	FL
EPA 608	AROCLOR-1242 (PCB-1242)	FL	EPA 608	AROCLOR-1248 (PCB-1248)	FL
EPA 608	AROCLOR-1254 (PCB-1254)	FL	EPA 608	AROCLOR-1260 (PCB-1260)	FL
EPA 608	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL	EPA 608	CHLORDANE (TECH)	FL
EPA 608	DELTA-BHC	FL	EPA 608	DIELDRIN	FL
EPA 608	ENDOSULFAN I	FL	EPA 608	ENDOSULFAN II	FL
EPA 608	ENDOSULFAN SULFATE	FL	EPA 608	ENDRIN	FL
EPA 608	ENDRIN ALDEHYDE	FL	EPA 608	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 608	HEPTACHLOR	FL	EPA 608	HEPTACHLOR EPOXIDE	FL
EPA 608	TOXAPHENE (CHLORINATED CAMPHENE)	FL	EPA 624	1,1,1-TRICHLOROETHANE	FL
EPA 624	1,1,2,2-TETRACHLOROETHANE	FL	EPA 624	1,1,2-TRICHLOROETHANE	FL
EPA 624	1,1-DICHLOROETHANE	FL	EPA 624	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 624	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL	EPA 624	1,2-DICHLOROPROPANE	FL
EPA 624	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL	EPA 624	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 624	2-CHLOROETHYL VINYL ETHER	FL	EPA 624	ACROLEIN (PROPENAL)	FL
EPA 624	ACRYLONITRILE	FL	EPA 624	BENZENE	FL
EPA 624	BROMODICHLOROMETHANE	FL	EPA 624	BROMOFORM	FL
EPA 624	CARBON TETRACHLORIDE	FL	EPA 624	CHLOROBENZENE	FL
EPA 624	CHLORODIBROMOMETHANE	FL	EPA 624	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 624	CHLOROFORM	FL	EPA 624	CIS-1,3-DICHLOROPROPENE	FL
EPA 624	ETHYLBENZENE	FL	EPA 624	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 624	METHYL CHLORIDE (CHLOROMETHANE)	FL	EPA 624	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 9947

Microbac Laboratories, Inc. - Marietta OH
158 Starlite Drive
Marietta, OH 45750

Virginia Laboratory ID: 460187
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 624	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 624	TRANS-1,2-DICHLOROETHENE	FL
EPA 624	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 624	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 624 - EXTENDED	XYLENE (TOTAL)	FL
EPA 625	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 625	2,4-DICHLOROPHENOL	FL
EPA 625	2,4-DINITROPHENOL	FL
EPA 625	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 625	2-CHLOROPHENOL	FL
EPA 625	2-NITROPHENOL	FL
EPA 625	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 625	4-CHLOROPHENYL PHENYLETHER	FL
EPA 625	ACENAPHTHENE	FL
EPA 625	ANTHRACENE	FL
EPA 625	BENZO(A)ANTHRACENE	FL
EPA 625	BENZO(B)FLUORANTHENE	FL
EPA 625	BENZO(K)FLUORANTHENE	FL
EPA 625	BIS(2-CHLOROETHYL) ETHER	FL
EPA 625	BUTYL BENZYL PHTHALATE	FL
EPA 625	DI-N-BUTYL PHTHALATE	FL
EPA 625	DIBENZO(A,H) ANTHRACENE	FL
EPA 625	DIMETHYL PHTHALATE	FL
EPA 625	FLUORENE	FL
EPA 625	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 625	HEXACHLOROETHANE	FL
EPA 625	ISOPHORONE	FL
EPA 625	N-NITROSODIMETHYLAMINE	FL
EPA 625	NAPHTHALENE	FL
EPA 625	PENTACHLOROPHENOL	FL
EPA 625	PHENOL	FL
EPA 6850	PERCHLORATE	FL
EPA 7470 A	MERCURY	FL

METHOD	ANALYTE	PRIMARY
EPA 624	TOLUENE	FL
EPA 624	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 624	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 624 - EXTENDED	1,1-DICHLOROETHYLENE	FL
EPA 625	1,2,4-TRICHLOROBENZENE	FL
EPA 625	2,4,6-TRICHLOROPHENOL	FL
EPA 625	2,4-DIMETHYLPHENOL	FL
EPA 625	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 625	2-CHLORONAPHTHALENE	FL
EPA 625	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 625	3,3'-DICHLOROBENZIDINE	FL
EPA 625	4-CHLORO-3-METHYLPHENOL	FL
EPA 625	4-NITROPHENOL	FL
EPA 625	ACENAPHTHYLENE	FL
EPA 625	BENZIDINE	FL
EPA 625	BENZO(A)PYRENE	FL
EPA 625	BENZO(G,H,I)PERYLENE	FL
EPA 625	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 625	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 625	CHRYSENE	FL
EPA 625	DI-N-OCTYL PHTHALATE	FL
EPA 625	DIETHYL PHTHALATE	FL
EPA 625	FLUORANTHENE	FL
EPA 625	HEXACHLOROBENZENE	FL
EPA 625	HEXACHLOROCYCLOPENTADIENE	FL
EPA 625	INDENO(1,2,3-CD) PYRENE	FL
EPA 625	N-NITROSODI-N-PROPYLAMINE	FL
EPA 625	N-NITROSODIPHENYLAMINE	FL
EPA 625	NITROBENZENE	FL
EPA 625	PHENANTHRENE	FL
EPA 625	PYRENE	FL
EPA 7196 A	CHROMIUM VI	FL
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL

Scope of Accreditation

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8015 C	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	FL
EPA 8015 C	METHANOL	FL
EPA 8015 D	ETHANOL	FL
EPA 8015 D	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	FL
EPA 8081 A	4,4'-DDD	FL
EPA 8081 A	4,4'-DDT	FL
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 A	DELTA-BHC	FL
EPA 8081 A	ENDOSULFAN I	FL
EPA 8081 A	ENDOSULFAN SULFATE	FL
EPA 8081 A	ENDRIN ALDEHYDE	FL
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 A	HEPTACHLOR	FL
EPA 8081 A	METHOXYCHLOR	FL
EPA 8081 B	4,4'-DDD	FL
EPA 8081 B	4,4'-DDT	FL
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	DELTA-BHC	FL
EPA 8081 B	ENDOSULFAN I	FL
EPA 8081 B	ENDOSULFAN SULFATE	FL
EPA 8081 B	ENDRIN ALDEHYDE	FL
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	HEPTACHLOR	FL
EPA 8081 B	METHOXYCHLOR	FL
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL
EPA 8015 B	ETHANOL	FL
EPA 8015 C	ETHANOL	FL
EPA 8015 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	FL
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	FL
EPA 8015 D	METHANOL	FL
EPA 8081 A	4,4'-DDE	FL
EPA 8081 A	ALDRIN	FL
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL
EPA 8081 A	CHLORDANE (TECH.)	FL
EPA 8081 A	DIELDRIN	FL
EPA 8081 A	ENDOSULFAN II	FL
EPA 8081 A	ENDRIN	FL
EPA 8081 A	ENDRIN KETONE	FL
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL
EPA 8081 A	HEPTACHLOR EPOXIDE	FL
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 8081 B	4,4'-DDE	FL
EPA 8081 B	ALDRIN	FL
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL
EPA 8081 B	CHLORDANE (TECH.)	FL
EPA 8081 B	DIELDRIN	FL
EPA 8081 B	ENDOSULFAN II	FL
EPA 8081 B	ENDRIN	FL
EPA 8081 B	ENDRIN KETONE	FL
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL
EPA 8081 B	HEPTACHLOR EPOXIDE	FL

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 8082	AROCLOR-1221 (PCB-1221)	FL
EPA 8082	AROCLOR-1242 (PCB-1242)	FL
EPA 8082	AROCLOR-1254 (PCB-1254)	FL
EPA 8082 A	AROCLOR-1016 (PCB-1016)	FL
EPA 8082 A	AROCLOR-1232 (PCB-1232)	FL
EPA 8082 A	AROCLOR-1248 (PCB-1248)	FL
EPA 8082 A	AROCLOR-1260 (PCB-1260)	FL
EPA 8151 A	2,4-D	FL
EPA 8151 A	DALAPON	FL
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	FL
EPA 8151 A	MCPA	FL
EPA 8151 A	PENTACHLOROPHENOL	FL
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	FL
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROPROPENE	FL
EPA 8260 B	1,2,3-TRICHLOROPROPANE	FL
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	FL
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	FL
EPA 8260 B	1,3-DICHLOROPROPANE	FL
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	FL
EPA 8260 B	1-CHLOROHEXANE	FL
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	FL
EPA 8260 B	2-CHLOROTOLUENE	FL
EPA 8260 B	2-NITROPROPANE	FL
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	FL
EPA 8260 B	ACETONE	FL
EPA 8260 B	ACROLEIN (PROPENAL)	FL
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	FL
EPA 8082	AROCLOR-1016 (PCB-1016)	FL
EPA 8082	AROCLOR-1232 (PCB-1232)	FL
EPA 8082	AROCLOR-1248 (PCB-1248)	FL
EPA 8082	AROCLOR-1260 (PCB-1260)	FL
EPA 8082 A	AROCLOR-1221 (PCB-1221)	FL
EPA 8082 A	AROCLOR-1242 (PCB-1242)	FL
EPA 8082 A	AROCLOR-1254 (PCB-1254)	FL
EPA 8151 A	2,4,5-T	FL
EPA 8151 A	2,4-DB	FL
EPA 8151 A	DICAMBA	FL
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8151 A	MCPP	FL
EPA 8151 A	SILVEX (2,4,5-TP)	FL
EPA 8260 B	1,1,1-TRICHLOROETHANE	FL
EPA 8260 B	1,1,2-TRICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHYLENE	FL
EPA 8260 B	1,2,3-TRICHLOROBENZENE	FL
EPA 8260 B	1,2,4-TRICHLOROBENZENE	FL
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8260 B	1,2-DICHLOROPROPANE	FL
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	FL
EPA 8260 B	2,2-DICHLOROPROPANE	FL
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	FL
EPA 8260 B	2-HEXANONE	FL
EPA 8260 B	4-CHLOROTOLUENE	FL
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	FL
EPA 8260 B	ACETONITRILE	FL
EPA 8260 B	ACRYLONITRILE	FL



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B	BENZENE	FL
EPA 8260 B	BROMOCHLOROMETHANE	FL
EPA 8260 B	BROMOFORM	FL
EPA 8260 B	CARBON TETRACHLORIDE	FL
EPA 8260 B	CHLORODIBROMOMETHANE	FL
EPA 8260 B	CHLOROFORM	FL
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	FL
EPA 8260 B	DIBROMOFLUOROMETHANE	FL
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	FL
EPA 8260 B	ETHYL ACETATE	FL
EPA 8260 B	ETHYLBENZENE	FL
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	FL
EPA 8260 B	ISOPROPYLBENZENE	FL
EPA 8260 B	METHACRYLONITRILE	FL
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	FL
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	FL
EPA 8260 B	N-BUTYLBENZENE	FL
EPA 8260 B	NAPHTHALENE	FL
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	FL
EPA 8260 B	STYRENE	FL
EPA 8260 B	TERT-BUTYLBENZENE	FL
EPA 8260 B	TOLUENE	FL
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 8260 B	VINYL ACETATE	FL
EPA 8260 B	XYLENE (TOTAL)	FL
EPA 8270 C	1,2,4-TRICHLOROBENZENE	FL
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	FL
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8260 B	BROMOBENZENE	FL
EPA 8260 B	BROMODICHLOROMETHANE	FL
EPA 8260 B	CARBON DISULFIDE	FL
EPA 8260 B	CHLOROBENZENE	FL
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	FL
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	FL
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	FL
EPA 8260 B	DIETHYL ETHER	FL
EPA 8260 B	ETHYL METHACRYLATE	FL
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	FL
EPA 8260 B	M+P-XYLENE	FL
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 8260 B	METHYL METHACRYLATE	FL
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL
EPA 8260 B	N-PROPYLBENZENE	FL
EPA 8260 B	O-XYLENE	FL
EPA 8260 B	SEC-BUTYLBENZENE	FL
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	FL
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	FL
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	FL
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	FL
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	FL



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL	EPA 8270 C	1,4-NAPHTHOQUINONE	FL
EPA 8270 C	1,4-PHENYLENEDIAMINE	FL	EPA 8270 C	1-NAPHTHYLAMINE	FL
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	FL	EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	FL
EPA 8270 C	2,4,5-TRICHLOROPHENOL	FL	EPA 8270 C	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 C	2,4-DICHLOROPHENOL	FL	EPA 8270 C	2,4-DIMETHYLPHENOL	FL
EPA 8270 C	2,4-DINITROPHENOL	FL	EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8270 C	2,6-DICHLOROPHENOL	FL	EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8270 C	2-ACETYLAMINOFLUORENE	FL	EPA 8270 C	2-CHLORONAPHTHALENE	FL
EPA 8270 C	2-CHLOROPHENOL	FL	EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 8270 C	2-METHYLNAPHTHALENE	FL	EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	FL
EPA 8270 C	2-NAPHTHYLAMINE	FL	EPA 8270 C	2-NITROANILINE	FL
EPA 8270 C	2-NITROPHENOL	FL	EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	FL
EPA 8270 C	3,3'-DICHLOROBENZIDINE	FL	EPA 8270 C	3,3'-DIMETHYLBENZIDINE	FL
EPA 8270 C	3-METHYLCHOLANTHRENE	FL	EPA 8270 C	3-METHYLPHENOL (M-CRESOL)	FL
EPA 8270 C	3-NITROANILINE	FL	EPA 8270 C	4-AMINOBIPHENYL	FL
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL	EPA 8270 C	4-CHLORO-3-METHYLPHENOL	FL
EPA 8270 C	4-CHLOROANILINE	FL	EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	FL
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	FL	EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	FL
EPA 8270 C	4-NITROANILINE	FL	EPA 8270 C	4-NITROPHENOL	FL
EPA 8270 C	4-NITROQUINOLINE-1-OXIDE	FL	EPA 8270 C	5-NITRO-O-TOLUIDINE	FL
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL	EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	FL
EPA 8270 C	ACENAPHTHENE	FL	EPA 8270 C	ACENAPHTHYLENE	FL
EPA 8270 C	ACETOPHENONE	FL	EPA 8270 C	ANILINE	FL
EPA 8270 C	ANTHRACENE	FL	EPA 8270 C	ARAMITE	FL
EPA 8270 C	BENZIDINE	FL	EPA 8270 C	BENZO(A)ANTHRACENE	FL
EPA 8270 C	BENZO(A)PYRENE	FL	EPA 8270 C	BENZO(B)FLUORANTHENE	FL
EPA 8270 C	BENZO(G,H,I)PERYLENE	FL	EPA 8270 C	BENZO(K)FLUORANTHENE	FL
EPA 8270 C	BENZOIC ACID	FL	EPA 8270 C	BENZYL ALCOHOL	FL
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	FL	EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	FL
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL	EPA 8270 C	BUTYL BENZYL PHTHALATE	FL
EPA 8270 C	CHLOROBENZILATE	FL	EPA 8270 C	CHRYSENE	FL
EPA 8270 C	DI-N-BUTYL PHTHALATE	FL	EPA 8270 C	DI-N-OCTYL PHTHALATE	FL
EPA 8270 C	DIALLATE	FL	EPA 8270 C	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 C	DIBENZOFURAN	FL	EPA 8270 C	DIETHYL PHTHALATE	FL
EPA 8270 C	DIMETHOATE	FL	EPA 8270 C	DIMETHYL PHTHALATE	FL

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8270 C	DISULFOTON	FL
EPA 8270 C	FAMPHUR	FL
EPA 8270 C	FLUORENE	FL
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 C	HEXACHLOROETHANE	FL
EPA 8270 C	HEXACHLOROPROPENE	FL
EPA 8270 C	ISODRIN	FL
EPA 8270 C	ISOSAFROLE	FL
EPA 8270 C	MALATHION	FL
EPA 8270 C	METHYL METHANESULFONATE	FL
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	FL
EPA 8270 C	N-NITROSODIETHYLAMINE	FL
EPA 8270 C	N-NITROSODIPHENYLAMINE	FL
EPA 8270 C	N-NITROSOMORPHOLINE	FL
EPA 8270 C	N-NITROSOPYRROLIDINE	FL
EPA 8270 C	NITROBENZENE	FL
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	FL
EPA 8270 C	PENTACHLORONITROBENZENE	FL
EPA 8270 C	PHENACETIN	FL
EPA 8270 C	PHENOL	FL
EPA 8270 C	PRONAMIDE (KERB)	FL
EPA 8270 C	PYRIDINE	FL
EPA 8270 C	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	FL
EPA 8270 C	TETRAETHYL PYROPHOSPHATE (TEPP)	FL
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	FL
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8270 D	1,4-NAPHTHOQUINONE	FL
EPA 8270 D	1-NAPHTHYLAMINE	FL
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	FL
EPA 8270 D	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 C	DIPHENYLAMINE	FL
EPA 8270 C	ETHYL METHANESULFONATE	FL
EPA 8270 C	FLUORANTHENE	FL
EPA 8270 C	HEXACHLOROBENZENE	FL
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 C	HEXACHLOROPHENE	FL
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 C	ISOPHORONE	FL
EPA 8270 C	KEPONE	FL
EPA 8270 C	METHAPYRILENE	FL
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	FL
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 C	N-NITROSODIMETHYLAMINE	FL
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 C	N-NITROSOPIPERIDINE	FL
EPA 8270 C	NAPHTHALENE	FL
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	FL
EPA 8270 C	PARATHION (PARATHION - ETHYL)	FL
EPA 8270 C	PENTACHLOROPHENOL	FL
EPA 8270 C	PHENANTHRENE	FL
EPA 8270 C	PHORATE	FL
EPA 8270 C	PYRENE	FL
EPA 8270 C	SAFROLE	FL
EPA 8270 C	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	FL
EPA 8270 C	THIONAZIN (ZINOPHOS)	FL
EPA 8270 D	1,2,4-TRICHLOROBENZENE	FL
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	FL
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-PHENYLENEDIAMINE	FL
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 8270 D	2,4,5-TRICHLOROPHENOL	FL
EPA 8270 D	2,4-DICHLOROPHENOL	FL



Commonwealth of Virginia

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8270 D	2,4-DIMETHYLPHENOL	FL	EPA 8270 D	2,4-DINITROPHENOL	FL
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	FL	EPA 8270 D	2,6-DICHLOROPHENOL	FL
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	FL	EPA 8270 D	2-ACETYLAMINOFLUORENE	FL
EPA 8270 D	2-CHLORONAPHTHALENE	FL	EPA 8270 D	2-CHLOROPHENOL	FL
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL	EPA 8270 D	2-METHYLNAPHTHALENE	FL
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	FL	EPA 8270 D	2-NAPHTHYLAMINE	FL
EPA 8270 D	2-NITROANILINE	FL	EPA 8270 D	2-NITROPHENOL	FL
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	FL	EPA 8270 D	3,3'-DICHLOROBENZIDINE	FL
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	FL	EPA 8270 D	3-METHYLCHOLANTHRENE	FL
EPA 8270 D	3-NITROANILINE	FL	EPA 8270 D	4-AMINOBIPHENYL	FL
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL	EPA 8270 D	4-CHLORO-3-METHYLPHENOL	FL
EPA 8270 D	4-CHLOROANILINE	FL	EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	FL
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	FL	EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	FL
EPA 8270 D	4-NITROANILINE	FL	EPA 8270 D	4-NITROPHENOL	FL
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	FL	EPA 8270 D	5-NITRO-O-TOLUIDINE	FL
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL	EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	FL
EPA 8270 D	ACENAPHTHENE	FL	EPA 8270 D	ACENAPHTHYLENE	FL
EPA 8270 D	ACETOPHENONE	FL	EPA 8270 D	ANILINE	FL
EPA 8270 D	ANTHRACENE	FL	EPA 8270 D	ARAMITE	FL
EPA 8270 D	BENZIDINE	FL	EPA 8270 D	BENZO(A)ANTHRACENE	FL
EPA 8270 D	BENZO(A)PYRENE	FL	EPA 8270 D	BENZO(B)FLUORANTHENE	FL
EPA 8270 D	BENZO(G,H,I)PERYLENE	FL	EPA 8270 D	BENZO(K)FLUORANTHENE	FL
EPA 8270 D	BENZOIC ACID	FL	EPA 8270 D	BENZYL ALCOHOL	FL
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	FL	EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	FL
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL	EPA 8270 D	BUTYL BENZYL PHTHALATE	FL
EPA 8270 D	CHLOROBENZILATE	FL	EPA 8270 D	CHRYSENE	FL
EPA 8270 D	DI-N-BUTYL PHTHALATE	FL	EPA 8270 D	DI-N-OCTYL PHTHALATE	FL
EPA 8270 D	DIALLATE	FL	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 D	DIBENZOFURAN	FL	EPA 8270 D	DIETHYL PHTHALATE	FL
EPA 8270 D	DIMETHOATE	FL	EPA 8270 D	DIMETHYL PHTHALATE	FL
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL	EPA 8270 D	DIPHENYLAMINE	FL
EPA 8270 D	DISULFOTON	FL	EPA 8270 D	ETHYL METHANESULFONATE	FL
EPA 8270 D	FAMPHUR	FL	EPA 8270 D	FLUORANTHENE	FL
EPA 8270 D	FLUORENE	FL	EPA 8270 D	HEXACHLOROBENZENE	FL



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 D	HEXACHLOROETHANE	FL
EPA 8270 D	HEXACHLOROPROPENE	FL
EPA 8270 D	ISODRIN	FL
EPA 8270 D	ISOSAFROLE	FL
EPA 8270 D	MALATHION	FL
EPA 8270 D	METHYL METHANESULFONATE	FL
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	FL
EPA 8270 D	N-NITROSODIETHYLAMINE	FL
EPA 8270 D	N-NITROSODIPHENYLAMINE	FL
EPA 8270 D	N-NITROSOMORPHOLINE	FL
EPA 8270 D	N-NITROSOPYRROLIDINE	FL
EPA 8270 D	NITROBENZENE	FL
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	FL
EPA 8270 D	PENTACHLORONITROBENZENE	FL
EPA 8270 D	PHENACETIN	FL
EPA 8270 D	PHENOL	FL
EPA 8270 D	PRONAMIDE (KERB)	FL
EPA 8270 D	SAFROLE	FL
EPA 8270 D	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	FL
EPA 8270 D	THIONAZIN (ZINOPHOS)	FL
EPA 8270 D - EXTENDED	CARBAZOLE	FL
EPA 8330 A	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8330 A	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	FL
EPA 8330 A	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8330 A	2-NITROTOLUENE	FL
EPA 8330 A	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	FL
EPA 8330 A	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	FL
EPA 8330 A	NITROGLYCERIN	FL
EPA 8330 A	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	FL
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 D	HEXACHLOROPHENE	FL
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 D	ISOPHORONE	FL
EPA 8270 D	KEPONE	FL
EPA 8270 D	METHAPYRILENE	FL
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	FL
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 D	N-NITROSODIMETHYLAMINE	FL
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 D	N-NITROSOPIPERIDINE	FL
EPA 8270 D	NAPHTHALENE	FL
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	FL
EPA 8270 D	PARATHION (PARATHION - ETHYL)	FL
EPA 8270 D	PENTACHLOROPHENOL	FL
EPA 8270 D	PHENANTHRENE	FL
EPA 8270 D	PHORATE	FL
EPA 8270 D	PYRENE	FL
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	FL
EPA 8270 D	TETRAETHYL PYROPHOSPHATE (TEPP)	FL
EPA 8270 D - EXTENDED	3+4-METHYLPHENOL (M+P CRESOL)	FL
EPA 8315 A	FORMALDEHYDE	FL
EPA 8330 A	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8330 A	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8330 A	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	FL
EPA 8330 A	3-NITROTOLUENE	FL
EPA 8330 A	4-NITROTOLUENE	FL
EPA 8330 A	NITROBENZENE	FL
EPA 8330 A	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	FL
EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	FL
EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	FL



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	FL
EPA 8330 B	3-NITROTOLUENE	FL
EPA 8330 B	4-NITROTOLUENE	FL
EPA 8330 B	NITROBENZENE	FL
EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	FL
EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	FL
EPA 9056	BROMIDE	FL
EPA 9056	FLUORIDE	FL
EPA 9056	SULFATE	FL
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	FL
OVL HPLC07/HPLC-MS-MS	HEXAMETHYLPHOSPHORAMIDE (HMPA)	FL
RSK-175	ETHENE (ETHYLENE)	FL
SM 2120 B-2011	COLOR	FL
SM 2320 B-2011	ALKALINITY AS CACO3	FL
SM 2540 B-2011	RESIDUE-TOTAL (TS)	FL
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	FL
SM 3500-CR B-2011	CHROMIUM VI	FL
SM 4500-CN^- E-2011	CYANIDE	FL
SM 4500-F^- C-2011	FLUORIDE	FL
SM 4500-$NO2^-$ B-2011	NITRITE AS N	FL
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	FL
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	FL
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	FL

METHOD	ANALYTE	PRIMARY
EPA 8330 B	2-NITROTOLUENE	FL
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	FL
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	FL
EPA 8330 B	NITROGLYCERIN	FL
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	FL
EPA 9014	AMENABLE CYANIDE	FL
EPA 9056	CHLORIDE	FL
EPA 9056	NITRITE AS N	FL
EPA 9056 A	NITRATE AS N	FL
HACH 8000	CHEMICAL OXYGEN DEMAND (COD)	FL
RSK-175	ETHANE	FL
RSK-175	METHANE	FL
SM 2310 B-2011	ACIDITY, AS CACO3	FL
SM 2340 C-2011	TOTAL HARDNESS AS CACO3	FL
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	FL
SM 2540 F-2011	RESIDUE-SETTLEABLE	FL
SM 4500-CL^- E-2011	CHLORIDE	FL
SM 4500-CN^- G-2011	AMENABLE CYANIDE	FL
SM 4500-H+ B-2011	PH	FL
SM 4500-$NO3^-$ F-2011	NITRATE AS N	FL
SM 4500-$S2^-$ F-2011	SULFIDE	FL
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	FL
SM 5540 C-2011	SURFACTANTS - MBAS	FL

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	FL
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	FL
EPA 6010 B	ANTIMONY	FL
EPA 6010 B	BARIUM	FL
EPA 6010 B	BORON	FL
EPA 6010 B	CALCIUM	FL
EPA 6010 B	COBALT	FL

METHOD	ANALYTE	PRIMARY
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	FL
EPA 6010 B	ALUMINUM	FL
EPA 6010 B	ARSENIC	FL
EPA 6010 B	BERYLLIUM	FL
EPA 6010 B	CADMIUM	FL
EPA 6010 B	CHROMIUM	FL
EPA 6010 B	COPPER	FL



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 6010 B	IRON	FL
EPA 6010 B	LITHIUM	FL
EPA 6010 B	MANGANESE	FL
EPA 6010 B	NICKEL	FL
EPA 6010 B	POTASSIUM	FL
EPA 6010 B	SILVER	FL
EPA 6010 B	STRONTIUM	FL
EPA 6010 B	TIN	FL
EPA 6010 B	VANADIUM	FL
EPA 6010 C	ALUMINUM	FL
EPA 6010 C	ARSENIC	FL
EPA 6010 C	BERYLLIUM	FL
EPA 6010 C	CADMIUM	FL
EPA 6010 C	CHROMIUM	FL
EPA 6010 C	COPPER	FL
EPA 6010 C	LEAD	FL
EPA 6010 C	MAGNESIUM	FL
EPA 6010 C	MOLYBDENUM	FL
EPA 6010 C	PHOSPHORUS, TOTAL	FL
EPA 6010 C	SELENIUM	FL
EPA 6010 C	SODIUM	FL
EPA 6010 C	THALLIUM	FL
EPA 6010 C	TITANIUM	FL
EPA 6010 C	ZINC	FL
EPA 6020	ARSENIC	FL
EPA 6020	CADMIUM	FL
EPA 6020	COBALT	FL
EPA 6020	LEAD	FL
EPA 6020	NICKEL	FL
EPA 6020	THALLIUM	FL
EPA 6020 - EXTENDED	URANIUM	FL
EPA 6020 A	ARSENIC	FL
EPA 6020 A	CADMIUM	FL
EPA 6020 A	COBALT	FL
EPA 6020 A	LEAD	FL
EPA 6020 A	NICKEL	FL
EPA 6020 A	SILVER	FL
EPA 6020 A	VANADIUM	FL
EPA 6020 A - EXTENDED	URANIUM	FL
EPA 6010 B	LEAD	FL
EPA 6010 B	MAGNESIUM	FL
EPA 6010 B	MOLYBDENUM	FL
EPA 6010 B	PHOSPHORUS, TOTAL	FL
EPA 6010 B	SELENIUM	FL
EPA 6010 B	SODIUM	FL
EPA 6010 B	THALLIUM	FL
EPA 6010 B	TITANIUM	FL
EPA 6010 B	ZINC	FL
EPA 6010 C	ANTIMONY	FL
EPA 6010 C	BARIUM	FL
EPA 6010 C	BORON	FL
EPA 6010 C	CALCIUM	FL
EPA 6010 C	COBALT	FL
EPA 6010 C	IRON	FL
EPA 6010 C	LITHIUM	FL
EPA 6010 C	MANGANESE	FL
EPA 6010 C	NICKEL	FL
EPA 6010 C	POTASSIUM	FL
EPA 6010 C	SILVER	FL
EPA 6010 C	STRONTIUM	FL
EPA 6010 C	TIN	FL
EPA 6010 C	VANADIUM	FL
EPA 6020	ANTIMONY	FL
EPA 6020	BARIUM	FL
EPA 6020	CHROMIUM	FL
EPA 6020	COPPER	FL
EPA 6020	MANGANESE	FL
EPA 6020	SILVER	FL
EPA 6020	ZINC	FL
EPA 6020 A	ANTIMONY	FL
EPA 6020 A	BARIUM	FL
EPA 6020 A	CHROMIUM	FL
EPA 6020 A	COPPER	FL
EPA 6020 A	MANGANESE	FL
EPA 6020 A	SELENIUM	FL
EPA 6020 A	THALLIUM	FL
EPA 6020 A	ZINC	FL
EPA 6850	PERCHLORATE	FL



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 7196 A	CHROMIUM VI	FL
EPA 7471 B	MERCURY	FL
EPA 8015 B	ETHANOL	FL
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	FL
EPA 8015 C	ETHANOL	FL
EPA 8015 C	GASOLINE RANGE ORGANICS (GRO)	FL
EPA 8015 D	METHANOL	FL
EPA 8081 A	4,4'-DDE	FL
EPA 8081 A	ALDRIN	FL
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL
EPA 8081 A	CHLORDANE (TECH.)	FL
EPA 8081 A	DIELDRIN	FL
EPA 8081 A	ENDOSULFAN II	FL
EPA 8081 A	ENDRIN	FL
EPA 8081 A	ENDRIN KETONE	FL
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL
EPA 8081 A	HEPTACHLOR EPOXIDE	FL
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 8081 B	4,4'-DDE	FL
EPA 8081 B	ALDRIN	FL
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	FL
EPA 8081 B	CHLORDANE (TECH.)	FL
EPA 8081 B	DIELDRIN	FL
EPA 8081 B	ENDOSULFAN II	FL
EPA 8081 B	ENDRIN	FL
EPA 8081 B	ENDRIN KETONE	FL
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	FL
EPA 7471 A	MERCURY	FL
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	FL
EPA 8015 B	ETHYLENE GLYCOL	FL
EPA 8015 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	FL
EPA 8015 C	ETHYLENE GLYCOL	FL
EPA 8015 D	ETHANOL	FL
EPA 8081 A	4,4'-DDD	FL
EPA 8081 A	4,4'-DDT	FL
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 A	DELTA-BHC	FL
EPA 8081 A	ENDOSULFAN I	FL
EPA 8081 A	ENDOSULFAN SULFATE	FL
EPA 8081 A	ENDRIN ALDEHYDE	FL
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 A	HEPTACHLOR	FL
EPA 8081 A	METHOXYCHLOR	FL
EPA 8081 B	4,4'-DDD	FL
EPA 8081 B	4,4'-DDT	FL
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	DELTA-BHC	FL
EPA 8081 B	ENDOSULFAN I	FL
EPA 8081 B	ENDOSULFAN SULFATE	FL
EPA 8081 B	ENDRIN ALDEHYDE	FL
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	FL
EPA 8081 B	HEPTACHLOR	FL



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METHOD	ANALYTE	PRIMARY
EPA 8081 B	HEPTACHLOR EPOXIDE	FL
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	FL
EPA 8082	AROCLOR-1221 (PCB-1221)	FL
EPA 8082	AROCLOR-1242 (PCB-1242)	FL
EPA 8082	AROCLOR-1254 (PCB-1254)	FL
EPA 8082 A	AROCLOR-1016 (PCB-1016)	FL
EPA 8082 A	AROCLOR-1232 (PCB-1232)	FL
EPA 8082 A	AROCLOR-1248 (PCB-1248)	FL
EPA 8082 A	AROCLOR-1260 (PCB-1260)	FL
EPA 8151 A	2,4-D	FL
EPA 8151 A	DALAPON	FL
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	FL
EPA 8151 A	MCPA	FL
EPA 8151 A	PENTACHLOROPHENOL	FL
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	FL
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROPROPENE	FL
EPA 8260 B	1,2,3-TRICHLOROPROPANE	FL
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	FL
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	FL
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	FL
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	FL
EPA 8260 B	1,3-DICHLOROPROPANE	FL
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	FL
EPA 8260 B	1-CHLOROHEXANE	FL
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	FL
EPA 8260 B	2-CHLOROTOLUENE	FL
EPA 8260 B	2-NITROPROPANE	FL
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	FL
EPA 8260 B	ACETONE	FL
EPA 8260 B	ACROLEIN (PROPENAL)	FL
EPA 8081 B	METHOXYCHLOR	FL
EPA 8082	AROCLOR-1016 (PCB-1016)	FL
EPA 8082	AROCLOR-1232 (PCB-1232)	FL
EPA 8082	AROCLOR-1248 (PCB-1248)	FL
EPA 8082	AROCLOR-1260 (PCB-1260)	FL
EPA 8082 A	AROCLOR-1221 (PCB-1221)	FL
EPA 8082 A	AROCLOR-1242 (PCB-1242)	FL
EPA 8082 A	AROCLOR-1254 (PCB-1254)	FL
EPA 8151 A	2,4,5-T	FL
EPA 8151 A	2,4-DB	FL
EPA 8151 A	DICAMBA	FL
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8151 A	MCPP	FL
EPA 8151 A	SILVEX (2,4,5-TP)	FL
EPA 8260 B	1,1,1-TRICHLOROETHANE	FL
EPA 8260 B	1,1,2-TRICHLOROETHANE	FL
EPA 8260 B	1,1-DICHLOROETHYLENE	FL
EPA 8260 B	1,2,3-TRICHLOROBENZENE	FL
EPA 8260 B	1,2,4-TRICHLOROBENZENE	FL
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	FL
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8260 B	1,2-DICHLOROPROPANE	FL
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	FL
EPA 8260 B	2,2-DICHLOROPROPANE	FL
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	FL
EPA 8260 B	2-HEXANONE	FL
EPA 8260 B	4-CHLOROTOLUENE	FL
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	FL
EPA 8260 B	ACETONITRILE	FL
EPA 8260 B	ACRYLONITRILE	FL



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

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Microbac Laboratories, Inc. - Marietta OH
158 Starlite Drive
Marietta, OH 45750

Virginia Laboratory ID: 460187
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	FL
EPA 8260 B	BROMOBENZENE	FL
EPA 8260 B	BROMODICHLOROMETHANE	FL
EPA 8260 B	CARBON DISULFIDE	FL
EPA 8260 B	CHLOROBENZENE	FL
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	FL
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	FL
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	FL
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	FL
EPA 8260 B	DIETHYL ETHER	FL
EPA 8260 B	ETHYL METHACRYLATE	FL
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	FL
EPA 8260 B	METHACRYLONITRILE	FL
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	FL
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	FL
EPA 8260 B	N-BUTYLBENZENE	FL
EPA 8260 B	NAPHTHALENE	FL
EPA 8260 B	SEC-BUTYLBENZENE	FL
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	FL
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	FL
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	FL
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	FL
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	FL
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	FL
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	FL
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8260 B	BENZENE	FL
EPA 8260 B	BROMOCHLOROMETHANE	FL
EPA 8260 B	BROMOFORM	FL
EPA 8260 B	CARBON TETRACHLORIDE	FL
EPA 8260 B	CHLORODIBROMOMETHANE	FL
EPA 8260 B	CHLOROFORM	FL
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	FL
EPA 8260 B	DIBROMOFLUOROMETHANE	FL
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	FL
EPA 8260 B	ETHYL ACETATE	FL
EPA 8260 B	ETHYLBENZENE	FL
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	FL
EPA 8260 B	ISOPROPYLBENZENE	FL
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	FL
EPA 8260 B	METHYL METHACRYLATE	FL
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	FL
EPA 8260 B	N-PROPYLBENZENE	FL
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	FL
EPA 8260 B	STYRENE	FL
EPA 8260 B	TERT-BUTYLBENZENE	FL
EPA 8260 B	TOLUENE	FL
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	FL
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	FL
EPA 8260 B	VINYL ACETATE	FL
EPA 8260 B	XYLENE (TOTAL)	FL
EPA 8270 C	1,2,4-TRICHLOROBENZENE	FL
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	FL
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL



Commonwealth of Virginia

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Scope of Accreditation

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Marietta, OH 45750

Virginia Laboratory ID: 460187
Effective Date: September 15, 2018
Expiration Date: September 14, 2019

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 C	1,4-PHENYLENEDIAMINE	FL
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 8270 C	2,4,5-TRICHLOROPHENOL	FL
EPA 8270 C	2,4-DICHLOROPHENOL	FL
EPA 8270 C	2,4-DINITROPHENOL	FL
EPA 8270 C	2,6-DICHLOROPHENOL	FL
EPA 8270 C	2-ACETYLAMINOFLUORENE	FL
EPA 8270 C	2-CHLOROPHENOL	FL
EPA 8270 C	2-METHYLNAPHTHALENE	FL
EPA 8270 C	2-NAPHTHYLAMINE	FL
EPA 8270 C	2-NITROPHENOL	FL
EPA 8270 C	3,3'-DICHLOROBENZIDINE	FL
EPA 8270 C	3-METHYLCHOLANTHRENE	FL
EPA 8270 C	3-NITROANILINE	FL
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 8270 C	4-CHLOROANILINE	FL
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	FL
EPA 8270 C	4-NITROANILINE	FL
EPA 8270 C	4-NITROQUINOLINE-1-OXIDE	FL
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL
EPA 8270 C	ACENAPHTHENE	FL
EPA 8270 C	ACETOPHENONE	FL
EPA 8270 C	ANTHRACENE	FL
EPA 8270 C	BENZIDINE	FL
EPA 8270 C	BENZO(A)PYRENE	FL
EPA 8270 C	BENZO(G,H,I)PERYLENE	FL
EPA 8270 C	BENZOIC ACID	FL
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 8270 C	CHLOROBENZILATE	FL
EPA 8270 C	DI-N-BUTYL PHTHALATE	FL
EPA 8270 C	DIALLATE	FL
EPA 8270 C	DIBENZOFURAN	FL
EPA 8270 C	DIMETHOATE	FL
EPA 8270 C	1,4-NAPHTHOQUINONE	FL
EPA 8270 C	1-NAPHTHYLAMINE	FL
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	FL
EPA 8270 C	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 C	2,4-DIMETHYLPHENOL	FL
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8270 C	2-CHLORONAPHTHALENE	FL
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	FL
EPA 8270 C	2-NITROANILINE	FL
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	FL
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	FL
EPA 8270 C	3-METHYLPHENOL (M-CRESOL)	FL
EPA 8270 C	4-AMINOBIPHENYL	FL
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	FL
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	FL
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	FL
EPA 8270 C	4-NITROPHENOL	FL
EPA 8270 C	5-NITRO-O-TOLUIDINE	FL
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	FL
EPA 8270 C	ACENAPHTHYLENE	FL
EPA 8270 C	ANILINE	FL
EPA 8270 C	ARAMITE	FL
EPA 8270 C	BENZO(A)ANTHRACENE	FL
EPA 8270 C	BENZO(B)FLUORANTHENE	FL
EPA 8270 C	BENZO(K)FLUORANTHENE	FL
EPA 8270 C	BENZYL ALCOHOL	FL
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	FL
EPA 8270 C	BUTYL BENZYL PHTHALATE	FL
EPA 8270 C	CHRYSENE	FL
EPA 8270 C	DI-N-OCTYL PHTHALATE	FL
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 C	DIETHYL PHTHALATE	FL
EPA 8270 C	DIMETHYL PHTHALATE	FL

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8270 C	DISULFOTON	FL
EPA 8270 C	FAMPHUR	FL
EPA 8270 C	FLUORENE	FL
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 C	HEXACHLOROETHANE	FL
EPA 8270 C	HEXACHLOROPROPENE	FL
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 C	ISOPHORONE	FL
EPA 8270 C	KEPONE	FL
EPA 8270 C	METHAPYRILENE	FL
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	FL
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 C	N-NITROSODIMETHYLAMINE	FL
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 C	N-NITROSOPIPERIDINE	FL
EPA 8270 C	NAPHTHALENE	FL
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	FL
EPA 8270 C	PARATHION (PARATHION - ETHYL)	FL
EPA 8270 C	PENTACHLORONITROBENZENE	FL
EPA 8270 C	PHENACETIN	FL
EPA 8270 C	PHENOL	FL
EPA 8270 C	PRONAMIDE (KERB)	FL
EPA 8270 C	PYRIDINE	FL
EPA 8270 C	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	FL
EPA 8270 C	TETRAETHYL PYROPHOSPHATE (TEPP)	FL
EPA 8270 C - EXTENDED	CARBAZOLE	FL
EPA 8270 D	1,2,4-TRICHLOROBENZENE	FL
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	FL
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	FL
EPA 8270 D	1,4-PHENYLENEDIAMINE	FL
EPA 8270 C	DIPHENYLAMINE	FL
EPA 8270 C	ETHYL METHANESULFONATE	FL
EPA 8270 C	FLUORANTHENE	FL
EPA 8270 C	HEXACHLOROBENZENE	FL
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 C	HEXACHLOROPHENE	FL
EPA 8270 C	HEXAMETHYLPHOSPHORAMIDE (HMPA)	FL
EPA 8270 C	ISODRIN	FL
EPA 8270 C	ISOSAFROLE	FL
EPA 8270 C	MALATHION	FL
EPA 8270 C	METHYL METHANESULFONATE	FL
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	FL
EPA 8270 C	N-NITROSODIETHYLAMINE	FL
EPA 8270 C	N-NITROSODIPHENYLAMINE	FL
EPA 8270 C	N-NITROSOMORPHOLINE	FL
EPA 8270 C	N-NITROSOPYRROLIDINE	FL
EPA 8270 C	NITROBENZENE	FL
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	FL
EPA 8270 C	PENTACHLOROBENZENE	FL
EPA 8270 C	PENTACHLOROPHENOL	FL
EPA 8270 C	PHENANTHRENE	FL
EPA 8270 C	PHORATE	FL
EPA 8270 C	PYRENE	FL
EPA 8270 C	SAFROLE	FL
EPA 8270 C	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	FL
EPA 8270 C	THIONAZIN (ZINOPHOS)	FL
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	FL
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	FL
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8270 D	1,4-NAPHTHOQUINONE	FL
EPA 8270 D	1-NAPHTHYLAMINE	FL

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	FL
EPA 8270 D	2,4,5-TRICHLOROPHENOL	FL
EPA 8270 D	2,4-DICHLOROPHENOL	FL
EPA 8270 D	2,4-DINITROPHENOL	FL
EPA 8270 D	2,6-DICHLOROPHENOL	FL
EPA 8270 D	2-ACETYLAMINOFLUORENE	FL
EPA 8270 D	2-CHLOROPHENOL	FL
EPA 8270 D	2-METHYLNAPHTHALENE	FL
EPA 8270 D	2-NAPHTHYLAMINE	FL
EPA 8270 D	2-NITROPHENOL	FL
EPA 8270 D	3,3'-DICHLOROBENZIDINE	FL
EPA 8270 D	3-METHYLCHOLANTHRENE	FL
EPA 8270 D	3-NITROANILINE	FL
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	FL
EPA 8270 D	4-CHLOROANILINE	FL
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	FL
EPA 8270 D	4-NITROANILINE	FL
EPA 8270 D	4-NITROQUINOLINE-1-OXIDE	FL
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	FL
EPA 8270 D	ACENAPHTHENE	FL
EPA 8270 D	ACETOPHENONE	FL
EPA 8270 D	ANTHRACENE	FL
EPA 8270 D	BENZIDINE	FL
EPA 8270 D	BENZO(A)PYRENE	FL
EPA 8270 D	BENZO(G,H,I)PERYLENE	FL
EPA 8270 D	BENZOIC ACID	FL
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	FL
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	FL
EPA 8270 D	CHLOROBENZILATE	FL
EPA 8270 D	DI-N-BUTYL PHTHALATE	FL
EPA 8270 D	DIALLATE	FL
EPA 8270 D	DIBENZOFURAN	FL
EPA 8270 D	DIMETHOATE	FL
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	FL
EPA 8270 D	DISULFOTON	FL
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	FL
EPA 8270 D	2,4,6-TRICHLOROPHENOL	FL
EPA 8270 D	2,4-DIMETHYLPHENOL	FL
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8270 D	2-CHLORONAPHTHALENE	FL
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	FL
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	FL
EPA 8270 D	2-NITROANILINE	FL
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	FL
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	FL
EPA 8270 D	3-METHYLPHENOL (M-CRESOL)	FL
EPA 8270 D	4-AMINOBIPHENYL	FL
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	FL
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	FL
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	FL
EPA 8270 D	4-NITROPHENOL	FL
EPA 8270 D	5-NITRO-O-TOLUIDINE	FL
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	FL
EPA 8270 D	ACENAPHTHYLENE	FL
EPA 8270 D	ANILINE	FL
EPA 8270 D	ARAMITE	FL
EPA 8270 D	BENZO(A)ANTHRACENE	FL
EPA 8270 D	BENZO(B)FLUORANTHENE	FL
EPA 8270 D	BENZO(K)FLUORANTHENE	FL
EPA 8270 D	BENZYL ALCOHOL	FL
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	FL
EPA 8270 D	BUTYL BENZYL PHTHALATE	FL
EPA 8270 D	CHRYSENE	FL
EPA 8270 D	DI-N-OCTYL PHTHALATE	FL
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	FL
EPA 8270 D	DIETHYL PHTHALATE	FL
EPA 8270 D	DIMETHYL PHTHALATE	FL
EPA 8270 D	DIPHENYLAMINE	FL
EPA 8270 D	ETHYL METHANESULFONATE	FL



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D	FAMPHUR	FL
EPA 8270 D	FLUORENE	FL
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	FL
EPA 8270 D	HEXACHLOROETHANE	FL
EPA 8270 D	HEXACHLOROPROPENE	FL
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	FL
EPA 8270 D	ISOPHORONE	FL
EPA 8270 D	KEPONE	FL
EPA 8270 D	METHAPYRILENE	FL
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	FL
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	FL
EPA 8270 D	N-NITROSODIMETHYLAMINE	FL
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	FL
EPA 8270 D	N-NITROSOPIPERIDINE	FL
EPA 8270 D	NAPHTHALENE	FL
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	FL
EPA 8270 D	PARATHION (PARATHION - ETHYL)	FL
EPA 8270 D	PENTACHLORONITROBENZENE	FL
EPA 8270 D	PHENACETIN	FL
EPA 8270 D	PHENOL	FL
EPA 8270 D	PRONAMIDE (KERB)	FL
EPA 8270 D	SAFROLE	FL
EPA 8270 D	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	FL
EPA 8270 D	THIONAZIN (ZINOPHOS)	FL
EPA 8270 D SIM	DIALLATE	FL
EPA 8270 D SIM	DISULFOTON	FL
EPA 8270 D SIM	KEPONE	FL
EPA 8270 D SIM	PHORATE	FL
EPA 8330 A	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8330 A	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	FL
EPA 8330 A	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8330 A	2-NITROTOLUENE	FL
EPA 8330 A	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	FL
EPA 8270 D	FLUORANTHENE	FL
EPA 8270 D	HEXACHLOROBENZENE	FL
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	FL
EPA 8270 D	HEXACHLOROPHENE	FL
EPA 8270 D	HEXAMETHYLPHOSPHORAMIDE (HMPA)	FL
EPA 8270 D	ISODRIN	FL
EPA 8270 D	ISOSAFROLE	FL
EPA 8270 D	MALATHION	FL
EPA 8270 D	METHYL METHANESULFONATE	FL
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	FL
EPA 8270 D	N-NITROSODIETHYLAMINE	FL
EPA 8270 D	N-NITROSODIPHENYLAMINE	FL
EPA 8270 D	N-NITROSOMORPHOLINE	FL
EPA 8270 D	N-NITROSOPYRROLIDINE	FL
EPA 8270 D	NITROBENZENE	FL
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	FL
EPA 8270 D	PENTACHLOROBENZENE	FL
EPA 8270 D	PENTACHLOROPHENOL	FL
EPA 8270 D	PHENANTHRENE	FL
EPA 8270 D	PHORATE	FL
EPA 8270 D	PYRENE	FL
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	FL
EPA 8270 D	TETRAETHYL PYROPHOSPHATE (TEPP)	FL
EPA 8270 D - EXTENDED	CARBAZOLE	FL
EPA 8270 D SIM	DIMETHOATE	FL
EPA 8270 D SIM	FAMPHUR	FL
EPA 8270 D SIM	METHYL PARATHION (PARATHION, METHYL)	FL
EPA 8315 A	FORMALDEHYDE	FL
EPA 8330 A	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8330 A	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8330 A	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	FL
EPA 8330 A	3-NITROTOLUENE	FL
EPA 8330 A	4-NITROTOLUENE	FL



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8330 A	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	FL
EPA 8330 A	NITROGLYCERIN	FL
EPA 8330 A	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	FL
EPA 8330 B	1,3-DINITROBENZENE (1,3-DNB)	FL
EPA 8330 B	2,4-DINITROTOLUENE (2,4-DNT)	FL
EPA 8330 B	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	FL
EPA 8330 B	3-NITROTOLUENE	FL
EPA 8330 B	4-NITROTOLUENE	FL
EPA 8330 B	NITROBENZENE	FL
EPA 8330 B	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	FL
EPA 8330 B	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	FL
EPA 9030 B	PREP: SULFIDE	FL
EPA 9040 C	PH	FL
EPA 9056	BROMIDE	FL
EPA 9056	FLUORIDE	FL
EPA 9056	SULFATE	FL
EPA 9056 A	CHLORIDE	FL
EPA 9056 A	NITRATE AS N	FL
EPA 9056 A	SULFATE	FL
EPA 8330 A	NITROBENZENE	FL
EPA 8330 A	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	FL
EPA 8330 B	1,3,5-TRINITROBENZENE (1,3,5-TNB)	FL
EPA 8330 B	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	FL
EPA 8330 B	2,6-DINITROTOLUENE (2,6-DNT)	FL
EPA 8330 B	2-NITROTOLUENE	FL
EPA 8330 B	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	FL
EPA 8330 B	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	FL
EPA 8330 B	NITROGLYCERIN	FL
EPA 8330 B	PENTAERYTHRITOLTETRANITRATE (PETN)	FL
EPA 9014	CYANIDE	FL
EPA 9034	TOTAL SULFIDES	FL
EPA 9045 D	PH	FL
EPA 9056	CHLORIDE	FL
EPA 9056	NITRITE AS N	FL
EPA 9056 A	BROMIDE	FL
EPA 9056 A	FLUORIDE	FL
EPA 9056 A	NITRITE AS N	FL
EPA 9095 B	FREE LIQUID	FL

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF GENERAL SERVICES
DIVISION OF CONSOLIDATED LABORATORY SERVICES

Certifies that

VA Laboratory ID#: 460132
Pace Analytical National Center for Testing & Innovation

12065 Lebanon Road
Mount Juliet, TN 37122

Owner: PAS PARENT, LLC
Operator: PACE ANALYTICAL SERVICES, LLC
Responsible Official: JOHNNY MITCHELL

Having met the requirements of 1 VAC 30-46 and
having been found compliant with the 2009 TNI Standard approved by The NELAC Institute
is hereby approved as an

Accredited Environmental Laboratory

As more fully described in the attached Scope of Accreditation

Effective Date: **June 15, 2019**
Expiration Date: **June 14, 2020**
Certificate # 10302

Denise M. Toney, Ph.D., HCLD
DGS Deputy Director for Laboratories

Continued accreditation status depends on successful ongoing participation in the program.
Certificate to be conspicuously displayed at the laboratory.
Not valid unless accompanied by a valid Virginia Environmental Laboratory Accreditation Program (VELAP) Scope of Accreditation.
Customers are urged to verify the laboratory's current accreditation status.

Certificate Not Transferable

Surrender Upon Revocation

Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services

Scope of Accreditation

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AIR

METHOD	ANALYTE	PRIMARY
EPA TO-15 2nd Ed.	1,1,1-TRICHLOROETHANE	NJ
EPA TO-15 2nd Ed.	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	NJ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHANE	NJ
EPA TO-15 2nd Ed.	1,2,4-TRICHLOROBENZENE	NJ
EPA TO-15 2nd Ed.	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA TO-15 2nd Ed.	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
EPA TO-15 2nd Ed.	1,3,5-TRIMETHYLBENZENE	NJ
EPA TO-15 2nd Ed.	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA TO-15 2nd Ed.	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	NJ
EPA TO-15 2nd Ed.	2-BUTANONE (METHYL ETHYL KETONE, MEK)	NJ
EPA TO-15 2nd Ed.	ACETALDEHYDE	NJ
EPA TO-15 2nd Ed.	BENZENE	NJ
EPA TO-15 2nd Ed.	BROMODICHLOROMETHANE	NJ
EPA TO-15 2nd Ed.	CARBON DISULFIDE	NJ
EPA TO-15 2nd Ed.	CHLOROBENZENE	NJ
EPA TO-15 2nd Ed.	CHLOROETHANE (ETHYL CHLORIDE)	NJ
EPA TO-15 2nd Ed.	CIS-1,2-DICHLOROETHYLENE	NJ
EPA TO-15 2nd Ed.	CYCLOHEXANE	NJ
EPA TO-15 2nd Ed.	ETHYLBENZENE	NJ
EPA TO-15 2nd Ed.	IODOMETHANE (METHYL IODIDE)	NJ
EPA TO-15 2nd Ed.	M+P-XYLENE	NJ
EPA TO-15 2nd Ed.	METHYL BROMIDE (BROMOMETHANE)	NJ
EPA TO-15 2nd Ed.	METHYL METHACRYLATE	NJ
EPA TO-15 2nd Ed.	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ
EPA TO-15 2nd Ed.	N-HEXANE	NJ
EPA TO-15 2nd Ed.	PROPYLENE (PROPENE)	NJ
EPA TO-15 2nd Ed.	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA TO-15 2nd Ed.	TOLUENE	NJ
EPA TO-15 2nd Ed.	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
EPA TO-15 2nd Ed.	1,1,2,2-TETRACHLOROETHANE	NJ
EPA TO-15 2nd Ed.	1,1,2-TRICHLOROETHANE	NJ
EPA TO-15 2nd Ed.	1,1-DICHLOROETHYLENE	NJ
EPA TO-15 2nd Ed.	1,2,4-TRIMETHYLBENZENE	NJ
EPA TO-15 2nd Ed.	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA TO-15 2nd Ed.	1,2-DICHLOROPROPANE	NJ
EPA TO-15 2nd Ed.	1,3-BUTADIENE	NJ
EPA TO-15 2nd Ed.	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA TO-15 2nd Ed.	2,2,4-TRIMETHYLPENTANE	NJ
EPA TO-15 2nd Ed.	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	NJ
EPA TO-15 2nd Ed.	ALLYL CHLORIDE (3-CHLOROPROPENE)	NJ
EPA TO-15 2nd Ed.	BENZYL CHLORIDE	NJ
EPA TO-15 2nd Ed.	BROMOFORM	NJ
EPA TO-15 2nd Ed.	CARBON TETRACHLORIDE	NJ
EPA TO-15 2nd Ed.	CHLORODIBROMOMETHANE	NJ
EPA TO-15 2nd Ed.	CHLOROFORM	NJ
EPA TO-15 2nd Ed.	CIS-1,3-DICHLOROPROPENE	NJ
EPA TO-15 2nd Ed.	DICHLORODIFLUOROMETHANE (FREON-12)	NJ
EPA TO-15 2nd Ed.	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA TO-15 2nd Ed.	ISOPROPYLBENZENE	NJ
EPA TO-15 2nd Ed.	METHANOL	NJ
EPA TO-15 2nd Ed.	METHYL CHLORIDE (CHLOROMETHANE)	NJ
EPA TO-15 2nd Ed.	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA TO-15 2nd Ed.	N-HEPTANE	NJ
EPA TO-15 2nd Ed.	O-XYLENE	NJ
EPA TO-15 2nd Ed.	STYRENE	NJ
EPA TO-15 2nd Ed.	TETRAHYDROFURAN (THF)	NJ
EPA TO-15 2nd Ed.	TRANS-1,2-DICHLOROETHENE	NJ
EPA TO-15 2nd Ed.	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ



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AIR

METHOD	ANALYTE	PRIMARY
EPA TO-15 2nd Ed.	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
EPA TO-15 2nd Ed.	VINYL BROMIDE (BROMOETHENE)	NJ
EPA TO-15 2nd Ed.	XYLENE (TOTAL)	NJ
EPA TO-15 2nd Ed. - EXTENDED	NAPHTHALENE	NJ
EPA TO-15 2nd Ed.	VINYL ACETATE	NJ
EPA TO-15 2nd Ed.	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA TO-15 2nd Ed. - EXTENDED	4-ETHYLTOLUENE	NJ

DRINKING WATER

METHOD	ANALYTE	PRIMARY
ASTM D5174-97	URANIUM	NJ
EPA 1622	CRYPTOSPORIDIUM	NJ
EPA 180.1 REV 2	TURBIDITY	NJ
EPA 200.7 REV 4.4	BARIUM	NJ
EPA 200.7 REV 4.4	CADMIUM	NJ
EPA 200.7 REV 4.4	CHROMIUM	NJ
EPA 200.7 REV 4.4	IRON	NJ
EPA 200.7 REV 4.4	MANGANESE	NJ
EPA 200.7 REV 4.4	SILVER	NJ
EPA 200.7 REV 4.4	ZINC	NJ
EPA 200.8 REV 5.4	ARSENIC	NJ
EPA 200.8 REV 5.4	BERYLLIUM	NJ
EPA 200.8 REV 5.4	CHROMIUM	NJ
EPA 200.8 REV 5.4	LEAD	NJ
EPA 200.8 REV 5.4	NICKEL	NJ
EPA 200.8 REV 5.4	SILVER	NJ
EPA 200.8 REV 5.4	ZINC	NJ
EPA 300.0 REV 2.1	BROMIDE	NJ
EPA 300.0 REV 2.1	FLUORIDE	NJ
EPA 300.0 REV 2.1	NITRITE AS N	NJ
EPA 335.4 REV 1.0	CYANIDE	NJ
EPA 353.2 REV 2	NITRITE AS N	NJ
EPA 504.1 REV 1.1	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 524.2 REV 4.1	1,1,2-TRICHLOROETHANE	NJ
EPA 524.2 REV 4.1	1,2,4-TRICHLOROBENZENE	NJ
EPA 524.2 REV 4.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
EPA 150.1	PH	NJ
EPA 1623	CRYPTOSPORIDIUM	NJ
EPA 200.7 REV 4.4	ALUMINUM	NJ
EPA 200.7 REV 4.4	BERYLLIUM	NJ
EPA 200.7 REV 4.4	CALCIUM	NJ
EPA 200.7 REV 4.4	COPPER	NJ
EPA 200.7 REV 4.4	MAGNESIUM	NJ
EPA 200.7 REV 4.4	NICKEL	NJ
EPA 200.7 REV 4.4	SODIUM	NJ
EPA 200.8 REV 5.4	ANTIMONY	NJ
EPA 200.8 REV 5.4	BARIUM	NJ
EPA 200.8 REV 5.4	CADMIUM	NJ
EPA 200.8 REV 5.4	COPPER	NJ
EPA 200.8 REV 5.4	MANGANESE	NJ
EPA 200.8 REV 5.4	SELENIUM	NJ
EPA 200.8 REV 5.4	THALLIUM	NJ
EPA 245.1 REV 3	MERCURY	NJ
EPA 300.0 REV 2.1	CHLORIDE	NJ
EPA 300.0 REV 2.1	NITRATE AS N	NJ
EPA 300.0 REV 2.1	SULFATE	NJ
EPA 353.2 REV 2	NITRATE AS N	NJ
EPA 504.1 REV 1.1	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 524.2 REV 4.1	1,1,1-TRICHLOROETHANE	NJ
EPA 524.2 REV 4.1	1,1-DICHLOROETHYLENE	NJ
EPA 524.2 REV 4.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 524.2 REV 4.1	1,2-DICHLOROPROPANE	NJ



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DRINKING WATER

METHOD	ANALYTE	PRIMARY
EPA 524.2 REV 4.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 524.2 REV 4.1	BROMODICHLOROMETHANE	NJ
EPA 524.2 REV 4.1	CARBON TETRACHLORIDE	NJ
EPA 524.2 REV 4.1	CHLORODIBROMOMETHANE	NJ
EPA 524.2 REV 4.1	CIS-1,2-DICHLOROETHYLENE	NJ
EPA 524.2 REV 4.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ
EPA 524.2 REV 4.1	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA 524.2 REV 4.1	TRANS-1,2-DICHLOROETHENE	NJ
EPA 524.2 REV 4.1	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA 552.2 REV 1	BROMOACETIC ACID	NJ
EPA 552.2 REV 1	DIBROMOACETIC ACID	NJ
EPA 552.2 REV 1	TRICHLOROACETIC ACID (TCAA)	NJ
EPA 900.0	GROSS BETA	NJ
EPA 904.0	RADIUM-228	NJ
SM 2120 B-2011	COLOR	NJ
SM 2150 B-2011	ODOR	NJ
SM 2510 B-2011	CONDUCTIVITY	NJ
SM 4110 B-2011	CHLORIDE	NJ
SM 4110 B-2011	NITRATE AS N	NJ
SM 4110 B-2011	SULFATE	NJ
SM 4500-CL G-2011	TOTAL RESIDUAL CHLORINE	NJ
SM 4500-CN^- G-2011	AMENABLE CYANIDE	NJ
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	NJ
SM 5310 C-2011	TOTAL ORGANIC CARBON (TOC)	NJ
SM 5910 B-2011	UV 254	NJ
SM 9223 COLILERT MPN	ESCHERICHIA COLI	NJ
SM 9223 COLILERT P/A	TOTAL COLIFORMS	NJ

METHOD	ANALYTE	PRIMARY
EPA 524.2 REV 4.1	BENZENE	NJ
EPA 524.2 REV 4.1	BROMOFORM	NJ
EPA 524.2 REV 4.1	CHLOROBENZENE	NJ
EPA 524.2 REV 4.1	CHLOROFORM	NJ
EPA 524.2 REV 4.1	ETHYLBENZENE	NJ
EPA 524.2 REV 4.1	STYRENE	NJ
EPA 524.2 REV 4.1	TOLUENE	NJ
EPA 524.2 REV 4.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
EPA 524.2 REV 4.1	XYLENE (TOTAL)	NJ
EPA 552.2 REV 1	CHLOROACETIC ACID	NJ
EPA 552.2 REV 1	DICHLOROACETIC ACID	NJ
EPA 900.0	GROSS ALPHA	NJ
EPA 901.1	GAMMA EMITTERS	NJ
EPA 905.0	STRONTIUM-90	NJ
SM 2130 B-2011	TURBIDITY	NJ
SM 2320 B-2011	ALKALINITY AS CACO3	NJ
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	NJ
SM 4110 B-2011	FLUORIDE	NJ
SM 4110 B-2011	NITRITE AS N	NJ
SM 4500-CL G-2011	RESIDUAL FREE CHLORINE	NJ
SM 4500-CN^- C-2011	PREP: CYANIDE DISTILLATION	NJ
SM 4500-H+ B-2011	PH	NJ
SM 5310 C-2011	DISSOLVED ORGANIC CARBON (DOC)	NJ
SM 5540 C-2011	SURFACTANTS - MBAS	NJ
SM 7500-RA B (GPC) -2011	RADIUM-226	NJ
SM 9223 COLILERT P/A	ESCHERICHIA COLI	NJ

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
ASTM D5174-97	URANIUM	NJ
EPA 1000 (FW CHRONIC 7D S, G)	PIMEPHALES PROMELAS	NJ
EPA 120.1	CONDUCTIVITY	NJ

METHOD	ANALYTE	PRIMARY
ASTM D7511-12	CYANIDE	NJ
EPA 1002 (FW CHRONIC 3-BROOD S, R)	CERIODAPHNIA DUBIA	NJ
EPA 130.1	TOTAL HARDNESS AS CACO3	NJ



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METHOD	ANALYTE	PRIMARY
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	NJ
EPA 160.4	RESIDUE-VOLATILE	NJ
EPA 1664 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	NJ
EPA 200.7 REV 4.4	ALUMINUM	NJ
EPA 200.7 REV 4.4	ARSENIC	NJ
EPA 200.7 REV 4.4	BERYLLIUM	NJ
EPA 200.7 REV 4.4	CADMIUM	NJ
EPA 200.7 REV 4.4	CHROMIUM	NJ
EPA 200.7 REV 4.4	COPPER	NJ
EPA 200.7 REV 4.4	LEAD	NJ
EPA 200.7 REV 4.4	MANGANESE	NJ
EPA 200.7 REV 4.4	NICKEL	NJ
EPA 200.7 REV 4.4	SELENIUM	NJ
EPA 200.7 REV 4.4	SODIUM	NJ
EPA 200.7 REV 4.4	TIN	NJ
EPA 200.7 REV 4.4	TOTAL HARDNESS AS CACO3	NJ
EPA 200.7 REV 4.4	ZINC	NJ
EPA 200.8 REV 5.4	ANTIMONY	NJ
EPA 200.8 REV 5.4	BARIUM	NJ
EPA 200.8 REV 5.4	CADMIUM	NJ
EPA 200.8 REV 5.4	COBALT	NJ
EPA 200.8 REV 5.4	LEAD	NJ
EPA 200.8 REV 5.4	MOLYBDENUM	NJ
EPA 200.8 REV 5.4	SELENIUM	NJ
EPA 200.8 REV 5.4	THALLIUM	NJ
EPA 200.8 REV 5.4	ZINC	NJ
EPA 200.8 REV 5.4 - EXTENDED	CALCIUM	NJ
EPA 200.8 REV 5.4 - EXTENDED	MAGNESIUM	NJ
EPA 200.8 REV 5.4 - EXTENDED	SODIUM	NJ
EPA 200.8 REV 5.4 - EXTENDED	TITANIUM	NJ
EPA 2000 (FW 48H NOAEC)	PIMEPHALES PROMELAS	NJ
EPA 2002 (FW 48H LC50)	CERIODAPHNIA DUBIA	NJ

METHOD	ANALYTE	PRIMARY
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	NJ
EPA 1664 A	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	NJ
EPA 180.1 REV 2	TURBIDITY	NJ
EPA 200.7 REV 4.4	ANTIMONY	NJ
EPA 200.7 REV 4.4	BARIUM	NJ
EPA 200.7 REV 4.4	BORON	NJ
EPA 200.7 REV 4.4	CALCIUM	NJ
EPA 200.7 REV 4.4	COBALT	NJ
EPA 200.7 REV 4.4	IRON	NJ
EPA 200.7 REV 4.4	MAGNESIUM	NJ
EPA 200.7 REV 4.4	MOLYBDENUM	NJ
EPA 200.7 REV 4.4	POTASSIUM	NJ
EPA 200.7 REV 4.4	SILVER	NJ
EPA 200.7 REV 4.4	THALLIUM	NJ
EPA 200.7 REV 4.4	TITANIUM	NJ
EPA 200.7 REV 4.4	VANADIUM	NJ
EPA 200.8 REV 5.4	ALUMINUM	NJ
EPA 200.8 REV 5.4	ARSENIC	NJ
EPA 200.8 REV 5.4	BERYLLIUM	NJ
EPA 200.8 REV 5.4	CHROMIUM	NJ
EPA 200.8 REV 5.4	COPPER	NJ
EPA 200.8 REV 5.4	MANGANESE	NJ
EPA 200.8 REV 5.4	NICKEL	NJ
EPA 200.8 REV 5.4	SILVER	NJ
EPA 200.8 REV 5.4	VANADIUM	NJ
EPA 200.8 REV 5.4 - EXTENDED	BORON	NJ
EPA 200.8 REV 5.4 - EXTENDED	IRON	NJ
EPA 200.8 REV 5.4 - EXTENDED	POTASSIUM	NJ
EPA 200.8 REV 5.4 - EXTENDED	TIN	NJ
EPA 2000 (FW 48H LC50)	PIMEPHALES PROMELAS	NJ
EPA 2000 (FW 96H LC50)	PIMEPHALES PROMELAS	NJ
EPA 2002 (FW 48H NOAEC)	CERIODAPHNIA DUBIA	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 2002 (FW 48H NONRENEWAL LC50)	CERIODAPHNIA DUBIA	NJ
EPA 245.1 REV 3	MERCURY	NJ
EPA 300.0 REV 2.1	CHLORIDE	NJ
EPA 300.0 REV 2.1	NITRATE AS N	NJ
EPA 300.0 REV 2.1	NITRITE AS N	NJ
EPA 3005	PREP: ACID DIGESTION OF WATERS FOR TOTAL RECOVERABLE OR DISSOLVED METALS	NJ
EPA 3010 A	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	NJ
EPA 335.4 REV 1.0	CYANIDE	NJ
EPA 351.2 REV 2	KJELDAHL NITROGEN - TOTAL (TKN)	NJ
EPA 3511	PREP: ORGANIC EXTRACTION AND SAMPLE PREPARATION	NJ
EPA 365.1 REV 2	PHOSPHORUS, TOTAL	NJ
EPA 410.4 REV 2	CHEMICAL OXYGEN DEMAND (COD)	NJ
EPA 5030	PREP: PURGE AND TRAP FOR AQUEOUS SAMPLES	NJ
EPA 6010 B	ANTIMONY	NJ
EPA 6010 B	BARIUM	NJ
EPA 6010 B	CADMIUM	NJ
EPA 6010 B	CHROMIUM	NJ
EPA 6010 B	COPPER	NJ
EPA 6010 B	LEAD	NJ
EPA 6010 B	MAGNESIUM	NJ
EPA 6010 B	MOLYBDENUM	NJ
EPA 6010 B	POTASSIUM	NJ
EPA 6010 B	SILVER	NJ
EPA 6010 B	STRONTIUM	NJ
EPA 6010 B	TIN	NJ
EPA 6010 B	VANADIUM	NJ
EPA 6010 C	ALUMINUM	NJ
EPA 6010 C	ARSENIC	NJ
EPA 6010 C	BERYLLIUM	NJ
EPA 6010 C	CADMIUM	NJ
EPA 6010 C	CHROMIUM	NJ
EPA 6010 C	COPPER	NJ
EPA 6010 C	LEAD	NJ

METHOD	ANALYTE	PRIMARY
EPA 2002 (FW 48H NONRENEWAL NOAEC)	CERIODAPHNIA DUBIA	NJ
EPA 300.0 REV 2.1	BROMIDE	NJ
EPA 300.0 REV 2.1	FLUORIDE	NJ
EPA 300.0 REV 2.1	NITRATE/NITRITE	NJ
EPA 300.0 REV 2.1	SULFATE	NJ
EPA 3010	PREP: ACID DIGESTION OF AQUEOUS SAMPLES AND EXTRACTS FOR TOTAL METALS	NJ
EPA 3015	PREP: MICROWAVE ASSISTED ACID DIGESTION AQUEOUS SAMPLES AND EXTRACTS	NJ
EPA 350.1 REV 2	AMMONIA AS N	NJ
EPA 3510 C	PREP: LIQUID-LIQUID EXTRACTION	NJ
EPA 353.2 REV 2	NITRATE/NITRITE	NJ
EPA 365.4	PHOSPHORUS, TOTAL	NJ
EPA 420.4 REV 1	TOTAL PHENOLICS	NJ
EPA 6010 B	ALUMINUM	NJ
EPA 6010 B	ARSENIC	NJ
EPA 6010 B	BERYLLIUM	NJ
EPA 6010 B	CALCIUM	NJ
EPA 6010 B	COBALT	NJ
EPA 6010 B	IRON	NJ
EPA 6010 B	LITHIUM	NJ
EPA 6010 B	MANGANESE	NJ
EPA 6010 B	NICKEL	NJ
EPA 6010 B	SELENIUM	NJ
EPA 6010 B	SODIUM	NJ
EPA 6010 B	THALLIUM	NJ
EPA 6010 B	TITANIUM	NJ
EPA 6010 B	ZINC	NJ
EPA 6010 C	ANTIMONY	NJ
EPA 6010 C	BARIUM	NJ
EPA 6010 C	BORON	NJ
EPA 6010 C	CALCIUM	NJ
EPA 6010 C	COBALT	NJ
EPA 6010 C	IRON	NJ
EPA 6010 C	LITHIUM	NJ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10302

Pace Analytical National Center for Testing & Innovation
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Virginia Laboratory ID: 460132
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 6010 C	MAGNESIUM	NJ
EPA 6010 C	MOLYBDENUM	NJ
EPA 6010 C	POTASSIUM	NJ
EPA 6010 C	SILVER	NJ
EPA 6010 C	STRONTIUM	NJ
EPA 6010 C	TIN	NJ
EPA 6010 C	VANADIUM	NJ
EPA 602	BENZENE	NJ
EPA 602	TOLUENE	NJ
EPA 6020	ALUMINUM	NJ
EPA 6020	ARSENIC	NJ
EPA 6020	BERYLLIUM	NJ
EPA 6020	CHROMIUM	NJ
EPA 6020	COPPER	NJ
EPA 6020	MANGANESE	NJ
EPA 6020	SILVER	NJ
EPA 6020	ZINC	NJ
EPA 6020 - EXTENDED	CALCIUM	NJ
EPA 6020 - EXTENDED	MAGNESIUM	NJ
EPA 6020 - EXTENDED	POTASSIUM	NJ
EPA 6020 - EXTENDED	SODIUM	NJ
EPA 6020 - EXTENDED	THORIUM	NJ
EPA 6020 - EXTENDED	TITANIUM	NJ
EPA 6020 - EXTENDED	VANADIUM	NJ
EPA 6020 A	ANTIMONY	NJ
EPA 6020 A	BARIUM	NJ
EPA 6020 A	CADMIUM	NJ
EPA 6020 A	CHROMIUM	NJ
EPA 6020 A	COPPER	NJ
EPA 6020 A	LEAD	NJ
EPA 6020 A	MANGANESE	NJ
EPA 6020 A	POTASSIUM	NJ
EPA 6020 A	SILVER	NJ
EPA 6020 A	THALLIUM	NJ
EPA 6020 A	ZINC	NJ
EPA 6020 A - EXTENDED	MOLYBDENUM	NJ
EPA 6020 A - EXTENDED	THORIUM	NJ
EPA 6020 A - EXTENDED	TITANIUM	NJ
EPA 6010 C	MANGANESE	NJ
EPA 6010 C	NICKEL	NJ
EPA 6010 C	SELENIUM	NJ
EPA 6010 C	SODIUM	NJ
EPA 6010 C	THALLIUM	NJ
EPA 6010 C	TITANIUM	NJ
EPA 6010 C	ZINC	NJ
EPA 602	ETHYLBENZENE	NJ
EPA 602	XYLENE (TOTAL)	NJ
EPA 6020	ANTIMONY	NJ
EPA 6020	BARIUM	NJ
EPA 6020	CADMIUM	NJ
EPA 6020	COBALT	NJ
EPA 6020	LEAD	NJ
EPA 6020	NICKEL	NJ
EPA 6020	THALLIUM	NJ
EPA 6020 - EXTENDED	BORON	NJ
EPA 6020 - EXTENDED	IRON	NJ
EPA 6020 - EXTENDED	MOLYBDENUM	NJ
EPA 6020 - EXTENDED	SELENIUM	NJ
EPA 6020 - EXTENDED	STRONTIUM	NJ
EPA 6020 - EXTENDED	TIN	NJ
EPA 6020 - EXTENDED	URANIUM	NJ
EPA 6020 A	ALUMINUM	NJ
EPA 6020 A	ARSENIC	NJ
EPA 6020 A	BERYLLIUM	NJ
EPA 6020 A	CALCIUM	NJ
EPA 6020 A	COBALT	NJ
EPA 6020 A	IRON	NJ
EPA 6020 A	MAGNESIUM	NJ
EPA 6020 A	NICKEL	NJ
EPA 6020 A	SELENIUM	NJ
EPA 6020 A	SODIUM	NJ
EPA 6020 A	VANADIUM	NJ
EPA 6020 A - EXTENDED	BORON	NJ
EPA 6020 A - EXTENDED	STRONTIUM	NJ
EPA 6020 A - EXTENDED	TIN	NJ
EPA 6020 A - EXTENDED	URANIUM	NJ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10302

Pace Analytical National Center for Testing & Innovation
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Virginia Laboratory ID: 460132
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Expiration Date: June 14, 2020

NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 608.3	4,4'-DDD	NJ	EPA 608.3	4,4'-DDE	NJ
EPA 608.3	4,4'-DDT	NJ	EPA 608.3	ALDRIN	NJ
EPA 608.3	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	NJ	EPA 608.3	AROCLOR-1016 (PCB-1016)	NJ
EPA 608.3	AROCLOR-1221 (PCB-1221)	NJ	EPA 608.3	AROCLOR-1232 (PCB-1232)	NJ
EPA 608.3	AROCLOR-1242 (PCB-1242)	NJ	EPA 608.3	AROCLOR-1248 (PCB-1248)	NJ
EPA 608.3	AROCLOR-1254 (PCB-1254)	NJ	EPA 608.3	AROCLOR-1260 (PCB-1260)	NJ
EPA 608.3	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	NJ	EPA 608.3	CHLORDANE, TOTAL	NJ
EPA 608.3	DELTA-BHC	NJ	EPA 608.3	DIELDRIN	NJ
EPA 608.3	ENDOSULFAN I	NJ	EPA 608.3	ENDOSULFAN II	NJ
EPA 608.3	ENDOSULFAN SULFATE	NJ	EPA 608.3	ENDRIN	NJ
EPA 608.3	ENDRIN ALDEHYDE	NJ	EPA 608.3	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 608.3	HEPTACHLOR	NJ	EPA 608.3	HEPTACHLOR EPOXIDE	NJ
EPA 608.3	TOXAPHENE (CHLORINATED CAMPHENE)	NJ	EPA 610 (HPLC)	ACENAPHTHENE	NJ
EPA 610 (HPLC)	ACENAPHTHYLENE	NJ	EPA 610 (HPLC)	ANTHRACENE	NJ
EPA 610 (HPLC)	BENZO(A)ANTHRACENE	NJ	EPA 610 (HPLC)	BENZO(A)PYRENE	NJ
EPA 610 (HPLC)	BENZO(B)FLUORANTHENE	NJ	EPA 610 (HPLC)	BENZO(G,H,I)PERYLENE	NJ
EPA 610 (HPLC)	BENZO(K)FLUORANTHENE	NJ	EPA 610 (HPLC)	CHRYSENE	NJ
EPA 610 (HPLC)	DIBENZO(A,H) ANTHRACENE	NJ	EPA 610 (HPLC)	FLUORANTHENE	NJ
EPA 610 (HPLC)	FLUORENE	NJ	EPA 610 (HPLC)	INDENO(1,2,3-CD) PYRENE	NJ
EPA 610 (HPLC)	NAPHTHALENE	NJ	EPA 610 (HPLC)	PHENANTHRENE	NJ
EPA 610 (HPLC)	PYRENE	NJ	EPA 624.1	1,1,1-TRICHLOROETHANE	NJ
EPA 624.1	1,1,2,2-TETRACHLOROETHANE	NJ	EPA 624.1	1,1,2-TRICHLOROETHANE	NJ
EPA 624.1	1,1-DICHLOROETHANE	NJ	EPA 624.1	1,1-DICHLOROETHYLENE	NJ
EPA 624.1	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ	EPA 624.1	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
EPA 624.1	1,2-DICHLOROPROPANE	NJ	EPA 624.1	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 624.1	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ	EPA 624.1	2-BUTANONE (METHYL ETHYL KETONE, MEK)	NJ
EPA 624.1	2-CHLOROETHYL VINYL ETHER	NJ	EPA 624.1	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	NJ
EPA 624.1	ACETONE	NJ	EPA 624.1	ACROLEIN (PROPENAL)	NJ
EPA 624.1	ACRYLONITRILE	NJ	EPA 624.1	BENZENE	NJ
EPA 624.1	BROMODICHLOROMETHANE	NJ	EPA 624.1	BROMOFORM	NJ
EPA 624.1	CARBON TETRACHLORIDE	NJ	EPA 624.1	CHLOROBENZENE	NJ
EPA 624.1	CHLORODIBROMOMETHANE	NJ			



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



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VELAP Certificate No.: 10302

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Virginia Laboratory ID: 460132
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Expiration Date: June 14, 2020

NON-POTABLE WATER

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EPA 624.1	CHLOROETHANE (ETHYL CHLORIDE)	NJ
EPA 624.1	CIS-1,3-DICHLOROPROPENE	NJ
EPA 624.1	ETHYLBENZENE	NJ
EPA 624.1	METHYL BROMIDE (BROMOMETHANE)	NJ
EPA 624.1	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 624.1	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA 624.1	TRANS-1,2-DICHLOROETHENE	NJ
EPA 624.1	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
EPA 624.1	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA 624.1 EXTENDED	N-HEXANE	NJ
EPA 625.1	1,2-DIPHENYLHYDRAZINE	NJ
EPA 625.1	2,3-DICHLOROANILINE	NJ
EPA 625.1	2,4-DICHLOROPHENOL	NJ
EPA 625.1	2,4-DINITROPHENOL	NJ
EPA 625.1	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 625.1	2-CHLOROPHENOL	NJ
EPA 625.1	2-METHYLPHENOL (O-CRESOL)	NJ
EPA 625.1	3,3'-DICHLOROBENZIDINE	NJ
EPA 625.1	4-CHLORO-3-METHYLPHENOL	NJ
EPA 625.1	4-NITROPHENOL	NJ
EPA 625.1	ACENAPHTHYLENE	NJ
EPA 625.1	ALPHA-TERPINEOL	NJ
EPA 625.1	ANTHRACENE	NJ
EPA 625.1	BENZO(A)ANTHRACENE	NJ
EPA 625.1	BENZO(B)FLUORANTHENE	NJ
EPA 625.1	BENZO(K)FLUORANTHENE	NJ
EPA 625.1	BIS(2-CHLOROETHOXY)METHANE	NJ
EPA 625.1	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	NJ
EPA 625.1	CARBAZOLE	NJ
EPA 625.1	DI-N-BUTYL PHTHALATE	NJ
EPA 625.1	DIBENZO(A,H) ANTHRACENE	NJ

METHOD	ANALYTE	PRIMARY
EPA 624.1	CHLOROFORM	NJ
EPA 624.1	ETHYL ACETATE	NJ
EPA 624.1	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	NJ
EPA 624.1	METHYL CHLORIDE (CHLOROMETHANE)	NJ
EPA 624.1	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ
EPA 624.1	TOLUENE	NJ
EPA 624.1	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
EPA 624.1	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
EPA 624.1	XYLENE (TOTAL)	NJ
EPA 625.1	1,2,4-TRICHLOROBENZENE	NJ
EPA 625.1	2,2'-OXYBIS(1-CHLOROPROPANE)	NJ
EPA 625.1	2,4,6-TRICHLOROPHENOL	NJ
EPA 625.1	2,4-DIMETHYLPHENOL	NJ
EPA 625.1	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 625.1	2-CHLORONAPHTHALENE	NJ
EPA 625.1	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	NJ
EPA 625.1	2-NITROPHENOL	NJ
EPA 625.1	4-BROMOPHENYL PHENYL ETHER (BDE-3)	NJ
EPA 625.1	4-CHLOROPHENYL PHENYLETHER	NJ
EPA 625.1	ACENAPHTHENE	NJ
EPA 625.1	ACETOPHENONE	NJ
EPA 625.1	ANILINE	NJ
EPA 625.1	BENZIDINE	NJ
EPA 625.1	BENZO(A)PYRENE	NJ
EPA 625.1	BENZO(G,H,I)PERYLENE	NJ
EPA 625.1	BENZOIC ACID	NJ
EPA 625.1	BIS(2-CHLOROETHYL) ETHER	NJ
EPA 625.1	BUTYL BENZYL PHTHALATE	NJ
EPA 625.1	CHRYSENE	NJ
EPA 625.1	DI-N-OCTYL PHTHALATE	NJ
EPA 625.1	DIETHYL PHTHALATE	NJ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

VELAP Certificate No.: 10302

Pace Analytical National Center for Testing & Innovation
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Virginia Laboratory ID: 460132
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Expiration Date: June 14, 2020

NON-POTABLE WATER

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EPA 625.1	DIMETHYL PHTHALATE	NJ
EPA 625.1	FLUORENE	NJ
EPA 625.1	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 625.1	HEXACHLOROETHANE	NJ
EPA 625.1	ISOPHORONE	NJ
EPA 625.1	N-NITROSODIMETHYLAMINE	NJ
EPA 625.1	NAPHTHALENE	NJ
EPA 625.1	PENTACHLOROPHENOL	NJ
EPA 625.1	PHENOL	NJ
EPA 625.1	PYRIDINE	NJ
EPA 625.1 EXTENDED	N-OCTADECANE	NJ
EPA 7199	CHROMIUM VI	NJ
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	NJ
EPA 8015 B	ETHYLENE GLYCOL	NJ
EPA 8015 B	METHANOL	NJ
EPA 8015 C	ETHYLENE GLYCOL	NJ
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	NJ
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	NJ
EPA 8015 D - EXTENDED	ETHYLENE GLYCOL	NJ
EPA 8021 B	ETHYLBENZENE	NJ
EPA 8021 B	O-XYLENE	NJ
EPA 8021 B	XYLENE (TOTAL)	NJ
EPA 8081 A	4,4'-DDD	NJ
EPA 8081 A	4,4'-DDT	NJ
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 A	DELTA-BHC	NJ
EPA 8081 A	ENDOSULFAN I	NJ
EPA 8081 A	ENDOSULFAN SULFATE	NJ
EPA 8081 A	ENDRIN ALDEHYDE	NJ
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 625.1	FLUORANTHENE	NJ
EPA 625.1	HEXACHLOROBENZENE	NJ
EPA 625.1	HEXACHLOROCYCLOPENTADIENE	NJ
EPA 625.1	INDENO(1,2,3-CD) PYRENE	NJ
EPA 625.1	N-NITROSODI-N-PROPYLAMINE	NJ
EPA 625.1	N-NITROSODIPHENYLAMINE	NJ
EPA 625.1	NITROBENZENE	NJ
EPA 625.1	PHENANTHRENE	NJ
EPA 625.1	PYRENE	NJ
EPA 625.1 EXTENDED	4-METHYLPHENOL (P-CRESOL)	NJ
EPA 7196 A	CHROMIUM VI	NJ
EPA 7470 A	MERCURY	NJ
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 8015 B	ETHANOL	NJ
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	NJ
EPA 8015 B - EXTENDED	PROPYLENE GLYCOL	NJ
EPA 8015 C - EXTENDED	PROPYLENE GLYCOL	NJ
EPA 8015 D	ETHANOL	NJ
EPA 8015 D	METHANOL	NJ
EPA 8021 B	BENZENE	NJ
EPA 8021 B	M+P-XYLENE	NJ
EPA 8021 B	TOLUENE	NJ
EPA 8021 B - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 8081 A	4,4'-DDE	NJ
EPA 8081 A	ALDRIN	NJ
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	NJ
EPA 8081 A	CHLORDANE, TOTAL	NJ
EPA 8081 A	DIELDRIN	NJ
EPA 8081 A	ENDOSULFAN II	NJ
EPA 8081 A	ENDRIN	NJ
EPA 8081 A	ENDRIN KETONE	NJ
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	NJ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



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Virginia Laboratory ID: 460132
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8081 A	HEPTACHLOR	NJ
EPA 8081 A	HEXACHLOROBENZENE	NJ
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	NJ
EPA 8081 B	4,4'-DDE	NJ
EPA 8081 B	ALDRIN	NJ
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	NJ
EPA 8081 B	CHLORDANE, TOTAL	NJ
EPA 8081 B	DIELDRIN	NJ
EPA 8081 B	ENDOSULFAN II	NJ
EPA 8081 B	ENDRIN	NJ
EPA 8081 B	ENDRIN KETONE	NJ
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	NJ
EPA 8081 B	HEPTACHLOR EPOXIDE	NJ
EPA 8081 B	METHOXYCHLOR	NJ
EPA 8082	AROCLOR-1016 (PCB-1016)	NJ
EPA 8082	AROCLOR-1232 (PCB-1232)	NJ
EPA 8082	AROCLOR-1248 (PCB-1248)	NJ
EPA 8082	AROCLOR-1260 (PCB-1260)	NJ
EPA 8082 A	AROCLOR-1221 (PCB-1221)	NJ
EPA 8082 A	AROCLOR-1242 (PCB-1242)	NJ
EPA 8082 A	AROCLOR-1254 (PCB-1254)	NJ
EPA 8141 A	AZINPHOS-METHYL (GUTHION)	NJ
EPA 8141 A	CHLORPYRIFOS	NJ
EPA 8141 A	DEMETON-O	NJ
EPA 8141 A	DIAZINON	NJ
EPA 8141 A	DIMETHOATE	NJ
EPA 8141 A	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	NJ
EPA 8141 A	FENSULFOTHION	NJ
EPA 8141 A	MALATHION	NJ
EPA 8141 A	METHYL PARATHION (PARATHION, METHYL)	NJ

METHOD	ANALYTE	PRIMARY
EPA 8081 A	HEPTACHLOR EPOXIDE	NJ
EPA 8081 A	METHOXYCHLOR	NJ
EPA 8081 B	4,4'-DDD	NJ
EPA 8081 B	4,4'-DDT	NJ
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 B	DELTA-BHC	NJ
EPA 8081 B	ENDOSULFAN I	NJ
EPA 8081 B	ENDOSULFAN SULFATE	NJ
EPA 8081 B	ENDRIN ALDEHYDE	NJ
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 B	HEPTACHLOR	NJ
EPA 8081 B	HEXACHLOROBENZENE	NJ
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	NJ
EPA 8082	AROCLOR-1221 (PCB-1221)	NJ
EPA 8082	AROCLOR-1242 (PCB-1242)	NJ
EPA 8082	AROCLOR-1254 (PCB-1254)	NJ
EPA 8082 A	AROCLOR-1016 (PCB-1016)	NJ
EPA 8082 A	AROCLOR-1232 (PCB-1232)	NJ
EPA 8082 A	AROCLOR-1248 (PCB-1248)	NJ
EPA 8082 A	AROCLOR-1260 (PCB-1260)	NJ
EPA 8141 A	BOLSTAR (SULPROFOS)	NJ
EPA 8141 A	COUMAPHOS	NJ
EPA 8141 A	DEMETON-S	NJ
EPA 8141 A	DICHLOROVOS (DDVP, DICHLORVOS)	NJ
EPA 8141 A	DISULFOTON	NJ
EPA 8141 A	ETHOPROP	NJ
EPA 8141 A	FENTHION	NJ
EPA 8141 A	MERPHOS	NJ
EPA 8141 A	MEVINPHOS	NJ



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NON-POTABLE WATER

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EPA 8141 A	NALED	NJ
EPA 8141 A	PHORATE	NJ
EPA 8141 A	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8141 A	TETRAETHYL PYROPHOSPHATE (TEPP)	NJ
EPA 8141 A	TRICHLORONATE	NJ
EPA 8141 B	BOLSTAR (SULPROFOS)	NJ
EPA 8141 B	COUMAPHOS	NJ
EPA 8141 B	DEMETON-S	NJ
EPA 8141 B	DICHLOROVOS (DDVP, DICHLORVOS)	NJ
EPA 8141 B	DISULFOTON	NJ
EPA 8141 B	ETHOPROP	NJ
EPA 8141 B	FENTHION	NJ
EPA 8141 B	MERPHOS	NJ
EPA 8141 B	MEVINPHOS	NJ
EPA 8141 B	PARATHION (PARATHION - ETHYL)	NJ
EPA 8141 B	RONNEL	NJ
EPA 8141 B	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	NJ
EPA 8141 B	TOKUTHION (PROTHIOPHOS)	NJ
EPA 8151 A	2,4,5-T	NJ
EPA 8151 A	2,4-DB	NJ
EPA 8151 A	DICAMBA	NJ
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	NJ
EPA 8151 A	MCPP	NJ
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	NJ
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	NJ
EPA 8260 B	1,1-DICHLOROETHANE	NJ
EPA 8260 B	1,1-DICHLOROPROPENE	NJ
EPA 8260 B	1,2,3-TRICHLOROPROPANE	NJ
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	NJ
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ

METHOD	ANALYTE	PRIMARY
EPA 8141 A	PARATHION (PARATHION - ETHYL)	NJ
EPA 8141 A	RONNEL	NJ
EPA 8141 A	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	NJ
EPA 8141 A	TOKUTHION (PROTHIOPHOS)	NJ
EPA 8141 B	AZINPHOS-METHYL (GUTHION)	NJ
EPA 8141 B	CHLORPYRIFOS	NJ
EPA 8141 B	DEMETON-O	NJ
EPA 8141 B	DIAZINON	NJ
EPA 8141 B	DIMETHOATE	NJ
EPA 8141 B	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	NJ
EPA 8141 B	FENSULFOTHION	NJ
EPA 8141 B	MALATHION	NJ
EPA 8141 B	METHYL PARATHION (PARATHION, METHYL)	NJ
EPA 8141 B	NALED	NJ
EPA 8141 B	PHORATE	NJ
EPA 8141 B	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8141 B	TETRAETHYL PYROPHOSPHATE (TEPP)	NJ
EPA 8141 B	TRICHLORONATE	NJ
EPA 8151 A	2,4-D	NJ
EPA 8151 A	DALAPON	NJ
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	NJ
EPA 8151 A	MCPA	NJ
EPA 8151 A	SILVEX (2,4,5-TP)	NJ
EPA 8260 B	1,1,1-TRICHLOROETHANE	NJ
EPA 8260 B	1,1,2-TRICHLOROETHANE	NJ
EPA 8260 B	1,1-DICHLOROETHYLENE	NJ
EPA 8260 B	1,2,3-TRICHLOROBENZENE	NJ
EPA 8260 B	1,2,4-TRICHLOROBENZENE	NJ
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8260 B	1,2-DICHLOROPROPANE	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	NJ
EPA 8260 B	1,3-DICHLOROPROPANE	NJ
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	NJ
EPA 8260 B	2,2-DICHLOROPROPANE	NJ
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	NJ
EPA 8260 B	2-HEXANONE	NJ
EPA 8260 B	4-CHLOROTOLUENE	NJ
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	NJ
EPA 8260 B	ACETONITRILE	NJ
EPA 8260 B	ACRYLONITRILE	NJ
EPA 8260 B	BENZENE	NJ
EPA 8260 B	BROMOCHLOROMETHANE	NJ
EPA 8260 B	BROMOFORM	NJ
EPA 8260 B	CARBON TETRACHLORIDE	NJ
EPA 8260 B	CHLORODIBROMOMETHANE	NJ
EPA 8260 B	CHLOROFORM	NJ
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	NJ
EPA 8260 B	CIS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	NJ
EPA 8260 B	ETHANOL	NJ
EPA 8260 B	ETHYL METHACRYLATE	NJ
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	NJ
EPA 8260 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	NJ
EPA 8260 B	M+P-XYLENE	NJ
EPA 8260 B	METHYL ACRYLATE	NJ
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	NJ
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 8260 B	N-BUTYLBENZENE	NJ
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	NJ
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	NJ
EPA 8260 B	2-CHLOROTOLUENE	NJ
EPA 8260 B	2-NITROPROPANE	NJ
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	NJ
EPA 8260 B	ACETONE	NJ
EPA 8260 B	ACROLEIN (PROPENAL)	NJ
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	NJ
EPA 8260 B	BROMOBENZENE	NJ
EPA 8260 B	BROMODICHLOROMETHANE	NJ
EPA 8260 B	CARBON DISULFIDE	NJ
EPA 8260 B	CHLOROBENZENE	NJ
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	NJ
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	NJ
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	NJ
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	NJ
EPA 8260 B	DIETHYL ETHER	NJ
EPA 8260 B	ETHYL ACETATE	NJ
EPA 8260 B	ETHYLBENZENE	NJ
EPA 8260 B	HEXACHLOROETHANE	NJ
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	NJ
EPA 8260 B	ISOPROPYLBENZENE	NJ
EPA 8260 B	METHACRYLONITRILE	NJ
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	NJ
EPA 8260 B	METHYL METHACRYLATE	NJ
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 B	N-NITROSO-DI-N-BUTYLAMINE	NJ
EPA 8260 B	NAPHTHALENE	NJ
EPA 8260 B	PENTACHLOROETHANE	NJ
EPA 8260 B	SEC-BUTYLBENZENE	NJ
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	NJ
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	NJ
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	NJ
EPA 8260 B - EXTENDED	2-METHYLNAPHTHALENE	NJ
EPA 8260 B - EXTENDED	CYCLOHEXANE	NJ
EPA 8260 B - EXTENDED	DIISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	NJ
EPA 8260 B - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	NJ
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	NJ
EPA 8260 B - EXTENDED	N-OCTANE	NJ
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	NJ
EPA 8260 B - EXTENDED	TETRAHYDROFURAN (THF)	NJ
EPA 8260 C	1,1,1-TRICHLOROETHANE	NJ
EPA 8260 C	1,1,2-TRICHLOROETHANE	NJ
EPA 8260 C	1,1-DICHLOROETHYLENE	NJ
EPA 8260 C	1,2,3-TRICHLOROBENZENE	NJ
EPA 8260 C	1,2,4-TRICHLOROBENZENE	NJ
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8260 C	1,2-DICHLOROPROPANE	NJ
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8260 B	N-PROPYLBENZENE	NJ
EPA 8260 B	O-XYLENE	NJ
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	NJ
EPA 8260 B	STYRENE	NJ
EPA 8260 B	TERT-BUTYLBENZENE	NJ
EPA 8260 B	TOLUENE	NJ
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
EPA 8260 B	VINYL ACETATE	NJ
EPA 8260 B	XYLENE (TOTAL)	NJ
EPA 8260 B - EXTENDED	1,2,3-TRIMETHYLBENZENE	NJ
EPA 8260 B - EXTENDED	3,3-DIMETHYL-1-BUTANOL	NJ
EPA 8260 B - EXTENDED	CYCLOHEXANONE	NJ
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	NJ
EPA 8260 B - EXTENDED	METHYL ACETATE	NJ
EPA 8260 B - EXTENDED	N-HEXANE	NJ
EPA 8260 B - EXTENDED	T-AMYL ALCOHOL (TAA)	NJ
EPA 8260 B - EXTENDED	TERT-BUTYL FORMATE	NJ
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	NJ
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	NJ
EPA 8260 C	1,1-DICHLOROETHANE	NJ
EPA 8260 C	1,1-DICHLOROPROPENE	NJ
EPA 8260 C	1,2,3-TRICHLOROPROPANE	NJ
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	NJ
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	NJ
EPA 8260 C	1,3-DICHLOROPROPANE	NJ
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	NJ
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	NJ
EPA 8260 C	2-CHLOROTOLUENE	NJ
EPA 8260 C	2-NITROPROPANE	NJ
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	NJ
EPA 8260 C	ACETONE	NJ
EPA 8260 C	ACROLEIN (PROPENAL)	NJ
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	NJ
EPA 8260 C	BROMOBENZENE	NJ
EPA 8260 C	BROMODICHLOROMETHANE	NJ
EPA 8260 C	CARBON DISULFIDE	NJ
EPA 8260 C	CHLOROBENZENE	NJ
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	NJ
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	NJ
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	NJ
EPA 8260 C	CYCLOHEXANE	NJ
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	NJ
EPA 8260 C	ETHANOL	NJ
EPA 8260 C	ETHYL METHACRYLATE	NJ
EPA 8260 C	ETHYLBENZENE	NJ
EPA 8260 C	HEXACHLOROETHANE	NJ
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	NJ
EPA 8260 C	ISOPROPYLBENZENE	NJ
EPA 8260 C	METHACRYLONITRILE	NJ
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	NJ
EPA 8260 C	METHYL METHACRYLATE	NJ
EPA 8260 C	METHYLCYCLOHEXANE	NJ
EPA 8260 C	N-BUTYLBENZENE	NJ
EPA 8260 C	NAPHTHALENE	NJ
EPA 8260 C	2,2-DICHLOROPROPANE	NJ
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	NJ
EPA 8260 C	2-HEXANONE	NJ
EPA 8260 C	4-CHLOROTOLUENE	NJ
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	NJ
EPA 8260 C	ACETONITRILE	NJ
EPA 8260 C	ACRYLONITRILE	NJ
EPA 8260 C	BENZENE	NJ
EPA 8260 C	BROMOCHLOROMETHANE	NJ
EPA 8260 C	BROMOFORM	NJ
EPA 8260 C	CARBON TETRACHLORIDE	NJ
EPA 8260 C	CHLORODIBROMOMETHANE	NJ
EPA 8260 C	CHLOROFORM	NJ
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	NJ
EPA 8260 C	CIS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	NJ
EPA 8260 C	DIETHYL ETHER	NJ
EPA 8260 C	ETHYL ACETATE	NJ
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	NJ
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	NJ
EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	NJ
EPA 8260 C	M+P-XYLENE	NJ
EPA 8260 C	METHYL ACRYLATE	NJ
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	NJ
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ
EPA 8260 C	N-PROPYLBENZENE	NJ
EPA 8260 C	O-XYLENE	NJ



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NON-POTABLE WATER

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EPA 8260 C	PENTACHLOROETHANE	NJ
EPA 8260 C	SEC-BUTYLBENZENE	NJ
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	NJ
EPA 8260 C	TERT-BUTYLBENZENE	NJ
EPA 8260 C	TOLUENE	NJ
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
EPA 8260 C	VINYL ACETATE	NJ
EPA 8260 C	XYLENE (TOTAL)	NJ
EPA 8260 C - EXTENDED	2-METHYLNAPHTHALENE	NJ
EPA 8260 C - EXTENDED	N-OCTANE	NJ
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	NJ
EPA 8270 C	1,2,4-TRICHLOROBENZENE	NJ
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	NJ
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8270 C	1,4-PHENYLENEDIAMINE	NJ
EPA 8270 C	1-NAPHTHYLAMINE	NJ
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	NJ
EPA 8270 C	2,4,6-TRICHLOROPHENOL	NJ
EPA 8270 C	2,4-DIMETHYLPHENOL	NJ
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8270 C	2-CHLORONAPHTHALENE	NJ
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	NJ
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	NJ
EPA 8270 C	2-NITROANILINE	NJ
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	NJ
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	NJ
EPA 8270 C	3-NITROANILINE	NJ
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	NJ
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	NJ
EPA 8260 C	STYRENE	NJ
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	NJ
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	NJ
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	NJ
EPA 8260 C - EXTENDED	METHYL ACETATE	NJ
EPA 8260 C - EXTENDED	T-AMYL ALCOHOL (TAA)	NJ
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	NJ
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8270 C	1,4-NAPHTHOQUINONE	NJ
EPA 8270 C	1-CHLORONAPHTHALENE	NJ
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	NJ
EPA 8270 C	2,4,5-TRICHLOROPHENOL	NJ
EPA 8270 C	2,4-DICHLOROPHENOL	NJ
EPA 8270 C	2,4-DINITROPHENOL	NJ
EPA 8270 C	2,6-DICHLOROPHENOL	NJ
EPA 8270 C	2-ACETYLAMINOFLUORENE	NJ
EPA 8270 C	2-CHLOROPHENOL	NJ
EPA 8270 C	2-METHYLNAPHTHALENE	NJ
EPA 8270 C	2-NAPHTHYLAMINE	NJ
EPA 8270 C	2-NITROPHENOL	NJ
EPA 8270 C	3,3'-DICHLOROBENZIDINE	NJ
EPA 8270 C	3-METHYLCHOLANTHRENE	NJ
EPA 8270 C	4-AMINOBIPHENYL	NJ
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C	4-CHLOROANILINE	NJ
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	NJ
EPA 8270 C	4-NITROANILINE	NJ
EPA 8270 C	5-NITRO-O-TOLUIDINE	NJ
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	NJ
EPA 8270 C	ACENAPHTHYLENE	NJ
EPA 8270 C	ANILINE	NJ
EPA 8270 C	ARAMITE	NJ
EPA 8270 C	BENZO(A)ANTHRACENE	NJ
EPA 8270 C	BENZO(B)FLUORANTHENE	NJ
EPA 8270 C	BENZO(K)FLUORANTHENE	NJ
EPA 8270 C	BENZYL ALCOHOL	NJ
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	NJ
EPA 8270 C	BUTYL BENZYL PHTHALATE	NJ
EPA 8270 C	CHRYSENE	NJ
EPA 8270 C	DI-N-OCTYL PHTHALATE	NJ
EPA 8270 C	DIBENZ(A, J) ACRIDINE	NJ
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8270 C	DIETHYL PHTHALATE	NJ
EPA 8270 C	DIMETHYL PHTHALATE	NJ
EPA 8270 C	DIPHENYLAMINE	NJ
EPA 8270 C	ETHYL METHANESULFONATE	NJ
EPA 8270 C	FLUORANTHENE	NJ
EPA 8270 C	HEXACHLOROBENZENE	NJ
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	NJ
EPA 8270 C	HEXACHLOROPHENE	NJ
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8270 C	ISOPHORONE	NJ
EPA 8270 C	KEPONE	NJ
EPA 8270 C	METHYL METHANESULFONATE	NJ
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	NJ
EPA 8270 C	N-NITROSODIETHYLAMINE	NJ
EPA 8270 C	N-NITROSODIPHENYLAMINE	NJ
EPA 8270 C	N-NITROSOMORPHOLINE	NJ
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	NJ
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	NJ
EPA 8270 C	4-NITROPHENOL	NJ
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	NJ
EPA 8270 C	ACENAPHTHENE	NJ
EPA 8270 C	ACETOPHENONE	NJ
EPA 8270 C	ANTHRACENE	NJ
EPA 8270 C	BENZIDINE	NJ
EPA 8270 C	BENZO(A)PYRENE	NJ
EPA 8270 C	BENZO(G,H,I)PERYLENE	NJ
EPA 8270 C	BENZOIC ACID	NJ
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	NJ
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	NJ
EPA 8270 C	CHLOROBENZILATE	NJ
EPA 8270 C	DI-N-BUTYL PHTHALATE	NJ
EPA 8270 C	DIALLATE	NJ
EPA 8270 C	DIBENZO(A,E) PYRENE	NJ
EPA 8270 C	DIBENZOFURAN	NJ
EPA 8270 C	DIMETHOATE	NJ
EPA 8270 C	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	NJ
EPA 8270 C	DISULFOTON	NJ
EPA 8270 C	FAMPHUR	NJ
EPA 8270 C	FLUORENE	NJ
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8270 C	HEXACHLOROETHANE	NJ
EPA 8270 C	HEXACHLOROPROPENE	NJ
EPA 8270 C	ISODRIN	NJ
EPA 8270 C	ISOSAFROLE	NJ
EPA 8270 C	METHAPYRILENE	NJ
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	NJ
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	NJ
EPA 8270 C	N-NITROSODIMETHYLAMINE	NJ
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	NJ
EPA 8270 C	N-NITROSOPIPERIDINE	NJ

Scope of Accreditation

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Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road
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Virginia Laboratory ID: 460132
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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 C	N-NITROSOPYRROLIDINE	NJ
EPA 8270 C	NITROBENZENE	NJ
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	NJ
EPA 8270 C	PENTACHLOROBENZENE	NJ
EPA 8270 C	PENTACHLOROPHENOL	NJ
EPA 8270 C	PHENANTHRENE	NJ
EPA 8270 C	PHORATE	NJ
EPA 8270 C	PYRENE	NJ
EPA 8270 C	SAFROLE	NJ
EPA 8270 C	THIONAZIN (ZINOPHOS)	NJ
EPA 8270 C - EXTENDED	1-METHYLNAPHTHALENE	NJ
EPA 8270 C - EXTENDED	BENZALDEHYDE	NJ
EPA 8270 C - EXTENDED	CARBAZOLE	NJ
EPA 8270 C SIM	ACENAPHTHENE	NJ
EPA 8270 C SIM	ANTHRACENE	NJ
EPA 8270 C SIM	BENZO(A)PYRENE	NJ
EPA 8270 C SIM	BENZO(G,H,I)PERYLENE	NJ
EPA 8270 C SIM	CHRYSENE	NJ
EPA 8270 C SIM	FLUORANTHENE	NJ
EPA 8270 C SIM	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8270 C SIM	PHENANTHRENE	NJ
EPA 8270 C SIM - EXTENDED	1-METHYLNAPHTHALENE	NJ
EPA 8270 D	1,2,4-TRICHLOROBENZENE	NJ
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	NJ
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8270 D	1,4-PHENYLENEDIAMINE	NJ
EPA 8270 D	1-NAPHTHYLAMINE	NJ
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	NJ
EPA 8270 D	2,4,6-TRICHLOROPHENOL	NJ
EPA 8270 D	2,4-DIMETHYLPHENOL	NJ
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8270 D	2-CHLORONAPHTHALENE	NJ
EPA 8270 C	NAPHTHALENE	NJ
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	NJ
EPA 8270 C	PARATHION (PARATHION - ETHYL)	NJ
EPA 8270 C	PENTACHLORONITROBENZENE	NJ
EPA 8270 C	PHENACETIN	NJ
EPA 8270 C	PHENOL	NJ
EPA 8270 C	PRONAMIDE (KERB)	NJ
EPA 8270 C	PYRIDINE	NJ
EPA 8270 C	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8270 C - EXTENDED	1,1'-BIPHENYL (BZ-0)	NJ
EPA 8270 C - EXTENDED	ATRAZINE	NJ
EPA 8270 C - EXTENDED	CAPROLACTAM	NJ
EPA 8270 C - EXTENDED	PENTACHLOROETHANE	NJ
EPA 8270 C SIM	ACENAPHTHYLENE	NJ
EPA 8270 C SIM	BENZO(A)ANTHRACENE	NJ
EPA 8270 C SIM	BENZO(B)FLUORANTHENE	NJ
EPA 8270 C SIM	BENZO(K)FLUORANTHENE	NJ
EPA 8270 C SIM	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8270 C SIM	FLUORENE	NJ
EPA 8270 C SIM	NAPHTHALENE	NJ
EPA 8270 C SIM	PYRENE	NJ
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	NJ
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8270 D	1,4-NAPHTHOQUINONE	NJ
EPA 8270 D	1-CHLORONAPHTHALENE	NJ
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	NJ
EPA 8270 D	2,4,5-TRICHLOROPHENOL	NJ
EPA 8270 D	2,4-DICHLOROPHENOL	NJ
EPA 8270 D	2,4-DINITROPHENOL	NJ
EPA 8270 D	2,6-DICHLOROPHENOL	NJ
EPA 8270 D	2-ACETYLAMINOFLUORENE	NJ
EPA 8270 D	2-CHLOROPHENOL	NJ



Commonwealth of Virginia

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	NJ
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	NJ
EPA 8270 D	2-NITROANILINE	NJ
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	NJ
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	NJ
EPA 8270 D	3-NITROANILINE	NJ
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	NJ
EPA 8270 D	4-CHLOROANILINE	NJ
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	NJ
EPA 8270 D	4-NITROANILINE	NJ
EPA 8270 D	5-NITRO-O-TOLUIDINE	NJ
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	NJ
EPA 8270 D	ACENAPHTHYLENE	NJ
EPA 8270 D	ANILINE	NJ
EPA 8270 D	ARAMITE	NJ
EPA 8270 D	BENZO(A)ANTHRACENE	NJ
EPA 8270 D	BENZO(B)FLUORANTHENE	NJ
EPA 8270 D	BENZO(K)FLUORANTHENE	NJ
EPA 8270 D	BENZYL ALCOHOL	NJ
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	NJ
EPA 8270 D	BUTYL BENZYL PHTHALATE	NJ
EPA 8270 D	CHRYSENE	NJ
EPA 8270 D	DI-N-OCTYL PHTHALATE	NJ
EPA 8270 D	DIBENZ(A, J) ACRIDINE	NJ
EPA 8270 D	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8270 D	DIETHYL PHTHALATE	NJ
EPA 8270 D	DIMETHYL PHTHALATE	NJ
EPA 8270 D	DIPHENYLAMINE	NJ
EPA 8270 D	ETHYL METHANESULFONATE	NJ
EPA 8270 D	FLUORANTHENE	NJ
EPA 8270 D	HEXACHLOROBENZENE	NJ
EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	NJ
EPA 8270 D	HEXACHLOROPHENE	NJ
EPA 8270 D	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8270 D	2-METHYLNAPHTHALENE	NJ
EPA 8270 D	2-NAPHTHYLAMINE	NJ
EPA 8270 D	2-NITROPHENOL	NJ
EPA 8270 D	3,3'-DICHLOROBENZIDINE	NJ
EPA 8270 D	3-METHYLCHOLANTHRENE	NJ
EPA 8270 D	4-AMINOBIPHENYL	NJ
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	NJ
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	NJ
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	NJ
EPA 8270 D	4-NITROPHENOL	NJ
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	NJ
EPA 8270 D	ACENAPHTHENE	NJ
EPA 8270 D	ACETOPHENONE	NJ
EPA 8270 D	ANTHRACENE	NJ
EPA 8270 D	BENZIDINE	NJ
EPA 8270 D	BENZO(A)PYRENE	NJ
EPA 8270 D	BENZO(G,H,I)PERYLENE	NJ
EPA 8270 D	BENZOIC ACID	NJ
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	NJ
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	NJ
EPA 8270 D	CHLOROBENZILATE	NJ
EPA 8270 D	DI-N-BUTYL PHTHALATE	NJ
EPA 8270 D	DIALLATE	NJ
EPA 8270 D	DIBENZO(A,E) PYRENE	NJ
EPA 8270 D	DIBENZOFURAN	NJ
EPA 8270 D	DIMETHOATE	NJ
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	NJ
EPA 8270 D	DISULFOTON	NJ
EPA 8270 D	FAMPHUR	NJ
EPA 8270 D	FLUORENE	NJ
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8270 D	HEXACHLOROETHANE	NJ
EPA 8270 D	HEXACHLOROPROPENE	NJ
EPA 8270 D	ISODRIN	NJ

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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8270 D	ISOPHORONE	NJ
EPA 8270 D	KEPONE	NJ
EPA 8270 D	METHYL METHANESULFONATE	NJ
EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	NJ
EPA 8270 D	N-NITROSODIETHYLAMINE	NJ
EPA 8270 D	N-NITROSODIPHENYLAMINE	NJ
EPA 8270 D	N-NITROSOMORPHOLINE	NJ
EPA 8270 D	N-NITROSOPYRROLIDINE	NJ
EPA 8270 D	NITROBENZENE	NJ
EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	NJ
EPA 8270 D	PENTACHLOROBENZENE	NJ
EPA 8270 D	PENTACHLOROPHENOL	NJ
EPA 8270 D	PHENANTHRENE	NJ
EPA 8270 D	PHORATE	NJ
EPA 8270 D	PYRENE	NJ
EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8270 D - EXTENDED	1,1'-BIPHENYL (BZ-0)	NJ
EPA 8270 D - EXTENDED	ATRAZINE	NJ
EPA 8270 D - EXTENDED	CAPROLACTAM	NJ
EPA 8270 D - EXTENDED	N-DECANE	NJ
EPA 8270 D - EXTENDED	PYRIDINE	NJ
EPA 8310	ACENAPHTHYLENE	NJ
EPA 8310	BENZO(A)ANTHRACENE	NJ
EPA 8310	BENZO(B)FLUORANTHENE	NJ
EPA 8310	BENZO(K)FLUORANTHENE	NJ
EPA 8310	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8310	FLUORENE	NJ
EPA 8310	NAPHTHALENE	NJ
EPA 8310	PYRENE	NJ
EPA 8330	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8330	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8330	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	NJ
EPA 8330	3-NITROTOLUENE	NJ
EPA 8330	4-NITROTOLUENE	NJ
EPA 8330	NITROBENZENE	NJ
EPA 8270 D	ISOSAFROLE	NJ
EPA 8270 D	METHAPYRILENE	NJ
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	NJ
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	NJ
EPA 8270 D	N-NITROSODIMETHYLAMINE	NJ
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	NJ
EPA 8270 D	N-NITROSOPIPERIDINE	NJ
EPA 8270 D	NAPHTHALENE	NJ
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	NJ
EPA 8270 D	PARATHION (PARATHION - ETHYL)	NJ
EPA 8270 D	PENTACHLORONITROBENZENE	NJ
EPA 8270 D	PHENACETIN	NJ
EPA 8270 D	PHENOL	NJ
EPA 8270 D	PRONAMIDE (KERB)	NJ
EPA 8270 D	SAFROLE	NJ
EPA 8270 D	THIONAZIN (ZINOPHOS)	NJ
EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	NJ
EPA 8270 D - EXTENDED	BENZALDEHYDE	NJ
EPA 8270 D - EXTENDED	CARBAZOLE	NJ
EPA 8270 D - EXTENDED	PENTACHLOROETHANE	NJ
EPA 8310	ACENAPHTHENE	NJ
EPA 8310	ANTHRACENE	NJ
EPA 8310	BENZO(A)PYRENE	NJ
EPA 8310	BENZO(G,H,I)PERYLENE	NJ
EPA 8310	CHRYSENE	NJ
EPA 8310	FLUORANTHENE	NJ
EPA 8310	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8310	PHENANTHRENE	NJ
EPA 8330	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8330	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	NJ
EPA 8330	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8330	2-NITROTOLUENE	NJ
EPA 8330	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	NJ
EPA 8330	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	NJ
EPA 8330	NITROGLYCERIN	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
EPA 8330	OCTAHYDRO-1,3,5,7-TETRANITRO-1 ,3,5,7-TETRAZOCINE (HMX)	NJ
EPA 8330 A	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8330 A	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	NJ
EPA 8330 A	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8330 A	2-NITROTOLUENE	NJ
EPA 8330 A	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	NJ
EPA 8330 A	METHYL-2,4,6-TRINITROPHENYLNIT RAMINE (TETRYL)	NJ
EPA 8330 A	NITROGLYCERIN	NJ
EPA 8330 A	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	NJ
EPA 900.0	GROSS BETA	NJ
EPA 9010 B	PREP: CYANIDE DISTILLATION	NJ
EPA 9012 A	AMENABLE CYANIDE	NJ
EPA 9012 B	AMENABLE CYANIDE	NJ
EPA 9020 B	TOTAL ORGANIC HALIDES (TOX)	NJ
EPA 9040 B	PH	NJ
EPA 905.0	STRONTIUM-89	NJ
EPA 9050 A	CONDUCTIVITY	NJ
EPA 9056	CHLORIDE	NJ
EPA 9056	NITRATE AS N	NJ
EPA 9056	SULFATE	NJ
EPA 9056 A	CHLORIDE	NJ
EPA 9056 A	NITRATE AS N	NJ
EPA 9056 A	SULFATE	NJ
EPA 9060	TOTAL ORGANIC CARBON (TOC)	NJ
EPA 9066	TOTAL PHENOLICS	NJ
RSK-175	ETHENE (ETHYLENE)	NJ
SM 2120 B-2011	COLOR	NJ
SM 2310 B-2011	ACIDITY, AS CACO3	NJ
SM 2340 B-2011	TOTAL HARDNESS AS CACO3	NJ
SM 2510 B-2011	CONDUCTIVITY	NJ
SM 2540 C-2011	RESIDUE-FILTERABLE (TDS)	NJ
SM 2540 F-2011	RESIDUE-SETTLEABLE	NJ
SM 3500-FE B-2011	IRON	NJ

METHOD	ANALYTE	PRIMARY
EPA 8330	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	NJ
EPA 8330 A	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8330 A	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8330 A	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	NJ
EPA 8330 A	3-NITROTOLUENE	NJ
EPA 8330 A	4-NITROTOLUENE	NJ
EPA 8330 A	NITROBENZENE	NJ
EPA 8330 A	OCTAHYDRO-1,3,5,7-TETRANITRO-1 ,3,5,7-TETRAZOCINE (HMX)	NJ
EPA 900.0	GROSS ALPHA	NJ
EPA 901.1	GAMMA EMITTERS	NJ
EPA 9010 C	PREP: CYANIDE DISTILLATION	NJ
EPA 9012 A	TOTAL CYANIDE	NJ
EPA 9012 B	TOTAL CYANIDE	NJ
EPA 904.0	RADIUM-228	NJ
EPA 9040 C	PH	NJ
EPA 905.0	STRONTIUM-90	NJ
EPA 9056	BROMIDE	NJ
EPA 9056	FLUORIDE	NJ
EPA 9056	NITRITE AS N	NJ
EPA 9056 A	BROMIDE	NJ
EPA 9056 A	FLUORIDE	NJ
EPA 9056 A	NITRITE AS N	NJ
EPA 906.0	TRITIUM	NJ
EPA 9060 A	TOTAL ORGANIC CARBON (TOC)	NJ
RSK-175	ETHANE	NJ
RSK-175	METHANE	NJ
SM 2130 B-2011	TURBIDITY	NJ
SM 2320 B-2011	ALKALINITY AS CACO3	NJ
SM 2340 C-2011	TOTAL HARDNESS AS CACO3	NJ
SM 2540 B-2011	RESIDUE-TOTAL (TS)	NJ
SM 2540 D-2011	RESIDUE-NONFILTERABLE (TSS)	NJ
SM 3500-CR B-2011	CHROMIUM VI	NJ
SM 4500-CN^- E-2011	CYANIDE	NJ



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NON-POTABLE WATER

METHOD	ANALYTE	PRIMARY
SM 4500-NH3 B-2011	AMMONIA AS N	NJ
SM 4500-NO_3^- F-2011	NITRATE/NITRITE	NJ
SM 4500-P E-2011	ORTHOPHOSPHATE AS P	NJ
SM 5210 B-2011	BIOCHEMICAL OXYGEN DEMAND (BOD)	NJ
SM 5310 B-2011	TOTAL ORGANIC CARBON (TOC)	NJ
SM 6200 B-2011	1,1,1-TRICHLOROETHANE	NJ
SM 6200 B-2011	1,1,2-TRICHLOROETHANE	NJ
SM 6200 B-2011	1,1-DICHLOROETHYLENE	NJ
SM 6200 B-2011	1,2-DICHLOROPROPANE	NJ
SM 6200 B-2011	BENZENE	NJ
SM 6200 B-2011	BROMOFORM	NJ
SM 6200 B-2011	CHLORODIBROMOMETHANE	NJ
SM 6200 B-2011	CHLOROFORM	NJ
SM 6200 B-2011	ETHYLBENZENE	NJ
SM 6200 B-2011	METHYL CHLORIDE (CHLOROMETHANE)	NJ
SM 6200 B-2011	TOLUENE	NJ
SM 6200 B-2011	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
SM 6200 B-2011	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
SM 6640 B-2006	2,4,5-T	NJ
SM 6640 B-2006	SILVEX (2,4,5-TP)	NJ

METHOD	ANALYTE	PRIMARY
SM 4500-NH3 G-2011	AMMONIA AS N	NJ
SM 4500-P B 5-2011	PREP: TOTAL PHOSPHORUS	NJ
SM 4500-$S2^-$ D-2011	SULFIDE	NJ
SM 5210 B-2011	CARBONACEOUS BOD (CBOD)	NJ
SM 5540 C-2011	SURFACTANTS - MBAS	NJ
SM 6200 B-2011	1,1,2,2-TETRACHLOROETHANE	NJ
SM 6200 B-2011	1,1-DICHLOROETHANE	NJ
SM 6200 B-2011	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
SM 6200 B-2011	2-CHLOROETHYL VINYL ETHER	NJ
SM 6200 B-2011	BROMODICHLOROMETHANE	NJ
SM 6200 B-2011	CHLOROBENZENE	NJ
SM 6200 B-2011	CHLOROETHANE (ETHYL CHLORIDE)	NJ
SM 6200 B-2011	CIS-1,3-DICHLOROPROPENE	NJ
SM 6200 B-2011	METHYL BROMIDE (BROMOMETHANE)	NJ
SM 6200 B-2011	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
SM 6200 B-2011	TRANS-1,2-DICHLOROETHENE	NJ
SM 6200 B-2011	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
SM 6200 B-2011	VINYL CHLORIDE (CHLOROETHENE)	NJ
SM 6640 B-2006	2,4-D	NJ
SM 9222 D-2006	FECAL COLIFORMS	NJ

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 1010 A	FLASHPOINT	NJ
EPA 1312	PREP: SYNTHETIC PRECIPITATION LEACHING PROCEDURE	NJ
EPA 3040 A	PREP: DISSOLUTION PROCEDURE FOR OILS, GREASES, AND WAXES	NJ
EPA 3050 B	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	NJ
EPA 3060 A	PREP: HEXAVALENT CHROMIUM	NJ
EPA 3546	PREP: MICROWAVE EXTRACTION	NJ
EPA 3550 C	PREP: ULTRASONIC EXTRACTION	NJ

METHOD	ANALYTE	PRIMARY
EPA 1311	PREP: TOXICITY CHARACTERISTIC LEACHING PROCEDURE	NJ
EPA 3031	PREP: ACID DIGESTION OF OILS FOR METALS ANALYSIS OR ICP SPECTROMETRY	NJ
EPA 3050	PREP: ACID DIGESTION OF SEDIMENTS, SLUDGES, AND SOILS	NJ
EPA 3051	PREP: MICROWAVE ASSISTED ACID DIGESTION OF SEDIMENTS, SLUDGES, SOILS, AND OILS	NJ
EPA 3540 C	PREP: SOXHLET EXTRACTION	NJ
EPA 3550 B	PREP: ULTRASONIC EXTRACTION	NJ
EPA 3580 A	PREP: WASTE DILUTION	NJ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



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Virginia Laboratory ID: 460132
Effective Date: June 15, 2019
Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 3585	PREP: WASTE DILUTION FOR VOLATILE ORGANICS	NJ	EPA 3611 B	PREP: PETROLEUM WASTES - CLEANUP	NJ
EPA 3620 B	PREP: FLORISIL CLEANUP	NJ	EPA 3620 C	PREP: FLORISIL CLEANUP	NJ
EPA 3630 C	PREP: SILICA GEL CLEANUP	NJ	EPA 3660 B	PREP: SULFUR CLEANUP	NJ
EPA 3665 A	SULFURIC ACID/PERMANGANATE CLEAN-UP	NJ	EPA 5035	PREP: CLOSED-SYSTEM PURGE AND TRAP AND EXTRACTION	NJ
EPA 6010 B	ALUMINUM	NJ	EPA 6010 B	ANTIMONY	NJ
EPA 6010 B	ARSENIC	NJ	EPA 6010 B	BARIUM	NJ
EPA 6010 B	BERYLLIUM	NJ	EPA 6010 B	BORON	NJ
EPA 6010 B	CADMIUM	NJ	EPA 6010 B	CALCIUM	NJ
EPA 6010 B	CHROMIUM	NJ	EPA 6010 B	COBALT	NJ
EPA 6010 B	COPPER	NJ	EPA 6010 B	IRON	NJ
EPA 6010 B	LEAD	NJ	EPA 6010 B	LITHIUM	NJ
EPA 6010 B	MAGNESIUM	NJ	EPA 6010 B	MANGANESE	NJ
EPA 6010 B	MOLYBDENUM	NJ	EPA 6010 B	NICKEL	NJ
EPA 6010 B	POTASSIUM	NJ	EPA 6010 B	SELENIUM	NJ
EPA 6010 B	SILVER	NJ	EPA 6010 B	SODIUM	NJ
EPA 6010 B	STRONTIUM	NJ	EPA 6010 B	THALLIUM	NJ
EPA 6010 B	TIN	NJ	EPA 6010 B	TITANIUM	NJ
EPA 6010 B	VANADIUM	NJ	EPA 6010 B	ZINC	NJ
EPA 6010 C	ALUMINUM	NJ	EPA 6010 C	ANTIMONY	NJ
EPA 6010 C	ARSENIC	NJ	EPA 6010 C	BARIUM	NJ
EPA 6010 C	BERYLLIUM	NJ	EPA 6010 C	BORON	NJ
EPA 6010 C	CADMIUM	NJ	EPA 6010 C	CALCIUM	NJ
EPA 6010 C	CHROMIUM	NJ	EPA 6010 C	COBALT	NJ
EPA 6010 C	COPPER	NJ	EPA 6010 C	IRON	NJ
EPA 6010 C	LEAD	NJ	EPA 6010 C	LITHIUM	NJ
EPA 6010 C	MAGNESIUM	NJ	EPA 6010 C	MANGANESE	NJ
EPA 6010 C	MOLYBDENUM	NJ	EPA 6010 C	NICKEL	NJ
EPA 6010 C	POTASSIUM	NJ	EPA 6010 C	SELENIUM	NJ
EPA 6010 C	SILVER	NJ	EPA 6010 C	SODIUM	NJ
EPA 6010 C	STRONTIUM	NJ	EPA 6010 C	THALLIUM	NJ
EPA 6010 C	TIN	NJ	EPA 6010 C	TITANIUM	NJ
EPA 6010 C	VANADIUM	NJ	EPA 6010 C	ZINC	NJ
EPA 6020	ALUMINUM	NJ	EPA 6020	ANTIMONY	NJ
EPA 6020	ARSENIC	NJ	EPA 6020	BARIUM	NJ
EPA 6020	BERYLLIUM	NJ	EPA 6020	CADMIUM	NJ
EPA 6020	CHROMIUM	NJ	EPA 6020	COBALT	NJ
EPA 6020	COPPER	NJ	EPA 6020	LEAD	NJ



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 6020	MANGANESE	NJ
EPA 6020	SILVER	NJ
EPA 6020	ZINC	NJ
EPA 6020 - EXTENDED	CALCIUM	NJ
EPA 6020 - EXTENDED	MAGNESIUM	NJ
EPA 6020 - EXTENDED	POTASSIUM	NJ
EPA 6020 - EXTENDED	SODIUM	NJ
EPA 6020 - EXTENDED	THORIUM	NJ
EPA 6020 - EXTENDED	TITANIUM	NJ
EPA 6020 - EXTENDED	VANADIUM	NJ
EPA 6020 A	ANTIMONY	NJ
EPA 6020 A	BARIUM	NJ
EPA 6020 A	CADMIUM	NJ
EPA 6020 A	CHROMIUM	NJ
EPA 6020 A	COPPER	NJ
EPA 6020 A	LEAD	NJ
EPA 6020 A	MANGANESE	NJ
EPA 6020 A	POTASSIUM	NJ
EPA 6020 A	SILVER	NJ
EPA 6020 A	THALLIUM	NJ
EPA 6020 A	ZINC	NJ
EPA 6020 A - EXTENDED	MOLYBDENUM	NJ
EPA 6020 A - EXTENDED	THORIUM	NJ
EPA 6020 A - EXTENDED	TITANIUM	NJ
EPA 7196 A	CHROMIUM VI	NJ
EPA 7471 B	MERCURY	NJ
EPA 8011	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 8015 B	ETHANOL	NJ
EPA 8015 B	GASOLINE RANGE ORGANICS (GRO)	NJ
EPA 8015 B - EXTENDED	PROPYLENE GLYCOL	NJ
EPA 8015 C - EXTENDED	PROPYLENE GLYCOL	NJ
EPA 8015 D	ETHANOL	NJ
EPA 8015 D	METHANOL	NJ
EPA 8021 B	BENZENE	NJ
EPA 8021 B	M+P-XYLENE	NJ
EPA 8021 B	TOLUENE	NJ
EPA 6020	NICKEL	NJ
EPA 6020	THALLIUM	NJ
EPA 6020 - EXTENDED	BORON	NJ
EPA 6020 - EXTENDED	IRON	NJ
EPA 6020 - EXTENDED	MOLYBDENUM	NJ
EPA 6020 - EXTENDED	SELENIUM	NJ
EPA 6020 - EXTENDED	STRONTIUM	NJ
EPA 6020 - EXTENDED	TIN	NJ
EPA 6020 - EXTENDED	URANIUM	NJ
EPA 6020 A	ALUMINUM	NJ
EPA 6020 A	ARSENIC	NJ
EPA 6020 A	BERYLLIUM	NJ
EPA 6020 A	CALCIUM	NJ
EPA 6020 A	COBALT	NJ
EPA 6020 A	IRON	NJ
EPA 6020 A	MAGNESIUM	NJ
EPA 6020 A	NICKEL	NJ
EPA 6020 A	SELENIUM	NJ
EPA 6020 A	SODIUM	NJ
EPA 6020 A	VANADIUM	NJ
EPA 6020 A - EXTENDED	BORON	NJ
EPA 6020 A - EXTENDED	STRONTIUM	NJ
EPA 6020 A - EXTENDED	TIN	NJ
EPA 6020 A - EXTENDED	URANIUM	NJ
EPA 7471 A	MERCURY	NJ
EPA 8011	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 8015 B	DIESEL RANGE ORGANICS (DRO)	NJ
EPA 8015 B	ETHYLENE GLYCOL	NJ
EPA 8015 B	METHANOL	NJ
EPA 8015 C	ETHYLENE GLYCOL	NJ
EPA 8015 D	DIESEL RANGE ORGANICS (DRO)	NJ
EPA 8015 D	GASOLINE RANGE ORGANICS (GRO)	NJ
EPA 8015 D - EXTENDED	ETHYLENE GLYCOL	NJ
EPA 8021 B	ETHYLBENZENE	NJ
EPA 8021 B	O-XYLENE	NJ
EPA 8021 B	XYLENE (TOTAL)	NJ

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Virginia Laboratory ID: 460132
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Expiration Date: June 14, 2020

SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8021 B - EXTENDED	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 8081 A	4,4'-DDE	NJ
EPA 8081 A	ALDRIN	NJ
EPA 8081 A	ALPHA-CHLORDANE (CIS-CHLORDANE)	NJ
EPA 8081 A	CHLORDANE, TOTAL	NJ
EPA 8081 A	DIELDRIN	NJ
EPA 8081 A	ENDOSULFAN II	NJ
EPA 8081 A	ENDRIN	NJ
EPA 8081 A	ENDRIN KETONE	NJ
EPA 8081 A	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	NJ
EPA 8081 A	HEPTACHLOR EPOXIDE	NJ
EPA 8081 A	METHOXYCHLOR	NJ
EPA 8081 B	4,4'-DDD	NJ
EPA 8081 B	4,4'-DDT	NJ
EPA 8081 B	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 B	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 B	DELTA-BHC	NJ
EPA 8081 B	ENDOSULFAN I	NJ
EPA 8081 B	ENDOSULFAN SULFATE	NJ
EPA 8081 B	ENDRIN ALDEHYDE	NJ
EPA 8081 B	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 B	HEPTACHLOR	NJ
EPA 8081 B	HEXACHLOROBENZENE	NJ
EPA 8081 B	TOXAPHENE (CHLORINATED CAMPHENE)	NJ
EPA 8082	AROCLOR-1221 (PCB-1221)	NJ
EPA 8082	AROCLOR-1242 (PCB-1242)	NJ
EPA 8082	AROCLOR-1254 (PCB-1254)	NJ
EPA 8082 A	AROCLOR-1016 (PCB-1016)	NJ
EPA 8081 A	4,4'-DDD	NJ
EPA 8081 A	4,4'-DDT	NJ
EPA 8081 A	ALPHA-BHC (ALPHA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 A	BETA-BHC (BETA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 A	DELTA-BHC	NJ
EPA 8081 A	ENDOSULFAN I	NJ
EPA 8081 A	ENDOSULFAN SULFATE	NJ
EPA 8081 A	ENDRIN ALDEHYDE	NJ
EPA 8081 A	GAMMA-BHC (LINDANE, GAMMA-HEXACHLOROCYCLOHEXANE)	NJ
EPA 8081 A	HEPTACHLOR	NJ
EPA 8081 A	HEXACHLOROBENZENE	NJ
EPA 8081 A	TOXAPHENE (CHLORINATED CAMPHENE)	NJ
EPA 8081 B	4,4'-DDE	NJ
EPA 8081 B	ALDRIN	NJ
EPA 8081 B	ALPHA-CHLORDANE (CIS-CHLORDANE)	NJ
EPA 8081 B	CHLORDANE, TOTAL	NJ
EPA 8081 B	DIELDRIN	NJ
EPA 8081 B	ENDOSULFAN II	NJ
EPA 8081 B	ENDRIN	NJ
EPA 8081 B	ENDRIN KETONE	NJ
EPA 8081 B	GAMMA-CHLORDANE (BETA-CHLORDANE, TRANS-CHLORDANE)	NJ
EPA 8081 B	HEPTACHLOR EPOXIDE	NJ
EPA 8081 B	METHOXYCHLOR	NJ
EPA 8082	AROCLOR-1016 (PCB-1016)	NJ
EPA 8082	AROCLOR-1232 (PCB-1232)	NJ
EPA 8082	AROCLOR-1248 (PCB-1248)	NJ
EPA 8082	AROCLOR-1260 (PCB-1260)	NJ
EPA 8082 A	AROCLOR-1221 (PCB-1221)	NJ

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8082 A	AROCLOR-1232 (PCB-1232)	NJ
EPA 8082 A	AROCLOR-1248 (PCB-1248)	NJ
EPA 8082 A	AROCLOR-1260 (PCB-1260)	NJ
EPA 8141 A	BOLSTAR (SULPROFOS)	NJ
EPA 8141 A	COUMAPHOS	NJ
EPA 8141 A	DEMETON-S	NJ
EPA 8141 A	DICHLOROVOS (DDVP, DICHLORVOS)	NJ
EPA 8141 A	DISULFOTON	NJ
EPA 8141 A	ETHOPROP	NJ
EPA 8141 A	FENTHION	NJ
EPA 8141 A	MERPHOS	NJ
EPA 8141 A	MEVINPHOS	NJ
EPA 8141 A	PARATHION (PARATHION - ETHYL)	NJ
EPA 8141 A	RONNEL	NJ
EPA 8141 A	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	NJ
EPA 8141 A	TOKUTHION (PROTHIOPHOS)	NJ
EPA 8141 B	AZINPHOS-METHYL (GUTHION)	NJ
EPA 8141 B	CHLORPYRIFOS	NJ
EPA 8141 B	DEMETON-O	NJ
EPA 8141 B	DIAZINON	NJ
EPA 8141 B	DIMETHOATE	NJ
EPA 8141 B	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	NJ
EPA 8141 B	FENSULFOTHION	NJ
EPA 8141 B	MALATHION	NJ
EPA 8141 B	METHYL PARATHION (PARATHION, METHYL)	NJ
EPA 8141 B	NALED	NJ
EPA 8141 B	PHORATE	NJ
EPA 8141 B	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8141 B	TETRAETHYL PYROPHOSPHATE (TEPP)	NJ
EPA 8141 B	TRICHLORONATE	NJ
EPA 8151 A	2,4-D	NJ
EPA 8151 A	DALAPON	NJ
EPA 8082 A	AROCLOR-1242 (PCB-1242)	NJ
EPA 8082 A	AROCLOR-1254 (PCB-1254)	NJ
EPA 8141 A	AZINPHOS-METHYL (GUTHION)	NJ
EPA 8141 A	CHLORPYRIFOS	NJ
EPA 8141 A	DEMETON-O	NJ
EPA 8141 A	DIAZINON	NJ
EPA 8141 A	DIMETHOATE	NJ
EPA 8141 A	EPN (PHOSPHONOTHIOIC ACID, PHENYL-, O-ETHYL O-(P-NITROPHENYL) ESTER)	NJ
EPA 8141 A	FENSULFOTHION	NJ
EPA 8141 A	MALATHION	NJ
EPA 8141 A	METHYL PARATHION (PARATHION, METHYL)	NJ
EPA 8141 A	NALED	NJ
EPA 8141 A	PHORATE	NJ
EPA 8141 A	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8141 A	TETRAETHYL PYROPHOSPHATE (TEPP)	NJ
EPA 8141 A	TRICHLORONATE	NJ
EPA 8141 B	BOLSTAR (SULPROFOS)	NJ
EPA 8141 B	COUMAPHOS	NJ
EPA 8141 B	DEMETON-S	NJ
EPA 8141 B	DICHLOROVOS (DDVP, DICHLORVOS)	NJ
EPA 8141 B	DISULFOTON	NJ
EPA 8141 B	ETHOPROP	NJ
EPA 8141 B	FENTHION	NJ
EPA 8141 B	MERPHOS	NJ
EPA 8141 B	MEVINPHOS	NJ
EPA 8141 B	PARATHION (PARATHION - ETHYL)	NJ
EPA 8141 B	RONNEL	NJ
EPA 8141 B	TETRACHLORVINPHOS (STIROPHOS, GARDONA) Z-ISOMER	NJ
EPA 8141 B	TOKUTHION (PROTHIOPHOS)	NJ
EPA 8151 A	2,4,5-T	NJ
EPA 8151 A	2,4-DB	NJ



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METHOD	ANALYTE	PRIMARY
EPA 8151 A	DICAMBA	NJ
EPA 8151 A	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	NJ
EPA 8151 A	MCPP	NJ
EPA 8260 B	1,1,1,2-TETRACHLOROETHANE	NJ
EPA 8260 B	1,1,2,2-TETRACHLOROETHANE	NJ
EPA 8260 B	1,1-DICHLOROETHANE	NJ
EPA 8260 B	1,1-DICHLOROPROPENE	NJ
EPA 8260 B	1,2,3-TRICHLOROPROPANE	NJ
EPA 8260 B	1,2,4-TRIMETHYLBENZENE	NJ
EPA 8260 B	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 8260 B	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
EPA 8260 B	1,3,5-TRIMETHYLBENZENE	NJ
EPA 8260 B	1,3-DICHLOROPROPANE	NJ
EPA 8260 B	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	NJ
EPA 8260 B	2,2-DICHLOROPROPANE	NJ
EPA 8260 B	2-CHLOROETHYL VINYL ETHER	NJ
EPA 8260 B	2-HEXANONE	NJ
EPA 8260 B	4-CHLOROTOLUENE	NJ
EPA 8260 B	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	NJ
EPA 8260 B	ACETONITRILE	NJ
EPA 8260 B	ACRYLONITRILE	NJ
EPA 8260 B	BENZENE	NJ
EPA 8260 B	BROMOCHLOROMETHANE	NJ
EPA 8260 B	BROMOFORM	NJ
EPA 8260 B	CARBON TETRACHLORIDE	NJ
EPA 8260 B	CHLORODIBROMOMETHANE	NJ
EPA 8260 B	CHLOROFORM	NJ
EPA 8260 B	CIS-1,2-DICHLOROETHYLENE	NJ
EPA 8260 B	CIS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8151 A	DICHLOROPROP (DICHLORPROP)	NJ
EPA 8151 A	MCPA	NJ
EPA 8151 A	SILVEX (2,4,5-TP)	NJ
EPA 8260 B	1,1,1-TRICHLOROETHANE	NJ
EPA 8260 B	1,1,2-TRICHLOROETHANE	NJ
EPA 8260 B	1,1-DICHLOROETHYLENE	NJ
EPA 8260 B	1,2,3-TRICHLOROBENZENE	NJ
EPA 8260 B	1,2,4-TRICHLOROBENZENE	NJ
EPA 8260 B	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 8260 B	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8260 B	1,2-DICHLOROPROPANE	NJ
EPA 8260 B	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8260 B	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8260 B	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	NJ
EPA 8260 B	2-BUTANONE (METHYL ETHYL KETONE, MEK)	NJ
EPA 8260 B	2-CHLOROTOLUENE	NJ
EPA 8260 B	2-NITROPROPANE	NJ
EPA 8260 B	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	NJ
EPA 8260 B	ACETONE	NJ
EPA 8260 B	ACROLEIN (PROPENAL)	NJ
EPA 8260 B	ALLYL CHLORIDE (3-CHLOROPROPENE)	NJ
EPA 8260 B	BROMOBENZENE	NJ
EPA 8260 B	BROMODICHLOROMETHANE	NJ
EPA 8260 B	CARBON DISULFIDE	NJ
EPA 8260 B	CHLOROBENZENE	NJ
EPA 8260 B	CHLOROETHANE (ETHYL CHLORIDE)	NJ
EPA 8260 B	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	NJ
EPA 8260 B	CIS-1,3-DICHLOROPROPENE	NJ
EPA 8260 B	DIBROMOMETHANE (METHYLENE BROMIDE)	NJ



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METHOD	ANALYTE	PRIMARY
EPA 8260 B	DICHLORODIFLUOROMETHANE (FREON-12)	NJ
EPA 8260 B	ETHANOL	NJ
EPA 8260 B	ETHYL METHACRYLATE	NJ
EPA 8260 B	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8260 B	IODOMETHANE (METHYL IODIDE)	NJ
EPA 8260 B	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	NJ
EPA 8260 B	M+P-XYLENE	NJ
EPA 8260 B	METHYL ACRYLATE	NJ
EPA 8260 B	METHYL CHLORIDE (CHLOROMETHANE)	NJ
EPA 8260 B	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 8260 B	N-BUTYLBENZENE	NJ
EPA 8260 B	N-PROPYLBENZENE	NJ
EPA 8260 B	O-XYLENE	NJ
EPA 8260 B	PROPIONITRILE (ETHYL CYANIDE)	NJ
EPA 8260 B	STYRENE	NJ
EPA 8260 B	TERT-BUTYLBENZENE	NJ
EPA 8260 B	TOLUENE	NJ
EPA 8260 B	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
EPA 8260 B	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
EPA 8260 B	VINYL ACETATE	NJ
EPA 8260 B	XYLENE (TOTAL)	NJ
EPA 8260 B - EXTENDED	1,2,3-TRIMETHYLBENZENE	NJ
EPA 8260 B - EXTENDED	3,3-DIMETHYL-1-BUTANOL	NJ
EPA 8260 B - EXTENDED	CYCLOHEXANONE	NJ
EPA 8260 B - EXTENDED	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	NJ
EPA 8260 B - EXTENDED	METHYL ACETATE	NJ
EPA 8260 B - EXTENDED	N-HEXANE	NJ
EPA 8260 B - EXTENDED	T-AMYL ALCOHOL (TAA)	NJ
EPA 8260 B - EXTENDED	TERT-BUTYL FORMATE	NJ
EPA 8260 B	DIETHYL ETHER	NJ
EPA 8260 B	ETHYL ACETATE	NJ
EPA 8260 B	ETHYLBENZENE	NJ
EPA 8260 B	HEXACHLOROETHANE	NJ
EPA 8260 B	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	NJ
EPA 8260 B	ISOPROPYLBENZENE	NJ
EPA 8260 B	METHACRYLONITRILE	NJ
EPA 8260 B	METHYL BROMIDE (BROMOMETHANE)	NJ
EPA 8260 B	METHYL METHACRYLATE	NJ
EPA 8260 B	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ
EPA 8260 B	N-NITROSO-DI-N-BUTYLAMINE	NJ
EPA 8260 B	NAPHTHALENE	NJ
EPA 8260 B	PENTACHLOROETHANE	NJ
EPA 8260 B	SEC-BUTYLBENZENE	NJ
EPA 8260 B	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	NJ
EPA 8260 B	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA 8260 B	TRANS-1,2-DICHLOROETHENE	NJ
EPA 8260 B	TRANS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 B	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
EPA 8260 B	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA 8260 B - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	NJ
EPA 8260 B - EXTENDED	2-METHYLNAPHTHALENE	NJ
EPA 8260 B - EXTENDED	CYCLOHEXANE	NJ
EPA 8260 B - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	NJ
EPA 8260 B - EXTENDED	GASOLINE RANGE ORGANICS (GRO)	NJ
EPA 8260 B - EXTENDED	METHYLCYCLOHEXANE	NJ
EPA 8260 B - EXTENDED	N-OCTANE	NJ
EPA 8260 B - EXTENDED	T-AMYLMETHYLETHER (TAME)	NJ
EPA 8260 B - EXTENDED	TETRAHYDROFURAN (THF)	NJ



Commonwealth of Virginia

Department of General Services
Division of Consolidated Laboratory Services



Scope of Accreditation

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Pace Analytical National Center for Testing & Innovation
12065 Lebanon Road
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Virginia Laboratory ID: 460132
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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 C	1,1,1,2-TETRACHLOROETHANE	NJ
EPA 8260 C	1,1,2,2-TETRACHLOROETHANE	NJ
EPA 8260 C	1,1-DICHLOROETHANE	NJ
EPA 8260 C	1,1-DICHLOROPROPENE	NJ
EPA 8260 C	1,2,3-TRICHLOROPROPANE	NJ
EPA 8260 C	1,2,4-TRIMETHYLBENZENE	NJ
EPA 8260 C	1,2-DIBROMOETHANE (EDB, ETHYLENE DIBROMIDE)	NJ
EPA 8260 C	1,2-DICHLOROETHANE (ETHYLENE DICHLORIDE)	NJ
EPA 8260 C	1,3,5-TRIMETHYLBENZENE	NJ
EPA 8260 C	1,3-DICHLOROPROPANE	NJ
EPA 8260 C	1,4-DIOXANE (P-DIOXANE /1,4-DIETHYLENEOXIDE)	NJ
EPA 8260 C	2,2-DICHLOROPROPANE	NJ
EPA 8260 C	2-CHLOROETHYL VINYL ETHER	NJ
EPA 8260 C	2-HEXANONE	NJ
EPA 8260 C	4-CHLOROTOLUENE	NJ
EPA 8260 C	4-METHYL-2-PENTANONE (METHYL ISOBUTYL KETONE, MIBK)	NJ
EPA 8260 C	ACETONITRILE	NJ
EPA 8260 C	ACRYLONITRILE	NJ
EPA 8260 C	BENZENE	NJ
EPA 8260 C	BROMOCHLOROMETHANE	NJ
EPA 8260 C	BROMOFORM	NJ
EPA 8260 C	CARBON TETRACHLORIDE	NJ
EPA 8260 C	CHLORODIBROMOMETHANE	NJ
EPA 8260 C	CHLOROFORM	NJ
EPA 8260 C	CIS-1,2-DICHLOROETHYLENE	NJ
EPA 8260 C	CIS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 C	DIBROMOMETHANE (METHYLENE BROMIDE)	NJ
EPA 8260 C	DIETHYL ETHER	NJ
EPA 8260 C	ETHYL ACETATE	NJ

METHOD	ANALYTE	PRIMARY
EPA 8260 C	1,1,1-TRICHLOROETHANE	NJ
EPA 8260 C	1,1,2-TRICHLOROETHANE	NJ
EPA 8260 C	1,1-DICHLOROETHYLENE	NJ
EPA 8260 C	1,2,3-TRICHLOROBENZENE	NJ
EPA 8260 C	1,2,4-TRICHLOROBENZENE	NJ
EPA 8260 C	1,2-DIBROMO-3-CHLOROPROPANE (DBCP)	NJ
EPA 8260 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8260 C	1,2-DICHLOROPROPANE	NJ
EPA 8260 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8260 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8260 C	1-BUTANOL (N-BUTANOL, N-BUTYL ALCOHOL)	NJ
EPA 8260 C	2-BUTANONE (METHYL ETHYL KETONE, MEK)	NJ
EPA 8260 C	2-CHLOROTOLUENE	NJ
EPA 8260 C	2-NITROPROPANE	NJ
EPA 8260 C	4-ISOPROPYLTOLUENE (P-CYMENE, P-ISOPROPYLTOLUENE)	NJ
EPA 8260 C	ACETONE	NJ
EPA 8260 C	ACROLEIN (PROPENAL)	NJ
EPA 8260 C	ALLYL CHLORIDE (3-CHLOROPROPENE)	NJ
EPA 8260 C	BROMOBENZENE	NJ
EPA 8260 C	BROMODICHLOROMETHANE	NJ
EPA 8260 C	CARBON DISULFIDE	NJ
EPA 8260 C	CHLOROBENZENE	NJ
EPA 8260 C	CHLOROETHANE (ETHYL CHLORIDE)	NJ
EPA 8260 C	CHLOROPRENE (2-CHLORO-1,3-BUTADIENE)	NJ
EPA 8260 C	CIS-1,3-DICHLOROPROPENE	NJ
EPA 8260 C	CYCLOHEXANE	NJ
EPA 8260 C	DICHLORODIFLUOROMETHANE (FREON-12)	NJ
EPA 8260 C	ETHANOL	NJ
EPA 8260 C	ETHYL METHACRYLATE	NJ

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8260 C	ETHYL-T-BUTYLETHER (2-ETHOXY-2-METHYLPROPANE, ETBE)	NJ
EPA 8260 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8260 C	IODOMETHANE (METHYL IODIDE)	NJ
EPA 8260 C	ISOPROPYL ALCOHOL (2-PROPANOL, ISOPROPANOL)	NJ
EPA 8260 C	M+P-XYLENE	NJ
EPA 8260 C	METHYL ACRYLATE	NJ
EPA 8260 C	METHYL CHLORIDE (CHLOROMETHANE)	NJ
EPA 8260 C	METHYL TERT-BUTYL ETHER (MTBE)	NJ
EPA 8260 C	METHYLENE CHLORIDE (DICHLOROMETHANE)	NJ
EPA 8260 C	N-PROPYLBENZENE	NJ
EPA 8260 C	O-XYLENE	NJ
EPA 8260 C	PROPIONITRILE (ETHYL CYANIDE)	NJ
EPA 8260 C	STYRENE	NJ
EPA 8260 C	TERT-BUTYL ALCOHOL (2-METHYL-2-PROPANOL)	NJ
EPA 8260 C	TETRACHLOROETHENE (PERCHLOROETHENE)	NJ
EPA 8260 C	TRANS-1,2-DICHLOROETHENE	NJ
EPA 8260 C	TRANS-1,4-DICHLORO-2-BUTENE	NJ
EPA 8260 C	TRICHLOROFLUOROMETHANE (FLUOROTRICHLOROMETHANE, FREON 11)	NJ
EPA 8260 C	VINYL CHLORIDE (CHLOROETHENE)	NJ
EPA 8260 C - EXTENDED	1,1,2-TRICHLORO-1,2,2-TRIFLUORO ETHANE (FREON 113)	NJ
EPA 8260 C - EXTENDED	DI-ISOPROPYLETHER (DIPE, ISOPROPYL ETHER)	NJ
EPA 8260 C - EXTENDED	N-OCTANE	NJ
EPA 8260 C - EXTENDED	TETRAHYDROFURAN (THF)	NJ
EPA 8270 C	1,2,4,5-TETRACHLOROBENZENE	NJ
EPA 8270 C	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8270 C	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8270 C	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8260 C	ETHYLBENZENE	NJ
EPA 8260 C	HEXACHLOROETHANE	NJ
EPA 8260 C	ISOBUTYL ALCOHOL (2-METHYL-1-PROPANOL)	NJ
EPA 8260 C	ISOPROPYLBENZENE	NJ
EPA 8260 C	METHACRYLONITRILE	NJ
EPA 8260 C	METHYL BROMIDE (BROMOMETHANE)	NJ
EPA 8260 C	METHYL METHACRYLATE	NJ
EPA 8260 C	METHYLCYCLOHEXANE	NJ
EPA 8260 C	N-BUTYLBENZENE	NJ
EPA 8260 C	NAPHTHALENE	NJ
EPA 8260 C	PENTACHLOROETHANE	NJ
EPA 8260 C	SEC-BUTYLBENZENE	NJ
EPA 8260 C	T-AMYLMETHYLETHER (TAME)	NJ
EPA 8260 C	TERT-BUTYLBENZENE	NJ
EPA 8260 C	TOLUENE	NJ
EPA 8260 C	TRANS-1,3-DICHLOROPROPENE (TRANS-1,3-DICHLOROPROPYLENE)	NJ
EPA 8260 C	TRICHLOROETHENE (TRICHLOROETHYLENE)	NJ
EPA 8260 C	VINYL ACETATE	NJ
EPA 8260 C	XYLENE (TOTAL)	NJ
EPA 8260 C - EXTENDED	2-METHYLNAPHTHALENE	NJ
EPA 8260 C - EXTENDED	METHYL ACETATE	NJ
EPA 8260 C - EXTENDED	T-AMYL ALCOHOL (TAA)	NJ
EPA 8270 C	1,1'-BIPHENYL (BZ-0)	NJ
EPA 8270 C	1,2,4-TRICHLOROBENZENE	NJ
EPA 8270 C	1,2-DIPHENYLHYDRAZINE	NJ
EPA 8270 C	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8270 C	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C	1,4-NAPHTHOQUINONE	NJ
EPA 8270 C	1-CHLORONAPHTHALENE	NJ
EPA 8270 C	2,2'-OXYBIS(1-CHLOROPROPANE)	NJ
EPA 8270 C	2,4,5-TRICHLOROPHENOL	NJ
EPA 8270 C	2,4-DICHLOROPHENOL	NJ
EPA 8270 C	2,4-DINITROPHENOL	NJ
EPA 8270 C	2,6-DICHLOROPHENOL	NJ
EPA 8270 C	2-ACETYLAMINOFLUORENE	NJ
EPA 8270 C	2-CHLOROPHENOL	NJ
EPA 8270 C	2-METHYLNAPHTHALENE	NJ
EPA 8270 C	2-NAPHTHYLAMINE	NJ
EPA 8270 C	2-NITROPHENOL	NJ
EPA 8270 C	3,3'-DICHLOROBENZIDINE	NJ
EPA 8270 C	3-METHYLCHOLANTHRENE	NJ
EPA 8270 C	4-AMINOBIPHENYL	NJ
EPA 8270 C	4-CHLORO-3-METHYLPHENOL	NJ
EPA 8270 C	4-CHLOROPHENYL PHENYLETHER	NJ
EPA 8270 C	4-METHYLPHENOL (P-CRESOL)	NJ
EPA 8270 C	4-NITROPHENOL	NJ
EPA 8270 C	7,12-DIMETHYLBENZ(A) ANTHRACENE	NJ
EPA 8270 C	ACENAPHTHENE	NJ
EPA 8270 C	ACETOPHENONE	NJ
EPA 8270 C	ANTHRACENE	NJ
EPA 8270 C	BENZIDINE	NJ
EPA 8270 C	BENZO(A)PYRENE	NJ
EPA 8270 C	BENZO(G,H,I)PERYLENE	NJ
EPA 8270 C	BENZOIC ACID	NJ
EPA 8270 C	BIS(2-CHLOROETHOXY)METHANE	NJ
EPA 8270 C	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	NJ
EPA 8270 C	CHLOROBENZILATE	NJ
EPA 8270 C	DI-N-BUTYL PHTHALATE	NJ
EPA 8270 C	DIALLATE	NJ
EPA 8270 C	DIBENZO(A,E) PYRENE	NJ
EPA 8270 C	DIBENZOFURAN	NJ
EPA 8270 C	DIMETHOATE	NJ
EPA 8270 C	1,4-PHENYLENEDIAMINE	NJ
EPA 8270 C	1-NAPHTHYLAMINE	NJ
EPA 8270 C	2,3,4,6-TETRACHLOROPHENOL	NJ
EPA 8270 C	2,4,6-TRICHLOROPHENOL	NJ
EPA 8270 C	2,4-DIMETHYLPHENOL	NJ
EPA 8270 C	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8270 C	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8270 C	2-CHLORONAPHTHALENE	NJ
EPA 8270 C	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	NJ
EPA 8270 C	2-METHYLPHENOL (O-CRESOL)	NJ
EPA 8270 C	2-NITROANILINE	NJ
EPA 8270 C	2-PICOLINE (2-METHYLPYRIDINE)	NJ
EPA 8270 C	3,3'-DIMETHYLBENZIDINE	NJ
EPA 8270 C	3-NITROANILINE	NJ
EPA 8270 C	4-BROMOPHENYL PHENYL ETHER (BDE-3)	NJ
EPA 8270 C	4-CHLOROANILINE	NJ
EPA 8270 C	4-DIMETHYL AMINOAZOBENZENE	NJ
EPA 8270 C	4-NITROANILINE	NJ
EPA 8270 C	5-NITRO-O-TOLUIDINE	NJ
EPA 8270 C	A-A-DIMETHYLPHENETHYLAMINE	NJ
EPA 8270 C	ACENAPHTHYLENE	NJ
EPA 8270 C	ANILINE	NJ
EPA 8270 C	ARAMITE	NJ
EPA 8270 C	BENZO(A)ANTHRACENE	NJ
EPA 8270 C	BENZO(B)FLUORANTHENE	NJ
EPA 8270 C	BENZO(K)FLUORANTHENE	NJ
EPA 8270 C	BENZYL ALCOHOL	NJ
EPA 8270 C	BIS(2-CHLOROETHYL) ETHER	NJ
EPA 8270 C	BUTYL BENZYL PHTHALATE	NJ
EPA 8270 C	CHRYSENE	NJ
EPA 8270 C	DI-N-OCTYL PHTHALATE	NJ
EPA 8270 C	DIBENZ(A, J) ACRIDINE	NJ
EPA 8270 C	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8270 C	DIETHYL PHTHALATE	NJ
EPA 8270 C	DIMETHYL PHTHALATE	NJ

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METHOD	ANALYTE	PRIMARY
EPA 8270 C	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	NJ
EPA 8270 C	DISULFOTON	NJ
EPA 8270 C	FAMPHUR	NJ
EPA 8270 C	FLUORENE	NJ
EPA 8270 C	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ
EPA 8270 C	HEXACHLOROETHANE	NJ
EPA 8270 C	HEXACHLOROPROPENE	NJ
EPA 8270 C	ISODRIN	NJ
EPA 8270 C	ISOSAFROLE	NJ
EPA 8270 C	METHAPYRILENE	NJ
EPA 8270 C	METHYL PARATHION (PARATHION, METHYL)	NJ
EPA 8270 C	N-NITROSODI-N-PROPYLAMINE	NJ
EPA 8270 C	N-NITROSODIMETHYLAMINE	NJ
EPA 8270 C	N-NITROSOMETHYLETHYLAMINE	NJ
EPA 8270 C	N-NITROSOPIPERIDINE	NJ
EPA 8270 C	NAPHTHALENE	NJ
EPA 8270 C	O,O,O-TRIETHYL PHOSPHOROTHIOATE	NJ
EPA 8270 C	PARATHION (PARATHION - ETHYL)	NJ
EPA 8270 C	PENTACHLORONITROBENZENE	NJ
EPA 8270 C	PHENACETIN	NJ
EPA 8270 C	PHENOL	NJ
EPA 8270 C	PRONAMIDE (KERB)	NJ
EPA 8270 C	PYRIDINE	NJ
EPA 8270 C	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8270 C - EXTENDED	1,1'-BIPHENYL (BZ-0)	NJ
EPA 8270 C - EXTENDED	ATRAZINE	NJ
EPA 8270 C - EXTENDED	CAPROLACTAM	NJ
EPA 8270 C - EXTENDED	PENTACHLOROETHANE	NJ
EPA 8270 C SIM	ACENAPHTHYLENE	NJ
EPA 8270 C SIM	BENZO(A)ANTHRACENE	NJ
EPA 8270 C SIM	BENZO(B)FLUORANTHENE	NJ
EPA 8270 C SIM	BENZO(K)FLUORANTHENE	NJ
EPA 8270 C SIM	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8270 C SIM	FLUORENE	NJ
EPA 8270 C SIM	NAPHTHALENE	NJ
EPA 8270 C	DIPHENYLAMINE	NJ
EPA 8270 C	ETHYL METHANESULFONATE	NJ
EPA 8270 C	FLUORANTHENE	NJ
EPA 8270 C	HEXACHLOROBENZENE	NJ
EPA 8270 C	HEXACHLOROCYCLOPENTADIENE	NJ
EPA 8270 C	HEXACHLOROPHENE	NJ
EPA 8270 C	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8270 C	ISOPHORONE	NJ
EPA 8270 C	KEPONE	NJ
EPA 8270 C	METHYL METHANESULFONATE	NJ
EPA 8270 C	N-NITROSO-DI-N-BUTYLAMINE	NJ
EPA 8270 C	N-NITROSODIETHYLAMINE	NJ
EPA 8270 C	N-NITROSODIPHENYLAMINE	NJ
EPA 8270 C	N-NITROSOMORPHOLINE	NJ
EPA 8270 C	N-NITROSOPYRROLIDINE	NJ
EPA 8270 C	NITROBENZENE	NJ
EPA 8270 C	O-TOLUIDINE (2-METHYLANILINE)	NJ
EPA 8270 C	PENTACHLOROBENZENE	NJ
EPA 8270 C	PENTACHLOROPHENOL	NJ
EPA 8270 C	PHENANTHRENE	NJ
EPA 8270 C	PHORATE	NJ
EPA 8270 C	PYRENE	NJ
EPA 8270 C	SAFROLE	NJ
EPA 8270 C	THIONAZIN (ZINOPHOS)	NJ
EPA 8270 C - EXTENDED	1-METHYLNAPHTHALENE	NJ
EPA 8270 C - EXTENDED	BENZALDEHYDE	NJ
EPA 8270 C - EXTENDED	CARBAZOLE	NJ
EPA 8270 C SIM	ACENAPHTHENE	NJ
EPA 8270 C SIM	ANTHRACENE	NJ
EPA 8270 C SIM	BENZO(A)PYRENE	NJ
EPA 8270 C SIM	BENZO(G,H,I)PERYLENE	NJ
EPA 8270 C SIM	CHRYSENE	NJ
EPA 8270 C SIM	FLUORANTHENE	NJ
EPA 8270 C SIM	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8270 C SIM	PHENANTHRENE	NJ

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 C SIM	PYRENE	NJ
EPA 8270 D	1,2,4,5-TETRACHLOROBENZENE	NJ
EPA 8270 D	1,2-DICHLOROBENZENE (O-DICHLOROBENZENE)	NJ
EPA 8270 D	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8270 D	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8270 D	1,4-NAPHTHOQUINONE	NJ
EPA 8270 D	1-CHLORONAPHTHALENE	NJ
EPA 8270 D	2,2'-OXYBIS(1-CHLOROPROPANE)	NJ
EPA 8270 D	2,4,5-TRICHLOROPHENOL	NJ
EPA 8270 D	2,4-DICHLOROPHENOL	NJ
EPA 8270 D	2,4-DINITROPHENOL	NJ
EPA 8270 D	2,6-DICHLOROPHENOL	NJ
EPA 8270 D	2-ACETYLAMINOFLUORENE	NJ
EPA 8270 D	2-CHLOROPHENOL	NJ
EPA 8270 D	2-METHYLNAPHTHALENE	NJ
EPA 8270 D	2-NAPHTHYLAMINE	NJ
EPA 8270 D	2-NITROPHENOL	NJ
EPA 8270 D	3,3'-DICHLOROBENZIDINE	NJ
EPA 8270 D	3-METHYLCHOLANTHRENE	NJ
EPA 8270 D	4-AMINOBIPHENYL	NJ
EPA 8270 D	4-CHLORO-3-METHYLPHENOL	NJ
EPA 8270 D	4-CHLOROPHENYL PHENYLETHER	NJ
EPA 8270 D	4-METHYLPHENOL (P-CRESOL)	NJ
EPA 8270 D	4-NITROPHENOL	NJ
EPA 8270 D	7,12-DIMETHYLBENZ(A) ANTHRACENE	NJ
EPA 8270 D	ACENAPHTHENE	NJ
EPA 8270 D	ACETOPHENONE	NJ
EPA 8270 D	ANTHRACENE	NJ
EPA 8270 D	BENZIDINE	NJ
EPA 8270 D	BENZO(A)PYRENE	NJ
EPA 8270 D	BENZO(G,H,I)PERYLENE	NJ
EPA 8270 D	BENZOIC ACID	NJ
EPA 8270 D	BIS(2-CHLOROETHOXY)METHANE	NJ
EPA 8270 C SIM - EXTENDED	1-METHYLNAPHTHALENE	NJ
EPA 8270 D	1,2,4-TRICHLOROBENZENE	NJ
EPA 8270 D	1,2-DIPHENYLHYDRAZINE	NJ
EPA 8270 D	1,3-DICHLOROBENZENE (M-DICHLOROBENZENE)	NJ
EPA 8270 D	1,4-DICHLOROBENZENE (P-DICHLOROBENZENE)	NJ
EPA 8270 D	1,4-PHENYLENEDIAMINE	NJ
EPA 8270 D	1-NAPHTHYLAMINE	NJ
EPA 8270 D	2,3,4,6-TETRACHLOROPHENOL	NJ
EPA 8270 D	2,4,6-TRICHLOROPHENOL	NJ
EPA 8270 D	2,4-DIMETHYLPHENOL	NJ
EPA 8270 D	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8270 D	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8270 D	2-CHLORONAPHTHALENE	NJ
EPA 8270 D	2-METHYL-4,6-DINITROPHENOL (4,6-DINITRO-2-METHYLPHENOL)	NJ
EPA 8270 D	2-METHYLPHENOL (O-CRESOL)	NJ
EPA 8270 D	2-NITROANILINE	NJ
EPA 8270 D	2-PICOLINE (2-METHYLPYRIDINE)	NJ
EPA 8270 D	3,3'-DIMETHYLBENZIDINE	NJ
EPA 8270 D	3-NITROANILINE	NJ
EPA 8270 D	4-BROMOPHENYL PHENYL ETHER (BDE-3)	NJ
EPA 8270 D	4-CHLOROANILINE	NJ
EPA 8270 D	4-DIMETHYL AMINOAZOBENZENE	NJ
EPA 8270 D	4-NITROANILINE	NJ
EPA 8270 D	5-NITRO-O-TOLUIDINE	NJ
EPA 8270 D	A-A-DIMETHYLPHENETHYLAMINE	NJ
EPA 8270 D	ACENAPHTHYLENE	NJ
EPA 8270 D	ANILINE	NJ
EPA 8270 D	ARAMITE	NJ
EPA 8270 D	BENZO(A)ANTHRACENE	NJ
EPA 8270 D	BENZO(B)FLUORANTHENE	NJ
EPA 8270 D	BENZO(K)FLUORANTHENE	NJ
EPA 8270 D	BENZYL ALCOHOL	NJ
EPA 8270 D	BIS(2-CHLOROETHYL) ETHER	NJ

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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY	METHOD	ANALYTE	PRIMARY
EPA 8270 D	BIS(2-ETHYLHEXYL) PHTHALATE (DI(2-ETHYLHEXYL)PHTHALATE), (DEHP)	NJ	EPA 8270 D	BUTYL BENZYL PHTHALATE	NJ
EPA 8270 D	CHLOROBENZILATE	NJ	EPA 8270 D	CHRYSENE	NJ
EPA 8270 D	DI-N-BUTYL PHTHALATE	NJ	EPA 8270 D	DI-N-OCTYL PHTHALATE	NJ
EPA 8270 D	DIALLATE	NJ	EPA 8270 D	DIBENZ(A, J) ACRIDINE	NJ
EPA 8270 D	DIBENZO(A,E) PYRENE	NJ	EPA 8270 D	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8270 D	DIBENZOFURAN	NJ	EPA 8270 D	DIETHYL PHTHALATE	NJ
EPA 8270 D	DIMETHOATE	NJ	EPA 8270 D	DIMETHYL PHTHALATE	NJ
EPA 8270 D	DINOSEB (2-SEC-BUTYL-4,6-DINITROPHENOL, DNBP)	NJ	EPA 8270 D	DIPHENYLAMINE	NJ
EPA 8270 D	DISULFOTON	NJ	EPA 8270 D	ETHYL METHANESULFONATE	NJ
EPA 8270 D	FAMPHUR	NJ	EPA 8270 D	FLUORANTHENE	NJ
EPA 8270 D	FLUORENE	NJ	EPA 8270 D	HEXACHLOROBENZENE	NJ
EPA 8270 D	HEXACHLOROBUTADIENE (1,3-HEXACHLOROBUTADIENE)	NJ	EPA 8270 D	HEXACHLOROCYCLOPENTADIENE	NJ
EPA 8270 D	HEXACHLOROETHANE	NJ	EPA 8270 D	HEXACHLOROPHENE	NJ
EPA 8270 D	HEXACHLOROPROPENE	NJ	EPA 8270 D	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8270 D	ISODRIN	NJ	EPA 8270 D	ISOPHORONE	NJ
EPA 8270 D	ISOSAFROLE	NJ	EPA 8270 D	KEPONE	NJ
EPA 8270 D	METHAPYRILENE	NJ	EPA 8270 D	METHYL METHANESULFONATE	NJ
EPA 8270 D	METHYL PARATHION (PARATHION, METHYL)	NJ	EPA 8270 D	N-NITROSO-DI-N-BUTYLAMINE	NJ
EPA 8270 D	N-NITROSODI-N-PROPYLAMINE	NJ	EPA 8270 D	N-NITROSODIETHYLAMINE	NJ
EPA 8270 D	N-NITROSODIMETHYLAMINE	NJ	EPA 8270 D	N-NITROSODIPHENYLAMINE	NJ
EPA 8270 D	N-NITROSOMETHYLETHYLAMINE	NJ	EPA 8270 D	N-NITROSOMORPHOLINE	NJ
EPA 8270 D	N-NITROSOPIPERIDINE	NJ	EPA 8270 D	N-NITROSOPYRROLIDINE	NJ
EPA 8270 D	NAPHTHALENE	NJ	EPA 8270 D	NITROBENZENE	NJ
EPA 8270 D	O,O,O-TRIETHYL PHOSPHOROTHIOATE	NJ	EPA 8270 D	O-TOLUIDINE (2-METHYLANILINE)	NJ
EPA 8270 D	PARATHION (PARATHION - ETHYL)	NJ	EPA 8270 D	PENTACHLOROBENZENE	NJ
EPA 8270 D	PENTACHLORONITROBENZENE	NJ	EPA 8270 D	PENTACHLOROPHENOL	NJ
EPA 8270 D	PHENACETIN	NJ	EPA 8270 D	PHENANTHRENE	NJ
EPA 8270 D	PHENOL	NJ	EPA 8270 D	PHORATE	NJ
EPA 8270 D	PRONAMIDE (KERB)	NJ	EPA 8270 D	PYRENE	NJ
EPA 8270 D	SAFROLE	NJ	EPA 8270 D	SULFOTEPP (TETRAETHYL DITHIOPYROPHOSPHATE)	NJ
EPA 8270 D	THIONAZIN (ZINOPHOS)	NJ	EPA 8270 D - EXTENDED	1-METHYLNAPHTHALENE	NJ
EPA 8270 D - EXTENDED	ATRAZINE	NJ	EPA 8270 D - EXTENDED	BENZALDEHYDE	NJ
EPA 8270 D - EXTENDED	CAPROLACTAM	NJ	EPA 8270 D - EXTENDED	CARBAZOLE	NJ
EPA 8270 D - EXTENDED	N-DECANE	NJ	EPA 8270 D - EXTENDED	PENTACHLOROETHANE	NJ



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SOLID AND CHEMICAL MATERIALS

METHOD	ANALYTE	PRIMARY
EPA 8270 D - EXTENDED	PYRIDINE	NJ
EPA 8310	ACENAPHTHYLENE	NJ
EPA 8310	BENZO(A)ANTHRACENE	NJ
EPA 8310	BENZO(B)FLUORANTHENE	NJ
EPA 8310	BENZO(K)FLUORANTHENE	NJ
EPA 8310	DIBENZO(A,H) ANTHRACENE	NJ
EPA 8310	FLUORENE	NJ
EPA 8310	NAPHTHALENE	NJ
EPA 8310	PYRENE	NJ
EPA 8330	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8330	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8330	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	NJ
EPA 8330	3-NITROTOLUENE	NJ
EPA 8330	4-NITROTOLUENE	NJ
EPA 8330	NITROBENZENE	NJ
EPA 8330	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	NJ
EPA 8330 A	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8330 A	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	NJ
EPA 8330 A	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8330 A	2-NITROTOLUENE	NJ
EPA 8330 A	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	NJ
EPA 8330 A	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	NJ
EPA 8330 A	NITROGLYCERIN	NJ
EPA 8330 A	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	NJ
EPA 9010 C	PREP: CYANIDE DISTILLATION	NJ
EPA 9012 B	AMENABLE CYANIDE	NJ
EPA 9013	PREP: CYANIDE DISTILLATION	NJ
EPA 9030 B	PREP: SULFIDE	NJ
EPA 9045 C	PH	NJ
EPA 9056	BROMIDE	NJ
EPA 9056	FLUORIDE	NJ

METHOD	ANALYTE	PRIMARY
EPA 8310	ACENAPHTHENE	NJ
EPA 8310	ANTHRACENE	NJ
EPA 8310	BENZO(A)PYRENE	NJ
EPA 8310	BENZO(G,H,I)PERYLENE	NJ
EPA 8310	CHRYSENE	NJ
EPA 8310	FLUORANTHENE	NJ
EPA 8310	INDENO(1,2,3-CD) PYRENE	NJ
EPA 8310	PHENANTHRENE	NJ
EPA 8330	1,3,5-TRINITROBENZENE (1,3,5-TNB)	NJ
EPA 8330	2,4,6-TRINITROTOLUENE (2,4,6-TNT)	NJ
EPA 8330	2,6-DINITROTOLUENE (2,6-DNT)	NJ
EPA 8330	2-NITROTOLUENE	NJ
EPA 8330	4-AMINO-2,6-DINITROTOLUENE (4-AM-DNT)	NJ
EPA 8330	METHYL-2,4,6-TRINITROPHENYLNITRAMINE (TETRYL)	NJ
EPA 8330	NITROGLYCERIN	NJ
EPA 8330	RDX (HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE)	NJ
EPA 8330 A	1,3-DINITROBENZENE (1,3-DNB)	NJ
EPA 8330 A	2,4-DINITROTOLUENE (2,4-DNT)	NJ
EPA 8330 A	2-AMINO-4,6-DINITROTOLUENE (2-AM-DNT)	NJ
EPA 8330 A	3-NITROTOLUENE	NJ
EPA 8330 A	4-NITROTOLUENE	NJ
EPA 8330 A	NITROBENZENE	NJ
EPA 8330 A	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TETRAZOCINE (HMX)	NJ
EPA 9010 B	PREP: CYANIDE DISTILLATION	NJ
EPA 9012 A	CYANIDE	NJ
EPA 9012 B	TOTAL CYANIDE	NJ
EPA 9023	EXTRACTABLE ORGANIC HALIDES (EOX)	NJ
EPA 9034	TOTAL SULFIDES	NJ
EPA 9045 D	PH	NJ
EPA 9056	CHLORIDE	NJ

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METHOD	ANALYTE	PRIMARY
EPA 9056	NITRATE AS N	NJ
EPA 9056	ORTHOPHOSPHATE AS P	NJ
EPA 9056 A	BROMIDE	NJ
EPA 9056 A	FLUORIDE	NJ
EPA 9056 A	NITRITE AS N	NJ
EPA 9056 A	SULFATE	NJ
EPA 9095 B	FREE LIQUID	NJ
EPA 9320	RADIUM-228	NJ
SM 2540 G-2011	RESIDUE-VOLATILE	NJ
EPA 9056	NITRITE AS N	NJ
EPA 9056	SULFATE	NJ
EPA 9056 A	CHLORIDE	NJ
EPA 9056 A	NITRATE AS N	NJ
EPA 9056 A	ORTHOPHOSPHATE AS P	NJ
EPA 9071 B	OIL AND GREASE (AS N-HEXANE EXTRACTABLE MATERIAL (HEM))	NJ
EPA 9310	GROSS ALPHA AND BETA	NJ
SM 2540 G-2011	RESIDUE-TOTAL (TS)	NJ

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information													Contaminant		Screening Levels										Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				1.2E-03	O					1	0.1		Acephate	30560-19-1	7.6E+01	n	9.8E+02	n					2.4E+01	n		5.3E-03	n	
		2.2E-06	I			9.0E-03	I	V		1		1.1E+05	Acetaldehyde	75-07-0	1.1E+01	c**	4.9E+01	c**	1.3E+00	c**	5.6E+00	c**	2.6E+00	c**		5.2E-04	c**	
				2.0E-02	I					1	0.1		Acetochlor	34256-82-1	1.3E+03	n	1.6E+04	n					3.5E+02	n		2.8E-01	n	
				9.0E-01	I	3.1E+01	A	V		1		1.1E+05	Acetone	67-64-1	6.1E+04	n	6.7E+05	s	3.2E+04	n	1.4E+05	n	1.4E+04	n		2.9E+00	n	
						2.0E-03	X			1	0.1		Acetone Cyanohydrin	75-86-5	2.8E+06	nm	1.2E+07	nm	2.1E+00	n	8.8E+00	n						
						6.0E-02	I	V		1		1.3E+05	Acetonitrile	75-05-8	8.1E+02	n	3.4E+03	n	6.3E+01	n	2.6E+02	n	1.3E+02	n		2.6E-02	n	
				1.0E-01	I			V		1		2.5E+03	Acetophenone	98-86-2	7.8E+03	ns	1.2E+05	s					1.9E+03	n		5.8E-01	n	
3.8E+00	C	1.3E-03	C							1	0.1		Acetylaminofluorene, 2-	53-96-3	1.4E-01	c	6.0E-01	c	2.2E-03	c	9.4E-03	c	1.6E-02	c		7.2E-05	c	
				5.0E-04	I	2.0E-05	I	V		1		2.3E+04	Acrolein	107-02-8	1.4E-01	n	6.0E-01	n	2.1E-02	n	8.8E-02	n	4.2E-02	n		8.4E-06	n	
5.0E-01	I	1.0E-04	I	2.0E-03	I	6.0E-03	I		M	1	0.1		Acrylamide	79-06-1	2.4E-01	c	4.6E+00	c	1.0E-02	c	1.2E-01	c	5.0E-02	c		1.1E-05	c	
				5.0E-01	I	1.0E-03	I	V		1		1.1E+05	Acrylic Acid	79-10-7	9.9E+01	n	4.2E+02	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		4.2E-04	n	
5.4E-01	I	6.8E-05	I	4.0E-02	A	2.0E-03	I	V		1		1.1E+04	Acrylonitrile	107-13-1	2.5E-01	c*	1.1E+00	c*	4.1E-02	c*	1.8E-01	c*	5.2E-02	c*		1.1E-05	c*	
						6.0E-03	P			1	0.1		Adiponitrile	111-69-3	8.5E+06	nm	3.6E+07	nm	6.3E+00	n	2.6E+01	n						
5.6E-02	C			1.0E-02	I					1	0.1		Alachlor	15972-60-8	9.7E+00	c*	4.1E+01	c					1.1E+00	c	2	8.7E-04	c	1.6E-03
				1.0E-03	I					1	0.1		Aldicarb	116-06-3	6.3E+01	n	8.2E+02	n					2.0E+01	n	3	4.9E-03	n	7.5E-04
				1.0E-03	I					1	0.1		Aldicarb Sulfone	1646-88-4	6.3E+01	n	8.2E+02	n					2.0E+01	n	2	4.4E-03	n	4.4E-04
										1	0.1		Aldicarb sulfoxide	1646-87-3											4			8.8E-04
1.7E+01	I	4.9E-03	I	3.0E-05	I			V		1			Aldrin	309-00-2	3.9E-02	c*	1.8E-01	c	5.7E-04	c	2.5E-03	c	9.2E-04	c		1.5E-04	c	
				5.0E-03	I	1.0E-04	X	V		1		1.1E+05	Allyl Alcohol	107-18-6	3.5E+00	n	1.5E+01	n	1.0E-01	n	4.4E-01	n	2.1E-01	n		4.2E-05	n	
2.1E-02	C	6.0E-06	C			1.0E-03	I	V		1		1.4E+03	Allyl Chloride	107-05-1	7.2E-01	c**	3.2E+00	c**	4.7E-01	c**	2.0E+00	c**	7.3E-01	c**		2.3E-04	c**	
				1.0E+00	P	5.0E-03	P			1			Aluminum	7429-90-5	7.7E+04	n	1.1E+06	nm	5.2E+00	n	2.2E+01	n	2.0E+04	n		3.0E+04	n	
				4.0E-04	I					1			Aluminum Phosphide	20859-73-8	3.1E+01	n	4.7E+02	n					8.0E+00	n				
				9.0E-03	I					1	0.1		Ametryn	834-12-8	5.7E+02	n	7.4E+03	n					1.5E+02	n		1.6E-01	n	
2.1E+01	C	6.0E-03	C							1	0.1		Aminobiphenyl, 4-	92-67-1	2.6E-02	c	1.1E-01	c	4.7E-04	c	2.0E-03	c	3.0E-03	c		1.5E-05	c	
				8.0E-02	P					1	0.1		Aminophenol, m-	591-27-5	5.1E+03	n	6.6E+04	n					1.6E+03	n		6.1E-01	n	
				4.0E-03	X					1	0.1		Aminophenol, o-	95-55-6	2.5E+02	n	3.3E+03	n					7.9E+01	n		3.0E-02	n	
				2.0E-02	P					1	0.1		Aminophenol, p-	123-30-8	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.5E-01	n	
				2.5E-03	I					1	0.1		Amitraz	33089-61-1	1.6E+02	n	2.1E+03	n					8.2E+00	n		4.2E+00	n	
						5.0E-01	I	V		1			Ammonia	7664-41-7					5.2E+02	n	2.2E+03	n						
				2.0E-01	I					1			Ammonium Sulfamate	7773-06-0	1.6E+04	n	2.3E+05	nm					4.0E+03	n				
						3.0E-03	X	V		1		1.4E+04	Amyl Alcohol, tert-	75-85-4	8.2E+01	n	3.4E+02	n	3.1E+00	n	1.3E+01	n	6.3E+00	n		1.3E-03	n	
5.7E-03	I	1.6E-06	C	7.0E-03	P	1.0E-03	I			1	0.1		Aniline	62-53-3	9.5E+01	c**	4.0E+02	c*	1.0E+00	n	4.4E+00	n	1.3E+01	c*		4.6E-03	c*	
4.0E-02	P			2.0E-03	X					1	0.1		Anthraquinone, 9,10-	84-65-1	1.4E+01	c**	5.7E+01	c*					1.4E+00	c*		1.4E-02	c*	
				4.0E-04	I					0.15			Antimony (metallic)	7440-36-0	3.1E+01	n	4.7E+02	n					7.8E+00	n	6	3.5E-01	n	2.7E-01
				5.0E-04	H					0.15			Antimony Pentoxide	1314-60-9	3.9E+01	n	5.8E+02	n					9.7E+00	n				
				4.0E-04	H					0.15			Antimony Tetroxide	1332-81-6	3.1E+01	n	4.7E+02	n					7.8E+00	n				
						2.0E-04	I			0.15			Antimony Trioxide	1309-64-4	2.8E+05	nm	1.2E+06	nm	2.1E-01	n	8.8E-01	n						
1.5E+00	I	4.3E-03	I	3.0E-04	I	1.5E-05	C			1	0.03		Arsenic, Inorganic	7440-38-2	6.8E-01	c*R	3.0E+00	cR	6.5E-04	c*	2.9E-03	c*	5.2E-02	c	10	1.5E-03	c	2.9E-01
				3.5E-06	C	5.0E-05	I			1			Arsine	7784-42-1	2.7E-01	n	4.1E+00	n	5.2E-02	n	2.2E-01	n	7.0E-02	n				
										1			Asbestos (units in fibers)	1332-21-4											7.0E+06 (G)			
				3.6E-02	O					1	0.1		Asulam	3337-71-1	2.3E+03	n	3.0E+04	n					7.2E+02	n		1.8E-01	n	
2.3E-01	C			3.5E-02	I					1	0.1		Atrazine	1912-24-9	2.4E+00	c	1.0E+01	c					3.0E-01	c	3	2.0E-04	c	1.9E-03
8.8E-01	C	2.5E-04	C							1	0.1		Auramine	492-80-8	6.2E-01	c	2.6E+00	c	1.1E-02	c	4.9E-02	c	6.7E-02	c		6.1E-04	c	
				4.0E-04	I					1	0.1		Avermectin B1	65195-55-3	2.5E+01	n	3.3E+02	n					8.0E+00	n		1.4E+01	n	
				3.0E-03	A	1.0E-02	A			1	0.1		Azinphos-methyl	86-50-0	1.9E+02	n	2.5E+03	n	1.0E+01	n	4.4E+01	n	5.6E+01	n		1.7E-02	n	
1.1E-01	I	3.1E-05	I					V		1			Azobenzene	103-33-3	5.6E+00	c	2.6E+01	c	9.1E-02	c	4.0E-01	c	1.2E-01	c		9.3E-04	c	
				1.0E+00	P	7.0E-06	P			1	0.1		Azodicarbonamide	123-77-3	8.6E+03	n	4.0E+04	n	7.3E-03	n	3.1E-02	n	2.0E+04	n		6.8E+00	n	
				2.0E-01	I	5.0E-04	H			0.07			Barium	7440-39-3	1.5E+04	n	2.2E+05	nm	5.2E-01	n	2.2E+00	n	3.8E+03	n	2000	1.6E+02	n	8.2E+01
				5.0E-03	O			V		1			Benfluralin	1861-40-1	3.9E+02	n	5.8E+03	n					2.8E+01	n		9.4E-01	n	
				5.0E-02	I					1	0.1		Benomyl	17804-35-2	3.2E+03	n	4.1E+04	n					9.7E+02	n		8.5E-01	n	
				2.0E-01	I					1	0.1		Bensulfuron-methyl	83055-99-6	1.3E+04	n	1.6E+05	nm					3.9E+03	n		1.0E+00	n	
				3.0E-02	I					1	0.1		Bentazon	25057-89-0	1.9E+03	n	2.5E+04	n					5.7E+02	n		1.2E-01	n	
4.0E-03	P			1.0E-01	I			V		1		1.2E+03	Benzaldehyde	100-52-7	1.7E+02	c*	8.2E+02	c					1.9E+01	c		4.1E-03	c	
5.5E-02	I	7.8E-06	I	4.0E-03	I	3.0E-02	I	V		1		1.8E+03	Benzene	71-43-2	1.2E+00	c*	5.1E+00	c*	3.6E-01	c*	1.6E+00	c*	4.6E-01	c*	5	2.3E-04	c*	2.6E-03
1.0E-01	X			3.0E-04	X					1	0.1		Benzenediamine-2-methyl sulfate, 1,4-	6369-59-1	5.4E+00	c**	2.3E+01	c*					7.8E-01	c**		2.2E-04	c**	
				1.0E-03	P			V		1		1.3E+03	Benzenethiol	108-98-5	7.8E+01	n	1.2E+03	n					1.7E+01	n		1.1E-02	n	
2.3E+02	I	6.7E-02	I	3.0E-03	I				M	1	0.1		Benzidine	92-87-5	5.3E-04	c	1.0E-02	c	1.5E-05	c	1.8E-04	c	1.1E-04	c		2.8E-07	c	
				4.0E+00	I					1	0.1		Benzoic Acid	65-85-0	2.5E+05	nm	3.3E+06	nm					7.5E+04	n		1.5E+01	n	
1.3E+01	I							V		1		3.2E+02	Benzotrichloride	98-07-7	5.3E-02	c	2.5E-01	c					3.0E-03	c		6.6E-06	c	
				1.0E-01	P					1	0.1		Benzyl Alcohol	100-51-6	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.8E-01	n	
1.7E-01	I	4.9E-05	C	2.0E-03	P	1.0E-03	P	V		1		1.5E+03	Benzyl Chloride	100-44-7	1.1E+00	c*	4.8E+00	c*	5.7E-02	c*	2.5E-01	c*	8.9E-02	c*		9.8E-05	c*	
		2.4E-03	I	2.0E-03	I	2.0E-05	I			0.007			Beryllium and compounds	7440-41-7	1.6E+02	n	2.3E+03	n	1.2E-03	c*	5.1E-03	c*	2.5E+01	n	4	1.9E+01	n	3.2E+00
				9.0E-03	P					1	0.1		Bifenox	42576-02-3	5.7E+02	n	7.4E+03	n					1.0E+02	n		7.6E-01	n	
				1.5E-02	I					1	0.1		Biphenthrin	82657-04-3	9.5E+02	n	1.2E+04	n					3.0E+02	n		1.4E+03	n	
8.0E-03	I			5.0E-01	I	4.0E-04	X	V		1			Biphenyl, 1,1'-	92-52-4	4.7E+01	n	2.0E+02	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		8.7E-03	n	
				4.0E-02	I			V		1		1.0E+03	Bis(2-chloro-1-methylethyl) ether	108-60-1	3.1E+03	ns	4.7E+04	ns					7.1E+02	n		2.6E-01	n	
				3.0E-03	P					1	0.1		Bis(2-chloroethoxy)methane	111-91-1	1.9E+02	n	2.5E+03	n					5.9E+01	n		1.3E-02	n	
1.1E+00	I	3.3E-04	I					V		1		5.1E+03	Bis(2-chloroethyl)ether	111-44-4	2.3E-01	c	1.0E+00	c	8.5E-03	c	3.7E-02	c	1.4E-02	c		3.6E-06	c	
2.2E+02	I	6.2E-02	I					V		1		4.2E+03	Bis(chloromethyl)ether	542-88-1	8.3E-05	c	3.6E-04	c	4.5E-05	c	2.0E-04	c	7.2E-05	c		1.7E-08	c	
				5.0E-02	I					1	0.1		Bisphenol A	80-05-7	3.2E+03	n	4.1E+04	n					7.7E+02	n		5.8E+01	n	
				2.0E-01	I	2.0E-02	H			1			Boron And Borates Only	7440-42-8	1.6E+04	n	2.3E+05	nm	2.1E+01	n	8.8E+01	n	4.0E+03	n		1.3E+01	n	
				2.0E+00	P	2.0E-02	P	V		1			Boron Trichloride	10294-34-5	1.6E+05	nm	2.3E+06	nm	2.1E+01	n	8.8E+01	n	4.2E+01	n				
				4.0E-02	C	1.3E-02	C	V		1			Boron Trifluoride	7637-07-2	3.1E+03	n	4.7E+04	n	1.4E+01	n	5.7E+01	n	2.6E+01	n				
7.0E-01	I			4.0E-03	I					1			Bromate	15541-45-4	9.9E-01	c	4.7E+00	c					1.1E-01	c	10	8.5E-04	c	7.7E-02
2.0E+00	X	6.0E-04	X					V		1		2.4E+03	Bromo-2-chloroethane, 1-	107-04-0	2.6E-02	c	1.1E-01	c	4.7E-03	c	2.0E-02	c	7.4E-03	c		2.1E-06	c	

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information													Contaminant		Screening Levels													Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				3.0E-04	X			V		1		9.0E+02	Bromo-3-fluorobenzene, 1-	1073-06-9	2.3E+01	n	3.5E+02	n					4.9E+00	n		4.7E-03	n	
				3.0E-04	X			V		1		3.2E+02	Bromo-4-fluorobenzene, 1-	460-00-4	2.3E+01	n	3.5E+02	ns					4.6E+00	n		4.4E-03	n	
										1	0.1		Bromoacetic acid	79-08-3											6.0E+01 (G)			1.2E-02
				8.0E-03	I	6.0E-02	I	V		1		6.8E+02	Bromobenzene	108-86-1	2.9E+02	n	1.8E+03	ns	6.3E+01	n	2.6E+02	n	6.2E+01	n		4.2E-02	n	
						4.0E-02	X	V		1		4.0E+03	Bromochloromethane	74-97-5	1.5E+02	n	6.3E+02	n	4.2E+01	n	1.8E+02	n	8.3E+01	n		2.1E-02	n	
6.2E-02	I	3.7E-05	C	2.0E-02	I			V		1		9.3E+02	Bromodichloromethane	75-27-4	2.9E-01	c	1.3E+00	c	7.6E-02	c	3.3E-01	c	1.3E-01	c	8.0E+01 (G)	3.6E-05	c	2.2E-02
7.9E-03	I	1.1E-06	I	2.0E-02	I			V		1		9.2E+02	Bromoform	75-25-2	1.9E+01	c*	8.6E+01	c	2.6E+00	c	1.1E+01	c	3.3E+00	c	8.0E+01 (G)	8.7E-04	c	2.1E-02
				1.4E-03	I	5.0E-03	I	V		1		3.6E+03	Bromomethane	74-83-9	6.8E+00	n	3.0E+01	n	5.2E+00	n	2.2E+01	n	7.5E+00	n		1.9E-03	n	
				5.0E-03	H			V		1			Bromophos	2104-96-3	3.9E+02	n	5.8E+03	n					3.5E+01	n		1.5E-01	n	
						1.0E-01	A	V		1		9.7E+02	Bromopropane, 1-	106-94-5	2.2E+02	n	9.4E+02	n	1.0E+02	n	4.4E+02	n	2.1E+02	n		6.4E-02	n	
1.0E-01	O			1.5E-02	O					1	0.1		Bromoxynil	1689-84-5	5.3E+00	c	2.2E+01	c					6.1E-01	c		5.2E-04	c	
1.0E-01	O			1.5E-02	O			V		1			Bromoxynil Octanoate	1689-99-2	6.7E+00	c	3.2E+01	c					2.4E-01	c		2.1E-03	c	
6.0E-01	C	3.0E-05	I			2.0E-03	I	V		1		6.7E+02	Butadiene, 1,3-	106-99-0	7.6E-02	c*	3.3E-01	c*	9.4E-02	c*	4.1E-01	c*	7.1E-02	c*		3.9E-05	c*	
				3.0E-02	O					1	0.1		Butanoic acid, 4-(2,4-dichlorophenoxy)-	94-82-6	1.9E+03	n	2.5E+04	n					4.5E+02	n		4.2E-01	n	
				1.0E-01	I			V		1		7.6E+03	Butanol, N-	71-36-3	7.8E+03	ns	1.2E+05	s					2.0E+03	n		4.1E-01	n	
				2.0E+00	P	3.0E+01	P	V		1		2.1E+04	Butyl alcohol, sec-	78-92-2	1.3E+05	s	1.5E+06	s	3.1E+04	n	1.3E+05	n	2.4E+04	n		5.0E+00	n	
				5.0E-02	I			V		1			Butylate	2008-41-5	3.9E+03	n	5.8E+04	n					4.6E+02	n		4.5E-01	n	
2.0E-04	C	5.7E-08	C							1	0.1		Butylated hydroxyanisole	25013-16-5	2.7E+03	c	1.1E+04	c	4.9E+01	c	2.2E+02	c	1.5E+02	c		2.9E-01	c	
3.6E-03	P			3.0E-01	P					1	0.1		Butylated hydroxytoluene	128-37-0	1.5E+02	c	6.4E+02	c					3.4E+00	c		1.0E-01	c	
				5.0E-02	P			V		1		1.1E+02	Butylbenzene, n-	104-51-8	3.9E+03	ns	5.8E+04	ns					1.0E+03	n		3.2E+00	n	
				1.0E-01	X			V		1		1.5E+02	Butylbenzene, sec-	135-98-8	7.8E+03	ns	1.2E+05	s					2.0E+03	n		5.9E+00	n	
				1.0E-01	X			V		1		1.8E+02	Butylbenzene, tert-	98-06-6	7.8E+03	ns	1.2E+05	s					6.9E+02	n		1.6E+00	n	
				2.0E-02	A					1	0.1		Cacodylic Acid	75-60-5	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.1E-01	n	
		1.8E-03	I	1.0E-03	I	1.0E-05	A			0.025	0.001		Cadmium (Diet)	7440-43-9	7.1E+01	n	9.8E+02	n										
		1.8E-03	I	5.0E-04	I	1.0E-05	A			0.05	0.001		Cadmium (Water)	7440-43-9					1.6E-03	c**	6.8E-03	c**	9.2E+00	n	5	6.9E-01	n	3.8E-01
				5.0E-01	I	2.2E-03	C			1	0.1		Caprolactam	105-60-2	3.1E+04	n	4.0E+05	nm	2.3E+00	n	9.6E+00	n	9.9E+03	n		2.5E+00	n	
1.5E-01	C	4.3E-05	C	2.0E-03	I					1	0.1		Captafol	2425-06-1	3.6E+00	c*	1.5E+01	c	6.5E-02	c	2.9E-01	c	4.0E-01	c*		7.1E-04	c*	
2.3E-03	C	6.6E-07	C	1.3E-01	I					1	0.1		Captan	133-06-2	2.4E+02	c*	1.0E+03	c	4.3E+00	c	1.9E+01	c	3.1E+01	c*		2.2E-02	c*	
				1.0E-01	I					1	0.1		Carbaryl	63-25-2	6.3E+03	n	8.2E+04	n					1.8E+03	n		1.7E+00	n	
				5.0E-03	I					1	0.1		Carbofuran	1563-66-2	3.2E+02	n	4.1E+03	n					9.4E+01	n	40	3.7E-02	n	1.6E-02
				1.0E-01	I	7.0E-01	I	V		1		7.4E+02	Carbon Disulfide	75-15-0	7.7E+02	ns	3.5E+03	ns	7.3E+02	n	3.1E+03	n	8.1E+02	n		2.4E-01	n	
7.0E-02	I	6.0E-06	I	4.0E-03	I	1.0E-01	I	V		1		4.6E+02	Carbon Tetrachloride	56-23-5	6.5E-01	c	2.9E+00	c	4.7E-01	c	2.0E+00	c	4.6E-01	c	5	1.8E-04	c	1.9E-03
						1.0E-01	P	V		1		5.9E+03	Carbonyl Sulfide	463-58-1	6.7E+01	n	2.8E+02	n	1.0E+02	n	4.4E+02	n	2.1E+02	n		5.1E-01	n	
				1.0E-02	I					1	0.1		Carbosulfan	55285-14-8	6.3E+02	n	8.2E+03	n					5.1E+01	n		1.2E+00	n	
				1.0E-01	I					1	0.1		Carboxin	5234-68-4	6.3E+03	n	8.2E+04	n					1.9E+03	n		1.0E+00	n	
						9.0E-04	I			1			Ceric oxide	1306-38-3	1.3E+06	nm	5.4E+06	nm	9.4E-01	n	3.9E+00	n						
				1.0E-01	I			V		1			Chloral Hydrate	302-17-0	7.8E+03	n	1.2E+05	nm					2.0E+03	n		4.0E-01	n	
				1.5E-02	I					1	0.1		Chloramben	133-90-4	9.5E+02	n	1.2E+04	n					2.9E+02	n		7.0E-02	n	
													Chloramines, Organic													4.0E+03 (G)			
4.0E-01	H									1	0.1		Chloranil	118-75-2	1.3E+00	c	5.7E+00	c					1.8E-01	c		1.5E-04	c	
3.5E-01	I	1.0E-04	I	5.0E-04	I	7.0E-04	I	V		1	0.04		Chlordane	12789-03-6	1.7E+00	c*	7.7E+00	c*	2.8E-02	c*	1.2E-01	c*	2.0E-02	c*	2	2.7E-03	c*	2.7E-01
1.0E+01	I	4.6E-03	C	3.0E-04	I					1	0.1		Chlordecone (Kepone)	143-50-0	5.4E-02	c	2.3E-01	c	6.1E-04	c	2.7E-03	c	3.5E-03	c		1.2E-04	c	
				7.0E-04	A					1	0.1		Chlorfenvinphos	470-90-6	4.4E+01	n	5.7E+02	n					1.1E+01	n		3.1E-02	n	
				9.0E-02	O					1	0.1		Chlorimuron, Ethyl-	90982-32-4	5.7E+03	n	7.4E+04	n					1.8E+03	n		6.0E-01	n	
				1.0E-01	I	1.5E-04	A	V		1		2.8E+03	Chlorine	7782-50-5	1.8E-01	n	7.8E-01	n	1.5E-01	n	6.4E-01	n	3.0E-01	n	4000	1.5E-04	n	2.0E+00
				3.0E-02	I	2.0E-04	I	V		1			Chlorine Dioxide	10049-04-4	2.3E+03	n	3.4E+04	n	2.1E-01	n	8.8E-01	n	4.2E-01	n	800			
				3.0E-02	I					1			Chlorite (Sodium Salt)	7758-19-2	2.3E+03	n	3.5E+04	n					6.0E+02	n	1000			
						5.0E+01	I	V		1		1.2E+03	Chloro-1,1-difluoroethane, 1-	75-68-3	5.4E+04	ns	2.3E+05	s	5.2E+04	n	2.2E+05	n	1.0E+05	n		5.2E+01	n	
		3.0E-04	I	2.0E-02	H	2.0E-02	I	V		1		7.9E+02	Chloro-1,3-butadiene, 2-	126-99-8	1.0E-02	c	4.4E-02	c	9.4E-03	c	4.1E-02	c	1.9E-02	c		9.8E-06	c	
4.6E-01	H									1	0.1		Chloro-2-methylaniline HCl, 4-	3165-93-3	1.2E+00	c	5.0E+00	c					1.7E-01	c		1.5E-04	c	
1.0E-01	P	7.7E-05	C	3.0E-03	X					1	0.1		Chloro-2-methylaniline, 4-	95-69-2	5.4E+00	c*	2.3E+01	c	3.6E-02	c	1.6E-01	c	7.0E-01	c*		4.0E-04	c*	
2.7E-01	X							V		1		1.2E+04	Chloroacetaldehyde, 2-	107-20-0	2.6E+00	c	1.2E+01	c					2.9E-01	c		5.8E-05	c	
										1	0.1		Chloroacetic Acid	79-11-8											6.0E+01 (G)			1.2E-02
						3.0E-05	I			1	0.1		Chloroacetophenone, 2-	532-27-4	4.3E+04	n	1.8E+05	nm	3.1E-02	n	1.3E-01	n						
2.0E-01	P			4.0E-03	I					1	0.1		Chloroaniline, p-	106-47-8	2.7E+00	c*	1.1E+01	c					3.7E-01	c		1.6E-04	c	
				2.0E-02	I	5.0E-02	P	V		1		7.6E+02	Chlorobenzene	108-90-7	2.8E+02	n	1.3E+03	ns	5.2E+01	n	2.2E+02	n	7.8E+01	n	100	5.3E-02	n	6.8E-02
				1.0E-01	X					1	0.1		Chlorobenzene sulfonic acid, p-	98-66-8	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.7E-01	n	
1.1E-01	C	3.1E-05	C	2.0E-02	I					1	0.1		Chlorobenzilate	510-15-6	4.9E+00	c	2.1E+01	c	9.1E-02	c	4.0E-01	c	3.1E-01	c		1.0E-03	c	
				3.0E-02	X					1	0.1		Chlorobenzoic Acid, p-	74-11-3	1.9E+03	n	2.5E+04	n					5.1E+02	n		1.3E-01	n	
				3.0E-03	P	3.0E-01	P	V		1		2.9E+02	Chlorobenzotrifluoride, 4-	98-56-6	2.1E+02	n	2.5E+03	ns	3.1E+02	n	1.3E+03	n	3.5E+01	n		1.2E-01	n	
				4.0E-02	P			V		1		7.3E+02	Chlorobutane, 1-	109-69-3	3.1E+03	ns	4.7E+04	ns					6.4E+02	n		2.6E-01	n	
						5.0E+01	I	V		1		1.7E+03	Chlorodifluoromethane	75-45-6	4.9E+04	ns	2.1E+05	s	5.2E+04	n	2.2E+05	n	1.0E+05	n		4.3E+01	n	
				2.0E-02	P			V		1		1.1E+05	Chloroethanol, 2-	107-07-3	1.6E+03	n	2.3E+04	n					4.0E+02	n		8.1E-02	n	
3.1E-02	C	2.3E-05	I	1.0E-02	I	9.8E-02	A	V		1		2.5E+03	Chloroform	67-66-3	3.2E-01	c	1.4E+00	c	1.2E-01	c	5.3E-01	c	2.2E-01	c	8.0E+01 (G)	6.1E-05	c	2.2E-02
						9.0E-02	I	V		1		1.3E+03	Chloromethane	74-87-3	1.1E+02	n	4.6E+02	n	9.4E+01	n	3.9E+02	n	1.9E+02	n		4.9E-02	n	
2.4E+00	C	6.9E-04	C					V		1		9.3E+03	Chloromethyl Methyl Ether	107-30-2	2.0E-02	c	8.9E-02	c	4.1E-03	c	1.8E-02	c	6.5E-03	c		1.4E-06	c	
3.0E-01	P			3.0E-03	P	1.0E-05	X			1	0.1		Chloronitrobenzene, o-	88-73-3	1.8E+00	c	7.7E+00	c	1.0E-02	n	4.4E-02	n	2.4E-01	c		2.2E-04	c	
6.0E-02	P			7.0E-04	P	2.0E-03	P			1	0.1		Chloronitrobenzene, p-	100-00-5	9.0E+00	c**	3.8E+01	c*	2.1E+00	n	8.8E+00	n	1.2E+00	c*		1.1E-03	c*	
				5.0E-03	I			V		1		2.7E+04	Chlorophenol, 2-	95-57-8	3.9E+02	n	5.8E+03	n					9.1E+01	n		8.9E-02	n	
						4.0E-04	C	V		1		6.2E+02	Chloropicrin	76-06-2	2.0E+00	n	8.2E+00	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		2.5E-04	n	
3.1E-03	C	8.9E-07	C	1.5E-02	I					1	0.1		Chlorothalonil	1897-45-6	1.8E+02	c**	7.4E+02	c*	3.2E+00	c	1.4E+01	c	2.2E+01	c*		5.0E-02	c*	
				2.0E-02	I			V		1		9.1E+02	Chlorotoluene, o-	95-49-8	1.6E+03	ns	2.3E+04	ns					2.4E+02	n		2.3E-01	n	
				2.0E-02	X			V		1		2.5E+02	Chlorotoluene, p-	106-43-4	1.6E+03	ns	2.3E+04	ns					2.5E+02	n		2.4E-01	n	
2.4E+02	C	6.9E-02	C							1	0.1		Chlorozotocin	54749-90-5	2.3E-03	c	9.6E-03	c	4.1E-05	c	1.8E-04	c	3.2E-04	c		7.1E-08	c	
				5.0E-02	O					1	0.1		Chlorpropham	101-21-3	3.2E+03	n	4.1E+04	n					7.1E+02	n		6.4E-01	n	

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				1.0E-03	A					1	0.1		Chlorpyrifos	2921-88-2	6.3E+01	n	8.2E+02	n					8.4E+00	n		1.2E-01	n	
				1.0E-02	H					1	0.1		Chlorpyrifos Methyl	5598-13-0	6.3E+02	n	8.2E+03	n					1.2E+02	n		5.4E-01	n	
				5.0E-02	O					1	0.1		Chlorsulfuron	64902-72-3	3.2E+03	n	4.1E+04	n					9.9E+02	n		8.3E-01	n	
				1.0E-02	I					1	0.1		Chlorthal-dimethyl	1861-32-1	6.3E+02	n	8.2E+03	n					1.2E+02	n		1.5E-01	n	
				8.0E-04	H					1	0.1		Chlorthiophos	60238-56-4	5.1E+01	n	6.6E+02	n					2.8E+00	n		7.3E-02	n	
				1.5E+00	I					0.013			Chromium(III), Insoluble Salts	16065-83-1	1.2E+05	nm	1.8E+06	nm					2.2E+04	n		4.0E+07	n	
5.0E-01	C	8.4E-02	G	3.0E-03	I	1.0E-04	I		M	0.025			Chromium(VI)	18540-29-9	3.0E-01	c	6.3E+00	c	1.2E-05	c	1.5E-04	c	3.5E-02	c		6.7E-04	c	
										0.013			Chromium, Total	7440-47-3											100			1.8E+05
				1.3E-02	I					1	0.1		Clofentezine	74115-24-5	8.2E+02	n	1.1E+04	n					2.3E+02	n		1.4E+01	n	
		9.0E-03	P	3.0E-04	P	6.0E-06	P			1			Cobalt	7440-48-4	2.3E+01	n	3.5E+02	n	3.1E-04	c*	1.4E-03	c*	6.0E+00	n		2.7E-01	n	
		6.2E-04	I					V	M	1			Coke Oven Emissions	8007-45-2					1.6E-03	c	2.0E-02	c						
				4.0E-02	H					1			Copper	7440-50-8	3.1E+03	n	4.7E+04	n					8.0E+02	n	1300	2.8E+01	n	4.6E+01
				5.0E-02	I	6.0E-01	C			1	0.1		Cresol, m-	108-39-4	3.2E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	9.3E+02	n		7.4E-01	n	
				5.0E-02	I	6.0E-01	C			1	0.1		Cresol, o-	95-48-7	3.2E+03	n	4.1E+04	n	6.3E+02	n	2.6E+03	n	9.3E+02	n		7.5E-01	n	
				1.0E-01	A	6.0E-01	C			1	0.1		Cresol, p-	106-44-5	6.3E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.9E+03	n		1.5E+00	n	
				1.0E-01	A					1	0.1		Cresol, p-chloro-m-	59-50-7	6.3E+03	n	8.2E+04	n					1.4E+03	n		1.7E+00	n	
				1.0E-01	A	6.0E-01	C			1	0.1		Cresols	1319-77-3	6.3E+03	n	8.2E+04	n	6.3E+02	n	2.6E+03	n	1.5E+03	n		1.3E+00	n	
1.9E+00	H			1.0E-03	P			V		1		1.7E+04	Crotonaldehyde, trans-	123-73-9	3.7E-01	c	1.7E+00	c					4.0E-02	c		8.2E-06	c	
				1.0E-01	I	4.0E-01	I	V		1		2.7E+02	Cumene	98-82-8	1.9E+03	ns	9.9E+03	ns	4.2E+02	n	1.8E+03	n	4.5E+02	n		7.4E-01	n	
2.2E-01	C	6.3E-05	C							1	0.1		Cupferron	135-20-6	2.5E+00	c	1.0E+01	c	4.5E-02	c	1.9E-01	c	3.5E-01	c		6.1E-04	c	
8.4E-01	H			2.0E-03	H					1	0.1		Cyanazine	21725-46-2	6.5E-01	c	2.7E+00	c					8.8E-02	c		4.1E-05	c	
													Cyanides															
				1.0E-03	I					1			~Calcium Cyanide	592-01-8	7.8E+01	n	1.2E+03	n					2.0E+01	n				
				5.0E-03	I					1			~Copper Cyanide	544-92-3	3.9E+02	n	5.8E+03	n					1.0E+02	n				
				6.0E-04	I	8.0E-04	G	V		1		9.5E+05	~Cyanide (CN-)	57-12-5	2.3E+01	n	1.5E+02	n	8.3E-01	n	3.5E+00	n	1.5E+00	n	200	1.5E-02	n	2.0E+00
				1.0E-03	I			V		1			~Cyanogen	460-19-5	7.8E+01	n	1.2E+03	n					2.0E+01	n				
				9.0E-02	I			V		1			~Cyanogen Bromide	506-68-3	7.0E+03	n	1.1E+05	nm					1.8E+03	n				
				5.0E-02	I			V		1			~Cyanogen Chloride	506-77-4	3.9E+03	n	5.8E+04	n					1.0E+03	n				
				6.0E-04	I	8.0E-04	I	V		1		1.0E+07	~Hydrogen Cyanide	74-90-8	2.3E+01	n	1.5E+02	n	8.3E-01	n	3.5E+00	n	1.5E+00	n		1.5E-02	n	
				2.0E-03	I					1			~Potassium Cyanide	151-50-8	1.6E+02	n	2.3E+03	n					4.0E+01	n				
				5.0E-03	I					0.04			~Potassium Silver Cyanide	506-61-6	3.9E+02	n	5.8E+03	n					8.2E+01	n				
				1.0E-01	I					0.04			~Silver Cyanide	506-64-9	7.8E+03	n	1.2E+05	nm					1.8E+03	n				
				1.0E-03	I					1			~Sodium Cyanide	143-33-9	7.8E+01	n	1.2E+03	n					2.0E+01	n	200			
				2.0E-04	P					1			~Thiocyanates	E1790664	1.6E+01	n	2.3E+02	n					4.0E+00	n				
				2.0E-04	X			V		1			~Thiocyanic Acid	463-56-9	1.6E+01	n	2.3E+02	n					4.0E+00	n				
				5.0E-02	I					1			~Zinc Cyanide	557-21-1	3.9E+03	n	5.8E+04	n					1.0E+03	n				
						6.0E+00	I	V		1		1.2E+02	Cyclohexane	110-82-7	6.5E+03	ns	2.7E+04	ns	6.3E+03	n	2.6E+04	n	1.3E+04	n		1.3E+01	n	
2.0E-02	X			2.0E-02	X					1	0.1		Cyclohexane, 1,2,3,4,5-pentabromo-6-chloro-	87-84-3	2.7E+01	c*	1.1E+02	c					2.8E+00	c		1.6E-02	c	
				5.0E+00	I	7.0E-01	P	V		1		5.1E+03	Cyclohexanone	108-94-1	2.8E+04	ns	1.3E+05	s	7.3E+02	n	3.1E+03	n	1.4E+03	n		3.4E-01	n	
				5.0E-03	P	1.0E+00	X	V		1		2.8E+02	Cyclohexene	110-83-8	3.1E+02	ns	3.1E+03	ns	1.0E+03	n	4.4E+03	n	7.0E+01	n		4.6E-02	n	
				2.0E-01	I			V		1		2.9E+05	Cyclohexylamine	108-91-8	1.6E+04	n	2.3E+05	nm					3.8E+03	n		1.0E+00	n	
				2.5E-02	I					1	0.1		Cyfluthrin	68359-37-5	1.6E+03	n	2.1E+04	n					1.2E+02	n		3.1E+01	n	
				1.0E-03	O					1	0.1		Cyhalothrin	68085-85-8	6.3E+01	n	8.2E+02	n					2.0E+01	n		1.4E+01	n	
				5.0E-01	O					1	0.1		Cyromazine	66215-27-8	3.2E+04	n	4.1E+05	nm					9.9E+03	n		2.5E+00	n	
2.4E-01	I	6.9E-05	C	3.0E-05	X					1	0.1		DDD, p,p'- (DDD)	72-54-8	1.9E+00	n	9.6E+00	c**	4.1E-02	c	1.8E-01	c	3.2E-02	c**		7.5E-03	c**	
3.4E-01	I	9.7E-05	C	3.0E-04	X			V		1			DDE, p,p'-	72-55-9	2.0E+00	c*	9.3E+00	c*	2.9E-02	c	1.3E-01	c	4.6E-02	c		1.1E-02	c	
3.4E-01	I	9.7E-05	I	5.0E-04	I					1	0.03		DDT	50-29-3	1.9E+00	c*	8.5E+00	c*	2.9E-02	c	1.3E-01	c	2.3E-01	c*		7.7E-02	c*	
				3.0E-02	I					1	0.1		Dalapon	75-99-0	1.9E+03	n	2.5E+04	n					6.0E+02	n	200	1.2E-01	n	4.1E-02
1.8E-02	C	5.1E-06	C	1.5E-01	I					1	0.1		Daminozide	1596-84-5	3.0E+01	c	1.3E+02	c	5.5E-01	c	2.4E+00	c	4.3E+00	c		9.5E-04	c	
7.0E-04	I			7.0E-03	I					1	0.1		Decabromodiphenyl ether, 2,2',3,3',4,4',5,5',6,6'- (BDE-209)	1163-19-5	4.4E+02	n	3.3E+03	c**					1.1E+02	c**		6.2E+01	c**	
				4.0E-05	I					1	0.1		Demeton	8065-48-3	2.5E+00	n	3.3E+01	n					4.2E-01	n				
1.2E-03	I			6.0E-01	I					1	0.1		Di(2-ethylhexyl)adipate	103-23-1	4.5E+02	c*	1.9E+03	c					6.5E+01	c	400	4.7E+00	c	2.9E+01
6.1E-02	H									1	0.1		Diallate	2303-16-4	8.9E+00	c	3.8E+01	c					5.4E-01	c		8.0E-04	c	
				7.0E-04	A					1	0.1		Diazinon	333-41-5	4.4E+01	n	5.7E+02	n					1.0E+01	n		6.5E-02	n	
				1.0E-02	X			V		1			Dibenzothiophene	132-65-0	7.8E+02	n	1.2E+04	n					6.5E+01	n		1.2E+00	n	
8.0E-01	P	6.0E-03	P	2.0E-04	P	2.0E-04	I	V	M	1		9.8E+02	Dibromo-3-chloropropane, 1,2-	96-12-8	5.3E-03	c	6.4E-02	c	1.7E-04	c	2.0E-03	c	3.3E-04	c	0.2	1.4E-07	c	8.6E-05
										1	0.1		Dibromoacetic acid	631-64-1											6.0E+01 (G)			1.2E-02
				4.0E-04	X			V		1		1.6E+02	Dibromobenzene, 1,3-	108-36-1	3.1E+01	n	4.7E+02	ns					5.3E+00	n		5.1E-03	n	
				1.0E-02	I			V		1			Dibromobenzene, 1,4-	106-37-6	7.8E+02	n	1.2E+04	n					1.3E+02	n		1.2E-01	n	
8.4E-02	I			2.0E-02	I			V		1		8.0E+02	Dibromochloromethane	124-48-1	8.3E+00	c	3.9E+01	c					8.7E-01	c	8.0E+01 (G)	2.3E-04	c	2.1E-02
2.0E+00	I	6.0E-04	I	9.0E-03	I	9.0E-03	I	V		1		1.3E+03	Dibromoethane, 1,2-	106-93-4	3.6E-02	c	1.6E-01	c	4.7E-03	c	2.0E-02	c	7.5E-03	c	0.05	2.1E-06	c	1.4E-05
						4.0E-03	X	V		1		2.8E+03	Dibromomethane (Methylene Bromide)	74-95-3	2.4E+01	n	9.9E+01	n	4.2E+00	n	1.8E+01	n	8.3E+00	n		2.1E-03	n	
				3.0E-04	P					1	0.1		Dibutyltin Compounds	E1790660	1.9E+01	n	2.5E+02	n					6.0E+00	n				
				3.0E-02	I					1	0.1		Dicamba	1918-00-9	1.9E+03	n	2.5E+04	n					5.7E+02	n		1.5E-01	n	
													Dichloramine	3400-09-7											4.0E+03 (G)			
		4.2E-03	P					V		1		5.5E+02	Dichloro-2-butene, 1,4-	764-41-0	2.1E-03	c	9.4E-03	c	6.7E-04	c	2.9E-03	c	1.3E-03	c		6.6E-07	c	
		4.2E-03	P					V		1		5.2E+02	Dichloro-2-butene, cis-1,4-	1476-11-5	7.4E-03	c	3.2E-02	c	6.7E-04	c	2.9E-03	c	1.3E-03	c		6.2E-07	c	
		4.2E-03	P					V		1		7.6E+02	Dichloro-2-butene, trans-1,4-	110-57-6	7.4E-03	c	3.2E-02	c	6.7E-04	c	2.9E-03	c	1.3E-03	c		6.2E-07	c	
5.0E-02	I			4.0E-03	I					1	0.1		Dichloroacetic Acid	79-43-6	1.1E+01	c*	4.6E+01	c*					1.5E+00	c*	6.0E+01 (G)	3.1E-04	c*	1.2E-02
				9.0E-02	I	2.0E-01	H	V		1		3.8E+02	Dichlorobenzene, 1,2-	95-50-1	1.8E+03	ns	9.3E+03	ns	2.1E+02	n	8.8E+02	n	3.0E+02	n	600	3.0E-01	n	5.8E-01
5.4E-03	C	1.1E-05	C	7.0E-02	A	8.0E-01	I	V		1			Dichlorobenzene, 1,4-	106-46-7	2.6E+00	c	1.1E+01	c	2.6E-01	c	1.1E+00	c	4.8E-01	c	75	4.6E-04	c	7.2E-02
4.5E-01	I	3.4E-04	C							1	0.1		Dichlorobenzidine, 3,3'-	91-94-1	1.2E+00	c	5.1E+00	c	8.3E-03	c	3.6E-02	c	1.3E-01	c		8.2E-04	c	
				9.0E-03	X					1	0.1		Dichlorobenzophenone, 4,4'-	90-98-2	5.7E+02	n	7.4E+03	n					7.8E+01	n		4.7E-01	n	
				2.0E-01	I	1.0E-01	X	V		1		8.5E+02	Dichlorodifluoromethane	75-71-8	8.7E+01	n	3.7E+02	n	1.0E+02	n	4.4E+02	n	2.0E+02	n		3.0E-01	n	
5.7E-03	C	1.6E-06	C	2.0E-01	P			V		1		1.7E+03	Dichloroethane, 1,1-	75-34-3	3.6E+00	c	1.6E+01	c	1.8E+00	c	7.7E+00	c	2.8E+00	c		7.8E-04	c	

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
9.1E-02	I	2.6E-05	I	6.0E-03	X	7.0E-03	P	V		1		3.0E+03	Dichloroethane, 1,2-	107-06-2	4.6E-01	c*	2.0E+00	c*	1.1E-01	c*	4.7E-01	c*	1.7E-01	c*	5	4.8E-05	c*	1.4E-03
				5.0E-02	I	2.0E-01	I	V		1		1.2E+03	Dichloroethylene, 1,1-	75-35-4	2.3E+02	n	1.0E+03	n	2.1E+02	n	8.8E+02	n	2.8E+02	n	7	1.0E-01	n	2.5E-03
				2.0E-03	I			V		1		2.4E+03	Dichloroethylene, 1,2-cis-	156-59-2	1.6E+02	n	2.3E+03	n					3.6E+01	n	70	1.1E-02	n	2.1E-02
				2.0E-02	I			V		1		1.9E+03	Dichloroethylene, 1,2-trans-	156-60-5	1.6E+03	n	2.3E+04	ns					3.6E+02	n	100	1.1E-01	n	3.1E-02
				3.0E-03	I					1	0.1		Dichlorophenol, 2,4-	120-83-2	1.9E+02	n	2.5E+03	n					4.6E+01	n		2.3E-02	n	
				1.0E-02	I					1	0.05		Dichlorophenoxy Acetic Acid, 2,4-	94-75-7	7.0E+02	n	9.6E+03	n					1.7E+02	n	70	4.5E-02	n	1.8E-02
3.7E-02	P	3.7E-06	P	4.0E-02	P	4.0E-03	I	V		1		1.4E+03	Dichloropropane, 1,2-	78-87-5	2.5E+00	c**	1.1E+01	c**	7.6E-01	c**	3.3E+00	c**	8.5E-01	c**	5	2.8E-04	c**	1.7E-03
				2.0E-02	P			V		1		1.5E+03	Dichloropropane, 1,3-	142-28-9	1.6E+03	ns	2.3E+04	ns					3.7E+02	n		1.3E-01	n	
				3.0E-03	I					1	0.1		Dichloropropanol, 2,3-	616-23-9	1.9E+02	n	2.5E+03	n					5.9E+01	n		1.3E-02	n	
1.0E-01	I	4.0E-06	I	3.0E-02	I	2.0E-02	I	V		1		1.6E+03	Dichloropropene, 1,3-	542-75-6	1.8E+00	c*	8.2E+00	c*	7.0E-01	c*	3.1E+00	c*	4.7E-01	c*		1.7E-04	c*	
2.9E-01	I	8.3E-05	C	5.0E-04	I	5.0E-04	I			1	0.1		Dichlorvos	62-73-7	1.9E+00	c*	7.9E+00	c*	3.4E-02	c*	1.5E-01	c*	2.6E-01	c*		8.1E-05	c*	
				3.0E-05	O					1	0.1		Dicrotophos	141-66-2	1.9E+00	n	2.5E+01	n					6.0E-01	n		1.4E-04	n	
				8.0E-02	P	3.0E-04	X	V		1		2.6E+02	Dicyclopentadiene	77-73-6	1.3E+00	n	5.4E+00	n	3.1E-01	n	1.3E+00	n	6.3E-01	n		2.2E-03	n	
1.6E+01	I	4.6E-03	I	5.0E-05	I					1	0.1		Dieldrin	60-57-1	3.4E-02	c*	1.4E-01	c	6.1E-04	c	2.7E-03	c	1.8E-03	c		7.1E-05	c	
		3.0E-04	C			5.0E-03	I			1	0.1		Diesel Engine Exhaust	E17136615					9.4E-03	c	4.1E-02	c						
				2.0E-03	P	2.0E-04	P			1	0.1		Diethanolamine	111-42-2	1.3E+02	n	1.6E+03	n	2.1E-01	n	8.8E-01	n	4.0E+01	n		8.1E-03	n	
				3.0E-02	P	1.0E-04	P			1	0.1		Diethylene Glycol Monobutyl Ether	112-34-5	1.9E+03	n	2.4E+04	n	1.0E-01	n	4.4E-01	n	6.0E+02	n		1.3E-01	n	
				6.0E-02	P	3.0E-04	P			1	0.1		Diethylene Glycol Monoethyl Ether	111-90-0	3.8E+03	n	4.8E+04	n	3.1E-01	n	1.3E+00	n	1.2E+03	n		2.4E-01	n	
				1.0E-03	P			V		1		1.1E+05	Diethylformamide	617-84-5	7.8E+01	n	1.2E+03	n					2.0E+01	n		4.1E-03	n	
3.5E+02	C	1.0E-01	C							1	0.1		Diethylstilbestrol	56-53-1	1.6E-03	c	6.6E-03	c	2.8E-05	c	1.2E-04	c	5.1E-05	c		2.8E-05	c	
				8.3E-02	O					1	0.1		Difenzoquat	43222-48-6	5.2E+03	n	6.8E+04	n					1.7E+03	n		2.6E+02	n	
				2.0E-02	I					1	0.1		Diflubenzuron	35367-38-5	1.3E+03	n	1.6E+04	n					2.9E+02	n		3.3E-01	n	
						4.0E+01	I	V		1		1.4E+03	Difluoroethane, 1,1-	75-37-6	4.8E+04	ns	2.0E+05	s	4.2E+04	n	1.8E+05	n	8.3E+04	n		2.8E+01	n	
						3.0E+01	X	V		1		6.9E+02	Difluoropropane, 2,2-	420-45-1	2.4E+04	ns	1.0E+05	ns	3.1E+04	n	1.3E+05	n	6.3E+04	n		1.4E+02	n	
4.4E-02	C	1.3E-05	C					V		1			Dihydrosafrole	94-58-6	9.9E+00	c	4.5E+01	c	2.2E-01	c	9.4E-01	c	3.0E-01	c		1.9E-04	c	
						7.0E-01	P	V		1		2.3E+03	Diisopropyl Ether	108-20-3	2.2E+03	n	9.4E+03	ns	7.3E+02	n	3.1E+03	n	1.5E+03	n		3.7E-01	n	
				8.0E-02	I			V		1		5.3E+02	Diisopropyl Methylphosphonate	1445-75-6	6.3E+03	ns	9.3E+04	ns					1.6E+03	n		4.5E-01	n	
				2.2E-02	O					1	0.1		Dimethipin	55290-64-7	1.4E+03	n	1.8E+04	n					4.4E+02	n		9.6E-02	n	
				2.2E-03	O					1	0.1		Dimethoate	60-51-5	1.4E+02	n	1.8E+03	n					4.4E+01	n		9.9E-03	n	
1.6E+00	P									1	0.1		Dimethoxybenzidine, 3,3'-	119-90-4	3.4E-01	c	1.4E+00	c					4.7E-02	c		5.8E-05	c	
1.7E-03	P			6.0E-02	P					1	0.1		Dimethyl methylphosphonate	756-79-6	3.2E+02	c*	1.4E+03	c*					4.6E+01	c*		9.6E-03	c*	
4.6E+00	C	1.3E-03	C							1	0.1		Dimethylamino azobenzene [p-]	60-11-7	1.2E-01	c	5.0E-01	c	2.2E-03	c	9.4E-03	c	5.0E-03	c		2.1E-05	c	
5.8E-01	H									1	0.1		Dimethylaniline HCl, 2,4-	21436-96-4	9.4E-01	c	4.0E+00	c					1.3E-01	c		1.2E-04	c	
2.0E-01	P			2.0E-03	X					1	0.1		Dimethylaniline, 2,4-	95-68-1	2.7E+00	c*	1.1E+01	c					3.7E-01	c		2.1E-04	c	
2.7E-02	P			2.0E-03	I			V		1		8.3E+02	Dimethylaniline, N,N-	121-69-7	2.6E+01	c**	1.2E+02	c*					2.5E+00	c*		9.0E-04	c*	
1.1E+01	P									1	0.1		Dimethylbenzidine, 3,3'-	119-93-7	4.9E-02	c	2.1E-01	c					6.5E-03	c		4.3E-05	c	
				1.0E-01	P	3.0E-02	I	V		1		1.1E+05	Dimethylformamide	68-12-2	2.6E+03	n	1.5E+04	n	3.1E+01	n	1.3E+02	n	6.1E+01	n		1.2E-02	n	
				1.0E-04	X	2.0E-06	X	V		1		1.7E+05	Dimethylhydrazine, 1,1-	57-14-7	5.7E-02	n	2.4E-01	n	2.1E-03	n	8.8E-03	n	4.2E-03	n		9.3E-07	n	
5.5E+02	C	1.6E-01	C					V		1		1.9E+05	Dimethylhydrazine, 1,2-	540-73-8	8.8E-04	c	4.1E-03	c	1.8E-05	c	7.7E-05	c	2.8E-05	c		6.5E-09	c	
				2.0E-02	I					1	0.1		Dimethylphenol, 2,4-	105-67-9	1.3E+03	n	1.6E+04	n					3.6E+02	n		4.2E-01	n	
				6.0E-04	I					1	0.1		Dimethylphenol, 2,6-	576-26-1	3.8E+01	n	4.9E+02	n					1.1E+01	n		1.3E-02	n	
				1.0E-03	I					1	0.1		Dimethylphenol, 3,4-	95-65-8	6.3E+01	n	8.2E+02	n					1.8E+01	n		2.1E-02	n	
4.5E-02	C	1.3E-05	C					V		1		4.7E+02	Dimethylvinylchloride	513-37-1	1.1E+00	c	4.8E+00	c	2.2E-01	c	9.4E-01	c	3.3E-01	c		1.1E-04	c	
				8.0E-05	X					1	0.1		Dinitro-o-cresol, 4,6-	534-52-1	5.1E+00	n	6.6E+01	n					1.5E+00	n		2.6E-03	n	
				2.0E-03	I					1	0.1		Dinitro-o-cyclohexyl Phenol, 4,6-	131-89-5	1.3E+02	n	1.6E+03	n					2.3E+01	n		7.7E-01	n	
				1.0E-04	P					1	0.1		Dinitrobenzene, 1,2-	528-29-0	6.3E+00	n	8.2E+01	n					1.9E+00	n		1.8E-03	n	
				1.0E-04	I					1	0.1		Dinitrobenzene, 1,3-	99-65-0	6.3E+00	n	8.2E+01	n					2.0E+00	n		1.8E-03	n	
				1.0E-04	P					1	0.1		Dinitrobenzene, 1,4-	100-25-4	6.3E+00	n	8.2E+01	n					2.0E+00	n		1.8E-03	n	
				2.0E-03	I					1	0.1		Dinitrophenol, 2,4-	51-28-5	1.3E+02	n	1.6E+03	n					3.9E+01	n		4.4E-02	n	
6.8E-01	I									1	0.1		Dinitrotoluene Mixture, 2,4/2,6-	E1615210	8.0E-01	c	3.4E+00	c					1.1E-01	c		1.5E-04	c	
3.1E-01	C	8.9E-05	C	2.0E-03	I					1	0.102		Dinitrotoluene, 2,4-	121-14-2	1.7E+00	c*	7.4E+00	c	3.2E-02	c	1.4E-01	c	2.4E-01	c		3.2E-04	c	
1.5E+00	P			3.0E-04	X					1	0.099		Dinitrotoluene, 2,6-	606-20-2	3.6E-01	c*	1.5E+00	c					4.9E-02	c		6.7E-05	c	
				2.0E-03	G					1	0.006		Dinitrotoluene, 2-Amino-4,6-	35572-78-2	1.5E+02	n	2.3E+03	n					3.9E+01	n		3.0E-02	n	
				2.0E-03	G					1	0.009		Dinitrotoluene, 4-Amino-2,6-	19406-51-0	1.5E+02	n	2.3E+03	n					3.9E+01	n		3.0E-02	n	
4.5E-01	X			9.0E-04	X					1	0.1		Dinitrotoluene, Technical grade	25321-14-6	1.2E+00	c*	5.1E+00	c					1.0E-01	c		1.4E-04	c	
				1.0E-03	I					1	0.1		Dinoseb	88-85-7	6.3E+01	n	8.2E+02	n					1.5E+01	n	7	1.3E-01	n	6.2E-02
1.0E-01	I	5.0E-06	I	3.0E-02	I	3.0E-02	I	V		1		1.2E+05	Dioxane, 1,4-	123-91-1	5.3E+00	c	2.4E+01	c	5.6E-01	c*	2.5E+00	c*	4.6E-01	c		9.4E-05	c	
													Dioxins																
6.2E+03	I	1.3E+00	I							1	0.03		~Hexachlorodibenzo-p-dioxin, Mixture		1.0E-04	c	4.7E-04	c	2.2E-06	c	9.4E-06	c	1.3E-05	c		1.7E-05	c	
1.3E+05	C	3.8E+01	C	7.0E-10	I	4.0E-08	C	V		1	0.03		~TCDD, 2,3,7,8-	1746-01-6	4.8E-06	c*	2.2E-05	c*	7.4E-08	c	3.2E-07	c	1.2E-07	c	0.00003	5.9E-08	c	1.5E-05
				3.0E-02	I					1	0.1		Diphenamid	957-51-7	1.9E+03	n	2.5E+04	n					5.3E+02	n		5.2E+00	n	
						4.0E-04	X	V		1			Diphenyl Ether	101-84-8	3.4E+01	n	1.4E+02	n	4.2E-01	n	1.8E+00	n	8.3E-01	n		3.4E-03	n	
				8.0E-04	X					1	0.1		Diphenyl Sulfone	127-63-9	5.1E+01	n	6.6E+02	n					1.5E+01	n		3.6E-02	n	
				1.0E-01	O					1	0.1		Diphenylamine	122-39-4	6.3E+03	n	8.2E+04	n					1.3E+03	n		2.3E+00	n	
8.0E-01	I	2.2E-04	I							1	0.1		Diphenylhydrazine, 1,2-	122-66-7	6.8E-01	c	2.9E+00	c	1.3E-02	c	5.6E-02	c	7.8E-02	c		2.5E-04	c	
				2.2E-03	I					1	0.1		Diquat	85-00-7	1.4E+02	n	1.8E+03	n					4.4E+01	n	20	8.3E-01	n	3.7E-01
7.1E+00	C	1.4E-01	C							1	0.1		Direct Black 38	1937-37-7	7.6E-02	c	3.2E-01	c	2.0E-05	c	8.8E-05	c	1.1E-02	c		5.3E+00	c	
7.4E+00	C	1.4E-01	C							1	0.1		Direct Blue 6	2602-46-2	7.3E-02	c	3.1E-01	c	2.0E-05	c	8.8E-05	c	1.1E-02	c		1.7E+01	c	
6.7E+00	C	1.4E-01	C							1	0.1		Direct Brown 95	16071-86-6	8.1E-02	c	3.4E-01	c	2.0E-05	c	8.8E-05	c	1.2E-02	c		1.6E-01	c	
				4.0E-05	I					1	0.1		Disulfoton	298-04-4	2.5E+00	n	3.3E+01	n					5.0E-01	n		9.4E-04	n	
				1.0E-02	I			V		1			Dithiane, 1,4-	505-29-3	7.8E+02	n	1.2E+04	n					2.0E+02	n		9.7E-02	n	
				2.0E-03	I					1	0.1		Diuron	330-54-1	1.3E+02	n	1.6E+03	n					3.6E+01	n		1.5E-02	n	
				2.0E-02	O					1	0.1		Dodine	2439-10-3	1.3E+03	n	1.6E+04	n					4.0E+02	n		2.1E+00	n	
				5.0E-02	O			V		1			EPTC	759-94-4	3.9E+03	n	5.8E+04	n					7.5E+02	n		4.0E-01	n	
				6.0E-03	I			V		1			Endosulfan	115-29-7	4.7E+02	n	7.0E+03	n					1.0E+02	n		1.4E+00	n	

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information														Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				6.0E-03	P					1	0.1		Endosulfan Sulfate	1031-07-8	3.8E+02	n	4.9E+03	n					1.1E+02	n		2.1E+00	n		
				2.0E-02	I					1	0.1		Endothall	145-73-3	1.3E+03	n	1.6E+04	n					3.8E+02	n	100	9.1E-02	n	2.4E-02	
				3.0E-04	I					1	0.1		Endrin	72-20-8	1.9E+01	n	2.5E+02	n					2.3E+00	n	2	9.2E-02	n	8.1E-02	
9.9E-03	I	1.2E-06	I	6.0E-03	P	1.0E-03	I	V		1		1.1E+04	Epichlorohydrin	106-89-8	1.9E+01	n	8.2E+01	n	1.0E+00	n	4.4E+00	n	2.0E+00	n		4.5E-04	n		
						2.0E-02	I	V		1		1.5E+04	Epoxybutane, 1,2-	106-88-7	1.6E+02	n	6.7E+02	n	2.1E+01	n	8.8E+01	n	4.2E+01	n		9.2E-03	n		
				4.0E-02	P					1	0.1		Ethanol, 2-(2-methoxyethoxy)-	111-77-3	2.5E+03	n	3.3E+04	n					8.0E+02	n		1.6E-01	n		
				5.0E-03	I					1	0.1		Ethephon	16672-87-0	3.2E+02	n	4.1E+03	n					1.0E+02	n		2.1E-02	n		
				5.0E-04	I					1	0.1		Ethion	563-12-2	3.2E+01	n	4.1E+02	n					4.3E+00	n		8.5E-03	n		
				1.0E-01	P	6.0E-02	P	V		1		2.4E+04	Ethoxyethanol Acetate, 2-	111-15-9	2.6E+03	n	1.4E+04	n	6.3E+01	n	2.6E+02	n	1.2E+02	n		2.5E-02	n		
				9.0E-02	P	2.0E-01	I	V		1		1.1E+05	Ethoxyethanol, 2-	110-80-5	5.2E+03	n	4.7E+04	n	2.1E+02	n	8.8E+02	n	3.4E+02	n		6.8E-02	n		
				9.0E-01	I	7.0E-02	P	V		1		1.1E+04	Ethyl Acetate	141-78-6	6.2E+02	n	2.6E+03	n	7.3E+01	n	3.1E+02	n	1.4E+02	n		3.1E-02	n		
				5.0E-03	P	8.0E-03	P	V		1		2.5E+03	Ethyl Acrylate	140-88-5	4.7E+01	n	2.1E+02	n	8.3E+00	n	3.5E+01	n	1.4E+01	n		3.2E-03	n		
						1.0E+01	I	V		1		2.1E+03	Ethyl Chloride (Chloroethane)	75-00-3	1.4E+04	ns	5.7E+04	ns	1.0E+04	n	4.4E+04	n	2.1E+04	n		5.9E+00	n		
				2.0E-01	I			V		1		1.0E+04	Ethyl Ether	60-29-7	1.6E+04	ns	2.3E+05	s					3.9E+03	n		8.8E-01	n		
						3.0E-01	P	V		1		1.1E+03	Ethyl Methacrylate	97-63-2	1.8E+03	ns	7.6E+03	ns	3.1E+02	n	1.3E+03	n	6.3E+02	n		1.5E-01	n		
				1.0E-05	I					1	0.1		Ethyl-p-nitrophenyl Phosphonate	2104-64-5	6.3E-01	n	8.2E+00	n					8.9E-02	n		2.8E-03	n		
1.1E-02	C	2.5E-06	C	1.0E-01	I	1.0E+00	I	V		1		4.8E+02	Ethylbenzene	100-41-4	5.8E+00	c	2.5E+01	c	1.1E+00	c	4.9E+00	c	1.5E+00	c	700	1.7E-03	c	7.8E-01	
				7.0E-02	P					1	0.1		Ethylene Cyanohydrin	109-78-4	4.4E+03	n	5.7E+04	n					1.4E+03	n		2.8E-01	n		
				9.0E-02	P			V		1		1.9E+05	Ethylene Diamine	107-15-3	7.0E+03	n	1.1E+05	nm					1.8E+03	n		4.1E-01	n		
				2.0E+00	I	4.0E-01	C			1	0.1		Ethylene Glycol	107-21-1	1.3E+05	nm	1.6E+06	nm	4.2E+02	n	1.8E+03	n	4.0E+04	n		8.1E+00	n		
				1.0E-01	I	1.6E+00	I			1	0.1		Ethylene Glycol Monobutyl Ether	111-76-2	6.3E+03	n	8.2E+04	n	1.7E+03	n	7.0E+03	n	2.0E+03	n		4.1E-01	n		
3.1E-01	C	3.0E-03	I			3.0E-02	C	V	M	1		1.2E+05	Ethylene Oxide	75-21-8	2.0E-03	c	2.5E-02	c	3.4E-04	c	4.1E-03	c	6.7E-04	c		1.4E-07	c		
4.5E-02	C	1.3E-05	C	8.0E-05	I					1	0.1		Ethylene Thiourea	96-45-7	5.1E+00	n	5.1E+01	c**	2.2E-01	c	9.4E-01	c	1.6E+00	n		3.6E-04	n		
6.5E+01	C	1.9E-02	C					V		1		1.5E+05	Ethyleneimine	151-56-4	2.7E-03	c	1.2E-02	c	1.5E-04	c	6.5E-04	c	2.4E-04	c		5.2E-08	c		
				3.0E+00	I					1	0.1		Ethylphthalyl Ethyl Glycolate	84-72-0	1.9E+05	nm	2.5E+06	nm					5.8E+04	n		1.3E+02	n		
				2.5E-04	I					1	0.1		Fenamiphos	22224-92-6	1.6E+01	n	2.1E+02	n					4.4E+00	n		4.3E-03	n		
				2.5E-02	I					1	0.1		Fenpropathrin	39515-41-8	1.6E+03	n	2.1E+04	n					6.4E+01	n		2.9E+00	n		
				2.5E-02	I					1	0.1		Fenvalerate	51630-58-1	1.6E+03	n	2.1E+04	n					5.0E+02	n		3.2E+02	n		
				1.3E-02	I					1	0.1		Fluometuron	2164-17-2	8.2E+02	n	1.1E+04	n					2.4E+02	n		1.9E-01	n		
				4.0E-02	C	1.3E-02	C			1			Fluoride	16984-48-8	3.1E+03	n	4.7E+04	n	1.4E+01	n	5.7E+01	n	8.0E+02	n	4000	1.2E+02	n	6.0E+02	
				6.0E-02	I	1.3E-02	C			1			Fluorine (Soluble Fluoride)	7782-41-4	4.7E+03	n	7.0E+04	n	1.4E+01	n	5.7E+01	n	1.2E+03	n	4000	1.8E+02	n	6.0E+02	
				8.0E-02	I					1	0.1		Fluridone	59756-60-4	5.1E+03	n	6.6E+04	n					1.4E+03	n		1.6E+02	n		
				4.0E-02	O					1	0.1		Flurprimidol	56425-91-3	2.5E+03	n	3.3E+04	n					6.9E+02	n		3.1E+00	n		
				2.0E-03	O					1	0.1		Flusilazole	85509-19-9	1.3E+02	n	1.6E+03	n					3.1E+01	n		5.1E+00	n		
				5.0E-01	O					1	0.1		Flutolanil	66332-96-5	3.2E+04	n	4.1E+05	nm					7.9E+03	n		4.2E+01	n		
				1.0E-02	I					1	0.1		Fluvalinate	69409-94-5	6.3E+02	n	8.2E+03	n					2.0E+02	n		2.9E+02	n		
				9.0E-02	O					1	0.1		Folpet	133-07-3	5.7E+03	n	7.4E+04	n					1.6E+03	n		3.9E-01	n		
				2.5E-03	O					1	0.1		Fomesafen	72178-02-0	1.6E+02	n	2.1E+03	n					4.8E+01	n		1.6E-01	n		
				2.0E-03	I					1	0.1		Fonofos	944-22-9	1.3E+02	n	1.6E+03	n					2.4E+01	n		4.7E-02	n		
2.1E-02	C	1.3E-05	I	2.0E-01	I	9.8E-03	A	V		1		4.2E+04	Formaldehyde	50-00-0	1.1E+01	c*	5.0E+01	c*	2.2E-01	c*	9.4E-01	c*	3.9E-01	c*		7.8E-05	c*		
				9.0E-01	P	3.0E-04	X	V		1		1.1E+05	Formic Acid	64-18-6	2.9E+01	n	1.2E+02	n	3.1E-01	n	1.3E+00	n	6.3E-01	n		1.3E-04	n		
				2.5E+00	O					1	0.1		Fosetyl-AL	39148-24-8	1.6E+05	nm	2.1E+06	nm					5.0E+04	n		6.6E+02	n		
													Furans																	
				1.0E-03	X			V		1	0.03		~Dibenzofuran	132-64-9	7.3E+01	n	1.0E+03	n					7.9E+00	n		1.5E-01	n		
				1.0E-03	I			V		1	0.03	6.2E+03	~Furan	110-00-9	7.3E+01	n	1.0E+03	n					1.9E+01	n		7.3E-03	n		
				9.0E-01	I	2.0E+00	I	V		1	0.03	1.7E+05	~Tetrahydrofuran	109-99-9	1.8E+04	n	9.4E+04	n	2.1E+03	n	8.8E+03	n	3.4E+03	n		7.5E-01	n		
3.8E+00	H									1	0.1		Furazolidone	67-45-8	1.4E-01	c	6.0E-01	c					2.0E-02	c		3.9E-05	c		
				3.0E-03	I	5.0E-02	H	V		1		1.0E+04	Furfural	98-01-1	2.1E+02	n	2.6E+03	n	5.2E+01	n	2.2E+02	n	3.8E+01	n		8.1E-03	n		
1.5E+00	C	4.3E-04	C							1	0.1		Furium	531-82-8	3.6E-01	c	1.5E+00	c	6.5E-03	c	2.9E-02	c	5.1E-02	c		6.8E-05	c		
3.0E-02	I	8.6E-06	C							1	0.1		Furmecyclox	60568-05-0	1.8E+01	c	7.7E+01	c	3.3E-01	c	1.4E+00	c	1.1E+00	c		1.2E-03	c		
				6.0E-03	O					1	0.1		Glufosinate, Ammonium	77182-82-2	3.8E+02	n	4.9E+03	n					1.2E+02	n		2.6E-02	n		
				1.0E-01	A	8.0E-05	C			1	0.1		Glutaraldehyde	111-30-8	6.0E+03	n	7.0E+04	n	8.3E-02	n	3.5E-01	n	2.0E+03	n		4.0E-01	n		
				4.0E-04	I	1.0E-03	H	V		1		1.1E+05	Glycidyl	765-34-4	2.3E+01	n	2.1E+02	n	1.0E+00	n	4.4E+00	n	1.7E+00	n		3.3E-04	n		
				1.0E-01	I					1	0.1		Glyphosate	1071-83-6	6.3E+03	n	8.2E+04	n					2.0E+03	n	700	8.8E+00	n	3.1E+00	
				1.0E-02	X			V		1			Guanidine	113-00-8	7.8E+02	n	1.2E+04	n					2.0E+02	n		4.5E-02	n		
				2.0E-02	P					1	0.1		Guanidine Chloride	50-01-1	1.3E+03	n	1.6E+04	n					4.0E+02	n					
				3.0E-02	X					1	0.1		Guanidine Nitrate	506-93-4	1.9E+03	n	2.5E+04	n					6.0E+02	n		1.5E-01	n		
				5.0E-05	I					1	0.1		Haloxyfop, Methyl	69806-40-2	3.2E+00	n	4.1E+01	n					7.6E-01	n		8.4E-03	n		
4.5E+00	I	1.3E-03	I	5.0E-04	I			V		1			Heptachlor	76-44-8	1.3E-01	c	6.3E-01	c	2.2E-03	c	9.4E-03	c	1.4E-03	c	0.4	1.2E-04	c	3.3E-02	
9.1E+00	I	2.6E-03	I	1.3E-05	I			V		1			Heptachlor Epoxide	1024-57-3	7.0E-02	c*	3.3E-01	c*	1.1E-03	c	4.7E-03	c	1.4E-03	c*	0.2	2.8E-05	c*	4.1E-03	
						3.0E-03	X	V		1		2.1E+02	Heptanal, n-	111-71-7	2.4E+01	n	1.0E+02	n	3.1E+00	n	1.3E+01	n	6.3E+00	n		1.4E-03	n		
				3.0E-04	X	4.0E-01	P	V		1		5.8E+01	Heptane, N-	142-82-5	2.2E+01	n	2.9E+02	ns	4.2E+02	n	1.8E+03	n	6.0E+00	n		4.8E-02	n		
				2.0E-03	I			V		1			Hexabromobenzene	87-82-1	1.6E+02	n	2.3E+03	n					4.0E+01	n		2.3E-01	n		
				2.0E-04	I					1	0.1		Hexabromodiphenyl ether, 2,2',4,4',5,5'- (BDE-153)	68631-49-2	1.3E+01	n	1.6E+02	n					4.0E+00	n					
1.6E+00	I	4.6E-04	I	8.0E-04	I			V		1			Hexachlorobenzene	118-74-1	2.1E-01	c	9.6E-01	c	6.1E-03	c	2.7E-02	c	9.8E-03	c	1	1.2E-04	c	1.3E-02	
7.8E-02	I	2.2E-05	I	1.0E-03	P			V		1		1.7E+01	Hexachlorobutadiene	87-68-3	1.2E+00	c*	5.3E+00	c	1.3E-01	c	5.6E-01	c	1.4E-01	c*		2.7E-04	c*		
6.3E+00	I	1.8E-03	I	8.0E-03	A					1	0.1		Hexachlorocyclohexane, Alpha-	319-84-6	8.6E-02	c	3.6E-01	c	1.6E-03	c	6.8E-03	c	7.2E-03	c		4.2E-05	c		
1.8E+00	I	5.3E-04	I							1	0.1		Hexachlorocyclohexane, Beta-	319-85-7	3.0E-01	c	1.3E+00	c	5.3E-03	c	2.3E-02	c	2.5E-02	c		1.5E-04	c		
1.1E+00	C	3.1E-04	C	3.0E-04	I					1	0.04		Hexachlorocyclohexane, Gamma- (Lindane)	58-89-9	5.7E-01	c*	2.5E+00	c	9.1E-03	c	4.0E-02	c	4.2E-02	c*	0.2	2.4E-04	c*	1.2E-03	
1.8E+00	I	5.1E-04	I							1	0.1		Hexachlorocyclohexane, Technical	608-73-1	3.0E-01	c	1.3E+00	c	5.5E-03	c	2.4E-02	c	2.5E-02	c		1.5E-04	c		
				6.0E-03	I	2.0E-04	I	V		1		1.6E+01	Hexachlorocyclopentadiene	77-47-4	1.8E+00	n	7.5E+00	n	2.1E-01	n	8.8E-01	n	4.1E-01	n	50	1.3E-03	n	1.6E-01	
4.0E-02	I	1.1E-05	C	7.0E-04	I	3.0E-02	I	V		1			Hexachloroethane	67-72-1	1.8E+00	c*	8.0E+00	c*	2.6E-01	c	1.1E+00	c	3.3E-01	c*		2.0E-04	c*		
				3.0E-04	I					1	0.1		Hexachlorophene	70-30-4	1.9E+01	n	2.5E+02	n					6.0E+00	n		8.0E+00	n		
8.0E-02	I			4.0E-03	I					1	0.015		Hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX)	121-82-4	8.3E+00	c*	3.8E+01	c					9.7E-01	c*		3.7E-04	c*		
						1.0E-05	I	V		1		3.4E+03	Hexamethylene Diisocyanate, 1,6-	822-06-0	3.1E+00	n	1.3E+01	n	1.0E-02	n	4.4E-02	n	2.1E-02	n		2.1E-04	n		

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information												Contaminant		Screening Levels										Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				4.0E-04	P					1	0.1		Hexamethylphosphoramide	680-31-9	2.5E+01	n	3.3E+02	n					8.0E+00	n		1.8E-03	n	
						7.0E-01	I	V		1		1.4E+02	Hexane, N-	110-54-3	6.1E+02	ns	2.5E+03	ns	7.3E+02	n	3.1E+03	n	1.5E+03	n		1.0E+01	n	
				2.0E+00	P					1	0.1		Hexanedioic Acid	124-04-9	1.3E+05	nm	1.6E+06	nm					4.0E+04	n		9.9E+00	n	
9.5E-03	P			7.0E-02	P	4.0E-04	P	V		1			Hexanol, 1-,2-ethyl- (2-Ethyl-1-hexanol)	104-76-7	7.3E+01	c*	3.4E+02	c	4.2E-01	n	1.8E+00	n	8.3E-01	n				
				5.0E-03	I	3.0E-02	I	V		1		3.3E+03	Hexanone, 2-	591-78-6	2.0E+02	n	1.3E+03	n	3.1E+01	n	1.3E+02	n	3.8E+01	n		8.8E-03	n	
				3.3E-02	I					1	0.1		Hexazinone	51235-04-2	2.1E+03	n	2.7E+04	n					6.4E+02	n		3.0E-01	n	
				2.5E-02	I					1	0.1		Hexythiazox	78587-05-0	1.6E+03	n	2.1E+04	n					1.1E+02	n		5.0E-01	n	
				1.7E-02	O					1	0.1		Hydramethylnon	67485-29-4	1.1E+03	n	1.4E+04	n					3.4E+02	n		1.2E+05	n	
3.0E+00	I	4.9E-03	I			3.0E-05	P	V		1		1.1E+05	Hydrazine	302-01-2	3.2E-02	c*	1.4E-01	c*	5.7E-04	c*	2.5E-03	c*	1.1E-03	c*		2.2E-07	c*	
3.0E+00	I	4.9E-03	I							1			Hydrazine Sulfate	10034-93-2	2.3E-01	c	1.1E+00	c	5.7E-04	c	2.5E-03	c	2.6E-02	c				
						2.0E-02	I	V		1			Hydrogen Chloride	7647-01-0	2.8E+07	nm	1.2E+08	nm	2.1E+01	n	8.8E+01	n	4.2E+01	n				
				4.0E-02	C	1.4E-02	C	V		1			Hydrogen Fluoride	7664-39-3	3.1E+03	n	4.7E+04	n	1.5E+01	n	6.1E+01	n	2.8E+01	n				
						2.0E-03	I	V		1			Hydrogen Sulfide	7783-06-4	2.8E+06	nm	1.2E+07	nm	2.1E+00	n	8.8E+00	n	4.2E+00	n				
6.0E-02	P			4.0E-02	P					1	0.1		Hydroquinone	123-31-9	9.0E+00	c	3.8E+01	c					1.3E+00	c		8.7E-04	c	
6.1E-02	O			2.5E-03	O					1	0.1		Imazalil	35554-44-0	8.9E+00	c*	3.8E+01	c*					9.0E-01	c*		1.5E-02	c*	
				2.5E-01	I					1	0.1		Imazaquin	81335-37-7	1.6E+04	n	2.1E+05	nm					4.9E+03	n		2.4E+01	n	
				2.5E+00	O					1	0.1		Imazethapyr	81335-77-5	1.6E+05	nm	2.1E+06	nm					4.7E+04	n		4.1E+01	n	
				1.0E-02	A					1			Iodine	7553-56-2	7.8E+02	n	1.2E+04	n					2.0E+02	n		1.2E+01	n	
				4.0E-02	I					1	0.1		Iprodione	36734-19-7	2.5E+03	n	3.3E+04	n					7.4E+02	n		2.2E-01	n	
				7.0E-01	P					1			Iron	7439-89-6	5.5E+04	n	8.2E+05	nm					1.4E+04	n		3.5E+02	n	
				3.0E-01	I			V		1		1.0E+04	Isobutyl Alcohol	78-83-1	2.3E+04	ns	3.5E+05	s					5.9E+03	n		1.2E+00	n	
9.5E-04	I			2.0E-01	I	2.0E+00	C			1	0.1		Isophorone	78-59-1	5.7E+02	c*	2.4E+03	c*	2.1E+03	n	8.8E+03	n	7.8E+01	c*		2.6E-02	c*	
				1.5E-02	I			V		1			Isopropalin	33820-53-0	1.2E+03	n	1.8E+04	n					4.0E+01	n		9.2E-01	n	
				2.0E+00	P	2.0E-01	P	V		1		1.1E+05	Isopropanol	67-63-0	5.6E+03	n	2.4E+04	n	2.1E+02	n	8.8E+02	n	4.1E+02	n		8.4E-02	n	
				1.0E-01	I					1	0.1		Isopropyl Methyl Phosphonic Acid	1832-54-8	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.3E-01	n	
				5.0E-02	I					1	0.1		Isoxaben	82558-50-7	3.2E+03	n	4.1E+04	n					7.3E+02	n		2.0E+00	n	
						3.0E-01	A	V		1			JP-7	E1737665	4.3E+08	nm	1.8E+09	nm	3.1E+02	n	1.3E+03	n	6.3E+02	n				
				8.0E-03	O					1	0.1		Lactofen	77501-63-4	5.1E+02	n	6.6E+03	n					1.0E+02	n		4.6E+00	n	
				2.0E-04	X					1	0.1		Lactonitrile	78-97-7	1.3E+01	n	1.6E+02	n					4.0E+00	n		8.1E-04	n	
				5.0E-05	P					1			Lanthanum	7439-91-0	3.9E+00	n	5.8E+01	n					1.0E+00	n				
				2.1E-05	P					1	0.1		Lanthanum Acetate Hydrate	100587-90-4	1.3E+00	n	1.7E+01	n					4.2E-01	n				
				1.9E-05	P					1			Lanthanum Chloride Heptahydrate	10025-84-0	1.5E+00	n	2.2E+01	n					3.7E-01	n				
				2.8E-05	P					1			Lanthanum Chloride, Anhydrous	10099-58-8	2.2E+00	n	3.3E+01	n					5.7E-01	n				
				1.6E-05	P					1			Lanthanum Nitrate Hexahydrate	10277-43-7	1.3E+00	n	1.9E+01	n					3.2E-01	n				
													Lead Compounds															
8.5E-03	C	1.2E-05	C							1			~Lead Phosphate	7446-27-7	8.2E+01	c	3.8E+02	c	2.3E-01	c	1.0E+00	c	9.1E+00	c				
8.5E-03	C	1.2E-05	C							1	0.1		~Lead acetate	301-04-2	6.4E+01	c	2.7E+02	c	2.3E-01	c	1.0E+00	c	9.2E+00	c		1.8E-03	c	
										1			~Lead and Compounds	7439-92-1	4.0E+02	G	8.0E+02	G	1.5E-01	G			1.5E+01	G	15			1.4E+01
8.5E-03	C	1.2E-05	C							1	0.1		~Lead subacetate	1335-32-6	6.4E+01	c	2.7E+02	c	2.3E-01	c	1.0E+00	c	9.2E+00	c		2.0E-03	c	
				1.0E-07	I			V		1		2.4E+00	~Tetraethyl Lead	78-00-2	7.8E-03	n	1.2E-01	n					1.3E-03	n		4.7E-06	n	
				5.0E-06	P			V		1		3.8E+02	Lewisite	541-25-3	3.9E-01	n	5.8E+00	n					9.0E-02	n		3.8E-05	n	
				7.7E-03	O					1	0.1		Linuron	330-55-2	4.9E+02	n	6.3E+03	n					1.3E+02	n		1.1E-01	n	
				2.0E-03	P					1			Lithium	7439-93-2	1.6E+02	n	2.3E+03	n					4.0E+01	n		1.2E+01	n	
				5.0E-04	I					1	0.1		MCPA	94-74-6	3.2E+01	n	4.1E+02	n					7.5E+00	n		2.0E-03	n	
				4.4E-03	O					1	0.1		MCPB	94-81-5	2.8E+02	n	3.6E+03	n					6.5E+01	n		2.6E-02	n	
				1.0E-03	I					1	0.1		MCPP	93-65-2	6.3E+01	n	8.2E+02	n					1.6E+01	n		4.7E-03	n	
				2.0E-02	I					1	0.1		Malathion	121-75-5	1.3E+03	n	1.6E+04	n					3.9E+02	n		1.0E-01	n	
				1.0E-01	I	7.0E-04	C			1	0.1		Maleic Anhydride	108-31-6	6.3E+03	n	8.0E+04	n	7.3E-01	n	3.1E+00	n	1.9E+03	n		3.8E-01	n	
				5.0E-01	I					1	0.1		Maleic Hydrazide	123-33-1	3.2E+04	n	4.1E+05	nm					1.0E+04	n		2.1E+00	n	
				1.0E-04	P					1	0.1		Malononitrile	109-77-3	6.3E+00	n	8.2E+01	n					2.0E+00	n		4.1E-04	n	
				3.0E-02	H					1	0.1		Mancozeb	8018-01-7	1.9E+03	n	2.5E+04	n					5.4E+02	n		7.6E-01	n	
				5.0E-03	I					1	0.1		Maneb	12427-38-2	3.2E+02	n	4.1E+03	n					9.8E+01	n		1.4E-01	n	
				1.4E-01	I	5.0E-05	I			1			Manganese (Diet)	7439-96-5														
				2.4E-02	G	5.0E-05	I			0.04			Manganese (Non-diet)	7439-96-5	1.8E+03	n	2.6E+04	n	5.2E-02	n	2.2E-01	n	4.3E+02	n		2.8E+01	n	
				9.0E-05	H					1	0.1		Mephosfolan	950-10-7	5.7E+00	n	7.4E+01	n					1.8E+00	n		2.6E-03	n	
				3.0E-02	I					1	0.1		Mepiquat Chloride	24307-26-4	1.9E+03	n	2.5E+04	n					6.0E+02	n		2.0E-01	n	
1.1E-02	P			4.0E-03	P					1	0.1		Mercaptobenzothiazole, 2-	149-30-4	4.9E+01	c**	2.1E+02	c*					6.3E+00	c*		1.8E-02	c*	
													Mercury Compounds															
				3.0E-04	I	3.0E-04	G			0.07			~Mercuric Chloride (and other Mercury salts)	7487-94-7	2.3E+01	n	3.5E+02	n	3.1E-01	n	1.3E+00	n	5.7E+00	n	2			
						3.0E-04	I	V		1		3.1E+00	~Mercury (elemental)	7439-97-6	1.1E+01	ns	4.6E+01	ns	3.1E-01	n	1.3E+00	n	6.3E-01	n	2	3.3E-02	n	1.0E-01
				1.0E-04	I					1			~Methyl Mercury	22967-92-6	7.8E+00	n	1.2E+02	n					2.0E+00	n		1.4E+01	n	
				8.0E-05	I					1	0.1		~Phenylmercuric Acetate	62-38-4	5.1E+00	n	6.6E+01	n					1.6E+00	n		5.0E-04	n	
				3.0E-05	I			V		1			Merphos	150-50-5	2.3E+00	n	3.5E+01	n					6.0E-01	n		5.9E-02	n	
				1.0E-04	O					1	0.1		Merphos Oxide	78-48-8	6.3E+00	n	8.2E+01	n					2.8E-01	n		1.4E-03	n	
				6.0E-02	I					1	0.1		Metalaxyl	57837-19-1	3.8E+03	n	4.9E+04	n					1.2E+03	n		3.3E-01	n	
				1.0E-04	I	3.0E-02	P	V		1		4.6E+03	Methacrylonitrile	126-98-7	7.5E+00	n	1.0E+02	n	3.1E+01	n	1.3E+02	n	1.9E+00	n		4.3E-04	n	
				5.0E-05	I					1	0.1		Methamidophos	10265-92-6	3.2E+00	n	4.1E+01	n					1.0E+00	n		2.1E-04	n	
				2.0E+00	I	2.0E+01	I	V		1		1.1E+05	Methanol	67-56-1	1.2E+05	s	1.2E+06	s	2.1E+04	n	8.8E+04	n	2.0E+04	n		4.1E+00	n	
				1.5E-03	O					1	0.1		Methidathion	950-37-8	9.5E+01	n	1.2E+03	n					2.9E+01	n		7.1E-03	n	
				2.5E-02	I					1	0.1		Methomyl	16752-77-5	1.6E+03	n	2.1E+04	n					5.0E+02	n		1.1E-01	n	
4.9E-02	C	1.4E-05	C							1	0.1		Methoxy-5-nitroaniline, 2-	99-59-2	1.1E+01	c	4.7E+01	c	2.0E-01	c	8.8E-01	c	1.5E+00	c		5.3E-04	c	
				5.0E-03	I					1	0.1		Methoxychlor	72-43-5	3.2E+02	n	4.1E+03	n					3.7E+01	n	40	2.0E+00	n	2.2E+00
				8.0E-03	P	1.0E-03	P	V		1		1.2E+05	Methoxyethanol Acetate, 2-	110-49-6	1.1E+02	n	5.1E+02	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		4.2E-04	n	
				5.0E-03	P	2.0E-02	I	V		1		1.1E+05	Methoxyethanol, 2-	109-86-4	3.3E+02	n	3.5E+03	n	2.1E+01	n	8.8E+01	n	2.9E+01	n		5.9E-03	n	
				1.0E+00	X			V		1		2.9E+04	Methyl Acetate	79-20-9	7.8E+04	ns	1.2E+06	s					2.0E+04	n		4.1E+00	n	

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information												Contaminant		Screening Levels										Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	volatile	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
						2.0E-02	P	V		1		6.8E+03	Methyl Acrylate	96-33-3	1.5E+02	n	6.1E+02	n	2.1E+01	n	8.8E+01	n	4.2E+01	n		8.9E-03	n	
				6.0E-01	I	5.0E+00	I	V		1		2.8E+04	Methyl Ethyl Ketone (2-Butanone)	78-93-3	2.7E+04	n	1.9E+05	s	5.2E+03	n	2.2E+04	n	5.6E+03	n		1.2E+00	n	
		1.0E-03	X	1.0E-03	P	2.0E-05	X	V		1		1.8E+05	Methyl Hydrazine	60-34-4	1.4E-01	c**	6.2E-01	c**	2.8E-03	c**	1.2E-02	c**	5.6E-03	c**		1.3E-06	c**	
						3.0E+00	I	V		1		3.4E+03	Methyl Isobutyl Ketone (4-methyl-2-pentanone)	108-10-1	3.3E+04	ns	1.4E+05	s	3.1E+03	n	1.3E+04	n	6.3E+03	n		1.4E+00	n	
						1.0E-03	C	V		1		1.0E+04	Methyl Isocyanate	624-83-9	4.6E+00	n	1.9E+01	n	1.0E+00	n	4.4E+00	n	2.1E+00	n		5.9E-04	n	
				1.4E+00	I	7.0E-01	I	V		1		2.4E+03	Methyl Methacrylate	80-62-6	4.4E+03	ns	1.9E+04	ns	7.3E+02	n	3.1E+03	n	1.4E+03	n		3.0E-01	n	
				2.5E-04	I					1	0.1		Methyl Parathion	298-00-0	1.6E+01	n	2.1E+02	n					4.5E+00	n		7.4E-03	n	
				6.0E-02	X					1	0.1		Methyl Phosphonic Acid	993-13-5	3.8E+03	n	4.9E+04	n					1.2E+03	n		2.4E-01	n	
				6.0E-03	H	4.0E-02	H	V		1		3.9E+02	Methyl Styrene (Mixed Isomers)	25013-15-4	3.2E+02	n	2.6E+03	ns	4.2E+01	n	1.8E+02	n	2.3E+01	n		3.8E-02	n	
9.9E-02	C	2.8E-05	C							1	0.1		Methyl methanesulfonate	66-27-3	5.5E+00	c	2.3E+01	c	1.0E-01	c	4.4E-01	c	7.9E-01	c		1.6E-04	c	
1.8E-03	C	2.6E-07	C			3.0E+00	I	V		1		8.9E+03	Methyl tert-Butyl Ether (MTBE)	1634-04-4	4.7E+01	c	2.1E+02	c	1.1E+01	c	4.7E+01	c	1.4E+01	c		3.2E-03	c	
				3.0E-04	X					1	0.1		Methyl-1,4-benzenediamine dihydrochloride, 2-	615-45-2	1.9E+01	n	2.5E+02	n					6.0E+00	n		3.6E-03	n	
						3.0E+00	X	V		1		2.5E+03	Methyl-2-Pentanol, 4-	108-11-2	5.4E+04	ns	2.3E+05	s	3.1E+03	n	1.3E+04	n	6.3E+03	n		1.4E+00	n	
9.0E-03	P			2.0E-02	X					1	0.1		Methyl-5-Nitroaniline, 2-	99-55-8	6.0E+01	c*	2.6E+02	c*					8.2E+00	c*		4.6E-03	c*	
8.3E+00	C	2.4E-03	C							1	0.1		Methyl-N-nitro-N-nitrosoguanidine, N-	70-25-7	6.5E-02	c	2.8E-01	c	1.2E-03	c	5.1E-03	c	9.4E-03	c		3.2E-06	c	
1.3E-01	C	3.7E-05	C							1	0.1		Methylaniline Hydrochloride, 2-	636-21-5	4.2E+00	c	1.8E+01	c	7.6E-02	c	3.3E-01	c	6.0E-01	c		2.6E-04	c	
				1.0E-02	A					1	0.1		Methylarsonic acid	124-58-3	6.3E+02	n	8.2E+03	n					2.0E+02	n		5.8E-02	n	
				2.0E-04	X					1	0.1		Methylbenzene,1-4-diamine monohydrochloride, 2-	74612-12-7	1.3E+01	n	1.6E+02	n					4.0E+00	n				
1.0E-01	X			3.0E-04	X					1	0.1		Methylbenzene-1,4-diamine sulfate, 2-	615-50-9	5.4E+00	c**	2.3E+01	c*					7.8E-01	c**				
2.2E+01	C	6.3E-03	C						M	1	0.1		Methylcholanthrene, 3-	56-49-5	5.5E-03	c	1.0E-01	c	1.6E-04	c	1.9E-03	c	1.1E-03	c		2.2E-03	c	
2.0E-03	I	1.0E-08	I	6.0E-03	I	6.0E-01	I	V	M	1		3.3E+03	Methylene Chloride	75-09-2	5.7E+01	c**	1.0E+03	c**	1.0E+02	c**	1.2E+03	c**	1.1E+01	c**	5	2.9E-03	c**	1.3E-03
1.0E-01	P	4.3E-04	C	2.0E-03	P				M	1	0.1		Methylene-bis(2-chloroaniline), 4,4'-	101-14-4	1.2E+00	c	2.3E+01	c*	2.4E-03	c	2.9E-02	c	1.6E-01	c		1.8E-03	c	
4.6E-02	I	1.3E-05	C							1	0.1		Methylene-bis(N,N-dimethyl) Aniline, 4,4'-	101-61-1	1.2E+01	c	5.0E+01	c	2.2E-01	c	9.4E-01	c	4.8E-01	c		2.6E-03	c	
1.6E+00	C	4.6E-04	C			2.0E-02	C			1	0.1		Methylenebisbenzenamine, 4,4'-	101-77-9	3.4E-01	c	1.4E+00	c	6.1E-03	c	2.7E-02	c	4.7E-02	c		2.1E-04	c	
						6.0E-04	I			1	0.1		Methylenediphenyl Diisocyanate	101-68-8	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n						
				7.0E-02	H			V		1		5.0E+02	Methylstyrene, Alpha-	98-83-9	5.5E+03	ns	8.2E+04	ns					7.8E+02	n		1.2E+00	n	
				1.5E-01	I					1	0.1		Metolachlor	51218-45-2	9.5E+03	n	1.2E+05	nm					2.7E+03	n		3.2E+00	n	
				2.5E-02	I					1	0.1		Metribuzin	21087-64-9	1.6E+03	n	2.1E+04	n					4.9E+02	n		1.5E-01	n	
				2.5E-01	I					1	0.1		Metsulfuron-methyl	74223-64-6	1.6E+04	n	2.1E+05	nm					4.9E+03	n		1.9E+00	n	
				3.0E+00	P			V		1		3.4E-01	Mineral oils	8012-95-1	2.3E+05	s	3.5E+06	s					6.0E+04	n		2.4E+03	n	
1.8E+01	C	5.1E-03	C	2.0E-04	I			V		1			Mirex	2385-85-5	3.6E-02	c	1.7E-01	c	5.5E-04	c	2.4E-03	c	8.8E-04	c		6.3E-04	c	
				2.0E-03	I					1	0.1		Molinate	2212-67-1	1.3E+02	n	1.6E+03	n					3.0E+01	n		1.7E-02	n	
				5.0E-03	I					1			Molybdenum	7439-98-7	3.9E+02	n	5.8E+03	n					1.0E+02	n		2.0E+00	n	
				1.0E-01	I					1			Monochloramine	10599-90-3	7.8E+03	n	1.2E+05	nm					2.0E+03	n	4.0E+03 (G)			
				2.0E-03	P					1	0.1		Monomethylaniline	100-61-8	1.3E+02	n	1.6E+03	n					3.8E+01	n		1.4E-02	n	
				2.5E-02	I					1	0.1		Myclobutanil	88671-89-0	1.6E+03	n	2.1E+04	n					4.5E+02	n		5.6E+00	n	
				3.0E-04	X					1	0.1		N,N'-Diphenyl-1,4-benzenediamine	74-31-7	1.9E+01	n	2.5E+02	n					3.6E+00	n		3.7E-01	n	
				2.0E-03	I			V		1			Naled	300-76-5	1.6E+02	n	2.3E+03	n					4.0E+01	n		1.8E-02	n	
				3.0E-02	X	1.0E-01	P	V		1			Naphtha, High Flash Aromatic (HFAN)	64742-95-6	2.3E+03	n	3.5E+04	n	1.0E+02	n	4.4E+02	n	1.5E+02	n				
1.8E+00	C	0.0E+00	C							1	0.1		Naphthylamine, 2-	91-59-8	3.0E-01	c	1.3E+00	c					3.9E-02	c		2.0E-04	c	
				1.2E-01	O					1	0.1		Napropamide	15299-99-7	7.6E+03	n	9.8E+04	n					2.0E+03	n		1.3E+01	n	
		2.6E-04	C	1.1E-02	C	1.4E-05	C			1	0.1		Nickel Acetate	373-02-4	6.7E+02	n	8.1E+03	n	1.1E-02	c**	4.7E-02	c**	2.2E+02	n		4.5E-02	n	
		2.6E-04	C	1.1E-02	C	1.4E-05	C			1	0.1		Nickel Carbonate	3333-67-3	6.7E+02	n	8.1E+03	n	1.1E-02	c**	4.7E-02	c**	2.2E+02	n				
		2.6E-04	C	1.1E-02	C	1.4E-05	C	V		1			Nickel Carbonyl	13463-39-3	8.2E+02	n	1.1E+04	n	1.1E-02	c**	4.7E-02	c**	2.2E-02	c**				
		2.6E-04	C	1.1E-02	C	1.4E-05	C			0.04			Nickel Hydroxide	12054-48-7	8.2E+02	n	1.1E+04	n	1.1E-02	c**	4.7E-02	c**	2.0E+02	n				
		2.6E-04	C	1.1E-02	C	2.0E-05	C			0.04			Nickel Oxide	1313-99-1	8.4E+02	n	1.2E+04	n	1.1E-02	c**	4.7E-02	c**	2.0E+02	n				
		2.4E-04	I	1.1E-02	C	1.4E-05	C			0.04			Nickel Refinery Dust	E715532	8.2E+02	n	1.1E+04	n	1.2E-02	c**	5.1E-02	c**	2.2E+02	n		3.2E+01	n	
		2.6E-04	C	2.0E-02	I	9.0E-05	A			0.04			Nickel Soluble Salts	7440-02-0	1.5E+03	n	2.2E+04	n	1.1E-02	c**	4.7E-02	c**	3.9E+02	n		2.6E+01	n	
1.7E+00	C	4.8E-04	I	1.1E-02	C	1.4E-05	C			0.04			Nickel Subsulfide	12035-72-2	4.1E-01	c	1.9E+00	c	5.8E-03	c**	2.6E-02	c**	4.5E-02	c				
		2.6E-04	C	1.1E-02	C	1.4E-05	C			1	0.1		Nickelocene	1271-28-9	6.7E+02	n	8.1E+03	n	1.1E-02	c**	4.7E-02	c**	2.2E+02	n				
				1.6E+00	I					1			Nitrate (measured as nitrogen)	14797-55-8	1.3E+05	nm	1.9E+06	nm					3.2E+04	n	10000			
										1			Nitrate + Nitrite (measured as nitrogen)	E701177											10000			
				1.0E-01	I					1			Nitrite (measured as nitrogen)	14797-65-0	7.8E+03	n	1.2E+05	nm					2.0E+03	n	1000			
				1.0E-02	X	5.0E-05	X			1	0.1		Nitroaniline, 2-	88-74-4	6.3E+02	n	8.0E+03	n	5.2E-02	n	2.2E-01	n	1.9E+02	n		8.0E-02	n	
2.0E-02	P			4.0E-03	P	6.0E-03	P			1	0.1		Nitroaniline, 4-	100-01-6	2.7E+01	c**	1.1E+02	c*	6.3E+00	n	2.6E+01	n	3.8E+00	c*		1.6E-03	c*	
		4.0E-05	I	2.0E-03	I	9.0E-03	I	V		1		3.1E+03	Nitrobenzene	98-95-3	5.1E+00	c*	2.2E+01	c*	7.0E-02	c	3.1E-01	c	1.4E-01	c*		9.2E-05	c*	
				3.0E+03	P					1	0.1		Nitrocellulose	9004-70-0	1.9E+08	nm	2.5E+09	nm					6.0E+07	n		1.3E+04	n	
				7.0E-02	H					1	0.1		Nitrofurantoin	67-20-9	4.4E+03	n	5.7E+04	n					1.4E+03	n		6.1E-01	n	
1.3E+00	C	3.7E-04	C							1	0.1		Nitrofurazone	59-87-0	4.2E-01	c	1.8E+00	c	7.6E-03	c	3.3E-02	c	6.0E-02	c		5.4E-05	c	
1.7E-02	P			1.0E-04	P					1	0.1		Nitroglycerin	55-63-0	6.3E+00	n	8.2E+01	n					2.0E+00	n		8.5E-04	n	
				1.0E-01	I					1	0.1		Nitroguanidine	556-88-7	6.3E+03	n	8.2E+04	n					2.0E+03	n		4.8E-01	n	
		8.8E-06	P			5.0E-03	P	V		1		1.8E+04	Nitromethane	75-52-5	5.4E+00	c*	2.4E+01	c*	3.2E-01	c*	1.4E+00	c*	6.4E-01	c*		1.4E-04	c*	
		2.7E-03	H			2.0E-02	I	V		1		4.9E+03	Nitropropane, 2-	79-46-9	1.4E-02	c	6.0E-02	c	1.0E-03	c	4.5E-03	c	2.1E-03	c		5.4E-07	c	
2.7E+01	C	7.7E-03	C						M	1	0.1		Nitroso-N-ethylurea, N-	759-73-9	4.5E-03	c	8.5E-02	c	1.3E-04	c	1.6E-03	c	9.2E-04	c		2.2E-07	c	
1.2E+02	C	3.4E-02	C						M	1	0.1		Nitroso-N-methylurea, N-	684-93-5	1.0E-03	c	1.9E-02	c	3.0E-05	c	3.6E-04	c	2.1E-04	c		4.6E-08	c	
5.4E+00	I	1.6E-03	I					V		1			Nitroso-di-N-butylamine, N-	924-16-3	9.9E-02	c	4.6E-01	c	1.8E-03	c	7.7E-03	c	2.7E-03	c		5.5E-06	c	
7.0E+00	I	2.0E-03	C							1	0.1		Nitroso-di-N-propylamine, N-	621-64-7	7.8E-02	c	3.3E-01	c	1.4E-03	c	6.1E-03	c	1.1E-02	c		8.1E-06	c	
2.8E+00	I	8.0E-04	C							1	0.1		Nitrosodiethanolamine, N-	1116-54-7	1.9E-01	c	8.2E-01	c	3.5E-03	c	1.5E-02	c	2.8E-02	c		5.6E-06	c	
1.5E+02	I	4.3E-02	I						M	1	0.1		Nitrosodiethylamine, N-	55-18-5	8.1E-04	c	1.5E-02	c	2.4E-05	c	2.9E-04	c	1.7E-04	c		6.1E-08	c	
5.1E+01	I	1.4E-02	I	8.0E-06	P	4.0E-05	X	V	M	1		2.4E+05	Nitrosodimethylamine, N-	62-75-9	2.0E-03	c	3.4E-02	c	7.2E-05	c	8.8E-04	c	1.1E-04	c		2.7E-08	c	
4.9E-03	I	2.6E-06	C							1	0.1		Nitrosodiphenylamine, N-	86-30-6	1.1E+02	c	4.7E+02	c	1.1E+00	c	4.7E+00	c	1.2E+01	c		6.7E-02	c	
2.2E+01	I	6.3E-03	C					V		1		1.1E+05	Nitrosomethylethylamine, N-	10595-95-6	2.0E-02	c	9.1E-02	c	4.5E-04	c	1.9E-03	c	7.1E-04	c		2.0E-07	c	
6.7E+00	C	1.9E-03	C							1	0.1		Nitrosomorpholine [N-]	59-89-2	8.1E-02	c	3.4E-01	c	1.5E-03	c	6.5E-03	c	1.2E-02	c		2.8E-06	c	
9.4E+00	C	2.7E-03	C							1	0.1		Nitrosopiperidine [N-]	100-75-4	5.8E-02	c	2.4E-01	c	1.0E-03	c	4.5E-03	c	8.2E-03	c		4.4E-06	c	
2.1E+00	I	6.1E-04	I							1	0.1		Nitrosopyrrolidine, N-	930-55-2	2.6E-01	c	1.1E+00	c	4.6E-03	c	2.0E-02	c	3.7E-02	c		1.4E-05	c	

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				1.0E-04	X					1	0.1		Nitrotoluene, m-	99-08-1	6.3E+00	n	8.2E+01	n					1.7E+00	n		1.6E-03	n	
2.2E-01	P			9.0E-04	P			V		1		1.5E+03	Nitrotoluene, o-	88-72-2	3.2E+00	c*	1.5E+01	c*					3.1E-01	c*		3.0E-04	c*	
1.6E-02	P			4.0E-03	P					1	0.1		Nitrotoluene, p-	99-99-0	3.4E+01	c**	1.4E+02	c*					4.3E+00	c*		4.0E-03	c*	
				3.0E-04	X	2.0E-02	P	V		1		6.9E+00	Nonane, n-	111-84-2	1.1E+01	ns	7.2E+01	ns	2.1E+01	n	8.8E+01	n	5.3E+00	n		7.5E-02	n	
				1.5E-02	O					1	0.1		Norflurazon	27314-13-2	9.5E+02	n	1.2E+04	n					2.9E+02	n		1.9E+00	n	
				3.0E-03	I					1	0.1		Octabromodiphenyl Ether	32536-52-0	1.9E+02	n	2.5E+03	n					6.0E+01	n		1.2E+01	n	
				5.0E-02	I					1	0.006		Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX)	2691-41-0	3.9E+03	n	5.7E+04	n					1.0E+03	n		1.3E+00	n	
				2.0E-03	H					1	0.1		Octamethylpyrophosphoramide	152-16-9	1.3E+02	n	1.6E+03	n					4.0E+01	n		9.6E-03	n	
7.8E-03	O			1.4E-01	O					1	0.1		Oryzalin	19044-88-3	7.0E+01	c	2.9E+02	c					7.9E+00	c		1.5E-02	c	
				5.0E-03	I					1	0.1		Oxadiazon	19666-30-9	3.2E+02	n	4.1E+03	n					4.7E+01	n		4.8E-01	n	
				2.5E-02	I					1	0.1		Oxamyl	23135-22-0	1.6E+03	n	2.1E+04	n					5.0E+02	n	200	1.1E-01	n	4.4E-02
7.3E-02	O			3.0E-02	O					1	0.1		Oxyfluorfen	42874-03-3	7.4E+00	c	3.1E+01	c					5.4E-01	c		4.3E-02	c	
				1.3E-02	I					1	0.1		Paclobutrazol	76738-62-0	8.2E+02	n	1.1E+04	n					2.3E+02	n		4.6E-01	n	
				4.5E-03	I					1	0.1		Paraquat Dichloride	1910-42-5	2.8E+02	n	3.7E+03	n					9.0E+01	n		1.2E+00	n	
				6.0E-03	H					1	0.1		Parathion	56-38-2	3.8E+02	n	4.9E+03	n					8.6E+01	n		4.3E-01	n	
				5.0E-02	H			V		1			Pebulate	1114-71-2	3.9E+03	n	5.8E+04	n					5.6E+02	n		4.5E-01	n	
				3.0E-01	O					1	0.1		Pendimethalin	40487-42-1	1.9E+04	n	2.5E+05	nm					1.4E+03	n		1.6E+01	n	
				2.0E-03	I			V		1		3.1E-01	Pentabromodiphenyl Ether	32534-81-9	1.6E+02	ns	2.3E+03	ns					4.0E+01	n		1.7E+00	n	
				1.0E-04	I					1	0.1		Pentabromodiphenyl ether, 2,2',4,4',5- (BDE-99)	60348-60-9	6.3E+00	n	8.2E+01	n					2.0E+00	n		8.7E-02	n	
				8.0E-04	I			V		1			Pentachlorobenzene	608-93-5	6.3E+01	n	9.3E+02	n					3.2E+00	n		2.4E-02	n	
9.0E-02	P							V		1		4.6E+02	Pentachloroethane	76-01-7	7.7E+00	c	3.6E+01	c					6.5E-01	c		3.1E-04	c	
2.6E-01	H			3.0E-03	I			V		1			Pentachloronitrobenzene	82-68-8	2.7E+00	c*	1.3E+01	c					1.2E-01	c		1.5E-03	c	
4.0E-01	I	5.1E-06	C	5.0E-03	I					1	0.25		Pentachlorophenol	87-86-5	1.0E+00	c	4.0E+00	c	5.5E-01	c	2.4E+00	c	4.1E-02	c	1	5.7E-05	c	1.4E-03
4.0E-03	X			2.0E-03	P					1	0.1		Pentaerythritol tetranitrate (PETN)	78-11-5	1.3E+02	n	5.7E+02	c**					1.9E+01	c**		2.8E-02	c**	
						1.0E+00	P	V		1		3.9E+02	Pentane, n-	109-66-0	8.1E+02	ns	3.4E+03	ns	1.0E+03	n	4.4E+03	n	2.1E+03	n		1.0E+01	n	
													Perchlorates																
				7.0E-04	I					1			~Ammonium Perchlorate	7790-98-9	5.5E+01	n	8.2E+02	n					1.4E+01	n				
				7.0E-04	I					1			~Lithium Perchlorate	7791-03-9	5.5E+01	n	8.2E+02	n					1.4E+01	n				
				7.0E-04	I					1			~Perchlorate and Perchlorate Salts	14797-73-0	5.5E+01	n	8.2E+02	n					1.4E+01	n	1.5E+01 (G)			
				7.0E-04	I					1			~Potassium Perchlorate	7778-74-7	5.5E+01	n	8.2E+02	n					1.4E+01	n				
				7.0E-04	I					1			~Sodium Perchlorate	7601-89-0	5.5E+01	n	8.2E+02	n					1.4E+01	n				
				2.0E-02	P					1	0.1		Perfluorobutane sulfonic acid (PFBS)	375-73-5	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.3E-01	n	
				2.0E-02	P					1	0.1		Perfluorobutanesulfonate	45187-15-3	1.3E+03	n	1.6E+04	n					4.0E+02	n		1.3E-01	n	
				5.0E-02	I					1	0.1		Permethrin	52645-53-1	3.2E+03	n	4.1E+04	n					1.0E+03	n		2.4E+02	n	
2.2E-03	C	6.3E-07	C							1	0.1		Phenacetin	62-44-2	2.5E+02	c	1.0E+03	c	4.5E+00	c	1.9E+01	c	3.4E+01	c		9.7E-03	c	
				2.4E-01	O					1	0.1		Phenmedipham	13684-63-4	1.5E+04	n	2.0E+05	nm					3.8E+03	n		2.1E+01	n	
				3.0E-01	I	2.0E-01	C			1	0.1		Phenol	108-95-2	1.9E+04	n	2.5E+05	nm	2.1E+02	n	8.8E+02	n	5.8E+03	n		3.3E+00	n	
				4.0E-03	I					1	0.1		Phenol, 2-(1-methylethoxy)-, methylcarbamate	114-26-1	2.5E+02	n	3.3E+03	n					7.8E+01	n		2.5E-02	n	
				5.0E-04	X					1	0.1		Phenothiazine	92-84-2	3.2E+01	n	4.1E+02	n					4.3E+00	n		1.4E-02	n	
				2.0E-04	X			V		1		1.3E+02	Phenyl Isothiocyanate	103-72-0	1.6E+01	n	2.3E+02	ns					2.6E+00	n		1.7E-03	n	
				6.0E-03	I					1	0.1		Phenylenediamine, m-	108-45-2	3.8E+02	n	4.9E+03	n					1.2E+02	n		3.2E-02	n	
1.2E-01	P			4.0E-03	P					1	0.1		Phenylenediamine, o-	95-54-5	4.5E+00	c*	1.9E+01	c					6.5E-01	c		1.7E-04	c	
				1.0E-03	X					1	0.1		Phenylenediamine, p-	106-50-3	6.3E+01	n	8.2E+02	n					2.0E+01	n		5.4E-03	n	
1.9E-03	H									1	0.1		Phenylphenol, 2-	90-43-7	2.8E+02	c	1.2E+03	c					3.0E+01	c		4.1E-01	c	
				2.0E-04	H					1	0.1		Phorate	298-02-2	1.3E+01	n	1.6E+02	n					3.0E+00	n		3.4E-03	n	
						3.0E-04	I	V		1		1.6E+03	Phosgene	75-44-5	3.1E-01	n	1.3E+00	n	3.1E-01	n	1.3E+00	n	6.3E-01	n		1.6E-04	n	
				2.0E-02	I					1	0.1		Phosmet	732-11-6	1.3E+03	n	1.6E+04	n					3.7E+02	n		8.2E-02	n	
													Phosphates, Inorganic																
				4.9E+01	P					1			~Aluminum metaphosphate	13776-88-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Ammonium polyphosphate	68333-79-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Calcium pyrophosphate	7790-76-3	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Diammonium phosphate	7783-28-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Dicalcium phosphate	7757-93-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Dimagnesium phosphate	7782-75-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Dipotassium phosphate	7758-11-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Disodium phosphate	7558-79-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monoaluminum phosphate	13530-50-2	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monoammonium phosphate	7722-76-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monocalcium phosphate	7758-23-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monomagnesium phosphate	7757-86-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monopotassium phosphate	7778-77-0	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Monosodium phosphate	7558-80-7	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Polyphosphoric acid	8017-16-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Potassium tripolyphosphate	13845-36-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium acid pyrophosphate	7758-16-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium aluminum phosphate (acidic)	7785-88-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium aluminum phosphate (anhydrous)	10279-59-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium aluminum phosphate (tetrahydrate)	10305-76-7	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium hexametaphosphate	10124-56-8	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium polyphosphate	68915-31-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium trimetaphosphate	7785-84-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Sodium tripolyphosphate	7758-29-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tetrapotassium phosphate	7320-34-5	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tetrasodium pyrophosphate	7722-88-5	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Trialuminum sodium tetra decahydrogenoctaorthophosphate (dihydrate)	15136-87-5	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				

TR=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information															Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				4.9E+01	P					1			~Tricalcium phosphate	7758-87-4	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Trimagnesium phosphate	7757-87-1	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Tripotassium phosphate	7778-53-2	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				4.9E+01	P					1			~Trisodium phosphate	7601-54-9	3.8E+06	nm	5.7E+07	nm					9.7E+05	n				
				3.0E-04	I	3.0E-04	I	V		1			Phosphine	7803-51-2	2.3E+01	n	3.5E+02	n	3.1E-01	n	1.3E+00	n	5.7E-01	n				
				4.9E+01	P	1.0E-02	I			1			Phosphoric Acid	7664-38-2	3.0E+06	nm	2.9E+07	nm	1.0E+01	n	4.4E+01	n	9.7E+05	n				
				2.0E-05	I			V		1			Phosphorus, White	7723-14-0	1.6E+00	n	2.3E+01	n					4.0E-01	n		1.5E-03	n	
													Phthalates																
1.4E-02	I	2.4E-06	C	2.0E-02	I					1	0.1		~Bis(2-ethylhexyl)phthalate	117-81-7	3.9E+01	c*	1.6E+02	c	1.2E+00	c	5.1E+00	c	5.6E+00	c*	6	1.3E+00	c*	1.4E+00
1.9E-03	P			2.0E-01	I					1	0.1		~Butyl Benzyl Phthalate	85-68-7	2.9E+02	c*	1.2E+03	c					1.6E+01	c		2.4E-01	c	
				1.0E+00	I					1	0.1		~Butylphthalyl Butylglycolate	85-70-1	6.3E+04	n	8.2E+05	nm					1.3E+04	n		3.1E+02	n	
				1.0E-01	I					1	0.1		~Dibutyl Phthalate	84-74-2	6.3E+03	n	8.2E+04	n					9.0E+02	n		2.3E+00	n	
				8.0E-01	I					1	0.1		~Diethyl Phthalate	84-66-2	5.1E+04	n	6.6E+05	nm					1.5E+04	n		6.1E+00	n	
				1.0E-01	I			V		1			~Dimethylterephthalate	120-61-6	7.8E+03	n	1.2E+05	nm					1.9E+03	n		4.9E-01	n	
				1.0E-02	P					1	0.1		~Octyl Phthalate, di-N-	117-84-0	6.3E+02	n	8.2E+03	n					2.0E+02	n		5.7E+01	n	
				1.0E+00	H					1	0.1		~Phthalic Acid, P-	100-21-0	6.3E+04	n	8.2E+05	nm					1.9E+04	n		6.8E+00	n	
				2.0E+00	I	2.0E-02	C			1	0.1		~Phthalic Anhydride	85-44-9	1.3E+05	nm	1.6E+06	nm	2.1E+01	n	8.8E+01	n	3.9E+04	n		8.5E+00	n	
				7.0E-02	I					1	0.1		Picloram	1918-02-1	4.4E+03	n	5.7E+04	n					1.4E+03	n	500	3.8E-01	n	1.4E-01
				1.0E-04	X					1	0.1		Picramic Acid (2-Amino-4,6-dinitrophenol)	96-91-3	6.3E+00	n	8.2E+01	n					2.0E+00	n		1.3E-03	n	
				9.0E-04	X					1	0.1		Picric Acid (2,4,6-Trinitrophenol)	88-89-1	5.7E+01	n	7.4E+02	n					1.8E+01	n		8.4E-02	n	
				7.0E-05	O					1	0.1		Pirimiphos, Methyl	29232-93-7	4.4E+00	n	5.7E+01	n					8.5E-01	n		8.1E-04	n	
3.0E+01	C	8.6E-03	C	7.0E-06	H					1	0.1		Polybrominated Biphenyls	59536-65-1	1.8E-02	c*	7.7E-02	c*	3.3E-04	c	1.4E-03	c	2.6E-03	c*				
													Polychlorinated Biphenyls (PCBs)																
7.0E-02	G	2.0E-05	G	7.0E-05	I			V		1	0.14		~Aroclor 1016	12674-11-2	4.1E+00	n	2.7E+01	c**	1.4E-01	c	6.1E-01	c	2.2E-01	c**		2.1E-02	c**	
2.0E+00	G	5.7E-04	G					V		1	0.14		~Aroclor 1221	11104-28-2	2.0E-01	c	8.3E-01	c	4.9E-03	c	2.1E-02	c	4.7E-03	c		8.0E-05	c	
2.0E+00	G	5.7E-04	G					V		1	0.14		~Aroclor 1232	11141-16-5	1.7E-01	c	7.2E-01	c	4.9E-03	c	2.1E-02	c	4.7E-03	c		8.0E-05	c	
2.0E+00	G	5.7E-04	G					V		1	0.14		~Aroclor 1242	53469-21-9	2.3E-01	c	9.5E-01	c	4.9E-03	c	2.1E-02	c	7.8E-03	c		1.2E-03	c	
2.0E+00	G	5.7E-04	G					V		1	0.14		~Aroclor 1248	12672-29-6	2.3E-01	c	9.5E-01	c	4.9E-03	c	2.1E-02	c	7.8E-03	c		1.2E-03	c	
2.0E+00	G	5.7E-04	G	2.0E-05	I			V		1	0.14		~Aroclor 1254	11097-69-1	2.4E-01	c**	9.7E-01	c*	4.9E-03	c	2.1E-02	c	7.8E-03	c*		2.0E-03	c*	
2.0E+00	G	5.7E-04	G					V		1	0.14		~Aroclor 1260	11096-82-5	2.4E-01	c	9.9E-01	c	4.9E-03	c	2.1E-02	c	7.8E-03	c		5.5E-03	c	
				6.0E-04	X			V		1	0.14		~Aroclor 5460	11126-42-4	3.5E+01	n	4.4E+02	n					1.2E+01	n		2.0E+00	n	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Heptachlorobiphenyl, 2,3,3',4,4',5,5'- (PCB 189)	39635-31-9	1.3E-01	c*	5.2E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		2.8E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Hexachlorobiphenyl, 2,3',4,4',5,5'- (PCB 167)	52663-72-6	1.2E-01	c*	5.1E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.7E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Hexachlorobiphenyl, 2,3,3',4,4',5'- (PCB 157)	69782-90-7	1.2E-01	c*	5.0E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.7E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Hexachlorobiphenyl, 2,3,3',4,4',5- (PCB 156)	38380-08-4	1.2E-01	c*	5.0E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.7E-03	c	
3.9E+03	W	1.1E+00	W	2.3E-08	W	1.3E-06	W	V		1	0.14		~Hexachlorobiphenyl, 3,3',4,4',5,5'- (PCB 169)	32774-16-6	1.2E-04	c*	5.1E-04	c*	2.5E-06	c	1.1E-05	c	4.0E-06	c		1.7E-06	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2',3,4,4',5- (PCB 123)	65510-44-3	1.2E-01	c*	4.9E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2,3',4,4',5- (PCB 118)	31508-00-6	1.2E-01	c*	4.9E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2,3,3',4,4'- (PCB 105)	32598-14-4	1.2E-01	c*	4.9E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
3.9E+00	W	1.1E-03	W	2.3E-05	W	1.3E-03	W	V		1	0.14		~Pentachlorobiphenyl, 2,3,4,4',5- (PCB 114)	74472-37-0	1.2E-01	c*	5.0E-01	c*	2.5E-03	c	1.1E-02	c	4.0E-03	c		1.0E-03	c	
1.3E+04	W	3.8E+00	W	7.0E-09	W	4.0E-07	W	V		1	0.14		~Pentachlorobiphenyl, 3,3',4,4',5- (PCB 126)	57465-28-8	3.6E-05	c*	1.5E-04	c*	7.4E-07	c	3.2E-06	c	1.2E-06	c		3.0E-07	c	
2.0E+00	I	5.7E-04	I					V		1	0.14		~Polychlorinated Biphenyls (high risk)	1336-36-3	2.3E-01	c	9.4E-01	c	4.9E-03	c	2.1E-02	c			0.5			
4.0E-01	I	1.0E-04	I					V		1	0.14		~Polychlorinated Biphenyls (low risk)	1336-36-3					2.8E-02	c	1.2E-01	c	4.4E-02	c	0.5	6.8E-03	c	7.8E-02
7.0E-02	I	2.0E-05	I					V		1	0.14		~Polychlorinated Biphenyls (lowest risk)	1336-36-3					1.4E-01	c	6.1E-01	c			0.5			
1.3E+01	W	3.8E-03	W	7.0E-06	W	4.0E-04	W			1	0.14		~Tetrachlorobiphenyl, 3,3',4,4'- (PCB 77)	32598-13-3	3.8E-02	c*	1.6E-01	c*	7.4E-04	c	3.2E-03	c	6.0E-03	c*		9.4E-04	c*	
3.9E+01	W	1.1E-02	W	2.3E-06	W	1.3E-04	W	V		1	0.14		~Tetrachlorobiphenyl, 3,4,4',5- (PCB 81)	70362-50-4	1.2E-02	c*	4.8E-02	c*	2.5E-04	c	1.1E-03	c	4.0E-04	c		6.2E-05	c	
						6.0E-04	I			1	0.1		Polymeric Methylene Diphenyl Diisocyanate (PMDI)	9016-87-9	8.5E+05	nm	3.6E+06	nm	6.3E-01	n	2.6E+00	n						
													Polynuclear Aromatic Hydrocarbons (PAHs)																
				6.0E-02	I			V		1	0.13		~Acenaphthene	83-32-9	3.6E+03	n	4.5E+04	n					5.3E+02	n		5.5E+00	n	
				3.0E-01	I			V		1	0.13		~Anthracene	120-12-7	1.8E+04	n	2.3E+05	nm					1.8E+03	n		5.8E+01	n	
1.0E-01	E	6.0E-05	E					V	M	1	0.13		~Benz[a]anthracene	56-55-3	1.1E+00	c	2.1E+01	c	1.7E-02	c	2.0E-01	c	3.0E-02	c		1.1E-02	c	
1.2E+00	C	1.1E-04	C							1	0.13		~Benzo(j)fluoranthene	205-82-3	4.2E-01	c	1.8E+00	c	2.6E-02	c	1.1E-01	c	6.5E-02	c		7.8E-02	c	
1.0E+00	I	6.0E-04	I	3.0E-04	I	2.0E-06	I		M	1	0.13		~Benzo[a]pyrene	50-32-8	1.1E-01	c	2.1E+00	c	1.7E-03	c**	8.8E-03	n	2.5E-02	c	0.2	2.9E-02	c	2.4E-01
1.0E-01	E	6.0E-05	E						M	1	0.13		~Benzo[b]fluoranthene	205-99-2	1.1E+00	c	2.1E+01	c	1.7E-02	c	2.0E-01	c	2.5E-01	c		3.0E-01	c	
1.0E-02	E	6.0E-06	E						M	1	0.13		~Benzo[k]fluoranthene	207-08-9	1.1E+01	c	2.1E+02	c	1.7E-01	c	2.0E+00	c	2.5E+00	c		2.9E+00	c	
				8.0E-02	I			V		1	0.13		~Chloronaphthalene, Beta-	91-58-7	4.8E+03	n	6.0E+04	n					7.5E+02	n		3.9E+00	n	
1.0E-03	E	6.0E-07	E						M	1	0.13		~Chrysene	218-01-9	1.1E+02	c	2.1E+03	c	1.7E+00	c	2.0E+01	c	2.5E+01	c		9.0E+00	c	
1.0E+00	E	6.0E-04	E						M	1	0.13		~Dibenz[a,h]anthracene	53-70-3	1.1E-01	c	2.1E+00	c	1.7E-03	c	2.0E-02	c	2.5E-02	c		9.6E-02	c	
1.2E+01	C	1.1E-03	C							1	0.13		~Dibenzo(a,e)pyrene	192-65-4	4.2E-02	c	1.8E-01	c	2.6E-03	c	1.1E-02	c	6.5E-03	c		8.4E-02	c	
2.5E+02	C	7.1E-02	C						M	1	0.13		~Dimethylbenz(a)anthracene, 7,12-	57-97-6	4.6E-04	c	8.4E-03	c	1.4E-05	c	1.7E-04	c	1.0E-04	c		9.9E-05	c	
				4.0E-02	I					1	0.13		~Fluoranthene	206-44-0	2.4E+03	n	3.0E+04	n					8.0E+02	n		8.9E+01	n	
				4.0E-02	I			V		1	0.13		~Fluorene	86-73-7	2.4E+03	n	3.0E+04	n					2.9E+02	n		5.4E+00	n	
1.0E-01	E	6.0E-05	E						M	1	0.13		~Indeno[1,2,3-cd]pyrene	193-39-5	1.1E+00	c	2.1E+01	c	1.7E-02	c	2.0E-01	c	2.5E-01	c		9.8E-01	c	
2.9E-02	P			7.0E-02	A			V		1	0.13	3.9E+02	~Methylnaphthalene, 1-	90-12-0	1.8E+01	c	7.3E+01	c					1.1E+00	c		6.0E-03	c	
				4.0E-03	I			V		1	0.13		~Methylnaphthalene, 2-	91-57-6	2.4E+02	n	3.0E+03	n					3.6E+01	n		1.9E-01	n	
		3.4E-05	C	2.0E-02	I	3.0E-03	I	V		1	0.13		~Naphthalene	91-20-3	3.8E+00	c*	1.7E+01	c*	8.3E-02	c*	3.6E-01	c*	1.7E-01	c*		5.4E-04	c*	
1.2E+00	C	1.1E-04	C							1	0.13		~Nitropyrene, 4-	57835-92-4	4.2E-01	c	1.8E+00	c	2.6E-02	c	1.1E-01	c	1.9E-02	c		3.3E-03	c	
				3.0E-02	I			V		1	0.13		~Pyrene	129-00-0	1.8E+03	n	2.3E+04	n					1.2E+02	n		1.3E+01	n	
				2.0E-02	P					1	0.1		Potassium Perfluorobutane Sulfonate	29420-49-3	1.3E+03	n	1.6E+04	n					4.0E+02	n				
1.5E-01	I			9.0E-03	I					1	0.1		Prochloraz	67747-09-5	3.6E+00	c	1.5E+01	c					3.8E-01	c		1.9E-03	c	
				6.0E-03	H			V		1			Profluralin	26399-36-0	4.7E+02	n	7.0E+03	n					2.6E+01	n		1.6E+00	n	
				1.5E-02	I					1	0.1		Prometon	1610-18-0	9.5E+02	n	1.2E+04	n					2.5E+02	n		1.2E-01	n	
				4.0E-02	O					1	0.1		Prometryn	7287-19-6	2.5E+03	n	3.3E+04	n					6.0E+02	n		9.0E-01	n	
				7.5E-02	I					1	0.1		Pronamide	23950-58-5	4.7E+03	n	6.2E+04	n					1.2E+03	n		1.2E+00	n	
				1.3E-02	I					1	0.1		Propachlor	1918-16-7	8.2E+02	n	1.1E+04	n					2.5E+02	n		1.5E-01	n	

THQ=1E-06

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				5.0E-03	I					1	0.1		Propanil	709-98-8	3.2E+02	n	4.1E+03	n					8.2E+01	n		4.5E-02	n	
1.9E-01	O			4.0E-02	O					1	0.1		Propargite	2312-35-8	2.8E+00	c	1.2E+01	c					1.6E-01	c		1.1E-02	c	
				2.0E-03	I			V		1		1.1E+05	Propargyl Alcohol	107-19-7	1.6E+02	n	2.3E+03	n					4.0E+01	n		8.1E-03	n	
				2.0E-02	I					1	0.1		Propazine	139-40-2	1.3E+03	n	1.6E+04	n					3.4E+02	n		3.0E-01	n	
				2.0E-02	I					1	0.1		Propham	122-42-9	1.3E+03	n	1.6E+04	n					3.5E+02	n		2.2E-01	n	
				1.0E-01	O					1	0.1		Propiconazole	60207-90-1	6.3E+03	n	8.2E+04	n					1.6E+03	n		5.3E+00	n	
						8.0E-03	I	V		1		3.3E+04	Propionaldehyde	123-38-6	7.5E+01	n	3.1E+02	n	8.3E+00	n	3.5E+01	n	1.7E+01	n		3.4E-03	n	
				1.0E-01	X	1.0E+00	X	V		1		2.6E+02	Propyl benzene	103-65-1	3.8E+03	ns	2.4E+04	ns	1.0E+03	n	4.4E+03	n	6.6E+02	n		1.2E+00	n	
						3.0E+00	C	V		1		3.5E+02	Propylene	115-07-1	2.2E+03	ns	9.3E+03	ns	3.1E+03	n	1.3E+04	n	6.3E+03	n		6.0E+00	n	
				2.0E+01	P					1	0.1		Propylene Glycol	57-55-6	1.3E+06	nm	1.6E+07	nm					4.0E+05	n		8.1E+01	n	
						2.7E-04	A			1	0.1		Propylene Glycol Dinitrate	6423-43-4	3.9E+05	nm	1.6E+06	nm	2.8E-01	n	1.2E+00	n						
				7.0E-01	H	2.0E+00	I	V		1		1.1E+05	Propylene Glycol Monomethyl Ether	107-98-2	4.1E+04	n	3.7E+05	s	2.1E+03	n	8.8E+03	n	3.2E+03	n		6.5E-01	n	
2.4E-01	I	3.7E-06	I			3.0E-02	I	V		1		7.8E+04	Propylene Oxide	75-56-9	2.1E+00	c	9.7E+00	c	7.6E-01	c*	3.3E+00	c*	2.7E-01	c		5.6E-05	c	
				1.0E-03	I			V		1		5.3E+05	Pyridine	110-86-1	7.8E+01	n	1.2E+03	n					2.0E+01	n		6.8E-03	n	
				5.0E-04	I					1	0.1		Quinalphos	13593-03-8	3.2E+01	n	4.1E+02	n					5.1E+00	n		4.3E-02	n	
3.0E+00	I									1	0.1		Quinoline	91-22-5	1.8E-01	c	7.7E-01	c					2.4E-02	c		7.8E-05	c	
				9.0E-03	I					1	0.1		Quizalofop-ethyl	76578-14-8	5.7E+02	n	7.4E+03	n					1.2E+02	n		1.9E+00	n	
						3.0E+04	A			1			Refractory Ceramic Fibers (units in fibers)	E715557					3.1E+04	G	1.3E+05	G						
				3.0E-02	I					1	0.1		Resmethrin	10453-86-8	1.9E+03	n	2.5E+04	n					6.7E+01	n		4.2E+01	n	
				5.0E-02	H			V		1			Ronnel	299-84-3	3.9E+03	n	5.8E+04	n					4.1E+02	n		3.7E+00	n	
				4.0E-03	I					1	0.1		Rotenone	83-79-4	2.5E+02	n	3.3E+03	n					6.1E+01	n		3.2E+01	n	
2.2E-01	C	6.3E-05	C						M	1	0.1		Safrole	94-59-7	5.5E-01	c	1.0E+01	c	1.6E-02	c	1.9E-01	c	9.6E-02	c		5.9E-05	c	
				5.0E-03	I					1			Selenious Acid	7783-00-8	3.9E+02	n	5.8E+03	n					1.0E+02	n				
				5.0E-03	I	2.0E-02	C			1			Selenium	7782-49-2	3.9E+02	n	5.8E+03	n	2.1E+01	n	8.8E+01	n	1.0E+02	n	50	5.2E-01	n	2.6E-01
				5.0E-03	C	2.0E-02	C			1			Selenium Sulfide	7446-34-6	3.9E+02	n	5.8E+03	n	2.1E+01	n	8.8E+01	n	1.0E+02	n				
				1.4E-01	O					1	0.1		Sethoxydim	74051-80-2	8.8E+03	n	1.1E+05	nm					1.6E+03	n		1.4E+01	n	
						3.0E-03	C			1			Silica (crystalline, respirable)	7631-86-9	4.3E+06	nm	1.8E+07	nm	3.1E+00	n	1.3E+01	n						
				5.0E-03	I					0.04			Silver	7440-22-4	3.9E+02	n	5.8E+03	n					9.4E+01	n		8.0E-01	n	
1.2E-01	H			5.0E-03	I					1	0.1		Simazine	122-34-9	4.5E+00	c*	1.9E+01	c					6.1E-01	c	4	3.0E-04	c	2.0E-03
				1.3E-02	I					1	0.1		Sodium Acifluorfen	62476-59-9	8.2E+02	n	1.1E+04	n					2.6E+02	n		2.1E+00	n	
				4.0E-03	I					1			Sodium Azide	26628-22-8	3.1E+02	n	4.7E+03	n					8.0E+01	n				
2.7E-01	H			3.0E-02	I					1	0.1		Sodium Diethyldithiocarbamate	148-18-5	2.0E+00	c	8.5E+00	c					2.9E-01	c		1.8E-04	c	
				5.0E-02	A	1.3E-02	C			1			Sodium Fluoride	7681-49-4	3.9E+03	n	5.8E+04	n	1.4E+01	n	5.7E+01	n	1.0E+03	n	4000	1.5E+02	n	6.0E+02
				2.0E-05	I					1	0.1		Sodium Fluoroacetate	62-74-8	1.3E+00	n	1.6E+01	n					4.0E-01	n		8.1E-05	n	
				1.0E-03	H					1			Sodium Metavanadate	13718-26-8	7.8E+01	n	1.2E+03	n					2.0E+01	n				
				8.0E-04	P					1			Sodium Tungstate	13472-45-2	6.3E+01	n	9.3E+02	n					1.6E+01	n				
				8.0E-04	P					1			Sodium Tungstate Dihydrate	10213-10-2	6.3E+01	n	9.3E+02	n					1.6E+01	n				
2.4E-02	H			3.0E-02	I					1	0.1		Stirofos (Tetrachlorovinphos)	961-11-5	2.3E+01	c*	9.6E+01	c					2.8E+00	c		8.2E-03	c	
				6.0E-01	I					1			Strontium, Stable	7440-24-6	4.7E+04	n	7.0E+05	nm					1.2E+04	n		4.2E+02	n	
				3.0E-04	I					1	0.1		Strychnine	57-24-9	1.9E+01	n	2.5E+02	n					5.9E+00	n		6.5E-02	n	
				2.0E-01	I	1.0E+00	I	V		1		8.7E+02	Styrene	100-42-5	6.0E+03	ns	3.5E+04	ns	1.0E+03	n	4.4E+03	n	1.2E+03	n	100	1.3E+00	n	1.1E-01
				3.0E-03	P					1	0.1		Styrene-Acrylonitrile (SAN) Trimer (THNA isomer)	57964-39-3	1.9E+02	n	2.5E+03	n					4.8E+01	n				
				3.0E-03	P					1	0.1		Styrene-Acrylonitrile (SAN) Trimer (THNP isomer)	57964-40-6	1.9E+02	n	2.5E+03	n					4.8E+01	n				
				1.0E-03	P	2.0E-03	X			1	0.1		Sulfolane	126-33-0	6.3E+01	n	8.2E+02	n	2.1E+00	n	8.8E+00	n	2.0E+01	n		4.4E-03	n	
				8.0E-04	P					1	0.1		Sulfonylbis(4-chlorobenzene), 1,1'-	80-07-9	5.1E+01	n	6.6E+02	n					1.1E+01	n		6.5E-02	n	
						1.0E-03	C	V		1			Sulfur Trioxide	7446-11-9	1.4E+06	nm	6.0E+06	nm	1.0E+00	n	4.4E+00	n	2.1E+00	n				
						1.0E-03	C			1			Sulfuric Acid	7664-93-9	1.4E+06	nm	6.0E+06	nm	1.0E+00	n	4.4E+00	n						
2.5E-02	I	7.1E-06	I	5.0E-02	H					1	0.1		Sulfurous acid, 2-chloroethyl 2-[4-(1,1-dimethylethyl)phenoxy]-1-methylethyl ester	140-57-8	2.2E+01	c	9.2E+01	c	4.0E-01	c	1.7E+00	c	1.3E+00	c		1.5E-02	c	
				3.0E-02	H					1	0.1		TCMTB	21564-17-0	1.9E+03	n	2.5E+04	n					4.8E+02	n		3.3E+00	n	
				7.0E-02	I					1	0.1		Tebuthiuron	34014-18-1	4.4E+03	n	5.7E+04	n					1.4E+03	n		3.9E-01	n	
				2.0E-02	H					1	0.1		Temephos	3383-96-8	1.3E+03	n	1.6E+04	n					4.0E+02	n		7.6E+01	n	
				1.3E-02	I					1	0.1		Terbacil	5902-51-2	8.2E+02	n	1.1E+04	n					2.5E+02	n		7.5E-02	n	
				2.5E-05	H			V		1		3.1E+01	Terbufos	13071-79-9	2.0E+00	n	2.9E+01	n					2.4E-01	n		5.2E-04	n	
				1.0E-03	I					1	0.1		Terbutryn	886-50-0	6.3E+01	n	8.2E+02	n					1.3E+01	n		1.9E-02	n	
5.0E-03	C	1.3E-06	C					V		1			Tert-Butyl Acetate	540-88-5	8.1E+00	c	3.6E+01	c	2.2E+00	c	9.4E+00	c	3.3E+00	c		7.6E-04	c	
				1.0E-04	I					1	0.1		Tetrabromodiphenyl ether, 2,2',4,4'- (BDE-47)	5436-43-1	6.3E+00	n	8.2E+01	n					2.0E+00	n		5.3E-02	n	
				3.0E-04	I			V		1			Tetrachlorobenzene, 1,2,4,5-	95-94-3	2.3E+01	n	3.5E+02	n					1.7E+00	n		7.9E-03	n	
2.6E-02	I	7.4E-06	I	3.0E-02	I			V		1		6.8E+02	Tetrachloroethane, 1,1,1,2-	630-20-6	2.0E+00	c	8.8E+00	c	3.8E-01	c	1.7E+00	c	5.7E-01	c		2.2E-04	c	
2.0E-01	I	5.8E-05	C	2.0E-02	I			V		1		1.9E+03	Tetrachloroethane, 1,1,2,2-	79-34-5	6.0E-01	c	2.7E+00	c	4.8E-02	c	2.1E-01	c	7.6E-02	c		3.0E-05	c	
2.1E-03	I	2.6E-07	I	6.0E-03	I	4.0E-02	I	V		1		1.7E+02	Tetrachloroethylene	127-18-4	2.4E+01	c**	1.0E+02	c**	1.1E+01	c**	4.7E+01	c**	1.1E+01	c**	5	5.1E-03	c**	2.3E-03
				3.0E-02	I					1	0.1		Tetrachlorophenol, 2,3,4,6-	58-90-2	1.9E+03	n	2.5E+04	n					2.4E+02	n		1.8E-01	n	
2.0E+01	H							V		1			Tetrachlorotoluene, p- alpha, alpha, alpha-	5216-25-1	3.5E-02	c	1.6E-01	c					1.3E-03	c		4.5E-06	c	
				5.0E-04	I					1	0.1		Tetraethyl Dithiopyrophosphate	3689-24-5	3.2E+01	n	4.1E+02	n					7.1E+00	n		5.2E-03	n	
						8.0E+01	I	V		1		2.1E+03	Tetrafluoroethane, 1,1,1,2-	811-97-2	1.0E+05	s	4.3E+05	s	8.3E+04	n	3.5E+05	n	1.7E+05	n		9.3E+01	n	
				2.0E-03	P					1	0.00065		Tetryl (Trinitrophenylmethylnitramine)	479-45-8	1.6E+02	n	2.3E+03	n					3.9E+01	n		3.7E-01	n	
				2.0E-05	G					1			Thallic Oxide	1314-32-5	1.6E+00	n	2.3E+01	n					4.0E-01	n				
				1.0E-05	X					1			Thallium (I) Nitrate	10102-45-1	7.8E-01	n	1.2E+01	n					2.0E-01	n				
				1.0E-05	X					1			Thallium (Soluble Salts)	7440-28-0	7.8E-01	n	1.2E+01	n					2.0E-01	n	2	1.4E-02	n	1.4E-01
				1.0E-05	X			V		1			Thallium Acetate	563-68-8	7.8E-01	n	1.2E+01	n					2.0E-01	n		4.1E-05	n	
				2.0E-05	X			V		1			Thallium Carbonate	6533-73-9	1.6E+00	n	2.3E+01	n					4.0E-01	n		8.3E-05	n	
				1.0E-05	X					1			Thallium Chloride	7791-12-0	7.8E-01	n	1.2E+01	n					2.0E-01	n				
				1.0E-05	G					1			Thallium Selenite	12039-52-0	7.8E-01	n	1.2E+01	n					2.0E-01	n				
				2.0E-05	X					1			Thallium Sulfate	7446-18-6	1.6E+00	n	2.3E+01	n					4.0E-01	n				
				4.3E-02	O					1	0.1		Thifensulfuron-methyl	79277-27-3	2.7E+03	n	3.5E+04	n					8.6E+02	n		2.6E-01	n	
				1.0E-02	I					1	0.1		Thiobencarb	28249-77-6	6.3E+02	n	8.2E+03	n					1.6E+02	n		5.5E-01	n	

TR=1E-06
THQ=1.0

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c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information													Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				7.0E-02	X					1	0.0075		Thiodiglycol	111-48-8	5.4E+03	n	7.9E+04	n					1.4E+03	n		2.8E-01	n	
				3.0E-04	H					1	0.1		Thiofanox	39196-18-4	1.9E+01	n	2.5E+02	n					5.3E+00	n		1.8E-03	n	
1.2E-02	O			2.7E-02	O					1	0.1		Thiophanate, Methyl	23564-05-8	4.7E+01	c*	2.0E+02	c					6.7E+00	c*		5.7E-03	c*	
				1.5E-02	O					1	0.1		Thiram	137-26-8	9.5E+02	n	1.2E+04	n					2.9E+02	n		4.2E-01	n	
				6.0E-01	H					1			Tin	7440-31-5	4.7E+04	n	7.0E+05	nm					1.2E+04	n		3.0E+03	n	
						1.0E-04	A	V		1			Titanium Tetrachloride	7550-45-0	1.4E+05	nm	6.0E+05	nm	1.0E-01	n	4.4E-01	n	2.1E-01	n				
				8.0E-02	I	5.0E+00	I	V		1		8.2E+02	Toluene	108-88-3	4.9E+03	ns	4.7E+04	ns	5.2E+03	n	2.2E+04	n	1.1E+03	n	1000	7.6E-01	n	6.9E-01
3.9E-02	C	1.1E-05	C			8.0E-06	C	V		1			Toluene-2,4-diisocyanate	584-84-9	6.4E+00	n	2.7E+01	n	8.3E-03	n	3.5E-02	n	1.7E-02	n		2.5E-04	n	
1.8E-01	X			2.0E-04	X					1	0.1		Toluene-2,5-diamine	95-70-5	3.0E+00	c**	1.3E+01	c*					4.3E-01	c**		1.3E-04	c**	
3.9E-02	C	1.1E-05	C			8.0E-06	C	V		1		1.7E+03	Toluene-2,6-diisocyanate	91-08-7	5.3E+00	n	2.2E+01	n	8.3E-03	n	3.5E-02	n	1.7E-02	n		2.6E-04	n	
				5.0E-03	P					1	0.1		Toluic Acid, p-	99-94-5	3.2E+02	n	4.1E+03	n					9.0E+01	n		2.3E-02	n	
1.6E-02	P	5.1E-05	C							1	0.1		Toluidine, o- (Methylaniline, 2-)	95-53-4	3.4E+01	c	1.4E+02	c	5.5E-02	c	2.4E-01	c	4.7E+00	c		2.0E-03	c	
3.0E-02	P			4.0E-03	X					1	0.1		Toluidine, p-	106-49-0	1.8E+01	c*	7.7E+01	c*					2.5E+00	c*		1.1E-03	c*	
				3.0E+00	P			V		1		3.4E-01	Total Petroleum Hydrocarbons (Aliphatic High)	E1790670	2.3E+05	s	3.5E+06	s					6.0E+04	n		2.4E+03	n	
						6.0E-01	P	V		1		1.4E+02	Total Petroleum Hydrocarbons (Aliphatic Low)	E1790666	5.2E+02	ns	2.2E+03	ns	6.3E+02	n	2.6E+03	n	1.3E+03	n		8.8E+00	n	
				1.0E-02	X	1.0E-01	P	V		1		6.9E+00	Total Petroleum Hydrocarbons (Aliphatic Medium)	E1790668	9.6E+01	ns	4.4E+02	ns	1.0E+02	n	4.4E+02	n	1.0E+02	n		1.5E+00	n	
				4.0E-02	P					1	0.1		Total Petroleum Hydrocarbons (Aromatic High)	E1790676	2.5E+03	n	3.3E+04	n					8.0E+02	n		8.9E+01	n	
				4.0E-03	P	3.0E-02	P	V		1		1.8E+03	Total Petroleum Hydrocarbons (Aromatic Low)	E1790672	8.2E+01	n	4.2E+02	n	3.1E+01	n	1.3E+02	n	3.3E+01	n		1.7E-02	n	
				4.0E-03	P	3.0E-03	P	V		1			Total Petroleum Hydrocarbons (Aromatic Medium)	E1790674	1.1E+02	n	6.0E+02	n	3.1E+00	n	1.3E+01	n	5.5E+00	n		2.3E-02	n	
1.1E+00	I	3.2E-04	I	9.0E-05	P					1	0.1		Toxaphene	8001-35-2	4.9E-01	c*	2.1E+00	c*	8.8E-03	c	3.8E-02	c	7.1E-02	c*	3	1.1E-02	c*	4.6E-01
				3.0E-05	X					1	0.1		Toxaphene, Weathered	E1841606	1.9E+00	n	2.5E+01	n					6.0E-01	n		9.3E-02	n	
				7.5E-03	I					1	0.1		Tralomethrin	66841-25-6	4.7E+02	n	6.2E+03	n					1.5E+02	n		5.8E+01	n	
				3.0E-04	A			V		1			Tri-n-butyltin	688-73-3	2.3E+01	n	3.5E+02	n					3.7E+00	n		8.2E-02	n	
				8.0E+01	X					1	0.1		Triacetin	102-76-1	5.1E+06	nm	6.6E+07	nm					1.6E+06	n		4.5E+02	n	
				3.4E-02	O					1	0.1		Triadimefon	43121-43-3	2.1E+03	n	2.8E+04	n					6.3E+02	n		5.0E-01	n	
7.2E-02	O			2.5E-02	O			V		1			Triallate	2303-17-5	9.7E+00	c	4.6E+01	c					4.7E-01	c		1.0E-03	c	
				1.0E-02	I					1	0.1		Triasulfuron	82097-50-5	6.3E+02	n	8.2E+03	n					2.0E+02	n		2.1E-01	n	
				8.0E-03	I					1	0.1		Tribenuron-methyl	101200-48-0	5.1E+02	n	6.6E+03	n					1.6E+02	n		6.1E-02	n	
				5.0E-03	I			V		1			Tribromobenzene, 1,2,4-	615-54-3	3.9E+02	n	5.8E+03	n					4.5E+01	n		6.4E-02	n	
				9.0E-03	X					1	0.1		Tribromophenol, 2,4,6-	118-79-6	5.7E+02	n	7.4E+03	n					1.2E+02	n		2.2E-01	n	
9.0E-03	P			1.0E-02	P					1	0.1		Tributyl Phosphate	126-73-8	6.0E+01	c*	2.6E+02	c*					5.2E+00	c*		2.5E-02	c*	
				3.0E-04	P					1	0.1		Tributyltin Compounds	E1790678	1.9E+01	n	2.5E+02	n					6.0E+00	n				
				3.0E-04	I					1	0.1		Tributyltin Oxide	56-35-9	1.9E+01	n	2.5E+02	n					5.7E+00	n		2.9E+02	n	
													Trichloramine	10025-85-1											4000			
				3.0E+01	I	5.0E+00	P	V		1		9.1E+02	Trichloro-1,2,2-trifluoroethane, 1,1,2-	76-13-1	6.7E+03	ns	2.8E+04	ns	5.2E+03	n	2.2E+04	n	1.0E+04	n		2.6E+01	n	
7.0E-02	I			2.0E-02	I					1	0.1		Trichloroacetic Acid	76-03-9	7.8E+00	c	3.3E+01	c					1.1E+00	c	6.0E+01 (G)	2.2E-04	c	1.2E-02
2.9E-02	H									1	0.1		Trichloroaniline HCl, 2,4,6-	33663-50-2	1.9E+01	c	7.9E+01	c					2.7E+00	c		7.4E-03	c	
7.0E-03	X			3.0E-05	X					1	0.1		Trichloroaniline, 2,4,6-	634-93-5	1.9E+00	n	2.5E+01	n					4.0E-01	n		3.6E-03	n	
				8.0E-04	X			V		1			Trichlorobenzene, 1,2,3-	87-61-6	6.3E+01	n	9.3E+02	n					7.0E+00	n		2.1E-02	n	
2.9E-02	P			1.0E-02	I	2.0E-03	P	V		1		4.0E+02	Trichlorobenzene, 1,2,4-	120-82-1	2.4E+01	c**	1.1E+02	c**	2.1E+00	n	8.8E+00	n	1.2E+00	c**	70	3.4E-03	c**	2.0E-01
				2.0E+00	I	5.0E+00	I	V		1		6.4E+02	Trichloroethane, 1,1,1-	71-55-6	8.1E+03	ns	3.6E+04	ns	5.2E+03	n	2.2E+04	n	8.0E+03	n	200	2.8E+00	n	7.0E-02
5.7E-02	I	1.6E-05	I	4.0E-03	I	2.0E-04	X	V		1		2.2E+03	Trichloroethane, 1,1,2-	79-00-5	1.1E+00	c**	5.0E+00	c**	1.8E-01	c**	7.7E-01	c**	2.8E-01	c**	5	8.9E-05	c**	1.6E-03
4.6E-02	I	4.1E-06	I	5.0E-04	I	2.0E-03	I	V	M	1		6.9E+02	Trichloroethylene	79-01-6	9.4E-01	c**	6.0E+00	c**	4.8E-01	c**	3.0E+00	c**	4.9E-01	c**	5	1.8E-04	c**	1.8E-03
				3.0E-01	I			V		1		1.2E+03	Trichlorofluoromethane	75-69-4	2.3E+04	ns	3.5E+05	s					5.2E+03	n		3.3E+00	n	
				1.0E-01	I					1	0.1		Trichlorophenol, 2,4,5-	95-95-4	6.3E+03	n	8.2E+04	n					1.2E+03	n		4.0E+00	n	
1.1E-02	I	3.1E-06	I	1.0E-03	P					1	0.1		Trichlorophenol, 2,4,6-	88-06-2	4.9E+01	c**	2.1E+02	c**	9.1E-01	c	4.0E+00	c	4.1E+00	c**		4.0E-03	c**	
				1.0E-02	I					1	0.1		Trichlorophenoxyacetic Acid, 2,4,5-	93-76-5	6.3E+02	n	8.2E+03	n					1.6E+02	n		6.8E-02	n	
				8.0E-03	I					1	0.1		Trichlorophenoxypropionic acid, -2,4,5	93-72-1	5.1E+02	n	6.6E+03	n					1.1E+02	n	50	6.1E-02	n	2.8E-02
				5.0E-03	I			V		1		1.3E+03	Trichloropropane, 1,1,2-	598-77-6	3.9E+02	n	5.8E+03	ns					8.8E+01	n		3.5E-02	n	
3.0E+01	I			4.0E-03	I	3.0E-04	I	V	M	1		1.4E+03	Trichloropropane, 1,2,3-	96-18-4	5.1E-03	c	1.1E-01	c	3.1E-01	n	1.3E+00	n	7.5E-04	c		3.2E-07	c	
				3.0E-03	X	3.0E-04	P	V		1		3.1E+02	Trichloropropene, 1,2,3-	96-19-5	7.3E-01	n	3.1E+00	n	3.1E-01	n	1.3E+00	n	6.2E-01	n		3.1E-04	n	
				2.0E-02	A					1	0.1		Tricresyl Phosphate (TCP)	1330-78-5	1.3E+03	n	1.6E+04	n					1.6E+02	n		1.5E+01	n	
				3.0E-03	I					1	0.1		Tridiphane	58138-08-2	1.9E+02	n	2.5E+03	n					1.8E+01	n		1.3E-01	n	
						7.0E-03	I	V		1		2.8E+04	Triethylamine	121-44-8	1.2E+02	n	4.8E+02	n	7.3E+00	n	3.1E+01	n	1.5E+01	n		4.4E-03	n	
				2.0E+00	P					1	0.1		Triethylene Glycol	112-27-6	1.3E+05	nm	1.6E+06	nm					4.0E+04	n		8.8E+00	n	
						2.0E+01	P	V		1		4.8E+03	Trifluoroethane, 1,1,1-	420-46-2	1.5E+04	ns	6.2E+04	ns	2.1E+04	n	8.8E+04	n	4.2E+04	n		1.3E+02	n	
7.7E-03	I			7.5E-03	I			V		1			Trifluralin	1582-09-8	9.0E+01	c**	4.2E+02	c*					2.6E+00	c*		8.4E-02	c*	
2.0E-02	P			1.0E-02	P					1	0.1		Trimethyl Phosphate	512-56-1	2.7E+01	c*	1.1E+02	c*					3.9E+00	c*		8.6E-04	c*	
				1.0E-02	I	6.0E-02	I	V		1		2.9E+02	Trimethylbenzene, 1,2,3-	526-73-8	3.4E+02	ns	2.0E+03	ns	6.3E+01	n	2.6E+02	n	5.5E+01	n		8.1E-02	n	
				1.0E-02	I	6.0E-02	I	V		1		2.2E+02	Trimethylbenzene, 1,2,4-	95-63-6	3.0E+02	ns	1.8E+03	ns	6.3E+01	n	2.6E+02	n	5.6E+01	n		8.1E-02	n	
				1.0E-02	I	6.0E-02	I	V		1		1.8E+02	Trimethylbenzene, 1,3,5-	108-67-8	2.7E+02	ns	1.5E+03	ns	6.3E+01	n	2.6E+02	n	6.0E+01	n		8.7E-02	n	
				1.0E-02	X			V		1		3.0E+01	Trimethylpentene, 2,4,4-	25167-70-8	7.8E+02	ns	1.2E+04	ns					6.5E+01	n		2.2E-01	n	
				3.0E-02	I					1	0.019		Trinitrobenzene, 1,3,5-	99-35-4	2.2E+03	n	3.2E+04	n					5.9E+02	n		2.1E+00	n	
3.0E-02	I			5.0E-04	I					1	0.032		Trinitrotoluene, 2,4,6-	118-96-7	2.1E+01	c**	9.6E+01	c**					2.5E+00	c**		1.5E-02	c**	
				2.0E-02	P					1	0.1		Triphenylphosphine Oxide	791-28-6	1.3E+03	n	1.6E+04	n					3.6E+02	n		1.5E+00	n	
				2.0E-02	A					1	0.1		Tris(1,3-Dichloro-2-propyl) Phosphate	13674-87-8	1.3E+03	n	1.6E+04	n					3.6E+02	n		8.0E+00	n	
				1.0E-02	X					1	0.1		Tris(1-chloro-2-propyl)phosphate	13674-84-5	6.3E+02	n	8.2E+03	n					1.9E+02	n		6.5E-01	n	
2.3E+00	C	6.6E-04	C					V		1		4.7E+02	Tris(2,3-dibromopropyl)phosphate	126-72-7	2.8E-01	c	1.3E+00	c	4.3E-03	c	1.9E-02	c	6.8E-03	c		1.3E-04	c	
2.0E-02	P			7.0E-03	P					1	0.1		Tris(2-chloroethyl)phosphate	115-96-8	2.7E+01	c*	1.1E+02	c*					3.8E+00	c*		3.8E-03	c*	
3.2E-03	P			1.0E-01	P					1	0.1		Tris(2-ethylhexyl)phosphate	78-42-2	1.7E+02	c*	7.2E+02	c					2.4E+01	c*		1.2E+02	c*	
				8.0E-04	P					1			Tungsten	7440-33-7	6.3E+01	n	9.3E+02	n					1.6E+01	n		2.4E+00	n	
				2.0E-04	A	4.0E-05	A			1			Uranium (Soluble Salts)	E715565	1.6E+01	n	2.3E+02	n	4.2E-02	n	1.8E-01	n	4.0E+00	n	30	1.8E+00	n	1.4E+01
1.0E+00	C	2.9E-04	C						M	1	0.1		Urethane	51-79-6	1.2E-01	c	2.3E+00	c	3.5E-03	c	4.2E-02	c	2.5E-02	c		5.6E-06	c	
		8.3E-03	P	9.0E-03	I	7.0E-06	P			0.026			Vanadium Pentoxide	1314-62-1	4.6E+02	c**	2.0E+03	c**	3.4E-04	c*	1.5E-03	c*	1.5E+02	n				
				5.0E-03	G	1.0E-04	A			0.026			Vanadium and Compounds	7440-62-2	3.9E+02	n	5.8E+03	n	1.0E-01	n	4.4E-01	n	8.6E+01	n		8.6E+01	n	

R=1E-06
THQ=1.0

Key: I = IRIS; P = PPRTV; O = OPP; A = ATSDR; C = Cal EPA; X = PPRTV Screening Level; H = HEAST; W = TEF applied; E = RPF applied; G = user's guide Section 5; M = mutagen; V = volatile; R = RBA applied;
c = cancer; n = noncancer; * = where: n SL < 100X c SL; ** = where n SL < 10X c SL; SSL values are based on DAF=1; m = ceiling limit exceeded; s = Csat exceeded.

Toxicity and Chemical-specific Information												Contaminant		Screening Levels												Protection of Ground Water SSLs		
SFO (mg/kg-day)$^{-1}$	key	IUR (ug/m^3)$^{-1}$	key	RfD_o (mg/kg-day)	key	RfC_i (mg/m^3)	key	vol	mutagen	GIABS	ABS_d	C_{sat} (mg/kg)	Analyte	CAS No.	Resident Soil (mg/kg)	key	Industrial Soil (mg/kg)	key	Resident Air (ug/m^3)	key	Industrial Air (ug/m^3)	key	Tapwater (ug/L)	key	MCL (ug/L)	Risk-based SSL (mg/kg)	key	MCL-based SSL (mg/kg)
				1.0E-03	I			V		1			Vernolate	1929-77-7	7.8E+01	n	1.2E+03	n					1.1E+01	n		8.9E-03	n	
				1.2E-03	O					1	0.1		Vinclozolin	50471-44-8	7.6E+01	n	9.8E+02	n					2.1E+01	n		1.6E-02	n	
				1.0E+00	H	2.0E-01	I	V		1		2.8E+03	Vinyl Acetate	108-05-4	9.1E+02	n	3.8E+03	ns	2.1E+02	n	8.8E+02	n	4.1E+02	n		8.7E-02	n	
		3.2E-05	H			3.0E-03	I	V		1		2.5E+03	Vinyl Bromide	593-60-2	1.2E-01	c*	5.2E-01	c*	8.8E-02	c*	3.8E-01	c*	1.8E-01	c*		5.1E-05	c*	
7.2E-01	I	4.4E-06	I	3.0E-03	I	1.0E-01	I	V	M	1		3.9E+03	Vinyl Chloride	75-01-4	5.9E-02	c	1.7E+00	c	1.7E-01	c	2.8E+00	c	1.9E-02	c	2	6.5E-06	c	6.9E-04
				3.0E-04	I					1	0.1		Warfarin	81-81-2	1.9E+01	n	2.5E+02	n					5.6E+00	n		5.9E-03	n	
				2.0E-01	G	1.0E-01	G	V		1		3.9E+02	Xylene, P-	106-42-3	5.6E+02	ns	2.4E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	n	
				2.0E-01	G	1.0E-01	G	V		1		3.9E+02	Xylene, m-	108-38-3	5.5E+02	ns	2.4E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	n	
				2.0E-01	G	1.0E-01	G	V		1		4.3E+02	Xylene, o-	95-47-6	6.5E+02	ns	2.8E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n		1.9E-01	n	
				2.0E-01	I	1.0E-01	I	V		1		2.6E+02	Xylenes	1330-20-7	5.8E+02	ns	2.5E+03	ns	1.0E+02	n	4.4E+02	n	1.9E+02	n	10000	1.9E-01	n	9.9E+00
				3.0E-04	I					1			Zinc Phosphide	1314-84-7	2.3E+01	n	3.5E+02	n					6.0E+00	n				
				3.0E-01	I					1			Zinc and Compounds	7440-66-6	2.3E+04	n	3.5E+05	nm					6.0E+03	n		3.7E+02	n	
				5.0E-02	I					1	0.1		Zineb	12122-67-7	3.2E+03	n	4.1E+04	n					9.9E+02	n		2.9E+00	n	
				8.0E-05	X					1			Zirconium	7440-67-7	6.3E+00	n	9.3E+01	n					1.6E+00	n		4.8E+00	n	

TR=1E-06
THQ=1.0