Data Validation Report

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Data Validation Summary
Fourth Quarter 2009 Semiannual Groundwater Monitoring Event

Open Burning Ground (OBG) - HWMU 13
Radford Facility Army Ammunition Plant, Radford, Virginia
EPA ID# VA1210020730

Draper Aden Associates performed data validation of the analytical results for the Fourth Quarter 2009 semiannual groundwater monitoring event at the Open Burning Ground (OBG) located at the Radford Facility Army Ammunition Plant (RFAAP) in Radford, Virginia. The following information and attached table summarize the data validation results.

Sample Collection/Analytical Services

Draper Aden Associates of Blacksburg, Virginia collected the groundwater samples during October 19-20, 2009.

Samples were submitted for laboratory analysis via courier to CompuChem, a Division of Liberty Analytical, of Cary, North Carolina and Lancaster Laboratories, Lancaster, Pennsylvania.

The chain of custody and permit required target analytes submitted to each laboratory is provided as an attachment.

Receipt of Monitoring Event Data

On behalf of Alliant Techsystems 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 the event was received on December 31, 2009.

Verification Events

No verification sampling was required.

Data Presentation

Sample results provided by the laboratory were reported and presented on the attached data validation summary table to at or above the method detection limit (MDL). Validated sample results are reported to at or above the quantitation limit (QL).

A reported value for a target analyte detected between the MDL and the QL should be considered an estimated concentration. Target analytes reported by the laboratory as detected less than the corresponding QLs are validated and qualified as "U" to note the analyte was analyzed for, but not detected above the QL.

No results were rejected based on the data validation criteria.

A summary of the data validation is provided below.

Data Validation Summary

The 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 and III)* and *USEPA Methods for the "Determination of Organic and Inorganic Compounds in Drinking Water, Volume 1, EPA 815-R-00-014.* All data, except where noted below, were evaluated in general accordance with:

- *USEPA Region III Modifications to the Laboratory Data Validation Functional Guidelines for Evaluating Inorganic Analyses, April 1993.*
- *USEPA Region III Modifications to National Functional Guidelines for Organic Data Review, September 1994.*
- *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008.*
- *USEPA Region III Innovative Approaches for Validation of Organic and Inorganic Data Standard Operating Procedures M-1, June 1995, modified, and the analytical method.*

The evaluation of the data was based on the following:

- Data package completeness
- Chain of custody
- Holding time/preservation
- Initial and continuing calibrations
- Blanks
- Interference check sample (inorganics)
- Surrogates
- Matrix spike/matrix spike duplicate (MS/MSD) samples
- Laboratory control samples (LCS)
- Internal standards
- Field duplicate
- Serial dilution (inorganics)
- Target analyte identification and quantitation
- Other criteria as noted below

Data validation results are summarized on the attached reports and table. A summary of the required methods of analysis and the laboratory that performed the analysis is provided below.

Summary of Required Analytical Methods and Laboratory

Analytical Method	Laboratory/ SDG	Monitoring Well							
		13MW1	13MW2	13MW3	13MW4	13MWDUP (13MW4)	13MW5	13MW6	13MW7
8260B Volatiles	Lancaster Laboratories, Inc./ RAD23	X	X	X	X	X	X	X	X
8270C Semivolatiles	CompuChem/ 0910165	X	X	X	X	X	X	X	X
6020 Inorganics (*)	CompuChem/ 0910165	X	X	X	X	X	X	X	X
7470A Mercury	CompuChem/ 0910165	X	X	X	X	X	X	X	X
8330A Explosives	CompuChem/ 0910165	X	X	X	X	X	X	X	X
8332 Nitroglycerin	CompuChem/ 0910165	X	X	X	X	X	X	X	X
314.0 Perchlorate	CompuChem/ 0910165	X	X	X	X	X	X	X	X

Note: ***13MW1 and 13MW2 background monitoring wells. Remaining monitoring locations are compliance wells.***
(*) For 4Q2009, the laboratory analyzed inorganics by 6020 ICP-MS, instead of 6010B-ICP.

Each final certificate of analysis was complete in its presentation and the data were of acceptable quality.

The chain of custody documentation was complete. The chain of custody was appropriately signed and dated by field and laboratory personnel.

Each laboratory received the samples on ice and in good condition, with custody seals intact. Applicable holding time and preservation criteria were met for all samples and methods, except where noted below. The data set demonstrated the laboratory's ability to achieve the reported permit QL, except where discussed below.

SW-846 Method 8260B/5030B-25 ml purge volume
Volatile Organic Analytes

The instrument performance check, instrument calibration, blank, surrogate, MS/MSD, LCS, internal standards, sample/field sample duplicate results, and target analyte identification and quantitation were met, except where noted below. The laboratory analyzed a passing method detection limit check sample. Although not required, the laboratory also analyzed a passing initial calibration verification standard. The MS/MSD analysis was performed on project sample 13MW5. MS/MSD criteria were met except where noted below. A trip blank was analyzed for each day of sample collection. Sample 13MW4 was selected as the blind field duplicate (13MWDUP). Trichloroethene was detected at 1.4 µg/l in 13MW4 and in 13MWDUP. Sample/Field Sample Duplicate RPD criteria were met. Sample results were reviewed for transcription errors from the instrument data to the laboratory report and no errors were noted.

Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

- Toluene was reported in the trip blanks and influenced final sample results. For toluene, detected results were attributed to blank contamination and qualified as "U" to reflect the analyte was analyzed for, but not detected above the QL.

- MS/MSD recovered within laboratory control limits, with the exception of MS which recovered outside the project specified control limits for carbon tetrachloride. The MS for carbon tetrachloride recovered slightly high and detected results above the QL for carbon tetrachloride were qualified as "J" to note the result is estimated. This applied to 13MW3 only.

- The laboratory provided the analyst initial demonstration of capability data for analyst A. Sneeringer.

- Hexachloroethane was reported by Method 8260B and 8270C.

- The laboratory revised the Method 8260B certificate of analysis to include hexachloroethane.

- Performance evaluation samples were not evaluated with the sampling event.

SW-846 Method 8270C/3510C - Semivolatile Organic Analytes

The instrument performance check, instrument calibration, blank, surrogate, MS/MSD, LCS, internal standards, sample/field sample duplicate results, and target analyte identification and quantitation were met, except where noted below. The MS/MSD analysis was performed on project sample 13MW5. Associated blanks were interference free, except where noted below. Sample 13MW4 was selected as the blind field duplicate (13MWDUP). No other target analytes were detected in the 13MW4 or the field duplicate. Sample results were reviewed for transcription errors from the instrument data to the laboratory report and no errors were noted, except noted below.

Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

- The laboratory revised the certificate of analysis to include the initial demonstration of capability data for analyst 2650, the method detection limit study data and passing performance evaluation sample data.

- Hexachloroethane was reported by Method 8260B and 8270C.

- Bis(2-ethylhexyl)phthalate was reported below the QL in the blind field duplicate. Bis(2-ethylhexyl)phthalate was not detected in any project sample and no data qualification was required.

- Although listed on the certificate of analysis separately, 3-methylphenol and 4-methylphenol cannot be analyzed separately due to analytical limitations. 3-Methylphenol and 4-methylphenol cannot be resolved under the chromatographic conditions used for sample analysis. The result reported for 4-methylphenol represents the combined total for both compounds.

- N-nitrosodiphenylamine converts to diphenylamine during analysis and cannot be resolved under the chromatographic conditions used for sample analysis. The result reported as n-nitrosodiphenylamine represents the combined total for both n-nitrosodiphenylamine and diphenylamine.

SW-846 Method 6020/3005 – Inorganics-total

Instrument tune, calibration, QL check standard, blank, interference check sample, MS/MSD, LCS, internal standards, serial dilution, sample/field sample duplicate results were met, except where noted below. The MS/MSD samples were analyzed on project sample 13MW5 as noted on the chain of custody. Sample 13MW4 was selected as the blind field duplicate (13MWDUP). Barium was detected at 55.3 µg/l in 13MW4 and 56.1 µg/l in 13MWDUP. Sample/Field Sample Duplicate RPD criteria were met. Chromium was detected above the QL in 13MW4 and below the QL in the field duplicate.

Sample results were reviewed for transcription errors from the instrument data to the laboratory report and no errors were noted.

Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

- The internal standard relative intensity for Bi209 recovered low (68%R) in sample 13MW6. The result associated with the Bi209 internal standard (lead) was lead. Lead was not detected at or above the detection limit or QL and the QL was qualified as estimated "J" due to the observed QC deviation. Bi209 also recovered low in the ICSA and ICSAB.

- The laboratory reported the inorganic results by Method 6020, instead of Method 6010B as allowed by VDEQ. Target analyte QL were similar and reported concentrations were consistent with historical data. The laboratory was requested to analyze future project samples as noted on the chain of custody.

- The laboratory provided as a revision, the method detection limit study (MDL) and analyst initial demonstration of capability data.

SW-846 Method 7470A – Mercury-total

QL standard, Calibration, blank, MS/MSD, LCS, and sample/field sample duplicate results were met, except where noted below. The MS/MSD was analyzed on project sample 13MW5, as noted on the chain of custody. Mercury was not detected in the sample/field duplicate sample (13MW4/13MWDUP). Sample results were reviewed for transcription errors from the instrument data to the laboratory report and no errors were noted.

No deviations from specific QA/QC criteria were identified during the data review process.

- The laboratory provided as a revision, the method detection limit study (MDL) and analyst initial demonstration of capability data for analyst N. Bolton.

- Performance evaluation samples were not evaluated with the sampling event.

SW-846 Methods 8330B/8332 - Explosives/Nitroglycerin

The instrument performance check, instrument calibration, blank, surrogate, MS/MSD, LCS, internal standards, sample/field sample duplicate results, and target analyte identification and quantitation were met, except where noted below. The MS/MSD analysis was performed on project sample 13MW5. Sample 13MW4 was selected as the blind field duplicate (13MWDUP). No target analytes were detected in the sample/field duplicate sample (13MW4/13MWDUP). Sample results were reviewed for transcription errors from the instrument data to the laboratory report and no errors were noted.

Deviations from specific QA/QC criteria that were identified during the data review process are summarized below.

- Low surrogate recovery was observed in sample MW-2 for Methods 8330B/8332. MW-2 was re-extracted within the holding time criteria for Method 8330B (explosives) with acceptable surrogate recoveries. MW-2 was re-extracted outside the holding time criteria for Method 8332 (nitroglycerin) with acceptable recoveries. Nitroglycerin was not detected at or above the detection limit or QL in MW-2 and the nitroglycerin result was qualified as "UJ" to note that the QL is estimated due to the 7-day holding time exceedance.

- The laboratory provided as a revision the analyst initial demonstration of capability data and MDL study data.

- As per the laboratory's narrative from Second Quarter 2009, the data meets the requirements outline in SW-846 8330B. The laboratory will reference 8330B for future events.

- Performance evaluation samples were not evaluated with the sampling event.

US EPA Method 314.0 – Perchlorate

The instrument performance check, instrument calibration, blank, surrogate, MS/MSD, LCS, and sample/field sample duplicate results were met, except where noted below. The laboratory analyzed an initial calibration standard at 4 µg/l, the QL. The MS/MSD analysis was performed on project sample 13MW5. Sample 13MW4 was selected as the blind field duplicate (13MWDUP). Perchlorate was detected at 132.2 µg/l in 13MW4 and 140.8 µg/l in 13MWDUP. Sample/Field Sample Duplicate RPD criteria were met. Sample results were reviewed for transcription errors from the instrument data to the laboratory report and no errors were noted.

No deviations from specific QA/QC criteria were identified during the data review process.

- The laboratory provided the method detection limit study and analyst initial demonstration of capability data as a revision.

- Performance evaluation samples were not evaluated with the sampling event.

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Radford Facility Army Ammunition Plant: HWMU-13

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 6020								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Barium	13MW1	120		120		1	0.2	No action taken.
	13MW2	147		147		1	0.2	No action taken.
	13MW3	81		81	J	1	0.2	Serial dilution % Difference > 10% (33%).
	13MW4	41.5		41.5	J	1	0.2	Serial dilution % Difference > 10% (33%).
	13MW5	106		106	J	1	0.2	Serial dilution % Difference > 10% (33%).
	13MW6	75.8		75.8	J	1	0.2	Serial dilution % Difference > 10% (33%).
	13MW7	125		125	J	1	0.2	Serial dilution % Difference > 10% (33%).
	13MWDUP	41		41	J	1	0.2	Serial dilution % Difference > 10% (33%). Field duplicate for 13MW4.
Chromium	13MW1	4	B	4	J	5	1.1	Result < QL.
	13MW2	1.9	B	1.9	J	5	1.1	Result < QL.
	13MW3	1.6	B	1.6	J	5	1.1	Result < QL.
	13MW4	1.6	B	1.6	J	5	1.1	Result < QL.
	13MW5	3.3	B	3.3	J	5	1.1	Result < QL.
	13MW6	1.4	B	1.4	J	5	1.1	Result < QL.
	13MW7	1.4	B	1.4	J	5	1.1	Result < QL.
	13MWDUP	1.5	B	1.5	J	5	1.1	Result < QL. Field duplicate for 13MW4.
Nickel	13MW1	2.4	B	2.4	J	5	0.9	Result < QL.
	13MW2	2.2	B	2.2	J	5	0.9	Result < QL.
	13MW3	2.1	B	2.1	J	5	0.9	Result < QL.
	13MW4	2.6	B	2.6	J	5	0.9	Result < QL.
	13MW5	2.9	B	2.9	J	5	0.9	Result < QL.
	13MW6	3.7	B	3.7	J	5	0.9	Result < QL.
	13MW7	222		222		5	0.9	No action taken.
	13MWDUP	2.6	B	2.6	J	5	0.9	Result < QL. Field duplicate for 13MW4.
Selenium	13MW1	4	B	4	J	5	1	Result < QL.
	13MW5	2.1	B	2.1	J	5	1	Result < QL.
	13MW6	3.2	B	3.2	J	5	1	Result < QL.
	13MW7	2.3	B	2.3	J	5	1	Result < QL.
Tin	13MW3	2.1	U	U	J	10	2.1	Target analyte not detected at or above the detection limit. MS/MSD recovered low (58%).
	13MW4	2.1	U	U	J	10	2.1	Target analyte not detected at or above the detection limit. MS/MSD recovered low (58%).
	13MW5	2.1	U	U	J	10	2.1	Target analyte not detected at or above the detection limit. MS/MSD recovered low (58%).
	13MW6	2.1	U	U	J	10	2.1	Target analyte not detected at or above the detection limit. MS/MSD recovered low (58%).
	13MW7	2.1	U	U	J	10	2.1	Target analyte not detected at or above the detection limit. MS/MSD recovered low (58%).

See last page of this report for definitions.

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Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 6020								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Tin	13MWDUP	2.1	U	U	J	10	2.1	Target analyte not detected at or above the detection limit. MS/MSD recovered low (58%). Field duplicate for 13MW4.
Zinc	13MW4	3.1	B	3.1	J	5	2.7	Result < QL.
	13MW6	2.8	B	2.8	J	5	2.7	Result < QL.
	13MW7	6.8		6.8		5	2.7	No action taken.
	13MWDUP	2.8	B	2.8	J	5	2.7	Result < QL. Field duplicate for 13MW4.
Method: 8260B								
Laboratory: Lancaster Laboratories, Lancaster, PA								
Acrolein	13MW3	5	U	U	J	25	5	Target analyte not detected at or above the detection limit. QL estimated due to sample pH<2.
	13MW4	5	U	U	J	25	5	Target analyte not detected at or above the detection limit. QL estimated due to sample pH<2.
	13MW5	5	U	U	J	25	5	Target analyte not detected at or above the detection limit. QL estimated due to sample pH<2.
	13MW6	5	U	U	J	25	5	Target analyte not detected at or above the detection limit. QL estimated due to sample pH<2.
	13MW7	5	U	U	J	25	5	Target analyte not detected at or above the detection limit. QL estimated due to sample pH<2.
	13MWDUP	5	U	U	J	25	5	Target analyte not detected at or above the detection limit. QL estimated due to sample pH<2.
Carbon tetrachloride	13MW3	6.6		6.6	J	0.5	0.1	MS/MSD recovered high (148%).
	13MW5	0.1	J	0.1	J	0.5	0.1	Result < QL. MS/MSD recovered high (148%).
Chloroform	13MW3	0.6		0.6	J	0.5	0.1	MS/MSD recovered high (142%).
trans-1,4-Dichloro-2-butene	13MW3	1	U	U	J	5	1	Target analyte not detected at or above the detection limit. Percent drift requirement of +/- 25% exceeded (28%D).
	13MW4	1	U	U	J	5	1	Target analyte not detected at or above the detection limit. Percent drift requirement of +/- 25% exceeded (28%D).
	13MW5	1	U	U	J	5	1	Target analyte not detected at or above the detection limit. Percent drift requirement of +/- 25% exceeded (28%D).
	13MW6	1	U	U	J	5	1	Target analyte not detected at or above the detection limit. Percent drift requirement of +/- 25% exceeded (28%D).
	13MW7	1	U	U	J	5	1	Target analyte not detected at or above the detection limit. Percent drift requirement of +/- 25% exceeded (28%D).
	13MWDUP	1	U	U	J	5	1	Target analyte not detected at or above the detection limit. Percent drift requirement of +/- 25% exceeded (28%D).
Tetrachloroethene	13MW7	0.1	J	0.1	J	0.5	0.1	Result < QL. MS/MSD recovered high (136%).
Trichloroethene	13MW3	1		1	J	0.5	0.1	MS/MSD recovered high (143%).
	13MW4	1.5		1.5	J	0.5	0.1	MS/MSD recovered high (143%). Blind field duplicate 13MWDUP result is 1.5 ug/l. RPD between results is <1.
	13MW7	1.4		1.4	J	0.5	0.1	MS/MSD recovered high (143%).
	13MWDUP	1.5		1.5	J	0.5	0.1	MS/MSD recovered high (143%). Blind field duplicate for 13MW4. RPD between results is <1.

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 8270C								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Acenaphthene	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Acenaphthylene	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Benzo[k]fluoranthene	13MW1	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW2	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
bis(2-Chloroethyl) ether	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
p-Chloroaniline	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Chlorobenzilate	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 8270C								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Chlorobenzilate	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
2-Chloronaphthalene	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
4-Chlorophenyl phenyl ether	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Chrysene	13MW3	5	U	U	J	5	1.3	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.4	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1.3	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1.3	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1.3	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1.3	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
p-Phenylenediamine	13MW3	50	U	U	J	50	50	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW4	53	U	U	J	50	53	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW5	50	U	U	J	50	50	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW6	51	U	U	J	50	51	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW7	50	U	U	J	50	50	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MWDUP	51	U	U	J	50	51	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
Diallate	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 8270C								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Diallate	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Dibenzofuran	13MW1	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW2	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Dimethoate	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
3,3'-Dimethylbenzidine	13MW1	5	U	U	J	5	4	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW2	5	U	U	J	5	4	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW3	5	U	U	J	5	4	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW4	5.3	U	U	J	5	4.2	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW5	5	U	U	J	5	4	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW6	5.1	U	U	J	5	4.1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW7	5	U	U	J	5	4	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MWDUP	5.1	U	U	J	5	4.1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
4,6-Dinitro-o-cresol	13MW3	10	U	U	J	10	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW4	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW5	10	U	U	J	10	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW6	10	U	U	J	10	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW7	10	U	U	J	10	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MWDUP	10	U	U	J	10	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
2,4-Dinitrophenol	13MW3	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW4	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW5	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 8270C								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
2,4-Dinitrophenol	13MW6	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW7	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MWDUP	10	U	U	J	10	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
Famphur	13MW3	5	U	U	J	5	5	Analyte not detected above the detection limit. MS recovered low.
	13MW4	5.3	U	U	J	5	5.3	Analyte not detected above the detection limit. MS recovered low.
	13MW5	5	U	U	J	5	5	Analyte not detected above the detection limit. MS recovered low.
	13MW6	5.1	U	U	J	5	5.1	Analyte not detected above the detection limit. MS recovered low.
	13MW7	5	U	U	J	5	5	Analyte not detected above the detection limit. MS recovered low.
	13MWDUP	5.1	U	U	J	5	5.1	Analyte not detected above the detection limit. MS recovered low.
Fluorene	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Hexachlorophene	13MW3	500	U	U	J	500	141	Target analyte not detected by TIC.
	13MW4	500	U	U	J	500	141	Target analyte not detected by TIC.
	13MW5	500	U	U	J	500	141	Target analyte not detected by TIC.
	13MW6	500	<	U	J	500	141	Target analyte not detected by TIC.
	13MW7	500	U	U	J	500	141	Target analyte not detected by TIC.
	13MWDUP	500	U	U	J	500	141	Target analyte not detected by TIC.
Hexachloropropene	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. LCS recovered low.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. LCS recovered low.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. LCS recovered low.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. LCS recovered low.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. LCS recovered low.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. LCS recovered low.
Kepone	13MW3	5	U	U	J	5	5	Analyte not detected above the detection limit. MS recovered low.
	13MW4	5.3	U	U	J	5	5.3	Analyte not detected above the detection limit. MS recovered low.
	13MW5	5	U	U	J	5	5	Analyte not detected above the detection limit. MS recovered low.
	13MW6	5.1	U	U	J	5	5.1	Analyte not detected above the detection limit. MS recovered low.
	13MW7	5	U	U	J	5	5	Analyte not detected above the detection limit. MS recovered low.
	13MWDUP	5.1	U	U	J	5	5.1	Analyte not detected above the detection limit. MS recovered low.

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 8270C								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Methapyrilene	13MW3	5	U	U	J	5	5	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW4	5.3	U	U	J	5	5.3	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW5	5	U	U	J	5	5	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW6	5.1	U	U	J	5	5.1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MW7	5	U	U	J	5	5	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
	13MWDUP	5.1	U	U	J	5	5.1	Analyte not detected above the detection limit. Continuing calibration %D > +/-25%.
Methyl parathion	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
2-Naphthylamine	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%. Continuing calibration %D > +/-25%.
4-Nitroquinoline-1-oxide	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
N-Nitrosomorpholine	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
N-Nitrosopyrrolidine	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes
Method: 8270C								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
N-Nitrosopyrrolidine	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Pentachlorobenzene	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Pyrene	13MW1	5	U	U	J	5	1.4	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW2	5	U	U	J	5	1.4	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW3	5	U	U	J	5	1.4	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.5	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1.4	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1.5	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1.4	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1.5	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
o-Toluidine	13MW3	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW4	5.3	U	U	J	5	1.1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW5	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW6	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MW7	5	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
	13MWDUP	5.1	U	U	J	5	1	Analyte not detected above the detection limit. Initial calibration RSD > 15%.
Method: E314.0								
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC								
Perchlorate	13MW4	127.3		127.3		4	0.887	No action taken. Field duplicate result was 123.6 ug/l (RPD = 2.9).
	13MW6	1.334	J	1.33	J	4	0.887	Result < QL.
	13MWDUP	123.6		123.6		4	0.887	No action taken. Field duplicate for 13MW4.

Radford Facility Army Ammunition Plant: HWMU-13

Analyte	Sample ID	Result (ug/L)	Q	Result (ug/L)	Q	QL (ug/L)	DL (ug/L)	Validation Notes

Definitions: **QL** Denotes quantitation limit. **DL** Denotes detection limit. **Q** Denotes data qualifier. **U** Denotes analyte not detected at or above QL.
UA Denotes analyte not detected at or above adjusted sample QL. **J** Denotes analyte reported at or above QL and associated result is estimated due to quality control reasons.
When used with a "U" (i.e., "UJ"), denotes analyte not detected at or above QL and QL is estimated due to quality control reasons. When used with "UA" (i.e., "UAJ"), denotes analyte not detected at or above adjusted QL and adjusted QL is estimated due to quality control reasons. **R** Denotes result rejected.

B or **J** denotes result between detection limit and QL. Estimated result. B and J are laboratory result data qualifiers.
Appendix IX Monitoring Events:
For Appendix IX Monitoring Events, results are reported to the detection limit.
Appendix IX Monitoring Events: First Quarter 2006 (First Appendix IX Monitoring Event for unit), Second Quarter 2007, Second Quarter 2008, Second Quarter 2009.

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

Sample ID: 13MW1, 13MW2, 13MW3, 13MW4, 13MW5, 13MW6, 13MW7
QC Samples: Blanks, LCS, 13MW5 MS/MSD, field dup (13MWDUP/13MW4)
Laboratory: Lancaster Laboratories, Lancaster, PA; **SDG:** RSD23

"☑" denotes items reviewed. See Data Validation Report for additional comments.

A. QC DELIVERABLES PACKAGE:

- ☑ Case narrative and Chain of custody present and signed by a laboratory representative
- ☑ Sample results included for all sample locations
- ☑ All project specific target analytes reported at or above required permit QL
- ☑ MDL study performed for all target analytes and supports required QL
- ☑ Analyst initial demonstration of proficiency performed for all target analytes
- ☑ Passed single blind performance evaluation sample within 12 months (5 ml purge volume)
- ☑ Electronic data file reviewed

B. TECHNICAL HOLDING TIME AND PRESERVATION REVIEW CRITERIA:

- ☑ 14-day sample holding time, zero head space, pH <2
- ☑ Samples received at ≤6°C
- ☑ Preparation Method 5030C (25 ml purge volume)

C. GC/MS INSTRUMENT PERFORMANCE CHECK REVIEW CRITERIA:

- ☑ Instrument performance check solution was analyzed at the beginning of each 12-hour period of standard and/or sample analysis

D. INITIAL GC/MS CALIBRATION REVIEW CRITERIA:

- ☑ Target analytes included in the ICAL
- ☑ ICAL consisted of 5 calibration standards (or more, as needed)
- ☑ Lowest concentration calibration standard at or below the associated MCL, regulatory compliance, action limit, or required QL
- ☑ MDL check standard analyzed with ICAL for all target analytes
- ☑ No calibration standards were removed from curve that would negatively impact the data integrity
- ☑ Each target analyte %RSD ≤ 15% or
- ☑ Correlation coefficient or coefficient of determination >0.99 for target analytes with ≥15 % RSD
- ☑ ICAL verification standard after ICAL, all analytes, 70-130%

E. CALIBRATION VERIFICATION REVIEW CRITERIA:

- ☑ Calibration verification standard analyzed at the beginning of each 12-hour period following the instrument performance check analysis and prior to the method blank and sample analysis
- ☑ % Difference/Drift of target analytes within ± 25.0%

F. BLANK REVIEW CRITERIA:

- ☑ Method/extraction blank analyzed on each GC/MS system used for sample analysis
- ☑ Trip Blank-one per day of collection.

G. SURROGATE REVIEW CRITERIA:

- ☑ The following surrogates (or others as allowed) were used and within the specified range
  - dibromofluoromethane (80-120%), 4-bromofluorobenzene (80-120%)
  - toluene-d_8 (80-120%), 1,2-dichloroethane-d_4 (80-120%)

H. MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD) / LABORATORY CONTROL SAMPLE (LCS) REVIEW CRITERIA:

- ☑ MS/MSD and LCS analyzed; MS/MSD and LCS within range
- ☑ Project specific analytes -%R 75-130%; Independent source

☑ All analytes

I. INTERNAL STANDARDS REVIEW CRITERIA:

☑ The following internal standards (or others as allowed) were used -fluorobenzene or 1,4-difluorobenzene, chlorobenzene-d_5, 1,4-dichlorobenzene-d_4
☑ Internal standard areas within ± 50% of last calibration verification
☑ Internal standard retention times within ± 30 seconds of last calibration verification

J. TARGET ANALYTE IDENTIFICATION REVIEW CRITERIA:

☑ Results were consistent with historical data. New detections evaluated as follows:
☑ RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT
☑ Sample spectra versus laboratory standard spectra criteria were evaluated:
* Characteristic ions maximized in the same scan or within one scan of each other
* Characteristic ions present in the standard spectra were present in the sample spectra for analytes detected above the QL
* Relative intensities of the ions between the standard and sample spectra were within ±30%.

K. TARGET ANALYTE QUANTITATION REVIEW CRITERIA:

☑ Results are consistent with historical data. New detections evaluated as follows:
* If analyte %RSD was 15% or less, use average relative response factor for quantitation.
* If analyte %RSD was greater than 15%, use first or higher order regression fit of five calibration points (6 calibration points for 2nd order).

☑ Results that exceed the initial calibration range were reanalyzed at a higher dilution.
☑ Analyte concentrations recorded on the sample quantitation reports were accurately transferred to the sample summary sheets (laboratory report).

L. REPORTING:

☑ Detected analytes or results requiring validation are presented on the attached data validation report
☑ Validated results reported to at or above required QL
☑ Sample/field duplicate RPD<20, where applicable

LIMITATIONS AND REFERENCES:

Draper Aden Associates conducted data validation of the above noted data set using summary tables and raw data provided by the analyzing laboratory. Data validation was conducted 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 and III) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999 and USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008, where applicable). Validation of this data set is limited to the items detailed in this report.

Validated by: Date:

Draper Aden Associates
Engineering ◆ Surveying ◆ Environmental Services

Kathy Olsen

01/25/10

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

Sample ID: 13MW1, 13MW2, 13MW3, 13MW4, 13MW5, 13MW6, 13MW7
QC Samples: Blanks, LCS, 13MW5 MS/MSD, field dup (13MWDUP/13MW4)
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC; SDG 0910165

"☑" denotes items reviewed. See Data Validation Report for additional comments.

A. QC DELIVERABLES PACKAGE:

- ☑ Case narrative and Chain of custody present and signed by a laboratory representative
- ☑ Sample results included for all sample locations
- ☑ All project specific target analytes reported at or above permit QL
- ☑ MDL study performed for all target analytes and supports permit QL
- ☑ Initial demonstration of proficiency performed for all target analytes
- ☑ Passed single blind performance evaluation sample within 12 months
- ☑ Electronic data file reviewed

B. TECHNICAL HOLDING TIME AND PRESERVATION REVIEW CRITERIA:

- ☑ Holding time: 7-day sample collection to extraction / 40-day extraction to analysis
- ☑ Samples received at $\leq 6^{\circ}C$
- ☑ Extraction Method 3510C

C. GC/MS INSTRUMENT PERFORMANCE CHECK REVIEW CRITERIA:

- ☑ Instrument performance check solution analyzed at the beginning of each 12-hour period of standard and/or sample analysis

D. INITIAL GC/MS CALIBRATION REVIEW CRITERIA:

- ☑ All target analytes included in the ICAL
- ☑ ICAL consisted of a minimum of 5 calibration standards (or more, as needed)
- ☑ Lowest concentration calibration standard at or below the associated MCL, regulatory compliance, action limit, or permit QL
- ☑ No calibration standards were removed that would negatively impact the data integrity
- ☑ Each target analyte %RSD ≤ 15%
- ☑ Correlation coefficient or coefficient of determination >0.99 for target analytes with ≥15 % RSD

E. CALIBRATION VERIFICATION REVIEW CRITERIA:

- ☑ Calibration verification standard analyzed at the beginning of each 12-hour period following the instrument performance check analysis and prior to he method blank and sample analysis
- ☑ All analytes have % Difference/Drift within ± 25.0%

F. BLANK REVIEW CRITERIA:

- ☑ Method/extraction blank analyzed on each GC/MS system used for sample analysis

G. SURROGATE REVIEW CRITERIA:

- ☑ The following surrogates (or others, as allowed) were used and within the specified range
  - phenol - d_6 Or - d_6 (10%-94%), - 2-fluorophenol (21%-100%), - 2,4,6-tribromophenol (10%-123%),
  - nitrobenzene – $d_{8\ or\ ds}$ (35%-114%), - 2-fluorobiphenyl (43%-116%), -p-terphenyl - d_{14} (33%-141%)

H. MATRIX SPIKE / MATRIX SPIKE DUPLICATE (MS/MSD) / LABORATORY CONTROL SAMPLE (LCS) REVIEW CRITERIA:

- ☑ MS/MSD and LCS analyzed with all target analytes
- ☑ MS/MSD and LCS recovered at or above 45%, RPD <20

I. INTERNAL STANDARDS REVIEW CRITERIA:

- ☑ The following internal standards were used (or others as allowed)
  - 1,4-Dichlorobenzene-d_4, Naphthalene-d_8, Acenapththene-d_{10}, Phenanthrene-d_{10}, Chrysene-d_{12}, Perylene-d_{12}
- ☑ Internal standard areas within ± 50% of last calibration verification
- ☑ Internal standard retention times within ± 30 seconds of last calibration verification

J. TARGET ANALYTE IDENTIFICATION REVIEW CRITERIA:

- ☑ Results were consistent with historical data. New detections evaluated as follows:
- ☑ RRTs of the reported analytes within ± 0.06 RRT units of the standard RRT
- ☑ Sample spectra versus laboratory standard spectra criteria were evaluated:
  - * Characteristic ions maximized in the same scan or within one scan of each other
  - * Characteristic ions present in the standard spectra were present in the sample spectra for analytes detected above the permit QL
  - * Relative intensities of the ions between the standard and sample spectra were within ±30%.

K. TARGET ANALYTE QUANTITATION REVIEW CRITERIA:

- ☑ Results were consistent with historical data. New detections evaluated as follows:
  - * If analyte %RSD was 15% or less, use average relative response factor for quantitation.
  - * If analyte %RSD was greater than 15%, use first or higher order regression fit of five calibration points (6 calibration points for 2nd order).
- ☑ Results that exceed the initial calibration range were reanalyzed at a higher dilution.
- ☑ Analyte concentrations recorded on the sample quantitation reports were accurately transferred to the sample summary sheets (laboratory report).

L. REPORTING:

- ☑ Detected analytes or results requiring validation are presented on the attached data validation report
- ☑ Validated results reported to at or above the permit QL

LIMITATIONS AND REFERENCES:

Draper Aden Associates conducted data validation of the above noted data set using summary tables and raw data provided by the analyzing laboratory. Data validation was conducted 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 and III) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999 and USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008, where applicable). Validation of this data set is limited to the items detailed in this report.

Validated by: Date:

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

Kathy Olsen — 01/25/10

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SW-846 METHOD 8330B/8332 (GC) ORGANIC DATA VALIDATION

Sample ID: 13MW1, 13MW2, 13MW3, 13MW4, 13MW5, 13MW6, 13MW7
QC Samples: Blanks, LCS, 13MW5 MS/MSD, field dup (13MWDUP/13MW4)
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC; SDG 0910165

"☑" denotes items reviewed. See Data Validation Report for additional comments.

A. QC DELIVERABLES PACKAGE:

☑ Case narrative present and signed by a laboratory representative
☑ Chain of Custody present and signed by a laboratory representative
☑ Sample results included for all sample locations
☑ Results provided for project specific analytes
☑ Quantitation limits (QLs) at permit or project required QL
☑ MDL study supports QL-*(8330- April 2007, 8332 -March 2008) in use, submitted*
☑ Analyst initial demonstration of capability provided for all analytes *–2646 submitted*
Comment: As per the laboratory's narrative from Second Quarter 2009, the data meets the requirements outline in SW-846 8330B. The laboratory will reference 8330B for future events.

B. TECHNICAL HOLDING TIME AND PRESERVATION CRITERIA:

☑ 7-day sample collection to extraction holding time
☑ 40-day extraction to analysis holding time
☑ Extraction Method 3535, Samples received at ≤6°C

C. INITIAL CALIBRATION CRITERIA:

☑ Analytes included in the ICAL
☑ ICAL consist of a minimum of 5 calibration levels
☑ A calibration standard at or below the associated MCL, regulatory compliance, or action limit
☑ Calibration levels removed from the curve should not negatively impact the data integrity
☑ Each analyte %RSD ≤ 20%
☑ If not, correlation coefficient/coefficient of determination >0.99 for analytes with ≥20% RSD

D. CALIBRATION VERIFICATION (CV) CRITERIA:

☑ CV 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
☑ All analytes have % Difference/Drift within ± 15%.

E. BLANK CRITERIA:

☑ Method blank analyzed
☑ Sample results evaluated for blank influence, where applicable.
☑ Blank analyzed after result exceeding calibration range, if required

F. SURROGATE CRITERIA:

☑ 1,4-dinitrobenzene (80-120%R);Surrogate added to all samples

G. MATRIX SPIKE/ MATRIX SPIKE DUPLICATE (MS/MSD) / LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

☑ MS/MSD and LCS analyzed-all target analytes, where applicable
☑ MS/MSD and LCS within range, project specific analytes (50-150%,RPD<20), except as noted:

H. REPORTING:

- ☑ Detected analytes or results requiring validation are presented on the attached table(s).
- ☑ Laboratory reported results to at or above QL.
- ☑ Results validated to the MDL.
- ☑ Secondary/confirmation column provides adequate separation from primary column.

I. COMMENTS REGARDING ANALYTE DETECTIONS:

2,4-DNT and 2,6-DNT elute at similar retention times on C-18 columns using the separation conditions described in SW-846 Method 8330B (retention time difference of 0.2 minutes). A large concentration of one isomer (generally 2,4-DNT) may mask the response or the other isomer. If it is not apparent that both isomers are present or are not detected, an isomeric mixture should be reported. No detections were reported for this event.

J. ADDITIONAL COMMENTS:

Calculation checks performed to verify low calibration standard at or below QL.

LIMITATIONS AND REFERENCES:

Draper Aden Associates conducted data validation of the above noted data set using summary tables and raw data provided by the analyzing laboratory. Data validation was conducted 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 and III) and CLP data validation guidelines (USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review, October 1999 and USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review, June 2008, where applicable). Validation of this data set is limited to the items detailed in this report.

Validated by: *Date:*

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

Kathy Olsen 01/25/10

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SW-846 METHOD 6020 DATA EVALUATION FOR INORGANICS BY ICP/MS

Sample ID: 13MW1, 13MW2, 13MW3, 13MW4, 13MW5, 13MW6, 13MW7
QC Samples: Blanks, LCS, 13MW5 MS/MSD, field dup (13MWDUP/13MW4)
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC; SDG 0910165

Does Laboratory analyte list correspond to project analyte list? (total) _X_ yes ___ no
Corresponds to: antimony, arsenic, barium, cadmium, chromium, lead, nickel, selenium, silver, zinc
Preparation Method: 3005A
"☑" denotes items reviewed. See Data Validation Report for additional comments.

A. QC DOCUMENTATION CRITERIA:

☑ Specific detection limits for all target analytes, where applicable
☑ Specific quantitation limits for all target analytes
☑ Electronic data file reviewed
☑ Performance evaluation sample analyzed within 12 months
☑ Analyst IDOC previously provided

B. TECHNICAL HOLDING TIME/ PRESERVATION REQUIREMENTS:

☑ 6 month holding time, pH<2 with Nitric Acid (HNO_3)

C. INSTRUMENT CALIBRATION/TUNE CRITERIA:

☑ 1 calibration blank and at least 1 standard, correlation coefficient
☑ Instrument tuned prior to analysis (RSD <5%)

D. INSTRUMENT CONTINUING CALIBRATION CRITERIA:

☑ 10 sample frequency
☑ Use of calibration blank and check standard
☑ %R within 90-110% range

E. BLANK SAMPLE CRITERIA:

N/A Trip Blank (check only if analyzed)
N/A Equipment Blank
☑ Method/Other Lab Blanks (check only if analyzed)
☑ Interference free
☑ CCB 10 sample frequency

F. INTERFERENCE CHECK SAMPLE (ICS) CRITERIA:

☑ At beginning of batch or every 12 hours (80-120%)

G. MATRIX SPIKE DUPLICATE (MSD) SAMPLE CRITERIA:

☑ One MS/MSD per batch of samples
☑ %RPD ± 20% for spike/sample sample values greater than 5 times QL (100X DL)
☑ {spike/sample ± QL} when spike/sample values are less than 5 times QL (100X DL)

H. MATRIX SPIKE (MS) SAMPLE CRITERIA:

☑ %R within 75-125% range

I. SAMPLE RESULTS CRITERIA:

☑ Sample results reported within instrument calibration range

J. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

☑ Each element, 1 LCS per 20 samples, (80-120% R)

K. INTERNAL STANDARDS CRITERIA:

☑ IS (Li, Sc, In, Tb, Bi) intensities (see section 9.3, 6020A)

L. SERIAL DILUTION CRITERIA:

☑ Similar matrix
☑ If concentration 50 times IDL, %D must be within 10%

M. QUANTIATION LIMIT STANDARD (CDRL STANDARD) CRITERIA:

☑ All elements
☑ 85-115% recovery
☑ Standard analyzed at the quantitation limit

N. FIELD DUPLICATE CRITERIA:

☑ All elements
☑ RPD <20

O. COMMENT:
For Fourth Quarter 2009 event, results reported by laboratory to at or above the detection limit. However, the laboratory submitted results less than the QL electronically only.

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 in general accordance with SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA and III) method requirements and CLP data validation guidelines USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004). Validation of this data set is limited to review of items detailed in this data review report.

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

Sample ID: 13MW1, 13MW2, 13MW3, 13MW4, 13MW5, 13MW6, 13MW7
QC Samples: Blanks, LCS, 13MW5 MS/MSD, field dup (13MWDUP/13MW4)
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC; SDG 0910165

Does Laboratory analyte list correspond to analyte list requested? ☑ yes ___no
Corresponds to: mercury - total
"☑" denotes items were reviewed. See Data Validation Summary for additional comments.

A. QC DOCUMENTATION CRITERIA:

☑ Specific quantitation limit for mercury
☑ Specific detection limit for mercury
☑ Electronic data file reviewed
☑ QC standard analyzed at or less than the QL (70-130%R)
☑ Analyst IDOC and MDL study provided

B. TECHNICAL HOLDING TIME / PRESERVATION REQUIREMENTS:

☑ 28 days holding time
☑ Adjust pH <2 w/ HNO_3

C. INSTRUMENT CALIBRATION CRITERIA:

☑ 1 calibration blank and at least 5 standards , correlation coeffici>0.995
☑ Instrument calibrated for every analytical sequence for every method

D. INITIAL / CONTINUING CALIBRATION VERIFICATION CRITERIA:

☑ 15 sample frequency for CCV
☑ %R within 80-120% range

E. 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

F. MATRIX SPIKE DUPLICATE (MS/MSD) SAMPLE CRITERIA:

☑ Mercury
☑ One MS/MSD per batch of samples
☑ %RPD ± 20% for spike/sample values greater than 5 times QL
☑ {spike/sample ± QL} when spike/sample values are < than 5 times QL

G. MATRIX SPIKE (MS) SAMPLE CRITERIA:

☑ Mercury, spiked prior to digestion
☑ %R within 75-125% range

H. LABORATORY CONTROL SAMPLE (LCS) CRITERIA:

☑ %R within 80-120% range
☑ Mercury

I. SAMPLE RESULTS CRITERIA:

☑ Results reported within instrument calibration range

M. COMMENT:
For Fourth Quarter 2009 event, results reported by laboratory to at or above the detection limit. However, the laboratory submitted results less than the QL electronically only.

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 in general accordance with SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA and III) method requirements and CLP data validation guidelines USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004). Validation of this data set is limited to review of items detailed in this data review report.

Validated by:

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

Kathy Olsen

Date: 01/26/10

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USEPA METHOD 314.0 (PERCHLORATE) DATA VALIDATION

Sample ID: 13MW1, 13MW2, 13MW3, 13MW4, 13MW5, 13MW6, 13MW7
QC Samples: Blanks, LCS, 13MW5 MS/MSD, field dup (13MWDUP/13MW4)
Laboratory: CompuChem, a Division of Liberty Analytical, Cary, NC; SDG 0910165

A. INSTRUMENT PERFORMANCE CHECK (IPC):

- ☑ % Recovery within 80-120%
- ☑ Conductance of IPC within 10% of Matrix Conductivity Threshold (MCT)
  (Comment: The laboratory did not analyze a conductance standard as required by the method. The laboratory stated that the analysis was established for perchlorate only and the conductance standard was not applicable. No additional data qualification was required.

B. INITIAL/CONTINUING CALIBRATION VERIFICATION CRITERIA:

- ☑ Calibration has at least five calibration standards and correlation coefficient ≥ 0.995
- ☑ Lowest calibration standard at or below QL for all target analytes
- ☑ Continuing calibration verification standard recovered within 85-115%

C SAMPLE AND QC RESULTS:

- ☑ Perchlorate results were reported within calibration range
- ☑ Laboratory control standard recovered within criteria for target analytes- %R 85-115
- ☑ MS/MSD (or batch QC) per sample batch. %RSD 80-120/ RPD <20
- ☑ Sample/Field Duplicate RPD <20

D. METHOD/QC INFORMATION DOCUMENTATION:

- ☑ Requested target analytes analyzed
- ☑ Sample documentation provided (chain of custody)

E. TECHNICAL HOLDING TIMES/PRESERVATION REQUIREMENTS:

- ☑ Samples analyzed 28 days from collection

F. BLANK SAMPLES ANALYSES CRITERIA:

- ☑ Method blank @ 1 per batch/other laboratory blanks as needed

G. LIMITATIONS AND 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 in general accordance with SW-846 (Test Methods for Evaluating Solid Waste-Physical/Chemical Methods, USEPA, SW-846, 3rd Edition-Final Update I, II/IIA and III) method requirements and CLP data validation guidelines USEPA Contract Laboratory Program National Functional Guidelines for Inorganic Data Review, October 2004). Validation of this data set is limited to review of items detailed in this data review report.

Validated by: Date:

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

01/26/10

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Revisions to Data Set

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

Demonstration of Capability Certification Statement

Date(s) of study: 12/18/08,12/19/08,12/24/08

Analyst(s): Jason Long 1693

Matrix: water-25 mL purge

Method, SOP and revision #: 8260B 1594,1595...Revision 10

Analyte(s): all 8260B compounds

We, the undersigned, CERTIFY that:

1. The analysts identified above, using the cited test method(s), which is in use at this facility for the analyses of samples under the National Environmental Laboratory Accreditation Program, have met the Demonstration of Capability.
2. The test method was performed by the analyst(s) identified on this certification.
3. A copy of the test method(s) and the laboratory-specific SOPs are available for all personnel on-site.
4. The data associated with the demonstration capability are true, accurate, complete, and self-explanatory (1).
5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these analyses have been retained at the facility, and that the associated information is well organized and available for review by authorized assessors.

1975 Manager — Date: 1/23/09
Technical Director's Name and Title

Barbara Wady QA Sr Specialist — Date: 2/2/09
Quality Assurance Officer's Name and Title

This certification form must be completed each time a demonstration of capability study is completed.

(1) True: Consistent with supporting Data

Accurate: Based on good laboratory practices consistent with sound scientific principles/practices.

Complete: Includes the results of all supporting performance testing.

Self-explanatory: Data properly labeled and stored so that the results are clear and require no additional explanation.

Quad Study

EMPLOYEE: 1693
METHOD: SW-846 8260B 25mL purge

QUAD1 =	G083532AA	LCSG52	Q	12/18/08	14:48
QUAD2 =	G083541AA	LCSG53	Q	12/19/08	13:27
QUAD3 =	G083591AA	LCSG58	Q	12/24/08	12:55
QUAD4 =	G083591AA	LCSG58	Y	12/24/08	13:16

nalysis			%Rec1	%Rec2	%Rec3	%Rec4	Avg %Rec	Rec Limits	In Spec	SD	SD Limit	In Spec
2898	02206	Benzyl Chloride	92.3	98.0	92.3	92.8	93.9	67-129	Y	2.8	10	Y
2898	02901	Dichlorodifluoromethane	80.9	77.1	89.9	89.0	84.2	47-160	Y	6.2	10	Y
2898	02902	Chloromethane	92.0	91.3	104.2	103.7	97.8	64-136	Y	7.1	10	Y
2898	02903	Vinyl Chloride	86.3	86.3	95.8	97.7	91.5	63-133	Y	6.1	10	Y
2898	02904	Bromomethane	94.7	95.3	106.1	98.2	98.6	74-124	Y	5.2	10	Y
2898	02905	Chloroethane	95.5	93.6	106.2	101.4	99.2	71-125	Y	5.7	10	Y
2898	02906	Trichlorofluoromethane	113.6	115.9	128.9	127.0	121.3	63-151	Y	7.7	10	Y
2898	02907	Acrolein	76.2	48.5	119.9	87.6	83.1	29-132	Y	29.5	10	N*
2898	02908	1,1-Dichloroethene	103.1	102.9	102.7	101.7	102.6	86-124	Y	0.6	10	Y
2898	02909	Freon 113	107.0	108.1	101.2	100.1	104.1	76-132	Y	4.1	10	Y
2898	02910	Acetone	121.2	113.9	133.5	111.4	120.0	73-133	Y	9.9	10	Y
2898	02911	Methyl Iodide	97.2	99.5	99.1	99.6	98.8	72-125	Y	1.1	10	Y
2898	02912	Carbon Disulfide	101.8	105.7	101.4	100.0	102.2	67-137	Y	2.5	10	Y
2898	02914	Allyl Chloride	105.0	105.9	99.8	101.7	103.1	60-132	Y	2.9	10	Y
2898	02915	Methylene Chloride	101.3	103.1	99.7	99.5	100.9	83-111	Y	1.6	10	Y
2898	02916	t-Butyl Alcohol	100.1	109.6	115.1	99.5	106.1	68-132	Y	7.6	10	Y
2898	02917	Acrylonitrile	116.8	105.0	131.0	100.2	113.3	72-138	Y	13.7	10	N*
2898	02918	trans-1,2-Dichloroethene	101.2	101.4	100.6	101.0	101.1	86-111	Y	0.3	10	Y
2898	02919	Methyl Tertiary Butyl Ether	92.6	95.8	86.0	87.2	90.4	77-115	Y	4.6	10	Y
2898	02920	n-Hexane	93.9	94.5	87.6	88.0	91.0	73-121	Y	3.7	10	Y
2898	02921	1,1-Dichloroethane	103.7	103.4	100.2	99.9	101.8	84-116	Y	2.0	10	Y
2898	02925	2-Chloro-1,3-Butadiene	106.6	104.1	99.0	98.9	102.2	70-140	Y	3.8	10	Y
2898	02927	di-Isopropyl Ether	98.4	99.0	92.1	92.1	95.4	71-119	Y	3.8	10	Y
2898	02928	Ethyl t-butyl ether	90.7	93.8	85.4	85.7	88.9	74-117	Y	4.1	10	Y
2898	02929	2,2-Dichloropropane	102.5	104.5	98.8	97.6	100.8	75-130	Y	3.2	10	Y
2898	02930	cis-1,2-Dichloroethene	97.5	99.6	97.6	97.1	97.9	86-113	Y	1.1	10	Y
2898	02931	2-Butanone	114.3	100.4	121.7	95.0	107.8	70-145	Y	12.3	10	N*
2898	02932	Propionitrile	117.6	113.7	128.3	105.7	116.3	77-135	Y	9.4	10	Y
2898	02933	Bromochloromethane	104.3	105.9	103.0	104.0	104.3	83-115	Y	1.2	10	Y
2898	02934	Methacrylonitrile	112.4	98.6	124.2	96.7	108.0	71-142	Y	12.9	10	N*
2898	02935	Tetrahydrofuran	109.8	95.2	120.9	96.6	105.6	71-133	Y	12.1	10	N*
2898	02936	Chloroform	106.6	105.5	103.6	102.4	104.5	83-121	Y	1.9	10	Y
2898	02938	1,1,1-Trichloroethane	107.5	109.0	104.6	104.3	106.3	79-131	Y	2.3	10	Y
2898	02939	Cyclohexane	96.0	96.5	88.1	87.8	92.1	78-121	Y	4.8	10	Y
2898	02940	Carbon Tetrachloride	112.4	112.6	108.5	107.7	110.3	73-143	Y	2.6	10	Y
2898	02941	1,1-Dichloropropene	101.9	102.8	98.9	98.1	100.4	87-114	Y	2.3	10	Y
2898	02942	Benzene	100.9	100.7	99.3	98.6	99.9	87-111	Y	1.1	10	Y

EMPLOYEE: 1693
METHOD: SW-846 8260B 25mL purge

QUAD1 =	G083532AA	LCSG52	Q	12/18/08 14:48
QUAD2 =	G083541AA	LCSG53	Q	12/19/08 13:27
QUAD3 =	G083591AA	LCSG58	Q	12/24/08 12:55
QUAD4 =	G083591AA	LCSG58	Y	12/24/08 13:16

nalysis			%Rec1	%Rec2	%Rec3	%Rec4	Avg %Rec	Rec Limits	In Spec	SD	SD Limit	In Spec
2898	02944	1,2-Dichloroethane	113.7	113.5	104.8	104.8	109.2	78-137	Y	5.1	10	Y
2898	02945	Isobutyl Alcohol	116.0	113.7	122.9	108.2	115.2	66-139	Y	6.1	10	Y
2898	02953	t-Amyl methyl ether	90.0	92.9	84.7	85.9	88.4	77-114	Y	3.8	10	Y
2898	02954	Trichloroethene	102.2	102.8	99.2	99.2	100.9	87-116	Y	1.9	10	Y
2898	02955	n-Heptane	101.5	101.2	90.8	90.2	95.9	73-128	Y	6.3	10	Y
2898	02956	1,2-Dichloropropane	100.4	101.3	96.3	97.5	98.9	85-115	Y	2.4	10	Y
2898	02957	Dibromomethane	106.8	106.3	102.3	99.8	103.8	90-116	Y	3.3	10	Y
2898	02958	Methyl Methacrylate	95.6	83.7	103.1	80.4	90.7	50-134	Y	10.6	10	N*
2898	02959	1,4-Dioxane	102.0	104.7	95.6	117.3	104.9	59-161	Y	9.1	10	Y
2898	02960	Bromodichloromethane	103.8	104.8	99.6	100.2	102.1	85-123	Y	2.6	10	Y
2898	02961	2-Nitropropane	119.5	102.3	126.0	96.3	111.0	50-164	Y	14.0	10	N*
2898	02963	cis-1,3-Dichloropropene	88.4	94.7	88.3	89.7	90.3	72-115	Y	3.1	10	Y
2898	02964	4-Methyl-2-Pentanone	96.3	98.5	86.4	87.4	92.2	71-130	Y	6.1	10	Y
2898	02965	Toluene	98.9	100.0	99.3	97.3	98.9	89-113	Y	1.1	10	Y
2898	02966	1,1,2-Trichloroethane	102.6	102.0	99.8	97.9	100.6	87-115	Y	2.2	10	Y
2898	02967	trans-1,3-Dichloropropene	93.8	99.8	93.2	92.8	94.9	77-122	Y	3.3	10	Y
2898	02968	Ethyl Methacrylate	87.4	88.3	80.5	80.7	84.2	21-178	Y	4.2	10	Y
2898	02969	Tetrachloroethene	98.4	99.2	100.6	100.2	99.6	81-116	Y	1.0	10	Y
2898	02970	1,3-Dichloropropane	101.9	103.5	98.2	97.7	100.3	88-114	Y	2.8	10	Y
2898	02971	2-Hexanone	98.9	99.3	88.4	89.2	93.9	69-135	Y	6.0	10	Y
2898	02972	Dibromochloromethane	97.9	103.4	98.3	95.9	98.9	84-127	Y	3.2	10	Y
2898	02973	1,2-Dibromoethane	98.8	100.2	95.5	95.3	97.4	86-116	Y	2.4	10	Y
2898	02974	Chlorobenzene	99.2	101.0	98.9	98.5	99.4	88-112	Y	1.1	10	Y
2898	02975	1,1,1,2-Tetrachloroethane	103.6	105.3	103.3	102.9	103.8	86-119	Y	1.1	10	Y
2898	02976	Ethylbenzene	100.3	100.3	98.4	97.4	99.1	88-114	Y	1.4	10	Y
2898	02977	m+p-Xylene	100.8	101.0	101.3	99.6	100.7	88-115	Y	0.7	10	Y
2898	02978	o-Xylene	98.4	99.1	97.9	97.6	98.2	88-115	Y	0.6	10	Y
2898	02979	Styrene	97.2	96.9	96.5	95.0	96.4	87-111	Y	1.0	10	Y
2898	02980	Bromoform	86.9	98.8	94.5	91.3	92.9	66-131	Y	5.0	10	Y
2898	02981	Isopropylbenzene	98.8	100.1	97.7	96.7	98.3	87-115	Y	1.5	10	Y
2898	02982	1,1,2,2-Tetrachloroethane	98.8	101.1	93.8	94.7	97.1	83-119	Y	3.5	10	Y
2898	02983	Bromobenzene	97.0	98.1	95.5	97.1	96.9	84-112	Y	1.1	10	Y
2898	02984	1,2,3-Trichloropropane	106.4	104.7	99.2	100.5	102.7	80-120	Y	3.4	10	Y
2898	02985	trans-1,4-Dichloro-2-butene	49.9	71.1	108.2	84.3	78.4	15-165	Y	24.4	10	N*
2898	02986	n-Propylbenzene	100.4	102.3	98.0	98.7	99.8	88-116	Y	1.9	10	Y
2898	02987	2-Chlorotoluene	98.1	98.6	96.5	96.9	97.5	90-112	Y	1.0	10	Y
2898	02988	1,3,5-Trimethylbenzene	98.3	100.3	96.2	96.3	97.8	86-113	Y	1.9	10	Y

Quad Study

EMPLOYEE: 1693
METHOD: SW-846 8260B 25mL purge

QUAD1 =	G083532AA	LCSG52	Q	12/18/08 14:48
QUAD2 =	G083541AA	LCSG53	Q	12/19/08 13:27
QUAD3 =	G083591AA	LCSG58	Q	12/24/08 12:55
QUAD4 =	G083591AA	LCSG58	Y	12/24/08 13:16

nalysis			%Rec1	%Rec2	%Rec3	%Rec4	Avg %Rec	Rec Limits	In Spec	SD	SD Limit	In Spec
2898	02989	4-Chlorotoluene	98.7	101.4	98.0	98.7	99.2	90-113	Y	1.5	10	Y
2898	02990	tert-Butylbenzene	96.7	96.7	93.8	95.4	95.7	90-114	Y	1.4	10	Y
2898	02991	Pentachloroethane	104.2	106.1	104.3	106.2	105.2	78-125	Y	1.1	10	Y
2898	02992	1,2,4-Trimethylbenzene	99.7	100.2	96.0	96.9	98.2	86-114	Y	2.1	10	Y
2898	02993	sec-Butylbenzene	99.2	99.3	95.1	95.8	97.4	83-115	Y	2.2	10	Y
2898	02994	p-Isopropyltoluene	97.7	99.3	95.5	95.7	97.0	85-115	Y	1.8	10	Y
2898	02995	1,3-Dichlorobenzene	99.0	98.8	97.6	98.4	98.4	85-109	Y	0.6	10	Y
2898	02996	1,4-Dichlorobenzene	98.4	98.3	97.8	98.8	98.3	85-112	Y	0.4	10	Y
2898	02997	n-Butylbenzene	104.1	104.5	99.4	100.0	102.0	84-116	Y	2.7	10	Y
2898	02998	1,2-Dichlorobenzene	99.1	101.2	98.1	99.0	99.3	89-114	Y	1.3	10	Y
2898	02999	1,2-Dibromo-3-chloropropane	105.5	97.3	120.6	95.0	104.6	65-129	Y	11.6	10	N*
2898	04857	1,2,4-Trichlorobenzene	93.3	96.6	93.9	96.5	95.1	71-115	Y	1.7	10	Y
2898	05140	Ethyl ether	102.9	101.5	88.8	91.9	96.3	61-124	Y	7.0	10	Y
2898	05186	n-Butanol	100.1	99.4	97.3	93.9	97.7	63-121	Y	2.8	10	Y
2898	05213	Hexachlorobutadiene	99.6	101.5	100.7	102.6	101.1	74-117	Y	1.2	10	Y
2898	05214	Naphthalene	91.5	95.2	88.7	92.7	92.0	69-123	Y	2.7	10	Y
2898	05246	1,2,3-Trichlorobenzene	94.7	99.0	95.9	99.5	97.3	76-117	Y	2.3	10	Y
2898	06075	Dichlorofluoromethane	96.8	101.3	111.3	106.8	104.1	62-154	Y	6.4	10	Y
2898	06076	Methyl Acetate	105.8	103.7	93.9	95.1	99.6	52-144	Y	6.0	10	Y
2898	06077	Methylcyclohexane	104.7	107.7	97.4	97.8	101.9	83-127	Y	5.1	10	Y
2898	10073	Freon 123a	100.7	100.8	108.5	107.1	104.3	57-160	Y	4.1	10	Y

La aster Laboratories

Quad Study

EMPLOYEE: 1693
METHOD: SW-846 8260B 25mL purge

QUAD1 =	G083532AA	LCSG52	Q	12/18/08 14:48
QUAD2 =	G083541AA	LCSG53	Q	12/19/08 13:27
QUAD3 =	G083591AA	LCSG58	Q	12/24/08 12:55
QUAD4 =	G083591AA	LCSG58	Y	12/24/08 13:16

nalysis	%Rec1	%Rec2	%Rec3	%Rec4	Avg %Rec	Rec Limits	In Spec	SD	SD Limit	In Spec

omments:
SD limit failure is due to instrument drift experienced over several days.

Analyst Signature Jason Ley 1693 Date: 1/13/09

CompuChem
A Division Of
Liberty Analytical Corp.

Demonstration of Capability
Certification Statement

Study Date: January 15, 2009
Laboratory Name: CompuChem, a Division of Liberty Analytical Corporation
Laboratory Address: 501 Madison Avenue, Cary, NC 27513
Analyst Name/Employee ID#: **Perry, T. Brian/2650**

Matrix: Water
Method Number: 3510C; 8270C; 625; OLM04.3; OLC03.2; SOM01.2
SOP No./Rev#: 2.5.2.7/12; 2.5.1.2/3; 2.4.4.2/1; 2.4.4.4/5; 2.4.3.1/4; 2.4.4.1/1; 2.4.4.3/5
Analyte/Class of Analytes/Measured Parameters: Semivolatiles (plus Appendix 9 compounds)

We, the undersigned, CERTIFY that:

1. The analyst identified above, using the cited test method, which is in use at this facility for the analyses of samples under the National Environmental Laboratory Accreditation Program, have met the Demonstration of Capability.

2. The test method was performed by the analyst identified on this certification.

3. A copy of the test method and the laboratory-specific SOPs are available for all personnel on-site.

4. The data associated with the demonstration capability are true, accurate, complete and self-explanatory.

5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these analyses have been retained at the facility, and that the associated information is well organized and available for review by authorized assessors.

Kathryn Humphries, Organic Extractables Manager Technical Director's Name and Title	Kathryn E Humphries Signature	2/20/09 Date
Jennifer B. Rebman, QA Manager Quality Assurance Officer's Name	Signature	2/20/09 Date

This certification form must be completed each time a demonstration of capability study is completed.

(1)
True:	Consistent with supporting data.
Accurate:	Based on good laboratory practices consistent with sound scientific principles/practices.
Complete:	Includes the results of all supporting performance testing.
Self-Explanatory:	Data properly labeled and stored so that the results are clear and require no additional explanation.

Preparation: IDOC
Ann McKoy01-14-09
Analysis: DOC
Brian Perry01-15-09

8332 Soil and Water Explosives
Study Dates: March 2008 (water)
(the primary column)

CAS#	Compound	MDL µg/L	RL µg/L	MDL µg/Kg	RL µg/Kg
55-63-0	Nitroglycerin	1.05	16		
3032-55-1	TMETN	2.3	10		
78-11-5	PETN	1.31	10		

ConpuChem
Method Detection Limit Study

Explosives 8330		
Instrument: Allure A11001/A11002, RestekC18 column		
Column: Restek C18/Pinnacle Cyano		
Extraction Date:	April 9, 2007	
Analysis Date:	Apirl 17, 2007	
Compound	MDL	Reporting Limit
	µg/L	µg/L
HMX	0.93	2.50
RDX	0.88	2.50
1,3,5-Trinitrobenzene	1.10	2.50
1,3-Dinitrobenzene	0.96	2.50
Nitrobenzene	0.45	2.50
Tetryl	3.79	5.00
2,4,6-Trinitrotoluene	0.84	2.50
4-Amino-2,6-dinitrotoluene	1.55	5.00
2-Amino-4,6-dinitrotoluene	1.53	5.00
2,6-Dinitrotoluene	1.38	2.50
2,4-Dinitrotoluene	1.03	2.50
2-Nitrotoluene	1.03	5.00
4-Nitrotoluene	TBD	5.00
3-Nitrotoluene	0.83	5.00

CC MDLs 6010B

Copy

5

6010B

CompuChem
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6010B MDL

Summary Sheet

Study Dates: 4/15-16/2009

Instrument: P4

Parameter	Rep#1 µg/L	Rep#2 µg/L	Rep#3 µg/L	Rep#4 µg/L	Rep#5 µg/L	Rep#6 µg/L	Rep#7 µg/L	Rep#8 µg/L	Mean µg/L	Test Conc. µg/L	S.Dev.	MDL µg/L	6010A Report Limit µg/L	10X Rule[1]	MDL < test conc[1]	6010A < 1/2RL	DOD ratio
Aluminum	115.132	111.930	128.847	133.347	120.165	128.047	133.902	139.012	126.298	100.0	9.617	28.832	200	TRUE	TRUE	TRUE	4
Antimony	33.099	30.126	32.303	33.367	31.594	32.358	32.761	30.635	32.030	30.0	1.159	3.476	10	TRUE	TRUE	TRUE	9
Arsenic	1.847	3.172	3.082	3.233	2.293	3.606	3.146	3.436	2.977	2.0	0.597	1.790	10	TRUE	TRUE	TRUE	2
Barium	7.227	7.373	7.335	7.425	7.282	8.535	7.322	7.279	7.472	8.0	0.434	1.301	200	TRUE	TRUE	TRUE	6
Beryllium	2.996	2.793	3.319	3.416	3.109	3.298	3.520	3.561	3.251	2.5	0.267	0.799	5	TRUE	TRUE	TRUE	4
Calcium	224.012	223.195	216.282	217.951	218.107	252.123	217.128	219.863	223.583	200.0	11.855	35.570	5000	TRUE	TRUE	TRUE	6
Cadmium	2.360	1.920	2.254	2.680	2.284	2.154	2.311	2.192	2.269	2.5	0.214	0.641	5	TRUE	TRUE	TRUE	4
Chromium	5.459	4.769	4.325	5.157	4.811	4.623	4.626	4.766	4.804	5.0	0.358	1.073	10	TRUE	TRUE	TRUE	4
Cobalt	0.922	1.230	1.208	0.709	1.419	1.607	1.118	1.057	1.159	2	0.279	0.838	10	TRUE	TRUE	TRUE	1
Copper	14.077	12.881	13.201	13.310	12.658	13.002	12.658	12.513	13.038	12.5	0.503	1.508	5	TRUE	TRUE	TRUE	9
Iron	48.043	41.605	27.161	31.136	27.028	34.574	35.850	23.514	33.614	50.0	8.204	24.596	100	TRUE	TRUE	TRUE	1
Lead	8.443	9.146	8.583	9.570	9.247	8.431	9.139	8.236	8.849	10.0	0.484	1.450	3	TRUE	TRUE	TRUE	6
Magnesium	204.020	212.515	207.210	210.492	211.191	237.212	208.614	208.429	212.460	200.0	10.337	30.991	5000	TRUE	TRUE	TRUE	7
Manganese	1.856	1.857	1.727	1.777	1.775	1.768	1.711	1.792	1.783	1.5	0.053	0.159	10	TRUE	TRUE	TRUE	11
Nickel	1.669	1.408	1.181	1.215	1.818	1.163	1.091	0.9544474	1.312	1.6	0.297	0.891	5	TRUE	TRUE	TRUE	1
Potassium	154.555	154.960	152.491	155.061	151.579	173.648	152.916	152.135	155.918	200.0	7.287	21.848	5000	TRUE	TRUE	TRUE	7
Selenium	3.165	3.301	3.487	3.612	2.669	3.035	2.735	2.868	3.109	3.5	0.345	1.034	5	TRUE	TRUE	TRUE	3
Silver	1.921	1.747	1.599	1.639	1.518	1.397	1.223	1.357	1.550	1.0	0.225	0.676	5	TRUE	TRUE	TRUE	2
Sodium	388.108	440.925	409.279	395.004	382.530	356.919	352.072	368.639	386.684	100.0	29.156	87.411	5000	TRUE	TRUE	TRUE	4
Thallium	8.097	8.463	9.721	8.370	10.331	10.166	10.489	10.073	9.464	12.5	0.986	2.955	10	TRUE	TRUE	TRUE	3
Vanadium	1.025	1.165	0.998	1.016	1.399	1.080	1.105	0.957	1.093	1.0	0.140	0.420	20	TRUE	TRUE	TRUE	3
Zinc	9.353	8.558	8.366	8.254	8.129	8.972	10.862	8.945	8.930	6.0	0.884	2.650	20	TRUE	TRUE	TRUE	3

Additional Analtyes

Bismuth	7.813	5.418	4.608	4.796	5.277	4.035	4.410	3.957	5.039	5.0	1.237	3.709	50	TRUE	TRUE	TRUE	1
Molybdenum	12.747	12.331	12.317	13.356	12.340	13.199	13.121	12.283	12.712	10.0	0.454	1.362	50	TRUE	TRUE	TRUE	9
Tin	12.172	12.388	12.404	12.692	11.312	13.631	12.555	13.235	12.536	10.0	0.693	2.078	50	TRUE	TRUE	TRUE	6
Titanium	1.896	1.669	1.620	1.546	1.591	1.753	1.603	1.655	1.667	1.0	0.111	0.334	50	TRUE	TRUE	TRUE	5

CompuChem
A Division Of
Liberty Analytical Corp.

Demonstration of Capability
Certification Statement

Study Date: January 15, 2009
Laboratory Name: CompuChem, a Division of Liberty Analytical Corporation
Laboratory Address: 501 Madison Avenue, Cary, NC 27513
Analyst Name/Employee ID#: **Perry, T. Brian/2650**

Matrix: Water
Method Number: 3510C; 8270C; 625; OLM04.3; OLC03.2; SOM01.2
SOP No./Rev#: 2.5.2.7/12; 2.5.1.2/3; 2.4.4.2/1; 2.4.4.4/5; 2.4.3.1/4; 2.4.4.1/1; 2.4.4.3/5
Analyte/Class of Analytes/Measured Parameters: Semivolatiles (plus Appendix 9 compounds)

We, the undersigned, CERTIFY that:

1. The analyst identified above, using the cited test method, which is in use at this facility for the analyses of samples under the National Environmental Laboratory Accreditation Program, have met the Demonstration of Capability.

2. The test method was performed by the analyst identified on this certification.

3. A copy of the test method and the laboratory-specific SOPs are available for all personnel on-site.

4. The data associated with the demonstration capability are true, accurate, complete and self-explanatory.

5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these analyses have been retained at the facility, and that the associated information is well organized and available for review by authorized assessors.

Kathryn Humphries, Organic Extractables Manager Technical Director's Name and Title	Kathryn E Humphries Signature	2/20/09 Date
Jennifer B. Rebman, QA Manager Quality Assurance Officer's Name	 Signature	2/20/09 Date

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Accurate: Based on good laboratory practices consistent with sound scientific principles/practices.
Complete: Includes the results of all supporting performance testing.
Self-Explanatory: Data properly labeled and stored so that the results are clear and require no additional explanation.

Preparation: IDOC
Ann McKoy01-14-09
Analysis: DOC
Brian Perry01-15-09

Analyst Capability Study

Laboratory Name/North Carolina Certificate Number: CompuChem/79											
Prep. Analyst: Jim Feldhaus/2605											
Analyst: Jim Feldhaus/2605											
Date: June 6, 2006											
Instrument: ICP-MS MS1											
Method: 3005A/6020											
Parameter	TrueVal	Rep# 1	Rep# 2	Rep# 3	Rep# 4	Mean	Mean	SOP range	SD(n-1)	SOP	RSD
	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	% R	ug/L	ug/L	% RSD	%
	7m1-35-22										
Aluminum	496	539	529	533	548	537	108	80-120	8	20	1.5
Antimony	198	200	196	198	205	200	101	80-120	4	20	1.9
Arsenic	199	187	185	190	192	189	95	80-120	3.1	20	1.6
Barium	100	98	97	95	99	97	97	80-120	2	20	1.8
Beryllium	99	98	97	95	99	97	98	80-120	1.7	20	1.8
Cadmium	99	97	95	97	99	97	98	80-120	1.6	20	1.7
Chromium	98	101	99	100	102	101	103	80-120	1.3	20	1.3
Cobalt	99	105	102	103	106	104	105	80-120	2	20	1.8
Copper	98	101	99	100	103	101	103	80-120	1.7	20	1.7
Lead	199	200	199	200	204	201	101	80-120	2.22	20	1.1
Manganese	99	101	99	100	103	101	102	80-120	1.7	20	1.7
Nickel	98	103	100	100	105	102	104	80-120	2	20	2.4
Selenium	201	192	190	193	195	193	96	80-120	2.1	20	1.1
Silver	99	103	101	102	105	103	104	80-120	1.7	20	1.7
Thallium	205	207	205	208	212	208	101	80-120	2.9	20	1.4
Vanadium	100	102	99	101	104	102	102	80-120	2	20	2.1
Zinc	200	188	185	186	190	187	94	80-120	2.2	20	1.2
Molybdenum	100	106	103	106	107	106	106	80-120	1.7	20	1.6
Tin	100	105	103	105	108	105	105	80-120	2.1	20	2.0
Note: True values for Tin and Molybdenum from separately prepared standards											

CompuChem
A Division Of
Liberty Analytical Corp.

Demonstration of Capability
Certification Statement

Study Date: January 7, 2008
Laboratory Name: CompuChem, a Division of Liberty Analytical Corporation
Laboratory Address: 501 Madison Avenue, Cary, NC 27513
Analyst Name/Employee ID#: **Bolton, Norma/1151**

Matrix: Soil and Water
Method Number: ILM05.4, ILM04.1, 245.5, 7471A
SOP No./Rev#: 3.3.1/r17; 3.3.2/r15; 3.3.3/r15; 3.3.4/r21
Analyte/Class of Analytes/Measured Parameters: Mercury

We, the undersigned, CERTIFY that:

1. The analyst identified above, using the cited test method, which is in use at this facility for the analyses of samples under the National Environmental Laboratory Accreditation Program, have met the Demonstration of Capability.

2. The test method was performed by the analyst identified on this certification.

3. A copy of the test method and the laboratory-specific SOPs are available for all personnel on-site.

4. The data associated with the demonstration capability are true, accurate, complete and self-explanatory.

5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these analyses have been retained at the facility, and that the associated information is well organized and available for review by authorized assessors.

James Feldhaus, Supervisor Inorganics		01-22-08
Technical Director's Name and Title	Signature	Date
Valgena Respass, QA Manager		1/21/08
Quality Assurance Officer's Name	Signature	Date

This certification form must be completed each time a demonstration of capability study is completed.

(1) True: Consistent with supporting data.
Accurate: Based on good laboratory practices consistent with sound scientific principles/practices.
Complete: Includes the results of all supporting performance testing.
Self-Explanatory: Data properly labeled and stored so that the results are clear and require no additional explanation.

CompuChem
A Division Of
Liberty Analytical Corp.

Demonstration of Capability
Certification Statement

Study Date: February 24, 2008
Laboratory Name: CompuChem, a Division of Liberty Analytical Corporation
Laboratory Address: 501 Madison Avenue, Cary, NC 27513
Analyst Name/Employee ID#: **Mohn/2695**

Matrix: Water
Method Number: 314.0
SOP No./Rev#: 3.5.22.2/0
Analyte/Class of Analytes/Measured Parameters: Perchlorate

We, the undersigned, CERTIFY that:

1. The analyst identified above, using the cited test method, which is in use at this facility for the analyses of samples under the National Environmental Laboratory Accreditation Program, have met the Demonstration of Capability.

2. The test method was performed by the analyst identified on this certification.

3. A copy of the test method and the laboratory-specific SOPs are available for all personnel on-site.

4. The data associated with the demonstration capability are true, accurate, complete and self-explanatory.

5. All raw data (including a copy of this certification form) necessary to reconstruct and validate these analyses have been retained at the facility, and that the associated information is well organized and available for review by authorized assessors.

Kenneth Grzybowski, Laboratory Manager Technical Director's Name and Title	Signature	7-17-9 Date
Jennifer B. Rebman, QA Manager Quality Assurance Officer's Name	Signature	7/17/09 Date

This certification form must be completed each time a demonstration of capability study is completed.

(1) True: Consistent with supporting data.
Accurate: Based on good laboratory practices consistent with sound scientific principles/practices.
Complete: Includes the results of all supporting performance testing.
Self-Explanatory: Data properly labeled and stored so that the results are clear and require no additional explanation.

Perchlorate Method: 314.0
Study Date: 7/17/09
Matrix: Water
Analyst: J. Mohn/2695
Instrument: ICS 2000

Parameter	Rep#1 ug/L	Rep#2 ug/L	Rep#3 ug/L	Rep#4 ug/L	Rep#5 ug/L	Rep#6 ug/L	Rep#7 ug/L	Rep#8 ug/L	Mean ug/L	Test Conc. ug/L	S.Dev. ug/L	MDL ug/L	RL ug/L	40-CFR
Perchlorate	0.448	1.319	2.911	1.302	1.165	0.911	1.130	2.290	1.43	2.00	0.789	2.36	4.00	TRUE

* Dixon Outlier

CompuChem

A Division Of

Liberty Analytical Corp.

11/12/2009

JANET FRAZIER

DRAPER

2206 SOUTH MAIN STREET

BLACKSBURG, VA 24060

Subject:

Report of Data - Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07
WorkOrder: 0910165

Attn. JANET FRAZIER

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES ____

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

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SDG NARRATIVE
SDG # 0910165

The 8 water samples were received intact properly refrigerated between -1.7C and 2.3C, with proper documentation, in sealed a shipping container, on October 21st, 2009. The samples were scheduled for the requested analysis of the Wet Chemistry fraction. The samples were analyzed, in accordance with current EPA methods, for the analytes requested as per the COC, with the exceptions and/or additions requested by the client.

SAMPLE IDs:
The cover page contained in this package lists the client ID's and the associated CompuChem numbers which are part of this SDG.

INSTRUMENTAL QUALITY CONTROL:
All calibration verification solutions (ICV & CCV), blanks (ICB, & CCB), associated with this data were confirmed to be within allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:
The sample preparation procedure verifications (LCS & Blank) were found to be within acceptable ranges and all field samples were prepared and analyzed within the contract specified holding times.

MATRIX RELATED QUALITY CONTROL:
13MW5 *(0910165-01)* was used as the original to prepare the matrix spike and matrix spike duplicate. The associated spikes were found to be inside control limits.

I certify that this Sample 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 Sample Data Package and in the electronic data deliverable has been authorized by the Laboratory Manager or the Manager's designee, as verified by the following signature.

Preeti Khare
Analyst II
October 28, 2009

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
13MW5	0910165-01	Water	10/19/2009 08:50	10/21/2009 16:00
13MW1	0910165-02	Water	10/20/2009 08:50	10/21/2009 16:00
13MW2	0910165-03	Water	10/20/2009 09:30	10/21/2009 16:00
13MW3	0910165-04	Water	10/19/2009 07:40	10/21/2009 16:00
13MW4	0910165-05	Water	10/20/2009 08:05	10/21/2009 16:00
13MWDUP	0910165-06	Water	10/20/2009 08:20	10/21/2009 16:00
13MW6	0910165-07	Water	10/19/2009 10:30	10/21/2009 16:00
13MW7	0910165-08	Water	10/19/2009 11:30	10/21/2009 16:00

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW5

0910165-01 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
COMPUCHEM								
INORGANIC ANIONS BY IC								
Perchlorate	ND	4.000	ug/L	1	9102248	10/22/2009 14:41	10/22/2009 23:02	EPA 314.0 U

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW1

0910165-02 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	
COMPUCHEM									
INORGANIC ANIONS BY IC									
Perchlorate	**2.802**	4.000	ug/L	1	9102248	10/22/2009 14:41	10/22/2009 23:50	EPA 314.0	J

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW2

0910165-03 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	
COMPUCHEM									
INORGANIC ANIONS BY IC									
Perchlorate	ND	4.000	ug/L	1	9102248	10/22/2009 14:41	10/23/2009 00:37	EPA 314.0	U

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW3

0910165-04 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	
COMPUCHEM									
INORGANIC ANIONS BY IC									
Perchlorate	ND	4.000	ug/L	1	9102248	10/22/2009 14:41	10/23/2009 00:53	EPA 314.0	U

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joe Mohn For Cathy Dover, Project Manager

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW4

0910165-05 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
COMPUCHEM								
INORGANIC ANIONS BY IC								
Perchlorate	**132.2**	4.000	ug/L	1	9102248	10/22/2009 14:41	10/23/2009 01:09	EPA 314.0

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joe Mohn For Cathy Dover, Project Manager

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MWDUP

0910165-06 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
COMPUCHEM								
INORGANIC ANIONS BY IC								
Perchlorate	**140.8**	4.000	ug/L	1	9102248	10/22/2009 14:41	10/23/2009 01:25	EPA 314.0

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joe Mohn For Cathy Dover, Project Manager

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DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW6

0910165-07 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method
COMPUCHEM								
INORGANIC ANIONS BY IC								
Perchlorate	**5.156**	4.000	ug/L	1	9102248	10/22/2009 14:41	10/23/2009 01:41	EPA 314.0

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joe Mohn For Cathy Dover, Project Manager

CompuChem
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Liberty Analytical Corp.

DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

13MW7

0910165-08 (Water)

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	
COMPUCHEM									
INORGANIC ANIONS BY IC									
Perchlorate	**3.805**	4.000	ug/L	1	9102248	10/22/2009 14:41	10/23/2009 01:57	EPA 314.0	J

DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

INORGANIC ANIONS BY IC - Quality Control

COMPUCHEM

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 9102248 - NO PREP										
Blank (9102248-BLK1)				Prepared: 10/22/2009 14:41 Analyzed: 10/22/2009 21:26						
Perchlorate	ND	4.000	ug/L							U
LCS (9102248-BS1)				Prepared: 10/22/2009 14:41 Analyzed: 10/22/2009 21:42						
Perchlorate	302.4	4.000	ug/L	300.0		101	85-115		20	
Matrix Spike (9102248-MS1)	**Source: 0910165-01**			Prepared: 10/22/2009 14:41 Analyzed: 10/22/2009 23:18						
Perchlorate	95.54	4.000	ug/L	100.0	0.000	96	80-120		20	
Matrix Spike Dup (9102248-MSD1)	**Source: 0910165-01**			Prepared: 10/22/2009 14:41 Analyzed: 10/22/2009 23:34						
Perchlorate	89.91	4.000	ug/L	100.0	0.000	90	80-120	6	20	

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Joe Mohn For Cathy Dover, Project Manager

DRAPER	Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07	
2206 SOUTH MAIN STREET	Project Number: RAAP SEMI-ANNUAL MONITORING 2009/B(	**Reported:**
BLACKSBURG VA, 24060	Project Manager: JANET FRAZIER	11/12/2009 09:43

Notes and Definitions

U	The compound was analyzed for but not detected (CLP U-flag).
J	Compound detected below the Reporting Limit; therefore, result is an estimated concentration (CLP J-flag).
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

Items for Project Manager Review

LabNumber	Analysis	Analyte	Exception
			Default Report (not modified)
			VERSION 6.01:4018
	IC 314.0 Perchlorate Water	(WATER)	B-Flags used
	IC 314.0 Perchlorate Water	(WATER)	D-Flags used
	IC 314.0 Perchlorate Water	(WATER)	J-Flags used
	IC 314.0 Perchlorate Water	(WATER)	Result calculations based on MDL
	IC 314.0 Perchlorate Water	(WATER)	RPD calculations based on %Recovery
	IC 314.0 Perchlorate Water	(WATER)	U-Flags used

Page 1 of 1

Page 1 of 1

Page 1 of 1

13

COMPUCHEM
A DIVISION OF LIBERTY CORP

ANALYST: [signature]

DATE: 10/22/08 , 10/26/08

CASE(S): 0910116 , 0910165

METHOD 314.0 CL04 in Water

DIONEX IC 2000 CL04 RUN

Reviewed by: [signature]

Date: 10-28-09

Sample	Sample Name	Ret.Time	Area	Height	Amount	
No.		min	µS*min	µS	PPB	
		perchlorate	perchlorate	perchlorate	perchlorate	
		ECD_1	ECD_1	ECD_1	ECD_1	
1	500 PPB	8.1	0.2942	1.1697	509.0866	
2	200 PPB	8.12	0.1076	0.4284	186.222	
3	100 PPB	8.123	0.0493	0.2065	85.35	
4	50 PPB	8.12	0.0259	0.0963	44.8227	
5	20 PPB	8.134	0.0099	0.0485	17.1707	
6	10 PPB	8.113	0.0026	0.0201	4.5107	
7	4 PPB	8.207	0.001	0.0107	1.6793	
8	0 PPB	8.514	0.0006	0.0071	1.1127	
9	ICV	8.124	0.1756	0.6965	303.8489	
10	ICB	n.a.	n.a.	n.a.	n.a.	
11	CCV	8.12	0.1437	0.5693	248.5703	
12	CCB	8.27	0.0008	0.0106	1.3598	
13	PBW 9101905	n.a.	n.a.	n.a.	n.a.	- 9102248 - BLK1
14	LCSW 9101905	8.117	0.1748	0.6893	302.4171	- BS1
15	LCSWD 9101905	8.117	0.1764	0.6902	305.1522	- BSD1
16	0910116-01	8.17	0.0075	0.0296	12.971	see 10-26_04 CK
17	0910116-02	8.137	0.0066	0.0348	11.3802	for MS/MSD
18	0910116-03	8.027	0.0008	0.0163	1.3616	
19	0910165-01	8.22	0.001	0.0115	1.7059	
20	9102248-MS1	8.163	0.0552	0.2072	95.537	
21	9102248-MSD1	8.167	0.052	0.2144	89.9072	
22	0910165-02	7.987	0.0016	0.0176	2.8019	
23	CCV	8.144	0.1438	0.5669	248.8342	
24	CCB	7.997	0.0011	0.0145	1.8207	
25	0910165-03	n.a.	n.a.	n.a.	n.a.	
26	0910165-04	7.99	0.0007	0.0081	1.1631	
27	0910165-05	8.16	0.0764	0.3011	132.2358	
28	0910165-06	8.177	0.0814	0.3141	140.7555	
29	0910165-07	8.157	0.003	0.0256	5.1558	
30	0910165-08	8.32	0.0022	0.0136	3.8053	
31	CCV	8.154	0.1423	0.5743	246.289	
32	CCB	8.404	0.0009	0.0089	1.5483	
33	CCV	8.144	0.1376	0.5595	238.1172	
34	CCB	8.087	0.0005	0.0078	0.8942	
35	CCB	n.a.	n.a.	n.a.	n.a.	
Average:		8.154	0.0605	0.2442	104.7609	
Rel.Std.Dev:		1.33%	127.60%	124.36%	127.60%	

Reagent /Standards/QC Preparation for Perchlorate by IC

CompuChem a division of Liberty Analytical Corporation WORKSHEET 1 Y(7)

Sequence File Number: 10-22-09-C104

STANDARDS AND REAGENTS TRACEABILITY*	Ref #:	Manufacturer	Lot #	Expiration Date
1000 mg/L Perchlorate Stock Standard	1U(6)1-15-21	NSI	1011807	10/09
1000 mg/L Perchlorate Second Source Stock Standard	1U(6)1-10-21	HIGH PURITY STDS	518811	10/09
Eluent Solution (Elugen Cartridge)	1U(6)1-13-27	DIONEX	058900	N/A

STANDARD LOT NUMBER* *	PREPARATION INSTRUCTIONS	RESULTANT ANALYTE CONC (UG/L)
Intermediate Standard – 10 22 09 jm	Place in a 100- mL volumetric flask: 10 mL of 1000 mg/L Perchlorate Stock Standard. Dilute to the mark with deionized water.	10,000
S500 – 10 22 09 jm	Place in a 100- mL volumetric flask: 5.0 ml of the intermediate standard Dilute to the mark with deionized water.	500
S200 – 10 22 09 jm	Place in a 100-mL volumetric flask: 2.0 ml of the intermediate standard Dilute to the mark with deionized water.	200
S100 – 10 22 09 jm	Place in a 100-mL volumetric flask: 1.0 ml of the intermediate standard Dilute to the mark with deionized water.	100
S50 – 10 22 09 jm	Place in a 100-mL volumetric flask: 0.5 ml of the intermediate standard Dilute to the mark with deionized water.	50
S20 – 10 22 09 jm	Place in a 100-mL volumetric flask: 0.2 ml of the intermediate standard Dilute to the mark with deionized water.	20
S4 – 10 22 09 jm	Place in a 100-mL volumetric flask: .04 ml of the intermediate standard . Dilute to the mark with deionized water	4
CCV – 10 22 09 jm	Place in a 100-mL volumetric flask: 2.5ml of the intermediate standard . Dilute to the mark with deionized water	250
ICV/LCS 10 22 09 jm **(Used for IDOC)**	Place in a 100-mL volumetric flask: 0.030 ml of the 1000 mg/L Perchlorate Second Source Stock Standard. Dilute to the mark with deionized water	300
For Matrix Spike and Matrix Spike Duplicates	In a 15-mL plastic beaker: Add 0.100 mL of the intermediate standard to 9.9 mL of sample	100
2 ug/L **(used for MDL)**	Place in a 100-mL volumetric flask: .02 ml of the intermediate standard . Dilute to the mark with deionized water	2

* Ref# = Logbook ID, Page number, and item number from a Material Receipt Log

**Standard Lot Number consists of standard ID, date prepared, and initials of preparer.

The presence of the Chemist's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist together with the chemist's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Standard Solutions Prepared and Entered By: _____ Date: 10/22/09

Reviewed By: _____ Date: 10/28/09

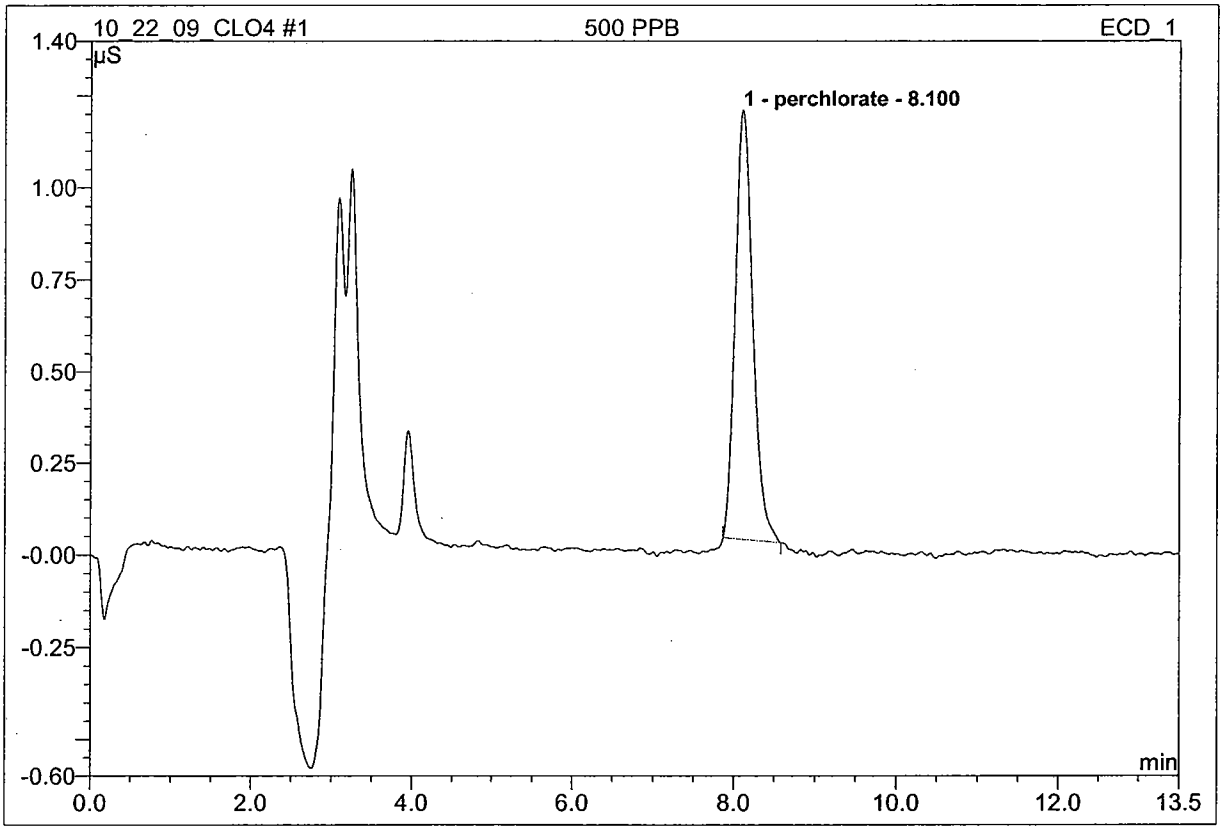
8/25/08:vr

Title:
Datasource: D143S571_local
Location:
Timebase: ICS_2000 Created: 10/22/2009 2:52:22 PM by chromeleon
#Samples: 35 Last Update: 10/26/2009 11:11:30 AM by chromeleon

No.	Name	Inj. Date/Time	Weight	Dil. Factor	ISTD Amount	Sample ID	Replicate ID	Comment
1	500 PPB	10/22/2009 6:15:59 PM	1.0000	1.0000	1.0000		99	
2	200 PPB	10/22/2009 6:31:53 PM	1.0000	1.0000	1.0000		100	
3	100 PPB	10/22/2009 6:47:48 PM	1.0000	1.0000	1.0000		101	
4	50 PPB	10/22/2009 7:03:41 PM	1.0000	1.0000	1.0000		102	
5	20 PPB	10/22/2009 7:19:35 PM	1.0000	1.0000	1.0000		102	
6	10 PPB	10/22/2009 7:35:30 PM	1.0000	1.0000	1.0000		103	
7	4 PPB	10/22/2009 7:51:24 PM	1.0000	1.0000	1.0000		104	
8	0 PPB	10/22/2009 8:07:19 PM	1.0000	1.0000	1.0000		01	
9	ICV	10/22/2009 8:23:13 PM	1.0000	1.0000	1.0000		02	
10	ICB	10/22/2009 8:39:07 PM	1.0000	1.0000	1.0000		03	
11	CCV	10/22/2009 8:55:01 PM	1.0000	1.0000	1.0000		04	
12	CCB	10/22/2009 9:10:56 PM	1.0000	1.0000	1.0000		05	
13	PBW	10/22/2009 9:26:50 PM	1.0000	1.0000	1.0000		06	
14	LCSW	10/22/2009 9:42:45 PM	1.0000	1.0000	1.0000		07	
15	LCSWD	10/22/2009 9:58:39 PM	1.0000	1.0000	1.0000		08	
16	0910116-01	10/22/2009 10:14:34 PM	1.0000	1.0000	1.0000		09	
17	0910116-02	10/22/2009 10:30:28 PM	1.0000	1.0000	1.0000		10	
18	0910116-03	10/22/2009 10:46:23 PM	1.0000	1.0000	1.0000		11	
19	0910165-01	10/22/2009 11:02:17 PM	1.0000	1.0000	1.0000		12	
20	9102248-MS1	10/22/2009 11:18:11 PM	1.0000	1.0000	1.0000		13	
21	9102248-MSD1	10/22/2009 11:34:05 PM	1.0000	1.0000	1.0000		14	
22	0910165-02	10/22/2009 11:50:00 PM	1.0000	1.0000	1.0000		15	
23	CCV	10/23/2009 12:05:53 AM	1.0000	1.0000	1.0000		16	
24	CCB	10/23/2009 12:21:49 AM	1.0000	1.0000	1.0000		17	
25	0910165-03	10/23/2009 12:37:45 AM	1.0000	1.0000	1.0000		18	
26	0910165-04	10/23/2009 12:53:39 AM	1.0000	1.0000	1.0000		19	
27	0910165-05	10/23/2009 1:09:34 AM	1.0000	1.0000	1.0000		20	
28	0910165-06	10/23/2009 1:25:28 AM	1.0000	1.0000	1.0000		20	
29	0910165-07	10/23/2009 1:41:23 AM	1.0000	1.0000	1.0000		20	
30	0910165-08	10/23/2009 1:57:16 AM	1.0000	1.0000	1.0000		20	
31	CCV	10/23/2009 2:13:12 AM	1.0000	1.0000	1.0000		20	
32	CCB	10/23/2009 2:29:05 AM	1.0000	1.0000	1.0000		20	
33	CCV	10/23/2009 2:45:00 AM	1.0000	1.0000	1.0000		20	
34	CCB	10/23/2009 3:00:54 AM	1.0000	1.0000	1.0000		20	
35	CCB	10/23/2009 3:16:52 AM	1.0000	1.0000	1.0000		20	

1 500 PPB

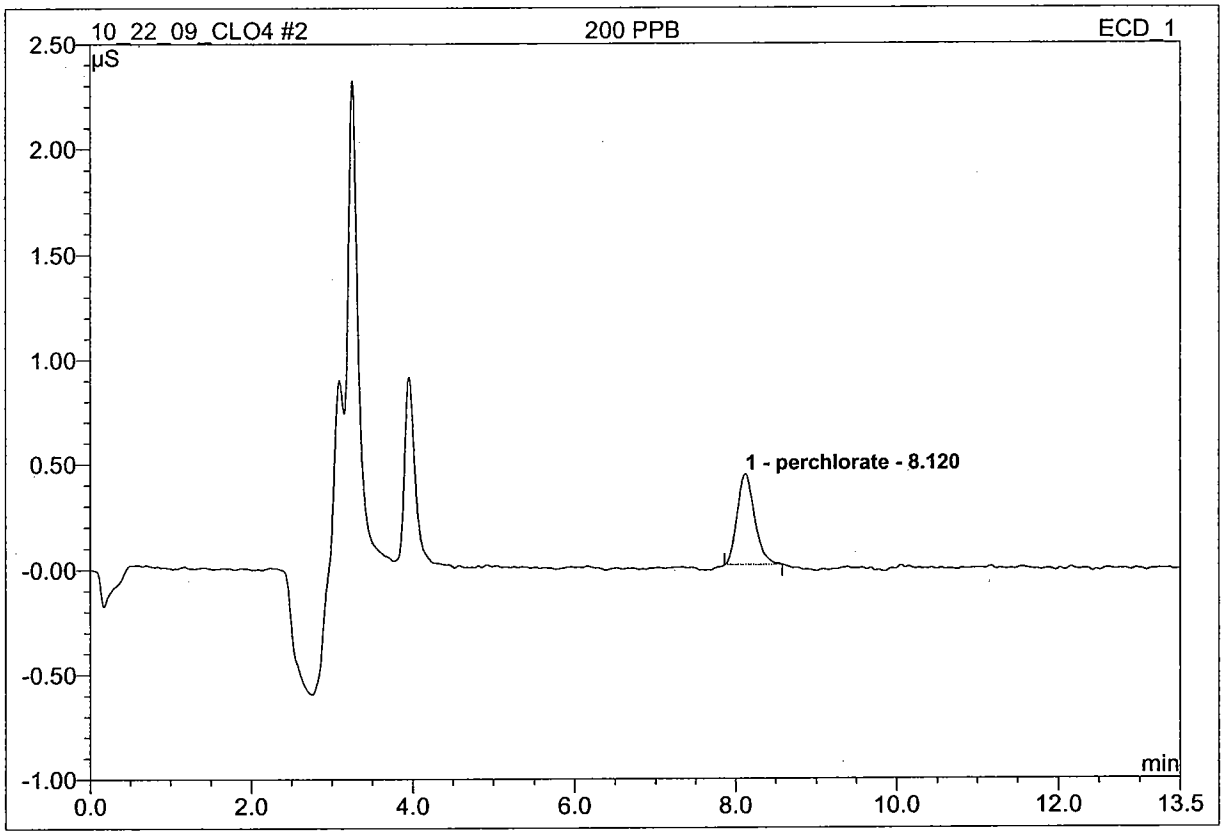
Sample Name:	**500 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**99**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 18:15**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.10	perchlorate	1.170	0.294	100.00	509.195	BMB
Total:			1.170	0.294	100.00	509.195	

2 200 PPB

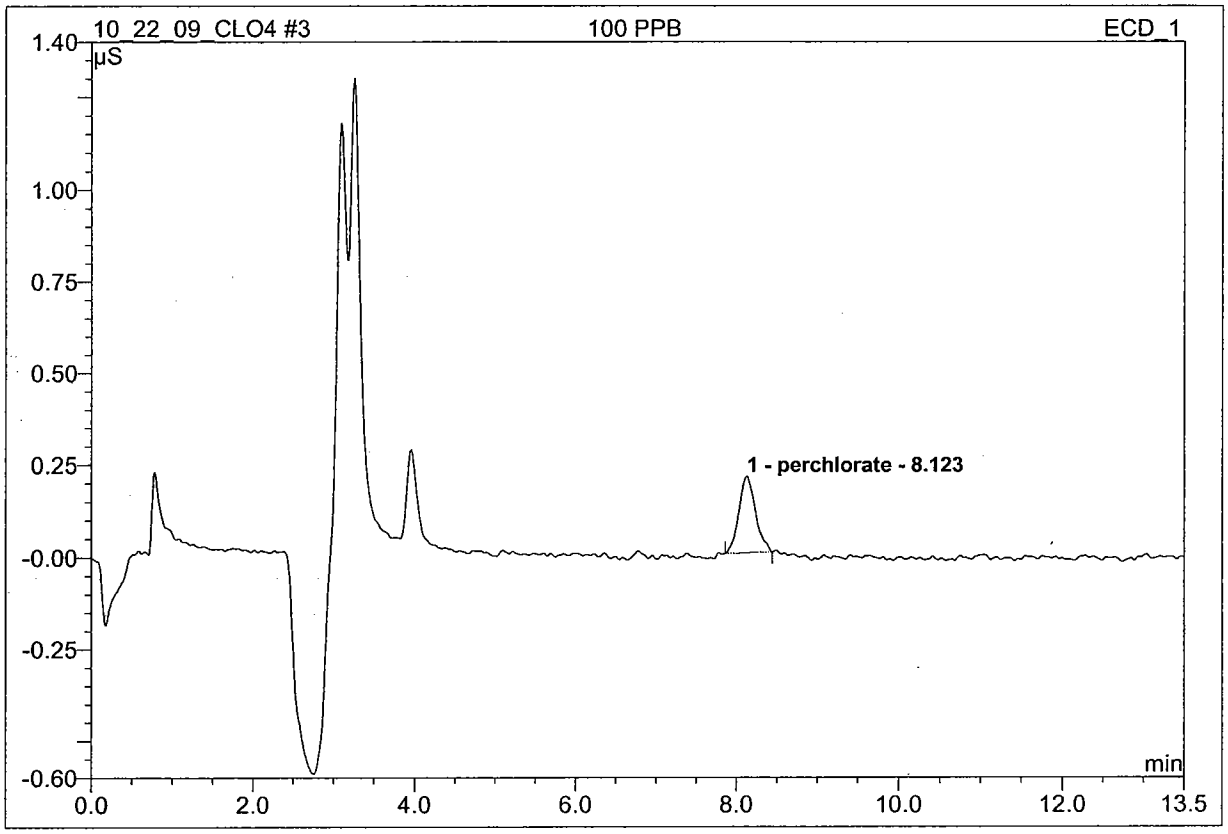
Sample Name:	**200 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**100**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 18:31**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.12	perchlorate	0.428	0.108	100.00	186.262	BMB
Total:			0.428	0.108	100.00	186.262	

3 100 PPB

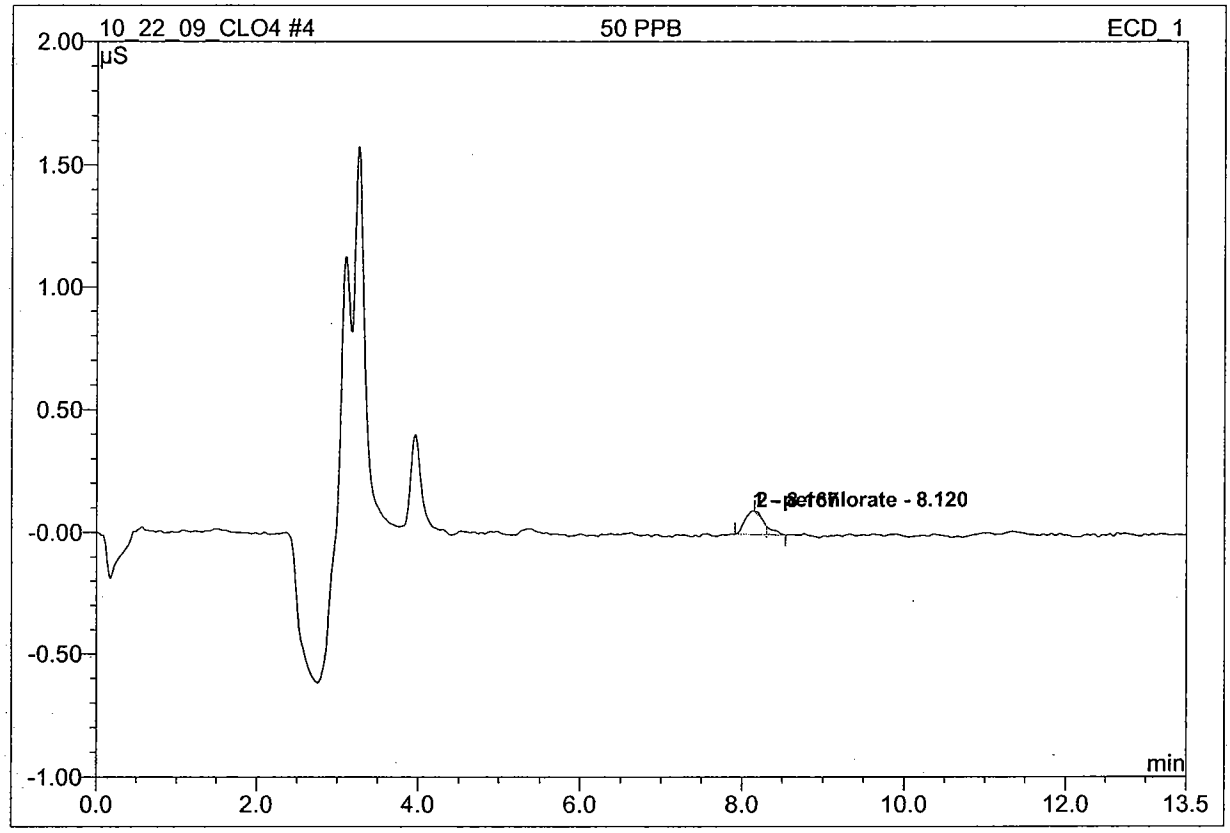
Sample Name:	**100 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**101**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 18:47**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.12	perchlorate	0.206	0.049	100.00	85.368	BMB
Total:			0.206	0.049	100.00	85.368	

4 50 PPB

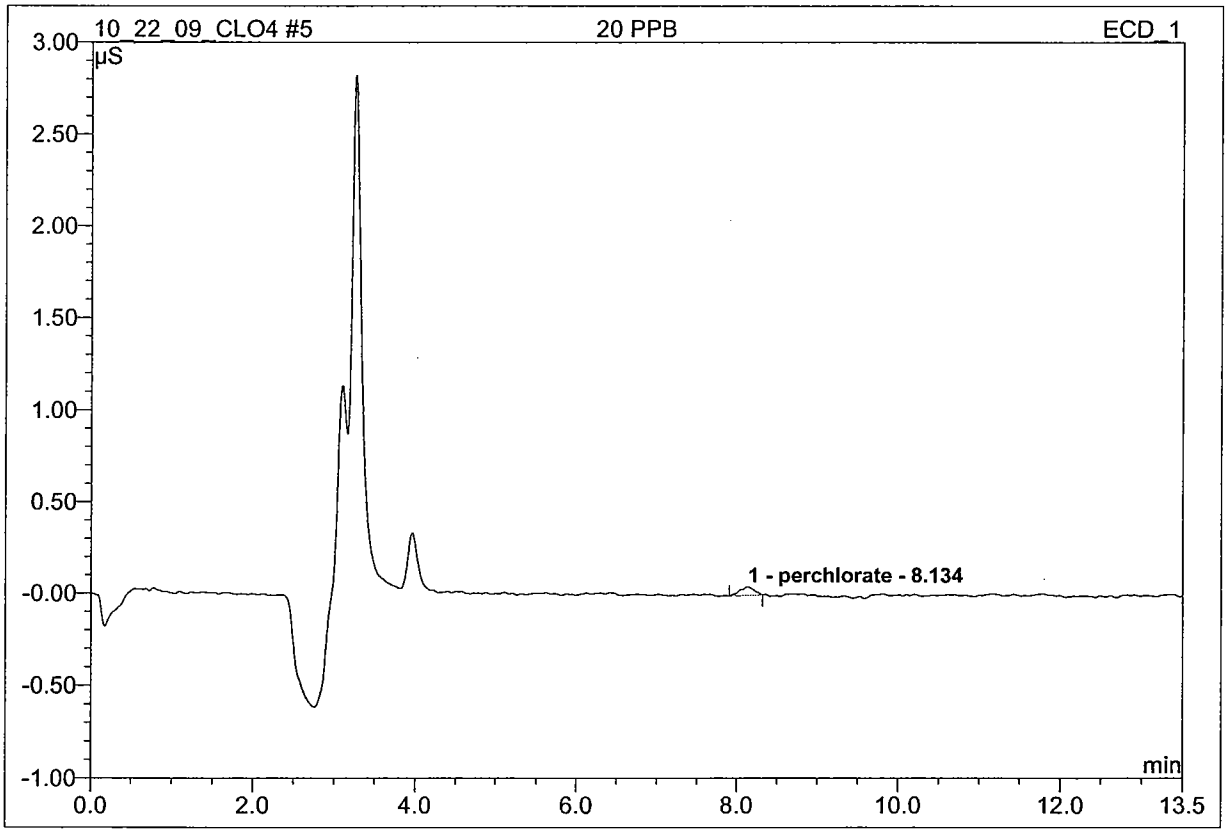
Sample Name:	**50 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**102**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 19:03**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.12	perchlorate	0.096	0.026	96.31	44.832	BMB
2	8.17	n.a.	0.007	0.001	3.69	n.a.	Rd
Total:			0.103	0.027	100.00	44.832	

5 20 PPB

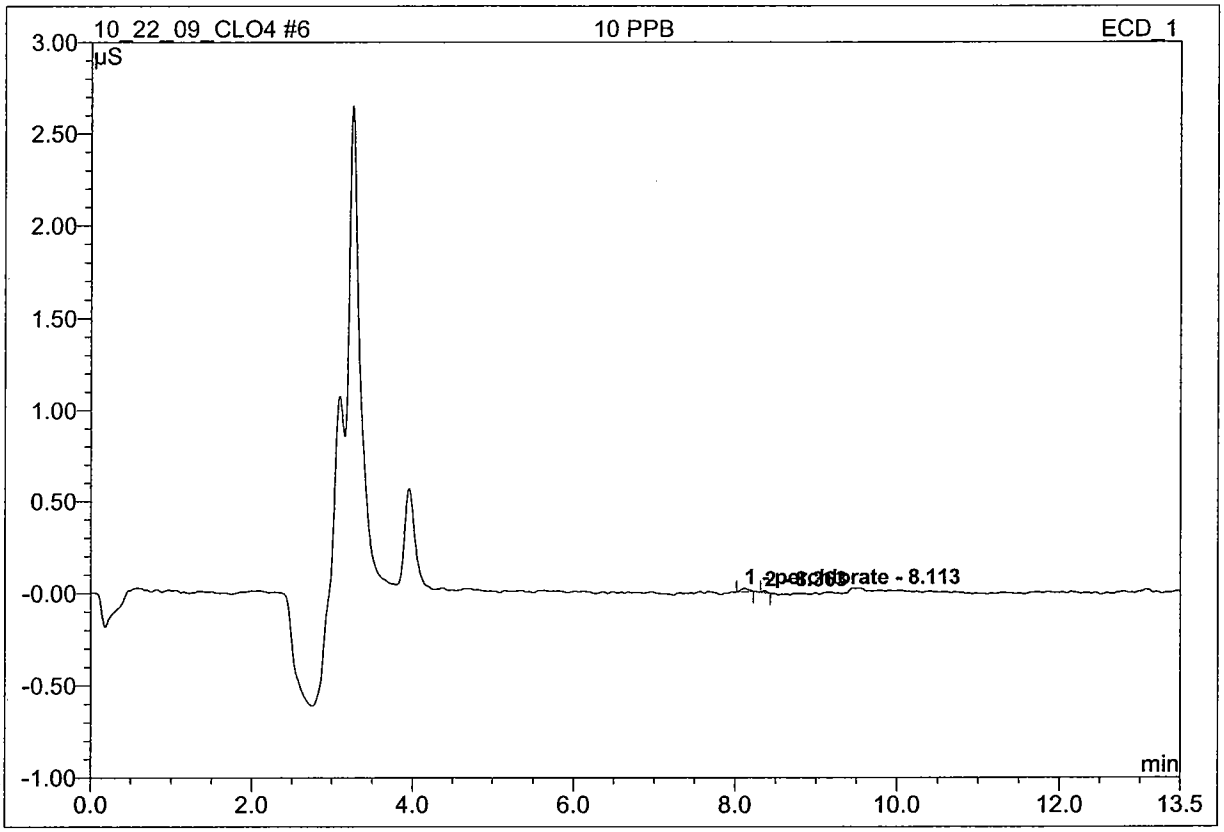
Sample Name:	**20 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**103**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 19:19**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.13	perchlorate	0.048	0.010	100.00	17.174	BMB
Total:			0.048	0.010	100.00	17.174	

6 10 PPB

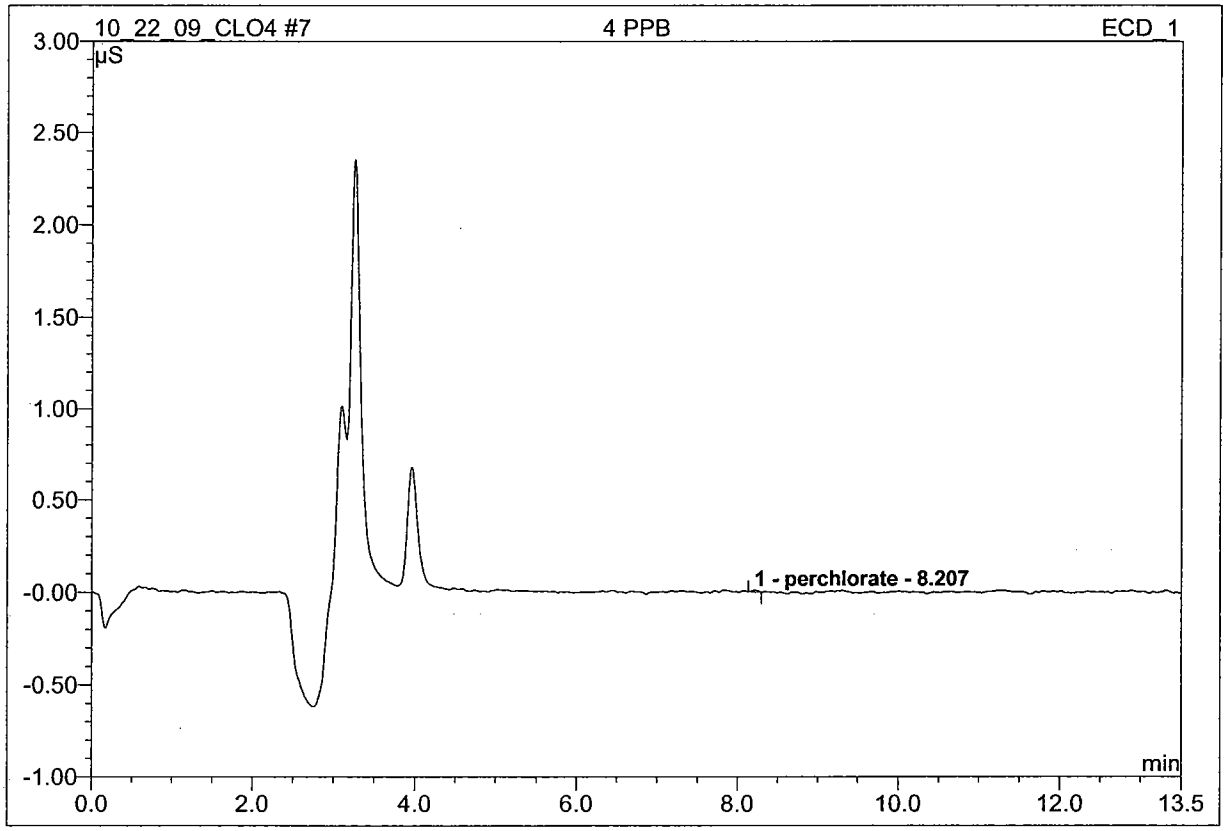
Sample Name:	**10 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**103**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 19:35**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.11	perchlorate	0.019	0.002	74.30	3.769	BMB
2	8.36	n.a.	0.013	0.001	25.70	n.a.	BMB
Total:			0.032	0.003	100.00	3.769	

7 4 PPB

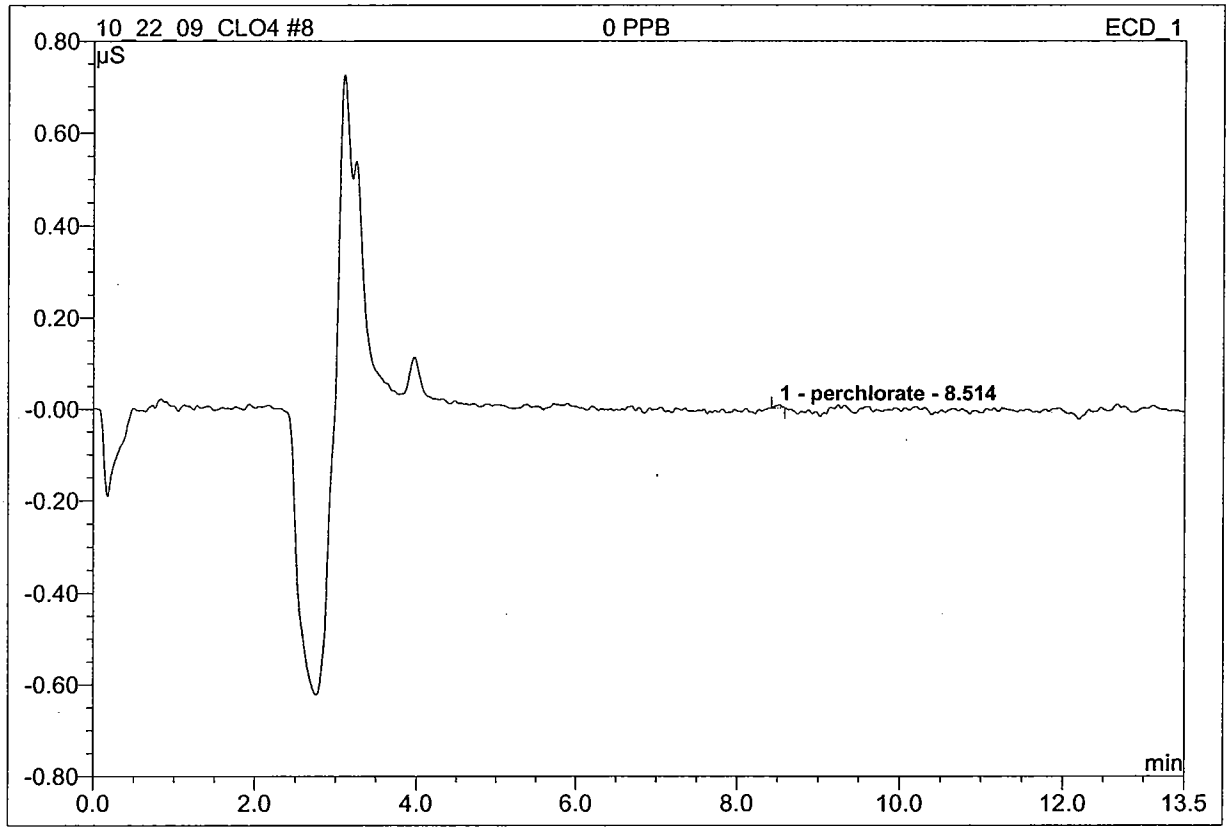
Sample Name:	**4 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**104**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 19:51**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.21	perchlorate	0.011	0.001	100.00	1.680	BMB
Total:			0.011	0.001	100.00	1.680	

8 0 PPB

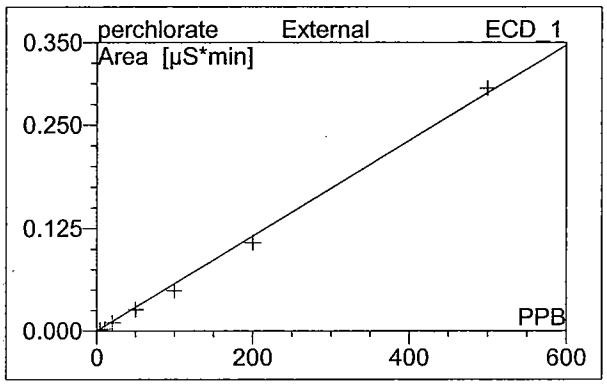
Sample Name:	**0 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 20:07**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**

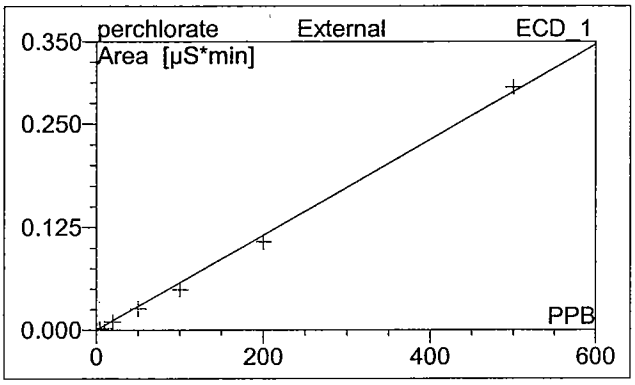


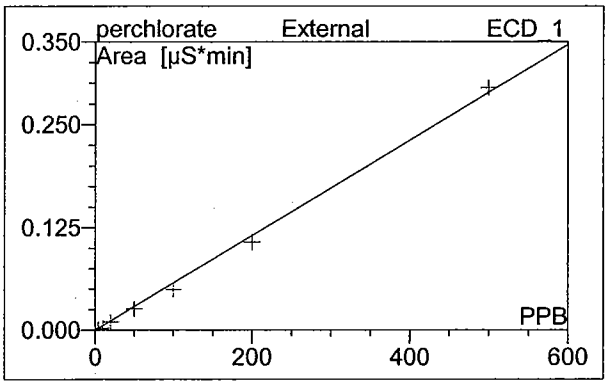
No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.51	perchlorate	0.007	0.001	100.00	1.113	BMB
Total:			0.007	0.001	100.00	1.113	

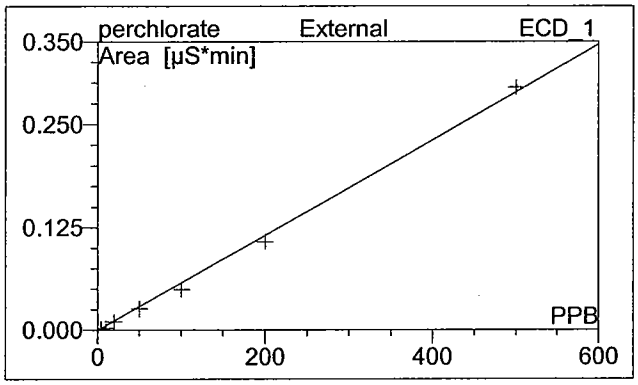
8 0 PPB

Sample Name:	**0 PPB**	*Injection Volume:*	**20.0**
Vial Number:	**1**	*Channel:*	**ECD_1**
Sample Type:	**standard**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**###############**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**





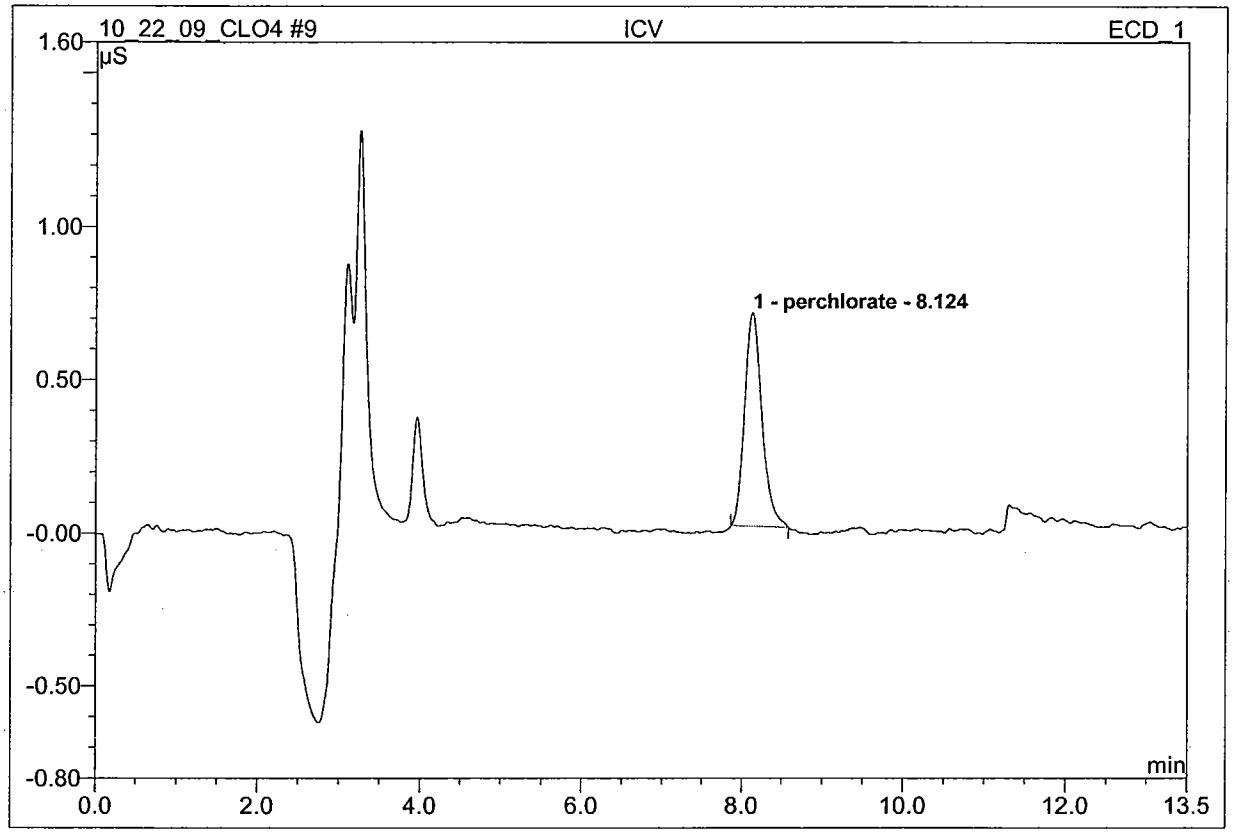




No.	Ret.Time min	Peak Name	Cal.Type	Points	Corr.Coeff. %	Offset	Slope	Curve
1	8.51	perchlorate	Lin	7	99.9308	0.0000	0.0006	0.0000
Average:					99.9308	0.0000	0.0006	0.0000

9 ICV

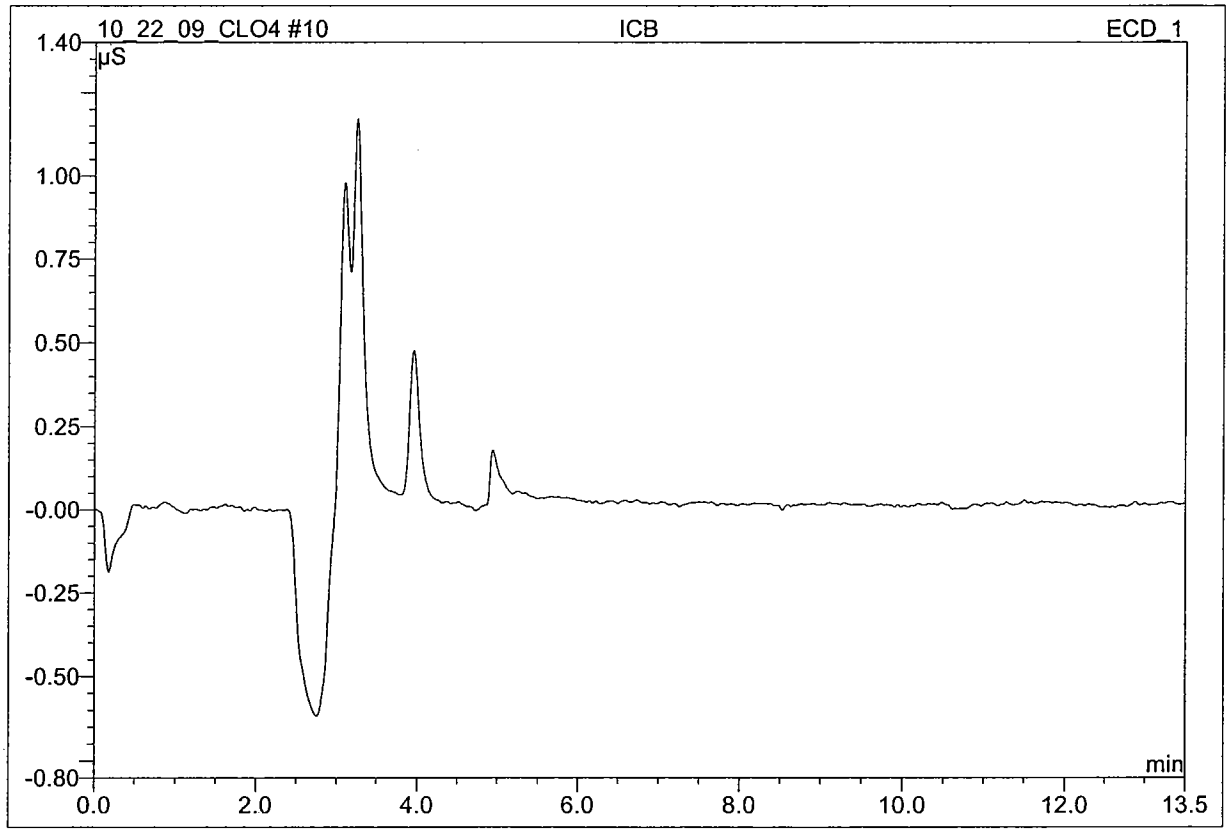
Sample Name:	**ICV**	*Injection Volume:*	**20.0**
Vial Number:	**2**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 20:23**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.12	perchlorate	0.696	0.176	100.00	303.913	BMB
Total:			0.696	0.176	100.00	303.913	

10 ICB

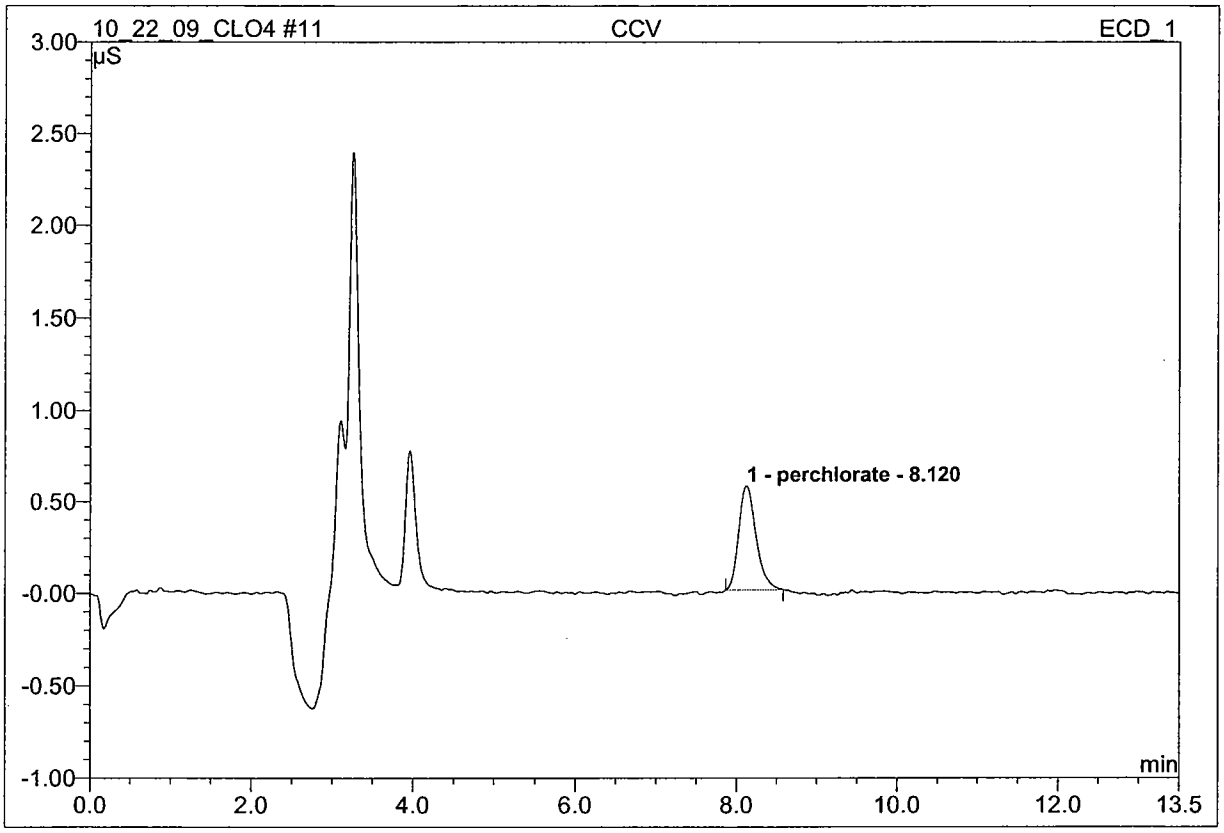
Sample Name:	**ICB**	*Injection Volume:*	**20.0**
Vial Number:	**3**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 20:39**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
Total:			0.000	0.000	0.00	0.000	

11 CCV

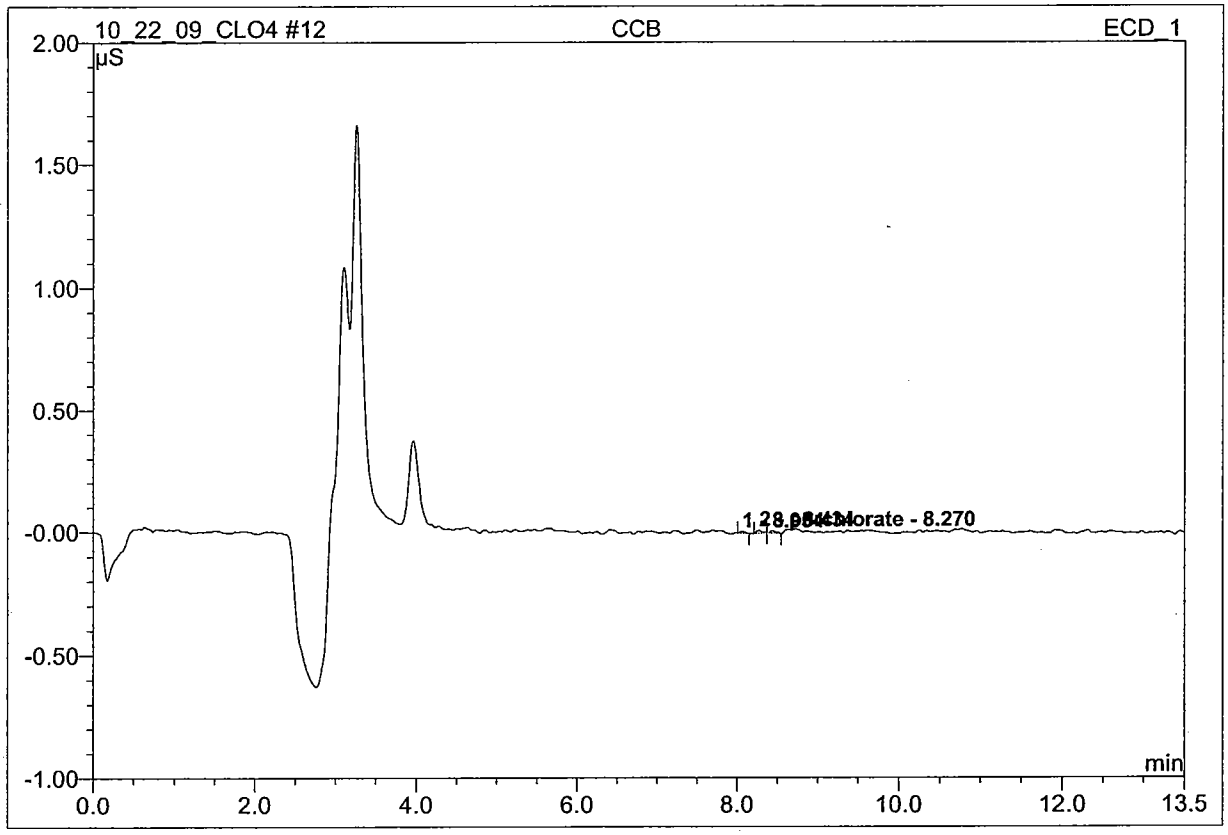
Sample Name:	**CCV**	*Injection Volume:*	**20.0**
Vial Number:	**4**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 20:55**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.12	perchlorate	0.569	0.144	100.00	248.623	BMB
Total:			0.569	0.144	100.00	248.623	

12 CCB

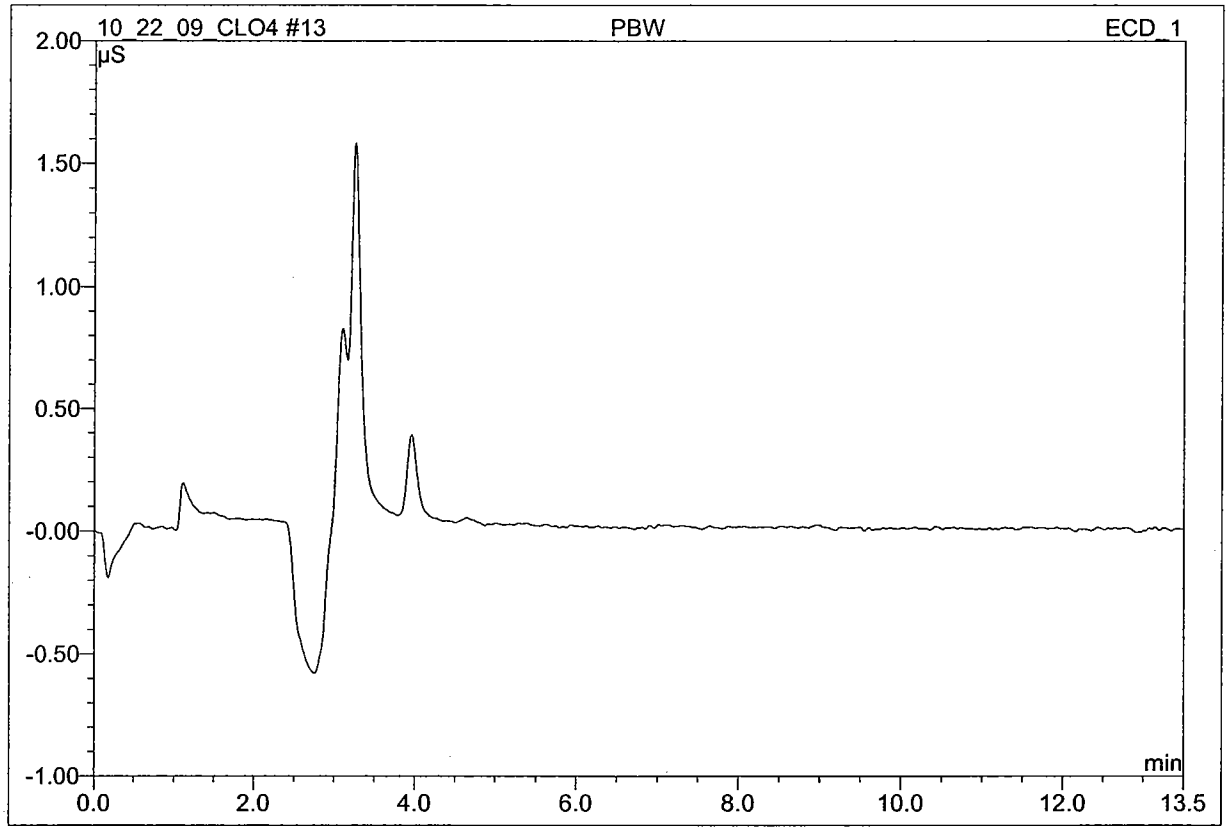
Sample Name:	**CCB**	*Injection Volume:*	**20.0**
Vial Number:	**5**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 21:10**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.05	n.a.	0.007	0.001	25.71	n.a.	BMB
2	8.27	perchlorate	0.011	0.001	36.10	1.360	BMB
3	8.43	n.a.	0.010	0.001	38.19	n.a.	bMB
Total:			0.027	0.002	100.00	1.360	

13 PBW

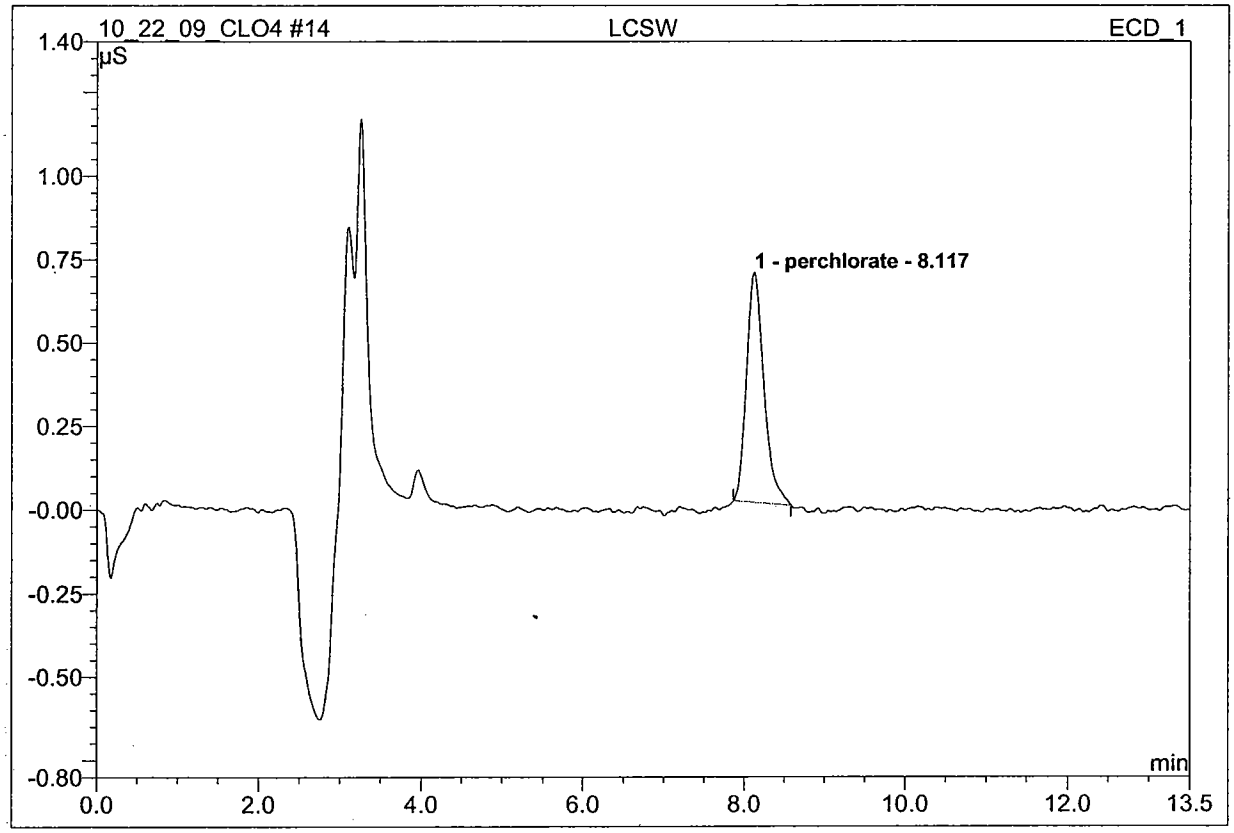
Sample Name:	**PBW**	*Injection Volume:*	**20.0**
Vial Number:	**6**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 21:26**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
Total:			0.000	0.000	0.00	0.000	

14 LCSW

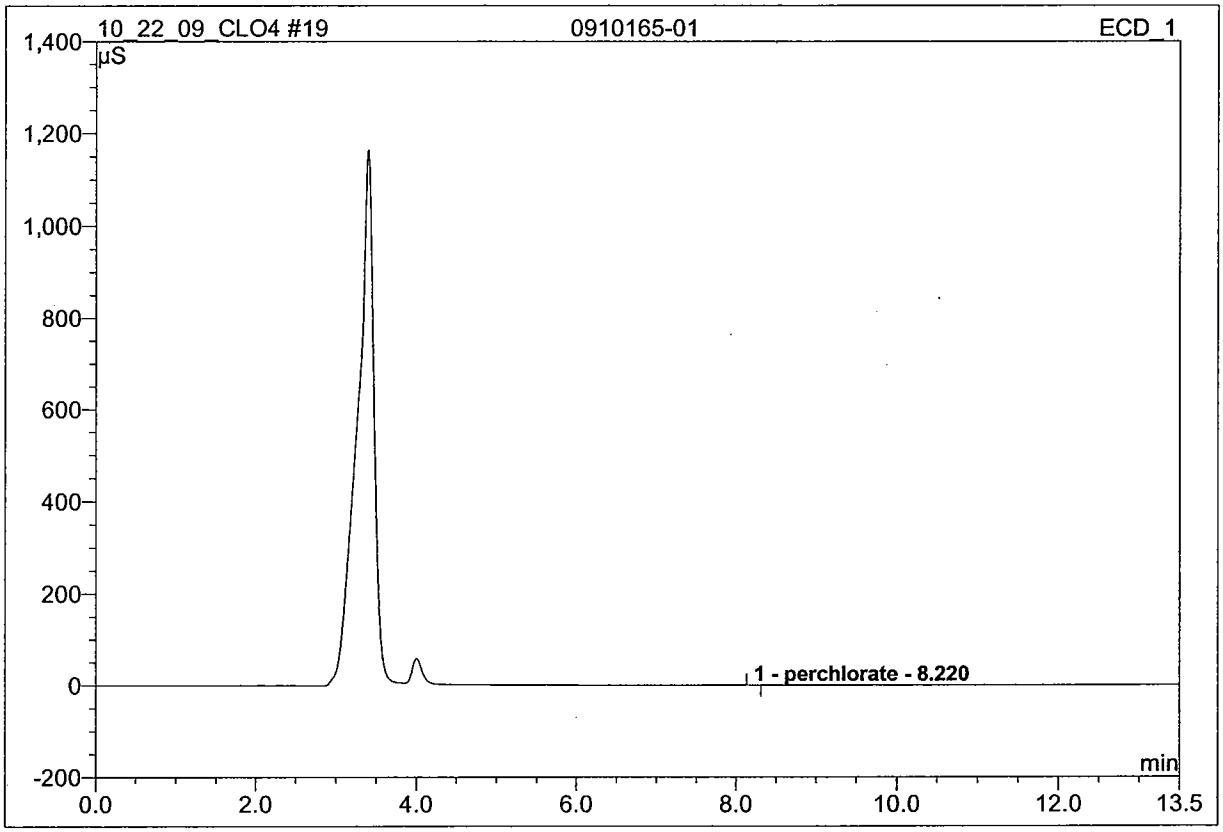
Sample Name:	**LCSW**	*Injection Volume:*	**20.0**
Vial Number:	**7**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 21:42**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.12	perchlorate	0.689	0.175	100.00	302.481	BMB
Total:			0.689	0.175	100.00	302.481	

19 0910165-01

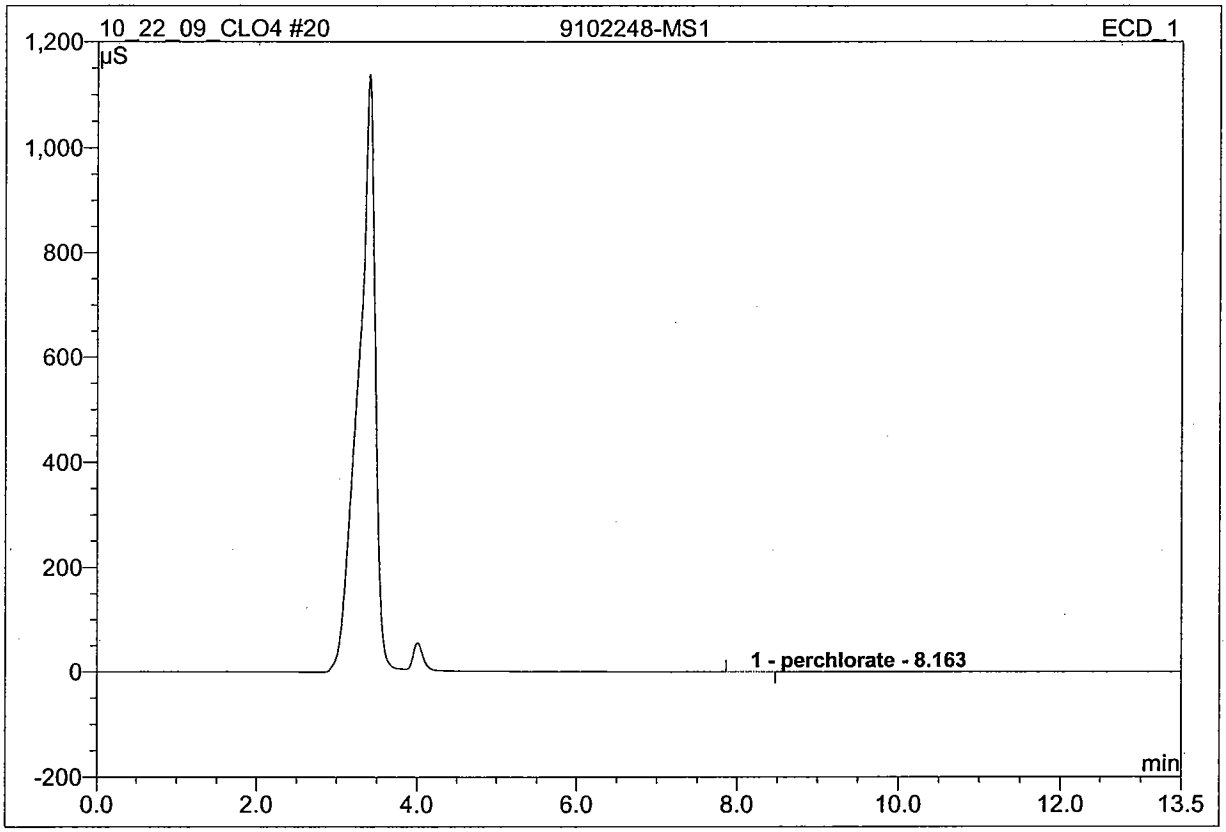
Sample Name:	**0910165-01**	*Injection Volume:*	**20.0**
Vial Number:	**12**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 23:02**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.22	perchlorate	0.012	0.001	100.00	1.706	BMB
Total:			0.012	0.001	100.00	1.706	

20 9102248-MS1

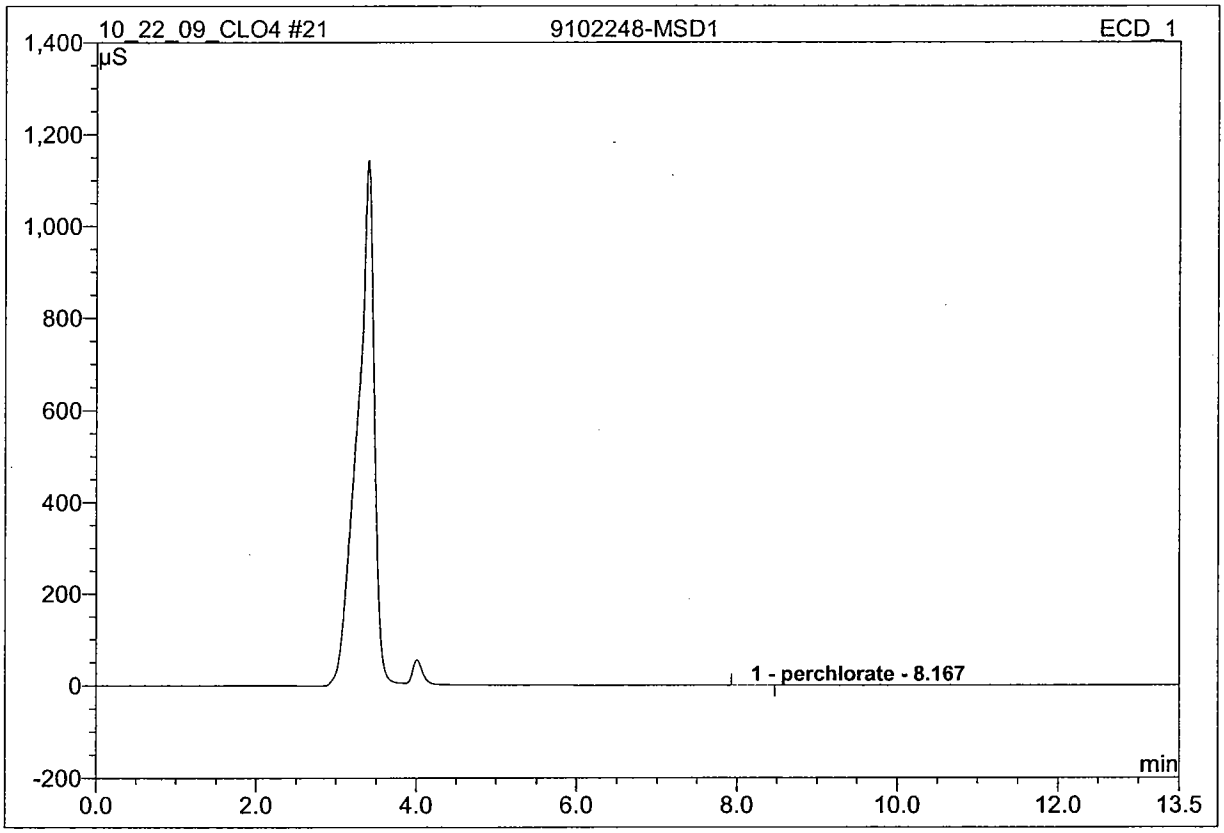
Sample Name:	**9102248-MS1**	*Injection Volume:*	**20.0**
Vial Number:	**13**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 23:18**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.16	perchlorate	0.207	0.055	100.00	95.557	BMB
Total:			0.207	0.055	100.00	95.557	

21 9102248-MSD1

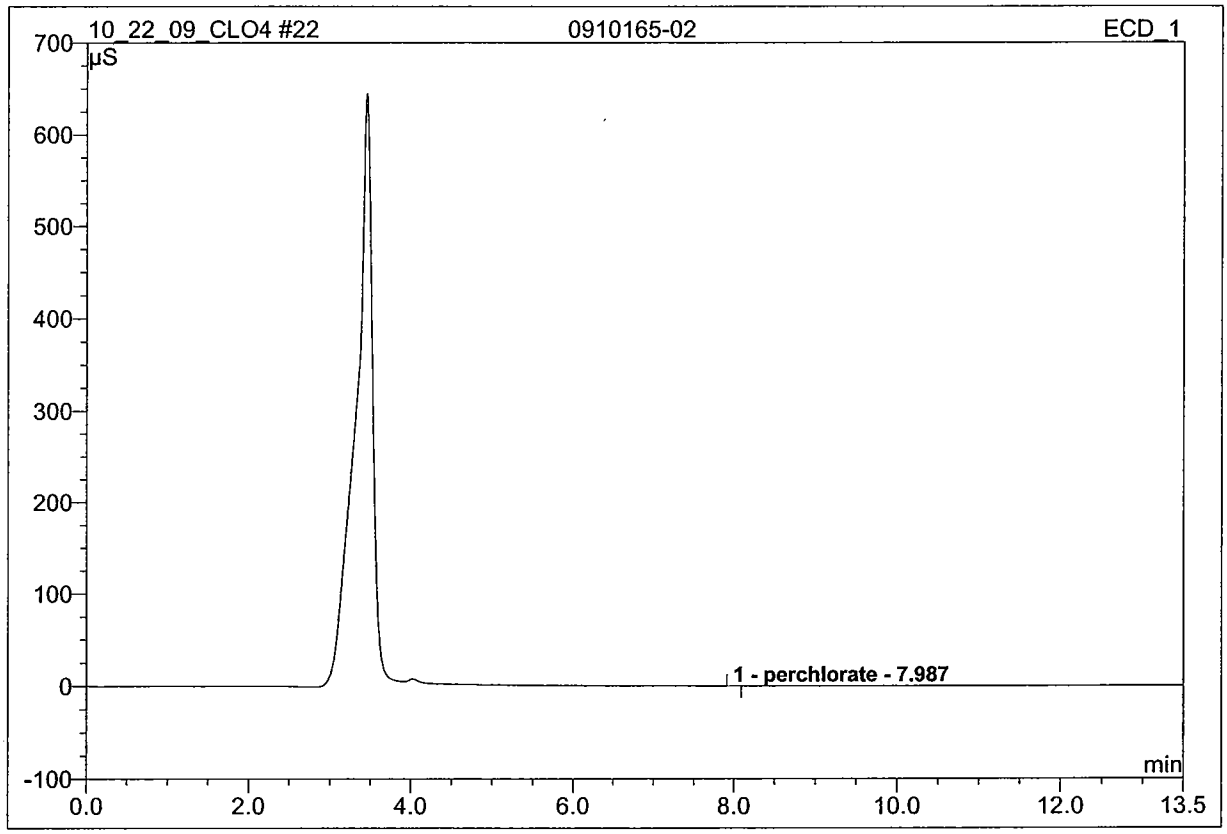
Sample Name:	**9102248-MSD1**	*Injection Volume:*	**20.0**
Vial Number:	**14**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 23:34**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.17	perchlorate	0.214	0.052	100.00	89.926	BMB
Total:			0.214	0.052	100.00	89.926	

22 0910165-02

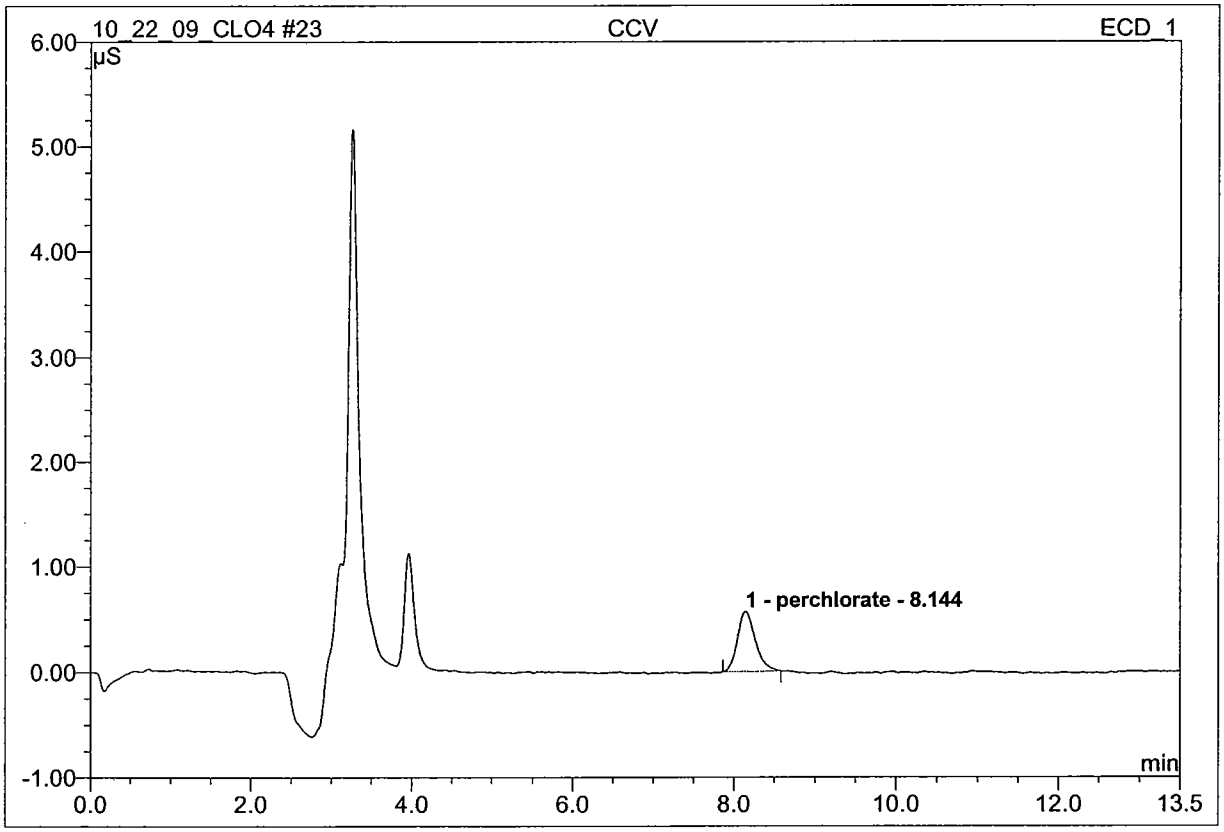
Sample Name:	**0910165-02**	*Injection Volume:*	**20.0**
Vial Number:	**15**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/22/2009 23:50**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	7.99	perchlorate	0.018	0.002	100.00	2.803	BMB
Total:			0.018	0.002	100.00	2.803	

23 CCV

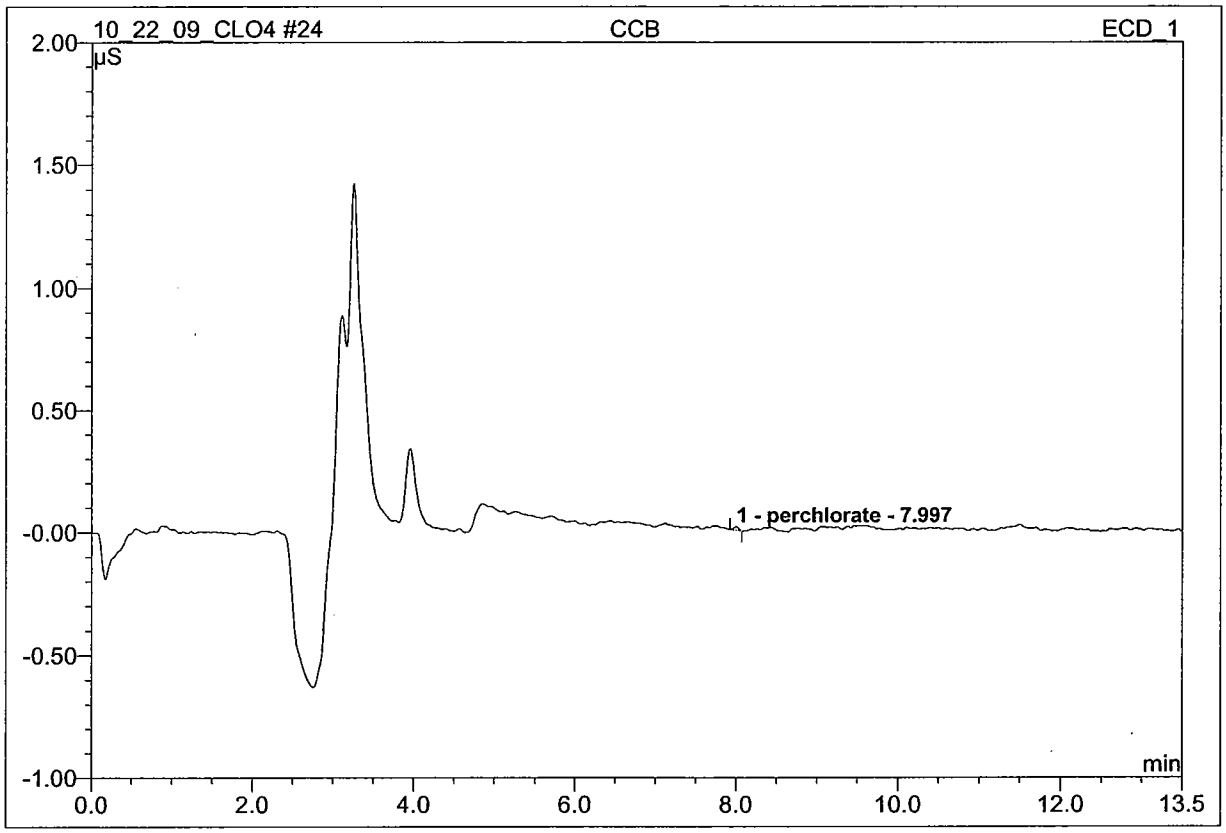
Sample Name:	**CCV**	*Injection Volume:*	**20.0**
Vial Number:	**16**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 0:05**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.14	perchlorate	0.567	0.144	100.00	248.887	BMB
Total:			0.567	0.144	100.00	248.887	

24 CCB

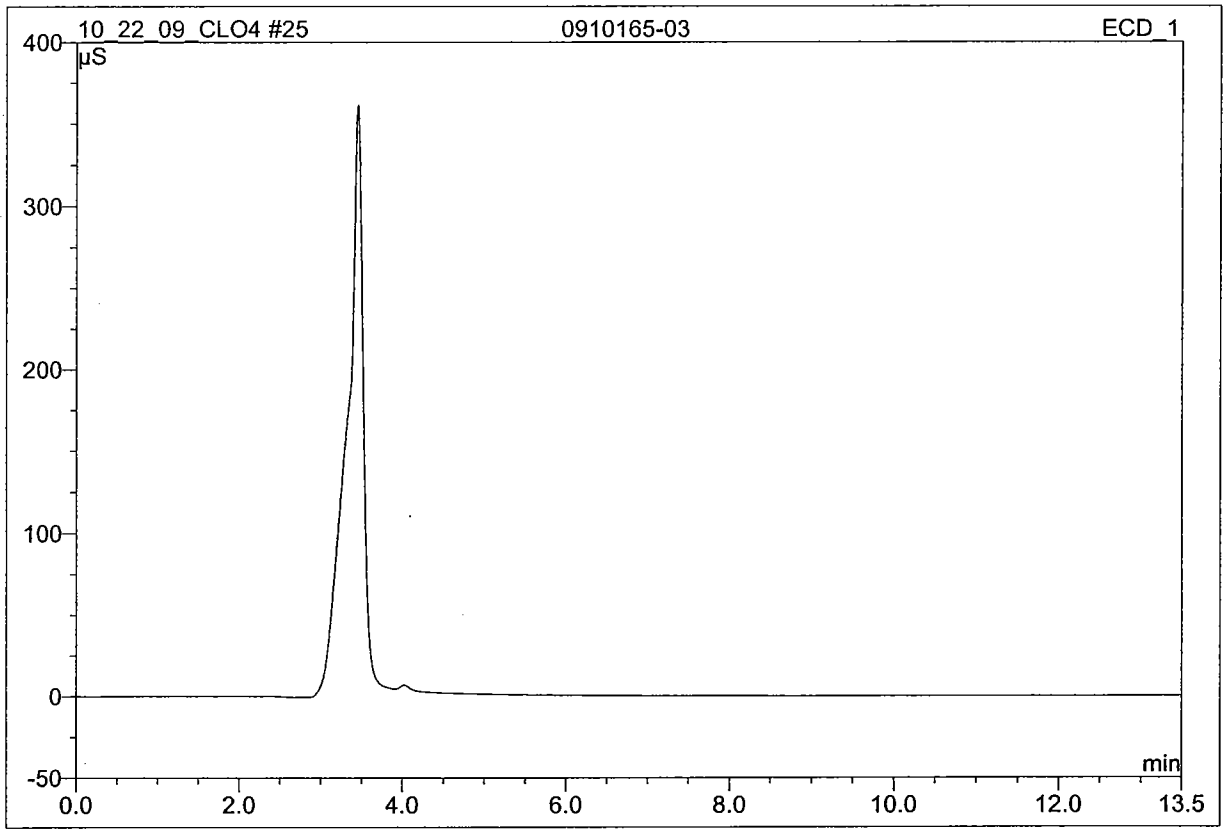
Sample Name:	**CCB**	*Injection Volume:*	**20.0**
Vial Number:	**17**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 0:21**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.00	perchlorate	0.014	0.001	100.00	1.821	BMB
Total:			0.014	0.001	100.00	1.821	

25 0910165-03

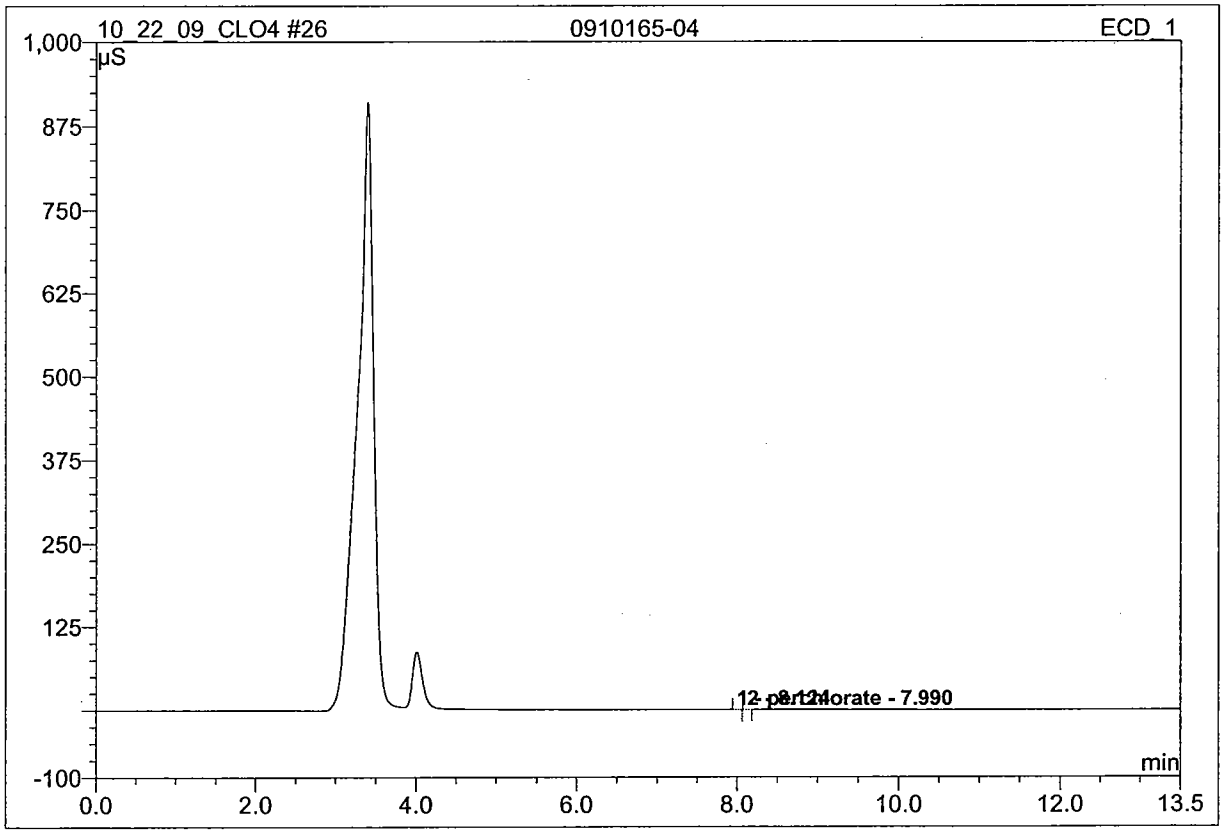
Sample Name:	**0910165-03**	*Injection Volume:*	**20.0**
Vial Number:	**18**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 0:37**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
Total:			0.000	0.000	0.00	0.000	

26 0910165-04

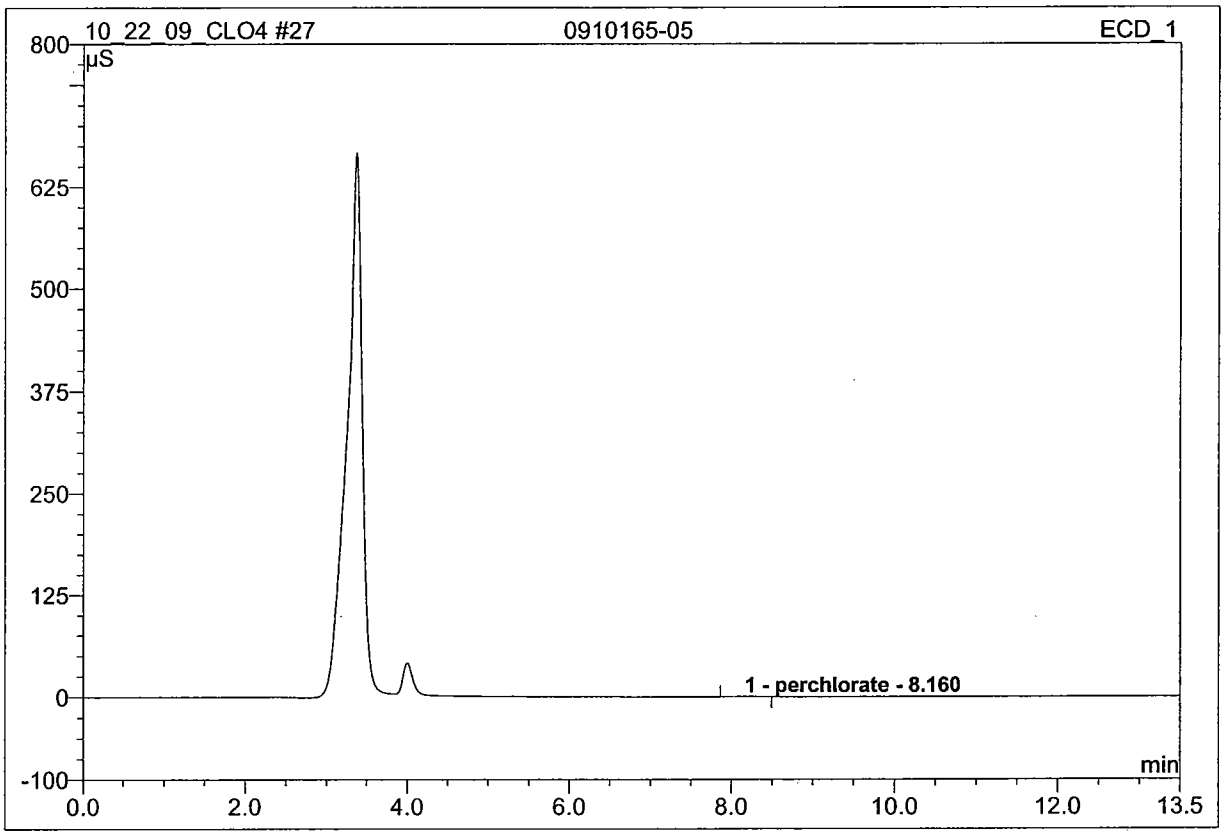
Sample Name:	**0910165-04**	*Injection Volume:*	**20.0**
Vial Number:	**19**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 0:53**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	7.99	perchlorate	0.008	0.001	48.21	1.163	BMB
2	8.12	n.a.	0.011	0.001	51.79	n.a.	BMB
Total:			0.020	0.001	100.00	1.163	

27 0910165-05

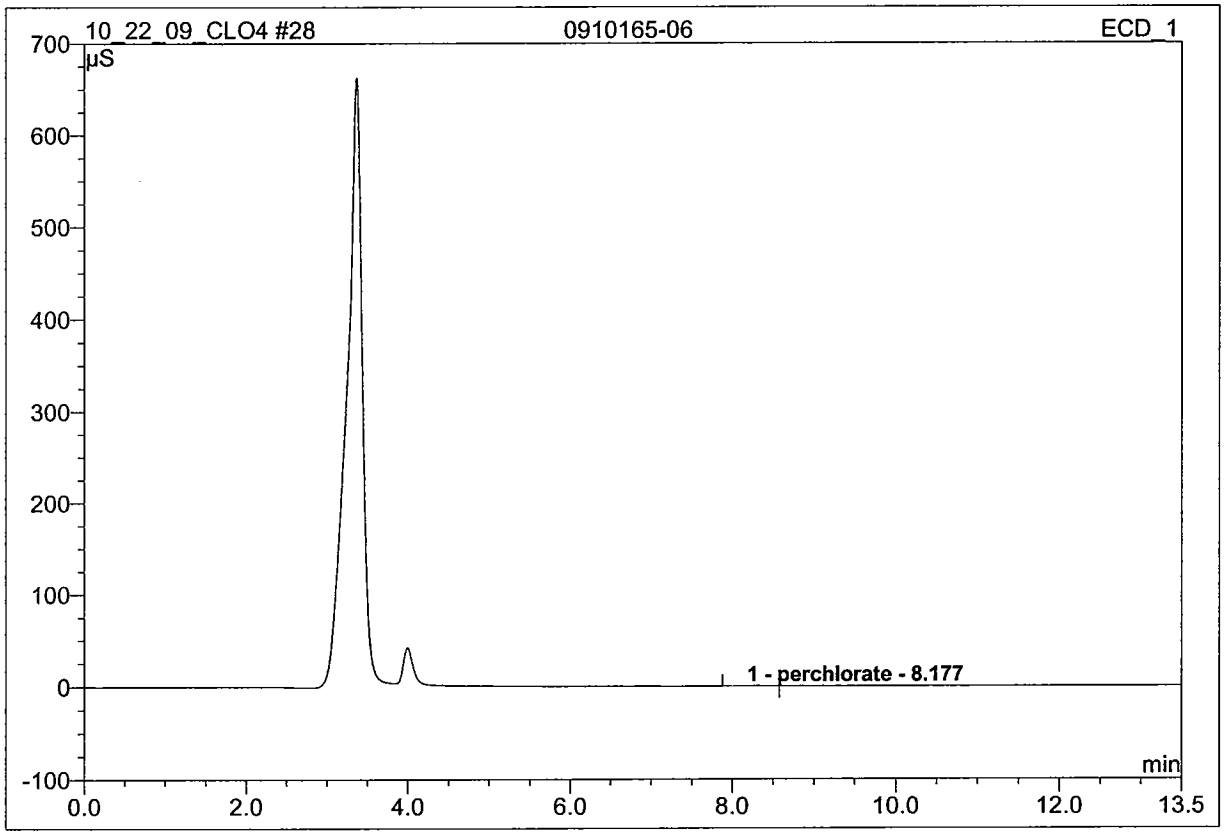
Sample Name:	**0910165-05**	*Injection Volume:*	**20.0**
Vial Number:	**20**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 1:09**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.16	perchlorate	0.301	0.076	100.00	132.264	BMB
Total:			0.301	0.076	100.00	132.264	

28 0910165-06

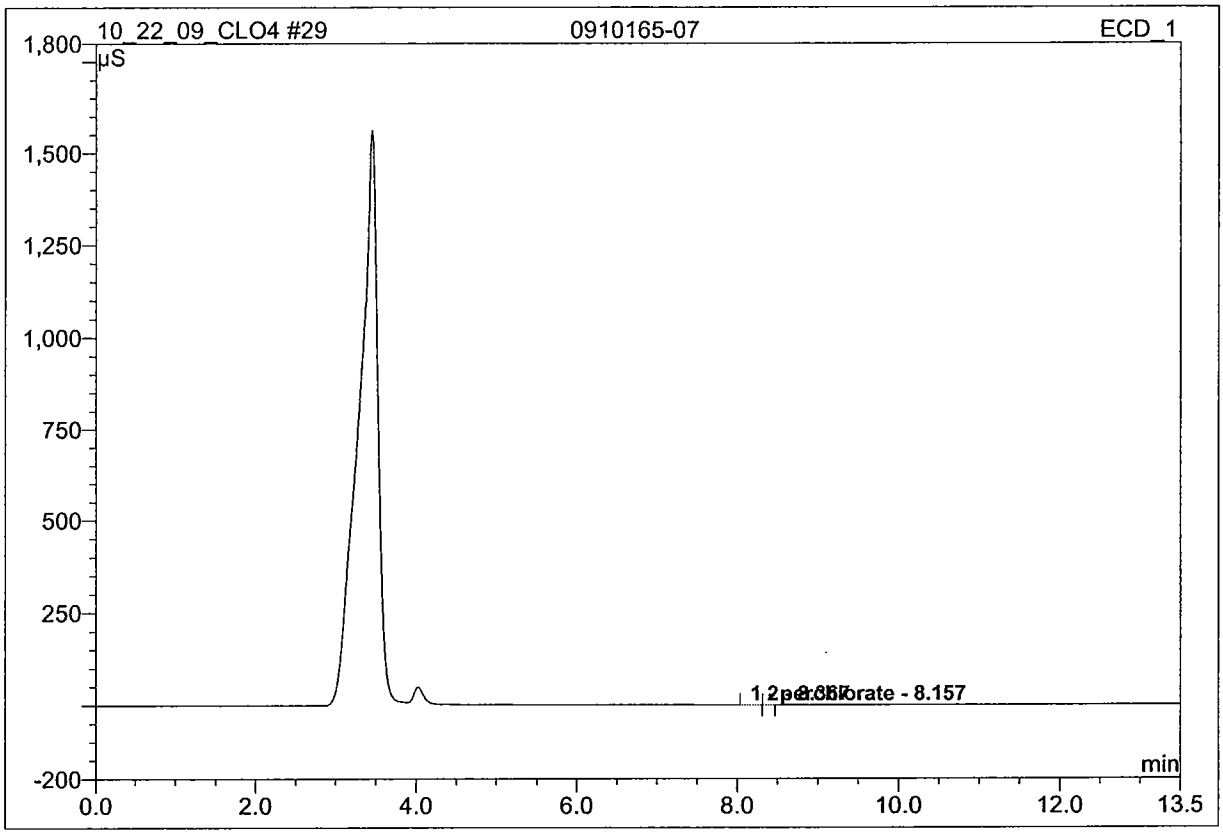
Sample Name:	**0910165-06**	*Injection Volume:*	**20.0**
Vial Number:	**21**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 1:25**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.18	perchlorate	0.314	0.081	100.00	140.785	BMB
Total:			0.314	0.081	100.00	140.785	

29 0910165-07

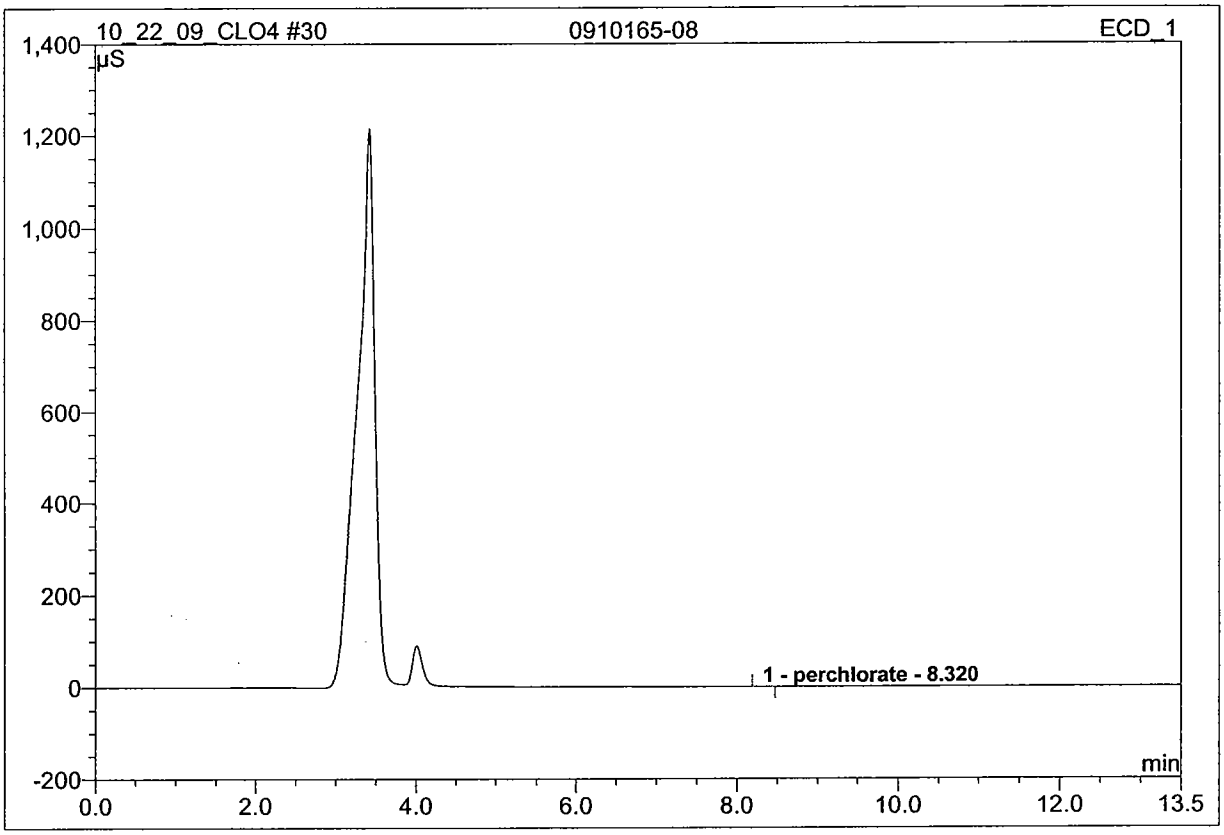
Sample Name:	**0910165-07**	*Injection Volume:*	**20.0**
Vial Number:	**22**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 1:41**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.16	perchlorate	0.026	0.003	71.95	5.157	BMB
2	8.37	n.a.	0.011	0.001	28.05	n.a.	BMB
Total:			0.037	0.004	100.00	5.157	

30 0910165-08

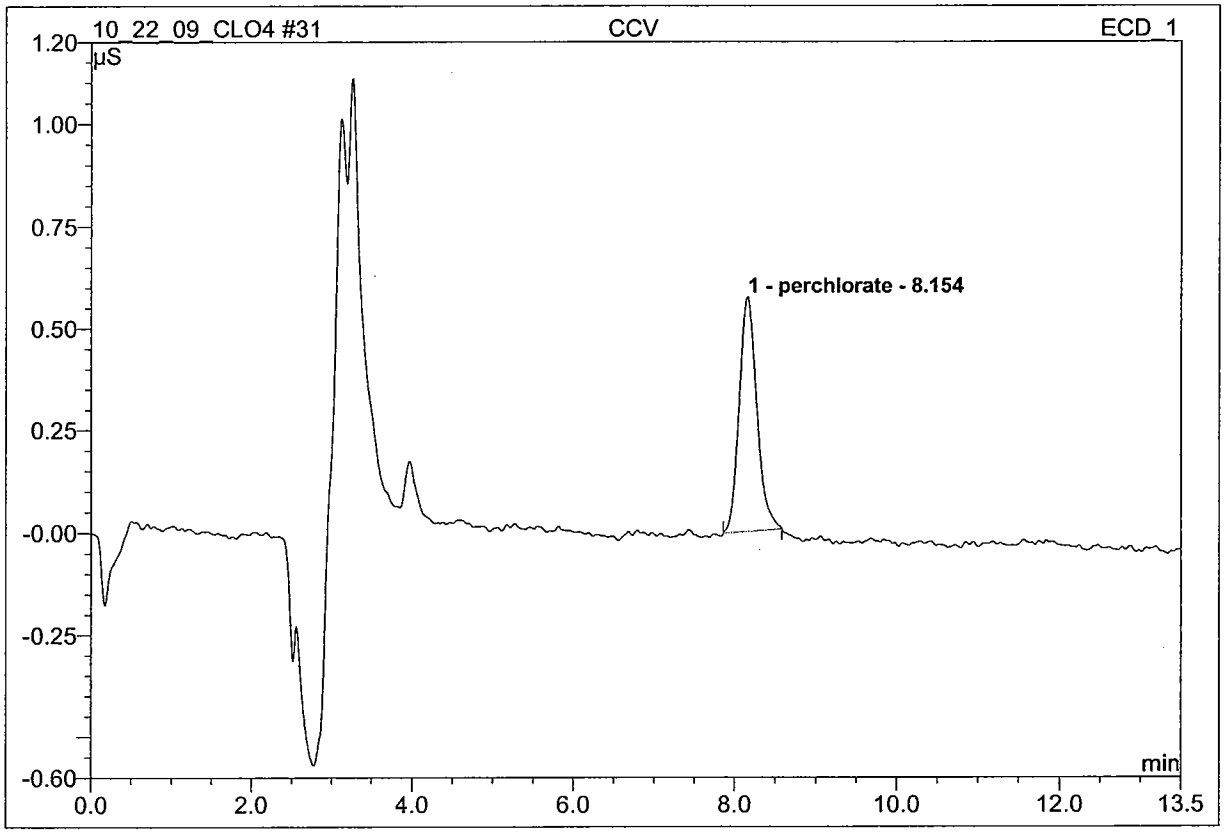
Sample Name:	**0910165-08**	*Injection Volume:*	**20.0**
Vial Number:	**23**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 1:57**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.32	perchlorate	0.014	0.002	100.00	3.806	BMB
Total:			0.014	0.002	100.00	3.806	

31 CCV

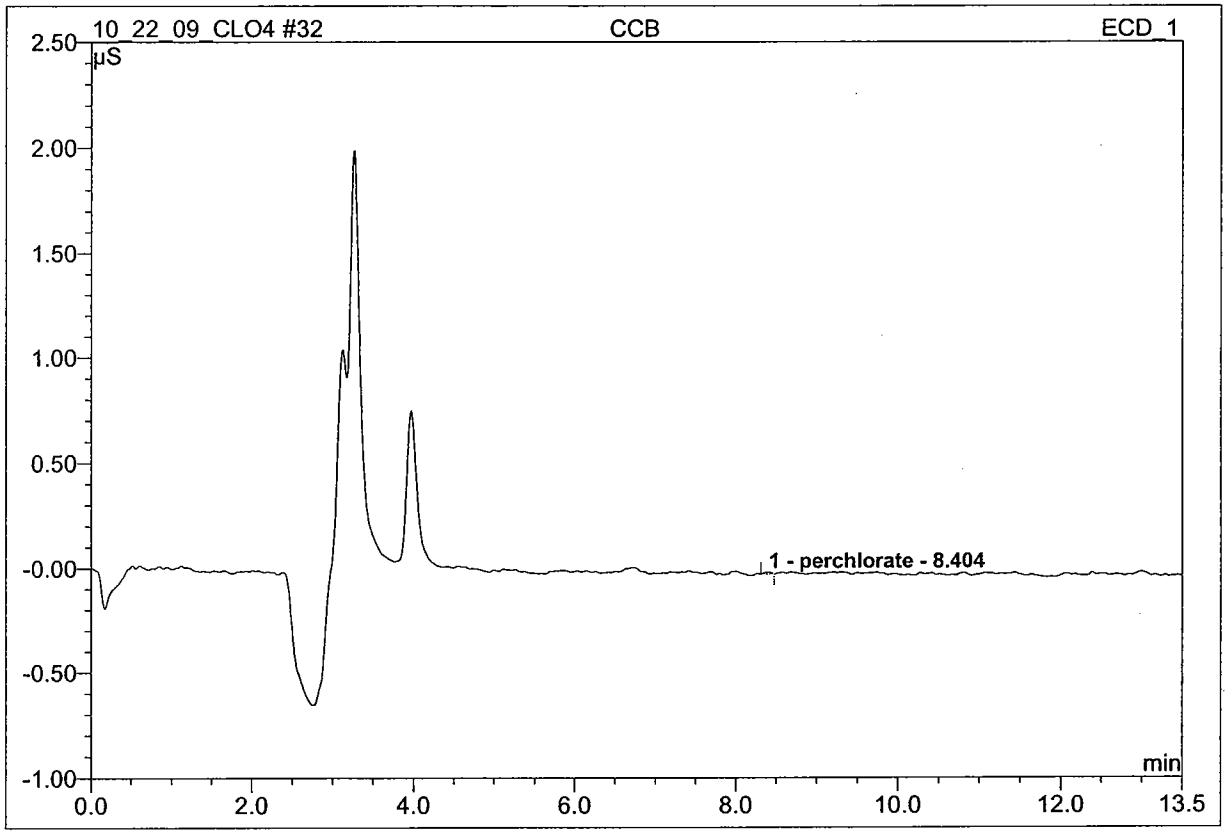
Sample Name:	**CCV**	*Injection Volume:*	**20.0**
Vial Number:	**24**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 2:13**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.15	perchlorate	0.574	0.142	100.00	246.341	BMB
Total:			0.574	0.142	100.00	246.341	

32 CCB

Sample Name:	**CCB**	*Injection Volume:*	**20.0**
Vial Number:	**25**	*Channel:*	**ECD_1**
Sample Type:	**unknown**	*Wavelength:*	**n.a.**
Control Program:	**ICS_2000 perchlorate**	*Bandwidth:*	**n.a.**
Quantif. Method:	**ics 2000 perchlorate**	*Dilution Factor:*	**1.0000**
Recording Time:	**10/23/2009 2:29**	*Sample Weight:*	**1.0000**
Run Time (min):	**13.50**	*Sample Amount:*	**1.0000**



No.	Ret.Time min	Peak Name	Height µS	Area µS*min	Rel.Area %	Amount PPB	Type
1	8.40	perchlorate	0.009	0.001	100.00	1.549	BMB
Total:			0.009	0.001	100.00	1.549	

CHAIN OF CUSTODY RECORD

Laboratory: CompuChem Environmental, 501 Madison Avenue, Cary, NC 27513/Cathy Dover, Manager/1-800-833-5097

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:** RAAP, Radford, Virginia **Location:** HWMU13/Open Burning Ground **Event:** 2009 2nd Semi Annual Ground Water Monitoi **DAA JN:** B03204-07 **Lab JN:**	**Project Specific (PS) QC:** ☑YES ☐NO **Sample Collection for Project Complete?** ☑YES ☐NO **Carrier:** N.C Courier Service **Tracking Number:**		

Box 1: Matrix
SW 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 ☐NO
Bill: ☐Client ☑Consultant
Preserved and shipped on ice: ☑YES & ☐NO

Box 4 - Sample Type				G	G	G	G	G	G					
Box 3 - Filtered/Unfiltered				U	U	U	U	U	U					
Required pH of Sample								<2	<2					
Box 2 - Preservative				H	H	H	H	B	B					
Box 5 - Sample Container Type				2-1L A	[redacted]	1-500ml P 250ml	2-1L A	1-500 ml P (plastic liters)						
Sample ID	**Date: 2009**	**Time**	**Box 1: Matrix**	**Number of Bottles** 10/19/09	**8332/3535 - Nitroglycerine**	**8330 - Explosives**	**EPA 314.0 - Perchlorate**	**8270C/3520C - Semivolatile**	**ICP 6010B/3005A (Metals-Total)**	**7470A (Mercury-Total)**	**Metals Hg pH**			
13MW1	10/20	1040	GW	7	X	X	X	X	X	X				09101165-02
13MW2	10/20	0930	GW	7	X	X	X	X	X	X				-03
13MW3	10/19	0740	GW	7	X	X	X	X	X	X				-04
13MW4	10/20	0805	GW	7	X	X	X	X	X	X				-05
13MWDUP	10/20	0820	GW	7	X	X	X	X	X	X				-06
13MW5	10/19	0850	GW	421	X	X	X	X	X	X				09101165-01 USE FOR QC
13MW6	10/19	1030	GW	7	X	X	X	X	X	X				-07
13MW7	10/19	1130	GW	7	X	X	X	X	X	X				-08

GENERAL NOTES:
1. Only report results at or above this permit limit.
2. Level 4 with EDD & PDF

Residual Chlorine Present?
Yes _____ No ✓

Clients Special Instructions: level 4 with edd and PDF.

-1.2°C, 2.3°C, 0.1°C, 1.7°C, -1.1°C, 0.2°C, -0.1°C

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): Dale Slaughter	Date: 10/19/09	#1 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	#2 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	Sample Storage Time Requested:
Sampler Signature: Dale Slaughter	Time: 0600	Company Name: DAA	Time: 0800	Company Name: DAA	Time: 1110	
Sampler Name (Print): Tyler Emery	Date: 10/19/09	#1 Received by (Signature): Dale Slaughter	Date: 10/21/09	#2 Received by (Signature): Eli Courier	Date: 10/21/09	30 DYS ORG/6 MTHS INORG
Sampler Signature: Tyler Emery	Time: 0600	Company Name: DAA	Time: 0800	Company Name: N.C. COURIER	Time: 1110	

Cathy Dover CompuChem 10/21/09 1110

ANALYTICAL METHOD: 314.0
TYPE METHOD: GC

No.	PARAMETER	CAS RN
1.	Perchlorate	14797-73-0

Unit 13/OBG

Draper Aden Associates
Engineering • Surveying • Environmental Services

2206 S. Main Street
Blacksburg, Virginia 24060
(540) 552-0444 Fax: (540) 552-0291
daa@daa.com www.daa.com

MEMORANDUM

To:	Cathy Dover, CompuChem
From:	~~Kathy Olsen, DAA~~ Ken C. / DAA
Date:	Oct. 1st, 2009
Project Name:	RAAP-Radford Arsenal
Job No.:	B03204-07
Subject:	Sample kit order-Second Semi Annual 2009 Semiannual Monitoring
cc:	***Please deliver on or before October 14th, 2009*** ✓

Please separate samples by landfill unit.

HWMU-13:
8 wells plus MS/MSD:

- 8330 (2-1L ambers no preservative) ✓
- 8332/3535 (2-1L ambers no preservative) ✓
- EPA 314 (perchlorate only) ✓
- 8270C/3520C SV/no preservative (2-1L ambers) ✓
- ICP 6010B/3005A/7470A (1-Total Metals & Mercury w/ HNO3 pH<2) ✓

Radford AAP/Solid/Hazardous Waste Management Units and Well Identifications

HWMU-13

13MW1
13MW2
13MW3
13MW4
13MWDUP
13MW5 (QC Well)
13MW6
13MW7

OK
JUC
9-6-05

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Received**

Report To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone: (540)552-0444
Fax: -

Invoice To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone :(540)552-0444
Fax: -

Date Due: 11/10/2009 00:00 (20 day TAT)

Received By: Cathy Dover — Date Received: 10/21/2009 16:00

Logged In By: Cathy Dover — Date Logged In: 10/21/2009 21:04

J & B Flags?: NO	TICS?:NO	Spike Level: FULL Spike	Deliverable: **Style 9**	EDD : DRAPER ACCESS + ERIS

USE 0910165-01 FOR QC*SVOC 8270C=HWMU13a.SUB*6020MTL=Sb,As,Ba,Cd,Cr,Pb,Ni,Se,Ag & Zn + Hg 7470 (SPECIAL LIMITS-Ba & Cd @ 1 ppb)*PERCHLORATE NEEDS 4 ug/L STD.*8330=HWMU13.SUB*8332=NITROGLYCERIN ONLY*NEEDS UNIT 13 NOTED ON FORM 1s

Analysis	Due	TAT	Expires	Received	Comments
0910165-01 13MW5 [Water] Sampled 10/19/2009 08:50 Eastern					**USE FOR QC**
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
0910165-02 13MW1 [Water] Sampled 10/20/2009 08:50 Eastern					
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Received**

Analysis	Due	TAT	Expires	Comments
0910165-03 13MW2 [Water] Sampled 10/20/2009 09:30 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 09:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
0910165-04 13MW3 [Water] Sampled 10/19/2009 07:40 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 07:40	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
0910165-05 13MW4 [Water] Sampled 10/20/2009 08:05 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:05	10/21/2009 16:00
0910165-06 13MWDUP [Water] Sampled 10/20/2009 08:20 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:20	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Received**

Analysis	Due	TAT	Expires	Comments
0910165-07 13MW6 [Water] Sampled 10/19/2009 10:30 Eastern				
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 10:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
0910165-08 13MW7 [Water] Sampled 10/19/2009 11:30 Eastern				
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 11:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00

CompuChem

A Division Of

Liberty Analytical Corp.

11/16/2009

JANET FRAZIER

DRAPER

2206 SOUTH MAIN STREET

BLACKSBURG, VA 24060

Subject:

Report of Data - Project: RAAP SEMI-ANNUAL MONITORING 2009, WorkOrder: 0910165

Attn.: JANET FRAZIER

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES _____

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem, a division of Liberty Analytical

Client: DRAPER **Work:** 0910165

Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07 **Sdg:** 0910165

Lab ID	Client ID	Matrix	Date Sampled	Date Received
0910165-01	13MW5	Water	10/19/2009 08:50	10/21/2009 16:00
0910165-02	13MW1	Water	10/20/2009 08:50	10/21/2009 16:00
0910165-03	13MW2	Water	10/20/2009 09:30	10/21/2009 16:00
0910165-04	13MW3	Water	10/19/2009 07:40	10/21/2009 16:00
0910165-05	13MW4	Water	10/20/2009 08:05	10/21/2009 16:00
0910165-06	13MWDUP	Water	10/20/2009 08:20	10/21/2009 16:00
0910165-07	13MW6	Water	10/19/2009 10:30	10/21/2009 16:00
0910165-08	13MW7	Water	10/19/2009 11:30	10/21/2009 16:00

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA PACKAGE

DOCUMENT 6020

The sample data package shall include data for all analyses of all samples in one Sample Delivery Group (SDG), including field and analytical samples, reanalyses, blanks, spikes, duplicates, and laboratory control samples. The sample data package consists of the following:

A. Cover Documentation

B. Sample Data

LAB CODE : LIBRTY CONTRACT # : SW846

SDG # : 0910165

A. Cover Documentation

1. Cover Page

2. SDG Narrative

3. Sample Traffic Reports/
   Chain-Of-Custody Records

1. Cover Page

Inorganic Analyses Data Package

The Cover Page includes laboratory information, the Case and SDG numbers, Non-Routine Analytical Service (NRAS) number (if appropriate), the EPA sample numbers in alphanumeric order showing the EPA sample numbers cross-referenced with Lab ID numbers, and completion of the questions on the use of background and interelement correction for the samples.

SW846 - METALS

COVER PAGE - INORGANIC ANALYSES DATA PACKAGE

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: 0910165

SOW No.: SW846

EPA Sample No.	Lab Sample ID.
13MW1	0910165-02
13MW2	0910165-03
13MW3	0910165-04
13MW4	0910165-05
13MW5	0910165-01
13MW5D	9102718-DUP1
13MW5D	9102720-DUP1
13MW5S	9102718-MS1
13MW5S	9102720-MS1
13MW5SD	9102718-MSD1
13MW5SD	9102720-MSD1
13MW6	0910165-07
13MW7	0910165-08
13MWDUP	0910165-06

Were ICP interelement corrections applied? Yes/No NO

Were ICP background corrections applied? Yes/No NO

If yes-were raw data generated before application 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: J C Susan Bass Name: Susan W Bass

Date: 11/10/01 Title: Senior Chemist

2. SDG Narrative

The SDG Narrative contains laboratory information, the Case and SDG numbers, contract number, and detailed documentation of any QC, sample, shipment, and/or analytical problems encountered in processing the samples. This will include any technical and administrative problems encountered and the resolution or corrective actions taken. The SDG Narrative will also document the alternative means of determining the cooler temperature when a cooler's temperature indicator bottle is absent. The SDG Narrative also provides equations or curves and utilizes raw data from the SDG being reported to demonstrate how sample results are obtained from raw instrument output. The SDG Narrative also includes a discussion of any flexibility Statement of Work (SOW) modification, including attaching a copy of the USEPA approved modification form to the SDG Narrative. Finally, the SDG Narrative will identify and explain any differences between results being provided in the data package and those provided previously as Preliminary Results.

CompuChem
a Division of Liberty Analytical Corp.
501 Madison Avenue
Cary, NC 27513

SDG NARRATIVE
SDG # 0910165

The indicated Sample Delivery Group (SDG) consisting of eight (8) liquid samples was received into the laboratory information management system (LIMS) on October 21, 2009 intact and in good condition with Chain of Custody (COC) Records in order, unless otherwise noted in any attachments or Quality Assurance Notices. The temperature of the samples upon receipt was -1.2 to 1.7°C. Sample ID's reported in this data package are noted by the receiving department on the COC if they differ from those listed by the samplers on the COC.

The samples were prepared and analyzed in accordance with SW846-6020 methodology for the requested metals and mercury.

INSTRUMENTAL QUALITY CONTROL:

All calibration verification solutions (ICV & CCV), blanks (ICB & CCB), and interference check samples (ICSA & ICSAB) associated with this data were confirmed to be within allowable limits.

SAMPLE PREPARATION QUALITY CONTROL:

The sample preparation procedure verification (PBW & LCSW) was found to be within acceptable ranges and the field samples were prepared and analyzed within the specified holding times.

MATRIX RELATED QUALITY CONTROL:

The sample matrix spikes, CCN = 0910165-01 ID 13MW5S and 13MW5SD were inside control limits for the requested analytes.

Control limits for matrix spikes recoveries are set at 75% to 125% of the analyte quantity added unless original sample concentrations exceed the true values of these "spikes" by a factor of four or more. In this case, affected analytes are not flagged even if recoveries are outside percentage recovery control limits.

The sample matrix duplicate, CCN = 0910165-01 ID 13MW5D was inside control limits for the requested analytes.

CLP control limits for duplicate determinations are +/- 20% Relative Percent Difference (RPD) for concentrations greater than or equal to five times the CRDL in both the original and duplicate samples, and +/- the CRDL for concentrations less than five times the CRDL. The RPD is not calculated if both the original and duplicate values fall below the IDL.

A five-fold serial dilution of sample, CCN = 0910165-01 ID 13MW5L was performed in accordance with requirements for ICP/MS and mercury.

The adjusted sample concentration was inside control limits for the requested analytes.

The laboratory manager or his designee, as verified by the following signature has authorized release of the data contained in this hard copy data package. Furthermore, I certify that the tests used in this report meet all requirements of the NELAC standards unless otherwise stated in the SDG narrative or QA notice.

Susan W. Bass
Senior Chemist
November 11, 2009

3. Sample Traffic Reports/ Chain-Of-Custody Records

CHAIN OF CUSTODY RECORD

Laboratory: CompuChem Environmental, 501 Madison Avenue, Cary, NC 27513/Cathy Dover, Manager/1-800-833-5097

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:** RAAP, Radford, Virginia **Location:** HWMU13/Open Burning Ground **Event:** 2009 2nd Semi Annual Ground Water Monitoi **DAA JN:** B03204-07 **Lab JN:**	**Project Specific (PS) QC:** ☑YES ☐NO **Sample Collection for Project Complete?** ☑YES ☐NO **Carrier:** NC Courier Service **Tracking Number:**		

Box 1: Matrix
SW 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 ☐NO
Bill: ☐Client ☑Consultant
Preserved and shipped on ice: ☑YES ☐NO

Box 4 - Sample Type	G	G	G	G	G	G			
Box 3 - Filtered/Unfiltered	U	U	U	U	U	U			
Required pH of Sample					<2	<2			
Box 2 - Preservative	H	H	H	H	B	B			
Box 5 - Sample Container Type	2-1L A	[illegible]	1-500ml P 250ml	2-1L A	1-500 ml P (plastic liters)				

Sample ID	Date: 2009	Time	Box 1: Matrix	Number of Bottles 10/19/09	8332/3535 - Nitroglycerine	8330 - Explosives	EPA 314.0 - Perchlorate	8270C/3520C - Semivolatile	ICP 6010B/3005A (Metals-Total)	7470A (Mercury-Total)	Metals Hg pH			
13MW1	10/20	1040	GW	7	X	X	X	X	X	X	<2			09101165-02
13MW2	10/20	0930	GW	7	X	X	X	X	X	X	<2			-03
13MW3	10/19	0740	GW	7	X	X	X	X	X	X	<2			-04
13MW4	10/20	0805	GW	7	X	X	X	X	X	X	<2			-05
13MWDUP	10/20	0820	GW	7	X	X	X	X	X	X	<2			-06
13MW5	10/19	0850	GW	421	X	X	X	X	X	X	<2			09101165-01 USE FOR QC
13MW6	10/19	1030	GW	7	X	X	X	X	X	X	<2			-07
13MW7	10/19	1130	GW	7	X	X	X	X	X	X	<2			-08

GENERAL NOTES:
1. Only report results at or above this permit limit.
2. Level 4 with EDD & PDF

Residual Chlorine Present?
Yes _____ No ✓

Clients Special Instructions: level 4 with edd and PDF.

-1.2°C, 2.3°C, 0.1°C, 1.7°C, -1.1°C, 0.2°C, -0.1°C

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): Dale Slaughter	Date: 10/19/09	#1 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	#2 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09
Sampler Signature: Dale Slaughter	Time: 0600	Company Name: DAA	Time: 0800	Company Name: DAA	Time: 1110
Sampler Name (Print): Tyler Emery	Date: 10/19/09	#1 Received by (Signature): Dale Slaughter	Date: 10/21/09	#2 Received by (Signature): Eli Carter	Date: 10/21/09
Sampler Signature: Tyler Emery	Time: 0600	Company Name: DAA	Time: 0800	Company Name: N.C. Courier	Time: 1110

Sample Storage Time Requested: 30 DYS ORG/6 MTHS INORG

Cathy Dover CompuChem 10/21/09 1600

WO#0910165

ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: SEE BELOW
CLASS: TOTAL

Method SW 846-6010B

No.	PARAMETER	CAS RN	Permit QL (ug/l) for GW10 use	GW10
1.	Antimony	7440-36-0	5	10
2.	Arsenic	7440-38-2	5	10
3.	Barium	7440-39-3	1	200
4.	Cadmium	7440-43-9	1	5
5.	Chromium	7440-47-3	5	10
6.	Lead	7440-92-1	5	3
7.	Nickel	7440-02-0	5	40
8.	Selenium	7782-49-2	5	5
9.	Silver	7440-22-4	2	5
10.	Zinc	7440-66-6	5	20

Method SW 7470A/CVAA

11.	Mercury	7439-97-6	0.5

.p:\admin\divisions\envr\templates\bburg eteam temp\field events\raap\sample event set up\semi-annual events\hwmu-13\hwmu13-target analyte list gw (new) 2007 10.doc
Revised July 18, 2005 - JCF
Revised November, 2005 - new permit - JCF
Revised Oct 10, 2009

WORK ORDER **Printed: 11/11/2009 10:17:07AM**

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Prepared**

Report To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone: (540)552-0444
Fax: -

Invoice To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone :(540)552-0444
Fax: -

Date Due: 11/10/2009 00:00 (20 day TAT)

Received By: Cathy Dover — Date Received: 10/21/2009 16:00

Logged In By: Cathy Dover — Date Logged In: 10/21/2009 21:04

J & B Flags?: NO	TICS?:NO	Spike Level: FULL Spike	Deliverable: **Style 9**	EDD : DRAPER ACCESS + ERIS

USE 0910165-01 FOR QC*SVOC 8270C=HWMU13a.SUB*6020MTL=Sb,As,Ba,Cd,Cr,Pb,Ni,Se,Ag & Zn + Hg 7470 (SPECIAL LIMITS-Ba & Cd @ 1 ppb)*PERCHLORATE NEEDS 4 ug/L STD.*8330=HWMU13.SUB*8332=NITROGLYCERIN ONLY*NEEDS UNIT 13 NOTED ON FORM 1s

Analysis	Due	TAT	Expires	Received	Comments
0910165-01 13MW5 [Water] Sampled 10/19/2009 08:50 Eastern					**USE FOR QC**
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
0910165-02 13MW1 [Water] Sampled 10/20/2009 08:50 Eastern					
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Prepared**

Analysis	Due	TAT	Expires	Comments
0910165-03 13MW2 [Water] Sampled 10/20/2009 09:30 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 09:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
0910165-04 13MW3 [Water] Sampled 10/19/2009 07:40 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 07:40	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
0910165-05 13MW4 [Water] Sampled 10/20/2009 08:05 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:05	10/21/2009 16:00
0910165-06 13MWDUP [Water] Sampled 10/20/2009 08:20 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:20	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Prepared**

Analysis	Due	TAT	Expires	Comments
0910165-07 13MW6 [Water] Sampled 10/19/2009 10:30 Eastern				
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 10:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
0910165-08 13MW7 [Water] Sampled 10/19/2009 11:30 Eastern				
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 11:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00

INTERNAL DIGESTION COC

9102718

COMPUCHEM

Printed: 10/27/2009 4:20:11PM

Matrix: Water **Prepared using: METALS - EPA 3005A**

Lab Number	Client ID	Sample Type	
0910165-01	13MW5	Sample	
0910165-02	13MW1	Sample	
0910165-03	13MW2	Sample	
0910165-04	13MW3	Sample	
0910165-05	13MW4	Sample	
0910165-06	13MWDUP	Sample	
0910165-07	13MW6	Sample	
0910165-08	13MW7	Sample	
9102718-BLK1	PBW	Blank	
9102718-BS1	LCSW	LCS	
9102718-DUP1	13MW5D	Duplicate	
9102718-MS1	13MW5S	Matrix Spike	
9102718-MSD1	13MW5SD	Matrix Spike Dup	

Relinquished By	Date: 10/28/09 1640	Received By: ICP Stg	Date: 10/28/09 1640
Relinquished By	Date: 110903	Received By	Date: 110903
Relinquished By	Date: 110905	Received By	Date: 110905
Relinquished By	Date	Received By	Date

INTERNAL DIGESTION COC

9102720

COMPUCHEM

Printed: 10/27/2009 4:20:03PM

Matrix: Water **Prepared using: METALS - EPA 7470A Prep**

Lab Number	Client ID	Sample Type	
0910165-01	13MW5	Sample	
0910165-02	13MW1	Sample	
0910165-03	13MW2	Sample	
0910165-04	13MW3	Sample	
0910165-05	13MW4	Sample	
0910165-06	13MWDUP	Sample	
0910165-07	13MW6	Sample	
0910165-08	13MW7	Sample	
9102720-BLK1	PBW	Blank	
9102720-BS1	LCSW	LCS	
9102720-DUP1	13MW5D	Duplicate	
9102720-MS1	13MW5S	Matrix Spike	
9102720-MSD1	13MW5SD	Matrix Spike Dup	

Relinquished By	Date	Received By	Date
Hg Stg	10/28/09 1530	10/28/09 FC Hg Stg	10/28/09 1530
Relinquished By	Date	Received By	Date
	10/29/09 10:00		10/29/09 10:00
Relinquished By	Date	Received By	Date
	10/29/09 1700	Waste	10/29/09 1700
Relinquished By	Date	Received By	Date

Metals Internal Chain of Custody Sheet

Matrix Water **Batch**: 9102718 **Status:** Batched **Analysis**: 6020 ICP MS

Lab Id	Client Id	Received	Container	Extraction	Due_Date
0910165-01 Q	13MW5	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-02 F	13MW1	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-03 F	13MW2	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-04 F	13MW3	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-05 F	13MW4	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-06 F	13MWDUP	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-07 F	13MW6	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009
0910165-08 F	13MW7	10/21/09	3s_1000mL Plastic, HN	EPA 3005A	11/10/2009

Ambient storage	10/28/09 0855	Diane Byrd	10/28/09 0855
Relinquished By	Date/Time	Received By	Date/Time
Diane Byrd	10/28/09 0855	D. Dickens	10-28-09 0855
Relinquished By	Date/Time	Received By	Date/Time
D Dickens	10/28/09 1200	Cooler	10/28/09 1200
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time
Relinquished By	Date/Time	Received By	Date/Time

B. Sample Data

1. Results
2. Quality Control Data
3. Raw Data
4. Digestion and Distillation Logs

LAB CODE : LIBRTY CONTRACT # : SW846

SDG # : 0910165

1. Results

Sample results shall be arranged in packets with the Inorganic Analysis Data Sheet [Form IA – IN and Form IB – IN]. These sample packets shall be placed in increasing alphanumeric EPA sample number order, considering both letters and numbers, and shall include all the samples in the SDG.

2. Quality Control (QC) Data

a. Initial and Continuing Calibration Verification
[Form IIA - IN]

b. CRQL Check Standard
[Form IIB - IN]

c. Blanks
[Form III - IN]

d. ICP-MS Interference Check Sample
[Form IVB - IN]

e. Matrix Spike Sample Recovery
[Form VA - IN]

f. Post Digest Spike Sample Recovery
[Form VB - IN]

g. Duplicates
[Form VI - IN]

h. Laboratory Control Sample
[Form VII - IN]

i. ICP-MS Serial Dilutions
[Form VIII - IN]

j. Method Detection Limits (Annually)
[Form IX - IN]

k. ICP-MS Linear Ranges (Quarterly)
[Form XI – IN]

l. Preparation Log
[Form XII - IN]

m. Analysis Run Log
[Form XIII - IN]

n. ICP-MS Tune
[Form XIV – IN]

o. ICP-MS Internal Standards Relative Intensity Summary
[Form XV – IN]

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-02

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	115			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	5.0	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.
13MW2

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-03

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	169			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	5.0	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.: 13MW3

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-04

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	110			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	5.0	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.: 13MW4

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-05

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	55.3			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.1			MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	5.0	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.: 13MW5

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-01

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	108			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	5.0	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-07

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	104			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	6.4			MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.: 13MW7

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-08

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	173			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	51.0			MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	7.8			MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

INORGANIC ANALYSES DATA SHEET

EPA SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Lab Sample ID: 0910165-06

Level (low/med): LOW Date Received: 10/21/2009

% Solids: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

CAS No.	Analyte	Concentration	C	Q	M
7440-36-0	Antimony	5.0	U		MS
7440-38-2	Arsenic	5.0	U		MS
7440-39-3	Barium	56.1			MS
7440-43-9	Cadmium	1.0	U		MS
7440-47-3	Chromium	5.0	U		MS
7439-92-1	Lead	5.0	U		MS
7439-97-6	Mercury	0.50	U		CV
7440-02-0	Nickel	5.0	U		MS
7782-49-2	Selenium	5.0	U		MS
7440-22-4	Silver	2.0	U		MS
7440-66-6	Zinc	5.0	U		MS

Color Before: COLORLESS Clarity Before: CLEAR Texture:

Color After: COLORLESS Clarity After: CLEAR Artifacts:

Comments: UNIT 13

SW846 - METALS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Initial Calibration Source: EPA-0307

Continuing Calibration Source: HP615001

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Antimony	198.0	200.74	101	120.0	116.07	97	111.71	93	MS
Arsenic	199.0	201.72	101	120.0	118.47	99	111.98	93	MS
Barium	100.0	102.20	102	120.0	118.13	98	117.29	98	MS
Cadmium	99.0	101.20	102	120.0	119.29	99	118.77	99	MS
Chromium	98.0	101.84	104	120.0	119.05	99	118.04	98	MS
Lead	199.0	210.33	106	120.0	121.08	101	122.19	102	MS
Mercury	4.0	3.80	95.0	5.0	4.92	98.4	5.21	104.2	CV
Nickel	98.0	103.51	106	120.0	118.45	99	114.16	95	MS
Selenium	201.0	200.56	100	120.0	117.52	98	114.04	95	MS
Silver	99.0	103.03	104	120.0	116.52	97	119.11	99	MS
Zinc	200.0	203.38	102	120.0	123.85	103	116.94	97	MS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

SW846 - METALS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Initial Calibration Source: EPA-0307

Continuing Calibration Source: HP615001

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Antimony				120.0	111.16	93	110.59	92	MS
Arsenic				120.0	115.34	96	114.86	96	MS
Barium				120.0	115.81	97	113.70	95	MS
Cadmium				120.0	116.28	97	114.58	95	MS
Chromium				120.0	120.89	101	121.24	101	MS
Lead				120.0	121.64	101	121.11	101	MS
Mercury				5.0	5.24	104.8	5.32	106.4	CV
Nickel				120.0	118.08	98	115.95	97	MS
Selenium				120.0	114.19	95	112.87	94	MS
Silver				120.0	120.21	100	117.51	98	MS
Zinc				120.0	121.07	101	116.49	97	MS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

SW846 - METALS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Initial Calibration Source: EPA-0307

Continuing Calibration Source: HP615001

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Antimony				120.0	112.12	93	113.01	94	MS
Arsenic				120.0	122.81	102	126.24	105	MS
Barium				120.0	116.52	97	120.52	100	MS
Cadmium				120.0	115.94	97	122.47	102	MS
Chromium				120.0	121.36	101	121.24	101	MS
Lead				120.0	124.03	103	120.51	100	MS
Mercury				5.0	5.33	106.6	5.28	105.6	CV
Nickel				120.0	120.42	100	122.26	102	MS
Selenium				120.0	123.92	103	127.23	106	MS
Silver				120.0	115.55	96	117.14	98	MS
Zinc				120.0	123.26	103	127.94	107	MS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

SW846 - METALS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Initial Calibration Source: EPA-0307

Continuing Calibration Source: HP615001

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Antimony				120.0	117.72	98	119.70	100	MS
Arsenic				120.0	128.14	107	125.15	104	MS
Barium				120.0	121.31	101	123.22	103	MS
Cadmium				120.0	127.73	106	124.48	104	MS
Chromium				120.0	119.65	100	114.55	95	MS
Lead				120.0	122.07	102	120.42	100	MS
Mercury				5.0	5.34	106.8	5.38	107.6	CV
Nickel				120.0	123.29	103	119.46	100	MS
Selenium				120.0	128.14	107	125.47	105	MS
Silver				120.0	119.01	99	116.35	97	MS
Zinc				120.0	130.22	109	121.87	102	MS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

SW846 - METALS

2A
INITIAL AND CONTINUING CALIBRATION VERIFICATION

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Initial Calibration Source: EPA-0307

Continuing Calibration Source: HP615001

Concentration Units: ug/L

Analyte	Initial Calibration			Continuing Calibration					
	True	Found	%R(1)	True	Found	%R(1)	Found	%R(1)	M
Antimony				120.0	121.65	101	115.88	97	MS
Arsenic				120.0	122.58	102	120.15	100	MS
Barium				120.0	125.41	105	120.15	100	MS
Cadmium				120.0	126.92	106	122.75	102	MS
Chromium				120.0	115.06	96	111.70	93	MS
Lead				120.0	124.50	104	118.77	99	MS
Mercury				5.0	5.43	108.6	5.31	106.2	CV
Nickel				120.0	120.66	101	116.42	97	MS
Selenium				120.0	125.38	104	120.48	100	MS
Silver				120.0	114.35	95	113.75	95	MS
Zinc				120.0	127.20	106	121.45	101	MS

(1) Control Limits: Mercury 80-120; Other Metals 90-110; Cyanide 85-115

2B-IN

CRDL STANDARD FOR AA AND ICP

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

AA CRDL Standard Source: HP0916320

ICP CRDL Standard Source: HP527008

Concentration Units: ug/L

Analyte	CRDL Standard for AA			CRDL Standard for ICP				
				Initial			Final	
	True	Found	%R	True	Found	%R	Found	%R
Antimony				1.0	0.96	96		
Arsenic				1.0	0.96	96		
Barium				1.0	0.98	98		
Cadmium				1.0	1.01	101		
Chromium				1.0	0.96	96		
Lead				1.0	0.98	98		
Mercury	0.2	0.15	75.0					
Nickel				1.0	0.94	94		
Selenium				1.0	0.90	90		
Silver				1.0	0.94	94		
Zinc				1.0	0.97	97		

Control Limits: no limits have been established by EPA at this time

SW846 - METALS

3

BLANKS

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Antimony	1.221	B	0.386	B	0.252	B	0.273	B	0.043	U	MS
Arsenic	0.084	U	0.084	U	0.084	U	0.084	U	0.084	U	MS
Barium	0.071	U	0.071	U	0.071	U	0.071	U	0.071	U	MS
Cadmium	0.110	U	0.110	U	0.110	U	0.110	U	0.110	U	MS
Chromium	0.200	U	0.200	U	0.200	U	0.200	U	0.200	U	MS
Lead	0.083	U	0.123	B	0.104	B	0.083	U	0.083	U	MS
Mercury	0.110	U	0.110	U	0.110	U	0.110	U	0.110	U	CV
Nickel	0.120	U	0.120	U	0.120	U	0.120	U	0.145	B	MS
Selenium	0.160	U	0.160	U	0.160	U	0.160	U	0.160	U	MS
Silver	0.093	U	0.093	U	0.093	U	0.093	U	0.093	U	MS
Zinc	0.280	U	0.280	U	0.280	U	0.280	U	0.280	U	MS

SW846 - METALS

3

BLANKS

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Antimony			0.366	B	0.585	B	0.320	B			MS
Arsenic			0.084	U	0.084	U	0.084	U			MS
Barium			0.071	U	0.071	U	0.071	U			MS
Cadmium			0.110	U	0.110	U	0.110	U			MS
Chromium			0.200	U	0.200	U	0.200	U			MS
Lead			0.083	U	0.083	U	0.083	U			MS
Mercury			0.110	U	0.110	U	-0.123	B			CV
Nickel			0.120	U	0.120	U	0.120	U			MS
Selenium			0.160	U	0.160	U	0.160	U			MS
Silver			0.093	U	0.093	U	0.093	U			MS
Zinc			0.280	U	0.280	U	0.280	U			MS

SW846 - METALS

3

BLANKS

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Antimony			0.320	B	0.299	B	0.283	B			MS
Arsenic			0.084	U	0.084	U	0.084	U			MS
Barium			0.071	U	0.071	U	0.071	U			MS
Cadmium			0.110	U	0.110	U	0.110	U			MS
Chromium			0.200	U	0.200	U	0.200	U			MS
Lead			0.083	U	0.083	U	0.083	U			MS
Mercury			0.110	U	0.110	U	0.110	U			CV
Nickel			0.120	U	0.120	U	0.120	U			MS
Selenium			0.160	U	0.160	U	0.160	U			MS
Silver			0.093	U	0.093	U	0.093	U			MS
Zinc			0.280	U	0.280	U	0.280	U			MS

SW846 - METALS

3

BLANKS

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Preparation Blank Matrix (soil/water): WATER

Preparation Blank Concentration Units (ug/L or mg/kg): UG/L

Analyte	Initial Calib. Blank (ug/L)	C	Continuing Calibration Blank (ug/L) 1	C	2	C	3	C	Preparation Blank	C	M
Antimony			0.304	B							MS
Arsenic			0.084	U							MS
Barium			0.071	U							MS
Cadmium			0.110	U							MS
Chromium			0.200	U							MS
Lead			0.083	U							MS
Mercury			0.110	U							CV
Nickel			0.120	U							MS
Selenium			0.160	U							MS
Silver			0.093	U							MS
Zinc			0.280	U							MS

4

ICP INTERFERENCE CHECK SAMPLE

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: 0910165

ICP ID Number: PEMS ICS Source: EPA-803

Concentration Units: ug/L

Analyte	True		Initial Found			Final Found		
	Sol.A	Sol.AB	Sol.A	Sol.AB	%R	Sol.A	Sol.AB	%R
Antimony	2	22	1.2	17.6	80			
Arsenic	0	19	0.13	15.3	81			
Barium	1	22	1.2	20.1	91			
Cadmium	1	20	0.27	18.9	94			
Chromium	21	40	17.6	34.8	87			
Lead	4	25	4.1	25.2	101			
Nickel	6	24	5.4	20.9	87			
Selenium	0	19	0.21	15.3	81			
Silver	0	18	0.0082	17.1	95			
Zinc	11	29	10.7	23.9	82			

SW846 - METALS

5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

13MW5S

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75 - 125	106.6599		0.9154	B	100.00	106		MS
Arsenic	75 - 125	43.8290		0.1821	B	40.00	109		MS
Barium	75 - 125	2282.8350		108.4456		2000.00	109		MS
Cadmium	75 - 125	58.1699		0.1100	U	50.00	116		MS
Chromium	75 - 125	197.8024		3.8978	B	200.00	97		MS
Lead	75 - 125	23.1315		0.1436	B	20.00	115		MS
Mercury	75 - 125	0.9010		0.1100	U	1.00	90.1		CV
Nickel	75 - 125	489.3019		2.0158	B	500.00	97		MS
Selenium	75 - 125	13.2704		1.6133	B	10.00	117		MS
Silver	75 - 125	49.9523		0.0930	U	50.00	100		MS
Zinc	75 - 125	504.1014		1.9398	B	500.00	100		MS

Comments:

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5A

SPIKE SAMPLE RECOVERY

SAMPLE NO.

13MW5SD

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit %R	Spiked Sample Result (SSR)	C	Sample Result (SR)	C	Spike Added (SA)	%R	Q	M
Antimony	75 - 125	109.2450		0.9154	B	100.00	108		MS
Arsenic	75 - 125	43.2634		0.1821	B	40.00	108		MS
Barium	75 - 125	2297.3340		108.4456		2000.00	109		MS
Cadmium	75 - 125	57.4548		0.1100	U	50.00	115		MS
Chromium	75 - 125	199.5308		3.8978	B	200.00	98		MS
Lead	75 - 125	23.0895		0.1436	B	20.00	115		MS
Mercury	75 - 125	0.8810		0.1100	U	1.00	88.1		CV
Nickel	75 - 125	475.9715		2.0158	B	500.00	95		MS
Selenium	75 - 125	13.5834		1.6132	B	10.00	120		MS
Silver	75 - 125	50.5340		0.0930	U	50.00	101		MS
Zinc	75 - 125	505.9021		1.9398	B	500.00	101		MS

Comments:

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DUPLICATES

SAMPLE NO.

13MW5D

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Level (low/med): LOW

% Solids for Sample: 0.0 % Solids for Duplicate: 0.0

Concentration Units (ug/L or mg/kg dry weight): UG/L

Analyte	Control Limit	Sample (S)	C	Duplicate (D)	C	RPD	Q	M
Antimony		0.9154	B	0.2450	B	116		MS
Arsenic		0.1821	B	0.1606	B	13		MS
Barium		108.4456		109.4662		1		MS
Cadmium		0.1100	U	0.1100	U			MS
Chromium		3.8978	B	3.8910	B	0		MS
Lead		0.1436	B	0.0966	B	39		MS
Mercury		0.1100	U	0.1100	U			CV
Nickel		2.0158	B	2.0481	B	2		MS
Selenium		1.6133	B	1.5128	B	6		MS
Silver		0.0930	U	0.0930	U			MS
Zinc		1.9398	B	1.9167	B	1		MS

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LABORATORY CONTROL SAMPLE

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Solid LCS Source:

Aqueous LCS Source: EPA-0307

Analyte	Aqueous (ug/L) True	Found	%R	Solid (mg/kg) True	Found	C	Limits		%R
Antimony	198.0	198.57	100						
Arsenic	199.0	218.75	110						
Barium	100.0	103.07	103						
Cadmium	99.0	105.00	106						
Chromium	98.0	99.78	102						
Lead	199.0	207.95	104						
Mercury	3.0	2.55	85.0						
Nickel	98.0	106.84	109						
Selenium	201.0	219.30	109						
Silver	99.0	98.40	99						
Zinc	200.0	215.24	108						

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ICP SERIAL DILUTIONS

SAMPLE NO.

13MW5L

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix (soil/water): WATER Level (low/med): LOW

Concentration Units: ug/L

Analyte	Initial Sample Result (I)	C	Serial Dilution Result (S)	C	% Difference	Q	M
Antimony	0.92	B	2.32	B	152		MS
Arsenic	0.18	B	0.42	U	100.0		MS
Barium	108.45		117.00		8		MS
Cadmium	0.11	U	0.55	U			MS
Chromium	3.90	B	4.19	B	7		MS
Lead	0.14	B	0.41	U	100.0		MS
Mercury	0.11	U	0.55	U			CV
Nickel	2.02	B	3.05	B	51		MS
Selenium	1.61	B	1.30	B	19		MS
Silver	0.09	U	0.47	U			MS
Zinc	1.94	B	2.59	B	34		MS

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

ICP ID Number: PEMS Date: 11/9/2009

Flame AA ID Number:

Furnace AA ID Number:

Analyte	Isotope	Back-ground	CRQL (ug/L)	PQL (ug/L)	M
Antimony	121		5	5	MS
Arsenic	75		5	5	MS
Barium	137		1	1	MS
Cadmium	111		1	1	MS
Chromium	52		5	5	MS
Lead	208		5	5	MS
Nickel	60		5	5	MS
Selenium	82		5	5	MS
Silver	107		2	2	MS
Zinc	66		5	5	MS

Comments:

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INSTRUMENT DETECTION LIMITS (QUARTERLY)

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: 0910165

ICP ID Number: _____ Date: 10/15/2009

Flame AA ID Number: V4

Furnace AA ID Number: _____

Analyte	Wave-length (nm)	Back-ground	CRQL (ug/L)	PQL (ug/L)	M
Mercury	253.70		0.50	0.11	CV

Comments: _____

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ICP LINEAR RANGES (QUARTERLY)

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

ICP ID Number: PEMS Date: 10/15/2009

Analyte	Integ. Time (Sec.)	Concentration (ug/L)	M
Antimony	0.200	4000.0	MS
Arsenic	1.500	4000.0	MS
Barium	0.500	4000.0	MS
Cadmium	0.200	4000.0	MS
Chromium	0.200	4000.0	MS
Lead	0.200	4000.0	MS
Nickel	0.300	4000.0	MS
Selenium	1.500	4000.0	MS
Silver	0.300	4000.0	MS
Zinc	0.300	4000.0	MS

Comments:

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PREPARATION LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Method: MS

EPA Sample No.	Preparation Date		Volume (mL)
13MW1	10/28/2009		50.0
13MW2	10/28/2009		50.0
13MW3	10/28/2009		50.0
13MW4	10/28/2009		50.0
13MW5	10/28/2009		50.0
13MW5D	10/28/2009		50.0
13MW5S	10/28/2009		50.0
13MW5SD	10/28/2009		50.0
13MW6	10/28/2009		50.0
13MW7	10/28/2009		50.0
13MWDUP	10/28/2009		50.0
LCSW	10/28/2009		50.0
PBW	10/28/2009		50.0

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PREPARATION LOG

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ SAS No.: _____ SDG No.: 0910165

Method: CV

EPA Sample No.	Preparation Date		Volume (mL)
13MW1	10/28/2009		100.0
13MW2	10/28/2009		100.0
13MW3	10/28/2009		100.0
13MW4	10/28/2009		100.0
13MW5	10/28/2009		100.0
13MW5D	10/28/2009		100.0
13MW5S	10/28/2009		100.0
13MW5SD	10/28/2009		100.0
13MW6	10/28/2009		100.0
13MW7	10/28/2009		100.0
13MWDUP	10/28/2009		100.0
LCSW	10/28/2009		100.0
PBW	10/28/2009		100.0

ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID Number: V4 Method: CV

Start Date: 10/29/2009 End Date: 10/29/2009

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	1.00	1040																X								
S0.2	1.00	1042																X								
S0.5	1.00	1044																X								
S1	1.00	1045																X								
S5	1.00	1047																X								
S10	1.00	1049																X								
ICV	1.00	1051																X								
ICB	1.00	1054																X								
CRA	1.00	1056																X								
CCV	1.00	1058																X								
CCB	1.00	1100																X								
ZZZZZZ	1.00	1102																								
ZZZZZZ	1.00	1104																								
ZZZZZZ	1.00	1106																								
ZZZZZZ	1.00	1108																								
ZZZZZZ	1.00	1110																								
ZZZZZZ	1.00	1112																								
ZZZZZZ	1.00	1114																								
ZZZZZZ	1.00	1116																								
ZZZZZZ	1.00	1118																								
ZZZZZZ	1.00	1120																								
CCV	1.00	1123																X								
CCB	1.00	1125																X								
ZZZZZZ	1.00	1127																								
ZZZZZZ	1.00	1129																								
ZZZZZZ	1.00	1131																								
ZZZZZZ	1.00	1133																								
ZZZZZZ	1.00	1136																								
ZZZZZZ	1.00	1138																								
ZZZZZZ	1.00	1140																								
ZZZZZZ	1.00	1141																								
ZZZZZZ	1.00	1143																								
CCV	1.00	1146																X								
CCB	1.00	1147																X								
ZZZZZZ	1.00	1149																								
ZZZZZZ	1.00	1151																								
ZZZZZZ	1.00	1154																								
ZZZZZZ	1.00	1156																								

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ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID Number: V4 Method: CV

Start Date: 10/29/2009 End Date: 10/29/2009

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	1158																X								
ZZZZZZ	1.00	1200																X								
ZZZZZZ	1.00	1202																								
ZZZZZZ	1.00	1204																								
ZZZZZZ	1.00	1206																								
ZZZZZZ	1.00	1208																								
CCV	1.00	1210																X								
CCB	1.00	1212																X								
ZZZZZZ	1.00	1214																								
ZZZZZZ	1.00	1216																								
ZZZZZZ	1.00	1218																								
ZZZZZZ	1.00	1221																								
ZZZZZZ	1.00	1223																								
ZZZZZZ	1.00	1224																								
ZZZZZZ	1.00	1226																								
ZZZZZZ	1.00	1228																								
ZZZZZZ	1.00	1231																								
CCV	1.00	1233																X								
CCB	1.00	1235																X								
ZZZZZZ	1.00	1237																								
ZZZZZZ	1.00	1239																								
ZZZZZZ	1.00	1241																								
ZZZZZZ	1.00	1243																								
ZZZZZZ	1.00	1245																								
ZZZZZZ	1.00	1247																								
ZZZZZZ	1.00	1249																								
ZZZZZZ	1.00	1251																								
ZZZZZZ	1.00	1253																								
CCV	1.00	1256																X								
CCB	1.00	1258																X								
ZZZZZZ	1.00	1300																								
ZZZZZZ	1.00	1302																								
ZZZZZZ	1.00	1304																								
ZZZZZZ	1.00	1306																								
ZZZZZZ	1.00	1308																								
ZZZZZZ	1.00	1310																								
ZZZZZZ	1.00	1312																								
ZZZZZZ	1.00	1314																								

SW846 - METALS

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ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID Number: V4 Method: CV

Start Date: 10/29/2009 End Date: 10/29/2009

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
CCV	1.00	1316																X								
CCB	1.00	1318																X								
ZZZZZZ	1.00	1320																								
ZZZZZZ	1.00	1322																								
ZZZZZZ	1.00	1324																								
ZZZZZZ	1.00	1326																								
ZZZZZZ	1.00	1328																								
ZZZZZZ	1.00	1330																								
CCV	1.00	1332																X								
CCB	1.00	1335																X								
PBW	1.00	1337																X								
LCSW	1.00	1339																X								
ZZZZZZ	1.00	1341																								
13MW5	1.00	1343																X								
13MW5D	1.00	1345																X								
13MW5S	1.00	1348																X								
13MW5SD	1.00	1350																X								
13MW5L	5.00	1352																X								
CCV	1.00	1354																X								
CCB	1.00	1356																X								
13MW1	1.00	1358																X								
13MW2	1.00	1400																X								
13MW3	1.00	1402																X								
13MW4	1.00	1404																X								
13MWDUP	1.00	1406																X								
13MW6	1.00	1409																X								
13MW7	1.00	1411																X								
CCV	1.00	1413																X								
CCB	1.00	1415																X								

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ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID Number: PEMS Method: MS

Start Date: 11/9/2009 End Date: 11/9/2009

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
TUNE	1.00	0758																										
S0	1.00	1736			X	X	X		X		X				X				X		X	X				X	
S1	1.00	1738			X	X	X		X		X				X				X		X	X				X	
S20	1.00	1740			X	X	X		X		X				X				X		X	X				X	
S200	1.00	1742			X	X	X		X		X				X				X		X	X				X	
ICV	1.00	1744			X	X	X		X		X				X				X		X	X				X	
ICB	1.00	1746			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	1749																										
ICSA	1.00	1751			X	X	X		X		X				X				X		X	X				X	
ICSAB	1.00	1753			X	X	X		X		X				X				X		X	X				X	
CCV	1.00	1755			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	1757			X	X	X		X		X				X				X		X	X				X	
LRS	1.00	1803			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	1805																										
ZZZZZZ	1.00	1807																										
ZZZZZZ	1.00	1809																										
ZZZZZZ	1.00	1810																										
ZZZZZZ	1.00	1814																										
ZZZZZZ	1.00	1817																										
ZZZZZZ	1.00	1824																										
ZZZZZZ	1.00	1832																										
ZZZZZZ	5.00	1838																										
CCV	1.00	1840			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	1841			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	1847																										
ZZZZZZ	1.00	1855																										
ZZZZZZ	1.00	1859																										
ZZZZZZ	5.00	1905																										
CCV	1.00	1907			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	1909			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	1921																										
ZZZZZZ	1.00	1923																										
ZZZZZZ	1.00	1925																										
ZZZZZZ	1.00	1927																										
ZZZZZZ	1.00	1929																										
ZZZZZZ	1.00	1931																										
CCV	1.00	1933			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	1935			X	X	X		X		X				X				X		X	X				X	

ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID Number: PEMS Method: MS

Start Date: 11/9/2009 End Date: 11/9/2009

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	1940																								
ZZZZZZ	1.00	1942																								
ZZZZZZ	1.00	1943																								
ZZZZZZ	1.00	1945																								
ZZZZZZ	1.00	1947																								
ZZZZZZ	1.00	1949																								
ZZZZZZ	1.00	1951																								
ZZZZZZ	1.00	1953																								
ZZZZZZ	1.00	1955																								
ZZZZZZ	1.00	1957																								
CCV	1.00	1959			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	2001			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	2004																								
ZZZZZZ	1.00	2006																								
ZZZZZZ	1.00	2008																								
ZZZZZZ	1.00	2010																								
ZZZZZZ	1.00	2013																								
ZZZZZZ	1.00	2015																								
ZZZZZZ	1.00	2020																								
ZZZZZZ	1.00	2022																								
ZZZZZZ	1.00	2024																								
ZZZZZZ	1.00	2025																								
CCV	1.00	2027			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	2029			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	2033																								
ZZZZZZ	1.00	2035																								
ZZZZZZ	1.00	2038																								
ZZZZZZ	1.00	2040																								
ZZZZZZ	1.00	2042																								
ZZZZZZ	1.00	2044																								
ZZZZZZ	1.00	2046																								
ZZZZZZ	1.00	2048																								
ZZZZZZ	1.00	2050																								
ZZZZZZ	1.00	2052																								
CCV	1.00	2054			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	2056			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	2109																								
ZZZZZZ	1.00	2111																								

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ANALYSIS RUN LOG

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID Number: PEMS Method: MS

Start Date: 11/9/2009 End Date: 11/9/2009

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	2113																								
ZZZZZZ	1.00	2115																								
ZZZZZZ	1.00	2117																								
ZZZZZZ	1.00	2119																								
ZZZZZZ	1.00	2121																								
ZZZZZZ	1.00	2123																								
ZZZZZZ	1.00	2125																								
ZZZZZZ	1.00	2127																								
CCV	1.00	2129			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	2131			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	1.00	2134																									
PBW	1.00	2136			X	X	X		X		X				X				X		X	X				X	
LCSW	1.00	2138			X	X	X		X		X				X				X		X	X				X	
13MW5	1.00	2140			X	X	X		X		X				X				X		X	X				X	
13MW5D	1.00	2142			X	X	X		X		X				X				X		X	X				X	
13MW5S	1.00	2144			X	X	X		X		X				X				X		X	X				X	
13MW5SD	1.00	2146			X	X	X		X		X				X				X		X	X				X	
13MW5L	5.00	2148			X	X	X		X		X				X				X		X	X				X	
13MW1	1.00	2150			X	X	X		X		X				X				X		X	X				X	
13MW2	1.00	2152			X	X	X		X		X				X				X		X	X				X	
CCV	1.00	2154			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	2156			X	X	X		X		X				X				X		X	X				X	
13MW3	1.00	2159			X	X	X		X		X				X				X		X	X				X	
13MW4	1.00	2201			X	X	X		X		X				X				X		X	X				X	
13MWDUP	1.00	2203			X	X	X		X		X				X				X		X	X				X	
13MW6	1.00	2205			X	X	X		X		X				X				X		X	X				X	
13MW7	1.00	2207			X	X	X		X		X				X				X		X	X				X	
ZZZZZZ	5.00	2215																									
CCV	1.00	2217			X	X	X		X		X				X				X		X	X				X	
CCB	1.00	2219			X	X	X		X		X				X				X		X	X				X	

SW846 - METALS

14 - IN

ICP-MS Tune

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ NRAS No.: _____ SDG NO.: 0910165

ICP-MS Instrument ID: PEMS Date: 11/09/2009

Element - Mass	Avg. Measured Mass (amu)	Avg. Peak Width at Peak Height (amu)	%RSD
Be_9	8.93	0.70	1.59
Mg_24	23.98	0.73	2.58
Mg_25	25.03	0.71	2.20
Mg_26	25.98	0.72	2.50
Co_59	58.98	0.70	1.61
In_113	112.88	0.72	2.00
In_115	114.88	0.70	1.56
Pb_206	205.98	0.70	1.12
Pb_207	206.98	0.69	1.61
Pb_208	207.98	0.70	1.92

Comments: _____

SW846 - METALS

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: NRAS No.: SDG NO.: 0910165

ICP-MS Instrument ID: PEMS Start Date: 11/09/2009 End Date: 11/09/2009

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li_6	Q	Element Sc_45	Q	Element In_115	Q	Element Tb_159	Q	Element Bi_209	Q	Element	Q
S0	S0	1736	100		100		100		100		100			
S1	S1	1738	98		98		96		95		97			
S20	S20	1740	98		98		100		100		100			
S200	S200	1742	100		99		97		98		97			
ICV1	ICV	1744	104		103		104		102		103			
ICB1	ICB	1746	101		98		98		95		99			
CRDL1	ZZZZZZ	1749	0											
ICS-A1	ICSA	1751	91		87		70		79		60			
ICS-AB1	ICSAB	1753	99		100		75		86		66			
CCV1	CCV	1755	105		107		108		107		107			
CCB1	CCB	1757	99		99		100		100		104			
LRS	LRS	1803	102		103		100		100		101			
9102206-BLK	ZZZZZZ	1805	0											
9102206-BS1	ZZZZZZ	1807	0											
9102206-BSD	ZZZZZZ	1809	0											
0910167-01	ZZZZZZ	1810	0											
SDI0910167-	ZZZZZZ	1814	0											
0910167-02	ZZZZZZ	1817	0											
0910167-03	ZZZZZZ	1824	0											
0910167-04	ZZZZZZ	1832	0											
IBL	ZZZZZZ	1838	0											
CCV2	CCV	1840	115		118		112		114		113			
CCB2	CCB	1841	108		108		106		108		106			
0910167-05	ZZZZZZ	1847	0											
0910167-06	ZZZZZZ	1855	0											
SDI0910167-	ZZZZZZ	1859	0											
IBL	ZZZZZZ	1905	0											
CCV3	CCV	1907	111		112		110		110		109			
CCB3	CCB	1909	106		105		105		102		104			
9102240-BLK	ZZZZZZ	1921	0											
9102240-BS1	ZZZZZZ	1923	0											
9102240-BSD	ZZZZZZ	1925	0											
0910096-01	ZZZZZZ	1927	0											
SDI0910096-	ZZZZZZ	1929	0											
0910096-03	ZZZZZZ	1931	0											
CCV4	CCV	1933	109		112		111		110		109			
CCB4	CCB	1935	107		107		106		107		108			
9101927-BLK	ZZZZZZ	1940	0											
9101927-BS1	ZZZZZZ	1942	0											
9101927-BSD	ZZZZZZ	1943	0											
0910086-01	ZZZZZZ	1945	0											
SDI0910086-	ZZZZZZ	1947	0											
0910086-02	ZZZZZZ	1949	0											
0910086-03	ZZZZZZ	1951	0											
0910086-04	ZZZZZZ	1953	0											

SW846 - METALS

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: COMPUCHEM Contract:

Lab Code: LIBRTY Case No.: NRAS No.: SDG NO.: 0910165

ICP-MS Instrument ID: PEMS Start Date: 11/09/2009 End Date: 11/09/2009

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li_6	Q	Element Sc_45	Q	Element In_115	Q	Element Tb_159	Q	Element Bi_209	Q	Element	Q
9101926-BLK	ZZZZZZ	1955	0											
9101926-BS1	ZZZZZZ	1957	0											
CCV5	CCV	1959	102		97		104		107		107			
0910085-04	ZZZZZZ	2022	0											
0910085-05	ZZZZZZ	2024	0											
0910085-06	ZZZZZZ	2025	0											
CCB5	CCB	2001	102		93		102		103		109			
0910085-01	ZZZZZZ	2004	0											
9101926-DUP	ZZZZZZ	2006	0											
9101926-MS1	ZZZZZZ	2008	0											
9101926-MSD	ZZZZZZ	2010	0											
SDI0910085-	ZZZZZZ	2013	0											
0910085-02	ZZZZZZ	2015	0											
0910085-03	ZZZZZZ	2020	0											
CCV6	CCV	2027	97		85		91		95		96			
CCB6	CCB	2029	103		94		99		102		105			
0910085-07	ZZZZZZ	2033	0											
0910085-08	ZZZZZZ	2035	0											
9101926-PS1	ZZZZZZ	2038	0											
9101632-BLK	ZZZZZZ	2040	0											
9101632-BS1	ZZZZZZ	2042	0											
0910073-01	ZZZZZZ	2044	0											
9101632-DUP	ZZZZZZ	2046	0											
9101632-MS1	ZZZZZZ	2048	0											
9101632-MSD	ZZZZZZ	2050	0											
SDI0910073-	ZZZZZZ	2052	0											
CCV7	CCV	2054	91		83		88		93		95			
CCB7	CCB	2056	90		83		89		93		96			
0910073-02	ZZZZZZ	2109	0											
0910073-03	ZZZZZZ	2111	0											
0910073-04	ZZZZZZ	2113	0											
0910073-05	ZZZZZZ	2115	0											
0910073-06	ZZZZZZ	2117	0											
0910073-07	ZZZZZZ	2119	0											
0910073-08	ZZZZZZ	2121	0											
0910073-09	ZZZZZZ	2123	0											
0910073-10	ZZZZZZ	2125	0											
0910073-11	ZZZZZZ	2127	0											
CCV8	CCV	2129	93		84		88		90		94			
CCB8	CCB	2131	88		75		83		86		90			
0910073-12	ZZZZZZ	2134	0											
9102718-BLK	PBW	2136	92		83		89		90		96			
9102718-BS1	LCSW	2138	89		78		83		88		91			
0910165-01	13MW5	2140	82		78		75		79		74			
9102718-DUP	13MW5D	2142	83		81		74		79		74			

SW846 - METALS

15-IN

ICP-MS INTERNAL STANDARDS RELATIVE INTENSITY SUMMARY

Lab Name: COMPUCHEM Contract: _____

Lab Code: LIBRTY Case No.: _____ NRAS No.: _____ SDG NO.: 0910165

ICP-MS Instrument ID: PEMS Start Date: 11/09/2009 End Date: 11/09/2009

Sample No.	Client ID	Time	Internal Standards %RI For:											
			Element Li_6	Q	Element Sc_45	Q	Element In_115	Q	Element Tb_159	Q	Element Bi_209	Q	Element	Q
9102718-MS1	13MW5S	2144	91		90		81		85		79			
9102718-MSD	13MW5SD	2146	94		93		83		87		81			
0910165-01	13MW5L	2148	102		97		96		96		95			
0910165-02	13MW1	2150	93		87		81		84		80			
0910165-03	13MW2	2152	94		89		82		86		82			
CCV9	CCV	2154	94		91		92		95		98			
CCB9	CCB	2156	105		96		92		95		100			
0910165-04	13MW3	2159	77		75		72		76		73			
0910165-05	13MW4	2201	79		74		73		77		72			
0910165-06	13MWDUP	2203	85		83		76		81		78			
0910165-07	13MW6	2205	79		78		69		74		68			
0910165-08	13MW7	2207	96		97		84		87		81			
IBL	ZZZZZZ	2215	0											
CCV10	CCV	2217	95		88		90		94		99			
CCB10	CCB	2219	95		87		91		95		101			

3. Raw Data

For each reported value, the laboratory shall include in the data package all raw data used to obtain that value. This applies to all required QA/QC measurements, instrument standardization, as well as all sample analysis results. This does not apply to the quarterly verification of method and instrument parameters submitted as a part of each data package.

Daily Instrument Profile

Detector Cross Cal: 110905
Analog Voltage: 1050
Pulse Voltage: 2050
Nebulizer Pressure: 0.85

Maintenance: None

Printed: 11/10/2009 9:15:27 AM

Method(s) (circle one): ILM05.4 (SW-846 6020) Other _____

Operator(s): JC

Date/Time 110909/1736 to 111009/0046

Tune Date/Time 110909/0758

↑	Specified element(s) fail(s) high
↓	Specified element(s) fail(s) low
RR	Re-run sample(s) neat
RR #X	Re-run at a #-fold dilution
#X	Sample run at a #-fold dilution (aliquot of sample diluted with acidified water)
L	Matrix = leachate
W	Matrix = water
S	Matrix = solid
B	Matrix = biological tissue

SDG	Matrix	Comments
0910073	Water	Cu Stan
0910085	Water	Co+Ti
0910086	Water	Co+Ti
0910096	Water	PPL
0910143	Water	Custm
0910152	Water	Custm
0910165	Water	Custm
0910166	Water	Custm
0910167	Water	Custm
0910193	Water	PPL

ICP-MS Run Log: PEM

File Name: PEMSJCF110909E

Sample ID	Client ID	Sample Type	DF	Date	Time	SDG	Action Needed
TUN1	Tune	CALIB STD					
CAL1	S0	CALIB STD	1	11/09/09	17:36:42		
S1	S1	CALIB STD	1	11/09/09	17:38:40		
CAL3	S20	CALIB STD	1	11/09/09	17:40:38		
CAL4	S200	CALIB STD	1	11/09/09	17:42:35		
ICV1	ICV	ICV	1	11/09/09	17:44:32		
ICB1	ICB	ICB	1	11/09/09	17:46:31		
CRL1	CRI	CRI	1	11/09/09	17:49:29		
IFA1	ICSA	ICS	1	11/09/09	17:51:27		
IFB1	ICSAB	ICS	1	11/09/09	17:53:25		

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

Reviewed By: _____ Date: 11-10-09

ICP-MS Run Log: PEM

File Name: PEMSJCF110909E

Sample ID	Client ID	Sample Type	DF	Date	Time	SDG	Action Needed
CCV1	CCV	CCV	1	11/09/09	17:55:23		
CCB1	CCB	CCB	1	11/09/09	17:57:22		
LRS	LRS	LRS	1	11/09/09	18:03:08		
9102206-BLK1	PBW	BLANK	1	11/09/09	18:05:06		
9102206-BS1	LCSW	LCS	1	11/09/09	18:07:04		
9102206-BSD1	LCSWD	LCS DUP	1	11/09/09	18:09:01		
0910167-01	MW-1-03	SAMPLE	1	11/09/09	18:10:59	0910167	
~~SRD1~~ IBL	~~MW-1-03L~~ IBL	CALIB STD	5	11/09/09	18:14:27	0910167	
0910167-02	MW-2-03	SAMPLE	1	11/09/09	18:17:55	0910167	
0910167-03	MW-3-03	SAMPLE	1	11/09/09	18:24:56	0910167	
0910167-04	MW-4-03	SAMPLE	1	11/09/09	18:32:09	0910167	
IBL1	IBL	SAMPLE	1	11/09/09	18:38:02		
CCV2	CCV	CCV	1	11/09/09	18:40:01		
CCB2	CCB	CCB	1	11/09/09	18:41:59		
0910167-05	MW-DUP-03	SAMPLE	1	11/09/09	18:47:55	0910167	
0910167-06	EB-03	SAMPLE	1	11/09/09	18:55:13	0910167	
SRD2	MW-1-03L	CALIB STD	5	11/09/09	18:59:47	0910167	
IBL2	IBL	SAMPLE	1	11/09/09	19:05:25		
CCV3	CCV	CCV	1	11/09/09	19:07:23		
CCB3	CCB	CCB	1	11/09/09	19:09:21		
9102240-BLK1	PBW	BLANK	1	11/09/09	19:21:08	0910167	
9102240-BS1	LCSW	LCS	1	11/09/09	19:23:06	0910167	
9102240-BSD1	LCSWD	LCS DUP	1	11/09/09	19:25:03	0910167	
0910096-01	MW-10	SAMPLE	1	11/09/09	19:27:20	0910096	
SRD3	MW-10L	CALIB STD	5	11/09/09	19:29:18	0910096	
0910096-03	MW-10 101409	SAMPLE	1	11/09/09	19:31:15	0910096	
CCV4	CCV	CCV	1	11/09/09	19:33:14		
CCB4	CCB	CCB	1	11/09/09	19:35:12		
9101927-BLK1	PBW	BLANK	1	11/09/09	19:40:02	0910096	
9101927-BS1	LCSW	LCS	1	11/09/09	19:42:00	0910096	
9101927-BSD1	LCSWD	LCS DUP	1	11/09/09	19:43:58	0910096	
0910086-01	16-3	SAMPLE	1	11/09/09	19:45:55	0910086	

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Reviewed By: L. Jones Date: 11-10-09

ICP-MS Run Log: PEM

File Name: PEMSJCF110909E

Sample ID	Client ID	Sample Type	DF	Date	Time	SDG	Action Needed
SRD4	16-3L	CALIB STD	5	11/09/09	19:47:53	0910086	
0910086-02	FAL2	SAMPLE	1	11/09/09	19:49:50	0910086	
0910086-03	FAL3	SAMPLE	1	11/09/09	19:51:48	0910086	
0910086-04	WELL7	SAMPLE	1	11/09/09	19:53:46	0910086	
9101926-BLK1	PBW	BLANK	1	11/09/09	19:55:43	0910086	
9101926-BS1	LCSW	LCS	1	11/09/09	19:57:41	0910086	
CCV5	CCV	CCV	1	11/09/09	19:59:40		
CCB5	CCB	CCB	1	11/09/09	20:01:37		
0910085-01	74MW4	SAMPLE	1	11/09/09	20:04:25	0910085	
9101926-DUP1	74MW4D	DUPLICATE	1	11/09/09	20:06:23	0910085	
9101926-MS1	74MW4S	MATRIX SPIK	1	11/09/09	20:08:21	0910085	
9101926-MSD1	74MW4SD	MATRIX SPIK	1	11/09/09	20:10:19	0910085	
SRD5	74MW4L	CALIB STD	5	11/09/09	20:13:51	0910085	
0910085-02	74MW1	SAMPLE	1	11/09/09	20:15:50	0910085	
0910085-03	74MW2	SAMPLE	1	11/09/09	20:20:06	0910085	
0910085-04	74MW3	SAMPLE	1	11/09/09	20:22:04	0910085	
0910085-05	74MWDUP	SAMPLE	1	11/09/09	20:24:02	0910085	
0910085-06	74MW5	SAMPLE	1	11/09/09	20:25:59	0910085	
CCV6	CCV	CCV	1	11/09/09	20:27:58		
CCB6	CCB	CCB	1	11/09/09	20:29:56		
0910085-07	74MW6	SAMPLE	1	11/09/09	20:33:23	0910085	
0910085-08	74MW7	SAMPLE	1	11/09/09	20:35:21	0910085	
9101926-PS1	9101926-PS1	SAMPLE	1	11/09/09	20:38:32	0910085	
9101632-BLK1	PBW	BLANK	1	11/09/09	20:40:29	0910085	
9101632-BS1	LCSW	LCS	1	11/09/09	20:42:27	0910085	
0910073-01	16WC1A	SAMPLE	1	11/09/09	20:44:24	0910073	
9101632-DUP1	16WC1AD	DUPLICATE	1	11/09/09	20:46:22	0910073	
9101632-MS1	16WC1AS	MATRIX SPIK	1	11/09/09	20:48:20	0910073	
9101632-MSD1	16WC1ASD	MATRIX SPIK	1	11/09/09	20:50:17	0910073	
SRD6	16WC1AL	CALIB STD	1	11/09/09	20:52:15	0910073	
CCV7	CCV	CCV	1	11/09/09	20:54:14		
CCB7	CCB	CCB	1	11/09/09	20:56:12		

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Reviewed By: L. Jones Date: 11-10-09

ICP-MS Run Log: PEM

File Name: PEMSJCF110909E

Sample ID	Client ID	Sample Type	DF	Date	Time	SDG	Action Needed
0910073-02	16C1	SAMPLE	1	11/09/09	21:09:33	0910073	
0910073-03	16MW8	SAMPLE	1	11/09/09	21:11:30	0910073	
0910073-04	16MW9	SAMPLE	1	11/09/09	21:13:28	0910073	
0910073-05	16WDUP	SAMPLE	1	11/09/09	21:15:26	0910073	
0910073-06	16WC1B	SAMPLE	1	11/09/09	21:17:23	0910073	
0910073-07	16-1	SAMPLE	1	11/09/09	21:19:21	0910073	
0910073-08	16-2	SAMPLE	1	11/09/09	21:21:18	0910073	
0910073-09	16-3	SAMPLE	1	11/09/09	21:23:16	0910073	
0910073-10	16-5	SAMPLE	1	11/09/09	21:25:14	0910073	
0910073-11	16WC2B	SAMPLE	1	11/09/09	21:27:12	0910073	
CCV8	CCV	CCV	1	11/09/09	21:29:11		
CCB8	CCB	CCB	1	11/09/09	21:31:09		
0910073-12	16SPRING	SAMPLE	1	11/09/09	21:34:36	0910073	
9102718-BLK1	PBW	BLANK	1	11/09/09	21:36:34	0910073	
9102718-BS1	LCSW	LCS	1	11/09/09	21:38:32	0910073	
0910165-01	13MW5	SAMPLE	1	11/09/09	21:40:29	0910165	
9102718-DUP1	13MW5D	DUPLICATE	1	11/09/09	21:42:26	0910165	
9102718-MS1	13MW5S	MATRIX SPIK	1	11/09/09	21:44:24	0910165	
9102718-MSD1	13MW5SD	MATRIX SPIK	1	11/09/09	21:46:22	0910165	
SRD7	13MW5L	CALIB STD	5	11/09/09	21:48:19	0910165	
0910165-02	13MW1	SAMPLE	1	11/09/09	21:50:17	0910165	
0910165-03	13MW2	SAMPLE	1	11/09/09	21:52:14	0910165	
CCV9	CCV	CCV	1	11/09/09	21:54:14		
CCB9	CCB	CCB	1	11/09/09	21:56:11		
0910165-04	13MW3	SAMPLE	1	11/09/09	21:59:10	0910165	
0910165-05	13MW4	SAMPLE	1	11/09/09	22:01:08	0910165	
0910165-06	13MWDUP	SAMPLE	1	11/09/09	22:03:06	0910165	
0910165-07	13MW6	SAMPLE	1	11/09/09	22:05:04	0910165	
0910165-08	13MW7	SAMPLE	1	11/09/09	22:07:01	0910165	
IBL3	IBL	SAMPLE	1	11/09/09	22:15:17		
CCVA	CCV	CCV	1	11/09/09	22:17:16		
CCBA	CCB	CCB	1	11/09/09	22:19:13		

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Reviewed By: 2. Jones Date: 11/10/09

ICP-MS Run Log: PEM

File Name: PEMSJCF110909E

Sample ID	Client ID	Sample Type	DF	Date	Time	SDG	Action Needed
9102232-BLK1	PBW	BLANK	1	11/09/09	22:22:17	0910165	
9102232-BS1	LCSW	LCS	1	11/09/09	22:24:43	0910165	
0910166-01	7W11B	SAMPLE	1	11/09/09	22:33:49	0910166	
9102232-DUP1	7W11BD	DUPLICATE	1	11/09/09	22:35:47	0910166	
9102232-MS1	7W11BS	MATRIX SPIK	1	11/09/09	22:37:45	0910166	
9102232-MSD1	7W11BSD	MATRIX SPIK	1	11/09/09	22:39:42	0910166	
SRD8	7W11BL	CALIB STD	5	11/09/09	22:41:40	0910166	
0910166-02	7W12B	SAMPLE	1	11/09/09	22:43:37	0910166	
0910166-03	7WCA	SAMPLE	1	11/09/09	22:45:35	0910166	
0910166-04	7WDUP	SAMPLE	1	11/09/09	22:47:32	0910166	
CCVB	CCV	CCV	1	11/09/09	22:49:32		
CCBB	CCB	CCB	1	11/09/09	22:51:29		
0910166-05	7MW6	SAMPLE	1	11/09/09	22:55:40	0910166	
0910166-06	7W9C	SAMPLE	1	11/09/09	22:57:38	0910166	
0910166-07	7W10B	SAMPLE	1	11/09/09	22:59:36	0910166	
0910166-08	7W10C	SAMPLE	1	11/09/09	23:01:34	0910166	
0910166-09	7W13	SAMPLE	1	11/09/09	23:03:31	0910166	
9102232-PS1	9102232-PS1	SAMPLE	1	11/09/09	23:05:29	0910166	
9102619-BLK1	PBW	BLANK	1	11/09/09	23:07:26	0910166	
9102619-BS1	LCSW	LCS	1	11/09/09	23:09:24	0910166	
9102619-BSD1	LCSWD	LCS DUP	1	11/09/09	23:11:22	0910166	
CCVC	CCV	CCV	1	11/09/09	23:13:21		
CCBC	CCB	CCB	1	11/09/09	23:15:18		
0910193-11	MW-1	SAMPLE	1	11/09/09	23:18:58	0910193	
SRD9	MW-1L	CALIB STD	5	11/09/09	23:20:56	0910193	
0910193-12	MW-2	SAMPLE	1	11/09/09	23:22:53	0910193	
0910193-13	MW-3	SAMPLE	1	11/09/09	23:24:51	0910193	
0910193-14	MW-4	SAMPLE	1	11/09/09	23:26:49	0910193	
0910193-15	MW-10	SAMPLE	1	11/09/09	23:28:46	0910193	
0910193-16	MW-11	SAMPLE	1	11/09/09	23:30:44	0910193	
0910193-17	MW-5	SAMPLE	1	11/09/09	23:32:42	0910193	
0910193-18	MW-6	SAMPLE	1	11/09/09	23:34:39	0910193	

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Reviewed By: _____ Date: 11/10/09

ICP-MS Run Log: PEM

File Name: PEMSJCF110909E

Sample ID	Client ID	Sample Type	DF	Date	Time	SDG	Action Needed
0910193-19	MW-7	SAMPLE	1	11/09/09	23:36:37	0910193	
CCVD	CCV	CCV	1	11/09/09	23:38:36		
CCBD	CCB	CCB	1	11/09/09	23:40:33		
9102030-BLK1	PBW	BLANK	1	11/09/09	23:48:02	0910193	
9102030-BS1	LCSW	LCS	1	11/09/09	23:49:59	0910193	
9102030-BSD1	LCSWD	LCS DUP	1	11/09/09	23:51:57	0910193	
0910143-01	PZ-1	SAMPLE	1	11/09/09	23:53:55	0910143	
SRDA	PZ-1L	CALIB STD	5	11/09/09	23:55:53	0910143	
0910143-02	PZ-2	SAMPLE	1	11/09/09	23:57:51	0910143	
0910143-03	PZ-3S	SAMPLE	1	11/09/09	23:59:48	0910143	
0910143-04	PZ-3D	SAMPLE	1	11/10/09	00:01:46	0910143	
0910143-05	PZ-4	SAMPLE	1	11/10/09	00:03:43	0910143	
0910143-06	PZ-5	SAMPLE	1	11/10/09	00:05:41	0910143	
CCVE	CCV	CCV	1	11/10/09	00:07:41		
CCBE	CCB	CCB	1	11/10/09	00:09:38		
0910143-07	PZ-DUP	SAMPLE	1	11/10/09	00:13:14	0910143	
0910143-08	PZ-BLANK	SAMPLE	1	11/10/09	00:15:11	0910143	
0910152-01	MW-01-06	SAMPLE	1	11/10/09	00:17:09	0910152	
SRDB	MW-01-06L	CALIB STD	5	11/10/09	00:19:07	0910152	
0910152-02	MW-02-06	SAMPLE	1	11/10/09	00:22:36	0910152	
0910152-03	MW-03-06	SAMPLE	1	11/10/09	00:24:33	0910152	
0910152-04	MW-04-06	SAMPLE	1	11/10/09	00:26:31	0910152	
0910152-05	MW-DUP-06	SAMPLE	1	11/10/09	00:28:28	0910152	
0910152-06	RB-102009	SAMPLE	1	11/10/09	00:34:15	0910152	
CCVF	CCV	CCV	1	11/10/09	00:36:14		
CCBF	CCB	CCB	1	11/10/09	00:38:12		
0910143-01	PZ-1	SAMPLE	2	11/10/09	00:40:21	0910143	
SRDC	PZ-1L	CALIB STD	10	11/10/09	00:42:19	0910143	
CCVG	CCV	CCV	1	11/10/09	00:44:17		
CCBG	CCB	CCB	1	11/10/09	00:46:15		

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Reviewed By: D. Jones Date: 11-10-09

Standards/QC Preparation for ICP-MS (PEMS) 1 of 4 CompuChem a division of Liberty Analytical Corp. WORKSHEET 1 Y(6) 1

STANDARDS and REAGENTS TRACEABILITY Seq. File Name : pemsjcf 1109qE

STANDARD / REAGENT	Ref # *	Manufacturer	Lot #	Expiration Date
Nitric Acid (HNO3)	NHO3-D-031109-JCF	JT Baker	G17027	03/10
Hydrochloric Acid (HCl)	HCL-D-112508-JCF	Caledon	60544	11/09
ICP-MS-TS-3 (Tuning Soln)	9I04001	High Purity	0904345	08/28/10
Q-6042-M (CAL Standard)	7m1-42-11	NSI	123008	01/10
ICV-1 (0307) multi-element solution	7M1-40-28	EPA	0307	12/09
SM-770-032 (CP-MS-CRQL-Rev multi-element solution)	7m1-41-13/8K07008	High Purity	0830418	10/31/09
ICSA (0803) multi-element solution	7M1-39-02	EPA	0803	07/10
ICSAB (0803) multi-element solution	7M1-39-03	EPA	0803	07/10
LITHIUM^{6} (Li^{6}) 1000 mg/L single element standard	7M1-40-13	High Purity	0712718	01/03/10
SCANDIUM (Sc) 1,000 mg/L single element standard	7m1-42-10/8L17019	High Purity	0801101	06/15/10
INDIUM (In) 1,000 mg/L single element standard	7m1-42-8/8L17017	High Purity	0808613	06/15/10
TERBIUM (Tb) 1,000 mg/L single element standard	7m1-42-9/8L17018	High Purity	0811919	06/15/10
BISMUTH (Bi) 1,000 mg/L single element standard	7m1-40-22	High Purity	0732309	01/23/10
TIN (Sn) 10 µg/ml single element standard	7M1-42-12	NSI	1020008-SN	10/10
MOLYBDENUM (Mo) 10 µg/ml single element standard	7M1-42-13	NSI	1020008-MO	10/10
Water Spike Sample D ICP-MS Matrix Spike multi-element solution	1m2-186-28	High Purity	0835021	12/17/09

Entered By: J. Feldhaus

Reviewed By: Rm Date: 11/9/09

*Ref# = Logbook ID, Page number, and item number from Materials Receipt Log

10.12.07:jcf

Multi-Element Stock Standard Concentrations:

Stock Standard	Analyte Concentrations (µg/mL)
Tuning Solution	Be: 10 Mg: 10 Co: 10 In: 10 Pb: 10
CAL standard	Al: 1000 Sb: 100 As: 100 Ba: 100 Be: 100 B: 100 Cd: 100 Ca: 1000 Cr: 100 Co: 100 Cu: 100 Fe: 1000 Pb: 100 Mg: 1000 Mn: 100 Mo: 100 Ni: 100 K: 1000 Se: 100 Si: 100 Ag: 100 Na: 1000 Tl: 100 Ti: 100 V: 100 Zn: 100 Sn: 100 Sr: 100
CP-MS-CRQL-Rev multi-element solution	Be: 1 V: 5 Cr: 2 Mn: 1 Co: 1 Ni: 1 Cu: 2 Zn: 2 As: 1 Se: 5 Ag: 1 Cd: 1 Sb: 2 Ba: 10 Tl: 1 Pb: 1 Al: 30 Sn: 1 Mo: 1

Entered By: J. Feldhaus

Reviewed By: [signature] Date: 11/9/09

10.12.07:jcf

Standards/QC Preparation for ICP-MS (PEMS) 3 of 4 CompuChem a division of Liberty Analytical Corp. WORKSHEET 1 Y(6) 1

Standard Lot Number *	Preparation Instructions	Resultant Analyte Conc. (µg/L)
Instrument Tune Solution– 11 06 09- JCF	Place in a 500-mLvolumetric flask: 0.5 mL of PRE-Tuning solution and 5 mL distilled nitric acid. Dilute to volume with deionized water	Li^7: 10 Be: 10 Mg: 10 Co: 10 In: 10 Ce: 10 Pb: 10 U: 10
Internal Standard– 09 21 0 9 – JCF	Place in a 100-mLvolumetric flask: 50 mL of deionized water , 1.0 mL of distilled nitric acid. Pipet: 2.0 ml of $Lithium^6$, 1.0 ml of Scandium, 1.0 ml of Indium, 1.0 ml of Terbium, and 1.0 ml of Bismuth. Dilute to volume with deionized water	Li^6: 20000 Sc: 10000 In: 10000 Tb: 10000 Bi: 10000
S0/ICB/CCB– 11 09 0 9 – JCF	Place in a 100-mL volumetric flask: 1 mL distilled nitric acid and 1mL Internal Standard.Dilute to volume with deionized water. Prepare Daily.	Li^6: 200 Sc: 100 In: 100 Tb: 100 Bi: 100
S1– 11 09 0 9 – JCF SW-846	Place in a 100-mL volumetric flask: 1 mL distilled nitric acid and 1 mL Internal Standard. Pipet 0.001 ml of CAL Standard and 0.040 mL of 100 ug/mL of Aluminum into flask. Dilute to volume with deionized water	Li^6: 200 Be: 1 Al: 50 Sc: 100 V: 1 Cr: 1 Mn: 1 Co: 1 Ni: 1 Cu: 1 Zn: 1 As: 1 Se: 1 Mo: 1 Ag: 1 Cd: 1 In: 100 Sn: 1 Sb: 1 Ba: 1 Tb: 100 Tl: 1 Pb: 1 Bi: 100
S2 --11 09 0 9 – JCF	Place in a 100-mL volumetric flask: Pipet 1.0 mL distilled nitric acid and 1 mL Internal Standard. 0.002 ml of CAL Standard into flask. Dilute to volume with deionized water	Li^6: 200 Be: 2 Sc: 100 V: 2 Cr: 2 Mn: 2 Co: 2 Ni: 2 Cu: 2 Zn: 2 As: 2 Se: 2 Mo: 2 Ag: 2 Cd: 2 In: 100 Sn: 2 Sb: 2 Ba: 2 Tb: 100 Tl: 2 Pb: 2 Bi: 100 Al: 20 Ca: 20 Na: 20 Mg: 20 Fe: 20 K: 20
S20–11 09 0 9 – JCF	Place in a 100-mL volumetric flask: 1 mL distilled nitric acid and 1 mL Internal Standard. Pipet 0.020 ml of CAL Standard into flask. Dilute to volume with deionized water	Li^6: 200 Be: 20 Al: 200 Sc: 100 V: 20 Cr: 20 Mn: 20 Co: 20 Ni: 20 Cu: 20 Zn: 20 As: 20 Se: 20 Mo: 20 Ag: 20 Cd: 20 In: 100 Sn: 20 Sb: 20 Ba: 20 Tb: 100 Tl: 20 Pb: 20 Bi: 100 Al: 200 Ca: 200 Na: 200 Mg: 200 Fe: 200 K: 200
S200–11 09 0 9 – JCF	Place in a 100-mL volumetric flask: 1 mL distilled nitric acid and 1 mL Internal Standard. Pipet 0.200 ml of CAL Standard into flask. Dilute to volume with deionized water	Li^6: 200 Be: 200 Al: 2000 Sc: 20 V: 200 Cr: 200 Mn: 200 Co: 200 Ni: 200 Cu: 200 Zn: 200 As: 200 Se: 200 Mo: 200 Ag: 200 Cd: 200 In: 20 Sn: 200 Sb: 200 Ba: 200 Tb: 20 Tl: 200 Pb: 200 Bi: 20 Al: 2000 Ca: 2000 Na: 2000 Mg: 2000 Fe: 2000 K: 2000

Standard Solutions Prepared By: _____

Entered By: J Feldhaus Date: 11/9/09

Reviewed By: RM Date: 11/9/09

*Standard Lot Number consists of standard ID, date prepared, and initials of preparer.

10.12.07:jcf

Standards/QC Preparation for ICP-MS (PEMS) 4 of 4 CompuChem a division of Liberty Analytical Corp. WORKSHEET 1 Y(6) 1

Standard Lot Number *	Preparation Instructions	Resultant Analyte Conc. (µg/L)
ICV– 11 09 09 – JCF	Place in a 200-mL volumetric flask: 2 mL distilled nitric acid, and 2 mL Internal Standard. Pipet 4.0 ml of ICV (0307) multi-element solution, 2.2 ml of 10 µg/ml Molybdenum and 0.022 ml of 1000 µg/ml Tin into flask. Dilute to volume with deionized water. (Note: Tin must be from a source different than that used for the calibration standards)	Al: 504 Sb: 199 As: 200 Ba: 99 Be: 99 Ca: 2005 Cr: 98 Co: 100 Cu: 98 Fe: 1016 Pb: 200 Mg: 1215 Mn: 100 Ni: 101 K: 2004 Se: 206 Ag: 100 Na: 2019 Tl: 206 V: 100 Zn: 205 Cd: 99 Li^6: 200 Sc: 100 In: 100 Tb: 100 Bi: 100 Mo: 110 Sn: 110
CRI–11 09 0 9 – JCF	Place in a 200-mL volumetric flask: 2 mL distilled nitric acid and 2 mL Internal Standard. Pipet 0.200 ml of CP-MS-CRQL, into flask. Dilute to volume with deionized water	Li^6: 200 Be: 1 Al: 30 Sc: 100 V: 5 Cr: 2 Mn: 1 Co: 1 Ni: 1 Cu: 2 Zn: 2 As: 1 Se: 5 Mo: 1 Ag: 1 Cd: 1 In: 100 Sn: 1 Sb: 2 Ba: 10 Tb: 100 Tl: 1 Pb: 1 Bi: 100
ICSA– 11 08 0 9 – JCF	Place in a 200-mL volumetric flask: 2 mL distilled nitric acid and 2 mL Internal Standard. Pipet 20.0 ml of ICS Part A (0803) into flask. Dilute to volume with deionized water.	Al: 100000 Sb: 1.5 As 0.1 Ba: 1.2 Be: 0 Cd: 0.7 Ca: 100000 C: 200000 Cl: 1000000 Cr: 21 Co: 1 Cu: 8 Fe: 10000 Pb: 4 Mg: 100000 Mn: 7 Mo: 2000 Ni: 6 P: 100000 K: 10000 Se: 0.3 Ag: 0 Na: 100000 S: 100000 Tl: 0 Ti: 2000 V: 0.5 Zn: 11
ICSAB– 11 08 0 9 – JCF	Place in a 200-mL volumetric flask: 2 mL distilled nitric acid and 2 mL Internal Standard. Pipet 20.0 ml of ICS Part A (0803) and 20.0 ml of ICS Part B (0803) and 0.400 ml of 10 µg/ml Tin into flask. Dilute to volume with deionized water.	Al: 100000 Sb: 22 As 19 Ba: 22 Be: 19 Cd: 20 Ca: 100000 C: 200000 Cl: 1000000 Cr: 40 Co: 20 Cu: 25 Fe: 10000 Pb: 25 Mg: 100000 Mn: 27 Mo: 2000 Ni: 24 P: 100000 K: 10000 Se: 19 Ag: 18 Na: 100000 S: 100000 Tl: 21 Ti: 2000 V: 19 Zn: 29
CCV– 11 09 0 9 – JCF	Place in a 200-mL volumetric flask: 2 mL distilled nitric acid, and 2 mL Internal Standard. Pipet 0.240 ml of CAL Standard. Dilute to volume with deionized water.	Li^6: 200 Be: 120 Sc: 100 V: 120 Cr: 120 Mn: 120 Co: 120 Ni: 120 Cu: 120 Zn: 120 As: 120 Se: 120 Mo: 120 Ag: 120 Cd: 120 In: 20 Sn: 120 Sb: 120 Ba: 120 Tb: 100 Tl: 120 Pb: 120 Bi: 100 Al: 1200 Na: 1200 Ca: 1200 K:1200 Mg: 1200 Fe 1200

Preparation Instructions for Dissolved Metals		Prepared By	Date
Preparation Blank	Use acidified deionized water (1% HNO_3).	NA	NA
Laboratory Control Sample	Add 0.200 ml of ICV multi-element solution and 0.100 ml Internal Standard to 9.7 ml of acidified deionized water.	NA	NA
Sample Spike	Add 0.100 ml Water Spike Sample D and 0.100 ml of Internal Standard to 9.8 ml of sample.	NA	NA

Standard Solutions Prepared By: [signature]

Entered By: J Feldhaus Date: 110909

Reviewed By: [signature] Date: 11/9/09

*Standard Lot Number consists of standard ID, date prepared, and initials of preparer.

10.12.07:jcf

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ILM05.4 TUNING REPORT SUMMARY

Sample ID: TUNE

Sample Date/Time: Monday, November 09, 2009 07:58:26
Sample Description: 100 ppb tuning soln @ 10% peak height
Number of Replicates: 5
Sample File: C:\Elandata1\Sample\100608.sam
Method File: C:\Elandata1\Method\ILM05.4\ILM05.4TUNE.mth
Dataset File: C:\Elandata\Dataset\Default\TUNE.6272

Tuning File

Analyte	Exact Mass	Measured Mass	Measured Peak Width
Be	9.012	8.925	0.702
Mg	23.985	23.975	0.728
Mg	24.986	25.025	0.713
Mg	25.983	25.975	0.720
Co	58.933	58.975	0.699
In	112.904	112.875	0.724
In	114.904	114.875	0.700
Pb	205.975	205.975	0.703
Pb	206.976	206.975	0.689
Pb	207.977	207.975	0.695

Concentration Results

Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD
Be	9	8146.398	1.586
Mg	24	53154.048	2.580
Mg	25	7901.562	2.201
Mg	26	9440.777	2.495
Co	59	263884.625	1.607
In	113	30112.625	2.000
In	115	666709.919	1.563
Pb	206	253396.223	1.116
Pb	207	213276.688	1.613
Pb	208	519563.583	1.915

RAW DATA

Replicate 1

Analyte	Mass	Meas. Intensity
Be	9	8316.056
Mg	24	55065.394
Mg	25	8103.082
Mg	26	9768.969
Co	59	269491.196
In	113	30865.743
In	115	675348.085
Pb	206	257945.022

Pb	207	219026.241
Pb	208	535562.332

Replicate 2

Analyte	Mass	Meas. Intensity
Be	9	8142.714
Mg	24	53520.037
Mg	25	7933.946
Mg	26	9575.983
Co	59	265446.957
In	113	30483.314
In	115	678331.276
Pb	206	253513.020
Pb	207	213797.291
Pb	208	520987.866

Replicate 3

Analyte	Mass	Meas. Intensity
Be	9	8215.774
Mg	24	53546.378
Mg	25	8002.000
Mg	26	9412.227
Co	59	265197.672
In	113	30153.736
In	115	662714.979
Pb	206	253434.466
Pb	207	211101.928
Pb	208	518295.425

Replicate 4

Analyte	Mass	Meas. Intensity
Be	9	7976.580
Mg	24	51727.642
Mg	25	7652.727
Mg	26	9207.037
Co	59	259240.688
In	113	29348.975
In	115	652384.540
Pb	206	251365.415
Pb	207	210561.920
Pb	208	509782.120

Replicate 5

Analyte	Mass	Meas. Intensity
Be	9	8080.864
Mg	24	51910.788
Mg	25	7816.053
Mg	26	9239.667
Co	59	260046.613
In	113	29711.356
In	115	664770.716
Pb	206	250723.191
Pb	207	211896.061
Pb	208	513190.171

EPA 6020 - Summary Report

Sample ID: S0

Sample Date/Time: Monday, November 09, 2009 17:36:42
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\S0.829

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	121246.161	24.493				ppb
	Be	9	3.333	91.652				ppb
	Na	23	8009.239	12.483				ppb
	Mg	24	434.010	17.070				ppb
	Mg	25	60.000	16.415				ppb
	Mg	26	164.001	12.241				ppb
	Al	27	3452.276	18.495				ppb
	K	39	320148.042	0.370				ppb
	Ca	44	27549.282	4.585				ppb
>	Sc	45	506479.178	24.638				ppb
	Ti	47	78.334	13.287				ppb
	V	51	1812.298	4.288				ppb
	Cr	52	7263.972	2.846				ppb
	Mn	55	5840.090	21.267				ppb
	Fe	54	59916.803	9.937				ppb
	Fe	56	2018135.733	1.300				ppb
	Fe	57	3608.986	5.485				ppb
	Co	59	112.001	12.500				ppb
	Ni	60	50.000	23.094				ppb
	Cu	63	203.335	2.839				ppb
	Cu	65	118.890	12.643				ppb
	Zn	66	297.782	16.952				ppb
	As	75	-35.209	94.607				ppb
	Se	82	49.111	17.923				ppb
	Mo	96	116.667	33.432				ppb
	Ag	107	55.556	3.464				ppb
	Ag	109	46.667	21.429				ppb
	Cd	111	3.970	136.997				ppb
	In	113	60885.536	18.250				ppb
>	In	115	1397205.943	20.221				ppb
	Sn	118	195.002	13.568				ppb
	Sb	121	665.022	11.936				ppb
	Ba	135	31.333	7.370				ppb
	Ba	137	52.000	7.692				ppb
>	Tb	159	2179059.104	18.278				ppb
	Tl	205	73.334	25.813				ppb
	Pb	206	345.006	27.537				ppb
	Pb	207	616.677	28.785				ppb
	Pb	208	1005.032	29.176				ppb
>	Bi	209	1658384.270	19.609				ppb
	Cr	53	3670.676	7.516				ppb
	Pd	106	3.333	86.603				ppb
	Pd	108	3.333	173.205				ppb
	C	12	387639.243	1.812				ppb
	Kr	83	52.667	19.487				ppb
	Se	77	114.890	4.726				ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86956.434		ppb
	Be	9	4.000		ppb
	Na	23	6857.350		ppb
	Mg	24	362.007		ppb
	Mg	25	52.000		ppb
	Mg	26	143.001		ppb
	Al	27	2715.369		ppb
	K	39	318944.439		ppb
	Ca	44	28899.699		ppb
>	Sc	45	362555.297		ppb
	Ti	47	75.000		ppb
	V	51	1849.569		ppb
	Cr	52	7486.802		ppb
	Mn	55	4405.970		ppb
	Fe	54	53502.745		ppb
	Fe	56	1990141.605		ppb
	Fe	57	3520.620		ppb
	Co	59	98.000		ppb
	Ni	60	43.333		ppb
	Cu	63	210.002		ppb
	Cu	65	103.334		ppb
	Zn	66	240.003		ppb
	As	75	-6.504		ppb
	Se	82	47.333		ppb
	Mo	96	78.000		ppb
	Ag	107	56.667		ppb
	Ag	109	36.667		ppb
	Cd	111	8.820		ppb
	In	113	48085.333		ppb
>	In	115	1071025.446		ppb
	Sn	118	165.001		ppb
	Sb	121	635.020		ppb
	Ba	135	30.000		ppb
	Ba	137	48.000		ppb
>	Tb	159	1719303.504		ppb
	Tl	205	95.000		ppb
	Pb	206	265.004		ppb
	Pb	207	440.005		ppb
	Pb	208	670.014		ppb
>	Bi	209	1284384.388		ppb
	Cr	53	3986.795		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	379530.026		ppb
	Kr	83	64.000		ppb
	Se	77	108.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	138585.691		ppb
	Be	9	0.000		ppb
	Na	23	8518.627		ppb
	Mg	24	510.013		ppb
	Mg	25	71.000		ppb
	Mg	26	183.002		ppb
	Al	27	3800.722		ppb
	K	39	321312.464		ppb
	Ca	44	27351.354		ppb
>	Sc	45	584470.304		ppb

	Ti	47	90.000		ppb
	V	51	1864.349		ppb
	Cr	52	7078.504		ppb
	Mn	55	6562.152		ppb
	Fe	54	60980.365		ppb
	Fe	56	2022116.136		ppb
	Fe	57	3835.736		ppb
	Co	59	112.001		ppb
	Ni	60	43.333		ppb
	Cu	63	200.002		ppb
	Cu	65	120.001		ppb
	Zn	66	333.339		ppb
	As	75	-71.733		ppb
	Se	82	41.333		ppb
	Mo	96	156.001		ppb
	Ag	107	56.667		ppb
	Ag	109	46.667		ppb
	Cd	111	-1.910		ppb
	In	113	68050.760		ppb
>	In	115	1565462.862		ppb
	Sn	118	205.002		ppb
	Sb	121	755.029		ppb
	Ba	135	34.000		ppb
	Ba	137	56.000		ppb
>	Tb	159	2418980.182		ppb
	Tl	205	60.000		ppb
	Pb	206	320.005		ppb
	Pb	207	615.009		ppb
	Pb	208	1130.039		ppb
>	Bi	209	1874477.444		ppb
	Cr	53	3546.629		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	391606.529		ppb
	Kr	83	44.000		ppb
	Se	77	118.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	138196.359		ppb
	Be	9	6.000		ppb
	Na	23	8651.741		ppb
	Mg	24	430.009		ppb
	Mg	25	57.000		ppb
	Mg	26	166.001		ppb
	Al	27	3840.737		ppb
	K	39	320187.222		ppb
	Ca	44	26396.794		ppb
>	Sc	45	572411.933		ppb
	Ti	47	70.000		ppb
	V	51	1722.977		ppb
	Cr	52	7226.610		ppb
	Mn	55	6552.146		ppb
	Fe	54	65267.298		ppb
	Fe	56	2042149.457		ppb
	Fe	57	3470.602		ppb
	Co	59	126.001		ppb
	Ni	60	63.334		ppb
	Cu	63	200.002		ppb
	Cu	65	133.334		ppb
	Zn	66	320.005		ppb
	As	75	-27.389		ppb
	Se	82	58.667		ppb

⌈	Mo	96	116.001	ppb
|	Ag	107	53.333	ppb
|	Ag	109	56.667	ppb
|	Cd	111	5.000	ppb
|	In	113	66520.516	ppb
|>	In	115	1555129.520	ppb
⌊	Sn	118	215.002	ppb
⌈	Sb	121	605.018	ppb
|	Ba	135	30.000	ppb
|	Ba	137	52.000	ppb
⌊>	Tb	159	2398893.626	ppb
⌈	Tl	205	65.000	ppb
|	Pb	206	450.010	ppb
|	Pb	207	795.016	ppb
|	Pb	208	1215.044	ppb
⌊>	Bi	209	1816290.977	ppb
	Cr	53	3478.605	ppb
	Pd	106	0.000	ppb
	Pd	108	0.000	ppb
	C	12	391781.174	ppb
	Kr	83	50.000	ppb
	Se	77	117.334	ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115					
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209					
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: S1

Sample Date/Time: Monday, November 09, 2009 17:38:40
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\S1.830

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	118896.031	32.427	118896.031			ppb
	Be	9	330.006	23.292	0.003	1.00000	12.56	ppb
	Na	23	38649.220	28.455	0.263	10.00000	6.61	ppb
	Mg	24	28471.283	30.334	0.238	10.00000	5.72	ppb
	Mg	25	4517.742	28.525	0.038	10.00000	7.77	ppb
	Mg	26	5677.688	26.799	0.047	10.00000	8.55	ppb
	Al	27	51618.880	22.165	0.419	10.00000	15.26	ppb
	K	39	404356.411	9.985	0.985	10.00000	105.84	ppb
	Ca	44	31259.484	3.345	0.063	10.00000	200.77	ppb
>	Sc	45	493742.567	27.591	493742.567			ppb
	Ti	47	821.701	16.333	0.002	1.00000	16.28	ppb
	V	51	12243.678	27.548	0.021	1.00000	1.79	ppb
	Cr	52	17048.083	15.438	0.021	1.00000	25.08	ppb
	Mn	55	19962.383	24.758	0.029	1.00000	8.65	ppb
	Fe	54	68275.177	13.718	0.025	10.00000	108.39	ppb
	Fe	56	2117949.690	8.694	0.494	10.00000	208.28	ppb
	Fe	57	6683.932	14.684	0.007	10.00000	32.98	ppb
	Co	59	13796.566	24.776	0.028	1.00000	3.85	ppb
	Ni	60	3217.214	29.290	0.006	1.00000	2.21	ppb
	Cu	63	7572.967	22.981	0.015	1.00000	5.91	ppb
	Cu	65	3806.309	24.507	0.008	1.00000	3.99	ppb
	Zn	66	1845.733	25.629	0.003	1.00000	2.95	ppb
	As	75	1619.435	21.056	0.003	1.00000	8.22	ppb
	Se	82	196.891	19.011	0.000	1.00000	20.12	ppb
	Mo	96	3907.454	21.850	0.003	1.00000	3.03	ppb
	Ag	107	12667.300	27.135	0.009	1.00000	4.00	ppb
	Ag	109	11877.360	25.722	0.009	1.00000	2.20	ppb
	Cd	111	2507.208	22.805	0.002	1.00000	1.60	ppb
	In	113	61780.014	22.581	0.003	1.00000	26.69	ppb
>	In	115	1334622.636	23.928	1334622.636			ppb
	Sn	118	7594.666	24.677	0.006	1.00000	0.96	ppb
	Sb	121	7571.322	25.483	0.003	1.00000	4.78	ppb
	Ba	135	2409.635	24.682	0.001	1.00000	3.55	ppb
	Ba	137	4243.597	22.514	0.002	1.00000	0.75	ppb
>	Tb	159	2075258.426	21.927	2075258.426			ppb
	Tl	205	34780.730	22.422	0.022	1.00000	1.30	ppb
	Pb	206	11705.449	24.284	0.007	1.00000	1.87	ppb
	Pb	207	21852.412	22.756	0.013	1.00000	0.04	ppb
	Pb	208	35953.513	25.391	0.022	1.00000	3.23	ppb
>	Bi	209	1612215.729	22.778	1612215.729			ppb
	Cr	53	5120.660	13.390	1449.984			ppb
	Pd	106	245.003	38.883	241.670			ppb
	Pd	108	186.668	15.231	183.335			ppb
	C	12	379002.717	9.334	-8636.526			ppb
	Kr	83	46.667	17.321	-6.000			ppb
	Se	77	261.337	11.480	146.447			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	74379.591		ppb
	Be	9	242.003	1.142656	ppb
	Na	23	25950.628	10.763779	ppb
	Mg	24	18640.357	10.394280	ppb
	Mg	25	3058.468	10.691253	ppb
	Mg	26	3934.774	10.917822	ppb
	Al	27	38619.429	11.709002	ppb
	K	39	359041.883	22.189052	ppb
	Ca	44	32466.619	33.182395	ppb
>	Sc	45	336813.216		ppb
	Ti	47	670.022	1.179870	ppb
	V	51	8348.992	0.999418	ppb
	Cr	52	14021.824	1.289557	ppb
	Mn	55	14465.455	1.074942	ppb
	Fe	54	58460.383	22.315370	ppb
	Fe	56	1908342.630	34.048493	ppb
	Fe	57	5571.552	13.802178	ppb
	Co	59	9878.877	1.043009	ppb
	Ni	60	2133.561	0.975579	ppb
	Cu	63	5564.881	1.067580	ppb
	Cu	65	2730.373	1.045471	ppb
	Zn	66	1300.085	1.033079	ppb
	As	75	1226.066	1.091192	ppb
	Se	82	158.001	1.193406	ppb
	Mo	96	2922.427	1.029805	ppb
	Ag	107	8710.459	0.955586	ppb
	Ag	109	8353.488	0.974853	ppb
	Cd	111	1847.004	1.015466	ppb
	In	113	45679.091	1.307026	ppb
>	In	115	966121.102		ppb
	Sn	118	5431.475	0.989123	ppb
	Sb	121	5346.429	0.946897	ppb
	Ba	135	1724.149	0.962167	ppb
	Ba	137	3140.493	0.991869	ppb
>	Tb	159	1549821.297		ppb
	Tl	205	25783.196	1.003334	ppb
	Pb	206	8438.559	0.978394	ppb
	Pb	207	16141.525	1.000348	ppb
	Pb	208	25463.724	0.962727	ppb
>	Bi	209	1190429.617		ppb
	Cr	53	5907.745		ppb
	Pd	106	135.001		ppb
	Pd	108	155.001		ppb
	C	12	338346.702		ppb
	Kr	83	56.000		ppb
	Se	77	231.336		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	141526.450		ppb
	Be	9	384.007	0.951291	ppb
	Na	23	45095.451	9.612255	ppb
	Mg	24	31935.914	9.344135	ppb
	Mg	25	4995.247	9.158494	ppb
	Mg	26	6357.020	9.226898	ppb
	Al	27	56076.791	8.774461	ppb
	K	39	417524.075	3.142331	ppb
	Ca	44	30638.865	-1.701151	ppb
>	Sc	45	581584.113		ppb

	Ti	47	870.038	0.862611	ppb
	V	51	14205.835	0.982356	ppb
	Cr	52	18801.659	0.849958	ppb
	Mn	55	24038.859	1.019699	ppb
	Fe	54	77116.203	5.772271	ppb
	Fe	56	2253613.538	-2.221238	ppb
	Fe	57	7427.758	8.275685	ppb
	Co	59	16171.065	0.988359	ppb
	Ni	60	3844.072	1.018619	ppb
	Cu	63	8643.734	0.957663	ppb
	Cu	65	4387.629	0.970801	ppb
	Zn	66	2140.229	0.976260	ppb
	As	75	1801.395	0.931530	ppb
	Se	82	200.002	0.791859	ppb
	Mo	96	4364.952	0.969230	ppb
	Ag	107	14914.447	1.033153	ppb
	Ag	109	13782.825	1.015457	ppb
	Cd	111	2834.264	0.983562	ppb
	In	113	70266.001	0.822978	ppb
>	In	115	1530547.472		ppb
	Sn	118	8728.808	1.003759	ppb
	Sb	121	8583.682	1.013548	ppb
	Ba	135	2716.369	1.005318	ppb
	Ba	137	4807.155	1.006507	ppb
>	Tb	159	2338211.082		ppb
	Tl	205	38960.749	1.010996	ppb
	Pb	206	13063.527	1.010935	ppb
	Pb	207	24189.713	0.999621	ppb
	Pb	208	40298.676	1.017518	ppb
>	Bi	209	1785241.402		ppb
	Cr	53	4801.152		ppb
	Pd	106	300.005		ppb
	Pd	108	210.002		ppb
	C	12	402762.779		ppb
	Kr	83	42.000		ppb
	Se	77	261.337		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	140782.052		ppb
	Be	9	364.007	0.906053	ppb
	Na	23	44901.582	9.623966	ppb
	Mg	24	34837.577	10.261584	ppb
	Mg	25	5499.512	10.150253	ppb
	Mg	26	6741.271	9.855280	ppb
	Al	27	60160.421	9.516536	ppb
	K	39	436503.273	4.668618	ppb
	Ca	44	30672.970	-1.481244	ppb
>	Sc	45	562830.371		ppb
	Ti	47	925.043	0.957519	ppb
	V	51	14176.205	1.018226	ppb
	Cr	52	18320.767	0.860486	ppb
	Mn	55	21382.837	0.905359	ppb
	Fe	54	69248.943	1.912360	ppb
	Fe	56	2191892.903	-1.827255	ppb
	Fe	57	7052.486	7.922137	ppb
	Co	59	15339.756	0.968633	ppb
	Ni	60	3674.008	1.005802	ppb
	Cu	63	8510.286	0.974757	ppb
	Cu	65	4300.925	0.983728	ppb
	Zn	66	2096.886	0.990661	ppb
	As	75	1830.844	0.977278	ppb
	Se	82	232.669	1.014736	ppb

⌈	Mo	96	4434.983	1.000965	ppb
|	Ag	107	14376.994	1.011261	ppb
|	Ag	109	13495.767	1.009689	ppb
|	Cd	111	2840.357	1.000972	ppb
|	In	113	69394.950	0.869996	ppb
|>	In	115	1507199.333		ppb
⌊	Sn	118	8623.717	1.007118	ppb
⌈	Sb	121	8783.856	1.039554	ppb
|	Ba	135	2788.389	1.032515	ppb
|	Ba	137	4783.144	1.001624	ppb
⌊>	Tb	159	2337742.899		ppb
⌈	Tl	205	39598.246	0.985670	ppb
|	Pb	206	13614.261	1.010671	ppb
|	Pb	207	25225.999	1.000032	ppb
|	Pb	208	42098.138	1.019755	ppb
⌊>	Bi	209	1860976.169		ppb
	Cr	53	4653.082		ppb
	Pd	106	300.005		ppb
	Pd	108	195.002		ppb
	C	12	395898.670		ppb
	Kr	83	42.000		ppb
	Se	77	291.338		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115					
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209					
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: S20

Sample Date/Time: Monday, November 09, 2009 17:40:38
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\S20.831

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	118824.980	17.301	118824.980			ppb
|	Be	9	7289.391	19.728	0.061	20.00381	3.95	ppb
|	Na	23	750247.650	18.955	6.236	200.07843	2.37	ppb
|	Mg	24	614348.187	22.071	5.134	200.03704	5.61	ppb
|	Mg	25	94476.880	17.849	0.794	200.02148	2.68	ppb
|	Mg	26	115697.555	17.931	0.972	200.01403	2.31	ppb
|	Al	27	992661.305	19.281	8.316	199.99599	6.53	ppb
|	K	39	1818460.768	16.912	12.677	199.72368	4.20	ppb
⌊	Ca	44	89091.986	12.697	0.527	199.30779	8.13	ppb
⌈>	Sc	45	494870.906	19.970	494870.906			ppb
|	Ti	47	16562.509	22.723	0.033	20.00312	3.29	ppb
|	V	51	225053.977	17.143	0.453	20.00316	3.42	ppb
|	Cr	52	208131.528	16.446	0.409	19.99821	4.22	ppb
|	Mn	55	283360.698	16.559	0.564	19.99819	4.22	ppb
|	Fe	54	215499.031	14.933	0.321	199.72846	8.03	ppb
|	Fe	56	4694797.484	7.021	5.698	199.63502	26.01	ppb
|	Fe	57	65635.158	16.340	0.126	199.95990	5.19	ppb
|	Co	59	279466.414	17.259	0.567	20.00077	3.55	ppb
|	Ni	60	64530.099	18.651	0.131	20.00104	1.60	ppb
|	Cu	63	154249.898	18.702	0.312	20.00158	1.48	ppb
|	Cu	65	75047.337	19.114	0.152	20.00034	1.01	ppb
|	Zn	66	33294.250	17.601	0.067	20.00268	3.33	ppb
|	As	75	37063.487	17.239	0.075	20.00483	3.54	ppb
⌊	Se	82	3345.011	13.540	0.007	20.00366	7.52	ppb
⌈	Mo	96	80752.936	16.981	0.058	20.00078	1.11	ppb
|	Ag	107	264039.781	15.020	0.191	20.00069	3.53	ppb
|	Ag	109	258137.081	16.748	0.186	20.00245	2.42	ppb
|	Cd	111	53185.618	16.365	0.038	20.00093	1.72	ppb
|	In	113	112577.404	15.971	0.038	19.97465	5.71	ppb
|>	In	115	1391076.043	17.858	1391076.043			ppb
⌊	Sn	118	159053.961	14.517	0.115	20.00168	3.80	ppb
⌈	Sb	121	156495.446	14.629	0.072	20.00371	2.01	ppb
|	Ba	135	51182.053	15.468	0.024	20.00150	1.47	ppb
|	Ba	137	90590.035	14.348	0.042	20.00158	0.57	ppb
⌊>	Tb	159	2170757.668	14.147	2170757.668			ppb
⌈	Tl	205	720300.600	14.303	0.433	20.00022	0.42	ppb
|	Pb	206	242995.277	12.576	0.146	20.00186	2.49	ppb
|	Pb	207	450582.499	13.504	0.271	20.00129	1.89	ppb
|	Pb	208	722837.419	14.179	0.434	20.00024	0.54	ppb
⌊>	Bi	209	1664743.079	14.660	1664743.079			ppb
	Cr	53	27489.642	15.155	23818.966			ppb
	Pd	106	4502.702	18.138	4499.369			ppb
	Pd	108	3477.283	16.995	3473.949			ppb
	C	12	390603.592	3.063	2964.349			ppb
	Kr	83	41.333	11.175	-11.333			ppb
	Se	77	2681.254	15.276	2566.364			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	95289.855		ppb
	Be	9	5629.584	19.321662	ppb
	Na	23	590297.073	196.651049	ppb
	Mg	24	458163.036	187.181740	ppb
	Mg	25	75013.298	198.145252	ppb
	Mg	26	91742.917	197.913446	ppb
	Al	27	777930.556	195.663183	ppb
	K	39	1464836.426	200.594333	ppb
	Ca	44	76052.101	215.831651	ppb
>	Sc	45	380872.653		ppb
	Ti	47	12217.459	19.250548	ppb
	V	51	180507.066	20.760352	ppb
	Cr	52	168644.152	20.972795	ppb
	Mn	55	229207.030	20.925011	ppb
	Fe	54	178341.224	218.028136	ppb
	Fe	56	4330652.486	258.759739	ppb
	Fe	57	53467.558	210.986351	ppb
	Co	59	223857.883	20.727356	ppb
	Ni	60	50634.536	20.350172	ppb
	Cu	63	120963.881	20.340644	ppb
	Cu	65	58493.911	20.228210	ppb
	Zn	66	26541.843	20.645958	ppb
	As	75	29695.280	20.734878	ppb
	Se	82	2822.398	21.738454	ppb
	Mo	96	64966.348	20.240072	ppb
	Ag	107	218300.359	20.743580	ppb
	Ag	109	208385.503	20.301651	ppb
	Cd	111	43139.841	20.389561	ppb
	In	113	91844.846	21.041523	ppb
>	In	115	1104583.844		ppb
	Sn	118	132405.800	20.875546	ppb
	Sb	121	130060.320	19.843443	ppb
	Ba	135	42110.478	19.661966	ppb
	Ba	137	75649.061	19.933341	ppb
>	Tb	159	1819328.514		ppb
	Tl	205	601480.834	20.093215	ppb
	Pb	206	207919.281	20.552324	ppb
	Pb	207	381034.873	20.330585	ppb
	Pb	208	604623.940	20.124797	ppb
>	Bi	209	1383158.644		ppb
	Cr	53	22715.771		ppb
	Pd	106	3560.634		ppb
	Pd	108	2795.391		ppb
	C	12	384926.529		ppb
	Kr	83	44.000		ppb
	Se	77	2216.246		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	133280.302		ppb
	Be	9	8077.261	19.820657	ppb
	Na	23	862389.944	205.498880	ppb
	Mg	24	701948.756	205.049027	ppb
	Mg	25	103702.941	195.845670	ppb
	Mg	26	127603.977	196.808676	ppb
	Al	27	1054733.480	189.645987	ppb
	K	39	1967058.393	190.926631	ppb
	Ca	44	94958.727	183.454960	ppb
>	Sc	45	547408.651		ppb

	Ti	47	18667.407	20.471007	ppb
	V	51	247731.087	19.816779	ppb
	Cr	52	226369.482	19.540756	ppb
	Mn	55	311950.943	19.793229	ppb
	Fe	54	234379.881	193.056012	ppb
	Fe	56	4972765.438	178.663987	ppb
	Fe	57	69722.215	190.381158	ppb
	Co	59	309964.587	19.968503	ppb
	Ni	60	71269.734	19.929101	ppb
	Cu	63	169792.676	19.864741	ppb
	Cu	65	82828.278	19.928912	ppb
	Zn	66	37048.503	20.046250	ppb
	As	75	41076.697	19.956888	ppb
	Se	82	3589.311	19.201689	ppb
	Mo	96	87585.892	19.804157	ppb
	Ag	107	288859.252	19.921596	ppb
	Ag	109	286557.772	20.262269	ppb
	Cd	111	57954.535	19.880537	ppb
	In	113	123877.559	20.109810	ppb
>	In	115	1521901.370		ppb
	Sn	118	171630.317	19.638358	ppb
	Sb	121	169504.516	19.707022	ppb
	Ba	135	56694.258	20.172653	ppb
	Ba	137	99296.555	19.938439	ppb
>	Tb	159	2387430.696		ppb
	Tl	205	784797.583	19.976187	ppb
	Pb	206	263876.196	19.873456	ppb
	Pb	207	494004.015	20.083341	ppb
	Pb	208	786733.903	19.952458	ppb
>	Bi	209	1815283.419		ppb
	Cr	53	29363.046		ppb
	Pd	106	5011.255		ppb
	Pd	108	3795.720		ppb
	C	12	404348.901		ppb
	Kr	83	44.000		ppb
	Se	77	2839.070		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	127904.784		ppb
	Be	9	8161.329	20.869109	ppb
	Na	23	798055.934	198.085362	ppb
	Mg	24	682932.770	207.880359	ppb
	Mg	25	104714.400	206.073524	ppb
	Mg	26	127745.770	205.319963	ppb
	Al	27	1145319.878	214.678795	ppb
	K	39	2023487.485	207.650083	ppb
	Ca	44	96265.129	198.636772	ppb
>	Sc	45	556331.414		ppb
	Ti	47	18802.660	20.287792	ppb
	V	51	246923.778	19.432363	ppb
	Cr	52	229380.951	19.481068	ppb
	Mn	55	308924.122	19.276344	ppb
	Fe	54	233775.989	188.101230	ppb
	Fe	56	4780974.527	161.481329	ppb
	Fe	57	73715.702	198.512201	ppb
	Co	59	304576.773	19.306452	ppb
	Ni	60	71686.027	19.723852	ppb
	Cu	63	171993.137	19.799366	ppb
	Cu	65	83819.822	19.843893	ppb
	Zn	66	36292.404	19.315842	ppb
	As	75	40418.483	19.322735	ppb
	Se	82	3623.323	19.070823	ppb

⌈	Mo	96	89706.567	19.958122	ppb
|	Ag	107	284959.734	19.336905	ppb
|	Ag	109	279467.968	19.443438	ppb
|	Cd	111	58462.479	19.732679	ppb
|	In	113	122009.806	18.772620	ppb
|>	In	115	1546742.916		ppb
⌊	Sn	118	173125.765	19.491137	ppb
⌈	Sb	121	169921.504	20.460672	ppb
|	Ba	135	54741.422	20.169867	ppb
|	Ba	137	96824.491	20.132961	ppb
⌊>	Tb	159	2305513.793		ppb
⌈	Tl	205	774623.382	19.931272	ppb
|	Pb	206	257190.353	19.579794	ppb
|	Pb	207	476708.608	19.589940	ppb
|	Pb	208	777154.414	19.923450	ppb
⌊>	Bi	209	1795787.175		ppb
	Cr	53	30390.108		ppb
	Pd	106	4936.218		ppb
	Pd	108	3840.737		ppb
	C	12	382535.347		ppb
	Kr	83	36.000		ppb
	Se	77	2988.446		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6					
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45					
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115					
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159					
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209					
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: S200

Sample Date/Time: Monday, November 09, 2009 17:42:35
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\S200.832

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
[>	Li	6	121322.912	26.048	121322.912			ppb
|	Be	9	72667.017	27.611	0.597	199.95233	2.02	ppb
|	Na	23	7178642.945	29.968	58.624	1998.74570	5.71	ppb
|	Mg	24	6027301.283	29.306	49.336	1999.19596	4.26	ppb
|	Mg	25	929898.439	27.683	7.644	1999.23036	4.89	ppb
|	Mg	26	1148288.979	28.311	9.422	1999.38065	4.31	ppb
|	Al	27	10068620.958	25.843	83.002	1999.96290	1.27	ppb
|	K	39	16147221.752	23.239	131.269	2000.65448	3.85	ppb
[	Ca	44	649425.237	23.278	5.162	1999.50632	5.64	ppb
[>	Sc	45	498724.330	23.101	498724.330			ppb
|	Ti	47	168308.031	24.084	0.337	200.02991	1.36	ppb
|	V	51	2381902.844	23.745	4.767	200.09833	1.34	ppb
|	Cr	52	2078288.395	22.372	4.159	200.03484	1.61	ppb
|	Mn	55	2833147.336	23.801	5.662	200.00729	2.08	ppb
|	Fe	54	1622094.518	20.599	3.149	1999.61809	3.49	ppb
|	Fe	56	28180594.808	20.189	52.828	1998.40155	3.86	ppb
|	Fe	57	615795.311	20.703	1.233	1999.51576	2.93	ppb
|	Co	59	2887688.784	22.676	5.795	200.04317	1.98	ppb
|	Ni	60	625144.936	21.462	1.258	199.92419	3.37	ppb
|	Cu	63	1565538.442	20.388	3.155	200.02260	3.69	ppb
|	Cu	65	723717.079	21.830	1.455	199.91622	3.14	ppb
|	Zn	66	322952.941	22.165	0.648	199.93557	3.25	ppb
|	As	75	363012.917	20.825	0.731	199.94133	3.24	ppb
[	Se	82	33207.999	17.914	0.067	199.99533	6.18	ppb
[	Mo	96	788669.601	18.034	0.585	200.01689	4.12	ppb
|	Ag	107	2651348.390	18.286	1.967	200.06237	3.24	ppb
|	Ag	109	2584336.308	20.047	1.912	200.05554	1.56	ppb
|	Cd	111	510924.855	19.610	0.378	199.97505	3.29	ppb
|	In	113	567216.910	19.352	0.377	200.00197	2.82	ppb
|>	In	115	1352955.771	20.548	1352955.771			ppb
[	Sn	118	1589600.760	19.333	1.177	200.05054	1.41	ppb
[	Sb	121	1582826.791	19.712	0.739	200.05882	3.13	ppb
|	Ba	135	497847.921	18.994	0.233	199.97901	2.16	ppb
|	Ba	137	870138.794	19.456	0.407	199.94956	1.14	ppb
[>	Tb	159	2141740.397	20.049	2141740.397			ppb
[	Tl	205	7052730.750	20.897	4.352	200.01084	5.21	ppb
|	Pb	206	2424189.745	21.445	1.495	200.04559	6.63	ppb
|	Pb	207	4533644.336	19.293	2.803	200.06872	4.42	ppb
|	Pb	208	7166096.939	17.309	4.443	200.04665	3.63	ppb
[>	Bi	209	1613256.873	17.221	1613256.873			ppb
	Cr	53	233947.738	21.576	230277.062			ppb
	Pd	106	46144.798	16.458	46141.465			ppb
	Pd	108	33460.464	18.298	33457.130			ppb
	C	12	393909.930	2.932	6270.687			ppb
	Kr	83	57.334	37.625	4.667			ppb
	Se	77	25673.163	20.459	25558.273			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	84858.527		ppb
|	Be	9	49502.221	195.402621	ppb
|	Na	23	4702927.209	1887.278344	ppb
|	Mg	24	3998038.523	1909.008852	ppb
|	Mg	25	636213.312	1960.661051	ppb
|	Mg	26	774817.972	1937.368827	ppb
|	Al	27	7064459.275	2005.257149	ppb
|	K	39	11816642.071	2082.070234	ppb
⌊	Ca	44	476923.940	2089.071646	ppb
⌈>	Sc	45	365904.014		ppb
|	Ti	47	121701.079	197.487533	ppb
|	V	51	1732897.352	198.632810	ppb
|	Cr	52	1541445.133	201.944626	ppb
|	Mn	55	2054966.760	197.962923	ppb
|	Fe	54	1236407.575	2070.270218	ppb
|	Fe	56	21640218.263	2086.502441	ppb
|	Fe	57	468629.267	2065.241055	ppb
|	Co	59	2132121.690	201.135996	ppb
|	Ni	60	470766.211	204.525496	ppb
|	Cu	63	1197243.154	207.432340	ppb
|	Cu	65	541909.261	203.497654	ppb
|	Zn	66	240678.535	202.666548	ppb
|	As	75	275781.349	206.143817	ppb
⌊	Se	82	26344.656	214.220086	ppb
⌈	Mo	96	624763.266	206.453517	ppb
|	Ag	107	2091531.351	205.754754	ppb
|	Ag	109	1986397.996	201.048128	ppb
|	Cd	111	395468.676	202.181664	ppb
|	In	113	440471.725	203.150243	ppb
|>	In	115	1033946.035		ppb
⌊	Sn	118	1236748.441	203.273530	ppb
⌈	Sb	121	1223600.751	200.784585	ppb
|	Ba	135	388658.809	202.507901	ppb
|	Ba	137	674849.841	201.311137	ppb
⌊>	Tb	159	1648320.937		ppb
⌈	Tl	205	5350982.230	189.691380	ppb
|	Pb	206	1826363.556	188.453094	ppb
|	Pb	207	3525427.767	194.034618	ppb
|	Pb	208	5737522.971	199.246915	ppb
⌊>	Bi	209	1296491.875		ppb
	Cr	53	175759.108		ppb
	Pd	106	37379.732		ppb
	Pd	108	26424.868		ppb
	C	12	380828.000		ppb
	Kr	83	42.000		ppb
	Se	77	19613.215		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	140757.713		ppb
|	Be	9	84604.388	201.336482	ppb
|	Na	23	8240237.686	1993.693333	ppb
|	Mg	24	7219980.303	2078.370437	ppb
|	Mg	25	1036994.845	1926.633679	ppb
|	Mg	26	1302233.343	1963.023780	ppb
|	Al	27	11526002.472	1972.380349	ppb
|	K	39	18186081.160	1928.902504	ppb
⌊	Ca	44	712536.097	1872.890716	ppb
⌈>	Sc	45	558597.657		ppb

	Ti	47	187873.397	199.701280	ppb
	V	51	2643294.037	198.468422	ppb
	Cr	52	2352152.994	201.853924	ppb
	Mn	55	3245345.339	204.803712	ppb
	Fe	54	1823958.182	1998.015328	ppb
	Fe	56	30915240.643	1942.852788	ppb
	Fe	57	686143.878	1980.254058	ppb
	Co	59	3290621.916	203.340572	ppb
	Ni	60	713561.479	203.067954	ppb
	Cu	63	1761818.393	199.949957	ppb
	Cu	65	827652.736	203.586550	ppb
	Zn	66	370955.092	204.615161	ppb
	As	75	409440.315	200.477308	ppb
	Se	82	36390.761	193.805119	ppb
	Mo	96	861650.851	190.736497	ppb
	Ag	107	2928897.983	193.014443	ppb
	Ag	109	2899126.162	196.562803	ppb
	Cd	111	562277.045	192.566394	ppb
	In	113	629445.646	193.483697	ppb
>	In	115	1543466.628		ppb
	Sn	118	1798703.157	198.042429	ppb
	Sb	121	1786305.991	205.931143	ppb
	Ba	135	553043.346	202.443436	ppb
	Ba	137	960146.587	201.219127	ppb
>	Tb	159	2346230.602		ppb
	Tl	205	7913602.413	210.519334	ppb
	Pb	206	2770223.390	214.507180	ppb
	Pb	207	5089592.699	210.212342	ppb
	Pb	208	7969517.156	207.684845	ppb
>	Bi	209	1727693.056		ppb
	Cr	53	265952.116		ppb
	Pd	106	50286.118		ppb
	Pd	108	37580.482		ppb
	C	12	398197.289		ppb
	Kr	83	82.000		ppb
	Se	77	28489.191		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	138352.495		ppb
	Be	9	83894.444	203.117887	ppb
	Na	23	8592763.939	2115.265425	ppb
	Mg	24	6863885.023	2010.208579	ppb
	Mg	25	1116487.160	2110.396362	ppb
	Mg	26	1367815.622	2097.749342	ppb
	Al	27	11615401.126	2022.251198	ppb
	K	39	18438942.024	1990.990687	ppb
	Ca	44	758815.675	2036.556590	ppb
>	Sc	45	571671.317		ppb
	Ti	47	195349.617	202.900904	ppb
	V	51	2769517.142	203.193749	ppb
	Cr	52	2341267.058	196.305962	ppb
	Mn	55	3199129.908	197.255220	ppb
	Fe	54	1805917.796	1930.568719	ppb
	Fe	56	31986325.518	1965.849436	ppb
	Fe	57	692612.789	1953.052172	ppb
	Co	59	3240322.746	195.652946	ppb
	Ni	60	691107.117	192.179106	ppb
	Cu	63	1737553.781	192.685509	ppb
	Cu	65	801589.241	192.664462	ppb
	Zn	66	357225.195	192.524993	ppb
	As	75	403817.086	193.202867	ppb
	Se	82	36888.580	191.960795	ppb

⌈	Mo	96	879594.685	202.860664	ppb
|	Ag	107	2933615.838	201.417902	ppb
|	Ag	109	2867484.765	202.555692	ppb
|	Cd	111	575028.843	205.177089	ppb
|	In	113	631733.360	203.371956	ppb
|>	In	115	1481454.650		ppb
⌊	Sn	118	1733350.682	198.835659	ppb
⌈	Sb	121	1738573.629	193.460719	ppb
|	Ba	135	551841.609	194.985679	ppb
|	Ba	137	975419.954	197.318411	ppb
⌊>	Tb	159	2430669.652		ppb
⌈	Tl	205	7893607.606	199.821818	ppb
|	Pb	206	2675982.289	197.176504	ppb
|	Pb	207	4985912.541	195.959213	ppb
|	Pb	208	7791250.691	193.208192	ppb
⌊>	Bi	209	1815585.687		ppb
	Cr	53	260131.991		ppb
	Pd	106	50768.546		ppb
	Pd	108	36376.041		ppb
	C	12	402704.501		ppb
	Kr	83	48.000		ppb
	Se	77	28917.083		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6					
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45					
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115					
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159					
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209					
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: ICV

Sample Date/Time: Monday, November 09, 2009 17:44:32
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\ICV.833

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	126512.956	27.528	126512.956			ppb
|	Be	9	39399.395	27.643	0.311	104.33825	2.18	ppb
|	Na	23	8163788.020	24.888	64.852	2211.09705	3.38	ppb
|	Mg	24	4042471.039	25.271	32.116	1301.39790	3.36	ppb
|	Mg	25	613106.707	28.389	4.841	1266.10562	5.58	ppb
|	Mg	26	760216.139	29.338	5.992	1271.65692	6.93	ppb
|	Al	27	2712740.585	31.006	21.267	512.43128	7.33	ppb
|	K	39	16943223.550	27.808	131.325	2001.50941	5.37	ppb
⌊	Ca	44	616623.962	27.681	4.650	1801.12384	5.50	ppb
⌈>	Sc	45	520286.562	27.257	520286.562			ppb
|	Ti	47	95.001	41.775	0.000	0.03354	279.24	ppb
|	V	51	1262508.837	25.832	2.431	102.03513	1.85	ppb
|	Cr	52	1101417.798	24.266	2.117	101.83517	3.80	ppb
|	Mn	55	1563534.880	25.234	3.009	106.27344	3.85	ppb
|	Fe	54	936793.134	28.668	1.677	1064.76095	3.36	ppb
|	Fe	56	16465393.900	21.466	28.097	1062.85865	9.01	ppb
|	Fe	57	329065.513	22.473	0.632	1025.33480	6.16	ppb
|	Co	59	1533783.551	21.785	2.985	103.04216	7.02	ppb
|	Ni	60	334820.739	22.129	0.651	103.51063	6.66	ppb
|	Cu	63	779333.519	21.876	1.517	96.15865	7.38	ppb
|	Cu	65	376049.741	22.502	0.731	100.41090	6.52	ppb
|	Zn	66	339496.406	22.294	0.659	203.38231	6.59	ppb
|	As	75	378518.136	21.261	0.738	201.71738	7.46	ppb
⌊	Se	82	34674.874	22.235	0.067	200.55824	6.29	ppb
⌈	Mo	96	1048.057	22.962	0.001	0.23260	49.49	ppb
|	Ag	107	1467986.585	17.866	1.013	103.03454	1.77	ppb
|	Ag	109	1433029.825	19.768	0.986	103.19563	1.58	ppb
|	Cd	111	277668.527	18.417	0.191	101.19956	1.12	ppb
|	In	113	335213.580	19.999	0.187	99.34794	2.25	ppb
|>	In	115	1451512.100	18.960	1451512.100			ppb
⌊	Sn	118	891.707	18.870	0.001	0.08599	49.71	ppb
⌈	Sb	121	1655277.362	20.339	0.742	200.73534	1.60	ppb
|	Ba	135	266971.347	19.685	0.120	102.89427	0.79	ppb
|	Ba	137	463377.909	20.068	0.208	102.20394	1.54	ppb
⌊>	Tb	159	2227422.900	19.441	2227422.900			ppb
⌈	Tl	205	7925664.102	18.980	4.679	215.07390	3.42	ppb
|	Pb	206	2623762.769	21.264	1.543	206.47304	2.49	ppb
|	Pb	207	4927186.047	20.815	2.900	206.93120	1.61	ppb
|	Pb	208	7948936.251	21.679	4.671	210.32504	1.43	ppb
⌊>	Bi	209	1699654.959	20.933	1699654.959			ppb
	Cr	53	127100.886	24.697	123430.210			ppb
	Pd	106	24596.065	20.608	24592.731			ppb
	Pd	108	18069.940	16.496	18066.607			ppb
	C	12	396693.770	2.785	9054.527			ppb
	Kr	83	61.334	29.588	8.667			ppb
	Se	77	27218.353	21.519	27103.463			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86518.662		ppb
	Be	9	27062.570	104.771394	ppb
	Na	23	5821691.515	2291.891115	ppb
	Mg	24	2862997.079	1340.767843	ppb
	Mg	25	413605.157	1250.129833	ppb
	Mg	26	506046.662	1240.945699	ppb
	Al	27	1748802.612	486.355684	ppb
	K	39	11538877.411	1992.416596	ppb
	Ca	44	420838.772	1796.189260	ppb
>	Sc	45	356550.063		ppb
	Ti	47	140.001	0.141376	ppb
	V	51	886134.766	104.166268	ppb
	Cr	52	792808.167	106.264883	ppb
	Mn	55	1110717.917	109.625495	ppb
	Fe	54	628078.580	1043.305775	ppb
	Fe	56	12418903.190	1166.856331	ppb
	Fe	57	243749.932	1096.995989	ppb
	Co	59	1148726.773	111.205914	ppb
	Ni	60	249476.931	111.222145	ppb
	Cu	63	583984.802	103.821938	ppb
	Cu	65	278888.798	107.460547	ppb
	Zn	66	252426.241	218.149097	ppb
	As	75	285590.771	219.075536	ppb
	Se	82	25776.512	215.100218	ppb
	Mo	96	1298.084	0.362446	ppb
	Ag	107	1165147.504	104.458042	ppb
	Ag	109	1105917.865	102.007724	ppb
	Cd	111	218627.151	101.862503	ppb
	In	113	257805.902	97.560993	ppb
>	In	115	1134525.135		ppb
	Sn	118	1050.055	0.133586	ppb
	Sb	121	1266559.877	198.141788	ppb
	Ba	135	206330.886	102.488221	ppb
	Ba	137	357332.253	101.617881	ppb
>	Tb	159	1728939.010		ppb
	Tl	205	6210256.096	221.446409	ppb
	Pb	206	1987014.814	206.237223	ppb
	Pb	207	3749665.796	207.590854	ppb
	Pb	208	5965757.333	208.391374	ppb
>	Bi	209	1288918.398		ppb
	Cr	53	90943.666		ppb
	Pd	106	18767.595		ppb
	Pd	108	14640.710		ppb
	C	12	383962.510		ppb
	Kr	83	48.000		ppb
	Se	77	20458.239		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	142873.401		ppb
	Be	9	43454.209	101.873884	ppb
	Na	23	9215550.163	2196.878463	ppb
	Mg	24	4616010.805	1309.051610	ppb
	Mg	25	733938.603	1343.353883	ppb
	Mg	26	923219.080	1370.992007	ppb
	Al	27	3297629.269	555.455863	ppb
	K	39	20187311.011	2113.222823	ppb
	Ca	44	734161.407	1902.485170	ppb
>	Sc	45	604112.581		ppb

	Ti	47	80.000	-0.013210	ppb
	V	51	1461401.743	101.387041	ppb
	Cr	52	1253575.940	99.122705	ppb
	Mn	55	1746578.123	101.712281	ppb
	Fe	54	1065687.158	1044.899412	ppb
	Fe	56	18028368.081	978.168188	ppb
	Fe	57	368605.563	977.853671	ppb
	Co	59	1705188.978	97.427617	ppb
	Ni	60	372317.687	97.964536	ppb
	Cu	63	855898.257	89.804014	ppb
	Cu	65	415666.370	94.525214	ppb
	Zn	66	376499.986	192.016009	ppb
	As	75	424558.300	192.218398	ppb
	Se	82	39361.313	193.831792	ppb
	Mo	96	1028.053	0.192341	ppb
	Ag	107	1621095.175	103.669148	ppb
	Ag	109	1596754.315	105.057942	ppb
	Cd	111	306438.752	101.843685	ppb
	In	113	374270.251	101.852647	ppb
>	In	115	1590501.014		ppb
	Sn	118	910.041	0.073526	ppb
	Sb	121	1854091.595	199.737780	ppb
	Ba	135	299282.471	102.368931	ppb
	Ba	137	530988.859	103.982847	ppb
>	Tb	159	2510744.029		ppb
	Tl	205	9019886.718	216.753420	ppb
	Pb	206	3026834.124	211.720015	ppb
	Pb	207	5625366.101	209.880882	ppb
	Pb	208	9081642.596	213.789232	ppb
>	Bi	209	1912579.924		ppb
	Cr	53	142976.864		ppb
	Pd	106	27974.073		ppb
	Pd	108	19529.051		ppb
	C	12	402383.978		ppb
	Kr	83	82.000		ppb
	Se	77	30779.964		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	150146.804		ppb
	Be	9	47681.405	106.369475	ppb
	Na	23	9454122.381	2144.521557	ppb
	Mg	24	4648405.234	1254.374243	ppb
	Mg	25	691776.360	1204.833132	ppb
	Mg	26	851382.675	1203.033050	ppb
	Al	27	3091789.873	495.482298	ppb
	K	39	19103482.228	1898.888817	ppb
	Ca	44	694871.707	1704.697096	ppb
>	Sc	45	600197.041		ppb
	Ti	47	65.000	-0.027543	ppb
	V	51	1439990.003	100.552067	ppb
	Cr	52	1257869.288	100.117934	ppb
	Mn	55	1833308.600	107.482555	ppb
	Fe	54	1116613.664	1106.077670	ppb
	Fe	56	18948910.428	1043.551425	ppb
	Fe	57	374841.044	1001.154753	ppb
	Co	59	1747434.900	100.492959	ppb
	Ni	60	382667.599	101.345218	ppb
	Cu	63	898117.498	94.850002	ppb
	Cu	65	433594.055	99.246952	ppb
	Zn	66	389562.990	199.981820	ppb
	As	75	425405.338	193.858220	ppb
	Se	82	38886.796	192.742712	ppb

⌈	Mo	96	818.033	0.143012	ppb
|	Ag	107	1617717.076	100.976430	ppb
|	Ag	109	1596417.295	102.521213	ppb
|	Cd	111	307939.677	99.892487	ppb
|	In	113	373564.587	98.630193	ppb
|>	In	115	1629510.152		ppb
⌊	Sn	118	715.026	0.050858	ppb
⌈	Sb	121	1845180.612	204.326446	ppb
|	Ba	135	295300.684	103.825662	ppb
|	Ba	137	501812.617	101.011091	ppb
⌊>	Tb	159	2442585.662		ppb
⌈	Tl	205	8546849.491	207.021858	ppb
|	Pb	206	2857439.368	201.461876	ppb
|	Pb	207	5406526.245	203.321871	ppb
|	Pb	208	8799408.823	208.794499	ppb
⌊>	Bi	209	1897466.556		ppb
	Cr	53	147382.130		ppb
	Pd	106	27046.526		ppb
	Pd	108	20040.060		ppb
	C	12	403734.822		ppb
	Kr	83	54.000		ppb
	Se	77	30416.856		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		104.344			
	Be	9	105.392				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		102.726			
	Ti	47					
	V	51	102.035				
	Cr	52	103.913				
	Mn	55	106.273				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	103.042				
	Ni	60	102.486				
	Cu	63	98.121				
	Cu	65	102.460				
	Zn	66	99.211				
	As	75	100.859				
	Se	82	97.358				
	Mo	96					
	Ag	107	103.035				
	Ag	109	103.196				
	Cd	111	102.222				
	In	113					
>	In	115		103.887			
	Sn	118	0.086				
	Sb	121	100.872				
	Ba	135	103.934				
	Ba	137	103.236				
>	Tb	159		102.219			
	Tl	205	104.405				
	Pb	206	103.237				
	Pb	207	103.466				
	Pb	208	105.163				
>	Bi	209		102.489			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 1	Sn	118	ICV is out of control

EPA 6020 - Summary Report

Sample ID: ICB

Sample Date/Time: Monday, November 09, 2009 17:46:31
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\ICB.834

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	122608.759	31.118	122608.759			ppb
	Be	9	10.000	121.655	0.000	0.02951	186.75	ppb
	Na	23	8913.666	10.339	0.011	0.37056	188.35	ppb
	Mg	24	917.380	40.316	0.005	0.21738	131.58	ppb
	Mg	25	171.002	67.364	0.001	0.33386	142.30	ppb
	Mg	26	301.339	48.770	0.002	0.34880	157.97	ppb
	Al	27	4294.263	11.567	0.011	0.25660	185.52	ppb
	K	39	315780.033	1.044	0.147	2.24784	694.48	ppb
	Ca	44	24992.554	3.709	-0.004	-1.55820	2321.17	ppb
>	Sc	45	495284.266	26.700	495284.266			ppb
	Ti	47	56.667	30.987	-0.000	-0.01557	303.32	ppb
	V	51	2367.838	4.271	0.001	0.06058	93.73	ppb
	Cr	52	7530.170	3.930	0.002	0.08263	280.90	ppb
	Mn	55	3857.415	9.776	-0.003	-0.12157	49.48	ppb
	Fe	54	59364.157	17.269	0.004	2.58868	347.87	ppb
	Fe	56	2030699.701	8.810	0.284	10.75214	336.77	ppb
	Fe	57	3537.293	5.457	0.000	0.57889	536.35	ppb
	Co	59	393.344	78.117	0.001	0.02618	137.35	ppb
	Ni	60	105.556	56.166	0.000	0.02437	143.50	ppb
	Cu	63	342.229	37.929	0.000	0.02458	143.22	ppb
	Cu	65	164.446	34.539	0.000	0.01918	174.48	ppb
	Zn	66	327.783	5.017	0.000	0.03390	186.34	ppb
	As	75	82.345	155.585	0.000	0.08163	120.78	ppb
	Se	82	60.222	16.618	0.000	0.10646	175.76	ppb
	Mo	96	344.006	14.098	0.000	0.06071	35.29	ppb
	Ag	107	282.226	26.942	0.000	0.01910	68.56	ppb
	Ag	109	281.116	51.990	0.000	0.02119	93.49	ppb
	Cd	111	41.367	102.506	0.000	0.01851	133.34	ppb
	In	113	60230.096	25.162	0.000	0.25007	337.72	ppb
>	In	115	1365951.487	24.550	1365951.487			ppb
	Sn	118	388.341	12.961	0.000	0.02695	58.35	ppb
	Sb	121	9274.411	19.832	0.005	1.22119	46.45	ppb
	Ba	135	54.667	16.497	0.000	0.01219	90.97	ppb
	Ba	137	113.334	27.358	0.000	0.01713	75.26	ppb
>	Tb	159	2065799.118	24.720	2065799.118			ppb
	Tl	205	900.047	49.653	0.001	0.02651	83.42	ppb
	Pb	206	528.348	28.617	0.000	0.01921	139.31	ppb
	Pb	207	921.690	28.523	0.000	0.01726	144.88	ppb
	Pb	208	1438.399	29.634	0.000	0.01588	157.15	ppb
>	Bi	209	1648717.312	23.411	1648717.312			ppb
	Cr	53	2739.713	13.475	-930.963			ppb
	Pd	106	8.333	124.900	5.000			ppb
	Pd	108	0.000		-3.333			ppb
	C	12	377528.372	7.310	-10110.871			ppb
	Kr	83	46.000	28.511	-6.667			ppb
	Se	77	108.667	10.211	-6.222			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	78577.513		ppb
	Be	9	24.000	0.093105	ppb
	Na	23	7898.118	1.174753	ppb
	Mg	24	1343.090	0.547571	ppb
	Mg	25	304.005	0.882404	ppb
	Mg	26	471.011	0.985007	ppb
	Al	27	4866.184	0.806118	ppb
	K	39	311994.263	20.271157	ppb
	Ca	44	26009.782	40.204871	ppb
>	Sc	45	342832.673		ppb
	Ti	47	75.000	0.038080	ppb
	V	51	2255.502	0.125953	ppb
	Cr	52	7398.736	0.348206	ppb
	Mn	55	3445.594	-0.052290	ppb
	Fe	54	47527.676	12.908702	ppb
	Fe	56	1841242.260	52.431418	ppb
	Fe	57	3320.551	4.151175	ppb
	Co	59	748.028	0.067684	ppb
	Ni	60	173.335	0.064685	ppb
	Cu	63	490.012	0.065169	ppb
	Cu	65	223.336	0.057266	ppb
	Zn	66	320.005	0.106539	ppb
	As	75	216.008	0.191326	ppb
	Se	82	70.000	0.319433	ppb
	Mo	96	316.005	0.081214	ppb
	Ag	107	370.007	0.034206	ppb
	Ag	109	446.677	0.044013	ppb
	Cd	111	90.280	0.047000	ppb
	In	113	42731.103	-0.078473	ppb
>	In	115	983932.178		ppb
	Sn	118	395.008	0.044511	ppb
	Sb	121	10525.536	1.846810	ppb
	Ba	135	64.000	0.024888	ppb
	Ba	137	126.001	0.030238	ppb
>	Tb	159	1476165.556		ppb
	Tl	205	1415.100	0.052031	ppb
	Pb	206	700.025	0.050020	ppb
	Pb	207	1225.038	0.046135	ppb
	Pb	208	1920.111	0.044581	ppb
>	Bi	209	1203024.090		ppb
	Cr	53	3164.501		ppb
	Pd	106	20.000		ppb
	Pd	108	0.000		ppb
	C	12	346279.434		ppb
	Kr	83	32.000		ppb
	Se	77	113.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143350.151		ppb
	Be	9	2.000	-0.004536	ppb
	Na	23	9146.181	-0.076869	ppb
	Mg	24	675.023	0.045763	ppb
	Mg	25	106.001	0.063968	ppb
	Mg	26	219.002	0.037161	ppb
	Al	27	4045.818	-0.006023	ppb
	K	39	317317.903	-6.506250	ppb
	Ca	44	24195.235	-22.635240	ppb
>	Sc	45	564014.363		ppb

	Ti	47	55.000	-0.033948	ppb
	V	51	2451.604	0.032256	ppb
	Cr	52	7869.095	-0.018767	ppb
	Mn	55	3940.776	-0.160492	ppb
	Fe	54	65418.280	-1.468996	ppb
	Fe	56	2054090.666	-12.964716	ppb
	Fe	57	3690.681	-0.943811	ppb
	Co	59	224.003	0.006076	ppb
	Ni	60	63.334	0.002157	ppb
	Cu	63	246.670	0.002275	ppb
	Cu	65	110.001	-0.005457	ppb
	Zn	66	316.672	-0.008168	ppb
	As	75	70.419	0.053157	ppb
	Se	82	60.667	0.031571	ppb
	Mo	96	400.008	0.062459	ppb
	Ag	107	236.669	0.011981	ppb
	Ag	109	170.001	0.008348	ppb
	Cd	111	18.820	0.005121	ppb
	In	113	68881.418	1.209486	ppb
>	In	115	1502205.864		ppb
	Sn	118	335.006	0.014182	ppb
	Sb	121	10135.133	1.076229	ppb
	Ba	135	54.000	0.007247	ppb
	Ba	137	78.000	0.004472	ppb
>	Tb	159	2366619.212		ppb
	Tl	205	615.019	0.013074	ppb
	Pb	206	470.011	0.005772	ppb
	Pb	207	780.016	0.003211	ppb
	Pb	208	1110.037	-0.000577	ppb
>	Bi	209	1871219.674		ppb
	Cr	53	2558.327		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	387748.472		ppb
	Kr	83	58.000		ppb
	Se	77	96.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	145898.612		ppb
	Be	9	4.000	-0.000025	ppb
	Na	23	9696.699	0.013782	ppb
	Mg	24	734.027	0.058818	ppb
	Mg	25	103.001	0.055212	ppb
	Mg	26	214.002	0.024225	ppb
	Al	27	3970.788	-0.030293	ppb
	K	39	318027.932	-7.021375	ppb
	Ca	44	24772.646	-22.244228	ppb
>	Sc	45	579005.761		ppb
	Ti	47	40.000	-0.050837	ppb
	V	51	2396.408	0.023530	ppb
	Cr	52	7322.680	-0.081536	ppb
	Mn	55	4185.876	-0.151930	ppb
	Fe	54	65146.514	-3.673680	ppb
	Fe	56	2196766.177	-7.210285	ppb
	Fe	57	3600.648	-1.470687	ppb
	Co	59	208.002	0.004767	ppb
	Ni	60	80.000	0.006271	ppb
	Cu	63	290.004	0.006302	ppb
	Cu	65	160.001	0.005717	ppb
	Zn	66	346.673	0.003328	ppb
	As	75	-39.391	0.000406	ppb
	Se	82	50.000	-0.031613	ppb

⌈	Mo	96	316.005	0.038466	ppb
|	Ag	107	240.003	0.011102	ppb
|	Ag	109	226.669	0.011222	ppb
|	Cd	111	15.000	0.003418	ppb
|	In	113	69077.766	-0.380812	ppb
|>	In	115	1611716.417		ppb
⌊	Sn	118	435.009	0.022152	ppb
⌈	Sb	121	7162.564	0.740533	ppb
|	Ba	135	46.000	0.004429	ppb
|	Ba	137	136.001	0.016668	ppb
⌊>	Tb	159	2354612.586		ppb
⌈	Tl	205	670.022	0.014419	ppb
|	Pb	206	415.009	0.001828	ppb
|	Pb	207	760.015	0.002438	ppb
|	Pb	208	1285.050	0.003623	ppb
⌊>	Bi	209	1871908.171		ppb
	Cr	53	2496.312		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	398557.210		ppb
	Kr	83	48.000		ppb
	Se	77	116.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.124			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.790			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		97.763			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		94.802			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		99.417			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CRI

Sample Date/Time: Monday, November 09, 2009 17:49:29
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CRI.835

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	121300.579	29.744	121300.579			ppb
|	Be	9	368.674	24.324	0.003	1.02497	9.31	ppb
|	Na	23	2709.700	1.230	-0.042	-1.42993	21.38	ppb
|	Mg	24	534.348	16.078	0.001	0.03996	83.44	ppb
|	Mg	25	83.334	25.437	0.000	0.05470	59.76	ppb
|	Mg	26	186.002	5.295	0.000	0.06017	183.67	ppb
|	Al	27	147568.490	31.225	1.185	28.54963	4.77	ppb
|	K	39	302438.706	2.173	0.031	0.47980	2862.95	ppb
⌊	Ca	44	25399.583	3.945	-0.000	-0.01180	294918.27	ppb
⌈>	Sc	45	492177.634	28.100	492177.634			ppb
|	Ti	47	70.000	18.898	0.000	0.00089	5043.61	ppb
|	V	51	56046.621	28.069	0.110	4.63013	0.40	ppb
|	Cr	52	26181.919	21.195	0.040	1.91098	11.83	ppb
|	Mn	55	16353.932	25.312	0.022	0.77407	5.83	ppb
|	Fe	54	60143.402	10.887	0.009	5.69108	304.24	ppb
|	Fe	56	2012478.383	8.879	0.290	10.97470	342.07	ppb
|	Fe	57	3455.601	10.079	0.000	0.33634	814.86	ppb
|	Co	59	13570.922	25.098	0.028	0.95177	6.33	ppb
|	Ni	60	3028.251	21.851	0.006	0.97781	9.33	ppb
|	Cu	63	14679.031	26.066	0.030	1.87523	4.43	ppb
|	Cu	65	7282.758	24.589	0.015	2.02018	6.98	ppb
|	Zn	66	3198.312	25.684	0.006	1.83968	9.54	ppb
|	As	75	1716.672	21.621	0.004	0.98820	9.00	ppb
⌊	Se	82	823.146	19.693	0.002	4.79372	11.28	ppb
⌈	Mo	96	3805.423	25.924	0.003	0.93222	4.73	ppb
|	Ag	107	12847.429	23.080	0.010	0.96632	1.39	ppb
|	Ag	109	12185.432	21.768	0.009	0.94561	1.06	ppb
|	Cd	111	2512.394	24.140	0.002	0.98365	4.58	ppb
|	In	113	62443.669	24.367	0.003	1.43283	57.98	ppb
|>	In	115	1344494.131	22.132	1344494.131			ppb
⌊	Sn	118	7611.318	21.461	0.006	0.93962	1.39	ppb
⌈	Sb	121	16799.568	22.354	0.008	2.13048	6.09	ppb
|	Ba	135	23541.840	21.213	0.011	9.85482	6.70	ppb
|	Ba	137	41722.214	21.602	0.020	9.98251	4.30	ppb
⌊>	Tb	159	2061796.909	23.729	2061796.909			ppb
⌈	Tl	205	33355.634	21.858	0.021	0.95159	2.18	ppb
|	Pb	206	11641.986	21.733	0.007	0.94109	0.89	ppb
|	Pb	207	21425.268	22.201	0.013	0.92383	1.00	ppb
|	Pb	208	34459.561	21.323	0.021	0.93867	1.66	ppb
⌊>	Bi	209	1609293.812	22.305	1609293.812			ppb
	Cr	53	4798.487	5.606	1127.811			ppb
	Pd	106	233.336	17.453	230.003			ppb
	Pd	108	153.335	37.654	150.001			ppb
	C	12	381674.154	5.803	-5965.089			ppb
	Kr	83	50.667	14.945	-2.000			ppb
	Se	77	735.805	18.266	620.916			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	79639.868		ppb
	Be	9	268.004	1.118070	ppb
	Na	23	2745.377	-1.076876	ppb
	Mg	24	438.010	0.077814	ppb
	Mg	25	64.000	0.080750	ppb
	Mg	26	178.002	0.187268	ppb
	Al	27	95165.681	28.106798	ppb
	K	39	295661.102	16.338201	ppb
	Ca	44	26342.651	40.113534	ppb
>	Sc	45	333510.235		ppb
	Ti	47	80.000	0.050618	ppb
	V	51	38032.335	4.636302	ppb
	Cr	52	19843.669	2.172105	ppb
	Mn	55	11576.697	0.818784	ppb
	Fe	54	52944.787	25.681642	ppb
	Fe	56	1806521.589	54.172159	ppb
	Fe	57	3095.479	3.495871	ppb
	Co	59	9662.666	0.992480	ppb
	Ni	60	2270.258	1.066508	ppb
	Cu	63	10265.266	1.926077	ppb
	Cu	65	5231.368	2.123375	ppb
	Zn	66	2276.926	1.924109	ppb
	As	75	1290.547	1.077283	ppb
	Se	82	636.020	5.392852	ppb
	Mo	96	2666.355	0.881744	ppb
	Ag	107	9424.439	0.953676	ppb
	Ag	109	9124.161	0.950450	ppb
	Cd	111	1828.018	0.963887	ppb
	In	113	45006.050	0.736820	ppb
>	In	115	1000941.571		ppb
	Sn	118	5726.639	0.948666	ppb
	Sb	121	12517.830	2.173984	ppb
	Ba	135	17873.960	10.215169	ppb
	Ba	137	31333.011	10.252763	ppb
>	Tb	159	1501039.660		ppb
	Tl	205	25006.227	0.959802	ppb
	Pb	206	8723.804	0.948996	ppb
	Pb	207	15946.411	0.925870	ppb
	Pb	208	26000.221	0.952510	ppb
>	Bi	209	1194913.250		ppb
	Cr	53	4503.014		ppb
	Pd	106	205.002		ppb
	Pd	108	120.001		ppb
	C	12	356727.216		ppb
	Kr	83	56.000		ppb
	Se	77	580.684		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	142358.130		ppb
	Be	9	398.008	0.927341	ppb
	Na	23	2679.359	-1.610490	ppb
	Mg	24	562.016	0.014925	ppb
	Mg	25	106.001	0.065315	ppb
	Mg	26	197.002	0.006624	ppb
	Al	27	181746.720	30.076273	ppb
	K	39	308786.983	-7.184476	ppb
	Ca	44	24347.604	-21.765023	ppb
>	Sc	45	587182.472		ppb

	Ti	47	55.000	-0.036233	ppb
	V	51	67077.787	4.644706	ppb
	Cr	52	30165.429	1.781225	ppb
	Mn	55	18882.811	0.728596	ppb
	Fe	54	65745.415	-4.020875	ppb
	Fe	56	2126075.565	-13.763008	ppb
	Fe	57	3790.718	-1.086213	ppb
	Co	59	15143.458	0.882620	ppb
	Ni	60	3323.886	0.884250	ppb
	Cu	63	16713.956	1.779311	ppb
	Cu	65	8083.266	1.859573	ppb
	Zn	66	3463.933	1.637951	ppb
	As	75	1890.040	0.899311	ppb
	Se	82	912.708	4.342151	ppb
	Mo	96	4362.952	0.951539	ppb
	Ag	107	14490.491	0.964876	ppb
	Ag	109	13629.282	0.934121	ppb
	Cd	111	2983.305	1.035170	ppb
	In	113	73025.667	2.352484	ppb
>	In	115	1521202.427		ppb
	Sn	118	8488.601	0.924692	ppb
	Sb	121	19534.060	2.232779	ppb
	Ba	135	27295.201	10.257001	ppb
	Ba	137	47442.272	10.207262	ppb
>	Tb	159	2282889.987		ppb
	Tl	205	36596.844	0.927965	ppb
	Pb	206	12978.417	0.932275	ppb
	Pb	207	23829.300	0.913742	ppb
	Pb	208	38123.022	0.921857	ppb
>	Bi	209	1808633.538		ppb
	Cr	53	5029.264		ppb
	Pd	106	280.004		ppb
	Pd	108	220.002		ppb
	C	12	389261.588		ppb
	Kr	83	42.000		ppb
	Se	77	809.366		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	141903.740		ppb
	Be	9	440.010	1.029490	ppb
	Na	23	2704.366	-1.602427	ppb
	Mg	24	603.018	0.027146	ppb
	Mg	25	80.000	0.018020	ppb
	Mg	26	183.002	-0.013372	ppb
	Al	27	165793.068	27.465824	ppb
	K	39	302868.034	-7.714333	ppb
	Ca	44	25508.493	-18.383902	ppb
>	Sc	45	555840.197		ppb
	Ti	47	75.000	-0.011721	ppb
	V	51	63029.742	4.609396	ppb
	Cr	52	28536.659	1.779614	ppb
	Mn	55	18602.286	0.774819	ppb
	Fe	54	61740.005	-4.587533	ppb
	Fe	56	2104837.994	-7.485048	ppb
	Fe	57	3480.606	-1.400623	ppb
	Co	59	15906.641	0.980214	ppb
	Ni	60	3490.609	0.982681	ppb
	Cu	63	17057.869	1.920306	ppb
	Cu	65	8533.640	2.077599	ppb
	Zn	66	3854.076	1.956993	ppb
	As	75	1969.430	0.988010	ppb
	Se	82	920.709	4.646167	ppb

⌈	Mo	96	4386.962	0.963364	ppb
|	Ag	107	14627.357	0.980411	ppb
|	Ag	109	13802.853	0.952259	ppb
|	Cd	111	2725.858	0.951892	ppb
|	In	113	69299.290	1.209174	ppb
|>	In	115	1511338.393		ppb
⌊	Sn	118	8618.713	0.945513	ppb
⌈	Sb	121	18346.815	1.984684	ppb
|	Ba	135	25456.360	9.092283	ppb
|	Ba	137	46391.359	9.487515	ppb
⌊>	Tb	159	2401461.081		ppb
⌈	Tl	205	38463.831	0.966996	ppb
|	Pb	206	13223.738	0.942004	ppb
|	Pb	207	24500.092	0.931891	ppb
|	Pb	208	39255.441	0.941639	ppb
⌊>	Bi	209	1824334.648		ppb
	Cr	53	4863.182		ppb
	Pd	106	215.002		ppb
	Pd	108	120.001		ppb
	C	12	399033.657		ppb
	Kr	83	54.000		ppb
	Se	77	817.367		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			100.045		
	Be	9	102.497				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			97.176		
	Ti	47					
	V	51	92.603				
	Cr	52	95.549				
	Mn	55	77.407				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	95.177				
	Ni	60	97.781				
	Cu	63	93.762				
	Cu	65	101.009				
	Zn	66	91.984				
	As	75	98.820				
	Se	82	95.874				
	Mo	96					
	Ag	107	96.632				
	Ag	109	94.561				
	Cd	111	98.365				
	In	113					
>	In	115			96.227		
	Sn	118	93.962				
	Sb	121	106.524				
	Ba	135	98.548				
	Ba	137	99.825				
>	Tb	159			94.619		
	Tl	205	95.159				
	Pb	206	94.109				
	Pb	207	92.383				
	Pb	208	93.867				
>	Bi	209			97.040		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: ICSA

Sample Date/Time: Monday, November 09, 2009 17:51:27
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\ICSA.836

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	110428.403	31.888	110428.403			ppb
	Be	9	80.667	31.394	0.001	0.23633	6.35	ppb
	Na	23	S	S	19999999[illegible]68188500901.27505			ppb
	Mg	24	S	S	19999999[illegible]81043735614.33841		0.00	ppb
	Mg	25	37659646.203	36.226	337.096	88161.24855	6.96	ppb
	Mg	26	47012125.555	36.642	420.206	89173.37471	7.19	ppb
	Al	27	S	S	19999999[illegible]48190917742.55194		0.00	ppb
	K	39	S	S	19999999[illegible]30481824084.43193		0.00	ppb
	Ca	44	22858369.573	34.313	205.395	79563.07869	4.03	ppb
>	Sc	45	438443.359	34.144	438443.359			ppb
	Ti	47	1509496.303	34.576	3.438	2042.34208	0.59	ppb
	V	51	2156.690	106.004	0.000	0.01784	1040.42	ppb
	Cr	52	166510.452	33.215	0.367	17.63055	1.89	ppb
	Mn	55	97650.958	29.068	0.215	7.58462	7.34	ppb
	Fe	54	54889226.378	33.399	125.388	79609.63461	2.79	ppb
	Fe	56	S	S	19999999[illegible]75656640734.54942		0.00	ppb
	Fe	57	23079594.768	32.634	52.882	85750.51187	2.07	ppb
	Co	59	12585.088	31.019	0.029	0.99323	5.26	ppb
	Ni	60	14708.155	30.729	0.034	5.37620	5.52	ppb
	Cu	63	41744.612	30.693	0.096	6.07725	5.19	ppb
	Cu	65	22261.791	30.019	0.051	7.03623	5.94	ppb
	Zn	66	15386.000	32.655	0.035	10.70492	5.71	ppb
	As	75	214.205	88.359	0.000	0.13029	76.72	ppb
	Se	82	69.111	11.427	0.000	0.21414	68.54	ppb
	Mo	96	5875850.308	27.344	5.978	2042.71323	0.64	ppb
	Ag	107	113.334	20.588	0.000	0.00821	42.13	ppb
	Ag	109	142.223	3.580	0.000	0.01267	44.61	ppb
	Cd	111	476.060	89.882	0.001	0.26959	79.92	ppb
	In	113	50181.279	26.121	0.008	4.04931	11.54	ppb
>	In	115	982048.084	26.945	982048.084			ppb
	Sn	118	1901.867	39.857	0.002	0.29597	18.20	ppb
	Sb	121	8442.068	26.964	0.005	1.24512	4.74	ppb
	Ba	135	2617.689	24.006	0.002	1.30157	3.03	ppb
	Ba	137	4344.978	23.330	0.003	1.23871	3.86	ppb
>	Tb	159	1720229.801	26.417	1720229.801			ppb
	Tl	205	173.335	20.465	0.000	0.00668	65.04	ppb
	Pb	206	32938.168	25.520	0.033	4.38475	1.87	ppb
	Pb	207	59128.907	25.523	0.059	4.19839	1.68	ppb
	Pb	208	91555.188	24.503	0.091	4.10968	2.88	ppb
>	Bi	209	1001671.338	26.799	1001671.338			ppb
	Cr	53	26772.762	26.226	23102.085			ppb
	Pd	106	21.667	13.323	18.333			ppb
	Pd	108	7277.731	21.742	7274.397			ppb
	C	12	3285867.293	32.190	2898228.050			ppb
	Kr	83	106.667	18.875	54.000			ppb
	Se	77	1860.625	25.377	1745.735			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	69782.634		ppb
	Be	9	52.000	0.240410	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	22000962.053	82455.106497	ppb
	Mg	26	27199109.424	82713.856713	ppb
	Al	27		48190917742.551941	ppb
	K	39		30481824084.431938	ppb
	Ca	44	13816560.460	76608.384680	ppb
>	Sc	45	265847.386		ppb
	Ti	47	907833.395	2028.469677	ppb
	V	51	-137.603	-0.171916	ppb
	Cr	52	102650.163	17.883034	ppb
	Mn	55	64874.756	8.212218	ppb
	Fe	54	33735510.570	80493.273245	ppb
	Fe	56		75656640734.549423	ppb
	Fe	57	14396373.954	87800.119873	ppb
	Co	59	8085.267	1.042207	ppb
	Ni	60	9497.842	5.664134	ppb
	Cu	63	26956.283	6.403527	ppb
	Cu	65	14547.240	7.487727	ppb
	Zn	66	9634.639	10.995119	ppb
	As	75	-2.958	0.015969	ppb
	Se	82	60.000	0.383525	ppb
	Mo	96	4020620.730	2030.844781	ppb
	Ag	107	103.334	0.011492	ppb
	Ag	109	146.668	0.019193	ppb
	Cd	111	465.997	0.362613	ppb
	In	113	35081.428	4.398237	ppb
>	In	115	676511.158		ppb
	Sn	118	1030.053	0.235061	ppb
	Sb	121	5856.715	1.242998	ppb
	Ba	135	1892.179	1.347040	ppb
	Ba	137	3174.504	1.293967	ppb
>	Tb	159	1195527.669		ppb
	Tl	205	205.002	0.011588	ppb
	Pb	206	23246.990	4.468654	ppb
	Pb	207	41714.026	4.277098	ppb
	Pb	208	65653.100	4.246455	ppb
>	Bi	209	691740.400		ppb
	Cr	53	18669.411		ppb
	Pd	106	20.000		ppb
	Pd	108	5476.499		ppb
	C	12	2065165.679		ppb
	Kr	83	104.001		ppb
	Se	77	1315.420		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	131699.565		ppb
	Be	9	90.000	0.219710	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	43997389.194	87370.706459	ppb
	Mg	26	55395870.017	89261.484010	ppb
	Al	27		48190917742.551941	ppb
	K	39		30481824084.431938	ppb
	Ca	44	26927830.820	79114.582347	ppb
>	Sc	45	516476.654		ppb

	Ti	47	1780241.316	2047.496289	ppb
	V	51	2172.987	0.026405	ppb
	Cr	52	198064.238	17.756373	ppb
	Mn	55	114021.359	7.390557	ppb
	Fe	54	66154448.810	81248.774682	ppb
	Fe	56		75656640734.549423	ppb
	Fe	57	26995900.849	84746.047816	ppb
	Co	59	15065.340	0.999274	ppb
	Ni	60	17572.092	5.393286	ppb
	Cu	63	49522.320	6.054003	ppb
	Cu	65	26274.472	6.958948	ppb
	Zn	66	18921.217	11.116607	ppb
	As	75	344.076	0.201207	ppb
	Se	82	73.334	0.134137	ppb
	Mo	96	6793289.877	2040.647680	ppb
	Ag	107	96.667	0.004599	ppb
	Ag	109	136.668	0.009078	ppb
	Cd	111	53.289	0.023261	ppb
	In	113	58631.380	4.231112	ppb
>	In	115	1137550.627		ppb
	Sn	118	2270.258	0.315477	ppb
	Sb	121	10145.144	1.305135	ppb
	Ba	135	2970.441	1.277365	ppb
	Ba	137	4921.211	1.211560	ppb
>	Tb	159	1978193.541		ppb
	Tl	205	180.002	0.005147	ppb
	Pb	206	37314.489	4.304780	ppb
	Pb	207	67299.376	4.141486	ppb
	Pb	208	104244.593	4.046256	ppb
>	Bi	209	1152331.423		ppb
	Cr	53	31052.137		ppb
	Pd	106	25.000		ppb
	Pd	108	8443.563		ppb
	C	12	3861502.092		ppb
	Kr	83	128.001		ppb
	Se	77	2134.895		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129803.009		ppb
	Be	9	100.001	0.248861	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	46980587.362	94657.932689	ppb
	Mg	26	58441397.224	95544.783416	ppb
	Al	27		48190917742.551941	ppb
	K	39		30481824084.431938	ppb
	Ca	44	27830717.440	82966.269052	ppb
>	Sc	45	533006.037		ppb
	Ti	47	1840414.198	2051.060275	ppb
	V	51	4434.685	0.199034	ppb
	Cr	52	198816.955	17.252254	ppb
	Mn	55	114056.759	7.151079	ppb
	Fe	54	64777719.753	77086.855918	ppb
	Fe	56		75656640734.549423	ppb
	Fe	57	27846509.503	84705.367909	ppb
	Co	59	14604.657	0.938213	ppb
	Ni	60	17054.530	5.071171	ppb
	Cu	63	48755.231	5.774220	ppb
	Cu	65	25963.662	6.662002	ppb
	Zn	66	17602.145	10.003043	ppb
	As	75	301.497	0.173709	ppb
	Se	82	74.000	0.124744	ppb

⌈	Mo	96	6813640.317	2056.647225	ppb
|	Ag	107	140.001	0.008535	ppb
|	Ag	109	143.334	0.009755	ppb
|	Cd	111	908.893	0.422888	ppb
|	In	113	56831.031	3.518586	ppb
|>	In	115	1132082.467		ppb
⌊	Sn	118	2405.289	0.337387	ppb
⌈	Sb	121	9324.345	1.187228	ppb
|	Ba	135	2990.447	1.280317	ppb
|	Ba	137	4939.219	1.210614	ppb
⌊>	Tb	159	1986968.194		ppb
⌈	Tl	205	135.001	0.003312	ppb
|	Pb	206	38253.025	4.380810	ppb
|	Pb	207	68373.318	4.176590	ppb
|	Pb	208	104767.870	4.036339	ppb
⌊>	Bi	209	1160942.191		ppb
	Cr	53	30596.737		ppb
	Pd	106	20.000		ppb
	Pd	108	7913.130		ppb
	C	12	3930934.107		ppb
	Kr	83	88.000		ppb
	Se	77	2131.560		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
> Li	6			91.078		
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
> Sc	45			86.567		
Ti	47					
V	51	3.568				
Cr	52	83.955				
Mn	55	108.352				
Fe	54					
Fe	56					
Fe	57					
Co	59	99.323				
Ni	60	89.603				
Cu	63	75.966				
Cu	65	87.953				
Zn	66	97.317				
As	75	130.295				
Se	82	71.378				
Mo	96					
Ag	107					
Ag	109					
Cd	111	38.512				
In	113					
> In	115			70.287		
Sn	118					
Sb	121	83.008				
Ba	135	108.465				
Ba	137	103.226				
> Tb	159			78.944		
Tl	205	66825.519				
Pb	206	109.619				
Pb	207	104.960				
Pb	208	102.742				
> Bi	209			60.400		
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: ICSAB

Sample Date/Time: Monday, November 09, 2009 17:53:25
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\ICSAB.837

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	120129.149	24.004	120129.149			ppb
|	Be	9	6827.754	24.144	0.057	19.02429	3.75	ppb
|	Na	23	S	S	19999999[illegible]68188500901.27505			ppb
|	Mg	24	S	S	19999999[illegible]81043735614.33841		0.00	ppb
|	Mg	25	44426583.060	25.980	368.492	96372.22999	5.43	ppb
|	Mg	26	56239702.202	26.260	466.110	98914.71606	4.38	ppb
|	Al	27	S	S	19999999[illegible]48190917742.55194		0.00	ppb
|	K	39	S	S	19999999[illegible]30481824084.43193		0.00	ppb
⌊	Ca	44	26029671.755	24.769	216.113	83715.14336	3.33	ppb
⌈>	Sc	45	505370.864	23.131	505370.864			ppb
|	Ti	47	1717820.767	22.032	3.406	2023.20317	1.31	ppb
|	V	51	218906.992	22.776	0.430	18.04232	0.61	ppb
|	Cr	52	372447.469	22.623	0.723	34.79159	0.70	ppb
|	Mn	55	357068.240	19.602	0.700	24.71183	4.59	ppb
|	Fe	54	60451409.711	20.912	120.007	76193.05957	2.98	ppb
|	Fe	56	S	S	19999999[illegible]75656640734.54942		0.00	ppb
|	Fe	57	25802194.103	19.770	51.363	83288.03722	4.07	ppb
|	Co	59	254448.290	20.923	0.505	17.44250	2.82	ppb
|	Ni	60	66258.892	21.613	0.131	20.88795	2.90	ppb
|	Cu	63	158660.040	20.548	0.315	19.97439	3.06	ppb
|	Cu	65	77810.559	19.893	0.155	21.25575	4.55	ppb
|	Zn	66	39276.737	19.664	0.078	23.93841	4.19	ppb
|	As	75	28056.432	19.414	0.056	15.30660	4.78	ppb
⌊	Se	82	2624.353	19.801	0.005	15.27863	4.16	ppb
⌈	Mo	96	6433166.995	18.360	6.176	2110.32995	1.74	ppb
|	Ag	107	174791.367	18.413	0.168	17.06043	0.95	ppb
|	Ag	109	169080.709	17.944	0.162	16.98974	0.51	ppb
|	Cd	111	37112.511	15.573	0.036	18.90063	3.00	ppb
|	In	113	89495.435	16.001	0.043	22.63442	5.60	ppb
|>	In	115	1041652.217	18.205	1041652.217			ppb
⌊	Sn	118	1618.470	26.366	0.001	0.23886	14.56	ppb
⌈	Sb	121	121737.579	18.190	0.065	17.56577	1.30	ppb
|	Ba	135	43787.505	17.057	0.023	20.16657	0.14	ppb
|	Ba	137	76419.975	17.285	0.041	20.14466	0.71	ppb
⌊>	Tb	159	1863956.915	17.134	1863956.915			ppb
⌈	Tl	205	541903.183	17.026	0.492	22.59974	0.83	ppb
|	Pb	206	215082.641	16.199	0.195	26.11433	0.96	ppb
|	Pb	207	394190.329	16.498	0.358	25.51951	0.67	ppb
|	Pb	208	618655.910	17.503	0.560	25.23738	0.91	ppb
⌊>	Bi	209	1101780.642	16.900	1101780.642			ppb
	Cr	53	51477.913	20.694	47807.237			ppb
	Pd	106	3325.562	15.890	3322.229			ppb
	Pd	108	9863.313	19.101	9859.980			ppb
	C	12	3812925.042	22.129	3425285.799			ppb
	Kr	83	107.334	21.191	54.667			ppb
	Se	77	3937.908	20.554	3823.019			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	88013.623		ppb
|	Be	9	4933.217	18.766741	ppb
|	Na	23		68188500901.275040	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	31128411.884	92497.583030	ppb
|	Mg	26	39342508.311	94860.036328	ppb
|	Al	27		48190917742.551941	ppb
|	K	39		30481824084.431938	ppb
⌊	Ca	44	18647898.595	81985.379646	ppb
⌈>	Sc	45	371468.638		ppb
|	Ti	47	1284314.336	2053.733934	ppb
|	V	51	161642.786	18.114308	ppb
|	Cr	52	275721.425	35.012815	ppb
|	Mn	55	276264.098	25.861570	ppb
|	Fe	54	46098027.683	78714.680751	ppb
|	Fe	56		75656640734.549423	ppb
|	Fe	57	19924226.434	86962.726875	ppb
|	Co	59	193094.446	17.935947	ppb
|	Ni	60	49723.314	21.264744	ppb
|	Cu	63	121287.769	20.676408	ppb
|	Cu	65	59939.098	22.142397	ppb
|	Zn	66	30382.752	25.042176	ppb
|	As	75	21767.270	16.044614	ppb
⌊	Se	82	2032.206	16.010287	ppb
⌈	Mo	96	5089258.523	2112.658438	ppb
|	Ag	107	137904.369	17.036595	ppb
|	Ag	109	134191.027	17.056489	ppb
|	Cd	111	30449.655	19.552205	ppb
|	In	113	73106.253	24.029069	ppb
|>	In	115	823159.601		ppb
⌊	Sn	118	1215.074	0.227160	ppb
⌈	Sb	121	96215.657	17.313138	ppb
|	Ba	135	35191.814	20.183820	ppb
|	Ba	137	61182.595	20.090359	ppb
⌊>	Tb	159	1496629.679		ppb
⌈	Tl	205	435631.465	22.535148	ppb
|	Pb	206	174992.844	26.327107	ppb
|	Pb	207	319387.868	25.630517	ppb
|	Pb	208	494099.609	25.016657	ppb
⌊>	Bi	209	888399.288		ppb
	Cr	53	39393.440		ppb
	Pd	106	2720.370		ppb
	Pd	108	7707.969		ppb
	C	12	2844534.411		ppb
	Kr	83	82.000		ppb
	Se	77	3015.121		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	128573.275		ppb
|	Be	9	7614.898	19.830489	ppb
|	Na	23		68188500901.275040	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	50306447.942	102328.433404	ppb
|	Mg	26	62694643.283	103478.703693	ppb
|	Al	27		48190917742.551941	ppb
|	K	39		30481824084.431938	ppb
⌊	Ca	44	28883965.066	86933.873195	ppb
⌈>	Sc	45	557583.333		ppb

	Ti	47	1886616.610	2009.872223	ppb
	V	51	242390.894	18.096332	ppb
	Cr	52	411731.153	34.828781	ppb
	Mn	55	395993.309	24.677877	ppb
	Fe	54	65326713.457	74310.817454	ppb
	Fe	56		75656640734.549423	ppb
	Fe	57	28413824.692	82621.050989	ppb
	Co	59	281807.604	17.438709	ppb
	Ni	60	74446.083	21.210627	ppb
	Cu	63	173427.595	19.695275	ppb
	Cu	65	86963.159	21.401304	ppb
	Zn	66	43156.256	23.687684	ppb
	As	75	31141.427	15.293310	ppb
	Se	82	2836.402	14.866880	ppb
	Mo	96	6903808.419	2072.404724	ppb
	Ag	107	189315.209	16.912223	ppb
	Ag	109	183776.650	16.891445	ppb
	Cd	111	40113.546	18.625757	ppb
	In	113	95786.567	21.550421	ppb
>	In	115	1138342.283		ppb
	Sn	118	1575.124	0.211454	ppb
	Sb	121	133150.591	17.758858	ppb
	Ba	135	47480.453	20.182114	ppb
	Ba	137	83444.704	20.307264	ppb
>	Tb	159	2019408.738		ppb
	Tl	205	588485.838	22.810870	ppb
	Pb	206	232210.134	26.177344	ppb
	Pb	207	425846.917	25.606854	ppb
	Pb	208	671497.911	25.476052	ppb
>	Bi	209	1185615.920		ppb
	Cr	53	55531.762		ppb
	Pd	106	3560.634		ppb
	Pd	108	10685.706		ppb
	C	12	4204514.281		ppb
	Kr	83	114.001		ppb
	Se	77	4270.912		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143800.549		ppb
	Be	9	7935.147	18.475648	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	51844889.354	94290.673543	ppb
	Mg	26	66681955.011	98405.408164	ppb
	Al	27		48190917742.551941	ppb
	K	39		30481824084.431938	ppb
	Ca	44	30557151.603	82226.177250	ppb
>	Sc	45	587060.621		ppb
	Ti	47	1982531.354	2006.003353	ppb
	V	51	252687.295	17.916310	ppb
	Cr	52	429889.828	34.533162	ppb
	Mn	55	398947.312	23.596042	ppb
	Fe	54	69929487.992	75553.680498	ppb
	Fe	56		75656640734.549423	ppb
	Fe	57	29068531.182	80280.333791	ppb
	Co	59	288442.820	16.952851	ppb
	Ni	60	74607.278	20.188471	ppb
	Cu	63	181264.756	19.551494	ppb
	Cu	65	86529.421	20.223555	ppb
	Zn	66	44291.202	23.085383	ppb
	As	75	31260.598	14.581878	ppb
	Se	82	3004.451	14.958735	ppb

⌈	Mo	96	7306434.043	2145.926684	ppb
|	Ag	107	197154.524	17.232458	ppb
|	Ag	109	189274.448	17.021291	ppb
|	Cd	111	40774.333	18.523921	ppb
|	In	113	99593.486	22.323772	ppb
|>	In	115	1163454.766		ppb
⌊	Sn	118	2065.213	0.277971	ppb
⌈	Sb	121	135846.488	17.625322	ppb
|	Ba	135	48690.249	20.133771	ppb
|	Ba	137	84632.625	20.036368	ppb
⌊>	Tb	159	2075832.328		ppb
⌈	Tl	205	601592.246	22.453196	ppb
|	Pb	206	238044.944	25.838544	ppb
|	Pb	207	437336.202	25.321171	ppb
|	Pb	208	690370.210	25.219444	ppb
⌊>	Bi	209	1231326.716		ppb
	Cr	53	59508.538		ppb
	Pd	106	3695.683		ppb
	Pd	108	11196.264		ppb
	C	12	4389726.435		ppb
	Kr	83	126.001		ppb
	Se	77	4527.691		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		99.079			
	Be	9	100.128				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		99.781			
	Ti	47					
	V	51	94.960				
	Cr	52	86.979				
	Mn	55	91.525				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	87.213				
	Ni	60	87.033				
	Cu	63	79.898				
	Cu	65	85.023				
	Zn	66	82.546				
	As	75	80.561				
	Se	82	80.414				
	Mo	96					
	Ag	107	94.780				
	Ag	109	94.387				
	Cd	111	94.503				
	In	113					
>	In	115		74.553			
	Sn	118	1.194				
	Sb	121	79.844				
	Ba	135	91.666				
	Ba	137	91.567				
>	Tb	159		85.540			
	Tl	205	107.618				
	Pb	206	104.457				
	Pb	207	102.078				
	Pb	208	100.950				
>	Bi	209		66.437			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
QC Std 5	Sn	118	ICSAB is out of control
QC Std 5	Sb	121	ICSAB is out of control

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 17:55:23
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.838

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	127053.715	23.161	127053.715			ppb
	Be	9	47726.276	24.852	0.374	125.42778	2.04	ppb
	Na	23	5229978.375	24.211	41.017	1398.44649	1.27	ppb
	Mg	24	4459163.066	20.852	35.254	1428.56282	3.85	ppb
	Mg	25	691224.474	20.344	5.472	1431.09487	5.16	ppb
	Mg	26	829191.910	19.771	6.569	1393.98037	5.13	ppb
	Al	27	7127091.865	17.373	56.671	1365.50785	6.93	ppb
	K	39	11188006.947	20.169	85.908	1309.32211	3.74	ppb
	Ca	44	444207.402	18.317	3.301	1278.54720	6.29	ppb
>	Sc	45	541271.482	19.120	541271.482			ppb
	Ti	47	108163.558	17.484	0.200	118.89895	2.12	ppb
	V	51	1565125.744	18.136	2.892	121.40271	2.32	ppb
	Cr	52	1347028.243	18.916	2.475	119.05088	1.28	ppb
	Mn	55	1922217.544	20.490	3.533	124.77909	1.58	ppb
	Fe	54	1123448.819	15.000	1.970	1250.59927	4.97	ppb
	Fe	56	19703217.480	17.091	32.530	1230.53805	3.00	ppb
	Fe	57	415446.848	17.765	0.762	1235.74792	2.27	ppb
	Co	59	1894184.060	16.823	3.511	121.20804	2.83	ppb
	Ni	60	401784.691	16.598	0.745	118.44678	3.25	ppb
	Cu	63	957445.333	18.091	1.771	112.29529	1.19	ppb
	Cu	65	478069.579	19.075	0.883	121.35891	0.41	ppb
	Zn	66	217237.371	17.664	0.402	123.85287	1.67	ppb
	As	75	234206.708	18.477	0.433	118.47268	2.02	ppb
	Se	82	21319.119	16.626	0.039	117.52087	4.20	ppb
	Mo	96	522434.482	17.694	0.346	118.33575	3.60	ppb
	Ag	107	1724368.033	15.886	1.146	116.52234	2.12	ppb
	Ag	109	1671518.270	15.813	1.110	116.21369	1.64	ppb
	Cd	111	340346.460	17.693	0.226	119.28714	3.82	ppb
	In	113	399628.815	16.795	0.222	117.72184	1.65	ppb
>	In	115	1505703.692	16.116	1505703.692			ppb
	Sn	118	1013255.756	15.307	0.674	114.47015	1.32	ppb
	Sb	121	1002704.166	17.104	0.429	116.07003	1.78	ppb
	Ba	135	323358.510	15.345	0.139	119.13865	2.28	ppb
	Ba	137	561576.695	17.769	0.240	118.12748	3.45	ppb
>	Tb	159	2332899.975	16.036	2332899.975			ppb
	Tl	205	4670421.373	17.767	2.641	121.38745	1.74	ppb
	Pb	206	1605035.675	16.724	0.909	121.57120	0.95	ppb
	Pb	207	2923379.610	16.589	1.655	118.12702	0.85	ppb
	Pb	208	4745274.557	15.981	2.689	121.07667	1.18	ppb
>	Bi	209	1765426.098	16.394	1765426.098			ppb
	Cr	53	159408.431	18.147	155737.755			ppb
	Pd	106	30216.447	16.891	30213.114			ppb
	Pd	108	23083.694	15.309	23080.360			ppb
	C	12	438425.835	2.729	50786.592			ppb
	Kr	83	51.333	36.201	-1.333			ppb
	Se	77	16803.496	17.247	16688.607			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	93095.329		ppb
	Be	9	34039.837	122.475320	ppb
	Na	23	3768535.225	1377.896364	ppb
	Mg	24	3391129.420	1475.921462	ppb
	Mg	25	531060.029	1491.770353	ppb
	Mg	26	641458.703	1461.934784	ppb
	Al	27	5697432.744	1473.955642	ppb
	K	39	8587181.665	1365.589621	ppb
	Ca	44	350293.675	1369.544608	ppb
>	Sc	45	422808.294		ppb
	Ti	47	86371.397	121.258430	ppb
	V	51	1237368.579	122.686799	ppb
	Cr	52	1053305.656	119.139536	ppb
	Mn	55	1471545.649	122.525880	ppb
	Fe	54	929809.448	1321.130604	ppb
	Fe	56	15892422.166	1271.150190	ppb
	Fe	57	332264.788	1262.747366	ppb
	Co	59	1532375.673	125.099830	ppb
	Ni	60	326452.998	122.733834	ppb
	Cu	63	758749.597	113.755492	ppb
	Cu	65	374029.835	121.539191	ppb
	Zn	66	173295.331	126.217678	ppb
	As	75	184247.712	119.195654	ppb
	Se	82	17235.507	121.161989	ppb
	Mo	96	415719.165	115.283858	ppb
	Ag	107	1408849.118	116.319502	ppb
	Ag	109	1367965.637	116.201720	ppb
	Cd	111	270814.418	116.200551	ppb
	In	113	322936.542	116.100128	ppb
>	In	115	1231937.730		ppb
	Sn	118	840823.004	115.977841	ppb
	Sb	121	808135.981	114.051904	ppb
	Ba	135	266420.335	119.422353	ppb
	Ba	137	446876.714	114.681265	ppb
>	Tb	159	1915925.216		ppb
	Tl	205	3717056.272	119.334810	ppb
	Pb	206	1296750.134	121.169522	ppb
	Pb	207	2366187.361	117.932871	ppb
	Pb	208	3875642.998	121.879271	ppb
>	Bi	209	1431571.799		ppb
	Cr	53	126152.738		ppb
	Pd	106	24359.633		ppb
	Pd	108	19023.077		ppb
	C	12	425126.541		ppb
	Kr	83	30.000		ppb
	Se	77	13457.716		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	145050.406		ppb
	Be	9	55008.884	127.029345	ppb
	Na	23	5998430.720	1407.685257	ppb
	Mg	24	4897907.308	1368.154131	ppb
	Mg	25	748177.606	1348.863531	ppb
	Mg	26	902013.599	1319.386737	ppb
	Al	27	7825861.787	1299.329107	ppb
	K	39	12625483.444	1286.356774	ppb
	Ca	44	488744.662	1217.208672	ppb
>	Sc	45	614099.168		ppb

	Ti	47	120273.968	116.253080	ppb
	V	51	1731080.166	118.168199	ppb
	Cr	52	1508666.991	117.480166	ppb
	Mn	55	2200449.063	126.157136	ppb
	Fe	54	1236849.741	1203.647653	ppb
	Fe	56	22278133.221	1221.594046	ppb
	Fe	57	473086.976	1237.651267	ppb
	Co	59	2133116.333	119.897424	ppb
	Ni	60	453285.718	117.332442	ppb
	Cu	63	1076588.635	111.128739	ppb
	Cu	65	544152.980	121.740838	ppb
	Zn	66	244137.551	122.420338	ppb
	As	75	259996.583	115.806510	ppb
	Se	82	23123.370	111.895575	ppb
	Mo	96	577861.328	116.517062	ppb
	Ag	107	1901582.661	114.156139	ppb
	Ag	109	1850732.858	114.308148	ppb
	Cd	111	375470.785	117.140993	ppb
	In	113	447644.955	117.198688	ppb
>	In	115	1694308.371		ppb
	Sn	118	1141369.696	114.470058	ppb
	Sb	121	1131943.098	115.975263	ppb
	Ba	135	357371.623	116.293267	ppb
	Ba	137	628420.063	117.077426	ppb
>	Tb	159	2639131.860		ppb
	Tl	205	5230058.067	123.559707	ppb
	Pb	206	1786958.849	122.872621	ppb
	Pb	207	3250475.565	119.216343	ppb
	Pb	208	5268765.450	121.926213	ppb
>	Bi	209	1945409.518		ppb
	Cr	53	178749.416		ppb
	Pd	106	32577.980		ppb
	Pd	108	25462.375		ppb
	C	12	441840.154		ppb
	Kr	83	60.000		ppb
	Se	77	18531.822		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143015.409		ppb
	Be	9	54130.108	126.778664	ppb
	Na	23	5922969.179	1409.757858	ppb
	Mg	24	5088452.469	1441.612863	ppb
	Mg	25	794435.787	1452.650711	ppb
	Mg	26	944103.427	1400.619595	ppb
	Al	27	7857981.064	1323.238809	ppb
	K	39	12351355.732	1276.019922	ppb
	Ca	44	493583.869	1248.888320	ppb
>	Sc	45	586906.984		ppb
	Ti	47	117845.308	119.185328	ppb
	V	51	1726928.488	123.353136	ppb
	Cr	52	1479112.082	120.532926	ppb
	Mn	55	2094657.921	125.654268	ppb
	Fe	54	1203687.267	1227.019565	ppb
	Fe	56	20939097.052	1198.869926	ppb
	Fe	57	440988.782	1206.845135	ppb
	Co	59	2017060.174	118.626878	ppb
	Ni	60	425615.356	115.274051	ppb
	Cu	63	1036997.768	112.001650	ppb
	Cu	65	516025.923	120.796715	ppb
	Zn	66	234279.230	122.920586	ppb
	As	75	258375.828	120.415867	ppb
	Se	82	23598.478	119.505042	ppb

⌈	Mo	96	573722.953	123.206332	ppb
|	Ag	107	1862672.319	119.091372	ppb
|	Ag	109	1795856.314	118.131197	ppb
|	Cd	111	374754.176	124.519881	ppb
|	In	113	428304.949	119.866709	ppb
|>	In	115	1590864.975		ppb
|	Sn	118	1057574.568	112.962553	ppb
⌈	Sb	121	1068033.420	118.182927	ppb
|	Ba	135	346283.573	121.700344	ppb
|	Ba	137	609433.309	122.623762	ppb
⌊>	Tb	159	2443642.849		ppb
⌈	Tl	205	5064149.779	121.267835	ppb
|	Pb	206	1731398.042	120.671457	ppb
|	Pb	207	3153475.903	117.231853	ppb
|	Pb	208	5091415.224	119.424534	ppb
⌊>	Bi	209	1919296.976		ppb
	Cr	53	173323.140		ppb
	Pd	106	33711.728		ppb
	Pd	108	24765.629		ppb
	C	12	448310.811		ppb
	Kr	83	64.000		ppb
	Se	77	18420.951		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			104.790		
	Be	9	104.523				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			106.869		
	Ti	47					
	V	51	101.169				
	Cr	52	99.209				
	Mn	55	103.983				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	101.007				
	Ni	60	98.706				
	Cu	63	93.579				
	Cu	65	101.132				
	Zn	66	103.211				
	As	75	98.727				
	Se	82	97.934				
	Mo	96					
	Ag	107	97.102				
	Ag	109	96.845				
	Cd	111	99.406				
	In	113					
>	In	115			107.765		
	Sn	118	95.392				
	Sb	121	96.725				
	Ba	135	99.282				
	Ba	137	98.440				
>	Tb	159			107.060		
	Tl	205	101.156				
	Pb	206	101.309				
	Pb	207	98.439				
	Pb	208	100.897				
>	Bi	209			106.455		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 17:57:22
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.839

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	120092.575	24.240	120092.575			ppb
|	Be	9	1.333	86.603	-0.000	-0.00498	78.66	ppb
|	Na	23	22469.858	54.467	0.150	5.10517	118.82	ppb
|	Mg	24	14944.440	89.503	0.149	6.01785	115.39	ppb
|	Mg	25	2257.713	85.781	0.022	5.84059	111.89	ppb
|	Mg	26	2775.866	75.896	0.026	5.57323	106.36	ppb
|	Al	27	24999.450	84.774	0.224	5.40005	122.76	ppb
|	K	39	379514.667	8.026	0.720	10.97505	172.21	ppb
⌊	Ca	44	25840.121	7.109	0.001	0.42512	7416.74	ppb
⌈>	Sc	45	502808.534	23.117	502808.534			ppb
|	Ti	47	146.668	52.850	0.000	0.10565	149.02	ppb
|	V	51	1851.435	26.409	0.000	0.00504	442.79	ppb
|	Cr	52	7291.992	1.649	0.001	0.03954	522.61	ppb
|	Mn	55	11698.521	5.871	0.013	0.44577	46.43	ppb
|	Fe	54	62992.025	8.357	0.010	6.61151	214.22	ppb
|	Fe	56	2028872.692	4.448	0.205	7.77217	492.94	ppb
|	Fe	57	4741.148	17.996	0.003	4.85764	150.81	ppb
|	Co	59	187.335	29.361	0.000	0.00639	120.24	ppb
|	Ni	60	38.889	57.071	-0.000	-0.00162	717.12	ppb
|	Cu	63	307.783	15.214	0.000	0.01602	108.46	ppb
|	Cu	65	156.668	7.671	0.000	0.01298	121.14	ppb
|	Zn	66	182.224	2.794	-0.000	-0.06434	52.69	ppb
|	As	75	-27.341	187.037	-0.000	-0.00132	2737.40	ppb
⌊	Se	82	59.334	16.552	0.000	0.06928	77.13	ppb
⌈	Mo	96	1613.473	32.519	0.001	0.39061	56.76	ppb
|	Ag	107	195.558	27.713	0.000	0.01098	65.55	ppb
|	Ag	109	214.447	34.490	0.000	0.01360	68.38	ppb
|	Cd	111	15.543	90.749	0.000	0.00482	124.14	ppb
|	In	113	61365.177	18.231	0.000	0.08979	307.64	ppb
|>	In	115	1401293.461	17.378	1401293.461			ppb
⌊	Sn	118	473.345	33.693	0.000	0.03748	87.45	ppb
⌈	Sb	121	3669.010	9.222	0.001	0.38631	33.87	ppb
|	Ba	135	47.333	54.495	0.000	0.00797	189.15	ppb
|	Ba	137	85.334	10.569	0.000	0.00792	56.51	ppb
⌊>	Tb	159	2188664.405	17.748	2188664.405			ppb
⌈	Tl	205	441.678	41.770	0.000	0.01059	72.06	ppb
|	Pb	206	1830.168	4.498	0.001	0.11749	25.91	ppb
|	Pb	207	3423.628	2.901	0.002	0.11816	23.17	ppb
|	Pb	208	5604.267	4.646	0.003	0.12283	27.81	ppb
⌊>	Bi	209	1724407.298	16.729	1724407.298			ppb
	Cr	53	3457.935	10.154	-212.741			ppb
	Pd	106	1.667	173.205	-1.667			ppb
	Pd	108	10.000		6.667			ppb
	C	12	412276.357	3.894	24637.114			ppb
	Kr	83	46.000	4.348	-6.667			ppb
	Se	77	123.334	15.469	8.445			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86498.488		ppb
	Be	9	2.000	-0.001464	ppb
	Na	23	36347.939	12.074719	ppb
	Mg	24	30199.532	14.002496	ppb
	Mg	25	4455.993	13.343440	ppb
	Mg	26	5161.332	12.375636	ppb
	Al	27	49240.936	13.030729	ppb
	K	39	414466.753	32.785139	ppb
	Ca	44	27860.757	36.752409	ppb
>	Sc	45	368750.772		ppb
	Ti	47	235.003	0.286701	ppb
	V	51	1418.732	0.011298	ppb
	Cr	52	7420.752	0.278116	ppb
	Mn	55	11371.462	0.681953	ppb
	Fe	54	56961.771	22.965617	ppb
	Fe	56	1970457.179	51.407340	ppb
	Fe	57	5631.585	13.209878	ppb
	Co	59	242.003	0.015021	ppb
	Ni	60	63.334	0.011610	ppb
	Cu	63	356.673	0.035872	ppb
	Cu	65	170.001	0.031097	ppb
	Zn	66	186.668	-0.025204	ppb
	As	75	-82.000	-0.041804	ppb
	Se	82	50.667	0.120470	ppb
	Mo	96	2212.245	0.645201	ppb
	Ag	107	256.670	0.019223	ppb
	Ag	109	296.671	0.024174	ppb
	Cd	111	24.270	0.009932	ppb
	In	113	48622.923	-0.128730	ppb
>	In	115	1122042.406		ppb
	Sn	118	650.021	0.074741	ppb
	Sb	121	3965.786	0.533857	ppb
	Ba	135	76.000	0.025147	ppb
	Ba	137	86.000	0.012558	ppb
>	Tb	159	1740809.712		ppb
	Tl	205	645.021	0.019224	ppb
	Pb	206	1880.177	0.152539	ppb
	Pb	207	3445.299	0.149761	ppb
	Pb	208	5871.049	0.162267	ppb
>	Bi	209	1394678.389		ppb
	Cr	53	3850.741		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	393833.476		ppb
	Kr	83	46.000		ppb
	Se	77	145.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	137892.203		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	13220.734	1.016678	ppb
	Mg	24	5226.365	1.390801	ppb
	Mg	25	803.032	1.393639	ppb
	Mg	26	1170.068	1.513665	ppb
	Al	27	9979.978	1.057837	ppb
	K	39	358633.618	-0.604361	ppb
	Ca	44	24271.419	-19.833345	ppb
>	Sc	45	575459.598		ppb

	Ti	47	90.000	0.001030	ppb
	V	51	2381.862	0.023540	ppb
	Cr	52	7272.644	-0.081970	ppb
	Mn	55	12487.792	0.359212	ppb
	Fe	54	66671.516	-1.550928	ppb
	Fe	56	1983343.782	-20.355359	ppb
	Fe	57	3930.772	-0.478308	ppb
	Co	59	132.001	0.000285	ppb
	Ni	60	20.000	-0.010169	ppb
	Cu	63	263.337	0.003560	ppb
	Cu	65	146.668	0.002767	ppb
	Zn	66	183.335	-0.083067	ppb
	As	75	19.336	0.028201	ppb
	Se	82	70.000	0.073519	ppb
	Mo	96	1394.097	0.286465	ppb
	Ag	107	176.668	0.007838	ppb
	Ag	109	193.335	0.009883	ppb
	Cd	111	-0.730	-0.001757	ppb
	In	113	65896.404	-0.002177	ppb
>	In	115	1512337.922		ppb
	Sn	118	430.009	0.024605	ppb
	Sb	121	3740.700	0.340715	ppb
	Ba	135	26.000	-0.003011	ppb
	Ba	137	94.000	0.007596	ppb
>	Tb	159	2391221.468		ppb
	Tl	205	285.004	0.004754	ppb
	Pb	206	1875.176	0.102147	ppb
	Pb	207	3510.309	0.103250	ppb
	Pb	208	5590.916	0.103139	ppb
>	Bi	209	1930228.979		ppb
	Cr	53	3174.504		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	419885.947		ppb
	Kr	83	44.000		ppb
	Se	77	113.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	135887.034		ppb
	Be	9	2.000	-0.004279	ppb
	Na	23	17840.901	2.224121	ppb
	Mg	24	9407.423	2.660267	ppb
	Mg	25	1514.115	2.784679	ppb
	Mg	26	1996.199	2.830395	ppb
	Al	27	15777.437	2.111575	ppb
	K	39	365443.630	0.744359	ppb
	Ca	44	25388.187	-15.643705	ppb
>	Sc	45	564215.232		ppb
	Ti	47	115.001	0.029204	ppb
	V	51	1753.712	-0.019727	ppb
	Cr	52	7182.579	-0.077533	ppb
	Mn	55	11236.309	0.296141	ppb
	Fe	54	65342.789	-1.580163	ppb
	Fe	56	2132817.115	-7.735478	ppb
	Fe	57	4661.086	1.841355	ppb
	Co	59	188.002	0.003869	ppb
	Ni	60	33.333	-0.006302	ppb
	Cu	63	303.338	0.008633	ppb
	Cu	65	153.335	0.005089	ppb
	Zn	66	176.668	-0.084753	ppb
	As	75	-19.358	0.009628	ppb
	Se	82	57.333	0.013855	ppb

⌈	Mo	96	1234.076	0.240153	ppb
|	Ag	107	153.335	0.005893	ppb
|	Ag	109	153.335	0.006729	ppb
|	Cd	111	23.090	0.006275	ppb
|	In	113	69576.203	0.400279	ppb
|>	In	115	1569500.054		ppb
⌊	Sn	118	340.006	0.013098	ppb
⌈	Sb	121	3300.545	0.284349	ppb
|	Ba	135	40.000	0.001765	ppb
|	Ba	137	76.000	0.003620	ppb
⌊>	Tb	159	2433962.035		ppb
⌈	Tl	205	395.008	0.007790	ppb
|	Pb	206	1735.151	0.097771	ppb
|	Pb	207	3315.275	0.101471	ppb
|	Pb	208	5350.836	0.103070	ppb
⌊>	Bi	209	1848314.525		ppb
	Cr	53	3348.561		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	423109.647		ppb
	Kr	83	48.000		ppb
	Se	77	111.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			99.049		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			99.275		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			100.293		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			100.441		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			103.981		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: LRS

Sample Date/Time: Monday, November 09, 2009 18:03:08
Sample Type: Sample
Sample Description: LRS 1 PPB
Number of Replicates: 3
Batch ID: LRS
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\LRS .840

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	123198.752	22.797	123198.752			ppb
|	Be	9	370.007	26.019	0.003	0.99284	6.75	ppb
|	Na	23	47790.102	15.626	0.327	11.15061	10.75	ppb
|	Mg	24	35380.299	18.929	0.286	11.57423	4.69	ppb
|	Mg	25	5623.601	13.917	0.046	12.00170	10.59	ppb
|	Mg	26	7242.646	11.864	0.059	12.44765	14.01	ppb
|	Al	27	67215.630	12.026	0.531	12.78268	18.02	ppb
|	K	39	434045.156	7.387	0.983	14.98423	67.59	ppb
⌊	Ca	44	27067.934	2.603	0.001	0.22780	9058.66	ppb
⌈>	Sc	45	520177.365	17.377	520177.365			ppb
|	Ti	47	923.376	13.113	0.002	0.96902	6.67	ppb
|	V	51	12719.533	34.091	0.020	0.85395	23.25	ppb
|	Cr	52	17616.220	7.004	0.020	0.96206	20.99	ppb
|	Mn	55	19073.505	16.586	0.025	0.88921	2.16	ppb
|	Fe	54	71921.850	6.874	0.022	13.89837	76.33	ppb
|	Fe	56	2276940.727	2.740	0.503	19.02427	190.76	ppb
|	Fe	57	7627.913	5.118	0.008	12.74430	36.62	ppb
|	Co	59	14142.269	20.366	0.027	0.92717	3.48	ppb
|	Ni	60	3158.293	22.454	0.006	0.94320	5.84	ppb
|	Cu	63	7750.849	18.487	0.014	0.91798	1.47	ppb
|	Cu	65	3875.211	17.527	0.007	0.99132	0.90	ppb
|	Zn	66	1930.189	16.128	0.003	0.96547	4.97	ppb
|	As	75	1801.625	19.505	0.004	0.96361	2.35	ppb
⌊	Se	82	207.558	15.605	0.000	0.90269	2.73	ppb
⌈	Mo	96	4360.316	22.488	0.003	1.03261	4.56	ppb
|	Ag	107	12953.100	22.059	0.009	0.93575	5.58	ppb
|	Ag	109	12277.763	21.441	0.009	0.91279	3.22	ppb
|	Cd	111	2673.186	19.016	0.002	1.01107	5.00	ppb
|	In	113	64072.831	21.984	0.002	1.10511	82.18	ppb
|>	In	115	1396833.759	18.753	1396833.759			ppb
⌊	Sn	118	7749.744	19.478	0.005	0.91830	1.84	ppb
⌈	Sb	121	8395.287	20.459	0.004	0.95809	1.07	ppb
|	Ba	135	2504.987	17.590	0.001	0.97800	4.33	ppb
|	Ba	137	4419.004	20.657	0.002	0.98391	3.36	ppb
⌊>	Tb	159	2185699.246	21.228	2185699.246			ppb
⌈	Tl	205	35248.684	20.131	0.021	0.96864	2.73	ppb
|	Pb	206	12584.829	21.699	0.007	0.97843	2.59	ppb
|	Pb	207	23487.572	20.189	0.014	0.97769	2.74	ppb
|	Pb	208	37487.616	21.708	0.022	0.98179	2.80	ppb
⌊>	Bi	209	1675210.486	22.237	1675210.486			ppb
	Cr	53	4208.245	21.199	537.569			ppb
	Pd	106	213.336	25.710	210.002			ppb
	Pd	108	185.002	36.562	181.669			ppb
	C	12	448206.926	12.737	60567.683			ppb
	Kr	83	42.667	40.954	-10.000			ppb
	Se	77	295.782	30.778	180.893			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	90788.263		ppb
	Be	9	264.003	0.964886	ppb
	Na	23	39304.089	12.507909	ppb
	Mg	24	27659.199	12.200183	ppb
	Mg	25	4720.114	13.467690	ppb
	Mg	26	6295.981	14.429509	ppb
	Al	27	60115.150	15.268652	ppb
	K	39	398509.359	26.655702	ppb
	Ca	44	26262.441	24.037486	ppb
>	Sc	45	416798.738		ppb
	Ti	47	785.031	1.026982	ppb
	V	51	7712.440	0.626484	ppb
	Cr	52	16331.325	1.194856	ppb
	Mn	55	15426.890	0.900063	ppb
	Fe	54	66253.753	25.814026	ppb
	Fe	56	2332047.366	60.922626	ppb
	Fe	57	7617.901	18.082818	ppb
	Co	59	10837.870	0.889959	ppb
	Ni	60	2350.276	0.880774	ppb
	Cu	63	6125.209	0.906316	ppb
	Cu	65	3093.812	0.987826	ppb
	Zn	66	1573.457	0.982887	ppb
	As	75	1400.952	0.938252	ppb
	Se	82	170.668	0.931067	ppb
	Mo	96	3242.526	0.983009	ppb
	Ag	107	9824.824	0.908287	ppb
	Ag	109	9240.934	0.879363	ppb
	Cd	111	2126.342	1.024622	ppb
	In	113	47849.204	0.056407	ppb
>	In	115	1095377.971		ppb
	Sn	118	6006.804	0.908304	ppb
	Sb	121	6412.055	0.968967	ppb
	Ba	135	1996.199	1.026771	ppb
	Ba	137	3382.572	0.996347	ppb
>	Tb	159	1649982.231		ppb
	Tl	205	27056.553	0.995542	ppb
	Pb	206	9434.448	0.984795	ppb
	Pb	207	18013.126	1.004726	ppb
	Pb	208	28308.121	0.995278	ppb
>	Bi	209	1246567.383		ppb
	Cr	53	5235.370		ppb
	Pd	106	170.001		ppb
	Pd	108	120.001		ppb
	C	12	395112.474		ppb
	Kr	83	38.000		ppb
	Se	77	400.675		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	138411.301		ppb
	Be	9	394.008	0.944366	ppb
	Na	23	50707.236	10.238305	ppb
	Mg	24	38865.379	11.233339	ppb
	Mg	25	6058.835	11.318891	ppb
	Mg	26	7458.781	11.148811	ppb
	Al	27	65518.936	10.719848	ppb
	K	39	442813.835	8.516330	ppb
	Ca	44	27569.953	-10.857571	ppb
>	Sc	45	559390.167		ppb

Sample ID: LRS
Page 2

	Ti	47	1010.051	0.980737	ppb
	V	51	15231.435	0.992687	ppb
	Cr	52	17725.696	0.834330	ppb
	Mn	55	20711.426	0.900494	ppb
	Fe	54	75342.761	10.404018	ppb
	Fe	56	2209202.592	-1.336541	ppb
	Fe	57	7242.622	9.440232	ppb
	Co	59	15467.954	0.946874	ppb
	Ni	60	3447.261	0.964025	ppb
	Cu	63	8296.774	0.914938	ppb
	Cu	65	4207.552	1.001415	ppb
	Zn	66	2146.897	1.002261	ppb
	As	75	1946.452	0.970627	ppb
	Se	82	220.669	0.886400	ppb
	Mo	96	4763.134	1.038023	ppb
	Ag	107	13609.254	0.903050	ppb
	Ag	109	13682.688	0.934794	ppb
	Cd	111	2761.877	0.955166	ppb
	In	113	71182.449	1.629592	ppb
>	In	115	1526067.276		ppb
	Sn	118	8633.725	0.937831	ppb
	Sb	121	9404.420	0.956696	ppb
	Ba	135	2760.381	0.955925	ppb
	Ba	137	4771.138	0.946425	ppb
>	Tb	159	2448566.321		ppb
	Tl	205	39206.708	0.967620	ppb
	Pb	206	14275.182	0.999941	ppb
	Pb	207	26137.213	0.977206	ppb
	Pb	208	40337.516	0.950111	ppb
>	Bi	209	1858373.311		ppb
	Cr	53	3626.658		ppb
	Pd	106	275.004		ppb
	Pd	108	255.003		ppb
	C	12	508589.510		ppb
	Kr	83	28.000		ppb
	Se	77	237.336		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	140396.691		ppb
	Be	9	452.010	1.069273	ppb
	Na	23	53358.980	10.705629	ppb
	Mg	24	39616.317	11.289173	ppb
	Mg	25	6091.855	11.218507	ppb
	Mg	26	7973.177	11.764617	ppb
	Al	27	76012.803	12.359554	ppb
	K	39	460812.276	9.780646	ppb
	Ca	44	27371.409	-12.496500	ppb
>	Sc	45	584343.188		ppb
	Ti	47	975.048	0.899349	ppb
	V	51	15214.724	0.942683	ppb
	Cr	52	18791.640	0.856987	ppb
	Mn	55	21082.200	0.867061	ppb
	Fe	54	74169.036	5.477059	ppb
	Fe	56	2289572.224	-2.513286	ppb
	Fe	57	8023.217	10.709852	ppb
	Co	59	16120.984	0.944691	ppb
	Ni	60	3677.343	0.984786	ppb
	Cu	63	8830.564	0.932699	ppb
	Cu	65	4324.268	0.984723	ppb
	Zn	66	2070.214	0.911249	ppb
	As	75	2057.472	0.981950	ppb
	Se	82	231.336	0.890598	ppb

⌈	Mo	96	5075.288	1.076784	ppb
|	Ag	107	15425.221	0.995921	ppb
|	Ag	109	13909.667	0.924226	ppb
|	Cd	111	3131.339	1.053425	ppb
|	In	113	73186.839	1.629324	ppb
|>	In	115	1569056.028		ppb
⌊	Sn	118	8608.704	0.908776	ppb
⌈	Sb	121	9369.387	0.948620	ppb
|	Ba	135	2758.380	0.951294	ppb
|	Ba	137	5103.302	1.008970	ppb
⌊>	Tb	159	2458549.188		ppb
⌈	Tl	205	39482.791	0.942766	ppb
|	Pb	206	14044.856	0.950550	ppb
|	Pb	207	26312.376	0.951148	ppb
|	Pb	208	43817.211	0.999979	ppb
⌊>	Bi	209	1920690.765		ppb
	Cr	53	3762.708		ppb
	Pd	106	195.002		ppb
	Pd	108	180.002		ppb
	C	12	440918.795		ppb
	Kr	83	62.000		ppb
	Se	77	249.336		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.610			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		102.705			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		99.973			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		100.305			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		101.015			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102206-BLK1

Sample Date/Time: Monday, November 09, 2009 18:05:06
Sample Type: Sample
Sample Description: PBW
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102206-BLK1.841

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	123798.243	26.527	123798.243			ppb
	Be	9	0.000		-0.000	-0.00921	0.00	ppb
	Na	23	10208.263	12.562	0.019	0.65135	82.01	ppb
	Mg	24	882.041	29.929	0.004	0.14463	28.06	ppb
	Mg	25	134.668	23.510	0.001	0.15952	25.63	ppb
	Mg	26	239.670	24.388	0.001	0.12620	16.95	ppb
	Al	27	4074.195	23.949	0.005	0.11162	29.19	ppb
	K	39	325317.597	0.377	0.139	2.12415	617.04	ppb
	Ca	44	24911.668	2.272	-0.013	-5.11083	548.49	ppb
>	Sc	45	522760.795	18.940	522760.795			ppb
	Ti	47	50.000	20.000	-0.000	-0.03486	17.93	ppb
	V	51	2120.808	18.311	0.000	0.02030	18.74	ppb
	Cr	52	7273.979	2.147	-0.000	-0.00238	6070.23	ppb
	Mn	55	3732.370	11.784	-0.004	-0.15237	14.77	ppb
	Fe	54	60523.632	9.219	-0.001	-0.56525	1454.39	ppb
	Fe	56	2060205.706	4.745	0.039	1.47535	1681.21	ppb
	Fe	57	3944.116	9.518	0.001	0.85378	165.10	ppb
	Co	59	91.334	12.452	-0.000	-0.00152	51.92	ppb
	Ni	60	62.222	29.505	0.000	0.00300	83.42	ppb
	Cu	63	245.559	10.006	0.000	0.00556	176.71	ppb
	Cu	65	152.223	10.349	0.000	0.00842	69.75	ppb
	Zn	66	381.119	18.478	0.000	0.04438	44.68	ppb
	As	75	-77.740	22.626	-0.000	-0.02292	55.74	ppb
	Se	82	47.333	6.139	-0.000	-0.00933	832.63	ppb
	Mo	96	342.673	16.304	0.000	0.05536	9.87	ppb
	Ag	107	42.222	57.112	-0.000	-0.00103	141.15	ppb
	Ag	109	37.778	13.478	-0.000	-0.00061	98.02	ppb
	Cd	111	17.640	92.457	0.000	0.00612	135.94	ppb
	In	113	61054.606	17.541	0.000	0.01223	2050.49	ppb
>	In	115	1400284.042	17.489	1400284.042			ppb
	Sn	118	193.335	14.706	0.000	0.00074	1156.16	ppb
	Sb	121	681.690	18.181	0.000	0.00175	144.40	ppb
	Ba	135	32.000	21.651	0.000	0.00015	414.76	ppb
	Ba	137	58.667	51.288	0.000	0.00089	578.11	ppb
>	Tb	159	2185236.098	17.199	2185236.098			ppb
	Tl	205	63.334	16.434	-0.000	-0.00030	62.64	ppb
	Pb	206	471.678	5.440	0.000	0.01008	49.56	ppb
	Pb	207	866.686	6.433	0.000	0.01069	54.32	ppb
	Pb	208	1386.724	9.685	0.000	0.01013	45.10	ppb
>	Bi	209	1687127.657	15.762	1687127.657			ppb
	Cr	53	2396.957	11.724	-1273.720			ppb
	Pd	106	10.000	50.000	6.667			ppb
	Pd	108	0.000		-3.333			ppb
	C	12	416835.839	4.481	29196.596			ppb
	Kr	83	36.667	8.332	-16.000			ppb
	Se	77	100.889	11.240	-14.000			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	85915.495		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	8846.912	1.258575	ppb
	Mg	24	632.020	0.153040	ppb
	Mg	25	105.001	0.190205	ppb
	Mg	26	174.002	0.142741	ppb
	Al	27	2950.435	0.141389	ppb
	K	39	324127.147	17.254961	ppb
	Ca	44	25564.636	27.246538	ppb
>	Sc	45	409121.244		ppb
	Ti	47	40.000	-0.033796	ppb
	V	51	1684.208	0.022599	ppb
	Cr	52	7244.623	0.161892	ppb
	Mn	55	3230.522	-0.128376	ppb
	Fe	54	54080.843	8.817066	ppb
	Fe	56	1951301.723	29.689855	ppb
	Fe	57	3520.620	2.399391	ppb
	Co	59	82.000	-0.000715	ppb
	Ni	60	43.333	0.001144	ppb
	Cu	63	273.337	0.016906	ppb
	Cu	65	140.001	0.014768	ppb
	Zn	66	306.671	0.049848	ppb
	As	75	-78.434	-0.033419	ppb
	Se	82	50.667	0.080076	ppb
	Mo	96	282.004	0.057650	ppb
	Ag	107	26.667	-0.001619	ppb
	Ag	109	36.667	-0.000064	ppb
	Cd	111	36.460	0.015735	ppb
	In	113	48688.239	-0.017313	ppb
>	In	115	1118137.724		ppb
	Sn	118	225.003	0.010480	ppb
	Sb	121	540.015	0.000848	ppb
	Ba	135	24.000	-0.000581	ppb
	Ba	137	24.000	-0.004996	ppb
>	Tb	159	1751472.200		ppb
	Tl	205	55.000	-0.000202	ppb
	Pb	206	450.010	0.015762	ppb
	Pb	207	845.018	0.017128	ppb
	Pb	208	1290.048	0.014772	ppb
>	Bi	209	1381076.358		ppb
	Cr	53	2720.370		ppb
	Pd	106	15.000		ppb
	Pd	108	0.000		ppb
	C	12	396408.274		ppb
	Kr	83	40.000		ppb
	Se	77	112.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	141264.789		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	10384.389	0.254085	ppb
	Mg	24	856.037	0.100503	ppb
	Mg	25	131.001	0.113107	ppb
	Mg	26	259.003	0.102038	ppb
	Al	27	4706.107	0.116641	ppb
	K	39	325246.629	-5.152798	ppb
	Ca	44	24610.246	-20.532059	ppb
>	Sc	45	590430.597		ppb

	Ti	47	50.000	-0.041570	ppb
	V	51	2427.637	0.022389	ppb
	Cr	52	7134.544	-0.108634	ppb
	Mn	55	3915.767	-0.173030	ppb
	Fe	54	63797.861	-6.506214	ppb
	Fe	56	2088946.394	-16.895344	ppb
	Fe	57	4075.830	-0.360773	ppb
	Co	59	104.001	-0.001553	ppb
	Ni	60	80.000	0.005846	ppb
	Cu	63	236.669	-0.000040	ppb
	Cu	65	170.001	0.007310	ppb
	Zn	66	390.008	0.022390	ppb
	As	75	-59.814	-0.008694	ppb
	Se	82	45.333	-0.060140	ppb
	Mo	96	392.008	0.059309	ppb
	Ag	107	70.000	0.000625	ppb
	Ag	109	43.333	-0.000522	ppb
	Cd	111	7.640	0.001146	ppb
	In	113	67245.339	0.276380	ppb
>	In	115	1524943.862		ppb
	Sn	118	185.002	-0.003102	ppb
	Sb	121	770.030	0.004604	ppb
	Ba	135	36.000	0.000588	ppb
	Ba	137	78.000	0.004314	ppb
>	Tb	159	2389892.432		ppb
	Tl	205	75.000	-0.000181	ppb
	Pb	206	500.013	0.008099	ppb
	Pb	207	930.022	0.009113	ppb
	Pb	208	1540.071	0.009960	ppb
>	Bi	209	1861748.630		ppb
	Cr	53	2212.245		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	421055.620		ppb
	Kr	83	34.000		ppb
	Se	77	89.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144214.446		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	11393.487	0.441388	ppb
	Mg	24	1158.067	0.180347	ppb
	Mg	25	168.001	0.175247	ppb
	Mg	26	286.004	0.133812	ppb
	Al	27	4566.042	0.076821	ppb
	K	39	326579.014	-5.729704	ppb
	Ca	44	24560.123	-22.046972	ppb
>	Sc	45	568730.542		ppb
	Ti	47	60.000	-0.029206	ppb
	V	51	2250.578	0.015907	ppb
	Cr	52	7442.769	-0.060389	ppb
	Mn	55	4050.820	-0.155704	ppb
	Fe	54	63692.191	-4.006592	ppb
	Fe	56	2140369.002	-8.368465	ppb
	Fe	57	4235.897	0.522709	ppb
	Co	59	88.000	-0.002292	ppb
	Ni	60	63.334	0.002009	ppb
	Cu	63	226.669	-0.000185	ppb
	Cu	65	146.668	0.003181	ppb
	Zn	66	446.677	0.060891	ppb
	As	75	-94.972	-0.026658	ppb
	Se	82	46.000	-0.047919	ppb

⌈	Mo	96	354.006	0.049122	ppb
|	Ag	107	30.000	-0.002086	ppb
|	Ag	109	33.333	-0.001256	ppb
|	Cd	111	8.820	0.001491	ppb
|	In	113	67230.238	-0.222389	ppb
|>	In	115	1557770.540		ppb
⌊	Sn	118	170.001	-0.005173	ppb
⌈	Sb	121	735.027	-0.000202	ppb
|	Ba	135	36.000	0.000457	ppb
|	Ba	137	74.000	0.003337	ppb
⌊>	Tb	159	2414343.661		ppb
⌈	Tl	205	60.000	-0.000516	ppb
|	Pb	206	465.011	0.006378	ppb
|	Pb	207	825.017	0.005839	ppb
|	Pb	208	1330.054	0.005644	ppb
⌊>	Bi	209	1818557.983		ppb
	Cr	53	2258.255		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	433043.623		ppb
	Kr	83	36.000		ppb
	Se	77	101.334		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		102.105			
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		103.215			
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115		100.220			
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159		100.283			
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		101.733			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102206-BS1

Sample Date/Time: Monday, November 09, 2009 18:07:04
Sample Type: Sample
Sample Description: LCSW
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102206-BS1.842

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	123670.464	20.531	123670.464			ppb
|	Be	9	39032.015	19.844	0.316	105.83529	0.96	ppb
|	Na	23	7869464.950	20.753	63.568	2167.30898	2.31	ppb
|	Mg	24	3988670.637	21.508	32.202	1304.90349	1.53	ppb
|	Mg	25	613859.627	21.604	4.955	1295.92825	1.51	ppb
|	Mg	26	746253.025	23.110	6.008	1275.02671	3.02	ppb
|	Al	27	2619987.809	24.423	21.025	506.61750	4.88	ppb
|	K	39	16729962.637	24.238	131.835	2009.29068	4.57	ppb
⌊	Ca	44	613678.522	21.061	4.732	1833.07197	3.22	ppb
⌈>	Sc	45	512027.779	22.270	512027.779			ppb
|	Ti	47	63.334	16.434	-0.000	-0.01706	68.19	ppb
|	V	51	1236735.341	21.272	2.418	101.48256	4.47	ppb
|	Cr	52	1057408.475	22.202	2.051	98.66624	1.97	ppb
|	Mn	55	1486976.771	23.142	2.889	102.02676	2.56	ppb
|	Fe	54	842943.905	22.377	1.529	970.50486	4.14	ppb
|	Fe	56	15606557.182	19.193	26.698	1009.94396	7.55	ppb
|	Fe	57	320317.100	21.864	0.620	1004.58199	5.00	ppb
|	Co	59	1478285.325	22.302	2.887	99.65670	1.92	ppb
|	Ni	60	323607.106	19.748	0.635	100.90963	3.00	ppb
|	Cu	63	760494.580	20.576	1.489	94.42876	2.31	ppb
|	Cu	65	367454.452	19.991	0.720	98.99403	3.14	ppb
|	Zn	66	325116.245	18.555	0.639	197.03479	5.89	ppb
|	As	75	369503.764	19.150	0.726	198.47034	3.87	ppb
⌊	Se	82	34233.382	18.500	0.067	200.23412	4.57	ppb
⌈	Mo	96	440.677	18.505	0.000	0.07859	6.06	ppb
|	Ag	107	1412453.699	17.545	1.005	102.25640	2.22	ppb
|	Ag	109	1358949.540	15.735	0.969	101.43334	0.33	ppb
|	Cd	111	269820.815	17.521	0.192	101.52454	2.27	ppb
|	In	113	329416.602	18.291	0.191	101.29708	3.92	ppb
|>	In	115	1401716.271	15.565	1401716.271			ppb
⌊	Sn	118	176.668	9.098	-0.000	-0.00200	164.53	ppb
⌈	Sb	121	1632046.670	17.153	0.736	199.26563	1.99	ppb
|	Ba	135	260024.865	15.016	0.118	101.06401	1.96	ppb
|	Ba	137	449945.976	15.026	0.204	100.12029	1.92	ppb
⌊>	Tb	159	2214228.198	16.680	2214228.198			ppb
⌈	Tl	205	7612356.270	16.441	4.465	205.20036	0.52	ppb
|	Pb	206	2583307.943	15.953	1.516	202.88046	3.23	ppb
|	Pb	207	4804644.124	15.653	2.821	201.30706	2.49	ppb
|	Pb	208	7744550.267	15.993	4.544	204.62510	1.03	ppb
⌊>	Bi	209	1705996.976	16.903	1705996.976			ppb
	Cr	53	122751.332	21.050	119080.656			ppb
	Pd	106	23937.438	16.022	23934.104			ppb
	Pd	108	17776.220	20.328	17772.886			ppb
	C	12	424925.646	0.284	37286.403			ppb
	Kr	83	54.667	4.225	2.000			ppb
	Se	77	26597.442	18.279	26482.553			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	94488.303		ppb
	Be	9	30155.399	106.898417	ppb
	Na	23	6029512.267	2173.379029	ppb
	Mg	24	3010053.109	1290.734036	ppb
	Mg	25	462376.152	1279.668215	ppb
	Mg	26	548564.077	1231.744333	ppb
	Al	27	1881344.815	479.075600	ppb
	K	39	12054918.561	1904.208512	ppb
	Ca	44	464746.200	1817.269498	ppb
>	Sc	45	380732.463		ppb
	Ti	47	55.000	-0.006062	ppb
	V	51	936273.785	103.068069	ppb
	Cr	52	786400.378	98.662058	ppb
	Mn	55	1089920.416	100.707277	ppb
	Fe	54	626679.785	969.936469	ppb
	Fe	56	12231625.405	1064.561784	ppb
	Fe	57	240707.554	1013.628277	ppb
	Co	59	1097678.016	99.513778	ppb
	Ni	60	250064.674	104.402242	ppb
	Cu	63	579819.258	96.532331	ppb
	Cu	65	282641.997	101.987814	ppb
	Zn	66	256169.649	207.313868	ppb
	As	75	287798.409	206.747830	ppb
	Se	82	26920.855	210.374486	ppb
	Mo	96	350.006	0.075440	ppb
	Ag	107	1126792.204	99.631902	ppb
	Ag	109	1112301.993	101.187580	ppb
	Cd	111	215579.495	99.063108	ppb
	In	113	259847.742	96.846171	ppb
>	In	115	1150322.706		ppb
	Sn	118	170.001	0.001397	ppb
	Sb	121	1309165.954	197.934255	ppb
	Ba	135	215213.181	103.313029	ppb
	Ba	137	372297.627	102.320965	ppb
>	Tb	159	1788972.139		ppb
	Tl	205	6176719.125	206.401550	ppb
	Pb	206	2109204.786	205.154311	ppb
	Pb	207	3936440.574	204.227725	ppb
	Pb	208	6325356.109	207.059438	ppb
>	Bi	209	1375400.448		ppb
	Cr	53	92923.744		ppb
	Pd	106	19509.012		ppb
	Pd	108	13604.247		ppb
	C	12	424934.638		ppb
	Kr	83	56.000		ppb
	Se	77	20985.329		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	140713.092		ppb
	Be	9	44418.431	105.733484	ppb
	Na	23	9147299.618	2214.103944	ppb
	Mg	24	4610968.714	1327.699160	ppb
	Mg	25	709038.062	1317.699301	ppb
	Mg	26	865894.022	1305.591205	ppb
	Al	27	3005368.944	513.947940	ppb
	K	39	19293518.094	2049.475613	ppb
	Ca	44	679867.177	1783.578795	ppb
>	Sc	45	586281.868		ppb

	Ti	47	75.000	-0.015883	ppb
	V	51	1348183.182	96.369522	ppb
	Cr	52	1187362.115	96.725889	ppb
	Mn	55	1672183.636	100.336052	ppb
	Fe	54	928695.151	930.608740	ppb
	Fe	56	16638910.970	922.850545	ppb
	Fe	57	347815.382	950.442701	ppb
	Co	59	1661439.079	97.815017	ppb
	Ni	60	365613.680	99.126527	ppb
	Cu	63	852524.172	92.171125	ppb
	Cu	65	408725.547	95.774063	ppb
	Zn	66	350997.038	184.446547	ppb
	As	75	410696.902	191.597837	ppb
	Se	82	37955.227	192.590238	ppb
	Mo	96	464.011	0.076253	ppb
	Ag	107	1540795.943	103.569652	ppb
	Ag	109	1472287.882	101.819148	ppb
	Cd	111	291624.651	101.873457	ppb
	In	113	363503.816	104.461299	ppb
>	In	115	1513169.430		ppb
	Sn	118	165.001	-0.005188	ppb
	Sb	121	1780021.701	196.129100	ppb
	Ba	135	286738.853	100.314420	ppb
	Ba	137	495782.737	99.301634	ppb
>	Tb	159	2454773.520		ppb
	Tl	205	8473909.511	204.367030	ppb
	Pb	206	2784880.122	195.495807	ppb
	Pb	207	5221577.933	195.515955	ppb
	Pb	208	8607299.917	203.351741	ppb
>	Bi	209	1905711.738		ppb
	Cr	53	137032.506		ppb
	Pd	106	26129.092		ppb
	Pd	108	19804.592		ppb
	C	12	423714.465		ppb
	Kr	83	56.000		ppb
	Se	77	29521.512		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	135809.998		ppb
	Be	9	42522.215	104.873959	ppb
	Na	23	8431582.965	2114.443978	ppb
	Mg	24	4344990.087	1296.277281	ppb
	Mg	25	670164.668	1290.417239	ppb
	Mg	26	824300.976	1287.744577	ppb
	Al	27	2973249.667	526.828954	ppb
	K	39	18841451.255	2074.187919	ppb
	Ca	44	696422.189	1898.367626	ppb
>	Sc	45	569069.005		ppb
	Ti	47	60.000	-0.029243	ppb
	V	51	1425749.056	105.010091	ppb
	Cr	52	1198462.933	100.610765	ppb
	Mn	55	1698826.259	105.036954	ppb
	Fe	54	973456.780	1010.969369	ppb
	Fe	56	17949135.172	1042.419545	ppb
	Fe	57	372428.363	1049.674982	ppb
	Co	59	1675738.881	101.641313	ppb
	Ni	60	355142.964	99.200132	ppb
	Cu	63	849140.312	94.582814	ppb
	Cu	65	410995.812	99.220208	ppb
	Zn	66	368182.048	199.343965	ppb
	As	75	410015.980	197.065361	ppb
	Se	82	37824.065	197.737637	ppb

⌈	Mo	96	508.013	0.084070	ppb
|	Ag	107	1569772.951	103.567650	ppb
|	Ag	109	1492258.746	101.293288	ppb
|	Cd	111	302258.298	103.637051	ppb
|	In	113	364898.247	102.583765	ppb
|>	In	115	1541656.676		ppb
⌊	Sn	118	195.002	-0.002223	ppb
⌈	Sb	121	1806952.357	203.733525	ppb
|	Ba	135	278122.562	99.564583	ppb
|	Ba	137	481757.564	98.738262	ppb
⌊>	Tb	159	2398938.934		ppb
⌈	Tl	205	8186440.175	204.832486	ppb
|	Pb	206	2855838.920	207.991259	ppb
|	Pb	207	5255913.864	204.177508	ppb
|	Pb	208	8300994.776	203.464129	ppb
⌊>	Bi	209	1836878.743		ppb
	Cr	53	138297.746		ppb
	Pd	106	26174.210		ppb
	Pd	108	19919.820		ppb
	C	12	426127.836		ppb
	Kr	83	52.000		ppb
	Se	77	29285.486		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			101.999		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			101.096		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			100.323		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			101.614		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			102.871		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102206-BSD1

Sample Date/Time: Monday, November 09, 2009 18:09:01
Sample Type: Sample
Sample Description: LCSWD
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102206-BSD1.843

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
[>	Li	6	116132.862	20.774	116132.862			ppb
|	Be	9	35327.369	20.531	0.304	101.93412	1.30	ppb
|	Na	23	7269678.584	17.349	62.896	2144.38506	4.81	ppb
|	Mg	24	3701811.436	15.515	32.181	1304.02408	8.14	ppb
|	Mg	25	551648.748	17.616	4.790	1252.76764	9.74	ppb
|	Mg	26	702288.438	17.221	6.099	1294.31852	9.50	ppb
|	Al	27	2457509.436	18.674	21.280	512.74951	9.48	ppb
|	K	39	15615927.573	17.011	132.772	2023.56535	6.66	ppb
[	Ca	44	562305.677	17.069	4.645	1799.45086	5.48	ppb
[>	Sc	45	470605.934	18.073	470605.934			ppb
|	Ti	47	61.667	38.318	-0.000	-0.01140	313.23	ppb
|	V	51	1146122.961	19.978	2.426	101.80697	2.82	ppb
|	Cr	52	988554.463	19.199	2.083	100.19397	1.96	ppb
|	Mn	55	1364110.451	20.221	2.879	101.70175	4.27	ppb
|	Fe	54	794389.006	25.591	1.553	985.94595	9.14	ppb
|	Fe	56	14410350.338	16.902	26.689	1009.58318	3.24	ppb
|	Fe	57	297047.039	18.011	0.624	1012.14483	2.43	ppb
|	Co	59	1358806.375	19.965	2.881	99.45922	5.02	ppb
|	Ni	60	292720.067	20.227	0.620	98.60539	4.28	ppb
|	Cu	63	700711.333	20.875	1.483	94.02918	4.27	ppb
|	Cu	65	343938.195	21.430	0.727	99.94559	4.35	ppb
|	Zn	66	305009.705	21.124	0.645	198.90487	4.90	ppb
|	As	75	339726.928	20.765	0.719	196.73354	3.98	ppb
[	Se	82	30913.482	16.702	0.066	195.78172	1.93	ppb
[	Mo	96	354.006	2.037	0.000	0.06422	22.12	ppb
|	Ag	107	1310676.903	14.880	0.990	100.72783	3.61	ppb
|	Ag	109	1266622.011	14.361	0.957	100.16351	1.25	ppb
|	Cd	111	246658.543	17.272	0.186	98.19885	2.03	ppb
|	In	113	302011.507	15.744	0.184	97.90155	1.18	ppb
|>	In	115	1324988.739	15.469	1324988.739			ppb
[	Sn	118	121.667	23.368	-0.000	-0.00776	62.23	ppb
[	Sb	121	1527412.060	17.605	0.746	201.79400	2.91	ppb
|	Ba	135	240762.783	16.411	0.118	101.13681	1.90	ppb
|	Ba	137	422054.652	14.506	0.207	101.70993	0.59	ppb
[>	Tb	159	2041373.060	14.996	2041373.060			ppb
[	Tl	205	7171358.779	15.008	4.539	208.62660	1.84	ppb
|	Pb	206	2378495.559	16.134	1.504	201.18240	3.05	ppb
|	Pb	207	4492066.345	14.699	2.844	202.95260	1.57	ppb
|	Pb	208	7348860.858	13.361	4.658	209.76776	0.67	ppb
[>	Bi	209	1578053.920	13.805	1578053.920			ppb
	Cr	53	112247.670	20.007	108576.993			ppb
	Pd	106	21987.868	15.537	21984.535			ppb
	Pd	108	16507.164	15.501	16503.831			ppb
	C	12	400527.955	4.805	12888.712			ppb
	Kr	83	40.000	36.056	-12.667			ppb
	Se	77	24000.341	18.929	23885.451			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	88356.628		ppb
	Be	9	26952.272	102.173618	ppb
	Na	23	5818704.919	2243.016649	ppb
	Mg	24	3059706.936	1403.089127	ppb
	Mg	25	450176.477	1332.371727	ppb
	Mg	26	574724.955	1380.076166	ppb
	Al	27	1977526.993	538.599108	ppb
	K	39	12615962.750	2135.923693	ppb
	Ca	44	452051.699	1893.836102	ppb
>	Sc	45	374005.621		ppb
	Ti	47	70.000	0.019307	ppb
	V	51	882769.120	98.919905	ppb
	Cr	52	770542.066	98.409459	ppb
	Mn	55	1045619.958	98.342137	ppb
	Fe	54	567768.096	888.724985	ppb
	Fe	56	11598392.391	1022.372442	ppb
	Fe	57	235306.259	1008.649069	ppb
	Co	59	1046417.837	96.572649	ppb
	Ni	60	224355.517	95.352002	ppb
	Cu	63	531916.950	90.148324	ppb
	Cu	65	259134.591	95.185094	ppb
	Zn	66	230612.119	189.972153	ppb
	As	75	258381.515	188.955505	ppb
	Se	82	24981.164	198.711829	ppb
	Mo	96	348.006	0.080627	ppb
	Ag	107	1088360.346	101.616015	ppb
	Ag	109	1057175.091	101.551417	ppb
	Cd	111	197644.980	95.901321	ppb
	In	113	247807.858	97.686457	ppb
>	In	115	1089394.486		ppb
	Sn	118	130.001	-0.003439	ppb
	Sb	121	1217951.951	195.054870	ppb
	Ba	135	195686.100	99.505543	ppb
	Ba	137	351654.198	102.374843	ppb
>	Tb	159	1688886.719		ppb
	Tl	205	5938172.538	205.732176	ppb
	Pb	206	1937333.547	195.369905	ppb
	Pb	207	3731312.727	200.708599	ppb
	Pb	208	6217267.347	211.010945	ppb
>	Bi	209	1326584.270		ppb
	Cr	53	86391.570		ppb
	Pd	106	18066.305		ppb
	Pd	108	13594.234		ppb
	C	12	380398.092		ppb
	Kr	83	28.000		ppb
	Se	77	18840.398		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	131861.681		ppb
	Be	9	39566.119	100.504779	ppb
	Na	23	7887508.307	2037.147599	ppb
	Mg	24	3879163.212	1191.944553	ppb
	Mg	25	560900.333	1112.347516	ppb
	Mg	26	716843.549	1153.373998	ppb
	Al	27	2503011.745	456.696357	ppb
	K	39	16561801.301	1874.012251	ppb
	Ca	44	607683.492	1697.160187	ppb
>	Sc	45	503572.876		ppb

	Ti	47	35.000	-0.050588	ppb
	V	51	1257537.008	104.666881	ppb
	Cr	52	1078249.191	102.303508	ppb
	Mn	55	1525721.579	106.609472	ppb
	Fe	54	854693.101	1002.490270	ppb
	Fe	56	15770230.164	1033.925243	ppb
	Fe	57	326045.006	1038.342547	ppb
	Co	59	1535066.497	105.219159	ppb
	Ni	60	327499.736	103.377343	ppb
	Cu	63	779850.472	98.163713	ppb
	Cu	65	380112.882	103.701259	ppb
	Zn	66	342072.288	209.305076	ppb
	As	75	376706.324	204.603698	ppb
	Se	82	33366.908	197.123198	ppb
	Mo	96	352.006	0.055984	ppb
	Ag	107	1452917.520	103.835642	ppb
	Ag	109	1357681.702	99.828017	ppb
	Cd	111	267529.856	99.363519	ppb
	In	113	321542.690	96.865481	ppb
>	In	115	1423211.685		ppb
	Sn	118	90.000	-0.012973	ppb
	Sb	121	1660083.549	204.606454	ppb
	Ba	135	257195.482	100.648059	ppb
	Ba	137	451694.070	101.198812	ppb
>	Tb	159	2194554.448		ppb
	Tl	205	7654407.376	207.168091	ppb
	Pb	206	2635145.602	207.598105	ppb
	Pb	207	4916471.111	206.595717	ppb
	Pb	208	7854062.526	208.238441	ppb
>	Bi	209	1698138.025		ppb
	Cr	53	123461.461		ppb
	Pd	106	23577.763		ppb
	Pd	108	17535.361		ppb
	C	12	418749.762		ppb
	Kr	83	36.000		ppb
	Se	77	25761.808		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	128180.278		ppb
	Be	9	39463.716	103.123975	ppb
	Na	23	8102822.526	2152.990926	ppb
	Mg	24	4166564.159	1317.038568	ppb
	Mg	25	643869.434	1313.583666	ppb
	Mg	26	815296.808	1349.505382	ppb
	Al	27	2891989.569	542.953062	ppb
	K	39	17670018.670	2060.760091	ppb
	Ca	44	627181.840	1807.356299	ppb
>	Sc	45	534239.304		ppb
	Ti	47	80.000	-0.002921	ppb
	V	51	1298062.755	101.834136	ppb
	Cr	52	1116872.132	99.868937	ppb
	Mn	55	1520989.814	100.153648	ppb
	Fe	54	960705.820	1066.622607	ppb
	Fe	56	15862428.458	972.451848	ppb
	Fe	57	329789.851	989.442876	ppb
	Co	59	1494934.793	96.585862	ppb
	Ni	60	326304.949	97.086824	ppb
	Cu	63	790366.576	93.775509	ppb
	Cu	65	392567.113	100.950429	ppb
	Zn	66	342344.710	197.437385	ppb
	As	75	384092.944	196.641430	ppb
	Se	82	34392.374	191.510145	ppb

⌈	Mo	96	362.007	0.056058	ppb
|	Ag	107	1390752.842	96.731828	ppb
|	Ag	109	1385009.238	99.111085	ppb
|	Cd	111	274800.794	99.331702	ppb
|	In	113	336683.971	99.152723	ppb
|>	In	115	1462360.046		ppb
⌊	Sn	118	145.001	-0.006868	ppb
⌈	Sb	121	1704200.679	205.720690	ppb
|	Ba	135	269406.766	103.256838	ppb
|	Ba	137	462815.688	101.556139	ppb
⌊>	Tb	159	2240678.014		ppb
⌈	Tl	205	7921496.422	212.979548	ppb
|	Pb	206	2563007.527	200.579189	ppb
|	Pb	207	4828415.198	201.553478	ppb
|	Pb	208	7975252.700	210.053902	ppb
⌊>	Bi	209	1709439.466		ppb
	Cr	53	126889.978		ppb
	Pd	106	24319.536		ppb
	Pd	108	18391.898		ppb
	C	12	402436.010		ppb
	Kr	83	56.000		ppb
	Se	77	27398.817		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			95.783		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			92.917		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			94.831		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			93.681		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			95.156		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910167-01

Sample Date/Time: Monday, November 09, 2009 18:10:59
Sample Type: Sample
Sample Description: MW-1-03
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910167-01.844

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	135733.578	35.344	135733.578			ppb
	Be	9	160.001	21.973	0.001	0.40325	18.66	ppb
	Na	23	S	S	666666922729510218.90718		173.20	ppb
	Mg	24	25144157.243	34.269	185.882	7532.26757	1.67	ppb
	Mg	25	3799671.947	32.881	28.218	7379.83989	3.67	ppb
	Mg	26	4674640.531	33.888	34.600	7342.64550	2.16	ppb
	Al	27	23682844.827	35.548	174.325	4200.44296	2.02	ppb
	K	39	31006085.937	31.724	228.494	3482.45854	5.05	ppb
	Ca	44	5169686.680	30.258	38.494	14911.22415	7.01	ppb
>	Sc	45	576943.472	29.819	576943.472			ppb
	Ti	47	311093.877	29.516	0.539	320.47968	0.55	ppb
	V	51	266299.813	30.915	0.457	19.17403	3.17	ppb
	Cr	52	196192.134	28.626	0.327	15.71868	1.83	ppb
	Mn	55	2709483.110	28.506	4.702	166.06537	2.24	ppb
	Fe	54	4968781.392	28.112	8.532	5416.87255	2.30	ppb
	Fe	56	88760419.132	27.994	150.629	5698.03685	3.10	ppb
	Fe	57	2098756.690	28.161	3.648	5915.72572	3.52	ppb
	Co	59	60599.767	26.782	0.106	3.64810	4.67	ppb
	Ni	60	33625.822	26.908	0.059	9.31994	3.79	ppb
	Cu	63	4474279.847	25.432	7.843	497.24520	5.63	ppb
	Cu	65	2175703.297	24.994	3.818	524.67617	6.20	ppb
	Zn	66	246901.436	27.394	0.430	132.62293	3.17	ppb
	As	75	-584.676	107.412	-0.001	-0.25290	95.87	ppb
	Se	82	315.561	20.921	0.000	1.37809	13.67	ppb
	Mo	96	50281.001	22.518	0.040	13.50405	4.61	ppb
	Ag	107	2493.657	24.808	0.002	0.19476	2.50	ppb
	Ag	109	2392.517	21.473	0.002	0.19433	7.45	ppb
	Cd	111	662.177	24.249	0.001	0.28128	26.49	ppb
	In	113	57236.676	21.504	0.002	0.85079	164.22	ppb
>	In	115	1279936.235	26.229	1279936.235			ppb
	Sn	118	10876.404	35.351	0.008	1.39190	11.78	ppb
	Sb	121	32038.499	13.177	0.016	4.24398	21.42	ppb
	Ba	135	428664.905	22.175	0.208	178.64260	1.33	ppb
	Ba	137	733951.193	21.609	0.356	175.28095	1.05	ppb
>	Tb	159	2058504.527	21.526	2058504.527			ppb
	Tl	205	1471.776	13.932	0.001	0.04344	7.29	ppb
	Pb	206	26317.373	22.087	0.017	2.31010	3.17	ppb
	Pb	207	48367.413	21.856	0.032	2.26625	3.46	ppb
	Pb	208	77242.924	20.938	0.051	2.28611	2.00	ppb
>	Bi	209	1500847.615	19.800	1500847.615			ppb
	Cr	53	138398.392	35.280	134727.716			ppb
	Pd	106	110.001	20.830	106.667			ppb
	Pd	108	140.001	35.175	136.668			ppb
	C	12	1111410.062	25.325	723770.819			ppb
	Kr	83	122.001	24.260	69.334			ppb
	Se	77	20278.871	23.812	20163.982			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	80514.832		ppb
	Be	9	120.001	0.490054	ppb
	Na	23	35145255.422	14880.113046	ppb
	Mg	24	15206414.503	7653.007802	ppb
	Mg	25	2357395.798	7657.256556	ppb
	Mg	26	2847412.445	7504.648038	ppb
	Al	27	13962408.539	4177.806646	ppb
	K	39	19662462.533	3681.727575	ppb
	Ca	44	3365607.304	16104.336019	ppb
>	Sc	45	378520.835		ppb
	Ti	47	205270.393	322.052797	ppb
	V	51	171406.144	18.856661	ppb
	Cr	52	131535.426	16.025097	ppb
	Mn	55	1822208.435	169.631145	ppb
	Fe	54	3356252.405	5554.451817	ppb
	Fe	56	60264888.516	5871.973365	ppb
	Fe	57	1424193.714	6089.582841	ppb
	Co	59	42042.192	3.826410	ppb
	Ni	60	23196.874	9.727073	ppb
	Cu	63	3161464.342	529.531977	ppb
	Cu	65	1548770.321	562.265141	ppb
	Zn	66	168945.169	137.462354	ppb
	As	75	-315.834	-0.209181	ppb
	Se	82	239.336	1.594922	ppb
	Mo	96	37219.135	14.222617	ppb
	Ag	107	1780.158	0.198850	ppb
	Ag	109	1813.498	0.209159	ppb
	Cd	111	584.030	0.344426	ppb
	In	113	43027.369	2.462831	ppb
>	In	115	892444.099		ppb
	Sn	118	6442.074	1.203133	ppb
	Sb	121	29653.903	5.085295	ppb
	Ba	135	319444.011	176.695446	ppb
	Ba	137	551695.890	174.709919	ppb
>	Tb	159	1552675.702		ppb
	Tl	205	1235.076	0.046712	ppb
	Pb	206	19659.305	2.230868	ppb
	Pb	207	36202.979	2.192077	ppb
	Pb	208	58722.439	2.243316	ppb
>	Bi	209	1164552.173		ppb
	Cr	53	83039.351		ppb
	Pd	106	105.001		ppb
	Pd	108	85.000		ppb
	C	12	790637.346		ppb
	Kr	83	108.001		ppb
	Se	77	14708.810		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	159522.300		ppb
	Be	9	174.002	0.356178	ppb
	Na	23	69610173.136	14875.333439	ppb
	Mg	24	29692652.364	7542.384954	ppb
	Mg	25	4492660.383	7365.436375	ppb
	Mg	26	5514674.110	7335.908586	ppb
	Al	27	28434660.411	4294.300835	ppb
	K	39	36182516.671	3416.668690	ppb
	Ca	44	5994984.608	14469.559656	ppb
>	Sc	45	667914.664		ppb

	Ti	47	358311.370	318.587561	ppb
	V	51	318646.581	19.874318	ppb
	Cr	52	224195.317	15.455877	ppb
	Mn	55	3075001.784	162.208693	ppb
	Fe	54	5743917.376	5384.944451	ppb
	Fe	56	100110060.705	5519.147061	ppb
	Fe	57	2346308.479	5684.782274	ppb
	Co	59	67615.825	3.486897	ppb
	Ni	60	38296.524	9.099817	ppb
	Cu	63	5083628.034	482.552365	ppb
	Cu	65	2458558.157	505.825429	ppb
	Zn	66	281791.835	129.927787	ppb
	As	75	-1302.359	-0.514252	ppb
	Se	82	352.673	1.284259	ppb
	Mo	96	56326.186	13.117075	ppb
	Ag	107	2880.415	0.196058	ppb
	Ag	109	2570.330	0.180215	ppb
	Cd	111	555.640	0.199097	ppb
	In	113	64079.654	0.100000	ppb
>	In	115	1464179.563		ppb
	Sn	118	12903.319	1.474084	ppb
	Sb	121	36913.003	4.367052	ppb
	Ba	135	473867.667	181.302187	ppb
	Ba	137	809573.569	177.332834	ppb
>	Tb	159	2244740.633		ppb
	Tl	205	1585.126	0.043221	ppb
	Pb	206	28911.734	2.374990	ppb
	Pb	207	53572.103	2.348296	ppb
	Pb	208	84428.448	2.334185	ppb
>	Bi	209	1609911.386		ppb
	Cr	53	156824.123		ppb
	Pd	106	90.000		ppb
	Pd	108	180.002		ppb
	C	12	1226492.312		ppb
	Kr	83	102.001		ppb
	Se	77	22843.395		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	167163.602		ppb
	Be	9	186.002	0.363523	ppb
	Na	23	68188500901.275040		ppb
	Mg	24	30533404.863	7401.409940	ppb
	Mg	25	4548959.662	7116.826733	ppb
	Mg	26	5661835.038	7187.379879	ppb
	Al	27	28651465.529	4129.221388	ppb
	K	39	37173278.607	3348.979347	ppb
	Ca	44	6148468.128	14159.776777	ppb
>	Sc	45	684394.917		ppb
	Ti	47	369699.868	320.798691	ppb
	V	51	308846.715	18.791110	ppb
	Cr	52	232845.658	15.675052	ppb
	Mn	55	3231239.112	166.356270	ppb
	Fe	54	5806174.394	5311.221387	ppb
	Fe	56	105906308.176	5702.990135	ppb
	Fe	57	2525767.879	5972.812053	ppb
	Co	59	72141.283	3.631002	ppb
	Ni	60	39384.069	9.132944	ppb
	Cu	63	5177747.166	479.651257	ppb
	Cu	65	2519781.414	505.937943	ppb
	Zn	66	289967.304	130.478641	ppb
	As	75	-135.834	-0.035268	ppb
	Se	82	354.673	1.255085	ppb

⌈	Mo	96	57297.682	13.172454	ppb
|	Ag	107	2820.398	0.189378	ppb
|	Ag	109	2793.724	0.193623	ppb
|	Cd	111	846.863	0.300318	ppb
|	In	113	64603.006	-0.010462	ppb
|>	In	115	1483185.042		ppb
⌊	Sn	118	13283.817	1.498493	ppb
⌈	Sb	121	29548.592	3.279578	ppb
|	Ba	135	492683.036	177.930162	ppb
|	Ba	137	840584.120	173.800087	ppb
⌊>	Tb	159	2378097.244		ppb
⌈	Tl	205	1595.127	0.040392	ppb
|	Pb	206	30381.081	2.324448	ppb
|	Pb	207	55327.157	2.258383	ppb
|	Pb	208	88577.885	2.280829	ppb
⌊>	Bi	209	1728079.286		ppb
	Cr	53	175331.703		ppb
	Pd	106	135.001		ppb
	Pd	108	155.001		ppb
	C	12	1317100.528		ppb
	Kr	83	156.001		ppb
	Se	77	23284.410		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		111.949			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		113.913			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		91.607			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		94.468			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		90.501			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: ~~SDI0910167-01~~ 222222

Sample Date/Time: Monday, November 09, 2009 18:14:27
Sample Type: Sample
Sample Description: MW-1-03L 5X
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910167-01.845

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	163295.627	27.107	163295.627			ppb
	Be	9	32.000	45.069	0.000	0.05544	31.01	ppb
	Na	23	15452213.499	26.956	94.597	3225.20029	1.68	ppb
	Mg	24	6435045.159	27.072	39.420	1597.38088	3.21	ppb
	Mg	25	978731.128	23.814	6.039	1579.26367	4.57	ppb
	Mg	26	1185369.000	22.998	7.328	1555.02858	5.92	ppb
	Al	27	5857100.680	22.555	36.209	872.47924	5.69	ppb
	K	39	7690799.493	22.656	44.932	684.80488	5.85	ppb
	Ca	44	1228558.712	22.781	7.370	2854.88839	5.58	ppb
>	Sc	45	636423.508	22.886	636423.508			ppb
	Ti	47	73474.402	22.230	0.115	68.57615	1.17	ppb
	V	51	64246.002	27.267	0.097	4.05741	6.58	ppb
	Cr	52	54675.415	19.308	0.072	3.46951	5.10	ppb
	Mn	55	611566.272	22.629	0.950	33.55927	2.74	ppb
	Fe	54	1257797.371	20.433	1.867	1185.39713	3.50	ppb
	Fe	56	22691048.475	20.126	31.849	1204.80025	3.76	ppb
	Fe	57	484153.489	20.516	0.757	1227.37642	2.86	ppb
	Co	59	14387.999	21.648	0.022	0.77478	3.30	ppb
	Ni	60	8183.452	21.700	0.013	2.03326	2.52	ppb
	Cu	63	1010474.781	22.268	1.589	100.75699	1.13	ppb
	Cu	65	490607.971	22.007	0.772	106.07742	1.32	ppb
	Zn	66	51095.481	21.959	0.080	24.61964	1.18	ppb
	As	75	-131.403	475.901	-0.000	-0.07952	394.55	ppb
	Se	82	98.223	16.435	0.000	0.18202	49.55	ppb
	Mo	96	11931.259	17.544	0.008	2.56891	3.18	ppb
	Ag	107	560.016	17.221	0.000	0.03225	1.24	ppb
	Ag	109	548.904	14.389	0.000	0.03351	15.70	ppb
	Cd	111	168.099	12.212	0.000	0.05559	9.32	ppb
	In	113	68459.451	19.555	-0.000	-0.04850	735.97	ppb
>	In	115	1571372.090	18.184	1571372.090			ppb
	Sn	118	2890.433	23.692	0.002	0.28659	6.74	ppb
	Sb	121	11161.418	21.551	0.004	1.16009	7.61	ppb
	Ba	135	104661.172	18.005	0.043	37.09331	1.60	ppb
	Ba	137	179292.440	18.421	0.074	36.35732	1.10	ppb
>	Tb	159	2427528.296	19.356	2427528.296			ppb
	Tl	205	428.343	12.150	0.000	0.00869	12.14	ppb
	Pb	206	6715.628	16.487	0.003	0.45825	5.95	ppb
	Pb	207	12142.140	18.041	0.006	0.44098	3.84	ppb
	Pb	208	19411.466	17.535	0.010	0.44457	3.34	ppb
>	Bi	209	1859358.479	19.867	1859358.479			ppb
	Cr	53	49173.370	18.590	45502.694			ppb
	Pd	106	41.667	24.980	38.333			ppb
	Pd	108	28.333	56.727	25.000			ppb
	C	12	777927.868	10.257	390288.625			ppb
	Kr	83	58.000	11.945	5.333			ppb
	Se	77	5295.213	19.092	5180.324			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	112309.145		ppb
	Be	9	20.000	0.050444	ppb
	Na	23	10642511.511	3228.548397	ppb
	Mg	24	4427929.772	1597.480717	ppb
	Mg	25	709698.251	1652.526858	ppb
	Mg	26	871431.364	1646.322078	ppb
	Al	27	4332271.472	928.784703	ppb
	K	39	5683336.325	731.013809	ppb
	Ca	44	905498.722	3035.149775	ppb
>	Sc	45	468535.000		ppb
	Ti	47	54709.247	69.271964	ppb
	V	51	44616.758	3.846767	ppb
	Cr	52	42502.130	3.673494	ppb
	Mn	55	452213.786	33.683782	ppb
	Fe	54	961114.824	1227.285981	ppb
	Fe	56	17418826.158	1255.619449	ppb
	Fe	57	369679.122	1267.869175	ppb
	Co	59	10805.835	0.788485	ppb
	Ni	60	6135.215	2.066064	ppb
	Cu	63	750676.472	101.558551	ppb
	Cu	65	365955.861	107.306239	ppb
	Zn	66	38149.297	24.928570	ppb
	As	75	-730.820	-0.407569	ppb
	Se	82	86.667	0.262208	ppb
	Mo	96	9514.524	2.579617	ppb
	Ag	107	450.010	0.032675	ppb
	Ag	109	500.013	0.038481	ppb
	Cd	111	145.366	0.060140	ppb
	In	113	53266.489	-0.449626	ppb
>	In	115	1246576.862		ppb
	Sn	118	2120.225	0.265355	ppb
	Sb	121	8548.652	1.144483	ppb
	Ba	135	82902.220	37.759336	ppb
	Ba	137	141159.315	36.809282	ppb
>	Tb	159	1885130.864		ppb
	Tl	205	370.007	0.009832	ppb
	Pb	206	5461.491	0.481993	ppb
	Pb	207	9632.361	0.453076	ppb
	Pb	208	15517.303	0.460211	ppb
>	Bi	209	1433301.440		ppb
	Cr	53	38678.658		ppb
	Pd	106	30.000		ppb
	Pd	108	35.000		ppb
	C	12	685968.020		ppb
	Kr	83	54.000		ppb
	Se	77	4128.185		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	185679.996		ppb
	Be	9	28.000	0.041305	ppb
	Na	23	17861837.968	3277.508640	ppb
	Mg	24	7555227.700	1648.669817	ppb
	Mg	25	1119739.716	1577.031074	ppb
	Mg	26	1362239.248	1556.612974	ppb
	Al	27	6582845.776	853.561516	ppb
	K	39	8577563.416	663.816850	ppb
	Ca	44	1382526.371	2796.218829	ppb
>	Sc	45	728981.266		ppb

	Ti	47	84495.472	68.762493	ppb
	V	51	78292.070	4.357717	ppb
	Cr	52	61307.355	3.355414	ppb
	Mn	55	680892.536	32.584138	ppb
	Fe	54	1399987.005	1144.209310	ppb
	Fe	56	25422959.424	1168.516937	ppb
	Fe	57	547519.478	1206.354114	ppb
	Co	59	15900.631	0.745305	ppb
	Ni	60	9124.161	1.974150	ppb
	Cu	63	1143735.111	99.451769	ppb
	Cu	65	554745.166	104.547107	ppb
	Zn	66	57994.348	24.352751	ppb
	As	75	-180.386	-0.048662	ppb
	Se	82	91.334	0.084386	ppb
	Mo	96	13170.668	2.644797	ppb
	Ag	107	600.018	0.032208	ppb
	Ag	109	506.680	0.028000	ppb
	Cd	111	185.281	0.056674	ppb
	In	113	73584.743	0.070156	ppb
>	In	115	1683525.969		ppb
	Sn	118	3120.487	0.291308	ppb
	Sb	121	13283.817	1.255184	ppb
	Ba	135	115480.965	36.902228	ppb
	Ba	137	197943.890	36.213869	ppb
>	Tb	159	2686916.721		ppb
	Tl	205	470.011	0.008480	ppb
	Pb	206	7557.855	0.464275	ppb
	Pb	207	13669.722	0.448217	ppb
	Pb	208	20897.790	0.430652	ppb
>	Bi	209	2054880.680		ppb
	Cr	53	53440.413		ppb
	Pd	106	50.000		ppb
	Pd	108	40.000		ppb
	C	12	819038.534		ppb
	Kr	83	54.000		ppb
	Se	77	5901.741		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	191897.739		ppb
	Be	9	48.000	0.074581	ppb
	Na	23	17852291.017	3169.543821	ppb
	Mg	24	7321978.006	1545.992111	ppb
	Mg	25	1106755.418	1508.233076	ppb
	Mg	26	1322436.389	1462.150701	ppb
	Al	27	6656184.791	835.091500	ppb
	K	39	8811498.738	659.583985	ppb
	Ca	44	1397651.043	2733.296579	ppb
>	Sc	45	711754.257		ppb
	Ti	47	81218.488	67.694007	ppb
	V	51	69829.177	3.967754	ppb
	Cr	52	60216.759	3.379622	ppb
	Mn	55	701592.496	34.409904	ppb
	Fe	54	1412290.283	1184.696111	ppb
	Fe	56	25231359.843	1190.264367	ppb
	Fe	57	535261.868	1207.905975	ppb
	Co	59	16457.531	0.790538	ppb
	Ni	60	9290.981	2.059573	ppb
	Cu	63	1137012.759	101.260642	ppb
	Cu	65	551122.888	106.378912	ppb
	Zn	66	57142.800	24.577604	ppb
	As	75	516.996	0.217662	ppb
	Se	82	116.667	0.199465	ppb

⌈	Mo	96	13108.586	2.482326	ppb
|	Ag	107	630.020	0.031877	ppb
|	Ag	109	640.020	0.034048	ppb
|	Cd	111	173.650	0.049951	ppb
|	In	113	78527.120	0.233982	ppb
|>	In	115	1784013.438		ppb
⌊	Sn	118	3430.588	0.303107	ppb
⌈	Sb	121	11651.784	1.080602	ppb
|	Ba	135	115600.332	36.618366	ppb
|	Ba	137	198774.116	36.048802	ppb
⌊>	Tb	159	2710537.303		ppb
⌈	Tl	205	445.010	0.007754	ppb
|	Pb	206	7127.539	0.428481	ppb
|	Pb	207	13124.337	0.421639	ppb
|	Pb	208	21819.305	0.442836	ppb
⌊>	Bi	209	2089893.315		ppb
	Cr	53	55401.040		ppb
	Pd	106	45.000		ppb
	Pd	108	10.000		ppb
	C	12	828777.051		ppb
	Kr	83	66.000		ppb
	Se	77	5855.714		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		134.681			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		125.656			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		112.465			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		111.403			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		112.119			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Li 6 Int Std for sample	Li	6	Int Std out of control
Sc 45 Int Std for sample	Sc	45	Int Std out of control

EPA 6020 - Summary Report

Sample ID: 0910167-02

Sample Date/Time: Monday, November 09, 2009 18:17:55
Sample Type: Sample
Sample Description: MW-2-03
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910167-02.846

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
[>	Li	6	142716.219	35.606	142716.219			ppb
[	Be	9	12.667	32.868	0.000	0.02083	7.78	ppb
[	Na	23	S	S	19999999[68188500901.27505			ppb
[	Mg	24	29963600.109	31.719	212.588	8614.45904	5.31	ppb
[	Mg	25	4732457.707	32.489	33.492	8759.09631	4.60	ppb
[	Mg	26	5837648.442	31.995	41.388	8783.14337	5.92	ppb
[	Al	27	156522.408	30.700	1.086	26.16104	6.98	ppb
[	K	39	58229938.058	30.313	412.396	6285.28800	7.41	ppb
[	Ca	44	6512876.394	28.892	46.407	17976.41154	9.09	ppb
[>	Sc	45	567100.935	29.510	567100.935			ppb
[	Ti	47	2712.053	27.843	0.005	2.76105	2.31	ppb
[	V	51	-11840.576	28.002	-0.025	-1.03122	4.99	ppb
[	Cr	52	48589.281	24.922	0.072	3.47961	7.04	ppb
[	Mn	55	4135485.053	26.451	7.338	259.17289	3.96	ppb
[	Fe	54	134017.134	19.245	0.124	78.85729	25.33	ppb
[	Fe	56	3844165.424	14.105	3.060	115.76630	44.27	ppb
[	Fe	57	54304.102	26.893	0.089	144.77017	4.04	ppb
[	Co	59	9624.853	26.892	0.017	0.58214	3.49	ppb
[	Ni	60	9352.341	25.697	0.017	2.63169	4.97	ppb
[	Cu	63	11793.965	27.393	0.021	1.30026	2.78	ppb
[	Cu	65	4604.444	26.786	0.008	1.09225	5.31	ppb
[	Zn	66	16431.921	26.992	0.029	8.81206	3.38	ppb
[	As	75	-784.835	181.324	-0.002	-0.51726	174.60	ppb
[	Se	82	205.335	14.458	0.000	0.83284	26.65	ppb
[	Mo	96	4281.609	20.694	0.003	1.13445	5.29	ppb
[	Ag	107	3973.039	23.001	0.003	0.31602	5.97	ppb
[	Ag	109	3878.551	20.442	0.003	0.31926	5.14	ppb
[	Cd	111	104.314	50.800	0.000	0.04405	51.51	ppb
[	In	113	56191.722	23.883	0.001	0.43239	181.77	ppb
[>	In	115	1267063.818	24.316	1267063.818			ppb
[	Sn	118	4215.991	41.600	0.003	0.52405	21.70	ppb
[	Sb	121	18757.661	38.701	0.009	2.31900	19.82	ppb
[	Ba	135	94714.277	22.184	0.046	39.68305	2.20	ppb
[	Ba	137	164977.116	21.435	0.081	39.63096	3.10	ppb
[>	Tb	159	2056551.247	23.997	2056551.247			ppb
[	Tl	205	665.023	26.890	0.000	0.01941	14.72	ppb
[	Pb	206	2138.569	20.755	0.001	0.17384	8.96	ppb
[	Pb	207	3882.060	22.309	0.002	0.16794	5.73	ppb
[	Pb	208	6171.159	19.803	0.004	0.16864	7.15	ppb
[>	Bi	209	1430570.097	24.026	1430570.097			ppb
	Cr	53	164360.092	33.098	160689.416			ppb
	Pd	106	41.667	66.091	38.333			ppb
	Pd	108	11.667	98.974	8.333			ppb
	C	12	2170172.209	32.377	1782532.966			ppb
	Kr	83	72.667	10.420	20.000			ppb
	Se	77	23823.951	27.092	23709.062			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	84582.201		ppb
	Be	9	8.000	0.022474	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	19031426.462	9117.481801	ppb
	Mg	25	2959638.744	9151.188598	ppb
	Mg	26	3680953.561	9235.072541	ppb
	Al	27	101118.678	28.120231	ppb
	K	39	37866527.226	6782.946483	ppb
	Ca	44	4347363.646	19821.897718	ppb
>	Sc	45	374000.432		ppb
	Ti	47	1840.169	2.830931	ppb
	V	51	-8076.408	-1.056590	ppb
	Cr	52	34619.823	3.762647	ppb
	Mn	55	2872504.491	270.878747	ppb
	Fe	54	104280.905	101.918363	ppb
	Fe	56	3219883.628	174.943402	ppb
	Fe	57	37449.994	150.817411	ppb
	Co	59	6636.201	0.604871	ppb
	Ni	60	6582.166	2.782252	ppb
	Cu	63	8066.586	1.342061	ppb
	Cu	65	3203.846	1.144990	ppb
	Zn	66	11319.737	9.152612	ppb
	As	75	-2023.657	-1.460769	ppb
	Se	82	172.668	1.086604	ppb
	Mo	96	3258.531	1.186276	ppb
	Ag	107	2923.761	0.320411	ppb
	Ag	109	2963.772	0.334885	ppb
	Cd	111	97.275	0.054597	ppb
	In	113	40697.647	0.437801	ppb
>	In	115	916597.039		ppb
	Sn	118	2315.268	0.405589	ppb
	Sb	121	10505.515	1.828573	ppb
	Ba	135	70469.425	40.679711	ppb
	Ba	137	124164.080	41.036167	ppb
>	Tb	159	1487417.048		ppb
	Tl	205	500.013	0.020186	ppb
	Pb	206	1645.135	0.184975	ppb
	Pb	207	2895.213	0.173226	ppb
	Pb	208	4770.698	0.180402	ppb
>	Bi	209	1034331.710		ppb
	Cr	53	102219.788		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	1364302.463		ppb
	Kr	83	78.000		ppb
	Se	77	16395.429		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	164884.225		ppb
	Be	9	14.000	0.019233	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	34596948.539	8502.384360	ppb
	Mg	25	5535800.864	8780.492490	ppb
	Mg	26	6915087.481	8899.733807	ppb
	Al	27	181609.256	25.853505	ppb
	K	39	67653548.652	6213.246264	ppb
	Ca	44	7441909.055	17395.454267	ppb
>	Sc	45	657337.125		ppb

	Ti	47	3140.493	2.746201	ppb
	V	51	-14327.942	-1.065081	ppb
	Cr	52	55045.082	3.338072	ppb
	Mn	55	4750770.429	254.871489	ppb
	Fe	54	147469.402	67.327396	ppb
	Fe	56	4115204.250	86.088916	ppb
	Fe	57	63204.109	144.360677	ppb
	Co	59	11108.166	0.575698	ppb
	Ni	60	10595.610	2.546903	ppb
	Cu	63	13525.808	1.279182	ppb
	Cu	65	5081.291	1.030059	ppb
	Zn	66	18720.840	8.601573	ppb
	As	75	769.562	0.339187	ppb
	Se	82	212.669	0.675014	ppb
	Mo	96	4785.145	1.148395	ppb
	Ag	107	4594.389	0.332320	ppb
	Ag	109	4304.259	0.320716	ppb
	Cd	111	160.474	0.059554	ppb
	In	113	63722.382	1.215634	ppb
>	In	115	1389343.950		ppb
	Sn	118	4561.040	0.534238	ppb
	Sb	121	24159.148	2.739725	ppb
	Ba	135	106043.294	39.309715	ppb
	Ba	137	184270.277	39.107868	ppb
>	Tb	159	2316266.897		ppb
	Tl	205	640.020	0.016250	ppb
	Pb	206	2505.314	0.180495	ppb
	Pb	207	4515.516	0.173744	ppb
	Pb	208	7021.457	0.169211	ppb
>	Bi	209	1609018.308		ppb
	Cr	53	187472.987		ppb
	Pd	106	60.000		ppb
	Pd	108	5.000		ppb
	C	12	2491673.810		ppb
	Kr	83	64.000		ppb
	Se	77	27015.777		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	178682.231		ppb
	Be	9	16.000	0.020786	ppb
	Na	23	68188500901.275040		ppb
	Mg	24	36262425.327	8223.510967	ppb
	Mg	25	5701933.512	8345.607841	ppb
	Mg	26	6916904.283	8214.623768	ppb
	Al	27	186839.291	24.509369	ppb
	K	39	69169738.296	5859.671248	ppb
	Ca	44	7749356.481	16711.882630	ppb
>	Sc	45	669965.249		ppb
	Ti	47	3155.498	2.706010	ppb
	V	51	-13117.378	-0.971994	ppb
	Cr	52	56102.937	3.338100	ppb
	Mn	55	4783180.238	251.768448	ppb
	Fe	54	150301.096	67.326121	ppb
	Fe	56	4197408.393	86.266595	ppb
	Fe	57	62258.203	139.132412	ppb
	Co	59	11130.191	0.565838	ppb
	Ni	60	10879.248	2.565907	ppb
	Cu	63	13789.501	1.279546	ppb
	Cu	65	5528.194	1.101707	ppb
	Zn	66	19255.187	8.681989	ppb
	As	75	-1100.411	-0.430184	ppb
	Se	82	230.669	0.736894	ppb

⌈	Mo	96	4801.152	1.068693	ppb
|	Ag	107	4400.968	0.295338	ppb
|	Ag	109	4367.620	0.302187	ppb
|	Cd	111	55.194	0.018010	ppb
|	In	113	64155.136	-0.356273	ppb
|>	In	115	1495250.465		ppb
⌊	Sn	118	5771.665	0.632327	ppb
⌈	Sb	121	21608.321	2.388704	ppb
|	Ba	135	107630.112	39.059710	ppb
|	Ba	137	186496.990	38.748855	ppb
⌊>	Tb	159	2365969.797		ppb
⌈	Tl	205	855.037	0.021808	ppb
|	Pb	206	2265.257	0.156037	ppb
|	Pb	207	4235.451	0.156839	ppb
|	Pb	208	6721.322	0.156322	ppb
⌊>	Bi	209	1648360.272		ppb
	Cr	53	203387.502		ppb
	Pd	106	55.000		ppb
	Pd	108	25.000		ppb
	C	12	2654540.353		ppb
	Kr	83	76.000		ppb
	Se	77	28060.648		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		117.708			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		111.969			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		90.686			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		94.378			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		86.263			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910167-03

Sample Date/Time: Monday, November 09, 2009 18:24:56
Sample Type: Sample
Sample Description: MW-3-03
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910167-03.847

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
[>	Li	6	124570.242	23.730	124570.242			ppb
|	Be	9	13.333	56.789	0.000	0.03208	108.32	ppb
|	Na	23	S	S	19999999[68188500901.27505			ppb
|	Mg	24	28315720.727	22.184	227.982	9238.27475	2.52	ppb
|	Mg	25	4331065.527	24.290	34.731	9083.13721	1.68	ppb
|	Mg	26	5430511.605	24.999	43.488	9228.76901	2.39	ppb
|	Al	27	144168.897	23.900	1.128	27.19062	0.99	ppb
|	K	39	20234464.311	23.092	159.995	2438.47565	1.86	ppb
[	Ca	44	7970291.784	24.208	63.699	24674.93921	1.98	ppb
[>	Sc	45	574389.411	17.956	574389.411			ppb
|	Ti	47	1713.487	26.814	0.003	1.65918	10.80	ppb
|	V	51	-20744.918	23.830	-0.039	-1.65408	6.39	ppb
|	Cr	52	60524.604	25.701	0.090	4.32727	10.54	ppb
|	Mn	55	8917373.797	19.899	15.473	546.51239	2.23	ppb
|	Fe	54	63506.851	7.912	-0.006	-3.87094	232.56	ppb
|	Fe	56	2632051.973	3.912	0.688	26.01036	109.78	ppb
|	Fe	57	28120.284	17.484	0.042	67.88304	1.10	ppb
|	Co	59	2354.955	24.309	0.004	0.13267	7.84	ppb
|	Ni	60	12911.910	21.060	0.022	3.54308	3.59	ppb
|	Cu	63	7777.587	24.318	0.013	0.82572	7.90	ppb
|	Cu	65	3152.738	23.947	0.005	0.71598	7.23	ppb
|	Zn	66	17567.016	21.827	0.030	9.20209	5.13	ppb
|	As	75	-174.833	662.257	-0.000	-0.09647	560.15	ppb
[	Se	82	305.782	8.854	0.000	1.31691	12.52	ppb
[	Mo	96	1299.419	17.197	0.001	0.28700	3.01	ppb
|	Ag	107	355.562	14.951	0.000	0.02173	4.04	ppb
|	Ag	109	343.339	19.418	0.000	0.02207	12.01	ppb
|	Cd	111	249.260	17.894	0.000	0.09225	7.22	ppb
|	In	113	59934.491	17.783	-0.001	-0.54504	73.24	ppb
|>	In	115	1406475.371	16.589	1406475.371			ppb
[	Sn	118	3797.451	36.273	0.002	0.42463	23.76	ppb
[	Sb	121	16891.861	31.466	0.007	2.02287	18.89	ppb
|	Ba	135	117656.912	16.800	0.055	47.34339	1.40	ppb
|	Ba	137	203461.150	16.125	0.095	46.90838	0.63	ppb
[>	Tb	159	2130952.053	15.578	2130952.053			ppb
[	Tl	205	606.685	17.950	0.000	0.01563	3.50	ppb
|	Pb	206	2270.262	15.434	0.001	0.16542	8.10	ppb
|	Pb	207	4088.763	15.881	0.002	0.15906	8.59	ppb
|	Pb	208	6274.504	12.957	0.003	0.15267	3.79	ppb
[>	Bi	209	1574160.796	15.213	1574160.796			ppb
	Cr	53	200802.191	31.402	197131.514			ppb
	Pd	106	60.000	33.333	56.667			ppb
	Pd	108	21.667	81.044	18.333			ppb
	C	12	2272177.720	27.665	1884538.477			ppb
	Kr	83	69.334	30.844	16.667			ppb
	Se	77	28063.484	27.230	27948.594			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	90594.876		ppb
	Be	9	22.000	0.072138	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	21062637.873	9420.889141	ppb
	Mg	25	3116710.208	8997.264047	ppb
	Mg	26	3863135.823	9048.883951	ppb
	Al	27	104437.527	27.091103	ppb
	K	39	14839582.975	2456.242003	ppb
	Ca	44	5742413.846	24465.474809	ppb
>	Sc	45	455635.430		ppb
	Ti	47	1190.071	1.459688	ppb
	V	51	-15037.403	-1.535443	ppb
	Cr	52	42974.141	3.846856	ppb
	Mn	55	6877726.824	532.763390	ppb
	Fe	54	58455.354	6.344945	ppb
	Fe	56	2525819.099	58.969504	ppb
	Fe	57	22445.161	68.325159	ppb
	Co	59	1694.143	0.120716	ppb
	Ni	60	9791.458	3.400735	ppb
	Cu	63	5594.898	0.753100	ppb
	Cu	65	2290.262	0.658516	ppb
	Zn	66	13145.301	8.715882	ppb
	As	75	-776.985	-0.447355	ppb
	Se	82	274.670	1.507139	ppb
	Mo	96	1042.054	0.284269	ppb
	Ag	107	296.671	0.022464	ppb
	Ag	109	276.670	0.021939	ppb
	Cd	111	205.196	0.093781	ppb
	In	113	47633.176	-0.920854	ppb
>	In	115	1138375.517		ppb
	Sn	118	2295.263	0.318964	ppb
	Sb	121	10755.781	1.582511	ppb
	Ba	135	94871.909	46.606821	ppb
	Ba	137	165591.773	46.573865	ppb
>	Tb	159	1747892.866		ppb
	Tl	205	485.012	0.015084	ppb
	Pb	206	1885.178	0.165838	ppb
	Pb	207	3380.289	0.158694	ppb
	Pb	208	5335.849	0.157198	ppb
>	Bi	209	1302369.296		ppb
	Cr	53	129118.229		ppb
	Pd	106	40.000		ppb
	Pd	108	5.000		ppb
	C	12	1548579.088		ppb
	Kr	83	58.000		ppb
	Se	77	19336.677		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	138712.232		ppb
	Be	9	8.000	0.010110	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	31896699.444	9317.806388	ppb
	Mg	25	4911310.231	9259.775667	ppb
	Mg	26	6193022.402	9474.301216	ppb
	Al	27	162230.346	27.494673	ppb
	K	39	22867909.327	2472.352656	ppb
	Ca	44	9067056.932	25232.583136	ppb
>	Sc	45	625983.118		ppb

	Ti	47	1900.181	1.711336	ppb
	V	51	-23683.504	-1.738214	ppb
	Cr	52	65991.025	4.380913	ppb
	Mn	55	9768323.359	550.776238	ppb
	Fe	54	63561.362	-10.642406	ppb
	Fe	56	2638928.579	8.739001	ppb
	Fe	57	30827.443	68.301187	ppb
	Co	59	2670.356	0.139621	ppb
	Ni	60	14170.032	3.583049	ppb
	Cu	63	8933.989	0.879439	ppb
	Cu	65	3473.937	0.730396	ppb
	Zn	66	19973.260	9.658491	ppb
	As	75	1160.004	0.525803	ppb
	Se	82	318.672	1.227810	ppb
	Mo	96	1444.104	0.296665	ppb
	Ag	107	370.007	0.020758	ppb
	Ag	109	410.008	0.024781	ppb
	Cd	111	248.201	0.084959	ppb
	In	113	65765.547	-0.126009	ppb
>	In	115	1517453.201		ppb
	Sn	118	4095.839	0.435029	ppb
	Sb	121	20070.120	2.267786	ppb
	Ba	135	127900.732	47.530952	ppb
	Ba	137	221487.980	47.124241	ppb
>	Tb	159	2310603.394		ppb
	Tl	205	695.024	0.016178	ppb
	Pb	206	2355.277	0.151813	ppb
	Pb	207	4230.453	0.145575	ppb
	Pb	208	6756.367	0.146147	ppb
>	Bi	209	1754158.242		ppb
	Cr	53	225596.301		ppb
	Pd	106	80.000		ppb
	Pd	108	40.000		ppb
	C	12	2584612.395		ppb
	Kr	83	56.000		ppb
	Se	77	31296.898		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144403.618		ppb
	Be	9	10.000	0.013988	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	31987824.865	8976.128723	ppb
	Mg	25	4965176.143	8992.371918	ppb
	Mg	26	6235376.589	9163.121857	ppb
	Al	27	165838.817	26.986100	ppb
	K	39	22995900.629	2386.832287	ppb
	Ca	44	9101404.574	24326.759684	ppb
>	Sc	45	641549.685		ppb
	Ti	47	2050.210	1.806501	ppb
	V	51	-23513.847	-1.688582	ppb
	Cr	52	72608.647	4.754038	ppb
	Mn	55	10106071.209	555.997528	ppb
	Fe	54	68503.838	-7.315348	ppb
	Fe	56	2731408.240	10.322561	ppb
	Fe	57	31088.249	67.022767	ppb
	Co	59	2700.365	0.137663	ppb
	Ni	60	14774.239	3.645455	ppb
	Cu	63	8803.874	0.844623	ppb
	Cu	65	3694.015	0.759034	ppb
	Zn	66	19582.488	9.231895	ppb
	As	75	-907.518	-0.367852	ppb
	Se	82	324.005	1.215778	ppb

⌈	Mo	96	1412.100	0.280073	ppb
|	Ag	107	400.008	0.021977	ppb
|	Ag	109	343.339	0.019484	ppb
|	Cd	111	294.382	0.098020	ppb
|	In	113	66404.750	-0.588268	ppb
|>	In	115	1563597.395		ppb
⌊	Sn	118	5001.250	0.519907	ppb
⌈	Sb	121	19849.681	2.218314	ppb
|	Ba	135	130198.095	47.892395	ppb
|	Ba	137	223303.697	47.027023	ppb
⌊>	Tb	159	2334359.900		ppb
⌈	Tl	205	640.020	0.015625	ppb
|	Pb	206	2570.330	0.178596	ppb
|	Pb	207	4655.548	0.172898	ppb
|	Pb	208	6731.296	0.154652	ppb
⌊>	Bi	209	1665954.850		ppb
	Cr	53	247692.042		ppb
	Pd	106	60.000		ppb
	Pd	108	20.000		ppb
	C	12	2683341.677		ppb
	Kr	83	94.000		ppb
	Se	77	33556.876		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.742			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		113.408			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		100.663			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		97.792			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		94.921			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910167-04

Sample Date/Time: Monday, November 09, 2009 18:32:09
Sample Type: Sample
Sample Description: MW-4-03
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910167-04.848

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	126769.182	35.619	126769.182			ppb
	Be	9	51.333	44.819	0.000	0.12575	26.92	ppb
	Na	23	S	S	19999999[illegible]68188500901.27505			ppb
	Mg	24	23691638.023	29.625	190.517	7720.10558	9.08	ppb
	Mg	25	3658494.568	31.198	29.260	7652.33607	6.56	ppb
	Mg	26	4459566.590	31.025	35.696	7575.06982	7.42	ppb
	Al	27	4113765.594	30.851	32.933	793.53412	8.33	ppb
	K	39	59885208.697	30.438	477.672	7280.15618	8.24	ppb
	Ca	44	10156582.504	30.285	81.258	31476.81128	8.03	ppb
>	Sc	45	570017.579	29.747	570017.579			ppb
	Ti	47	21562.766	27.982	0.038	22.48207	2.61	ppb
	V	51	508.069	194.324	-0.002	-0.09127	118.84	ppb
	Cr	52	95223.959	29.181	0.153	7.35875	2.70	ppb
	Mn	55	4745214.779	28.918	8.332	294.30360	2.44	ppb
	Fe	54	621430.465	29.267	0.975	618.77346	5.81	ppb
	Fe	56	12432888.999	25.379	18.085	684.12974	8.23	ppb
	Fe	57	258427.087	25.887	0.451	731.79079	7.26	ppb
	Co	59	19340.831	25.565	0.034	1.17678	6.39	ppb
	Ni	60	9357.889	24.811	0.017	2.62913	7.48	ppb
	Cu	63	1639910.960	26.068	2.904	184.15456	5.36	ppb
	Cu	65	745626.111	27.475	1.316	180.82568	3.90	ppb
	Zn	66	72566.008	25.669	0.128	39.49196	5.43	ppb
	As	75	-1167.764	104.952	-0.002	-0.44680	114.88	ppb
	Se	82	218.447	18.159	0.000	0.88886	21.11	ppb
	Mo	96	32987.222	24.895	0.024	8.06253	2.42	ppb
	Ag	107	657.800	20.798	0.000	0.04435	3.00	ppb
	Ag	109	636.688	27.251	0.000	0.04421	7.52	ppb
	Cd	111	340.500	20.935	0.000	0.12917	9.59	ppb
	In	113	60458.254	22.370	0.000	0.01216	2571.88	ppb
>	In	115	1388491.651	23.080	1388491.651			ppb
	Sn	118	12670.142	29.152	0.009	1.51116	7.93	ppb
	Sb	121	16823.708	36.224	0.007	1.94854	16.83	ppb
	Ba	135	42340.704	20.883	0.019	16.68688	3.83	ppb
	Ba	137	74335.098	21.599	0.034	16.74693	2.24	ppb
>	Tb	159	2187139.035	23.066	2187139.035			ppb
	Tl	205	846.703	18.864	0.000	0.02287	4.42	ppb
	Pb	206	29180.410	20.869	0.018	2.46197	2.27	ppb
	Pb	207	53223.413	20.562	0.034	2.39641	1.46	ppb
	Pb	208	84513.093	21.858	0.053	2.39500	0.83	ppb
>	Bi	209	1570945.040	21.773	1570945.040			ppb
	Cr	53	213790.067	33.400	210119.391			ppb
	Pd	106	76.667	47.180	73.334			ppb
	Pd	108	65.000	35.251	61.667			ppb
	C	12	1818557.100	30.245	1430917.857			ppb
	Kr	83	92.667	27.329	40.000			ppb
	Se	77	31122.953	31.860	31008.064			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	75674.631		ppb
	Be	9	28.000	0.114736	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	15587154.557	8346.385486	ppb
	Mg	25	2342890.645	8096.898444	ppb
	Mg	26	2862143.796	8025.979763	ppb
	Al	27	2648769.692	842.705170	ppb
	K	39	38837683.788	7781.687456	ppb
	Ca	44	6605822.445	33726.173506	ppb
>	Sc	45	374457.053		ppb
	Ti	47	14595.644	23.062638	ppb
	V	51	1640.579	0.033704	ppb
	Cr	52	63170.900	7.424741	ppb
	Mn	55	3161932.665	297.848876	ppb
	Fe	54	413948.953	626.756692	ppb
	Fe	56	8811554.879	739.426886	ppb
	Fe	57	182215.129	777.512526	ppb
	Co	59	13657.320	1.251364	ppb
	Ni	60	6695.574	2.826989	ppb
	Cu	63	1147170.136	194.215314	ppb
	Cu	65	509468.880	186.943151	ppb
	Zn	66	51060.024	41.869967	ppb
	As	75	99.651	0.091792	ppb
	Se	82	174.668	1.100840	ppb
	Mo	96	23509.603	7.851298	ppb
	Ag	107	500.013	0.045842	ppb
	Ag	109	446.677	0.042355	ppb
	Cd	111	268.823	0.137879	ppb
	In	113	44845.330	0.217977	ppb
>	In	115	1019513.664		ppb
	Sn	118	8518.627	1.396398	ppb
	Sb	121	9824.824	1.573172	ppb
	Ba	135	32169.661	17.196347	ppb
	Ba	137	55797.233	17.076618	ppb
>	Tb	159	1605610.575		ppb
	Tl	205	665.022	0.023940	ppb
	Pb	206	22244.714	2.501217	ppb
	Pb	207	40621.584	2.436859	ppb
	Pb	208	63307.582	2.395040	ppb
>	Bi	209	1176844.379		ppb
	Cr	53	132321.698		ppb
	Pd	106	35.000		ppb
	Pd	108	40.000		ppb
	C	12	1189865.797		ppb
	Kr	83	64.000		ppb
	Se	77	19710.072		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143323.656		ppb
	Be	9	74.000	0.163747	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	27768258.328	7850.768915	ppb
	Mg	25	4248106.931	7751.651459	ppb
	Mg	26	5236930.568	7753.812846	ppb
	Al	27	4878918.143	819.553754	ppb
	K	39	70376875.772	7443.572012	ppb
	Ca	44	11858823.674	31963.319456	ppb
>	Sc	45	676076.694		ppb

	Ti	47	25016.252	21.888783	ppb
	V	51	-171.416	-0.160832	ppb
	Cr	52	109989.577	7.135561	ppb
	Mn	55	5483058.447	286.053865	ppb
	Fe	54	697034.736	579.478427	ppb
	Fe	56	13896732.006	626.827630	ppb
	Fe	57	285611.264	673.477459	ppb
	Co	59	21711.544	1.100919	ppb
	Ni	60	10415.421	2.433501	ppb
	Cu	63	1860647.406	174.469425	ppb
	Cu	65	851842.964	173.121699	ppb
	Zn	66	83053.468	37.703227	ppb
	As	75	-2346.740	-0.930284	ppb
	Se	82	252.003	0.821635	ppb
	Mo	96	37456.017	8.236160	ppb
	Ag	107	730.027	0.043904	ppb
	Ag	109	676.690	0.042231	ppb
	Cd	111	341.293	0.114991	ppb
	In	113	67970.215	0.166112	ppb
>	In	115	1548672.361		ppb
	Sn	118	13899.653	1.501710	ppb
	Sb	121	20956.937	2.179119	ppb
	Ba	135	46656.589	15.970378	ppb
	Ba	137	83368.069	16.338489	ppb
>	Tb	159	2507285.517		ppb
	Tl	205	910.041	0.021931	ppb
	Pb	206	31644.991	2.397980	ppb
	Pb	207	58711.572	2.374080	ppb
	Pb	208	93119.009	2.375068	ppb
>	Bi	209	1745409.282		ppb
	Cr	53	243523.515		ppb
	Pd	106	100.001		ppb
	Pd	108	70.000		ppb
	C	12	2054886.134		ppb
	Kr	83	102.001		ppb
	Se	77	36032.801		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	161309.260		ppb
	Be	9	52.000	0.098776	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	27719501.184	6963.162342	ppb
	Mg	25	4384486.128	7108.458311	ppb
	Mg	26	5279625.405	6945.416849	ppb
	Al	27	4813608.947	718.343422	ppb
	K	39	70441066.532	6615.209074	ppb
	Ca	44	12005101.394	28740.940892	ppb
>	Sc	45	659518.990		ppb
	Ti	47	25076.402	22.494802	ppb
	V	51	55.043	-0.146687	ppb
	Cr	52	112511.400	7.515948	ppb
	Mn	55	5590653.226	299.008072	ppb
	Fe	54	753307.707	650.085268	ppb
	Fe	56	14590380.113	686.134713	ppb
	Fe	57	307454.867	744.382392	ppb
	Co	59	22653.630	1.178059	ppb
	Ni	60	10962.672	2.626908	ppb
	Cu	63	1911915.338	183.778953	ppb
	Cu	65	875566.489	182.412198	ppb
	Zn	66	83584.532	38.902671	ppb
	As	75	-1256.204	-0.501902	ppb
	Se	82	228.669	0.744106	ppb

⌈	Mo	96	37996.048	8.100139	ppb
|	Ag	107	743.361	0.043293	ppb
|	Ag	109	786.698	0.048047	ppb
|	Cd	111	411.382	0.134640	ppb
|	In	113	68559.215	-0.347619	ppb
|>	In	115	1597288.929		ppb
⌊	Sn	118	15592.146	1.635371	ppb
⌈	Sb	121	19689.364	2.093319	ppb
|	Ba	135	48195.863	16.893913	ppb
|	Ba	137	83839.990	16.825669	ppb
⌊>	Tb	159	2448521.013		ppb
⌈	Tl	205	965.047	0.022739	ppb
|	Pb	206	33651.526	2.486717	ppb
|	Pb	207	60337.085	2.378306	ppb
|	Pb	208	97112.687	2.414895	ppb
⌊>	Bi	209	1790581.459		ppb
	Cr	53	265524.988		ppb
	Pd	106	95.000		ppb
	Pd	108	85.000		ppb
	C	12	2210919.371		ppb
	Kr	83	112.001		ppb
	Se	77	37625.986		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		104.555			
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		112.545			
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115		99.376			
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159		100.371			
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		94.727			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: IBL

Sample Date/Time: Monday, November 09, 2009 18:38:02
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\IBL.849

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	132377.430	30.020	132377.430			ppb
	Be	9	2.000	100.000	-0.000	-0.00491	86.87	ppb
	Na	23	17428.851	2.989	0.075	2.55790	62.76	ppb
	Mg	24	3335.894	11.166	0.024	0.97773	52.24	ppb
	Mg	25	548.015	16.370	0.004	1.07998	58.80	ppb
	Mg	26	790.365	20.877	0.005	1.14704	72.79	ppb
	Al	27	2930.431	7.608	-0.005	-0.12027	135.13	ppb
	K	39	342936.612	0.593	0.150	2.29280	665.37	ppb
	Ca	44	29555.698	5.420	0.017	6.46043	618.18	ppb
>	Sc	45	588151.270	24.189	588151.270			ppb
	Ti	47	91.667	20.651	0.000	0.00725	596.48	ppb
	V	51	869.417	106.237	-0.002	-0.08130	84.24	ppb
	Cr	52	8432.888	1.299	0.001	0.03099	624.75	ppb
	Mn	55	17061.216	2.725	0.019	0.67129	49.85	ppb
	Fe	54	67478.637	10.742	-0.001	-0.33526	3580.90	ppb
	Fe	56	2273234.188	4.137	0.034	1.29070	2800.87	ppb
	Fe	57	3925.771	3.113	-0.000	-0.28421	975.55	ppb
	Co	59	98.000	14.286	-0.000	-0.00160	116.10	ppb
	Ni	60	100.001	8.819	0.000	0.01233	51.32	ppb
	Cu	63	491.123	15.393	0.000	0.03157	80.23	ppb
	Cu	65	214.447	15.647	0.000	0.02166	109.32	ppb
	Zn	66	273.337	12.195	-0.000	-0.03410	74.68	ppb
	As	75	-35.411	180.627	-0.000	-0.00391	1040.98	ppb
	Se	82	47.778	21.811	-0.000	-0.04512	41.36	ppb
	Mo	96	161.335	3.120	0.000	0.00856	99.33	ppb
	Ag	107	22.222	34.641	-0.000	-0.00248	30.30	ppb
	Ag	109	13.333	50.000	-0.000	-0.00256	18.10	ppb
	Cd	111	3.577	130.937	-0.000	-0.00004	4730.87	ppb
	In	113	66409.628	21.148	-0.000	-0.17191	285.43	ppb
>	In	115	1532279.420	19.785	1532279.420			ppb
	Sn	118	216.669	22.414	0.000	0.00044	790.03	ppb
	Sb	121	390.008	13.012	-0.000	-0.03639	16.33	ppb
	Ba	135	33.333	3.464	0.000	0.00050	726.81	ppb
	Ba	137	66.667	12.124	0.000	0.00319	175.09	ppb
>	Tb	159	2328877.630	23.000	2328877.630			ppb
	Tl	205	60.000	30.046	-0.000	-0.00042	192.75	ppb
	Pb	206	600.020	44.442	0.000	0.01424	83.44	ppb
	Pb	207	1190.040	45.544	0.000	0.01802	73.20	ppb
	Pb	208	1848.439	38.401	0.000	0.01687	55.12	ppb
>	Bi	209	1836884.341	21.316	1836884.341			ppb
	Cr	53	12644.011	6.535	8973.335			ppb
	Pd	106	5.000	100.000	1.667			ppb
	Pd	108	3.333	86.603	-0.000			ppb
	C	12	522240.032	17.087	134600.789			ppb
	Kr	83	65.334	21.718	12.667			ppb
	Se	77	303.338	12.454	188.448			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86534.801		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	16904.276	4.408008	ppb
	Mg	24	3642.663	1.560708	ppb
	Mg	25	641.021	1.807914	ppb
	Mg	26	977.048	2.109012	ppb
	Al	27	2700.365	0.065835	ppb
	K	39	341468.158	19.897641	ppb
	Ca	44	31405.237	52.566662	ppb
>	Sc	45	424247.360		ppb
	Ti	47	105.001	0.055148	ppb
	V	51	1147.847	-0.036627	ppb
	Cr	52	8329.468	0.254522	ppb
	Mn	55	17590.458	1.057242	ppb
	Fe	54	59144.387	13.402573	ppb
	Fe	56	2173097.596	43.033677	ppb
	Fe	57	3785.716	2.915126	ppb
	Co	59	98.000	0.000340	ppb
	Ni	60	93.334	0.019281	ppb
	Cu	63	576.683	0.060731	ppb
	Cu	65	250.003	0.048724	ppb
	Zn	66	240.003	-0.006856	ppb
	As	75	-108.054	-0.050644	ppb
	Se	82	36.667	-0.031397	ppb
	Mo	96	162.001	0.018286	ppb
	Ag	107	26.667	-0.001750	ppb
	Ag	109	13.333	-0.002315	ppb
	Cd	111	7.640	0.001914	ppb
	In	113	50210.740	-0.590038	ppb
>	In	115	1182378.396		ppb
	Sn	118	175.002	0.001435	ppb
	Sb	121	335.006	-0.029644	ppb
	Ba	135	34.000	0.004703	ppb
	Ba	137	74.000	0.009515	ppb
>	Tb	159	1712416.685		ppb
	Tl	205	75.000	0.000456	ppb
	Pb	206	300.005	0.001145	ppb
	Pb	207	605.009	0.004635	ppb
	Pb	208	1075.034	0.007661	ppb
>	Bi	209	1385073.004		ppb
	Cr	53	13509.119		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	447852.965		ppb
	Kr	83	68.000		ppb
	Se	77	342.673		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	157055.715		ppb
	Be	9	4.000	-0.000678	ppb
	Na	23	17436.188	1.532927	ppb
	Mg	24	2921.427	0.608705	ppb
	Mg	25	462.011	0.639925	ppb
	Mg	26	664.022	0.610178	ppb
	Al	27	2945.434	-0.234189	ppb
	K	39	342082.633	-7.047131	ppb
	Ca	44	28640.957	-17.375729	ppb
>	Sc	45	679705.738		ppb

|	Ti	47	100.001	-0.004479	ppb
|	V	51	-161.414	-0.160158	ppb
|	Cr	52	8547.652	-0.084974	ppb
|	Mn	55	16718.965	0.461531	ppb
|	Fe	54	70975.989	-8.811856	ppb
|	Fe	56	2359711.356	-19.404833	ppb
|	Fe	57	4010.804	-1.986145	ppb
|	Co	59	84.000	-0.003367	ppb
|	Ni	60	96.667	0.006915	ppb
|	Cu	63	433.343	0.014968	ppb
|	Cu	65	183.335	0.004808	ppb
|	Zn	66	273.337	-0.057301	ppb
|	As	75	-10.636	0.014732	ppb
L	Se	82	57.333	-0.037586	ppb
⌈	Mo	96	156.001	0.002526	ppb
|	Ag	107	13.333	-0.003254	ppb
|	Ag	109	6.667	-0.003089	ppb
|	Cd	111	-1.545	-0.001978	ppb
|	In	113	73841.626	-0.293998	ppb
|>	In	115	1716321.892		ppb
L	Sn	118	205.002	-0.003420	ppb
⌈	Sb	121	435.009	-0.038669	ppb
|	Ba	135	32.000	-0.002097	ppb
|	Ba	137	58.000	-0.001095	ppb
L>	Tb	159	2680588.700		ppb
⌈	Tl	205	65.000	-0.000574	ppb
|	Pb	206	690.024	0.017242	ppb
|	Pb	207	1290.042	0.018413	ppb
|	Pb	208	2000.116	0.016685	ppb
L>	Bi	209	2048130.042		ppb
	Cr	53	12559.883		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	621185.470		ppb
	Kr	83	50.000		ppb
	Se	77	300.005		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	153541.773		ppb
|	Be	9	2.000	-0.004846	ppb
|	Na	23	17946.089	1.732777	ppb
|	Mg	24	3443.593	0.763762	ppb
|	Mg	25	541.015	0.792101	ppb
|	Mg	26	730.027	0.721939	ppb
|	Al	27	3145.495	-0.192451	ppb
|	K	39	345259.046	-5.972108	ppb
L	Ca	44	28620.899	-15.809651	ppb
⌈>	Sc	45	660500.712		ppb
|	Ti	47	70.000	-0.028919	ppb
|	V	51	1621.819	-0.047127	ppb
|	Cr	52	8421.545	-0.076569	ppb
|	Mn	55	16874.225	0.495096	ppb
|	Fe	54	72315.535	-5.596506	ppb
|	Fe	56	2286893.611	-19.756731	ppb
|	Fe	57	3980.792	-1.781608	ppb
|	Co	59	112.001	-0.001780	ppb
|	Ni	60	110.001	0.010782	ppb
|	Cu	63	463.344	0.019023	ppb
|	Cu	65	210.002	0.011435	ppb
|	Zn	66	306.671	-0.038131	ppb
|	As	75	12.457	0.024169	ppb
L	Se	82	49.333	-0.066365	ppb

⌈	Mo	96	166.001	0.004871	ppb
|	Ag	107	26.667	-0.002447	ppb
|	Ag	109	20.000	-0.002263	ppb
|	Cd	111	4.635	-0.000059	ppb
|	In	113	75176.517	0.368301	ppb
|>	In	115	1698137.973		ppb
⌊	Sn	118	270.004	0.003303	ppb
⌈	Sb	121	400.008	-0.040848	ppb
|	Ba	135	34.000	-0.001091	ppb
|	Ba	137	68.000	0.001158	ppb
⌊>	Tb	159	2593627.504		ppb
⌈	Tl	205	40.000	-0.001147	ppb
|	Pb	206	810.033	0.024335	ppb
|	Pb	207	1675.070	0.031006	ppb
|	Pb	208	2470.166	0.026252	ppb
⌊>	Bi	209	2077449.976		ppb
	Cr	53	11863.032		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	497681.661		ppb
	Kr	83	78.000		ppb
	Se	77	267.337		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		109.181			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		116.125			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		109.667			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		106.875			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		110.763			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 18:40:01
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.850

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	138894.293	22.890	138894.293			ppb
|	Be	9	53957.519	21.231	0.390	130.61401	4.24	ppb
|	Na	23	6119934.823	25.375	43.884	1496.19413	6.58	ppb
|	Mg	24	5199080.747	23.401	37.443	1517.27048	4.96	ppb
|	Mg	25	792802.596	18.702	5.753	1504.56310	5.56	ppb
|	Mg	26	956319.526	18.346	6.941	1473.01559	5.41	ppb
|	Al	27	7812595.857	21.461	56.380	1358.50854	2.67	ppb
|	K	39	12196072.586	20.556	85.567	1304.12424	3.88	ppb
⌊	Ca	44	470911.763	19.824	3.183	1232.81617	4.16	ppb
⌈>	Sc	45	599262.985	24.018	599262.985			ppb
|	Ti	47	118037.688	18.204	0.199	118.23616	6.98	ppb
|	V	51	1705052.464	21.767	2.854	119.79573	2.82	ppb
|	Cr	52	1472797.408	21.811	2.454	118.04153	3.16	ppb
|	Mn	55	2110449.029	20.315	3.536	124.88462	4.65	ppb
|	Fe	54	1216771.706	17.605	1.937	1230.10665	8.17	ppb
|	Fe	56	20946600.169	20.224	31.226	1181.24060	5.15	ppb
|	Fe	57	440205.146	19.251	0.734	1190.74007	6.04	ppb
|	Co	59	2006279.264	19.751	3.375	116.51612	5.13	ppb
|	Ni	60	426626.400	19.653	0.718	114.15556	5.72	ppb
|	Cu	63	1028042.965	19.423	1.731	109.72643	5.69	ppb
|	Cu	65	497895.924	19.330	0.838	115.20005	5.81	ppb
|	Zn	66	225184.519	18.538	0.379	116.93620	6.60	ppb
|	As	75	242472.221	17.967	0.409	111.97711	7.30	ppb
⌊	Se	82	22668.802	16.596	0.038	114.03956	8.94	ppb
⌈	Mo	96	536512.002	19.144	0.341	116.37200	4.40	ppb
|	Ag	107	1843249.047	18.591	1.171	119.10918	3.78	ppb
|	Ag	109	1753760.867	16.354	1.117	116.89457	1.48	ppb
|	Cd	111	353112.463	17.193	0.225	118.77161	2.22	ppb
|	In	113	417783.966	17.633	0.222	117.99869	3.24	ppb
|>	In	115	1568038.727	15.221	1568038.727			ppb
⌊	Sn	118	1048396.535	17.557	0.667	113.31271	2.63	ppb
⌈	Sb	121	1024728.870	18.121	0.413	111.71316	2.31	ppb
|	Ba	135	338866.219	17.347	0.137	117.44524	1.19	ppb
|	Ba	137	590798.330	16.927	0.239	117.29139	0.24	ppb
⌊>	Tb	159	2476350.206	16.853	2476350.206			ppb
⌈	Tl	205	5017288.523	17.757	2.689	123.57302	1.44	ppb
|	Pb	206	1710760.690	15.778	0.919	122.98902	3.70	ppb
|	Pb	207	3171802.882	16.133	1.704	121.59847	3.96	ppb
|	Pb	208	5065783.450	18.021	2.714	122.18749	1.78	ppb
⌊>	Bi	209	1869422.862	19.009	1869422.862			ppb
	Cr	53	172826.798	19.467	169156.122			ppb
	Pd	106	31824.837	16.753	31821.504			ppb
	Pd	108	23601.682	16.924	23598.349			ppb
	C	12	478012.308	3.401	90373.065			ppb
	Kr	83	60.000	23.333	7.333			ppb
	Se	77	17755.798	16.079	17640.909			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	102193.521		ppb
|	Be	9	41017.951	134.444337	ppb
|	Na	23	4413029.020	1470.041897	ppb
|	Mg	24	3843632.144	1523.935456	ppb
|	Mg	25	623415.665	1595.302486	ppb
|	Mg	26	753834.268	1565.111644	ppb
|	Al	27	5891561.987	1388.442000	ppb
|	K	39	9317290.584	1349.316456	ppb
|	Ca	44	363515.219	1289.895876	ppb
L	Sc	45	433423.564		ppb
[>	Ti	47	93237.646	127.697048	ppb
|	V	51	1276616.704	123.479158	ppb
|	Cr	52	1101950.706	121.603282	ppb
|	Mn	55	1615402.451	131.238525	ppb
|	Fe	54	970278.721	1346.216306	ppb
|	Fe	56	16060690.807	1251.012051	ppb
|	Fe	57	342408.506	1269.487957	ppb
|	Co	59	1549385.519	123.390458	ppb
|	Ni	60	331122.832	121.440391	ppb
|	Cu	63	799184.395	116.883841	ppb
|	Cu	65	387619.618	122.870626	ppb
|	Zn	66	177124.891	125.846767	ppb
|	As	75	192169.234	121.275191	ppb
L	Se	82	18324.774	125.675045	ppb
[	Mo	96	417913.861	110.465215	ppb
|	Ag	107	1447577.636	113.921212	ppb
|	Ag	109	1423082.910	115.223870	ppb
|	Cd	111	283023.179	115.753301	ppb
|	In	113	332740.210	113.609910	ppb
\>	In	115	1292450.021		ppb
L	Sn	118	835910.692	109.900686	ppb
[	Sb	121	810739.590	109.533302	ppb
|	Ba	135	271362.595	116.446585	ppb
|	Ba	137	476714.290	117.117964	ppb
L>	Tb	159	2001330.837		ppb
[	Tl	205	3996832.719	125.525302	ppb
|	Pb	206	1402784.007	128.227247	ppb
|	Pb	207	2601358.256	126.835170	ppb
|	Pb	208	4036971.329	124.191104	ppb
L>	Bi	209	1463410.628		ppb
	Cr	53	133995.769		ppb
	Pd	106	25677.926		ppb
	Pd	108	18993.020		ppb
	C	12	462183.430		ppb
	Kr	83	54.000		ppb
	Se	77	14459.780		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	156476.745		ppb
|	Be	9	58047.991	124.258716	ppb
|	Na	23	6497512.831	1413.471474	ppb
|	Mg	24	5556969.393	1438.910827	ppb
|	Mg	25	855931.897	1430.454483	ppb
|	Mg	26	1051928.118	1426.334290	ppb
|	Al	27	8564605.153	1318.155849	ppb
|	K	39	13899738.310	1313.598043	ppb
|	Ca	44	516589.252	1190.828552	ppb
L	Sc	45	672742.730		ppb
[>					

	Ti	47	129766.540	114.493222	ppb
	V	51	1910701.480	119.061104	ppb
	Cr	52	1665088.397	118.363247	ppb
	Mn	55	2361440.423	123.577046	ppb
	Fe	54	1322143.625	1172.674065	ppb
	Fe	56	23185710.183	1153.000241	ppb
	Fe	57	491981.744	1174.300173	ppb
	Co	59	2213475.842	113.568542	ppb
	Ni	60	460626.678	108.837892	ppb
	Cu	63	1118168.295	105.358072	ppb
	Cu	65	541104.033	110.502942	ppb
	Zn	66	246005.843	112.589484	ppb
	As	75	267480.013	108.755390	ppb
	Se	82	24858.191	109.799270	ppb
	Mo	96	595572.467	119.295019	ppb
	Ag	107	2037290.373	121.494679	ppb
	Ag	109	1903462.101	116.787751	ppb
	Cd	111	386942.373	119.921899	ppb
	In	113	458767.400	119.734934	ppb
>	In	115	1705584.055		ppb
	Sn	118	1158664.328	115.436535	ppb
	Sb	121	1120021.120	114.558716	ppb
	Ba	135	366457.748	119.048646	ppb
	Ba	137	632346.340	117.609745	ppb
>	Tb	159	2643602.252		ppb
	Tl	205	5414670.632	123.139048	ppb
	Pb	206	1823213.201	120.678430	ppb
	Pb	207	3323705.697	117.344658	ppb
	Pb	208	5381314.963	119.874933	ppb
>	Bi	209	2020959.565		ppb
	Cr	53	193251.436		ppb
	Pd	106	34604.771		ppb
	Pd	108	26063.922		ppb
	C	12	477190.202		ppb
	Kr	83	50.000		ppb
	Se	77	19354.044		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	158012.613		ppb
	Be	9	62806.616	133.138990	ppb
	Na	23	7449262.619	1605.069025	ppb
	Mg	24	6196640.705	1588.965147	ppb
	Mg	25	899060.228	1487.932337	ppb
	Mg	26	1063196.191	1427.600841	ppb
	Al	27	8981620.430	1368.927785	ppb
	K	39	13371188.864	1249.458237	ppb
	Ca	44	532630.816	1217.724068	ppb
>	Sc	45	691622.660		ppb
	Ti	47	131108.879	112.518218	ppb
	V	51	1927839.208	116.846930	ppb
	Cr	52	1651353.121	114.158075	ppb
	Mn	55	2354504.212	119.838284	ppb
	Fe	54	1357892.772	1171.429589	ppb
	Fe	56	23593399.516	1139.709506	ppb
	Fe	57	486225.190	1128.432069	ppb
	Co	59	2255976.431	112.589365	ppb
	Ni	60	488129.690	112.188393	ppb
	Cu	63	1166776.205	106.937384	ppb
	Cu	65	564964.122	112.226569	ppb
	Zn	66	252422.823	112.372353	ppb
	As	75	267767.415	105.900748	ppb
	Se	82	24823.439	106.644374	ppb

⌈	Mo	96	596049.678	119.355767	ppb
|	Ag	107	2044879.134	121.911652	ppb
|	Ag	109	1934737.590	118.672076	ppb
|	Cd	111	389371.838	120.639625	ppb
|	In	113	461844.287	120.651238	ppb
\>	In	115	1706082.105		ppb
⌊	Sn	118	1150614.584	114.600911	ppb
⌈	Sb	121	1143425.901	111.047455	ppb
|	Ba	135	378778.315	116.840486	ppb
|	Ba	137	663334.360	117.146460	ppb
⌊>	Tb	159	2784117.530		ppb
⌈	Tl	205	5640362.218	122.054717	ppb
|	Pb	206	1906284.862	120.061390	ppb
|	Pb	207	3590344.693	120.615593	ppb
|	Pb	208	5779064.058	122.496443	ppb
⌊>	Bi	209	2123898.393		ppb
	Cr	53	191233.189		ppb
	Pd	106	35191.814		ppb
	Pd	108	25748.106		ppb
	C	12	494663.292		ppb
	Kr	83	76.000		ppb
	Se	77	19453.570		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			114.556		
	Be	9	108.845				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			118.319		
	Ti	47					
	V	51	99.830				
	Cr	52	98.368				
	Mn	55	104.071				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	97.097				
	Ni	60	95.130				
	Cu	63	91.439				
	Cu	65	96.000				
	Zn	66	97.447				
	As	75	93.314				
	Se	82	95.033				
	Mo	96					
	Ag	107	99.258				
	Ag	109	97.412				
	Cd	111	98.976				
	In	113					
>	In	115			112.227		
	Sn	118	94.427				
	Sb	121	93.094				
	Ba	135	97.871				
	Ba	137	97.743				
>	Tb	159			113.643		
	Tl	205	102.978				
	Pb	206	102.491				
	Pb	207	101.332				
	Pb	208	101.823				
>	Bi	209			112.726		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 18:41:59
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.851

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	131108.492	29.198	131108.492			ppb
|	Be	9	7.333	41.660	0.000	0.01124	98.42	ppb
|	Na	23	4460.995	1.403	-0.030	-1.01056	41.49	ppb
|	Mg	24	573.683	17.436	0.001	0.03765	75.01	ppb
|	Mg	25	96.667	5.103	0.000	0.07895	101.68	ppb
|	Mg	26	211.669	13.240	0.000	0.07256	126.39	ppb
|	Al	27	1105.061	8.295	-0.020	-0.47212	11.88	ppb
|	K	39	313097.199	7.291	-0.121	-1.83991	560.45	ppb
⌊	Ca	44	26825.368	6.550	-0.004	-1.71038	2120.43	ppb
⌈>	Sc	45	548873.169	31.402	548873.169			ppb
|	Ti	47	91.667	26.907	0.000	0.01151	234.28	ppb
|	V	51	1504.486	43.721	-0.001	-0.02563	240.64	ppb
|	Cr	52	7863.090	1.046	0.001	0.05735	484.32	ppb
|	Mn	55	2476.445	15.500	-0.006	-0.22718	43.64	ppb
|	Fe	54	65417.284	12.879	0.007	4.46849	417.97	ppb
|	Fe	56	2190122.167	6.879	0.289	10.94761	469.82	ppb
|	Fe	57	3895.764	9.849	0.000	0.71404	513.71	ppb
|	Co	59	161.335	20.155	0.000	0.00384	166.83	ppb
|	Ni	60	41.111	4.681	-0.000	-0.00259	219.73	ppb
|	Cu	63	262.226	11.811	0.000	0.00786	187.86	ppb
|	Cu	65	113.334	21.209	0.000	0.00019	10523.04	ppb
|	Zn	66	134.445	9.387	-0.000	-0.10114	21.93	ppb
|	As	75	-43.534	127.458	-0.000	-0.00998	382.77	ppb
⌊	Se	82	60.445	17.311	0.000	0.07210	228.57	ppb
⌈	Mo	96	535.348	7.669	0.000	0.10052	36.00	ppb
|	Ag	107	131.112	21.920	0.000	0.00500	11.05	ppb
|	Ag	109	153.335	23.007	0.000	0.00736	4.43	ppb
|	Cd	111	9.635	53.888	0.000	0.00205	87.56	ppb
|	In	113	64226.813	21.366	-0.000	-0.02217	1394.45	ppb
|>	In	115	1477155.855	22.073	1477155.855			ppb
⌊	Sn	118	816.701	17.759	0.000	0.07137	15.09	ppb
⌈	Sb	121	2823.734	8.391	0.001	0.25217	28.39	ppb
|	Ba	135	38.000	39.736	0.000	0.00200	290.96	ppb
|	Ba	137	65.334	23.381	0.000	0.00200	90.84	ppb
⌊>	Tb	159	2355614.397	22.533	2355614.397			ppb
⌈	Tl	205	301.671	4.171	0.000	0.00613	33.22	ppb
|	Pb	206	1808.499	13.830	0.001	0.11182	15.74	ppb
|	Pb	207	3158.591	12.265	0.001	0.10369	15.60	ppb
|	Pb	208	5042.447	12.235	0.002	0.10377	14.38	ppb
⌊>	Bi	209	1761933.231	21.980	1761933.231			ppb
	Cr	53	9513.291	18.310	5842.615			ppb
	Pd	106	0.000		-3.333			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	437444.869	5.650	49805.626			ppb
	Kr	83	42.000	37.192	-10.667			ppb
	Se	77	236.447	30.857	121.558			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86928.190		ppb
	Be	9	8.000	0.021619	ppb
	Na	23	4399.968	-0.526468	ppb
	Mg	24	461.011	0.069851	ppb
	Mg	25	100.001	0.171439	ppb
	Mg	26	189.002	0.174354	ppb
	Al	27	1005.051	-0.407489	ppb
	K	39	286874.666	10.053730	ppb
	Ca	44	28763.307	40.157568	ppb
>	Sc	45	350041.056		ppb
	Ti	47	75.000	0.035404	ppb
	V	51	1458.307	0.024675	ppb
	Cr	52	7771.018	0.377986	ppb
	Mn	55	2919.255	-0.112711	ppb
	Fe	54	55724.831	25.964186	ppb
	Fe	56	2041755.543	69.916796	ppb
	Fe	57	3545.628	4.870410	ppb
	Co	59	190.002	0.011104	ppb
	Ni	60	43.333	0.003986	ppb
	Cu	63	276.670	0.024659	ppb
	Cu	65	140.001	0.022705	ppb
	Zn	66	120.001	-0.075595	ppb
	As	75	-87.608	-0.049436	ppb
	Se	82	64.000	0.255837	ppb
	Mo	96	546.015	0.140921	ppb
	Ag	107	100.001	0.005194	ppb
	Ag	109	113.334	0.007276	ppb
	Cd	111	9.270	0.002948	ppb
	In	113	48381.757	0.193250	ppb
>	In	115	1101076.003		ppb
	Sn	118	670.022	0.079703	ppb
	Sb	121	2660.354	0.330029	ppb
	Ba	135	36.000	0.005372	ppb
	Ba	137	52.000	0.002922	ppb
>	Tb	159	1744660.894		ppb
	Tl	205	300.005	0.008453	ppb
	Pb	206	1555.121	0.130387	ppb
	Pb	207	2735.191	0.121897	ppb
	Pb	208	4330.566	0.120995	ppb
>	Bi	209	1315064.525		ppb
	Cr	53	11510.621		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	409352.422		ppb
	Kr	83	60.000		ppb
	Se	77	320.672		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	151986.281		ppb
	Be	9	4.000	-0.000393	ppb
	Na	23	4457.993	-1.252150	ppb
	Mg	24	608.018	0.017056	ppb
	Mg	25	91.000	0.027167	ppb
	Mg	26	203.002	-0.003601	ppb
	Al	27	1125.063	-0.507713	ppb
	K	39	328523.164	-7.299606	ppb
	Ca	44	25336.055	-23.442722	ppb
>	Sc	45	655779.694		ppb

	Ti	47	120.001	0.016827	ppb
	V	51	871.011	-0.094441	ppb
	Cr	52	7929.142	-0.108271	ppb
	Mn	55	2271.577	-0.284932	ppb
	Fe	54	69535.925	-7.787210	ppb
	Fe	56	2185646.558	-24.654212	ppb
	Fe	57	3835.736	-2.069935	ppb
	Co	59	126.001	-0.001001	ppb
	Ni	60	40.000	-0.005997	ppb
	Cu	63	283.337	0.001940	ppb
	Cu	65	106.667	-0.009906	ppb
	Zn	66	140.001	-0.115479	ppb
	As	75	18.777	0.026842	ppb
	Se	82	68.667	0.023073	ppb
	Mo	96	570.016	0.089531	ppb
	Ag	107	136.668	0.004382	ppb
	Ag	109	166.668	0.007077	ppb
	Cd	111	4.635	-0.000017	ppb
	In	113	72255.100	0.116646	ppb
>	In	115	1649802.042		ppb
	Sn	118	960.046	0.075182	ppb
	Sb	121	3095.479	0.237264	ppb
	Ba	135	54.000	0.005360	ppb
	Ba	137	62.000	-0.000093	ppb
>	Tb	159	2618788.559		ppb
	Tl	205	315.005	0.005314	ppb
	Pb	206	1815.165	0.095396	ppb
	Pb	207	3245.267	0.090979	ppb
	Pb	208	5375.881	0.095539	ppb
>	Bi	209	1970816.769		ppb
	Cr	53	8719.800		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	447135.924		ppb
	Kr	83	34.000		ppb
	Se	77	196.002		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	154411.004		ppb
	Be	9	10.000	0.012485	ppb
	Na	23	4525.024	-1.253053	ppb
	Mg	24	652.021	0.026058	ppb
	Mg	25	99.000	0.038259	ppb
	Mg	26	243.003	0.046922	ppb
	Al	27	1185.070	-0.501149	ppb
	K	39	323893.765	-8.273861	ppb
	Ca	44	26376.741	-21.845989	ppb
>	Sc	45	640798.758		ppb
	Ti	47	80.000	-0.017713	ppb
	V	51	2184.139	-0.007126	ppb
	Cr	52	7889.111	-0.097679	ppb
	Mn	55	2238.503	-0.283895	ppb
	Fe	54	70991.096	-4.771515	ppb
	Fe	56	2342964.400	-12.419739	ppb
	Fe	57	4305.927	-0.658369	ppb
	Co	59	168.001	0.001417	ppb
	Ni	60	40.000	-0.005771	ppb
	Cu	63	226.669	-0.003027	ppb
	Cu	65	93.334	-0.012243	ppb
	Zn	66	143.334	-0.112336	ppb
	As	75	-61.772	-0.007352	ppb
	Se	82	48.667	-0.062622	ppb

⌈	Mo	96	490.012	0.071101	ppb
|	Ag	107	156.668	0.005438	ppb
|	Ag	109	180.002	0.007713	ppb
|	Cd	111	15.000	0.003216	ppb
|	In	113	72043.582	-0.376408	ppb
|>	In	115	1680589.521		ppb
⌊	Sn	118	820.034	0.059211	ppb
⌈	Sb	121	2715.369	0.189207	ppb
|	Ba	135	24.000	-0.004725	ppb
|	Ba	137	82.000	0.003181	ppb
⌊>	Tb	159	2703393.738		ppb
⌈	Tl	205	290.004	0.004632	ppb
|	Pb	206	2055.211	0.109662	ppb
|	Pb	207	3495.315	0.098192	ppb
|	Pb	208	5420.896	0.094766	ppb
⌊>	Bi	209	1999918.398		ppb
	Cr	53	8309.451		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	455846.260		ppb
	Kr	83	32.000		ppb
	Se	77	192.669		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		108.134			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		108.370			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		105.722			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		108.102			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		106.244			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910167-05

Sample Date/Time: Monday, November 09, 2009 18:47:55
Sample Type: Sample
Sample Description: MW-DUP-03
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910167-05.852

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	128496.243	32.476	128496.243			ppb
	Be	9	17.333	37.091	0.000	0.03559	18.94	ppb
	Na	23	S	S	19999999	68188500	901.27505	ppb
	Mg	24	32006603.838	25.482	253.880	10287.68862	9.77	ppb
	Mg	25	4975922.365	25.377	39.482	10325.75090	9.91	ppb
	Mg	26	6176692.478	24.613	49.116	10423.17030	10.81	ppb
	Al	27	204701.839	19.931	1.621	39.04825	16.33	ppb
	K	39	53553941.811	24.447	423.138	6449.00576	10.04	ppb
	Ca	44	6790768.785	23.482	53.919	20886.25262	11.54	ppb
>	Sc	45	554035.707	23.105	554035.707			ppb
	Ti	47	3110.489	13.125	0.006	3.30528	12.28	ppb
	V	51	-5563.301	219.047	-0.010	-0.43745	220.47	ppb
	Cr	52	56520.911	21.679	0.088	4.23012	1.98	ppb
	Mn	55	3492183.914	23.660	6.285	222.01282	0.84	ppb
	Fe	54	120936.869	18.640	0.102	64.62134	11.50	ppb
	Fe	56	3594397.933	10.566	2.653	100.36866	36.76	ppb
	Fe	57	48711.727	20.725	0.081	131.64659	3.16	ppb
	Co	59	7639.696	24.047	0.014	0.46772	2.48	ppb
	Ni	60	8660.519	20.339	0.016	2.48331	4.90	ppb
	Cu	63	13329.165	22.067	0.024	1.50307	2.61	ppb
	Cu	65	5508.230	21.547	0.010	1.33795	1.91	ppb
	Zn	66	34218.765	19.186	0.062	19.00866	5.47	ppb
	As	75	-567.908	156.759	-0.001	-0.34410	163.46	ppb
	Se	82	212.225	16.630	0.000	0.87870	24.29	ppb
	Mo	96	4318.276	13.165	0.003	1.04403	8.36	ppb
	Ag	107	270.004	24.661	0.000	0.01557	8.66	ppb
	Ag	109	272.226	9.973	0.000	0.01741	19.60	ppb
	Cd	111	116.504	7.651	0.000	0.04417	24.38	ppb
	In	113	59618.096	19.004	-0.001	-0.34049	44.12	ppb
>	In	115	1389659.350	19.529	1389659.350			ppb
	Sn	118	4702.815	24.038	0.003	0.54838	7.14	ppb
	Sb	121	15035.306	30.030	0.006	1.71649	14.78	ppb
	Ba	135	91381.511	15.439	0.041	35.40329	3.59	ppb
	Ba	137	160067.499	16.453	0.072	35.45252	2.31	ppb
>	Tb	159	2225107.157	18.279	2225107.157			ppb
	Tl	205	270.004	35.718	0.000	0.00595	41.20	ppb
	Pb	206	2907.096	15.023	0.002	0.22299	3.16	ppb
	Pb	207	5254.046	17.617	0.003	0.21475	7.28	ppb
	Pb	208	8620.610	15.914	0.005	0.22288	5.32	ppb
>	Bi	209	1547162.094	12.452	1547162.094			ppb
	Cr	53	176770.350	33.546	173099.674			ppb
	Pd	106	76.667	24.691	73.334			ppb
	Pd	108	28.333	20.377	25.000			ppb
	C	12	1537980.186	25.667	1150340.943			ppb
	Kr	83	64.667	10.862	12.000			ppb
	Se	77	27930.874	23.884	27815.985			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	82179.939		ppb
	Be	9	10.000	0.031553	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	22593121.821	11140.231803	ppb
	Mg	25	3518369.689	11196.816473	ppb
	Mg	26	4421364.078	11416.999870	ppb
	Al	27	157627.024	45.530743	ppb
	K	39	38556562.649	7110.372564	ppb
	Ca	44	4952616.988	23256.846418	ppb
>	Sc	45	406681.830		ppb
	Ti	47	2640.349	3.764869	ppb
	V	51	7299.913	0.603229	ppb
	Cr	52	42409.739	4.326200	ppb
	Mn	55	2543451.956	220.498755	ppb
	Fe	54	94933.490	73.099118	ppb
	Fe	56	3156114.642	142.840160	ppb
	Fe	57	37113.744	136.428294	ppb
	Co	59	5555.543	0.463922	ppb
	Ni	60	6638.870	2.579572	ppb
	Cu	63	9934.933	1.523450	ppb
	Cu	65	4140.857	1.367020	ppb
	Zn	66	26658.821	20.034273	ppb
	As	75	-1437.306	-0.947544	ppb
	Se	82	184.668	1.063981	ppb
	Mo	96	3670.674	1.135542	ppb
	Ag	107	193.335	0.014206	ppb
	Ag	109	253.337	0.021109	ppb
	Cd	111	116.933	0.055862	ppb
	In	113	46603.341	-0.173430	ppb
>	In	115	1077530.119		ppb
	Sn	118	3475.604	0.524492	ppb
	Sb	121	9834.834	1.432114	ppb
	Ba	135	75096.923	36.699884	ppb
	Ba	137	129659.161	36.277508	ppb
>	Tb	159	1756924.265		ppb
	Tl	205	200.002	0.004885	ppb
	Pb	206	2410.290	0.214853	ppb
	Pb	207	4185.448	0.198247	ppb
	Pb	208	7036.541	0.211154	ppb
>	Bi	209	1328834.482		ppb
	Cr	53	109744.911		ppb
	Pd	106	90.000		ppb
	Pd	108	25.000		ppb
	C	12	1092951.215		ppb
	Kr	83	58.000		ppb
	Se	77	20233.115		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	140143.250		ppb
	Be	9	22.000	0.043377	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	36466084.478	10543.879414	ppb
	Mg	25	5670189.124	10581.420534	ppb
	Mg	26	7035904.787	10653.897698	ppb
	Al	27	229836.846	38.830805	ppb
	K	39	59405718.925	6420.270042	ppb
	Ca	44	7616529.586	20964.661653	ppb
>	Sc	45	617606.515		ppb

	Ti	47	3375.570	3.154880	ppb
	V	51	-16935.333	-1.301138	ppb
	Cr	52	62685.862	4.192273	ppb
	Mn	55	3879346.240	221.456029	ppb
	Fe	54	132932.722	61.546507	ppb
	Fe	56	3800399.746	82.041871	ppb
	Fe	57	53492.692	128.892929	ppb
	Co	59	8339.476	0.458476	ppb
	Ni	60	9864.863	2.523651	ppb
	Cu	63	15131.439	1.527944	ppb
	Cu	65	6111.867	1.327716	ppb
	Zn	66	38487.255	19.036556	ppb
	As	75	-608.238	-0.250324	ppb
	Se	82	252.003	0.926771	ppb
	Mo	96	4735.121	1.034867	ppb
	Ag	107	313.338	0.016902	ppb
	Ag	109	260.003	0.014387	ppb
	Cd	111	125.194	0.041991	ppb
	In	113	64975.407	-0.464517	ppb
>	In	115	1521594.768		ppb
	Sn	118	4931.216	0.527091	ppb
	Sb	121	17956.107	1.919246	ppb
	Ba	135	99922.746	35.347411	ppb
	Ba	137	174971.475	35.436797	ppb
>	Tb	159	2427150.729		ppb
	Tl	205	380.007	0.008753	ppb
	Pb	206	3080.474	0.226683	ppb
	Pb	207	5805.846	0.229329	ppb
	Pb	208	9427.617	0.234861	ppb
>	Bi	209	1619377.881		ppb
	Cr	53	198156.030		ppb
	Pd	106	55.000		ppb
	Pd	108	25.000		ppb
	C	12	1675109.355		ppb
	Kr	83	64.000		ppb
	Se	77	31530.965		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	163165.540		ppb
	Be	9	20.000	0.031851	ppb
	Na	23		68188500901.275040	ppb
	Mg	24	36960605.213	9178.954655	ppb
	Mg	25	5739208.280	9199.015697	ppb
	Mg	26	7072808.569	9198.613327	ppb
	Al	27	226641.647	32.783211	ppb
	K	39	62699543.860	5816.374660	ppb
	Ca	44	7803159.781	18437.249788	ppb
>	Sc	45	637818.775		ppb
	Ti	47	3315.550	2.996091	ppb
	V	51	-7054.482	-0.614429	ppb
	Cr	52	64467.133	4.171894	ppb
	Mn	55	4053753.547	224.083679	ppb
	Fe	54	134944.397	59.218405	ppb
	Fe	56	3826679.411	76.223960	ppb
	Fe	57	55528.745	129.618542	ppb
	Co	59	9024.070	0.480756	ppb
	Ni	60	9477.823	2.346708	ppb
	Cu	63	14921.124	1.457811	ppb
	Cu	65	6271.966	1.319114	ppb
	Zn	66	37510.219	17.955145	ppb
	As	75	341.820	0.165578	ppb
	Se	82	200.002	0.645343	ppb

⌈	Mo	96	4549.034	0.961671	ppb
|	Ag	107	303.338	0.015610	ppb
|	Ag	109	303.338	0.016726	ppb
|	Cd	111	107.383	0.034656	ppb
|	In	113	67275.541	-0.383511	ppb
|>	In	115	1569853.163		ppb
⌊	Sn	118	5701.625	0.593567	ppb
⌈	Sb	121	17314.977	1.798105	ppb
|	Ba	135	99124.864	34.162579	ppb
|	Ba	137	175571.861	34.643270	ppb
⌊>	Tb	159	2491246.477		ppb
⌈	Tl	205	230.003	0.004211	ppb
|	Pb	206	3230.522	0.227432	ppb
|	Pb	207	5770.844	0.216687	ppb
|	Pb	208	9397.673	0.222624	ppb
⌊>	Bi	209	1693273.919		ppb
	Cr	53	222410.111		ppb
	Pd	106	85.000		ppb
	Pd	108	35.000		ppb
	C	12	1845879.988		ppb
	Kr	83	72.000		ppb
	Se	77	32028.543		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		105.980			
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		109.390			
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115		99.460			
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159		102.113			
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		93.293			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910167-06

Sample Date/Time: Monday, November 09, 2009 18:55:13
Sample Type: Sample
Sample Description: EB-03
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910167-06.853

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	104978.011	25.913	104978.011			ppb
	Be	9	1.333	86.603	-0.000	-0.00440	103.61	ppb
	Na	23	45087.915	17.930	0.371	12.64328	11.76	ppb
	Mg	24	1311.087	11.146	0.009	0.37688	24.44	ppb
	Mg	25	227.003	8.800	0.002	0.45655	25.92	ppb
	Mg	26	345.673	10.987	0.002	0.43403	29.81	ppb
	Al	27	4834.511	10.825	0.019	0.45918	44.92	ppb
	K	39	385410.324	7.504	1.174	17.88785	70.55	ppb
	Ca	44	27241.089	3.813	0.048	18.77714	193.56	ppb
>	Sc	45	526228.064	22.823	526228.064			ppb
	Ti	47	66.667	49.938	-0.000	-0.02009	119.96	ppb
	V	51	1245.503	135.199	-0.002	-0.06786	184.02	ppb
	Cr	52	7987.857	2.534	0.002	0.07383	298.98	ppb
	Mn	55	25384.165	12.263	0.040	1.40043	49.37	ppb
	Fe	54	65024.515	5.727	0.009	5.81966	280.57	ppb
	Fe	56	2213434.350	6.646	0.351	13.29009	245.37	ppb
	Fe	57	4050.821	3.542	0.001	1.41022	226.65	ppb
	Co	59	117.334	4.921	0.000	0.00035	544.84	ppb
	Ni	60	283.337	10.052	0.000	0.07223	22.04	ppb
	Cu	63	620.020	20.968	0.001	0.04983	14.81	ppb
	Cu	65	307.783	19.684	0.000	0.04870	11.57	ppb
	Zn	66	710.026	20.232	0.001	0.23689	6.97	ppb
	As	75	-40.581	321.145	0.000	0.00930	805.42	ppb
	Se	82	46.667	13.628	-0.000	-0.01645	370.52	ppb
	Mo	96	134.001	21.680	0.000	0.00317	95.33	ppb
	Ag	107	21.111	32.868	-0.000	-0.00245	34.16	ppb
	Ag	109	28.889	56.918	-0.000	-0.00154	56.58	ppb
	Cd	111	3.455	506.403	0.000	0.00007	8308.43	ppb
	In	113	63549.244	21.718	0.000	0.13253	466.34	ppb
>	In	115	1450275.003	21.641	1450275.003			ppb
	Sn	118	223.336	18.234	0.000	0.00292	158.89	ppb
	Sb	121	363.340	4.204	-0.000	-0.03820	31.49	ppb
	Ba	135	50.667	28.556	0.000	0.00633	29.37	ppb
	Ba	137	89.334	11.268	0.000	0.00771	36.39	ppb
>	Tb	159	2298873.651	20.122	2298873.651			ppb
	Tl	205	101.667	34.543	0.000	0.00075	154.15	ppb
	Pb	206	1120.072	47.557	0.000	0.05433	51.59	ppb
	Pb	207	1996.781	43.618	0.001	0.05221	44.91	ppb
	Pb	208	3252.027	42.365	0.001	0.05366	42.30	ppb
>	Bi	209	1760013.273	21.606	1760013.273			ppb
	Cr	53	10620.520	24.012	6949.844			ppb
	Pd	106	5.000	100.000	1.667			ppb
	Pd	108	5.000	173.205	1.667			ppb
	C	12	449283.575	4.804	61644.332			ppb
	Kr	83	54.000	16.144	1.333			ppb
	Se	77	293.782	33.491	178.893			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	73940.125		ppb
	Be	9	2.000	-0.000149	ppb
	Na	23	36024.773	14.359059	ppb
	Mg	24	1146.066	0.483034	ppb
	Mg	25	204.002	0.592148	ppb
	Mg	26	302.005	0.579728	ppb
	Al	27	4230.895	0.692679	ppb
	K	39	352385.269	32.392111	ppb
	Ca	44	28338.096	60.444551	ppb
>	Sc	45	387775.194		ppb
	Ti	47	30.000	-0.045918	ppb
	V	51	-396.019	-0.193056	ppb
	Cr	52	8211.370	0.328697	ppb
	Mn	55	28565.742	2.194699	ppb
	Fe	54	60940.121	24.667765	ppb
	Fe	56	2065806.783	50.791851	ppb
	Fe	57	3980.792	5.091821	ppb
	Co	59	114.001	0.002515	ppb
	Ni	60	256.670	0.089535	ppb
	Cu	63	490.012	0.054665	ppb
	Cu	65	240.003	0.052797	ppb
	Zn	66	546.682	0.253449	ppb
	As	75	108.092	0.095245	ppb
	Se	82	43.333	0.044043	ppb
	Mo	96	104.001	0.004130	ppb
	Ag	107	26.667	-0.001551	ppb
	Ag	109	10.000	-0.002533	ppb
	Cd	111	8.820	0.002783	ppb
	In	113	47703.511	0.141822	ppb
>	In	115	1088037.700		ppb
	Sn	118	195.002	0.006740	ppb
	Sb	121	380.007	-0.024355	ppb
	Ba	135	34.000	0.004186	ppb
	Ba	137	80.000	0.010541	ppb
>	Tb	159	1766000.972		ppb
	Tl	205	105.001	0.001610	ppb
	Pb	206	550.015	0.027716	ppb
	Pb	207	1085.029	0.031914	ppb
	Pb	208	1780.092	0.033217	ppb
>	Bi	209	1324753.873		ppb
	Cr	53	13561.189		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	425224.580		ppb
	Kr	83	64.000		ppb
	Se	77	407.342		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124675.995		ppb
	Be	9	2.000	-0.003836	ppb
	Na	23	51555.557	11.846342	ppb
	Mg	24	1424.101	0.317807	ppb
	Mg	25	240.003	0.374029	ppb
	Mg	26	364.007	0.332536	ppb
	Al	27	5111.306	0.301758	ppb
	K	39	406228.838	9.415782	ppb
	Ca	44	26272.467	-6.388385	ppb
>	Sc	45	602353.508		ppb

	Ti	47	95.000	0.001813	ppb
	V	51	2968.817	0.056684	ppb
	Cr	52	7935.147	-0.056207	ppb
	Mn	55	25241.817	1.072874	ppb
	Fe	54	68231.989	-3.190385	ppb
	Fe	56	2360026.487	-2.520428	ppb
	Fe	57	4215.888	-0.205302	ppb
	Co	59	124.001	-0.000527	ppb
	Ni	60	280.004	0.058207	ppb
	Cu	63	750.028	0.053493	ppb
	Cu	65	326.672	0.042271	ppb
	Zn	66	816.700	0.236813	ppb
	As	75	-135.073	-0.042315	ppb
	Se	82	42.667	-0.077858	ppb
	Mo	96	162.001	0.005603	ppb
	Ag	107	13.333	-0.003208	ppb
	Ag	109	36.667	-0.001129	ppb
	Cd	111	-16.095	-0.006748	ppb
	In	113	72945.082	0.745863	ppb
>	In	115	1621696.029		ppb
	Sn	118	205.002	-0.002236	ppb
	Sb	121	360.006	-0.044130	ppb
	Ba	135	58.000	0.007313	ppb
	Ba	137	100.001	0.007675	ppb
>	Tb	159	2533488.656		ppb
	Tl	205	65.000	-0.000559	ppb
	Pb	206	1205.073	0.051679	ppb
	Pb	207	2085.111	0.046847	ppb
	Pb	208	3465.373	0.049664	ppb
>	Bi	209	2027777.373		ppb
	Cr	53	9016.063		ppb
	Pd	106	0.000		ppb
	Pd	108	15.000		ppb
	C	12	466945.167		ppb
	Kr	83	48.000		ppb
	Se	77	240.003		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	116317.913		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	47683.415	11.724425	ppb
	Mg	24	1363.093	0.329812	ppb
	Mg	25	237.003	0.403460	ppb
	Mg	26	371.007	0.389828	ppb
	Al	27	5161.332	0.383102	ppb
	K	39	397616.865	11.855651	ppb
	Ca	44	27112.705	2.275250	ppb
>	Sc	45	588555.491		ppb
	Ti	47	75.000	-0.016177	ppb
	V	51	1163.712	-0.067199	ppb
	Cr	52	7817.054	-0.051003	ppb
	Mn	55	22344.937	0.933722	ppb
	Fe	54	65901.437	-4.018407	ppb
	Fe	56	2214469.780	-8.401162	ppb
	Fe	57	3955.782	-0.655860	ppb
	Co	59	114.001	-0.000947	ppb
	Ni	60	313.338	0.068944	ppb
	Cu	63	620.019	0.041339	ppb
	Cu	65	356.673	0.051023	ppb
	Zn	66	766.696	0.220415	ppb
	As	75	-94.761	-0.025021	ppb
	Se	82	54.000	-0.015539	ppb

⌈	Mo	96	136.001	-0.000215	ppb
|	Ag	107	23.333	-0.002598	ppb
|	Ag	109	40.000	-0.000945	ppb
|	Cd	111	17.640	0.004180	ppb
|	In	113	69999.139	-0.490098	ppb
|>	In	115	1641091.280		ppb
⌊	Sn	118	270.004	0.004242	ppb
⌈	Sb	121	350.006	-0.046114	ppb
|	Ba	135	60.000	0.007492	ppb
|	Ba	137	88.000	0.004927	ppb
⌊>	Tb	159	2597131.324		ppb
⌈	Tl	205	135.001	0.001187	ppb
|	Pb	206	1605.129	0.083585	ppb
|	Pb	207	2820.203	0.077881	ppb
|	Pb	208	4510.617	0.078085	ppb
⌊>	Bi	209	1927508.573		ppb
	Cr	53	9284.308		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	455680.977		ppb
	Kr	83	50.000		ppb
	Se	77	234.003		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		86.583			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		103.899			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		103.798			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		105.498			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		106.128			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: SDI0910167-01

Sample Date/Time: Monday, November 09, 2009 18:59:47
Sample Type: Sample
Sample Description: MW-1-03L 5X
Number of Replicates: 3
Batch ID: 0910167
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910167-01.854

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	109371.611	26.930	109371.611			ppb
	Be	9	10.667	21.651	0.000	0.02385	9.10	ppb
	Na	23	5186820.315	31.180	46.904	1599.16601	5.48	ppb
	Mg	24	2209545.686	31.360	20.006	810.69012	6.03	ppb
	Mg	25	321072.769	28.825	2.925	764.97449	4.14	ppb
	Mg	26	385738.807	25.745	3.537	750.70254	3.78	ppb
	Al	27	2096203.818	23.560	19.284	464.65199	4.28	ppb
	K	39	2934889.978	21.466	24.533	373.90791	8.04	ppb
	Ca	44	463983.816	22.001	4.063	1573.93123	6.83	ppb
>	Sc	45	509232.928	25.301	509232.928			ppb
	Ti	47	27027.885	24.102	0.053	31.51524	1.58	ppb
	V	51	24540.076	24.281	0.045	1.87861	5.15	ppb
	Cr	52	24979.018	15.932	0.036	1.71647	16.50	ppb
	Mn	55	230251.433	20.824	0.445	15.71250	5.75	ppb
	Fe	54	484648.075	20.765	0.843	534.91575	6.70	ppb
	Fe	56	9613848.111	17.550	15.203	575.10144	12.28	ppb
	Fe	57	182213.618	22.278	0.353	572.46220	4.65	ppb
	Co	59	5388.841	24.141	0.010	0.35868	3.55	ppb
	Ni	60	3189.412	20.543	0.006	0.98985	5.88	ppb
	Cu	63	389715.990	22.667	0.769	48.76891	3.80	ppb
	Cu	65	187421.483	25.800	0.367	50.49842	1.90	ppb
	Zn	66	18542.212	22.779	0.036	11.11178	4.69	ppb
	As	75	-290.573	100.995	-0.000	-0.12866	98.18	ppb
	Se	82	62.000	10.913	0.000	0.08508	79.46	ppb
	Mo	96	4664.453	21.014	0.003	1.04276	2.40	ppb
	Ag	107	215.558	23.672	0.000	0.01062	3.71	ppb
	Ag	109	243.336	28.505	0.000	0.01340	10.20	ppb
	Cd	111	59.063	27.696	0.000	0.02054	44.63	ppb
	In	113	66428.948	22.493	0.001	0.50622	51.83	ppb
>	In	115	1490305.516	21.931	1490305.516			ppb
	Sn	118	1153.404	31.041	0.001	0.10576	13.87	ppb
	Sb	121	1625.144	36.497	0.000	0.10212	37.09	ppb
	Ba	135	40321.869	19.618	0.017	14.90367	1.69	ppb
	Ba	137	70280.097	19.183	0.030	14.88222	1.60	ppb
>	Tb	159	2320384.893	19.144	2320384.893			ppb
	Tl	205	145.001	18.247	0.000	0.00185	79.35	ppb
	Pb	206	2942.104	13.067	0.001	0.19297	5.05	ppb
	Pb	207	5337.391	8.149	0.003	0.18846	11.25	ppb
	Pb	208	8317.043	4.019	0.004	0.18525	16.82	ppb
>	Bi	209	1791639.395	16.926	1791639.395			ppb
	Cr	53	26029.143	16.924	22358.467			ppb
	Pd	106	15.000	0.000	11.667			ppb
	Pd	108	10.000	50.000	6.667			ppb
	C	12	555536.155	19.008	167896.912			ppb
	Kr	83	61.334	4.981	8.667			ppb
	Se	77	2752.173	25.774	2637.284			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	75375.830		ppb
	Be	9	8.000	0.026344	ppb
	Na	23	3319441.306	1499.208741	ppb
	Mg	24	1416437.066	761.328166	ppb
	Mg	25	215869.093	748.871389	ppb
	Mg	26	272843.072	767.875766	ppb
	Al	27	1526937.035	487.431250	ppb
	K	39	2214184.891	407.462494	ppb
	Ca	44	346883.849	1694.667427	ppb
>	Sc	45	360705.235		ppb
	Ti	47	19509.012	32.037127	ppb
	V	51	17741.957	1.914347	ppb
	Cr	52	20420.829	2.033295	ppb
	Mn	55	174891.087	16.718642	ppb
	Fe	54	368574.447	573.647878	ppb
	Fe	56	7672671.844	653.925694	ppb
	Fe	57	135466.384	597.436048	ppb
	Co	59	3892.758	0.364901	ppb
	Ni	60	2433.629	1.056922	ppb
	Cu	63	287802.770	50.563662	ppb
	Cu	65	131600.271	50.106454	ppb
	Zn	66	13692.701	11.525450	ppb
	As	75	-129.387	-0.079088	ppb
	Se	82	54.667	0.162640	ppb
	Mo	96	3532.624	1.053902	ppb
	Ag	107	156.668	0.010245	ppb
	Ag	109	163.335	0.011832	ppb
	Cd	111	66.095	0.029826	ppb
	In	113	49215.813	0.294520	ppb
>	In	115	1115218.949		ppb
	Sn	118	740.027	0.089060	ppb
	Sb	121	945.045	0.058844	ppb
	Ba	135	31194.579	14.805396	ppb
	Ba	137	54725.334	14.870820	ppb
>	Tb	159	1808167.638		ppb
	Tl	205	175.002	0.003546	ppb
	Pb	206	2500.313	0.204174	ppb
	Pb	207	4835.585	0.212797	ppb
	Pb	208	7956.852	0.221194	ppb
>	Bi	209	1441916.060		ppb
	Cr	53	20943.909		ppb
	Pd	106	15.000		ppb
	Pd	108	5.000		ppb
	C	12	465474.948		ppb
	Kr	83	58.000		ppb
	Se	77	1940.855		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	125511.305		ppb
	Be	9	12.000	0.022818	ppb
	Na	23	6130767.714	1663.127122	ppb
	Mg	24	2514707.497	811.739145	ppb
	Mg	25	357403.741	744.602854	ppb
	Mg	26	424774.025	717.916527	ppb
	Al	27	2351674.746	450.784667	ppb
	K	39	3209537.980	349.492777	ppb
	Ca	44	510845.161	1488.609959	ppb
>	Sc	45	576100.608		ppb

	Ti	47	30601.752	31.462703	ppb
	V	51	28858.023	1.952338	ppb
	Cr	52	27762.484	1.628128	ppb
	Mn	55	258631.823	15.449768	ppb
	Fe	54	547456.148	528.228278	ppb
	Fe	56	10728135.930	553.706223	ppb
	Fe	57	208572.679	575.516383	ppb
	Co	59	6253.955	0.367096	ppb
	Ni	60	3537.292	0.960452	ppb
	Cu	63	444375.539	48.881023	ppb
	Cu	65	216403.118	51.589646	ppb
	Zn	66	21416.242	11.282921	ppb
	As	75	-113.027	-0.034644	ppb
	Se	82	63.334	0.038639	ppb
	Mo	96	5229.367	1.014053	ppb
	Ag	107	246.670	0.010594	ppb
	Ag	109	286.671	0.014008	ppb
	Cd	111	70.730	0.020312	ppb
	In	113	76058.146	0.424388	ppb
>	In	115	1713964.981		ppb
	Sn	118	1365.093	0.111645	ppb
	Sb	121	2035.207	0.129238	ppb
	Ba	135	44583.162	14.716090	ppb
	Ba	137	77519.302	14.649879	ppb
>	Tb	159	2599895.113		ppb
	Tl	205	125.001	0.000912	ppb
	Pb	206	3125.488	0.186490	ppb
	Pb	207	5605.796	0.178502	ppb
	Pb	208	8377.046	0.166038	ppb
>	Bi	209	1951169.390		ppb
	Cr	53	28466.459		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	529378.773		ppb
	Kr	83	62.000		ppb
	Se	77	3060.468		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	127227.699		ppb
	Be	9	12.000	0.022386	ppb
	Na	23	6110251.925	1635.162154	ppb
	Mg	24	2697492.495	859.003035	ppb
	Mg	25	389945.473	801.449217	ppb
	Mg	26	459599.324	766.315331	ppb
	Al	27	2409999.672	455.740065	ppb
	K	39	3380947.062	364.768459	ppb
	Ca	44	534222.438	1538.516291	ppb
>	Sc	45	590892.941		ppb
	Ti	47	30972.892	31.045885	ppb
	V	51	27020.248	1.769159	ppb
	Cr	52	26753.740	1.487985	ppb
	Mn	55	257231.388	14.969092	ppb
	Fe	54	537913.630	502.871088	ppb
	Fe	56	10440736.559	517.672416	ppb
	Fe	57	202601.792	544.434158	ppb
	Co	59	6019.811	0.344037	ppb
	Ni	60	3597.314	0.952164	ppb
	Cu	63	436969.661	46.862043	ppb
	Cu	65	214261.060	49.799165	ppb
	Zn	66	20517.694	10.526970	ppb
	As	75	-629.306	-0.272252	ppb
	Se	82	68.000	0.053969	ppb

⌈	Mo	96	5231.368	1.060340	ppb
|	Ag	107	243.336	0.011032	ppb
|	Ag	109	280.004	0.014353	ppb
|	Cd	111	40.365	0.011495	ppb
|	In	113	74012.886	0.799750	ppb
|>	In	115	1641732.618		ppb
⌊	Sn	118	1355.092	0.116565	ppb
⌈	Sb	121	1895.180	0.118280	ppb
|	Ba	135	45187.867	15.189523	ppb
|	Ba	137	78595.655	15.125963	ppb
⌊>	Tb	159	2553091.927		ppb
⌈	Tl	205	135.001	0.001098	ppb
|	Pb	206	3200.512	0.188239	ppb
|	Pb	207	5570.793	0.174069	ppb
|	Pb	208	8617.231	0.168504	ppb
⌊>	Bi	209	1981832.735		ppb
	Cr	53	28677.060		ppb
	Pd	106	15.000		ppb
	Pd	108	15.000		ppb
	C	12	671754.745		ppb
	Kr	83	64.000		ppb
	Se	77	3255.196		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		90.206			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		100.544			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		106.663			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		106.486			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		108.035			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: IBL

Sample Date/Time: Monday, November 09, 2009 19:05:25
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\IBL.855

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	103814.526	32.325	103814.526			ppb
|	Be	9	0.000		-0.000	-0.00921	0.00	ppb
|	Na	23	5011.923	3.049	-0.014	-0.46417	142.03	ppb
|	Mg	24	466.011	6.351	0.001	0.05054	125.76	ppb
|	Mg	25	84.334	15.476	0.000	0.11149	119.13	ppb
|	Mg	26	193.335	1.663	0.001	0.14450	116.71	ppb
|	Al	27	1413.435	15.112	-0.014	-0.33092	40.06	ppb
|	K	39	313911.009	5.299	0.620	9.44841	177.14	ppb
⌊	Ca	44	25239.215	5.777	0.043	16.53122	291.14	ppb
⌈>	Sc	45	487771.505	27.565	487771.505			ppb
|	Ti	47	43.333	13.323	-0.000	-0.03413	79.47	ppb
|	V	51	1830.962	62.815	-0.000	-0.00432	1667.15	ppb
|	Cr	52	7719.647	3.121	0.002	0.11431	204.61	ppb
|	Mn	55	19502.573	13.784	0.030	1.05075	23.89	ppb
|	Fe	54	63550.971	15.016	0.016	10.12195	138.11	ppb
|	Fe	56	2176875.415	5.602	0.704	26.63449	174.64	ppb
|	Fe	57	3834.070	6.002	0.001	2.05702	232.84	ppb
|	Co	59	106.001	14.976	0.000	0.00060	663.67	ppb
|	Ni	60	50.000	11.547	0.000	0.00145	329.94	ppb
|	Cu	63	213.336	19.201	0.000	0.00319	190.04	ppb
|	Cu	65	101.112	3.807	-0.000	-0.00221	384.07	ppb
|	Zn	66	148.890	6.840	-0.000	-0.08239	32.09	ppb
|	As	75	-74.488	20.483	-0.000	-0.02497	55.36	ppb
⌊	Se	82	48.222	10.468	0.000	0.02119	419.64	ppb
⌈	Mo	96	75.334	24.525	-0.000	-0.00971	88.72	ppb
|	Ag	107	22.222	34.641	-0.000	-0.00254	7.29	ppb
|	Ag	109	12.222	56.773	-0.000	-0.00265	12.99	ppb
|	Cd	111	-0.122	4260.469	-0.000	-0.00188	114.83	ppb
|	In	113	63438.879	24.973	-0.000	-0.23752	206.87	ppb
|>	In	115	1470780.306	24.830	1470780.306			ppb
⌊	Sn	118	176.668	9.098	-0.000	-0.00190	444.52	ppb
⌈	Sb	121	218.336	39.820	-0.000	-0.05695	8.76	ppb
|	Ba	135	25.333	39.736	-0.000	-0.00278	78.17	ppb
|	Ba	137	44.667	24.661	-0.000	-0.00101	559.54	ppb
⌊>	Tb	159	2238392.476	24.541	2238392.476			ppb
⌈	Tl	205	58.334	13.093	-0.000	-0.00040	159.96	ppb
|	Pb	206	1235.089	49.964	0.000	0.06240	48.32	ppb
|	Pb	207	2263.482	47.805	0.001	0.06203	43.67	ppb
|	Pb	208	3628.774	44.110	0.001	0.06291	37.00	ppb
⌊>	Bi	209	1742123.523	23.504	1742123.523			ppb
	Cr	53	6152.615	21.045	2481.939			ppb
	Pd	106	0.000		-3.333			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	434243.406	6.209	46604.162			ppb
	Kr	83	50.000	16.000	-2.667			ppb
	Se	77	178.891	27.699	64.001			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	65081.251		ppb
|	Be	9	0.000	-0.009209	ppb
|	Na	23	4864.183	0.296023	ppb
|	Mg	24	432.009	0.123933	ppb
|	Mg	25	98.000	0.264396	ppb
|	Mg	26	192.002	0.339022	ppb
|	Al	27	1355.092	-0.184372	ppb
|	K	39	294703.448	28.771169	ppb
|	Ca	44	26898.127	72.082354	ppb
L	Sc	45	333602.820		ppb
[>	Ti	47	50.000	-0.002842	ppb
|	V	51	543.185	-0.081848	ppb
|	Cr	52	7446.772	0.383853	ppb
|	Mn	55	16428.484	1.332145	ppb
|	Fe	54	52804.046	25.385813	ppb
|	Fe	56	2036173.224	80.156246	ppb
|	Fe	57	3935.774	7.576146	ppb
|	Co	59	124.001	0.005197	ppb
|	Ni	60	46.667	0.006545	ppb
|	Cu	63	183.335	0.009390	ppb
|	Cu	65	96.667	0.007563	ppb
|	Zn	66	140.001	-0.051897	ppb
|	As	75	-69.401	-0.037882	ppb
L	Se	82	46.000	0.121923	ppb
[	Mo	96	86.000	-0.000522	ppb
|	Ag	107	13.333	-0.002752	ppb
|	Ag	109	6.667	-0.002830	ppb
|	Cd	111	-5.365	-0.004205	ppb
|	In	113	45206.953	-0.258871	ppb
| >	In	115	1049145.471		ppb
L	Sn	118	195.002	0.007869	ppb
[	Sb	121	120.001	-0.062339	ppb
|	Ba	135	16.000	-0.003784	ppb
|	Ba	137	56.000	0.005432	ppb
L>	Tb	159	1604145.615		ppb
[	Tl	205	65.000	0.000321	ppb
|	Pb	206	535.014	0.028550	ppb
|	Pb	207	1035.027	0.031645	ppb
|	Pb	208	1800.097	0.036558	ppb
L>	Bi	209	1269556.495		ppb
	Cr	53	7646.923		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	404848.518		ppb
	Kr	83	50.000		ppb
	Se	77	236.003		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	124162.501		ppb
|	Be	9	0.000	-0.009209	ppb
|	Na	23	5002.251	-0.878600	ppb
|	Mg	24	486.012	0.013565	ppb
|	Mg	25	83.000	0.045407	ppb
|	Mg	26	191.002	0.039406	ppb
|	Al	27	1650.136	-0.365845	ppb
|	K	39	323424.952	-0.542999	ppb
|	Ca	44	24161.153	-12.637755	ppb
L	Sc	45	548989.814		ppb
[>					

Sample ID: IBL
Page 2

Ti	47	40.000	-0.048593	ppb
V	51	2755.911	0.060515	ppb
Cr	52	7809.048	-0.005661	ppb
Mn	55	21412.901	0.970402	ppb
Fe	54	71031.380	7.037927	ppb
Fe	56	2242156.279	3.764373	ppb
Fe	57	3570.637	-1.007993	ppb
Co	59	100.001	-0.001346	ppb
Ni	60	56.667	0.000715	ppb
Cu	63	196.669	-0.002741	ppb
Cu	65	103.334	-0.006392	ppb
Zn	66	146.668	-0.098927	ppb
As	75	-91.640	-0.026640	ppb
Se	82	44.667	-0.046490	ppb
Mo	96	86.000	-0.010996	ppb
Ag	107	26.667	-0.002426	ppb
Ag	109	10.000	-0.002871	ppb
Cd	111	0.000	-0.001502	ppb
In	113	73856.737	0.264171	ppb
In	115	1675746.083		ppb
Sn	118	165.001	-0.006986	ppb
Sb	121	250.003	-0.056033	ppb
Ba	135	24.000	-0.004261	ppb
Ba	137	34.000	-0.005173	ppb
Tb	159	2548198.661		ppb
Tl	205	60.000	-0.000629	ppb
Pb	206	1470.108	0.072258	ppb
Pb	207	2680.181	0.070797	ppb
Pb	208	4310.554	0.071483	ppb
Bi	209	1965140.859		ppb
Cr	53	5363.438		ppb
Pd	106	0.000		ppb
Pd	108	0.000		ppb
C	12	440051.832		ppb
Kr	83	42.000		ppb
Se	77	153.335		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
	Li	6	122199.826		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	5169.336	-0.809921	ppb
	Mg	24	480.012	0.014122	ppb
	Mg	25	72.000	0.024672	ppb
	Mg	26	197.002	0.055069	ppb
	Al	27	1235.076	-0.442543	ppb
	K	39	323604.627	0.117045	ppb
	Ca	44	24658.364	-9.850947	ppb
	Sc	45	580721.882		ppb
	Ti	47	40.000	-0.050958	ppb
	V	51	2193.791	0.008372	ppb
	Cr	52	7903.122	-0.035256	ppb
	Mn	55	20666.333	0.849713	ppb
	Fe	54	66817.486	-2.057902	ppb
	Fe	56	2252296.741	-4.017144	ppb
	Fe	57	3995.798	-0.397105	ppb
	Co	59	94.000	-0.002046	ppb
	Ni	60	46.667	-0.002919	ppb
	Cu	63	260.003	0.002933	ppb
	Cu	65	103.334	-0.007805	ppb
	Zn	66	160.001	-0.096349	ppb
	As	75	-62.425	-0.010387	ppb
	Se	82	54.000	-0.011852	ppb

⌈	Mo	96	54.000	-0.017598	ppb
|	Ag	107	26.667	-0.002437	ppb
|	Ag	109	20.000	-0.002255	ppb
|	Cd	111	5.000	0.000064	ppb
|	In	113	71252.948	-0.717869	ppb
|>	In	115	1687449.363		ppb
⌊	Sn	118	170.001	-0.006598	ppb
⌈	Sb	121	285.004	-0.052489	ppb
|	Ba	135	36.000	-0.000285	ppb
|	Ba	137	44.000	-0.003292	ppb
⌊>	Tb	159	2562833.152		ppb
⌈	Tl	205	50.000	-0.000879	ppb
|	Pb	206	1700.145	0.086379	ppb
|	Pb	207	3075.239	0.083656	ppb
|	Pb	208	4775.673	0.080683	ppb
⌊>	Bi	209	1991673.216		ppb
	Cr	53	5447.483		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	457829.866		ppb
	Kr	83	58.000		ppb
	Se	77	147.334		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
> Li	6			85.623		
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
> Sc	45			96.306		
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
> In	115			105.266		
Sn	118					
Sb	121					
Ba	135					
Ba	137					
> Tb	159			102.723		
Tl	205					
Pb	206					
Pb	207					
Pb	208					
> Bi	209			105.049		
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 19:07:23
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.856

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	134450.839	23.154	134450.839			ppb
|	Be	9	50329.166	22.294	0.375	125.63155	2.78	ppb
|	Na	23	5636768.529	21.630	41.978	1431.22427	1.97	ppb
|	Mg	24	4752329.989	22.901	35.362	1432.92095	1.35	ppb
|	Mg	25	727352.265	21.602	5.425	1418.82715	2.08	ppb
|	Mg	26	884258.385	21.832	6.592	1399.00151	2.34	ppb
|	Al	27	7439764.102	24.010	55.284	1332.08786	5.03	ppb
|	K	39	11755672.637	22.414	84.937	1294.52185	2.66	ppb
⌊	Ca	44	456054.035	22.738	3.168	1227.23373	2.48	ppb
⌈>	Sc	45	566452.464	23.119	566452.464			ppb
|	Ti	47	112532.025	22.339	0.199	118.09378	1.96	ppb
|	V	51	1657326.261	23.121	2.922	122.65991	1.88	ppb
|	Cr	52	1428816.736	22.092	2.513	120.88884	2.87	ppb
|	Mn	55	2029188.844	22.122	3.578	126.38659	3.18	ppb
|	Fe	54	1168759.813	23.137	1.945	1234.81225	0.94	ppb
|	Fe	56	20405156.530	20.620	32.214	1218.61447	4.78	ppb
|	Fe	57	420806.063	21.954	0.738	1195.96696	3.36	ppb
|	Co	59	1959442.926	21.735	3.468	119.71184	2.54	ppb
|	Ni	60	419086.702	20.896	0.743	118.08434	2.74	ppb
|	Cu	63	981263.441	20.701	1.740	110.29656	2.88	ppb
|	Cu	65	488299.181	20.535	0.866	118.99582	3.20	ppb
|	Zn	66	221909.421	21.118	0.393	121.07478	2.54	ppb
|	As	75	237552.452	20.145	0.422	115.34259	3.85	ppb
⌊	Se	82	21694.446	21.409	0.038	114.19311	3.20	ppb
⌈	Mo	96	509354.395	20.414	0.330	112.85245	1.93	ppb
|	Ag	107	1818339.156	18.874	1.182	120.20780	0.23	ppb
|	Ag	109	1769093.688	17.875	1.151	120.49974	1.18	ppb
|	Cd	111	338844.982	19.661	0.220	116.28090	0.93	ppb
|	In	113	406695.153	18.164	0.221	117.40762	1.12	ppb
|>	In	115	1538546.372	18.852	1538546.372			ppb
⌊	Sn	118	1024671.048	18.786	0.666	113.18229	0.31	ppb
⌈	Sb	121	989190.417	18.807	0.411	111.15587	3.34	ppb
|	Ba	135	325859.734	18.125	0.136	116.38404	2.23	ppb
|	Ba	137	565479.785	16.828	0.236	115.81209	0.92	ppb
⌊>	Tb	159	2398813.078	16.156	2398813.078			ppb
⌈	Tl	205	4856950.177	15.882	2.681	123.23179	2.89	ppb
|	Pb	206	1636381.988	16.473	0.902	120.71668	0.45	ppb
|	Pb	207	2997643.999	17.926	1.650	117.74361	1.87	ppb
|	Pb	208	4909867.918	18.221	2.701	121.63518	2.02	ppb
⌊>	Bi	209	1814175.106	16.858	1814175.106			ppb
	Cr	53	163026.101	20.575	159355.425			ppb
	Pd	106	30480.960	20.081	30477.627			ppb
	Pd	108	23299.459	19.421	23296.125			ppb
	C	12	454092.287	3.185	66453.044			ppb
	Kr	83	51.333	11.247	-1.333			ppb
	Se	77	17029.368	21.260	16914.478			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	98512.861		ppb
	Be	9	37514.234	127.553817	ppb
	Na	23	4231141.825	1462.100872	ppb
	Mg	24	3496792.666	1438.211007	ppb
	Mg	25	545983.417	1449.344636	ppb
	Mg	26	661803.687	1425.349123	ppb
	Al	27	5425623.364	1326.378061	ppb
	K	39	8727748.332	1310.025505	ppb
	Ca	44	336791.503	1236.296248	ppb
>	Sc	45	416022.392		ppb
	Ti	47	83507.223	119.148069	ppb
	V	51	1214886.630	122.422191	ppb
	Cr	52	1064488.130	122.387046	ppb
	Mn	55	1511414.947	127.916107	ppb
	Fe	54	857050.980	1232.865953	ppb
	Fe	56	15555704.811	1263.725835	ppb
	Fe	57	314277.102	1213.421359	ppb
	Co	59	1467680.599	121.772463	ppb
	Ni	60	318124.258	121.553279	ppb
	Cu	63	747580.270	113.909162	ppb
	Cu	65	372642.800	123.064006	ppb
	Zn	66	167863.853	124.253163	ppb
	As	75	182299.058	119.858587	ppb
	Se	82	16333.328	116.682076	ppb
	Mo	96	390248.975	110.666236	ppb
	Ag	107	1423787.397	120.210687	ppb
	Ag	109	1405721.547	122.108725	ppb
	Cd	111	262181.233	115.039595	ppb
	In	113	321496.231	118.613225	ppb
>	In	115	1204701.253		ppb
	Sn	118	803444.634	113.327082	ppb
	Sb	121	776117.853	107.533023	ppb
	Ba	135	257669.452	113.395008	ppb
	Ba	137	455601.475	114.790263	ppb
>	Tb	159	1951476.911		ppb
	Tl	205	3973586.452	124.961553	ppb
	Pb	206	1325406.572	121.314227	ppb
	Pb	207	2377617.106	116.078423	ppb
	Pb	208	3877343.447	119.438343	ppb
>	Bi	209	1461462.683		ppb
	Cr	53	124315.949		ppb
	Pd	106	23537.669		ppb
	Pd	108	18161.477		ppb
	C	12	440943.865		ppb
	Kr	83	48.000		ppb
	Se	77	12848.916		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	151732.470		ppb
	Be	9	55083.292	121.599035	ppb
	Na	23	6270925.083	1406.823213	ppb
	Mg	24	5426277.830	1449.003661	ppb
	Mg	25	822027.204	1416.745749	ppb
	Mg	26	1007851.163	1409.294899	ppb
	Al	27	8831730.472	1401.812669	ppb
	K	39	13527080.709	1318.497152	ppb
	Ca	44	524929.168	1252.106140	ppb
>	Sc	45	655017.065		ppb

	Ti	47	127391.291	115.439928	ppb
	V	51	1882536.539	120.482323	ppb
	Cr	52	1601625.064	116.924594	ppb
	Mn	55	2266883.050	121.833273	ppb
	Fe	54	1340615.123	1224.345197	ppb
	Fe	56	22573455.883	1152.922337	ppb
	Fe	57	469231.547	1150.070854	ppb
	Co	59	2205518.693	116.222730	ppb
	Ni	60	474482.482	115.146581	ppb
	Cu	63	1115574.513	107.958826	ppb
	Cu	65	550795.573	115.527512	ppb
	Zn	66	251281.273	118.124954	ppb
	As	75	265751.419	110.976219	ppb
	Se	82	24246.693	109.997010	ppb
	Mo	96	555770.478	112.860170	ppb
	Ag	107	1983594.867	119.927991	ppb
	Ag	109	1919667.965	119.410609	ppb
	Cd	111	371666.758	116.780204	ppb
	In	113	445737.524	117.596181	ppb
>	In	115	1682324.150		ppb
	Sn	118	1116575.905	112.780819	ppb
	Sb	121	1072045.587	110.979268	ppb
	Ba	135	359106.129	118.075493	ppb
	Ba	137	621109.892	116.921198	ppb
>	Tb	159	2611916.842		ppb
	Tl	205	5199554.674	119.139816	ppb
	Pb	206	1803451.883	120.271765	ppb
	Pb	207	3286802.019	116.917956	ppb
	Pb	208	5398790.901	121.172704	ppb
>	Bi	209	2005812.612		ppb
	Cr	53	181262.041		ppb
	Pd	106	32808.733		ppb
	Pd	108	25046.327		ppb
	C	12	451748.446		ppb
	Kr	83	58.000		ppb
	Se	77	19092.208		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	153107.186		ppb
	Be	9	58389.973	127.741806	ppb
	Na	23	6408238.680	1424.748729	ppb
	Mg	24	5333919.470	1411.548191	ppb
	Mg	25	814046.173	1390.391061	ppb
	Mg	26	983120.306	1362.360523	ppb
	Al	27	8061938.472	1268.072837	ppb
	K	39	13012188.871	1255.042888	ppb
	Ca	44	506441.432	1193.298815	ppb
>	Sc	45	628317.936		ppb
	Ti	47	126697.561	119.693342	ppb
	V	51	1874555.616	125.075216	ppb
	Cr	52	1620337.013	123.354879	ppb
	Mn	55	2309268.534	129.410383	ppb
	Fe	54	1308613.335	1247.225613	ppb
	Fe	56	23086308.896	1239.195231	ppb
	Fe	57	478909.539	1224.408664	ppb
	Co	59	2205129.485	121.140327	ppb
	Ni	60	464653.365	117.553164	ppb
	Cu	63	1080635.539	109.021705	ppb
	Cu	65	541459.169	118.395934	ppb
	Zn	66	246583.136	120.846213	ppb
	As	75	264606.880	115.192950	ppb
	Se	82	24503.317	115.900246	ppb

⌈	Mo	96	582043.731	115.030932	ppb
|	Ag	107	2047635.203	120.484717	ppb
|	Ag	109	1981891.553	119.979892	ppb
|	Cd	111	382686.955	117.022913	ppb
|	In	113	452851.703	116.013461	ppb
|>	In	115	1728613.714		ppb
⌊	Sn	118	1153992.605	113.438970	ppb
⌈	Sb	121	1119407.812	114.955324	ppb
|	Ba	135	360803.621	117.681628	ppb
|	Ba	137	619727.987	115.724804	ppb
⌊>	Tb	159	2633045.483		ppb
⌈	Tl	205	5397709.405	125.594013	ppb
|	Pb	206	1780287.509	120.564041	ppb
|	Pb	207	3328512.872	120.234447	ppb
|	Pb	208	5453469.405	124.294500	ppb
⌊>	Bi	209	1975250.023		ppb
	Cr	53	183500.311		ppb
	Pd	106	35096.480		ppb
	Pd	108	26690.572		ppb
	C	12	469584.551		ppb
	Kr	83	48.000		ppb
	Se	77	19146.979		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		110.891			
	Be	9	104.693				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		111.841			
	Ti	47					
	V	51	102.217				
	Cr	52	100.741				
	Mn	55	105.322				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	99.760				
	Ni	60	98.404				
	Cu	63	91.914				
	Cu	65	99.163				
	Zn	66	100.896				
	As	75	96.119				
	Se	82	95.161				
	Mo	96					
	Ag	107	100.173				
	Ag	109	100.416				
	Cd	111	96.901				
	In	113					
>	In	115		110.116			
	Sn	118	94.319				
	Sb	121	92.630				
	Ba	135	96.987				
	Ba	137	96.510				
>	Tb	159		110.085			
	Tl	205	102.693				
	Pb	206	100.597				
	Pb	207	98.120				
	Pb	208	101.363				
>	Bi	209		109.394			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 19:09:21
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.857

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	127969.820	33.879	127969.820			ppb
|	Be	9	8.667	26.647	0.000	0.01399	16.12	ppb
|	Na	23	9103.906	18.752	0.008	0.28889	178.29	ppb
|	Mg	24	617.353	16.744	0.002	0.06092	76.47	ppb
|	Mg	25	111.001	3.248	0.000	0.11908	80.51	ppb
|	Mg	26	221.002	9.284	0.001	0.10865	119.57	ppb
|	Al	27	2070.215	9.265	-0.011	-0.26564	51.22	ppb
|	K	39	309289.482	9.468	-0.040	-0.61441	2013.50	ppb
⌊	Ca	44	24520.828	8.208	-0.011	-4.11415	1041.74	ppb
⌈>	Sc	45	533745.403	33.416	533745.403			ppb
|	Ti	47	80.000	12.500	0.000	0.00616	674.87	ppb
|	V	51	2219.068	10.429	0.001	0.04440	205.82	ppb
|	Cr	52	7917.145	7.625	0.002	0.07972	316.07	ppb
|	Mn	55	11141.278	13.452	0.011	0.37667	56.21	ppb
|	Fe	54	63047.403	18.053	0.005	3.46266	467.90	ppb
|	Fe	56	2155919.211	12.596	0.311	11.75226	370.10	ppb
|	Fe	57	3629.000	13.917	0.000	0.14119	2144.67	ppb
|	Co	59	224.003	25.521	0.000	0.00945	123.30	ppb
|	Ni	60	66.667	8.660	0.000	0.00591	134.71	ppb
|	Cu	63	235.558	29.082	0.000	0.00648	288.19	ppb
|	Cu	65	127.779	18.508	0.000	0.00572	399.37	ppb
|	Zn	66	194.446	20.595	-0.000	-0.06385	38.47	ppb
|	As	75	-18.530	293.507	0.000	0.01683	196.69	ppb
⌊	Se	82	56.667	14.694	0.000	0.06947	274.11	ppb
⌈	Mo	96	520.680	10.093	0.000	0.10015	45.43	ppb
|	Ag	107	185.557	5.488	0.000	0.00961	49.51	ppb
|	Ag	109	190.002	14.360	0.000	0.01105	54.68	ppb
|	Cd	111	30.122	67.131	0.000	0.01137	107.03	ppb
|	In	113	63441.559	26.429	-0.000	-0.25302	170.28	ppb
|>	In	115	1467511.252	24.954	1467511.252			ppb
⌊	Sn	118	565.016	5.310	0.000	0.04507	45.10	ppb
⌈	Sb	121	2808.736	17.568	0.001	0.27316	34.86	ppb
|	Ba	135	36.000	20.031	0.000	0.00246	237.10	ppb
|	Ba	137	81.334	9.938	0.000	0.00694	60.59	ppb
⌊>	Tb	159	2227206.429	26.266	2227206.429			ppb
⌈	Tl	205	411.675	2.528	0.000	0.00953	36.27	ppb
|	Pb	206	1231.745	19.832	0.001	0.06893	9.06	ppb
|	Pb	207	2381.812	20.074	0.001	0.07320	8.03	ppb
|	Pb	208	3758.759	25.490	0.002	0.07097	3.27	ppb
⌊>	Bi	209	1721138.332	24.930	1721138.332			ppb
	Cr	53	5183.379	20.179	1512.703			ppb
	Pd	106	5.000	100.000	1.667			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	416447.825	7.820	28808.582			ppb
	Kr	83	57.334	20.440	4.667			ppb
	Se	77	154.446	11.101	39.556			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	77914.354		ppb
|	Be	9	6.000	0.016587	ppb
|	Na	23	7154.558	0.878550	ppb
|	Mg	24	499.012	0.114476	ppb
|	Mg	25	107.001	0.229742	ppb
|	Mg	26	200.002	0.257694	ppb
|	Al	27	1865.174	-0.109261	ppb
|	K	39	275614.539	13.669941	ppb
L	Ca	44	26829.944	45.373815	ppb
[>	Sc	45	327863.021		ppb
|	Ti	47	80.000	0.053073	ppb
|	V	51	2336.090	0.148878	ppb
|	Cr	52	7228.612	0.370644	ppb
|	Mn	55	9529.538	0.619357	ppb
|	Fe	54	50175.564	22.055108	ppb
|	Fe	56	1843076.772	61.919174	ppb
|	Fe	57	3065.470	3.606684	ppb
|	Co	59	290.004	0.022900	ppb
|	Ni	60	63.334	0.015016	ppb
|	Cu	63	270.004	0.026760	ppb
|	Cu	65	153.335	0.032012	ppb
|	Zn	66	153.335	-0.037089	ppb
|	As	75	42.645	0.054584	ppb
L	Se	82	63.334	0.286627	ppb
[	Mo	96	550.015	0.151309	ppb
|	Ag	107	196.669	0.015097	ppb
|	Ag	109	213.336	0.017867	ppb
|	Cd	111	53.090	0.025351	ppb
|	In	113	44086.969	-0.738949	ppb
|>	In	115	1045072.664		ppb
L	Sn	118	565.016	0.068168	ppb
[	Sb	121	2575.332	0.366322	ppb
|	Ba	135	38.000	0.008675	ppb
|	Ba	137	74.000	0.011706	ppb
L>	Tb	159	1552358.546		ppb
[	Tl	205	415.009	0.013523	ppb
|	Pb	206	950.045	0.075826	ppb
|	Pb	207	1830.084	0.079972	ppb
|	Pb	208	2665.198	0.070580	ppb
L>	Bi	209	1226248.299		ppb
	Cr	53	6390.041		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	378884.215		ppb
	Kr	83	66.000		ppb
	Se	77	174.002		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	153718.457		ppb
|	Be	9	10.000	0.012583	ppb
|	Na	23	9824.824	-0.073073	ppb
|	Mg	24	663.022	0.029729	ppb
|	Mg	25	112.001	0.061132	ppb
|	Mg	26	222.002	0.019435	ppb
|	Al	27	2100.221	-0.356866	ppb
|	K	39	328793.846	-7.643995	ppb
L	Ca	44	23593.801	-28.560813	ppb
[>	Sc	45	632164.358		ppb

	Ti	47	70.000	-0.026097	ppb
	V	51	1952.490	-0.020552	ppb
	Cr	52	8167.334	-0.068421	ppb
	Mn	55	11401.496	0.229762	ppb
	Fe	54	67184.935	-7.633471	ppb
	Fe	56	2330820.606	-11.257280	ppb
	Fe	57	4040.816	-1.189574	ppb
	Co	59	190.002	0.002742	ppb
	Ni	60	63.334	0.000233	ppb
	Cu	63	280.004	0.002629	ppb
	Cu	65	123.334	-0.005447	ppb
	Zn	66	196.669	-0.085375	ppb
	As	75	-36.822	0.003082	ppb
	Se	82	59.334	-0.009260	ppb
	Mo	96	552.015	0.084930	ppb
	Ag	107	176.668	0.006765	ppb
	Ag	109	196.669	0.008884	ppb
	Cd	111	22.275	0.005581	ppb
	In	113	72703.331	0.082238	ppb
>	In	115	1662495.296		ppb
	Sn	118	595.018	0.037109	ppb
	Sb	121	3375.570	0.277171	ppb
	Ba	135	28.000	-0.002878	ppb
	Ba	137	80.000	0.003760	ppb
>	Tb	159	2538955.824		ppb
	Tl	205	420.009	0.007673	ppb
	Pb	206	1360.092	0.063654	ppb
	Pb	207	2675.179	0.069446	ppb
	Pb	208	4450.578	0.073465	ppb
>	Bi	209	1989070.358		ppb
	Cr	53	4625.069		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	436743.425		ppb
	Kr	83	44.000		ppb
	Se	77	142.001		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	152276.648		ppb
	Be	9	10.000	0.012789	ppb
	Na	23	10332.335	0.061190	ppb
	Mg	24	690.024	0.038569	ppb
	Mg	25	114.001	0.066371	ppb
	Mg	26	241.003	0.048816	ppb
	Al	27	2245.252	-0.330800	ppb
	K	39	323460.061	-7.869175	ppb
	Ca	44	23138.739	-29.155466	ppb
>	Sc	45	641208.832		ppb
	Ti	47	90.000	-0.008496	ppb
	V	51	2368.626	0.004859	ppb
	Cr	52	8355.489	-0.063072	ppb
	Mn	55	12492.799	0.280892	ppb
	Fe	54	71781.709	-4.033656	ppb
	Fe	56	2293860.255	-15.405109	ppb
	Fe	57	3780.715	-1.993548	ppb
	Co	59	192.002	0.002703	ppb
	Ni	60	73.334	0.002488	ppb
	Cu	63	156.668	-0.009963	ppb
	Cu	65	106.667	-0.009398	ppb
	Zn	66	233.336	-0.069093	ppb
	As	75	-61.415	-0.007183	ppb
	Se	82	47.333	-0.068962	ppb

⌈	Mo	96	460.011	0.064208	ppb
|	Ag	107	183.335	0.006958	ppb
|	Ag	109	160.001	0.006383	ppb
|	Cd	111	15.000	0.003176	ppb
|	In	113	73534.375	-0.102336	ppb
|>	In	115	1694965.795		ppb
⌊	Sn	118	535.014	0.029927	ppb
⌈	Sb	121	2475.306	0.175996	ppb
|	Ba	135	42.000	0.001576	ppb
|	Ba	137	90.000	0.005351	ppb
⌊>	Tb	159	2590304.916		ppb
⌈	Tl	205	400.008	0.007405	ppb
|	Pb	206	1385.096	0.067295	ppb
|	Pb	207	2640.175	0.070183	ppb
|	Pb	208	4160.501	0.068879	ppb
⌊>	Bi	209	1948096.339		ppb
	Cr	53	4535.028		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	433715.835		ppb
	Kr	83	62.000		ppb
	Se	77	147.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			105.545		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			105.383		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			105.032		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			102.210		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			103.784		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102240-BLK1

Sample Date/Time: Monday, November 09, 2009 19:21:08
Sample Type: Sample
Sample Description: PBW
Number of Replicates: 3
Batch ID: 0910096
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102240-BLK1.858

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	131774.991	17.357	131774.991			ppb
	Be	9	2.667	114.564	-0.000	-0.00131	761.85	ppb
	Na	23	7769.018	2.452	-0.006	-0.19205	225.86	ppb
	Mg	24	688.024	7.805	0.002	0.07352	82.29	ppb
	Mg	25	92.667	4.086	0.000	0.05810	54.43	ppb
	Mg	26	212.669	4.615	0.000	0.06225	96.52	ppb
	Al	27	2171.903	2.526	-0.012	-0.28116	23.92	ppb
	K	39	312601.115	6.465	-0.234	-3.57023	125.42	ppb
	Ca	44	24286.122	0.252	-0.039	-14.99050	94.23	ppb
>	Sc	45	544614.666	21.360	544614.666			ppb
	Ti	47	56.667	28.364	-0.000	-0.02885	58.86	ppb
	V	51	2135.915	9.319	0.001	0.02210	247.46	ppb
	Cr	52	8135.316	5.979	0.001	0.06085	372.41	ppb
	Mn	55	5463.161	5.418	-0.001	-0.04343	154.35	ppb
	Fe	54	64871.525	2.975	0.005	3.18419	590.95	ppb
	Fe	56	2221327.628	7.453	0.285	10.78380	472.27	ppb
	Fe	57	4037.493	14.352	0.001	1.16305	423.22	ppb
	Co	59	220.670	63.421	0.000	0.00834	167.79	ppb
	Ni	60	91.112	33.994	0.000	0.01227	99.88	ppb
	Cu	63	338.895	16.760	0.000	0.01633	102.51	ppb
	Cu	65	140.001	22.713	0.000	0.00568	323.42	ppb
	Zn	66	346.673	17.652	0.000	0.01629	64.06	ppb
	As	75	-116.437	55.101	-0.000	-0.04696	112.18	ppb
	Se	82	46.000	13.825	-0.000	-0.02513	355.88	ppb
	Mo	96	141.334	4.323	0.000	0.00422	129.48	ppb
	Ag	107	74.445	34.780	0.000	0.00130	217.27	ppb
	Ag	109	80.000	36.085	0.000	0.00243	133.43	ppb
	Cd	111	3.455	332.817	-0.000	-0.00040	946.15	ppb
	In	113	64369.544	14.899	-0.001	-0.32738	72.59	ppb
>	In	115	1499790.452	15.705	1499790.452			ppb
	Sn	118	236.670	45.329	0.000	0.00502	364.87	ppb
	Sb	121	710.025	11.593	0.000	0.00320	785.07	ppb
	Ba	135	36.000	44.096	0.000	0.00173	450.88	ppb
	Ba	137	82.667	3.696	0.000	0.00616	47.79	ppb
>	Tb	159	2309309.598	15.436	2309309.598			ppb
	Tl	205	140.001	56.695	0.000	0.00192	154.33	ppb
	Pb	206	376.674	16.598	0.000	0.00060	148.45	ppb
	Pb	207	718.346	13.250	0.000	0.00256	94.27	ppb
	Pb	208	1240.047	12.591	0.000	0.00437	35.07	ppb
>	Bi	209	1772367.052	16.395	1772367.052			ppb
	Cr	53	3619.999	15.669	-50.677			ppb
	Pd	106	5.000	173.205	1.667			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	437299.408	1.732	49660.165			ppb
	Kr	83	57.333	13.207	4.667			ppb
	Se	77	139.112	35.002	24.223			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	105370.235		ppb
	Be	9	6.000	0.009865	ppb
	Na	23	7908.126	0.306616	ppb
	Mg	24	750.028	0.143385	ppb
	Mg	25	90.000	0.093961	ppb
	Mg	26	207.002	0.129851	ppb
	Al	27	2110.223	-0.203523	ppb
	K	39	289270.212	1.597166	ppb
	Ca	44	24299.487	1.314250	ppb
>	Sc	45	410355.296		ppb
	Ti	47	50.000	-0.019495	ppb
	V	51	2288.942	0.083935	ppb
	Cr	52	8625.719	0.321219	ppb
	Mn	55	5126.314	0.033966	ppb
	Fe	54	64532.553	24.735682	ppb
	Fe	56	2385507.070	69.174197	ppb
	Fe	57	4641.077	6.785011	ppb
	Co	59	382.007	0.024501	ppb
	Ni	60	100.001	0.023048	ppb
	Cu	63	393.341	0.035320	ppb
	Cu	65	176.668	0.026906	ppb
	Zn	66	276.670	0.026607	ppb
	As	75	-190.050	-0.107649	ppb
	Se	82	50.000	0.074126	ppb
	Mo	96	140.001	0.010422	ppb
	Ag	107	103.334	0.004514	ppb
	Ag	109	113.334	0.006162	ppb
	Cd	111	-0.730	-0.001816	ppb
	In	113	53331.836	-0.079677	ppb
>	In	115	1228090.231		ppb
	Sn	118	360.006	0.026102	ppb
	Sb	121	805.032	0.032199	ppb
	Ba	135	48.000	0.009373	ppb
	Ba	137	82.000	0.009512	ppb
>	Tb	159	1897832.213		ppb
	Tl	205	230.003	0.005318	ppb
	Pb	206	305.005	0.000541	ppb
	Pb	207	620.010	0.004229	ppb
	Pb	208	1065.033	0.006058	ppb
>	Bi	209	1438154.511		ppb
	Cr	53	4268.911		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	444036.291		ppb
	Kr	83	66.000		ppb
	Se	77	195.335		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144504.589		ppb
	Be	9	2.000	-0.004573	ppb
	Na	23	7847.078	-0.400756	ppb
	Mg	24	657.022	0.039190	ppb
	Mg	25	97.000	0.046134	ppb
	Mg	26	224.003	0.041914	ppb
	Al	27	2190.240	-0.320865	ppb
	K	39	324653.825	-6.002052	ppb
	Ca	44	24339.585	-22.770616	ppb
>	Sc	45	607997.758		ppb

	Ti	47	75.000	-0.018598	ppb
	V	51	2207.901	0.002233	ppb
	Cr	52	8127.301	-0.046887	ppb
	Mn	55	5581.557	-0.083024	ppb
	Fe	54	66948.356	-5.198481	ppb
	Fe	56	2224036.253	-12.357350	ppb
	Fe	57	3985.794	-0.924332	ppb
	Co	59	132.001	-0.000139	ppb
	Ni	60	116.667	0.014812	ppb
	Cu	63	280.004	0.003745	ppb
	Cu	65	120.001	-0.005135	ppb
	Zn	66	390.008	0.016504	ppb
	As	75	-86.846	-0.020053	ppb
	Se	82	38.667	-0.099418	ppb
	Mo	96	148.001	0.002184	ppb
	Ag	107	53.333	-0.000749	ppb
	Ag	109	63.334	0.000530	ppb
	Cd	111	-5.365	-0.003224	ppb
	In	113	70663.790	-0.348937	ppb
>	In	115	1646416.347		ppb
	Sn	118	165.001	-0.006687	ppb
	Sb	121	660.022	-0.011311	ppb
	Ba	135	42.000	0.002045	ppb
	Ba	137	80.000	0.003964	ppb
>	Tb	159	2505911.174		ppb
	Tl	205	80.000	-0.000161	ppb
	Pb	206	405.008	-0.000260	ppb
	Pb	207	725.013	-0.000208	ppb
	Pb	208	1365.060	0.003990	ppb
>	Bi	209	1965124.067		ppb
	Cr	53	3218.518		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	438760.925		ppb
	Kr	83	54.000		ppb
	Se	77	110.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	145450.150		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	7551.850	-0.481995	ppb
	Mg	24	657.022	0.037993	ppb
	Mg	25	91.000	0.034204	ppb
	Mg	26	207.002	0.014972	ppb
	Al	27	2215.245	-0.319096	ppb
	K	39	323879.308	-6.305810	ppb
	Ca	44	24219.293	-23.515139	ppb
>	Sc	45	615490.944		ppb
	Ti	47	45.000	-0.048444	ppb
	V	51	1910.901	-0.019877	ppb
	Cr	52	7652.927	-0.091788	ppb
	Mn	55	5681.614	-0.081230	ppb
	Fe	54	63133.666	-9.984628	ppb
	Fe	56	2054439.561	-24.465450	ppb
	Fe	57	3485.607	-2.371526	ppb
	Co	59	148.001	0.000667	ppb
	Ni	60	56.667	-0.001058	ppb
	Cu	63	343.339	0.009914	ppb
	Cu	65	123.334	-0.004721	ppb
	Zn	66	373.340	0.005745	ppb
	As	75	-72.414	-0.013164	ppb
	Se	82	49.333	-0.050091	ppb

⌈	Mo	96	136.001	0.000068	ppb
|	Ag	107	66.667	0.000129	ppb
|	Ag	109	63.334	0.000584	ppb
|	Cd	111	16.460	0.003853	ppb
|	In	113	69113.008	-0.553523	ppb
|>	In	115	1624864.777		ppb
⌊	Sn	118	185.002	-0.004370	ppb
⌈	Sb	121	665.022	-0.011291	ppb
|	Ba	135	18.000	-0.006226	ppb
|	Ba	137	86.000	0.005019	ppb
⌊>	Tb	159	2524185.409		ppb
⌈	Tl	205	110.001	0.000609	ppb
|	Pb	206	420.009	0.001528	ppb
|	Pb	207	810.016	0.003668	ppb
|	Pb	208	1290.048	0.003064	ppb
⌊>	Bi	209	1913822.579		ppb
	Cr	53	3372.569		ppb
	Pd	106	15.000		ppb
	Pd	108	0.000		ppb
	C	12	429101.009		ppb
	Kr	83	52.000		ppb
	Se	77	111.334		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		108.684			
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		107.530			
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115		107.342			
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159		105.977			
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		106.873			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102240-BS1

Sample Date/Time: Monday, November 09, 2009 19:23:06
Sample Type: Sample
Sample Description: LCSW
Number of Replicates: 3
Batch ID: 0910096
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102240-BS1.859

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	124015.336	25.369	124015.336			ppb
	Be	9	38885.164	24.632	0.314	105.20608	2.12	ppb
	Na	23	8298613.844	23.616	67.095	2287.55513	2.18	ppb
	Mg	24	4204156.547	23.758	34.019	1378.50583	2.96	ppb
	Mg	25	669518.880	24.822	5.410	1414.99517	4.71	ppb
	Mg	26	808362.564	22.702	6.556	1391.25353	4.41	ppb
	Al	27	2888306.447	23.026	23.378	563.31150	3.31	ppb
	K	39	17908205.735	23.154	142.434	2170.82348	2.87	ppb
	Ca	44	630003.422	21.822	4.891	1894.66023	4.89	ppb
>	Sc	45	517625.520	22.496	517625.520			ppb
	Ti	47	63.334	40.513	-0.000	-0.02128	76.35	ppb
	V	51	1292079.522	25.633	2.479	104.03512	3.87	ppb
	Cr	52	1117458.044	24.201	2.138	102.83340	2.07	ppb
	Mn	55	1582651.212	20.421	3.058	108.00684	3.13	ppb
	Fe	54	929904.367	20.393	1.689	1072.13091	7.67	ppb
	Fe	56	16922735.107	20.296	28.837	1090.86616	3.00	ppb
	Fe	57	336843.917	23.239	0.643	1042.39662	1.98	ppb
	Co	59	1555500.735	23.314	3.000	103.57408	1.02	ppb
	Ni	60	330882.279	24.848	0.636	101.18841	2.98	ppb
	Cu	63	782116.645	24.747	1.505	95.39377	2.95	ppb
	Cu	65	384768.006	23.073	0.742	102.01989	1.31	ppb
	Zn	66	342536.534	22.110	0.662	204.03804	0.80	ppb
	As	75	376218.071	21.165	0.729	199.26806	1.71	ppb
	Se	82	34369.516	19.194	0.067	198.70532	3.93	ppb
	Mo	96	246.670	10.706	0.000	0.03151	21.80	ppb
	Ag	107	1475230.837	20.412	1.035	105.23052	0.95	ppb
	Ag	109	1399911.958	21.049	0.981	102.66397	2.89	ppb
	Cd	111	267381.860	20.330	0.188	99.13170	0.88	ppb
	In	113	325287.282	20.002	0.185	98.11615	1.75	ppb
>	In	115	1424433.115	19.721	1424433.115			ppb
	Sn	118	178.335	27.661	-0.000	-0.00234	184.28	ppb
	Sb	121	1668928.629	21.424	0.721	195.19697	3.56	ppb
	Ba	135	263047.655	20.520	0.114	97.78703	1.14	ppb
	Ba	137	457363.184	19.614	0.198	97.48230	1.53	ppb
>	Tb	159	2309566.344	20.349	2309566.344			ppb
	Tl	205	8027911.921	21.649	4.618	212.25181	4.78	ppb
	Pb	206	2623751.537	19.228	1.514	202.57278	2.10	ppb
	Pb	207	4959038.684	19.160	2.862	204.23615	1.83	ppb
	Pb	208	8050542.338	18.535	4.650	209.37339	1.05	ppb
>	Bi	209	1729070.052	17.623	1729070.052			ppb
	Cr	53	126596.924	20.767	122926.248			ppb
	Pd	106	23585.336	21.923	23582.002			ppb
	Pd	108	17448.899	18.737	17445.565			ppb
	C	12	432676.696	3.947	45037.453			ppb
	Kr	83	62.000	25.604	9.333			ppb
	Se	77	26684.696	21.953	26569.806			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	87686.770		ppb
	Be	9	27862.763	106.432480	ppb
	Na	23	6035940.907	2344.634126	ppb
	Mg	24	3056069.415	1412.127752	ppb
	Mg	25	481673.726	1436.493558	ppb
	Mg	26	598267.084	1447.596020	ppb
	Al	27	2122272.849	582.493552	ppb
	K	39	13122498.448	2240.589286	ppb
	Ca	44	471702.835	1995.787136	ppb
>	Sc	45	383204.240		ppb
	Ti	47	35.000	-0.037619	ppb
	V	51	909679.003	99.489287	ppb
	Cr	52	805224.065	100.384009	ppb
	Mn	55	1210508.067	111.170107	ppb
	Fe	54	722112.873	1121.312571	ppb
	Fe	56	12956820.364	1128.311007	ppb
	Fe	57	246629.253	1032.073618	ppb
	Co	59	1137069.743	102.420266	ppb
	Ni	60	236207.128	97.979632	ppb
	Cu	63	558735.021	92.420978	ppb
	Cu	65	282306.037	101.209273	ppb
	Zn	66	255089.218	205.105969	ppb
	As	75	284276.686	202.900994	ppb
	Se	82	26752.403	207.705971	ppb
	Mo	96	218.002	0.039181	ppb
	Ag	107	1127911.857	104.281522	ppb
	Ag	109	1061970.410	101.016824	ppb
	Cd	111	204615.730	98.315116	ppb
	In	113	250283.377	97.702941	ppb
>	In	115	1100127.104		ppb
	Sn	118	145.001	-0.001319	ppb
	Sb	121	1258623.313	192.536754	ppb
	Ba	135	200720.418	97.492537	ppb
	Ba	137	353779.213	98.378766	ppb
>	Tb	159	1768100.244		ppb
	Tl	205	6022509.391	200.953997	ppb
	Pb	206	2041446.884	198.272332	ppb
	Pb	207	3861899.406	200.066770	ppb
	Pb	208	6328179.674	206.848783	ppb
>	Bi	209	1377415.564		ppb
	Cr	53	96238.878		ppb
	Pd	106	17620.510		ppb
	Pd	108	13674.343		ppb
	C	12	413006.147		ppb
	Kr	83	56.000		ppb
	Se	77	19943.200		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	142329.730		ppb
	Be	9	43608.880	102.627085	ppb
	Na	23	9464684.966	2264.957474	ppb
	Mg	24	4683039.619	1333.135859	ppb
	Mg	25	729464.179	1340.263944	ppb
	Mg	26	889464.539	1325.902089	ppb
	Al	27	3224557.914	545.209727	ppb
	K	39	20177360.468	2120.383105	ppb
	Ca	44	698812.613	1813.882653	ppb
>	Sc	45	587675.188		ppb

	Ti	47	70.000	-0.021118	ppb
	V	51	1478659.438	105.459649	ppb
	Cr	52	1278063.924	103.918808	ppb
	Mn	55	1744585.214	104.448805	ppb
	Fe	54	973968.159	977.135867	ppb
	Fe	56	18935224.744	1068.117608	ppb
	Fe	57	377114.157	1029.005128	ppb
	Co	59	1779061.681	104.492085	ppb
	Ni	60	384319.159	103.951745	ppb
	Cu	63	887688.466	95.746377	ppb
	Cu	65	433266.993	101.285855	ppb
	Zn	66	385590.038	202.161926	ppb
	As	75	421467.705	196.155994	ppb
	Se	82	38253.694	193.646082	ppb
	Mo	96	252.003	0.025925	ppb
	Ag	107	1634559.723	105.140942	ppb
	Ag	109	1603138.444	106.094233	ppb
	Cd	111	299289.208	100.048638	ppb
	In	113	366572.853	99.997081	ppb
>	In	115	1581263.084		ppb
	Sn	118	155.001	-0.007060	ppb
	Sb	121	1834405.526	189.980263	ppb
	Ba	135	294511.928	96.845647	ppb
	Ba	137	508674.605	95.764703	ppb
>	Tb	159	2611614.788		ppb
	Tl	205	9096044.639	220.623337	ppb
	Pb	206	2929055.192	206.791846	ppb
	Pb	207	5504970.645	207.305266	ppb
	Pb	208	8871372.649	210.787753	ppb
>	Bi	209	1894897.283		ppb
	Cr	53	141867.228		ppb
	Pd	106	26795.853		ppb
	Pd	108	19398.797		ppb
	C	12	443710.288		ppb
	Kr	83	80.000		ppb
	Se	77	29575.671		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	142029.507		ppb
	Be	9	45183.849	106.558665	ppb
	Na	23	9395215.661	2253.073786	ppb
	Mg	24	4873360.608	1390.253879	ppb
	Mg	25	797418.736	1468.228000	ppb
	Mg	26	937356.068	1400.262475	ppb
	Al	27	3318088.579	562.231226	ppb
	K	39	20424758.289	2151.498042	ppb
	Ca	44	719494.817	1874.310902	ppb
>	Sc	45	581997.133		ppb
	Ti	47	85.000	-0.005117	ppb
	V	51	1487900.125	107.156429	ppb
	Cr	52	1269086.143	104.197392	ppb
	Mn	55	1792860.355	108.401621	ppb
	Fe	54	1093632.070	1117.944293	ppb
	Fe	56	18876160.212	1076.169854	ppb
	Fe	57	386788.342	1066.111105	ppb
	Co	59	1750370.780	103.809893	ppb
	Ni	60	372120.549	101.633860	ppb
	Cu	63	899926.450	98.013967	ppb
	Cu	65	438730.986	103.564534	ppb
	Zn	66	386930.347	204.846225	ppb
	As	75	422909.823	198.747198	ppb
	Se	82	38102.452	194.763907	ppb

⌈	Mo	96	270.004	0.029425	ppb
|	Ag	107	1663220.931	106.269109	ppb
|	Ag	109	1534627.020	100.880842	ppb
|	Cd	111	298240.641	99.031357	ppb
|	In	113	359005.615	96.648424	ppb
|>	In	115	1591909.157		ppb
⌊	Sn	118	235.003	0.001369	ppb
⌈	Sb	121	1913757.048	203.073902	ppb
|	Ba	135	293910.619	99.022919	ppb
|	Ba	137	509635.735	98.303428	ppb
⌊>	Tb	159	2548984.000		ppb
⌈	Tl	205	8965181.733	215.178090	ppb
|	Pb	206	2900752.537	202.654161	ppb
|	Pb	207	5510246.000	205.336411	ppb
|	Pb	208	8952074.691	210.483643	ppb
⌊>	Bi	209	1914897.307		ppb
	Cr	53	141684.667		ppb
	Pd	106	26339.643		ppb
	Pd	108	19273.556		ppb
	C	12	441313.653		ppb
	Kr	83	50.000		ppb
	Se	77	30535.216		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.284			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		102.201			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		101.949			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		105.989			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		104.262			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102240-BSD1

Sample Date/Time: Monday, November 09, 2009 19:25:03
Sample Type: Sample
Sample Description: LCSWD
Number of Replicates: 3
Batch ID: 0910096
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102240-BSD1.860

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	130182.502	23.749	130182.502			ppb
	Be	9	40817.223	22.346	0.314	105.30398	1.77	ppb
	Na	23	8767546.992	23.198	67.362	2296.64666	1.82	ppb
	Mg	24	4445164.651	21.360	34.302	1389.98960	3.29	ppb
	Mg	25	691436.472	18.991	5.359	1401.64681	5.76	ppb
	Mg	26	843854.066	18.693	6.544	1388.78220	6.27	ppb
	Al	27	2960170.541	20.115	22.875	551.18165	5.05	ppb
	K	39	18774560.476	17.413	143.350	2184.78884	7.95	ppb
	Ca	44	670997.584	18.902	4.976	1927.60030	6.51	ppb
>	Sc	45	540810.276	23.054	540810.276			ppb
	Ti	47	51.667	11.175	-0.000	-0.03225	61.13	ppb
	V	51	1376906.509	21.265	2.551	107.08999	3.86	ppb
	Cr	52	1179119.230	21.665	2.172	104.48177	3.88	ppb
	Mn	55	1649957.328	18.932	3.062	108.16449	4.87	ppb
	Fe	54	947275.613	18.873	1.648	1046.02463	6.16	ppb
	Fe	56	17015503.638	19.364	27.690	1047.45508	5.11	ppb
	Fe	57	341044.791	18.888	0.628	1019.04601	5.77	ppb
	Co	59	1622143.452	20.155	3.015	104.07615	3.48	ppb
	Ni	60	348513.062	20.068	0.648	102.99136	3.68	ppb
	Cu	63	799071.853	21.288	1.483	94.01931	5.00	ppb
	Cu	65	395912.993	20.567	0.735	101.05333	4.23	ppb
	Zn	66	359937.806	20.232	0.669	206.20125	4.88	ppb
	As	75	392350.038	19.531	0.730	199.76883	5.33	ppb
	Se	82	35633.510	15.600	0.067	198.76147	9.31	ppb
	Mo	96	272.670	9.768	0.000	0.03340	9.22	ppb
	Ag	107	1516629.297	15.494	1.002	101.93262	2.07	ppb
	Ag	109	1450917.582	17.604	0.957	100.10736	4.07	ppb
	Cd	111	280419.099	16.209	0.185	97.86922	2.14	ppb
	In	113	342816.431	14.585	0.183	97.30366	2.39	ppb
>	In	115	1511509.380	14.292	1511509.380			ppb
	Sn	118	143.334	13.207	-0.000	-0.00714	68.20	ppb
	Sb	121	1755228.175	16.492	0.753	203.87931	0.46	ppb
	Ba	135	268270.143	17.165	0.115	98.86394	1.36	ppb
	Ba	137	471738.150	19.228	0.202	99.26958	3.14	ppb
>	Tb	159	2328500.063	16.456	2328500.063			ppb
	Tl	205	8256854.967	18.277	4.617	212.22153	2.77	ppb
	Pb	206	2727443.703	18.104	1.525	204.09174	2.58	ppb
	Pb	207	5109565.266	17.338	2.860	204.12470	1.71	ppb
	Pb	208	8204119.316	15.702	4.602	207.21275	1.06	ppb
>	Bi	209	1782979.995	15.811	1782979.995			ppb
	Cr	53	132650.098	20.176	128979.422			ppb
	Pd	106	24867.840	11.916	24864.507			ppb
	Pd	108	17784.420	16.504	17781.087			ppb
	C	12	451700.441	3.566	64061.198			ppb
	Kr	83	60.667	10.072	8.000			ppb
	Se	77	27629.699	19.002	27514.810			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	94488.303		ppb
	Be	9	30285.792	107.360690	ppb
	Na	23	6423958.776	2315.707314	ppb
	Mg	24	3350927.543	1436.920054	ppb
	Mg	25	539861.976	1494.138996	ppb
	Mg	26	662112.402	1486.764858	ppb
	Al	27	2276721.402	579.900570	ppb
	K	39	15012537.685	2381.270874	ppb
	Ca	44	525657.996	2066.985147	ppb
>	Sc	45	398265.943		ppb
	Ti	47	55.000	-0.009840	ppb
	V	51	1038965.849	109.346673	ppb
	Cr	52	884395.292	106.123531	ppb
	Mn	55	1291972.367	114.175369	ppb
	Fe	54	748134.361	1117.548884	ppb
	Fe	56	13219279.377	1104.868919	ppb
	Fe	57	266699.634	1074.322766	ppb
	Co	59	1246129.762	107.999283	ppb
	Ni	60	267949.042	106.944383	ppb
	Cu	63	603564.245	96.061605	ppb
	Cu	65	301920.003	104.148511	ppb
	Zn	66	275979.740	213.518567	ppb
	As	75	303975.022	208.754970	ppb
	Se	82	29231.328	218.384269	ppb
	Mo	96	242.003	0.036840	ppb
	Ag	107	1245532.863	100.149406	ppb
	Ag	109	1156278.335	95.654306	ppb
	Cd	111	228412.372	95.447022	ppb
	In	113	285086.607	96.569193	ppb
>	In	115	1264972.785		ppb
	Sn	118	165.001	-0.001551	ppb
	Sb	121	1421068.687	203.724553	ppb
	Ba	135	215540.110	98.108914	ppb
	Ba	137	367293.589	95.715256	ppb
>	Tb	159	1886716.645		ppb
	Tl	205	6522697.989	205.443773	ppb
	Pb	206	2159913.709	198.018974	ppb
	Pb	207	4091638.850	200.086485	ppb
	Pb	208	6739623.613	207.948871	ppb
>	Bi	209	1459212.470		ppb
	Cr	53	101781.350		ppb
	Pd	106	21447.976		ppb
	Pd	108	14400.361		ppb
	C	12	433653.205		ppb
	Kr	83	54.000		ppb
	Se	77	21708.203		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	148547.179		ppb
	Be	9	46003.574	103.731406	ppb
	Na	23	9806953.324	2248.620063	ppb
	Mg	24	4932877.950	1345.484194	ppb
	Mg	25	763942.648	1344.864351	ppb
	Mg	26	924230.386	1320.060577	ppb
	Al	27	3236803.389	524.347542	ppb
	K	39	20384565.898	2051.209230	ppb
	Ca	44	759284.803	1891.972041	ppb
>	Sc	45	629562.679		ppb

	Ti	47	55.000	-0.039979	ppb
	V	51	1537031.720	102.324693	ppb
	Cr	52	1316042.218	99.860423	ppb
	Mn	55	1867221.441	104.352760	ppb
	Fe	54	1093941.586	1028.117245	ppb
	Fe	56	19131866.419	998.837877	ppb
	Fe	57	376169.560	957.339266	ppb
	Co	59	1839374.558	100.846260	ppb
	Ni	60	393658.796	99.392836	ppb
	Cu	63	880463.003	88.646587	ppb
	Cu	65	440743.307	96.176718	ppb
	Zn	66	397894.937	194.726697	ppb
	As	75	432754.493	188.009187	ppb
	Se	82	38436.393	181.607363	ppb
	Mo	96	286.004	0.032476	ppb
	Ag	107	1642167.623	104.268457	ppb
	Ag	109	1586711.109	103.653221	ppb
	Cd	111	300309.505	99.095440	ppb
	In	113	371100.335	99.910791	ppb
>	In	115	1601915.494		ppb
	Sn	118	135.001	-0.009397	ppb
	Sb	121	1915183.370	204.887890	ppb
	Ba	135	288708.319	98.065505	ppb
	Ba	137	517165.943	100.571965	ppb
>	Tb	159	2528308.439		ppb
	Tl	205	8975908.201	215.358111	ppb
	Pb	206	2963928.105	206.993944	ppb
	Pb	207	5530692.071	206.024336	ppb
	Pb	208	8710820.882	204.736859	ppb
>	Bi	209	1915585.805		ppb
	Cr	53	149367.259		ppb
	Pd	106	26675.532		ppb
	Pd	108	19639.266		ppb
	C	12	456819.184		ppb
	Kr	83	66.000		ppb
	Se	77	29464.678		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147512.024		ppb
	Be	9	46162.303	104.819853	ppb
	Na	23	10071728.876	2325.612603	ppb
	Mg	24	5051688.462	1387.564550	ppb
	Mg	25	770504.791	1365.937098	ppb
	Mg	26	945219.412	1359.521179	ppb
	Al	27	3366986.832	549.296837	ppb
	K	39	20926577.844	2121.886409	ppb
	Ca	44	728049.954	1823.843705	ppb
>	Sc	45	594602.206		ppb
	Ti	47	45.000	-0.046918	ppb
	V	51	1554721.956	109.598613	ppb
	Cr	52	1336920.180	107.461358	ppb
	Mn	55	1790678.176	105.965333	ppb
	Fe	54	999750.890	992.407754	ppb
	Fe	56	18695365.118	1038.658449	ppb
	Fe	57	380265.178	1025.476004	ppb
	Co	59	1780926.037	103.382914	ppb
	Ni	60	383931.347	102.636852	ppb
	Cu	63	913188.310	97.349753	ppb
	Cu	65	445075.667	102.834767	ppb
	Zn	66	405938.740	210.358500	ppb
	As	75	440320.597	202.542326	ppb
	Se	82	39232.810	196.292773	ppb

⌈	Mo	96	290.004	0.030891	ppb
|	Ag	107	1662187.405	101.380003	ppb
|	Ag	109	1609763.301	101.014546	ppb
|	Cd	111	312535.419	99.065210	ppb
|	In	113	372262.350	95.430987	ppb
|>	In	115	1667639.862		ppb
⌊	Sn	118	130.001	-0.010471	ppb
⌈	Sb	121	1929432.469	203.025486	ppb
|	Ba	135	300562.001	100.417401	ppb
|	Ba	137	530754.917	101.521533	ppb
⌊>	Tb	159	2570475.105		ppb
⌈	Tl	205	9271958.710	215.862705	ppb
|	Pb	206	3058489.296	207.262294	ppb
|	Pb	207	5706364.877	206.263286	ppb
|	Pb	208	9161913.453	208.952509	ppb
⌊>	Bi	209	1974141.709		ppb
	Cr	53	146801.685		ppb
	Pd	106	26480.013		ppb
	Pd	108	19313.633		ppb
	C	12	464628.935		ppb
	Kr	83	62.000		ppb
	Se	77	31716.216		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		107.370			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		106.778			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		108.181			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		106.858			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		107.513			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910096-01

Sample Date/Time: Monday, November 09, 2009 19:27:20
Sample Type: Sample
Sample Description: MW-10
Number of Replicates: 3
Batch ID: 0910096
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910096-01.861

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	116848.085	23.177	116848.085			ppb
	Be	9	5.333	57.282	0.000	0.00803	164.76	ppb
	Na	23	95111.030	18.518	0.755	25.75157	7.19	ppb
	Mg	24	11727.053	19.871	0.097	3.94655	4.11	ppb
	Mg	25	1849.845	25.510	0.015	3.99378	4.21	ppb
	Mg	26	2272.263	16.764	0.018	3.88962	8.62	ppb
	Al	27	94617.802	21.769	0.783	18.87600	1.74	ppb
	K	39	393162.458	4.527	0.842	12.83189	90.84	ppb
	Ca	44	34380.412	4.491	0.077	29.92307	85.96	ppb
>	Sc	45	472825.856	26.082	472825.856			ppb
	Ti	47	218.336	13.419	0.000	0.18988	22.63	ppb
	V	51	2724.927	7.155	0.002	0.10463	73.25	ppb
	Cr	52	10825.213	7.778	0.009	0.45611	57.11	ppb
	Mn	55	5573.247	16.379	0.001	0.01850	312.30	ppb
	Fe	54	56206.648	8.740	0.005	3.17005	509.10	ppb
	Fe	56	2424778.381	4.231	1.383	52.32561	99.69	ppb
	Fe	57	5489.846	7.575	0.005	8.06260	56.64	ppb
	Co	59	152.001	19.472	0.000	0.00438	123.26	ppb
	Ni	60	121.112	15.159	0.000	0.02598	21.02	ppb
	Cu	63	1358.984	22.569	0.002	0.15814	4.96	ppb
	Cu	65	638.910	21.641	0.001	0.15583	12.77	ppb
	Zn	66	4186.460	22.129	0.008	2.57292	6.14	ppb
	As	75	-21.247	54.790	0.000	0.00691	66.18	ppb
	Se	82	63.111	3.710	0.000	0.12800	86.69	ppb
	Mo	96	64.667	12.499	-0.000	-0.01115	27.82	ppb
	Ag	107	141.112	16.759	0.000	0.00758	58.37	ppb
	Ag	109	146.668	12.654	0.000	0.00885	45.46	ppb
	Cd	111	11.001	63.132	0.000	0.00339	107.42	ppb
	In	113	55410.088	19.001	-0.001	-0.43130	30.38	ppb
>	In	115	1295400.794	18.848	1295400.794			ppb
	Sn	118	215.002	16.279	0.000	0.00581	186.53	ppb
	Sb	121	9803.180	11.689	0.005	1.28445	35.25	ppb
	Ba	135	276.671	9.761	0.000	0.10683	15.60	ppb
	Ba	137	474.011	17.937	0.000	0.10351	4.42	ppb
>	Tb	159	2030876.702	20.403	2030876.702			ppb
	Tl	205	458.344	21.664	0.000	0.01200	49.12	ppb
	Pb	206	1403.432	9.629	0.001	0.09259	13.32	ppb
	Pb	207	2523.497	14.247	0.001	0.08818	5.57	ppb
	Pb	208	4097.180	15.532	0.002	0.09002	3.67	ppb
>	Bi	209	1578014.737	18.053	1578014.737			ppb
	Cr	53	2877.081	3.674	-793.595			ppb
	Pd	106	8.333	69.282	5.000			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	589287.822	18.979	201648.579			ppb
	Kr	83	46.667	21.993	-6.000			ppb
	Se	77	126.667	2.294	11.778			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	85756.136		ppb
	Be	9	8.000	0.022040	ppb
	Na	23	74874.262	27.515734	ppb
	Mg	24	9042.086	4.127555	ppb
	Mg	25	1305.085	3.850711	ppb
	Mg	26	1833.168	4.249335	ppb
	Al	27	70965.918	19.253678	ppb
	K	39	374362.614	26.289851	ppb
	Ca	44	32681.316	59.607301	ppb
>	Sc	45	331727.381		ppb
	Ti	47	185.002	0.239415	ppb
	V	51	2708.893	0.192565	ppb
	Cr	52	9976.975	0.756805	ppb
	Mn	55	4611.063	0.083691	ppb
	Fe	54	50537.379	21.615706	ppb
	Fe	56	2306364.198	112.272641	ppb
	Fe	57	5061.281	13.186017	ppb
	Co	59	172.001	0.010265	ppb
	Ni	60	100.001	0.032230	ppb
	Cu	63	1006.717	0.166961	ppb
	Cu	65	486.679	0.169359	ppb
	Zn	66	3117.152	2.716541	ppb
	As	75	-13.974	0.007491	ppb
	Se	82	60.667	0.255972	ppb
	Mo	96	60.000	-0.008325	ppb
	Ag	107	166.668	0.012665	ppb
	Ag	109	163.335	0.013352	ppb
	Cd	111	16.095	0.006883	ppb
	In	113	43273.427	-0.491652	ppb
>	In	115	1014591.275		ppb
	Sn	118	250.003	0.018159	ppb
	Sb	121	10760.787	1.789693	ppb
	Ba	135	250.003	0.125720	ppb
	Ba	137	376.007	0.107154	ppb
>	Tb	159	1555197.849		ppb
	Tl	205	570.016	0.018806	ppb
	Pb	206	1265.080	0.106802	ppb
	Pb	207	2120.117	0.093814	ppb
	Pb	208	3380.355	0.093786	ppb
>	Bi	209	1257197.118		ppb
	Cr	53	2966.440		ppb
	Pd	106	15.000		ppb
	Pd	108	5.000		ppb
	C	12	490243.417		ppb
	Kr	83	58.000		ppb
	Se	77	125.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129491.003		ppb
	Be	9	6.000	0.006312	ppb
	Na	23	106975.140	25.913764	ppb
	Mg	24	12917.337	3.897196	ppb
	Mg	25	2133.228	4.179032	ppb
	Mg	26	2514.316	3.833480	ppb
	Al	27	104280.905	18.718331	ppb
	K	39	395374.533	6.291716	ppb
	Ca	44	34762.316	15.973363	ppb
>	Sc	45	526752.388		ppb

	Ti	47	230.003	0.167507	ppb
	V	51	2538.479	0.052084	ppb
	Cr	52	10837.870	0.299802	ppb
	Mn	55	5681.614	-0.026302	ppb
	Fe	54	59199.713	-3.755089	ppb
	Fe	56	2481081.767	27.444862	ppb
	Fe	57	5891.735	6.582511	ppb
	Co	59	166.001	0.003245	ppb
	Ni	60	130.001	0.023541	ppb
	Cu	63	1503.446	0.155511	ppb
	Cu	65	756.695	0.165157	ppb
	Zn	66	4747.793	2.598304	ppb
	As	75	-15.094	0.011175	ppb
	Se	82	63.334	0.069323	ppb
	Mo	96	74.000	-0.010650	ppb
	Ag	107	120.001	0.004588	ppb
	Ag	109	150.001	0.007606	ppb
	Cd	111	13.820	0.003664	ppb
	In	113	60869.694	-0.280958	ppb
>	In	115	1414004.741		ppb
	Sn	118	180.002	-0.002085	ppb
	Sb	121	10115.113	1.148085	ppb
	Ba	135	276.004	0.094239	ppb
	Ba	137	528.014	0.105009	ppb
>	Tb	159	2224034.867		ppb
	Tl	205	380.007	0.008392	ppb
	Pb	206	1410.099	0.084771	ppb
	Pb	207	2640.175	0.085921	ppb
	Pb	208	4315.552	0.088694	ppb
>	Bi	209	1675467.973		ppb
	Cr	53	2904.422		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	567043.678		ppb
	Kr	83	44.000		ppb
	Se	77	124.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	135297.115		ppb
	Be	9	2.000	-0.004258	ppb
	Na	23	103483.687	23.825226	ppb
	Mg	24	13221.735	3.814896	ppb
	Mg	25	2111.223	3.951605	ppb
	Mg	26	2469.305	3.586053	ppb
	Al	27	108606.584	18.655987	ppb
	K	39	409750.228	5.914110	ppb
	Ca	44	35697.602	14.188560	ppb
>	Sc	45	559997.800		ppb
	Ti	47	240.003	0.162716	ppb
	V	51	2927.408	0.069227	ppb
	Cr	52	11660.795	0.311733	ppb
	Mn	55	6427.065	-0.001901	ppb
	Fe	54	58882.851	-8.350457	ppb
	Fe	56	2486889.179	17.259317	ppb
	Fe	57	5516.521	4.419278	ppb
	Co	59	118.001	-0.000360	ppb
	Ni	60	133.334	0.022158	ppb
	Cu	63	1566.789	0.151939	ppb
	Cu	65	673.356	0.132986	ppb
	Zn	66	4694.435	2.403902	ppb
	As	75	-34.674	0.002078	ppb
	Se	82	65.334	0.058698	ppb

⌈	Mo	96	60.000	-0.014467	ppb
|	Ag	107	136.668	0.005493	ppb
|	Ag	109	126.667	0.005599	ppb
|	Cd	111	3.090	-0.000381	ppb
|	In	113	62087.144	-0.521303	ppb
|>	In	115	1457606.364		ppb
⌊	Sn	118	215.002	0.001349	ppb
⌈	Sb	121	8533.640	0.915568	ppb
|	Ba	135	304.005	0.100518	ppb
|	Ba	137	518.013	0.098373	ppb
⌊>	Tb	159	2313397.389		ppb
⌈	Tl	205	425.009	0.008811	ppb
|	Pb	206	1535.118	0.086186	ppb
|	Pb	207	2810.199	0.084796	ppb
|	Pb	208	4595.632	0.087589	ppb
⌊>	Bi	209	1801379.121		ppb
	Cr	53	2760.381		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	710576.372		ppb
	Kr	83	38.000		ppb
	Se	77	130.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		96.373			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		93.355			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		92.714			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		93.200			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		95.154			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: SDI0910096-01

Sample Date/Time: Monday, November 09, 2009 19:29:18
Sample Type: Sample
Sample Description: MW-10L 5X
Number of Replicates: 3
Batch ID: 0910096
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910096-01.862

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	144022.986	23.034	144022.986			ppb
	Be	9	2.000	100.000	-0.000	-0.00442	95.80	ppb
	Na	23	27521.002	18.391	0.127	4.32125	9.98	ppb
	Mg	24	3094.491	19.794	0.018	0.73088	5.27	ppb
	Mg	25	475.012	23.796	0.003	0.73239	4.91	ppb
	Mg	26	652.355	15.379	0.003	0.68901	15.28	ppb
	Al	27	21538.793	20.087	0.122	2.93920	6.76	ppb
	K	39	347228.114	1.836	-0.134	-2.03972	465.79	ppb
	Ca	44	24737.900	1.749	-0.049	-18.83296	91.82	ppb
>	Sc	45	584033.337	22.702	584033.337			ppb
	Ti	47	105.001	20.757	0.000	0.02126	207.11	ppb
	V	51	2668.896	23.754	0.001	0.05232	148.64	ppb
	Cr	52	9158.192	0.330	0.002	0.09440	210.53	ppb
	Mn	55	4227.582	19.132	-0.004	-0.14926	16.68	ppb
	Fe	54	68080.039	12.563	0.000	0.22923	3831.84	ppb
	Fe	56	2495990.459	3.428	0.435	16.47193	222.75	ppb
	Fe	57	4727.786	5.549	0.001	2.02348	148.46	ppb
	Co	59	118.667	16.882	-0.000	-0.00054	118.55	ppb
	Ni	60	75.556	19.894	0.000	0.00501	27.16	ppb
	Cu	63	506.680	8.703	0.000	0.03113	35.16	ppb
	Cu	65	251.114	22.305	0.000	0.02712	22.99	ppb
	Zn	66	1041.168	25.419	0.001	0.36690	13.00	ppb
	As	75	-57.923	60.608	-0.000	-0.00996	197.13	ppb
	Se	82	57.333	4.193	0.000	0.01321	483.13	ppb
	Mo	96	130.001	11.094	-0.000	-0.00028	831.66	ppb
	Ag	107	64.445	10.767	0.000	0.00021	519.13	ppb
	Ag	109	54.445	30.816	0.000	0.00029	625.36	ppb
	Cd	111	4.878	106.257	0.000	0.00038	575.98	ppb
	In	113	68834.816	18.555	-0.000	-0.12771	238.55	ppb
>	In	115	1587661.679	18.108	1587661.679			ppb
	Sn	118	168.335	9.548	-0.000	-0.00548	33.92	ppb
	Sb	121	4060.829	9.362	0.001	0.35964	21.77	ppb
	Ba	135	76.000	37.953	0.000	0.01284	49.76	ppb
	Ba	137	168.001	18.596	0.000	0.02086	3.79	ppb
>	Tb	159	2528293.336	16.486	2528293.336			ppb
	Tl	205	116.667	26.186	0.000	0.00078	100.56	ppb
	Pb	206	430.009	14.098	0.000	0.00191	56.68	ppb
	Pb	207	856.685	16.398	0.000	0.00502	33.12	ppb
	Pb	208	1375.055	15.029	0.000	0.00472	40.69	ppb
>	Bi	209	1941692.749	17.073	1941692.749			ppb
	Cr	53	2452.302	7.477	-1218.374			ppb
	Pd	106	0.000		-3.333			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	542026.410	14.402	154387.167			ppb
	Kr	83	38.667	21.535	-14.000			ppb
	Se	77	115.778	10.839	0.889			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	105936.167		ppb
	Be	9	2.000	-0.002885	ppb
	Na	23	21704.529	4.733148	ppb
	Mg	24	2387.285	0.768114	ppb
	Mg	25	345.006	0.722316	ppb
	Mg	26	540.015	0.794721	ppb
	Al	27	16578.731	3.084799	ppb
	K	39	341315.062	8.861277	ppb
	Ca	44	24377.677	1.122936	ppb
>	Sc	45	434034.212		ppb
	Ti	47	115.001	0.065519	ppb
	V	51	2843.482	0.124789	ppb
	Cr	52	9130.166	0.321963	ppb
	Mn	55	3330.555	-0.136245	ppb
	Fe	54	58254.185	10.104554	ppb
	Fe	56	2400779.664	58.508202	ppb
	Fe	57	4516.019	5.317271	ppb
	Co	59	98.000	0.000161	ppb
	Ni	60	60.000	0.006282	ppb
	Cu	63	473.345	0.043692	ppb
	Cu	65	190.002	0.027900	ppb
	Zn	66	740.027	0.344488	ppb
	As	75	-73.510	-0.027307	ppb
	Se	82	54.667	0.086355	ppb
	Mo	96	114.001	0.002395	ppb
	Ag	107	66.667	0.001339	ppb
	Ag	109	70.000	0.002321	ppb
	Cd	111	10.000	0.002695	ppb
	In	113	54467.935	-0.176448	ppb
>	In	115	1259535.219		ppb
	Sn	118	150.001	-0.003480	ppb
	Sb	121	3960.784	0.440927	ppb
	Ba	135	44.000	0.006109	ppb
	Ba	137	132.001	0.019971	ppb
>	Tb	159	2047242.966		ppb
	Tl	205	110.001	0.001206	ppb
	Pb	206	360.006	0.003016	ppb
	Pb	207	710.013	0.005917	ppb
	Pb	208	1145.038	0.005735	ppb
>	Bi	209	1561294.874		ppb
	Cr	53	2412.291		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	477081.180		ppb
	Kr	83	32.000		ppb
	Se	77	122.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	159514.172		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	30923.740	4.357393	ppb
	Mg	24	3457.598	0.733293	ppb
	Mg	25	550.015	0.772355	ppb
	Mg	26	733.027	0.688152	ppb
	Al	27	24535.062	3.020074	ppb
	K	39	353984.282	-6.421603	ppb
	Ca	44	24618.266	-28.233225	ppb
>	Sc	45	685566.207		ppb

	Ti	47	80.000	-0.022556	ppb
	V	51	1965.928	-0.029828	ppb
	Cr	52	9190.221	-0.045061	ppb
	Mn	55	4450.990	-0.177961	ppb
	Fe	54	73856.737	-6.710719	ppb
	Fe	56	2566437.219	-9.120702	ppb
	Fe	57	4646.079	-0.565338	ppb
	Co	59	138.001	-0.000685	ppb
	Ni	60	90.000	0.005176	ppb
	Cu	63	556.682	0.026029	ppb
	Cu	65	263.337	0.020528	ppb
	Zn	66	1146.732	0.334521	ppb
	As	75	-82.537	-0.013914	ppb
	Se	82	59.334	-0.031042	ppb
	Mo	96	142.001	-0.001506	ppb
	Ag	107	56.667	-0.000834	ppb
	Ag	109	56.667	-0.000192	ppb
	Cd	111	-0.365	-0.001609	ppb
	In	113	78905.077	0.198373	ppb
>	In	115	1795334.194		ppb
	Sn	118	175.002	-0.007154	ppb
	Sb	121	4481.004	0.353266	ppb
	Ba	135	84.000	0.013584	ppb
	Ba	137	188.002	0.021496	ppb
>	Tb	159	2781972.951		ppb
	Tl	205	150.001	0.001259	ppb
	Pb	206	465.011	0.001864	ppb
	Pb	207	870.019	0.003100	ppb
	Pb	208	1545.073	0.005921	ppb
>	Bi	209	2094931.105		ppb
	Cr	53	2652.352		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	520367.799		ppb
	Kr	83	36.000		ppb
	Se	77	124.001		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	166618.620		ppb
	Be	9	4.000	-0.001168	ppb
	Na	23	29934.737	3.873194	ppb
	Mg	24	3438.591	0.691219	ppb
	Mg	25	530.014	0.702510	ppb
	Mg	26	684.023	0.584158	ppb
	Al	27	23502.586	2.712737	ppb
	K	39	346384.997	-8.558847	ppb
	Ca	44	25217.757	-29.388589	ppb
>	Sc	45	632499.591		ppb
	Ti	47	120.001	0.020828	ppb
	V	51	3197.277	0.061985	ppb
	Cr	52	9154.188	0.006298	ppb
	Mn	55	4901.201	-0.133579	ppb
	Fe	54	72129.196	-2.706159	ppb
	Fe	56	2520754.495	0.028298	ppb
	Fe	57	5021.260	1.318521	ppb
	Co	59	120.001	-0.001084	ppb
	Ni	60	76.667	0.003576	ppb
	Cu	63	490.012	0.023666	ppb
	Cu	65	300.005	0.032924	ppb
	Zn	66	1236.743	0.421686	ppb
	As	75	-17.723	0.011349	ppb
	Se	82	58.000	-0.015689	ppb

⌈	Mo	96	134.001	-0.001726	ppb
|	Ag	107	70.000	0.000124	ppb
|	Ag	109	36.667	-0.001249	ppb
|	Cd	111	5.000	0.000045	ppb
|	In	113	73131.436	-0.405062	ppb
|>	In	115	1708115.625		ppb
⌊	Sn	118	180.002	-0.005810	ppb
⌈	Sb	121	3740.700	0.284733	ppb
|	Ba	135	100.001	0.018818	ppb
|	Ba	137	184.002	0.021099	ppb
⌊>	Tb	159	2755664.092		ppb
⌈	Tl	205	90.000	-0.000125	ppb
|	Pb	206	465.011	0.000852	ppb
|	Pb	207	990.025	0.006039	ppb
|	Pb	208	1435.055	0.002505	ppb
⌊>	Bi	209	2168852.267		ppb
	Cr	53	2292.263		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	628630.250		ppb
	Kr	83	48.000		ppb
	Se	77	101.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		118.786			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		115.312			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		113.631			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		116.027			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		117.083			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910096-03

Sample Date/Time: Monday, November 09, 2009 19:31:15
Sample Type: Sample
Sample Description: MW-10 101409
Number of Replicates: 3
Batch ID: 0910096
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910096-03.863

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	134481.027	22.825	134481.027			ppb
	Be	9	1.333	173.205	-0.000	-0.00470	166.16	ppb
	Na	23	2878315.875	20.936	21.412	730.02154	2.54	ppb
	Mg	24	68058.907	21.536	0.504	20.41082	1.64	ppb
	Mg	25	10901.449	21.173	0.081	21.13690	2.50	ppb
	Mg	26	13238.412	23.499	0.097	20.58076	2.10	ppb
	Al	27	100751.613	26.418	0.716	17.24937	4.62	ppb
	K	39	968313.259	16.253	4.647	70.82986	12.59	ppb
	Ca	44	66108.138	14.445	0.272	105.43045	19.49	ppb
>	Sc	45	578498.601	26.480	578498.601			ppb
	Ti	47	411.676	26.173	0.001	0.33212	9.91	ppb
	V	51	2832.326	14.284	0.002	0.06376	83.57	ppb
	Cr	52	13783.538	8.434	0.010	0.50259	52.84	ppb
	Mn	55	13329.061	17.609	0.012	0.42226	21.09	ppb
	Fe	54	89187.635	13.839	0.040	25.51789	61.58	ppb
	Fe	56	2898847.786	4.786	1.263	47.79566	106.43	ppb
	Fe	57	16552.187	13.519	0.022	36.16082	20.71	ppb
	Co	59	340.673	13.132	0.000	0.01334	28.07	ppb
	Ni	60	570.016	13.220	0.001	0.14697	24.65	ppb
	Cu	63	1607.910	17.486	0.002	0.15509	17.94	ppb
	Cu	65	741.139	12.898	0.001	0.14960	22.71	ppb
	Zn	66	3973.027	17.449	0.006	1.98304	14.40	ppb
	As	75	-63.224	66.786	-0.000	-0.01274	163.98	ppb
	Se	82	46.222	3.002	-0.000	-0.03654	221.83	ppb
	Mo	96	7336.075	17.034	0.005	1.61042	4.77	ppb
	Ag	107	26.667	37.500	-0.000	-0.00216	48.15	ppb
	Ag	109	43.333	20.352	-0.000	-0.00050	109.36	ppb
	Cd	111	8.483	20.815	0.000	0.00152	61.15	ppb
	In	113	66486.130	16.915	-0.000	-0.06923	98.63	ppb
>	In	115	1530588.586	17.073	1530588.586			ppb
	Sn	118	355.006	15.873	0.000	0.01577	9.81	ppb
	Sb	121	2123.561	11.122	0.001	0.16536	12.12	ppb
	Ba	135	690.024	15.869	0.000	0.24168	3.04	ppb
	Ba	137	1182.071	17.399	0.000	0.23689	1.33	ppb
>	Tb	159	2336816.602	16.960	2336816.602			ppb
	Tl	205	80.000	33.072	-0.000	-0.00003	1825.35	ppb
	Pb	206	623.353	22.293	0.000	0.01753	17.22	ppb
	Pb	207	1141.700	20.234	0.000	0.01789	11.43	ppb
	Pb	208	1878.441	16.020	0.000	0.01919	18.82	ppb
>	Bi	209	1825448.559	16.477	1825448.559			ppb
	Cr	53	3093.812	1.881	-576.864			ppb
	Pd	106	3.333	173.205	0.000			ppb
	Pd	108	10.000	86.603	6.667			ppb
	C	12	642602.661	16.138	254963.418			ppb
	Kr	83	48.000	8.333	-4.667			ppb
	Se	77	107.778	11.936	-7.111			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	99052.149		ppb
	Be	9	4.000	0.004318	ppb
	Na	23	2182833.596	749.090174	ppb
	Mg	24	51134.403	20.773844	ppb
	Mg	25	8239.393	21.625385	ppb
	Mg	26	9653.657	20.395330	ppb
	Al	27	70125.017	16.372558	ppb
	K	39	787211.746	80.883027	ppb
	Ca	44	55288.419	128.201791	ppb
>	Sc	45	403135.350		ppb
	Ti	47	290.004	0.335459	ppb
	V	51	2614.862	0.122062	ppb
	Cr	52	12563.888	0.809216	ppb
	Mn	55	10625.642	0.523703	ppb
	Fe	54	75413.290	43.660169	ppb
	Fe	56	2739466.587	106.326498	ppb
	Fe	57	13969.751	44.636725	ppb
	Co	59	292.004	0.017370	ppb
	Ni	60	506.680	0.184119	ppb
	Cu	63	1313.420	0.181115	ppb
	Cu	65	640.020	0.185919	ppb
	Zn	66	3200.512	2.267007	ppb
	As	75	-68.627	-0.027545	ppb
	Se	82	46.667	0.055993	ppb
	Mo	96	5899.740	1.603562	ppb
	Ag	107	36.667	-0.001025	ppb
	Ag	109	40.000	-0.000107	ppb
	Cd	111	8.905	0.002309	ppb
	In	113	53733.980	-0.040294	ppb
>	In	115	1235241.672		ppb
	Sn	118	290.004	0.016182	ppb
	Sb	121	1875.176	0.187137	ppb
	Ba	135	564.016	0.245157	ppb
	Ba	137	948.045	0.236073	ppb
>	Tb	159	1881234.374		ppb
	Tl	205	60.000	-0.000168	ppb
	Pb	206	465.011	0.014227	ppb
	Pb	207	875.019	0.015679	ppb
	Pb	208	1565.075	0.020355	ppb
>	Bi	209	1479195.701		ppb
	Cr	53	3088.477		ppb
	Pd	106	0.000		ppb
	Pd	108	15.000		ppb
	C	12	523720.187		ppb
	Kr	83	44.000		ppb
	Se	77	112.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	153101.094		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	3207470.929	712.023032	ppb
	Mg	24	76543.831	20.114105	ppb
	Mg	25	12120.341	20.574874	ppb
	Mg	26	14831.991	20.271558	ppb
	Al	27	118295.578	17.931597	ppb
	K	39	1045788.685	63.862881	ppb
	Ca	44	69677.908	88.278061	ppb
>	Sc	45	646130.992		ppb

	Ti	47	495.012	0.363227	ppb
	V	51	2583.010	0.017605	ppb
	Cr	52	13907.664	0.345481	ppb
	Mn	55	14515.527	0.386224	ppb
	Fe	54	92904.567	16.180807	ppb
	Fe	56	2964492.552	22.826755	ppb
	Fe	57	17916.035	33.408144	ppb
	Co	59	380.007	0.012668	ppb
	Ni	60	653.355	0.145063	ppb
	Cu	63	1873.509	0.158390	ppb
	Cu	65	830.034	0.144281	ppb
	Zn	66	4541.031	1.986059	ppb
	As	75	-18.557	0.011157	ppb
	Se	82	47.333	-0.070638	ppb
	Mo	96	7935.147	1.537236	ppb
	Ag	107	16.667	-0.003066	ppb
	Ag	109	53.333	-0.000272	ppb
	Cd	111	6.545	0.000496	ppb
	In	113	74985.088	-0.147205	ppb
>	In	115	1731776.357		ppb
	Sn	118	385.007	0.014065	ppb
	Sb	121	2345.275	0.161293	ppb
	Ba	135	744.028	0.233229	ppb
	Ba	137	1334.089	0.240366	ppb
>	Tb	159	2602190.720		ppb
	Tl	205	110.001	0.000527	ppb
	Pb	206	680.023	0.018230	ppb
	Pb	207	1280.041	0.019712	ppb
	Pb	208	2165.140	0.022071	ppb
>	Bi	209	1975166.060		ppb
	Cr	53	3154.497		ppb
	Pd	106	10.000		ppb
	Pd	108	15.000		ppb
	C	12	689614.328		ppb
	Kr	83	52.000		ppb
	Se	77	93.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	151289.839		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	3244643.101	728.951412	ppb
	Mg	24	76498.486	20.344504	ppb
	Mg	25	12344.615	21.210445	ppb
	Mg	26	15229.588	21.075394	ppb
	Al	27	113834.245	17.443947	ppb
	K	39	1071939.347	67.743663	ppb
	Ca	44	73358.087	99.811512	ppb
>	Sc	45	686229.461		ppb
	Ti	47	450.010	0.297678	ppb
	V	51	3299.106	0.051600	ppb
	Cr	52	14879.061	0.353072	ppb
	Mn	55	14846.012	0.356868	ppb
	Fe	54	99245.047	16.712694	ppb
	Fe	56	2992584.220	14.233732	ppb
	Fe	57	17770.776	30.437589	ppb
	Co	59	350.006	0.009973	ppb
	Ni	60	550.015	0.111728	ppb
	Cu	63	1636.801	0.125776	ppb
	Cu	65	753.362	0.118611	ppb
	Zn	66	4177.539	1.696060	ppb
	As	75	-102.487	-0.021833	ppb
	Se	82	44.667	-0.094969	ppb

⌈	Mo	96	8173.339	1.690476	ppb
|	Ag	107	26.667	-0.002375	ppb
|	Ag	109	36.667	-0.001134	ppb
|	Cd	111	10.000	0.001752	ppb
|	In	113	70739.321	-0.020179	ppb
|>	In	115	1624747.728		ppb
⌊	Sn	118	390.008	0.017077	ppb
⌈	Sb	121	2150.231	0.147662	ppb
|	Ba	135	762.029	0.246652	ppb
|	Ba	137	1264.080	0.234242	ppb
⌊>	Tb	159	2527024.712		ppb
⌈	Tl	205	70.000	-0.000441	ppb
|	Pb	206	725.026	0.020141	ppb
|	Pb	207	1270.041	0.018289	ppb
|	Pb	208	1905.107	0.015137	ppb
⌊>	Bi	209	2021983.915		ppb
	Cr	53	3038.462		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	714473.469		ppb
	Kr	83	48.000		ppb
	Se	77	118.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		110.916			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		114.220			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		109.546			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		107.240			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		110.074			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 19:33:14
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.864

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	131589.727	23.368	131589.727			ppb
|	Be	9	48950.193	24.291	0.371	124.44181	1.84	ppb
|	Na	23	5095005.495	27.146	38.478	1311.86369	6.40	ppb
|	Mg	24	4283305.761	25.705	32.471	1315.80554	5.22	ppb
|	Mg	25	678021.265	24.588	5.143	1345.04139	2.13	ppb
|	Mg	26	842912.547	25.263	6.382	1354.30108	2.32	ppb
|	Al	27	7160928.631	23.967	54.328	1309.06140	0.83	ppb
|	K	39	11689057.246	21.425	86.503	1318.39216	2.34	ppb
⌊	Ca	44	438351.565	21.677	3.114	1206.21770	2.28	ppb
⌈>	Sc	45	567598.505	21.699	567598.505			ppb
|	Ti	47	110925.253	22.311	0.195	115.87635	0.87	ppb
|	V	51	1651521.622	20.685	2.911	122.18838	1.20	ppb
|	Cr	52	1436137.059	20.889	2.521	121.24231	2.67	ppb
|	Mn	55	1987961.250	20.762	3.496	123.49970	1.11	ppb
|	Fe	54	1138069.785	20.695	1.890	1200.03914	2.39	ppb
|	Fe	56	20207389.387	17.731	31.853	1204.94938	5.15	ppb
|	Fe	57	410539.116	20.448	0.718	1163.70140	1.68	ppb
|	Co	59	1952494.836	19.238	3.454	119.22240	2.86	ppb
|	Ni	60	412900.461	20.043	0.729	115.95215	2.45	ppb
|	Cu	63	985241.263	18.580	1.744	110.60365	3.73	ppb
|	Cu	65	481218.429	17.985	0.853	117.20271	4.38	ppb
|	Zn	66	213853.605	19.195	0.378	116.49412	2.95	ppb
|	As	75	236860.505	17.972	0.420	114.85721	4.47	ppb
⌊	Se	82	21446.167	18.585	0.038	112.86689	3.69	ppb
⌈	Mo	96	514676.310	19.145	0.332	113.45631	3.35	ppb
|	Ag	107	1787623.655	17.859	1.155	117.51217	1.65	ppb
|	Ag	109	1726083.471	17.544	1.116	116.78121	1.55	ppb
|	Cd	111	335327.370	17.723	0.217	114.58308	2.66	ppb
|	In	113	393172.441	16.991	0.211	111.97313	0.96	ppb
|>	In	115	1544496.051	16.371	1544496.051			ppb
⌊	Sn	118	1018690.258	20.062	0.657	111.68190	6.99	ppb
⌈	Sb	121	979233.681	18.539	0.409	110.59478	2.67	ppb
|	Ba	135	321768.683	16.882	0.135	115.67514	1.96	ppb
|	Ba	137	553197.177	17.950	0.231	113.69895	2.23	ppb
⌊>	Tb	159	2387209.191	16.172	2387209.191			ppb
⌈	Tl	205	4770043.442	17.842	2.628	120.78051	2.61	ppb
|	Pb	206	1632934.006	16.550	0.901	120.52797	1.42	ppb
|	Pb	207	3026116.296	18.435	1.665	118.86029	2.07	ppb
|	Pb	208	4882523.603	17.861	2.690	121.10809	1.05	ppb
⌊>	Bi	209	1813307.487	17.044	1813307.487			ppb
	Cr	53	157838.816	20.542	154168.140			ppb
	Pd	106	30375.415	18.236	30372.082			ppb
	Pd	108	22645.920	13.426	22642.587			ppb
	C	12	438782.195	6.363	51142.952			ppb
	Kr	83	46.667	10.786	-6.000			ppb
	Se	77	16990.541	18.852	16875.651			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	97042.590		ppb
|	Be	9	35878.247	123.839219	ppb
|	Na	23	3674400.318	1288.685383	ppb
|	Mg	24	3140744.672	1311.329025	ppb
|	Mg	25	495159.214	1334.333202	ppb
|	Mg	26	602867.638	1318.066974	ppb
|	Al	27	5226149.272	1296.955149	ppb
|	K	39	8873829.867	1353.425802	ppb
L	Ca	44	330351.955	1230.655755	ppb
[>	Sc	45	427877.209		ppb
|	Ti	47	82745.934	114.787466	ppb
|	V	51	1264385.416	123.881854	ppb
|	Cr	52	1105943.219	123.637334	ppb
|	Mn	55	1520221.598	125.087757	ppb
|	Fe	54	866988.668	1211.373079	ppb
|	Fe	56	16110560.270	1273.591072	ppb
|	Fe	57	314488.598	1180.283548	ppb
|	Co	59	1523654.524	122.914140	ppb
|	Ni	60	317769.922	118.053419	ppb
|	Cu	63	775188.054	114.843452	ppb
|	Cu	65	381895.577	122.625301	ppb
|	Zn	66	166904.664	120.114237	ppb
|	As	75	187916.131	120.128536	ppb
L	Se	82	16877.564	117.230819	ppb
[	Mo	96	401661.797	109.150468	ppb
|	Ag	107	1425165.432	115.307049	ppb
|	Ag	109	1379472.475	114.829351	ppb
|	Cd	111	266774.171	112.171530	ppb
|	In	113	316975.290	110.788897	ppb
|>	In	115	1257147.097		ppb
L	Sn	118	785461.817	106.167102	ppb
[	Sb	121	769607.418	107.183167	ppb
|	Ba	135	259530.666	114.805980	ppb
|	Ba	137	438819.409	111.134409	ppb
L>	Tb	159	1941418.530		ppb
[	Tl	205	3802298.171	118.543654	ppb
|	Pb	206	1329011.791	120.595091	ppb
|	Pb	207	2401484.766	116.232700	ppb
|	Pb	208	3940246.733	120.329587	ppb
L>	Bi	209	1474174.704		ppb
	Cr	53	121432.847		ppb
	Pd	106	24018.811		ppb
	Pd	108	19228.469		ppb
	C	12	453762.633		ppb
	Kr	83	52.000		ppb
	Se	77	13386.955		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	155966.872		ppb
|	Be	9	59122.257	126.972246	ppb
|	Na	23	6437285.787	1404.934041	ppb
|	Mg	24	5337506.202	1386.596367	ppb
|	Mg	25	821550.209	1377.478638	ppb
|	Mg	26	1009094.891	1372.717894	ppb
|	Al	27	8499831.278	1312.460316	ppb
|	K	39	13669314.945	1295.507181	ppb
L	Ca	44	509128.870	1176.480273	ppb
[>	Sc	45	660436.684		ppb

	Ti	47	129128.358	116.054288	ppb
	V	51	1910609.995	121.276577	ppb
	Cr	52	1691927.193	122.536306	ppb
	Mn	55	2301029.696	122.656384	ppb
	Fe	54	1292485.319	1167.412449	ppb
	Fe	56	22754971.275	1152.621190	ppb
	Fe	57	469875.763	1142.120151	ppb
	Co	59	2223100.339	116.187876	ppb
	Ni	60	468322.031	112.718605	ppb
	Cu	63	1110700.821	106.604807	ppb
	Cu	65	540443.020	112.425020	ppb
	Zn	66	242973.031	113.274598	ppb
	As	75	265269.153	109.865987	ppb
	Se	82	24212.610	108.938240	ppb
	Mo	96	582581.743	114.850019	ppb
	Ag	107	2027108.227	118.979318	ppb
	Ag	109	1939311.438	117.109244	ppb
	Cd	111	372305.720	113.564379	ppb
	In	113	441683.454	112.242891	ppb
>	In	115	1732936.334		ppb
	Sn	118	1104175.751	108.270082	ppb
	Sb	121	1084335.762	112.252507	ppb
	Ba	135	359640.840	118.251326	ppb
	Ba	137	617321.787	116.208032	ppb
>	Tb	159	2611916.842		ppb
	Tl	205	5401849.151	119.410389	ppb
	Pb	206	1846225.955	118.782261	ppb
	Pb	207	3474784.803	119.246703	ppb
	Pb	208	5661169.239	122.581357	ppb
>	Bi	209	2079129.239		ppb
	Cr	53	183604.192		ppb
	Pd	106	34168.274		ppb
	Pd	108	25051.339		ppb
	C	12	456015.731		ppb
	Kr	83	46.000		ppb
	Se	77	19513.687		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	141759.719		ppb
	Be	9	51850.074	122.513952	ppb
	Na	23	5173330.380	1241.971650	ppb
	Mg	24	4371666.409	1249.491231	ppb
	Mg	25	717354.372	1323.312331	ppb
	Mg	26	916775.112	1372.118374	ppb
	Al	27	7756805.342	1317.768738	ppb
	K	39	12524026.924	1306.243497	ppb
	Ca	44	475573.869	1211.517072	ppb
>	Sc	45	614481.622		ppb
	Ti	47	120901.467	116.787289	ppb
	V	51	1779569.456	121.406711	ppb
	Cr	52	1510540.764	117.553294	ppb
	Mn	55	2142632.456	122.754962	ppb
	Fe	54	1254735.369	1221.331883	ppb
	Fe	56	21756636.617	1188.635872	ppb
	Fe	57	447252.988	1168.700497	ppb
	Co	59	2110729.647	118.565195	ppb
	Ni	60	452609.429	117.084433	ppb
	Cu	63	1069834.914	110.362691	ppb
	Cu	65	521316.689	116.557815	ppb
	Zn	66	231683.119	116.093523	ppb
	As	75	257396.231	114.577118	ppb
	Se	82	23248.326	112.431606	ppb

⌈	Mo	96	559785.389	116.368448	ppb
|	Ag	107	1910597.305	118.250146	ppb
|	Ag	109	1859466.500	118.405042	ppb
|	Cd	111	366902.220	118.013328	ppb
|	In	113	420858.580	112.887601	ppb
|>	In	115	1643404.720		ppb
⌊	Sn	118	1166433.205	120.608508	ppb
⌈	Sb	121	1083757.864	112.348662	ppb
|	Ba	135	346134.545	113.968113	ppb
|	Ba	137	603450.336	113.754408	ppb
⌊>	Tb	159	2608292.200		ppb
⌈	Tl	205	5105983.003	124.387493	ppb
|	Pb	206	1723564.272	122.206544	ppb
|	Pb	207	3202079.318	121.101473	ppb
|	Pb	208	5046154.838	120.413315	ppb
⌊>	Bi	209	1886618.516		ppb
	Cr	53	168479.410		ppb
	Pd	106	32939.160		ppb
	Pd	108	23657.952		ppb
	C	12	406568.221		ppb
	Kr	83	42.000		ppb
	Se	77	18070.980		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		108.531			
	Be	9	103.702				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		112.067			
	Ti	47					
	V	51	101.824				
	Cr	52	101.035				
	Mn	55	102.916				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	99.352				
	Ni	60	96.627				
	Cu	63	92.170				
	Cu	65	97.669				
	Zn	66	97.078				
	As	75	95.714				
	Se	82	94.056				
	Mo	96					
	Ag	107	97.927				
	Ag	109	97.318				
	Cd	111	95.486				
	In	113					
>	In	115		110.542			
	Sn	118	93.068				
	Sb	121	92.162				
	Ba	135	96.396				
	Ba	137	94.749				
>	Tb	159		109.552			
	Tl	205	100.650				
	Pb	206	100.440				
	Pb	207	99.050				
	Pb	208	100.923				
>	Bi	209		109.342			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 19:35:12
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.865

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	129370.467	30.713	129370.467			ppb
	Be	9	4.667	24.744	0.000	0.00467	188.29	ppb
	Na	23	8130.684	14.587	-0.000	-0.01604	2853.31	ppb
	Mg	24	522.014	8.722	0.001	0.02887	178.60	ppb
	Mg	25	88.667	23.934	0.000	0.05337	35.46	ppb
	Mg	26	186.335	13.728	0.000	0.03268	210.76	ppb
	Al	27	2655.361	19.438	-0.007	-0.17654	41.42	ppb
	K	39	313661.088	8.358	-0.070	-1.07187	1011.38	ppb
	Ca	44	23887.324	9.219	-0.023	-8.82200	424.78	ppb
>	Sc	45	539734.438	28.406	539734.438			ppb
	Ti	47	58.334	4.949	-0.000	-0.02289	110.93	ppb
	V	51	2491.097	3.824	0.001	0.05518	111.61	ppb
	Cr	52	7816.390	3.942	0.001	0.04800	454.06	ppb
	Mn	55	3313.886	10.583	-0.005	-0.18106	27.31	ppb
	Fe	54	64849.474	15.214	0.006	3.61781	357.26	ppb
	Fe	56	2226947.462	8.612	0.342	12.93720	310.43	ppb
	Fe	57	3837.417	16.999	0.000	0.30501	586.21	ppb
	Co	59	189.335	14.420	0.000	0.00549	99.93	ppb
	Ni	60	47.778	28.196	-0.000	-0.00054	1240.37	ppb
	Cu	63	252.225	6.246	0.000	0.00592	156.53	ppb
	Cu	65	120.001	16.667	0.000	0.00037	3238.98	ppb
	Zn	66	187.780	22.195	-0.000	-0.07150	24.25	ppb
	As	75	-47.051	76.579	-0.000	-0.00205	715.72	ppb
	Se	82	58.222	5.411	0.000	0.05595	222.41	ppb
	Mo	96	540.682	16.709	0.000	0.10251	43.97	ppb
	Ag	107	172.224	25.702	0.000	0.00799	32.99	ppb
	Ag	109	163.335	0.000	0.000	0.00852	36.24	ppb
	Cd	111	9.513	52.744	0.000	0.00205	92.94	ppb
	In	113	62464.763	23.211	-0.001	-0.75392	32.41	ppb
>	In	115	1479529.270	22.387	1479529.270			ppb
	Sn	118	516.680	16.547	0.000	0.03723	35.66	ppb
	Sb	121	3714.029	11.760	0.001	0.36641	29.40	ppb
	Ba	135	48.000	22.048	0.000	0.00582	65.61	ppb
	Ba	137	80.000	18.028	0.000	0.00549	39.35	ppb
>	Tb	159	2332759.017	26.702	2332759.017			ppb
	Tl	205	306.671	18.756	0.000	0.00640	59.89	ppb
	Pb	206	281.671	14.349	-0.000	-0.00639	54.20	ppb
	Pb	207	518.340	9.517	-0.000	-0.00526	88.32	ppb
	Pb	208	811.686	10.497	-0.000	-0.00608	96.67	ppb
>	Bi	209	1797287.317	23.495	1797287.317			ppb
	Cr	53	2494.318	17.788	-1176.359			ppb
	Pd	106	0.000		-3.333			ppb
	Pd	108	6.667	86.603	3.333			ppb
	C	12	424985.276	6.678	37346.033			ppb
	Kr	83	55.333	20.553	2.667			ppb
	Se	77	118.001	3.437	3.111			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	83593.943		ppb
	Be	9	6.000	0.014834	ppb
	Na	23	6778.296	0.512379	ppb
	Mg	24	481.012	0.088118	ppb
	Mg	25	65.000	0.073937	ppb
	Mg	26	157.001	0.111520	ppb
	Al	27	2060.212	-0.092233	ppb
	K	39	283393.489	11.425198	ppb
	Ca	44	26420.857	34.415252	ppb
>	Sc	45	362840.362		ppb
	Ti	47	60.000	0.006356	ppb
	V	51	2389.995	0.126284	ppb
	Cr	52	7462.784	0.299456	ppb
	Mn	55	2910.423	-0.123962	ppb
	Fe	54	53477.611	18.466532	ppb
	Fe	56	2012234.531	59.055591	ppb
	Fe	57	3100.481	2.301621	ppb
	Co	59	202.002	0.011584	ppb
	Ni	60	50.000	0.006213	ppb
	Cu	63	240.003	0.016484	ppb
	Cu	65	120.001	0.013191	ppb
	Zn	66	146.668	-0.056659	ppb
	As	75	-5.446	0.014907	ppb
	Se	82	59.334	0.198302	ppb
	Mo	96	576.017	0.150850	ppb
	Ag	107	146.668	0.009551	ppb
	Ag	109	163.335	0.012082	ppb
	Cd	111	10.000	0.003315	ppb
	In	113	45724.297	-1.012549	ppb
>	In	115	1097282.281		ppb
	Sn	118	475.011	0.049855	ppb
	Sb	121	3390.575	0.485825	ppb
	Ba	135	40.000	0.008935	ppb
	Ba	137	64.000	0.007763	ppb
>	Tb	159	1614083.175		ppb
	Tl	205	365.007	0.010775	ppb
	Pb	206	245.003	-0.002808	ppb
	Pb	207	485.006	-0.000112	ppb
	Pb	208	805.019	0.000386	ppb
>	Bi	209	1309825.224		ppb
	Cr	53	3006.452		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	393234.585		ppb
	Kr	83	68.000		ppb
	Se	77	120.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	149578.380		ppb
	Be	9	4.000	-0.000251	ppb
	Na	23	8619.713	-0.287447	ppb
	Mg	24	514.013	-0.005801	ppb
	Mg	25	95.000	0.036682	ppb
	Mg	26	204.002	0.002380	ppb
	Al	27	2925.428	-0.214822	ppb
	K	39	329219.512	-6.698328	ppb
	Ca	44	22807.981	-28.950234	ppb
>	Sc	45	622027.367		ppb

	Ti	47	55.000	-0.039350	ppb
	V	51	2504.131	0.018784	ppb
	Cr	52	8027.221	-0.069129	ppb
	Mn	55	3485.607	-0.209355	ppb
	Fe	54	71132.092	-2.504947	ppb
	Fe	56	2381275.312	-5.915920	ppb
	Fe	57	4340.942	-0.238264	ppb
	Co	59	208.002	0.003910	ppb
	Ni	60	33.333	-0.007175	ppb
	Cu	63	270.004	0.002067	ppb
	Cu	65	100.001	-0.010166	ppb
	Zn	66	230.003	-0.067285	ppb
	As	75	-67.965	-0.010870	ppb
	Se	82	60.667	0.001683	ppb
	Mo	96	608.018	0.095014	ppb
	Ag	107	223.336	0.009464	ppb
	Ag	109	163.335	0.006669	ppb
	Cd	111	14.270	0.002984	ppb
	In	113	70996.131	-0.722192	ppb
>	In	115	1681691.364		ppb
	Sn	118	615.019	0.038436	ppb
	Sb	121	4210.886	0.336812	ppb
	Ba	135	44.000	0.001560	ppb
	Ba	137	84.000	0.003469	ppb
>	Tb	159	2716835.118		ppb
	Tl	205	250.003	0.003625	ppb
	Pb	206	275.004	-0.009718	ppb
	Pb	207	495.006	-0.009143	ppb
	Pb	208	730.015	-0.011103	ppb
>	Bi	209	2030917.595		ppb
	Cr	53	2250.253		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	433839.010		ppb
	Kr	83	46.000		ppb
	Se	77	120.001		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	154939.079		ppb
	Be	9	4.000	-0.000561	ppb
	Na	23	8994.043	-0.273053	ppb
	Mg	24	571.016	0.004289	ppb
	Mg	25	106.001	0.049503	ppb
	Mg	26	198.002	-0.015852	ppb
	Al	27	2980.444	-0.222571	ppb
	K	39	328370.263	-7.942481	ppb
	Ca	44	22433.134	-31.931019	ppb
>	Sc	45	634335.586		ppb
	Ti	47	60.000	-0.035687	ppb
	V	51	2579.165	0.020471	ppb
	Cr	52	7959.166	-0.086334	ppb
	Mn	55	3545.628	-0.209853	ppb
	Fe	54	69938.719	-5.108170	ppb
	Fe	56	2287332.543	-14.328071	ppb
	Fe	57	4070.828	-1.148331	ppb
	Co	59	158.001	0.000965	ppb
	Ni	60	60.000	-0.000657	ppb
	Cu	63	246.670	-0.000799	ppb
	Cu	65	140.001	-0.001928	ppb
	Zn	66	186.668	-0.090565	ppb
	As	75	-67.742	-0.010194	ppb
	Se	82	54.667	-0.032136	ppb

⌈	Mo	96	438.010	0.061653	ppb
|	Ag	107	146.668	0.004945	ppb
|	Ag	109	163.335	0.006804	ppb
|	Cd	111	4.270	-0.000142	ppb
|	In	113	70673.860	-0.527020	ppb
|>	In	115	1659614.166		ppb
⌊	Sn	118	460.011	0.023389	ppb
⌈	Sb	121	3540.627	0.276597	ppb
|	Ba	135	60.000	0.006970	ppb
|	Ba	137	92.000	0.005226	ppb
⌊>	Tb	159	2667358.758		ppb
⌈	Tl	205	305.005	0.004802	ppb
|	Pb	206	325.005	-0.006634	ppb
|	Pb	207	575.008	-0.006531	ppb
|	Pb	208	900.024	-0.007530	ppb
⌊>	Bi	209	2051119.130		ppb
	Cr	53	2226.248		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	447882.233		ppb
	Kr	83	52.000		ppb
	Se	77	113.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		106.701			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		106.566			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		105.892			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		107.053			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		108.376			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101927-BLK1

Sample Date/Time: Monday, November 09, 2009 19:40:02
Sample Type: Sample
Sample Description: PBW
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101927-BLK1.866

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	125283.126	28.546	125283.126			ppb
	Be	9	0.667	173.205	-0.000	-0.00770	34.01	ppb
	Na	23	7035.860	17.833	-0.008	-0.28758	91.15	ppb
	Mg	24	625.687	20.806	0.002	0.06162	40.66	ppb
	Mg	25	108.001	15.158	0.000	0.10537	50.16	ppb
	Mg	26	216.336	17.881	0.000	0.09216	81.39	ppb
	Al	27	2086.893	23.642	-0.012	-0.27973	10.27	ppb
	K	39	319122.786	3.569	0.062	0.94980	1313.23	ppb
	Ca	44	24882.323	5.891	-0.012	-4.63677	730.63	ppb
>	Sc	45	524474.849	26.342	524474.849			ppb
	Ti	47	70.000	7.143	-0.000	-0.00915	216.64	ppb
	V	51	2103.087	24.796	0.001	0.02406	195.02	ppb
	Cr	52	7326.017	2.594	0.000	0.01682	1179.41	ppb
	Mn	55	2648.692	18.954	-0.006	-0.22604	7.22	ppb
	Fe	54	61500.455	16.940	0.001	0.86811	1004.94	ppb
	Fe	56	2118392.374	8.038	0.220	8.32620	429.97	ppb
	Fe	57	3704.022	7.174	0.000	0.45301	715.13	ppb
	Co	59	117.334	33.330	0.000	0.00105	523.91	ppb
	Ni	60	62.222	24.744	0.000	0.00369	123.01	ppb
	Cu	63	230.003	1.449	0.000	0.00395	230.65	ppb
	Cu	65	122.223	20.830	0.000	0.00056	1079.82	ppb
	Zn	66	255.559	9.615	-0.000	-0.02438	159.76	ppb
	As	75	-80.189	28.262	-0.000	-0.02655	88.41	ppb
	Se	82	41.556	6.679	-0.000	-0.04005	183.77	ppb
	Mo	96	166.001	6.375	0.000	0.01158	68.63	ppb
	Ag	107	63.334	18.977	0.000	0.00051	220.81	ppb
	Ag	109	54.445	35.874	0.000	0.00041	232.52	ppb
	Cd	111	6.030	34.958	0.000	0.00089	161.64	ppb
	In	113	61866.821	21.848	-0.001	-0.56818	55.07	ppb
>	In	115	1453567.468	21.026	1453567.468			ppb
	Sn	118	201.669	14.528	0.000	0.00031	1279.78	ppb
	Sb	121	1195.073	18.162	0.000	0.05874	9.11	ppb
	Ba	135	50.667	14.945	0.000	0.00677	21.72	ppb
	Ba	137	73.334	26.207	0.000	0.00396	57.55	ppb
>	Tb	159	2300076.830	21.219	2300076.830			ppb
	Tl	205	95.000	32.869	0.000	0.00040	128.17	ppb
	Pb	206	450.010	12.522	0.000	0.00677	109.79	ppb
	Pb	207	790.016	15.899	0.000	0.00529	45.39	ppb
	Pb	208	1288.385	17.280	0.000	0.00542	45.67	ppb
>	Bi	209	1791247.567	22.283	1791247.567			ppb
	Cr	53	2264.925	9.531	-1405.751			ppb
	Pd	106	1.667	173.205	-1.667			ppb
	Pd	108	3.333	86.603	-0.000			ppb
	C	12	417141.971	8.492	29502.728			ppb
	Kr	83	47.333	14.839	-5.333			ppb
	Se	77	102.223	3.347	-12.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	84041.672		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	5587.561	0.014590	ppb
	Mg	24	484.012	0.088322	ppb
	Mg	25	94.000	0.163100	ppb
	Mg	26	180.002	0.167475	ppb
	Al	27	1520.116	-0.250247	ppb
	K	39	306566.199	15.352295	ppb
	Ca	44	26573.260	34.465459	ppb
>	Sc	45	365696.632		ppb
	Ti	47	65.000	0.013711	ppb
	V	51	1825.283	0.059309	ppb
	Cr	52	7112.529	0.245659	ppb
	Mn	55	2070.214	-0.207328	ppb
	Fe	54	49562.519	10.938442	ppb
	Fe	56	1931020.799	49.016151	ppb
	Fe	57	3545.628	4.167250	ppb
	Co	59	158.001	0.007281	ppb
	Ni	60	53.333	0.007491	ppb
	Cu	63	230.003	0.014423	ppb
	Cu	65	100.001	0.005320	ppb
	Zn	66	236.669	0.018265	ppb
	As	75	-95.157	-0.052151	ppb
	Se	82	40.667	0.042419	ppb
	Mo	96	158.001	0.020517	ppb
	Ag	107	60.000	0.001500	ppb
	Ag	109	40.000	0.000308	ppb
	Cd	111	8.455	0.002558	ppb
	In	113	46301.946	-0.803323	ppb
>	In	115	1100740.326		ppb
	Sn	118	180.002	0.004073	ppb
	Sb	121	945.045	0.064678	ppb
	Ba	135	42.000	0.008423	ppb
	Ba	137	56.000	0.004123	ppb
>	Tb	159	1736535.655		ppb
	Tl	205	70.000	0.000386	ppb
	Pb	206	420.009	0.014406	ppb
	Pb	207	645.011	0.008063	ppb
	Pb	208	1040.036	0.007913	ppb
>	Bi	209	1330379.404		ppb
	Cr	53	2500.313		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	376272.320		ppb
	Kr	83	48.000		ppb
	Se	77	106.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144066.334		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	7726.984	-0.423545	ppb
	Mg	24	653.021	0.038626	ppb
	Mg	25	104.001	0.059376	ppb
	Mg	26	257.003	0.091526	ppb
	Al	27	2420.293	-0.281277	ppb
	K	39	322016.578	-6.176886	ppb
	Ca	44	24099.003	-23.219013	ppb
>	Sc	45	590441.197		ppb

	Ti	47	70.000	-0.021449	ppb
	V	51	2704.657	0.042079	ppb
	Cr	52	7388.729	-0.087937	ppb
	Mn	55	2905.422	-0.233475	ppb
	Fe	54	66183.289	-3.942375	ppb
	Fe	56	2263697.727	-5.701797	ppb
	Fe	57	3555.632	-1.789618	ppb
	Co	59	114.001	-0.000969	ppb
	Ni	60	53.333	-0.001334	ppb
	Cu	63	233.336	-0.000398	ppb
	Cu	65	150.001	0.002654	ppb
	Zn	66	283.337	-0.033328	ppb
	As	75	-54.116	-0.006054	ppb
	Se	82	44.667	-0.063508	ppb
	Mo	96	162.001	0.005298	ppb
	Ag	107	76.667	0.000721	ppb
	Ag	109	76.667	0.001408	ppb
	Cd	111	5.000	0.000113	ppb
	In	113	70648.683	-0.213034	ppb
>	In	115	1636310.524		ppb
	Sn	118	235.003	0.000689	ppb
	Sb	121	1305.085	0.054283	ppb
	Ba	135	56.000	0.006291	ppb
	Ba	137	70.000	0.001606	ppb
>	Tb	159	2580246.535		ppb
	Tl	205	130.001	0.000930	ppb
	Pb	206	515.013	0.006331	ppb
	Pb	207	865.019	0.004071	ppb
	Pb	208	1355.057	0.002964	ppb
>	Bi	209	2016862.163		ppb
	Cr	53	2076.216		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	439034.550		ppb
	Kr	83	54.000		ppb
	Se	77	99.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147741.373		ppb
	Be	9	2.000	-0.004675	ppb
	Na	23	7793.035	-0.453789	ppb
	Mg	24	740.027	0.057921	ppb
	Mg	25	126.001	0.093624	ppb
	Mg	26	212.002	0.017470	ppb
	Al	27	2320.269	-0.307659	ppb
	K	39	328785.581	-6.325996	ppb
	Ca	44	23974.705	-25.156742	ppb
>	Sc	45	617286.719		ppb
	Ti	47	75.000	-0.019700	ppb
	V	51	1779.321	-0.029203	ppb
	Cr	52	7476.794	-0.107252	ppb
	Mn	55	2970.441	-0.237313	ppb
	Fe	54	68755.557	-4.391726	ppb
	Fe	56	2160458.596	-18.335761	ppb
	Fe	57	4010.804	-1.018598	ppb
	Co	59	80.000	-0.003160	ppb
	Ni	60	80.000	0.004909	ppb
	Cu	63	226.669	-0.002173	ppb
	Cu	65	116.667	-0.006285	ppb
	Zn	66	246.670	-0.058083	ppb
	As	75	-91.295	-0.021436	ppb
	Se	82	39.333	-0.099051	ppb

⌈	Mo	96	178.002	0.008929	ppb
|	Ag	107	53.333	-0.000703	ppb
|	Ag	109	46.667	-0.000487	ppb
|	Cd	111	4.635	0.000007	ppb
|	In	113	68649.834	-0.688174	ppb
|>	In	115	1623651.555		ppb
⌊	Sn	118	190.002	-0.003832	ppb
⌈	Sb	121	1335.089	0.057256	ppb
|	Ba	135	54.000	0.005603	ppb
|	Ba	137	94.000	0.006157	ppb
⌊>	Tb	159	2583448.302		ppb
⌈	Tl	205	85.000	-0.000105	ppb
|	Pb	206	415.009	-0.000434	ppb
|	Pb	207	860.019	0.003749	ppb
|	Pb	208	1470.062	0.005376	ppb
⌊>	Bi	209	2026501.133		ppb
	Cr	53	2218.246		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	436119.042		ppb
	Kr	83	40.000		ppb
	Se	77	101.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		103.330			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		103.553			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		104.034			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		105.554			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		108.012			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101927-BS1

Sample Date/Time: Monday, November 09, 2009 19:42:00
Sample Type: Sample
Sample Description: LCSW
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101927-BS1.867

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
[>	Li	6	127840.312	21.910	127840.312			ppb
|	Be	9	39629.954	20.785	0.311	104.05328	2.22	ppb
|	Na	23	8477137.284	23.241	66.113	2254.07975	2.93	ppb
|	Mg	24	4356235.987	22.754	34.030	1378.97797	2.35	ppb
|	Mg	25	665542.191	23.128	5.195	1358.69093	2.02	ppb
|	Mg	26	829576.916	23.088	6.475	1373.98604	1.40	ppb
|	Al	27	2981527.630	23.371	23.254	560.30914	4.26	ppb
|	K	39	18343920.026	23.223	140.562	2142.29209	2.75	ppb
L	Ca	44	644989.787	21.864	4.819	1866.55719	0.64	ppb
[>	Sc	45	527349.768	23.217	527349.768			ppb
|	Ti	47	53.333	32.924	-0.000	-0.02893	88.12	ppb
|	V	51	1370999.274	22.283	2.601	109.17419	1.81	ppb
|	Cr	52	1152220.267	22.337	2.174	104.58234	1.26	ppb
|	Mn	55	1639102.102	19.901	3.116	110.06497	4.15	ppb
|	Fe	54	979914.262	16.637	1.763	1119.49876	8.84	ppb
|	Fe	56	16956300.298	18.928	28.429	1075.40491	6.03	ppb
|	Fe	57	345344.059	20.053	0.652	1056.66730	3.99	ppb
|	Co	59	1607811.616	19.126	3.072	106.04572	5.01	ppb
|	Ni	60	351487.803	21.475	0.669	106.29436	2.20	ppb
|	Cu	63	803077.053	19.828	1.532	97.16112	4.59	ppb
|	Cu	65	386175.475	19.570	0.737	101.28850	4.37	ppb
|	Zn	66	350819.441	19.362	0.669	206.46332	4.75	ppb
|	As	75	386931.070	18.756	0.740	202.39143	5.71	ppb
L	Se	82	34944.251	17.937	0.067	199.09415	6.47	ppb
[	Mo	96	276.671	12.979	0.000	0.03366	14.01	ppb
|	Ag	107	1509723.174	18.392	0.985	100.23368	3.64	ppb
|	Ag	109	1495089.717	19.649	0.974	101.89333	1.29	ppb
|	Cd	111	286650.086	17.902	0.187	98.96791	3.52	ppb
|	In	113	336034.727	17.936	0.176	93.40524	2.85	ppb
\>	In	115	1534925.011	19.395	1534925.011			ppb
L	Sn	118	185.002	28.217	-0.000	-0.00305	156.61	ppb
[	Sb	121	1712819.807	19.426	0.734	198.68934	3.98	ppb
|	Ba	135	267892.489	17.719	0.115	98.86941	1.92	ppb
|	Ba	137	470039.459	17.000	0.202	99.40313	0.87	ppb
L>	Tb	159	2323113.442	16.367	2323113.442			ppb
[	Tl	205	8439674.201	16.000	4.723	217.08697	3.26	ppb
|	Pb	206	2759525.661	17.359	1.541	206.17497	0.80	ppb
|	Pb	207	5125825.243	17.243	2.863	204.30488	0.78	ppb
|	Pb	208	8171443.247	17.664	4.561	205.38188	0.35	ppb
L>	Bi	209	1791398.701	17.689	1791398.701			ppb
	Cr	53	128213.130	20.723	124542.454			ppb
	Pd	106	24570.879	19.074	24567.546			ppb
	Pd	108	18515.869	18.951	18512.535			ppb
	C	12	453897.830	2.675	66258.587			ppb
	Kr	83	54.667	46.325	2.000			ppb
	Se	77	27464.096	18.729	27349.207			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	95497.825		ppb
|	Be	9	30165.429	105.803464	ppb
|	Na	23	6222438.124	2219.257720	ppb
|	Mg	24	3219428.615	1365.930680	ppb
|	Mg	25	488374.128	1337.337641	ppb
|	Mg	26	608428.044	1351.748774	ppb
|	Al	27	2193938.985	552.875920	ppb
|	K	39	13460536.451	2107.982075	ppb
L	Ca	44	482279.858	1868.250021	ppb
[>	Sc	45	385988.303		ppb
|	Ti	47	55.000	-0.007230	ppb
|	V	51	1019472.334	110.709811	ppb
|	Cr	52	855360.399	105.902836	ppb
|	Mn	55	1263392.504	115.204732	ppb
|	Fe	54	793268.488	1229.725819	ppb
|	Fe	56	13255598.212	1148.366868	ppb
|	Fe	57	265452.091	1103.621719	ppb
|	Co	59	1253553.551	112.098717	ppb
|	Ni	60	264423.710	108.894597	ppb
|	Cu	63	620537.265	101.906017	ppb
|	Cu	65	298911.623	106.391233	ppb
|	Zn	66	272578.331	217.598406	ppb
|	As	75	303702.655	215.201531	ppb
L	Se	82	27720.368	213.677200	ppb
[	Mo	96	236.003	0.039082	ppb
|	Ag	107	1191033.503	101.569444	ppb
|	Ag	109	1155970.202	101.422741	ppb
|	Cd	111	227641.758	100.888281	ppb
|	In	113	266437.791	95.516604	ppb
|>	In	115	1192711.807		ppb
L	Sn	118	160.001	-0.000921	ppb
[	Sb	121	1328611.949	190.421874	ppb
|	Ba	135	213145.599	96.997108	ppb
|	Ba	137	378132.552	98.518110	ppb
L>	Tb	159	1887139.520		ppb
[	Tl	205	6901677.502	222.522632	ppb
|	Pb	206	2206865.791	207.110678	ppb
|	Pb	207	4105824.885	205.530318	ppb
|	Pb	208	6505012.999	205.457446	ppb
L>	Bi	209	1425492.867		ppb
	Cr	53	97547.466		ppb
	Pd	106	19163.344		ppb
	Pd	108	14540.564		ppb
	C	12	439901.427		ppb
	Kr	83	26.000		ppb
	Se	77	21524.474		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	144224.590		ppb
|	Be	9	45179.831	104.927380	ppb
|	Na	23	9866977.241	2330.270945	ppb
|	Mg	24	5039807.410	1415.857651	ppb
|	Mg	25	766446.874	1389.716539	ppb
|	Mg	26	941979.686	1385.749484	ppb
|	Al	27	3517847.060	587.037133	ppb
|	K	39	21297284.358	2210.344025	ppb
L	Ca	44	731827.284	1877.567734	ppb
[>	Sc	45	599857.552		ppb

	Ti	47	70.000	-0.022555	ppb
	V	51	1572292.938	109.866585	ppb
	Cr	52	1312754.519	104.576072	ppb
	Mn	55	1850131.417	108.534195	ppb
	Fe	54	1051980.003	1038.336037	ppb
	Fe	56	18634139.688	1024.377202	ppb
	Fe	57	382347.359	1022.019208	ppb
	Co	59	1805801.735	103.908601	ppb
	Ni	60	398571.080	105.617478	ppb
	Cu	63	913417.927	96.520920	ppb
	Cu	65	430163.911	98.517301	ppb
	Zn	66	394688.203	202.730001	ppb
	As	75	437008.839	199.258139	ppb
	Se	82	38172.719	189.305320	ppb
	Mo	96	304.005	0.031370	ppb
	Ag	107	1638598.130	96.106530	ppb
	Ag	109	1671794.306	100.882025	ppb
	Cd	111	311475.594	94.941205	ppb
	In	113	370721.671	90.409458	ppb
>	In	115	1734176.077		ppb
	Sn	118	245.003	0.000291	ppb
	Sb	121	1906809.024	199.447011	ppb
	Ba	135	297570.503	98.824915	ppb
	Ba	137	523033.616	99.447810	ppb
>	Tb	159	2585894.935		ppb
	Tl	205	9430710.433	219.644623	ppb
	Pb	206	3055406.328	207.134405	ppb
	Pb	207	5666066.986	204.886665	ppb
	Pb	208	9031899.918	206.067592	ppb
>	Bi	209	1973369.248		ppb
	Cr	53	142745.595		ppb
	Pd	106	27457.644		ppb
	Pd	108	19824.631		ppb
	C	12	460152.931		ppb
	Kr	83	64.000		ppb
	Se	77	30436.248		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143798.520		ppb
	Be	9	43544.601	101.428995	ppb
	Na	23	9341996.486	2212.710579	ppb
	Mg	24	4809471.937	1355.145573	ppb
	Mg	25	741805.570	1349.018595	ppb
	Mg	26	938323.018	1384.459871	ppb
	Al	27	3232796.843	541.014375	ppb
	K	39	20273939.270	2108.550181	ppb
	Ca	44	720862.220	1853.853828	ppb
>	Sc	45	596203.450		ppb
	Ti	47	35.000	-0.057003	ppb
	V	51	1521232.549	106.946168	ppb
	Cr	52	1288545.882	103.268125	ppb
	Mn	55	1803782.383	106.455990	ppb
	Fe	54	1094494.294	1090.434433	ppb
	Fe	56	18979162.994	1053.470662	ppb
	Fe	57	388232.728	1044.360961	ppb
	Co	59	1764079.563	102.129850	ppb
	Ni	60	391468.617	104.370998	ppb
	Cu	63	875275.967	93.056413	ppb
	Cu	65	429450.892	98.956954	ppb
	Zn	66	385191.789	199.061555	ppb
	As	75	420081.716	192.714628	ppb
	Se	82	38939.668	194.299919	ppb

⌈	Mo	96	290.004	0.030528	ppb
|	Ag	107	1699537.888	103.025080	ppb
|	Ag	109	1657504.642	103.375235	ppb
|	Cd	111	320832.906	101.074239	ppb
|	In	113	370944.718	94.289644	ppb
|>	In	115	1677887.150		ppb
⌊	Sn	118	150.001	-0.008526	ppb
⌈	Sb	121	1903038.449	206.199145	ppb
|	Ba	135	292961.366	100.786196	ppb
|	Ba	137	508952.209	100.243474	ppb
⌊>	Tb	159	2496305.873		ppb
⌈	Tl	205	8986634.668	209.093662	ppb
|	Pb	206	3016304.863	204.279839	ppb
|	Pb	207	5605583.857	202.497655	ppb
|	Pb	208	8977416.823	204.620614	ppb
⌊>	Bi	209	1975333.986		ppb
	Cr	53	144346.328		ppb
	Pd	106	27091.648		ppb
	Pd	108	21182.411		ppb
	C	12	461639.133		ppb
	Kr	83	74.000		ppb
	Se	77	30431.567		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		105.439			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		104.121			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		109.857			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		106.611			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		108.021			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101927-BSD1

Sample Date/Time: Monday, November 09, 2009 19:43:58
Sample Type: Sample
Sample Description: LCSWD
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101927-BSD1.868

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	130846.975	21.749	130846.975			ppb
|	Be	9	41760.605	22.490	0.319	106.77784	1.67	ppb
|	Na	23	8525400.486	24.278	64.808	2209.59383	3.14	ppb
|	Mg	24	4333532.858	23.264	33.033	1338.55664	2.30	ppb
|	Mg	25	678994.267	22.924	5.179	1354.39137	1.94	ppb
|	Mg	26	838934.745	21.148	6.418	1361.95974	1.98	ppb
|	Al	27	2992864.173	23.355	22.803	549.44487	4.69	ppb
|	K	39	18956752.362	21.590	142.370	2169.85475	3.73	ppb
⌊	Ca	44	666983.196	21.259	4.875	1888.44614	1.73	ppb
⌈>	Sc	45	554068.386	22.546	554068.386			ppb
|	Ti	47	63.334	19.868	-0.000	-0.02102	110.11	ppb
|	V	51	1371628.715	19.954	2.483	104.24049	3.09	ppb
|	Cr	52	1170184.425	19.953	2.108	101.37735	3.40	ppb
|	Mn	55	1647597.012	21.128	2.970	104.91052	2.34	ppb
|	Fe	54	975712.934	24.959	1.636	1038.47064	3.76	ppb
|	Fe	56	17391162.168	17.837	27.669	1046.66404	6.38	ppb
|	Fe	57	340850.051	20.508	0.610	989.67222	2.54	ppb
|	Co	59	1626527.251	17.836	2.960	102.18603	5.60	ppb
|	Ni	60	338884.507	20.745	0.614	97.54769	2.56	ppb
|	Cu	63	789296.883	21.097	1.428	90.53486	1.87	ppb
|	Cu	65	385142.910	20.480	0.697	95.85427	2.60	ppb
|	Zn	66	345453.806	20.079	0.626	192.95142	3.09	ppb
|	As	75	387317.528	18.653	0.704	192.54533	4.83	ppb
⌊	Se	82	35669.699	17.601	0.065	193.21756	5.86	ppb
⌈	Mo	96	250.670	18.786	0.000	0.02830	14.53	ppb
|	Ag	107	1498635.098	17.588	0.994	101.08557	2.75	ppb
|	Ag	109	1470894.865	17.874	0.975	102.04455	3.10	ppb
|	Cd	111	276792.807	16.396	0.184	97.17808	2.66	ppb
|	In	113	335050.004	14.781	0.179	95.25970	1.62	ppb
|>	In	115	1504572.818	15.595	1504572.818			ppb
⌊	Sn	118	156.668	27.144	-0.000	-0.00591	71.79	ppb
⌈	Sb	121	1729130.718	16.179	0.735	198.94222	0.45	ppb
|	Ba	135	268377.963	16.249	0.114	98.03227	0.72	ppb
|	Ba	137	474680.052	16.849	0.202	99.19359	0.41	ppb
⌊>	Tb	159	2351858.865	16.509	2351858.865			ppb
⌈	Tl	205	8380231.693	17.301	4.565	209.80610	2.84	ppb
|	Pb	206	2818854.539	17.887	1.534	205.25490	2.98	ppb
|	Pb	207	5253116.463	16.337	2.864	204.38228	1.29	ppb
|	Pb	208	8364165.172	14.334	4.571	205.84168	2.55	ppb
⌊>	Bi	209	1832059.258	15.351	1832059.258			ppb
	Cr	53	129427.020	21.287	125756.343			ppb
	Pd	106	24555.696	17.068	24552.362			ppb
	Pd	108	18457.423	18.901	18454.089			ppb
	C	12	462298.067	1.510	74658.824			ppb
	Kr	83	47.333	24.026	-5.333			ppb
	Se	77	27820.411	18.475	27705.521			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	97987.739		ppb
	Be	9	30949.821	105.796245	ppb
	Na	23	6137186.833	2133.145431	ppb
	Mg	24	3173063.794	1312.044337	ppb
	Mg	25	499619.812	1333.366956	ppb
	Mg	26	634913.605	1374.753007	ppb
	Al	27	2203992.988	541.281957	ppb
	K	39	14310222.609	2185.553969	ppb
	Ca	44	503716.863	1903.285500	ppb
>	Sc	45	409985.585		ppb
	Ti	47	65.000	0.002305	ppb
	V	51	1055806.571	107.940764	ppb
	Cr	52	900683.369	104.981186	ppb
	Mn	55	1248796.399	107.180230	ppb
	Fe	54	697736.211	1005.409222	ppb
	Fe	56	13811072.678	1123.580191	ppb
	Fe	57	260371.094	1018.252097	ppb
	Co	59	1292267.767	108.796499	ppb
	Ni	60	258235.099	100.120101	ppb
	Cu	63	597640.540	92.398816	ppb
	Cu	65	294400.724	98.650012	ppb
	Zn	66	265361.397	199.422763	ppb
	As	75	303941.465	202.765764	ppb
	Se	82	28427.683	206.293347	ppb
	Mo	96	202.002	0.027411	ppb
	Ag	107	1194890.087	98.500033	ppb
	Ag	109	1168141.452	99.072619	ppb
	Cd	111	224833.184	96.320507	ppb
	In	113	277883.040	96.486731	ppb
>	In	115	1233859.352		ppb
	Sn	118	140.001	-0.004436	ppb
	Sb	121	1406339.440	199.818337	ppb
	Ba	135	218035.337	98.362083	ppb
	Ba	137	382377.478	98.760228	ppb
>	Tb	159	1903646.742		ppb
	Tl	205	6733003.797	205.244045	ppb
	Pb	206	2240761.589	198.821022	ppb
	Pb	207	4267063.382	201.951036	ppb
	Pb	208	7011033.363	209.362715	ppb
>	Bi	209	1507726.381		ppb
	Cr	53	97614.112		ppb
	Pd	106	19764.513		ppb
	Pd	108	14440.419		ppb
	C	12	455768.849		ppb
	Kr	83	60.000		ppb
	Se	77	21889.264		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147116.258		ppb
	Be	9	46423.508	105.696621	ppb
	Na	23	9799437.639	2268.771333	ppb
	Mg	24	4833906.552	1331.311618	ppb
	Mg	25	778459.899	1383.753988	ppb
	Mg	26	957005.557	1380.180639	ppb
	Al	27	3535069.350	578.305800	ppb
	K	39	22026990.866	2241.703190	ppb
	Ca	44	759244.455	1911.124095	ppb
>	Sc	45	632026.011		ppb

	Ti	47	75.000	-0.021383	ppb
	V	51	1539613.085	102.096726	ppb
	Cr	52	1298241.370	98.113779	ppb
	Mn	55	1890535.127	105.247367	ppb
	Fe	54	1151467.425	1081.605412	ppb
	Fe	56	19279527.750	1003.195306	ppb
	Fe	57	386424.680	979.873983	ppb
	Co	59	1812749.825	98.999022	ppb
	Ni	60	387200.508	97.380870	ppb
	Cu	63	898525.121	90.112945	ppb
	Cu	65	437307.283	95.054623	ppb
	Zn	66	385001.328	187.675748	ppb
	As	75	426583.978	184.606444	ppb
	Se	82	39574.820	186.264912	ppb
	Mo	96	254.003	0.024707	ppb
	Ag	107	1667259.339	104.020120	ppb
	Ag	109	1641587.652	105.372681	ppb
	Cd	111	308675.416	100.084189	ppb
	In	113	364944.904	95.764460	ppb
>	In	115	1630274.848		ppb
	Sn	118	125.001	-0.010689	ppb
	Sb	121	1879567.684	198.037050	ppb
	Ba	135	294481.038	98.515181	ppb
	Ba	137	518207.858	99.251925	ppb
>	Tb	159	2567092.106		ppb
	Tl	205	8944801.444	207.629611	ppb
	Pb	206	3048128.502	205.948606	ppb
	Pb	207	5660700.655	204.006774	ppb
	Pb	208	8787404.635	199.816828	ppb
>	Bi	209	1980002.338		ppb
	Cr	53	145508.997		ppb
	Pd	106	27542.878		ppb
	Pd	108	20726.457		ppb
	C	12	461467.476		ppb
	Kr	83	38.000		ppb
	Se	77	30973.895		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147436.929		ppb
	Be	9	47908.487	108.840641	ppb
	Na	23	9639576.987	2226.864731	ppb
	Mg	24	4993628.230	1372.313971	ppb
	Mg	25	758903.089	1346.053173	ppb
	Mg	26	924885.073	1330.945567	ppb
	Al	27	3239530.181	528.746861	ppb
	K	39	20533043.613	2082.307080	ppb
	Ca	44	737988.272	1850.928821	ppb
>	Sc	45	620193.562		ppb
	Ti	47	50.000	-0.043984	ppb
	V	51	1519466.488	102.683980	ppb
	Cr	52	1311628.536	101.037097	ppb
	Mn	55	1803459.510	102.303954	ppb
	Fe	54	1077935.166	1028.397293	ppb
	Fe	56	19082886.075	1013.216634	ppb
	Fe	57	375754.380	970.890589	ppb
	Co	59	1774564.163	98.762564	ppb
	Ni	60	371217.914	95.142094	ppb
	Cu	63	871724.987	89.092828	ppb
	Cu	65	423720.722	93.858164	ppb
	Zn	66	385998.692	191.755742	ppb
	As	75	431427.139	190.263792	ppb
	Se	82	39006.594	187.094411	ppb

⌈	Mo	96	296.004	0.032785	ppb
|	Ag	107	1633755.869	100.736563	ppb
|	Ag	109	1602955.490	101.688355	ppb
|	Cd	111	296869.819	95.129555	ppb
|	In	113	362322.068	93.527903	ppb
|>	In	115	1649584.255		ppb
⌊	Sn	118	205.002	-0.002599	ppb
⌈	Sb	121	1901485.029	198.971284	ppb
|	Ba	135	292617.515	97.219544	ppb
|	Ba	137	523454.820	99.568617	ppb
⌊>	Tb	159	2584837.748		ppb
⌈	Tl	205	9462889.836	216.544635	ppb
|	Pb	206	3167673.524	210.995059	ppb
|	Pb	207	5831585.354	207.189043	ppb
|	Pb	208	9294057.519	208.345489	ppb
⌊>	Bi	209	2008449.055		ppb
	Cr	53	145157.950		ppb
	Pd	106	26359.696		ppb
	Pd	108	20205.392		ppb
	C	12	469657.877		ppb
	Kr	83	44.000		ppb
	Se	77	30598.074		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		107.918			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		109.396			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		107.684			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		107.930			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		110.473			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910086-01

Sample Date/Time: Monday, November 09, 2009 19:45:55
Sample Type: Sample
Sample Description: 16-3
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910086-01.869

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	120620.582	25.966	120620.582			ppb
	Be	9	4.000	50.000	0.000	0.00254	238.33	ppb
	Na	23	2033439.255	21.745	16.948	577.82563	5.59	ppb
	Mg	24	S	S	6666670[illegible]27014594469.62718		173.20	ppb
	Mg	25	10746366.352	24.098	89.481	23402.02548	3.63	ppb
	Mg	26	13149604.165	25.114	109.426	23221.55843	6.36	ppb
	Al	27	51900.387	22.186	0.405	9.76633	5.11	ppb
	K	39	10197793.754	22.363	82.726	1260.81207	8.14	ppb
	Ca	44	6802385.634	21.209	56.796	22001.04673	7.44	ppb
>	Sc	45	493465.679	20.732	493465.679			ppb
	Ti	47	691.692	30.434	0.001	0.72783	13.23	ppb
	V	51	4445.802	12.994	0.006	0.23494	25.58	ppb
	Cr	52	29859.401	17.325	0.047	2.23767	7.03	ppb
	Mn	55	7034.181	15.808	0.003	0.10034	33.10	ppb
	Fe	54	66845.767	9.834	0.020	12.39120	87.33	ppb
	Fe	56	2679010.227	8.707	1.550	58.62864	49.42	ppb
	Fe	57	24444.007	20.506	0.042	68.83272	4.86	ppb
	Co	59	854.704	18.757	0.002	0.05237	5.50	ppb
	Ni	60	1719.042	22.974	0.003	0.53639	5.38	ppb
	Cu	63	2105.782	18.265	0.004	0.24617	3.12	ppb
	Cu	65	1767.939	21.125	0.003	0.45986	3.33	ppb
	Zn	66	4136.431	18.660	0.008	2.42380	11.68	ppb
	As	75	72.654	14.038	0.000	0.05972	5.47	ppb
	Se	82	95.778	11.101	0.000	0.31504	61.68	ppb
	Mo	96	1074.059	18.693	0.001	0.24969	3.13	ppb
	Ag	107	164.446	7.119	0.000	0.00888	23.01	ppb
	Ag	109	185.557	14.520	0.000	0.01169	35.61	ppb
	Cd	111	12.940	107.301	0.000	0.00466	162.74	ppb
	In	113	56669.473	20.253	-0.001	-0.38529	121.67	ppb
>	In	115	1321125.119	19.488	1321125.119			ppb
	Sn	118	501.679	15.258	0.000	0.04204	29.13	ppb
	Sb	121	11406.624	16.804	0.005	1.43611	34.61	ppb
	Ba	135	2066320.449	17.960	0.982	843.09982	3.77	ppb
	Ba	137	3648002.304	17.801	1.733	852.20685	2.99	ppb
>	Tb	159	2101839.132	16.528	2101839.132			ppb
	Tl	205	611.686	15.646	0.000	0.01688	36.57	ppb
	Pb	206	2313.606	16.206	0.001	0.17400	10.89	ppb
	Pb	207	4142.110	15.037	0.002	0.16580	3.52	ppb
	Pb	208	6599.655	14.371	0.004	0.16620	3.48	ppb
>	Bi	209	1540164.147	16.522	1540164.147			ppb
	Cr	53	4523.702	13.255	853.026			ppb
	Pd	106	6.667	43.301	3.333			ppb
	Pd	108	6.667	86.603	3.333			ppb
	C	12	651939.856	18.608	264300.613			ppb
	Kr	83	48.000	38.188	-4.667			ppb
	Se	77	149.557	5.574	34.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	84467.235		ppb
	Be	9	4.000	0.006654	ppb
	Na	23	1524111.416	612.938260	ppb
	Mg	24	51188454.729	24556.735328	ppb
	Mg	25	7771255.215	24061.598848	ppb
	Mg	26	9457506.135	23760.499089	ppb
	Al	27	38609.391	10.327791	ppb
	K	39	7661086.065	1342.090770	ppb
	Ca	44	5165210.578	23599.643128	ppb
>	Sc	45	377217.965		ppb
	Ti	47	450.010	0.616795	ppb
	V	51	4037.035	0.299014	ppb
	Cr	52	23894.513	2.357034	ppb
	Mn	55	5751.654	0.131283	ppb
	Fe	54	59315.396	24.725627	ppb
	Fe	56	2410222.336	90.970735	ppb
	Fe	57	18662.398	68.669820	ppb
	Co	59	670.022	0.053680	ppb
	Ni	60	1263.413	0.516776	ppb
	Cu	63	1666.806	0.254706	ppb
	Cu	65	1336.756	0.454741	ppb
	Zn	66	3327.220	2.538812	ppb
	As	75	61.346	0.063488	ppb
	Se	82	104.667	0.537787	ppb
	Mo	96	844.036	0.253136	ppb
	Ag	107	153.335	0.011187	ppb
	Ag	109	190.002	0.015923	ppb
	Cd	111	28.820	0.013376	ppb
	In	113	43454.209	-0.605279	ppb
>	In	115	1023965.287		ppb
	Sn	118	460.011	0.052633	ppb
	Sb	121	13133.619	1.997274	ppb
	Ba	135	1637813.589	823.260596	ppb
	Ba	137	2898778.853	834.208041	ppb
>	Tb	159	1708686.324		ppb
	Tl	205	700.025	0.023782	ppb
	Pb	206	1965.193	0.183130	ppb
	Pb	207	3435.301	0.170167	ppb
	Pb	208	5510.924	0.171813	ppb
>	Bi	209	1246365.871		ppb
	Cr	53	3864.747		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	511859.085		ppb
	Kr	83	64.000		ppb
	Se	77	158.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	137871.926		ppb
	Be	9	6.000	0.005369	ppb
	Na	23	2318976.040	571.205746	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	12494458.174	23700.807266	ppb
	Mg	26	15821389.500	24352.082888	ppb
	Al	27	58852.674	9.599427	ppb
	K	39	12078203.564	1294.929424	ppb
	Ca	44	7887948.016	22074.067587	ppb
>	Sc	45	569798.856		ppb

	Ti	47	835.035	0.778682	ppb
	V	51	5106.679	0.225985	ppb
	Cr	52	32566.944	2.059344	ppb
	Mn	55	7622.904	0.065256	ppb
	Fe	54	71439.270	4.492390	ppb
	Fe	56	2798238.498	35.039852	ppb
	Fe	57	27101.675	65.572335	ppb
	Co	59	936.044	0.049073	ppb
	Ni	60	1930.186	0.522848	ppb
	Cu	63	2383.617	0.239780	ppb
	Cu	65	1990.198	0.447744	ppb
	Zn	66	4217.556	2.101334	ppb
	As	75	81.156	0.057964	ppb
	Se	82	98.667	0.227012	ppb
	Mo	96	1214.074	0.255190	ppb
	Ag	107	163.335	0.007318	ppb
	Ag	109	210.002	0.011534	ppb
	Cd	111	6.910	0.000996	ppb
	In	113	64140.040	0.153007	ppb
>	In	115	1462225.365		ppb
	Sn	118	590.017	0.044860	ppb
	Sb	121	11741.890	1.259511	ppb
	Ba	135	2277635.809	826.328195	ppb
	Ba	137	4049029.964	841.018858	ppb
>	Tb	159	2367374.345		ppb
	Tl	205	625.020	0.014959	ppb
	Pb	206	2710.367	0.186659	ppb
	Pb	207	4610.548	0.168082	ppb
	Pb	208	7041.502	0.160253	ppb
>	Bi	209	1690682.097		ppb
	Cr	53	4669.090		ppb
	Pd	106	10.000		ppb
	Pd	108	10.000		ppb
	C	12	721520.931		ppb
	Kr	83	52.000		ppb
	Se	77	149.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	139522.585		ppb
	Be	9	2.000	-0.004408	ppb
	Na	23	2257230.308	549.332889	ppb
	Mg	24	80011594.182	23237.807806	ppb
	Mg	25	11973385.668	22443.670325	ppb
	Mg	26	14169916.859	21552.093322	ppb
	Al	27	58239.097	9.371777	ppb
	K	39	10854091.632	1145.416023	ppb
	Ca	44	7353998.307	20329.429462	ppb
>	Sc	45	533380.218		ppb
	Ti	47	790.031	0.788001	ppb
	V	51	4193.693	0.179825	ppb
	Cr	52	33116.745	2.296638	ppb
	Mn	55	7727.985	0.104479	ppb
	Fe	54	69782.634	7.955577	ppb
	Fe	56	2828569.846	49.875322	ppb
	Fe	57	27567.947	72.256016	ppb
	Co	59	958.046	0.054369	ppb
	Ni	60	1963.526	0.569557	ppb
	Cu	63	2266.924	0.244018	ppb
	Cu	65	1976.862	0.477082	ppb
	Zn	66	4864.516	2.631251	ppb
	As	75	75.461	0.057703	ppb
	Se	82	84.000	0.180312	ppb

⌈	Mo	96	1164.068	0.240749	ppb
|	Ag	107	176.668	0.008121	ppb
|	Ag	109	156.668	0.007604	ppb
|	Cd	111	3.090	-0.000396	ppb
|	In	113	62414.170	-0.703594	ppb
|>	In	115	1477184.706		ppb
⌊	Sn	118	455.010	0.028632	ppb
⌈	Sb	121	9344.364	1.051546	ppb
|	Ba	135	2283511.950	879.710674	ppb
|	Ba	137	3996198.096	881.393654	ppb
⌊>	Tb	159	2229456.727		ppb
⌈	Tl	205	510.013	0.011892	ppb
|	Pb	206	2265.257	0.152205	ppb
|	Pb	207	4380.480	0.159165	ppb
|	Pb	208	7246.540	0.166544	ppb
⌊>	Bi	209	1683444.473		ppb
	Cr	53	5037.268		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	722439.553		ppb
	Kr	83	28.000		ppb
	Se	77	141.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		99.484			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.431			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		94.555			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		96.456			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		92.871			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: SDI0910086-01

Sample Date/Time: Monday, November 09, 2009 19:47:53
Sample Type: Sample
Sample Description: 16-3L 5X
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910086-01.870

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	126320.970	28.396	126320.970			ppb
|	Be	9	2.000	100.000	-0.000	-0.00241	336.38	ppb
|	Na	23	365171.305	27.549	2.832	96.54197	2.17	ppb
|	Mg	24	13706519.941	28.887	108.414	4393.13587	1.87	ppb
|	Mg	25	2080693.549	26.047	16.564	4332.08429	2.98	ppb
|	Mg	26	2578232.473	27.479	20.454	4340.53155	1.93	ppb
|	Al	27	10909.503	23.664	0.059	1.41858	8.82	ppb
|	K	39	2178074.541	25.956	14.703	224.07993	3.74	ppb
⌊	Ca	44	1348199.996	26.438	10.497	4066.32771	3.59	ppb
⌈>	Sc	45	514552.089	29.696	514552.089			ppb
|	Ti	47	173.335	30.574	0.000	0.11080	29.60	ppb
|	V	51	2860.968	29.917	0.002	0.08305	1.28	ppb
|	Cr	52	12395.074	11.106	0.011	0.52412	53.28	ppb
|	Mn	55	3268.882	20.363	-0.005	-0.17751	15.35	ppb
|	Fe	54	62524.451	15.058	0.008	4.93839	296.66	ppb
|	Fe	56	2261596.854	9.306	0.641	24.24653	181.66	ppb
|	Fe	57	7389.442	15.974	0.008	12.55396	33.10	ppb
|	Co	59	267.337	21.454	0.000	0.01086	31.02	ppb
|	Ni	60	387.786	20.921	0.001	0.10716	15.65	ppb
|	Cu	63	575.572	13.413	0.001	0.04851	32.01	ppb
|	Cu	65	483.345	15.590	0.001	0.10281	31.52	ppb
|	Zn	66	968.938	26.151	0.001	0.40500	7.82	ppb
|	As	75	-110.893	14.908	-0.000	-0.04635	70.27	ppb
⌊	Se	82	48.667	9.589	0.000	0.00992	888.74	ppb
⌈	Mo	96	252.670	14.688	0.000	0.03274	26.07	ppb
|	Ag	107	60.000	5.556	0.000	0.00036	283.69	ppb
|	Ag	109	73.334	9.091	0.000	0.00218	97.57	ppb
|	Cd	111	16.638	39.427	0.000	0.00527	82.47	ppb
|	In	113	60665.052	23.288	-0.001	-0.70785	80.67	ppb
|>	In	115	1440137.511	24.692	1440137.511			ppb
⌊	Sn	118	176.668	16.093	-0.000	-0.00248	105.05	ppb
⌈	Sb	121	3964.130	14.762	0.001	0.40336	23.49	ppb
|	Ba	135	394973.552	23.481	0.174	149.68991	1.39	ppb
|	Ba	137	678306.708	22.375	0.300	147.49759	2.70	ppb
⌊>	Tb	159	2271155.210	24.584	2271155.210			ppb
⌈	Tl	205	156.668	12.898	0.000	0.00246	73.78	ppb
|	Pb	206	543.349	28.429	0.000	0.01470	40.72	ppb
|	Pb	207	1030.028	26.353	0.000	0.01622	10.73	ppb
|	Pb	208	1593.408	19.246	0.000	0.01516	29.89	ppb
⌊>	Bi	209	1708902.102	23.037	1708902.102			ppb
	Cr	53	2418.293	5.243	-1252.383			ppb
	Pd	106	6.667	86.603	3.333			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	457792.340	8.342	70153.097			ppb
	Kr	83	44.667	11.268	-8.000			ppb
	Se	77	126.223	7.171	11.333			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	85054.179		ppb
	Be	9	4.000	0.006544	ppb
	Na	23	250422.804	98.130627	ppb
	Mg	24	9192485.240	4379.377230	ppb
	Mg	25	1457395.405	4481.187573	ppb
	Mg	26	1760289.120	4391.697485	ppb
	Al	27	7938.149	1.562765	ppb
	K	39	1525905.447	233.184640	ppb
	Ca	44	936746.369	4178.257595	ppb
>	Sc	45	338364.282		ppb
	Ti	47	125.001	0.127578	ppb
	V	51	1873.441	0.082206	ppb
	Cr	52	10805.835	0.846258	ppb
	Mn	55	2500.313	-0.146279	ppb
	Fe	54	51673.162	21.849648	ppb
	Fe	56	2020022.766	75.101602	ppb
	Fe	57	6031.819	17.351880	ppb
	Co	59	214.002	0.014199	ppb
	Ni	60	300.005	0.125262	ppb
	Cu	63	490.012	0.066365	ppb
	Cu	65	420.009	0.138327	ppb
	Zn	66	680.023	0.438466	ppb
	As	75	-126.905	-0.083560	ppb
	Se	82	45.333	0.110272	ppb
	Mo	96	214.002	0.042328	ppb
	Ag	107	56.667	0.001541	ppb
	Ag	109	80.000	0.004617	ppb
	Cd	111	22.640	0.010095	ppb
	In	113	44353.142	-0.317873	ppb
>	In	115	1031990.774		ppb
	Sn	118	145.001	0.000160	ppb
	Sb	121	3515.618	0.502023	ppb
	Ba	135	288105.297	152.057104	ppb
	Ba	137	503134.622	152.029354	ppb
>	Tb	159	1627237.604		ppb
	Tl	205	180.002	0.004554	ppb
	Pb	206	405.008	0.015303	ppb
	Pb	207	720.013	0.014368	ppb
	Pb	208	1270.051	0.018238	ppb
>	Bi	209	1256172.768		ppb
	Cr	53	2564.329		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	414548.019		ppb
	Kr	83	50.000		ppb
	Se	77	134.668		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	150027.026		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	438210.563	97.332942	ppb
	Mg	24	16591775.895	4481.245845	ppb
	Mg	25	2440685.065	4254.543398	ppb
	Mg	26	3000447.817	4243.846401	ppb
	Al	27	12602.937	1.338049	ppb
	K	39	2528919.600	216.663999	ppb
	Ca	44	1545065.929	3901.312978	ppb
>	Sc	45	610817.021		ppb

	Ti	47	230.003	0.131809	ppb
	V	51	3389.140	0.082700	ppb
	Cr	52	13218.731	0.351086	ppb
	Mn	55	3645.664	-0.196467	ppb
	Fe	54	68518.941	-3.888636	ppb
	Fe	56	2405326.552	-1.768593	ppb
	Fe	57	8173.339	10.143405	ppb
	Co	59	328.005	0.010903	ppb
	Ni	60	460.011	0.104034	ppb
	Cu	63	640.020	0.040980	ppb
	Cu	65	566.683	0.095237	ppb
	Zn	66	1153.400	0.401013	ppb
	As	75	-93.886	-0.023025	ppb
	Se	82	54.000	-0.025502	ppb
	Mo	96	256.003	0.025959	ppb
	Ag	107	60.000	-0.000243	ppb
	Ag	109	73.334	0.001285	ppb
	Cd	111	9.635	0.001671	ppb
	In	113	68619.628	-0.442380	ppb
>	In	115	1605368.499		ppb
	Sn	118	200.002	-0.002546	ppb
	Sb	121	4626.070	0.395034	ppb
	Ba	135	454377.636	148.893833	ppb
	Ba	137	770396.867	144.531017	ppb
>	Tb	159	2620872.728		ppb
	Tl	205	145.001	0.001349	ppb
	Pb	206	710.025	0.020367	ppb
	Pb	207	1225.038	0.017822	ppb
	Pb	208	1630.075	0.009954	ppb
>	Bi	209	1970867.146		ppb
	Cr	53	2336.273		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	486897.758		ppb
	Kr	83	40.000		ppb
	Se	77	127.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143881.704		ppb
	Be	9	2.000	-0.004553	ppb
	Na	23	406880.547	94.162346	ppb
	Mg	24	15335298.689	4318.784526	ppb
	Mg	25	2344000.178	4260.521900	ppb
	Mg	26	2973960.482	4386.050759	ppb
	Al	27	12187.422	1.354916	ppb
	K	39	2479398.575	222.391154	ppb
	Ca	44	1562787.691	4119.412556	ppb
>	Sc	45	594474.966		ppb
	Ti	47	165.001	0.073004	ppb
	V	51	3320.325	0.084244	ppb
	Cr	52	13160.654	0.375003	ppb
	Mn	55	3660.670	-0.189780	ppb
	Fe	54	67381.249	-3.145841	ppb
	Fe	56	2359441.244	-0.593428	ppb
	Fe	57	7963.169	10.166600	ppb
	Co	59	260.003	0.007464	ppb
	Ni	60	403.341	0.092171	ppb
	Cu	63	596.684	0.038185	ppb
	Cu	65	463.344	0.074853	ppb
	Zn	66	1073.391	0.375516	ppb
	As	75	-111.887	-0.032461	ppb
	Se	82	46.667	-0.055014	ppb

⌈	Mo	96	288.004	0.029941	ppb
|	Ag	107	63.334	-0.000217	ppb
|	Ag	109	66.667	0.000650	ppb
|	Cd	111	17.640	0.004038	ppb
|	In	113	69022.385	-1.363290	ppb
|>	In	115	1683053.260		ppb
⌊	Sn	118	185.002	-0.005039	ppb
⌈	Sb	121	3750.703	0.313037	ppb
|	Ba	135	442437.724	148.118782	ppb
|	Ba	137	761388.634	145.932387	ppb
⌊>	Tb	159	2565355.298		ppb
⌈	Tl	205	145.001	0.001476	ppb
|	Pb	206	515.013	0.008439	ppb
|	Pb	207	1145.033	0.016479	ppb
|	Pb	208	1880.098	0.017276	ppb
⌊>	Bi	209	1899666.391		ppb
	Cr	53	2354.277		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	471931.242		ppb
	Kr	83	44.000		ppb
	Se	77	116.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		104.186			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		101.594			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		103.073			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		104.226			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		103.046			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910086-02

Sample Date/Time: Monday, November 09, 2009 19:49:50
Sample Type: Sample
Sample Description: FAL2
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910086-02.871

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	106306.413	21.831	106306.413			ppb
|	Be	9	20.667	39.111	0.000	0.05428	25.73	ppb
|	Na	23	9155146.971	20.945	86.229	2939.92988	3.37	ppb
|	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
|	Mg	25	23304304.661	16.957	221.116	57828.77700	6.19	ppb
|	Mg	26	29310145.337	17.255	277.915	58977.31727	5.56	ppb
|	Al	27	1947047.138	17.830	18.433	444.15725	6.82	ppb
|	K	39	10098500.705	17.579	93.102	1418.96529	6.27	ppb
⌊	Ca	44	35271050.227	15.302	335.328	129894.93034	7.79	ppb
⌈>	Sc	45	437638.110	17.338	437638.110			ppb
|	Ti	47	10667.478	18.116	0.024	14.37327	2.06	ppb
|	V	51	15251.784	15.228	0.031	1.31655	2.96	ppb
|	Cr	52	18893.301	10.715	0.029	1.40547	12.27	ppb
|	Mn	55	175911.752	15.661	0.391	13.82182	2.83	ppb
|	Fe	54	539315.517	16.217	1.116	708.46157	2.56	ppb
|	Fe	56	11526279.939	15.316	22.424	848.24342	3.69	ppb
|	Fe	57	295795.149	17.861	0.669	1084.18967	4.32	ppb
|	Co	59	8358.239	18.654	0.019	0.65073	4.22	ppb
|	Ni	60	9606.937	18.294	0.022	3.47030	3.08	ppb
|	Cu	63	7581.807	15.363	0.017	1.07578	2.26	ppb
|	Cu	65	4137.545	19.954	0.009	1.26267	4.03	ppb
|	Zn	66	4873.434	17.729	0.011	3.25138	2.74	ppb
|	As	75	130.726	25.660	0.000	0.10024	10.05	ppb
⌊	Se	82	60.667	3.962	0.000	0.13417	65.18	ppb
⌈	Mo	96	258.670	9.606	0.000	0.05809	7.36	ppb
|	Ag	107	67.778	23.242	0.000	0.00283	73.96	ppb
|	Ag	109	58.889	3.268	0.000	0.00261	40.36	ppb
|	Cd	111	41.131	43.215	0.000	0.01955	38.67	ppb
|	In	113	46641.905	15.443	0.002	0.98670	38.82	ppb
|>	In	115	1025133.908	14.071	1025133.908			ppb
⌊	Sn	118	671.690	21.810	0.001	0.08678	11.36	ppb
⌈	Sb	121	1761.822	6.537	0.001	0.18957	14.88	ppb
|	Ba	135	376131.710	14.701	0.213	182.62220	1.75	ppb
|	Ba	137	651320.093	15.750	0.368	180.84094	1.87	ppb
⌊>	Tb	159	1767848.532	14.077	1767848.532			ppb
⌈	Tl	205	406.675	4.655	0.000	0.01471	14.17	ppb
|	Pb	206	8168.368	12.307	0.007	0.94241	4.32	ppb
|	Pb	207	14695.531	13.607	0.013	0.90315	3.23	ppb
|	Pb	208	22945.806	14.306	0.020	0.88775	1.83	ppb
⌊>	Bi	209	1131245.121	15.850	1131245.121			ppb
	Cr	53	3000.450	2.972	-670.226			ppb
	Pd	106	35.000	57.143	31.667			ppb
	Pd	108	8.333	69.282	5.000			ppb
	C	12	491312.642	5.656	103673.399			ppb
	Kr	83	43.333	13.323	-9.333			ppb
	Se	77	139.112	5.992	24.223			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	79508.831		ppb
	Be	9	12.000	0.041348	ppb
	Na	23	6972605.370	2987.676736	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	18779452.852	61771.846306	ppb
	Mg	26	23487461.852	62688.977180	ppb
	Al	27	1560386.251	472.195013	ppb
	K	39	8085499.295	1509.652232	ppb
	Ca	44	29057940.077	141482.187921	ppb
>	Sc	45	352018.691		ppb
	Ti	47	8448.567	14.165243	ppb
	V	51	12587.509	1.350696	ppb
	Cr	52	16571.720	1.574540	ppb
	Mn	55	144176.910	14.059394	ppb
	Fe	54	438643.957	716.035339	ppb
	Fe	56	9490819.511	869.161900	ppb
	Fe	57	234855.854	1070.295772	ppb
	Co	59	6558.150	0.635464	ppb
	Ni	60	7579.538	3.407406	ppb
	Cu	63	6268.631	1.103617	ppb
	Cu	65	3187.174	1.211995	ppb
	Zn	66	3877.418	3.215540	ppb
	As	75	101.718	0.098036	ppb
	Se	82	61.334	0.230207	ppb
	Mo	96	230.003	0.063008	ppb
	Ag	107	73.334	0.004643	ppb
	Ag	109	60.000	0.003818	ppb
	Cd	111	31.095	0.017642	ppb
	In	113	38328.312	0.565838	ppb
>	In	115	858573.837		ppb
	Sn	118	505.013	0.076250	ppb
	Sb	121	1650.136	0.218617	ppb
	Ba	135	312281.008	180.916466	ppb
	Ba	137	533450.839	176.935018	ppb
>	Tb	159	1482448.269		ppb
	Tl	205	385.007	0.017114	ppb
	Pb	206	7012.458	0.987346	ppb
	Pb	207	12403.911	0.931270	ppb
	Pb	208	19155.920	0.906014	ppb
>	Bi	209	924222.927		ppb
	Cr	53	2908.423		ppb
	Pd	106	15.000		ppb
	Pd	108	5.000		ppb
	C	12	459286.429		ppb
	Kr	83	40.000		ppb
	Se	77	130.668		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	119785.153		ppb
	Be	9	28.000	0.069093	ppb
	Na	23	10569490.664	3006.124504	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	26076631.702	56933.966393	ppb
	Mg	26	32610907.144	57773.700307	ppb
	Al	27	2231963.525	448.285970	ppb
	K	39	11440003.033	1415.330062	ppb
	Ca	44	38800345.512	125386.348227	ppb
>	Sc	45	496544.155		ppb

	Ti	47	11982.174	14.242942	ppb
	V	51	16849.907	1.274148	ppb
	Cr	52	19817.617	1.229890	ppb
	Mn	55	193687.756	13.370619	ppb
	Fe	54	596617.057	687.754916	ppb
	Fe	56	12639809.944	812.208983	ppb
	Fe	57	323783.272	1045.818034	ppb
	Co	59	9234.262	0.634323	ppb
	Ni	60	10699.054	3.409854	ppb
	Cu	63	8490.269	1.058667	ppb
	Cu	65	4677.760	1.262381	ppb
	Zn	66	5421.469	3.185809	ppb
	As	75	167.459	0.111244	ppb
	Se	82	58.000	0.059115	ppb
	Mo	96	274.004	0.056006	ppb
	Ag	107	80.000	0.003303	ppb
	Ag	109	60.000	0.002174	ppb
	Cd	111	30.644	0.013124	ppb
	In	113	51004.743	1.314951	ppb
>	In	115	1107545.440		ppb
	Sn	118	730.027	0.088307	ppb
	Sb	121	1755.154	0.162280	ppb
	Ba	135	407963.351	180.645178	ppb
	Ba	137	720419.995	182.632806	ppb
>	Tb	159	1939576.003		ppb
	Tl	205	420.009	0.013633	ppb
	Pb	206	8838.905	0.931856	ppb
	Pb	207	16086.530	0.905089	ppb
	Pb	208	24893.180	0.882330	ppb
>	Bi	209	1232301.550		ppb
	Cr	53	3006.452		ppb
	Pd	106	35.000		ppb
	Pd	108	15.000		ppb
	C	12	509061.570		ppb
	Kr	83	50.000		ppb
	Se	77	139.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	119625.256		ppb
	Be	9	22.000	0.052396	ppb
	Na	23	9923344.879	2825.988414	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	25056829.429	54780.518303	ppb
	Mg	26	31832067.015	56469.274330	ppb
	Al	27	2048791.639	411.990781	ppb
	K	39	10769999.785	1331.913574	ppb
	Ca	44	37954865.091	122816.254860	ppb
>	Sc	45	464351.483		ppb
	Ti	47	11571.691	14.711625	ppb
	V	51	16317.935	1.324809	ppb
	Cr	52	20290.564	1.411974	ppb
	Mn	55	189870.591	14.035460	ppb
	Fe	54	582685.536	721.594458	ppb
	Fe	56	12448210.363	863.359366	ppb
	Fe	57	328746.321	1136.455202	ppb
	Co	59	9282.306	0.682401	ppb
	Ni	60	10542.221	3.593647	ppb
	Cu	63	7986.521	1.065045	ppb
	Cu	65	4547.701	1.313644	ppb
	Zn	66	5321.415	3.352798	ppb
	As	75	123.001	0.091454	ppb
	Se	82	62.667	0.113184	ppb

⌈	Mo	96	272.004	0.055258	ppb
|	Ag	107	50.000	0.000540	ppb
|	Ag	109	56.667	0.001851	ppb
|	Cd	111	61.654	0.027878	ppb
|	In	113	50592.658	1.079309	ppb
|>	In	115	1109282.446		ppb
⌊	Sn	118	780.030	0.095793	ppb
⌈	Sb	121	1880.177	0.187816	ppb
|	Ba	135	408150.771	186.304954	ppb
|	Ba	137	700089.445	182.954995	ppb
⌊>	Tb	159	1881521.325		ppb
⌈	Tl	205	415.009	0.013385	ppb
|	Pb	206	8653.743	0.908024	ppb
|	Pb	207	15596.152	0.873105	ppb
|	Pb	208	24788.319	0.874904	ppb
⌊>	Bi	209	1237210.885		ppb
	Cr	53	3086.476		ppb
	Pd	106	55.000		ppb
	Pd	108	5.000		ppb
	C	12	505589.926		ppb
	Kr	83	40.000		ppb
	Se	77	147.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		87.678			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		86.408			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		73.370			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		81.129			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		68.214			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910086-03

Sample Date/Time: Monday, November 09, 2009 19:51:48
Sample Type: Sample
Sample Description: FAL3
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910086-03.872

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	101686.730	21.016	101686.730			ppb
	Be	9	22.000	31.492	0.000	0.06380	27.71	ppb
	Na	23	S	S	1999999968188500901.27505			ppb
	Mg	24	S	S	1999999981043735614.33841		0.00	ppb
	Mg	25	29938052.082	20.852	294.517	77025.45866	1.56	ppb
	Mg	26	36753858.207	21.782	360.984	76605.64403	1.07	ppb
	Al	27	1033217.468	21.401	10.128	244.03007	2.20	ppb
	K	39	17707326.094	20.325	171.757	2617.72718	3.12	ppb
	Ca	44	56363624.984	20.516	554.529214806.08857		1.12	ppb
>	Sc	45	415317.302	21.549	415317.302			ppb
	Ti	47	6357.070	19.289	0.015	9.03578	2.77	ppb
	V	51	28511.730	17.649	0.066	2.75045	4.92	ppb
	Cr	52	21912.302	14.175	0.039	1.88011	12.06	ppb
	Mn	55	1600858.303	21.401	3.844	135.77530	0.64	ppb
	Fe	54	268063.322	18.586	0.530	336.78531	4.69	ppb
	Fe	56	6468444.168	12.488	11.830	447.50237	14.11	ppb
	Fe	57	227159.624	18.208	0.543	880.40485	4.00	ppb
	Co	59	10571.098	22.030	0.025	0.87032	1.59	ppb
	Ni	60	14321.607	19.062	0.035	5.49149	4.13	ppb
	Cu	63	19231.088	17.861	0.046	2.92884	4.41	ppb
	Cu	65	9810.491	19.785	0.023	3.22382	2.40	ppb
	Zn	66	7687.493	21.992	0.018	5.52454	2.40	ppb
	As	75	459.790	28.680	0.001	0.31811	8.04	ppb
	Se	82	253.559	15.796	0.001	1.54792	8.13	ppb
	Mo	96	266.670	20.694	0.000	0.06778	10.49	ppb
	Ag	107	42.222	24.119	0.000	0.00051	147.52	ppb
	Ag	109	30.000	29.397	-0.000	-0.00018	343.85	ppb
	Cd	111	122.469	15.175	0.000	0.06732	2.11	ppb
	In	113	42796.312	16.227	0.002	0.98602	10.26	ppb
>	In	115	941733.402	16.025	941733.402			ppb
	Sn	118	3355.569	13.014	0.003	0.58443	5.53	ppb
	Sb	121	1086.726	1.916	0.000	0.09490	30.74	ppb
	Ba	135	435806.353	15.300	0.259	222.15163	1.01	ppb
	Ba	137	762939.769	16.106	0.452	222.44104	0.46	ppb
>	Tb	159	1686681.728	16.195	1686681.728			ppb
	Tl	205	458.344	17.737	0.000	0.01882	14.85	ppb
	Pb	206	10754.176	12.785	0.010	1.39431	4.61	ppb
	Pb	207	18327.088	13.899	0.018	1.26438	3.35	ppb
	Pb	208	27444.688	16.646	0.026	1.18840	1.83	ppb
>	Bi	209	1016891.899	16.778	1016891.899			ppb
	Cr	53	3266.538	11.925	-404.138			ppb
	Pd	106	55.000	32.778	51.667			ppb
	Pd	108	16.667	96.437	13.333			ppb
	C	12	502710.630	15.526	115071.387			ppb
	Kr	83	52.667	21.925	0.000			ppb
	Se	77	190.446	7.680	75.557			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	77031.555		ppb
	Be	9	18.000	0.069066	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	22735721.572	77190.397466	ppb
	Mg	26	27510236.695	75787.306580	ppb
	Al	27	778557.886	242.846714	ppb
	K	39	13581055.699	2646.807155	ppb
	Ca	44	43011969.918	216205.287460	ppb
>	Sc	45	312085.030		ppb
	Ti	47	4941.220	9.313491	ppb
	V	51	22701.576	2.903020	ppb
	Cr	52	18336.797	2.136334	ppb
	Mn	55	1205297.558	136.007098	ppb
	Fe	54	210594.394	353.323866	ppb
	Fe	56	5535971.865	520.291781	ppb
	Fe	57	179486.442	921.034302	ppb
	Co	59	7883.106	0.864305	ppb
	Ni	60	11189.590	5.684424	ppb
	Cu	63	15264.975	3.075802	ppb
	Cu	65	7569.530	3.300968	ppb
	Zn	66	5761.659	5.512125	ppb
	As	75	307.631	0.288593	ppb
	Se	82	207.335	1.690447	ppb
	Mo	96	204.002	0.062133	ppb
	Ag	107	33.333	0.000365	ppb
	Ag	109	23.333	-0.000319	ppb
	Cd	111	101.010	0.067943	ppb
	In	113	34820.518	0.909149	ppb
>	In	115	768866.409		ppb
	Sn	118	2860.409	0.608582	ppb
	Sb	121	1070.057	0.128547	ppb
	Ba	135	358849.147	224.727693	ppb
	Ba	137	621326.762	222.767458	ppb
>	Tb	159	1371428.512		ppb
	Tl	205	395.008	0.020109	ppb
	Pb	206	9169.202	1.468347	ppb
	Pb	207	15391.137	1.313047	ppb
	Pb	208	22224.729	1.193205	ppb
>	Bi	209	819968.432		ppb
	Cr	53	2834.402		ppb
	Pd	106	35.000		ppb
	Pd	108	10.000		ppb
	C	12	438004.838		ppb
	Kr	83	46.000		ppb
	Se	77	174.002		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	113126.279		ppb
	Be	9	18.000	0.044091	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	33796822.488	78133.193629	ppb
	Mg	26	41271032.547	77419.912579	ppb
	Al	27	1176468.885	249.897235	ppb
	K	39	20198237.098	2680.959558	ppb
	Ca	44	63161230.521	216188.559460	ppb
>	Sc	45	471075.266		ppb

	Ti	47	7072.500	8.826733	ppb
	V	51	31376.852	2.645523	ppb
	Cr	52	23455.476	1.705138	ppb
	Mn	55	1803370.441	134.810391	ppb
	Fe	54	294534.580	321.858392	ppb
	Fe	56	6953047.948	407.612034	ppb
	Fe	57	253497.842	861.045978	ppb
	Co	59	11847.013	0.860487	ppb
	Ni	60	15578.792	5.241889	ppb
	Cu	63	21235.857	2.832755	ppb
	Cu	65	10895.933	3.146393	ppb
	Zn	66	8927.316	5.662962	ppb
	As	75	540.895	0.333030	ppb
	Se	82	275.337	1.452490	ppb
	Mo	96	308.005	0.075763	ppb
	Ag	107	53.333	0.001331	ppb
	Ag	109	26.667	-0.000730	ppb
	Cd	111	133.284	0.068315	ppb
	In	113	46065.859	1.100634	ppb
>	In	115	1009140.710		ppb
	Sn	118	3685.679	0.597025	ppb
	Sb	121	1110.062	0.079524	ppb
	Ba	135	476297.099	220.766080	ppb
	Ba	137	841350.740	223.264145	ppb
>	Tb	159	1852947.066		ppb
	Tl	205	430.009	0.015610	ppb
	Pb	206	11626.755	1.360852	ppb
	Pb	207	19950.218	1.244446	ppb
	Pb	208	30713.500	1.207298	ppb
>	Bi	209	1120221.847		ppb
	Cr	53	3590.645		ppb
	Pd	106	60.000		ppb
	Pd	108	35.000		ppb
	C	12	589397.217		ppb
	Kr	83	46.000		ppb
	Se	77	195.335		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	114902.357		ppb
	Be	9	30.000	0.078252	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	33281612.186	75752.784898	ppb
	Mg	26	41480305.380	76609.712939	ppb
	Al	27	1144625.633	239.346248	ppb
	K	39	19342685.484	2525.414834	ppb
	Ca	44	62917674.513	212024.418788	ppb
>	Sc	45	462791.611		ppb
	Ti	47	7057.490	8.967102	ppb
	V	51	31456.762	2.702812	ppb
	Cr	52	23944.633	1.798849	ppb
	Mn	55	1793906.911	136.508414	ppb
	Fe	54	299060.991	335.173662	ppb
	Fe	56	6916312.690	414.603297	ppb
	Fe	57	248494.588	859.134260	ppb
	Co	59	11983.176	0.886182	ppb
	Ni	60	16196.439	5.548172	ppb
	Cu	63	21192.432	2.877966	ppb
	Cu	65	10966.009	3.224098	ppb
	Zn	66	8373.504	5.398527	ppb
	As	75	530.844	0.332711	ppb
	Se	82	278.004	1.500827	ppb

⌈	Mo	96	288.004	0.065447	ppb
|	Ag	107	40.000	-0.000159	ppb
|	Ag	109	40.000	0.000502	ppb
|	Cd	111	133.114	0.065692	ppb
|	In	113	47502.557	0.948282	ppb
|>	In	115	1047193.088		ppb
⌊	Sn	118	3520.620	0.547679	ppb
⌈	Sb	121	1080.058	0.076627	ppb
|	Ba	135	472272.814	220.961125	ppb
|	Ba	137	826141.806	221.291531	ppb
⌊>	Tb	159	1835669.607		ppb
⌈	Tl	205	550.015	0.020732	ppb
|	Pb	206	11466.570	1.353728	ppb
|	Pb	207	19639.909	1.235648	ppb
|	Pb	208	29395.835	1.164692	ppb
⌊>	Bi	209	1110485.420		ppb
	Cr	53	3374.569		ppb
	Pd	106	70.000		ppb
	Pd	108	5.000		ppb
	C	12	480729.835		ppb
	Kr	83	66.000		ppb
	Se	77	202.002		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			83.868		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			82.001		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			67.401		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			77.404		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			61.318		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910086-04

Sample Date/Time: Monday, November 09, 2009 19:53:46
Sample Type: Sample
Sample Description: WELL7
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910086-04.873

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
[>	Li	6	102117.402	27.185	102117.402			ppb
|	Be	9	6.667	45.826	0.000	0.01231	50.28	ppb
|	Na	23	S	S	666667022729512960.87889		173.20	ppb
|	Mg	24	S	S	666667027014600196.42573		173.20	ppb
|	Mg	25	12302547.038	27.173	120.492	31512.54373	1.80	ppb
|	Mg	26	14895464.142	28.855	145.343	30843.74982	2.68	ppb
|	Al	27	67397.871	25.620	0.634	15.27646	2.62	ppb
|	K	39	14068185.196	25.409	135.695	2068.10984	2.53	ppb
[	Ca	44	15533382.113	26.538	152.146	58936.18226	2.00	ppb
[>	Sc	45	437304.543	26.808	437304.543			ppb
|	Ti	47	1001.718	22.271	0.002	1.28767	11.01	ppb
|	V	51	2552.026	18.216	0.002	0.09947	26.72	ppb
|	Cr	52	15811.954	12.487	0.023	1.10536	28.52	ppb
|	Mn	55	30383.942	19.675	0.059	2.08577	10.47	ppb
|	Fe	54	75936.669	15.284	0.060	37.96827	41.71	ppb
|	Fe	56	2690047.311	5.282	2.462	93.13321	67.18	ppb
|	Fe	57	48007.771	19.190	0.105	169.52479	10.37	ppb
|	Co	59	2170.910	21.987	0.005	0.16557	6.28	ppb
|	Ni	60	7587.415	22.021	0.017	2.77449	7.64	ppb
|	Cu	63	5224.753	24.697	0.012	0.73622	5.53	ppb
|	Cu	65	3129.401	26.086	0.007	0.95288	2.90	ppb
|	Zn	66	5760.598	21.411	0.013	3.93223	7.72	ppb
|	As	75	739.587	5.563	0.002	0.50382	24.87	ppb
[	Se	82	732.472	14.576	0.002	4.83746	15.76	ppb
[	Mo	96	176.002	21.770	0.000	0.02748	10.04	ppb
|	Ag	107	146.668	20.455	0.000	0.00997	18.47	ppb
|	Ag	109	160.001	30.690	0.000	0.01200	19.46	ppb
|	Cd	111	89.278	59.738	0.000	0.03928	48.98	ppb
|	In	113	50202.874	21.456	0.003	1.68854	41.50	ppb
|>	In	115	1078442.673	23.773	1078442.673			ppb
[	Sn	118	388.341	15.892	0.000	0.03852	18.81	ppb
[	Sb	121	980.050	24.304	0.000	0.06210	12.83	ppb
|	Ba	135	107325.977	22.481	0.059	50.41689	2.75	ppb
|	Ba	137	184113.228	24.077	0.100	49.39819	5.17	ppb
[>	Tb	159	1821901.002	20.400	1821901.002			ppb
[	Tl	205	161.668	11.709	0.000	0.00412	22.67	ppb
|	Pb	206	4364.330	26.603	0.003	0.44271	6.37	ppb
|	Pb	207	8025.021	23.767	0.006	0.43689	1.61	ppb
|	Pb	208	12337.901	21.169	0.009	0.42453	4.10	ppb
[>	Bi	209	1237273.653	24.314	1237273.653			ppb
	Cr	53	2763.048	1.770	-907.628			ppb
	Pd	106	26.667	70.986	23.333			ppb
	Pd	108	15.000	100.000	11.667			ppb
	C	12	514972.120	13.572	127332.877			ppb
	Kr	83	39.333	2.936	-13.333			ppb
	Se	77	435.565	17.707	320.676			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	70076.680		ppb
	Be	9	4.000	0.009911	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	8446640.908	31523.371346	ppb
	Mg	26	9958911.436	30158.287275	ppb
	Al	27	47547.771	15.662948	ppb
	K	39	9951918.187	2124.190133	ppb
	Ca	44	10800295.548	59613.385098	ppb
>	Sc	45	302631.018		ppb
	Ti	47	770.030	1.419625	ppb
	V	51	2015.292	0.129320	ppb
	Cr	52	13585.222	1.469398	ppb
	Mn	55	23487.551	2.334058	ppb
	Fe	54	62595.297	56.212330	ppb
	Fe	56	2528182.580	165.286041	ppb
	Fe	57	37384.751	188.759985	ppb
	Co	59	1620.131	0.177165	ppb
	Ni	60	5674.943	2.965503	ppb
	Cu	63	3744.034	0.758951	ppb
	Cu	65	2186.906	0.960824	ppb
	Zn	66	4370.955	4.272816	ppb
	As	75	696.593	0.648515	ppb
	Se	82	610.019	5.716614	ppb
	Mo	96	132.001	0.028975	ppb
	Ag	107	116.667	0.011085	ppb
	Ag	109	116.667	0.012071	ppb
	Cd	111	27.725	0.017183	ppb
	In	113	37801.312	2.452987	ppb
>	In	115	784350.305		ppb
	Sn	118	320.005	0.045621	ppb
	Sb	121	705.025	0.054043	ppb
	Ba	135	79539.070	48.912925	ppb
	Ba	137	132927.655	46.799936	ppb
>	Tb	159	1396332.822		ppb
	Tl	205	140.001	0.005198	ppb
	Pb	206	3060.468	0.432301	ppb
	Pb	207	5825.851	0.440664	ppb
	Pb	208	9322.531	0.444425	ppb
>	Bi	209	889921.083		ppb
	Cr	53	2816.397		ppb
	Pd	106	5.000		ppb
	Pd	108	15.000		ppb
	C	12	434866.214		ppb
	Kr	83	40.000		ppb
	Se	77	346.673		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	117304.000		ppb
	Be	9	10.000	0.019347	ppb
	Na	23	65493304.319	19033.289036	ppb
	Mg	24	97565623.138	33703.235022	ppb
	Mg	25	14386733.368	32075.360674	ppb
	Mg	26	16920440.908	30610.275373	ppb
	Al	27	75700.447	14.863581	ppb
	K	39	15861165.988	2020.544349	ppb
	Ca	44	17462053.008	57575.999527	ppb
>	Sc	45	492769.126		ppb

	Ti	47	1020.052	1.137807	ppb
	V	51	2827.775	0.090675	ppb
	Cr	52	16501.604	0.920909	ppb
	Mn	55	33576.274	1.999449	ppb
	Fe	54	81505.812	29.906015	ppb
	Fe	56	2747750.028	60.203911	ppb
	Fe	57	53809.384	165.515834	ppb
	Co	59	2428.295	0.162472	ppb
	Ni	60	8763.839	2.811746	ppb
	Cu	63	6108.532	0.760519	ppb
	Cu	65	3613.986	0.975628	ppb
	Zn	66	6185.246	3.689599	ppb
	As	75	743.577	0.431693	ppb
	Se	82	781.364	4.435324	ppb
	Mo	96	202.002	0.029174	ppb
	Ag	107	176.668	0.010979	ppb
	Ag	109	150.001	0.009628	ppb
	Cd	111	121.740	0.052297	ppb
	In	113	55584.051	1.536245	ppb
>	In	115	1196162.526		ppb
	Sn	118	440.010	0.038800	ppb
	Sb	121	1120.063	0.069970	ppb
	Ba	135	119473.457	51.638212	ppb
	Ba	137	209761.153	51.905877	ppb
>	Tb	159	1986726.552		ppb
	Tl	205	170.001	0.003493	ppb
	Pb	206	4746.126	0.421206	ppb
	Pb	207	9022.040	0.428762	ppb
	Pb	208	13795.443	0.411978	ppb
>	Bi	209	1414176.131		ppb
	Cr	53	2720.370		ppb
	Pd	106	35.000		ppb
	Pd	108	0.000		ppb
	C	12	546518.911		ppb
	Kr	83	40.000		ppb
	Se	77	475.345		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	118971.526		ppb
	Be	9	6.000	0.007684	ppb
	Na	23	66126957.817	18948.072592	ppb
	Mg	24	91813625.169	31271.703769	ppb
	Mg	25	14074266.837	30938.899175	ppb
	Mg	26	17807040.082	31762.686801	ppb
	Al	27	78945.394	15.302837	ppb
	K	39	16391471.413	2059.595038	ppb
	Ca	44	18337797.784	59619.162167	ppb
>	Sc	45	516513.485		ppb
	Ti	47	1215.074	1.305571	ppb
	V	51	2813.010	0.078403	ppb
	Cr	52	17349.036	0.925779	ppb
	Mn	55	34088.001	1.923805	ppb
	Fe	54	83708.899	27.786458	ppb
	Fe	56	2794209.325	53.909663	ppb
	Fe	57	52829.178	154.298546	ppb
	Co	59	2464.304	0.157059	ppb
	Ni	60	8323.463	2.546222	ppb
	Cu	63	5821.694	0.689177	ppb
	Cu	65	3587.310	0.922197	ppb
	Zn	66	6725.594	3.834272	ppb
	As	75	778.591	0.431261	ppb
	Se	82	806.032	4.360442	ppb

⌈	Mo	96	194.002	0.024298	ppb
|	Ag	107	146.668	0.007845	ppb
|	Ag	109	213.336	0.014297	ppb
|	Cd	111	118.370	0.048363	ppb
|	In	113	57223.258	1.076378	ppb
|>	In	115	1254815.189		ppb
⌊	Sn	118	405.008	0.031136	ppb
⌈	Sb	121	1115.062	0.062295	ppb
|	Ba	135	122965.405	50.699528	ppb
|	Ba	137	209650.876	49.488751	ppb
⌊>	Tb	159	2082643.634		ppb
⌈	Tl	205	175.002	0.003681	ppb
|	Pb	206	5286.397	0.474614	ppb
|	Pb	207	9227.173	0.441249	ppb
|	Pb	208	13895.729	0.417199	ppb
⌊>	Bi	209	1407723.746		ppb
	Cr	53	2752.379		ppb
	Pd	106	40.000		ppb
	Pd	108	30.000		ppb
	C	12	563531.235		ppb
	Kr	83	38.000		ppb
	Se	77	484.678		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		84.223			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		86.342			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		77.186			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		83.610			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		74.607			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101926-BLK1

Sample Date/Time: Monday, November 09, 2009 19:55:43
Sample Type: Sample
Sample Description: PBW
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101926-BLK1.874

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	128961.404	22.889	128961.404			ppb
|	Be	9	0.667	173.205	-0.000	-0.00686	59.45	ppb
|	Na	23	14023.536	8.099	0.046	1.56414	46.42	ppb
|	Mg	24	5917.127	19.396	0.044	1.77139	27.07	ppb
|	Mg	25	911.376	17.328	0.007	1.76383	21.34	ppb
|	Mg	26	1180.738	21.224	0.008	1.72319	32.79	ppb
|	Al	27	8878.943	3.300	0.044	1.05097	48.72	ppb
|	K	39	324621.566	0.536	-0.016	-0.24030	4468.81	ppb
⌊	Ca	44	19535.070	2.436	-0.069	-26.77283	62.90	ppb
⌈>	Sc	45	525484.880	18.901	525484.880			ppb
|	Ti	47	55.000	9.091	-0.000	-0.02866	30.38	ppb
|	V	51	2324.195	4.337	0.001	0.03960	84.44	ppb
|	Cr	52	7540.179	4.465	0.000	0.02336	785.66	ppb
|	Mn	55	2135.233	18.908	-0.007	-0.26370	2.14	ppb
|	Fe	54	60846.619	12.993	-0.002	-0.96302	531.51	ppb
|	Fe	56	2163752.464	3.663	0.224	8.48838	323.37	ppb
|	Fe	57	3502.282	7.450	-0.000	-0.56733	253.48	ppb
|	Co	59	96.667	5.973	-0.000	-0.00109	145.94	ppb
|	Ni	60	121.112	8.847	0.000	0.02172	31.29	ppb
|	Cu	63	435.565	17.119	0.000	0.02764	26.92	ppb
|	Cu	65	256.670	3.436	0.000	0.03700	46.05	ppb
|	Zn	66	918.932	13.986	0.001	0.36229	11.31	ppb
|	As	75	-65.673	66.531	-0.000	-0.01827	154.24	ppb
⌊	Se	82	52.889	9.461	0.000	0.01849	356.71	ppb
⌈	Mo	96	76.667	10.543	-0.000	-0.01074	45.22	ppb
|	Ag	107	74.445	15.725	0.000	0.00097	47.23	ppb
|	Ag	109	51.111	32.171	0.000	0.00002	3673.61	ppb
|	Cd	111	6.273	124.259	0.000	0.00050	496.78	ppb
|	In	113	64887.238	17.104	-0.001	-0.43459	63.43	ppb
|>	In	115	1515824.722	16.168	1515824.722			ppb
⌊	Sn	118	120.001	35.600	-0.000	-0.01007	46.97	ppb
⌈	Sb	121	1011.719	16.373	0.000	0.03370	31.73	ppb
|	Ba	135	78.000	26.770	0.000	0.01565	21.66	ppb
|	Ba	137	114.001	13.245	0.000	0.01216	18.79	ppb
⌊>	Tb	159	2362355.224	16.212	2362355.224			ppb
⌈	Tl	205	68.334	15.232	-0.000	-0.00030	179.70	ppb
|	Pb	206	150.001	18.559	-0.000	-0.01712	3.81	ppb
|	Pb	207	298.336	10.775	-0.000	-0.01502	10.44	ppb
|	Pb	208	491.674	5.959	-0.000	-0.01530	9.61	ppb
⌊>	Bi	209	1866097.921	13.998	1866097.921			ppb
	Cr	53	1480.776	4.586	-2189.900			ppb
	Pd	106	1.667	173.205	-1.667			ppb
	Pd	108	0.000		-3.333			ppb
	C	12	463268.327	2.563	75629.084			ppb
	Kr	83	37.333	27.491	-15.333			ppb
	Se	77	91.112	13.339	-23.778			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	94898.157		ppb
	Be	9	2.000	-0.002150	ppb
	Na	23	12898.313	2.381816	ppb
	Mg	24	5472.497	2.191726	ppb
	Mg	25	807.033	2.094693	ppb
	Mg	26	1120.063	2.217661	ppb
	Al	27	9164.197	1.640792	ppb
	K	39	326248.484	12.153108	ppb
	Ca	44	19747.479	-7.408967	ppb
>	Sc	45	412297.797		ppb
	Ti	47	50.000	-0.019836	ppb
	V	51	2243.546	0.078211	ppb
	Cr	52	7925.139	0.234722	ppb
	Mn	55	1670.139	-0.264203	ppb
	Fe	54	51718.395	4.532465	ppb
	Fe	56	2074709.230	39.622430	ppb
	Fe	57	3215.517	1.091923	ppb
	Co	59	100.001	0.000739	ppb
	Ni	60	116.667	0.029292	ppb
	Cu	63	370.007	0.031446	ppb
	Cu	65	266.670	0.056627	ppb
	Zn	66	773.363	0.397143	ppb
	As	75	-94.734	-0.043827	ppb
	Se	82	52.667	0.091686	ppb
	Mo	96	84.000	-0.005251	ppb
	Ag	107	63.334	0.001181	ppb
	Ag	109	40.000	-0.000100	ppb
	Cd	111	0.000	-0.001502	ppb
	In	113	52075.239	-0.710628	ppb
>	In	115	1232874.908		ppb
	Sn	118	115.001	-0.007867	ppb
	Sb	121	855.037	0.037914	ppb
	Ba	135	54.000	0.011805	ppb
	Ba	137	100.001	0.013875	ppb
>	Tb	159	1920123.759		ppb
	Tl	205	80.000	0.000315	ppb
	Pb	206	120.001	-0.017583	ppb
	Pb	207	285.002	-0.013551	ppb
	Pb	208	470.006	-0.013775	ppb
>	Bi	209	1566097.567		ppb
	Cr	53	1554.121		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	451319.724		ppb
	Kr	83	40.000		ppb
	Se	77	102.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144963.155		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	15169.497	1.315565	ppb
	Mg	24	7220.606	1.873341	ppb
	Mg	25	1093.060	1.842593	ppb
	Mg	26	1456.106	1.844564	ppb
	Al	27	8893.953	0.792257	ppb
	K	39	324831.456	-6.091693	ppb
	Ca	44	19867.717	-34.926621	ppb
>	Sc	45	598086.026		ppb

	Ti	47	55.000	-0.037248	ppb
	V	51	2437.190	0.020850	ppb
	Cr	52	7394.733	-0.095148	ppb
	Mn	55	2340.274	-0.269073	ppb
	Fe	54	65483.706	-5.594700	ppb
	Fe	56	2189957.098	-12.219616	ppb
	Fe	57	3725.694	-1.453357	ppb
	Co	59	100.001	-0.001862	ppb
	Ni	60	133.334	0.019748	ppb
	Cu	63	420.009	0.019071	ppb
	Cu	65	253.337	0.025952	ppb
	Zn	66	966.713	0.317148	ppb
	As	75	-15.426	0.011958	ppb
	Se	82	58.000	0.000031	ppb
	Mo	96	78.000	-0.012490	ppb
	Ag	107	73.334	0.000445	ppb
	Ag	109	43.333	-0.000766	ppb
	Cd	111	3.820	-0.000287	ppb
	In	113	71041.451	-0.433837	ppb
>	In	115	1661402.343		ppb
	Sn	118	165.001	-0.006841	ppb
	Sb	121	995.050	0.021546	ppb
	Ba	135	92.000	0.018208	ppb
	Ba	137	112.001	0.009564	ppb
>	Tb	159	2585804.319		ppb
	Tl	205	60.000	-0.000683	ppb
	Pb	206	175.002	-0.016376	ppb
	Pb	207	335.003	-0.014837	ppb
	Pb	208	480.006	-0.016711	ppb
>	Bi	209	2043276.972		ppb
	Cr	53	1420.101		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	475062.398		ppb
	Kr	83	46.000		ppb
	Se	77	78.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147022.900		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	14002.797	0.995027	ppb
	Mg	24	5058.279	1.249092	ppb
	Mg	25	834.035	1.354199	ppb
	Mg	26	966.047	1.107348	ppb
	Al	27	8578.678	0.719876	ppb
	K	39	322784.758	-6.782315	ppb
	Ca	44	18990.014	-37.982912	ppb
>	Sc	45	566070.816		ppb
	Ti	47	60.000	-0.028911	ppb
	V	51	2291.850	0.019747	ppb
	Cr	52	7300.664	-0.069506	ppb
	Mn	55	2395.287	-0.257823	ppb
	Fe	54	65337.756	-1.826838	ppb
	Fe	56	2226591.064	-1.937672	ppb
	Fe	57	3565.636	-1.340561	ppb
	Co	59	90.000	-0.002145	ppb
	Ni	60	113.334	0.016135	ppb
	Cu	63	516.680	0.032417	ppb
	Cu	65	250.003	0.028435	ppb
	Zn	66	1016.718	0.372582	ppb
	As	75	-86.859	-0.022952	ppb
	Se	82	48.000	-0.036261	ppb

⌈	Mo	96	68.000	-0.014478	ppb
|	Ag	107	86.667	0.001288	ppb
|	Ag	109	70.000	0.000936	ppb
|	Cd	111	15.000	0.003294	ppb
|	In	113	71545.022	-0.159291	ppb
|>	In	115	1653196.916		ppb
⌊	Sn	118	80.000	-0.015496	ppb
⌈	Sb	121	1185.070	0.041654	ppb
|	Ba	135	88.000	0.016933	ppb
|	Ba	137	130.001	0.013032	ppb
⌊>	Tb	159	2581137.592		ppb
⌈	Tl	205	65.000	-0.000530	ppb
|	Pb	206	155.001	-0.017408	ppb
|	Pb	207	275.002	-0.016670	ppb
|	Pb	208	525.009	-0.015403	ppb
⌊>	Bi	209	1988919.225		ppb
	Cr	53	1468.108		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	463422.859		ppb
	Kr	83	26.000		ppb
	Se	77	93.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		106.363			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		103.753			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		108.490			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		108.412			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		112.525			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101926-BS1

Sample Date/Time: Monday, November 09, 2009 19:57:41
Sample Type: Sample
Sample Description: LCSW
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101926-BS1.875

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	124735.252	25.627	124735.252			ppb
|	Be	9	39884.919	25.899	0.320	107.05290	1.60	ppb
|	Na	23	8174168.108	24.043	65.687	2239.55336	2.14	ppb
|	Mg	24	4099990.108	23.284	33.029	1338.38805	2.89	ppb
|	Mg	25	595282.905	26.571	4.762	1245.52760	1.41	ppb
|	Mg	26	733900.312	23.983	5.904	1252.83396	2.76	ppb
|	Al	27	2570579.327	26.869	20.528	494.63170	2.24	ppb
|	K	39	16139251.765	25.914	126.695	1930.94281	2.17	ppb
⌊	Ca	44	580844.122	21.615	4.469	1731.16037	5.27	ppb
⌈>	Sc	45	491105.170	25.513	491105.170			ppb
|	Ti	47	90.000	14.699	0.000	0.02504	193.49	ppb
|	V	51	1183269.676	24.044	2.414	101.31386	2.74	ppb
|	Cr	52	1023240.760	22.832	2.081	100.09981	3.45	ppb
|	Mn	55	1493167.033	23.615	3.041	107.41339	2.35	ppb
|	Fe	54	820995.814	22.478	1.564	993.05422	4.01	ppb
|	Fe	56	15343212.802	21.481	27.523	1041.14592	5.70	ppb
|	Fe	57	313648.994	21.343	0.637	1033.29147	5.46	ppb
|	Co	59	1439787.336	23.240	2.946	101.68026	2.92	ppb
|	Ni	60	312537.496	22.092	0.641	101.88759	4.24	ppb
|	Cu	63	734136.756	22.035	1.506	95.45487	4.46	ppb
|	Cu	65	356056.332	20.944	0.732	100.56012	5.60	ppb
|	Zn	66	326678.976	20.618	0.671	207.06726	5.99	ppb
|	As	75	357255.919	20.431	0.735	201.09093	6.21	ppb
⌊	Se	82	33257.803	21.536	0.068	203.17752	5.06	ppb
⌈	Mo	96	222.669	28.295	0.000	0.02467	31.15	ppb
|	Ag	107	1380510.089	20.340	0.971	98.76628	1.78	ppb
|	Ag	109	1324396.929	20.413	0.931	97.47884	2.06	ppb
|	Cd	111	261467.260	20.699	0.184	97.18685	3.07	ppb
|	In	113	321784.182	20.030	0.183	97.14214	2.06	ppb
|>	In	115	1418676.729	18.870	1418676.729			ppb
⌊	Sn	118	168.335	10.431	-0.000	-0.00275	235.43	ppb
⌈	Sb	121	1631674.791	21.195	0.705	190.63530	1.68	ppb
|	Ba	135	257272.318	19.903	0.111	95.65737	3.03	ppb
|	Ba	137	454541.597	20.431	0.197	96.66604	2.20	ppb
⌊>	Tb	159	2319503.903	22.286	2319503.903			ppb
⌈	Tl	205	8208529.995	20.803	4.663	214.31635	2.49	ppb
|	Pb	206	2702005.008	20.345	1.536	205.48329	2.11	ppb
|	Pb	207	5070362.688	20.333	2.882	205.66593	1.74	ppb
|	Pb	208	8263575.213	19.137	4.705	211.86453	0.64	ppb
⌊>	Bi	209	1756425.248	19.239	1756425.248			ppb
	Cr	53	117261.881	23.881	113591.205			ppb
	Pd	106	23395.001	23.450	23391.668			ppb
	Pd	108	17218.494	18.833	17215.161			ppb
	C	12	463375.422	4.687	75736.179			ppb
	Kr	83	36.000	9.623	-16.667			ppb
	Se	77	25816.478	20.980	25701.588			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	87832.037		ppb
	Be	9	27971.064	106.669486	ppb
	Na	23	5905238.447	2290.017080	ppb
	Mg	24	2998003.930	1383.003096	ppb
	Mg	25	412655.091	1228.605437	ppb
	Mg	26	531091.555	1282.896835	ppb
	Al	27	1774029.628	485.993494	ppb
	K	39	11322520.163	1924.478670	ppb
	Ca	44	435926.932	1834.557761	ppb
>	Sc	45	346428.464		ppb
	Ti	47	100.001	0.079600	ppb
	V	51	856000.192	103.562971	ppb
	Cr	52	753781.248	103.970979	ppb
	Mn	55	1086023.668	110.322523	ppb
	Fe	54	607907.512	1039.014595	ppb
	Fe	56	11539552.952	1109.331496	ppb
	Fe	57	236575.688	1095.803471	ppb
	Co	59	1053625.398	104.979029	ppb
	Ni	60	232829.283	106.832381	ppb
	Cu	63	547621.510	100.200800	ppb
	Cu	65	269951.840	107.055929	ppb
	Zn	66	248902.889	221.391575	ppb
	As	75	272971.998	215.513949	ppb
	Se	82	25005.892	214.765788	ppb
	Mo	96	160.001	0.020743	ppb
	Ag	107	1056368.887	96.836336	ppb
	Ag	109	1012919.504	95.531635	ppb
	Cd	111	199431.248	95.009295	ppb
	In	113	247454.262	95.321023	ppb
>	In	115	1109560.585		ppb
	Sn	118	185.002	0.004618	ppb
	Sb	121	1232370.514	193.338366	ppb
	Ba	135	198147.870	98.702466	ppb
	Ba	137	347525.563	99.109274	ppb
>	Tb	159	1724045.744		ppb
	Tl	205	6239351.640	209.839559	ppb
	Pb	206	2068048.009	202.448451	ppb
	Pb	207	3880228.670	202.609871	ppb
	Pb	208	6443212.325	212.278803	ppb
>	Bi	209	1366584.317		ppb
	Cr	53	84943.242		ppb
	Pd	106	17064.548		ppb
	Pd	108	13474.071		ppb
	C	12	438307.684		ppb
	Kr	83	38.000		ppb
	Se	77	19562.449		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	142510.274		ppb
	Be	9	46343.136	108.924151	ppb
	Na	23	9347582.468	2234.069503	ppb
	Mg	24	4627333.180	1315.606983	ppb
	Mg	25	688668.977	1263.699440	ppb
	Mg	26	846766.153	1260.639441	ppb
	Al	27	3003420.039	507.128425	ppb
	K	39	18850621.364	1975.756323	ppb
	Ca	44	656705.590	1697.019222	ppb
>	Sc	45	562661.240		ppb

	Ti	47	95.000	0.008422	ppb
	V	51	1371654.241	102.172330	ppb
	Cr	52	1146878.293	97.354538	ppb
	Mn	55	1693938.624	105.930962	ppb
	Fe	54	927326.458	971.284568	ppb
	Fe	56	17137358.000	1001.430884	ppb
	Fe	57	357275.270	1018.090339	ppb
	Co	59	1644040.025	100.854199	ppb
	Ni	60	353955.282	99.994453	ppb
	Cu	63	836198.311	94.201869	ppb
	Cu	65	399729.296	97.598761	ppb
	Zn	66	365509.991	200.151690	ppb
	As	75	399648.282	194.270114	ppb
	Se	82	36903.301	195.117300	ppb
	Mo	96	222.002	0.019740	ppb
	Ag	107	1549437.369	100.284515	ppb
	Ag	109	1462206.159	97.368317	ppb
	Cd	111	299026.861	100.581927	ppb
	In	113	362197.682	99.283176	ppb
>	In	115	1571500.567		ppb
	Sn	118	170.001	-0.005335	ppb
	Sb	121	1827302.160	191.459616	ppb
	Ba	135	286598.926	95.346143	ppb
	Ba	137	502159.390	95.644314	ppb
>	Tb	159	2581409.441		ppb
	Tl	205	9105698.460	212.888324	ppb
	Pb	206	2991068.329	203.550004	ppb
	Pb	207	5641616.618	204.784966	ppb
	Pb	208	9298828.978	212.972361	ppb
>	Bi	209	1965829.357		ppb
	Cr	53	132536.514		ppb
	Pd	106	26765.772		ppb
	Pd	108	19108.239		ppb
	C	12	476513.030		ppb
	Kr	83	32.000		ppb
	Se	77	28985.948		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	143863.444		ppb
	Be	9	45340.556	105.565051	ppb
	Na	23	9269683.408	2194.573491	ppb
	Mg	24	4674633.214	1316.554063	ppb
	Mg	25	684524.648	1244.277918	ppb
	Mg	26	823843.227	1214.965604	ppb
	Al	27	2934288.315	490.773195	ppb
	K	39	18244613.767	1892.593447	ppb
	Ca	44	649899.843	1661.904140	ppb
>	Sc	45	564225.804		ppb
	Ti	47	75.000	-0.012913	ppb
	V	51	1322154.595	98.206266	ppb
	Cr	52	1169062.740	98.973913	ppb
	Mn	55	1699538.807	105.986673	ppb
	Fe	54	927753.471	968.863484	ppb
	Fe	56	17352727.454	1012.675374	ppb
	Fe	57	347096.024	985.980593	ppb
	Co	59	1621696.583	99.207547	ppb
	Ni	60	350827.923	98.835945	ppb
	Cu	63	818590.446	91.961935	ppb
	Cu	65	398487.860	97.025665	ppb
	Zn	66	365624.049	199.658520	ppb
	As	75	399147.476	193.488723	ppb
	Se	82	37864.216	199.649473	ppb

⌈	Mo	96	286.004	0.033520	ppb
|	Ag	107	1535724.010	99.178001	ppb
|	Ag	109	1498065.125	99.536556	ppb
|	Cd	111	285943.671	95.969326	ppb
|	In	113	355700.601	96.822225	ppb
|>	In	115	1574969.035		ppb
⌊	Sn	118	150.001	-0.007533	ppb
⌈	Sb	121	1835351.700	187.107912	ppb
|	Ba	135	287070.158	92.923497	ppb
|	Ba	137	513939.838	95.244524	ppb
⌊>	Tb	159	2653056.526		ppb
⌈	Tl	205	9280539.884	220.221177	ppb
|	Pb	206	3046898.685	210.451421	ppb
|	Pb	207	5689242.775	209.602946	ppb
|	Pb	208	9048684.335	210.342412	ppb
⌊>	Bi	209	1936862.068		ppb
	Cr	53	134305.887		ppb
	Pd	106	26354.683		ppb
	Pd	108	19073.172		ppb
	C	12	475305.553		ppb
	Kr	83	38.000		ppb
	Se	77	28901.037		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.878			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		96.965			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		101.537			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		106.445			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		105.912			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 19:59:40
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.876

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	123896.086	25.216	123896.086			ppb
	Be	9	47724.117	24.453	0.386	129.29768	3.53	ppb
	Na	23	4785310.923	28.281	38.313	1306.26534	3.91	ppb
	Mg	24	4072549.037	27.975	32.712	1325.55741	5.56	ppb
	Mg	25	609301.671	28.725	4.888	1278.47964	6.68	ppb
	Mg	26	730509.186	28.568	5.856	1242.79803	5.09	ppb
	Al	27	6033143.313	30.960	48.126	1159.61798	8.11	ppb
	K	39	9722932.732	25.674	75.833	1155.75792	4.48	ppb
	Ca	44	391189.911	23.207	2.943	1140.15036	2.67	ppb
>	Sc	45	492046.044	26.185	492046.044			ppb
	Ti	47	98141.798	24.643	0.200	118.78845	1.91	ppb
	V	51	1423448.342	24.509	2.900	121.73805	3.38	ppb
	Cr	52	1244914.751	24.861	2.523	121.35502	1.99	ppb
	Mn	55	1764184.001	22.922	3.599	127.13306	4.08	ppb
	Fe	54	1043232.479	23.591	2.014	1278.69598	4.05	ppb
	Fe	56	17949101.408	20.135	32.974	1247.34908	8.51	ppb
	Fe	57	375612.839	19.832	0.767	1243.33131	7.94	ppb
	Co	59	1739069.324	19.123	3.588	123.85828	8.64	ppb
	Ni	60	368686.931	21.091	0.757	120.42274	6.39	ppb
	Cu	63	884575.867	22.456	1.812	114.90332	5.32	ppb
	Cu	65	440170.449	24.148	0.898	123.45481	2.63	ppb
	Zn	66	194642.977	20.675	0.400	123.26268	6.75	ppb
	As	75	218060.777	20.186	0.449	122.81397	7.71	ppb
	Se	82	20275.572	20.834	0.042	123.91803	6.92	ppb
	Mo	96	474776.185	19.620	0.325	111.20236	2.55	ppb
	Ag	107	1655549.233	18.878	1.136	115.54637	1.09	ppb
	Ag	109	1603655.209	18.036	1.102	115.28532	0.21	ppb
	Cd	111	319890.537	19.394	0.219	115.94367	1.39	ppb
	In	113	382710.961	18.514	0.219	116.41991	0.64	ppb
>	In	115	1456029.160	18.214	1456029.160			ppb
	Sn	118	954942.739	18.960	0.655	111.32987	0.86	ppb
	Sb	121	964091.182	17.059	0.414	112.11532	0.81	ppb
	Ba	135	316083.748	19.038	0.136	116.43756	1.51	ppb
	Ba	137	552097.412	18.525	0.237	116.52435	1.40	ppb
>	Tb	159	2327251.575	17.738	2327251.575			ppb
	Tl	205	4808368.217	18.860	2.721	125.03849	2.00	ppb
	Pb	206	1608826.209	20.409	0.908	121.46638	0.41	ppb
	Pb	207	3012105.087	19.555	1.702	121.47008	1.34	ppb
	Pb	208	4873440.238	19.445	2.754	124.02799	1.55	ppb
>	Bi	209	1772255.101	20.571	1772255.101			ppb
	Cr	53	143964.017	24.853	140293.341			ppb
	Pd	106	28265.860	19.104	28262.526			ppb
	Pd	108	21942.941	18.700	21939.608			ppb
	C	12	429030.726	3.035	41391.483			ppb
	Kr	83	40.000	22.913	-12.667			ppb
	Se	77	15831.464	24.441	15716.575			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	87832.037		ppb
	Be	9	34364.946	131.055079	ppb
	Na	23	3222765.729	1248.746719	ppb
	Mg	24	2776134.406	1280.642182	ppb
	Mg	25	411275.431	1224.497319	ppb
	Mg	26	490843.368	1185.652161	ppb
	Al	27	3897891.711	1068.644578	ppb
	K	39	6881922.553	1153.931155	ppb
	Ca	44	286426.078	1175.212146	ppb
>	Sc	45	343846.609		ppb
	Ti	47	70326.424	121.405869	ppb
	V	51	1020886.971	124.469450	ppb
	Cr	52	887734.563	123.495625	ppb
	Mn	55	1299821.531	133.116245	ppb
	Fe	54	759089.032	1326.534176	ppb
	Fe	56	13776340.752	1364.873429	ppb
	Fe	57	289598.512	1354.169937	ppb
	Co	59	1355209.001	136.043762	ppb
	Ni	60	278899.079	128.935391	ppb
	Cu	63	655473.924	120.840850	ppb
	Cu	65	318230.905	127.155834	ppb
	Zn	66	148288.042	132.815621	ppb
	As	75	167281.238	133.069058	ppb
	Se	82	15400.516	133.152524	ppb
	Mo	96	368268.478	109.412282	ppb
	Ag	107	1294778.465	114.530755	ppb
	Ag	109	1269729.017	115.554585	ppb
	Cd	111	248317.589	114.151764	ppb
	In	113	300982.365	115.895939	ppb
>	In	115	1149873.103		ppb
	Sn	118	745903.397	110.226807	ppb
	Sb	121	774240.357	113.124293	ppb
	Ba	135	246599.533	114.438748	ppb
	Ba	137	434181.400	115.356156	ppb
>	Tb	159	1850606.151		ppb
	Tl	205	3765409.178	127.925055	ppb
	Pb	206	1231755.109	121.797089	ppb
	Pb	207	2336513.921	123.234767	ppb
	Pb	208	3787946.589	126.057323	ppb
>	Bi	209	1352814.360		ppb
	Cr	53	102650.163		ppb
	Pd	106	22154.514		ppb
	Pd	108	17204.788		ppb
	C	12	415396.149		ppb
	Kr	83	42.000		ppb
	Se	77	11389.149		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	141161.343		ppb
	Be	9	55933.994	132.724646	ppb
	Na	23	5583646.157	1346.348116	ppb
	Mg	24	4914271.775	1410.549028	ppb
	Mg	25	743255.567	1376.909811	ppb
	Mg	26	872070.083	1310.729156	ppb
	Al	27	7364414.844	1256.378717	ppb
	K	39	11565067.704	1208.414248	ppb
	Ca	44	440358.916	1120.390890	ppb
>	Sc	45	554841.989		ppb

	Ti	47	109895.552	117.567143	ppb
	V	51	1637634.624	123.735536	ppb
	Cr	52	1413293.640	121.832552	ppb
	Mn	55	1953929.651	123.980699	ppb
	Fe	54	1189427.403	1285.953630	ppb
	Fe	56	20086983.127	1218.769188	ppb
	Fe	57	418221.323	1210.718866	ppb
	Co	59	1921612.837	119.544695	ppb
	Ni	60	413162.407	118.368616	ppb
	Cu	63	1008671.855	115.238934	ppb
	Cu	65	489070.703	121.103168	ppb
	Zn	66	215010.218	119.324773	ppb
	As	75	245360.327	120.958343	ppb
	Se	82	22850.077	122.409380	ppb
	Mo	96	515006.676	109.725837	ppb
	Ag	107	1843619.075	116.947881	ppb
	Ag	109	1765071.912	115.194750	ppb
	Cd	111	353058.187	116.390017	ppb
	In	113	420279.993	116.085558	ppb
>	In	115	1603451.122		ppb
	Sn	118	1056704.389	111.983441	ppb
	Sb	121	1063140.978	111.858108	ppb
	Ba	135	350571.149	117.154300	ppb
	Ba	137	605373.511	115.822592	ppb
>	Tb	159	2569886.100		ppb
	Tl	205	5410715.247	123.528444	ppb
	Pb	206	1831687.151	121.711851	ppb
	Pb	207	3418023.978	121.145551	ppb
	Pb	208	5535671.165	123.794657	ppb
>	Bi	209	2013117.406		ppb
	Cr	53	164335.300		ppb
	Pd	106	30250.686		ppb
	Pd	108	24324.548		ppb
	C	12	441340.813		ppb
	Kr	83	30.000		ppb
	Se	77	18467.036		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	142694.879		ppb
	Be	9	52873.411	124.113316	ppb
	Na	23	5549520.884	1323.701177	ppb
	Mg	24	4527240.929	1285.481032	ppb
	Mg	25	673374.017	1234.031790	ppb
	Mg	26	828614.106	1232.012782	ppb
	Al	27	6837123.384	1153.830654	ppb
	K	39	10721807.939	1104.928342	ppb
	Ca	44	446784.738	1124.848050	ppb
>	Sc	45	577449.533		ppb
	Ti	47	114203.418	117.392334	ppb
	V	51	1611823.432	117.009174	ppb
	Cr	52	1433716.052	118.736877	ppb
	Mn	55	2038800.822	124.302230	ppb
	Fe	54	1181181.001	1223.600134	ppb
	Fe	56	19983980.345	1158.404632	ppb
	Fe	57	419018.682	1165.105114	ppb
	Co	59	1940386.133	115.986385	ppb
	Ni	60	413999.308	113.964200	ppb
	Cu	63	989581.821	108.630178	ppb
	Cu	65	513209.738	122.105431	ppb
	Zn	66	220630.671	117.647661	ppb
	As	75	241540.765	114.414513	ppb
	Se	82	22576.122	116.192195	ppb

⌈	Mo	96	541053.401	114.468956	ppb
|	Ag	107	1828250.160	115.160467	ppb
|	Ag	109	1776164.696	115.106640	ppb
|	Cd	111	358295.836	117.289225	ppb
|	In	113	426870.527	117.278232	ppb
|>	In	115	1614763.255		ppb
⌊	Sn	118	1062220.432	111.779367	ppb
⌈	Sb	121	1054892.209	111.363549	ppb
|	Ba	135	351080.561	117.719621	ppb
|	Ba	137	616737.327	118.394314	ppb
⌊>	Tb	159	2561262.474		ppb
⌈	Tl	205	5248980.226	123.661960	ppb
|	Pb	206	1763036.367	120.890188	ppb
|	Pb	207	3281777.362	120.029911	ppb
|	Pb	208	5296702.959	122.231996	ppb
⌊>	Bi	209	1950833.538		ppb
	Cr	53	164906.590		ppb
	Pd	106	32392.378		ppb
	Pd	108	24299.487		ppb
	C	12	430355.217		ppb
	Kr	83	48.000		ppb
	Se	77	17638.208		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.186			
	Be	9	107.748				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.150			
	Ti	47					
	V	51	101.448				
	Cr	52	101.129				
	Mn	55	105.944				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	103.215				
	Ni	60	100.352				
	Cu	63	95.753				
	Cu	65	102.879				
	Zn	66	102.719				
	As	75	102.345				
	Se	82	103.265				
	Mo	96					
	Ag	107	96.289				
	Ag	109	96.071				
	Cd	111	96.620				
	In	113					
>	In	115		104.210			
	Sn	118	92.775				
	Sb	121	93.429				
	Ba	135	97.031				
	Ba	137	97.104				
>	Tb	159		106.801			
	Tl	205	104.199				
	Pb	206	101.222				
	Pb	207	101.225				
	Pb	208	103.357				
>	Bi	209		106.866			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 20:01:37
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.877

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	123445.832	27.553	123445.832			ppb
	Be	9	6.667	62.450	0.000	0.01068	129.37	ppb
	Na	23	6134.550	4.318	-0.013	-0.43269	157.62	ppb
	Mg	24	1456.780	31.965	0.010	0.39918	90.10	ppb
	Mg	25	221.669	31.844	0.002	0.40386	85.97	ppb
	Mg	26	322.339	25.357	0.002	0.33347	108.69	ppb
	Al	27	1866.842	8.874	-0.012	-0.29150	56.43	ppb
	K	39	303301.209	2.824	-0.043	-0.64899	1802.32	ppb
	Ca	44	19290.032	9.506	-0.058	-22.29828	126.64	ppb
>	Sc	45	472149.612	22.134	472149.612			ppb
	Ti	47	58.334	52.372	-0.000	-0.01409	312.52	ppb
	V	51	2194.052	21.013	0.001	0.04524	5.98	ppb
	Cr	52	7260.636	2.653	0.002	0.08028	258.27	ppb
	Mn	55	1911.850	9.032	-0.007	-0.26011	11.41	ppb
	Fe	54	57944.620	14.163	0.006	3.91629	194.83	ppb
	Fe	56	1994152.021	8.501	0.340	12.85892	201.37	ppb
	Fe	57	3368.902	6.594	0.000	0.33958	649.48	ppb
	Co	59	218.002	21.574	0.000	0.00945	83.10	ppb
	Ni	60	55.556	15.100	0.000	0.00412	187.72	ppb
	Cu	63	248.892	13.680	0.000	0.00974	128.57	ppb
	Cu	65	126.667	6.963	0.000	0.00635	186.98	ppb
	Zn	66	148.890	16.952	-0.000	-0.08317	7.43	ppb
	As	75	2.603	1640.008	0.000	0.02489	119.81	ppb
	Se	82	60.889	6.415	0.000	0.11447	113.54	ppb
	Mo	96	574.685	36.410	0.000	0.12182	73.11	ppb
	Ag	107	294.449	27.669	0.000	0.01874	64.47	ppb
	Ag	109	331.117	38.074	0.000	0.02338	74.02	ppb
	Cd	111	57.697	75.575	0.000	0.02336	102.24	ppb
	In	113	61010.848	20.755	-0.001	-0.31873	98.81	ppb
>	In	115	1422305.174	21.831	1422305.174			ppb
	Sn	118	615.020	27.964	0.000	0.05588	76.27	ppb
	Sb	121	5328.100	12.244	0.002	0.58519	31.45	ppb
	Ba	135	73.334	37.128	0.000	0.01846	103.79	ppb
	Ba	137	117.334	33.417	0.000	0.01608	95.28	ppb
>	Tb	159	2239253.328	21.242	2239253.328			ppb
	Tl	205	633.355	33.768	0.000	0.01565	67.41	ppb
	Pb	206	340.006	25.641	-0.000	-0.00055	2561.96	ppb
	Pb	207	598.343	34.296	-0.000	-0.00058	2713.43	ppb
	Pb	208	923.362	42.164	-0.000	-0.00175	983.94	ppb
>	Bi	209	1799834.199	21.494	1799834.199			ppb
	Cr	53	1496.780	11.943	-2173.896			ppb
	Pd	106	6.667	86.603	3.333			ppb
	Pd	108	10.000	50.000	6.667			ppb
	C	12	412418.794	6.540	24779.551			ppb
	Kr	83	41.333	18.319	-11.333			ppb
	Se	77	92.000	7.137	-22.889			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	84229.241		ppb
	Be	9	8.000	0.022607	ppb
	Na	23	6440.073	0.354621	ppb
	Mg	24	1994.199	0.814339	ppb
	Mg	25	300.005	0.802091	ppb
	Mg	26	411.008	0.748478	ppb
	Al	27	2040.208	-0.102434	ppb
	K	39	293422.597	12.850213	ppb
	Ca	44	21368.807	10.257641	ppb
>	Sc	45	351708.043		ppb
	Ti	47	65.000	0.017910	ppb
	V	51	1662.103	0.048168	ppb
	Cr	52	7380.723	0.319547	ppb
	Mn	55	1795.161	-0.226998	ppb
	Fe	54	48512.388	12.465160	ppb
	Fe	56	1798429.478	42.699803	ppb
	Fe	57	3125.488	2.855499	ppb
	Co	59	264.003	0.018278	ppb
	Ni	60	63.334	0.012934	ppb
	Cu	63	273.337	0.023821	ppb
	Cu	65	133.334	0.019840	ppb
	Zn	66	120.001	-0.076096	ppb
	As	75	51.750	0.059252	ppb
	Se	82	65.334	0.264550	ppb
	Mo	96	778.030	0.221217	ppb
	Ag	107	383.341	0.032584	ppb
	Ag	109	476.678	0.043365	ppb
	Cd	111	103.906	0.050094	ppb
	In	113	46447.619	0.029594	ppb
>	In	115	1064522.554		ppb
	Sn	118	805.032	0.104810	ppb
	Sb	121	5416.467	0.784295	ppb
	Ba	135	104.001	0.040483	ppb
	Ba	137	154.001	0.033056	ppb
>	Tb	159	1690714.142		ppb
	Tl	205	880.039	0.027825	ppb
	Pb	206	440.010	0.015623	ppb
	Pb	207	835.017	0.017452	ppb
	Pb	208	1365.055	0.018085	ppb
>	Bi	209	1354695.134		ppb
	Cr	53	1688.142		ppb
	Pd	106	0.000		ppb
	Pd	108	15.000		ppb
	C	12	381480.164		ppb
	Kr	83	36.000		ppb
	Se	77	84.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	141191.768		ppb
	Be	9	2.000	-0.004464	ppb
	Na	23	5968.781	-0.810877	ppb
	Mg	24	1203.072	0.200229	ppb
	Mg	25	202.002	0.244749	ppb
	Mg	26	306.005	0.172883	ppb
	Al	27	1850.171	-0.370331	ppb
	K	39	307795.096	-7.018452	ppb
	Ca	44	18599.281	-36.988548	ppb
>	Sc	45	538804.734		ppb

	Ti	47	25.000	-0.064313	ppb
	V	51	2477.845	0.042836	ppb
	Cr	52	7362.709	-0.032574	ppb
	Mn	55	2110.223	-0.268947	ppb
	Fe	54	61870.810	-2.203684	ppb
	Fe	56	2094371.147	-3.690840	ppb
	Fe	57	3420.585	-1.260218	ppb
	Co	59	170.001	0.003258	ppb
	Ni	60	56.667	0.001025	ppb
	Cu	63	263.337	0.005534	ppb
	Cu	65	116.667	-0.002502	ppb
	Zn	66	166.668	-0.085923	ppb
	As	75	-18.727	0.009506	ppb
	Se	82	59.334	0.039192	ppb
	Mo	96	586.017	0.094975	ppb
	Ag	107	276.670	0.013313	ppb
	Ag	109	260.003	0.013286	ppb
	Cd	111	17.275	0.004130	ppb
	In	113	69425.159	-0.402449	ppb
>	In	115	1621362.654		ppb
	Sn	118	570.016	0.036032	ppb
	Sb	121	5931.759	0.549883	ppb
	Ba	135	64.000	0.009310	ppb
	Ba	137	122.001	0.011905	ppb
>	Tb	159	2537808.021		ppb
	Tl	205	520.014	0.009978	ppb
	Pb	206	300.005	-0.007664	ppb
	Pb	207	490.006	-0.008965	ppb
	Pb	208	630.011	-0.013034	ppb
>	Bi	209	1990027.538		ppb
	Cr	53	1468.108		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	430977.162		ppb
	Kr	83	38.000		ppb
	Se	77	94.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144916.486		ppb
	Be	9	10.000	0.013906	ppb
	Na	23	5994.796	-0.841802	ppb
	Mg	24	1173.069	0.182965	ppb
	Mg	25	163.001	0.164747	ppb
	Mg	26	250.003	0.079054	ppb
	Al	27	1710.146	-0.401728	ppb
	K	39	308685.934	-7.778725	ppb
	Ca	44	17902.010	-40.163927	ppb
>	Sc	45	525936.060		ppb
	Ti	47	85.000	0.004131	ppb
	V	51	2442.208	0.044715	ppb
	Cr	52	7038.476	-0.046145	ppb
	Mn	55	1830.167	-0.284371	ppb
	Fe	54	63450.663	1.487381	ppb
	Fe	56	2089655.438	-0.432195	ppb
	Fe	57	3560.634	-0.576538	ppb
	Co	59	220.002	0.006806	ppb
	Ni	60	46.667	-0.001588	ppb
	Cu	63	210.002	-0.000138	ppb
	Cu	65	130.001	0.001710	ppb
	Zn	66	160.001	-0.087498	ppb
	As	75	-25.215	0.005900	ppb
	Se	82	58.000	0.039667	ppb

⌈	Mo	96	360.006	0.049276	ppb
|	Ag	107	223.336	0.010324	ppb
|	Ag	109	256.670	0.013494	ppb
|	Cd	111	51.910	0.015854	ppb
|	In	113	67159.767	-0.583344	ppb
|>	In	115	1581030.315		ppb
⌊	Sn	118	470.011	0.026805	ppb
⌈	Sb	121	4636.074	0.421378	ppb
|	Ba	135	52.000	0.005592	ppb
|	Ba	137	76.000	0.003279	ppb
⌊>	Tb	159	2489237.822		ppb
⌈	Tl	205	500.013	0.009152	ppb
|	Pb	206	280.004	-0.009602	ppb
|	Pb	207	470.006	-0.010214	ppb
|	Pb	208	775.019	-0.010305	ppb
⌊>	Bi	209	2054779.924		ppb
	Cr	53	1334.089		ppb
	Pd	106	10.000		ppb
	Pd	108	10.000		ppb
	C	12	424799.056		ppb
	Kr	83	50.000		ppb
	Se	77	97.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			101.814		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			93.222		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			101.796		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			102.762		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			108.529		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-01

Sample Date/Time: Monday, November 09, 2009 20:04:25
Sample Type: Sample
Sample Description: 74MW4
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-01.878

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	124191.263	25.242	124191.263			ppb
	Be	9	4.000	100.000	0.000	0.00395	393.88	ppb
	Na	23	24796088.377	25.252	199.624	6806.04101	3.30	ppb
	Mg	24	S	S	19999999810437	35614.33841	0.00	ppb
	Mg	25	14740161.589	22.632	119.382	31222.13336	5.21	ppb
	Mg	26	17464270.183	22.134	141.716	30074.10270	7.27	ppb
	Al	27	458507.820	21.913	3.690	88.91825	5.64	ppb
	K	39	12950959.293	19.845	102.873	1567.87827	8.18	ppb
	Ca	44	18357645.007	19.377	149.449	57891.46649	8.15	ppb
>	Sc	45	506604.515	23.126	506604.515			ppb
	Ti	47	2320.279	23.402	0.004	2.62913	2.98	ppb
	V	51	5560.429	13.989	0.008	0.31995	21.16	ppb
	Cr	52	21176.661	13.273	0.028	1.35792	17.92	ppb
	Mn	55	95039.501	19.830	0.177	6.26205	5.52	ppb
	Fe	54	468910.454	22.052	0.809	513.80496	3.11	ppb
	Fe	56	9785020.457	19.998	15.447	584.33051	5.90	ppb
	Fe	57	219667.064	23.660	0.426	691.19248	3.88	ppb
	Co	59	2388.290	16.306	0.005	0.15723	9.28	ppb
	Ni	60	4926.837	29.031	0.010	1.51487	8.82	ppb
	Cu	63	3268.328	21.181	0.006	0.38516	3.94	ppb
	Cu	65	1931.302	19.184	0.004	0.49578	6.18	ppb
	Zn	66	11414.553	24.693	0.022	6.74734	2.77	ppb
	As	75	489.942	30.823	0.001	0.28001	8.95	ppb
	Se	82	98.889	10.209	0.000	0.30674	29.89	ppb
	Mo	96	3374.585	20.292	0.002	0.82288	5.18	ppb
	Ag	107	84.445	8.217	0.000	0.00254	74.72	ppb
	Ag	109	91.112	21.437	0.000	0.00361	32.97	ppb
	Cd	111	22.911	96.466	0.000	0.00885	129.73	ppb
	In	113	58124.252	22.828	-0.001	-0.46224	195.94	ppb
>	In	115	1354720.776	19.737	1354720.776			ppb
	Sn	118	950.046	21.132	0.001	0.09597	14.75	ppb
	Sb	121	1953.526	11.563	0.001	0.16823	28.07	ppb
	Ba	135	421602.214	20.637	0.195	167.86342	2.93	ppb
	Ba	137	733802.693	21.628	0.340	167.04380	4.05	ppb
>	Tb	159	2149800.190	18.204	2149800.190			ppb
	Tl	205	255.003	16.981	0.000	0.00592	50.07	ppb
	Pb	206	3357.254	25.360	0.002	0.26078	10.43	ppb
	Pb	207	6092.638	22.423	0.004	0.25387	6.49	ppb
	Pb	208	9434.357	20.229	0.005	0.24749	3.96	ppb
>	Bi	209	1540236.915	17.301	1540236.915			ppb
	Cr	53	2868.415	11.680	-802.261			ppb
	Pd	106	23.333	32.733	20.000			ppb
	Pd	108	21.667	74.182	18.333			ppb
	C	12	568053.537	19.168	180414.294			ppb
	Kr	83	48.000	33.072	-4.667			ppb
	Se	77	132.001	3.499	17.111			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	88348.557		ppb
	Be	9	8.000	0.021123	ppb
	Na	23	17566233.190	6776.665031	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	10896841.685	32256.954728	ppb
	Mg	26	13063257.594	31377.656995	ppb
	Al	27	342703.352	92.780017	ppb
	K	39	10001570.300	1685.116535	ppb
	Ca	44	14266014.669	62461.738017	ppb
>	Sc	45	371914.769		ppb
	Ti	47	1710.146	2.639643	ppb
	V	51	4762.295	0.387270	ppb
	Cr	52	17944.085	1.630894	ppb
	Mn	55	73368.161	6.560634	ppb
	Fe	54	349559.648	521.633567	ppb
	Fe	56	7529996.333	615.161397	ppb
	Fe	57	159888.072	685.559990	ppb
	Co	59	1942.189	0.172631	ppb
	Ni	60	3287.207	1.389467	ppb
	Cu	63	2470.305	0.395681	ppb
	Cu	65	1516.782	0.528206	ppb
	Zn	66	8159.995	6.584913	ppb
	As	75	321.160	0.255174	ppb
	Se	82	87.334	0.410720	ppb
	Mo	96	2606.340	0.822754	ppb
	Ag	107	90.000	0.004706	ppb
	Ag	109	76.667	0.004173	ppb
	Cd	111	45.365	0.021419	ppb
	In	113	42821.488	-1.405882	ppb
>	In	115	1046211.724		ppb
	Sn	118	760.029	0.099749	ppb
	Sb	121	1865.174	0.214656	ppb
	Ba	135	321198.902	162.462984	ppb
	Ba	137	551018.005	159.563393	ppb
>	Tb	159	1697963.426		ppb
	Tl	205	305.005	0.009341	ppb
	Pb	206	2380.283	0.230555	ppb
	Pb	207	4515.511	0.234919	ppb
	Pb	208	7236.529	0.237088	ppb
>	Bi	209	1232545.536		ppb
	Cr	53	2482.308		ppb
	Pd	106	15.000		ppb
	Pd	108	15.000		ppb
	C	12	459301.080		ppb
	Kr	83	54.000		ppb
	Se	77	126.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	146495.240		ppb
	Be	9	4.000	-0.000063	ppb
	Na	23	28356578.035	6597.254204	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	16437841.107	29345.619018	ppb
	Mg	26	19019641.589	27551.594869	ppb
	Al	27	510332.978	83.253219	ppb
	K	39	14139917.110	1430.829958	ppb
	Ca	44	20092169.657	53040.259843	ppb
>	Sc	45	563025.932		ppb

	Ti	47	2500.313	2.546158	ppb
	V	51	6316.228	0.320682	ppb
	Cr	52	23044.522	1.278889	ppb
	Mn	55	107590.691	6.342427	ppb
	Fe	54	531604.298	524.363463	ppb
	Fe	56	11035703.679	590.729518	ppb
	Fe	57	254138.807	720.383104	ppb
	Co	59	2660.354	0.155474	ppb
	Ni	60	5918.418	1.655472	ppb
	Cu	63	3707.354	0.392039	ppb
	Cu	65	2046.876	0.467352	ppb
	Zn	66	13021.806	6.951205	ppb
	As	75	536.394	0.279560	ppb
	Se	82	106.001	0.272024	ppb
	Mo	96	3920.768	0.865528	ppb
	Ag	107	76.667	0.001159	ppb
	Ag	109	113.334	0.004419	ppb
	Cd	111	1.179	-0.001086	ppb
	In	113	66429.916	0.400052	ppb
>	In	115	1498540.585		ppb
	Sn	118	1160.067	0.107851	ppb
	Sb	121	2210.244	0.169790	ppb
	Ba	135	474846.498	172.088170	ppb
	Ba	137	813735.900	168.837247	ppb
>	Tb	159	2369805.876		ppb
	Tl	205	230.003	0.004210	ppb
	Pb	206	3750.703	0.268522	ppb
	Pb	207	6911.203	0.264737	ppb
	Pb	208	10673.320	0.256535	ppb
>	Bi	209	1693352.125		ppb
	Cr	53	3040.462		ppb
	Pd	106	25.000		ppb
	Pd	108	40.000		ppb
	C	12	567790.306		ppb
	Kr	83	60.000		ppb
	Se	77	134.668		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	137729.990		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	28465453.905	7044.203789	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	16885801.975	32063.826332	ppb
	Mg	26	20309911.365	31293.056236	ppb
	Al	27	522487.130	90.721518	ppb
	K	39	14711390.468	1587.688313	ppb
	Ca	44	20714750.694	58172.401598	ppb
>	Sc	45	584872.846		ppb
	Ti	47	2750.378	2.701603	ppb
	V	51	5602.765	0.251892	ppb
	Cr	52	22541.377	1.163970	ppb
	Mn	55	104159.651	5.883097	ppb
	Fe	54	525567.416	495.417860	ppb
	Fe	56	10789361.360	547.100607	ppb
	Fe	57	244974.312	667.634360	ppb
	Co	59	2562.328	0.143595	ppb
	Ni	60	5574.887	1.499670	ppb
	Cu	63	3627.324	0.367769	ppb
	Cu	65	2230.249	0.491776	ppb
	Zn	66	13061.858	6.705900	ppb
	As	75	612.271	0.305307	ppb
	Se	82	103.334	0.237488	ppb

⌈	Mo	96	3596.647	0.780353	ppb
|	Ag	107	86.667	0.001757	ppb
|	Ag	109	83.334	0.002244	ppb
|	Cd	111	22.189	0.006218	ppb
|	In	113	65121.351	-0.380877	ppb
|>	In	115	1519410.021		ppb
⌊	Sn	118	930.043	0.080314	ppb
⌈	Sb	121	1785.159	0.120241	ppb
|	Ba	135	468761.242	169.039096	ppb
|	Ba	137	836654.175	172.730765	ppb
⌊>	Tb	159	2381631.270		ppb
⌈	Tl	205	230.003	0.004205	ppb
|	Pb	206	3940.776	0.283272	ppb
|	Pb	207	6851.200	0.261959	ppb
|	Pb	208	10393.222	0.248848	ppb
⌊>	Bi	209	1694813.084		ppb
	Cr	53	3082.475		ppb
	Pd	106	30.000		ppb
	Pd	108	10.000		ppb
	C	12	677069.225		ppb
	Kr	83	30.000		ppb
	Se	77	134.668		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		102.429			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		100.025			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		96.959			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		98.657			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		92.876			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101926-DUP1

Sample Date/Time: Monday, November 09, 2009 20:06:23
Sample Type: Sample
Sample Description: 74MW4D
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101926-DUP1.879

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	107159.081	30.024	107159.081			ppb
	Be	9	6.000	66.667	0.000	0.00824	107.13	ppb
	Na	23	20334106.899	27.528	191.137	6516.68235	5.91	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	12527492.984	25.954	118.245	30924.89791	6.84	ppb
	Mg	26	15475591.598	23.238	146.970	31188.88766	8.68	ppb
	Al	27	379517.903	23.574	3.575	86.13125	9.05	ppb
	K	39	11691593.659	24.293	108.107	1647.64489	7.66	ppb
	Ca	44	16664642.522	24.383	157.616	61055.38082	7.58	ppb
>	Sc	45	424083.737	25.125	424083.737			ppb
	Ti	47	1840.177	26.770	0.004	2.49439	11.58	ppb
	V	51	4832.251	22.216	0.008	0.33367	16.67	ppb
	Cr	52	20375.679	14.122	0.035	1.67364	18.72	ppb
	Mn	55	97880.949	25.770	0.219	7.73437	1.11	ppb
	Fe	54	421309.130	25.074	0.875	555.71614	0.35	ppb
	Fe	56	8770644.136	22.889	16.795	635.33423	3.94	ppb
	Fe	57	201544.438	27.386	0.466	755.56157	3.22	ppb
	Co	59	2645.028	22.620	0.006	0.20878	3.19	ppb
	Ni	60	4150.902	26.629	0.010	1.53733	5.13	ppb
	Cu	63	3141.619	21.259	0.007	0.44812	5.57	ppb
	Cu	65	1737.938	29.520	0.004	0.52620	6.55	ppb
	Zn	66	11920.768	26.546	0.027	8.46215	1.83	ppb
	As	75	491.205	12.644	0.001	0.34423	14.89	ppb
	Se	82	97.334	4.939	0.000	0.42536	42.98	ppb
	Mo	96	3271.888	23.358	0.003	0.97883	1.58	ppb
	Ag	107	58.889	19.879	0.000	0.00141	36.97	ppb
	Ag	109	50.000	6.667	0.000	0.00137	68.20	ppb
	Cd	111	23.941	99.498	0.000	0.00996	99.47	ppb
	In	113	51270.020	21.245	0.003	1.48131	17.86	ppb
>	In	115	1107383.947	22.071	1107383.947			ppb
	Sn	118	768.363	16.156	0.001	0.09543	8.72	ppb
	Sb	121	1358.427	13.726	0.000	0.11321	18.10	ppb
	Ba	135	395414.446	20.926	0.208	178.48905	1.27	ppb
	Ba	137	682953.718	21.203	0.359	176.42189	1.15	ppb
>	Tb	159	1900898.055	20.340	1900898.055			ppb
	Tl	205	218.336	42.372	0.000	0.00552	37.32	ppb
	Pb	206	5119.681	20.619	0.004	0.50200	0.63	ppb
	Pb	207	9350.592	18.899	0.007	0.49104	2.05	ppb
	Pb	208	14893.407	18.909	0.011	0.49286	2.08	ppb
>	Bi	209	1292306.303	20.344	1292306.303			ppb
	Cr	53	2896.423	11.266	-774.253			ppb
	Pd	106	15.000	33.333	11.667			ppb
	Pd	108	11.667	173.205	8.333			ppb
	C	12	500712.225	10.607	113072.982			ppb
	Kr	83	42.667	31.211	-10.000			ppb
	Se	77	129.334	16.079	14.445			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	70050.497		ppb
|	Be	9	2.000	0.000355	ppb
|	Na	23	13944483.928	6784.662198	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	8806689.456	32879.384324	ppb
|	Mg	26	11326735.929	34313.291026	ppb
|	Al	27	276793.438	94.523310	ppb
|	K	39	8425079.876	1792.804360	ppb
⌊	Ca	44	12008077.539	66314.519335	ppb
⌈>	Sc	45	301085.398		ppb
|	Ti	47	1345.090	2.561973	ppb
|	V	51	3756.679	0.373516	ppb
|	Cr	52	17058.537	2.035372	ppb
|	Mn	55	68755.557	7.658693	ppb
|	Fe	54	299416.392	556.277166	ppb
|	Fe	56	6463368.309	661.324415	ppb
|	Fe	57	137863.816	730.938005	ppb
|	Co	59	1954.191	0.216413	ppb
|	Ni	60	2897.086	1.514034	ppb
|	Cu	63	2376.949	0.475092	ppb
|	Cu	65	1153.400	0.494193	ppb
|	Zn	66	8270.085	8.289407	ppb
|	As	75	421.829	0.402171	ppb
⌊	Se	82	93.334	0.634674	ppb
⌈	Mo	96	2390.286	0.961050	ppb
|	Ag	107	46.667	0.001706	ppb
|	Ag	109	46.667	0.002421	ppb
|	Cd	111	17.640	0.009795	ppb
|	In	113	38694.720	1.754866	ppb
|>	In	115	825395.744		ppb
⌊	Sn	118	625.020	0.104980	ppb
⌈	Sb	121	1160.067	0.133150	ppb
|	Ba	135	299869.675	176.994975	ppb
|	Ba	137	516349.325	174.485411	ppb
⌊>	Tb	159	1455067.121		ppb
⌈	Tl	205	125.001	0.003778	ppb
|	Pb	206	3900.761	0.499995	ppb
|	Pb	207	7311.342	0.501164	ppb
|	Pb	208	11643.970	0.502975	ppb
⌊>	Bi	209	988792.510		ppb
	Cr	53	2532.321		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	439968.273		ppb
	Kr	83	36.000		ppb
	Se	77	105.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	127250.516		ppb
|	Be	9	6.000	0.006585	ppb
|	Na	23	22684368.671	6075.574226	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	13954146.959	28679.112459	ppb
|	Mg	26	17702801.091	29522.332610	ppb
|	Al	27	421398.220	79.107576	ppb
|	K	39	13578979.621	1586.123636	ppb
⌊	Ca	44	19490725.631	59244.239210	ppb
⌈>	Sc	45	488218.890		ppb

	Ti	47	2330.271	2.743472	ppb
	V	51	5903.724	0.357367	ppb
	Cr	52	22200.616	1.497406	ppb
	Mn	55	112297.010	7.717138	ppb
	Fe	54	486335.358	557.347194	ppb
	Fe	56	10118042.528	633.237034	ppb
	Fe	57	231151.016	756.182908	ppb
	Co	59	2996.449	0.204229	ppb
	Ni	60	4571.044	1.472787	ppb
	Cu	63	3610.652	0.443451	ppb
	Cu	65	2113.557	0.562674	ppb
	Zn	66	13882.963	8.588043	ppb
	As	75	510.148	0.304780	ppb
	Se	82	96.000	0.296945	ppb
	Mo	96	3746.702	0.988910	ppb
	Ag	107	60.000	0.000806	ppb
	Ag	109	50.000	0.000663	ppb
	Cd	111	3.905	0.000138	ppb
	In	113	57741.223	1.226867	ppb
>	In	115	1258356.065		ppb
	Sn	118	840.035	0.089739	ppb
	Sb	121	1530.117	0.114250	ppb
	Ba	135	443555.650	181.099650	ppb
	Ba	137	753945.169	176.236550	ppb
>	Tb	159	2103500.426		ppb
	Tl	205	220.002	0.004996	ppb
	Pb	206	5736.645	0.505644	ppb
	Pb	207	10432.747	0.490956	ppb
	Pb	208	16628.217	0.493128	ppb
>	Bi	209	1438766.328		ppb
	Cr	53	2994.448		ppb
	Pd	106	15.000		ppb
	Pd	108	35.000		ppb
	C	12	523768.628		ppb
	Kr	83	34.000		ppb
	Se	77	140.668		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124176.229		ppb
	Be	9	10.000	0.017767	ppb
	Na	23	24373468.099	6689.810614	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	14821642.537	31216.196946	ppb
	Mg	26	17397237.774	29731.039329	ppb
	Al	27	440362.050	84.762851	ppb
	K	39	13070721.479	1564.006684	ppb
	Ca	44	18495124.397	57607.383922	ppb
>	Sc	45	482946.923		ppb
	Ti	47	1845.170	2.177735	ppb
	V	51	4836.349	0.270141	ppb
	Cr	52	21867.884	1.488143	ppb
	Mn	55	112590.280	7.827275	ppb
	Fe	54	478175.640	553.524072	ppb
	Fe	56	9730521.571	611.441250	ppb
	Fe	57	235618.483	779.563796	ppb
	Co	59	2984.445	0.205684	ppb
	Ni	60	4984.575	1.625165	ppb
	Cu	63	3437.257	0.425806	ppb
	Cu	65	1946.856	0.521733	ppb
	Zn	66	13609.254	8.508992	ppb
	As	75	541.637	0.325731	ppb
	Se	82	102.667	0.344468	ppb

⌈	Mo	96	3678.677	0.986535	ppb
|	Ag	107	70.000	0.001705	ppb
|	Ag	109	53.333	0.001012	ppb
|	Cd	111	50.280	0.019960	ppb
|	In	113	57374.119	1.462187	ppb
|>	In	115	1238400.031		ppb
⌊	Sn	118	840.035	0.091567	ppb
⌈	Sb	121	1385.096	0.092219	ppb
|	Ba	135	442818.014	177.372517	ppb
|	Ba	137	778566.659	178.543717	ppb
⌊>	Tb	159	2144126.619		ppb
⌈	Tl	205	310.005	0.007798	ppb
|	Pb	206	5721.636	0.500360	ppb
|	Pb	207	10307.688	0.481015	ppb
|	Pb	208	16408.035	0.482484	ppb
⌊>	Bi	209	1449360.072		ppb
	Cr	53	3162.500		ppb
	Pd	106	20.000		ppb
	Pd	108	0.000		ppb
	C	12	538399.773		ppb
	Kr	83	58.000		ppb
	Se	77	142.001		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		88.381			
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		83.732			
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115		79.257			
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159		87.235			
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		77.926			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101926-MS1

Sample Date/Time: Monday, November 09, 2009 20:08:21
Sample Type: Spike - 2 of 11
Sample Description: 74MW4S
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101926-MS1.880

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	121751.334	22.531	121751.334			ppb
|	Be	9	20700.762	22.034	0.170	57.02664	3.92	ppb
|	Na	23	23995394.441	24.941	196.234	6690.43468	4.42	ppb
|	Mg	24	S	S	133333355402916	7546.27683	86.60	ppb
|	Mg	25	14835875.779	25.596	121.390	31747.26582	7.37	ppb
|	Mg	26	17541902.375	28.031	142.790	30301.91582	8.31	ppb
|	Al	27	5934660.926	27.570	48.320	1164.29143	7.86	ppb
|	K	39	13335201.472	24.564	106.517	1623.41695	4.00	ppb
⌊	Ca	44	18329736.297	21.268	150.663	58361.80814	1.50	ppb
⌈>	Sc	45	481144.490	24.228	481144.490			ppb
|	Ti	47	2233.592	24.007	0.004	2.67308	7.87	ppb
|	V	51	6142037.291	22.863	12.799	537.21895	3.73	ppb
|	Cr	52	2084807.924	23.015	4.329	208.21382	1.87	ppb
|	Mn	55	7575189.049	21.138	15.828	559.06455	3.76	ppb
|	Fe	54	515358.626	20.601	0.960	609.71690	4.97	ppb
|	Fe	56	9264484.253	16.181	15.581	589.40482	12.80	ppb
|	Fe	57	212537.018	20.632	0.438	710.17278	6.15	ppb
|	Co	59	7110730.537	20.610	14.883	513.73746	4.33	ppb
|	Ni	60	1554538.070	21.624	3.247	516.21344	3.21	ppb
|	Cu	63	1810147.010	20.276	3.791	240.33366	4.75	ppb
|	Cu	65	829983.384	21.342	1.735	238.36690	3.49	ppb
|	Zn	66	807724.444	21.869	1.686	519.95654	2.99	ppb
|	As	75	74349.675	21.385	0.155	42.51447	3.44	ppb
⌊	Se	82	1919.521	17.002	0.004	11.76628	9.12	ppb
⌈	Mo	96	3511.297	18.454	0.003	0.89726	2.26	ppb
|	Ag	107	614907.551	19.404	0.474	48.19704	3.17	ppb
|	Ag	109	581599.801	17.482	0.449	47.02363	2.30	ppb
|	Cd	111	128789.535	17.875	0.099	52.56433	1.54	ppb
|	In	113	183588.902	17.625	0.098	52.17832	2.15	ppb
|>	In	115	1293166.649	16.661	1293166.649			ppb
⌊	Sn	118	761.696	15.104	0.000	0.07682	10.03	ppb
⌈	Sb	121	762411.151	17.098	0.365	98.78388	3.72	ppb
|	Ba	135	5794066.167	16.312	2.780	2387.55211	4.17	ppb
|	Ba	137	10043825.105	17.317	4.811	2365.82042	2.63	ppb
⌊>	Tb	159	2094766.047	19.608	2094766.047			ppb
⌈	Tl	205	1902283.186	18.283	1.292	59.39689	4.04	ppb
|	Pb	206	241812.428	18.152	0.164	21.95660	4.24	ppb
|	Pb	207	454408.497	18.454	0.308	21.99788	3.85	ppb
|	Pb	208	732481.069	18.936	0.496	22.35472	3.29	ppb
⌊>	Bi	209	1480491.702	21.692	1480491.702			ppb
	Cr	53	236920.814	20.287	233250.138			ppb
	Pd	106	11238.203	23.121	11234.869			ppb
	Pd	108	8355.230	17.923	8351.897			ppb
	C	12	527901.799	6.111	140262.556			ppb
	Kr	83	50.667	6.030	-2.000			ppb
	Se	77	1546.790	20.420	1431.900			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	90205.021		ppb
	Be	9	15463.947	57.417154	ppb
	Na	23	17099541.841	6460.759058	ppb
	Mg	24	69921916.196	31410.153709	ppb
	Mg	25	10550976.836	30590.322011	ppb
	Mg	26	11913681.714	28027.430829	ppb
	Al	27	4062285.531	1084.426851	ppb
	K	39	9557917.524	1574.648839	ppb
	Ca	44	13845057.143	59366.718325	ppb
>	Sc	45	347779.154		ppb
	Ti	47	1630.133	2.692539	ppb
	V	51	4521291.846	545.522943	ppb
	Cr	52	1532265.362	211.235486	ppb
	Mn	55	5747681.037	583.344111	ppb
	Fe	54	393060.955	642.463207	ppb
	Fe	56	7540800.821	669.489054	ppb
	Fe	57	162113.473	744.315376	ppb
	Co	59	5433886.497	539.339635	ppb
	Ni	60	1167684.557	533.767210	ppb
	Cu	63	1387792.748	252.983351	ppb
	Cu	65	627591.019	247.962224	ppb
	Zn	66	606670.688	537.778357	ppb
	As	75	56184.878	44.201324	ppb
	Se	82	1542.786	12.927779	ppb
	Mo	96	2764.382	0.875952	ppb
	Ag	107	477200.685	46.472275	ppb
	Ag	109	465201.313	46.610774	ppb
	Cd	111	102226.127	51.739096	ppb
	In	113	146292.302	51.260228	ppb
>	In	115	1044386.469		ppb
	Sn	118	645.021	0.081248	ppb
	Sb	121	611884.400	101.717264	ppb
	Ba	135	4703248.223	2483.728965	ppb
	Ba	137	8062048.426	2437.461674	ppb
>	Tb	159	1626422.059		ppb
	Tl	205	1505895.509	62.164147	ppb
	Pb	206	191241.342	22.954945	ppb
	Pb	207	357903.682	22.915583	ppb
	Pb	208	572946.352	23.145654	ppb
>	Bi	209	1113343.554		ppb
	Cr	53	181439.211		ppb
	Pd	106	8238.392		ppb
	Pd	108	6627.195		ppb
	C	12	490749.349		ppb
	Kr	83	48.000		ppb
	Se	77	1182.070		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	135049.806		ppb
	Be	9	23806.303	59.040757	ppb
	Na	23	27832511.350	7024.256331	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	17784267.687	34440.093041	ppb
	Mg	26	21005065.071	33006.444438	ppb
	Al	27	7089259.706	1264.172946	ppb
	K	39	15395246.432	1697.171963	ppb
	Ca	44	20236766.025	57957.616177	ppb
>	Sc	45	563617.922		ppb

	Ti	47	2415.292	2.453777	ppb
	V	51	6909237.812	514.389551	ppb
	Cr	52	2396281.219	203.815857	ppb
	Mn	55	8732278.267	546.837451	ppb
	Fe	54	583914.186	582.660054	ppb
	Fe	56	9988388.676	519.658134	ppb
	Fe	57	233760.637	660.985397	ppb
	Co	59	8146274.566	498.917885	ppb
	Ni	60	1775550.469	500.814954	ppb
	Cu	63	2051755.209	230.784917	ppb
	Cu	65	956763.577	233.253747	ppb
	Zn	66	937983.264	513.046931	ppb
	As	75	85742.962	41.624079	ppb
	Se	82	2100.221	10.813080	ppb
	Mo	96	3922.769	0.916255	ppb
	Ag	107	680003.316	48.746539	ppb
	Ag	109	626523.784	46.208384	ppb
	Cd	111	141185.324	52.599887	ppb
	In	113	200311.337	51.848870	ppb
>	In	115	1418806.342		ppb
	Sn	118	765.029	0.067923	ppb
	Sb	121	838146.728	94.661789	ppb
	Ba	135	6368267.655	2284.983381	ppb
	Ba	137	11316944.870	2324.754598	ppb
>	Tb	159	2393743.614		ppb
	Tl	205	2156355.217	57.981150	ppb
	Pb	206	270037.439	21.110324	ppb
	Pb	207	509505.768	21.246960	ppb
	Pb	208	824521.265	21.694296	ppb
>	Bi	209	1709254.747		ppb
	Cr	53	265853.547		ppb
	Pd	106	12688.044		ppb
	Pd	108	9274.299		ppb
	C	12	544106.553		ppb
	Kr	83	50.000		ppb
	Se	77	1728.149		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	139999.176		ppb
	Be	9	22832.035	54.621999	ppb
	Na	23	27054130.133	6586.288639	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	16172382.815	30211.382420	ppb
	Mg	26	19706960.339	29871.872205	ppb
	Al	27	6652437.542	1144.274483	ppb
	K	39	15052440.461	1598.430045	ppb
	Ca	44	20907385.722	57761.089916	ppb
>	Sc	45	532036.393		ppb
	Ti	47	2655.352	2.872923	ppb
	V	51	6995582.216	551.744355	ppb
	Cr	52	2325877.189	209.590108	ppb
	Mn	55	8245607.842	547.012079	ppb
	Fe	54	569100.737	604.027435	ppb
	Fe	56	10264263.261	579.067269	ppb
	Fe	57	241736.943	725.217577	ppb
	Co	59	7752030.550	502.954863	ppb
	Ni	60	1720379.182	514.058151	ppb
	Cu	63	1990893.073	237.232709	ppb
	Cu	65	905595.557	233.884743	ppb
	Zn	66	878519.379	509.044322	ppb
	As	75	81121.184	41.717996	ppb
	Se	82	2115.557	11.557973	ppb

⌈	Mo	96	3846.740	0.899578	ppb
|	Ag	107	687518.651	49.372302	ppb
|	Ag	109	653074.305	48.251729	ppb
|	Cd	111	142957.154	53.354002	ppb
|	In	113	204163.068	53.425849	ppb
|>	In	115	1416307.136		ppb
⌊	Sn	118	875.038	0.081286	ppb
⌈	Sb	121	837202.324	99.972601	ppb
|	Ba	135	6310682.623	2393.943982	ppb
|	Ba	137	10752482.019	2335.244997	ppb
⌊>	Tb	159	2264132.466		ppb
⌈	Tl	205	2044598.831	58.045378	ppb
|	Pb	206	264158.504	21.804530	ppb
|	Pb	207	495816.041	21.831107	ppb
|	Pb	208	799975.591	22.224215	ppb
⌊>	Bi	209	1618876.806		ppb
	Cr	53	263469.686		ppb
	Pd	106	12788.172		ppb
	Pd	108	9164.197		ppb
	C	12	548849.496		ppb
	Kr	83	54.000		ppb
	Se	77	1730.150		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		100.417			
	Be	9			114.045		
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		94.998			
	Ti	47					
	V	51			107.380		
	Cr	52			103.428		
	Mn	55			110.560		
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60			102.940		
	Cu	63			95.979		
	Cu	65					
	Zn	66			102.642		
	As	75			105.586		
	Se	82			114.595		
	Mo	96					
	Ag	107			96.389		
	Ag	109					
	Cd	111			105.111		
	In	113					
>	In	115		92.554			
	Sn	118					
	Sb	121			98.616		
	Ba	135					
	Ba	137			109.939		
>	Tb	159		96.132			
	Tl	205			118.782		
	Pb	206					
	Pb	207					
	Pb	208			110.536		
>	Bi	209		89.273			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101926-MSD1

Sample Date/Time: Monday, November 09, 2009 20:10:19
Sample Type: Spike - 2 of 11
Sample Description: 74MW4SD
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101926-MSD1.881

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	104180.729	24.952	104180.729			ppb
|	Be	9	18719.469	23.273	0.180	60.39536	2.91	ppb
|	Na	23	20624243.656	24.710	198.413	6764.75307	6.78	ppb
|	Mg	24	82256781.271	24.116	791.416	32069.64727	4.12	ppb
|	Mg	25	12440002.355	22.665	120.160	31425.63386	6.72	ppb
|	Mg	26	15214199.270	20.694	147.349	31269.45281	5.92	ppb
|	Al	27	5046295.263	20.149	48.884	1177.87314	5.83	ppb
|	K	39	11259772.395	18.912	106.769	1627.25102	7.49	ppb
⌊	Ca	44	16389562.395	23.430	157.578	61040.57954	1.96	ppb
⌈>	Sc	45	412940.016	23.585	412940.016			ppb
|	Ti	47	1920.188	17.989	0.005	2.70137	8.00	ppb
|	V	51	5593209.884	21.998	13.582	570.07312	1.96	ppb
|	Cr	52	1880459.174	22.774	4.546	218.68883	0.98	ppb
|	Mn	55	6628123.414	23.738	16.042	566.61489	2.33	ppb
|	Fe	54	443516.039	22.411	0.958	608.55539	2.92	ppb
|	Fe	56	8248689.843	19.503	16.150	610.93221	6.60	ppb
|	Fe	57	191442.589	22.301	0.458	742.03687	1.57	ppb
|	Co	59	6492007.812	22.853	15.743	543.44056	1.50	ppb
|	Ni	60	1443843.071	21.891	3.508	557.70778	2.94	ppb
|	Cu	63	1650121.518	22.086	4.007	254.07536	2.55	ppb
|	Cu	65	771085.991	23.153	1.869	256.83690	2.50	ppb
|	Zn	66	739732.412	20.109	1.805	556.64100	7.07	ppb
|	As	75	69120.942	20.606	0.168	46.06931	4.64	ppb
⌊	Se	82	1721.040	16.126	0.004	12.30510	9.24	ppb
⌈	Mo	96	3153.843	18.977	0.003	0.96449	1.69	ppb
|	Ag	107	567484.843	20.824	0.521	53.03417	1.94	ppb
|	Ag	109	544472.241	20.214	0.501	52.39430	0.63	ppb
|	Cd	111	123188.838	20.266	0.113	59.87945	1.32	ppb
|	In	113	170333.284	18.279	0.114	60.30428	2.25	ppb
|>	In	115	1086530.737	19.671	1086530.737			ppb
⌊	Sn	118	565.016	11.089	0.000	0.06596	16.09	ppb
⌈	Sb	121	717441.837	19.352	0.389	105.38775	5.67	ppb
|	Ba	135	5262623.550	16.791	2.867	2462.08129	2.02	ppb
|	Ba	137	9255325.293	16.241	5.045	2480.60853	1.79	ppb
⌊>	Tb	159	1832790.030	15.309	1832790.030			ppb
⌈	Tl	205	1756475.852	14.542	1.388	63.77262	4.06	ppb
|	Pb	206	225854.860	14.822	0.178	23.83777	4.18	ppb
|	Pb	207	416471.932	15.231	0.328	23.43525	4.03	ppb
|	Pb	208	675078.135	17.668	0.530	23.88662	2.14	ppb
⌊>	Bi	209	1272071.513	18.137	1272071.513			ppb
	Cr	53	214865.074	23.525	211194.398			ppb
	Pd	106	10582.412	19.964	10579.078			ppb
	Pd	108	7909.889	21.413	7906.556			ppb
	C	12	507536.482	9.648	119897.239			ppb
	Kr	83	54.000	12.830	1.333			ppb
	Se	77	1434.327	18.642	1319.438			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	74214.371		ppb
	Be	9	13693.369	61.798687	ppb
	Na	23	14928848.235	6856.094614	ppb
	Mg	24	59539211.976	32508.923744	ppb
	Mg	25	9271462.683	32672.506446	ppb
	Mg	26	11592897.362	33149.171285	ppb
	Al	27	3874120.101	1257.139071	ppb
	K	39	8803258.444	1767.623361	ppb
	Ca	44	11956980.168	62322.230932	ppb
>	Sc	45	300843.272		ppb
	Ti	47	1525.116	2.919584	ppb
	V	51	4174362.829	582.252629	ppb
	Cr	52	1387361.647	221.130725	ppb
	Mn	55	4844615.254	568.390386	ppb
	Fe	54	330616.485	622.630707	ppb
	Fe	56	6417336.690	656.189918	ppb
	Fe	57	142280.031	755.339114	ppb
	Co	59	4779209.250	548.366815	ppb
	Ni	60	1079024.508	570.192792	ppb
	Cu	63	1229331.402	259.060125	ppb
	Cu	65	565101.571	258.107594	ppb
	Zn	66	571944.633	586.110648	ppb
	As	75	52722.872	47.947232	ppb
	Se	82	1400.765	13.583295	ppb
	Mo	96	2464.304	0.974232	ppb
	Ag	107	431638.801	52.278047	ppb
	Ag	109	417396.234	52.011466	ppb
	Cd	111	94394.381	59.416424	ppb
	In	113	134381.898	61.856540	ppb
>	In	115	839768.212		ppb
	Sn	118	500.013	0.077477	ppb
	Sb	121	557461.832	99.681253	ppb
	Ba	135	4244628.054	2411.160582	ppb
	Ba	137	7521362.511	2446.071681	ppb
>	Tb	159	1512004.202		ppb
	Tl	205	1463241.040	66.679928	ppb
	Pb	206	187200.961	24.807041	ppb
	Pb	207	343238.929	24.261759	ppb
	Pb	208	537372.742	23.965239	ppb
>	Bi	209	1008546.802		ppb
	Cr	53	156673.794		ppb
	Pd	106	8143.314		ppb
	Pd	108	5961.777		ppb
	C	12	451313.450		ppb
	Kr	83	58.000		ppb
	Se	77	1127.397		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	120673.741		ppb
	Be	9	21050.132	58.424534	ppb
	Na	23	22190263.162	6267.217750	ppb
	Mg	24	91079690.045	30584.132329	ppb
	Mg	25	13376000.920	28989.151349	ppb
	Mg	26	16746482.157	29449.575299	ppb
	Al	27	5690465.203	1135.554247	ppb
	K	39	12581388.880	1548.767183	ppb
	Ca	44	18705293.535	59956.611126	ppb
>	Sc	45	476818.066		ppb

	Ti	47	2070.214	2.487277	ppb
	V	51	6365787.492	560.217403	ppb
	Cr	52	2159248.875	217.132503	ppb
	Mn	55	7819504.015	578.841758	ppb
	Fe	54	517844.754	614.425674	ppb
	Fe	56	9433758.311	597.694278	ppb
	Fe	57	219191.197	733.866938	ppb
	Co	59	7377160.459	534.062136	ppb
	Ni	60	1617068.325	539.145143	ppb
	Cu	63	1855867.748	246.753939	ppb
	Cu	65	867046.656	249.863343	ppb
	Zn	66	791814.678	511.937935	ppb
	As	75	76227.441	43.740122	ppb
	Se	82	1871.508	11.405001	ppb
	Mo	96	3458.598	0.945693	ppb
	Ag	107	646543.055	54.206616	ppb
	Ag	109	609448.883	52.570601	ppb
	Cd	111	136385.949	59.427132	ppb
	In	113	188438.889	59.365811	ppb
>	In	115	1213122.496		ppb
	Sn	118	625.020	0.063846	ppb
	Sb	121	806387.977	111.595415	ppb
	Ba	135	5711603.176	2510.788803	ppb
	Ba	137	10055855.858	2530.797177	ppb
>	Tb	159	1953832.928		ppb
	Tl	205	1875623.444	62.922692	ppb
	Pb	206	244887.217	23.888974	ppb
	Pb	207	454240.965	23.636474	ppb
	Pb	208	741806.444	24.354983	ppb
>	Bi	209	1369975.718		ppb
	Cr	53	247864.230		ppb
	Pd	106	11842.008		ppb
	Pd	108	9034.079		ppb
	C	12	530432.465		ppb
	Kr	83	46.000		ppb
	Se	77	1558.788		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	117654.076		ppb
	Be	9	21414.905	60.962847	ppb
	Na	23	24753619.572	7170.946835	ppb
	Mg	24	96151441.791	33115.885733	ppb
	Mg	25	14672543.463	32615.243771	ppb
	Mg	26	17303218.292	31209.611850	ppb
	Al	27	5574300.485	1140.926116	ppb
	K	39	12394669.862	1565.362531	ppb
	Ca	44	18506413.482	60842.896567	ppb
>	Sc	45	461158.710		ppb
	Ti	47	2165.234	2.697255	ppb
	V	51	6239479.330	567.749343	ppb
	Cr	52	2094767.001	217.803263	ppb
	Mn	55	7220250.974	552.612537	ppb
	Fe	54	482086.879	588.609779	ppb
	Fe	56	8894974.527	578.912436	ppb
	Fe	57	212856.539	736.904566	ppb
	Co	59	7319653.727	547.892730	ppb
	Ni	60	1635436.378	563.785392	ppb
	Cu	63	1865165.403	256.412028	ppb
	Cu	65	881109.747	262.539756	ppb
	Zn	66	855437.925	571.874414	ppb
	As	75	78412.512	46.520568	ppb
	Se	82	1890.845	11.927013	ppb

⌈	Mo	96	3538.626	0.973540	ppb
|	Ag	107	624272.672	52.617838	ppb
|	Ag	109	606571.607	52.600825	ppb
|	Cd	111	138786.185	60.794799	ppb
|	In	113	188179.064	59.690499	ppb
|>	In	115	1206701.505		ppb
⌊	Sn	118	570.016	0.056565	ppb
⌈	Sb	121	788475.701	104.886576	ppb
|	Ba	135	5831639.421	2464.294494	ppb
|	Ba	137	10188757.510	2464.956739	ppb
⌊>	Tb	159	2032532.962		ppb
⌈	Tl	205	1930563.071	61.715233	ppb
|	Pb	206	245476.401	22.817307	ppb
|	Pb	207	451935.901	22.407506	ppb
|	Pb	208	746055.219	23.339635	ppb
⌊>	Bi	209	1437692.018		ppb
	Cr	53	240057.198		ppb
	Pd	106	11761.913		ppb
	Pd	108	8733.812		ppb
	C	12	540863.532		ppb
	Kr	83	58.000		ppb
	Se	77	1616.797		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		85.925			
	Be	9			120.783		
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		81.531			
	Ti	47					
	V	51			113.951		
	Cr	52			108.665		
	Mn	55			112.071		
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60			111.239		
	Cu	63			101.476		
	Cu	65					
	Zn	66			109.979		
	As	75			114.473		
	Se	82			119.984		
	Mo	96					
	Ag	107			106.063		
	Ag	109					
	Cd	111			119.741		
	In	113					
>	In	115		77.765			
	Sn	118					
	Sb	121			105.220		
	Ba	135					
	Ba	137			115.678		
>	Tb	159		84.109			
	Tl	205			127.533		
	Pb	206					
	Pb	207					
	Pb	208			118.196		
>	Bi	209		76.705			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message
Tl 205 Spike	Tl	205	

EPA 6020 - Summary Report

Sample ID: SDI0910085-01

Sample Date/Time: Monday, November 09, 2009 20:13:51
Sample Type: Sample
Sample Description: 74MW4L 5X
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910085-01.882

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	117159.516	27.700	117159.516			ppb
	Be	9	3.333	91.652	0.000	0.00125	729.76	ppb
	Na	23	4385303.822	25.118	37.589	1281.57578	3.31	ppb
	Mg	24	18078850.690	26.166	154.912	6277.33605	2.88	ppb
	Mg	25	2669415.866	24.643	22.948	6001.58188	4.15	ppb
	Mg	26	3193776.915	24.281	27.476	5830.73362	4.30	ppb
	Al	27	97090.359	28.198	0.799	19.25853	0.67	ppb
	K	39	2581462.777	21.654	19.707	300.35866	8.73	ppb
	Ca	44	3424609.787	27.890	29.019	11240.92344	3.65	ppb
>	Sc	45	463259.977	26.036	463259.977			ppb
	Ti	47	385.008	34.873	0.001	0.40696	29.64	ppb
	V	51	3264.275	12.044	0.004	0.15675	44.32	ppb
	Cr	52	9742.106	9.592	0.007	0.35974	62.75	ppb
	Mn	55	19403.010	26.379	0.030	1.07252	8.47	ppb
	Fe	54	133058.386	22.384	0.171	108.64135	7.56	ppb
	Fe	56	3366074.349	13.485	3.480	131.62841	33.21	ppb
	Fe	57	44249.493	23.148	0.089	144.27922	4.59	ppb
	Co	59	938.711	6.401	0.002	0.06564	29.93	ppb
	Ni	60	1013.387	26.630	0.002	0.33175	1.51	ppb
	Cu	63	1086.727	18.362	0.002	0.12569	11.15	ppb
	Cu	65	526.681	12.706	0.001	0.12899	23.26	ppb
	Zn	66	2660.363	19.177	0.005	1.61604	9.64	ppb
	As	75	63.484	42.782	0.000	0.05621	17.17	ppb
	Se	82	50.667	21.661	0.000	0.04009	53.20	ppb
	Mo	96	739.361	16.398	0.000	0.16256	13.60	ppb
	Ag	107	328.894	2.110	0.000	0.02189	30.21	ppb
	Ag	109	304.449	16.974	0.000	0.02097	27.14	ppb
	Cd	111	16.488	36.177	0.000	0.00495	32.07	ppb
	In	113	58275.478	20.030	0.000	0.03203	1558.83	ppb
>	In	115	1336960.720	20.729	1336960.720			ppb
	Sn	118	303.338	19.105	0.000	0.01510	24.16	ppb
	Sb	121	2770.386	9.408	0.001	0.26557	21.04	ppb
	Ba	135	87007.467	17.067	0.040	34.15127	3.04	ppb
	Ba	137	150541.874	17.458	0.069	33.80586	1.95	ppb
>	Tb	159	2189333.957	17.520	2189333.957			ppb
	Tl	205	200.002	21.360	0.000	0.00376	61.47	ppb
	Pb	206	796.699	21.120	0.000	0.03621	15.14	ppb
	Pb	207	1446.721	18.166	0.000	0.03563	8.20	ppb
	Pb	208	2206.812	17.162	0.001	0.03257	1.81	ppb
>	Bi	209	1659223.901	16.755	1659223.901			ppb
	Cr	53	1523.449	3.565	-2147.227			ppb
	Pd	106	13.333	21.651	10.000			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	452054.600	5.616	64415.357			ppb
	Kr	83	42.000	24.744	-10.667			ppb
	Se	77	84.667	10.825	-30.223			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	79756.794		ppb
|	Be	9	4.000	0.007591	ppb
|	Na	23	3113839.078	1328.844565	ppb
|	Mg	24	12674393.317	6439.307500	ppb
|	Mg	25	1909905.012	6262.662842	ppb
|	Mg	26	2298981.435	6116.737592	ppb
|	Al	27	65529.001	19.111000	ppb
|	K	39	1940249.240	330.523439	ppb
⌊	Ca	44	2346365.794	11307.930757	ppb
⌈>	Sc	45	326055.335		ppb
|	Ti	47	305.005	0.463810	ppb
|	V	51	2993.885	0.235215	ppb
|	Cr	52	8877.939	0.619838	ppb
|	Mn	55	13519.132	1.057240	ppb
|	Fe	54	98871.373	117.416000	ppb
|	Fe	56	2845879.536	179.441406	ppb
|	Fe	57	32432.508	149.740341	ppb
|	Co	59	906.041	0.088289	ppb
|	Ni	60	710.025	0.330504	ppb
|	Cu	63	856.703	0.141137	ppb
|	Cu	65	456.677	0.160221	ppb
|	Zn	66	2090.218	1.795656	ppb
|	As	75	44.441	0.056287	ppb
⌊	Se	82	38.000	0.058332	ppb
⌈	Mo	96	614.019	0.176779	ppb
|	Ag	107	336.672	0.029465	ppb
|	Ag	109	283.337	0.025519	ppb
|	Cd	111	10.730	0.004048	ppb
|	In	113	44825.240	0.151697	ppb
|>	In	115	1021955.822		ppb
⌊	Sn	118	250.003	0.017857	ppb
⌈	Sb	121	2640.349	0.325735	ppb
|	Ba	135	69901.460	34.300108	ppb
|	Ba	137	120194.015	33.766306	ppb
⌊>	Tb	159	1749750.495		ppb
⌈	Tl	205	245.003	0.006382	ppb
|	Pb	206	620.019	0.034156	ppb
|	Pb	207	1155.034	0.035059	ppb
|	Pb	208	1770.091	0.032272	ppb
⌊>	Bi	209	1338221.563		ppb
	Cr	53	1574.124		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	422805.166		ppb
	Kr	83	54.000		ppb
	Se	77	76.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	137853.677		ppb
|	Be	9	6.000	0.005370	ppb
|	Na	23	5049626.267	1246.631600	ppb
|	Mg	24	21467490.296	6310.189361	ppb
|	Mg	25	3039630.522	5766.557412	ppb
|	Mg	26	3670888.409	5650.712606	ppb
|	Al	27	114430.998	19.315329	ppb
|	K	39	2966149.032	287.690017	ppb
⌊	Ca	44	4164441.435	11614.002615	ppb
⌈>	Sc	45	552566.014		ppb

	Ti	47	540.015	0.488669	ppb
	V	51	3715.281	0.132025	ppb
	Cr	52	10733.758	0.244506	ppb
	Mn	55	21863.875	0.990313	ppb
	Fe	54	153392.509	101.140416	ppb
	Fe	56	3570703.091	93.715950	ppb
	Fe	57	50592.658	136.914079	ppb
	Co	59	1008.051	0.055340	ppb
	Ni	60	1226.742	0.337254	ppb
	Cu	63	1213.407	0.113777	ppb
	Cu	65	533.348	0.100387	ppb
	Zn	66	3073.806	1.534190	ppb
	As	75	94.585	0.065825	ppb
	Se	82	56.667	0.016643	ppb
	Mo	96	856.037	0.173811	ppb
	Ag	107	326.672	0.018940	ppb
	Ag	109	363.340	0.022807	ppb
	Cd	111	22.640	0.006776	ppb
	In	113	64250.747	0.460698	ppb
>	In	115	1445659.264		ppb
	Sn	118	295.004	0.010962	ppb
	Sb	121	3070.471	0.255692	ppb
	Ba	135	94534.739	33.046213	ppb
	Ba	137	165732.069	33.168934	ppb
>	Tb	159	2456117.658		ppb
	Tl	205	195.002	0.002890	ppb
	Pb	206	815.033	0.032057	ppb
	Pb	207	1520.058	0.033042	ppb
	Pb	208	2405.169	0.032193	ppb
>	Bi	209	1820774.610		ppb
	Cr	53	1466.107		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	464955.605		ppb
	Kr	83	36.000		ppb
	Se	77	82.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	133868.075		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	4992446.123	1269.251179	ppb
	Mg	24	20094668.457	6082.511297	ppb
	Mg	25	3058712.065	5975.525395	ppb
	Mg	26	3611460.900	5724.750657	ppb
	Al	27	111311.079	19.349257	ppb
	K	39	2837990.059	282.862519	ppb
	Ca	44	3763022.133	10800.836944	ppb
>	Sc	45	511158.583		ppb
	Ti	47	310.005	0.268393	ppb
	V	51	3083.659	0.103022	ppb
	Cr	52	9614.620	0.214884	ppb
	Mn	55	22826.022	1.170013	ppb
	Fe	54	146911.277	107.367630	ppb
	Fe	56	3681640.419	121.727882	ppb
	Fe	57	49723.314	146.183254	ppb
	Co	59	902.041	0.053283	ppb
	Ni	60	1103.394	0.327482	ppb
	Cu	63	1190.071	0.122161	ppb
	Cu	65	590.017	0.126368	ppb
	Zn	66	2817.063	1.518262	ppb
	As	75	51.426	0.046526	ppb
	Se	82	57.333	0.045280	ppb

⌈	Mo	96	748.028	0.137098	ppb
|	Ag	107	323.339	0.017267	ppb
|	Ag	109	266.670	0.014588	ppb
|	Cd	111	16.095	0.004011	ppb
|	In	113	65750.448	-0.516291	ppb
|>	In	115	1543267.074		ppb
⌊	Sn	118	365.007	0.016478	ppb
⌈	Sb	121	2600.338	0.215296	ppb
|	Ba	135	96586.203	35.107474	ppb
|	Ba	137	165699.537	34.482345	ppb
⌊>	Tb	159	2362133.718		ppb
⌈	Tl	205	160.001	0.002011	ppb
|	Pb	206	955.046	0.042427	ppb
|	Pb	207	1665.071	0.038801	ppb
|	Pb	208	2445.176	0.033252	ppb
⌊>	Bi	209	1818675.531		ppb
	Cr	53	1530.117		ppb
	Pd	106	15.000		ppb
	Pd	108	5.000		ppb
	C	12	468403.029		ppb
	Kr	83	36.000		ppb
	Se	77	94.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			96.629		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			91.467		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			95.688		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			100.472		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			100.051		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-02

Sample Date/Time: Monday, November 09, 2009 20:15:50
Sample Type: Sample
Sample Description: 74MW1
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-02.883

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	110052.541	21.834	110052.541			ppb
	Be	9	2.667	114.564	0.000	0.00075	1698.01	ppb
	Na	23	27110787.120	17.861	247.998	8455.30732	5.13	ppb
	Mg	24	S	S	13333336(54029168238.57597		86.60	ppb
	Mg	25	13120727.746	21.904	119.300	31200.73483	4.52	ppb
	Mg	26	15831876.324	25.030	143.241	30397.57432	6.72	ppb
	Al	27	17828.145	23.835	0.133	3.20535	5.09	ppb
	K	39	9389874.066	21.929	82.717	1260.68111	4.13	ppb
	Ca	44	20445139.969	21.931	185.601	71895.48622	3.59	ppb
>	Sc	45	434399.729	22.777	434399.729			ppb
	Ti	47	755.029	15.658	0.002	0.95666	12.68	ppb
	V	51	4467.236	10.809	0.007	0.29271	26.85	ppb
	Cr	52	14493.900	10.029	0.020	0.95231	25.78	ppb
	Mn	55	5228.064	18.508	0.001	0.02112	103.63	ppb
	Fe	54	49705.600	9.299	-0.001	-0.67865	1730.36	ppb
	Fe	56	2131218.952	2.685	1.106	41.83003	109.99	ppb
	Fe	57	57456.008	16.821	0.127	205.30624	7.95	ppb
	Co	59	1458.108	16.381	0.003	0.10972	9.90	ppb
	Ni	60	9199.873	17.575	0.021	3.38341	6.37	ppb
	Cu	63	2215.806	17.093	0.005	0.30136	7.63	ppb
	Cu	65	1403.434	19.115	0.003	0.41512	6.78	ppb
	Zn	66	4295.396	21.683	0.009	2.87857	5.83	ppb
	As	75	126.806	20.268	0.000	0.10006	12.83	ppb
	Se	82	110.890	9.124	0.000	0.49147	26.96	ppb
	Mo	96	2244.257	17.215	0.002	0.63714	3.90	ppb
	Ag	107	57.778	46.632	0.000	0.00093	192.99	ppb
	Ag	109	47.778	10.657	0.000	0.00102	145.66	ppb
	Cd	111	44.671	14.963	0.000	0.01982	36.94	ppb
	In	113	52264.046	17.682	0.002	0.93487	93.60	ppb
>	In	115	1156397.330	19.620	1156397.330			ppb
	Sn	118	1510.115	9.231	0.001	0.20191	14.30	ppb
	Sb	121	1323.422	15.438	0.000	0.09724	2.77	ppb
	Ba	135	341296.265	15.179	0.171	147.27730	3.65	ppb
	Ba	137	593754.799	15.675	0.298	146.56392	1.92	ppb
>	Tb	159	1991483.894	15.463	1991483.894			ppb
	Tl	205	226.669	29.949	0.000	0.00557	24.26	ppb
	Pb	206	1605.131	14.402	0.001	0.13132	2.53	ppb
	Pb	207	2915.218	14.623	0.002	0.12761	2.38	ppb
	Pb	208	4787.374	18.252	0.003	0.13176	4.52	ppb
>	Bi	209	1350390.229	14.916	1350390.229			ppb
	Cr	53	2173.571	10.088	-1497.105			ppb
	Pd	106	15.000	33.333	11.667			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	542383.778	12.792	154744.535			ppb
	Kr	83	38.667	28.487	-14.000			ppb
	Se	77	134.890	8.290	20.000			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	82406.145		ppb
	Be	9	6.000	0.015181	ppb
	Na	23	21524774.327	8903.285664	ppb
	Mg	24	68100285.196	33487.051101	ppb
	Mg	25	9838907.434	31225.499965	ppb
	Mg	26	11333669.582	29186.305875	ppb
	Al	27	12938.365	3.097086	ppb
	K	39	7029790.553	1259.907525	ppb
	Ca	44	15293486.551	71802.120166	ppb
>	Sc	45	320179.996		ppb
	Ti	47	630.020	1.077016	ppb
	V	51	4036.688	0.378991	ppb
	Cr	52	12816.207	1.235520	ppb
	Mn	55	4110.845	0.046215	ppb
	Fe	54	44373.231	12.880836	ppb
	Fe	56	2079132.317	94.911210	ppb
	Fe	57	46377.294	223.323613	ppb
	Co	59	1192.071	0.120886	ppb
	Ni	60	7336.023	3.626886	ppb
	Cu	63	1780.158	0.327062	ppb
	Cu	65	1103.394	0.441334	ppb
	Zn	66	3263.866	2.962364	ppb
	As	75	105.358	0.109004	ppb
	Se	82	100.001	0.641631	ppb
	Mo	96	1798.162	0.656053	ppb
	Ag	107	33.333	-0.000267	ppb
	Ag	109	53.333	0.002723	ppb
	Cd	111	50.280	0.028109	ppb
	In	113	41596.333	1.469826	ppb
>	In	115	897563.544		ppb
	Sn	118	1355.092	0.232876	ppb
	Sb	121	1090.059	0.096504	ppb
	Ba	135	281476.471	146.772220	ppb
	Ba	137	487086.631	145.410408	ppb
>	Tb	159	1647037.209		ppb
	Tl	205	155.001	0.004340	ppb
	Pb	206	1340.090	0.132555	ppb
	Pb	207	2430.149	0.128602	ppb
	Pb	208	3780.421	0.124986	ppb
>	Bi	209	1117908.144		ppb
	Cr	53	1960.192		ppb
	Pd	106	20.000		ppb
	Pd	108	0.000		ppb
	C	12	479781.899		ppb
	Kr	83	46.000		ppb
	Se	77	122.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	121845.825		ppb
	Be	9	2.000	-0.003711	ppb
	Na	23	30115553.021	8424.521610	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	15187753.765	32599.061394	ppb
	Mg	26	18807530.004	32755.916675	ppb
	Al	27	20626.250	3.392840	ppb
	K	39	10819947.611	1313.154465	ppb
	Ca	44	23468086.508	74520.676261	ppb
>	Sc	45	489236.876		ppb

	Ti	47	865.037	0.958465	ppb
	V	51	4375.688	0.225215	ppb
	Cr	52	15375.812	0.821853	ppb
	Mn	55	5796.680	0.011220	ppb
	Fe	54	52180.787	-7.392288	ppb
	Fe	56	2122046.392	13.346775	ppb
	Fe	57	64160.168	201.101494	ppb
	Co	59	1654.137	0.109078	ppb
	Ni	60	10225.225	3.307045	ppb
	Cu	63	2466.971	0.294258	ppb
	Cu	65	1486.777	0.385375	ppb
	Zn	66	4547.701	2.685322	ppb
	As	75	155.292	0.105820	ppb
	Se	82	120.001	0.441882	ppb
	Mo	96	2470.305	0.646387	ppb
	Ag	107	86.667	0.003004	ppb
	Ag	109	46.667	0.000409	ppb
	Cd	111	37.275	0.014252	ppb
	In	113	57821.685	1.409715	ppb
>	In	115	1250727.333		ppb
	Sn	118	1625.132	0.197117	ppb
	Sb	121	1470.108	0.094991	ppb
	Ba	135	370849.274	142.172518	ppb
	Ba	137	658416.797	144.513230	ppb
>	Tb	159	2240194.728		ppb
	Tl	205	290.004	0.007019	ppb
	Pb	206	1710.146	0.127554	ppb
	Pb	207	3230.262	0.130019	ppb
	Pb	208	5345.847	0.136186	ppb
>	Bi	209	1472521.078		ppb
	Cr	53	2398.288		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	616981.226		ppb
	Kr	83	26.000		ppb
	Se	77	140.668		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	125905.653		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	29692034.013	8038.114695	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	14335522.039	29777.643142	ppb
	Mg	26	17354429.387	29250.500397	ppb
	Al	27	19919.820	3.126121	ppb
	K	39	10319884.034	1208.981326	ppb
	Ca	44	22573846.847	69363.662225	ppb
>	Sc	45	493782.315		ppb
	Ti	47	770.030	0.834498	ppb
	V	51	4989.333	0.273922	ppb
	Cr	52	15289.680	0.799547	ppb
	Mn	55	5776.668	0.005936	ppb
	Fe	54	52562.780	-7.524484	ppb
	Fe	56	2192478.146	17.232099	ppb
	Fe	57	61830.562	191.493619	ppb
	Co	59	1528.117	0.099194	ppb
	Ni	60	10038.369	3.216298	ppb
	Cu	63	2400.288	0.282752	ppb
	Cu	65	1620.131	0.418644	ppb
	Zn	66	5074.621	2.988020	ppb
	As	75	119.767	0.085345	ppb
	Se	82	112.667	0.390907	ppb

⌈	Mo	96	2464.304	0.608979	ppb
|	Ag	107	53.333	0.000063	ppb
|	Ag	109	43.333	-0.000062	ppb
|	Cd	111	46.460	0.017091	ppb
|	In	113	57374.119	-0.074925	ppb
|>	In	115	1320901.113		ppb
⌊	Sn	118	1550.120	0.175733	ppb
⌈	Sb	121	1410.099	0.100226	ppb
|	Ba	135	371563.050	152.887149	ppb
|	Ba	137	635760.969	149.768128	ppb
⌊>	Tb	159	2087219.744		ppb
⌈	Tl	205	235.003	0.005362	ppb
|	Pb	206	1765.156	0.133846	ppb
|	Pb	207	3085.243	0.124196	ppb
|	Pb	208	5235.854	0.134113	ppb
⌊>	Bi	209	1460741.463		ppb
	Cr	53	2162.234		ppb
	Pd	106	15.000		ppb
	Pd	108	0.000		ppb
	C	12	530388.208		ppb
	Kr	83	44.000		ppb
	Se	77	142.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		90.768			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		85.769			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		82.765			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		91.392			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		81.428			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-03

Sample Date/Time: Monday, November 09, 2009 20:20:06
Sample Type: Sample
Sample Description: 74MW2
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-03.884

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	109045.499	24.545	109045.499			ppb
	Be	9	2.000	100.000	-0.000	-0.00386	136.47	ppb
	Na	23	15248245.805	22.354	140.416	4787.39492	3.30	ppb
	Mg	24	44520577.861	22.668	409.848	16607.79911	2.56	ppb
	Mg	25	6484976.714	23.562	59.613	15590.69861	2.69	ppb
	Mg	26	8055660.376	25.333	73.778	15656.64888	3.46	ppb
	Al	27	29652.474	25.574	0.243	5.85294	2.69	ppb
	K	39	17780100.620	24.102	160.552	2446.96309	1.47	ppb
	Ca	44	8423203.776	25.456	76.884	29782.27086	2.64	ppb
>	Sc	45	431794.514	26.237	431794.514			ppb
	Ti	47	801.700	22.971	0.002	1.02205	9.18	ppb
	V	51	4689.111	21.918	0.007	0.31021	9.44	ppb
	Cr	52	25070.079	18.223	0.045	2.15205	13.21	ppb
	Mn	55	9537.999	19.862	0.011	0.38412	17.66	ppb
	Fe	54	61309.732	7.482	0.029	18.71323	112.34	ppb
	Fe	56	2209176.331	6.259	1.362	51.52456	97.50	ppb
	Fe	57	30562.518	16.903	0.065	105.56825	12.83	ppb
	Co	59	616.019	17.245	0.001	0.04260	13.48	ppb
	Ni	60	2099.118	23.840	0.005	0.76120	3.04	ppb
	Cu	63	1243.413	21.027	0.003	0.15927	8.08	ppb
	Cu	65	750.030	28.222	0.001	0.20556	3.97	ppb
	Zn	66	5532.696	23.122	0.012	3.80225	6.53	ppb
	As	75	92.236	44.746	0.000	0.08368	47.83	ppb
	Se	82	81.111	15.163	0.000	0.28970	41.29	ppb
	Mo	96	1098.728	15.245	0.001	0.29541	6.39	ppb
	Ag	107	58.889	11.783	0.000	0.00119	76.79	ppb
	Ag	109	31.111	34.442	-0.000	-0.00065	148.61	ppb
	Cd	111	21.123	67.737	0.000	0.00874	90.40	ppb
	In	113	52133.713	18.778	0.001	0.62280	153.32	ppb
>	In	115	1168146.568	20.409	1168146.568			ppb
	Sn	118	405.008	6.173	0.000	0.03653	26.92	ppb
	Sb	121	910.042	19.010	0.000	0.04485	15.85	ppb
	Ba	135	58564.953	18.693	0.030	25.99863	0.75	ppb
	Ba	137	101470.571	18.053	0.052	25.81521	1.03	ppb
>	Tb	159	1933419.147	18.543	1933419.147			ppb
	Tl	205	233.336	15.502	0.000	0.00554	20.95	ppb
	Pb	206	1135.067	23.802	0.001	0.07733	10.51	ppb
	Pb	207	2030.107	19.631	0.001	0.07436	5.87	ppb
	Pb	208	3240.319	14.569	0.002	0.07510	9.25	ppb
>	Bi	209	1438358.194	20.482	1438358.194			ppb
	Cr	53	3389.246	11.727	-281.430			ppb
	Pd	106	8.333	124.900	5.000			ppb
	Pd	108	3.333	86.603	-0.000			ppb
	C	12	546026.966	13.410	158387.723			ppb
	Kr	83	39.333	16.345	-13.333			ppb
	Se	77	114.001	19.545	-0.889			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	78303.375		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	11379064.513	4952.332130	ppb
	Mg	24	32997938.386	17076.233732	ppb
	Mg	25	4759159.078	15895.351228	ppb
	Mg	26	5701804.673	15452.410569	ppb
	Al	27	20896.811	5.744275	ppb
	K	39	12835347.231	2458.019335	ppb
	Ca	44	5947261.202	29333.085293	ppb
>	Sc	45	301379.047		ppb
	Ti	47	605.018	1.100656	ppb
	V	51	3530.896	0.341561	ppb
	Cr	52	19857.697	2.479470	ppb
	Mn	55	7362.709	0.455622	ppb
	Fe	54	56051.650	42.972549	ppb
	Fe	56	2072987.265	109.463883	ppb
	Fe	57	24670.394	121.183179	ppb
	Co	59	496.012	0.049179	ppb
	Ni	60	1523.449	0.787938	ppb
	Cu	63	946.711	0.173713	ppb
	Cu	65	510.013	0.200302	ppb
	Zn	66	4114.179	4.028570	ppb
	As	75	114.751	0.123141	ppb
	Se	82	70.667	0.409697	ppb
	Mo	96	908.041	0.315157	ppb
	Ag	107	53.333	0.001964	ppb
	Ag	109	26.667	-0.000404	ppb
	Cd	111	30.280	0.016227	ppb
	In	113	40848.259	0.886220	ppb
>	In	115	902824.479		ppb
	Sn	118	380.007	0.047817	ppb
	Sb	121	715.026	0.044543	ppb
	Ba	135	45953.343	25.920615	ppb
	Ba	137	80587.413	26.025107	ppb
>	Tb	159	1521971.966		ppb
	Tl	205	210.002	0.006696	ppb
	Pb	206	825.034	0.071987	ppb
	Pb	207	1570.062	0.074787	ppb
	Pb	208	2710.221	0.083069	ppb
>	Bi	209	1105851.650		ppb
	Cr	53	2930.429		ppb
	Pd	106	20.000		ppb
	Pd	108	0.000		ppb
	C	12	468878.554		ppb
	Kr	83	42.000		ppb
	Se	77	89.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	121665.651		ppb
	Be	9	2.000	-0.003703	ppb
	Na	23	16557663.489	4637.686198	ppb
	Mg	24	48775638.104	16245.031277	ppb
	Mg	25	7030220.442	15111.972841	ppb
	Mg	26	9328821.937	16271.350877	ppb
	Al	27	33927.456	6.033138	ppb
	K	39	20088390.904	2476.205618	ppb
	Ca	44	9667299.992	30691.345464	ppb
>	Sc	45	488129.690		ppb

	Ti	47	830.034	0.918250	ppb
	V	51	5044.237	0.283554	ppb
	Cr	52	26972.326	1.968015	ppb
	Mn	55	10825.857	0.376085	ppb
	Fe	54	63385.250	7.334867	ppb
	Fe	56	2205105.891	20.155759	ppb
	Fe	57	32703.388	97.085221	ppb
	Co	59	654.021	0.038617	ppb
	Ni	60	2343.608	0.747600	ppb
	Cu	63	1343.424	0.149044	ppb
	Cu	65	830.034	0.201425	ppb
	Zn	66	5885.065	3.536742	ppb
	As	75	117.354	0.084761	ppb
	Se	82	94.667	0.288914	ppb
	Mo	96	1166.068	0.293525	ppb
	Ag	107	66.667	0.001436	ppb
	Ag	109	43.333	0.000170	ppb
	Cd	111	4.635	0.000478	ppb
	In	113	57218.229	1.418350	ppb
>	In	115	1237239.042		ppb
	Sn	118	405.008	0.031916	ppb
	Sb	121	1045.055	0.052105	ppb
	Ba	135	64126.956	26.221035	ppb
	Ba	137	108996.795	25.516070	ppb
>	Tb	159	2099558.629		ppb
	Tl	205	215.002	0.004374	ppb
	Pb	206	1320.087	0.086678	ppb
	Pb	207	2270.132	0.078501	ppb
	Pb	208	3395.344	0.071836	ppb
>	Bi	209	1542403.164		ppb
	Cr	53	3628.658		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	614566.322		ppb
	Kr	83	44.000		ppb
	Se	77	120.001		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	127167.470		ppb
	Be	9	4.000	0.001327	ppb
	Na	23	17808009.413	4772.166423	ppb
	Mg	24	51788157.092	16502.132330	ppb
	Mg	25	7665550.622	15764.771759	ppb
	Mg	26	9136354.519	15246.185200	ppb
	Al	27	34133.154	5.781411	ppb
	K	39	20416563.724	2406.664317	ppb
	Ca	44	9655050.134	29322.381829	ppb
>	Sc	45	505874.805		ppb
	Ti	47	970.047	1.047230	ppb
	V	51	5492.202	0.305508	ppb
	Cr	52	28380.215	2.008650	ppb
	Mn	55	10425.432	0.320647	ppb
	Fe	54	64492.294	5.832280	ppb
	Fe	56	2349435.838	24.954050	ppb
	Fe	57	34313.771	98.436339	ppb
	Co	59	698.024	0.039997	ppb
	Ni	60	2430.295	0.748068	ppb
	Cu	63	1440.104	0.155040	ppb
	Cu	65	910.041	0.214963	ppb
	Zn	66	6598.843	3.841452	ppb
	As	75	44.603	0.043125	ppb
	Se	82	78.000	0.170487	ppb

⌈	Mo	96	1222.075	0.277542	ppb
|	Ag	107	56.667	0.000180	ppb
|	Ag	109	23.333	-0.001706	ppb
|	Cd	111	28.455	0.009522	ppb
|	In	113	58334.652	-0.436165	ppb
|>	In	115	1364376.184		ppb
⌊	Sn	118	430.009	0.029846	ppb
⌈	Sb	121	970.047	0.037895	ppb
|	Ba	135	65614.560	25.854238	ppb
|	Ba	137	114827.504	25.904439	ppb
⌊>	Tb	159	2178726.845		ppb
⌈	Tl	205	275.004	0.005551	ppb
|	Pb	206	1260.079	0.073313	ppb
|	Pb	207	2250.128	0.069804	ppb
|	Pb	208	3615.394	0.070381	ppb
⌊>	Bi	209	1666819.768		ppb
	Cr	53	3608.651		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	554636.021		ppb
	Kr	83	32.000		ppb
	Se	77	132.668		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			89.937		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			85.254		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			83.606		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			88.727		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			86.733		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-04

Sample Date/Time: Monday, November 09, 2009 20:22:04
Sample Type: Sample
Sample Description: 74MW3
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-04.885

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	110978.175	11.235	110978.175			ppb
	Be	9	4.667	65.465	0.000	0.00571	200.72	ppb
	Na	23	11559285.964	4.317	104.714	3570.15514	8.14	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	17747914.649	3.179	161.126	42139.46584	10.26	ppb
	Mg	26	20928267.354	7.587	189.139	40137.71689	4.00	ppb
	Al	27	153356.118	7.369	1.359	32.73950	6.28	ppb
	K	39	11236708.922	9.305	98.771	1505.36004	2.25	ppb
	Ca	44	20896010.317	9.083	188.390	72976.09099	2.34	ppb
>	Sc	45	420744.657	13.907	420744.657			ppb
	Ti	47	1371.762	11.809	0.003	1.84917	2.88	ppb
	V	51	2830.377	13.040	0.003	0.13272	10.85	ppb
	Cr	52	10325.328	1.237	0.011	0.50878	38.65	ppb
	Mn	55	178012.652	14.687	0.411	14.52591	1.72	ppb
	Fe	54	219564.284	9.829	0.406	257.61670	6.06	ppb
	Fe	56	5068362.644	9.907	8.112	306.86847	7.07	ppb
	Fe	57	125711.845	13.864	0.292	472.99427	1.12	ppb
	Co	59	2149.566	11.721	0.005	0.16916	3.55	ppb
	Ni	60	5231.382	12.441	0.012	1.96514	4.08	ppb
	Cu	63	2627.021	20.464	0.006	0.36849	9.75	ppb
	Cu	65	1674.586	12.847	0.004	0.51530	1.24	ppb
	Zn	66	7029.204	20.245	0.016	4.93874	7.78	ppb
	As	75	116.386	46.298	0.000	0.09233	29.61	ppb
	Se	82	66.445	18.291	0.000	0.19012	62.83	ppb
	Mo	96	7926.514	13.876	0.007	2.39398	5.92	ppb
	Ag	107	88.889	20.653	0.000	0.00408	38.73	ppb
	Ag	109	108.889	9.841	0.000	0.00672	4.92	ppb
	Cd	111	73.698	49.659	0.000	0.03466	62.05	ppb
	In	113	50498.531	12.635	0.002	0.85645	103.83	ppb
>	In	115	1115003.706	9.174	1115003.706			ppb
	Sn	118	676.690	2.595	0.000	0.08005	13.06	ppb
	Sb	121	623.353	10.157	0.000	0.00770	63.12	ppb
	Ba	135	529680.333	14.580	0.282	242.35858	3.05	ppb
	Ba	137	922880.714	15.877	0.491	241.45257	3.98	ppb
>	Tb	159	1873803.858	12.526	1873803.858			ppb
	Tl	205	233.336	3.273	0.000	0.00626	18.24	ppb
	Pb	206	3517.292	12.660	0.002	0.33229	4.28	ppb
	Pb	207	6504.408	11.936	0.005	0.32884	3.38	ppb
	Pb	208	10596.703	11.332	0.008	0.33823	3.73	ppb
>	Bi	209	1305152.735	10.540	1305152.735			ppb
	Cr	53	1626.799	3.466	-2043.877			ppb
	Pd	106	15.000	88.192	11.667			ppb
	Pd	108	15.000	33.333	11.667			ppb
	C	12	498086.063	7.478	110446.820			ppb
	Kr	83	41.333	7.391	-11.333			ppb
	Se	77	114.223	12.108	-0.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	96584.184		ppb
	Be	9	8.000	0.018537	ppb
	Na	23	11042044.121	3895.593234	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	17362963.256	47015.446375	ppb
	Mg	26	19104009.313	41974.737787	ppb
	Al	27	142061.963	34.755007	ppb
	K	39	10034272.346	1543.157364	ppb
	Ca	44	18706715.930	74938.354802	ppb
>	Sc	45	353323.520		ppb
	Ti	47	1185.070	1.900567	ppb
	V	51	2447.844	0.140603	ppb
	Cr	52	10471.480	0.735702	ppb
	Mn	55	147849.960	14.373161	ppb
	Fe	54	194702.172	274.761214	ppb
	Fe	56	4491571.824	330.154674	ppb
	Fe	57	105811.861	474.061790	ppb
	Co	59	1868.174	0.174885	ppb
	Ni	60	4527.691	2.021568	ppb
	Cu	63	2073.548	0.346642	ppb
	Cu	65	1426.768	0.522686	ppb
	Zn	66	5394.788	4.527395	ppb
	As	75	56.246	0.062548	ppb
	Se	82	68.667	0.290127	ppb
	Mo	96	6660.217	2.249417	ppb
	Ag	107	80.000	0.004100	ppb
	Ag	109	96.667	0.006630	ppb
	Cd	111	114.550	0.059104	ppb
	In	113	43218.189	-0.169724	ppb
>	In	115	999099.795		ppb
	Sn	118	675.023	0.091110	ppb
	Sb	121	555.015	0.011065	ppb
	Ba	135	440780.911	236.054610	ppb
	Ba	137	753753.498	231.103085	ppb
>	Tb	159	1603722.740		ppb
	Tl	205	240.003	0.007580	ppb
	Pb	206	3010.453	0.323160	ppb
	Pb	207	5615.792	0.322704	ppb
	Pb	208	9237.538	0.335180	ppb
>	Bi	209	1147574.823		ppb
	Cr	53	1690.143		ppb
	Pd	106	20.000		ppb
	Pd	108	10.000		ppb
	C	12	456038.745		ppb
	Kr	83	44.000		ppb
	Se	77	126.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	117923.219		ppb
	Be	9	4.000	0.002153	ppb
	Na	23	12037791.453	3478.143626	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	17485295.286	38778.956890	ppb
	Mg	26	21681710.111	39017.861913	ppb
	Al	27	153341.739	30.646511	ppb
	K	39	11744372.592	1477.650711	ppb
	Ca	44	21903947.729	71864.414778	ppb
>	Sc	45	458270.371		ppb

	Ti	47	1455.106	1.794322	ppb
	V	51	3184.365	0.141468	ppb
	Cr	52	10269.270	0.388013	ppb
	Mn	55	191985.397	14.390111	ppb
	Fe	54	230516.622	244.257303	ppb
	Fe	56	5305509.893	287.215730	ppb
	Fe	57	138259.219	477.665000	ppb
	Co	59	2354.277	0.169703	ppb
	Ni	60	5811.688	2.000457	ppb
	Cu	63	3147.162	0.409969	ppb
	Cu	65	1813.498	0.511572	ppb
	Zn	66	7699.630	5.000098	ppb
	As	75	132.642	0.098169	ppb
	Se	82	53.333	0.057841	ppb
	Mo	96	8475.590	2.399897	ppb
	Ag	107	76.667	0.002494	ppb
	Ag	109	113.334	0.006449	ppb
	Cd	111	62.640	0.026261	ppb
	In	113	55116.474	1.400916	ppb
>	In	115	1192638.818		ppb
	Sn	118	660.022	0.070338	ppb
	Sb	121	680.023	0.009922	ppb
	Ba	135	580205.382	250.506830	ppb
	Ba	137	1011694.163	250.077212	ppb
>	Tb	159	1989218.493		ppb
	Tl	205	225.003	0.005535	ppb
	Pb	206	3845.739	0.348672	ppb
	Pb	207	7051.253	0.341681	ppb
	Pb	208	11513.964	0.352082	ppb
>	Bi	209	1366648.211		ppb
	Cr	53	1582.125		ppb
	Pd	106	25.000		ppb
	Pd	108	20.000		ppb
	C	12	526951.477		ppb
	Kr	83	38.000		ppb
	Se	77	99.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	118427.121		ppb
	Be	9	2.000	-0.003552	ppb
	Na	23	11598022.316	3336.728559	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	18395485.405	40623.994269	ppb
	Mg	26	21999082.638	39420.550968	ppb
	Al	27	164664.652	32.816978	ppb
	K	39	11931481.828	1495.272053	ppb
	Ca	44	22077367.293	72125.503384	ppb
>	Sc	45	450640.079		ppb
	Ti	47	1475.109	1.852627	ppb
	V	51	2858.922	0.116094	ppb
	Cr	52	10235.235	0.402631	ppb
	Mn	55	194202.598	14.814447	ppb
	Fe	54	233474.057	253.831594	ppb
	Fe	56	5408006.215	303.235019	ppb
	Fe	57	133064.456	467.256024	ppb
	Co	59	2226.248	0.162898	ppb
	Ni	60	5354.767	1.873399	ppb
	Cu	63	2660.354	0.348849	ppb
	Cu	65	1783.492	0.511630	ppb
	Zn	66	7993.193	5.288727	ppb
	As	75	160.272	0.116277	ppb
	Se	82	77.334	0.222385	ppb

⌈	Mo	96	8643.734	2.532611	ppb
|	Ag	107	110.001	0.005657	ppb
|	Ag	109	116.667	0.007091	ppb
|	Cd	111	43.905	0.018622	ppb
|	In	113	53160.930	1.338148	ppb
|>	In	115	1153272.505		ppb
⌊	Sn	118	695.024	0.078707	ppb
⌈	Sb	121	635.020	0.002128	ppb
|	Ba	135	568054.705	240.514307	ppb
|	Ba	137	1003194.481	243.177425	ppb
⌊>	Tb	159	2028470.342		ppb
⌈	Tl	205	235.003	0.005676	ppb
|	Pb	206	3695.683	0.325050	ppb
|	Pb	207	6846.179	0.322147	ppb
|	Pb	208	11038.606	0.327442	ppb
⌊>	Bi	209	1401235.172		ppb
	Cr	53	1608.129		ppb
	Pd	106	0.000		ppb
	Pd	108	15.000		ppb
	C	12	511267.968		ppb
	Kr	83	42.000		ppb
	Se	77	116.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		91.531			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		83.072			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		79.802			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		85.991			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		78.700			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-05

Sample Date/Time: Monday, November 09, 2009 20:24:02
Sample Type: Sample
Sample Description: 74MWDUP
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-05.886

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	114151.906	21.674	114151.906			ppb
	Be	9	6.000	57.735	0.000	0.00800	91.52	ppb
	Na	23	11250597.504	19.527	98.845	3370.03827	2.48	ppb
	Mg	24	S	S	19999999981043735614.33841		0.00	ppb
	Mg	25	17948446.267	19.908	157.781	41264.68431	4.89	ppb
	Mg	26	21420693.918	22.981	187.320	39751.78191	4.87	ppb
	Al	27	133824.286	21.915	1.145	27.57982	6.13	ppb
	K	39	10501816.792	22.993	89.162	1358.90973	3.67	ppb
	Ca	44	21558378.374	24.198	187.864	72772.33612	4.92	ppb
>	Sc	45	445579.591	23.526	445579.591			ppb
	Ti	47	1258.417	28.689	0.003	1.57200	9.00	ppb
	V	51	2988.817	6.191	0.003	0.14197	48.32	ppb
	Cr	52	10181.194	6.306	0.009	0.44637	53.34	ppb
	Mn	55	200759.823	24.175	0.439	15.50391	5.07	ppb
	Fe	54	176901.706	18.299	0.283	179.52566	9.69	ppb
	Fe	56	4313751.716	12.821	5.901	223.20941	22.54	ppb
	Fe	57	110497.274	19.445	0.243	393.90675	6.37	ppb
	Co	59	1998.206	21.180	0.004	0.14789	3.50	ppb
	Ni	60	5760.573	15.004	0.013	2.07654	12.24	ppb
	Cu	63	2358.061	16.951	0.005	0.31429	8.63	ppb
	Cu	65	1676.810	15.751	0.004	0.49325	11.65	ppb
	Zn	66	6494.382	19.218	0.014	4.35066	5.69	ppb
	As	75	67.139	60.779	0.000	0.05866	32.04	ppb
	Se	82	63.111	12.603	0.000	0.14186	39.50	ppb
	Mo	96	7969.247	18.583	0.007	2.27198	1.17	ppb
	Ag	107	32.222	5.973	-0.000	-0.00119	57.96	ppb
	Ag	109	31.111	30.930	-0.000	-0.00079	53.06	ppb
	Cd	111	8.240	302.091	0.000	0.00107	996.06	ppb
	In	113	53284.839	18.611	0.001	0.77255	122.03	ppb
>	In	115	1183173.602	18.254	1183173.602			ppb
	Sn	118	893.374	20.292	0.001	0.10425	3.57	ppb
	Sb	121	651.688	13.119	0.000	0.01018	138.39	ppb
	Ba	135	535989.366	16.925	0.278	239.07822	2.64	ppb
	Ba	137	919596.168	17.004	0.478	234.85320	3.54	ppb
>	Tb	159	1922882.515	15.713	1922882.515			ppb
	Tl	205	63.334	12.059	0.000	0.00018	286.03	ppb
	Pb	206	1596.798	20.644	0.001	0.13040	7.85	ppb
	Pb	207	2923.555	20.797	0.002	0.12779	5.73	ppb
	Pb	208	4580.637	21.768	0.003	0.12521	8.91	ppb
>	Bi	209	1345466.898	16.861	1345466.898			ppb
	Cr	53	1458.106	4.396	-2212.570			ppb
	Pd	106	13.333	114.564	10.000			ppb
	Pd	108	26.667	10.825	23.333			ppb
	C	12	528827.633	7.214	141188.390			ppb
	Kr	83	35.333	23.566	-17.333			ppb
	Se	77	114.890	8.416	0.000			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86101.081		ppb
	Be	9	4.000	0.006353	ppb
	Na	23	8751475.656	3463.151496	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13829270.954	42006.187869	ppb
	Mg	26	15739739.882	38793.430645	ppb
	Al	27	100189.394	27.352008	ppb
	K	39	7715652.479	1325.518639	ppb
	Ca	44	15535188.567	69804.443949	ppb
>	Sc	45	324733.346		ppb
	Ti	47	850.036	1.463105	ppb
	V	51	2858.085	0.219231	ppb
	Cr	52	9504.515	0.717981	ppb
	Mn	55	145587.122	15.428330	ppb
	Fe	54	139693.952	198.014550	ppb
	Fe	56	3691049.327	279.239718	ppb
	Fe	57	85937.684	417.574819	ppb
	Co	59	1514.115	0.153317	ppb
	Ni	60	4814.492	2.341342	ppb
	Cu	63	1896.847	0.344902	ppb
	Cu	65	1390.097	0.556025	ppb
	Zn	66	5054.610	4.618903	ppb
	As	75	32.243	0.046166	ppb
	Se	82	54.000	0.206542	ppb
	Mo	96	6271.966	2.256338	ppb
	Ag	107	33.333	-0.000430	ppb
	Ag	109	20.000	-0.001264	ppb
	Cd	111	-11.825	-0.008166	ppb
	In	113	41847.377	0.550525	ppb
>	In	115	938008.380		ppb
	Sn	118	685.023	0.100401	ppb
	Sb	121	595.018	0.019203	ppb
	Ba	135	431490.607	234.276054	ppb
	Ba	137	739037.682	229.725851	ppb
>	Tb	159	1581838.966		ppb
	Tl	205	65.000	0.000724	ppb
	Pb	206	1240.077	0.125252	ppb
	Pb	207	2230.126	0.120310	ppb
	Pb	208	3460.354	0.116477	ppb
>	Bi	209	1083824.543		ppb
	Cr	53	1392.097		ppb
	Pd	106	0.000		ppb
	Pd	108	25.000		ppb
	C	12	485235.830		ppb
	Kr	83	38.000		ppb
	Se	77	105.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	123489.808		ppb
	Be	9	4.000	0.001641	ppb
	Na	23	12123206.198	3344.838853	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	20211994.378	42805.607807	ppb
	Mg	26	24428032.807	41978.495045	ppb
	Al	27	154047.462	29.371823	ppb
	K	39	11801344.330	1416.259485	ppb
	Ca	44	24493471.711	76743.894715	ppb
>	Sc	45	512010.551		ppb

	Ti	47	1390.097	1.520924	ppb
	V	51	2907.826	0.088186	ppb
	Cr	52	10257.258	0.273751	ppb
	Mn	55	219829.992	14.757872	ppb
	Fe	54	192418.605	163.494270	ppb
	Fe	56	4502331.293	181.908732	ppb
	Fe	57	119727.468	367.626268	ppb
	Co	59	2298.264	0.147313	ppb
	Ni	60	5958.441	1.834411	ppb
	Cu	63	2573.664	0.293249	ppb
	Cu	65	1910.182	0.480443	ppb
	Zn	66	7159.228	4.130771	ppb
	As	75	57.167	0.049546	ppb
	Se	82	68.667	0.110672	ppb
	Mo	96	8637.729	2.302628	ppb
	Ag	107	33.333	-0.001367	ppb
	Ag	109	36.667	-0.000465	ppb
	Cd	111	0.450	-0.001314	ppb
	In	113	59481.377	1.806509	ppb
>	In	115	1266169.512		ppb
	Sn	118	980.048	0.107833	ppb
	Sb	121	750.028	0.017407	ppb
	Ba	135	581923.000	246.230608	ppb
	Ba	137	1009030.101	244.437365	ppb
>	Tb	159	2029754.070		ppb
	Tl	205	70.000	0.000163	ppb
	Pb	206	1660.138	0.123766	ppb
	Pb	207	3175.253	0.128124	ppb
	Pb	208	5370.858	0.137773	ppb
>	Bi	209	1465181.061		ppb
	Cr	53	1520.116		ppb
	Pd	106	10.000		ppb
	Pd	108	30.000		ppb
	C	12	545127.990		ppb
	Kr	83	42.000		ppb
	Se	77	124.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	132864.828		ppb
	Be	9	10.000	0.016003	ppb
	Na	23	12877110.657	3302.124464	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	19804073.469	38982.257240	ppb
	Mg	26	24094309.065	38483.420045	ppb
	Al	27	147236.001	26.015640	ppb
	K	39	11988453.566	1334.951071	ppb
	Ca	44	24646474.844	71768.669706	ppb
>	Sc	45	499994.875		ppb
	Ti	47	1535.118	1.731980	ppb
	V	51	3200.540	0.118487	ppb
	Cr	52	10781.809	0.347372	ppb
	Mn	55	236862.355	16.325543	ppb
	Fe	54	198592.562	177.068159	ppb
	Fe	56	4747874.529	208.479790	ppb
	Fe	57	125826.668	396.519163	ppb
	Co	59	2182.238	0.143027	ppb
	Ni	60	6508.784	2.053860	ppb
	Cu	63	2603.672	0.304714	ppb
	Cu	65	1730.150	0.443281	ppb
	Zn	66	7269.308	4.302293	ppb
	As	75	112.007	0.080277	ppb
	Se	82	66.667	0.108356	ppb

⌈	Mo	96	8998.046	2.256960	ppb
|	Ag	107	30.000	-0.001776	ppb
|	Ag	109	36.667	-0.000643	ppb
|	Cd	111	36.094	0.012680	ppb
|	In	113	58525.764	-0.039388	ppb
|>	In	115	1345342.914		ppb
⌊	Sn	118	1015.052	0.104513	ppb
⌈	Sb	121	610.019	-0.006057	ppb
|	Ba	135	594554.491	236.727987	ppb
|	Ba	137	1010720.720	230.396390	ppb
⌊>	Tb	159	2157054.508		ppb
⌈	Tl	205	55.000	-0.000333	ppb
|	Pb	206	1890.179	0.142195	ppb
|	Pb	207	3365.287	0.134932	ppb
|	Pb	208	4910.699	0.121377	ppb
⌊>	Bi	209	1487395.091		ppb
	Cr	53	1462.107		ppb
	Pd	106	30.000		ppb
	Pd	108	25.000		ppb
	C	12	556119.079		ppb
	Kr	83	26.000		ppb
	Se	77	114.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		94.149			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		87.976			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		84.681			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		88.244			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		81.131			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-06

Sample Date/Time: Monday, November 09, 2009 20:25:59
Sample Type: Sample
Sample Description: 74MW5
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-06.887

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	117001.832	24.380	117001.832			ppb
	Be	9	4.000	50.000	0.000	0.00379	257.89	ppb
	Na	23	26305882.010	26.656	223.753	7628.68010	2.79	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	15079502.316	24.216	128.951	33724.67673	2.37	ppb
	Mg	26	17589062.333	24.734	150.225	31879.70170	0.84	ppb
	Al	27	209025.376	25.701	1.753	42.24791	1.73	ppb
	K	39	21761715.194	21.975	184.248	2808.10744	3.05	ppb
	Ca	44	18644652.233	21.637	159.995	61976.60179	3.35	ppb
>	Sc	45	459341.585	23.982	459341.585			ppb
	Ti	47	1358.430	25.848	0.003	1.65866	2.43	ppb
	V	51	5956.187	12.841	0.010	0.40581	18.48	ppb
	Cr	52	18871.300	12.232	0.028	1.32987	20.57	ppb
	Mn	55	32900.915	22.880	0.060	2.12930	6.80	ppb
	Fe	54	125257.462	16.826	0.158	100.56705	18.04	ppb
	Fe	56	3499232.156	8.093	3.871	146.43260	38.62	ppb
	Fe	57	83552.291	20.533	0.176	285.57285	7.46	ppb
	Co	59	4314.291	21.089	0.009	0.31840	5.34	ppb
	Ni	60	6344.291	20.607	0.014	2.19600	7.21	ppb
	Cu	63	13285.757	21.467	0.029	1.81837	6.49	ppb
	Cu	65	6783.478	20.868	0.015	2.01132	7.50	ppb
	Zn	66	4879.004	21.453	0.010	3.12016	10.66	ppb
	As	75	195.082	22.891	0.000	0.13545	4.57	ppb
	Se	82	78.667	10.275	0.000	0.23460	35.78	ppb
	Mo	96	3974.138	17.021	0.003	1.09443	3.13	ppb
	Ag	107	41.111	4.681	-0.000	-0.00051	136.05	ppb
	Ag	109	43.333	20.352	0.000	0.00039	336.24	ppb
	Cd	111	29.821	60.329	0.000	0.01079	56.72	ppb
	In	113	54922.883	20.364	0.002	0.85904	62.49	ppb
>	In	115	1213750.751	19.417	1213750.751			ppb
	Sn	118	523.347	21.371	0.000	0.04989	18.65	ppb
	Sb	121	521.680	6.162	-0.000	-0.01003	105.73	ppb
	Ba	135	371576.735	19.220	0.187	160.94541	0.95	ppb
	Ba	137	644036.957	19.576	0.325	159.62533	1.11	ppb
>	Tb	159	1982573.316	19.161	1982573.316			ppb
	Tl	205	150.001	20.817	0.000	0.00295	8.44	ppb
	Pb	206	4517.717	20.906	0.003	0.40864	4.81	ppb
	Pb	207	8266.765	18.825	0.006	0.40074	3.75	ppb
	Pb	208	12759.916	20.794	0.009	0.38754	3.79	ppb
>	Bi	209	1379310.055	17.700	1379310.055			ppb
	Cr	53	2468.974	10.350	-1201.703			ppb
	Pd	106	18.333	56.773	15.000			ppb
	Pd	108	11.667	65.465	8.333			ppb
	C	12	519316.266	7.245	131677.023			ppb
	Kr	83	41.333	13.968	-11.333			ppb
	Se	77	119.556	10.347	4.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	84096.127		ppb
	Be	9	6.000	0.014691	ppb
	Na	23	18215286.225	7382.588834	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	10872165.816	33811.336236	ppb
	Mg	26	12565909.934	31709.286378	ppb
	Al	27	147007.678	41.434977	ppb
	K	39	16255111.777	2905.703622	ppb
	Ca	44	13994524.931	64374.100967	ppb
>	Sc	45	336440.996		ppb
	Ti	47	965.047	1.612062	ppb
	V	51	5076.563	0.483146	ppb
	Cr	52	16209.126	1.627545	ppb
	Mn	55	24209.269	2.134342	ppb
	Fe	54	101128.779	115.732893	ppb
	Fe	56	3185151.702	207.395865	ppb
	Fe	57	63782.765	295.861042	ppb
	Co	59	3264.533	0.327312	ppb
	Ni	60	4837.837	2.270351	ppb
	Cu	63	9994.992	1.858143	ppb
	Cu	65	5154.662	2.073264	ppb
	Zn	66	3704.019	3.213877	ppb
	As	75	143.519	0.135674	ppb
	Se	82	70.000	0.330990	ppb
	Mo	96	3194.510	1.130708	ppb
	Ag	107	40.000	0.000276	ppb
	Ag	109	46.667	0.001691	ppb
	Cd	111	10.730	0.004521	ppb
	In	113	42063.280	0.580361	ppb
>	In	115	941662.342		ppb
	Sn	118	425.009	0.052989	ppb
	Sb	121	485.012	0.002146	ppb
	Ba	135	289506.916	160.517610	ppb
	Ba	137	499143.905	158.444361	ppb
>	Tb	159	1548975.547		ppb
	Tl	205	115.001	0.002783	ppb
	Pb	206	3435.590	0.390994	ppb
	Pb	207	6496.058	0.395870	ppb
	Pb	208	9697.670	0.370588	ppb
>	Bi	209	1097524.891		ppb
	Cr	53	2174.236		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	475884.118		ppb
	Kr	83	38.000		ppb
	Se	77	106.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	134725.475		ppb
	Be	9	2.000	-0.004237	ppb
	Na	23	30628041.489	7748.621333	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	16940773.963	32885.597810	ppb
	Mg	26	20151622.527	31741.600554	ppb
	Al	27	241219.675	42.455718	ppb
	K	39	24871090.265	2773.315877	ppb
	Ca	44	21206426.382	60885.349279	ppb
>	Sc	45	549192.584		ppb

	Ti	47	1640.134	1.682188	ppb
	V	51	6327.787	0.333426	ppb
	Cr	52	20316.617	1.089557	ppb
	Mn	55	37148.874	1.981957	ppb
	Fe	54	134574.462	80.468010	ppb
	Fe	56	3577399.623	95.678735	ppb
	Fe	57	92339.369	261.088030	ppb
	Co	59	4875.188	0.298794	ppb
	Ni	60	7012.458	2.014269	ppb
	Cu	63	14820.975	1.685611	ppb
	Cu	65	7479.463	1.839348	ppb
	Zn	66	5221.363	2.750653	ppb
	As	75	221.166	0.129147	ppb
	Se	82	86.000	0.177653	ppb
	Mo	96	4404.970	1.090045	ppb
	Ag	107	43.333	-0.000769	ppb
	Ag	109	33.333	-0.000903	ppb
	Cd	111	46.459	0.016748	ppb
	In	113	62383.983	1.477875	ppb
>	In	115	1345678.390		ppb
	Sn	118	500.013	0.039431	ppb
	Sb	121	545.015	-0.017233	ppb
	Ba	135	419594.071	159.678273	ppb
	Ba	137	728748.162	158.774763	ppb
>	Tb	159	2256792.567		ppb
	Tl	205	175.002	0.003235	ppb
	Pb	206	4941.220	0.405086	ppb
	Pb	207	8886.999	0.388775	ppb
	Pb	208	14376.215	0.396613	ppb
>	Bi	209	1527129.161		ppb
	Cr	53	2604.339		ppb
	Pd	106	30.000		ppb
	Pd	108	20.000		ppb
	C	12	541886.756		ppb
	Kr	83	38.000		ppb
	Se	77	131.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	132183.893		ppb
	Be	9	4.000	0.000927	ppb
	Na	23	30074318.316	7754.830144	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	17425567.170	34477.096155	ppb
	Mg	26	20049654.538	32188.218183	ppb
	Al	27	238848.774	42.853046	ppb
	K	39	24158943.541	2745.302828	ppb
	Ca	44	20733005.385	60670.355117	ppb
>	Sc	45	492391.175		ppb
	Ti	47	1470.108	1.681715	ppb
	V	51	6464.210	0.400844	ppb
	Cr	52	20088.156	1.272510	ppb
	Mn	55	37344.601	2.271616	ppb
	Fe	54	140069.146	105.500244	ppb
	Fe	56	3735145.142	136.223190	ppb
	Fe	57	94534.739	299.769466	ppb
	Co	59	4803.153	0.329093	ppb
	Ni	60	7182.579	2.303370	ppb
	Cu	63	15041.304	1.911368	ppb
	Cu	65	7716.309	2.121357	ppb
	Zn	66	5711.631	3.395940	ppb
	As	75	220.562	0.141516	ppb
	Se	82	80.000	0.195168	ppb

⌈	Mo	96	4322.934	1.062538	ppb
|	Ag	107	40.000	-0.001039	ppb
|	Ag	109	50.000	0.000369	ppb
|	Cd	111	32.275	0.011099	ppb
|	In	113	60321.386	0.518870	ppb
|>	In	115	1353911.521		ppb
⌊	Sn	118	645.021	0.057251	ppb
⌈	Sb	121	535.014	-0.014993	ppb
|	Ba	135	405629.219	162.640339	ppb
|	Ba	137	704218.805	161.656858	ppb
⌊>	Tb	159	2141951.834		ppb
⌈	Tl	205	160.001	0.002827	ppb
|	Pb	206	5176.339	0.429837	ppb
|	Pb	207	9417.238	0.417584	ppb
|	Pb	208	14205.862	0.395424	ppb
⌊>	Bi	209	1513276.112		ppb
	Cr	53	2628.345		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	540177.923		ppb
	Kr	83	48.000		ppb
	Se	77	120.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		96.499			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		90.693			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		86.870			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		90.983			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		83.172			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 20:27:58
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.888

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	116967.809	22.004	116967.809			ppb
	Be	9	43510.619	21.253	0.373	124.83772	3.10	ppb
	Na	23	4367092.780	18.171	37.603	1282.04408	8.31	ppb
	Mg	24	3746178.569	13.297	32.629	1322.20079	14.25	ppb
	Mg	25	565354.729	10.248	4.972	1300.30442	20.71	ppb
	Mg	26	902467.800	39.746	8.527	1809.62899	65.89	ppb
	Al	27	5262492.568	20.119	45.231	1089.85617	7.60	ppb
	K	39	8524203.221	18.882	70.674	1077.14278	5.13	ppb
	Ca	44	419802.821	14.173	3.581	1387.06540	42.22	ppb
>	Sc	45	429839.506	21.754	429839.506			ppb
	Ti	47	84552.390	22.043	0.196	116.70056	0.38	ppb
	V	51	1212025.159	21.611	2.817	118.23372	0.26	ppb
	Cr	52	1089961.708	22.056	2.520	121.23531	1.03	ppb
	Mn	55	1542243.791	23.323	3.567	125.98850	1.84	ppb
	Fe	54	898537.235	22.571	1.970	1250.56399	1.75	ppb
	Fe	56	16087664.510	22.715	33.424	1264.38864	4.59	ppb
	Fe	57	340661.811	24.050	0.782	1268.65341	2.73	ppb
	Co	59	1509409.178	21.801	3.511	121.21224	0.84	ppb
	Ni	60	331245.140	23.173	0.769	122.26397	2.77	ppb
	Cu	63	792883.060	22.167	1.844	116.89694	2.21	ppb
	Cu	65	391989.731	21.961	0.912	125.28033	1.56	ppb
	Zn	66	178670.512	22.595	0.415	127.94186	3.61	ppb
	As	75	198572.055	22.493	0.462	126.23501	1.74	ppb
	Se	82	18289.085	18.391	0.043	127.23281	4.37	ppb
	Mo	96	435563.108	18.422	0.342	116.74039	3.49	ppb
	Ag	107	1466279.991	17.397	1.152	117.13780	2.37	ppb
	Ag	109	1463355.238	16.644	1.150	120.37543	1.55	ppb
	Cd	111	294425.782	15.694	0.232	122.47065	0.60	ppb
	In	113	352134.807	15.726	0.234	124.03685	1.07	ppb
>	In	115	1270152.305	15.226	1270152.305			ppb
	Sn	118	871896.088	18.693	0.684	116.19277	3.97	ppb
	Sb	121	866246.760	20.177	0.418	113.00647	6.89	ppb
	Ba	135	289878.813	16.525	0.140	120.57521	4.10	ppb
	Ba	137	505587.074	15.353	0.245	120.52438	1.44	ppb
>	Tb	159	2059944.315	14.116	2059944.315			ppb
	Tl	205	4289525.621	14.530	2.709	124.48859	3.36	ppb
	Pb	206	1436191.248	15.925	0.905	121.07827	2.40	ppb
	Pb	207	2641703.004	15.480	1.665	118.85545	2.26	ppb
	Pb	208	4247371.396	15.921	2.676	120.50774	1.71	ppb
>	Bi	209	1589456.117	17.345	1589456.117			ppb
	Cr	53	127452.775	22.828	123782.099			ppb
	Pd	106	26327.210	20.132	26323.877			ppb
	Pd	108	20133.944	16.393	20130.610			ppb
	C	12	408947.800	4.532	21308.557			ppb
	Kr	83	50.000	6.928	-2.667			ppb
	Se	77	14259.722	18.391	14144.832			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	87456.769		ppb
|	Be	9	33205.037	127.174709	ppb
|	Na	23	3547725.478	1380.797313	ppb
|	Mg	24	3293383.955	1525.798228	ppb
|	Mg	25	534680.700	1598.784206	ppb
|	Mg	26	1312726.082	3185.033461	ppb
|	Al	27	4176359.150	1149.954302	ppb
|	K	39	6736036.126	1133.631899	ppb
⌊	Ca	44	485565.771	2062.669529	ppb
⌈>	Sc	45	322946.868		ppb
|	Ti	47	63224.235	116.204703	ppb
|	V	51	913019.904	118.514838	ppb
|	Cr	52	817480.951	121.068564	ppb
|	Mn	55	1131671.288	123.366321	ppb
|	Fe	54	669738.272	1241.580951	ppb
|	Fe	56	12115499.672	1268.414638	ppb
|	Fe	57	247454.262	1230.942529	ppb
|	Co	59	1135863.678	121.402966	ppb
|	Ni	60	245626.692	120.901247	ppb
|	Cu	63	596381.971	117.061362	ppb
|	Cu	65	295001.375	125.501869	ppb
|	Zn	66	134420.749	128.180392	ppb
|	As	75	148268.669	125.578880	ppb
⌊	Se	82	14502.509	133.503728	ppb
⌈	Mo	96	345708.170	112.232932	ppb
|	Ag	107	1180143.201	114.068989	ppb
|	Ag	109	1189383.364	118.278168	ppb
|	Cd	111	242695.509	121.911181	ppb
|	In	113	289186.853	122.832841	ppb
|>	In	115	1052309.824		ppb
⌊	Sn	118	686582.502	110.867487	ppb
⌈	Sb	121	669340.418	104.016752	ppb
|	Ba	135	234878.374	115.938691	ppb
|	Ba	137	419379.339	118.517281	ppb
⌊>	Tb	159	1739843.141		ppb
⌈	Tl	205	3631764.094	129.320959	ppb
|	Pb	206	1178485.470	122.136317	ppb
|	Pb	207	2186050.294	120.845631	ppb
|	Pb	208	3498835.093	122.037243	ppb
⌊>	Bi	209	1290715.210		ppb
	Cr	53	93999.731		ppb
	Pd	106	20410.809		ppb
	Pd	108	16398.434		ppb
	C	12	394648.689		ppb
	Kr	83	52.000		ppb
	Se	77	11271.015		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	128682.668		ppb
|	Be	9	46242.673	120.368071	ppb
|	Na	23	4421558.751	1169.232159	ppb
|	Mg	24	3665395.360	1154.079276	ppb
|	Mg	25	529200.438	1075.404379	ppb
|	Mg	26	648035.738	1068.401988	ppb
|	Al	27	5319487.556	995.372641	ppb
|	K	39	8979487.321	1023.268794	ppb
⌊	Ca	44	369697.793	1024.865601	ppb
⌈>	Sc	45	470090.511		ppb

	Ti	47	92722.893	117.079065	ppb
	V	51	1322138.373	117.900628	ppb
	Cr	52	1180301.083	120.081449	ppb
	Mn	55	1693170.408	126.813482	ppb
	Fe	54	969714.958	1234.591789	ppb
	Fe	56	16840594.740	1204.435437	ppb
	Fe	57	373232.527	1275.892912	ppb
	Co	59	1635890.675	120.117604	ppb
	Ni	60	354203.855	119.772624	ppb
	Cu	63	847198.892	114.240924	ppb
	Cu	65	421621.392	123.224289	ppb
	Zn	66	188095.854	123.213806	ppb
	As	75	213868.660	124.441306	ppb
	Se	82	19434.199	122.881203	ppb
>	Mo	96	460916.938	117.816807	ppb
	Ag	107	1548805.770	117.868844	ppb
	Ag	109	1545344.267	120.997653	ppb
	Cd	111	308979.180	122.202393	ppb
	In	113	373881.092	125.452238	ppb
>	In	115	1336518.397		ppb
	Sn	118	936154.934	119.023921	ppb
	Sb	121	926352.058	117.478377	ppb
	Ba	135	312289.260	125.785963	ppb
	Ba	137	527448.689	121.630394	ppb
>	Tb	159	2132180.404		ppb
	Tl	205	4365488.007	122.074116	ppb
	Pb	206	1515051.203	123.307288	ppb
	Pb	207	2762223.006	119.913673	ppb
	Pb	208	4429088.919	121.317274	ppb
>	Bi	209	1643578.767		ppb
	Cr	53	141491.967		ppb
	Pd	106	27928.947		ppb
	Pd	108	21347.762		ppb
	C	12	402306.970		ppb
	Kr	83	52.000		ppb
	Se	77	15331.744		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	134763.989		ppb
	Be	9	51084.147	126.970389	ppb
	Na	23	5131994.112	1296.102767	ppb
	Mg	24	4279756.391	1286.724863	ppb
	Mg	25	632183.047	1226.724667	ppb
	Mg	26	746641.579	1175.451531	ppb
	Al	27	6291631.000	1124.241564	ppb
	K	39	9857086.217	1074.527662	ppb
	Ca	44	404144.898	1073.661066	ppb
>	Sc	45	496481.138		ppb
	Ti	47	97710.042	116.817913	ppb
	V	51	1400917.201	118.285690	ppb
	Cr	52	1272103.090	122.555906	ppb
	Mn	55	1801889.677	127.785702	ppb
	Fe	54	1056158.474	1275.519225	ppb
	Fe	56	19306899.119	1320.315831	ppb
	Fe	57	401298.645	1299.124792	ppb
	Co	59	1756473.183	122.116146	ppb
	Ni	60	393904.874	126.118045	ppb
	Cu	63	935068.315	119.388521	ppb
	Cu	65	459346.426	127.114834	ppb
	Zn	66	213494.933	132.431370	ppb
	As	75	233578.836	128.684857	ppb
	Se	82	20930.548	125.313513	ppb

⌈	Mo	96	500064.216	120.171417	ppb
|	Ag	107	1669891.002	119.475581	ppb
|	Ag	109	1655338.083	121.850483	ppb
|	Cd	111	331602.657	123.298362	ppb
|	In	113	393336.477	123.825483	ppb
|>	In	115	1421628.695		ppb
⌊	Sn	118	992950.830	118.686898	ppb
⌈	Sb	121	1003047.805	117.524288	ppb
|	Ba	135	322468.806	120.000980	ppb
|	Ba	137	569933.196	121.425468	ppb
⌊>	Tb	159	2307809.399		ppb
⌈	Tl	205	4871324.761	122.070704	ppb
|	Pb	206	1615037.069	117.791219	ppb
|	Pb	207	2976835.711	115.807052	ppb
|	Pb	208	4814190.174	118.168701	ppb
⌊>	Bi	209	1834074.374		ppb
	Cr	53	146866.628		ppb
	Pd	106	30641.874		ppb
	Pd	108	22655.635		ppb
	C	12	429887.741		ppb
	Kr	83	46.000		ppb
	Se	77	16176.407		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			96.471		
	Be	9	104.031				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			84.868		
	Ti	47					
	V	51	98.528				
	Cr	52	101.029				
	Mn	55	104.990				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	101.010				
	Ni	60	101.887				
	Cu	63	97.414				
	Cu	65	104.400				
	Zn	66	106.618				
	As	75	105.196				
	Se	82	106.027				
	Mo	96					
	Ag	107	97.615				
	Ag	109	100.313				
	Cd	111	102.059				
	In	113					
>	In	115			90.907		
	Sn	118	96.827				
	Sb	121	94.172				
	Ba	135	100.479				
	Ba	137	100.437				
>	Tb	159			94.534		
	Tl	205	103.740				
	Pb	206	100.899				
	Pb	207	99.046				
	Pb	208	100.423				
>	Bi	209			95.844		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 20:29:56
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.889

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	124909.706	30.142	124909.706			ppb
	Be	9	5.333	43.301	0.000	0.00785	174.79	ppb
	Na	23	5905.077	2.914	-0.015	-0.51692	119.15	ppb
	Mg	24	1991.876	28.956	0.015	0.60114	82.86	ppb
	Mg	25	295.671	23.536	0.002	0.57685	75.24	ppb
	Mg	26	466.011	22.950	0.003	0.61486	89.18	ppb
	Al	27	1790.162	11.440	-0.013	-0.30313	61.78	ppb
	K	39	300378.640	0.304	-0.046	-0.70839	2026.12	ppb
	Ca	44	16291.276	4.375	-0.085	-32.91822	69.18	ppb
>	Sc	45	474807.106	25.484	474807.106			ppb
	Ti	47	55.000	31.492	-0.000	-0.01484	326.40	ppb
	V	51	2172.387	4.405	0.001	0.05161	112.12	ppb
	Cr	52	7055.156	2.620	0.001	0.06698	370.13	ppb
	Mn	55	1625.134	15.814	-0.008	-0.28391	5.18	ppb
	Fe	54	56880.413	15.091	0.004	2.63508	380.56	ppb
	Fe	56	1887543.991	3.417	0.181	6.86260	620.07	ppb
	Fe	57	3118.820	4.918	-0.000	-0.43824	625.43	ppb
	Co	59	177.335	55.210	0.000	0.00741	171.77	ppb
	Ni	60	51.111	20.965	0.000	0.00308	317.63	ppb
	Cu	63	256.670	5.661	0.000	0.01089	112.81	ppb
	Cu	65	128.890	34.922	0.000	0.00938	279.15	ppb
	Zn	66	166.668	26.230	-0.000	-0.07278	13.29	ppb
	As	75	-30.472	65.936	-0.000	-0.00046	3197.90	ppb
	Se	82	52.222	22.197	0.000	0.05154	186.55	ppb
	Mo	96	512.681	35.123	0.000	0.10996	73.53	ppb
	Ag	107	178.891	37.838	0.000	0.01054	88.77	ppb
	Ag	109	194.447	43.142	0.000	0.01284	85.76	ppb
	Cd	111	20.758	24.039	0.000	0.00644	3.29	ppb
	In	113	61437.594	22.134	0.001	0.55057	24.37	ppb
>	In	115	1376609.569	21.927	1376609.569			ppb
	Sn	118	630.021	23.126	0.000	0.05923	63.25	ppb
	Sb	121	3198.850	12.204	0.001	0.31991	35.85	ppb
	Ba	135	71.334	40.274	0.000	0.01768	108.65	ppb
	Ba	137	127.334	32.049	0.000	0.01861	90.08	ppb
>	Tb	159	2229084.194	20.189	2229084.194			ppb
	Tl	205	388.343	58.359	0.000	0.00947	98.88	ppb
	Pb	206	215.003	42.693	-0.000	-0.00970	124.04	ppb
	Pb	207	410.005	49.941	-0.000	-0.00790	173.05	ppb
	Pb	208	670.015	44.721	-0.000	-0.00821	159.12	ppb
>	Bi	209	1739985.262	19.991	1739985.262			ppb
	Cr	53	1093.394	10.557	-2577.283			ppb
	Pd	106	3.333	86.603	0.000			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	411528.506	5.729	23889.263			ppb
	Kr	83	38.000	32.015	-14.667			ppb
	Se	77	85.778	10.779	-29.111			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	81442.297		ppb
	Be	9	8.000	0.023696	ppb
	Na	23	5841.706	0.193331	ppb
	Mg	24	2655.352	1.176128	ppb
	Mg	25	376.007	1.078030	ppb
	Mg	26	589.017	1.247749	ppb
	Al	27	2025.205	-0.086901	ppb
	K	39	299811.983	15.862760	ppb
	Ca	44	17112.630	-6.623231	ppb
>	Sc	45	335091.810		ppb
	Ti	47	75.000	0.041082	ppb
	V	51	2140.317	0.117904	ppb
	Cr	52	7266.639	0.353225	ppb
	Mn	55	1330.088	-0.267081	ppb
	Fe	54	47080.569	14.094848	ppb
	Fe	56	1830358.989	55.896037	ppb
	Fe	57	2950.435	2.722949	ppb
	Co	59	288.004	0.022035	ppb
	Ni	60	63.334	0.014353	ppb
	Cu	63	266.670	0.025003	ppb
	Cu	65	173.335	0.038828	ppb
	Zn	66	120.001	-0.070878	ppb
	As	75	-39.864	-0.013523	ppb
	Se	82	48.000	0.137880	ppb
	Mo	96	690.024	0.200604	ppb
	Ag	107	256.670	0.021326	ppb
	Ag	109	283.337	0.025319	ppb
	Cd	111	15.000	0.006203	ppb
	In	113	45754.434	0.470909	ppb
>	In	115	1029042.123		ppb
	Sn	118	755.029	0.100983	ppb
	Sb	121	3350.561	0.446746	ppb
	Ba	135	104.001	0.039802	ppb
	Ba	137	172.001	0.037646	ppb
>	Tb	159	1712794.252		ppb
	Tl	205	650.021	0.020290	ppb
	Pb	206	320.005	0.004156	ppb
	Pb	207	645.010	0.007856	ppb
	Pb	208	1015.029	0.006861	ppb
>	Bi	209	1338372.697		ppb
	Cr	53	1226.075		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	384303.230		ppb
	Kr	83	52.000		ppb
	Se	77	96.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147315.154		ppb
	Be	9	4.000	-0.000114	ppb
	Na	23	6099.860	-0.840451	ppb
	Mg	24	1710.146	0.325358	ppb
	Mg	25	257.003	0.326841	ppb
	Mg	26	395.008	0.281978	ppb
	Al	27	1695.144	-0.408812	ppb
	K	39	299892.340	-9.217098	ppb
	Ca	44	15836.530	-46.374293	ppb
>	Sc	45	545144.874		ppb

	Ti	47	45.000	-0.042840	ppb
	V	51	2096.842	0.011256	ppb
	Cr	52	6974.431	-0.074478	ppb
	Mn	55	1745.152	-0.294210	ppb
	Fe	54	63068.255	-1.656984	ppb
	Fe	56	1957446.775	-14.902321	ppb
	Fe	57	3250.528	-1.885784	ppb
	Co	59	142.001	0.001358	ppb
	Ni	60	43.333	-0.003057	ppb
	Cu	63	263.337	0.005173	ppb
	Cu	65	130.001	0.000513	ppb
	Zn	66	173.335	-0.083261	ppb
	As	75	-44.148	-0.003136	ppb
	Se	82	43.333	-0.052068	ppb
	Mo	96	518.013	0.083998	ppb
	Ag	107	133.334	0.004577	ppb
	Ag	109	183.335	0.008702	ppb
	Cd	111	23.820	0.006503	ppb
	In	113	69953.824	0.475309	ppb
>	In	115	1573006.509		ppb
	Sn	118	665.022	0.048134	ppb
	Sb	121	3490.609	0.289527	ppb
	Ba	135	60.000	0.007952	ppb
	Ba	137	92.000	0.006088	ppb
>	Tb	159	2538306.409		ppb
	Tl	205	255.003	0.004021	ppb
	Pb	206	175.002	-0.015742	ppb
	Pb	207	315.003	-0.014928	ppb
	Pb	208	520.008	-0.015196	ppb
>	Bi	209	1936274.326		ppb
	Cr	53	1038.054		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	425030.589		ppb
	Kr	83	30.000		ppb
	Se	77	83.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	145971.667		ppb
	Be	9	4.000	-0.000030	ppb
	Na	23	5773.666	-0.903646	ppb
	Mg	24	1610.130	0.301922	ppb
	Mg	25	254.003	0.325665	ppb
	Mg	26	414.009	0.314838	ppb
	Al	27	1650.136	-0.413690	ppb
	K	39	301431.596	-8.770826	ppb
	Ca	44	15924.670	-45.757130	ppb
>	Sc	45	544184.635		ppb
	Ti	47	45.000	-0.042753	ppb
	V	51	2280.002	0.025668	ppb
	Cr	52	6924.397	-0.077815	ppb
	Mn	55	1800.162	-0.290440	ppb
	Fe	54	60492.415	-4.532636	ppb
	Fe	56	1874826.209	-20.405909	ppb
	Fe	57	3155.498	-2.151893	ppb
	Co	59	102.001	-0.001163	ppb
	Ni	60	46.667	-0.002061	ppb
	Cu	63	240.003	0.002508	ppb
	Cu	65	83.334	-0.011214	ppb
	Zn	66	206.669	-0.064197	ppb
	As	75	-7.404	0.015291	ppb
	Se	82	65.334	0.068798	ppb

⌈	Mo	96	330.005	0.045278	ppb
|	Ag	107	146.668	0.005720	ppb
|	Ag	109	116.667	0.004496	ppb
|	Cd	111	23.455	0.006613	ppb
|	In	113	68604.525	0.705479	ppb
|>	In	115	1527780.075		ppb
⌊	Sn	118	470.011	0.028567	ppb
⌈	Sb	121	2755.380	0.223466	ppb
|	Ba	135	50.000	0.005278	ppb
|	Ba	137	118.001	0.012084	ppb
⌊>	Tb	159	2436151.923		ppb
⌈	Tl	205	260.003	0.004111	ppb
|	Pb	206	150.001	-0.017518	ppb
|	Pb	207	270.002	-0.016633	ppb
|	Pb	208	475.007	-0.016294	ppb
⌊>	Bi	209	1945308.762		ppb
	Cr	53	1016.052		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	425251.698		ppb
	Kr	83	32.000		ppb
	Se	77	78.000		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		103.022			
Be	9					
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		93.747			
Ti	47					
V	51					
Cr	52					
Mn	55					
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60					
Cu	63					
Cu	65					
Zn	66					
As	75					
Se	82					
Mo	96					
Ag	107					
Ag	109					
Cd	111					
In	113					
In	115		98.526			
Sn	118					
Sb	121					
Ba	135					
Ba	137					
Tb	159		102.296			
Tl	205					
Pb	206					
Pb	207					
Pb	208					
Bi	209		104.921			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-07

Sample Date/Time: Monday, November 09, 2009 20:33:23
Sample Type: Sample
Sample Description: 74MW6
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-07.890

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	105552.706	22.927	105552.706			ppb
|	Be	9	7.333	31.492	0.000	0.01439	42.09	ppb
|	Na	23	S	S	19999999[illegible]68188500901.27505			ppb
|	Mg	24	S	S	19999999[illegible]81043735614.33841		0.00	ppb
|	Mg	25	20653650.612	30.479	192.974	50468.67910	9.31	ppb
|	Mg	26	25259295.232	31.322	235.747	50028.69101	10.48	ppb
|	Al	27	66745.296	30.058	0.596	14.36037	9.48	ppb
|	K	39	10071862.271	26.605	92.169	1404.74292	5.09	ppb
⌊	Ca	44	24421412.470	28.662	228.785	88623.78824	7.24	ppb
⌈>	Sc	45	439536.067	25.096	439536.067			ppb
|	Ti	47	1106.731	26.035	0.002	1.40303	8.21	ppb
|	V	51	4520.001	15.440	0.007	0.29128	22.55	ppb
|	Cr	52	19865.260	12.784	0.032	1.53714	20.70	ppb
|	Mn	55	84125.297	21.979	0.181	6.39704	6.20	ppb
|	Fe	54	64342.159	7.780	0.033	21.01729	90.79	ppb
|	Fe	56	2396866.788	4.659	1.693	64.05117	79.31	ppb
|	Fe	57	68751.792	22.542	0.150	243.92781	9.34	ppb
|	Co	59	2702.379	23.976	0.006	0.20611	12.20	ppb
|	Ni	60	6137.512	24.221	0.014	2.22048	12.49	ppb
|	Cu	63	2802.621	15.140	0.006	0.38837	16.21	ppb
|	Cu	65	2027.992	24.608	0.004	0.60242	4.10	ppb
|	Zn	66	3487.294	21.863	0.007	2.28236	6.81	ppb
|	As	75	266.607	38.921	0.001	0.18034	16.60	ppb
⌊	Se	82	233.781	23.877	0.000	1.29935	2.00	ppb
⌈	Mo	96	2520.992	19.270	0.002	0.76608	2.52	ppb
|	Ag	107	84.445	8.217	0.000	0.00417	56.45	ppb
|	Ag	109	46.667	44.607	0.000	0.00135	217.59	ppb
|	Cd	111	47.003	36.864	0.000	0.02115	26.38	ppb
|	In	113	49543.824	19.421	0.002	1.11578	5.86	ppb
|>	In	115	1084890.241	19.565	1084890.241			ppb
⌊	Sn	118	953.379	10.415	0.001	0.12784	13.74	ppb
⌈	Sb	121	885.039	8.148	0.000	0.04603	42.30	ppb
|	Ba	135	341341.046	18.972	0.180	154.62620	2.24	ppb
|	Ba	137	604663.748	19.410	0.319	156.70526	1.76	ppb
⌊>	Tb	159	1901673.326	20.832	1901673.326			ppb
⌈	Tl	205	208.336	26.761	0.000	0.00542	11.57	ppb
|	Pb	206	2698.711	23.292	0.002	0.25473	4.80	ppb
|	Pb	207	5013.987	22.246	0.004	0.25407	4.95	ppb
|	Pb	208	8095.319	19.403	0.006	0.25977	3.42	ppb
⌊>	Bi	209	1271548.272	19.998	1271548.272			ppb
	Cr	53	2852.411	11.848	-818.266			ppb
	Pd	106	11.667	24.744	8.333			ppb
	Pd	108	3.333	86.603	-0.000			ppb
	C	12	504846.722	8.643	117207.479			ppb
	Kr	83	38.667	13.017	-14.000			ppb
	Se	77	273.559	19.709	158.670			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	77618.064		ppb
	Be	9	6.000	0.016685	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13389495.050	45115.323429	ppb
	Mg	26	16232440.858	44380.344566	ppb
	Al	27	43896.133	12.940873	ppb
	K	39	7006627.493	1335.562625	ppb
	Ca	44	16409041.821	81804.236885	ppb
>	Sc	45	316221.995		ppb
	Ti	47	775.030	1.364056	ppb
	V	51	3884.838	0.365459	ppb
	Cr	52	17022.476	1.899438	ppb
	Mn	55	62776.427	6.604740	ppb
	Fe	54	58661.556	42.670088	ppb
	Fe	56	2271418.433	120.988198	ppb
	Fe	57	51095.203	250.456435	ppb
	Co	59	1988.198	0.209401	ppb
	Ni	60	4514.352	2.253888	ppb
	Cu	63	2343.608	0.444448	ppb
	Cu	65	1453.439	0.599387	ppb
	Zn	66	2607.006	2.361121	ppb
	As	75	147.189	0.146308	ppb
	Se	82	170.668	1.319085	ppb
	Mo	96	1964.193	0.770672	ppb
	Ag	107	90.000	0.006856	ppb
	Ag	109	63.334	0.004397	ppb
	Cd	111	32.275	0.018812	ppb
	In	113	38433.716	1.161811	ppb
>	In	115	839828.526		ppb
	Sn	118	845.036	0.147294	ppb
	Sb	121	805.032	0.068236	ppb
	Ba	135	266656.506	158.556783	ppb
	Ba	137	469144.607	159.708235	ppb
>	Tb	159	1444359.325		ppb
	Tl	205	145.001	0.004782	ppb
	Pb	206	1975.195	0.242384	ppb
	Pb	207	3745.352	0.246766	ppb
	Pb	208	6301.183	0.262829	ppb
>	Bi	209	978010.587		ppb
	Cr	53	2462.303		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	454601.472		ppb
	Kr	83	44.000		ppb
	Se	77	213.336		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	118908.787		ppb
	Be	9	10.000	0.018962	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	24511533.853	53911.252914	ppb
	Mg	26	28555806.007	50962.471676	ppb
	Al	27	74864.187	14.484265	ppb
	K	39	11239236.189	1400.324827	ppb
	Ca	44	27507897.643	89523.918708	ppb
>	Sc	45	473569.006		ppb

	Ti	47	1295.084	1.532659	ppb
	V	51	4408.055	0.240504	ppb
	Cr	52	20663.327	1.408926	ppb
	Mn	55	94575.118	6.646668	ppb
	Fe	54	66258.787	13.722275	ppb
	Fe	56	2485403.562	47.799956	ppb
	Fe	57	80104.557	262.732560	ppb
	Co	59	3252.529	0.229449	ppb
	Ni	60	7432.761	2.479530	ppb
	Cu	63	3180.506	0.400367	ppb
	Cu	65	2276.926	0.628487	ppb
	Zn	66	3937.442	2.382761	ppb
	As	75	317.835	0.202560	ppb
	Se	82	254.003	1.309103	ppb
	Mo	96	2740.375	0.744913	ppb
	Ag	107	86.667	0.003237	ppb
	Ag	109	23.333	-0.001478	ppb
	Cd	111	42.640	0.017115	ppb
	In	113	55131.557	1.040881	ppb
>	In	115	1210721.633		ppb
	Sn	118	975.048	0.113156	ppb
	Sb	121	905.041	0.031855	ppb
	Ba	135	381935.043	153.277591	ppb
	Ba	137	671550.458	154.296401	ppb
>	Tb	159	2140018.692		ppb
	Tl	205	250.003	0.006036	ppb
	Pb	206	3010.453	0.254985	ppb
	Pb	207	5455.752	0.246850	ppb
	Pb	208	8762.294	0.249751	ppb
>	Bi	209	1424200.509		ppb
	Cr	53	3056.467		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	526704.987		ppb
	Kr	83	38.000		ppb
	Se	77	290.004		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	120131.268		ppb
	Be	9	6.000	0.007521	ppb
	Na	23		68188500901.275040	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	24059922.933	52379.460963	ppb
	Mg	26	30989638.830	54743.256799	ppb
	Al	27	81475.567	15.655973	ppb
	K	39	11969723.131	1478.341316	ppb
	Ca	44	29347297.945	94543.209118	ppb
>	Sc	45	528817.199		ppb
	Ti	47	1250.078	1.312379	ppb
	V	51	5267.110	0.267872	ppb
	Cr	52	21909.976	1.303049	ppb
	Mn	55	95024.346	5.939711	ppb
	Fe	54	68106.135	6.659494	ppb
	Fe	56	2433778.370	23.365362	ppb
	Fe	57	75055.614	218.594423	ppb
	Co	59	2866.411	0.179475	ppb
	Ni	60	6465.423	1.928027	ppb
	Cu	63	2883.749	0.320299	ppb
	Cu	65	2353.610	0.579384	ppb
	Zn	66	3917.434	2.103211	ppb
	As	75	334.798	0.192157	ppb
	Se	82	276.670	1.269859	ppb

⌈	Mo	96	2858.408	0.782650	ppb
|	Ag	107	76.667	0.002432	ppb
|	Ag	109	53.333	0.001140	ppb
|	Cd	111	66.095	0.027513	ppb
|	In	113	55066.198	1.144653	ppb
|>	In	115	1204120.564		ppb
⌊	Sn	118	1040.054	0.123082	ppb
⌈	Sb	121	945.045	0.038005	ppb
|	Ba	135	375431.590	152.044216	ppb
|	Ba	137	673296.179	156.111140	ppb
⌊>	Tb	159	2120641.961		ppb
⌈	Tl	205	230.003	0.005452	ppb
|	Pb	206	3110.484	0.266817	ppb
|	Pb	207	5840.856	0.268586	ppb
|	Pb	208	9222.479	0.266730	ppb
⌊>	Bi	209	1412433.718		ppb
	Cr	53	3038.462		ppb
	Pd	106	15.000		ppb
	Pd	108	5.000		ppb
	C	12	533233.706		ppb
	Kr	83	34.000		ppb
	Se	77	317.338		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			87.057		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			86.783		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			77.647		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			87.270		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			76.674		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910085-08

Sample Date/Time: Monday, November 09, 2009 20:35:21
Sample Type: Sample
Sample Description: 74MW7
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910085-08.891

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	113242.838	26.370	113242.838			ppb
	Be	9	2.667	114.564	-0.000	-0.00229	349.52	ppb
	Na	23	10175212.369	24.726	90.221	3076.01499	5.88	ppb
	Mg	24	76658707.480	23.358	683.094	27680.22687	8.46	ppb
	Mg	25	11617568.438	21.831	103.771	27139.33822	8.33	ppb
	Mg	26	13986435.276	18.968	125.595	26652.96397	10.02	ppb
	Al	27	17558.997	15.951	0.130	3.13704	16.03	ppb
	K	39	10615919.809	20.170	92.373	1407.85291	7.85	ppb
	Ca	44	15553160.530	22.278	138.346	53590.46297	5.20	ppb
>	Sc	45	458824.653	24.343	458824.653			ppb
	Ti	47	605.018	5.726	0.001	0.72449	28.56	ppb
	V	51	2622.289	7.450	0.002	0.09776	50.86	ppb
	Cr	52	9204.238	3.564	0.007	0.31485	77.88	ppb
	Mn	55	33369.023	21.920	0.062	2.17384	3.50	ppb
	Fe	54	101782.233	14.214	0.108	68.60757	26.16	ppb
	Fe	56	3001374.120	8.375	2.764	104.55675	46.25	ppb
	Fe	57	63085.486	23.277	0.131	211.88921	2.24	ppb
	Co	59	1814.170	21.562	0.004	0.12964	4.49	ppb
	Ni	60	3629.558	15.756	0.008	1.26343	10.56	ppb
	Cu	63	3659.585	24.349	0.008	0.48027	0.75	ppb
	Cu	65	2193.577	13.296	0.005	0.63912	13.86	ppb
	Zn	66	14811.265	20.432	0.032	9.85380	5.57	ppb
	As	75	2123.818	17.840	0.005	1.30122	7.75	ppb
	Se	82	54.445	6.963	0.000	0.08055	124.10	ppb
	Mo	96	11535.447	17.195	0.010	3.30349	1.56	ppb
	Ag	107	95.556	13.207	0.000	0.00427	28.31	ppb
	Ag	109	36.667	9.091	-0.000	-0.00017	437.34	ppb
	Cd	111	47.704	43.570	0.000	0.02098	57.46	ppb
	In	113	53918.930	15.438	0.002	1.12318	76.75	ppb
>	In	115	1185277.445	18.544	1185277.445			ppb
	Sn	118	598.352	17.255	0.000	0.06224	2.50	ppb
	Sb	121	1001.717	11.076	0.000	0.05281	24.08	ppb
	Ba	135	160374.439	15.961	0.079	68.24666	2.11	ppb
	Ba	137	285605.313	16.482	0.141	69.54629	3.05	ppb
>	Tb	159	2014273.829	14.146	2014273.829			ppb
	Tl	205	175.002	39.590	0.000	0.00348	39.34	ppb
	Pb	206	5449.858	20.030	0.004	0.48648	3.84	ppb
	Pb	207	10067.611	18.657	0.007	0.48107	2.31	ppb
	Pb	208	16273.002	16.830	0.011	0.49166	2.66	ppb
>	Bi	209	1415860.395	18.677	1415860.395			ppb
	Cr	53	1310.086	2.121	-2360.590			ppb
	Pd	106	43.333	35.251	40.000			ppb
	Pd	108	28.333	10.189	25.000			ppb
	C	12	534330.250	7.949	146691.007			ppb
	Kr	83	52.000	26.923	-0.667			ppb
	Se	77	102.223	17.817	-12.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	78875.848		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	7310600.135	3157.770029	ppb
	Mg	24	56716322.201	29137.434692	ppb
	Mg	25	8754615.733	29027.861137	ppb
	Mg	26	10953883.534	29470.825528	ppb
	Al	27	14350.289	3.697734	ppb
	K	39	8144199.575	1533.432687	ppb
	Ca	44	11552348.280	56646.666910	ppb
>	Sc	45	329975.838		ppb
	Ti	47	585.017	0.961300	ppb
	V	51	2398.922	0.154956	ppb
	Cr	52	8831.898	0.597566	ppb
	Mn	55	24926.027	2.260863	ppb
	Fe	54	85236.723	88.894138	ppb
	Fe	56	2713940.985	160.393163	ppb
	Fe	57	46141.206	215.190714	ppb
	Co	59	1364.093	0.135066	ppb
	Ni	60	2970.441	1.415443	ppb
	Cu	63	2633.680	0.480598	ppb
	Cu	65	1856.839	0.741064	ppb
	Zn	66	11333.085	10.410398	ppb
	As	75	1686.335	1.416649	ppb
	Se	82	53.333	0.192652	ppb
	Mo	96	9248.275	3.362478	ppb
	Ag	107	86.667	0.005415	ppb
	Ag	109	36.667	0.000622	ppb
	Cd	111	58.649	0.031764	ppb
	In	113	44328.031	2.118331	ppb
>	In	115	931957.593		ppb
	Sn	118	480.012	0.063819	ppb
	Sb	121	900.041	0.061799	ppb
	Ba	135	131172.708	66.778514	ppb
	Ba	137	231253.341	67.401881	ppb
>	Tb	159	1686817.652		ppb
	Tl	205	95.000	0.001899	ppb
	Pb	206	4220.891	0.480647	ppb
	Pb	207	7926.577	0.482798	ppb
	Pb	208	13115.111	0.504440	ppb
>	Bi	209	1110652.541		ppb
	Cr	53	1324.088		ppb
	Pd	106	60.000		ppb
	Pd	108	30.000		ppb
	C	12	486744.564		ppb
	Kr	83	58.000		ppb
	Se	77	82.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	132866.855		ppb
	Be	9	2.000	-0.004167	ppb
	Na	23	11188620.609	2868.799693	ppb
	Mg	24	81903035.114	24978.725463	ppb
	Mg	25	12515141.800	24634.330548	ppb
	Mg	26	15127257.744	24160.774172	ppb
	Al	27	18812.679	2.725610	ppb
	K	39	11903581.285	1325.194552	ppb
	Ca	44	17590556.424	51196.389083	ppb
>	Sc	45	528127.127		ppb

	Ti	47	645.021	0.633645	ppb
	V	51	2706.592	0.064918	ppb
	Cr	52	9330.351	0.159924	ppb
	Mn	55	37786.255	2.119885	ppb
	Fe	54	108055.664	54.793059	ppb
	Fe	56	3180098.354	77.049731	ppb
	Fe	57	71006.202	206.461885	ppb
	Co	59	2006.201	0.123495	ppb
	Ni	60	3924.103	1.165563	ppb
	Cu	63	4240.899	0.483682	ppb
	Cu	65	2356.944	0.581051	ppb
	Zn	66	16259.875	9.313334	ppb
	As	75	2338.847	1.230156	ppb
	Se	82	51.333	0.000695	ppb
	Mo	96	12573.900	3.280415	ppb
	Ag	107	90.000	0.003006	ppb
	Ag	109	40.000	-0.000272	ppb
	Cd	111	60.730	0.023220	ppb
	In	113	58163.660	0.645963	ppb
>	In	115	1298508.327		ppb
	Sn	118	645.021	0.060706	ppb
	Sb	121	985.049	0.038258	ppb
	Ba	135	178932.649	69.661523	ppb
	Ba	137	312231.498	69.593692	ppb
>	Tb	159	2205775.734		ppb
	Tl	205	215.002	0.004301	ppb
	Pb	206	5821.694	0.471400	ppb
	Pb	207	10837.952	0.469197	ppb
	Pb	208	17999.681	0.492188	ppb
>	Bi	209	1560250.659		ppb
	Cr	53	1328.088		ppb
	Pd	106	30.000		ppb
	Pd	108	30.000		ppb
	C	12	547844.577		ppb
	Kr	83	36.000		ppb
	Se	77	107.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	127985.811		ppb
	Be	9	6.000	0.006495	ppb
	Na	23	12026416.363	3201.475239	ppb
	Mg	24	91356765.125	28924.520449	ppb
	Mg	25	13582947.781	27755.822973	ppb
	Mg	26	15878164.549	26327.292203	ppb
	Al	27	19514.021	2.987762	ppb
	K	39	11799978.569	1364.931479	ppb
	Ca	44	17516576.887	52928.332918	ppb
>	Sc	45	518370.995		ppb
	Ti	47	585.017	0.578537	ppb
	V	51	2761.354	0.073401	ppb
	Cr	52	9450.463	0.187063	ppb
	Mn	55	37394.788	2.140774	ppb
	Fe	54	112054.311	62.135515	ppb
	Fe	56	3110083.023	76.227361	ppb
	Fe	57	72109.052	214.015024	ppb
	Co	59	2072.215	0.130359	ppb
	Ni	60	3994.131	1.209272	ppb
	Cu	63	4104.175	0.476541	ppb
	Cu	65	2366.947	0.595245	ppb
	Zn	66	16840.835	9.837656	ppb
	As	75	2346.271	1.256867	ppb
	Se	82	58.667	0.048293	ppb

⌈	Mo	96	12784.167	3.267572	ppb
|	Ag	107	110.001	0.004398	ppb
|	Ag	109	33.333	-0.000863	ppb
|	Cd	111	23.734	0.007964	ppb
|	In	113	59265.099	0.605240	ppb
|>	In	115	1325366.416		ppb
⌊	Sn	118	670.022	0.062201	ppb
⌈	Sb	121	1120.063	0.058371	ppb
|	Ba	135	171017.959	68.299949	ppb
|	Ba	137	313331.101	71.643300	ppb
⌊>	Tb	159	2150228.100		ppb
⌈	Tl	205	215.002	0.004235	ppb
|	Pb	206	6306.988	0.507381	ppb
|	Pb	207	11438.304	0.491206	ppb
|	Pb	208	17704.215	0.478338	ppb
⌊>	Bi	209	1576677.985		ppb
	Cr	53	1278.082		ppb
	Pd	106	40.000		ppb
	Pd	108	25.000		ppb
	C	12	568401.608		ppb
	Kr	83	62.000		ppb
	Se	77	117.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			93.399		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			90.591		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			84.832		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			92.438		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			85.376		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101926-PS1

Sample Date/Time: Monday, November 09, 2009 20:38:32
Sample Type: Sample
Sample Description: 74MW4A
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101926-PS1.892

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	110501.671	21.487	110501.671			ppb
	Be	9	810.700	20.645	0.007	2.45338	4.85	ppb
	Na	23	21744211.911	18.461	197.695	6740.26208	3.60	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	13096864.152	22.828	118.311	30941.98896	4.79	ppb
	Mg	26	15941374.104	24.117	143.848	30526.52592	7.63	ppb
	Al	27	698011.550	22.695	6.276	151.21609	2.99	ppb
	K	39	11921185.779	25.042	104.656	1595.05495	6.63	ppb
	Ca	44	16548844.331	26.775	148.224	57416.96025	7.19	ppb
>	Sc	45	449876.754	25.133	449876.754			ppb
	Ti	47	1938.530	26.692	0.004	2.46067	3.51	ppb
	V	51	115134.121	23.261	0.253	10.63428	2.75	ppb
	Cr	52	58466.095	19.611	0.117	5.63510	8.29	ppb
	Mn	55	115711.300	22.572	0.247	8.73605	6.08	ppb
	Fe	54	430288.552	21.414	0.846	537.17996	6.63	ppb
	Fe	56	8578733.176	16.906	15.465	584.99652	16.41	ppb
	Fe	57	199946.745	21.986	0.440	714.10175	4.90	ppb
	Co	59	27478.392	23.270	0.061	2.10932	3.08	ppb
	Ni	60	10129.651	15.221	0.023	3.63743	12.09	ppb
	Cu	63	29573.465	17.718	0.066	4.20623	9.04	ppb
	Cu	65	14713.271	17.974	0.033	4.52877	8.79	ppb
	Zn	66	16841.129	17.631	0.037	11.54281	9.34	ppb
	As	75	4365.508	21.508	0.010	2.69330	4.94	ppb
	Se	82	1808.613	21.359	0.004	11.78319	4.97	ppb
	Mo	96	10629.132	20.131	0.009	3.06667	6.36	ppb
	Ag	107	23967.097	18.206	0.020	2.07931	6.20	ppb
	Ag	109	23235.432	19.625	0.020	2.06900	4.36	ppb
	Cd	111	5090.931	20.884	0.004	2.28723	2.89	ppb
	In	113	59088.096	18.711	0.007	3.64604	37.57	ppb
>	In	115	1175309.202	20.696	1175309.202			ppb
	Sn	118	16116.534	16.111	0.014	2.32292	5.01	ppb
	Sb	121	29959.354	20.149	0.015	3.95582	5.48	ppb
	Ba	135	459448.867	16.859	0.230	197.34809	2.80	ppb
	Ba	137	798587.736	16.916	0.399	196.37629	2.98	ppb
>	Tb	159	1997378.971	15.829	1997378.971			ppb
	Tl	205	73822.991	13.277	0.053	2.43306	3.89	ppb
	Pb	206	26895.028	15.490	0.019	2.54788	2.02	ppb
	Pb	207	49637.953	15.533	0.035	2.50867	1.35	ppb
	Pb	208	81102.643	16.645	0.057	2.58289	1.82	ppb
>	Bi	209	1399394.364	16.709	1399394.364			ppb
	Cr	53	7205.986	18.213	3535.310			ppb
	Pd	106	485.012	14.869	481.679			ppb
	Pd	108	378.341	18.518	375.007			ppb
	C	12	526589.567	5.346	138950.324			ppb
	Kr	83	40.667	32.746	-12.000			ppb
	Se	77	1411.213	19.317	1296.324			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	83517.307		ppb
	Be	9	618.019	2.469622	ppb
	Na	23	17136720.360	6993.467130	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	9648081.635	30212.492432	ppb
	Mg	26	11558945.882	29370.406605	ppb
	Al	27	515355.469	147.998393	ppb
	K	39	8477411.686	1506.783171	ppb
	Ca	44	11436582.615	52956.707544	ppb
>	Sc	45	319323.245		ppb
	Ti	47	1345.090	2.410401	ppb
	V	51	84261.591	10.925548	ppb
	Cr	52	45352.610	6.141762	ppb
	Mn	55	86260.445	9.134290	ppb
	Fe	54	325270.383	571.621264	ppb
	Fe	56	7042995.307	683.609522	ppb
	Fe	57	149590.560	748.080785	ppb
	Co	59	20122.225	2.167605	ppb
	Ni	60	8353.488	4.143220	ppb
	Cu	63	23524.304	4.645448	ppb
	Cu	65	11663.465	4.987304	ppb
	Zn	66	13422.335	12.781453	ppb
	As	75	3286.426	2.833671	ppb
	Se	82	1363.426	12.432105	ppb
	Mo	96	8159.327	3.025123	ppb
	Ag	107	18931.236	2.104933	ppb
	Ag	109	18016.215	2.061428	ppb
	Cd	111	3893.549	2.252620	ppb
	In	113	46377.294	3.833524	ppb
>	In	115	913059.109		ppb
	Sn	118	13263.791	2.445255	ppb
	Sb	121	22991.400	3.719258	ppb
	Ba	135	370021.439	194.204025	ppb
	Ba	137	642655.405	193.106438	ppb
>	Tb	159	1636374.721		ppb
	Tl	205	62560.078	2.542331	ppb
	Pb	206	22149.503	2.594616	ppb
	Pb	207	40761.808	2.547669	ppb
	Pb	208	65532.121	2.583934	ppb
>	Bi	209	1130073.298		ppb
	Cr	53	5697.623		ppb
	Pd	106	425.009		ppb
	Pd	108	300.005		ppb
	C	12	500133.558		ppb
	Kr	83	44.000		ppb
	Se	77	1096.727		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	119793.249		ppb
	Be	9	920.042	2.563538	ppb
	Na	23	23609711.999	6717.287025	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	14954371.683	32648.108970	ppb
	Mg	26	18746212.951	33208.549146	ppb
	Al	27	780858.095	156.377316	ppb
	K	39	13774088.313	1712.189896	ppb
	Ca	44	18926031.179	61111.728274	ppb
>	Sc	45	516213.579		ppb

	Ti	47	2175.237	2.411301	ppb
	V	51	129015.878	10.340095	ppb
	Cr	52	63444.625	5.221908	ppb
	Mn	55	124809.034	8.132668	ppb
	Fe	54	468016.549	500.517677	ppb
	Fe	56	8768201.872	491.804920	ppb
	Fe	57	219584.690	678.215179	ppb
	Co	59	30608.773	2.039179	ppb
	Ni	60	10912.618	3.345102	ppb
	Cu	63	32703.388	3.991324	ppb
	Cu	65	16370.055	4.325764	ppb
	Zn	66	18774.274	11.034580	ppb
	As	75	4813.873	2.569349	ppb
	Se	82	2006.868	11.293797	ppb
	Mo	96	11802.961	3.279159	ppb
	Ag	107	26344.656	2.193582	ppb
	Ag	109	25241.817	2.162858	ppb
	Cd	111	5455.041	2.363319	ppb
	In	113	64411.778	4.912453	ppb
>	In	115	1219356.253		ppb
	Sn	118	16744.006	2.310150	ppb
	Sb	121	33290.320	4.145023	ppb
	Ba	135	505459.579	203.735699	ppb
	Ba	137	880283.521	203.137703	ppb
>	Tb	159	2130760.753		ppb
	Tl	205	78491.844	2.375351	ppb
	Pb	206	28585.799	2.492664	ppb
	Pb	207	53476.739	2.488518	ppb
	Pb	208	89524.139	2.629290	ppb
>	Bi	209	1517448.095		ppb
	Cr	53	7833.067		ppb
	Pd	106	465.011		ppb
	Pd	108	435.009		ppb
	C	12	523463.244		ppb
	Kr	83	52.000		ppb
	Se	77	1580.125		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	128194.458		ppb
	Be	9	894.040	2.326987	ppb
	Na	23	24486203.374	6510.032085	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	14688139.138	29965.365470	ppb
	Mg	26	17518963.480	29000.622021	ppb
	Al	27	797821.088	149.272553	ppb
	K	39	13512057.340	1566.191789	ppb
	Ca	44	19283919.198	58182.444940	ppb
>	Sc	45	514093.439		ppb
	Ti	47	2295.263	2.560316	ppb
	V	51	132124.894	10.637195	ppb
	Cr	52	66601.049	5.541618	ppb
	Mn	55	136064.421	8.941204	ppb
	Fe	54	497578.724	539.400933	ppb
	Fe	56	9925002.349	579.575128	ppb
	Fe	57	230664.984	716.009300	ppb
	Co	59	31704.178	2.121172	ppb
	Ni	60	11122.849	3.423974	ppb
	Cu	63	32492.703	3.981905	ppb
	Cu	65	16106.294	4.273229	ppb
	Zn	66	18326.778	10.812394	ppb
	As	75	4996.226	2.676875	ppb
	Se	82	2055.545	11.623661	ppb

⌈	Mo	96	11925.106	2.895728	ppb
|	Ag	107	26625.398	1.939423	ppb
|	Ag	109	26448.263	1.982716	ppb
|	Cd	111	5924.203	2.245740	ppb
|	In	113	66475.216	2.192131	ppb
|>	In	115	1393512.244		ppb
⌊	Sn	118	18341.806	2.213348	ppb
⌈	Sb	121	33596.341	4.003178	ppb
|	Ba	135	502865.583	194.104544	ppb
|	Ba	137	872824.282	192.884728	ppb
⌊>	Tb	159	2225001.438		ppb
⌈	Tl	205	80417.050	2.381492	ppb
|	Pb	206	29949.782	2.556368	ppb
|	Pb	207	54675.312	2.489811	ppb
|	Pb	208	88251.669	2.535438	ppb
⌊>	Bi	209	1550661.700		ppb
	Cr	53	8087.269		ppb
	Pd	106	565.016		ppb
	Pd	108	400.008		ppb
	C	12	556171.898		ppb
	Kr	83	26.000		ppb
	Se	77	1556.788		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			91.138		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			88.824		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			84.119		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			91.662		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			84.383		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101632-BLK1

Sample Date/Time: Monday, November 09, 2009 20:40:29
Sample Type: Sample
Sample Description: PBW
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101632-BLK1.893

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	127450.422	24.036	127450.422			ppb
	Be	9	4.000	50.000	0.000	0.00184	306.25	ppb
	Na	23	11447.958	30.639	0.033	1.13556	178.93	ppb
	Mg	24	8427.963	18.301	0.064	2.58073	14.62	ppb
	Mg	25	1247.080	21.129	0.009	2.46795	15.72	ppb
	Mg	26	1592.131	23.685	0.011	2.41245	21.99	ppb
	Al	27	2436.966	10.163	-0.008	-0.19630	93.47	ppb
	K	39	310585.294	2.480	-0.079	-1.19714	993.31	ppb
	Ca	44	18451.676	1.122	-0.076	-29.26123	57.12	ppb
>	Sc	45	478971.433	20.575	478971.433			ppb
	Ti	47	46.667	43.301	-0.000	-0.03577	44.94	ppb
	V	51	2312.404	4.239	0.001	0.06008	93.20	ppb
	Cr	52	7390.076	8.543	0.002	0.08688	290.35	ppb
	Mn	55	1841.837	5.357	-0.008	-0.26741	11.23	ppb
	Fe	54	59020.725	5.883	0.008	5.02927	277.39	ppb
	Fe	56	1906500.615	3.410	0.106	4.01649	758.32	ppb
	Fe	57	3292.210	6.432	0.000	0.04838	6927.31	ppb
	Co	59	74.667	20.104	-0.000	-0.00209	74.50	ppb
	Ni	60	122.223	97.663	0.000	0.03257	172.57	ppb
	Cu	63	364.451	26.261	0.000	0.02631	98.81	ppb
	Cu	65	205.558	17.491	0.000	0.03032	86.50	ppb
	Zn	66	385.563	18.830	0.000	0.08246	137.53	ppb
	As	75	-95.510	41.683	-0.000	-0.04006	89.92	ppb
	Se	82	39.333	30.130	-0.000	-0.04758	64.38	ppb
	Mo	96	123.334	14.714	0.000	0.00192	271.60	ppb
	Ag	107	31.111	16.366	-0.000	-0.00170	47.58	ppb
	Ag	109	12.222	15.746	-0.000	-0.00258	0.20	ppb
	Cd	111	10.487	100.524	0.000	0.00301	172.23	ppb
	In	113	64539.980	17.150	0.002	1.28207	25.25	ppb
>	In	115	1401597.521	16.099	1401597.521			ppb
	Sn	118	163.335	48.628	-0.000	-0.00237	607.74	ppb
	Sb	121	878.373	16.245	0.000	0.02616	47.96	ppb
	Ba	135	81.334	14.822	0.000	0.01957	13.27	ppb
	Ba	137	168.001	17.857	0.000	0.02596	16.20	ppb
>	Tb	159	2202709.892	17.963	2202709.892			ppb
	Tl	205	36.667	34.317	-0.000	-0.00100	56.94	ppb
	Pb	206	138.334	12.694	-0.000	-0.01681	21.48	ppb
	Pb	207	256.668	9.610	-0.000	-0.01564	21.95	ppb
	Pb	208	416.672	7.233	-0.000	-0.01617	19.29	ppb
>	Bi	209	1749724.988	19.077	1749724.988			ppb
	Cr	53	1032.720	9.036	-2637.956			ppb
	Pd	106	5.000	100.000	1.667			ppb
	Pd	108	0.000		-3.333			ppb
	C	12	461994.765	1.283	74355.522			ppb
	Kr	83	34.000	5.882	-18.667			ppb
	Se	77	83.778	6.952	-31.111			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	92156.695		ppb
	Be	9	4.000	0.005330	ppb
	Na	23	15496.999	3.481076	ppb
	Mg	24	6911.388	2.893929	ppb
	Mg	25	1004.050	2.719972	ppb
	Mg	26	1309.086	2.727442	ppb
	Al	27	2680.359	0.014735	ppb
	K	39	318971.275	12.508280	ppb
	Ca	44	18569.225	-9.963678	ppb
>	Sc	45	365323.353		ppb
	Ti	47	25.000	-0.051224	ppb
	V	51	2391.476	0.124575	ppb
	Cr	52	8107.285	0.377591	ppb
	Mn	55	1795.161	-0.233717	ppb
	Fe	54	55272.331	20.949618	ppb
	Fe	56	1833183.913	39.089484	ppb
	Fe	57	3475.604	3.872498	ppb
	Co	59	74.000	-0.000641	ppb
	Ni	60	260.003	0.097453	ppb
	Cu	63	470.011	0.056118	ppb
	Cu	65	246.670	0.060532	ppb
	Zn	66	466.678	0.212632	ppb
	As	75	-131.000	-0.079056	ppb
	Se	82	26.000	-0.076855	ppb
	Mo	96	116.001	0.006203	ppb
	Ag	107	36.667	-0.000776	ppb
	Ag	109	10.000	-0.002578	ppb
	Cd	111	22.640	0.008985	ppb
	In	113	51788.757	0.959641	ppb
>	In	115	1141144.377		ppb
	Sn	118	255.003	0.014259	ppb
	Sb	121	770.030	0.036275	ppb
	Ba	135	70.000	0.021945	ppb
	Ba	137	138.001	0.026974	ppb
>	Tb	159	1753073.083		ppb
	Tl	205	50.000	-0.000353	ppb
	Pb	206	155.001	-0.012680	ppb
	Pb	207	285.002	-0.011675	ppb
	Pb	208	445.006	-0.012646	ppb
>	Bi	209	1368431.507		ppb
	Cr	53	1130.064		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	463789.274		ppb
	Kr	83	36.000		ppb
	Se	77	88.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	147148.730		ppb
	Be	9	2.000	-0.004656	ppb
	Na	23	9339.359	-0.088264	ppb
	Mg	24	8377.508	2.161950	ppb
	Mg	25	1210.073	2.021274	ppb
	Mg	26	1447.105	1.799922	ppb
	Al	27	2445.299	-0.285661	ppb
	K	39	303828.520	-8.774318	ppb
	Ca	44	18573.232	-39.122869	ppb
>	Sc	45	530835.004		ppb

	Ti	47	65.000	-0.019136	ppb
	V	51	2202.737	0.023981	ppb
	Cr	52	7144.551	-0.042474	ppb
	Mn	55	1955.191	-0.277186	ppb
	Fe	54	62127.393	-0.802215	ppb
	Fe	56	1957131.644	-11.263175	ppb
	Fe	57	3340.558	-1.350123	ppb
	Co	59	60.000	-0.003732	ppb
	Ni	60	50.000	-0.000720	ppb
	Cu	63	283.337	0.008388	ppb
	Cu	65	190.002	0.016930	ppb
	Zn	66	363.340	0.029767	ppb
	As	75	-52.461	-0.008016	ppb
L	Se	82	48.667	-0.015750	ppb
⌈	Mo	96	110.001	-0.003897	ppb
	Ag	107	30.000	-0.002044	ppb
	Ag	109	13.333	-0.002581	ppb
	Cd	111	3.820	-0.000178	ppb
	In	113	70160.263	1.279413	ppb
>	In	115	1525715.550		ppb
L	Sn	118	115.001	-0.010910	ppb
⌈	Sb	121	1040.054	0.030095	ppb
	Ba	135	94.000	0.019974	ppb
	Ba	137	168.001	0.021341	ppb
L>	Tb	159	2497680.216		ppb
⌈	Tl	205	35.000	-0.001224	ppb
	Pb	206	140.001	-0.018418	ppb
	Pb	207	245.002	-0.017748	ppb
	Pb	208	385.004	-0.018574	ppb
L>	Bi	209	1989171.114		ppb
	Cr	53	1024.052		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	466817.405		ppb
	Kr	83	34.000		ppb
	Se	77	77.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	143045.840		ppb
	Be	9	6.000	0.004841	ppb
	Na	23	9507.517	0.013882	ppb
	Mg	24	9994.992	2.686319	ppb
	Mg	25	1527.117	2.662613	ppb
	Mg	26	2020.204	2.709993	ppb
	Al	27	2185.239	-0.317983	ppb
	K	39	308956.087	-7.325393	ppb
L	Ca	44	18212.570	-38.697152	ppb
⌈>	Sc	45	540755.941		ppb
	Ti	47	50.000	-0.036949	ppb
	V	51	2343.000	0.031673	ppb
	Cr	52	6918.392	-0.074468	ppb
	Mn	55	1775.158	-0.291332	ppb
	Fe	54	59662.451	-5.059605	ppb
	Fe	56	1929186.287	-15.776836	ppb
	Fe	57	3060.468	-2.377238	ppb
	Co	59	90.000	-0.001888	ppb
	Ni	60	56.667	0.000965	ppb
	Cu	63	340.006	0.014411	ppb
	Cu	65	180.002	0.013486	ppb
	Zn	66	326.672	0.004983	ppb
	As	75	-103.070	-0.033115	ppb
L	Se	82	43.333	-0.050145	ppb

⌈	Mo	96	144.001	0.003462	ppb
|	Ag	107	26.667	-0.002281	ppb
|	Ag	109	13.333	-0.002588	ppb
|	Cd	111	5.000	0.000217	ppb
|	In	113	71670.919	1.607147	ppb
|>	In	115	1537932.635		ppb
⌊	Sn	118	120.001	-0.010459	ppb
⌈	Sb	121	825.034	0.012120	ppb
|	Ba	135	80.000	0.016797	ppb
|	Ba	137	198.002	0.029567	ppb
⌊>	Tb	159	2357376.375		ppb
⌈	Tl	205	25.000	-0.001425	ppb
|	Pb	206	120.001	-0.019347	ppb
|	Pb	207	240.001	-0.017483	ppb
|	Pb	208	420.005	-0.017291	ppb
⌊>	Bi	209	1891572.342		ppb
	Cr	53	944.045		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	455377.616		ppb
	Kr	83	32.000		ppb
	Se	77	85.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		105.117			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		94.569			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		100.314			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		101.085			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		105.508			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101632-BS1

Sample Date/Time: Monday, November 09, 2009 20:42:27
Sample Type: Sample
Sample Description: LCSW
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101632-BS1.894

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	122547.003	24.705	122547.003			ppb
	Be	9	38284.459	26.114	0.311	104.34263	2.77	ppb
	Na	23	7841910.612	27.674	63.542	2166.40418	4.07	ppb
	Mg	24	3905068.364	26.054	31.776	1287.62830	2.97	ppb
	Mg	25	588222.102	28.534	4.764	1246.01810	6.41	ppb
	Mg	26	716664.353	27.001	5.825	1236.20377	6.39	ppb
	Al	27	2515310.193	23.625	20.567	495.56797	6.29	ppb
	K	39	15578611.004	24.007	124.811	1902.23880	6.22	ppb
	Ca	44	576868.328	25.986	4.472	1732.27023	5.94	ppb
>	Sc	45	479115.558	26.086	479115.558			ppb
	Ti	47	31.667	9.116	-0.000	-0.05088	20.46	ppb
	V	51	1105433.570	27.283	2.299	96.47876	4.82	ppb
	Cr	52	982125.185	25.891	2.036	97.95655	3.24	ppb
	Mn	55	1398168.028	23.626	2.927	103.38713	7.72	ppb
	Fe	54	809768.754	22.538	1.588	1008.17408	9.16	ppb
	Fe	56	14345538.418	19.073	26.432	999.86806	11.38	ppb
	Fe	57	300913.514	23.756	0.625	1013.47801	7.39	ppb
	Co	59	1361000.677	21.863	2.868	98.99792	7.03	ppb
	Ni	60	301060.375	22.862	0.633	100.68794	7.23	ppb
	Cu	63	709123.521	21.614	1.495	94.76536	7.08	ppb
	Cu	65	349889.630	22.532	0.737	101.21610	7.56	ppb
	Zn	66	323314.666	21.706	0.681	210.04415	7.45	ppb
	As	75	354808.089	20.092	0.750	205.16924	7.82	ppb
	Se	82	32930.304	20.461	0.069	206.91598	6.77	ppb
	Mo	96	233.336	25.287	0.000	0.02881	13.22	ppb
	Ag	107	1317707.432	21.117	0.952	96.83734	3.78	ppb
	Ag	109	1290354.663	19.963	0.934	97.75116	4.17	ppb
	Cd	111	263638.997	19.659	0.191	100.91218	3.27	ppb
	In	113	317351.772	19.463	0.186	98.94280	2.34	ppb
>	In	115	1382949.097	20.547	1382949.097			ppb
	Sn	118	105.001	37.192	-0.000	-0.01021	63.43	ppb
	Sb	121	1577370.991	20.359	0.729	197.15216	2.68	ppb
	Ba	135	255416.770	18.961	0.118	101.55958	1.45	ppb
	Ba	137	442340.954	18.614	0.205	100.75490	1.77	ppb
>	Tb	159	2157638.478	18.145	2157638.478			ppb
	Tl	205	7774532.641	17.651	4.561	209.64156	4.43	ppb
	Pb	206	2546840.197	19.375	1.491	199.54153	6.28	ppb
	Pb	207	4754113.648	18.461	2.787	198.87031	5.30	ppb
	Pb	208	7662200.388	17.556	4.496	202.44266	4.55	ppb
>	Bi	209	1697757.392	13.697	1697757.392			ppb
	Cr	53	115047.638	23.658	111376.962			ppb
	Pd	106	23231.176	22.280	23227.843			ppb
	Pd	108	17210.199	20.220	17206.866			ppb
	C	12	466235.177	2.436	78595.934			ppb
	Kr	83	32.667	27.608	-20.000			ppb
	Se	77	25306.798	19.599	25191.909			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	87981.341		ppb
	Be	9	26761.762	101.884127	ppb
	Na	23	5345391.324	2069.176927	ppb
	Mg	24	2731561.199	1257.939458	ppb
	Mg	25	394457.358	1172.426088	ppb
	Mg	26	494267.613	1191.898995	ppb
	Al	27	1836202.176	502.194803	ppb
	K	39	11299607.086	1917.175339	ppb
	Ca	44	404480.048	1692.839909	ppb
>	Sc	45	336839.065		ppb
	Ti	47	30.000	-0.038969	ppb
	V	51	757267.805	94.212566	ppb
	Cr	52	688616.048	97.644916	ppb
	Mn	55	1022072.467	106.768842	ppb
	Fe	54	602849.683	1061.198885	ppb
	Fe	56	11209475.855	1108.135051	ppb
	Fe	57	219303.622	1044.180310	ppb
	Co	59	1018524.573	104.370740	ppb
	Ni	60	222242.444	104.877478	ppb
	Cu	63	532587.955	100.224332	ppb
	Cu	65	259722.894	105.931322	ppb
	Zn	66	242693.020	222.014096	ppb
	As	75	272499.673	221.265340	ppb
	Se	82	25202.385	222.626108	ppb
	Mo	96	174.002	0.027193	ppb
	Ag	107	997505.751	95.090155	ppb
	Ag	109	993218.256	97.412572	ppb
	Cd	111	204069.783	101.099670	ppb
	In	113	247228.787	99.937431	ppb
>	In	115	1066972.651		ppb
	Sn	118	125.001	-0.003809	ppb
	Sb	121	1211427.587	191.858884	ppb
	Ba	135	200298.076	100.722292	ppb
	Ba	137	349214.912	100.537988	ppb
>	Tb	159	1707810.369		ppb
	Tl	205	6200937.477	199.353920	ppb
	Pb	206	1978136.541	185.107605	ppb
	Pb	207	3747063.312	187.029159	ppb
	Pb	208	6133697.542	193.170485	ppb
>	Bi	209	1429607.062		ppb
	Cr	53	83626.211		ppb
	Pd	106	17259.882		ppb
	Pd	108	13198.705		ppb
	C	12	454160.080		ppb
	Kr	83	24.000		ppb
	Se	77	19589.168		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	135305.224		ppb
	Be	9	43434.122	107.522893	ppb
	Na	23	8902836.728	2241.087250	ppb
	Mg	24	4443849.399	1330.720621	ppb
	Mg	25	688599.847	1330.865147	ppb
	Mg	26	846528.408	1327.411335	ppb
	Al	27	2939992.832	522.874465	ppb
	K	39	18223346.920	2012.452204	ppb
	Ca	44	676576.881	1848.962740	ppb
>	Sc	45	571189.946		ppb

	Ti	47	35.000	-0.055476	ppb
	V	51	1272953.599	93.391583	ppb
	Cr	52	1135678.629	94.947449	ppb
	Mn	55	1531110.225	94.274128	ppb
	Fe	54	878613.827	901.513812	ppb
	Fe	56	15581511.780	881.188031	ppb
	Fe	57	330993.660	928.105210	ppb
	Co	59	1508254.367	91.142121	ppb
	Ni	60	331622.314	92.285190	ppb
	Cu	63	786527.559	87.281323	ppb
	Cu	65	384132.176	92.388383	ppb
	Zn	66	356555.243	192.325685	ppb
	As	75	395029.692	189.158290	ppb
	Se	82	37574.460	195.700380	ppb
	Mo	96	234.003	0.026071	ppb
	Ag	107	1454735.760	101.042132	ppb
	Ag	109	1427194.558	101.988534	ppb
	Cd	111	288427.005	104.112840	ppb
	In	113	341136.108	100.598366	ppb
>	In	115	1464387.914		ppb
	Sn	118	60.000	-0.016757	ppb
	Sb	121	1708423.158	197.167344	ppb
	Ba	135	274804.703	100.698505	ppb
	Ba	137	472312.630	99.086908	ppb
>	Tb	159	2343632.942		ppb
	Tl	205	8399896.883	212.157587	ppb
	Pb	206	2800918.293	205.916881	ppb
	Pb	207	5159464.766	202.322655	ppb
	Pb	208	8187094.849	202.566674	ppb
>	Bi	209	1819699.881		ppb
	Cr	53	130171.756		ppb
	Pd	106	25998.753		ppb
	Pd	108	19013.058		ppb
	C	12	476703.808		ppb
	Kr	83	32.000		ppb
	Se	77	28453.757		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	144354.444		ppb
	Be	9	44657.492	103.620871	ppb
	Na	23	9277503.783	2188.948367	ppb
	Mg	24	4539794.492	1274.224807	ppb
	Mg	25	681609.100	1234.763064	ppb
	Mg	26	809197.039	1189.300969	ppb
	Al	27	2769735.572	461.634637	ppb
	K	39	17212879.005	1777.088852	ppb
	Ca	44	649548.054	1655.008041	ppb
>	Sc	45	529317.662		ppb
	Ti	47	30.000	-0.058208	ppb
	V	51	1286079.305	101.832142	ppb
	Cr	52	1122080.878	101.277277	ppb
	Mn	55	1641321.392	109.118423	ppb
	Fe	54	947842.752	1061.809530	ppb
	Fe	56	16245627.620	1010.281098	ppb
	Fe	57	352443.260	1068.148519	ppb
	Co	59	1556223.093	101.480891	ppb
	Ni	60	349316.365	104.901149	ppb
	Cu	63	808255.051	96.790429	ppb
	Cu	65	405813.820	105.328598	ppb
	Zn	66	370695.736	215.792678	ppb
	As	75	396894.902	205.084075	ppb
	Se	82	36014.067	202.421446	ppb

⌈	Mo	96	292.004	0.033156	ppb
|	Ag	107	1500880.784	94.379738	ppb
|	Ag	109	1450651.175	93.852378	ppb
|	Cd	111	298420.204	97.524018	ppb
|	In	113	363690.420	96.292614	ppb
|>	In	115	1617486.728		ppb
⌊	Sn	118	130.001	-0.010061	ppb
⌈	Sb	121	1812262.229	202.430256	ppb
|	Ba	135	291147.530	103.257930	ppb
|	Ba	137	505495.319	102.639790	ppb
⌊>	Tb	159	2421472.124		ppb
⌈	Tl	205	8722763.562	217.413172	ppb
|	Pb	206	2861465.757	207.600110	ppb
|	Pb	207	5355812.866	207.259122	ppb
|	Pb	208	8665808.774	211.590815	ppb
⌊>	Bi	209	1843965.233		ppb
	Cr	53	131344.947		ppb
	Pd	106	26434.894		ppb
	Pd	108	19418.836		ppb
	C	12	467841.644		ppb
	Kr	83	42.000		ppb
	Se	77	27877.470		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.073			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		94.597			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		98.980			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		99.017			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		102.374			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-01

Sample Date/Time: Monday, November 09, 2009 20:44:24
Sample Type: Sample
Sample Description: 16WC1A
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-01.895

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	106743.277	25.987	106743.277			ppb
	Be	9	4.667	24.744	0.000	0.00590	65.71	ppb
	Na	23	14212029.725	26.086	133.085	4537.43557	1.57	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	16868436.579	24.757	158.560	41468.40748	4.83	ppb
	Mg	26	20020358.612	24.664	188.353	39970.97419	6.23	ppb
	Al	27	27833.244	21.870	0.235	5.67231	11.25	ppb
	K	39	18885720.604	21.846	176.171	2685.00584	8.46	ppb
	Ca	44	22702873.184	21.344	214.779	83198.42788	7.59	ppb
>	Sc	45	418823.769	22.996	418823.769			ppb
	Ti	47	921.711	25.770	0.002	1.21573	10.73	ppb
	V	51	3030.584	10.011	0.004	0.16169	34.35	ppb
	Cr	52	8317.458	1.591	0.006	0.30399	83.07	ppb
	Mn	55	1331010.360	24.488	3.158	111.54345	2.65	ppb
	Fe	54	115146.982	17.184	0.160	101.30698	12.03	ppb
	Fe	56	3174249.674	12.365	3.743	141.57687	25.88	ppb
	Fe	57	90371.412	20.747	0.210	339.96752	4.78	ppb
	Co	59	106533.075	22.750	0.254	8.78056	3.52	ppb
	Ni	60	11526.860	22.340	0.027	4.36531	1.94	ppb
	Cu	63	4512.142	13.788	0.011	0.66928	11.46	ppb
	Cu	65	2543.664	17.694	0.006	0.81104	7.57	ppb
	Zn	66	5640.519	19.451	0.013	3.99942	4.84	ppb
	As	75	938.108	21.672	0.002	0.63340	4.00	ppb
	Se	82	78.889	9.347	0.000	0.30498	69.99	ppb
	Mo	96	756.696	18.392	0.001	0.21384	4.67	ppb
	Ag	107	163.335	12.745	0.000	0.01185	27.51	ppb
	Ag	109	142.223	23.477	0.000	0.01044	17.14	ppb
	Cd	111	51.760	36.489	0.000	0.02579	56.81	ppb
	In	113	48060.782	17.091	0.002	0.81456	83.94	ppb
>	In	115	1069274.354	19.500	1069274.354			ppb
	Sn	118	395.008	19.773	0.000	0.03980	26.58	ppb
	Sb	121	6702.273	13.709	0.004	0.95000	35.18	ppb
	Ba	135	420841.531	20.310	0.230	197.41581	2.29	ppb
	Ba	137	740555.923	19.564	0.405	199.10371	1.52	ppb
>	Tb	159	1825772.321	18.334	1825772.321			ppb
	Tl	205	1375.095	8.459	0.001	0.04947	15.32	ppb
	Pb	206	838.369	8.357	0.000	0.06503	37.97	ppb
	Pb	207	1540.060	5.633	0.001	0.06333	23.96	ppb
	Pb	208	2511.857	13.123	0.001	0.06422	14.18	ppb
>	Bi	209	1251741.171	20.391	1251741.171			ppb
	Cr	53	1209.407	7.327	-2461.269			ppb
	Pd	106	11.667	24.744	8.333			ppb
	Pd	108	6.667	43.301	3.333			ppb
	C	12	491948.765	8.317	104309.522			ppb
	Kr	83	46.000	19.924	-6.667			ppb
	Se	77	111.112	11.854	-3.778			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	74871.240		ppb
	Be	9	4.000	0.008687	ppb
	Na	23	9991609.706	4547.645007	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	12075697.718	42181.284651	ppb
	Mg	26	14405873.965	40831.373294	ppb
	Al	27	21147.337	6.119671	ppb
	K	39	14236239.832	2857.708951	ppb
	Ca	44	17170105.556	88746.213933	ppb
>	Sc	45	307944.595		ppb
	Ti	47	685.023	1.229564	ppb
	V	51	2748.503	0.224435	ppb
	Cr	52	8229.385	0.595560	ppb
	Mn	55	954669.860	109.094059	ppb
	Fe	54	92309.091	115.208947	ppb
	Fe	56	2721087.704	183.529875	ppb
	Fe	57	68876.384	351.130137	ppb
	Co	59	78678.301	8.811864	ppb
	Ni	60	8553.657	4.400232	ppb
	Cu	63	3804.057	0.757775	ppb
	Cu	65	2040.208	0.878222	ppb
	Zn	66	4374.290	4.199300	ppb
	As	75	704.953	0.645077	ppb
	Se	82	86.667	0.549602	ppb
	Mo	96	598.018	0.217932	ppb
	Ag	107	156.668	0.015175	ppb
	Ag	109	110.001	0.010389	ppb
	Cd	111	67.275	0.041389	ppb
	In	113	38579.275	1.568741	ppb
>	In	115	829130.131		ppb
	Sn	118	345.006	0.047001	ppb
	Sb	121	7497.810	1.326437	ppb
	Ba	135	322249.917	192.210732	ppb
	Ba	137	573985.389	196.007904	ppb
>	Tb	159	1439888.933		ppb
	Tl	205	1250.078	0.057991	ppb
	Pb	206	860.037	0.092380	ppb
	Pb	207	1440.054	0.080828	ppb
	Pb	208	2155.141	0.074094	ppb
>	Bi	209	957210.092		ppb
	Cr	53	1306.085		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	446705.305		ppb
	Kr	83	36.000		ppb
	Se	77	99.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	125435.804		ppb
	Be	9	4.000	0.001473	ppb
	Na	23	16943502.508	4603.099721	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	18804622.998	39207.180012	ppb
	Mg	26	21967402.160	37164.327905	ppb
	Al	27	29297.855	4.941864	ppb
	K	39	20311400.139	2427.666592	ppb
	Ca	44	24746395.257	76333.003903	ppb
>	Sc	45	466827.877		ppb

	Ti	47	920.042	1.078878	ppb
	V	51	2991.718	0.118801	ppb
	Cr	52	8253.405	0.160544	ppb
	Mn	55	1522915.921	114.820700	ppb
	Fe	54	125978.563	96.226562	ppb
	Fe	56	3407105.141	125.354778	ppb
	Fe	57	103356.381	347.459942	ppb
	Co	59	122805.457	9.073130	ppb
	Ni	60	13045.170	4.426889	ppb
	Cu	63	4761.133	0.621194	ppb
	Cu	65	2683.693	0.757773	ppb
	Zn	66	6308.656	3.986229	ppb
	As	75	1078.389	0.650770	ppb
	Se	82	78.000	0.208911	ppb
	Mo	96	858.037	0.221120	ppb
	Ag	107	146.668	0.008658	ppb
	Ag	109	176.668	0.012247	ppb
	Cd	111	30.730	0.012329	ppb
	In	113	52592.938	0.639783	ppb
>	In	115	1174446.572		ppb
	Sn	118	355.006	0.027654	ppb
	Sb	121	6912.388	0.835273	ppb
	Ba	135	474014.381	199.774845	ppb
	Ba	137	837324.983	202.037032	ppb
>	Tb	159	2037818.897		ppb
	Tl	205	1480.110	0.046921	ppb
	Pb	206	895.040	0.058343	ppb
	Pb	207	1595.065	0.055380	ppb
	Pb	208	2575.200	0.056158	ppb
>	Bi	209	1389619.404		ppb
	Cr	53	1190.071		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	526355.276		ppb
	Kr	83	48.000		ppb
	Se	77	108.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	119922.788		ppb
	Be	9	6.000	0.007550	ppb
	Na	23	15700976.960	4461.561995	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	19724989.019	43016.757768	ppb
	Mg	26	23687799.711	41917.221370	ppb
	Al	27	33054.540	5.955399	ppb
	K	39	22109521.842	2769.641976	ppb
	Ca	44	26192118.738	84516.065793	ppb
>	Sc	45	481698.834		ppb
	Ti	47	1160.067	1.338737	ppb
	V	51	3351.532	0.141849	ppb
	Cr	52	8469.585	0.155878	ppb
	Mn	55	1515445.298	110.715596	ppb
	Fe	54	127153.291	92.485441	ppb
	Fe	56	3394556.179	115.845968	ppb
	Fe	57	98881.472	321.312487	ppb
	Co	59	118115.468	8.456698	ppb
	Ni	60	12981.754	4.268808	ppb
	Cu	63	4971.235	0.628885	ppb
	Cu	65	2907.089	0.797117	ppb
	Zn	66	6238.612	3.812726	ppb
	As	75	1030.983	0.604352	ppb
	Se	82	72.000	0.156432	ppb

⌈	Mo	96	814.033	0.202456	ppb
|	Ag	107	186.668	0.011722	ppb
|	Ag	109	140.001	0.008671	ppb
|	Cd	111	57.275	0.023639	ppb
|	In	113	53010.132	0.235167	ppb
|>	In	115	1204246.359		ppb
⌊	Sn	118	485.012	0.044731	ppb
⌈	Sb	121	5696.622	0.688293	ppb
|	Ba	135	466260.295	200.261866	ppb
|	Ba	137	810357.398	199.266208	ppb
⌊>	Tb	159	1999609.132		ppb
⌈	Tl	205	1395.097	0.043495	ppb
|	Pb	206	760.029	0.044368	ppb
|	Pb	207	1585.063	0.053781	ppb
|	Pb	208	2805.230	0.062400	ppb
⌊>	Bi	209	1408394.017		ppb
	Cr	53	1132.064		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	502785.713		ppb
	Kr	83	54.000		ppb
	Se	77	125.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		88.038			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		82.693			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		76.529			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		83.787			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		75.480			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101632-DUP1

Sample Date/Time: Monday, November 09, 2009 20:46:22
Sample Type: Sample
Sample Description: 16WC1AD
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101632-DUP1.896

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	110122.488	21.733	110122.488			ppb
|	Be	9	2.667	86.603	-0.000	-0.00016	5071.84	ppb
|	Na	23	14729750.819	18.482	134.438	4583.57041	3.85	ppb
|	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
|	Mg	25	16816942.970	21.810	152.711	39938.69328	1.92	ppb
|	Mg	26	20788960.308	20.389	189.289	40169.71332	3.48	ppb
|	Al	27	14128.631	22.087	0.100	2.40643	5.98	ppb
|	K	39	19443698.945	22.727	173.697	2647.30499	3.44	ppb
⌊	Ca	44	23251711.124	21.058	211.164	81797.79284	1.11	ppb
⌈>	Sc	45	430567.792	21.898	430567.792			ppb
|	Ti	47	940.046	22.518	0.002	1.20429	3.05	ppb
|	V	51	2713.922	13.584	0.003	0.11950	33.62	ppb
|	Cr	52	8540.982	3.301	0.006	0.29520	71.75	ppb
|	Mn	55	1394107.988	18.772	3.244	114.59525	4.25	ppb
|	Fe	54	118753.433	15.296	0.161	102.08464	14.68	ppb
|	Fe	56	3238082.437	7.471	3.724	140.86508	34.57	ppb
|	Fe	57	89816.763	16.100	0.204	330.13783	7.23	ppb
|	Co	59	107065.622	16.986	0.251	8.64984	5.95	ppb
|	Ni	60	11633.522	14.338	0.027	4.34298	10.94	ppb
|	Cu	63	4826.739	15.636	0.011	0.69312	7.88	ppb
|	Cu	65	2693.702	15.113	0.006	0.83794	8.84	ppb
|	Zn	66	5984.050	17.838	0.013	4.13648	5.95	ppb
|	As	75	795.985	21.252	0.002	0.52525	1.66	ppb
⌊	Se	82	68.000	19.312	0.000	0.18414	13.06	ppb
⌈	Mo	96	704.025	16.514	0.001	0.19309	3.44	ppb
|	Ag	107	50.000	11.547	0.000	0.00069	89.90	ppb
|	Ag	109	40.000	22.048	0.000	0.00039	198.10	ppb
|	Cd	111	39.035	35.263	0.000	0.01813	45.09	ppb
|	In	113	51148.748	13.618	0.004	1.95355	22.28	ppb
|>	In	115	1084202.109	15.089	1084202.109			ppb
⌊	Sn	118	268.337	2.846	0.000	0.01907	38.49	ppb
⌈	Sb	121	2555.327	2.405	0.001	0.29233	15.62	ppb
|	Ba	135	422286.624	15.012	0.226	194.26400	3.44	ppb
|	Ba	137	743082.129	14.473	0.398	195.78697	2.65	ppb
⌊>	Tb	159	1862220.108	12.034	1862220.108			ppb
⌈	Tl	205	963.381	20.165	0.001	0.03236	8.38	ppb
|	Pb	206	680.023	13.499	0.000	0.04372	20.75	ppb
|	Pb	207	1241.706	8.373	0.001	0.04337	20.00	ppb
|	Pb	208	2011.788	3.995	0.001	0.04427	19.75	ppb
⌊>	Bi	209	1281643.010	15.030	1281643.010			ppb
	Cr	53	1274.081	6.663	-2396.595			ppb
	Pd	106	16.667	62.450	13.333			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	494509.638	4.143	106870.395			ppb
	Kr	83	38.000	27.850	-14.667			ppb
	Se	77	110.445	6.454	-4.444			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	82511.005		ppb
	Be	9	4.000	0.007030	ppb
	Na	23	11586718.637	4785.478716	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	12588844.497	39902.169685	ppb
	Mg	26	15931930.521	40975.658320	ppb
	Al	27	10595.610	2.408130	ppb
	K	39	14378181.405	2615.603608	ppb
	Ca	44	17597878.566	82529.254436	ppb
>	Sc	45	321831.769		ppb
	Ti	47	700.025	1.200232	ppb
	V	51	2369.967	0.158901	ppb
	Cr	52	8223.380	0.539196	ppb
	Mn	55	1092603.606	119.507447	ppb
	Fe	54	98028.132	118.279080	ppb
	Fe	56	2958898.978	197.058826	ppb
	Fe	57	73247.279	357.502966	ppb
	Co	59	86205.979	9.238708	ppb
	Ni	60	9811.478	4.831028	ppb
	Cu	63	3957.450	0.754198	ppb
	Cu	65	2233.583	0.921507	ppb
	Zn	66	4761.133	4.380961	ppb
	As	75	602.245	0.530784	ppb
	Se	82	53.333	0.204837	ppb
	Mo	96	574.016	0.190440	ppb
	Ag	107	46.667	0.001255	ppb
	Ag	109	36.667	0.000788	ppb
	Cd	111	44.099	0.024522	ppb
	In	113	43107.714	2.415328	ppb
>	In	115	895772.008		ppb
	Sn	118	270.004	0.027509	ppb
	Sb	121	2530.320	0.344406	ppb
	Ba	135	349600.024	187.245979	ppb
	Ba	137	618924.441	189.787015	ppb
>	Tb	159	1603511.303		ppb
	Tl	205	750.028	0.030507	ppb
	Pb	206	615.019	0.049839	ppb
	Pb	207	1165.034	0.051945	ppb
	Pb	208	1920.109	0.054324	ppb
>	Bi	209	1059403.840		ppb
	Cr	53	1324.088		ppb
	Pd	106	25.000		ppb
	Pd	108	0.000		ppb
	C	12	472100.979		ppb
	Kr	83	26.000		ppb
	Se	77	102.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	122937.059		ppb
	Be	9	4.000	0.001690	ppb
	Na	23	16252770.429	4505.143942	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	19143303.536	40724.579706	ppb
	Mg	26	23739919.206	40979.421906	ppb
	Al	27	16508.615	2.549584	ppb
	K	39	22507738.682	2750.115158	ppb
	Ca	44	26078026.920	82082.177533	ppb
>	Sc	45	489604.215		ppb

	Ti	47	1100.061	1.242831	ppb
	V	51	2668.686	0.078594	ppb
	Cr	52	8637.729	0.158741	ppb
	Mn	55	1527224.611	109.771148	ppb
	Fe	54	126322.865	88.702493	ppb
	Fe	56	3385451.147	110.838189	ppb
	Fe	57	99891.435	319.282826	ppb
	Co	59	119592.872	8.424192	ppb
	Ni	60	12003.867	3.882098	ppb
	Cu	63	5208.022	0.648984	ppb
	Cu	65	3007.119	0.811803	ppb
	Zn	66	6462.087	3.888998	ppb
	As	75	914.389	0.529774	ppb
	Se	82	78.667	0.189810	ppb
	Mo	96	798.032	0.200639	ppb
	Ag	107	56.667	0.000799	ppb
	Ag	109	50.000	0.000902	ppb
	Cd	111	23.455	0.008917	ppb
	In	113	55327.635	1.551006	ppb
>	In	115	1189932.943		ppb
	Sn	118	275.004	0.015559	ppb
	Sb	121	2510.315	0.259235	ppb
	Ba	135	451141.966	194.975664	ppb
	Ba	137	803064.874	198.703581	ppb
>	Tb	159	1987224.940		ppb
	Tl	205	1010.051	0.031108	ppb
	Pb	206	640.020	0.033296	ppb
	Pb	207	1200.036	0.034600	ppb
	Pb	208	2045.126	0.038452	ppb
>	Bi	209	1400811.519		ppb
	Cr	53	1322.087		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	499150.208		ppb
	Kr	83	46.000		ppb
	Se	77	116.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124919.400		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	16349763.391	4460.088564	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	18718680.876	39189.330461	ppb
	Mg	26	22695031.195	38554.059720	ppb
	Al	27	15281.668	2.261574	ppb
	K	39	21445176.747	2576.196190	ppb
	Ca	44	26079227.886	80781.946545	ppb
>	Sc	45	480267.390		ppb
	Ti	47	1020.052	1.169817	ppb
	V	51	3103.114	0.121009	ppb
	Cr	52	8761.837	0.187669	ppb
	Mn	55	1562495.747	114.507145	ppb
	Fe	54	131909.303	99.272339	ppb
	Fe	56	3369897.187	114.698239	ppb
	Fe	57	96311.573	313.627705	ppb
	Co	59	115398.015	8.286609	ppb
	Ni	60	13085.222	4.315829	ppb
	Cu	63	5314.745	0.676185	ppb
	Cu	65	2840.403	0.780507	ppb
	Zn	66	6728.930	4.139473	ppb
	As	75	871.321	0.515178	ppb
	Se	82	72.000	0.157759	ppb

⌈	Mo	96	740.027	0.188176	ppb
|	Ag	107	46.667	0.000023	ppb
|	Ag	109	33.333	-0.000506	ppb
|	Cd	111	49.550	0.020944	ppb
|	In	113	55010.895	1.894312	ppb
|>	In	115	1166901.375		ppb
⌊	Sn	118	260.003	0.014149	ppb
⌈	Sb	121	2625.345	0.273340	ppb
|	Ba	135	466117.881	200.570345	ppb
|	Ba	137	807257.072	198.870312	ppb
⌊>	Tb	159	1995924.080		ppb
⌈	Tl	205	1130.064	0.035476	ppb
|	Pb	206	785.031	0.048019	ppb
|	Pb	207	1360.047	0.043558	ppb
|	Pb	208	2070.128	0.040029	ppb
⌊>	Bi	209	1384713.672		ppb
	Cr	53	1176.069		ppb
	Pd	106	20.000		ppb
	Pd	108	10.000		ppb
	C	12	512277.726		ppb
	Kr	83	42.000		ppb
	Se	77	112.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		90.826			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		85.012			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		77.598			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		85.460			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		77.283			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101632-MS1

Sample Date/Time: Monday, November 09, 2009 20:48:20
Sample Type: Spike - 2 of 26
Sample Description: 16WC1AS
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101632-MS1.897

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	96855.967	17.249	96855.967			ppb
	Be	9	17011.495	19.626	0.175	58.65510	2.97	ppb
	Na	23	12163147.028	13.676	126.099	4299.24308	4.06	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	14089383.212	14.273	146.075	38203.28055	4.21	ppb
	Mg	26	17590802.843	16.334	181.958	38613.99697	3.77	ppb
	Al	27	3850370.795	14.268	39.883	960.99038	3.60	ppb
	K	39	17150220.662	13.584	175.401	2673.27713	5.88	ppb
	Ca	44	20770651.932	14.901	214.970	83272.40256	3.99	ppb
>	Sc	45	396495.176	17.073	396495.176			ppb
	Ti	47	956.712	4.060	0.002	1.36642	16.31	ppb
	V	51	4799978.100	15.329	12.129	509.10394	1.95	ppb
	Cr	52	1612085.534	14.740	4.063	195.45628	2.59	ppb
	Mn	55	6920141.998	14.293	17.503	618.21716	3.13	ppb
	Fe	54	161954.768	11.091	0.293	186.20614	9.43	ppb
	Fe	56	3040536.637	1.189	3.839	145.22790	35.54	ppb
	Fe	57	89436.738	18.046	0.218	353.87467	4.06	ppb
	Co	59	5624774.765	17.703	14.180	489.48896	4.14	ppb
	Ni	60	1228726.796	18.503	3.094	491.91695	4.19	ppb
	Cu	63	1398235.893	19.873	3.513	222.76829	3.61	ppb
	Cu	65	668308.901	19.095	1.681	231.02458	3.48	ppb
	Zn	66	642357.773	21.260	1.611	496.80759	5.46	ppb
	As	75	63495.296	20.472	0.160	43.62741	4.55	ppb
	Se	82	1588.129	17.294	0.004	11.64261	2.87	ppb
	Mo	96	696.691	12.489	0.001	0.21251	15.03	ppb
	Ag	107	496760.802	18.547	0.496	50.48318	2.90	ppb
	Ag	109	478053.228	17.135	0.479	50.07764	2.59	ppb
	Cd	111	107088.454	18.588	0.107	56.57328	3.85	ppb
	In	113	154173.704	17.717	0.111	58.78287	4.27	ppb
>	In	115	998714.521	16.712	998714.521			ppb
	Sn	118	485.012	9.449	0.000	0.05963	12.75	ppb
	Sb	121	672959.215	17.206	0.397	107.52460	2.29	ppb
	Ba	135	4695407.630	17.752	2.773	2381.53265	2.03	ppb
	Ba	137	8241146.477	17.996	4.865	2392.47774	2.27	ppb
>	Tb	159	1689767.708	15.948	1689767.708			ppb
	Tl	205	1496252.862	16.637	1.286	59.09853	2.99	ppb
	Pb	206	197571.379	16.337	0.170	22.69786	2.75	ppb
	Pb	207	368509.238	16.618	0.316	22.57251	1.69	ppb
	Pb	208	598213.377	16.224	0.514	23.13084	1.46	ppb
>	Bi	209	1164045.701	16.855	1164045.701			ppb
	Cr	53	189675.608	14.639	186004.932			ppb
	Pd	106	9674.759	16.119	9671.425			ppb
	Pd	108	7015.857	19.671	7012.524			ppb
	C	12	507870.215	10.168	120230.972			ppb
	Kr	83	48.667	6.278	-4.000			ppb
	Se	77	1246.746	19.201	1131.857			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	77706.748		ppb
|	Be	9	13242.763	57.078356	ppb
|	Na	23	10263356.628	4500.850290	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	11856362.804	39903.892444	ppb
|	Mg	26	14471278.822	39520.048958	ppb
|	Al	27	3227987.316	1000.254475	ppb
|	K	39	14652577.392	2833.620894	ppb
L	Ca	44	17362901.963	86465.751759	ppb
[>	Sc	45	320324.516		ppb
|	Ti	47	925.043	1.623606	ppb
|	V	51	3973233.815	520.477811	ppb
|	Cr	52	1344441.060	201.195140	ppb
|	Mn	55	5792638.375	638.334105	ppb
|	Fe	54	142031.535	206.406995	ppb
|	Fe	56	3000698.840	203.631622	ppb
|	Fe	57	70799.746	346.849567	ppb
|	Co	59	4475319.227	482.267988	ppb
|	Ni	60	966206.569	479.521699	ppb
|	Cu	63	1080568.923	213.857840	ppb
|	Cu	65	521443.027	223.677811	ppb
|	Zn	66	485387.602	467.121886	ppb
|	As	75	48567.968	41.485026	ppb
L	Se	82	1271.414	11.536536	ppb
[	Mo	96	634.020	0.240273	ppb
|	Ag	107	391357.735	49.385823	ppb
|	Ag	109	384862.812	49.967405	ppb
|	Cd	111	84616.081	55.493736	ppb
|	In	113	123204.318	58.052505	ppb
[>	In	115	805986.868		ppb
L	Sn	118	435.009	0.068011	ppb
[	Sb	121	539506.071	105.458041	ppb
|	Ba	135	3745374.141	2325.663832	ppb
|	Ba	137	6561690.292	2332.671609	ppb
L>	Tb	159	1383208.598		ppb
[	Tl	205	1209727.679	58.779099	ppb
|	Pb	206	160467.239	22.670716	ppb
|	Pb	207	298751.805	22.514241	ppb
|	Pb	208	488046.092	23.206448	ppb
L>	Bi	209	945884.736		ppb
	Cr	53	158000.423		ppb
	Pd	106	7948.157		ppb
	Pd	108	5471.496		ppb
	C	12	527719.946		ppb
	Kr	83	52.000		ppb
	Se	77	972.047		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
[>	Li	6	104410.244		ppb
|	Be	9	18192.533	58.358376	ppb
|	Na	23	12868274.649	4199.770156	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	14654071.990	36706.045982	ppb
|	Mg	26	18171990.100	36934.179765	ppb
|	Al	27	4055401.634	935.206412	ppb
|	K	39	17533637.694	2519.166749	ppb
L	Ca	44	21541736.231	79832.815495	ppb
[>	Sc	45	419388.720		ppb

	Ti	47	945.045	1.246722	ppb
	V	51	5043861.276	504.650529	ppb
	Cr	52	1693607.573	193.554539	ppb
	Mn	55	7326420.656	616.633577	ppb
	Fe	54	166921.610	177.590362	ppb
	Fe	56	3071299.414	126.295107	ppb
	Fe	57	98790.580	370.416337	ppb
	Co	59	6224873.151	512.352380	ppb
	Ni	60	1360410.659	515.682904	ppb
	Cu	63	1517968.639	229.462885	ppb
	Cu	65	731317.973	239.607210	ppb
	Zn	66	707817.356	520.299489	ppb
	As	75	69597.232	45.403533	ppb
	Se	82	1732.150	12.016311	ppb
	Mo	96	660.022	0.177616	ppb
	Ag	107	536973.398	49.919384	ppb
	Ag	109	510618.689	48.838749	ppb
	Cd	111	114141.832	55.147205	ppb
	In	113	164486.760	56.716067	ppb
>	In	115	1094057.833		ppb
	Sn	118	495.012	0.053179	ppb
	Sb	121	732650.400	110.250444	ppb
	Ba	135	5036816.770	2407.650162	ppb
	Ba	137	8791075.133	2405.832317	ppb
>	Tb	159	1796810.427		ppb
	Tl	205	1619579.307	61.001115	ppb
	Pb	206	213076.142	23.336116	ppb
	Pb	207	393356.678	22.979647	ppb
	Pb	208	635480.325	23.423639	ppb
>	Bi	209	1220221.067		ppb
	Cr	53	201214.194		ppb
	Pd	106	10095.093		ppb
	Pd	108	7447.772		ppb
	C	12	449251.655		ppb
	Kr	83	48.000		ppb
	Se	77	1357.425		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	108450.908		ppb
	Be	9	19599.188	60.528577	ppb
	Na	23	13357809.808	4197.108799	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	15757714.841	37999.903214	ppb
	Mg	26	20129139.607	39387.762183	ppb
	Al	27	4267723.436	947.510265	ppb
	K	39	19264446.899	2667.043744	ppb
	Ca	44	23407317.602	83518.640425	ppb
>	Sc	45	449772.292		ppb
	Ti	47	1000.050	1.228944	ppb
	V	51	5382839.209	502.183478	ppb
	Cr	52	1798207.968	191.619173	ppb
	Mn	55	7641366.963	599.683806	ppb
	Fe	54	176911.157	174.621067	ppb
	Fe	56	3049611.656	105.756963	ppb
	Fe	57	98719.887	344.358097	ppb
	Co	59	6174131.916	473.846502	ppb
	Ni	60	1359563.161	480.546234	ppb
	Cu	63	1596170.116	224.984145	ppb
	Cu	65	752165.705	229.788724	ppb
	Zn	66	733868.359	503.001408	ppb
	As	75	72320.689	43.993663	ppb
	Se	82	1760.822	11.374979	ppb

⌈	Mo	96	796.032	0.219634	ppb
|	Ag	107	561951.274	52.144338	ppb
|	Ag	109	538678.182	51.426780	ppb
|	Cd	111	122507.448	59.078914	ppb
|	In	113	174830.033	61.580027	ppb
|>	In	115	1096098.862		ppb
⌊	Sn	118	525.014	0.057688	ppb
⌈	Sb	121	746721.175	106.865302	ppb
|	Ba	135	5304031.980	2411.283962	ppb
|	Ba	137	9370674.006	2438.929297	ppb
⌊>	Tb	159	1889284.099		ppb
⌈	Tl	205	1659451.599	57.515382	ppb
|	Pb	206	219170.756	22.086751	ppb
|	Pb	207	413419.232	22.223640	ppb
|	Pb	208	671113.714	22.762420	ppb
⌊>	Bi	209	1326031.300		ppb
	Cr	53	209812.207		ppb
	Pd	106	10981.026		ppb
	Pd	108	8128.302		ppb
	C	12	546639.043		ppb
	Kr	83	46.000		ppb
	Se	77	1410.766		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		79.884			
Be	9			117.298		
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		78.285			
Ti	47					
V	51			101.788		
Cr	52			97.576		
Mn	55			101.335		
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60			97.510		
Cu	63			88.840		
Cu	65					
Zn	66			98.562		
As	75			107.485		
Se	82			113.376		
Mo	96					
Ag	107			100.943		
Ag	109					
Cd	111			113.095		
In	113					
In	115		71.479			
Sn	118					
Sb	121			106.575		
Ba	135					
Ba	137			109.669		
Tb	159		77.546			
Tl	205			118.098		
Pb	206					
Pb	207					
Pb	208			115.333		
Bi	209		70.192			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9101632-MSD1

Sample Date/Time: Monday, November 09, 2009 20:50:17
Sample Type: Spike - 2 of 26
Sample Description: 16WC1ASD
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9101632-MSD1.898

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	103717.703	21.684	103717.703			ppb
|	Be	9	18464.964	22.982	0.178	59.52150	4.68	ppb
|	Na	23	14863863.056	26.484	142.114	4845.26629	7.06	ppb
|	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
|	Mg	25	17018826.075	25.546	163.059	42645.10348	6.21	ppb
|	Mg	26	20777889.173	23.019	199.867	42414.45981	2.37	ppb
|	Al	27	4741187.227	25.235	45.409	1094.14463	4.25	ppb
|	K	39	19258240.004	22.964	182.626	2783.38969	1.97	ppb
⌊	Ca	44	23502536.732	22.816	225.975	87535.03187	1.50	ppb
⌈>	Sc	45	417072.526	24.490	417072.526			ppb
|	Ti	47	1048.389	7.755	0.002	1.45267	21.75	ppb
|	V	51	5241658.726	23.281	12.594	528.60645	2.56	ppb
|	Cr	52	1789770.257	23.056	4.289	206.31329	3.02	ppb
|	Mn	55	7601568.177	20.577	18.355	648.31865	5.02	ppb
|	Fe	54	196651.201	16.660	0.361	228.89939	12.67	ppb
|	Fe	56	3570192.879	11.518	4.794	181.36342	28.05	ppb
|	Fe	57	103612.839	20.961	0.243	394.21046	5.67	ppb
|	Co	59	6178707.917	21.837	14.893	514.11068	4.25	ppb
|	Ni	60	1336781.405	21.501	3.224	512.50092	3.62	ppb
|	Cu	63	1524963.686	21.803	3.675	233.02142	3.69	ppb
|	Cu	65	729843.468	20.739	1.763	242.21361	4.62	ppb
|	Zn	66	766390.403	20.430	1.852	571.07778	5.43	ppb
|	As	75	68195.137	20.233	0.165	45.10879	5.23	ppb
⌊	Se	82	1696.147	18.976	0.004	11.96757	7.74	ppb
⌈	Mo	96	736.694	12.234	0.001	0.20998	8.08	ppb
|	Ag	107	536386.807	18.014	0.504	51.26760	1.01	ppb
|	Ag	109	528121.795	16.511	0.497	52.03155	1.26	ppb
|	Cd	111	119053.711	16.959	0.112	59.23248	1.88	ppb
|	In	113	168232.413	15.614	0.115	61.08797	2.33	ppb
|>	In	115	1062945.306	17.126	1062945.306			ppb
⌊	Sn	118	356.673	15.442	0.000	0.03447	38.41	ppb
⌈	Sb	121	729814.884	17.009	0.408	110.51973	1.39	ppb
|	Ba	135	5087345.460	15.911	2.853	2450.27227	0.27	ppb
|	Ba	137	8968606.129	17.051	5.022	2469.64897	1.33	ppb
⌊>	Tb	159	1783439.526	15.981	1783439.526			ppb
⌈	Tl	205	1641004.309	16.002	1.317	60.53887	0.84	ppb
|	Pb	206	218751.263	15.656	0.175	23.47586	1.13	ppb
|	Pb	207	408989.175	15.860	0.328	23.40740	1.16	ppb
|	Pb	208	667034.202	16.434	0.535	24.07025	0.86	ppb
⌊>	Bi	209	1246704.445	16.566	1246704.445			ppb
	Cr	53	204477.453	22.203	200806.777			ppb
	Pd	106	10682.491	17.868	10679.157			ppb
	Pd	108	7611.283	16.698	7607.949			ppb
	C	12	525049.335	10.624	137410.092			ppb
	Kr	83	32.667	15.408	-20.000			ppb
	Se	77	1418.992	17.894	1304.102			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	78188.482		ppb
	Be	9	13567.197	58.116600	ppb
	Na	23	10318745.131	4497.258147	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	11998604.206	40133.817743	ppb
	Mg	26	15285773.683	41487.197124	ppb
	Al	27	3378696.985	1040.531921	ppb
	K	39	14196023.053	2726.920520	ppb
	Ca	44	17473890.034	86482.343390	ppb
>	Sc	45	300544.486		ppb
	Ti	47	960.046	1.805694	ppb
	V	51	3834249.399	535.332172	ppb
	Cr	52	1313502.310	209.530386	ppb
	Mn	55	5796891.397	680.872055	ppb
	Fe	54	158821.273	260.403409	ppb
	Fe	56	3103870.442	239.939505	ppb
	Fe	57	78552.316	412.265705	ppb
	Co	59	4620724.578	530.709106	ppb
	Ni	60	1006718.656	532.511785	ppb
	Cu	63	1141544.444	240.797915	ppb
	Cu	65	555540.900	253.992543	ppb
	Zn	66	585609.115	600.714693	ppb
	As	75	52295.975	47.606419	ppb
	Se	82	1341.423	13.008826	ppb
	Mo	96	644.021	0.228495	ppb
	Ag	107	427082.635	50.732463	ppb
	Ag	109	428035.436	52.312641	ppb
	Cd	111	96770.362	59.741892	ppb
	In	113	138401.162	62.717217	ppb
>	In	115	856215.823		ppb
	Sn	118	360.006	0.047741	ppb
	Sb	121	588851.446	109.283870	ppb
	Ba	135	4162172.714	2453.731342	ppb
	Ba	137	7210162.678	2433.537766	ppb
>	Tb	159	1456909.647		ppb
	Tl	205	1338931.335	61.014959	ppb
	Pb	206	179338.829	23.764017	ppb
	Pb	207	334508.441	23.643972	ppb
	Pb	208	541183.889	24.135399	ppb
>	Bi	209	1008546.802		ppb
	Cr	53	152112.173		ppb
	Pd	106	8548.652		ppb
	Pd	108	6171.904		ppb
	C	12	475435.518		ppb
	Kr	83	32.000		ppb
	Se	77	1129.397		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	112359.709		ppb
	Be	9	21044.119	62.730400	ppb
	Na	23	17080409.852	5180.600081	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	19511516.309	45415.395969	ppb
	Mg	26	23021147.079	43479.640172	ppb
	Al	27	5224526.579	1119.709897	ppb
	K	39	21208119.686	2836.509305	ppb
	Ca	44	25293795.791	87113.855277	ppb
>	Sc	45	459578.395		ppb

	Ti	47	1120.063	1.355886	ppb
	V	51	5886154.457	537.432935	ppb
	Cr	52	2015617.263	210.270535	ppb
	Mn	55	8440133.503	648.269764	ppb
	Fe	54	215767.945	222.973078	ppb
	Fe	56	3725837.526	155.944985	ppb
	Fe	57	116965.064	401.139337	ppb
	Co	59	6953701.793	522.289842	ppb
	Ni	60	1471667.860	509.072320	ppb
	Cu	63	1699700.289	234.466158	ppb
	Cu	65	805812.589	240.926818	ppb
	Zn	66	855137.090	573.639627	ppb
	As	75	75253.227	44.800453	ppb
L	Se	82	1777.491	11.234170	ppb
⌈	Mo	96	742.028	0.195189	ppb
|	Ag	107	571648.394	51.299300	ppb
|	Ag	109	568644.165	52.501975	ppb
|	Cd	111	124260.732	57.953305	ppb
|	In	113	178397.210	60.464963	ppb
|>	In	115	1133379.149		ppb
L	Sn	118	300.005	0.021268	ppb
⌈	Sb	121	777801.413	110.042882	ppb
|	Ba	135	5434925.313	2442.536877	ppb
|	Ba	137	9708465.705	2497.953377	ppb
L>	Tb	159	1911137.668		ppb
⌈	Tl	205	1769213.532	60.001895	ppb
|	Pb	206	235649.194	23.238438	ppb
|	Pb	207	439378.550	23.112555	ppb
|	Pb	208	718227.849	23.838158	ppb
L>	Bi	209	1355155.455		ppb
	Cr	53	232790.393		ppb
	Pd	106	11271.349		ppb
	Pd	108	8083.266		ppb
	C	12	585429.673		ppb
	Kr	83	28.000		ppb
	Se	77	1524.116		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	120604.918		ppb
|	Be	9	20783.575	57.717513	ppb
|	Na	23	17192434.184	4857.940639	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	19546357.710	42386.096739	ppb
|	Mg	26	24026746.757	42276.542129	ppb
|	Al	27	5620338.115	1122.192063	ppb
|	K	39	22370577.272	2786.739250	ppb
L	Ca	44	27739924.372	89008.896937	ppb
⌈>	Sc	45	491094.698		ppb
|	Ti	47	1065.057	1.196439	ppb
|	V	51	6004572.321	513.054257	ppb
|	Cr	52	2040191.200	199.138943	ppb
|	Mn	55	8567679.632	615.814138	ppb
|	Fe	54	215364.384	203.321685	ppb
|	Fe	56	3880870.669	148.205773	ppb
|	Fe	57	115321.136	369.226334	ppb
|	Co	59	6961697.381	489.333094	ppb
|	Ni	60	1531957.699	495.918666	ppb
|	Cu	63	1733646.324	223.800181	ppb
|	Cu	65	828176.913	231.721465	ppb
|	Zn	66	858425.005	538.879010	ppb
|	As	75	77036.208	42.919496	ppb
L	Se	82	1969.527	11.659701	ppb

⌈	Mo	96	824.034	0.206269	ppb
|	Ag	107	610429.393	51.771050	ppb
|	Ag	109	587685.785	51.280036	ppb
|	Cd	111	136130.039	60.002235	ppb
|	In	113	187898.869	60.081731	ppb
|>	In	115	1199240.945		ppb
⌊	Sn	118	410.008	0.034387	ppb
⌈	Sb	121	822791.795	112.232444	ppb
|	Ba	135	5664938.354	2454.548600	ppb
|	Ba	137	9987190.004	2477.455773	ppb
⌊>	Tb	159	1982271.263		ppb
⌈	Tl	205	1814868.060	60.599756	ppb
|	Pb	206	241265.767	23.425118	ppb
|	Pb	207	453080.533	23.465670	ppb
|	Pb	208	741690.868	24.237204	ppb
⌊>	Bi	209	1376411.077		ppb
	Cr	53	228529.792		ppb
	Pd	106	12227.471		ppb
	Pd	108	8578.678		ppb
	C	12	514282.813		ppb
	Kr	83	38.000		ppb
	Se	77	1603.462		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		85.543			
	Be	9			119.031		
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		82.347			
	Ti	47					
	V	51			105.689		
	Cr	52			103.005		
	Mn	55			107.355		
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60			101.627		
	Cu	63			92.941		
	Cu	65					
	Zn	66			113.416		
	As	75			111.188		
	Se	82			116.626		
	Mo	96					
	Ag	107			102.512		
	Ag	109					
	Cd	111			118.413		
	In	113					
>	In	115		76.076			
	Sn	118					
	Sb	121			109.570		
	Ba	135					
	Ba	137			113.527		
>	Tb	159		81.844			
	Tl	205			120.979		
	Pb	206					
	Pb	207					
	Pb	208			120.030		
>	Bi	209		75.176			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: SDI0910073-01

Sample Date/Time: Monday, November 09, 2009 20:52:15
Sample Type: Sample
Sample Description: 16WC1AL
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910073-01.899

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	110879.638	22.441	110879.638			ppb
	Be	9	2.667	86.603	-0.000	-0.00024	3485.57	ppb
	Na	23	3055242.337	18.206	27.700	944.42099	5.35	ppb
	Mg	24	23934303.473	18.921	217.240	8802.97036	4.58	ppb
	Mg	25	3637589.728	16.281	33.189	8679.87094	8.24	ppb
	Mg	26	4339430.585	15.161	39.666	8417.59800	9.32	ppb
	Al	27	9132.522	8.595	0.056	1.34763	24.36	ppb
	K	39	4186729.700	17.936	35.423	539.87660	5.77	ppb
	Ca	44	4657231.769	20.500	41.955	16252.09932	4.61	ppb
>	Sc	45	419149.032	19.746	419149.032			ppb
	Ti	47	448.348	83.043	0.001	0.50682	85.20	ppb
	V	51	2537.406	4.045	0.003	0.11308	61.67	ppb
	Cr	52	7051.825	6.240	0.003	0.14979	155.83	ppb
	Mn	55	284550.517	20.497	0.667	23.55389	3.48	ppb
	Fe	54	67116.032	10.236	0.044	28.04823	40.74	ppb
	Fe	56	2070661.299	3.650	1.077	40.74746	85.85	ppb
	Fe	57	23336.142	18.388	0.049	78.94369	3.92	ppb
	Co	59	23213.439	17.159	0.055	1.91245	4.44	ppb
	Ni	60	4349.853	16.808	0.010	1.64373	6.67	ppb
	Cu	63	17678.126	16.768	0.042	2.66248	5.29	ppb
	Cu	65	8626.034	19.415	0.020	2.79747	1.32	ppb
	Zn	66	1817.944	9.078	0.004	1.18015	16.02	ppb
	As	75	123.536	11.663	0.000	0.10081	9.96	ppb
	Se	82	43.556	7.550	0.000	0.02782	204.02	ppb
	Mo	96	451.344	19.216	0.000	0.09585	5.97	ppb
	Ag	107	112.223	6.183	0.000	0.00544	42.26	ppb
	Ag	109	103.334	14.061	0.000	0.00551	46.38	ppb
	Cd	111	25.851	36.337	0.000	0.01024	62.45	ppb
	In	113	56624.751	17.424	0.002	1.15779	49.73	ppb
>	In	115	1235784.793	16.161	1235784.793			ppb
	Sn	118	235.003	23.405	0.000	0.00846	48.03	ppb
	Sb	121	906.708	11.253	0.000	0.04371	14.91	ppb
	Ba	135	92372.859	16.366	0.047	40.59462	3.73	ppb
	Ba	137	162319.004	15.105	0.083	40.88360	1.17	ppb
>	Tb	159	1952393.139	15.393	1952393.139			ppb
	Tl	205	415.009	22.892	0.000	0.01134	48.98	ppb
	Pb	206	418.342	2.488	0.000	0.01034	63.37	ppb
	Pb	207	721.680	0.400	0.000	0.00862	72.55	ppb
	Pb	208	1145.040	5.454	0.000	0.00787	77.95	ppb
>	Bi	209	1493903.532	16.383	1493903.532			ppb
	Cr	53	1034.720	3.770	-2635.956			ppb
	Pd	106	10.000	50.000	6.667			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	442328.035	0.747	54688.792			ppb
	Kr	83	38.667	23.890	-14.000			ppb
	Se	77	81.556	5.742	-33.334			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	82174.249		ppb
	Be	9	4.000	0.007097	ppb
	Na	23	2414123.407	999.372157	ppb
	Mg	24	18715011.161	9228.624537	ppb
	Mg	25	2973575.305	9463.704815	ppb
	Mg	26	3600105.890	9296.908937	ppb
	Al	27	8228.384	1.726683	ppb
	K	39	3319646.350	575.453675	ppb
	Ca	44	3586457.538	16818.430683	ppb
>	Sc	45	323793.599		ppb
	Ti	47	165.001	0.210839	ppb
	V	51	2650.265	0.193363	ppb
	Cr	52	7460.782	0.418462	ppb
	Mn	55	217658.254	23.336269	ppb
	Fe	54	59224.861	41.020468	ppb
	Fe	56	1984593.051	81.124899	ppb
	Fe	57	18411.934	80.652140	ppb
	Co	59	18653.381	1.980982	ppb
	Ni	60	3537.292	1.721087	ppb
	Cu	63	14306.894	2.776052	ppb
	Cu	65	6692.239	2.808092	ppb
	Zn	66	1653.470	1.393494	ppb
	As	75	109.604	0.111586	ppb
	Se	82	41.333	0.091429	ppb
	Mo	96	352.006	0.091079	ppb
	Ag	107	120.001	0.008093	ppb
	Ag	109	113.334	0.008299	ppb
	Cd	111	36.095	0.017471	ppb
	In	113	45252.157	0.755484	ppb
>	In	115	1005629.202		ppb
	Sn	118	180.002	0.006701	ppb
	Sb	121	795.032	0.051058	ppb
	Ba	135	74976.020	39.991514	ppb
	Ba	137	134095.087	40.950010	ppb
>	Tb	159	1609763.810		ppb
	Tl	205	520.014	0.017655	ppb
	Pb	206	415.009	0.017905	ppb
	Pb	207	720.013	0.015789	ppb
	Pb	208	1125.038	0.014441	ppb
>	Bi	209	1213989.678		ppb
	Cr	53	1074.058		ppb
	Pd	106	15.000		ppb
	Pd	108	5.000		ppb
	C	12	441564.364		ppb
	Kr	83	44.000		ppb
	Se	77	76.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	126288.435		ppb
	Be	9	4.000	0.001401	ppb
	Na	23	3342274.008	900.065808	ppb
	Mg	24	26266202.036	8427.828338	ppb
	Mg	25	4111174.695	8513.726128	ppb
	Mg	26	4860284.889	8166.864231	ppb
	Al	27	9639.644	1.153139	ppb
	K	39	4620954.256	517.428945	ppb
	Ca	44	5419721.651	16535.993961	ppb
>	Sc	45	472348.255		ppb

	Ti	47	870.038	1.002308	ppb
	V	51	2449.623	0.067486	ppb
	Cr	52	7108.526	0.034019	ppb
	Mn	55	311223.805	22.865553	ppb
	Fe	54	70361.670	19.466743	ppb
	Fe	56	2126154.348	19.542338	ppb
	Fe	57	25322.020	75.374971	ppb
	Co	59	24973.144	1.817407	ppb
	Ni	60	4557.705	1.518310	ppb
	Cu	63	18851.085	2.504942	ppb
	Cu	65	9584.591	2.756302	ppb
	Zn	66	1983.530	1.113704	ppb
	As	75	138.377	0.099130	ppb
	Se	82	47.333	0.009662	ppb
	Mo	96	512.013	0.102201	ppb
	Ag	107	106.667	0.004063	ppb
	Ag	109	86.667	0.003282	ppb
	Cd	111	23.820	0.007906	ppb
	In	113	62897.183	1.817299	ppb
>	In	115	1338302.510		ppb
	Sn	118	290.004	0.013109	ppb
	Sb	121	995.050	0.041418	ppb
	Ba	135	99827.805	39.474546	ppb
	Ba	137	178346.314	40.376199	ppb
>	Tb	159	2171402.048		ppb
	Tl	205	335.006	0.007201	ppb
	Pb	206	430.009	0.006668	ppb
	Pb	207	720.013	0.004277	ppb
	Pb	208	1095.037	0.002281	ppb
>	Bi	209	1667541.851		ppb
	Cr	53	996.050		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	445946.540		ppb
	Kr	83	28.000		ppb
	Se	77	86.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124176.229		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	3409329.597	933.825013	ppb
	Mg	24	26821697.222	8752.458199	ppb
	Mg	25	3828019.183	8062.181881	ppb
	Mg	26	4557900.975	7789.020845	ppb
	Al	27	9529.538	1.163058	ppb
	K	39	4619588.495	526.747176	ppb
	Ca	44	4965516.119	15401.873321	ppb
>	Sc	45	461305.242		ppb
	Ti	47	310.005	0.307328	ppb
	V	51	2512.328	0.078402	ppb
	Cr	52	6586.168	-0.003119	ppb
	Mn	55	324769.492	24.459846	ppb
	Fe	54	71761.566	23.657488	ppb
	Fe	56	2101236.498	21.575142	ppb
	Fe	57	26274.472	80.803953	ppb
	Co	59	26013.792	1.938967	ppb
	Ni	60	4954.560	1.691800	ppb
	Cu	63	19876.401	2.706440	ppb
	Cu	65	9601.274	2.828026	ppb
	Zn	66	1816.832	1.033265	ppb
	As	75	122.626	0.091710	ppb
	Se	82	42.000	-0.017637	ppb

⌈	Mo	96	490.012	0.094279	ppb
|	Ag	107	110.001	0.004162	ppb
|	Ag	109	110.001	0.004948	ppb
|	Cd	111	17.640	0.005337	ppb
|	In	113	61724.912	0.900599	ppb
|>	In	115	1363422.665		ppb
⌊	Sn	118	235.003	0.005574	ppb
⌈	Sb	121	930.043	0.038642	ppb
|	Ba	135	102314.751	42.317797	ppb
|	Ba	137	174515.612	41.324588	ppb
⌊>	Tb	159	2076013.560		ppb
⌈	Tl	205	390.008	0.009170	ppb
|	Pb	206	410.008	0.006448	ppb
|	Pb	207	725.013	0.005797	ppb
|	Pb	208	1215.045	0.006902	ppb
⌊>	Bi	209	1600179.065		ppb
	Cr	53	1034.053		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	439473.201		ppb
	Kr	83	44.000		ppb
	Se	77	82.000		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			91.450		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			82.757		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			88.447		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			89.598		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			90.082		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 20:54:14
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.900

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	109748.525	29.431	109748.525			ppb
	Be	9	42073.501	29.712	0.383	128.31524	0.51	ppb
	Na	23	3918090.903	28.817	35.688	1216.75116	1.18	ppb
	Mg	24	3196673.530	31.464	28.980	1174.32424	4.23	ppb
	Mg	25	485787.188	31.185	4.406	1152.36510	3.13	ppb
	Mg	26	588800.185	31.606	5.334	1131.96404	3.54	ppb
	Al	27	5012820.954	30.063	45.572	1098.07631	1.75	ppb
	K	39	8005642.934	28.142	70.558	1075.36657	3.60	ppb
	Ca	44	330542.849	25.318	2.816	1090.98564	5.89	ppb
>	Sc	45	422437.811	25.276	422437.811			ppb
	Ti	47	86048.650	24.819	0.204	121.08032	3.07	ppb
	V	51	1183031.415	24.540	2.801	117.58555	1.66	ppb
	Cr	52	1055417.233	24.622	2.488	119.65106	1.12	ppb
	Mn	55	1467878.994	25.546	3.461	122.26047	0.77	ppb
	Fe	54	850049.657	26.006	1.891	1200.58958	1.39	ppb
	Fe	56	14755651.258	22.210	31.168	1179.02997	4.26	ppb
	Fe	57	332523.141	24.145	0.782	1267.86710	1.51	ppb
	Co	59	1453142.147	25.048	3.441	118.79229	0.61	ppb
	Ni	60	327912.894	25.671	0.776	123.28979	0.57	ppb
	Cu	63	777597.804	22.536	1.851	117.35075	3.41	ppb
	Cu	65	384124.258	22.445	0.914	125.66430	3.47	ppb
	Zn	66	177742.809	22.884	0.422	130.22350	3.05	ppb
	As	75	196864.799	22.729	0.469	128.14271	3.12	ppb
	Se	82	18212.394	25.434	0.043	128.14391	1.91	ppb
	Mo	96	427718.321	23.292	0.352	120.16049	4.35	ppb
	Ag	107	1420785.706	22.400	1.170	119.01408	3.90	ppb
	Ag	109	1378108.345	22.811	1.134	118.66716	3.43	ppb
	Cd	111	294401.414	24.048	0.242	127.72579	1.86	ppb
	In	113	346454.669	23.218	0.241	128.16522	3.84	ppb
>	In	115	1222260.754	25.570	1222260.754			ppb
	Sn	118	881647.233	22.222	0.726	123.44604	4.25	ppb
	Sb	121	886730.001	23.114	0.435	117.72119	3.54	ppb
	Ba	135	287134.228	21.116	0.141	121.45270	1.52	ppb
	Ba	137	500648.232	20.674	0.247	121.31442	0.58	ppb
>	Tb	159	2027770.585	20.247	2027770.585			ppb
	Tl	205	4266726.290	21.031	2.726	125.30296	3.82	ppb
	Pb	206	1402040.872	24.197	0.890	119.08851	1.20	ppb
	Pb	207	2607829.864	22.794	1.660	118.45911	0.64	ppb
	Pb	208	4240671.039	20.479	2.711	122.06712	3.42	ppb
>	Bi	209	1572294.048	23.312	1572294.048			ppb
	Cr	53	123885.085	24.335	120214.409			ppb
	Pd	106	26046.502	20.621	26043.168			ppb
	Pd	108	19319.265	22.374	19315.931			ppb
	C	12	394922.282	2.773	7283.039			ppb
	Kr	83	40.667	24.260	-12.000			ppb
	Se	77	13895.351	24.002	13780.461			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	72610.662		ppb
	Be	9	27684.268	127.709437	ppb
	Na	23	2616316.916	1226.236329	ppb
	Mg	24	2035770.134	1135.958191	ppb
	Mg	25	310877.272	1119.598488	ppb
	Mg	26	373951.658	1092.630811	ppb
	Al	27	3273707.099	1085.676075	ppb
	K	39	5405705.803	1094.409425	ppb
	Ca	44	234810.815	1164.663269	ppb
>	Sc	45	299153.703		ppb
	Ti	47	61579.017	122.187383	ppb
	V	51	848238.390	118.863554	ppb
	Cr	52	755427.246	120.775017	ppb
	Mn	55	1034954.002	121.791107	ppb
	Fe	54	594893.805	1187.458286	ppb
	Fe	56	10973285.253	1236.852068	ppb
	Fe	57	239821.647	1288.392053	ppb
	Co	59	1032872.426	119.175217	ppb
	Ni	60	230711.029	122.591694	ppb
	Cu	63	575401.388	121.927153	ppb
	Cu	65	284575.693	130.696840	ppb
	Zn	66	130793.118	134.649997	ppb
	As	75	145205.244	132.764711	ppb
	Se	82	12889.635	128.081937	ppb
	Mo	96	312866.901	123.798932	ppb
	Ag	107	1054081.732	124.178018	ppb
	Ag	109	1015779.362	123.117253	ppb
	Cd	111	213059.008	130.442270	ppb
	In	113	253600.394	132.880363	ppb
>	In	115	863390.620		ppb
	Sn	118	657806.533	129.467064	ppb
	Sb	121	651172.780	113.306641	ppb
	Ba	135	217448.770	120.176233	ppb
	Ba	137	381287.003	120.642977	ppb
>	Tb	159	1553944.327		ppb
	Tl	205	3244555.369	129.744556	ppb
	Pb	206	1011123.551	117.680285	ppb
	Pb	207	1922094.309	119.323758	ppb
	Pb	208	3237947.370	126.830882	ppb
>	Bi	209	1149338.049		ppb
	Cr	53	89078.994		ppb
	Pd	106	19844.671		ppb
	Pd	108	14345.282		ppb
	C	12	382898.870		ppb
	Kr	83	36.000		ppb
	Se	77	10044.375		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	125334.546		ppb
	Be	9	48276.249	129.018916	ppb
	Na	23	4506871.932	1223.733987	ppb
	Mg	24	3806307.709	1230.470951	ppb
	Mg	25	570861.490	1191.068374	ppb
	Mg	26	692825.929	1172.787995	ppb
	Al	27	5830184.057	1120.161803	ppb
	K	39	9383947.639	1100.862028	ppb
	Ca	44	367001.140	1046.260118	ppb
>	Sc	45	485448.802		ppb

	Ti	47	95630.080	116.929585	ppb
	V	51	1335740.965	115.341939	ppb
	Cr	52	1199545.940	118.167452	ppb
	Mn	55	1677405.279	121.641482	ppb
	Fe	54	971136.638	1195.015742	ppb
	Fe	56	16749837.043	1154.489350	ppb
	Fe	57	377809.686	1250.450723	ppb
	Co	59	1658974.093	117.958580	ppb
	Ni	60	376520.746	123.291424	ppb
	Cu	63	885576.282	115.638254	ppb
	Cu	65	434697.094	123.026392	ppb
	Zn	66	200122.615	126.950131	ppb
	As	75	223444.746	125.899742	ppb
	Se	82	21329.390	130.615766	ppb
>	Mo	96	490818.628	122.506640	ppb
	Ag	107	1583419.323	117.665180	ppb
	Ag	109	1540279.332	117.760822	ppb
	Cd	111	328011.755	126.674756	ppb
	In	113	390877.835	128.549015	ppb
>	In	115	1368752.600		ppb
	Sn	118	965206.667	119.827749	ppb
	Sb	121	984652.350	118.276684	ppb
	Ba	135	316139.446	120.610268	ppb
	Ba	137	555109.224	121.247418	ppb
>	Tb	159	2251083.756		ppb
	Tl	205	4630951.323	120.225695	ppb
	Pb	206	1575497.587	119.045250	ppb
	Pb	207	2925090.771	117.891928	ppb
	Pb	208	4732309.913	120.341947	ppb
>	Bi	209	1770329.546		ppb
	Cr	53	141840.858		ppb
	Pd	106	29147.417		ppb
	Pd	108	22164.536		ppb
	C	12	397541.974		ppb
	Kr	83	34.000		ppb
	Se	77	15848.549		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	131300.367		ppb
	Be	9	50259.987	128.217379	ppb
	Na	23	4631083.862	1200.283163	ppb
	Mg	24	3747942.746	1156.543568	ppb
	Mg	25	575622.803	1146.428436	ppb
	Mg	26	699622.967	1130.473302	ppb
	Al	27	5934571.706	1088.391063	ppb
	K	39	9227275.360	1030.828263	ppb
	Ca	44	389816.592	1062.033540	ppb
>	Sc	45	482710.928		ppb
	Ti	47	100936.854	124.123988	ppb
	V	51	1365114.890	118.551158	ppb
	Cr	52	1211278.512	120.010714	ppb
	Mn	55	1691277.702	123.348816	ppb
	Fe	54	984118.526	1219.294721	ppb
	Fe	56	16543831.479	1145.748481	ppb
	Fe	57	379938.091	1264.758532	ppb
	Co	59	1667579.921	119.243082	ppb
	Ni	60	376506.906	123.986247	ppb
	Cu	63	871815.744	114.486848	ppb
	Cu	65	433099.987	123.269675	ppb
	Zn	66	202312.693	129.070381	ppb
	As	75	221944.406	125.763690	ppb
	Se	82	20418.157	125.734022	ppb

⌈	Mo	96	479469.434	114.175902	ppb
|	Ag	107	1624856.062	115.199053	ppb
|	Ag	109	1578266.341	115.123412	ppb
|	Cd	111	342133.478	126.060355	ppb
|	In	113	394885.778	123.066280	ppb
|>	In	115	1434639.042		ppb
⌊	Sn	118	1021928.499	121.043305	ppb
⌈	Sb	121	1024364.874	121.580237	ppb
|	Ba	135	327814.467	123.571589	ppb
|	Ba	137	565548.470	122.052877	ppb
⌊>	Tb	159	2278283.672		ppb
⌈	Tl	205	4924672.178	125.938621	ppb
|	Pb	206	1619501.476	120.539984	ppb
|	Pb	207	2976304.512	118.161638	ppb
|	Pb	208	4751755.834	119.028532	ppb
⌊>	Bi	209	1797214.548		ppb
	Cr	53	140735.403		ppb
	Pd	106	29147.417		ppb
	Pd	108	21447.976		ppb
	C	12	404326.003		ppb
	Kr	83	52.000		ppb
	Se	77	15793.128		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
> Li	6			90.517		
Be	9	106.929				
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
> Sc	45			83.407		
Ti	47					
V	51	97.988				
Cr	52	99.709				
Mn	55	101.884				
Fe	54					
Fe	56					
Fe	57					
Co	59	98.994				
Ni	60	102.741				
Cu	63	97.792				
Cu	65	104.720				
Zn	66	108.520				
As	75	106.786				
Se	82	106.787				
Mo	96					
Ag	107	99.178				
Ag	109	98.889				
Cd	111	106.438				
In	113					
> In	115			87.479		
Sn	118	102.872				
Sb	121	98.101				
Ba	135	101.211				
Ba	137	101.095				
> Tb	159			93.057		
Tl	205	104.419				
Pb	206	99.240				
Pb	207	98.716				
Pb	208	101.723				
> Bi	209			94.809		
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 20:56:12
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.901

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	108755.450	26.821	108755.450			ppb
	Be	9	2.000	100.000	-0.000	-0.00147	623.97	ppb
	Na	23	6016.267	32.175	-0.003	-0.11682	1193.59	ppb
	Mg	24	854.372	29.203	0.005	0.21168	102.18	ppb
	Mg	25	130.334	30.347	0.001	0.22415	100.20	ppb
	Mg	26	236.336	31.393	0.001	0.23425	143.66	ppb
	Al	27	1493.450	27.413	-0.013	-0.31517	71.05	ppb
	K	39	290493.017	0.651	0.194	2.95369	471.19	ppb
	Ca	44	17043.875	5.467	-0.059	-22.91890	107.15	ppb
>	Sc	45	421521.619	23.418	421521.619			ppb
	Ti	47	51.667	20.145	-0.000	-0.01853	24.67	ppb
	V	51	1826.247	2.195	0.001	0.03895	119.86	ppb
	Cr	52	5932.427	3.717	0.000	0.02163	1022.92	ppb
	Mn	55	1270.081	2.192	-0.008	-0.29650	9.42	ppb
	Fe	54	51958.621	8.545	0.008	5.38894	267.46	ppb
	Fe	56	1621611.036	6.363	-0.012	-0.46512	6543.89	ppb
	Fe	57	2778.720	5.079	-0.000	-0.43286	647.62	ppb
	Co	59	144.001	20.175	0.000	0.00508	117.64	ppb
	Ni	60	87.778	107.700	0.000	0.02558	204.68	ppb
	Cu	63	224.447	45.880	0.000	0.01272	222.14	ppb
	Cu	65	140.001	51.892	0.000	0.01983	208.65	ppb
	Zn	66	185.558	49.274	-0.000	-0.02710	437.68	ppb
	As	75	-34.043	48.639	-0.000	-0.00203	331.90	ppb
	Se	82	42.889	14.104	0.000	0.02659	328.94	ppb
	Mo	96	407.342	31.399	0.000	0.09239	71.83	ppb
	Ag	107	138.890	13.218	0.000	0.00789	54.00	ppb
	Ag	109	141.112	8.296	0.000	0.00864	22.80	ppb
	Cd	111	14.092	27.312	0.000	0.00472	47.11	ppb
	In	113	55197.835	20.533	0.001	0.43666	11.47	ppb
>	In	115	1243060.812	20.444	1243060.812			ppb
	Sn	118	441.677	19.943	0.000	0.04041	68.65	ppb
	Sb	121	2917.093	5.477	0.001	0.32025	33.27	ppb
	Ba	135	64.000	26.700	0.000	0.01639	82.16	ppb
	Ba	137	102.667	13.260	0.000	0.01437	65.58	ppb
>	Tb	159	2029955.439	19.770	2029955.439			ppb
	Tl	205	196.669	26.946	0.000	0.00404	73.72	ppb
	Pb	206	150.001	10.000	-0.000	-0.01463	30.66	ppb
	Pb	207	278.335	25.171	-0.000	-0.01319	49.57	ppb
	Pb	208	420.005	26.806	-0.000	-0.01455	44.23	ppb
>	Bi	209	1595837.317	21.395	1595837.317			ppb
	Cr	53	988.716	10.094	-2681.960			ppb
	Pd	106	3.333	173.205	0.000			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	391679.379	3.919	4040.136			ppb
	Kr	83	30.000	40.000	-22.667			ppb
	Se	77	75.334	9.735	-39.556			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	75102.968		ppb
	Be	9	4.000	0.008632	ppb
	Na	23	8249.401	1.492767	ppb
	Mg	24	1118.062	0.458201	ppb
	Mg	25	176.002	0.483469	ppb
	Mg	26	322.005	0.622821	ppb
	Al	27	1960.192	-0.057184	ppb
	K	39	292047.202	19.022856	ppb
	Ca	44	18116.395	5.424296	ppb
>	Sc	45	307537.346		ppb
	Ti	47	40.000	-0.014612	ppb
	V	51	1780.703	0.092844	ppb
	Cr	52	6181.910	0.277024	ppb
	Mn	55	1245.078	-0.264283	ppb
	Fe	54	47010.239	21.942137	ppb
	Fe	56	1506708.311	34.599004	ppb
	Fe	57	2715.369	2.762739	ppb
	Co	59	174.002	0.011897	ppb
	Ni	60	196.669	0.085972	ppb
	Cu	63	343.339	0.045330	ppb
	Cu	65	223.336	0.067541	ppb
	Zn	66	290.004	0.109492	ppb
	As	75	-14.932	0.005733	ppb
	Se	82	42.000	0.117991	ppb
	Mo	96	546.015	0.167929	ppb
	Ag	107	156.668	0.012735	ppb
	Ag	109	130.001	0.010830	ppb
	Cd	111	14.635	0.006644	ppb
	In	113	42118.512	0.410306	ppb
>	In	115	949705.057		ppb
	Sn	118	535.014	0.072026	ppb
	Sb	121	3035.461	0.440803	ppb
	Ba	135	80.000	0.031434	ppb
	Ba	137	118.001	0.025240	ppb
>	Tb	159	1569333.952		ppb
	Tl	205	245.003	0.007333	ppb
	Pb	206	165.001	-0.009473	ppb
	Pb	207	350.003	-0.005763	ppb
	Pb	208	535.008	-0.007252	ppb
>	Bi	209	1202335.593		ppb
	Cr	53	1102.061		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	374740.375		ppb
	Kr	83	18.000		ppb
	Se	77	68.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	126804.909		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	4817.160	-0.956989	ppb
	Mg	24	622.019	0.053722	ppb
	Mg	25	107.001	0.091263	ppb
	Mg	26	194.002	0.037624	ppb
	Al	27	1195.071	-0.458989	ppb
	K	39	291042.540	-5.262390	ppb
	Ca	44	16433.492	-37.815180	ppb
>	Sc	45	478809.935		ppb

	Ti	47	60.000	-0.017436	ppb
	V	51	1841.846	0.011269	ppb
	Cr	52	5851.712	-0.102009	ppb
	Mn	55	1300.085	-0.311377	ppb
	Fe	54	55594.107	-1.391524	ppb
	Fe	56	1706332.475	-15.923541	ppb
	Fe	57	2680.359	-2.477207	ppb
	Co	59	142.001	0.002604	ppb
	Ni	60	40.000	-0.002413	ppb
	Cu	63	166.668	-0.003385	ppb
	Cu	65	106.667	-0.001644	ppb
	Zn	66	146.668	-0.086851	ppb
	As	75	-44.106	-0.006181	ppb
	Se	82	49.333	0.018077	ppb
	Mo	96	382.007	0.065806	ppb
	Ag	107	140.001	0.006247	ppb
	Ag	109	153.335	0.008101	ppb
	Cd	111	17.640	0.005237	ppb
	In	113	61352.632	0.405244	ppb
>	In	115	1383700.983		ppb
	Sn	118	430.009	0.029098	ppb
	Sb	121	2980.444	0.281291	ppb
	Ba	135	46.000	0.005476	ppb
	Ba	137	92.000	0.008677	ppb
>	Tb	159	2216377.811		ppb
	Tl	205	140.001	0.001516	ppb
	Pb	206	150.001	-0.016769	ppb
	Pb	207	275.002	-0.015716	ppb
	Pb	208	415.005	-0.016985	ppb
>	Bi	209	1813604.156		ppb
	Cr	53	914.042		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	395632.438		ppb
	Kr	83	42.000		ppb
	Se	77	82.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124358.473		ppb
	Be	9	2.000	-0.003822	ppb
	Na	23	4982.241	-0.886250	ppb
	Mg	24	823.034	0.123132	ppb
	Mg	25	108.001	0.097708	ppb
	Mg	26	193.002	0.042304	ppb
	Al	27	1325.088	-0.429330	ppb
	K	39	288389.310	-4.899399	ppb
	Ca	44	16581.736	-36.365825	ppb
>	Sc	45	478217.576		ppb
	Ti	47	55.000	-0.023555	ppb
	V	51	1856.193	0.012729	ppb
	Cr	52	5763.661	-0.110137	ppb
	Mn	55	1265.080	-0.313844	ppb
	Fe	54	53271.516	-4.383803	ppb
	Fe	56	1651792.322	-20.070832	ppb
	Fe	57	2940.432	-1.584100	ppb
	Co	59	116.001	0.000740	ppb
	Ni	60	26.667	-0.006830	ppb
	Cu	63	163.335	-0.003799	ppb
	Cu	65	90.000	-0.006395	ppb
	Zn	66	120.001	-0.103931	ppb
	As	75	-43.090	-0.005631	ppb
	Se	82	37.333	-0.056304	ppb

⌈	Mo	96	294.004	0.043445	ppb
|	Ag	107	120.001	0.004701	ppb
|	Ag	109	140.001	0.007001	ppb
|	Cd	111	10.000	0.002285	ppb
|	In	113	62122.362	0.494419	ppb
|>	In	115	1395776.395		ppb
⌊	Sn	118	360.006	0.020117	ppb
⌈	Sb	121	2735.374	0.238649	ppb
|	Ba	135	66.000	0.012252	ppb
|	Ba	137	98.000	0.009180	ppb
⌊>	Tb	159	2304154.552		ppb
⌈	Tl	205	205.002	0.003286	ppb
|	Pb	206	135.001	-0.017639	ppb
|	Pb	207	210.001	-0.018078	ppb
|	Pb	208	310.003	-0.019410	ppb
⌊>	Bi	209	1771572.201		ppb
	Cr	53	950.045		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	404665.323		ppb
	Kr	83	30.000		ppb
	Se	77	75.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		89.698			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		83.226			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		88.968			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		93.157			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		96.228			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-02

Sample Date/Time: Monday, November 09, 2009 21:09:33
Sample Type: Sample
Sample Description: 16C1
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-02.902

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	95334.855	23.550	95334.855			ppb
	Be	9	4.000	50.000	0.000	0.00431	104.94	ppb
	Na	23	14287007.252	24.466	149.594	5100.28644	3.06	ppb
	Mg	24	73456541.766	24.078	769.735	31191.08060	0.64	ppb
	Mg	25	10809240.449	22.952	113.532	29692.26612	2.20	ppb
	Mg	26	12697891.225	24.835	132.870	28196.82566	1.68	ppb
	Al	27	21224.967	23.111	0.194	4.68329	1.62	ppb
	K	39	19677197.304	25.710	202.938	3092.96096	3.12	ppb
	Ca	44	18371768.873	26.417	191.474	74170.66390	4.09	ppb
>	Sc	45	351921.702	24.874	351921.702			ppb
	Ti	47	1013.386	22.582	0.003	1.63010	7.44	ppb
	V	51	2263.285	2.519	0.003	0.13217	56.72	ppb
	Cr	52	6934.405	3.136	0.006	0.29986	84.33	ppb
	Mn	55	282322.955	24.758	0.791	27.93943	1.56	ppb
	Fe	54	39223.912	9.607	-0.003	-2.04296	689.03	ppb
	Fe	56	1585986.239	8.815	0.669	25.31711	132.70	ppb
	Fe	57	57934.683	22.625	0.159	257.03574	6.66	ppb
	Co	59	2273.597	17.125	0.006	0.21890	9.69	ppb
	Ni	60	9223.253	19.979	0.026	4.19457	6.85	ppb
	Cu	63	1250.079	13.076	0.003	0.20585	18.74	ppb
	Cu	65	887.818	16.042	0.002	0.32472	22.31	ppb
	Zn	66	3788.517	21.212	0.010	3.16444	5.54	ppb
	As	75	138.007	61.514	0.000	0.11887	40.01	ppb
	Se	82	62.222	22.509	0.000	0.24322	23.88	ppb
	Mo	96	174.002	26.287	0.000	0.03319	13.95	ppb
	Ag	107	126.668	32.338	0.000	0.00946	32.62	ppb
	Ag	109	123.334	8.108	0.000	0.01046	32.25	ppb
	Cd	111	62.554	83.422	0.000	0.03042	81.32	ppb
	In	113	43521.591	18.251	0.002	1.14739	55.29	ppb
>	In	115	954735.963	20.330	954735.963			ppb
	Sn	118	363.340	15.159	0.000	0.04173	17.51	ppb
	Sb	121	656.690	30.839	0.000	0.02396	64.28	ppb
	Ba	135	366503.778	20.908	0.222	190.73648	1.41	ppb
	Ba	137	641720.021	20.656	0.389	191.27472	1.14	ppb
>	Tb	159	1647278.852	19.693	1647278.852			ppb
	Tl	205	261.670	39.176	0.000	0.00825	29.74	ppb
	Pb	206	855.038	20.012	0.001	0.07225	7.72	ppb
	Pb	207	1626.736	25.109	0.001	0.07448	15.26	ppb
	Pb	208	2555.193	16.803	0.002	0.07373	2.77	ppb
>	Bi	209	1141767.674	18.563	1141767.674			ppb
	Cr	53	1271.414	3.931	-2399.262			ppb
	Pd	106	35.000	71.429	31.667			ppb
	Pd	108	11.667	89.214	8.333			ppb
	C	12	406330.919	9.078	18691.676			ppb
	Kr	83	41.333	27.514	-11.333			ppb
	Se	77	90.223	3.492	-24.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	69414.082		ppb
	Be	9	2.000	0.000442	ppb
	Na	23	10279816.232	5046.905227	ppb
	Mg	24	53036227.893	30960.820486	ppb
	Mg	25	7954789.553	29971.132798	ppb
	Mg	26	9060503.053	27699.547641	ppb
	Al	27	15567.107	4.717677	ppb
	K	39	13845589.551	2999.765352	ppb
	Ca	44	12787001.898	71270.127533	ppb
>	Sc	45	250852.371		ppb
	Ti	47	760.029	1.707933	ppb
	V	51	2204.367	0.218651	ppb
	Cr	52	6684.233	0.591832	ppb
	Mn	55	201892.665	28.020379	ppb
	Fe	54	35216.903	14.024025	ppb
	Fe	56	1424695.497	64.110718	ppb
	Fe	57	43288.492	268.269926	ppb
	Co	59	1824.166	0.243386	ppb
	Ni	60	7125.871	4.500394	ppb
	Cu	63	1083.392	0.248376	ppb
	Cu	65	783.364	0.396896	ppb
	Zn	66	2867.078	3.343378	ppb
	As	75	44.656	0.067696	ppb
	Se	82	48.000	0.281196	ppb
	Mo	96	122.001	0.028522	ppb
	Ag	107	96.667	0.009412	ppb
	Ag	109	123.334	0.014169	ppb
	Cd	111	11.545	0.006850	ppb
	In	113	34353.908	1.826832	ppb
>	In	115	730690.460		ppb
	Sn	118	310.005	0.048387	ppb
	Sb	121	455.010	0.013948	ppb
	Ba	135	278848.360	187.761773	ppb
	Ba	137	490190.936	188.969615	ppb
>	Tb	159	1275481.225		ppb
	Tl	205	160.001	0.006143	ppb
	Pb	206	660.022	0.070340	ppb
	Pb	207	1175.035	0.066688	ppb
	Pb	208	2065.133	0.076091	ppb
>	Bi	209	899515.131		ppb
	Cr	53	1228.075		ppb
	Pd	106	10.000		ppb
	Pd	108	15.000		ppb
	C	12	366040.890		ppb
	Kr	83	32.000		ppb
	Se	77	86.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	108665.216		ppb
	Be	9	6.000	0.009287	ppb
	Na	23	15872111.139	4977.701404	ppb
	Mg	24	83963724.982	31310.398385	ppb
	Mg	25	12027030.365	28946.085755	ppb
	Mg	26	14665335.941	28639.772867	ppb
	Al	27	23823.344	4.596519	ppb
	K	39	22295850.643	3086.876025	ppb
	Ca	44	20761348.195	73921.472998	ppb
>	Sc	45	401303.847		ppb

	Ti	47	1205.073	1.691958	ppb
	V	51	2318.202	0.092276	ppb
	Cr	52	7040.478	0.154015	ppb
	Mn	55	316722.466	27.469609	ppb
	Fe	54	39758.882	-12.206943	ppb
	Fe	56	1660897.354	5.829931	ppb
	Fe	57	68564.250	265.493982	ppb
	Co	59	2488.310	0.206405	ppb
	Ni	60	9961.626	3.930691	ppb
	Cu	63	1256.746	0.173104	ppb
	Cu	65	830.034	0.251985	ppb
	Zn	66	4344.277	3.157130	ppb
	As	75	158.777	0.127216	ppb
	Se	82	62.667	0.176354	ppb
	Mo	96	192.002	0.033266	ppb
	Ag	107	173.335	0.012563	ppb
	Ag	109	133.334	0.009648	ppb
	Cd	111	115.839	0.056175	ppb
	In	113	48351.612	1.044735	ppb
>	In	115	1061660.885		ppb
	Sn	118	360.006	0.033913	ppb
	Sb	121	655.021	0.016232	ppb
	Ba	135	399880.498	191.465548	ppb
	Ba	137	698769.769	191.549911	ppb
>	Tb	159	1793714.379		ppb
	Tl	205	260.003	0.007661	ppb
	Pb	206	980.048	0.078535	ppb
	Pb	207	1970.097	0.087515	ppb
	Pb	208	2735.201	0.072621	ppb
>	Bi	209	1232758.005		ppb
	Cr	53	1260.079		ppb
	Pd	106	60.000		ppb
	Pd	108	0.000		ppb
	C	12	414510.512		ppb
	Kr	83	38.000		ppb
	Se	77	91.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	107925.267		ppb
	Be	9	4.000	0.003206	ppb
	Na	23	16709094.386	5276.252682	ppb
	Mg	24	83369672.423	31302.022921	ppb
	Mg	25	12445901.428	30159.579820	ppb
	Mg	26	14367834.682	28251.156469	ppb
	Al	27	24284.451	4.735684	ppb
	K	39	22890151.718	3192.241511	ppb
	Ca	44	21566956.527	77320.391166	ppb
>	Sc	45	403608.888		ppb
	Ti	47	1075.058	1.490412	ppb
	V	51	2267.285	0.085596	ppb
	Cr	52	7078.504	0.153727	ppb
	Mn	55	328353.734	28.328302	ppb
	Fe	54	42695.953	-7.945957	ppb
	Fe	56	1672365.867	6.010682	ppb
	Fe	57	61951.306	237.343320	ppb
	Co	59	2508.315	0.206894	ppb
	Ni	60	10582.263	4.152620	ppb
	Cu	63	1410.099	0.196061	ppb
	Cu	65	1050.055	0.325277	ppb
	Zn	66	4154.196	2.992827	ppb
	As	75	210.588	0.161706	ppb
	Se	82	76.000	0.272121	ppb

⌈	Mo	96	208.002	0.037779	ppb
|	Ag	107	110.001	0.006394	ppb
|	Ag	109	113.334	0.007570	ppb
|	Cd	111	60.279	0.028226	ppb
|	In	113	47859.252	0.570599	ppb
|>	In	115	1071856.546		ppb
⌊	Sn	118	420.009	0.042879	ppb
⌈	Sb	121	860.037	0.041691	ppb
|	Ba	135	420782.475	192.982111	ppb
|	Ba	137	736199.359	193.304648	ppb
⌊>	Tb	159	1872640.953		ppb
⌈	Tl	205	365.007	0.010942	ppb
|	Pb	206	925.043	0.067885	ppb
|	Pb	207	1735.076	0.069227	ppb
|	Pb	208	2865.244	0.072492	ppb
⌊>	Bi	209	1293029.886		ppb
	Cr	53	1326.088		ppb
	Pd	106	35.000		ppb
	Pd	108	20.000		ppb
	C	12	438441.356		ppb
	Kr	83	54.000		ppb
	Se	77	92.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		78.629			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		69.484			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		68.332			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		75.596			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		68.848			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-03

Sample Date/Time: Monday, November 09, 2009 21:11:30
Sample Type: Sample
Sample Description: 16MW8
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-03.903

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	84348.404	26.801	84348.404			ppb
	Be	9	58.667	42.625	0.001	0.21568	21.58	ppb
	Na	23	6639319.546	29.132	78.241	2667.55267	3.11	ppb
	Mg	24	7260492.165	28.834	85.690	3472.30605	2.83	ppb
	Mg	25	1068643.027	27.661	12.646	3307.35463	1.82	ppb
	Mg	26	1334734.102	29.870	15.716	3335.10170	4.10	ppb
	Al	27	106444.752	27.382	1.232	29.68512	1.55	ppb
	K	39	13473761.162	26.959	157.043	2393.48376	0.36	ppb
	Ca	44	1064992.078	29.809	12.316	4770.94659	4.30	ppb
>	Sc	45	314676.275	28.982	314676.275			ppb
	Ti	47	665.023	17.585	0.002	1.19915	15.38	ppb
	V	51	1657.724	20.575	0.002	0.07765	53.45	ppb
	Cr	52	6986.446	6.204	0.009	0.43857	71.40	ppb
	Mn	55	3038376.064	27.246	9.689	342.24587	3.37	ppb
	Fe	54	76327.800	14.923	0.133	84.33060	33.53	ppb
	Fe	56	2026565.484	10.678	2.757	104.30028	57.05	ppb
	Fe	57	23049.182	23.591	0.067	108.92609	8.98	ppb
	Co	59	10254.140	24.997	0.033	1.12837	5.11	ppb
	Ni	60	10471.292	26.556	0.033	5.30689	3.38	ppb
	Cu	63	66905.663	25.027	0.214	13.59075	5.49	ppb
	Cu	65	32807.264	26.061	0.105	14.40457	4.63	ppb
	Zn	66	45128.941	27.543	0.143	44.21609	3.00	ppb
	As	75	111.587	37.315	0.000	0.11489	13.03	ppb
	Se	82	51.111	8.685	0.000	0.21948	57.68	ppb
	Mo	96	140.001	32.357	0.000	0.02146	35.51	ppb
	Ag	107	19370.301	18.935	0.021	2.09189	1.42	ppb
	Ag	109	18939.476	19.358	0.020	2.10362	0.99	ppb
	Cd	111	633.640	23.172	0.001	0.35272	6.20	ppb
	In	113	43630.509	18.686	0.003	1.51530	12.50	ppb
>	In	115	940078.967	18.978	940078.967			ppb
	Sn	118	12396.185	18.415	0.013	2.22030	4.31	ppb
	Sb	121	505.013	17.263	0.000	0.00574	22.25	ppb
	Ba	135	175069.008	19.319	0.113	96.91328	3.04	ppb
	Ba	137	302041.844	19.339	0.195	95.70347	2.12	ppb
>	Tb	159	1548784.247	17.906	1548784.247			ppb
	Tl	205	1451.776	23.828	0.001	0.05469	6.80	ppb
	Pb	206	33064.273	19.417	0.028	3.75352	2.90	ppb
	Pb	207	63590.526	20.302	0.054	3.84662	1.86	ppb
	Pb	208	104105.414	19.288	0.088	3.98068	3.12	ppb
>	Bi	209	1174609.586	21.729	1174609.586			ppb
	Cr	53	1443.438	8.242	-2227.238			ppb
	Pd	106	71.667	24.502	68.334			ppb
	Pd	108	38.333	19.924	35.000			ppb
	C	12	392431.695	8.261	4792.452			ppb
	Kr	83	34.000	38.573	-18.667			ppb
	Se	77	71.778	10.884	-43.112			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	58245.132		ppb
	Be	9	30.000	0.163328	ppb
	Na	23	4407819.139	2577.899732	ppb
	Mg	24	4846831.398	3371.856243	ppb
	Mg	25	728060.845	3268.998883	ppb
	Mg	26	875254.809	3188.660118	ppb
	Al	27	72849.389	29.451024	ppb
	K	39	9279985.192	2388.035797	ppb
	Ca	44	699484.177	4563.993636	ppb
>	Sc	45	209384.379		ppb
	Ti	47	530.014	1.411811	ppb
	V	51	1334.877	0.117400	ppb
	Cr	52	6486.103	0.800153	ppb
	Mn	55	2088990.936	351.988818	ppb
	Fe	54	63314.806	116.876696	ppb
	Fe	56	1789864.670	172.632844	ppb
	Fe	57	16884.242	119.203561	ppb
	Co	59	7294.660	1.194969	ppb
	Ni	60	7262.636	5.498635	ppb
	Cu	63	47623.129	14.395308	ppb
	Cu	65	22979.706	15.050092	ppb
	Zn	66	30820.756	45.212769	ppb
	As	75	68.183	0.108068	ppb
	Se	82	46.000	0.365643	ppb
	Mo	96	92.000	0.014070	ppb
	Ag	107	15161.485	2.085864	ppb
	Ag	109	14750.871	2.088451	ppb
	Cd	111	464.110	0.330962	ppb
	In	113	34323.805	1.560646	ppb
>	In	115	737915.000		ppb
	Sn	118	9764.765	2.225352	ppb
	Sb	121	405.008	0.006605	ppb
	Ba	135	136272.222	95.238367	ppb
	Ba	137	234649.085	93.888311	ppb
>	Tb	159	1228798.860		ppb
	Tl	205	1075.058	0.054115	ppb
	Pb	206	25652.861	3.872447	ppb
	Pb	207	48684.353	3.921636	ppb
	Pb	208	81004.047	4.117605	ppb
>	Bi	209	880014.303		ppb
	Cr	53	1570.123		ppb
	Pd	106	55.000		ppb
	Pd	108	40.000		ppb
	C	12	354999.330		ppb
	Kr	83	32.000		ppb
	Se	77	66.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	97464.665		ppb
	Be	9	70.000	0.231379	ppb
	Na	23	7675850.366	2682.847750	ppb
	Mg	24	8582378.201	3568.060885	ppb
	Mg	25	1258408.837	3376.617346	ppb
	Mg	26	1589105.249	3459.727487	ppb
	Al	27	124991.290	30.214583	ppb
	K	39	15626840.450	2403.383834	ppb
	Ca	44	1223567.195	4774.969570	ppb
>	Sc	45	365789.953		ppb

	Ti	47	735.027	1.101799	ppb
	V	51	2014.493	0.080967	ppb
	Cr	52	7226.610	0.260422	ppb
	Mn	55	3416657.515	329.512602	ppb
	Fe	54	81178.163	65.792182	ppb
	Fe	56	2075598.350	63.916738	ppb
	Fe	57	25101.465	99.720708	ppb
	Co	59	11698.839	1.096375	ppb
	Ni	60	12180.747	5.278316	ppb
	Cu	63	77781.325	13.456664	ppb
	Cu	65	38537.447	14.446123	ppb
	Zn	66	53261.462	44.722326	ppb
	As	75	151.202	0.132058	ppb
	Se	82	53.333	0.145504	ppb
	Mo	96	146.001	0.021018	ppb
	Ag	107	21065.498	2.124095	ppb
	Ag	109	20500.993	2.127344	ppb
	Cd	111	716.591	0.374715	ppb
	In	113	47055.451	1.677976	ppb
>	In	115	1006846.948		ppb
	Sn	118	13844.577	2.313309	ppb
	Sb	121	565.016	0.006332	ppb
	Ba	135	190587.027	95.185093	ppb
	Ba	137	333377.931	95.323803	ppb
>	Tb	159	1719530.044		ppb
	Tl	205	1525.116	0.051284	ppb
	Pb	206	36913.003	3.728828	ppb
	Pb	207	71216.740	3.839370	ppb
	Pb	208	113939.572	3.875220	ppb
>	Bi	209	1314701.442		ppb
	Cr	53	1334.089		ppb
	Pd	106	90.000		ppb
	Pd	108	30.000		ppb
	C	12	411331.187		ppb
	Kr	83	48.000		ppb
	Se	77	68.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	97335.415		ppb
	Be	9	76.000	0.252347	ppb
	Na	23	7834289.132	2741.910522	ppb
	Mg	24	8352266.898	3477.001017	ppb
	Mg	25	1219459.400	3276.447647	ppb
	Mg	26	1539842.248	3356.917483	ppb
	Al	27	121493.578	29.389755	ppb
	K	39	15514457.843	2389.031656	ppb
	Ca	44	1271924.862	4973.876565	ppb
>	Sc	45	368854.494		ppb
	Ti	47	730.027	1.083828	ppb
	V	51	1623.802	0.034588	ppb
	Cr	52	7246.625	0.255136	ppb
	Mn	55	3609479.740	345.236180	ppb
	Fe	54	84490.430	70.322911	ppb
	Fe	56	2214233.432	76.351268	ppb
	Fe	57	27161.838	107.853997	ppb
	Co	59	11768.921	1.093761	ppb
	Ni	60	11970.494	5.143711	ppb
	Cu	63	75312.535	12.920282	ppb
	Cu	65	36904.639	13.717489	ppb
	Zn	66	51304.605	42.713175	ppb
	As	75	115.377	0.104557	ppb
	Se	82	54.000	0.147280	ppb

⌈	Mo	96	182.002	0.029295	ppb
|	Ag	107	21883.919	2.065700	ppb
|	Ag	109	21566.564	2.095057	ppb
|	Cd	111	720.219	0.352491	ppb
|	In	113	49512.271	1.307265	ppb
|>	In	115	1075474.953		ppb
⌊	Sn	118	13579.213	2.122243	ppb
⌈	Sb	121	545.015	0.004271	ppb
|	Ba	135	198347.775	100.316369	ppb
|	Ba	137	338098.516	97.898304	ppb
⌊>	Tb	159	1698023.836		ppb
⌈	Tl	205	1755.154	0.058661	ppb
|	Pb	206	36626.954	3.659299	ppb
|	Pb	207	70870.485	3.778860	ppb
|	Pb	208	117372.623	3.949214	ppb
⌊>	Bi	209	1329113.013		ppb
	Cr	53	1426.102		ppb
	Pd	106	70.000		ppb
	Pd	108	45.000		ppb
	C	12	410964.566		ppb
	Kr	83	22.000		ppb
	Se	77	80.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		69.568			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		62.130			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		67.283			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		71.076			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		70.829			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-04

Sample Date/Time: Monday, November 09, 2009 21:13:28
Sample Type: Sample
Sample Description: 16MW9
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-04.904

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	90932.499	25.911	90932.499			ppb
	Be	9	2.667	43.301	0.000	0.00071	461.01	ppb
	Na	23	9027014.274	21.939	100.051	3411.16923	4.89	ppb
	Mg	24	S	S	13333336	54029168494.39809	86.60	ppb
	Mg	25	11846297.511	25.013	130.551	34143.09680	2.24	ppb
	Mg	26	14245957.576	25.046	156.966	33310.20120	1.63	ppb
	Al	27	16213.634	23.930	0.151	3.62870	3.16	ppb
	K	39	21491997.752	23.873	234.749	3577.78286	2.62	ppb
	Ca	44	19722684.805	23.812	217.645	84308.40244	2.62	ppb
>	Sc	45	342710.859	24.138	342710.859			ppb
	Ti	47	921.710	19.788	0.003	1.52131	8.16	ppb
	V	51	1982.664	8.517	0.003	0.10806	88.74	ppb
	Cr	52	7541.511	2.986	0.009	0.41333	67.52	ppb
	Mn	55	2133321.084	22.588	6.232	220.12271	2.21	ppb
	Fe	54	112355.650	16.536	0.215	136.21880	15.09	ppb
	Fe	56	2890369.265	14.804	4.603	174.12509	20.85	ppb
	Fe	57	89124.956	19.119	0.256	414.33083	6.63	ppb
	Co	59	19315.824	20.476	0.057	1.95187	4.46	ppb
	Ni	60	19589.584	18.035	0.058	9.17942	7.30	ppb
	Cu	63	1215.630	11.552	0.003	0.20515	17.62	ppb
	Cu	65	1090.061	22.853	0.003	0.40787	10.97	ppb
	Zn	66	2937.104	14.554	0.008	2.51096	12.22	ppb
	As	75	488.045	14.652	0.002	0.41947	18.48	ppb
	Se	82	64.889	11.863	0.000	0.30896	69.10	ppb
	Mo	96	298.671	22.112	0.000	0.08061	14.58	ppb
	Ag	107	22.222	17.321	-0.000	-0.00150	66.70	ppb
	Ag	109	37.778	22.205	0.000	0.00083	138.32	ppb
	Cd	111	61.338	1.238	0.000	0.03406	20.93	ppb
	In	113	41551.720	19.781	0.001	0.41867	90.26	ppb
>	In	115	935178.554	18.699	935178.554			ppb
	Sn	118	323.339	2.362	0.000	0.03666	35.46	ppb
	Sb	121	340.006	28.364	-0.000	-0.02454	47.91	ppb
	Ba	135	878836.291	20.245	0.552	474.48370	3.01	ppb
	Ba	137	1588265.116	18.038	1.001	492.43161	1.52	ppb
>	Tb	159	1585372.992	17.692	1585372.992			ppb
	Tl	205	828.369	19.638	0.001	0.03218	11.16	ppb
	Pb	206	798.366	12.086	0.001	0.06871	9.72	ppb
	Pb	207	1486.723	9.431	0.001	0.06967	12.86	ppb
	Pb	208	2285.152	10.451	0.001	0.06590	11.76	ppb
>	Bi	209	1115088.634	17.697	1115088.634			ppb
	Cr	53	1247.411	3.769	-2423.265			ppb
	Pd	106	25.000	34.641	21.667			ppb
	Pd	108	15.000	57.735	11.667			ppb
	C	12	445855.179	8.100	58215.936			ppb
	Kr	83	36.667	22.044	-16.000			ppb
	Se	77	87.556	17.369	-27.334			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	63726.408		ppb
	Be	9	2.000	0.001304	ppb
	Na	23	6740247.557	3603.846073	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	8435490.277	34618.894345	ppb
	Mg	26	10130485.636	33734.912262	ppb
	Al	27	11736.884	3.751732	ppb
	K	39	15570829.012	3683.701647	ppb
	Ca	44	14301386.885	86844.273657	ppb
>	Sc	45	247705.366		ppb
	Ti	47	715.026	1.622873	ppb
	V	51	2175.772	0.218491	ppb
	Cr	52	7340.693	0.735591	ppb
	Mn	55	1577347.924	224.514181	ppb
	Fe	54	91032.468	158.220210	ppb
	Fe	56	2401680.038	216.040394	ppb
	Fe	57	69460.402	443.154254	ppb
	Co	59	14782.919	2.052457	ppb
	Ni	60	15518.699	9.944379	ppb
	Cu	63	1063.390	0.246735	ppb
	Cu	65	823.367	0.424542	ppb
	Zn	66	2443.632	2.860973	ppb
	As	75	429.817	0.493561	ppb
	Se	82	69.334	0.545033	ppb
	Mo	96	234.003	0.080516	ppb
	Ag	107	26.667	-0.000345	ppb
	Ag	109	36.667	0.001738	ppb
	Cd	111	60.730	0.042277	ppb
	In	113	32071.346	0.085442	ppb
>	In	115	733269.141		ppb
	Sn	118	325.005	0.051611	ppb
	Sb	121	270.004	-0.024667	ppb
	Ba	135	673460.724	458.501505	ppb
	Ba	137	1258395.216	490.493077	ppb
>	Tb	159	1261541.457		ppb
	Tl	205	670.022	0.032664	ppb
	Pb	206	690.024	0.076186	ppb
	Pb	207	1325.044	0.080007	ppb
	Pb	208	2010.115	0.074693	ppb
>	Bi	209	887553.942		ppb
	Cr	53	1200.072		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	434620.744		ppb
	Kr	83	32.000		ppb
	Se	77	70.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	104355.679		ppb
	Be	9	4.000	0.003631	ppb
	Na	23	10169839.035	3320.356054	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13785691.551	34548.943252	ppb
	Mg	26	16472485.768	33497.452879	ppb
	Al	27	18602.286	3.609143	ppb
	K	39	24278740.277	3505.612056	ppb
	Ca	44	22323325.233	82775.851571	ppb
>	Sc	45	381635.942		ppb

	Ti	47	1060.056	1.558163	ppb
	V	51	1909.473	0.059819	ppb
	Cr	52	7498.811	0.255272	ppb
	Mn	55	2391846.191	220.964772	ppb
	Fe	54	125057.105	132.940712	ppb
	Fe	56	3071558.271	153.725280	ppb
	Fe	57	99532.887	411.356282	ppb
	Co	59	21100.238	1.900899	ppb
	Ni	60	21396.199	8.897431	ppb
	Cu	63	1243.411	0.181121	ppb
	Cu	65	1316.753	0.441900	ppb
	Zn	66	3173.837	2.383378	ppb
	As	75	567.861	0.425947	ppb
	Se	82	69.334	0.252376	ppb
	Mo	96	366.007	0.092408	ppb
	Ag	107	20.000	-0.002077	ppb
	Ag	109	30.000	-0.000459	ppb
	Cd	111	62.189	0.030286	ppb
	In	113	46678.691	0.829255	ppb
>	In	115	1034139.264		ppb
	Sn	118	315.005	0.028050	ppb
	Sb	121	300.005	-0.036235	ppb
	Ba	135	976750.943	478.948305	ppb
	Ba	137	1731568.937	486.106385	ppb
>	Tb	159	1751562.816		ppb
	Tl	205	995.050	0.035511	ppb
	Pb	206	830.034	0.063333	ppb
	Pb	207	1560.061	0.064859	ppb
	Pb	208	2440.173	0.062912	ppb
>	Bi	209	1218161.155		ppb
	Cr	53	1248.078		ppb
	Pd	106	30.000		ppb
	Pd	108	10.000		ppb
	C	12	486252.352		ppb
	Kr	83	46.000		ppb
	Se	77	96.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	104715.410		ppb
	Be	9	2.000	-0.002811	ppb
	Na	23	10170956.231	3309.305571	ppb
	Mg	24	88519883.941	34254.517448	ppb
	Mg	25	13317710.704	33261.452807	ppb
	Mg	26	16134901.323	32698.238448	ppb
	Al	27	18301.732	3.525229	ppb
	K	39	24626423.966	3544.034880	ppb
	Ca	44	22543342.297	83305.082079	ppb
>	Sc	45	398791.270		ppb
	Ti	47	990.049	1.382898	ppb
	V	51	1862.747	0.045867	ppb
	Cr	52	7785.029	0.249137	ppb
	Mn	55	2430769.137	214.889177	ppb
	Fe	54	120977.376	117.495486	ppb
	Fe	56	3197869.485	152.609595	ppb
	Fe	57	98381.578	388.481947	ppb
	Co	59	22064.315	1.902247	ppb
	Ni	60	21853.853	8.696450	ppb
	Cu	63	1340.090	0.187606	ppb
	Cu	65	1130.064	0.357168	ppb
	Zn	66	3193.843	2.288520	ppb
	As	75	466.458	0.338901	ppb
	Se	82	56.000	0.129479	ppb

⌈	Mo	96	296.004	0.068901	ppb
|	Ag	107	20.000	-0.002085	ppb
|	Ag	109	46.667	0.001209	ppb
|	Cd	111	61.094	0.029607	ppb
|	In	113	45905.123	0.341314	ppb
|>	In	115	1038127.257		ppb
⌊	Sn	118	330.005	0.030307	ppb
⌈	Sb	121	450.010	-0.012720	ppb
|	Ba	135	986297.207	486.001304	ppb
|	Ba	137	1774831.194	500.695358	ppb
⌊>	Tb	159	1743014.702		ppb
⌈	Tl	205	820.034	0.028373	ppb
|	Pb	206	875.038	0.066617	ppb
|	Pb	207	1575.063	0.064146	ppb
|	Pb	208	2405.170	0.060084	ppb
⌊>	Bi	209	1239550.805		ppb
	Cr	53	1294.084		ppb
	Pd	106	30.000		ppb
	Pd	108	25.000		ppb
	C	12	416692.443		ppb
	Kr	83	32.000		ppb
	Se	77	96.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		74.998			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		67.665			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		66.932			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		72.755			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		67.239			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-05

Sample Date/Time: Monday, November 09, 2009 21:15:26
Sample Type: Sample
Sample Description: 16WDUP
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-05.905

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	87831.680	21.417	87831.680			ppb
	Be	9	3.333	34.641	0.000	0.00436	155.35	ppb
	Na	23	10045995.272	21.970	114.233	3894.68737	1.90	ppb
	Mg	24	S	S	133333362	54029168955.58329	86.60	ppb
	Mg	25	11713494.626	23.294	132.975	34777.05580	3.57	ppb
	Mg	26	14393421.304	22.366	163.636	34725.64675	2.50	ppb
	Al	27	16731.060	20.958	0.162	3.90752	0.80	ppb
	K	39	13849105.572	21.891	154.913	2361.02152	1.28	ppb
	Ca	44	17424978.171	21.733	198.082	76730.42963	2.12	ppb
>	Sc	45	330964.848	20.669	330964.848			ppb
	Ti	47	773.364	23.503	0.002	1.29132	5.81	ppb
	V	51	2308.927	7.194	0.004	0.15528	59.43	ppb
	Cr	52	6574.828	2.653	0.006	0.29717	77.21	ppb
	Mn	55	1047074.744	22.128	3.145	111.09610	2.67	ppb
	Fe	54	83825.289	12.739	0.138	87.76208	17.11	ppb
	Fe	56	2351349.133	9.191	3.252	123.00993	29.45	ppb
	Fe	57	70393.465	20.049	0.206	333.70828	1.60	ppb
	Co	59	80479.382	20.345	0.243	8.39084	0.84	ppb
	Ni	60	9277.750	20.029	0.028	4.44560	1.06	ppb
	Cu	63	4119.756	18.051	0.012	0.76717	3.37	ppb
	Cu	65	2326.941	14.676	0.007	0.94335	7.26	ppb
	Zn	66	7547.355	18.317	0.022	6.87974	3.76	ppb
	As	75	701.551	21.898	0.002	0.59766	2.31	ppb
	Se	82	61.556	6.528	0.000	0.27846	34.81	ppb
	Mo	96	837.369	13.818	0.001	0.28991	7.20	ppb
	Ag	107	33.333	43.589	-0.000	-0.00033	376.76	ppb
	Ag	109	42.222	64.299	0.000	0.00133	196.41	ppb
	Cd	111	59.586	65.440	0.000	0.03193	56.99	ppb
	In	113	41106.313	18.901	0.002	0.96664	47.36	ppb
>	In	115	904698.571	18.184	904698.571			ppb
	Sn	118	360.007	7.349	0.000	0.04494	19.06	ppb
	Sb	121	500.013	15.133	0.000	0.00583	81.16	ppb
	Ba	135	364328.040	17.778	0.237	203.58814	0.95	ppb
	Ba	137	647065.708	18.080	0.421	206.97459	2.15	ppb
>	Tb	159	1535478.791	17.016	1535478.791			ppb
	Tl	205	776.698	19.123	0.001	0.03040	3.77	ppb
	Pb	206	695.025	25.750	0.000	0.05608	18.56	ppb
	Pb	207	1258.374	17.594	0.001	0.05527	8.08	ppb
	Pb	208	1926.776	9.628	0.001	0.05252	14.08	ppb
>	Bi	209	1097456.038	16.478	1097456.038			ppb
	Cr	53	1160.734	4.250	-2509.942			ppb
	Pd	106	35.000	74.231	31.667			ppb
	Pd	108	6.667	86.603	3.333			ppb
	C	12	408645.499	5.004	21006.256			ppb
	Kr	83	34.000	45.943	-18.667			ppb
	Se	77	80.667	7.575	-34.223			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	66162.150		ppb
	Be	9	4.000	0.011043	ppb
	Na	23	7531211.516	3878.682944	ppb
	Mg	24	58188362.376	35638.073082	ppb
	Mg	25	8570542.183	33878.248977	ppb
	Mg	26	10679954.565	34255.365923	ppb
	Al	27	12698.057	3.938403	ppb
	K	39	10348656.468	2343.641780	ppb
	Ca	44	13055451.689	76349.170734	ppb
>	Sc	45	251990.454		ppb
	Ti	47	570.016	1.251871	ppb
	V	51	2468.752	0.261023	ppb
	Cr	52	6550.145	0.560448	ppb
	Mn	55	780540.892	109.001047	ppb
	Fe	54	71519.843	105.089102	ppb
	Fe	56	2102125.618	164.834909	ppb
	Fe	57	54121.059	336.713524	ppb
	Co	59	61577.004	8.427577	ppb
	Ni	60	7132.543	4.484206	ppb
	Cu	63	3263.866	0.795772	ppb
	Cu	65	1933.520	1.022209	ppb
	Zn	66	5961.777	7.114802	ppb
	As	75	524.734	0.588504	ppb
	Se	82	57.333	0.388972	ppb
	Mo	96	710.025	0.310881	ppb
	Ag	107	23.333	-0.000724	ppb
	Ag	109	30.000	0.000897	ppb
	Cd	111	28.090	0.019270	ppb
	In	113	32156.619	0.747830	ppb
>	In	115	714838.730		ppb
	Sn	118	330.005	0.054742	ppb
	Sb	121	415.009	0.008319	ppb
	Ba	135	290194.419	201.742332	ppb
	Ba	137	515254.990	205.077468	ppb
>	Tb	159	1235398.728		ppb
	Tl	205	610.019	0.029478	ppb
	Pb	206	495.012	0.046601	ppb
	Pb	207	1010.026	0.054473	ppb
	Pb	208	1725.086	0.060013	ppb
>	Bi	209	889779.258		ppb
	Cr	53	1104.061		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	385086.515		ppb
	Kr	83	26.000		ppb
	Se	77	74.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	99955.067		ppb
	Be	9	2.000	-0.002507	ppb
	Na	23	11661600.949	3975.470575	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13094172.700	34260.645213	ppb
	Mg	26	16106286.698	34194.749049	ppb
	Al	27	19058.143	3.908135	ppb
	K	39	15634059.471	2343.601079	ppb
	Ca	44	19460941.661	75331.100241	ppb
>	Sc	45	369041.196		ppb

	Ti	47	830.034	1.244214	ppb
	V	51	2320.826	0.113772	ppb
	Cr	52	6760.284	0.191269	ppb
	Mn	55	1200421.056	114.486776	ppb
	Fe	54	89301.970	78.527212	ppb
	Fe	56	2465077.620	101.948999	ppb
	Fe	57	79293.129	336.856700	ppb
	Co	59	90259.509	8.435032	ppb
	Ni	60	10388.727	4.459688	ppb
	Cu	63	4487.673	0.745557	ppb
	Cu	65	2500.313	0.898824	ppb
	Zn	66	8500.278	6.921957	ppb
	As	75	802.287	0.613561	ppb
	Se	82	65.334	0.238556	ppb
	Mo	96	866.037	0.269110	ppb
	Ag	107	50.000	0.001071	ppb
	Ag	109	23.333	-0.001039	ppb
	Cd	111	47.469	0.023735	ppb
	In	113	46121.113	1.492748	ppb
>	In	115	994273.214		ppb
	Sn	118	380.007	0.041238	ppb
	Sb	121	525.014	0.000373	ppb
	Ba	135	409962.674	205.594833	ppb
	Ba	137	738592.530	212.061031	ppb
>	Tb	159	1712567.711		ppb
	Tl	205	825.034	0.030037	ppb
	Pb	206	840.035	0.067219	ppb
	Pb	207	1435.053	0.060076	ppb
	Pb	208	2090.129	0.052307	ppb
>	Bi	209	1182429.704		ppb
	Cr	53	1184.070		ppb
	Pd	106	50.000		ppb
	Pd	108	10.000		ppb
	C	12	419035.360		ppb
	Kr	83	52.000		ppb
	Se	77	86.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	97377.825		ppb
	Be	9	4.000	0.004551	ppb
	Na	23	10945173.352	3829.908599	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13475768.995	36192.273215	ppb
	Mg	26	16394022.649	35726.825281	ppb
	Al	27	18436.980	3.876025	ppb
	K	39	15564600.777	2395.821690	ppb
	Ca	44	19758541.162	78511.017926	ppb
>	Sc	45	371862.892		ppb
	Ti	47	920.042	1.377860	ppb
	V	51	2137.202	0.091043	ppb
	Cr	52	6414.056	0.139798	ppb
	Mn	55	1160262.285	109.800470	ppb
	Fe	54	90654.054	79.669918	ppb
	Fe	56	2486844.161	102.245889	ppb
	Fe	57	77766.208	327.554627	ppb
	Co	59	89601.632	8.309900	ppb
	Ni	60	10311.981	4.392918	ppb
	Cu	63	4607.728	0.760176	ppb
	Cu	65	2546.991	0.909009	ppb
	Zn	66	8180.011	6.602456	ppb
	As	75	777.631	0.590916	ppb
	Se	82	62.000	0.207847	ppb

⌈	Mo	96	936.044	0.289741	ppb
|	Ag	107	26.667	-0.001345	ppb
|	Ag	109	73.334	0.004141	ppb
|	Cd	111	103.199	0.052779	ppb
|	In	113	45041.208	0.659335	ppb
|>	In	115	1004983.767		ppb
⌊	Sn	118	370.007	0.038854	ppb
⌈	Sb	121	560.016	0.008789	ppb
|	Ba	135	392827.027	203.427241	ppb
|	Ba	137	687349.603	203.785283	ppb
⌊>	Tb	159	1658469.933		ppb
⌈	Tl	205	895.040	0.031682	ppb
|	Pb	206	750.028	0.054410	ppb
|	Pb	207	1330.045	0.051256	ppb
|	Pb	208	1965.113	0.045232	ppb
⌊>	Bi	209	1220159.151		ppb
	Cr	53	1194.071		ppb
	Pd	106	50.000		ppb
	Pd	108	0.000		ppb
	C	12	421814.623		ppb
	Kr	83	24.000		ppb
	Se	77	82.000		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		72.441			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		65.346			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		64.751			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		70.465			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		66.176			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-06

Sample Date/Time: Monday, November 09, 2009 21:17:23
Sample Type: Sample
Sample Description: 16WC1B
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-06.906

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	83879.472	21.273	83879.472			ppb
	Be	9	19.333	36.330	0.000	0.06655	23.13	ppb
	Na	23	10613030.644	21.726	126.394	4309.29427	1.99	ppb
	Mg	24	27778796.106	20.480	331.625	13438.07631	1.23	ppb
	Mg	25	4103321.554	18.598	49.141	12851.89587	3.32	ppb
	Mg	26	4901352.175	21.531	58.429	12399.43574	2.60	ppb
	Al	27	34400.618	19.870	0.383	9.21946	1.92	ppb
	K	39	15134542.605	19.896	178.209	2716.06295	1.67	ppb
	Ca	44	5940750.962	20.942	70.640	27363.76964	1.28	ppb
>	Sc	45	314016.889	22.405	314016.889			ppb
	Ti	47	555.016	23.407	0.002	0.95625	2.31	ppb
	V	51	2356.683	16.517	0.004	0.16927	22.15	ppb
	Cr	52	8737.824	5.570	0.014	0.68882	39.18	ppb
	Mn	55	72965103.320	19.095	233.715	8255.17411	3.99	ppb
	Fe	54	46270.621	8.283	0.033	20.83233	77.30	ppb
	Fe	56	1539084.259	0.788	1.107	41.87208	115.08	ppb
	Fe	57	25678.598	17.508	0.075	122.24648	7.14	ppb
	Co	59	9561.337	18.233	0.030	1.05146	5.59	ppb
	Ni	60	19263.326	16.749	0.062	9.83582	6.80	ppb
	Cu	63	5076.873	18.491	0.016	1.00726	6.02	ppb
	Cu	65	2763.723	17.864	0.009	1.18782	6.96	ppb
	Zn	66	18569.785	17.150	0.059	18.22914	6.65	ppb
	As	75	967.203	15.158	0.003	0.87223	8.37	ppb
	Se	82	67.556	6.345	0.000	0.37040	33.18	ppb
	Mo	96	262.670	16.408	0.000	0.06842	5.42	ppb
	Ag	107	2308.049	16.113	0.002	0.24953	2.71	ppb
	Ag	109	2305.827	17.482	0.002	0.25668	2.23	ppb
	Cd	111	728.624	8.829	0.001	0.41974	13.57	ppb
	In	113	42388.346	18.470	0.002	1.09284	23.83	ppb
>	In	115	928555.709	18.188	928555.709			ppb
	Sn	118	596.685	20.822	0.001	0.08681	24.47	ppb
	Sb	121	358.340	17.222	-0.000	-0.02144	10.33	ppb
	Ba	135	321394.289	18.885	0.202	173.53654	0.98	ppb
	Ba	137	565695.206	19.516	0.355	174.72582	1.72	ppb
>	Tb	159	1588735.854	18.037	1588735.854			ppb
	Tl	205	823.368	14.350	0.001	0.03114	2.40	ppb
	Pb	206	2271.929	16.119	0.002	0.23837	5.78	ppb
	Pb	207	4182.120	20.648	0.003	0.23324	6.81	ppb
	Pb	208	6601.314	20.342	0.005	0.23143	5.98	ppb
>	Bi	209	1142722.280	15.610	1142722.280			ppb
	Cr	53	1448.105	3.621	-2222.571			ppb
	Pd	106	95.001	46.780	91.667			ppb
	Pd	108	31.667	59.778	28.333			ppb
	C	12	434288.431	11.774	46649.188			ppb
	Kr	83	32.667	9.352	-20.000			ppb
	Se	77	78.000	6.784	-36.889			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	63285.622		ppb
	Be	9	12.000	0.054309	ppb
	Na	23	7974049.770	4293.656458	ppb
	Mg	24	21226848.221	13591.434088	ppb
	Mg	25	3225428.859	13329.139863	ppb
	Mg	26	3699916.427	12406.499669	ppb
	Al	27	26525.133	9.413140	ppb
	K	39	11660945.335	2768.031881	ppb
	Ca	44	4504975.487	27486.619172	ppb
>	Sc	45	233054.438		ppb
	Ti	47	405.008	0.940460	ppb
	V	51	1952.366	0.201433	ppb
	Cr	52	8189.352	1.000359	ppb
	Mn	55	56883936.861	8620.859565	ppb
	Fe	54	42038.175	39.414095	ppb
	Fe	56	1528463.597	97.361025	ppb
	Fe	57	20511.014	131.157653	ppb
	Co	59	7552.851	1.111070	ppb
	Ni	60	15572.115	10.606956	ppb
	Cu	63	4000.800	1.062984	ppb
	Cu	65	2200.242	1.265165	ppb
	Zn	66	14897.756	19.532183	ppb
	As	75	797.933	0.955368	ppb
	Se	82	62.667	0.512231	ppb
	Mo	96	214.002	0.071156	ppb
	Ag	107	1880.177	0.256665	ppb
	Ag	109	1843.503	0.259501	ppb
	Cd	111	670.129	0.481396	ppb
	In	113	33360.554	1.009920	ppb
>	In	115	733556.436		ppb
	Sn	118	530.014	0.099080	ppb
	Sb	121	290.004	-0.020241	ppb
	Ba	135	251484.965	171.582684	ppb
	Ba	137	438854.917	171.423340	ppb
>	Tb	159	1258777.668		ppb
	Tl	205	690.024	0.031792	ppb
	Pb	206	1890.179	0.241892	ppb
	Pb	207	3220.267	0.218571	ppb
	Pb	208	5070.788	0.216236	ppb
>	Bi	209	937623.417		ppb
	Cr	53	1462.107		ppb
	Pd	106	60.000		ppb
	Pd	108	10.000		ppb
	C	12	386940.045		ppb
	Kr	83	36.000		ppb
	Se	77	72.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	93608.083		ppb
	Be	9	26.000	0.083833	ppb
	Na	23	11626764.733	4232.487140	ppb
	Mg	24	30641006.836	13263.996184	ppb
	Mg	25	4476179.847	12505.861358	ppb
	Mg	26	5325613.195	12073.088899	ppb
	Al	27	37886.634	9.066242	ppb
	K	39	16739545.319	2685.225795	ppb
	Ca	44	6699711.754	27636.575977	ppb
>	Sc	45	360311.340		ppb

	Ti	47	630.020	0.946826	ppb
	V	51	2388.812	0.128087	ppb
	Cr	52	9118.155	0.527388	ppb
	Mn	55	81418608.235	7981.093536	ppb
	Fe	54	49507.246	12.127141	ppb
	Fe	56	1536499.435	10.581675	ppb
	Fe	57	27833.682	113.708814	ppb
	Co	59	10449.457	0.993466	ppb
	Ni	60	21546.521	9.491270	ppb
	Cu	63	5501.513	0.942642	ppb
	Cu	65	2970.441	1.100694	ppb
	Zn	66	20233.783	17.136750	ppb
	As	75	1053.744	0.818827	ppb
	Se	82	70.667	0.295436	ppb
	Mo	96	296.004	0.069892	ppb
	Ag	107	2553.659	0.248709	ppb
	Ag	109	2490.310	0.250096	ppb
	Cd	111	797.519	0.408716	ppb
	In	113	46492.828	0.883915	ppb
>	In	115	1027678.823		ppb
	Sn	118	520.014	0.062281	ppb
	Sb	121	375.007	-0.023999	ppb
	Ba	135	352070.467	174.562048	ppb
	Ba	137	618080.572	175.449861	ppb
>	Tb	159	1732170.982		ppb
	Tl	205	865.037	0.030322	ppb
	Pb	206	2305.266	0.223168	ppb
	Pb	207	4435.493	0.231062	ppb
	Pb	208	7151.487	0.234771	ppb
>	Bi	209	1228830.875		ppb
	Cr	53	1492.111		ppb
	Pd	106	145.001		ppb
	Pd	108	45.000		ppb
	C	12	488512.273		ppb
	Kr	83	30.000		ppb
	Se	77	82.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	94744.712		ppb
	Be	9	20.000	0.061503	ppb
	Na	23	12238277.430	4401.739209	ppb
	Mg	24	31468533.260	13458.798673	ppb
	Mg	25	4608355.955	12720.686381	ppb
	Mg	26	5678526.903	12718.718659	ppb
	Al	27	38790.088	9.179012	ppb
	K	39	17003137.161	2694.931163	ppb
	Ca	44	6617565.645	26968.113780	ppb
>	Sc	45	348684.890		ppb
	Ti	47	630.020	0.981460	ppb
	V	51	2728.871	0.178301	ppb
	Cr	52	8905.964	0.538705	ppb
	Mn	55	80592764.864	8163.569218	ppb
	Fe	54	47266.442	10.955757	ppb
	Fe	56	1552289.743	17.673544	ppb
	Fe	57	28691.100	121.872974	ppb
	Co	59	10681.702	1.049838	ppb
	Ni	60	20671.343	9.409238	ppb
	Cu	63	5728.307	1.016162	ppb
	Cu	65	3120.487	1.197608	ppb
	Zn	66	20577.817	18.018476	ppb
	As	75	1049.932	0.842506	ppb
	Se	82	69.334	0.303527	ppb

⌈	Mo	96	278.004	0.064199	ppb
|	Ag	107	2490.310	0.243220	ppb
|	Ag	109	2583.667	0.260437	ppb
|	Cd	111	718.223	0.369099	ppb
|	In	113	47311.656	1.384675	ppb
|>	In	115	1024431.868		ppb
⌊	Sn	118	740.027	0.099055	ppb
⌈	Sb	121	410.008	-0.020086	ppb
|	Ba	135	360627.433	174.464887	ppb
|	Ba	137	640150.128	177.304245	ppb
⌊>	Tb	159	1775258.911		ppb
⌈	Tl	205	915.042	0.031300	ppb
|	Pb	206	2620.343	0.250039	ppb
|	Pb	207	4890.601	0.250091	ppb
|	Pb	208	7581.668	0.243294	ppb
⌊>	Bi	209	1261712.546		ppb
	Cr	53	1390.097		ppb
	Pd	106	80.000		ppb
	Pd	108	40.000		ppb
	C	12	427412.975		ppb
	Kr	83	32.000		ppb
	Se	77	80.000		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		69.181			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		62.000			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		66.458			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		72.909			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		68.906			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-07

Sample Date/Time: Monday, November 09, 2009 21:19:21
Sample Type: Sample
Sample Description: 16-1
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-07.907

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	100262.120	23.774	100262.120			ppb
	Be	9	8.000	66.144	0.000	0.01656	81.54	ppb
	Na	23	6566518.753	24.920	65.293	2226.12804	2.03	ppb
	Mg	24	65756919.481	29.368	648.809	26290.95666	6.91	ppb
	Mg	25	9705597.598	27.519	96.121	25138.72272	4.97	ppb
	Mg	26	11822268.562	24.285	117.814	25001.65876	1.98	ppb
	Al	27	803809.995	23.144	7.999	192.73379	1.47	ppb
	K	39	16362665.443	24.250	160.409	2444.77868	0.66	ppb
	Ca	44	11318566.389	23.904	112.642	43633.82907	1.38	ppb
>	Sc	45	370832.498	23.662	370832.498			ppb
	Ti	47	2947.111	19.021	0.008	4.68337	9.78	ppb
	V	51	7668.211	21.322	0.017	0.72330	8.21	ppb
	Cr	52	14573.413	13.816	0.026	1.23624	18.45	ppb
	Mn	55	127188.145	22.893	0.332	11.72768	2.09	ppb
	Fe	54	248134.834	22.544	0.552	350.62982	1.77	ppb
	Fe	56	5097737.345	17.693	9.922	375.33358	10.51	ppb
	Fe	57	119797.630	22.746	0.317	513.34029	2.34	ppb
	Co	59	4452.355	21.557	0.012	0.40849	2.64	ppb
	Ni	60	12824.044	22.249	0.035	5.49815	2.53	ppb
	Cu	63	7369.456	20.307	0.020	1.24264	4.15	ppb
	Cu	65	3818.531	22.569	0.010	1.38587	1.97	ppb
	Zn	66	5791.724	20.558	0.015	4.66389	3.96	ppb
	As	75	325.224	8.358	0.001	0.26624	17.77	ppb
	Se	82	53.778	12.040	0.000	0.16446	86.97	ppb
	Mo	96	1428.772	20.542	0.001	0.44723	2.64	ppb
	Ag	107	15846.165	18.525	0.015	1.57123	1.34	ppb
	Ag	109	15240.824	20.668	0.015	1.55048	2.67	ppb
	Cd	111	130.588	34.844	0.000	0.06435	19.10	ppb
	In	113	46534.938	16.340	0.002	1.09144	88.27	ppb
>	In	115	1024992.072	19.679	1024992.072			ppb
	Sn	118	1016.719	12.210	0.001	0.14818	20.11	ppb
	Sb	121	578.350	14.630	0.000	0.00956	53.31	ppb
	Ba	135	456821.827	19.893	0.267	229.21726	2.41	ppb
	Ba	137	790797.569	19.255	0.462	227.34245	1.30	ppb
>	Tb	159	1707679.479	18.114	1707679.479			ppb
	Tl	205	578.351	22.978	0.000	0.01917	2.32	ppb
	Pb	206	6889.100	19.673	0.005	0.71173	3.30	ppb
	Pb	207	13022.700	20.073	0.010	0.71865	2.83	ppb
	Pb	208	20899.693	17.637	0.016	0.73096	6.83	ppb
>	Bi	209	1252255.047	22.350	1252255.047			ppb
	Cr	53	1892.847	11.101	-1777.829			ppb
	Pd	106	43.333	37.091	40.000			ppb
	Pd	108	11.667	65.465	8.333			ppb
	C	12	446298.696	8.375	58659.453			ppb
	Kr	83	39.333	10.585	-13.333			ppb
	Se	77	86.223	19.944	-28.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	72747.652		ppb
	Be	9	4.000	0.009209	ppb
	Na	23	4685858.225	2193.843761	ppb
	Mg	24	43458221.456	24206.935942	ppb
	Mg	25	6627608.699	23826.455802	ppb
	Mg	26	8513872.876	24835.654792	ppb
	Al	27	589129.433	194.445225	ppb
	K	39	11781263.378	2427.976534	ppb
	Ca	44	8196889.144	43558.791093	ppb
>	Sc	45	269611.166		ppb
	Ti	47	2340.274	5.064484	ppb
	V	51	5887.495	0.766381	ppb
	Cr	52	12255.505	1.496615	ppb
	Mn	55	93848.319	11.887686	ppb
	Fe	54	183549.196	357.129585	ppb
	Fe	56	4068069.672	420.046320	ppb
	Fe	57	88636.085	521.539921	ppb
	Co	59	3346.560	0.420838	ppb
	Ni	60	9557.899	5.620257	ppb
	Cu	63	5644.926	1.302047	ppb
	Cu	65	2823.732	1.407051	ppb
	Zn	66	4420.977	4.875540	ppb
	As	75	296.547	0.319819	ppb
	Se	82	55.333	0.322569	ppb
	Mo	96	1090.059	0.441186	ppb
	Ag	107	12471.105	1.595587	ppb
	Ag	109	11606.732	1.528200	ppb
	Cd	111	78.370	0.050738	ppb
	In	113	37756.142	2.143275	ppb
>	In	115	793006.553		ppb
	Sn	118	945.045	0.178825	ppb
	Sb	121	485.012	0.014552	ppb
	Ba	135	352934.125	224.343844	ppb
	Ba	137	615305.009	223.922703	ppb
>	Tb	159	1351130.519		ppb
	Tl	205	425.009	0.018980	ppb
	Pb	206	5326.418	0.738770	ppb
	Pb	207	10012.516	0.742108	ppb
	Pb	208	16758.380	0.784447	ppb
>	Bi	209	929636.915		ppb
	Cr	53	1724.149		ppb
	Pd	106	25.000		ppb
	Pd	108	10.000		ppb
	C	12	403634.908		ppb
	Kr	83	36.000		ppb
	Se	77	72.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	114621.157		ppb
	Be	9	6.000	0.008326	ppb
	Na	23	7665389.345	2277.830396	ppb
	Mg	24	76759884.976	27136.676700	ppb
	Mg	25	11077132.109	25274.597542	ppb
	Mg	26	13293082.994	24610.946477	ppb
	Al	27	904517.310	189.459968	ppb
	K	39	18699997.454	2446.252399	ppb
	Ca	44	12771077.832	43072.354211	ppb
>	Sc	45	417523.033		ppb

	Ti	47	3445.594	4.810403	ppb
	V	51	8015.392	0.655592	ppb
	Cr	52	15888.612	1.140584	ppb
	Mn	55	140099.568	11.444813	ppb
	Fe	54	279527.943	349.954384	ppb
	Fe	56	5477154.936	345.507732	ppb
	Fe	57	131605.337	499.567421	ppb
	Co	59	4941.220	0.400888	ppb
	Ni	60	14083.243	5.346776	ppb
	Cu	63	8136.642	1.210150	ppb
	Cu	65	4337.607	1.395446	ppb
	Zn	66	6385.371	4.535033	ppb
	As	75	350.612	0.248668	ppb
	Se	82	46.667	0.044108	ppb
	Mo	96	1588.126	0.439702	ppb
	Ag	107	17805.838	1.558630	ppb
	Ag	109	16927.648	1.524950	ppb
	Cd	111	151.654	0.067665	ppb
	In	113	51054.999	0.251807	ppb
>	In	115	1159006.244		ppb
	Sn	118	1160.067	0.146395	ppb
	Sb	121	650.021	0.009774	ppb
	Ba	135	521576.385	235.210968	ppb
	Ba	137	887826.627	229.221003	ppb
>	Tb	159	1904492.492		ppb
	Tl	205	650.021	0.018858	ppb
	Pb	206	7742.997	0.696591	ppb
	Pb	207	14720.430	0.708064	ppb
	Pb	208	23821.608	0.722782	ppb
>	Bi	209	1430094.496		ppb
	Cr	53	2128.226		ppb
	Pd	106	55.000		ppb
	Pd	108	5.000		ppb
	C	12	473268.258		ppb
	Kr	83	44.000		ppb
	Se	77	81.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	113417.550		ppb
	Be	9	14.000	0.032140	ppb
	Na	23	7348308.688	2206.709974	ppb
	Mg	24	77052652.010	27529.257346	ppb
	Mg	25	11412051.987	26315.114816	ppb
	Mg	26	13659849.814	25558.375013	ppb
	Al	27	917783.241	194.296166	ppb
	K	39	18606735.499	2460.107101	ppb
	Ca	44	12987732.190	44270.341914	ppb
>	Sc	45	425363.297		ppb
	Ti	47	3055.467	4.175216	ppb
	V	51	9101.745	0.747938	ppb
	Cr	52	15576.121	1.071508	ppb
	Mn	55	147616.550	11.850554	ppb
	Fe	54	281327.362	344.805484	ppb
	Fe	56	5747987.426	360.446695	ppb
	Fe	57	139151.467	518.913541	ppb
	Co	59	5069.285	0.403751	ppb
	Ni	60	14830.990	5.527406	ppb
	Cu	63	8326.799	1.215719	ppb
	Cu	65	4294.255	1.355125	ppb
	Zn	66	6568.823	4.581105	ppb
	As	75	328.512	0.230226	ppb
	Se	82	59.334	0.126691	ppb

⌈	Mo	96	1608.129	0.460817	ppb
|	Ag	107	17261.552	1.559485	ppb
|	Ag	109	17188.092	1.598279	ppb
|	Cd	111	161.740	0.074633	ppb
|	In	113	50793.673	0.879237	ppb
|>	In	115	1122963.419		ppb
⌊	Sn	118	945.045	0.119312	ppb
⌈	Sb	121	600.018	0.004362	ppb
|	Ba	135	495954.970	228.096965	ppb
|	Ba	137	869261.071	228.883646	ppb
⌊>	Tb	159	1867415.427		ppb
⌈	Tl	205	660.022	0.019682	ppb
|	Pb	206	7597.885	0.699837	ppb
|	Pb	207	14335.154	0.705767	ppb
|	Pb	208	22119.090	0.685657	ppb
⌊>	Bi	209	1397033.729		ppb
	Cr	53	1826.167		ppb
	Pd	106	50.000		ppb
	Pd	108	20.000		ppb
	C	12	461992.922		ppb
	Kr	83	38.000		ppb
	Se	77	105.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		82.693			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		73.218			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		73.360			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		78.368			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		75.511			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-08

Sample Date/Time: Monday, November 09, 2009 21:21:18
Sample Type: Sample
Sample Description: 16-2
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-08.908

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	102445.067	27.631	102445.067			ppb
|	Be	9	3.333	91.652	0.000	0.00018	4700.16	ppb
|	Na	23	12637201.718	28.130	123.151	4198.74972	1.21	ppb
|	Mg	24	60061665.323	25.087	589.758	23898.08518	3.20	ppb
|	Mg	25	8919398.622	24.746	87.652	22923.77114	3.70	ppb
|	Mg	26	10640666.231	25.519	104.380	22150.79385	2.72	ppb
|	Al	27	21841.157	20.472	0.188	4.53692	10.30	ppb
|	K	39	22270541.387	23.778	216.815	3304.45329	5.82	ppb
⌊	Ca	44	21814304.337	27.025	213.038	82523.76074	1.57	ppb
⌈>	Sc	45	365796.058	22.670	365796.058			ppb
|	Ti	47	788.366	26.093	0.002	1.18224	5.74	ppb
|	V	51	3143.328	20.934	0.005	0.21239	13.40	ppb
|	Cr	52	13953.152	11.826	0.025	1.18080	20.26	ppb
|	Mn	55	7065.893	19.699	0.008	0.27859	8.77	ppb
|	Fe	54	41439.049	2.435	-0.000	-0.28259	6856.64	ppb
|	Fe	56	1785974.304	7.532	1.039	39.30746	92.10	ppb
|	Fe	57	60970.328	23.339	0.159	258.40224	0.82	ppb
|	Co	59	1357.429	24.213	0.003	0.12015	4.68	ppb
|	Ni	60	6570.001	21.382	0.018	2.84622	2.29	ppb
|	Cu	63	2291.380	18.698	0.006	0.37455	5.41	ppb
|	Cu	65	1470.111	19.651	0.004	0.52319	5.19	ppb
|	Zn	66	4235.368	21.015	0.011	3.39980	2.54	ppb
|	As	75	131.334	57.274	0.000	0.11118	37.03	ppb
⌊	Se	82	51.778	3.240	0.000	0.15044	77.54	ppb
⌈	Mo	96	3738.055	22.243	0.004	1.26063	2.72	ppb
|	Ag	107	31.111	16.366	-0.000	-0.00080	60.33	ppb
|	Ag	109	37.778	20.377	0.000	0.00056	125.45	ppb
|	Cd	111	97.153	29.908	0.000	0.04989	12.82	ppb
|	In	113	45977.121	21.829	0.003	1.52116	34.55	ppb
|>	In	115	987538.851	20.114	987538.851			ppb
⌊	Sn	118	430.009	19.423	0.000	0.05061	13.50	ppb
⌈	Sb	121	380.008	29.393	-0.000	-0.02257	34.52	ppb
|	Ba	135	628954.137	21.029	0.371	318.77478	3.36	ppb
|	Ba	137	1097599.648	21.033	0.648	318.49302	3.45	ppb
⌊>	Tb	159	1688066.140	18.266	1688066.140			ppb
⌈	Tl	205	823.368	20.191	0.001	0.03015	13.36	ppb
|	Pb	206	1003.386	23.510	0.001	0.08580	17.34	ppb
|	Pb	207	1803.418	15.769	0.001	0.08304	9.85	ppb
|	Pb	208	3068.632	20.097	0.002	0.08966	8.25	ppb
⌊>	Bi	209	1183301.220	19.749	1183301.220			ppb
	Cr	53	1863.508	7.089	-1807.169			ppb
	Pd	106	15.000	66.667	11.667			ppb
	Pd	108	13.333	43.301	10.000			ppb
	C	12	456558.520	6.507	68919.277			ppb
	Kr	83	40.667	17.272	-12.000			ppb
	Se	77	104.667	5.442	-10.222			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	69764.508		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	8533706.461	4168.211162	ppb
	Mg	24	42666424.002	24782.129384	ppb
	Mg	25	6370999.016	23883.313121	ppb
	Mg	26	7507705.448	22837.033140	ppb
	Al	27	16678.898	5.074527	ppb
	K	39	16221696.365	3503.585102	ppb
	Ca	44	15026098.865	83344.262649	ppb
>	Sc	45	271229.045		ppb
	Ti	47	565.016	1.145606	ppb
	V	51	2405.370	0.222047	ppb
	Cr	52	12105.323	1.456939	ppb
	Mn	55	5466.494	0.304604	ppb
	Fe	54	41521.021	22.084645	ppb
	Fe	56	1661808.982	81.040403	ppb
	Fe	57	44749.904	255.984610	ppb
	Co	59	978.048	0.116842	ppb
	Ni	60	4951.225	2.886451	ppb
	Cu	63	1796.828	0.394580	ppb
	Cu	65	1136.731	0.543699	ppb
	Zn	66	3210.515	3.469070	ppb
	As	75	44.480	0.063861	ppb
	Se	82	52.000	0.282306	ppb
	Mo	96	2784.388	1.221824	ppb
	Ag	107	26.667	-0.000480	ppb
	Ag	109	33.333	0.001089	ppb
	Cd	111	67.640	0.045484	ppb
	In	113	34644.910	1.036608	ppb
>	In	115	760957.158		ppb
	Sn	118	340.006	0.052220	ppb
	Sb	121	255.003	-0.030829	ppb
	Ba	135	476305.485	306.813150	ppb
	Ba	137	831061.446	306.484418	ppb
>	Tb	159	1333324.466		ppb
	Tl	205	670.022	0.031663	ppb
	Pb	206	780.030	0.086363	ppb
	Pb	207	1490.056	0.089820	ppb
	Pb	208	2415.171	0.091710	ppb
>	Bi	209	913906.336		ppb
	Cr	53	1734.150		ppb
	Pd	106	25.000		ppb
	Pd	108	20.000		ppb
	C	12	422788.483		ppb
	Kr	83	40.000		ppb
	Se	77	105.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	119305.470		ppb
	Be	9	6.000	0.007637	ppb
	Na	23	14602468.187	4170.735101	ppb
	Mg	24	69065447.223	23457.798110	ppb
	Mg	25	10162185.861	22276.562857	ppb
	Mg	26	12316325.043	21907.234197	ppb
	Al	27	24339.585	4.229653	ppb
	K	39	26070228.285	3290.149313	ppb
	Ca	44	25650963.230	83196.779800	ppb
>	Sc	45	426103.846		ppb

	Ti	47	970.047	1.260483	ppb
	V	51	3355.598	0.180353	ppb
	Cr	52	15279.664	1.034982	ppb
	Mn	55	8003.201	0.256134	ppb
	Fe	54	42404.718	-11.925634	ppb
	Fe	56	1928882.411	20.508714	ppb
	Fe	57	71353.662	259.984479	ppb
	Co	59	1538.118	0.116972	ppb
	Ni	60	7469.455	2.771172	ppb
	Cu	63	2550.325	0.354030	ppb
	Cu	65	1626.799	0.492412	ppb
	Zn	66	4814.492	3.303142	ppb
	As	75	174.233	0.130839	ppb
	Se	82	50.000	0.060709	ppb
	Mo	96	4310.929	1.273214	ppb
	Ag	107	30.000	-0.001348	ppb
	Ag	109	46.667	0.000820	ppb
	Cd	111	125.730	0.057228	ppb
	In	113	53744.034	2.079921	ppb
>	In	115	1131641.027		ppb
	Sn	118	445.010	0.043115	ppb
	Sb	121	470.011	-0.015354	ppb
	Ba	135	709353.338	322.038324	ppb
	Ba	137	1234670.824	320.909758	ppb
>	Tb	159	1891821.348		ppb
	Tl	205	800.032	0.025582	ppb
	Pb	206	980.048	0.070644	ppb
	Pb	207	1875.088	0.073962	ppb
	Pb	208	3640.417	0.095821	ppb
>	Bi	209	1331535.796		ppb
	Cr	53	1998.200		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	468227.069		ppb
	Kr	83	48.000		ppb
	Se	77	98.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	118265.222		ppb
	Be	9	4.000	0.002120	ppb
	Na	23	14775430.505	4257.302898	ppb
	Mg	24	68453124.745	23454.328060	ppb
	Mg	25	10225010.990	22611.437452	ppb
	Mg	26	12097968.202	21708.114220	ppb
	Al	27	24504.988	4.306591	ppb
	K	39	24519699.512	3119.625467	ppb
	Ca	44	24765850.915	81030.239756	ppb
>	Sc	45	400055.284		ppb
	Ti	47	830.034	1.140634	ppb
	V	51	3669.014	0.234759	ppb
	Cr	52	14474.468	1.050477	ppb
	Mn	55	7727.985	0.275032	ppb
	Fe	54	40391.409	-11.006774	ppb
	Fe	56	1767231.519	16.373275	ppb
	Fe	57	66807.419	259.237634	ppb
	Co	59	1556.121	0.126638	ppb
	Ni	60	7289.322	2.881047	ppb
	Cu	63	2526.986	0.375041	ppb
	Cu	65	1646.802	0.533446	ppb
	Zn	66	4681.095	3.427192	ppb
	As	75	175.289	0.138842	ppb
	Se	82	53.333	0.108297	ppb

⌈	Mo	96	4118.848	1.286841	ppb
|	Ag	107	36.667	-0.000559	ppb
|	Ag	109	33.333	-0.000235	ppb
|	Cd	111	98.090	0.046956	ppb
|	In	113	49542.419	1.446943	ppb
|>	In	115	1070018.369		ppb
⌊	Sn	118	505.013	0.056495	ppb
⌈	Sb	121	415.009	-0.021518	ppb
|	Ba	135	701203.589	327.472863	ppb
|	Ba	137	1227066.675	328.084880	ppb
⌊>	Tb	159	1839052.606		ppb
⌈	Tl	205	1000.050	0.033203	ppb
|	Pb	206	1250.078	0.100385	ppb
|	Pb	207	2045.110	0.085350	ppb
|	Pb	208	3150.309	0.081458	ppb
⌊>	Bi	209	1304461.527		ppb
	Cr	53	1858.173		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	478660.008		ppb
	Kr	83	34.000		ppb
	Se	77	110.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		84.493			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		72.223			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		70.680			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		77.468			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		71.353			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-09

Sample Date/Time: Monday, November 09, 2009 21:23:16
Sample Type: Sample
Sample Description: 16-3
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-09.909

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	105397.070	23.351	105397.070			ppb
|	Be	9	1.333	173.205	-0.000	-0.00544	120.21	ppb
|	Na	23	1422924.735	28.480	13.305	453.61520	6.37	ppb
|	Mg	24	46226090.149	26.957	435.713	17655.90894	5.04	ppb
|	Mg	25	6878413.209	26.756	64.914	16977.03131	6.35	ppb
|	Mg	26	8248927.376	23.438	78.335	16623.82831	4.94	ppb
|	Al	27	80006.495	23.825	0.732	17.62642	6.98	ppb
|	K	39	6606613.011	23.367	60.059	915.35172	2.87	ppb
⌊	Ca	44	4418899.966	23.284	41.705	16154.99814	0.24	ppb
⌈>	Sc	45	380095.551	22.289	380095.551			ppb
|	Ti	47	600.018	11.577	0.001	0.86368	13.89	ppb
|	V	51	4036.706	20.066	0.007	0.29754	5.96	ppb
|	Cr	52	22193.767	17.461	0.045	2.14283	7.63	ppb
|	Mn	55	7529.548	15.846	0.009	0.30041	17.92	ppb
|	Fe	54	49445.948	9.107	0.015	9.54924	148.56	ppb
|	Fe	56	1801817.135	5.350	0.901	34.07705	108.79	ppb
|	Fe	57	19127.162	21.338	0.043	70.24298	4.96	ppb
|	Co	59	621.354	26.615	0.001	0.04867	13.14	ppb
|	Ni	60	1341.203	19.193	0.003	0.54847	4.30	ppb
|	Cu	63	1824.615	18.098	0.004	0.28118	5.53	ppb
|	Cu	65	1438.994	17.065	0.004	0.49387	9.75	ppb
|	Zn	66	3667.355	18.817	0.009	2.81364	5.46	ppb
|	As	75	53.725	49.258	0.000	0.05994	37.19	ppb
⌊	Se	82	58.445	9.290	0.000	0.18419	58.01	ppb
⌈	Mo	96	1394.100	22.425	0.001	0.40799	9.66	ppb
|	Ag	107	31.111	16.366	-0.000	-0.00101	107.00	ppb
|	Ag	109	10.000	33.333	-0.000	-0.00248	20.91	ppb
|	Cd	111	16.667	21.226	0.000	0.00671	25.46	ppb
|	In	113	49717.371	17.200	0.002	1.17202	15.03	ppb
|>	In	115	1085585.275	16.913	1085585.275			ppb
⌊	Sn	118	485.012	13.638	0.000	0.05257	7.74	ppb
⌈	Sb	121	226.669	16.557	-0.000	-0.04819	11.18	ppb
|	Ba	135	1640288.760	17.524	0.910	781.27151	0.95	ppb
|	Ba	137	2870614.163	18.532	1.590	781.81622	2.27	ppb
⌊>	Tb	159	1801653.351	16.827	1801653.351			ppb
⌈	Tl	205	133.334	12.055	0.000	0.00248	12.24	ppb
|	Pb	206	1168.403	16.186	0.001	0.08661	2.31	ppb
|	Pb	207	2111.781	14.858	0.001	0.08401	4.72	ppb
|	Pb	208	3347.003	10.933	0.002	0.08381	9.80	ppb
⌊>	Bi	209	1368361.867	17.486	1368361.867			ppb
	Cr	53	2651.689	12.894	-1018.987			ppb
	Pd	106	5.000	173.205	1.667			ppb
	Pd	108	6.667	86.603	3.333			ppb
	C	12	458604.489	6.874	70965.246			ppb
	Kr	83	28.000	7.143	-24.667			ppb
	Se	77	83.111	18.245	-31.778			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	77013.416		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	955001.402	420.532034	ppb
	Mg	24	31864706.071	16765.991009	ppb
	Mg	25	4785831.069	16252.173370	ppb
	Mg	26	6057003.577	16690.003533	ppb
	Al	27	58822.497	17.717925	ppb
	K	39	4830418.679	915.693844	ppb
	Ca	44	3232953.047	16173.289134	ppb
>	Sc	45	282340.318		ppb
	Ti	47	520.014	1.002222	ppb
	V	51	3117.461	0.313258	ppb
	Cr	52	17719.685	2.328942	ppb
	Mn	55	6151.892	0.362333	ppb
	Fe	54	44724.792	25.464044	ppb
	Fe	56	1698442.948	76.827450	ppb
	Fe	57	14485.484	71.639325	ppb
	Co	59	450.010	0.047385	ppb
	Ni	60	1046.721	0.573693	ppb
	Cu	63	1443.438	0.298691	ppb
	Cu	65	1176.736	0.540504	ppb
	Zn	66	2877.080	2.961213	ppb
	As	75	59.742	0.076880	ppb
	Se	82	56.000	0.302036	ppb
	Mo	96	1048.055	0.381035	ppb
	Ag	107	36.667	0.000221	ppb
	Ag	109	13.333	-0.001900	ppb
	Cd	111	15.000	0.007566	ppb
	In	113	39929.560	1.108728	ppb
>	In	115	874424.127		ppb
	Sn	118	410.008	0.055972	ppb
	Sb	121	205.002	-0.044373	ppb
	Ba	135	1308382.442	774.011959	ppb
	Ba	137	2256715.050	764.321319	ppb
>	Tb	159	1451850.251		ppb
	Tl	205	115.001	0.002806	ppb
	Pb	206	950.045	0.088525	ppb
	Pb	207	1755.078	0.088120	ppb
	Pb	208	2925.257	0.093290	ppb
>	Bi	209	1092418.541		ppb
	Cr	53	2266.257		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	422296.328		ppb
	Kr	83	28.000		ppb
	Se	77	70.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	120801.267		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	1660471.269	466.389615	ppb
	Mg	24	52639669.789	17657.432554	ppb
	Mg	25	7604163.392	16462.677251	ppb
	Mg	26	8977838.581	15771.204166	ppb
	Al	27	85425.566	16.353217	ppb
	K	39	7364377.571	888.884610	ppb
	Ca	44	5073603.104	16181.228663	ppb
>	Sc	45	425801.362		ppb

	Ti	47	635.020	0.794045	ppb
	V	51	4346.917	0.278307	ppb
	Cr	52	24495.966	2.077330	ppb
	Mn	55	8213.372	0.274040	ppb
	Fe	54	53693.765	4.952192	ppb
	Fe	56	1817776.263	10.759658	ppb
	Fe	57	22154.514	72.815136	ppb
	Co	59	780.030	0.055603	ppb
	Ni	60	1453.439	0.526971	ppb
	Cu	63	2023.538	0.275859	ppb
	Cu	65	1476.776	0.444365	ppb
	Zn	66	4150.861	2.824977	ppb
	As	75	76.662	0.068250	ppb
	Se	82	54.667	0.093610	ppb
	Mo	96	1478.109	0.389730	ppb
	Ag	107	26.667	-0.001798	ppb
	Ag	109	10.000	-0.002629	ppb
	Cd	111	14.270	0.004745	ppb
	In	113	55739.915	1.371093	ppb
>	In	115	1207596.210		ppb
	Sn	118	510.013	0.048060	ppb
	Sb	121	270.004	-0.045835	ppb
	Ba	135	1807762.600	780.905061	ppb
	Ba	137	3159206.101	781.306016	ppb
>	Tb	159	1988282.127		ppb
	Tl	205	140.001	0.002206	ppb
	Pb	206	1275.081	0.084535	ppb
	Pb	207	2345.139	0.083699	ppb
	Pb	208	3580.372	0.078902	ppb
>	Bi	209	1518223.649		ppb
	Cr	53	2918.426		ppb
	Pd	106	0.000		ppb
	Pd	108	10.000		ppb
	C	12	479033.259		ppb
	Kr	83	30.000		ppb
	Se	77	78.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	118376.527		ppb
	Be	9	4.000	0.002110	ppb
	Na	23	1653301.534	473.923942	ppb
	Mg	24	54173894.587	18544.303258	ppb
	Mg	25	8245245.168	18216.243305	ppb
	Mg	26	9711939.971	17410.277240	ppb
	Al	27	95771.423	18.808129	ppb
	K	39	7625042.783	941.476696	ppb
	Ca	44	4950143.747	16110.476623	ppb
>	Sc	45	432144.974		ppb
	Ti	47	645.021	0.794787	ppb
	V	51	4645.740	0.301041	ppb
	Cr	52	24365.648	2.022204	ppb
	Mn	55	8223.380	0.264857	ppb
	Fe	54	49919.287	-1.768523	ppb
	Fe	56	1889232.192	14.644040	ppb
	Fe	57	20741.488	66.274490	ppb
	Co	59	634.020	0.043011	ppb
	Ni	60	1523.449	0.544761	ppb
	Cu	63	2006.868	0.268990	ppb
	Cu	65	1663.472	0.496740	ppb
	Zn	66	3974.123	2.654722	ppb
	As	75	24.770	0.034688	ppb
	Se	82	64.667	0.156939	ppb

⌈	Mo	96	1656.137	0.453216	ppb
|	Ag	107	30.000	-0.001447	ppb
|	Ag	109	6.667	-0.002901	ppb
|	Cd	111	20.730	0.007826	ppb
|	In	113	53482.638	1.036246	ppb
|>	In	115	1174735.488		ppb
⌊	Sn	118	535.014	0.053685	ppb
⌈	Sb	121	205.002	-0.054348	ppb
|	Ba	135	1804721.238	788.897503	ppb
|	Ba	137	3195921.336	799.821332	ppb
⌊>	Tb	159	1964827.674		ppb
⌈	Tl	205	145.001	0.002427	ppb
|	Pb	206	1280.082	0.086771	ppb
|	Pb	207	2235.128	0.080200	ppb
|	Pb	208	3535.378	0.079236	ppb
⌊>	Bi	209	1494443.410		ppb
	Cr	53	2770.384		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	474483.879		ppb
	Kr	83	26.000		ppb
	Se	77	100.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		86.928			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		75.047			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		77.697			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		82.680			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		82.512			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-10

Sample Date/Time: Monday, November 09, 2009 21:25:14
Sample Type: Sample
Sample Description: 16-5
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-10.910

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	106650.537	22.855	106650.537			ppb
	Be	9	5.333	78.062	0.000	0.00746	145.31	ppb
	Na	23	8341895.684	22.932	78.139	2664.08378	0.42	ppb
	Mg	24	S	S	6666671	27014598387.40796	173.20	ppb
	Mg	25	11990940.019	22.805	112.450	29409.12391	0.75	ppb
	Mg	26	14200708.453	21.639	133.458	28321.49289	2.44	ppb
	Al	27	202384.400	20.722	1.878	45.24542	4.90	ppb
	K	39	11294547.471	21.926	103.453	1576.71817	2.45	ppb
	Ca	44	15245195.188	22.909	142.706	55279.44019	0.18	ppb
>	Sc	45	399266.862	22.559	399266.862			ppb
	Ti	47	1026.720	17.857	0.002	1.44861	5.95	ppb
	V	51	6286.541	20.440	0.012	0.51395	7.38	ppb
	Cr	52	18940.218	15.811	0.034	1.61965	11.41	ppb
	Mn	55	61347.165	22.389	0.142	5.02187	1.70	ppb
	Fe	54	116096.165	18.099	0.175	111.05549	10.05	ppb
	Fe	56	3085945.497	11.156	3.907	147.80992	28.17	ppb
	Fe	57	73437.509	20.085	0.178	288.03098	3.10	ppb
	Co	59	4162.892	20.937	0.010	0.35333	2.23	ppb
	Ni	60	6131.930	20.043	0.015	2.43765	3.77	ppb
	Cu	63	4642.206	15.637	0.011	0.72105	8.79	ppb
	Cu	65	2809.296	22.231	0.007	0.93637	5.31	ppb
	Zn	66	6505.489	17.007	0.016	4.89582	7.53	ppb
	As	75	237.946	26.430	0.001	0.18391	17.79	ppb
	Se	82	130.223	12.544	0.000	0.70302	20.50	ppb
	Mo	96	7574.273	19.396	0.007	2.34992	3.38	ppb
	Ag	107	171.113	17.569	0.000	0.01204	12.00	ppb
	Ag	109	157.779	17.077	0.000	0.01172	2.34	ppb
	Cd	111	7.238	283.448	0.000	0.00341	348.08	ppb
	In	113	50071.151	18.289	0.002	1.32761	22.10	ppb
>	In	115	1085854.215	17.631	1085854.215			ppb
	Sn	118	391.675	17.933	0.000	0.03789	18.46	ppb
	Sb	121	391.675	26.575	-0.000	-0.02394	29.15	ppb
	Ba	135	404893.080	17.588	0.226	194.43590	1.83	ppb
	Ba	137	701591.700	14.979	0.393	193.48859	1.31	ppb
>	Tb	159	1785030.341	15.983	1785030.341			ppb
	Tl	205	693.358	23.306	0.000	0.02259	10.07	ppb
	Pb	206	3122.163	16.603	0.002	0.29726	3.12	ppb
	Pb	207	5674.159	14.708	0.004	0.28922	1.62	ppb
	Pb	208	8830.677	16.798	0.006	0.28208	2.63	ppb
>	Bi	209	1284282.607	15.900	1284282.607			ppb
	Cr	53	2274.261	10.948	-1396.415			ppb
	Pd	106	10.000	50.000	6.667			ppb
	Pd	108	28.333	66.811	25.000			ppb
	C	12	502283.719	12.539	114644.476			ppb
	Kr	83	33.333	24.980	-19.333			ppb
	Se	77	146.446	13.267	31.556			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	78599.686		ppb
	Be	9	4.000	0.007838	ppb
	Na	23	6137247.136	2659.906540	ppb
	Mg	24	56613720.287	29186.914041	ppb
	Mg	25	8855481.243	29465.470026	ppb
	Mg	26	10653215.291	28762.591312	ppb
	Al	27	154387.648	46.642881	ppb
	K	39	8436005.963	1595.544696	ppb
	Ca	44	11228935.506	55252.113897	ppb
>	Sc	45	295399.540		ppb
	Ti	47	815.033	1.547128	ppb
	V	51	4837.015	0.537102	ppb
	Cr	52	15493.994	1.833068	ppb
	Mn	55	45493.247	5.032429	ppb
	Fe	54	92268.721	123.204655	ppb
	Fe	56	2703856.797	195.518786	ppb
	Fe	57	56448.875	298.313597	ppb
	Co	59	3156.498	0.361223	ppb
	Ni	60	4731.119	2.530530	ppb
	Cu	63	3807.391	0.791753	ppb
	Cu	65	2103.555	0.946358	ppb
	Zn	66	5254.714	5.304477	ppb
	As	75	195.865	0.200345	ppb
	Se	82	114.001	0.860893	ppb
	Mo	96	5879.728	2.291298	ppb
	Ag	107	140.001	0.012398	ppb
	Ag	109	126.667	0.011810	ppb
	Cd	111	30.000	0.016808	ppb
	In	113	39648.444	1.169583	ppb
>	In	115	866095.080		ppb
	Sn	118	325.005	0.040058	ppb
	Sb	121	275.004	-0.031561	ppb
	Ba	135	323232.890	190.335376	ppb
	Ba	137	580635.289	195.747203	ppb
>	Tb	159	1458510.530		ppb
	Tl	205	515.013	0.020540	ppb
	Pb	206	2530.320	0.295014	ppb
	Pb	207	4710.558	0.294047	ppb
	Pb	208	7146.471	0.279586	ppb
>	Bi	209	1048637.877		ppb
	Cr	53	2006.201		ppb
	Pd	106	15.000		ppb
	Pd	108	20.000		ppb
	C	12	446490.002		ppb
	Kr	83	24.000		ppb
	Se	77	126.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	118680.094		ppb
	Be	9	2.000	-0.003564	ppb
	Na	23	9325441.666	2676.747579	ppb
	Mg	24	88921373.803	30360.971433	ppb
	Mg	25	13235418.633	29166.331016	ppb
	Mg	26	16038497.289	28678.332831	ppb
	Al	27	231949.181	46.406252	ppb
	K	39	12790350.289	1602.295016	ppb
	Ca	44	16937470.837	55195.171938	ppb
>	Sc	45	446573.614		ppb

	Ti	47	1130.064	1.411350	ppb
	V	51	7285.757	0.534596	ppb
	Cr	52	20416.821	1.509246	ppb
	Mn	55	69646.691	5.101380	ppb
	Fe	54	124044.611	101.247937	ppb
	Fe	56	3181966.630	118.805634	ppb
	Fe	57	80880.768	282.131729	ppb
	Co	59	4669.090	0.353278	ppb
	Ni	60	6635.534	2.346553	ppb
	Cu	63	5124.646	0.702133	ppb
	Cu	65	3290.541	0.980353	ppb
	Zn	66	6905.717	4.587559	ppb
	As	75	207.732	0.146228	ppb
	Se	82	130.001	0.578413	ppb
	Mo	96	8489.602	2.440463	ppb
	Ag	107	200.002	0.013269	ppb
	Ag	109	173.335	0.011943	ppb
	Cd	111	1.545	-0.000807	ppb
	In	113	53739.007	1.147053	ppb
>	In	115	1174983.074		ppb
	Sn	118	465.011	0.043543	ppb
	Sb	121	425.009	-0.022381	ppb
	Ba	135	437363.670	196.625681	ppb
	Ba	137	753611.362	193.968854	ppb
>	Tb	159	1910367.432		ppb
	Tl	205	830.034	0.025038	ppb
	Pb	206	3340.558	0.289321	ppb
	Pb	207	6145.951	0.284698	ppb
	Pb	208	9942.940	0.290409	ppb
>	Bi	209	1409276.318		ppb
	Cr	53	2318.269		ppb
	Pd	106	10.000		ppb
	Pd	108	15.000		ppb
	C	12	570579.563		ppb
	Kr	83	40.000		ppb
	Se	77	164.668		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	122671.832		ppb
	Be	9	10.000	0.018098	ppb
	Na	23	9562998.251	2655.597232	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13881920.182	29595.570685	ppb
	Mg	26	15910412.777	27523.554538	ppb
	Al	27	220816.370	42.687138	ppb
	K	39	12657286.161	1532.314798	ppb
	Ca	44	17569179.220	55391.034724	ppb
>	Sc	45	455827.431		ppb
	Ti	47	1135.064	1.387350	ppb
	V	51	6736.853	0.470150	ppb
	Cr	52	20909.838	1.516627	ppb
	Mn	55	68901.556	4.931808	ppb
	Fe	54	131975.163	108.713869	ppb
	Fe	56	3372013.065	129.105331	ppb
	Fe	57	82982.885	283.647608	ppb
	Co	59	4663.087	0.345496	ppb
	Ni	60	7029.136	2.435875	ppb
	Cu	63	4994.580	0.669271	ppb
	Cu	65	3033.793	0.882390	ppb
	Zn	66	7356.038	4.795410	ppb
	As	75	310.241	0.205148	ppb
	Se	82	146.668	0.669743	ppb

⌈	Mo	96	8353.488	2.317996	ppb
|	Ag	107	173.335	0.010449	ppb
|	Ag	109	173.335	0.011416	ppb
|	Cd	111	-9.830	-0.005773	ppb
|	In	113	56826.002	1.666206	ppb
|>	In	115	1216484.490		ppb
⌊	Sn	118	385.007	0.030070	ppb
⌈	Sb	121	475.011	-0.017868	ppb
|	Ba	135	454082.681	196.346654	ppb
|	Ba	137	770528.448	190.749702	ppb
⌊>	Tb	159	1986213.061		ppb
⌈	Tl	205	735.027	0.022186	ppb
|	Pb	206	3495.611	0.307454	ppb
|	Pb	207	6165.967	0.288922	ppb
|	Pb	208	9402.622	0.276234	ppb
⌊>	Bi	209	1394933.626		ppb
	Cr	53	2498.312		ppb
	Pd	106	5.000		ppb
	Pd	108	50.000		ppb
	C	12	489781.592		ppb
	Kr	83	36.000		ppb
	Se	77	148.668		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		87.962			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		78.832			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		77.716			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		81.917			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		77.442			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-11

Sample Date/Time: Monday, November 09, 2009 21:27:12
Sample Type: Sample
Sample Description: 16WC2B
Number of Replicates: 3
Batch ID: 0910073
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-11.911

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	95512.042	22.671	95512.042			ppb
|	Be	9	2.667	114.564	0.000	0.00238	628.93	ppb
|	Na	23	1696646.851	14.191	17.974	612.82055	10.33	ppb
|	Mg	24	57090089.610	18.464	602.304	24406.47557	5.10	ppb
|	Mg	25	8548457.528	18.739	90.136	23573.42075	4.68	ppb
|	Mg	26	10361068.037	18.878	109.241	23182.39545	4.86	ppb
|	Al	27	46976.080	19.108	0.467	11.24109	4.50	ppb
|	K	39	7664359.217	17.684	78.327	1193.77499	6.10	ppb
⌊	Ca	44	5409818.682	18.936	56.796	22000.78246	4.47	ppb
⌈>	Sc	45	349969.634	19.725	349969.634			ppb
|	Ti	47	538.348	18.444	0.001	0.82398	2.86	ppb
|	V	51	2084.622	13.063	0.002	0.10244	20.82	ppb
|	Cr	52	7978.526	7.257	0.009	0.42737	36.79	ppb
|	Mn	55	53393.967	23.333	0.140	4.95237	5.32	ppb
|	Fe	54	55040.216	9.085	0.042	26.37834	47.76	ppb
|	Fe	56	1861106.761	12.516	1.391	52.61296	31.93	ppb
|	Fe	57	23827.783	24.103	0.061	98.23882	9.24	ppb
|	Co	59	2257.597	22.433	0.006	0.21439	7.52	ppb
|	Ni	60	1722.374	19.006	0.005	0.76754	2.14	ppb
|	Cu	63	1555.681	22.240	0.004	0.25552	6.89	ppb
|	Cu	65	995.607	21.135	0.003	0.35857	8.46	ppb
|	Zn	66	3838.532	18.835	0.010	3.20694	4.51	ppb
|	As	75	258.436	18.299	0.001	0.22154	4.89	ppb
⌊	Se	82	38.445	13.470	0.000	0.05074	194.07	ppb
⌈	Mo	96	7520.900	19.701	0.007	2.51300	5.00	ppb
|	Ag	107	33.333	20.000	-0.000	-0.00061	144.26	ppb
|	Ag	109	27.778	6.928	-0.000	-0.00056	92.05	ppb
|	Cd	111	37.997	13.697	0.000	0.01925	37.32	ppb
|	In	113	45505.767	18.954	0.001	0.76910	68.06	ppb
|>	In	115	1011298.495	19.374	1011298.495			ppb
⌊	Sn	118	510.014	27.081	0.000	0.06114	12.45	ppb
⌈	Sb	121	318.338	13.173	-0.000	-0.02967	8.53	ppb
|	Ba	135	246211.924	17.988	0.150	129.05987	1.08	ppb
|	Ba	137	425232.738	17.741	0.260	127.65199	0.64	ppb
⌊>	Tb	159	1637089.581	17.356	1637089.581			ppb
⌈	Tl	205	68.334	36.829	0.000	0.00068	221.78	ppb
|	Pb	206	921.709	8.216	0.001	0.07333	14.15	ppb
|	Pb	207	1753.411	8.661	0.001	0.07606	13.37	ppb
|	Pb	208	2716.882	14.143	0.002	0.07256	12.19	ppb
⌊>	Bi	209	1233420.649	17.157	1233420.649			ppb
	Cr	53	1150.733	2.515	-2519.943			ppb
	Pd	106	3.333	86.603	0.000			ppb
	Pd	108	16.667	96.437	13.333			ppb
	C	12	442745.111	7.254	55105.868			ppb
	Kr	83	32.667	21.501	-20.000			ppb
	Se	77	64.667	9.834	-50.223			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	70556.033		ppb
|	Be	9	6.000	0.019277	ppb
|	Na	23	1423260.635	685.499132	ppb
|	Mg	24	44985903.270	25836.239966	ppb
|	Mg	25	6699724.868	24833.874294	ppb
|	Mg	26	8126553.488	24442.160913	ppb
|	Al	27	36616.917	11.818898	ppb
|	K	39	6101347.552	1277.717709	ppb
⌊	Ca	44	4230119.290	23136.188925	ppb
⌈>	Sc	45	272302.637		ppb
|	Ti	47	430.009	0.846205	ppb
|	V	51	1771.135	0.122816	ppb
|	Cr	52	7310.671	0.601525	ppb
|	Mn	55	39106.316	4.665355	ppb
|	Fe	54	49306.256	39.853657	ppb
|	Fe	56	1592570.224	70.507948	ppb
|	Fe	57	17219.813	90.988892	ppb
|	Co	59	1676.140	0.204848	ppb
|	Ni	60	1346.757	0.770591	ppb
|	Cu	63	1156.734	0.243882	ppb
|	Cu	65	756.695	0.349631	ppb
|	Zn	66	3003.784	3.220549	ppb
|	As	75	203.996	0.223893	ppb
⌊	Se	82	40.000	0.148758	ppb
⌈	Mo	96	5811.688	2.481853	ppb
|	Ag	107	33.333	0.000241	ppb
|	Ag	109	26.667	0.000032	ppb
|	Cd	111	43.455	0.027535	ppb
|	In	113	35603.267	0.758900	ppb
|>	In	115	791090.895		ppb
⌊	Sn	118	365.007	0.054699	ppb
⌈	Sb	121	270.004	-0.026768	ppb
|	Ba	135	195178.320	128.051218	ppb
|	Ba	137	338199.858	127.032062	ppb
⌊>	Tb	159	1309024.264		ppb
⌈	Tl	205	95.000	0.002379	ppb
|	Pb	206	835.035	0.085038	ppb
|	Pb	207	1585.063	0.087744	ppb
|	Pb	208	2355.157	0.079851	ppb
⌊>	Bi	209	989838.819		ppb
	Cr	53	1136.065		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	405997.731		ppb
	Kr	83	40.000		ppb
	Se	77	57.333		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	106665.862		ppb
|	Be	9	2.000	-0.002928	ppb
|	Na	23	1789575.694	569.760644	ppb
|	Mg	24	62031416.580	23565.303219	ppb
|	Mg	25	9421889.048	23101.172859	ppb
|	Mg	26	11193655.213	22269.646975	ppb
|	Al	27	51859.121	11.028724	ppb
|	K	39	8377186.790	1156.727897	ppb
⌊	Ca	44	5924367.778	21426.865288	ppb
⌈>	Sc	45	373279.222		ppb

	Ti	47	560.016	0.799336	ppb
	V	51	2262.630	0.104231	ppb
	Cr	52	8339.476	0.384760	ppb
	Mn	55	59084.032	5.183532	ppb
	Fe	54	58495.588	24.384662	ppb
	Fe	56	1982274.588	50.152661	ppb
	Fe	57	27618.085	108.420540	ppb
	Co	59	2602.339	0.233020	ppb
	Ni	60	1873.509	0.782235	ppb
	Cu	63	1773.491	0.275783	ppb
	Cu	65	1153.400	0.392375	ppb
	Zn	66	4267.577	3.344403	ppb
	As	75	289.356	0.231009	ppb
	Se	82	42.667	0.051652	ppb
	Mo	96	8309.451	2.405940	ppb
	Ag	107	40.000	-0.000556	ppb
	Ag	109	30.000	-0.000804	ppb
	Cd	111	37.445	0.015469	ppb
	In	113	51376.640	0.250792	ppb
>	In	115	1166358.423		ppb
	Sn	118	640.020	0.069542	ppb
	Sb	121	345.006	-0.030859	ppb
	Ba	135	274568.342	130.643979	ppb
	Ba	137	471966.866	128.569480	ppb
>	Tb	159	1804935.665		ppb
	Tl	205	45.000	-0.000487	ppb
	Pb	206	975.048	0.069645	ppb
	Pb	207	1795.081	0.069186	ppb
	Pb	208	2675.206	0.062721	ppb
>	Bi	209	1338323.656		ppb
	Cr	53	1184.070		ppb
	Pd	106	0.000		ppb
	Pd	108	35.000		ppb
	C	12	456804.537		ppb
	Kr	83	26.000		ppb
	Se	77	68.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	109314.232		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	1877104.225	583.201878	ppb
	Mg	24	64252948.981	23817.883519	ppb
	Mg	25	9523758.668	22785.215090	ppb
	Mg	26	11762995.410	22835.378448	ppb
	Al	27	52452.202	10.875637	ppb
	K	39	8514543.309	1146.879374	ppb
	Ca	44	6074968.978	21439.293160	ppb
>	Sc	45	404327.044		ppb
	Ti	47	625.020	0.826404	ppb
	V	51	2220.102	0.080279	ppb
	Cr	52	8285.431	0.295811	ppb
	Mn	55	61991.554	5.008216	ppb
	Fe	54	57318.803	14.896710	ppb
	Fe	56	2008475.470	37.178263	ppb
	Fe	57	26645.452	95.307034	ppb
	Co	59	2494.311	0.205317	ppb
	Ni	60	1946.856	0.749803	ppb
	Cu	63	1736.817	0.246901	ppb
	Cu	65	1076.725	0.333707	ppb
	Zn	66	4244.234	3.055863	ppb
	As	75	281.956	0.209725	ppb
	Se	82	32.667	-0.048185	ppb

⌈	Mo	96	8441.561	2.651222	ppb
|	Ag	107	26.667	-0.001525	ppb
|	Ag	109	26.667	-0.000903	ppb
|	Cd	111	33.090	0.014747	ppb
|	In	113	49537.395	1.297599	ppb
|>	In	115	1076446.168		ppb
⌊	Sn	118	525.014	0.059174	ppb
⌈	Sb	121	340.006	-0.031392	ppb
|	Ba	135	268889.110	128.484424	ppb
|	Ba	137	465531.491	127.354439	ppb
⌊>	Tb	159	1797308.815		ppb
⌈	Tl	205	65.000	0.000145	ppb
|	Pb	206	955.046	0.065295	ppb
|	Pb	207	1880.088	0.071251	ppb
|	Pb	208	3120.284	0.075112	ppb
⌊>	Bi	209	1372099.472		ppb
	Cr	53	1132.064		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	465433.065		ppb
	Kr	83	32.000		ppb
	Se	77	68.000		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			78.775		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			69.099		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			72.380		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			75.128		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			74.375		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 21:29:11
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.912

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	112984.168	25.619	112984.168			ppb
	Be	9	42178.560	25.375	0.373	125.11415	0.51	ppb
	Na	23	3967081.447	26.622	34.983	1192.73282	1.98	ppb
	Mg	24	3269563.475	29.346	28.710	1163.37351	4.59	ppb
	Mg	25	481945.793	25.367	4.267	1116.04113	1.80	ppb
	Mg	26	584578.472	26.371	5.164	1095.97439	0.92	ppb
	Al	27	4851942.969	24.602	43.005	1036.22231	1.66	ppb
	K	39	7920357.063	23.256	67.806	1033.41838	3.12	ppb
	Ca	44	329988.690	21.791	2.717	1052.38958	5.09	ppb
>	Sc	45	427472.006	22.165	427472.006			ppb
	Ti	47	83987.819	18.860	0.197	117.30570	4.14	ppb
	V	51	1161229.542	21.979	2.714	113.90735	0.23	ppb
	Cr	52	1026896.624	23.725	2.381	114.54944	2.45	ppb
	Mn	55	1416634.902	25.043	3.288	116.13975	5.46	ppb
	Fe	54	842695.208	23.358	1.849	1173.90594	1.53	ppb
	Fe	56	14149883.403	19.060	29.330	1109.52007	6.98	ppb
	Fe	57	315699.802	22.253	0.732	1186.56413	3.99	ppb
	Co	59	1441217.636	21.604	3.376	116.53846	3.43	ppb
	Ni	60	321419.379	22.584	0.751	119.46274	2.68	ppb
	Cu	63	771912.370	24.200	1.799	114.07022	3.19	ppb
	Cu	65	375792.737	24.380	0.876	120.32459	3.40	ppb
	Zn	66	169835.979	24.408	0.395	121.86581	3.11	ppb
	As	75	195354.262	21.575	0.458	125.14947	2.29	ppb
	Se	82	17996.193	20.643	0.042	125.47405	1.96	ppb
	Mo	96	426401.326	19.650	0.349	119.35318	4.60	ppb
	Ag	107	1393770.483	18.609	1.144	116.35290	5.25	ppb
	Ag	109	1354179.900	18.656	1.111	116.29862	5.19	ppb
	Cd	111	287168.486	19.457	0.235	124.48453	5.60	ppb
	In	113	345512.160	20.315	0.239	127.06720	4.58	ppb
>	In	115	1228260.037	23.024	1228260.037			ppb
	Sn	118	847389.760	21.322	0.692	117.61735	3.11	ppb
	Sb	121	865264.476	20.680	0.442	119.69812	3.53	ppb
	Ba	135	286998.033	19.921	0.147	126.30118	5.25	ppb
	Ba	137	489457.705	20.185	0.251	123.22086	3.82	ppb
>	Tb	159	1951461.808	19.543	1951461.808			ppb
	Tl	205	4024822.096	20.443	2.581	118.64212	2.11	ppb
	Pb	206	1365677.880	20.900	0.875	117.06885	1.72	ppb
	Pb	207	2556722.790	20.575	1.639	116.95869	1.24	ppb
	Pb	208	4173392.763	20.773	2.674	120.42320	1.49	ppb
>	Bi	209	1557275.838	19.531	1557275.838			ppb
	Cr	53	120222.613	23.246	116551.937			ppb
	Pd	106	25125.578	18.522	25122.244			ppb
	Pd	108	19319.095	19.076	19315.761			ppb
	C	12	384710.156	4.870	-2929.087			ppb
	Kr	83	46.000	24.208	-6.667			ppb
	Se	77	13887.987	23.364	13773.098			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	79764.858		ppb
|	Be	9	29920.696	125.646362	ppb
|	Na	23	2768265.151	1180.999784	ppb
|	Mg	24	2170295.368	1102.400911	ppb
|	Mg	25	340841.307	1117.414376	ppb
|	Mg	26	407693.680	1084.375982	ppb
|	Al	27	3475749.060	1049.272147	ppb
|	K	39	5797218.830	1067.448772	ppb
⌊	Ca	44	247111.952	1112.047798	ppb
⌈>	Sc	45	318280.789		ppb
|	Ti	47	65700.119	122.530622	ppb
|	V	51	867018.912	114.188107	ppb
|	Cr	52	745594.233	111.989551	ppb
|	Mn	55	1011050.237	111.794853	ppb
|	Fe	54	616070.020	1153.826558	ppb
|	Fe	56	11100789.462	1168.619322	ppb
|	Fe	57	235352.324	1187.501761	ppb
|	Co	59	1083897.158	117.546829	ppb
|	Ni	60	237804.320	118.766675	ppb
|	Cu	63	556343.739	110.801997	ppb
|	Cu	65	270078.526	116.581146	ppb
|	Zn	66	121972.691	118.000983	ppb
|	As	75	146748.061	126.113031	ppb
⌊	Se	82	13707.388	128.022257	ppb
⌈	Mo	96	329707.191	124.721248	ppb
|	Ag	107	1094724.187	123.290342	ppb
|	Ag	109	1063019.987	123.172846	ppb
|	Cd	111	224874.649	131.617307	ppb
|	In	113	265908.992	133.253409	ppb
|>	In	115	903136.340		ppb
⌊	Sn	118	638860.446	120.202914	ppb
⌈	Sb	121	660207.253	116.723433	ppb
|	Ba	135	220980.946	124.087274	ppb
|	Ba	137	375850.908	120.830088	ppb
⌊>	Tb	159	1529417.585		ppb
⌈	Tl	205	3080859.415	117.400681	ppb
|	Pb	206	1036472.247	114.952977	ppb
|	Pb	207	1949492.903	115.328340	ppb
|	Pb	208	3172867.433	118.431171	ppb
⌊>	Bi	209	1206097.142		ppb
	Cr	53	87975.288		ppb
	Pd	106	19754.493		ppb
	Pd	108	15071.349		ppb
	C	12	364960.456		ppb
	Kr	83	44.000		ppb
	Se	77	10155.821		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	132791.869		ppb
|	Be	9	49671.055	125.291509	ppb
|	Na	23	4760069.267	1219.893382	ppb
|	Mg	24	3938792.639	1201.790250	ppb
|	Mg	25	556188.800	1095.275488	ppb
|	Mg	26	690331.376	1102.923955	ppb
|	Al	27	5606955.083	1016.711728	ppb
|	K	39	9091674.819	1003.234852	ppb
⌊	Ca	44	375844.681	1008.358899	ppb
⌈>	Sc	45	476147.208		ppb

	Ti	47	93414.283	116.451199	ppb
	V	51	1293406.275	113.866203	ppb
	Cr	52	1170390.712	117.544057	ppb
	Mn	55	1669277.776	123.422806	ppb
	Fe	54	940974.148	1179.608388	ppb
	Fe	56	16223298.346	1138.155252	ppb
	Fe	57	365556.650	1233.375534	ppb
	Co	59	1654370.863	119.929344	ppb
	Ni	60	368303.050	122.956449	ppb
	Cu	63	886306.955	117.995055	ppb
	Cu	65	432157.151	124.697277	ppb
	Zn	66	194166.915	125.576284	ppb
	As	75	221791.835	127.409456	ppb
	Se	82	20066.780	125.272627	ppb
>	Mo	96	471843.232	113.748840	ppb
	Ag	107	1557504.614	111.788987	ppb
	Ag	109	1515359.084	111.901179	ppb
	Cd	111	332859.689	124.159572	ppb
	In	113	398510.399	126.232562	ppb
>	In	115	1417119.637		ppb
	Sn	118	945983.451	113.431642	ppb
	Sb	121	989772.733	117.828968	ppb
	Ba	135	320170.706	121.056712	ppb
	Ba	137	555244.429	120.193068	ppb
>	Tb	159	2271381.750		ppb
	Tl	205	4590090.185	121.517498	ppb
	Pb	206	1543830.924	118.955473	ppb
	Pb	207	2874047.202	118.121581	ppb
	Pb	208	4701893.579	121.929383	ppb
>	Bi	209	1736055.786		ppb
	Cr	53	135293.061		ppb
	Pd	106	27663.210		ppb
	Pd	108	21222.496		ppb
	C	12	402232.045		ppb
	Kr	83	58.000		ppb
	Se	77	15467.954		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	126395.778		ppb
	Be	9	46943.929	124.404581	ppb
	Na	23	4372909.925	1177.305298	ppb
	Mg	24	3699602.420	1185.929377	ppb
	Mg	25	548807.270	1135.433528	ppb
	Mg	26	655710.361	1100.623247	ppb
	Al	27	5473124.763	1042.683050	ppb
	K	39	8872177.541	1029.571508	ppb
	Ca	44	367009.437	1036.762038	ppb
>	Sc	45	487988.021		ppb
	Ti	47	92849.055	112.935270	ppb
	V	51	1323263.440	113.667752	ppb
	Cr	52	1164704.927	114.114717	ppb
	Mn	55	1569576.695	113.201576	ppb
	Fe	54	971041.457	1188.282876	ppb
	Fe	56	15125562.401	1021.785631	ppb
	Fe	57	346190.430	1138.815088	ppb
	Co	59	1585384.887	112.139201	ppb
	Ni	60	358150.767	116.665105	ppb
	Cu	63	873086.416	113.413611	ppb
	Cu	65	425142.533	119.695332	ppb
	Zn	66	193368.330	122.020156	ppb
	As	75	217522.890	121.925928	ppb
	Se	82	20214.410	123.127267	ppb

⌈	Mo	96	477653.556	119.589452	ppb
|	Ag	107	1529082.648	113.979366	ppb
|	Ag	109	1484160.628	113.821823	ppb
|	Cd	111	303771.120	117.676703	ppb
|	In	113	372117.091	121.715620	ppb
|>	In	115	1364524.135		ppb
⌊	Sn	118	957325.384	119.217485	ppb
⌈	Sb	121	945813.442	124.541957	ppb
|	Ba	135	319842.448	133.759552	ppb
|	Ba	137	537277.778	128.639425	ppb
⌊>	Tb	159	2053586.089		ppb
⌈	Tl	205	4403516.687	117.008184	ppb
|	Pb	206	1516730.468	117.298090	ppb
|	Pb	207	2846628.266	117.426146	ppb
|	Pb	208	4645417.276	120.909037	ppb
⌊>	Bi	209	1729674.586		ppb
	Cr	53	137399.490		ppb
	Pd	106	27959.031		ppb
	Pd	108	21663.440		ppb
	C	12	386937.967		ppb
	Kr	83	36.000		ppb
	Se	77	16040.187		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			93.186		
	Be	9	104.262				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			84.401		
	Ti	47					
	V	51	94.923				
	Cr	52	95.458				
	Mn	55	96.783				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	97.115				
	Ni	60	99.552				
	Cu	63	95.059				
	Cu	65	100.270				
	Zn	66	101.555				
	As	75	104.291				
	Se	82	104.562				
	Mo	96					
	Ag	107	96.961				
	Ag	109	96.916				
	Cd	111	103.737				
	In	113					
>	In	115			87.908		
	Sn	118	98.014				
	Sb	121	99.748				
	Ba	135	105.251				
	Ba	137	102.684				
>	Tb	159			89.555		
	Tl	205	98.868				
	Pb	206	97.557				
	Pb	207	97.466				
	Pb	208	100.353				
>	Bi	209			93.903		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 21:31:09
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.913

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	106855.222	28.919	106855.222			ppb
	Be	9	4.000	86.603	0.000	0.00692	269.19	ppb
	Na	23	5652.999	25.289	-0.006	-0.20851	598.48	ppb
	Mg	24	1638.471	19.811	0.014	0.55070	70.22	ppb
	Mg	25	255.003	14.350	0.002	0.56154	61.76	ppb
	Mg	26	349.006	7.705	0.002	0.46310	64.37	ppb
	Al	27	1555.127	27.582	-0.012	-0.28627	89.03	ppb
	K	39	273639.399	3.733	0.081	1.23717	1027.80	ppb
	Ca	44	17289.014	9.076	-0.050	-19.43658	157.57	ppb
>	Sc	45	379615.771	26.836	379615.771			ppb
	Ti	47	38.333	19.924	-0.000	-0.02781	90.22	ppb
	V	51	1632.378	12.670	0.001	0.03671	101.13	ppb
	Cr	52	5723.638	1.426	0.002	0.08010	312.22	ppb
	Mn	55	1290.083	2.158	-0.008	-0.27957	15.36	ppb
	Fe	54	48890.940	14.723	0.014	8.92262	143.18	ppb
	Fe	56	1488790.869	10.250	0.086	3.25454	971.74	ppb
	Fe	57	2480.308	6.602	-0.000	-0.47062	582.17	ppb
	Co	59	182.668	28.178	0.000	0.01103	103.89	ppb
	Ni	60	86.667	86.688	0.000	0.02983	173.17	ppb
	Cu	63	271.115	47.178	0.000	0.02727	153.19	ppb
	Cu	65	117.779	50.734	0.000	0.01780	232.97	ppb
	Zn	66	182.224	25.892	-0.000	-0.01577	620.73	ppb
	As	75	-32.385	56.506	-0.000	-0.00750	267.85	ppb
	Se	82	47.333	12.909	0.000	0.10307	117.61	ppb
	Mo	96	341.339	20.250	0.000	0.07902	58.90	ppb
	Ag	107	221.114	35.108	0.000	0.01726	74.50	ppb
	Ag	109	171.113	22.410	0.000	0.01309	58.24	ppb
	Cd	111	17.060	66.140	0.000	0.00730	100.36	ppb
	In	113	53937.424	20.438	0.003	1.71049	38.32	ppb
>	In	115	1154162.628	21.166	1154162.628			ppb
	Sn	118	398.341	10.676	0.000	0.03760	52.16	ppb
	Sb	121	2550.327	10.059	0.001	0.29914	36.81	ppb
	Ba	135	62.000	32.738	0.000	0.01829	93.93	ppb
	Ba	137	127.334	11.032	0.000	0.02320	51.33	ppb
>	Tb	159	1878812.912	20.367	1878812.912			ppb
	Tl	205	351.674	61.161	0.000	0.01019	100.73	ppb
	Pb	206	185.002	53.169	-0.000	-0.00942	145.74	ppb
	Pb	207	346.670	53.314	-0.000	-0.00804	176.47	ppb
	Pb	208	583.345	43.109	-0.000	-0.00795	162.26	ppb
>	Bi	209	1489455.999	19.987	1489455.999			ppb
	Cr	53	973.382	17.181	-2697.294			ppb
	Pd	106	3.333	86.603	0.000			ppb
	Pd	108	6.667	173.205	3.333			ppb
	C	12	357170.970	4.722	-30468.273			ppb
	Kr	83	32.667	21.501	-20.000			ppb
	Se	77	76.223	13.446	-38.667			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	71174.392		ppb
	Be	9	8.000	0.028443	ppb
	Na	23	7268.641	1.229667	ppb
	Mg	24	2005.201	0.996574	ppb
	Mg	25	297.004	0.961925	ppb
	Mg	26	366.007	0.804238	ppb
	Al	27	2050.210	0.008004	ppb
	K	39	262246.147	15.912698	ppb
	Ca	44	19098.220	15.925488	ppb
>	Sc	45	262013.158		ppb
	Ti	47	40.000	-0.001187	ppb
	V	51	1423.467	0.077843	ppb
	Cr	52	5765.662	0.368603	ppb
	Mn	55	1315.086	-0.229999	ppb
	Fe	54	40722.749	23.568940	ppb
	Fe	56	1317629.777	39.501528	ppb
	Fe	57	2300.265	2.681337	ppb
	Co	59	242.003	0.024250	ppb
	Ni	60	173.335	0.089479	ppb
	Cu	63	416.675	0.075375	ppb
	Cu	65	186.668	0.065649	ppb
	Zn	66	236.669	0.097244	ppb
	As	75	-45.278	-0.028249	ppb
	Se	82	46.000	0.234171	ppb
	Mo	96	408.008	0.131055	ppb
	Ag	107	310.005	0.032049	ppb
	Ag	109	210.002	0.021660	ppb
	Cd	111	27.360	0.015052	ppb
	In	113	41214.758	1.911958	ppb
>	In	115	873639.541		ppb
	Sn	118	430.009	0.059935	ppb
	Sb	121	2675.358	0.421192	ppb
	Ba	135	84.000	0.037857	ppb
	Ba	137	142.001	0.036857	ppb
>	Tb	159	1437004.323		ppb
	Tl	205	600.018	0.022032	ppb
	Pb	206	290.004	0.006025	ppb
	Pb	207	560.008	0.008337	ppb
	Pb	208	870.022	0.006897	ppb
>	Bi	209	1145962.730		ppb
	Cr	53	1166.068		ppb
	Pd	106	5.000		ppb
	Pd	108	20.000		ppb
	C	12	337848.268		ppb
	Kr	83	40.000		ppb
	Se	77	88.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124413.147		ppb
	Be	9	2.000	-0.003824	ppb
	Na	23	4552.036	-1.004744	ppb
	Mg	24	1388.096	0.307058	ppb
	Mg	25	230.003	0.354071	ppb
	Mg	26	363.007	0.332139	ppb
	Al	27	1295.084	-0.435254	ppb
	K	39	281976.260	-5.700545	ppb
	Ca	44	16469.551	-36.737817	ppb
>	Sc	45	440732.862		ppb

	Ti	47	45.000	-0.031223	ppb
	V	51	1636.614	0.005673	ppb
	Cr	52	5629.584	-0.075463	ppb
	Mn	55	1295.084	-0.303492	ppb
	Fe	54	54307.064	3.123286	ppb
	Fe	56	1538086.344	-18.717415	ppb
	Fe	57	2520.318	-2.281795	ppb
	Co	59	150.001	0.004115	ppb
	Ni	60	46.667	0.001139	ppb
	Cu	63	220.002	0.006195	ppb
	Cu	65	80.000	-0.007314	ppb
	Zn	66	153.335	-0.074025	ppb
	As	75	-40.435	-0.006079	ppb
	Se	82	42.000	-0.004975	ppb
	Mo	96	346.006	0.064655	ppb
	Ag	107	186.668	0.010920	ppb
	Ag	109	170.001	0.010526	ppb
	Cd	111	18.820	0.006339	ppb
	In	113	60643.325	2.241546	ppb
>	In	115	1268784.746		ppb
	Sn	118	350.006	0.023165	ppb
	Sb	121	2720.370	0.269023	ppb
	Ba	135	44.000	0.005701	ppb
	Ba	137	114.001	0.015042	ppb
>	Tb	159	2093562.867		ppb
	Tl	205	225.003	0.004236	ppb
	Pb	206	170.001	-0.014048	ppb
	Pb	207	245.002	-0.015940	ppb
	Pb	208	400.006	-0.016371	ppb
>	Bi	209	1649775.248		ppb
	Cr	53	888.039		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	364736.504		ppb
	Kr	83	32.000		ppb
	Se	77	69.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124978.127		ppb
	Be	9	2.000	-0.003849	ppb
	Na	23	5138.320	-0.850444	ppb
	Mg	24	1522.116	0.348467	ppb
	Mg	25	238.003	0.368627	ppb
	Mg	26	318.005	0.252927	ppb
	Al	27	1320.087	-0.431567	ppb
	K	39	276695.791	-6.500646	ppb
	Ca	44	16299.272	-37.497404	ppb
>	Sc	45	436101.293		ppb
	Ti	47	30.000	-0.051011	ppb
	V	51	1837.052	0.026620	ppb
	Cr	52	5775.667	-0.052826	ppb
	Mn	55	1260.079	-0.305225	ppb
	Fe	54	51643.007	0.075635	ppb
	Fe	56	1610656.486	-11.020483	ppb
	Fe	57	2620.343	-1.811389	ppb
	Co	59	156.001	0.004715	ppb
	Ni	60	40.000	-0.001113	ppb
	Cu	63	176.668	0.000231	ppb
	Cu	65	86.667	-0.004948	ppb
	Zn	66	156.668	-0.070529	ppb
	As	75	-11.440	0.011837	ppb
	Se	82	54.000	0.080022	ppb

⌈	Mo	96	270.004	0.041361	ppb
|	Ag	107	166.668	0.008798	ppb
|	Ag	109	133.334	0.007075	ppb
|	Cd	111	5.000	0.000500	ppb
|	In	113	59954.188	0.977954	ppb
|>	In	115	1320063.597		ppb
⌊	Sn	118	415.009	0.029712	ppb
⌈	Sb	121	2255.254	0.207204	ppb
|	Ba	135	58.000	0.011306	ppb
|	Ba	137	126.001	0.017687	ppb
⌊>	Tb	159	2105871.546		ppb
⌈	Tl	205	230.003	0.004288	ppb
|	Pb	206	95.000	-0.020236	ppb
|	Pb	207	235.001	-0.016511	ppb
|	Pb	208	480.007	-0.014367	ppb
⌊>	Bi	209	1672630.018		ppb
	Cr	53	866.037		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	368928.137		ppb
	Kr	83	26.000		ppb
	Se	77	71.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		88.131			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		74.952			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		82.605			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		86.221			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		89.814			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910073-12

Sample Date/Time: Monday, November 09, 2009 21:34:36
Sample Type: Sample
Sample Description: 16SPRING
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910073-12.914

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	95678.436	17.827	95678.436			ppb
	Be	9	11.333	26.956	0.000	0.03167	44.19	ppb
	Na	23	13630986.551	19.237	142.191	4847.88678	3.29	ppb
	Mg	24	58911222.647	20.783	613.426	24857.16710	4.03	ppb
	Mg	25	8592436.732	20.736	89.484	23403.00391	4.19	ppb
	Mg	26	10574766.366	21.625	109.960	23335.06534	4.56	ppb
	Al	27	1471550.800	22.612	15.257	367.63394	6.19	ppb
	K	39	15966828.523	22.064	163.280	2488.54374	4.94	ppb
	Ca	44	15202052.968	21.709	157.823	61135.50669	4.46	ppb
>	Sc	45	354328.514	16.659	354328.514			ppb
	Ti	47	6772.343	18.248	0.019	11.25538	6.33	ppb
	V	51	14615.409	17.189	0.038	1.58048	3.37	ppb
	Cr	52	15779.171	8.879	0.031	1.47339	13.14	ppb
	Mn	55	216933.930	20.596	0.598	21.12632	6.43	ppb
	Fe	54	394098.121	19.047	0.991	629.12148	4.45	ppb
	Fe	56	7570408.118	15.476	17.416	658.81661	3.33	ppb
	Fe	57	191615.505	19.173	0.532	862.68711	3.59	ppb
	Co	59	3029.138	20.232	0.008	0.28643	6.68	ppb
	Ni	60	3876.318	15.187	0.011	1.72732	3.61	ppb
	Cu	63	3187.179	11.601	0.009	0.54851	6.14	ppb
	Cu	65	2005.760	16.273	0.005	0.74626	3.08	ppb
	Zn	66	4458.795	18.721	0.012	3.69045	4.01	ppb
	As	75	341.590	27.523	0.001	0.27933	12.56	ppb
	Se	82	89.334	5.829	0.000	0.47247	19.48	ppb
	Mo	96	1307.420	12.293	0.001	0.42858	4.13	ppb
	Ag	107	71.111	18.944	0.000	0.00338	35.13	ppb
	Ag	109	81.111	14.432	0.000	0.00520	15.33	ppb
	Cd	111	46.703	57.174	0.000	0.02279	51.42	ppb
	In	113	44723.023	15.406	0.002	1.07063	14.84	ppb
>	In	115	981356.793	15.764	981356.793			ppb
	Sn	118	361.673	11.758	0.000	0.03976	25.69	ppb
	Sb	121	796.699	18.801	0.000	0.04642	18.95	ppb
	Ba	135	460513.244	15.271	0.276	237.32242	0.63	ppb
	Ba	137	801141.181	15.387	0.481	236.35185	1.49	ppb
>	Tb	159	1665608.464	14.746	1665608.464			ppb
	Tl	205	436.676	9.184	0.000	0.01498	10.41	ppb
	Pb	206	5765.024	16.217	0.005	0.62017	3.67	ppb
	Pb	207	10414.447	13.870	0.008	0.59929	2.84	ppb
	Pb	208	16715.158	14.699	0.013	0.60581	2.50	ppb
>	Bi	209	1189682.092	15.164	1189682.092			ppb
	Cr	53	2104.222	6.975	-1566.454			ppb
	Pd	106	25.000	20.000	21.667			ppb
	Pd	108	10.000	50.000	6.667			ppb
	C	12	440004.789	4.862	52365.546			ppb
	Kr	83	41.333	28.352	-11.333			ppb
	Se	77	112.667	1.566	-2.222			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	75991.644		ppb
	Be	9	12.000	0.043688	ppb
	Na	23	10666499.496	4783.356969	ppb
	Mg	24	44963843.465	23976.424416	ppb
	Mg	25	6570296.668	22612.083604	ppb
	Mg	26	7937029.502	22164.553464	ppb
	Al	27	1090692.014	345.150957	ppb
	K	39	11900200.417	2346.465264	ppb
	Ca	44	11393505.448	57990.288123	ppb
>	Sc	45	286609.215		ppb
	Ti	47	5396.456	11.093045	ppb
	V	51	11723.946	1.566758	ppb
	Cr	52	14170.032	1.688250	ppb
	Mn	55	165904.900	20.038694	ppb
	Fe	54	307578.585	606.248703	ppb
	Fe	56	6219254.417	670.120574	ppb
	Fe	57	149194.712	832.547174	ppb
	Co	59	2334.272	0.273507	ppb
	Ni	60	3200.512	1.759606	ppb
	Cu	63	2760.381	0.585197	ppb
	Cu	65	1630.133	0.749372	ppb
	Zn	66	3497.278	3.581736	ppb
	As	75	234.242	0.242527	ppb
	Se	82	83.334	0.577370	ppb
	Mo	96	1122.063	0.449029	ppb
	Ag	107	63.334	0.003979	ppb
	Ag	109	70.000	0.005629	ppb
	Cd	111	21.824	0.012867	ppb
	In	113	36767.468	1.178045	ppb
>	In	115	802882.611		ppb
	Sn	118	345.006	0.049313	ppb
	Sb	121	630.020	0.040710	ppb
	Ba	135	379436.578	235.679735	ppb
	Ba	137	658828.638	234.283953	ppb
>	Tb	159	1382725.313		ppb
	Tl	205	395.008	0.016434	ppb
	Pb	206	4756.131	0.619458	ppb
	Pb	207	8816.955	0.613510	ppb
	Pb	208	13880.643	0.608486	ppb
>	Bi	209	983111.218		ppb
	Cr	53	1942.189		ppb
	Pd	106	30.000		ppb
	Pd	108	15.000		ppb
	C	12	416623.664		ppb
	Kr	83	46.000		ppb
	Se	77	111.334		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	106017.017		ppb
	Be	9	14.000	0.035026	ppb
	Na	23	15646945.278	5029.684059	ppb
	Mg	24	67886196.850	25947.344976	ppb
	Mg	25	9932011.400	24500.968991	ppb
	Mg	26	11788998.383	23597.636024	ppb
	Al	27	1618042.025	367.061160	ppb
	K	39	18086770.835	2559.894763	ppb
	Ca	44	17219697.967	62829.613119	ppb
>	Sc	45	381490.549		ppb

	Ti	47	7788.031	12.035263	ppb
	V	51	16264.104	1.639261	ppb
	Cr	52	16727.980	1.419306	ppb
	Mn	55	249022.478	22.649227	ppb
	Fe	54	441892.388	660.322115	ppb
	Fe	56	8305049.502	672.790430	ppb
	Fe	57	213137.428	894.402156	ppb
	Co	59	3492.610	0.308396	ppb
	Ni	60	4277.581	1.766919	ppb
	Cu	63	3410.582	0.541384	ppb
	Cu	65	2220.246	0.767550	ppb
	Zn	66	4997.915	3.858907	ppb
	As	75	409.284	0.312420	ppb
	Se	82	92.667	0.434811	ppb
	Mo	96	1408.099	0.418180	ppb
	Ag	107	86.667	0.004140	ppb
	Ag	109	80.000	0.004277	ppb
	Cd	111	43.369	0.019782	ppb
	In	113	48738.483	0.888066	ppb
>	In	115	1077130.783		ppb
	Sn	118	410.008	0.040975	ppb
	Sb	121	840.035	0.041991	ppb
	Ba	135	505024.397	237.707251	ppb
	Ba	137	869696.606	234.360647	ppb
>	Tb	159	1824689.963		ppb
	Tl	205	440.010	0.013332	ppb
	Pb	206	6602.179	0.643276	ppb
	Pb	207	11628.442	0.603948	ppb
	Pb	208	18029.712	0.589508	ppb
>	Bi	209	1316263.270		ppb
	Cr	53	2228.248		ppb
	Pd	106	25.000		ppb
	Pd	108	10.000		ppb
	C	12	458593.699		ppb
	Kr	83	28.000		ppb
	Se	77	112.001		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	105026.649		ppb
	Be	9	8.000	0.016307	ppb
	Na	23	14579514.878	4730.619306	ppb
	Mg	24	63883627.625	24647.731897	ppb
	Mg	25	9275002.127	23095.959144	ppb
	Mg	26	11998271.215	24243.006529	ppb
	Al	27	1705918.359	390.689695	ppb
	K	39	17913514.317	2559.271182	ppb
	Ca	44	16992955.490	62586.618831	ppb
>	Sc	45	394885.778		ppb
	Ti	47	7132.543	10.637818	ppb
	V	51	15858.176	1.535413	ppb
	Cr	52	16439.502	1.312620	ppb
	Mn	55	235874.411	20.691050	ppb
	Fe	54	432823.390	620.793608	ppb
	Fe	56	8186920.437	633.538833	ppb
	Fe	57	212514.376	861.111997	ppb
	Co	59	3260.531	0.277389	ppb
	Ni	60	4150.861	1.655432	ppb
	Cu	63	3390.575	0.518943	ppb
	Cu	65	2166.901	0.721854	ppb
	Zn	66	4881.191	3.630698	ppb
	As	75	381.245	0.283049	ppb
	Se	82	92.000	0.405232	ppb

⌈	Mo	96	1392.097	0.418530	ppb
|	Ag	107	63.334	0.002010	ppb
|	Ag	109	93.334	0.005684	ppb
|	Cd	111	74.915	0.035714	ppb
|	In	113	48663.118	1.145768	ppb
|>	In	115	1064056.984		ppb
⌊	Sn	118	330.005	0.028991	ppb
⌈	Sb	121	920.042	0.056546	ppb
|	Ba	135	497078.756	238.580284	ppb
|	Ba	137	874898.300	240.410940	ppb
⌊>	Tb	159	1789410.116		ppb
⌈	Tl	205	475.011	0.015163	ppb
|	Pb	206	5936.762	0.597781	ppb
|	Pb	207	10797.943	0.580402	ppb
|	Pb	208	18235.118	0.619427	ppb
⌊>	Bi	209	1269671.788		ppb
	Cr	53	2142.229		ppb
	Pd	106	20.000		ppb
	Pd	108	5.000		ppb
	C	12	444797.004		ppb
	Kr	83	50.000		ppb
	Se	77	114.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		78.913			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		69.959			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		70.237			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		76.437			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		71.737			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102718-BLK1

Sample Date/Time: Monday, November 09, 2009 21:36:34
Sample Type: Sample
Sample Description: PBW
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102718-BLK1.915

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	111255.114	21.623	111255.114			ppb
	Be	9	1.333	173.205	-0.000	-0.00559	111.93	ppb
	Na	23	8174.416	18.581	0.012	0.42426	280.71	ppb
	Mg	24	1975.202	23.243	0.016	0.62935	60.68	ppb
	Mg	25	301.671	27.951	0.002	0.63780	64.11	ppb
	Mg	26	423.009	20.931	0.003	0.57817	70.18	ppb
	Al	27	1280.084	19.762	-0.016	-0.38931	34.80	ppb
	K	39	289317.930	1.171	0.060	0.91862	1154.98	ppb
	Ca	44	17193.447	3.576	-0.066	-25.59611	69.29	ppb
>	Sc	45	419879.918	21.019	419879.918			ppb
	Ti	47	50.000	60.828	-0.000	-0.02290	143.49	ppb
	V	51	1885.597	5.989	0.001	0.04366	89.09	ppb
	Cr	52	6233.276	1.872	0.001	0.05115	375.96	ppb
	Mn	55	1183.404	8.786	-0.009	-0.30382	9.54	ppb
	Fe	54	50435.908	9.153	0.004	2.66399	406.51	ppb
	Fe	56	1620695.656	3.092	-0.009	-0.33748	9284.46	ppb
	Fe	57	2728.707	7.551	-0.000	-0.78078	216.08	ppb
	Co	59	75.334	20.102	-0.000	-0.00114	205.36	ppb
	Ni	60	407.786	7.417	0.001	0.14530	32.74	ppb
	Cu	63	3930.789	17.937	0.009	0.57136	4.99	ppb
	Cu	65	1891.294	18.716	0.004	0.59045	7.99	ppb
	Zn	66	190.002	34.956	-0.000	-0.02889	318.19	ppb
	As	75	-58.298	52.538	-0.000	-0.01713	81.14	ppb
	Se	82	36.000	8.486	-0.000	-0.02126	411.10	ppb
	Mo	96	116.001	28.383	0.000	0.00353	215.43	ppb
	Ag	107	25.556	49.382	-0.000	-0.00199	39.17	ppb
	Ag	109	17.778	54.127	-0.000	-0.00191	51.81	ppb
	Cd	111	7.818	32.745	0.000	0.00201	85.99	ppb
	In	113	55619.157	17.810	0.001	0.58329	33.85	ppb
>	In	115	1245042.808	17.812	1245042.808			ppb
	Sn	118	188.335	6.681	0.000	0.00263	214.00	ppb
	Sb	121	518.347	9.168	-0.000	-0.01005	64.48	ppb
	Ba	135	62.667	16.378	0.000	0.01535	18.35	ppb
	Ba	137	87.334	22.939	0.000	0.01068	55.74	ppb
>	Tb	159	1950530.476	15.664	1950530.476			ppb
	Tl	205	53.333	5.413	-0.000	-0.00046	61.92	ppb
	Pb	206	71.667	10.657	-0.000	-0.02165	7.53	ppb
	Pb	207	145.001	42.373	-0.000	-0.01966	20.49	ppb
	Pb	208	271.669	25.789	-0.000	-0.01928	17.42	ppb
>	Bi	209	1590312.541	14.230	1590312.541			ppb
	Cr	53	838.035	11.816	-2832.641			ppb
	Pd	106	1.667	173.205	-1.667			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	401465.170	1.431	13825.927			ppb
	Kr	83	36.667	16.664	-16.000			ppb
	Se	77	63.334	11.722	-51.556			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	83535.457		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	9926.925	1.799399	ppb
	Mg	24	2505.314	1.070241	ppb
	Mg	25	395.008	1.107262	ppb
	Mg	26	525.014	1.046697	ppb
	Al	27	1570.123	-0.233181	ppb
	K	39	292741.053	13.166821	ppb
	Ca	44	17865.945	-5.169476	ppb
>	Sc	45	318079.535		ppb
	Ti	47	30.000	-0.035848	ppb
	V	51	1799.928	0.087326	ppb
	Cr	52	6368.027	0.273123	ppb
	Mn	55	1225.075	-0.271244	ppb
	Fe	54	45216.998	15.146100	ppb
	Fe	56	1568755.332	35.835608	ppb
	Fe	57	2495.311	1.166374	ppb
	Co	59	82.000	0.001266	ppb
	Ni	60	430.009	0.199229	ppb
	Cu	63	3123.821	0.597226	ppb
	Cu	65	1506.780	0.618744	ppb
	Zn	66	266.670	0.077230	ppb
	As	75	-24.786	-0.002300	ppb
	Se	82	39.333	0.079528	ppb
	Mo	96	98.000	0.005320	ppb
	Ag	107	16.667	-0.002331	ppb
	Ag	109	23.333	-0.001027	ppb
	Cd	111	10.000	0.003842	ppb
	In	113	44232.610	0.604656	ppb
>	In	115	989213.868		ppb
	Sn	118	190.002	0.008924	ppb
	Sb	121	470.011	-0.003018	ppb
	Ba	135	54.000	0.016665	ppb
	Ba	137	86.000	0.014721	ppb
>	Tb	159	1598497.215		ppb
	Ti	205	55.000	-0.000135	ppb
	Pb	206	80.000	-0.019802	ppb
	Pb	207	215.001	-0.015023	ppb
	Pb	208	350.003	-0.015461	ppb
>	Bi	209	1332461.691		ppb
	Cr	53	948.045		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	394914.895		ppb
	Kr	83	38.000		ppb
	Se	77	55.333		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	126681.358		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	7357.706	-0.271979	ppb
	Mg	24	1711.146	0.402297	ppb
	Mg	25	279.004	0.446577	ppb
	Mg	26	378.007	0.346181	ppb
	Al	27	1105.061	-0.475888	ppb
	K	39	289245.513	-5.444472	ppb
	Ca	44	16659.866	-37.074011	ppb
>	Sc	45	474837.065		ppb

	Ti	47	85.000	0.014463	ppb
	V	51	1843.289	0.012748	ppb
	Cr	52	6163.899	-0.065466	ppb
	Mn	55	1260.079	-0.313551	ppb
	Fe	54	53985.329	-2.925841	ppb
	Fe	56	1668764.371	-17.788520	ppb
	Fe	57	2885.416	-1.700995	ppb
	Co	59	58.000	-0.003417	ppb
	Ni	60	373.340	0.109303	ppb
	Cu	63	4240.899	0.540821	ppb
	Cu	65	1963.526	0.536019	ppb
	Zn	66	150.001	-0.083896	ppb
	As	75	-84.843	-0.029854	ppb
	Se	82	35.333	-0.067197	ppb
	Mo	96	96.000	-0.004807	ppb
	Ag	107	40.000	-0.001102	ppb
	Ag	109	23.333	-0.001729	ppb
	Cd	111	5.000	0.000410	ppb
	In	113	62253.172	0.769162	ppb
>	In	115	1382648.048		ppb
	Sn	118	200.002	0.000864	ppb
	Sb	121	565.016	-0.011355	ppb
	Ba	135	74.000	0.017260	ppb
	Ba	137	68.000	0.003843	ppb
>	Tb	159	2146512.842		ppb
	Tl	205	55.000	-0.000593	ppb
	Pb	206	65.000	-0.022882	ppb
	Pb	207	120.000	-0.021661	ppb
	Pb	208	215.001	-0.021776	ppb
>	Bi	209	1755971.847		ppb
	Cr	53	810.033		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	403820.166		ppb
	Kr	83	42.000		ppb
	Se	77	70.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	123548.526		ppb
	Be	9	4.000	0.001636	ppb
	Na	23	7238.619	-0.254629	ppb
	Mg	24	1709.146	0.415521	ppb
	Mg	25	231.003	0.359572	ppb
	Mg	26	366.007	0.341625	ppb
	Al	27	1165.068	-0.458856	ppb
	K	39	285967.223	-4.966483	ppb
	Ca	44	17054.530	-34.544846	ppb
>	Sc	45	466723.155		ppb
	Ti	47	35.000	-0.047328	ppb
	V	51	2013.574	0.030895	ppb
	Cr	52	6167.902	-0.054198	ppb
	Mn	55	1065.057	-0.326680	ppb
	Fe	54	52105.396	-4.228298	ppb
	Fe	56	1624567.264	-19.059530	ppb
	Fe	57	2805.393	-1.807717	ppb
	Co	59	86.000	-0.001273	ppb
	Ni	60	420.009	0.127373	ppb
	Cu	63	4427.647	0.576035	ppb
	Cu	65	2203.576	0.616581	ppb
	Zn	66	153.335	-0.080000	ppb
	As	75	-65.263	-0.019230	ppb
	Se	82	33.333	-0.076110	ppb

⌈	Mo	96	154.001	0.010068	ppb
|	Ag	107	20.000	-0.002552	ppb
|	Ag	109	6.667	-0.002984	ppb
|	Cd	111	8.455	0.001776	ppb
|	In	113	60371.689	0.376064	ppb
|>	In	115	1363266.509		ppb
⌊	Sn	118	175.002	-0.001903	ppb
⌈	Sb	121	520.014	-0.015785	ppb
|	Ba	135	60.000	0.012113	ppb
|	Ba	137	108.001	0.013476	ppb
⌊>	Tb	159	2106581.372		ppb
⌈	Ti	205	50.000	-0.000667	ppb
|	Pb	206	70.000	-0.022268	ppb
|	Pb	207	100.000	-0.022296	ppb
|	Pb	208	250.002	-0.020598	ppb
⌊>	Bi	209	1682504.086		ppb
	Cr	53	756.029		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	405660.449		ppb
	Kr	83	30.000		ppb
	Se	77	64.667		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		91.760			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		82.902			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		89.109			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		89.513			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		95.895			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102718-BS1

Sample Date/Time: Monday, November 09, 2009 21:38:32
Sample Type: Sample
Sample Description: LCSW
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102718-BS1.916

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	108294.028	25.724	108294.028			ppb
	Be	9	33618.471	26.948	0.310	103.73255	2.35	ppb
	Na	23	6166479.913	27.090	56.715	1933.66042	2.12	ppb
	Mg	24	3121961.613	26.411	28.805	1167.22327	3.89	ppb
	Mg	25	459222.230	22.214	4.272	1117.18591	4.35	ppb
	Mg	26	544164.536	23.109	5.053	1072.29812	4.01	ppb
	Al	27	1914066.329	26.381	17.624	424.66269	1.74	ppb
	K	39	12112149.428	23.844	109.653	1671.21577	2.44	ppb
	Ca	44	477145.583	23.149	4.203	1628.07957	3.39	ppb
>	Sc	45	392947.736	24.523	392947.736			ppb
	Ti	47	73.334	34.988	0.000	0.02997	238.93	ppb
	V	51	934647.578	21.830	2.388	100.22313	3.29	ppb
	Cr	52	818019.863	22.865	2.074	99.78005	2.34	ppb
	Mn	55	1150524.126	24.261	2.918	103.07267	0.98	ppb
	Fe	54	677311.381	22.685	1.612	1023.27675	2.47	ppb
	Fe	56	11883743.412	18.491	26.624	1007.15192	8.51	ppb
	Fe	57	254398.443	22.976	0.642	1041.60946	2.54	ppb
	Co	59	1145073.340	21.823	2.930	101.12742	3.31	ppb
	Ni	60	262790.041	22.014	0.672	106.83930	3.09	ppb
	Cu	63	622356.846	22.989	1.589	100.71716	2.71	ppb
	Cu	65	305041.497	22.557	0.779	107.09262	3.33	ppb
	Zn	66	273517.588	22.749	0.698	215.23791	2.16	ppb
	As	75	312295.434	21.342	0.800	218.75409	3.88	ppb
	Se	82	28743.539	20.726	0.074	219.29872	4.62	ppb
	Mo	96	225.336	4.467	0.000	0.03974	36.76	ppb
	Ag	107	1124287.070	21.143	0.967	98.40241	2.12	ppb
	Ag	109	1103167.492	20.158	0.951	99.48897	1.73	ppb
	Cd	111	230243.762	19.516	0.199	105.00063	2.57	ppb
	In	113	285049.950	18.015	0.203	107.77774	3.46	ppb
>	In	115	1159545.315	19.705	1159545.315			ppb
	Sn	118	190.002	26.316	0.000	0.00509	188.16	ppb
	Sb	121	1412108.215	20.656	0.734	198.56592	1.25	ppb
	Ba	135	230183.709	19.647	0.120	102.93655	1.62	ppb
	Ba	137	403040.442	20.371	0.210	103.06735	0.85	ppb
>	Tb	159	1924266.926	20.862	1924266.926			ppb
	Tl	205	7030395.115	22.040	4.676	214.92277	1.49	ppb
	Pb	206	2300534.100	20.693	1.533	205.16485	0.87	ppb
	Pb	207	4310771.451	20.553	2.874	205.10742	1.04	ppb
	Pb	208	6918541.247	19.887	4.618	207.94634	2.06	ppb
>	Bi	209	1501899.230	21.406	1501899.230			ppb
	Cr	53	95530.856	23.128	91860.180			ppb
	Pd	106	20621.743	18.854	20618.410			ppb
	Pd	108	15320.338	18.886	15317.005			ppb
	C	12	402496.073	1.437	14856.830			ppb
	Kr	83	36.667	12.597	-16.000			ppb
	Se	77	22478.614	20.583	22363.724			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	76128.680		ppb
	Be	9	23200.883	102.079537	ppb
	Na	23	4239544.602	1896.429040	ppb
	Mg	24	2181735.083	1161.151594	ppb
	Mg	25	341499.191	1173.052348	ppb
	Mg	26	399946.042	1114.586364	ppb
	Al	27	1332824.520	421.165694	ppb
	K	39	8779296.658	1717.366143	ppb
	Ca	44	349614.517	1690.932646	ppb
>	Sc	45	281733.561		ppb
	Ti	47	95.000	0.108434	ppb
	V	51	699242.685	104.024670	ppb
	Cr	52	602119.608	102.110973	ppb
	Mn	55	829094.372	103.537860	ppb
	Fe	54	499895.066	1051.438998	ppb
	Fe	56	9348785.517	1104.527816	ppb
	Fe	57	186987.014	1064.673665	ppb
	Co	59	856878.183	104.980924	ppb
	Ni	60	196076.979	110.629025	ppb
	Cu	63	457473.430	102.928222	ppb
	Cu	65	225845.158	110.132084	ppb
	Zn	66	201686.908	220.588339	ppb
	As	75	235418.389	228.544340	ppb
	Se	82	21869.888	230.985791	ppb
	Mo	96	224.003	0.056579	ppb
	Ag	107	851259.625	96.274855	ppb
	Ag	109	847162.675	98.575225	ppb
	Cd	111	178370.738	104.839596	ppb
	In	113	225790.614	110.217647	ppb
>	In	115	899337.757		ppb
	Sn	118	190.002	0.012187	ppb
	Sb	121	1075637.301	199.158905	ppb
	Ba	135	177975.800	104.629545	ppb
	Ba	137	308372.482	103.790399	ppb
>	Tb	159	1460821.240		ppb
	Tl	205	5242209.143	213.053003	ppb
	Pb	206	1751344.675	207.182077	ppb
	Pb	207	3288710.047	207.517899	ppb
	Pb	208	5335400.556	212.420587	ppb
>	Bi	209	1130865.829		ppb
	Cr	53	70066.610		ppb
	Pd	106	16138.011		ppb
	Pd	108	12027.228		ppb
	C	12	395867.471		ppb
	Kr	83	34.000		ppb
	Se	77	17138.674		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124079.034		ppb
	Be	9	38004.079	102.592232	ppb
	Na	23	7205612.236	1977.695110	ppb
	Mg	24	3721912.666	1215.361292	ppb
	Mg	25	514541.630	1084.411742	ppb
	Mg	26	601648.482	1028.716508	ppb
	Al	27	2164713.789	419.689311	ppb
	K	39	13678680.162	1639.940306	ppb
	Ca	44	542466.980	1605.530590	ppb
>	Sc	45	445533.737		ppb

	Ti	47	45.000	-0.031876	ppb
	V	51	1044161.743	98.219376	ppb
	Cr	52	930763.859	99.797483	ppb
	Mn	55	1290669.740	101.915737	ppb
	Fe	54	765461.638	1015.708907	ppb
	Fe	56	13245581.551	973.892251	ppb
	Fe	57	290967.400	1047.443716	ppb
	Co	59	1276771.509	98.914632	ppb
	Ni	60	293192.665	104.604416	ppb
	Cu	63	713776.007	101.551671	ppb
	Cu	65	350154.941	107.973897	ppb
	Zn	66	307994.428	213.006568	ppb
	As	75	347657.108	213.423259	ppb
	Se	82	31947.618	213.348858	ppb
	Mo	96	216.002	0.030428	ppb
	Ag	107	1236352.104	100.453066	ppb
	Ag	109	1213868.142	101.471094	ppb
	Cd	111	255233.215	107.772638	ppb
	In	113	312905.068	109.628163	ppb
>	In	115	1251853.189		ppb
	Sn	118	240.003	0.008864	ppb
	Sb	121	1567259.639	195.849904	ppb
	Ba	135	255301.876	101.297163	ppb
	Ba	137	454804.394	103.313618	ppb
>	Tb	159	2164439.716		ppb
	Tl	205	7977274.055	218.615459	ppb
	Pb	206	2554584.118	203.775855	ppb
	Pb	207	4782438.549	203.484442	ppb
	Pb	208	7594415.381	203.879952	ppb
>	Bi	209	1677096.858		ppb
	Cr	53	106904.389		ppb
	Pd	106	22665.658		ppb
	Pd	108	17455.221		ppb
	C	12	406509.922		ppb
	Kr	83	34.000		ppb
	Se	77	25007.229		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124674.370		ppb
	Be	9	39650.452	106.525867	ppb
	Na	23	7054282.902	1926.857121	ppb
	Mg	24	3462237.091	1125.156914	ppb
	Mg	25	521625.869	1094.093641	ppb
	Mg	26	630899.083	1073.591502	ppb
	Al	27	2244660.676	433.133071	ppb
	K	39	13878471.463	1656.340851	ppb
	Ca	44	539355.253	1587.775462	ppb
>	Sc	45	451575.909		ppb
	Ti	47	80.000	0.013363	ppb
	V	51	1060538.305	98.425351	ppb
	Cr	52	921176.122	97.431680	ppb
	Mn	55	1331808.265	103.764419	ppb
	Fe	54	766577.440	1002.682337	ppb
	Fe	56	13056863.167	943.035704	ppb
	Fe	57	285240.915	1012.711002	ppb
	Co	59	1301570.327	99.486699	ppb
	Ni	60	299100.479	105.284461	ppb
	Cu	63	695821.100	97.671584	ppb
	Cu	65	339124.391	103.171879	ppb
	Zn	66	310871.428	212.118832	ppb
	As	75	353810.803	214.294684	ppb
	Se	82	32413.112	213.561513	ppb

⌈	Mo	96	236.003	0.032219	ppb
|	Ag	107	1285249.482	98.479305	ppb
|	Ag	109	1248471.659	98.420579	ppb
|	Cd	111	257127.331	102.389662	ppb
|	In	113	316454.169	103.487419	ppb
|>	In	115	1327444.998		ppb
⌊	Sn	118	140.001	-0.005796	ppb
⌈	Sb	121	1593427.706	200.688950	ppb
|	Ba	135	257273.450	102.882932	ppb
|	Ba	137	445944.450	102.098031	ppb
⌊>	Tb	159	2147539.824		ppb
⌈	Tl	205	7871702.148	213.099852	ppb
|	Pb	206	2595673.507	204.536606	ppb
|	Pb	207	4861165.758	204.319923	ppb
|	Pb	208	7825807.804	207.538474	ppb
⌊>	Bi	209	1697735.002		ppb
	Cr	53	109621.569		ppb
	Pd	106	23061.561		ppb
	Pd	108	16478.566		ppb
	C	12	405110.827		ppb
	Kr	83	42.000		ppb
	Se	77	25289.939		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			89.317		
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			77.584		
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115			82.990		
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159			88.307		
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209			90.564		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-01

Sample Date/Time: Monday, November 09, 2009 21:40:29
Sample Type: Sample
Sample Description: 13MW5
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-01.917

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	99640.288	23.709	99640.288			ppb
	Be	9	1.333	86.603	-0.000	-0.00414	113.38	ppb
	Na	23	32171639.836	27.813	320.357	10922.34413	5.59	ppb
	Mg	24	78112902.727	25.123	782.216	31696.84697	3.76	ppb
	Mg	25	11851276.582	23.977	118.879	31090.59690	0.33	ppb
	Mg	26	14265567.441	24.911	142.861	30316.91574	2.44	ppb
	Al	27	33457.350	19.921	0.310	7.46363	5.10	ppb
	K	39	9355784.919	21.875	91.617	1396.32192	3.71	ppb
	Ca	44	20852961.923	21.960	209.793	81266.97891	3.01	ppb
>	Sc	45	393939.374	23.276	393939.374			ppb
	Ti	47	1166.735	12.424	0.003	1.70228	13.24	ppb
	V	51	6019.182	23.042	0.012	0.49171	6.63	ppb
	Cr	52	37276.318	18.854	0.081	3.89777	6.17	ppb
	Mn	55	7069.254	23.194	0.006	0.22682	12.38	ppb
	Fe	54	45367.799	4.196	0.001	0.60586	2762.63	ppb
	Fe	56	1869408.959	8.156	0.891	33.70977	94.55	ppb
	Fe	57	59510.030	20.977	0.145	234.49458	5.11	ppb
	Co	59	1738.157	23.366	0.004	0.14467	0.81	ppb
	Ni	60	5027.975	22.926	0.013	2.01581	5.32	ppb
	Cu	63	1915.742	15.027	0.005	0.28762	11.01	ppb
	Cu	65	1562.348	21.598	0.004	0.51436	2.62	ppb
	Zn	66	2698.153	21.249	0.006	1.93979	3.83	ppb
	As	75	231.941	19.364	0.001	0.18212	11.65	ppb
	Se	82	249.114	18.025	0.001	1.61325	7.78	ppb
	Mo	96	3778.733	19.971	0.004	1.20162	3.07	ppb
	Ag	107	133.334	15.613	0.000	0.00904	19.70	ppb
	Ag	109	105.556	34.641	0.000	0.00697	35.42	ppb
	Cd	111	93.406	18.463	0.000	0.04715	30.81	ppb
	In	113	47340.454	16.403	0.002	0.92906	90.23	ppb
>	In	115	1048396.143	18.883	1048396.143			ppb
	Sn	118	281.671	31.171	0.000	0.02132	34.43	ppb
	Sb	121	6116.904	16.413	0.003	0.91544	37.20	ppb
	Ba	135	217427.313	17.039	0.126	108.32291	0.82	ppb
	Ba	137	379822.739	16.319	0.221	108.44560	1.91	ppb
>	Tb	159	1723622.869	16.956	1723622.869			ppb
	Tl	205	581.684	3.254	0.000	0.02033	23.57	ppb
	Pb	206	1630.134	11.706	0.001	0.15140	7.36	ppb
	Pb	207	3001.896	11.903	0.002	0.14952	7.76	ppb
	Pb	208	4647.311	16.881	0.003	0.14358	3.29	ppb
>	Bi	209	1225640.219	17.219	1225640.219			ppb
	Cr	53	4497.029	16.417	826.353			ppb
	Pd	106	40.000	25.000	36.667			ppb
	Pd	108	6.667	114.564	3.333			ppb
	C	12	466289.997	8.096	78650.754			ppb
	Kr	83	43.333	23.684	-9.333			ppb
	Se	77	212.002	16.106	97.113			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	72378.991		ppb
	Be	9	2.000	0.000047	ppb
	Na	23	21868831.152	10299.098963	ppb
	Mg	24	55622479.143	31140.476049	ppb
	Mg	25	8571874.659	30973.151483	ppb
	Mg	26	10168649.115	29813.914866	ppb
	Al	27	25763.144	7.890649	ppb
	K	39	7005956.807	1435.007571	ppb
	Ca	44	15578757.380	83288.297365	ppb
>	Sc	45	290915.934		ppb
	Ti	47	1005.051	1.960396	ppb
	V	51	4417.806	0.487211	ppb
	Cr	52	29230.659	4.143209	ppb
	Mn	55	5176.339	0.221200	ppb
	Fe	54	43288.492	19.364690	ppb
	Fe	56	1698082.799	70.072620	ppb
	Fe	57	45096.456	239.811338	ppb
	Co	59	1286.083	0.144969	ppb
	Ni	60	3697.350	2.004837	ppb
	Cu	63	1583.459	0.319652	ppb
	Cu	65	1176.736	0.523620	ppb
	Zn	66	2073.548	2.016781	ppb
	As	75	184.894	0.192827	ppb
	Se	82	197.335	1.732064	ppb
	Mo	96	2918.426	1.187951	ppb
	Ag	107	116.667	0.010431	ppb
	Ag	109	76.667	0.006291	ppb
	Cd	111	97.555	0.061401	ppb
	In	113	38438.735	1.759045	ppb
>	In	115	819797.803		ppb
	Sn	118	190.002	0.015671	ppb
	Sb	121	7052.486	1.292929	ppb
	Ba	135	174672.313	108.125080	ppb
	Ba	137	308292.058	109.258112	ppb
>	Tb	159	1387361.834		ppb
	Tl	205	595.018	0.025814	ppb
	Pb	206	1410.099	0.164273	ppb
	Pb	207	2595.170	0.162047	ppb
	Pb	208	3750.399	0.144667	ppb
>	Bi	209	982098.598		ppb
	Cr	53	3656.668		ppb
	Pd	106	30.000		ppb
	Pd	108	5.000		ppb
	C	12	424194.174		ppb
	Kr	83	46.000		ppb
	Se	77	173.335		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	114097.216		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	36647191.124	10948.571604	ppb
	Mg	24	86963466.236	30885.113960	ppb
	Mg	25	13582947.781	31134.443145	ppb
	Mg	26	16114348.755	29971.329176	ppb
	Al	27	37158.911	7.161275	ppb
	K	39	10313835.664	1337.461301	ppb
	Ca	44	23163521.402	78553.510469	ppb
>	Sc	45	424309.933		ppb

	Ti	47	1210.073	1.602239	ppb
	V	51	6838.768	0.526310	ppb
	Cr	52	40379.360	3.887637	ppb
	Mn	55	7983.185	0.257273	ppb
	Fe	54	47025.310	-4.744584	ppb
	Fe	56	1919979.964	20.439016	ppb
	Fe	57	66580.915	242.892842	ppb
	Co	59	1856.172	0.143373	ppb
	Ni	60	5721.636	2.128083	ppb
	Cu	63	2090.218	0.286882	ppb
	Cu	65	1706.812	0.520545	ppb
	Zn	66	2820.398	1.868559	ppb
	As	75	274.365	0.195851	ppb
	Se	82	272.670	1.625691	ppb
	Mo	96	4328.937	1.243445	ppb
	Ag	107	126.667	0.007034	ppb
	Ag	109	146.668	0.009703	ppb
	Cd	111	108.199	0.047678	ppb
	In	113	50859.004	0.082659	ppb
>	In	115	1162963.504		ppb
	Sn	118	365.007	0.029623	ppb
	Sb	121	6241.947	0.822108	ppb
	Ba	135	237597.490	109.295542	ppb
	Ba	137	417640.801	109.989767	ppb
>	Tb	159	1866947.244		ppb
	Tl	205	590.017	0.018206	ppb
	Pb	206	1730.150	0.144931	ppb
	Pb	207	3265.267	0.147379	ppb
	Pb	208	5205.791	0.147659	ppb
>	Bi	209	1339906.024		ppb
	Cr	53	4793.148		ppb
	Pd	106	50.000		ppb
	Pd	108	0.000		ppb
	C	12	477536.143		ppb
	Kr	83	52.000		ppb
	Se	77	224.669		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	112444.656		ppb
	Be	9	2.000	-0.003251	ppb
	Na	23	37998897.232	11519.361823	ppb
	Mg	24	91752762.803	33064.950894	ppb
	Mg	25	13399007.306	31164.196066	ppb
	Mg	26	16513704.454	31165.503164	ppb
	Al	27	37449.994	7.338980	ppb
	K	39	10747562.286	1416.496894	ppb
	Ca	44	23816606.988	81959.128885	ppb
>	Sc	45	466592.254		ppb
	Ti	47	1285.083	1.544217	ppb
	V	51	6800.973	0.461606	ppb
	Cr	52	42218.934	3.662468	ppb
	Mn	55	8048.237	0.201976	ppb
	Fe	54	45789.595	-12.802518	ppb
	Fe	56	1990164.114	10.617668	ppb
	Fe	57	66852.720	220.779567	ppb
	Co	59	2072.215	0.145672	ppb
	Ni	60	5664.937	1.914496	ppb
	Cu	63	2073.548	0.256313	ppb
	Cu	65	1803.496	0.498927	ppb
	Zn	66	3200.512	1.934033	ppb
	As	75	236.564	0.157669	ppb
	Se	82	277.337	1.481992	ppb

⌈	Mo	96	4088.836	1.173450	ppb
|	Ag	107	156.668	0.009665	ppb
|	Ag	109	93.334	0.004907	ppb
|	Cd	111	74.464	0.032360	ppb
|	In	113	52723.624	0.945469	ppb
|>	In	115	1162427.122		ppb
⌊	Sn	118	290.004	0.018681	ppb
⌈	Sb	121	5056.278	0.631290	ppb
|	Ba	135	240012.136	107.548099	ppb
|	Ba	137	413535.358	106.088923	ppb
⌊>	Tb	159	1916559.528		ppb
⌈	Tl	205	560.016	0.016964	ppb
|	Pb	206	1750.153	0.144993	ppb
|	Pb	207	3145.250	0.139130	ppb
|	Pb	208	4985.742	0.138407	ppb
⌊>	Bi	209	1354916.035		ppb
	Cr	53	5041.270		ppb
	Pd	106	40.000		ppb
	Pd	108	15.000		ppb
	C	12	497139.675		ppb
	Kr	83	32.000		ppb
	Se	77	238.003		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		82.180			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		77.780			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		75.035			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		79.099			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		73.906			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102718-DUP1

Sample Date/Time: Monday, November 09, 2009 21:42:26
Sample Type: Sample
Sample Description: 13MW5D
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102718-DUP1.918

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	100651.412	22.872	100651.412			ppb
	Be	9	2.667	43.301	0.000	0.00074	956.01	ppb
	Na	23	32365609.891	26.044	319.647	10898.12050	3.81	ppb
	Mg	24	82908537.956	26.496	818.257	33157.30814	4.42	ppb
	Mg	25	12187079.593	27.757	120.006	31385.27894	6.18	ppb
	Mg	26	15092322.164	26.414	149.007	31621.28786	5.13	ppb
	Al	27	36153.193	26.124	0.329	7.92065	5.67	ppb
	K	39	9737257.978	22.653	94.171	1435.25156	3.21	ppb
	Ca	44	22025825.814	24.318	218.059	84468.94917	2.98	ppb
>	Sc	45	407956.532	26.511	407956.532			ppb
	Ti	47	1118.398	24.112	0.003	1.54651	5.47	ppb
	V	51	6014.193	20.329	0.011	0.47830	13.26	ppb
	Cr	52	38355.521	20.772	0.081	3.89095	8.74	ppb
	Mn	55	6682.290	19.812	0.005	0.18008	28.58	ppb
	Fe	54	47000.631	7.728	0.002	1.09076	1584.94	ppb
	Fe	56	1897084.204	1.998	0.922	34.86089	157.40	ppb
	Fe	57	55166.505	17.522	0.131	212.07634	11.63	ppb
	Co	59	1660.142	21.244	0.004	0.13450	7.15	ppb
	Ni	60	5244.754	22.400	0.013	2.04806	6.21	ppb
	Cu	63	1973.530	10.875	0.005	0.29202	20.97	ppb
	Cu	65	1636.802	14.230	0.004	0.53414	15.96	ppb
	Zn	66	2724.824	18.600	0.006	1.91673	11.96	ppb
	As	75	206.211	27.433	0.001	0.16060	20.63	ppb
	Se	82	240.225	14.303	0.001	1.51277	17.70	ppb
	Mo	96	3816.084	21.671	0.004	1.23321	3.95	ppb
	Ag	107	57.778	8.813	0.000	0.00181	67.15	ppb
	Ag	109	26.667	50.000	-0.000	-0.00072	187.22	ppb
	Cd	111	75.616	34.297	0.000	0.04028	58.73	ppb
	In	113	47131.285	17.079	0.002	1.23628	47.29	ppb
>	In	115	1029149.616	18.660	1029149.616			ppb
	Sn	118	205.002	15.994	0.000	0.01112	83.98	ppb
	Sb	121	2015.203	5.374	0.001	0.24497	32.93	ppb
	Ba	135	217282.275	18.178	0.127	108.79390	1.39	ppb
	Ba	137	381882.629	18.146	0.223	109.46616	0.75	ppb
>	Tb	159	1714515.956	17.815	1714515.956			ppb
	Tl	205	350.006	27.256	0.000	0.01096	13.30	ppb
	Pb	206	1070.059	18.988	0.001	0.08910	4.24	ppb
	Pb	207	1988.434	15.066	0.001	0.09000	6.08	ppb
	Pb	208	3340.339	12.579	0.002	0.09656	7.17	ppb
>	Bi	209	1222455.173	17.523	1222455.173			ppb
	Cr	53	4587.075	18.194	916.399			ppb
	Pd	106	36.667	7.873	33.333			ppb
	Pd	108	10.000	100.000	6.667			ppb
	C	12	489835.310	7.068	102196.067			ppb
	Kr	83	50.667	26.283	-2.000			ppb
	Se	77	208.224	14.747	93.335			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	74157.954		ppb
|	Be	9	4.000	0.008859	ppb
|	Na	23	22682610.356	10426.117980	ppb
|	Mg	24	57589875.439	31468.486212	ppb
|	Mg	25	8281303.252	29205.385889	ppb
|	Mg	26	10493391.753	30028.002816	ppb
|	Al	27	25276.906	7.526915	ppb
|	K	39	7197074.916	1438.896536	ppb
⌊	Ca	44	15843930.785	82673.339802	ppb
⌈>	Sc	45	283235.095		ppb
|	Ti	47	810.033	1.607033	ppb
|	V	51	4681.159	0.543523	ppb
|	Cr	52	29246.706	4.276999	ppb
|	Mn	55	5176.339	0.238244	ppb
|	Fe	54	42861.660	20.969876	ppb
|	Fe	56	1863987.957	98.218424	ppb
|	Fe	57	44036.749	240.560994	ppb
|	Co	59	1256.079	0.145451	ppb
|	Ni	60	3914.099	2.181292	ppb
|	Cu	63	1733.484	0.362595	ppb
|	Cu	65	1370.094	0.632512	ppb
|	Zn	66	2160.233	2.170773	ppb
|	As	75	167.632	0.180873	ppb
⌊	Se	82	200.669	1.821932	ppb
⌈	Mo	96	2862.410	1.182643	ppb
|	Ag	107	56.667	0.003093	ppb
|	Ag	109	26.667	-0.000040	ppb
|	Cd	111	105.559	0.067592	ppb
|	In	113	37851.501	1.749398	ppb
|>	In	115	807586.420		ppb
⌊	Sn	118	210.002	0.020475	ppb
⌈	Sb	121	2115.224	0.337660	ppb
|	Ba	135	171957.872	108.428992	ppb
|	Ba	137	301870.543	108.976491	ppb
⌊>	Tb	159	1361974.239		ppb
⌈	Tl	205	240.003	0.009279	ppb
|	Pb	206	840.035	0.087419	ppb
|	Pb	207	1655.068	0.094583	ppb
|	Pb	208	2855.241	0.104551	ppb
⌊>	Bi	209	975194.473		ppb
	Cr	53	3628.658		ppb
	Pd	106	40.000		ppb
	Pd	108	0.000		ppb
	C	12	451169.152		ppb
	Kr	83	54.000		ppb
	Se	77	176.668		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	112013.861		ppb
|	Be	9	2.000	-0.003228	ppb
|	Na	23	36350118.439	11061.825319	ppb
|	Mg	24	94226263.157	34086.923627	ppb
|	Mg	25	14099264.159	32919.020036	ppb
|	Mg	26	17561771.868	33270.955248	ppb
|	Al	27	42284.209	8.409739	ppb
|	K	39	11168216.625	1479.334754	ppb
⌊	Ca	44	25283947.866	87349.038619	ppb
⌈>	Sc	45	464754.576		ppb

	Ti	47	1310.086	1.582645	ppb
	V	51	6278.076	0.416801	ppb
	Cr	52	41793.151	3.635610	ppb
	Mn	55	7207.597	0.140496	ppb
	Fe	54	49657.990	-7.271491	ppb
	Fe	56	1888838.279	3.008324	ppb
	Fe	57	60004.488	197.804376	ppb
	Co	59	1818.165	0.127409	ppb
	Ni	60	5681.614	1.927833	ppb
	Cu	63	2040.208	0.252879	ppb
	Cu	65	1740.151	0.482296	ppb
	Zn	66	2873.746	1.725571	ppb
	As	75	271.151	0.178570	ppb
	Se	82	257.337	1.360779	ppb
	Mo	96	4334.939	1.279931	ppb
	Ag	107	63.334	0.001646	ppb
	Ag	109	13.333	-0.002263	ppb
	Cd	111	60.279	0.026644	ppb
	In	113	52231.049	1.359714	ppb
>	In	115	1132102.597		ppb
	Sn	118	170.001	0.001801	ppb
	Sb	121	2030.206	0.206563	ppb
	Ba	135	244349.296	110.450150	ppb
	Ba	137	421209.918	109.003800	ppb
>	Tb	159	1899931.484		ppb
	Tl	205	410.008	0.011909	ppb
	Pb	206	1225.075	0.093432	ppb
	Pb	207	2235.126	0.091474	ppb
	Pb	208	3590.384	0.092320	ppb
>	Bi	209	1351672.997		ppb
	Cr	53	4979.239		ppb
	Pd	106	35.000		ppb
	Pd	108	20.000		ppb
	C	12	500379.411		ppb
	Kr	83	62.000		ppb
	Se	77	210.002		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	115782.420		ppb
	Be	9	2.000	-0.003423	ppb
	Na	23	38064100.878	11206.418209	ppb
	Mg	24	96909475.273	33916.514584	ppb
	Mg	25	14180671.369	32031.430891	ppb
	Mg	26	17221802.871	31564.905523	ppb
	Al	27	40898.464	7.825295	ppb
	K	39	10846482.393	1387.523379	ppb
	Ca	44	24949598.790	83384.469076	ppb
>	Sc	45	475879.925		ppb
	Ti	47	1235.076	1.449863	ppb
	V	51	7083.343	0.474572	ppb
	Cr	52	44026.705	3.760249	ppb
	Mn	55	7662.935	0.161486	ppb
	Fe	54	48482.242	-10.426100	ppb
	Fe	56	1938426.375	3.355929	ppb
	Fe	57	61458.277	197.863648	ppb
	Co	59	1906.182	0.130637	ppb
	Ni	60	6138.550	2.035048	ppb
	Cu	63	2146.897	0.260587	ppb
	Cu	65	1800.162	0.487597	ppb
	Zn	66	3140.493	1.853853	ppb
	As	75	179.851	0.122371	ppb
	Se	82	262.670	1.355604	ppb

⌈	Mo	96	4250.903	1.237062	ppb
|	Ag	107	53.333	0.000682	ppb
|	Ag	109	40.000	0.000152	ppb
|	Cd	111	61.009	0.026596	ppb
|	In	113	51311.306	0.599716	ppb
|>	In	115	1147759.832		ppb
⌊	Sn	118	235.003	0.011079	ppb
⌈	Sb	121	1900.181	0.190675	ppb
|	Ba	135	235539.658	107.502567	ppb
|	Ba	137	422567.427	110.418177	ppb
⌊>	Tb	159	1881642.146		ppb
⌈	Tl	205	400.008	0.011682	ppb
|	Pb	206	1145.066	0.086457	ppb
|	Pb	207	2075.109	0.083939	ppb
|	Pb	208	3575.393	0.092814	ppb
⌊>	Bi	209	1340498.050		ppb
	Cr	53	5153.327		ppb
	Pd	106	35.000		ppb
	Pd	108	10.000		ppb
	C	12	517957.368		ppb
	Kr	83	36.000		ppb
	Se	77	238.003		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		83.014			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		80.548			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		73.658			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		78.681			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		73.714			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102718-MS1

Sample Date/Time: Monday, November 09, 2009 21:44:24
Sample Type: Spike - 2 of 4
Sample Description: 13MW5S
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102718-MS1.919

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	109990.102	23.102	109990.102			ppb
	Be	9	19070.158	23.344	0.173	58.04493	0.47	ppb
	Na	23	39125694.561	24.065	355.194	12110.05755	3.41	ppb
	Mg	24	S	S	133333365402916886 9.82008		86.60	ppb
	Mg	25	14581587.129	20.323	133.375	34881.75671	5.60	ppb
	Mg	26	17730073.814	19.417	162.329	34448.29614	4.91	ppb
	Al	27	4885673.786	20.625	44.596	1074.55412	3.04	ppb
	K	39	10814398.191	19.419	96.352	1468.48999	4.52	ppb
	Ca	44	24272865.423	21.627	221.070	85635.34480	2.02	ppb
>	Sc	45	454733.199	20.277	454733.199			ppb
	Ti	47	1570.133	33.778	0.003	1.93038	19.18	ppb
	V	51	5504040.922	21.737	12.076	506.88839	3.34	ppb
	Cr	52	1884233.940	22.913	4.112	197.80235	3.41	ppb
	Mn	55	6551910.446	22.482	14.347	506.75360	2.79	ppb
	Fe	54	113604.378	16.166	0.133	84.60971	11.05	ppb
	Fe	56	2151203.502	7.395	0.843	31.88166	85.11	ppb
	Fe	57	68405.128	21.233	0.143	232.15769	4.17	ppb
	Co	59	6235404.199	21.337	13.691	472.59354	2.23	ppb
	Ni	60	1398746.662	19.890	3.078	489.30187	0.46	ppb
	Cu	63	1583200.498	20.456	3.481	220.71714	2.60	ppb
	Cu	65	762201.929	20.596	1.675	230.25652	2.56	ppb
	Zn	66	743033.846	19.928	1.635	504.10141	2.27	ppb
	As	75	72655.872	18.746	0.160	43.82896	2.81	ppb
	Se	82	2054.214	15.818	0.004	13.27035	6.23	ppb
	Mo	96	4304.943	16.357	0.004	1.27614	1.68	ppb
	Ag	107	554930.327	17.911	0.491	49.95225	0.65	ppb
	Ag	109	536037.747	16.539	0.475	49.73497	1.36	ppb
	Cd	111	124189.636	16.986	0.110	58.16987	0.81	ppb
	In	113	173054.716	16.601	0.110	58.35080	1.61	ppb
>	In	115	1129388.232	17.553	1129388.232			ppb
	Sn	118	731.694	11.524	0.001	0.08728	8.77	ppb
	Sb	121	735578.592	20.523	0.394	106.65993	2.31	ppb
	Ba	135	4933226.834	18.014	2.655	2280.49222	0.79	ppb
	Ba	137	8629995.331	18.373	4.642	2282.83516	0.54	ppb
>	Tb	159	1859466.387	18.560	1859466.387			ppb
	Tl	205	1663038.262	15.785	1.274	58.53855	3.47	ppb
	Pb	206	226530.313	16.775	0.173	23.15288	2.38	ppb
	Pb	207	421387.735	17.061	0.322	22.96379	1.98	ppb
	Pb	208	672333.453	16.641	0.514	23.13151	2.48	ppb
>	Bi	209	1311263.140	18.753	1311263.140			ppb
	Cr	53	221330.131	22.146	217659.455			ppb
	Pd	106	10896.051	17.290	10892.718			ppb
	Pd	108	8301.838	16.162	8298.505			ppb
	C	12	516929.931	6.068	129290.688			ppb
	Kr	83	40.667	24.260	-12.000			ppb
	Se	77	1650.139	18.550	1535.250			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	80655.963		ppb
	Be	9	13933.701	57.860547	ppb
	Na	23	28353083.622	11982.939004	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	11233310.071	36424.504320	ppb
	Mg	26	13772099.410	36235.368541	ppb
	Al	27	3723619.542	1111.721716	ppb
	K	39	8389804.835	1545.110984	ppb
	Ca	44	18224820.613	87440.423199	ppb
>	Sc	45	348358.816		ppb
	Ti	47	1050.055	1.698729	ppb
	V	51	4131016.247	497.591106	ppb
	Cr	52	1385896.149	190.672424	ppb
	Mn	55	4851117.256	491.466624	ppb
	Fe	54	92677.475	93.800860	ppb
	Fe	56	1970130.794	63.204580	ppb
	Fe	57	51859.121	229.841288	ppb
	Co	59	4701631.860	465.882253	ppb
	Ni	60	1077832.976	491.873556	ppb
	Cu	63	1211102.416	220.403497	ppb
	Cu	65	581771.205	229.473857	ppb
	Zn	66	572628.837	506.747133	ppb
	As	75	56981.590	44.753276	ppb
	Se	82	1683.475	14.109033	ppb
	Mo	96	3496.611	1.297926	ppb
	Ag	107	440562.252	49.744593	ppb
	Ag	109	434133.381	50.432938	ppb
	Cd	111	99912.100	58.629979	ppb
	In	113	139891.688	59.348340	ppb
>	In	115	900778.469		ppb
	Sn	118	635.020	0.096096	ppb
	Sb	121	561519.681	103.838082	ppb
	Ba	135	3912402.297	2298.311142	ppb
	Ba	137	6809000.425	2289.996452	ppb
>	Tb	159	1462089.864		ppb
	Tl	205	1359914.988	60.825222	ppb
	Pb	206	182653.010	23.755608	ppb
	Pb	207	338381.205	23.475241	ppb
	Pb	208	543430.944	23.787060	ppb
>	Bi	209	1027547.928		ppb
	Cr	53	164770.372		ppb
	Pd	106	8783.856		ppb
	Pd	108	6757.282		ppb
	C	12	481675.762		ppb
	Kr	83	34.000		ppb
	Se	77	1300.085		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	125174.561		ppb
	Be	9	21811.762	58.361682	ppb
	Na	23	43240275.030	11775.258817	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	15644784.459	32687.049054	ppb
	Mg	26	19389247.162	32871.046597	ppb
	Al	27	5518091.751	1061.518193	ppb
	K	39	12061619.325	1428.346450	ppb
	Ca	44	27649371.497	85476.084484	ppb
>	Sc	45	511826.478		ppb

	Ti	47	2110.223	2.357300	ppb
	V	51	6058035.945	496.651052	ppb
	Cr	52	2121335.046	198.670579	ppb
	Mn	55	7388412.350	509.471798	ppb
	Fe	54	121098.833	75.109894	ppb
	Fe	56	2268458.454	16.926202	ppb
	Fe	57	74305.040	223.856560	ppb
	Co	59	6926947.323	467.168452	ppb
	Ni	60	1572025.060	488.276055	ppb
	Cu	63	1737004.295	215.149992	ppb
	Cu	65	837352.482	224.797818	ppb
	Zn	66	816145.558	491.569543	ppb
	As	75	79377.663	42.432901	ppb
	Se	82	2189.573	12.456603	ppb
	Mo	96	4633.073	1.255025	ppb
	Ag	107	603772.963	49.786560	ppb
	Ag	109	578527.575	49.081085	ppb
	Cd	111	134614.376	57.688964	ppb
	In	113	188938.178	58.221626	ppb
>	In	115	1233440.399		ppb
	Sn	118	770.030	0.082385	ppb
	Sb	121	814399.818	108.354754	ppb
	Ba	135	5353043.815	2262.404834	ppb
	Ba	137	9375842.403	2268.641998	ppb
>	Tb	159	2032215.805		ppb
	Tl	205	1816275.909	57.842931	ppb
	Pb	206	248694.465	23.029616	ppb
	Pb	207	461837.000	22.812642	ppb
	Pb	208	729271.931	22.727936	ppb
>	Bi	209	1443127.866		ppb
	Cr	53	247821.183		ppb
	Pd	106	11501.611		ppb
	Pd	108	8969.020		ppb
	C	12	527364.414		ppb
	Kr	83	36.000		ppb
	Se	77	1782.826		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124139.781		ppb
	Be	9	21465.013	57.912562	ppb
	Na	23	45783725.031	12571.974821	ppb
	Mg	24	108390381.622	35380.783430	ppb
	Mg	25	16866666.857	35533.716764	ppb
	Mg	26	20028874.870	34238.473279	ppb
	Al	27	5415310.065	1050.422438	ppb
	K	39	11991770.413	1432.012525	ppb
	Ca	44	26944404.158	83989.526716	ppb
>	Sc	45	504014.302		ppb
	Ti	47	1550.120	1.735117	ppb
	V	51	6323070.574	526.423003	ppb
	Cr	52	2145470.624	204.064037	ppb
	Mn	55	7416201.730	519.322367	ppb
	Fe	54	127036.825	84.918370	ppb
	Fe	56	2215021.259	15.514212	ppb
	Fe	57	79051.225	242.775211	ppb
	Co	59	7077633.414	484.729927	ppb
	Ni	60	1546381.949	487.755987	ppb
	Cu	63	1801494.783	226.597928	ppb
	Cu	65	867482.098	236.497892	ppb
	Zn	66	840327.145	513.987565	ppb
	As	75	81608.363	44.300718	ppb
	Se	82	2289.595	13.245412	ppb

⌈	Mo	96	4785.145	1.275477	ppb
|	Ag	107	620455.767	50.325611	ppb
|	Ag	109	595452.284	49.690896	ppb
|	Cd	111	138042.432	58.190675	ppb
|	In	113	190334.281	57.482435	ppb
|>	In	115	1253945.829		ppb
⌊	Sn	118	790.031	0.083361	ppb
⌈	Sb	121	830816.276	107.786950	ppb
|	Ba	135	5534234.389	2280.760681	ppb
|	Ba	137	9705143.164	2289.867028	ppb
⌊>	Tb	159	2084093.490		ppb
⌈	Tl	205	1812923.888	56.947486	ppb
|	Pb	206	248243.465	22.673414	ppb
|	Pb	207	463945.000	22.603487	ppb
|	Pb	208	744297.485	22.879538	ppb
⌊>	Bi	209	1463113.627		ppb
	Cr	53	251398.840		ppb
	Pd	106	12402.687		ppb
	Pd	108	9179.211		ppb
	C	12	541749.617		ppb
	Kr	83	52.000		ppb
	Se	77	1867.508		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		90.716			
Be	9			116.098		
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		89.783			
Ti	47					
V	51			101.279		
Cr	52			96.952		
Mn	55			101.305		
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60			97.457		
Cu	63			88.172		
Cu	65					
Zn	66			100.432		
As	75			109.117		
Se	82			116.571		
Mo	96					
Ag	107			99.886		
Ag	109					
Cd	111			116.245		
In	113					
In	115		80.832			
Sn	118					
Sb	121			105.744		
Ba	135					
Ba	137			108.719		
Tb	159		85.333			
Tl	205			117.036		
Pb	206					
Pb	207					
Pb	208			114.940		
Bi	209		79.069			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 9102718-MSD1

Sample Date/Time: Monday, November 09, 2009 21:46:22
Sample Type: Spike - 2 of 4
Sample Description: 13MW5SD
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\9102718-MSD1.920

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	114491.337	19.881	114491.337			ppb
	Be	9	20583.732	20.109	0.180	60.19805	1.52	ppb
	Na	23	41853631.672	21.180	364.780	12436.91534	2.02	ppb
	Mg	24	S	S	19999999810437	35614.33841	0.00	ppb
	Mg	25	15730428.171	21.370	137.210	35884.84164	4.43	ppb
	Mg	26	18825949.959	21.482	164.050	34813.56340	2.35	ppb
	Al	27	5011011.457	20.799	43.708	1053.16096	3.64	ppb
	K	39	11715374.563	19.829	99.693	1519.41082	0.11	ppb
	Ca	44	25844542.768	19.979	225.523	87360.03548	1.90	ppb
>	Sc	45	469101.526	20.176	469101.526			ppb
	Ti	47	1418.436	16.386	0.003	1.71507	5.08	ppb
	V	51	5653581.649	19.670	12.057	506.09200	1.26	ppb
	Cr	52	1948377.732	18.867	4.148	199.53079	3.14	ppb
	Mn	55	6724328.556	20.278	14.321	505.82397	1.67	ppb
	Fe	54	113527.606	11.042	0.127	80.73136	20.22	ppb
	Fe	56	2149023.847	2.918	0.721	27.26649	128.73	ppb
	Fe	57	70928.470	16.435	0.145	235.06094	4.85	ppb
	Co	59	6463262.454	19.936	13.783	475.77531	1.74	ppb
	Ni	60	1407867.755	21.718	2.994	475.97150	2.62	ppb
	Cu	63	1594858.908	19.225	3.405	215.89137	3.07	ppb
	Cu	65	777345.379	20.406	1.656	227.62178	2.11	ppb
	Zn	66	770549.439	21.039	1.640	505.90207	4.07	ppb
	As	75	74021.329	18.898	0.158	43.26342	2.86	ppb
	Se	82	2173.574	17.334	0.005	13.58338	5.20	ppb
	Mo	96	4416.329	17.920	0.004	1.27570	3.91	ppb
	Ag	107	573154.643	15.327	0.497	50.53399	2.93	ppb
	Ag	109	549266.813	15.799	0.476	49.78704	1.46	ppb
	Cd	111	125530.599	16.114	0.109	57.45479	1.26	ppb
	In	113	177720.760	16.253	0.110	58.58403	0.96	ppb
>	In	115	1154278.679	15.652	1154278.679			ppb
	Sn	118	365.007	9.589	0.000	0.03045	14.68	ppb
	Sb	121	764436.360	16.442	0.404	109.24503	1.53	ppb
	Ba	135	5087286.163	15.240	2.693	2312.75864	1.70	ppb
	Ba	137	8824546.660	14.957	4.672	2297.33396	0.87	ppb
>	Tb	159	1889153.209	15.089	1889153.209			ppb
	Tl	205	1735145.824	16.684	1.287	59.13777	1.76	ppb
	Pb	206	231892.973	14.886	0.172	23.02727	0.25	ppb
	Pb	207	430484.574	15.172	0.319	22.79495	0.22	ppb
	Pb	208	691034.582	15.091	0.513	23.08952	0.54	ppb
>	Bi	209	1346105.390	15.109	1346105.390			ppb
	Cr	53	228960.746	17.070	225290.070			ppb
	Pd	106	11161.279	11.366	11157.945			ppb
	Pd	108	8278.497	17.793	8275.164			ppb
	C	12	546327.914	6.629	158688.671			ppb
	Kr	83	40.667	25.237	-12.000			ppb
	Se	77	1649.694	17.549	1534.805			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	88243.637		ppb
|	Be	9	15806.482	59.993864	ppb
|	Na	23	31619808.809	12214.534448	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	11998593.836	35560.618029	ppb
|	Mg	26	14198378.901	34144.768039	ppb
|	Al	27	3843748.983	1048.872838	ppb
|	K	39	9035898.122	1520.382849	ppb
⌊	Ca	44	19956171.459	87514.429570	ppb
⌈>	Sc	45	361140.458		ppb
|	Ti	47	1150.066	1.799863	ppb
|	V	51	4374800.773	508.308545	ppb
|	Cr	52	1523906.442	202.281436	ppb
|	Mn	55	5153182.028	503.601561	ppb
|	Fe	54	99340.993	99.537561	ppb
|	Fe	56	2085446.190	67.711761	ppb
|	Fe	57	57474.694	246.512147	ppb
|	Co	59	4978046.658	475.814112	ppb
|	Ni	60	1055504.338	464.634955	ppb
|	Cu	63	1240827.001	217.820581	ppb
|	Cu	65	594353.028	226.138879	ppb
|	Zn	66	583621.132	498.192389	ppb
|	As	75	57869.916	43.842733	ppb
⌊	Se	82	1740.151	14.067025	ppb
⌈	Mo	96	3502.613	1.233626	ppb
|	Ag	107	471824.372	50.605164	ppb
|	Ag	109	449246.079	49.573563	ppb
|	Cd	111	102254.581	56.997968	ppb
|	In	113	144876.919	58.007364	ppb
|>	In	115	948293.409		ppb
⌊	Sn	118	330.005	0.035425	ppb
⌈	Sb	121	619592.995	107.367976	ppb
|	Ba	135	4194830.055	2309.111726	ppb
|	Ba	137	7300730.770	2300.822095	ppb
⌊>	Tb	159	1560302.553		ppb
⌈	Tl	205	1401664.411	57.948877	ppb
|	Pb	206	192097.520	23.092781	ppb
|	Pb	207	355140.930	22.772945	ppb
|	Pb	208	570644.425	23.087487	ppb
⌊>	Bi	209	1111660.894		ppb
	Cr	53	183842.511		ppb
	Pd	106	9699.702		ppb
	Pd	108	6657.215		ppb
	C	12	504921.386		ppb
	Kr	83	32.000		ppb
	Se	77	1315.420		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
⌈>	Li	6	126436.285		ppb
|	Be	9	23102.656	61.199305	ppb
|	Na	23	47142439.008	12709.969763	ppb
|	Mg	24		81043735614.338409	ppb
|	Mg	25	16671223.189	34484.031563	ppb
|	Mg	26	20596966.015	34570.078998	ppb
|	Al	27	5340900.407	1017.150264	ppb
|	K	39	12946632.351	1520.372641	ppb
⌊	Ca	44	27977955.934	85628.923268	ppb
⌈>	Sc	45	508377.031		ppb

	Ti	47	1550.120	1.719439	ppb
	V	51	6191768.301	511.063355	ppb
	Cr	52	2162794.433	203.946021	ppb
	Mn	55	7420477.020	515.159255	ppb
	Fe	54	118133.681	72.426021	ppb
	Fe	56	2150802.085	9.308992	ppb
	Fe	57	77287.518	234.966994	ppb
	Co	59	7128989.694	484.057201	ppb
	Ni	60	1564791.957	489.327278	ppb
	Cu	63	1774892.675	221.335361	ppb
	Cu	65	862051.251	232.999983	ppb
	Zn	66	872734.243	529.233817	ppb
	As	75	81947.142	44.102955	ppb
	Se	82	2422.960	13.910848	ppb
	Mo	96	4859.180	1.262738	ppb
	Ag	107	619722.318	49.016600	ppb
	Ag	109	604512.354	49.193019	ppb
	Cd	111	138849.567	57.076042	ppb
	In	113	199173.955	59.129916	ppb
>	In	115	1285908.393		ppb
	Sn	118	400.008	0.029149	ppb
	Sb	121	828869.229	109.783302	ppb
	Ba	135	5594401.710	2353.742378	ppb
	Ba	137	9612112.007	2315.315620	ppb
>	Tb	159	2041428.437		ppb
	Tl	205	1921847.816	59.869295	ppb
	Pb	206	253743.968	22.984308	ppb
	Pb	207	471044.569	22.759559	ppb
	Pb	208	753321.552	22.965317	ppb
>	Bi	209	1475328.203		ppb
	Cr	53	250652.451		ppb
	Pd	106	11977.168		ppb
	Pd	108	8643.734		ppb
	C	12	561964.663		ppb
	Kr	83	52.000		ppb
	Se	77	1819.499		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	128794.089		ppb
	Be	9	22842.058	59.400983	ppb
	Na	23	46798647.199	12386.241812	ppb
	Mg	24	81043735614.338409		ppb
	Mg	25	18521467.487	37609.875332	ppb
	Mg	26	21682504.962	35725.843158	ppb
	Al	27	5848384.980	1093.459787	ppb
	K	39	13163593.216	1517.476977	ppb
	Ca	44	29599500.911	88936.753590	ppb
>	Sc	45	537787.089		ppb
	Ti	47	1555.121	1.625907	ppb
	V	51	6394175.873	498.904087	ppb
	Cr	52	2158432.323	192.364906	ppb
	Mn	55	7599326.619	498.711090	ppb
	Fe	54	123108.145	70.230507	ppb
	Fe	56	2210823.265	4.778727	ppb
	Fe	57	78023.198	223.703671	ppb
	Co	59	7282751.011	467.454631	ppb
	Ni	60	1603306.970	473.952260	ppb
	Cu	63	1768857.049	208.518178	ppb
	Cu	65	875631.858	223.726492	ppb
	Zn	66	855292.943	490.280015	ppb
	As	75	82246.931	41.844582	ppb
	Se	82	2357.611	12.772271	ppb

⌈	Mo	96	4887.194	1.330724	ppb
|	Ag	107	627917.239	51.980196	ppb
|	Ag	109	594042.006	50.594549	ppb
|	Cd	111	135487.648	58.290352	ppb
|	In	113	189111.407	58.614823	ppb
|>	In	115	1228634.235		ppb
⌊	Sn	118	365.007	0.026772	ppb
⌈	Sb	121	844846.854	110.583801	ppb
|	Ba	135	5472626.725	2275.421811	ppb
|	Ba	137	9560797.203	2275.864160	ppb
⌊>	Tb	159	2065728.639		ppb
⌈	Tl	205	1881925.244	59.595134	ppb
|	Pb	206	249837.432	23.004724	ppb
|	Pb	207	465268.224	22.852338	ppb
|	Pb	208	749137.770	23.215746	ppb
⌊>	Bi	209	1451327.073		ppb
	Cr	53	252387.275		ppb
	Pd	106	11806.966		ppb
	Pd	108	9534.543		ppb
	C	12	572097.694		ppb
	Kr	83	38.000		ppb
	Se	77	1814.165		ppb

QC Calculated Values

Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
Li	6		94.429			
Be	9			120.404		
Na	23					
Mg	24					
Mg	25					
Mg	26					
Al	27					
K	39					
Ca	44					
Sc	45		92.620			
Ti	47					
V	51			101.120		
Cr	52			97.817		
Mn	55			101.119		
Fe	54					
Fe	56					
Fe	57					
Co	59					
Ni	60			94.791		
Cu	63			86.242		
Cu	65					
Zn	66			100.792		
As	75			107.703		
Se	82			119.701		
Mo	96					
Ag	107			101.050		
Ag	109					
Cd	111			114.815		
In	113					
In	115		82.613			
Sn	118					
Sb	121			108.330		
Ba	135					
Ba	137			109.444		
Tb	159		86.696			
Tl	205			118.235		
Pb	206					
Pb	207					
Pb	208			114.730		
Bi	209		81.170			
Cr	53					
Pd	106					
Pd	108					
C	12					
Kr	83					
Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: SDI0910165-01

Sample Date/Time: Monday, November 09, 2009 21:48:19
Sample Type: Sample
Sample Description: 13MW5L 5X
Number of Replicates: 3
Batch ID: 0910086
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\SDI0910165-01.921

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	123341.585	20.164	123341.585			ppb
	Be	9	2.000	100.000	-0.000	-0.00433	113.09	ppb
	Na	23	9233276.135	24.029	74.339	2534.54325	4.56	ppb
	Mg	24	23751061.376	19.012	192.910	7817.05545	1.50	ppb
	Mg	25	3577210.064	17.269	29.134	7619.42123	3.41	ppb
	Mg	26	4170384.649	20.059	33.817	7176.30886	0.46	ppb
	Al	27	11830.358	8.213	0.069	1.66849	19.39	ppb
	K	39	2735998.007	17.359	19.643	299.38183	4.41	ppb
	Ca	44	5725495.230	18.939	46.284	17928.75795	1.82	ppb
>	Sc	45	491933.034	21.322	491933.034			ppb
	Ti	47	335.006	14.926	0.001	0.31866	16.21	ppb
	V	51	3292.471	3.029	0.003	0.14138	53.36	ppb
	Cr	52	15282.387	8.122	0.017	0.83782	28.20	ppb
	Mn	55	3180.513	15.200	-0.005	-0.17643	10.61	ppb
	Fe	54	56035.540	7.888	-0.002	-1.14030	1023.34	ppb
	Fe	56	1940962.429	2.325	0.087	3.28769	1021.03	ppb
	Fe	57	18298.729	17.360	0.030	49.16536	5.95	ppb
	Co	59	838.702	14.073	0.002	0.05199	11.24	ppb
	Ni	60	1896.848	9.748	0.004	0.60918	13.70	ppb
	Cu	63	3999.704	16.851	0.008	0.49448	7.81	ppb
	Cu	65	2212.470	14.336	0.004	0.59303	8.56	ppb
	Zn	66	1090.060	10.713	0.002	0.51750	22.62	ppb
	As	75	-16.436	268.869	0.000	0.01352	196.66	ppb
	Se	82	89.556	14.969	0.000	0.26001	20.03	ppb
	Mo	96	1107.395	12.337	0.001	0.25629	5.83	ppb
	Ag	107	121.112	8.847	0.000	0.00529	22.09	ppb
	Ag	109	126.667	2.632	0.000	0.00659	21.92	ppb
	Cd	111	24.306	84.512	0.000	0.00746	97.47	ppb
	In	113	60291.045	16.257	0.002	0.83425	34.43	ppb
>	In	115	1333956.199	15.276	1333956.199			ppb
	Sn	118	146.668	45.398	-0.000	-0.00543	118.73	ppb
	Sb	121	4095.848	12.632	0.002	0.46378	34.76	ppb
	Ba	135	57160.419	16.251	0.027	23.42869	0.31	ppb
	Ba	137	99709.970	16.288	0.048	23.39915	1.63	ppb
>	Tb	159	2095088.237	16.513	2095088.237			ppb
	Tl	205	241.670	23.255	0.000	0.00524	43.88	ppb
	Pb	206	530.014	11.123	0.000	0.01762	17.52	ppb
	Pb	207	901.688	7.770	0.000	0.01497	35.69	ppb
	Pb	208	1418.395	5.644	0.000	0.01417	53.98	ppb
>	Bi	209	1571191.332	16.603	1571191.332			ppb
	Cr	53	1745.487	11.100	-1925.189			ppb
	Pd	106	15.000	66.667	11.667			ppb
	Pd	108	6.667	86.603	3.333			ppb
	C	12	504857.336	4.925	117218.093			ppb
	Kr	83	40.000	27.839	-12.667			ppb
	Se	77	112.001	22.048	-2.889			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	94643.763		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	6672058.902	2401.274901	ppb
	Mg	24	18537072.104	7936.529953	ppb
	Mg	25	2863888.837	7913.725511	ppb
	Mg	26	3206291.082	7188.959923	ppb
	Al	27	10710.733	2.040780	ppb
	K	39	2189723.139	312.377675	ppb
	Ca	44	4473862.949	18223.026385	ppb
>	Sc	45	371297.453		ppb
	Ti	47	285.004	0.364102	ppb
	V	51	3349.351	0.228437	ppb
	Cr	52	13897.651	1.110545	ppb
	Mn	55	2645.350	-0.155632	ppb
	Fe	54	51135.408	12.330039	ppb
	Fe	56	1891955.824	42.023060	ppb
	Fe	57	14630.695	52.341520	ppb
	Co	59	706.025	0.058005	ppb
	Ni	60	1683.475	0.705126	ppb
	Cu	63	3240.525	0.527906	ppb
	Cu	65	1846.837	0.651299	ppb
	Zn	66	986.715	0.638223	ppb
	As	75	33.621	0.043775	ppb
	Se	82	74.667	0.310243	ppb
	Mo	96	958.046	0.269436	ppb
	Ag	107	113.334	0.006448	ppb
	Ag	109	123.334	0.008252	ppb
	Cd	111	3.090	-0.000015	ppb
	In	113	48974.633	0.530359	ppb
>	In	115	1098700.636		ppb
	Sn	118	90.000	-0.009798	ppb
	Sb	121	4546.033	0.642390	ppb
	Ba	135	46469.721	23.510434	ppb
	Ba	137	80966.457	23.452685	ppb
>	Tb	159	1696770.315		ppb
	Tl	205	255.003	0.007185	ppb
	Pb	206	465.011	0.021097	ppb
	Pb	207	845.018	0.020891	ppb
	Pb	208	1415.061	0.022824	ppb
>	Bi	209	1271504.440		ppb
	Cr	53	1524.116		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	533423.290		ppb
	Kr	83	42.000		ppb
	Se	77	84.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	136750.688		ppb
	Be	9	4.000	0.000589	ppb
	Na	23	10461427.301	2605.957898	ppb
	Mg	24	26363604.239	7811.899661	ppb
	Mg	25	3933538.854	7522.641754	ppb
	Mg	26	4600368.713	7138.683270	ppb
	Al	27	12452.749	1.508096	ppb
	K	39	3050923.759	299.783202	ppb
	Ca	44	6380735.050	17986.371232	ppb
>	Sc	45	561598.952		ppb

	Ti	47	335.006	0.262481	ppb
	V	51	3350.733	0.100240	ppb
	Cr	52	16295.266	0.705819	ppb
	Mn	55	3585.643	-0.181766	ppb
	Fe	54	59722.810	-7.591190	ppb
	Fe	56	1980800.225	-17.308901	ppb
	Fe	57	20135.251	46.583690	ppb
	Co	59	878.039	0.046336	ppb
	Ni	60	2010.202	0.553363	ppb
	Cu	63	4230.895	0.452207	ppb
	Cu	65	2413.625	0.558367	ppb
	Zn	66	1066.724	0.404452	ppb
	As	75	-32.883	0.002999	ppb
	Se	82	93.334	0.206251	ppb
	Mo	96	1138.065	0.240053	ppb
	Ag	107	133.334	0.005322	ppb
	Ag	109	126.667	0.005660	ppb
	Cd	111	25.730	0.007891	ppb
	In	113	66097.726	1.101261	ppb
>	In	115	1447930.882		ppb
	Sn	118	130.001	-0.008461	ppb
	Sb	121	4210.886	0.419864	ppb
	Ba	135	61750.067	23.375086	ppb
	Ba	137	109591.239	23.751581	ppb
>	Tb	159	2267757.108		ppb
	Tl	205	290.004	0.005832	ppb
	Pb	206	545.015	0.015192	ppb
	Pb	207	880.020	0.010519	ppb
	Pb	208	1340.056	0.008315	ppb
>	Bi	209	1694813.084		ppb
	Cr	53	1884.177		ppb
	Pd	106	15.000		ppb
	Pd	108	10.000		ppb
	C	12	488075.121		ppb
	Kr	83	50.000		ppb
	Se	77	121.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	138630.303		ppb
	Be	9	2.000	-0.004377	ppb
	Na	23	10566342.202	2596.396946	ppb
	Mg	24	26352507.785	7702.736726	ppb
	Mg	25	3934202.500	7421.896433	ppb
	Mg	26	4704494.153	7201.283403	ppb
	Al	27	12327.594	1.456593	ppb
	K	39	2967347.122	285.984607	ppb
	Ca	44	6321887.691	17576.876229	ppb
>	Sc	45	542902.697		ppb
	Ti	47	385.007	0.329395	ppb
	V	51	3177.329	0.095458	ppb
	Cr	52	15654.243	0.697089	ppb
	Mn	55	3310.548	-0.191898	ppb
	Fe	54	57248.401	-8.159749	ppb
	Fe	56	1950131.237	-14.851078	ppb
	Fe	57	20130.241	48.570868	ppb
	Co	59	932.043	0.051628	ppb
	Ni	60	1996.866	0.569054	ppb
	Cu	63	4527.691	0.503319	ppb
	Cu	65	2376.949	0.569423	ppb
	Zn	66	1216.741	0.509840	ppb
	As	75	-50.046	-0.006199	ppb
	Se	82	100.667	0.263547	ppb

⌈	Mo	96	1226.075	0.259371	ppb
|	Ag	107	116.667	0.004110	ppb
|	Ag	109	130.001	0.005853	ppb
|	Cd	111	44.099	0.014517	ppb
|	In	113	65800.777	0.871120	ppb
|>	In	115	1455237.080		ppb
⌊	Sn	118	220.002	0.001974	ppb
⌈	Sb	121	3530.623	0.329077	ppb
|	Ba	135	63261.470	23.400539	ppb
|	Ba	137	108572.214	22.993171	ppb
⌊>	Tb	159	2320737.288		ppb
⌈	Tl	205	180.002	0.002702	ppb
|	Pb	206	580.017	0.016580	ppb
|	Pb	207	980.025	0.013491	ppb
|	Pb	208	1500.069	0.011370	ppb
⌊>	Bi	209	1747256.471		ppb
	Cr	53	1828.167		ppb
	Pd	106	25.000		ppb
	Pd	108	0.000		ppb
	C	12	493073.597		ppb
	Kr	83	28.000		ppb
	Se	77	130.668		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		101.728			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		97.128			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		95.473			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		96.146			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		94.742			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-02

Sample Date/Time: Monday, November 09, 2009 21:50:17
Sample Type: Sample
Sample Description: 13MW1
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-02.922

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	112360.148	22.215	112360.148			ppb
	Be	9	2.667	43.301	-0.000	-0.00130	188.80	ppb
	Na	23	42200455.568	21.285	376.188	12825.85569	1.69	ppb
	Mg	24	92087672.776	23.549	817.643	33132.40355	2.29	ppb
	Mg	25	13855692.350	25.618	122.577	32057.65876	4.11	ppb
	Mg	26	16356951.499	25.323	144.787	30725.66156	4.39	ppb
	Al	27	83165.449	26.547	0.706	17.01391	5.35	ppb
	K	39	12847812.847	23.374	111.468	1698.87660	1.79	ppb
	Ca	44	29783067.391	24.528	263.762	102172.64993	2.79	ppb
>	Sc	45	441103.974	21.705	441103.974			ppb
	Ti	47	1531.786	15.648	0.003	1.99251	7.62	ppb
	V	51	8003.470	19.039	0.015	0.61501	5.13	ppb
	Cr	52	25222.922	15.164	0.043	2.09157	10.41	ppb
	Mn	55	12059.107	18.965	0.016	0.56288	5.57	ppb
	Fe	54	62199.027	9.655	0.026	16.25748	78.24	ppb
	Fe	56	2350906.449	3.659	1.509	57.08734	75.19	ppb
	Fe	57	83951.001	17.057	0.185	299.50829	5.72	ppb
	Co	59	2208.918	20.598	0.005	0.16567	3.70	ppb
	Ni	60	8301.296	18.022	0.019	2.99878	7.16	ppb
	Cu	63	1910.184	11.918	0.004	0.25382	13.05	ppb
	Cu	65	1361.205	12.388	0.003	0.39856	11.69	ppb
	Zn	66	3342.795	19.780	0.007	2.16660	5.99	ppb
	As	75	128.163	43.672	0.000	0.09549	21.59	ppb
	Se	82	624.020	21.927	0.001	3.92452	0.61	ppb
	Mo	96	4086.188	19.065	0.004	1.20083	3.55	ppb
	Ag	107	74.445	11.268	0.000	0.00277	47.77	ppb
	Ag	109	34.445	14.783	-0.000	-0.00029	129.53	ppb
	Cd	111	85.595	35.393	0.000	0.03759	22.37	ppb
	In	113	51313.330	15.206	0.002	0.97219	87.46	ppb
>	In	115	1132723.823	16.788	1132723.823			ppb
	Sn	118	218.336	9.255	0.000	0.00966	64.23	ppb
	Sb	121	1378.429	11.924	0.000	0.12567	32.20	ppb
	Ba	135	248182.448	16.067	0.136	116.94890	0.83	ppb
	Ba	137	427594.430	15.515	0.235	115.43771	1.47	ppb
>	Tb	159	1824216.746	16.805	1824216.746			ppb
	Tl	205	426.676	29.046	0.000	0.01271	19.06	ppb
	Pb	206	971.715	15.415	0.001	0.07112	7.98	ppb
	Pb	207	1703.408	13.389	0.001	0.06612	5.64	ppb
	Pb	208	2813.579	11.075	0.002	0.06958	9.44	ppb
>	Bi	209	1317594.112	16.779	1317594.112			ppb
	Cr	53	2885.754	12.161	-784.922			ppb
	Pd	106	85.000	41.177	81.667			ppb
	Pd	108	36.667	41.660	33.333			ppb
	C	12	559188.340	11.003	171549.097			ppb
	Kr	83	46.667	17.321	-6.000			ppb
	Se	77	541.571	18.968	426.681			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	83779.486		ppb
	Be	9	2.000	-0.001213	ppb
	Na	23	32013525.332	13025.724004	ppb
	Mg	24	67084334.478	32446.730185	ppb
	Mg	25	9782428.418	30537.330685	ppb
	Mg	26	11576384.693	29322.666463	ppb
	Al	27	57927.294	15.974144	ppb
	K	39	9391858.687	1668.295356	ppb
	Ca	44	21404522.054	98878.947260	ppb
>	Sc	45	331127.999		ppb
	Ti	47	1255.079	2.159715	ppb
	V	51	6246.432	0.641599	ppb
	Cr	52	20807.625	2.332722	ppb
	Mn	55	9434.448	0.599091	ppb
	Fe	54	55272.331	30.869610	ppb
	Fe	56	2251598.951	106.492288	ppb
	Fe	57	67426.553	318.637427	ppb
	Co	59	1702.145	0.169811	ppb
	Ni	60	6615.521	3.160527	ppb
	Cu	63	1650.136	0.290510	ppb
	Cu	65	1166.735	0.451964	ppb
	Zn	66	2627.012	2.265302	ppb
	As	75	63.822	0.071723	ppb
	Se	82	467.344	3.916058	ppb
	Mo	96	3188.508	1.163853	ppb
	Ag	107	73.334	0.004119	ppb
	Ag	109	30.000	-0.000060	ppb
	Cd	111	52.919	0.029111	ppb
	In	113	42384.633	1.491561	ppb
>	In	115	913766.642		ppb
	Sn	118	215.002	0.016270	ppb
	Sb	121	1350.091	0.165839	ppb
	Ba	135	202183.452	118.073915	ppb
	Ba	137	351028.790	117.365140	ppb
>	Tb	159	1470577.567		ppb
	Tl	205	315.005	0.011577	ppb
	Pb	206	805.032	0.073417	ppb
	Pb	207	1440.053	0.070071	ppb
	Pb	208	2455.186	0.076636	ppb
>	Bi	209	1063795.391		ppb
	Cr	53	2482.308		ppb
	Pd	106	45.000		ppb
	Pd	108	20.000		ppb
	C	12	503649.598		ppb
	Kr	83	48.000		ppb
	Se	77	424.009		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129871.895		ppb
	Be	9	4.000	0.001108	ppb
	Na	23	48982563.079	12856.756144	ppb
	Mg	24	105777671.215	33003.984336	ppb
	Mg	25	16286529.880	32797.111552	ppb
	Mg	26	18874183.912	30840.500559	ppb
	Al	27	98901.670	17.663399	ppb
	K	39	14821236.661	1699.079614	ppb
	Ca	44	34818180.769	103763.610279	ppb
>	Sc	45	505869.549		ppb

	Ti	47	1665.139	1.863482	ppb
	V	51	8801.864	0.580124	ppb
	Cr	52	27337.315	1.909514	ppb
	Mn	55	13624.275	0.544008	ppb
	Fe	54	65946.734	7.658558	ppb
	Fe	56	2402681.704	28.937537	ppb
	Fe	57	92712.800	285.634370	ppb
	Co	59	2582.333	0.168578	ppb
	Ni	60	8817.219	2.755300	ppb
	Cu	63	2006.868	0.226078	ppb
	Cu	65	1466.774	0.366209	ppb
	Zn	66	3930.772	2.214975	ppb
	As	75	165.623	0.108551	ppb
	Se	82	720.026	3.951729	ppb
	Mo	96	4585.051	1.247489	ppb
	Ag	107	66.667	0.001478	ppb
	Ag	109	40.000	-0.000086	ppb
	Cd	111	91.118	0.037725	ppb
	In	113	56820.974	1.434042	ppb
>	In	115	1227864.826		ppb
	Sn	118	200.002	0.003964	ppb
	Sb	121	1555.121	0.126278	ppb
	Ba	135	272969.452	116.355515	ppb
	Ba	137	467958.945	114.200544	ppb
>	Tb	159	2014757.114		ppb
	Tl	205	560.016	0.015498	ppb
	Pb	206	1015.052	0.064664	ppb
	Pb	207	1835.085	0.062659	ppb
	Pb	208	2965.264	0.063651	ppb
>	Bi	209	1468257.035		ppb
	Cr	53	3120.487		ppb
	Pd	106	110.001		ppb
	Pd	108	40.000		ppb
	C	12	625327.721		ppb
	Kr	83	38.000		ppb
	Se	77	614.019		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	123429.065		ppb
	Be	9	2.000	-0.003781	ppb
	Na	23	45605278.294	12595.086910	ppb
	Mg	24	103401012.636	33946.496138	ppb
	Mg	25	15498118.752	32838.534050	ppb
	Mg	26	18620285.891	32013.817661	ppb
	Al	27	92667.382	17.404177	ppb
	K	39	14330343.193	1729.254822	ppb
	Ca	44	33126499.348	103875.392255	ppb
>	Sc	45	486314.374		ppb
	Ti	47	1675.140	1.954326	ppb
	V	51	8962.115	0.623322	ppb
	Cr	52	27523.826	2.032485	ppb
	Mn	55	13118.599	0.545533	ppb
	Fe	54	65378.018	10.244270	ppb
	Fe	56	2398438.691	35.832184	ppb
	Fe	57	91713.650	294.253087	ppb
	Co	59	2342.274	0.158624	ppb
	Ni	60	9471.150	3.080500	ppb
	Cu	63	2073.548	0.244886	ppb
	Cu	65	1450.105	0.377521	ppb
	Zn	66	3470.602	2.019521	ppb
	As	75	155.045	0.106203	ppb
	Se	82	684.690	3.905768	ppb

⌈	Mo	96	4485.006	1.191162	ppb
|	Ag	107	83.334	0.002701	ppb
|	Ag	109	33.333	-0.000719	ppb
|	Cd	111	112.748	0.045929	ppb
|	In	113	54734.384	-0.009048	ppb
|>	In	115	1256540.002		ppb
⌊	Sn	118	240.003	0.008742	ppb
⌈	Sb	121	1230.076	0.084904	ppb
|	Ba	135	269394.441	116.417279	ppb
|	Ba	137	463795.555	114.747460	ppb
⌊>	Tb	159	1987315.556		ppb
⌈	Tl	205	405.008	0.011070	ppb
|	Pb	206	1095.060	0.075293	ppb
|	Pb	207	1835.087	0.065643	ppb
|	Pb	208	3020.287	0.068437	ppb
⌊>	Bi	209	1420729.911		ppb
	Cr	53	3054.466		ppb
	Pd	106	100.001		ppb
	Pd	108	50.000		ppb
	C	12	548587.701		ppb
	Kr	83	54.000		ppb
	Se	77	586.684		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		92.671			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		87.092			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		81.071			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		83.716			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		79.450			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-03

Sample Date/Time: Monday, November 09, 2009 21:52:14
Sample Type: Sample
Sample Description: 13MW2
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-03.923

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	113868.195	21.814	113868.195			ppb
|	Be	9	2.667	43.301	-0.000	-0.00137	186.31	ppb
|	Na	23	8853670.035	21.708	77.706	2649.31528	0.80	ppb
|	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
|	Mg	25	18217448.036	21.786	160.049	41857.73487	2.84	ppb
|	Mg	26	22143075.400	21.222	194.743	41326.96424	3.24	ppb
|	Al	27	29033.212	20.066	0.227	5.47849	4.13	ppb
|	K	39	12687567.640	21.245	108.892	1659.61310	0.75	ppb
⌊	Ca	44	24213079.809	21.956	212.368	82264.17055	0.55	ppb
⌈>	Sc	45	448645.573	21.852	448645.573			ppb
|	Ti	47	936.711	14.046	0.002	1.16752	12.40	ppb
|	V	51	5541.425	11.645	0.009	0.37841	19.47	ppb
|	Cr	52	30169.377	14.130	0.054	2.58785	11.45	ppb
|	Mn	55	3340.572	19.462	-0.004	-0.14286	10.72	ppb
|	Fe	54	47182.919	5.252	-0.010	-6.36182	214.65	ppb
|	Fe	56	2077995.595	3.567	0.794	30.03615	127.16	ppb
|	Fe	57	67077.754	18.713	0.143	232.23286	4.37	ppb
|	Co	59	1572.793	18.823	0.003	0.11407	5.24	ppb
|	Ni	60	6840.148	14.340	0.015	2.44048	9.36	ppb
|	Cu	63	1278.971	11.661	0.003	0.15865	14.97	ppb
|	Cu	65	1198.962	13.013	0.002	0.34064	11.41	ppb
|	Zn	66	2997.125	17.470	0.006	1.89468	5.88	ppb
|	As	75	176.405	34.599	0.000	0.12647	20.31	ppb
⌊	Se	82	131.779	17.989	0.000	0.59538	15.57	ppb
⌈	Mo	96	1383.431	19.128	0.001	0.38406	5.17	ppb
|	Ag	107	24.444	7.873	-0.000	-0.00184	17.54	ppb
|	Ag	109	25.556	19.924	-0.000	-0.00110	60.75	ppb
|	Cd	111	17.425	73.804	0.000	0.00636	79.89	ppb
|	In	113	53070.880	14.989	0.003	1.56653	16.87	ppb
|>	In	115	1141946.753	15.920	1141946.753			ppb
⌊	Sn	118	203.335	13.983	0.000	0.00699	80.36	ppb
⌈	Sb	121	1020.052	10.330	0.000	0.06555	19.17	ppb
|	Ba	135	371880.631	17.342	0.198	169.77813	1.60	ppb
|	Ba	137	645513.479	18.190	0.343	168.54981	2.51	ppb
⌊>	Tb	159	1878213.839	16.013	1878213.839			ppb
⌈	Tl	205	335.006	10.448	0.000	0.00941	17.88	ppb
|	Pb	206	2408.627	13.466	0.002	0.20939	3.78	ppb
|	Pb	207	4320.477	11.237	0.003	0.20099	5.68	ppb
|	Pb	208	6809.730	11.756	0.004	0.19885	5.10	ppb
⌊>	Bi	209	1361924.273	15.486	1361924.273			ppb
	Cr	53	3417.927	15.912	-252.749			ppb
	Pd	106	3.333	173.205	0.000			ppb
	Pd	108	1.667	173.205	-1.667			ppb
	C	12	606374.810	2.955	218735.567			ppb
	Kr	83	40.667	27.086	-12.000			ppb
	Se	77	147.779	14.759	32.889			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	85203.442		ppb
	Be	9	2.000	-0.001346	ppb
	Na	23	6640686.948	2655.025969	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	13663039.797	41938.489291	ppb
	Mg	26	16762639.981	41749.833544	ppb
	Al	27	22359.970	5.637303	ppb
	K	39	9575663.269	1672.619907	ppb
	Ca	44	18086296.633	82139.072611	ppb
>	Sc	45	335582.872		ppb
	Ti	47	795.032	1.315464	ppb
	V	51	4880.644	0.460261	ppb
	Cr	52	25247.832	2.929035	ppb
	Mn	55	2625.345	-0.130955	ppb
	Fe	54	44654.479	9.374270	ppb
	Fe	56	1994868.568	74.137891	ppb
	Fe	57	52608.017	242.650156	ppb
	Co	59	1234.076	0.119308	ppb
	Ni	60	5718.301	2.693311	ppb
	Cu	63	1116.729	0.185536	ppb
	Cu	65	1020.052	0.385467	ppb
	Zn	66	2396.954	2.021408	ppb
	As	75	129.296	0.124382	ppb
	Se	82	107.334	0.664027	ppb
	Mo	96	1084.059	0.368920	ppb
	Ag	107	23.333	-0.001498	ppb
	Ag	109	26.667	-0.000501	ppb
	Cd	111	10.000	0.004170	ppb
	In	113	43886.089	1.864411	ppb
>	In	115	932032.782		ppb
	Sn	118	195.002	0.011839	ppb
	Sb	121	910.041	0.078266	ppb
	Ba	135	297448.966	166.864146	ppb
	Ba	137	509991.186	163.794868	ppb
>	Tb	159	1530942.955		ppb
	Tl	205	320.005	0.011100	ppb
	Pb	206	2035.207	0.215305	ppb
	Pb	207	3760.356	0.213082	ppb
	Pb	208	5886.014	0.209366	ppb
>	Bi	209	1119959.788		ppb
	Cr	53	2792.390		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	585703.005		ppb
	Kr	83	48.000		ppb
	Se	77	122.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129069.607		ppb
	Be	9	4.000	0.001172	ppb
	Na	23	10104838.516	2666.981125	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	20052830.011	40632.563873	ppb
	Mg	26	24224551.029	39829.153107	ppb
	Al	27	31634.960	5.219720	ppb
	K	39	14295613.846	1647.824058	ppb
	Ca	44	27607337.670	82767.788787	ppb
>	Sc	45	500299.561		ppb

	Ti	47	1055.056	1.160861	ppb
	V	51	5573.585	0.317414	ppb
	Cr	52	32550.892	2.439708	ppb
	Mn	55	3500.613	-0.160138	ppb
	Fe	54	47286.537	-15.100728	ppb
	Fe	56	2101866.760	8.192834	ppb
	Fe	57	75035.464	231.647866	ppb
	Co	59	1782.159	0.115330	ppb
	Ni	60	7536.172	2.379073	ppb
	Cu	63	1310.086	0.140575	ppb
	Cu	65	1270.081	0.316616	ppb
	Zn	66	3233.856	1.812067	ppb
	As	75	245.357	0.153134	ppb
	Se	82	154.668	0.632170	ppb
	Mo	96	1480.110	0.376726	ppb
	Ag	107	26.667	-0.001871	ppb
	Ag	109	20.000	-0.001818	ppb
	Cd	111	32.275	0.012168	ppb
	In	113	57580.299	1.360010	ppb
>	In	115	1248031.931		ppb
	Sn	118	235.003	0.008283	ppb
	Sb	121	1120.063	0.065254	ppb
	Ba	135	411168.706	172.247507	ppb
	Ba	137	716820.639	171.921785	ppb
>	Tb	159	2050112.474		ppb
	Tl	205	310.005	0.007733	ppb
	Pb	206	2620.343	0.212461	ppb
	Pb	207	4620.543	0.199472	ppb
	Pb	208	7301.605	0.198059	ppb
>	Bi	209	1459020.246		ppb
	Cr	53	3778.714		ppb
	Pd	106	10.000		ppb
	Pd	108	5.000		ppb
	C	12	615910.440		ppb
	Kr	83	28.000		ppb
	Se	77	158.668		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	127331.538		ppb
	Be	9	2.000	-0.003948	ppb
	Na	23	9815484.642	2625.938741	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	20936474.301	43002.151447	ppb
	Mg	26	25442035.191	42401.906062	ppb
	Al	27	33104.706	5.578460	ppb
	K	39	14191425.804	1658.395343	ppb
	Ca	44	26945605.124	81885.650246	ppb
>	Sc	45	510054.285		ppb
	Ti	47	960.046	1.026249	ppb
	V	51	6170.045	0.357555	ppb
	Cr	52	32709.408	2.394804	ppb
	Mn	55	3895.759	-0.137500	ppb
	Fe	54	49607.742	-13.359000	ppb
	Fe	56	2137251.457	7.777730	ppb
	Fe	57	73589.780	222.400561	ppb
	Co	59	1702.145	0.107564	ppb
	Ni	60	7265.972	2.249054	ppb
	Cu	63	1410.099	0.149832	ppb
	Cu	65	1306.752	0.319824	ppb
	Zn	66	3360.565	1.850554	ppb
	As	75	154.563	0.101886	ppb
	Se	82	133.334	0.489940	ppb

⌈	Mo	96	1586.126	0.406540	ppb
|	Ag	107	23.333	-0.002139	ppb
|	Ag	109	30.000	-0.000975	ppb
|	Cd	111	10.000	0.002741	ppb
|	In	113	57746.251	1.475163	ppb
|>	In	115	1245775.546		ppb
⌊	Sn	118	180.002	0.000837	ppb
⌈	Sb	121	1030.053	0.053144	ppb
|	Ba	135	407024.220	170.222729	ppb
|	Ba	137	709728.612	169.932776	ppb
⌊>	Tb	159	2053586.089		ppb
⌈	Tl	205	375.007	0.009406	ppb
|	Pb	206	2570.330	0.200402	ppb
|	Pb	207	4580.532	0.190412	ppb
|	Pb	208	7241.570	0.189120	ppb
⌊>	Bi	209	1506792.786		ppb
	Cr	53	3682.678		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	617510.984		ppb
	Kr	83	46.000		ppb
	Se	77	162.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		93.915			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		88.581			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		81.731			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		86.194			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		82.124			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 21:54:14
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.924

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	113742.841	25.516	113742.841			ppb
	Be	9	43785.220	25.834	0.385	128.86959	2.07	ppb
	Na	23	4447702.840	25.045	39.098	1333.02398	3.87	ppb
	Mg	24	3678613.847	25.470	32.343	1310.60005	1.71	ppb
	Mg	25	553086.565	26.027	4.857	1270.22583	1.18	ppb
	Mg	26	683366.969	22.946	6.039	1281.55013	3.21	ppb
	Al	27	5551237.060	20.079	49.345	1188.99062	6.97	ppb
	K	39	8873125.647	23.708	75.665	1153.20169	2.31	ppb
	Ca	44	360637.935	25.130	2.946	1141.23195	0.76	ppb
>	Sc	45	458649.455	23.964	458649.455			ppb
	Ti	47	92630.889	22.146	0.203	120.29745	2.50	ppb
	V	51	1228092.890	24.840	2.670	112.04841	2.26	ppb
	Cr	52	1101657.034	22.969	2.392	115.06189	1.66	ppb
	Mn	55	1549395.251	21.987	3.379	119.36335	2.39	ppb
	Fe	54	920677.348	22.623	1.894	1202.76793	3.10	ppb
	Fe	56	15526633.986	17.362	30.302	1146.25508	9.17	ppb
	Fe	57	343709.768	20.404	0.747	1211.97413	4.64	ppb
	Co	59	1509098.452	21.248	3.307	114.15932	3.26	ppb
	Ni	60	347729.481	23.354	0.759	120.65920	2.14	ppb
	Cu	63	824625.605	23.135	1.801	114.18315	3.54	ppb
	Cu	65	399348.526	21.432	0.875	120.23423	4.29	ppb
	Zn	66	188257.685	21.299	0.412	127.20031	6.57	ppb
	As	75	205248.012	23.367	0.448	122.57915	3.53	ppb
	Se	82	19215.623	20.428	0.042	125.37800	4.22	ppb
	Mo	96	447935.078	20.064	0.347	118.43149	2.29	ppb
	Ag	107	1449536.231	18.570	1.124	114.35244	1.54	ppb
	Ag	109	1422347.885	19.518	1.102	115.28234	1.76	ppb
	Cd	111	310228.137	20.042	0.240	126.91951	2.36	ppb
	In	113	366472.463	20.670	0.240	127.38507	3.70	ppb
>	In	115	1288609.733	18.074	1288609.733			ppb
	Sn	118	935795.393	20.453	0.724	122.99790	2.74	ppb
	Sb	121	927502.540	21.011	0.450	121.65072	2.03	ppb
	Ba	135	298493.987	20.753	0.145	124.39462	1.99	ppb
	Ba	137	524763.251	19.597	0.255	125.41014	0.46	ppb
>	Tb	159	2058413.910	19.915	2058413.910			ppb
	Tl	205	4373706.046	21.306	2.697	123.95122	0.18	ppb
	Pb	206	1498530.090	21.846	0.923	123.50648	2.06	ppb
	Pb	207	2792620.127	21.553	1.721	122.84565	2.70	ppb
	Pb	208	4477619.528	20.499	2.765	124.50067	2.95	ppb
>	Bi	209	1622156.967	21.460	1622156.967			ppb
	Cr	53	134300.104	23.157	130629.428			ppb
	Pd	106	27140.892	17.829	27137.559			ppb
	Pd	108	20626.724	18.287	20623.391			ppb
	C	12	419236.180	1.903	31596.937			ppb
	Kr	83	34.667	29.038	-18.000			ppb
	Se	77	14907.957	23.515	14793.068			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	80293.060		ppb
	Be	9	30729.142	128.192578	ppb
	Na	23	3169511.642	1343.594191	ppb
	Mg	24	2596839.816	1310.414043	ppb
	Mg	25	386889.907	1260.052711	ppb
	Mg	26	502363.380	1327.451059	ppb
	Al	27	4278153.837	1283.161868	ppb
	K	39	6446503.973	1183.406648	ppb
	Ca	44	256358.395	1148.761915	ppb
>	Sc	45	332822.895		ppb
	Ti	47	68987.143	123.039689	ppb
	V	51	876169.305	110.346283	ppb
	Cr	52	810205.037	116.404020	ppb
	Mn	55	1158191.441	122.508025	ppb
	Fe	54	680176.164	1222.421847	ppb
	Fe	56	12413951.134	1260.225256	ppb
	Fe	57	262757.305	1268.631590	ppb
	Co	59	1140572.618	118.288681	ppb
	Ni	60	254005.483	121.315526	ppb
	Cu	63	604473.437	115.128431	ppb
	Cu	65	300566.809	124.074854	ppb
	Zn	66	142569.104	131.921623	ppb
	As	75	149905.032	123.197696	ppb
	Se	82	14709.477	131.386357	ppb
	Mo	96	344422.943	115.350460	ppb
	Ag	107	1141854.889	113.856382	ppb
	Ag	109	1103221.702	113.177099	ppb
	Cd	111	238797.070	123.744094	ppb
	In	113	279003.601	122.143676	ppb
>	In	115	1020070.095		ppb
	Sn	118	715014.994	119.109570	ppb
	Sb	121	703285.430	119.976194	ppb
	Ba	135	227277.738	123.142044	ppb
	Ba	137	406033.125	125.950543	ppb
>	Tb	159	1585070.938		ppb
	Tl	205	3300131.880	124.207003	ppb
	Pb	206	1120734.578	122.768699	ppb
	Pb	207	2099405.301	122.668285	ppb
	Pb	208	3420979.865	126.120696	ppb
>	Bi	209	1221143.339		ppb
	Cr	53	98389.657		ppb
	Pd	106	21588.278		ppb
	Pd	108	16273.230		ppb
	C	12	410027.242		ppb
	Kr	83	44.000		ppb
	Se	77	10861.228		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	128686.720		ppb
	Be	9	50641.906	131.815849	ppb
	Na	23	5211416.621	1378.460163	ppb
	Mg	24	4234230.458	1333.162123	ppb
	Mg	25	633560.458	1287.462545	ppb
	Mg	26	769828.864	1269.213561	ppb
	Al	27	6023970.360	1127.249503	ppb
	K	39	9992881.866	1143.255908	ppb
	Ca	44	405192.019	1131.673640	ppb
>	Sc	45	507209.951		ppb

	Ti	47	103199.776	120.774478	ppb
	V	51	1391041.912	114.963248	ppb
	Cr	52	1229401.684	115.899385	ppb
	Mn	55	1709269.544	118.624135	ppb
	Fe	54	1039515.102	1226.116350	ppb
	Fe	56	17110706.931	1125.404713	ppb
	Fe	57	382420.061	1211.045518	ppb
	Co	59	1662318.401	113.125005	ppb
	Ni	60	391998.791	122.852544	ppb
	Cu	63	941564.136	117.674613	ppb
	Cu	65	451319.724	122.250547	ppb
	Zn	66	217602.051	132.123445	ppb
	As	75	234695.212	126.565182	ppb
	Se	82	21045.456	123.331659	ppb
	Mo	96	493291.982	119.506911	ppb
	Ag	107	1565227.351	112.896826	ppb
	Ag	109	1555628.203	115.440926	ppb
	Cd	111	339693.448	127.332943	ppb
	In	113	409917.893	131.265683	ppb
>	In	115	1410171.868		ppb
	Sn	118	1037528.848	125.024104	ppb
	Sb	121	1023077.558	120.484248	ppb
	Ba	135	328297.946	122.793250	ppb
	Ba	137	585939.659	125.472430	ppb
>	Tb	159	2296104.827		ppb
	Tl	205	4847877.373	123.877486	ppb
	Pb	206	1698732.062	126.339320	ppb
	Pb	207	3182272.582	126.241465	ppb
	Pb	208	5077354.710	127.086684	ppb
>	Bi	209	1798625.129		ppb
	Cr	53	152148.723		ppb
	Pd	106	29378.090		ppb
	Pd	108	22690.714		ppb
	C	12	423991.859		ppb
	Kr	83	24.000		ppb
	Se	77	16846.846		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	132248.742		ppb
	Be	9	49984.612	126.600331	ppb
	Na	23	4962180.256	1277.017573	ppb
	Mg	24	4204771.266	1288.223994	ppb
	Mg	25	638809.331	1263.162234	ppb
	Mg	26	777908.664	1247.985769	ppb
	Al	27	6351586.983	1156.560492	ppb
	K	39	10179991.102	1132.942502	ppb
	Ca	44	420363.391	1143.260306	ppb
>	Sc	45	535915.519		ppb
	Ti	47	105705.748	117.078197	ppb
	V	51	1417067.453	110.835699	ppb
	Cr	52	1265364.382	112.882258	ppb
	Mn	55	1780724.769	116.957901	ppb
	Fe	54	1042340.777	1159.765596	ppb
	Fe	56	17055243.894	1053.135286	ppb
	Fe	57	385951.939	1156.245277	ppb
	Co	59	1724404.338	111.064277	ppb
	Ni	60	397184.169	117.809527	ppb
	Cu	63	927839.241	109.746392	ppb
	Cu	65	446159.044	114.377274	ppb
	Zn	66	204601.901	117.555852	ppb
	As	75	231143.792	117.974578	ppb
	Se	82	21891.937	121.415977	ppb

⌈	Mo	96	506090.309	120.437087	ppb
|	Ag	107	1641526.454	116.304121	ppb
|	Ag	109	1608193.749	117.228989	ppb
|	Cd	111	352193.892	129.681486	ppb
|	In	113	410495.893	128.745845	ppb
|>	In	115	1435587.237		ppb
⌊	Sn	118	1054842.337	124.860040	ppb
⌈	Sb	121	1056144.630	124.491728	ppb
|	Ba	135	339906.276	127.248552	ppb
|	Ba	137	582316.970	124.807434	ppb
⌊>	Tb	159	2294065.966		ppb
⌈	Tl	205	4973108.884	123.769163	ppb
|	Pb	206	1676123.632	121.411424	ppb
|	Pb	207	3096182.500	119.627187	ppb
|	Pb	208	4934524.009	120.294641	ppb
⌊>	Bi	209	1846702.432		ppb
	Cr	53	152361.932		ppb
	Pd	106	30456.309		ppb
	Pd	108	22916.228		ppb
	C	12	423689.437		ppb
	Kr	83	36.000		ppb
	Se	77	17015.798		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		93.811			
	Be	9	107.391				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		90.556			
	Ti	47					
	V	51	93.374				
	Cr	52	95.885				
	Mn	55	99.469				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	95.133				
	Ni	60	100.549				
	Cu	63	95.153				
	Cu	65	100.195				
	Zn	66	106.000				
	As	75	102.149				
	Se	82	104.482				
	Mo	96					
	Ag	107	95.294				
	Ag	109	96.069				
	Cd	111	105.766				
	In	113					
>	In	115		92.228			
	Sn	118	102.498				
	Sb	121	101.376				
	Ba	135	103.662				
	Ba	137	104.508				
>	Tb	159		94.463			
	Tl	205	103.293				
	Pb	206	102.922				
	Pb	207	102.371				
	Pb	208	103.751				
>	Bi	209		97.816			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 21:56:11
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.925

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	126739.236	6.878	126739.236			ppb
	Be	9	4.000	50.000	0.000	0.00156	362.87	ppb
	Na	23	8431.853	35.570	0.001	0.04617	2034.90	ppb
	Mg	24	1390.439	37.748	0.008	0.30554	63.42	ppb
	Mg	25	229.670	51.032	0.001	0.35385	77.16	ppb
	Mg	26	361.341	54.236	0.002	0.32976	111.51	ppb
	Al	27	2256.975	55.975	-0.010	-0.24791	108.48	ppb
	K	39	286411.582	1.484	-0.375	-5.70953	35.56	ppb
	Ca	44	24446.510	63.493	-0.030	-11.52085	456.75	ppb
>	Sc	45	485543.647	8.019	485543.647			ppb
	Ti	47	65.000	27.735	-0.000	-0.01129	239.00	ppb
	V	51	2632.447	37.700	0.002	0.08290	130.82	ppb
	Cr	52	7001.838	18.266	0.000	0.01338	1406.57	ppb
	Mn	55	1285.085	20.380	-0.009	-0.31241	8.77	ppb
	Fe	54	57468.747	14.895	0.001	0.89910	1934.27	ppb
	Fe	56	1768735.894	12.062	-0.303	-11.47362	247.42	ppb
	Fe	57	3540.668	31.535	0.000	0.52071	936.49	ppb
	Co	59	174.002	41.966	0.000	0.00508	126.90	ppb
	Ni	60	103.334	86.738	0.000	0.01991	168.90	ppb
	Cu	63	258.893	51.765	0.000	0.00947	223.67	ppb
	Cu	65	138.890	38.425	0.000	0.00804	232.45	ppb
	Zn	66	213.336	45.474	-0.000	-0.04177	181.30	ppb
	As	75	-81.335	100.206	-0.000	-0.02947	176.54	ppb
	Se	82	46.889	13.438	-0.000	-0.00163	1393.90	ppb
	Mo	96	359.340	20.301	0.000	0.06679	23.53	ppb
	Ag	107	138.890	1.386	0.000	0.00702	20.89	ppb
	Ag	109	170.001	22.097	0.000	0.01025	19.40	ppb
	Cd	111	15.122	129.818	0.000	0.00540	163.86	ppb
	In	113	59321.056	14.043	0.002	1.23606	42.89	ppb
>	In	115	1290345.338	12.312	1290345.338			ppb
	Sn	118	431.676	16.639	0.000	0.03378	36.68	ppb
	Sb	121	2785.393	13.802	0.001	0.28338	19.46	ppb
	Ba	135	52.667	17.946	0.000	0.00936	16.29	ppb
	Ba	137	101.334	17.800	0.000	0.01289	58.82	ppb
>	Tb	159	2074488.190	12.317	2074488.190			ppb
	Tl	205	246.670	23.494	0.000	0.00508	53.00	ppb
	Pb	206	143.334	34.416	-0.000	-0.01561	40.44	ppb
	Pb	207	308.336	28.659	-0.000	-0.01259	50.81	ppb
	Pb	208	530.008	22.877	-0.000	-0.01225	49.12	ppb
>	Bi	209	1651891.119	14.668	1651891.119			ppb
	Cr	53	1158.088	67.928	-2512.588			ppb
	Pd	106	5.000	100.000	1.667			ppb
	Pd	108	5.000	173.205	1.667			ppb
	C	12	406508.499	2.766	18869.256			ppb
	Kr	83	39.333	38.835	-13.333			ppb
	Se	77	95.778	38.938	-19.111			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	119623.232		ppb
	Be	9	4.000	0.001992	ppb
	Na	23	11870.041	1.130936	ppb
	Mg	24	1990.198	0.529120	ppb
	Mg	25	365.007	0.668589	ppb
	Mg	26	587.017	0.754330	ppb
	Al	27	3715.690	0.062367	ppb
	K	39	281546.399	-4.372162	ppb
	Ca	44	42369.569	49.185530	ppb
>	Sc	45	441725.241		ppb
	Ti	47	80.000	0.015710	ppb
	V	51	3766.528	0.207711	ppb
	Cr	52	8447.567	0.230015	ppb
	Mn	55	1580.125	-0.280933	ppb
	Fe	54	66676.550	20.726604	ppb
	Fe	56	2008306.650	21.254573	ppb
	Fe	57	4821.162	6.143674	ppb
	Co	59	256.003	0.012372	ppb
	Ni	60	206.669	0.058687	ppb
	Cu	63	413.342	0.033875	ppb
	Cu	65	193.335	0.027890	ppb
	Zn	66	323.339	0.044422	ppb
	As	75	-175.157	-0.089433	ppb
	Se	82	42.000	-0.005613	ppb
	Mo	96	340.006	0.075297	ppb
	Ag	107	140.001	0.008682	ppb
	Ag	109	150.001	0.010533	ppb
	Cd	111	32.640	0.013917	ppb
	In	113	50100.188	0.635329	ppb
>	In	115	1118990.777		ppb
	Sn	118	460.011	0.046149	ppb
	Sb	121	2665.355	0.322666	ppb
	Ba	135	42.000	0.007919	ppb
	Ba	137	120.001	0.021422	ppb
>	Tb	159	1779699.097		ppb
	Tl	205	300.005	0.008015	ppb
	Pb	206	200.002	-0.008335	ppb
	Pb	207	410.004	-0.005215	ppb
	Pb	208	670.013	-0.005304	ppb
>	Bi	209	1372277.019		ppb
	Cr	53	2066.213		ppb
	Pd	106	10.000		ppb
	Pd	108	0.000		ppb
	C	12	403745.230		ppb
	Kr	83	56.000		ppb
	Se	77	138.001		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	136462.795		ppb
	Be	9	2.000	-0.004300	ppb
	Na	23	7072.500	-0.485173	ppb
	Mg	24	1166.068	0.201206	ppb
	Mg	25	162.001	0.181054	ppb
	Mg	26	263.003	0.121950	ppb
	Al	27	1540.119	-0.414136	ppb
	K	39	288288.464	-8.045687	ppb
	Ca	44	15461.944	-44.125948	ppb
>	Sc	45	516176.749		ppb

	Ti	47	70.000	-0.011317	ppb
	V	51	2207.977	0.029353	ppb
	Cr	52	6540.138	-0.080412	ppb
	Mn	55	1195.071	-0.325506	ppb
	Fe	54	55976.230	-6.258086	ppb
	Fe	56	1698679.296	-26.243406	ppb
	Fe	57	3030.459	-2.034505	ppb
	Co	59	116.001	0.000124	ppb
	Ni	60	46.667	-0.001322	ppb
	Cu	63	173.335	-0.004163	ppb
	Cu	65	86.667	-0.009185	ppb
	Zn	66	140.001	-0.097673	ppb
	As	75	-40.795	-0.002603	ppb
	Se	82	54.000	0.022791	ppb
	Mo	96	440.010	0.076410	ppb
	Ag	107	140.001	0.005895	ppb
	Ag	109	213.336	0.012087	ppb
	Cd	111	-6.095	-0.003751	ppb
	In	113	66304.085	1.434633	ppb
>	In	115	1432754.375		ppb
	Sn	118	485.012	0.033814	ppb
	Sb	121	3215.517	0.307154	ppb
	Ba	135	56.000	0.009194	ppb
	Ba	137	100.001	0.010292	ppb
>	Tb	159	2232507.467		ppb
	Tl	205	185.002	0.002735	ppb
	Pb	206	120.001	-0.018832	ppb
	Pb	207	265.002	-0.015934	ppb
	Pb	208	460.006	-0.015675	ppb
>	Bi	209	1783461.384		ppb
	Cr	53	686.024		ppb
	Pd	106	0.000		ppb
	Pd	108	15.000		ppb
	C	12	418876.925		ppb
	Kr	83	36.000		ppb
	Se	77	82.000		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	124131.681		ppb
	Be	9	6.000	0.006982	ppb
	Na	23	6353.017	-0.507255	ppb
	Mg	24	1015.052	0.186305	ppb
	Mg	25	162.001	0.211896	ppb
	Mg	26	234.003	0.113000	ppb
	Al	27	1515.115	-0.391975	ppb
	K	39	289399.884	-4.710746	ppb
	Ca	44	15508.016	-39.622123	ppb
>	Sc	45	498728.951		ppb
	Ti	47	45.000	-0.038276	ppb
	V	51	1922.835	0.011637	ppb
	Cr	52	6017.810	-0.109468	ppb
	Mn	55	1080.058	-0.330790	ppb
	Fe	54	49753.463	-11.771227	ppb
	Fe	56	1599221.737	-29.432028	ppb
	Fe	57	2770.384	-2.547051	ppb
	Co	59	150.001	0.002749	ppb
	Ni	60	56.667	0.002369	ppb
	Cu	63	190.002	-0.001300	ppb
	Cu	65	136.668	0.005400	ppb
	Zn	66	176.668	-0.072073	ppb
	As	75	-28.052	0.003629	ppb
	Se	82	44.667	-0.022061	ppb

⌈	Mo	96	298.004	0.048654	ppb
|	Ag	107	136.668	0.006493	ppb
|	Ag	109	146.668	0.008139	ppb
|	Cd	111	18.820	0.006039	ppb
|	In	113	61558.893	1.638209	ppb
|>	In	115	1319290.864		ppb
⌊	Sn	118	350.006	0.021370	ppb
⌈	Sb	121	2475.306	0.220320	ppb
|	Ba	135	60.000	0.010955	ppb
|	Ba	137	84.000	0.006945	ppb
⌊>	Tb	159	2211258.005		ppb
⌈	Tl	205	255.003	0.004479	ppb
|	Pb	206	110.001	-0.019658	ppb
|	Pb	207	250.002	-0.016626	ppb
|	Pb	208	460.006	-0.015781	ppb
⌊>	Bi	209	1799934.955		ppb
	Cr	53	722.026		ppb
	Pd	106	5.000		ppb
	Pd	108	0.000		ppb
	C	12	396903.342		ppb
	Kr	83	26.000		ppb
	Se	77	67.334		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		104.531			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		95.866			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		92.352			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		95.201			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		99.608			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-04

Sample Date/Time: Monday, November 09, 2009 21:59:10
Sample Type: Sample
Sample Description: 13MW3
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-04.926

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	93629.376	25.281	93629.376			ppb
	Be	9	2.667	43.301	0.000	0.00042	768.65	ppb
	Na	23	37160511.671	26.277	396.001	13501.35089	1.27	ppb
	Mg	24	S	S	6666671	27014599241.51883	173.20	ppb
	Mg	25	10771855.072	27.211	114.621	29977.11898	3.09	ppb
	Mg	26	13260494.116	28.408	140.924	29906.01898	6.08	ppb
	Al	27	57704.556	27.861	0.586	14.11711	6.92	ppb
	K	39	12592319.031	24.646	132.068	2012.84425	2.34	ppb
	Ca	44	16560100.890	21.490	178.090	68986.16503	5.25	ppb
>	Sc	45	380453.517	23.534	380453.517			ppb
	Ti	47	1103.396	22.570	0.003	1.63648	4.88	ppb
	V	51	5742.230	13.227	0.012	0.49555	15.92	ppb
	Cr	52	27705.622	15.707	0.060	2.86345	11.24	ppb
	Mn	55	14677.890	25.315	0.027	0.95084	5.25	ppb
	Fe	54	50866.400	8.994	0.019	12.08028	122.53	ppb
	Fe	56	1912386.810	4.472	1.220	46.15607	93.10	ppb
	Fe	57	49878.591	18.572	0.125	203.19705	8.48	ppb
	Co	59	1468.110	16.117	0.004	0.12750	10.38	ppb
	Ni	60	3600.662	18.224	0.009	1.50368	6.28	ppb
	Cu	63	1929.079	18.514	0.005	0.29906	7.10	ppb
	Cu	65	1441.218	20.989	0.004	0.49073	3.21	ppb
	Zn	66	2082.446	21.724	0.005	1.51297	5.47	ppb
	As	75	108.516	51.790	0.000	0.09363	26.08	ppb
	Se	82	143.779	17.389	0.000	0.85225	13.34	ppb
	Mo	96	2917.771	20.847	0.003	0.96177	1.25	ppb
	Ag	107	84.445	16.434	0.000	0.00462	28.02	ppb
	Ag	109	53.333	27.243	0.000	0.00210	55.77	ppb
	Cd	111	48.628	57.250	0.000	0.02273	49.38	ppb
	In	113	44948.255	19.192	0.001	0.63162	88.39	ppb
>	In	115	1005223.051	19.821	1005223.051			ppb
	Sn	118	236.669	6.454	0.000	0.01713	37.27	ppb
	Sb	121	906.709	20.784	0.000	0.06593	32.77	ppb
	Ba	135	217405.526	18.515	0.131	112.43752	2.45	ppb
	Ba	137	371692.254	18.733	0.224	110.01264	1.53	ppb
>	Tb	159	1661107.867	18.718	1661107.867			ppb
	Tl	205	111.667	21.160	0.000	0.00222	9.27	ppb
	Pb	206	5676.654	20.027	0.005	0.60217	1.70	ppb
	Pb	207	10060.977	20.513	0.008	0.56878	3.21	ppb
	Pb	208	15383.844	19.407	0.012	0.54796	2.55	ppb
>	Bi	209	1204232.022	19.198	1204232.022			ppb
	Cr	53	3216.527	16.921	-454.149			ppb
	Pd	106	88.334	29.047	85.000			ppb
	Pd	108	30.000	28.868	26.667			ppb
	C	12	474873.690	1.889	87234.447			ppb
	Kr	83	48.000	22.048	-4.667			ppb
	Se	77	146.223	8.032	31.334			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	66313.145		ppb
	Be	9	2.000	0.000894	ppb
	Na	23	25887835.784	13307.723629	ppb
	Mg	24	50745987.149	31009.124400	ppb
	Mg	25	7414028.890	29239.951782	ppb
	Mg	26	9046082.190	28948.699019	ppb
	Al	27	39954.660	13.831797	ppb
	K	39	9039202.775	2037.258727	ppb
	Ca	44	12492134.596	72884.518394	ppb
>	Sc	45	279450.832		ppb
	Ti	47	840.035	1.693816	ppb
	V	51	4865.406	0.580591	ppb
	Cr	52	22761.876	3.228049	ppb
	Mn	55	10405.411	0.907919	ppb
	Fe	54	45869.962	29.105766	ppb
	Fe	56	1814062.221	94.831379	ppb
	Fe	57	39246.865	216.181085	ppb
	Co	59	1196.072	0.140112	ppb
	Ni	60	2860.409	1.611597	ppb
	Cu	63	1516.782	0.318683	ppb
	Cu	65	1096.727	0.507080	ppb
	Zn	66	1560.122	1.540367	ppb
	As	75	54.241	0.072095	ppb
	Se	82	118.667	0.976267	ppb
	Mo	96	2216.246	0.947970	ppb
	Ag	107	73.334	0.005574	ppb
	Ag	109	43.333	0.002352	ppb
	Cd	111	17.919	0.010711	ppb
	In	113	35011.182	0.832474	ppb
>	In	115	775548.251		ppb
	Sn	118	220.002	0.024493	ppb
	Sb	121	730.027	0.068176	ppb
	Ba	135	171038.302	112.102129	ppb
	Ba	137	291925.731	109.541884	ppb
>	Tb	159	1310307.991		ppb
	Tl	205	85.000	0.002135	ppb
	Pb	206	4370.955	0.596061	ppb
	Pb	207	7716.515	0.560956	ppb
	Pb	208	11984.289	0.548408	ppb
>	Bi	209	937376.829		ppb
	Cr	53	2596.337		ppb
	Pd	106	60.000		ppb
	Pd	108	40.000		ppb
	C	12	473549.449		ppb
	Kr	83	56.000		ppb
	Se	77	132.668		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	106481.918		ppb
	Be	9	4.000	0.003374	ppb
	Na	23	42585191.673	13633.022453	ppb
	Mg	24	81726724.798	31101.093672	ppb
	Mg	25	12082665.998	29676.244400	ppb
	Mg	26	14434942.790	28767.844581	ppb
	Al	27	61870.810	13.314475	ppb
	K	39	13965099.722	1958.601757	ppb
	Ca	44	18090879.070	65724.153481	ppb
>	Sc	45	411844.687		ppb

	Ti	47	1135.064	1.545323	ppb
	V	51	6195.897	0.481267	ppb
	Cr	52	29399.152	2.743766	ppb
	Mn	55	16473.558	1.005556	ppb
	Fe	54	51879.225	4.868025	ppb
	Fe	56	1969399.240	30.159036	ppb
	Fe	57	56212.550	209.770842	ppb
	Co	59	1626.132	0.128663	ppb
	Ni	60	3830.734	1.463043	ppb
	Cu	63	2126.893	0.301982	ppb
	Cu	65	1563.456	0.489441	ppb
	Zn	66	2350.276	1.578574	ppb
	As	75	104.846	0.088634	ppb
	Se	82	144.001	0.752828	ppb
	Mo	96	3238.524	0.969958	ppb
	Ag	107	100.001	0.005133	ppb
	Ag	109	70.000	0.003114	ppb
	Cd	111	72.213	0.032939	ppb
	In	113	50512.253	1.061670	ppb
>	In	115	1108326.435		ppb
	Sn	118	240.003	0.013084	ppb
	Sb	121	1105.061	0.086324	ppb
	Ba	135	237775.650	115.347194	ppb
	Ba	137	402854.359	111.885730	ppb
>	Tb	159	1770335.439		ppb
	Tl	205	130.001	0.002455	ppb
	Pb	206	6211.929	0.596442	ppb
	Pb	207	10863.010	0.555763	ppb
	Pb	208	16588.202	0.533755	ppb
>	Bi	209	1331370.847		ppb
	Cr	53	3438.591		ppb
	Pd	106	110.001		ppb
	Pd	108	25.000		ppb
	C	12	466637.283		ppb
	Kr	83	36.000		ppb
	Se	77	153.335		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	108093.065		ppb
	Be	9	2.000	-0.003011	ppb
	Na	23	43008507.554	13563.306594	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	12818870.329	31015.160756	ppb
	Mg	26	16300457.368	32001.513354	ppb
	Al	27	71288.198	15.205061	ppb
	K	39	14772654.597	2042.672262	ppb
	Ca	44	19097289.003	68349.823219	ppb
>	Sc	45	450065.031		ppb
	Ti	47	1335.089	1.670301	ppb
	V	51	6165.388	0.424798	ppb
	Cr	52	30955.839	2.618547	ppb
	Mn	55	17154.702	0.939032	ppb
	Fe	54	54850.015	2.267051	ppb
	Fe	56	1953698.969	13.477808	ppb
	Fe	57	54176.357	183.639216	ppb
	Co	59	1582.125	0.113713	ppb
	Ni	60	4110.845	1.436412	ppb
	Cu	63	2143.563	0.276524	ppb
	Cu	65	1663.472	0.475677	ppb
	Zn	66	2336.940	1.419983	ppb
	As	75	166.461	0.120163	ppb
	Se	82	168.668	0.827654	ppb

⌈	Mo	96	3298.544	0.967375	ppb
|	Ag	107	80.000	0.003145	ppb
|	Ag	109	46.667	0.000820	ppb
|	Cd	111	55.753	0.024538	ppb
|	In	113	49321.330	0.000720	ppb
|>	In	115	1131794.467		ppb
⌊	Sn	118	250.003	0.013822	ppb
⌈	Sb	121	885.039	0.043285	ppb
|	Ba	135	243402.624	109.863230	ppb
|	Ba	137	420296.672	108.610292	ppb
⌊>	Tb	159	1902680.171		ppb
⌈	Tl	205	120.001	0.002071	ppb
|	Pb	206	6447.078	0.614010	ppb
|	Pb	207	11603.407	0.589630	ppb
|	Pb	208	17579.040	0.561702	ppb
⌊>	Bi	209	1343948.390		ppb
	Cr	53	3614.653		ppb
	Pd	106	95.000		ppb
	Pd	108	25.000		ppb
	C	12	484434.339		ppb
	Kr	83	52.000		ppb
	Se	77	152.668		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		77.223			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		75.117			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		71.945			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		76.231			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		72.615			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-05

Sample Date/Time: Monday, November 09, 2009 22:01:08
Sample Type: Sample
Sample Description: 13MW4
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-05.927

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	95495.260	24.586	95495.260			ppb
|	Be	9	2.000	100.000	-0.000	-0.00306	200.82	ppb
|	Na	23	23846113.830	24.990	249.559	8508.53792	3.05	ppb
|	Mg	24	74470481.953	24.935	779.432	31584.02619	1.96	ppb
|	Mg	25	11186094.442	23.384	117.459	30719.21031	3.00	ppb
|	Mg	26	13289934.936	25.154	139.013	29500.34221	1.05	ppb
|	Al	27	118852.585	23.452	1.219	29.37785	2.61	ppb
|	K	39	7571160.266	24.984	76.582	1167.17708	0.90	ppb
⌊	Ca	44	16647442.430	24.248	174.243	67496.07251	1.66	ppb
⌈>	Sc	45	376761.418	25.506	376761.418			ppb
|	Ti	47	1296.754	24.466	0.003	1.96708	10.66	ppb
|	V	51	4248.778	37.633	0.008	0.31609	28.87	ppb
|	Cr	52	44885.033	21.871	0.106	5.08623	6.07	ppb
|	Mn	55	26900.555	21.278	0.061	2.13726	6.49	ppb
|	Fe	54	74235.524	12.108	0.084	53.53228	39.03	ppb
|	Fe	56	2341640.100	10.648	2.425	91.72876	47.17	ppb
|	Fe	57	59836.378	22.938	0.153	247.37994	3.66	ppb
|	Co	59	3227.204	22.041	0.008	0.29022	4.69	ppb
|	Ni	60	10632.435	17.802	0.029	4.54432	9.69	ppb
|	Cu	63	10494.546	20.460	0.028	1.75931	6.25	ppb
|	Cu	65	5483.761	18.785	0.015	1.99774	9.41	ppb
|	Zn	66	4975.715	19.931	0.013	3.94189	8.13	ppb
|	As	75	281.572	34.769	0.001	0.22125	14.02	ppb
⌊	Se	82	116.445	17.871	0.000	0.65488	25.08	ppb
⌈	Mo	96	9620.090	20.682	0.009	3.21068	1.24	ppb
|	Ag	107	42.222	24.119	0.000	0.00047	452.00	ppb
|	Ag	109	28.889	58.076	-0.000	-0.00046	348.54	ppb
|	Cd	111	48.941	66.515	0.000	0.02431	62.21	ppb
|	In	113	45931.484	20.399	0.002	0.90396	23.30	ppb
|>	In	115	1013360.044	19.703	1013360.044			ppb
⌊	Sn	118	331.672	12.185	0.000	0.03455	58.46	ppb
⌈	Sb	121	1815.167	14.513	0.001	0.21434	17.21	ppb
|	Ba	135	108262.786	18.075	0.065	55.65464	3.54	ppb
|	Ba	137	188339.548	19.812	0.112	55.27841	2.50	ppb
⌊>	Tb	159	1675475.544	19.856	1675475.544			ppb
⌈	Tl	205	828.368	13.448	0.001	0.02995	5.13	ppb
|	Pb	206	2738.714	15.588	0.002	0.27914	3.51	ppb
|	Pb	207	4908.952	13.449	0.004	0.26779	5.77	ppb
|	Pb	208	7568.403	17.935	0.006	0.25726	0.49	ppb
⌊>	Bi	209	1197090.333	17.568	1197090.333			ppb
	Cr	53	5414.828	17.117	1744.151			ppb
	Pd	106	20.000	25.000	16.667			ppb
	Pd	108	18.333	15.746	15.000			ppb
	C	12	512745.590	0.763	125106.347			ppb
	Kr	83	39.333	22.928	-13.333			ppb
	Se	77	124.890	8.563	10.000			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	68385.029		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	17026367.062	8486.465781	ppb
	Mg	24	53102405.559	31465.933055	ppb
	Mg	25	8186111.568	31306.805552	ppb
	Mg	26	9431565.260	29267.857655	ppb
	Al	27	86810.172	29.901480	ppb
	K	39	5388609.404	1160.711383	ppb
	Ca	44	12001393.410	67893.843335	ppb
>	Sc	45	265960.330		ppb
	Ti	47	960.046	2.052444	ppb
	V	51	2618.839	0.263110	ppb
	Cr	52	33596.341	5.386271	ppb
	Mn	55	20295.575	2.288117	ppb
	Fe	54	63908.565	77.454129	ppb
	Fe	56	2054360.779	141.465649	ppb
	Fe	57	43991.550	256.660936	ppb
	Co	59	2406.289	0.304681	ppb
	Ni	60	8453.572	5.037500	ppb
	Cu	63	8016.545	1.885652	ppb
	Cu	65	4310.929	2.195267	ppb
	Zn	66	3857.411	4.291481	ppb
	As	75	184.227	0.208450	ppb
	Se	82	98.667	0.816394	ppb
	Mo	96	7326.683	3.169297	ppb
	Ag	107	53.333	0.002885	ppb
	Ag	109	26.667	0.000069	ppb
	Cd	111	42.640	0.027287	ppb
	In	113	35126.586	0.685021	ppb
>	In	115	782918.668		ppb
	Sn	118	375.007	0.057688	ppb
	Sb	121	1565.122	0.245106	ppb
	Ba	135	85770.256	56.988019	ppb
	Ba	137	145344.632	55.288374	ppb
>	Tb	159	1292411.322		ppb
	Tl	205	700.025	0.031683	ppb
	Pb	206	2250.253	0.287672	ppb
	Pb	207	4155.435	0.284233	ppb
	Pb	208	6001.020	0.255882	ppb
>	Bi	209	954273.323		ppb
	Cr	53	4350.946		ppb
	Pd	106	25.000		ppb
	Pd	108	20.000		ppb
	C	12	516783.840		ppb
	Kr	83	48.000		ppb
	Se	77	114.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	109188.874		ppb
	Be	9	2.000	-0.003074	ppb
	Na	23	26461711.339	8260.423146	ppb
	Mg	24	83619174.498	31032.367868	ppb
	Mg	25	12382080.831	29657.687135	ppb
	Mg	26	15118173.736	29382.527852	ppb
	Al	27	132248.742	28.498162	ppb
	K	39	8736967.217	1179.288894	ppb
	Ca	44	19294247.510	68361.732950	ppb
>	Sc	45	437380.377		ppb

Ti	47	1340.090	1.728198	ppb
V	51	4312.719	0.263681	ppb
Cr	52	49640.906	4.769382	ppb
Mn	55	29994.917	2.015012	ppb
Fe	54	78501.923	38.844478	ppb
Fe	56	2468836.681	62.793556	ppb
Fe	57	67471.857	238.592167	ppb
Co	59	3614.653	0.277645	ppb
Ni	60	11573.360	4.191018	ppb
Cu	63	11803.629	1.685627	ppb
Cu	65	5898.406	1.821034	ppb
Zn	66	5748.318	3.871732	ppb
As	75	380.019	0.256629	ppb
Se	82	139.334	0.660221	ppb
Mo	96	10649.668	3.213708	ppb
Ag	107	33.333	-0.001024	ppb
Ag	109	13.333	-0.002252	ppb
Cd	111	20.000	0.007917	ppb
In	113	50859.004	0.921789	ppb
In	115	1122419.966		ppb
Sn	118	325.005	0.025493	ppb
Sb	121	1790.160	0.173448	ppb
Ba	135	117635.864	53.390775	ppb
Ba	137	207406.803	53.894121	ppb
Tb	159	1891972.375		ppb
Tl	205	885.039	0.028756	ppb
Pb	206	2925.428	0.268429	ppb
Pb	207	5185.683	0.253580	ppb
Pb	208	8357.113	0.257545	ppb
Bi	209	1321177.419		ppb
Cr	53	6047.828		ppb
Pd	106	15.000		ppb
Pd	108	20.000		ppb
C	12	508977.446		ppb
Kr	83	30.000		ppb
Se	77	124.001		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
	Li	6	108911.878		ppb
	Be	9	4.000	0.003093	ppb
	Na	23	28050263.089	8778.724837	ppb
	Mg	24	86689865.802	32253.777653	ppb
	Mg	25	12990090.928	31193.138253	ppb
	Mg	26	15320065.812	29850.641124	ppb
	Al	27	137498.842	29.733908	ppb
	K	39	8587904.177	1161.530951	ppb
	Ca	44	18646686.370	66232.641236	ppb
	Sc	45	426943.547		ppb
	Ti	47	1590.126	2.120585	ppb
	V	51	5814.775	0.421467	ppb
	Cr	52	51417.851	5.103032	ppb
	Mn	55	30411.172	2.108664	ppb
	Fe	54	80296.084	44.298234	ppb
	Fe	56	2501722.840	70.927089	ppb
	Fe	57	68045.726	246.886704	ppb
	Co	59	3660.670	0.288339	ppb
	Ni	60	11870.374	4.404452	ppb
	Cu	63	11663.465	1.706640	ppb
	Cu	65	6241.947	1.976919	ppb
	Zn	66	5321.415	3.662450	ppb
	As	75	280.469	0.198670	ppb
	Se	82	111.334	0.488027	ppb

Mo	96	10883.920	3.249045	ppb
Ag	107	40.000	-0.000459	ppb
Ag	109	46.667	0.000808	ppb
Cd	111	84.185	0.037714	ppb
In	113	51808.861	1.105082	ppb
In	115	1134741.497		ppb
Sn	118	295.004	0.020465	ppb
Sb	121	2090.218	0.224465	ppb
Ba	135	121382.238	56.585132	ppb
Ba	137	212267.209	56.652745	ppb
Tb	159	1842042.935		ppb
Tl	205	900.041	0.029406	ppb
Pb	206	3040.462	0.281332	ppb
Pb	207	5385.737	0.265571	ppb
Pb	208	8347.076	0.258361	ppb
Bi	209	1315820.255		ppb
Cr	53	5845.708		ppb
Pd	106	20.000		ppb
Pd	108	15.000		ppb
C	12	512475.482		ppb
Kr	83	40.000		ppb
Se	77	136.001		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		78.761			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		74.388			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		72.528			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		76.890			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		72.184			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-06

Sample Date/Time: Monday, November 09, 2009 22:03:06
Sample Type: Sample
Sample Description: 13MWDUP
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-06.928

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	102784.593	18.900	102784.593			ppb
	Be	9	4.000	50.000	0.000	0.00495	196.80	ppb
	Na	23	25906929.158	22.001	250.853	8552.64926	3.80	ppb
	Mg	24	76099911.030	19.717	739.493	29965.64671	1.30	ppb
	Mg	25	11274162.880	20.333	109.458	28626.64611	1.81	ppb
	Mg	26	13914165.369	20.344	135.093	28668.54988	2.44	ppb
	Al	27	138389.025	17.741	1.320	31.81080	1.93	ppb
	K	39	7965525.741	20.100	74.725	1138.87769	2.31	ppb
	Ca	44	17251507.316	19.507	167.539	64899.03960	3.79	ppb
>	Sc	45	417771.680	21.080	417771.680			ppb
	Ti	47	1593.462	13.641	0.004	2.20493	10.90	ppb
	V	51	4448.526	14.104	0.007	0.30257	15.16	ppb
	Cr	52	43987.040	16.956	0.092	4.40990	5.98	ppb
	Mn	55	34038.917	16.785	0.071	2.49210	6.78	ppb
	Fe	54	86026.544	11.282	0.091	57.76251	26.40	ppb
	Fe	56	2446713.742	7.512	2.010	76.04371	49.58	ppb
	Fe	57	62402.099	19.055	0.143	231.65115	5.08	ppb
	Co	59	3391.255	18.354	0.008	0.27443	7.90	ppb
	Ni	60	10428.893	18.508	0.025	3.97021	3.42	ppb
	Cu	63	3608.441	17.032	0.008	0.52592	5.30	ppb
	Cu	65	2185.801	20.700	0.005	0.68724	1.23	ppb
	Zn	66	5997.384	16.046	0.014	4.28307	6.32	ppb
	As	75	281.580	20.250	0.001	0.20362	1.63	ppb
	Se	82	117.778	13.589	0.000	0.56153	13.38	ppb
	Mo	96	9087.536	16.568	0.008	2.87646	3.23	ppb
	Ag	107	33.333	20.000	-0.000	-0.00075	155.98	ppb
	Ag	109	36.667	24.052	0.000	0.00022	616.98	ppb
	Cd	111	43.090	31.680	0.000	0.01946	20.76	ppb
	In	113	49020.113	15.556	0.002	1.23088	14.67	ppb
>	In	115	1067414.002	14.956	1067414.002			ppb
	Sn	118	391.674	17.143	0.000	0.03850	5.08	ppb
	Sb	121	1615.131	7.666	0.001	0.16806	11.26	ppb
	Ba	135	114567.868	15.231	0.065	55.96968	1.81	ppb
	Ba	137	200224.546	13.763	0.114	56.09463	2.42	ppb
>	Tb	159	1755559.990	13.999	1755559.990			ppb
	Tl	205	820.035	21.756	0.001	0.02708	8.19	ppb
	Pb	206	3162.175	15.981	0.002	0.30126	4.43	ppb
	Pb	207	5807.529	14.804	0.004	0.29628	4.41	ppb
	Pb	208	9315.944	14.392	0.007	0.29946	2.82	ppb
>	Bi	209	1285444.374	15.289	1285444.374			ppb
	Cr	53	5277.416	15.969	1606.740			ppb
	Pd	106	10.000	86.603	6.667			ppb
	Pd	108	16.667	17.321	13.333			ppb
	C	12	530849.415	11.712	143210.172			ppb
	Kr	83	45.333	31.300	-7.333			ppb
	Se	77	125.334	11.321	10.445			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	80520.881		ppb
	Be	9	6.000	0.015752	ppb
	Na	23	19339149.327	8186.354236	ppb
	Mg	24	58822030.115	29601.847729	ppb
	Mg	25	8636911.941	28052.521122	ppb
	Mg	26	10646801.485	28059.417509	ppb
	Al	27	110057.316	32.248008	ppb
	K	39	6117492.796	1117.669620	ppb
	Ca	44	13381960.705	64289.413862	ppb
>	Sc	45	316149.765		ppb
	Ti	47	1360.092	2.463707	ppb
	V	51	3763.718	0.349496	ppb
	Cr	52	35398.542	4.695869	ppb
	Mn	55	27502.768	2.665432	ppb
	Fe	54	74859.150	75.225750	ppb
	Fe	56	2252161.685	118.746147	ppb
	Fe	57	48934.437	239.433572	ppb
	Co	59	2716.369	0.288957	ppb
	Ni	60	8203.363	4.109474	ppb
	Cu	63	2900.421	0.556223	ppb
	Cu	65	1663.472	0.690829	ppb
	Zn	66	4887.861	4.586573	ppb
	As	75	216.180	0.206018	ppb
	Se	82	99.334	0.647210	ppb
	Mo	96	7382.724	2.828263	ppb
	Ag	107	40.000	0.000563	ppb
	Ag	109	43.333	0.001640	ppb
	Cd	111	27.725	0.015094	ppb
	In	113	40215.703	1.042981	ppb
>	In	115	883083.969		ppb
	Sn	118	315.005	0.036906	ppb
	Sb	121	1475.109	0.188256	ppb
	Ba	135	94429.754	55.020570	ppb
	Ba	137	168481.443	56.203212	ppb
>	Tb	159	1473764.231		ppb
	Tl	205	615.019	0.024667	ppb
	Pb	206	2595.337	0.300164	ppb
	Pb	207	4845.590	0.300104	ppb
	Pb	208	7781.783	0.303693	ppb
>	Bi	209	1058694.266		ppb
	Cr	53	4304.926		ppb
	Pd	106	5.000		ppb
	Pd	108	15.000		ppb
	C	12	476879.913		ppb
	Kr	83	48.000		ppb
	Se	77	112.667		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	111548.705		ppb
	Be	9	2.000	-0.003203	ppb
	Na	23	28821636.437	8806.923070	ppb
	Mg	24	83620071.181	30376.195703	ppb
	Mg	25	12395685.568	29062.168142	ppb
	Mg	26	15471314.544	29432.754069	ppb
	Al	27	151671.556	32.076256	ppb
	K	39	8845252.541	1168.284526	ppb
	Ca	44	19493848.144	67606.805398	ppb
>	Sc	45	471792.940		ppb

	Ti	47	1790.160	2.162129	ppb
	V	51	4586.187	0.257823	ppb
	Cr	52	47729.635	4.176325	ppb
	Mn	55	36531.606	2.327709	ppb
	Fe	54	90800.372	47.083061	ppb
	Fe	56	2470547.392	47.356164	ppb
	Fe	57	66822.519	218.114691	ppb
	Co	59	3514.618	0.249517	ppb
	Ni	60	11436.536	3.838075	ppb
	Cu	63	3920.768	0.501453	ppb
	Cu	65	2436.964	0.677591	ppb
	Zn	66	6498.778	4.066644	ppb
	As	75	320.873	0.205012	ppb
	Se	82	126.001	0.506792	ppb
	Mo	96	10235.235	2.983705	ppb
	Ag	107	33.333	-0.001124	ppb
	Ag	109	40.000	0.000110	ppb
	Cd	111	47.725	0.020225	ppb
	In	113	53321.783	1.246465	ppb
>	In	115	1161109.549		ppb
	Sn	118	440.010	0.040687	ppb
	Sb	121	1660.138	0.150729	ppb
	Ba	135	125235.314	55.853366	ppb
	Ba	137	214173.208	54.686049	ppb
>	Tb	159	1925409.695		ppb
	Tl	205	940.044	0.029028	ppb
	Pb	206	3565.636	0.315140	ppb
	Pb	207	6501.066	0.307009	ppb
	Pb	208	10263.115	0.304950	ppb
>	Bi	209	1390992.039		ppb
	Cr	53	5793.678		ppb
	Pd	106	5.000		ppb
	Pd	108	15.000		ppb
	C	12	516831.290		ppb
	Kr	83	30.000		ppb
	Se	77	122.667		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	116284.192		ppb
	Be	9	4.000	0.002313	ppb
	Na	23	29560001.709	8664.670469	ppb
	Mg	24	85857631.793	29918.896685	ppb
	Mg	25	12789891.132	28765.249080	ppb
	Mg	26	15624380.078	28513.478067	ppb
	Al	27	153438.202	31.108132	ppb
	K	39	8933831.887	1130.678912	ppb
	Ca	44	18878713.099	62800.899529	ppb
>	Sc	45	465372.334		ppb
	Ti	47	1630.133	1.988955	ppb
	V	51	4995.673	0.300385	ppb
	Cr	52	48832.942	4.357500	ppb
	Mn	55	38082.376	2.483145	ppb
	Fe	54	92420.109	50.978724	ppb
	Fe	56	2617432.150	62.028825	ppb
	Fe	57	71449.342	237.405183	ppb
	Co	59	3942.777	0.284824	ppb
	Ni	60	11646.778	3.963067	ppb
	Cu	63	4004.135	0.520081	ppb
	Cu	65	2456.968	0.693292	ppb
	Zn	66	6605.514	4.195984	ppb
	As	75	307.685	0.199828	ppb
	Se	82	128.001	0.530574	ppb

	Mo	96	9644.649	2.817398	ppb
	Ag	107	26.667	-0.001702	ppb
	Ag	109	26.667	-0.001086	ppb
	Cd	111	53.820	0.023065	ppb
	In	113	53522.852	1.403179	ppb
>	In	115	1158048.489		ppb
	Sn	118	420.009	0.037922	ppb
	Sb	121	1710.146	0.165208	ppb
	Ba	135	124038.536	57.035113	ppb
	Ba	137	218018.986	57.394629	ppb
>	Tb	159	1867506.043		ppb
	Tl	205	905.041	0.027539	ppb
	Pb	206	3325.553	0.288487	ppb
	Pb	207	6075.931	0.281727	ppb
	Pb	208	9902.935	0.289722	ppb
>	Bi	209	1406646.817		ppb
	Cr	53	5733.643		ppb
	Pd	106	20.000		ppb
	Pd	108	20.000		ppb
	C	12	598837.040		ppb
	Kr	83	58.000		ppb
	Se	77	140.668		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		84.773			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		82.485			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		76.396			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		80.565			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		77.512			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-07

Sample Date/Time: Monday, November 09, 2009 22:05:04
Sample Type: Sample
Sample Description: 13MW6
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-07.929

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	96219.513	22.558	96219.513			ppb
	Be	9	3.333	34.641	0.000	0.00330	193.77	ppb
	Na	23	36198554.240	26.790	373.826	12745.31361	5.61	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	16983874.067	28.319	174.790	45712.97568	6.65	ppb
	Mg	26	21003210.419	24.300	217.620	46181.93421	2.03	ppb
	Al	27	19628.052	19.255	0.177	4.25726	4.73	ppb
	K	39	13236555.737	25.110	134.367	2047.87200	6.16	ppb
	Ca	44	28393642.968	24.705	293.755	113791.04339	4.32	ppb
>	Sc	45	393219.775	22.319	393219.775			ppb
	Ti	47	863.371	13.685	0.002	1.23272	11.24	ppb
	V	51	4958.569	10.969	0.009	0.38989	18.78	ppb
	Cr	52	18724.329	11.290	0.034	1.64639	18.97	ppb
	Mn	55	3825.744	15.886	-0.002	-0.05972	43.97	ppb
	Fe	54	42058.608	7.701	-0.008	-4.79781	351.47	ppb
	Fe	56	1857494.010	4.339	0.920	34.78841	133.92	ppb
	Fe	57	69591.805	21.166	0.170	276.04551	1.88	ppb
	Co	59	1750.825	21.195	0.004	0.14729	11.74	ppb
	Ni	60	6156.383	18.605	0.016	2.50036	10.75	ppb
	Cu	63	1135.621	11.897	0.003	0.16151	17.10	ppb
	Cu	65	1529.011	25.128	0.004	0.49966	5.16	ppb
	Zn	66	8349.161	22.860	0.021	6.36328	2.55	ppb
	As	75	510.008	29.106	0.001	0.36948	8.03	ppb
	Se	82	443.343	19.373	0.001	3.08779	3.85	ppb
	Mo	96	4322.288	18.429	0.004	1.51037	2.60	ppb
	Ag	107	41.111	36.562	0.000	0.00044	396.50	ppb
	Ag	109	22.222	22.913	-0.000	-0.00108	20.37	ppb
	Cd	111	39.343	10.048	0.000	0.02094	31.38	ppb
	In	113	45145.530	18.001	0.003	1.85011	30.30	ppb
>	In	115	961760.122	19.602	961760.122			ppb
	Sn	118	225.003	23.518	0.000	0.01858	105.87	ppb
	Sb	121	358.340	2.905	-0.000	-0.02072	56.07	ppb
	Ba	135	193821.329	16.634	0.121	104.01055	2.29	ppb
	Ba	137	339327.481	17.792	0.212	104.07865	1.41	ppb
>	Tb	159	1604875.578	18.624	1604875.578			ppb
	Tl	205	501.680	21.958	0.000	0.01842	13.74	ppb
	Pb	206	1711.816	17.249	0.001	0.17585	7.59	ppb
	Pb	207	3176.926	17.190	0.002	0.17493	5.49	ppb
	Pb	208	5179.151	19.078	0.004	0.17917	1.52	ppb
>	Bi	209	1127941.647	18.038	1127941.647			ppb
	Cr	53	2270.927	13.027	-1399.749			ppb
	Pd	106	35.000	14.286	31.667			ppb
	Pd	108	10.000		6.667			ppb
	C	12	480795.275	6.293	93156.032			ppb
	Kr	83	49.333	32.769	-3.333			ppb
	Se	77	270.004	13.594	155.114			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	71800.846		ppb
	Be	9	4.000	0.009452	ppb
	Na	23	25867572.317	12280.827170	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	11663241.897	42482.720954	ppb
	Mg	26	15267492.117	45124.025313	ppb
	Al	27	15296.690	4.447300	ppb
	K	39	9398751.511	1954.796477	ppb
	Ca	44	20319129.809	109534.040614	ppb
>	Sc	45	292243.822		ppb
	Ti	47	730.027	1.392035	ppb
	V	51	4348.335	0.474337	ppb
	Cr	52	16377.400	2.005713	ppb
	Mn	55	3125.488	-0.029527	ppb
	Fe	54	41134.428	14.255666	ppb
	Fe	56	1847173.473	88.367775	ppb
	Fe	57	52748.756	281.129012	ppb
	Co	59	1404.099	0.158216	ppb
	Ni	60	5044.605	2.728561	ppb
	Cu	63	1003.384	0.192234	ppb
	Cu	65	1086.726	0.478768	ppb
	Zn	66	6191.916	6.352697	ppb
	As	75	338.601	0.335878	ppb
	Se	82	344.673	3.224942	ppb
	Mo	96	3426.587	1.542270	ppb
	Ag	107	40.000	0.001414	ppb
	Ag	109	16.667	-0.001155	ppb
	Cd	111	42.189	0.028416	ppb
	In	113	35909.359	2.441572	ppb
>	In	115	745425.986		ppb
	Sn	118	285.004	0.041262	ppb
	Sb	121	350.006	-0.007619	ppb
	Ba	135	157061.810	106.761908	ppb
	Ba	137	269829.949	105.008296	ppb
>	Tb	159	1263414.188		ppb
	Tl	205	395.008	0.018274	ppb
	Pb	206	1410.099	0.183194	ppb
	Pb	207	2590.169	0.180222	ppb
	Pb	208	4040.479	0.176214	ppb
>	Bi	209	894040.315		ppb
	Cr	53	1930.186		ppb
	Pd	106	30.000		ppb
	Pd	108	10.000		ppb
	C	12	452888.306		ppb
	Kr	83	52.000		ppb
	Se	77	229.336		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	113318.436		ppb
	Be	9	2.000	-0.003297	ppb
	Na	23	45105485.239	13568.687934	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	21023190.677	48520.003662	ppb
	Mg	26	25043247.243	46898.598504	ppb
	Al	27	22254.736	4.046058	ppb
	K	39	15149214.372	1997.270186	ppb
	Ca	44	32984304.913	112665.259368	ppb
>	Sc	45	451121.054		ppb

	Ti	47	955.046	1.165733	ppb
	V	51	5392.349	0.351526	ppb
	Cr	52	20478.948	1.493703	ppb
	Mn	55	4215.888	-0.077192	ppb
	Fe	54	45659.000	-10.849487	ppb
	Fe	56	1942759.425	12.176086	ppb
	Fe	57	80064.236	276.236259	ppb
	Co	59	2142.229	0.156287	ppb
	Ni	60	7332.687	2.568426	ppb
	Cu	63	1273.414	0.153520	ppb
	Cu	65	1720.148	0.491753	ppb
	Zn	66	9818.151	6.530450	ppb
	As	75	596.154	0.380420	ppb
	Se	82	501.346	3.022146	ppb
	Mo	96	4951.225	1.522298	ppb
	Ag	107	26.667	-0.001558	ppb
	Ag	109	23.333	-0.001257	ppb
	Cd	111	41.009	0.018368	ppb
	In	113	51200.741	1.782062	ppb
>	In	115	1090969.877		ppb
	Sn	118	205.002	0.008216	ppb
	Sb	121	355.006	-0.029772	ppb
	Ba	135	217301.623	102.591124	ppb
	Ba	137	378803.232	102.387991	ppb
>	Tb	159	1819041.563		ppb
	Tl	205	495.012	0.015969	ppb
	Pb	206	2000.200	0.183912	ppb
	Pb	207	3670.339	0.180713	ppb
	Pb	208	5810.997	0.179744	ppb
>	Bi	209	1263882.657		ppb
	Cr	53	2462.303		ppb
	Pd	106	35.000		ppb
	Pd	108	10.000		ppb
	C	12	512948.850		ppb
	Kr	83	32.000		ppb
	Se	77	300.671		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	103539.258		ppb
	Be	9	4.000	0.003732	ppb
	Na	23	37622605.164	12386.425740	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	18265189.627	46136.202428	ppb
	Mg	26	22698891.898	46523.178815	ppb
	Al	27	21332.730	4.278436	ppb
	K	39	15161701.328	2191.549340	ppb
	Ca	44	31877494.181	119173.830202	ppb
>	Sc	45	436294.450		ppb
	Ti	47	905.041	1.140386	ppb
	V	51	5135.025	0.343821	ppb
	Cr	52	19316.639	1.439764	ppb
	Mn	55	4135.855	-0.072453	ppb
	Fe	54	39382.396	-17.799595	ppb
	Fe	56	1782549.132	3.821383	ppb
	Fe	57	75962.423	270.771251	ppb
	Co	59	1706.146	0.127355	ppb
	Ni	60	6091.855	2.204099	ppb
	Cu	63	1130.064	0.138770	ppb
	Cu	65	1780.158	0.528463	ppb
	Zn	66	9037.415	6.206682	ppb
	As	75	595.270	0.392147	ppb
	Se	82	484.012	3.016294	ppb

⌈	Mo	96	4589.053	1.466532	ppb
|	Ag	107	56.667	0.001451	ppb
|	Ag	109	26.667	-0.000835	ppb
|	Cd	111	34.829	0.016051	ppb
|	In	113	48326.491	1.326703	ppb
|>	In	115	1048884.503		ppb
⌊	Sn	118	185.002	0.006257	ppb
⌈	Sb	121	370.007	-0.024780	ppb
|	Ba	135	207100.553	102.678610	ppb
|	Ba	137	369349.262	104.839662	ppb
⌊>	Tb	159	1732170.982		ppb
⌈	Tl	205	615.019	0.021026	ppb
|	Pb	206	1725.149	0.160452	ppb
|	Pb	207	3270.268	0.163843	ppb
|	Pb	208	5685.977	0.181566	ppb
⌊>	Bi	209	1225901.968		ppb
	Cr	53	2420.293		ppb
	Pd	106	40.000		ppb
	Pd	108	10.000		ppb
	C	12	476548.670		ppb
	Kr	83	64.000		ppb
	Se	77	280.004		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		79.359			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		77.638			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		68.835			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		73.650			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		68.014			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: 0910165-08

Sample Date/Time: Monday, November 09, 2009 22:07:01
Sample Type: Sample
Sample Description: 13MW7
Number of Replicates: 3
Batch ID: 0910085
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\0910165-08.930

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	116474.106	24.049	116474.106			ppb
	Be	9	4.000	50.000	0.000	0.00276	214.44	ppb
	Na	23	37194326.963	23.375	319.749	10901.58778	1.62	ppb
	Mg	24	S	S	19999999	81043735614.33841	0.00	ppb
	Mg	25	18490681.699	19.204	160.256	41912.08106	5.91	ppb
	Mg	26	22069934.943	19.370	191.211	40577.51848	5.68	ppb
	Al	27	28524.562	14.960	0.221	5.32119	12.69	ppb
	K	39	16228036.381	20.958	137.582	2096.87181	4.65	ppb
	Ca	44	28944434.981	21.928	249.293	96567.82774	2.56	ppb
>	Sc	45	490663.010	22.694	490663.010			ppb
	Ti	47	1301.753	19.093	0.003	1.49645	7.84	ppb
	V	51	5699.309	16.517	0.008	0.34352	13.88	ppb
	Cr	52	22113.403	13.895	0.031	1.51263	15.37	ppb
	Mn	55	18021.742	21.899	0.025	0.89284	7.15	ppb
	Fe	54	46823.123	7.655	-0.020	-12.86278	85.42	ppb
	Fe	56	2054263.238	6.296	0.325	12.30303	250.70	ppb
	Fe	57	72856.483	17.523	0.143	231.44782	6.41	ppb
	Co	59	3042.476	21.042	0.006	0.20704	2.19	ppb
	Ni	60	157125.220	21.471	0.321	51.00762	2.51	ppb
	Cu	63	3056.028	13.319	0.006	0.37632	12.41	ppb
	Cu	65	2515.882	21.889	0.005	0.67382	3.05	ppb
	Zn	66	12676.067	22.068	0.025	7.79438	1.15	ppb
	As	75	377.397	35.871	0.001	0.22616	18.96	ppb
	Se	82	363.562	20.382	0.001	1.92800	4.08	ppb
	Mo	96	5028.627	18.658	0.004	1.43584	4.57	ppb
	Ag	107	50.000	33.333	0.000	0.00040	397.63	ppb
	Ag	109	23.333	0.000	-0.000	-0.00136	30.15	ppb
	Cd	111	109.837	45.785	0.000	0.04952	48.45	ppb
	In	113	53502.304	17.483	0.002	1.09164	2.23	ppb
>	In	115	1172351.988	17.399	1172351.988			ppb
	Sn	118	445.010	14.736	0.000	0.04109	9.35	ppb
	Sb	121	601.685	21.193	0.000	0.00287	304.46	ppb
	Ba	135	377960.472	17.338	0.199	170.53881	1.38	ppb
	Ba	137	668844.931	17.970	0.351	172.62159	0.53	ppb
>	Tb	159	1904064.583	17.540	1904064.583			ppb
	Tl	205	255.003	10.917	0.000	0.00672	9.80	ppb
	Pb	206	1116.731	22.016	0.001	0.08229	9.64	ppb
	Pb	207	2030.106	15.005	0.001	0.08104	2.98	ppb
	Pb	208	3158.630	10.316	0.002	0.07895	9.93	ppb
>	Bi	209	1350088.599	16.950	1350088.599			ppb
	Cr	53	2396.957	12.430	-1273.719			ppb
	Pd	106	71.667	10.657	68.334			ppb
	Pd	108	21.667	113.836	18.333			ppb
	C	12	572227.099	2.576	184587.856			ppb
	Kr	83	55.333	22.085	2.667			ppb
	Se	77	248.670	14.507	133.780			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	84297.815		ppb
	Be	9	4.000	0.006686	ppb
	Na	23	27290917.058	11035.558978	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	14430976.417	44771.543917	ppb
	Mg	26	17176487.511	43240.191819	ppb
	Al	27	23733.130	6.097737	ppb
	K	39	12391941.389	2200.200153	ppb
	Ca	44	21638117.546	99343.843366	ppb
>	Sc	45	363400.148		ppb
	Ti	47	1020.052	1.575570	ppb
	V	51	4642.698	0.386049	ppb
	Cr	52	18569.225	1.768016	ppb
	Mn	55	13489.092	0.903818	ppb
	Fe	54	42736.124	-0.444365	ppb
	Fe	56	1907059.597	47.784194	ppb
	Fe	57	58153.602	247.936845	ppb
	Co	59	2306.266	0.211438	ppb
	Ni	60	118191.019	51.690437	ppb
	Cu	63	2590.335	0.426490	ppb
	Cu	65	1903.514	0.687588	ppb
	Zn	66	9461.140	7.847631	ppb
	As	75	234.983	0.195853	ppb
	Se	82	278.004	1.990323	ppb
	Mo	96	3966.787	1.417705	ppb
	Ag	107	50.000	0.001382	ppb
	Ag	109	23.333	-0.000890	ppb
	Cd	111	114.294	0.062958	ppb
	In	113	42721.060	1.064426	ppb
>	In	115	937267.466		ppb
	Sn	118	375.007	0.044282	ppb
	Sb	121	475.011	0.002063	ppb
	Ba	135	302441.409	171.052195	ppb
	Ba	137	530150.065	171.661898	ppb
>	Tb	159	1518528.557		ppb
	Tl	205	225.003	0.007466	ppb
	Pb	206	860.037	0.077860	ppb
	Pb	207	1680.071	0.083594	ppb
	Pb	208	2785.227	0.087909	ppb
>	Bi	209	1088709.922		ppb
	Cr	53	2056.211		ppb
	Pd	106	65.000		ppb
	Pd	108	5.000		ppb
	C	12	560367.646		ppb
	Kr	83	42.000		ppb
	Se	77	211.336		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129709.811		ppb
	Be	9	2.000	-0.004044	ppb
	Na	23	40722012.730	10701.537211	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	20022744.737	40371.354233	ppb
	Mg	26	23954301.793	39190.424052	ppb
	Al	27	29924.708	4.872867	ppb
	K	39	17417938.240	2006.365666	ppb
	Ca	44	32099192.598	95773.365477	ppb
>	Sc	45	538425.083		ppb

	Ti	47	1490.111	1.552147	ppb
	V	51	6448.528	0.352510	ppb
	Cr	52	24028.835	1.456777	ppb
	Mn	55	20696.395	0.950430	ppb
	Fe	54	49431.874	-16.820168	ppb
	Fe	56	2106076.008	-2.764807	ppb
	Fe	57	79278.009	227.203975	ppb
	Co	59	3352.562	0.207304	ppb
	Ni	60	175496.557	51.802943	ppb
	Cu	63	3343.892	0.368314	ppb
	Cu	65	2673.691	0.650166	ppb
	Zn	66	14013.145	7.844895	ppb
	As	75	504.422	0.275225	ppb
	Se	82	405.342	1.954037	ppb
	Mo	96	5745.650	1.508684	ppb
	Ag	107	66.667	0.001265	ppb
	Ag	109	23.333	-0.001583	ppb
	Cd	111	157.749	0.063785	ppb
	In	113	58329.623	1.111413	ppb
>	In	115	1277228.823		ppb
	Sn	118	455.010	0.036827	ppb
	Sb	121	730.027	0.011973	ppb
	Ba	135	419856.759	172.600309	ppb
	Ba	137	733907.766	172.730686	ppb
>	Tb	159	2089152.886		ppb
	Tl	205	260.003	0.006225	ppb
	Pb	206	1140.065	0.077567	ppb
	Pb	207	2175.119	0.080725	ppb
	Pb	208	3305.311	0.075554	ppb
>	Bi	209	1447209.437		ppb
	Cr	53	2526.319		ppb
	Pd	106	70.000		ppb
	Pd	108	10.000		ppb
	C	12	567585.136		ppb
	Kr	83	66.000		ppb
	Se	77	251.336		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	135414.691		ppb
	Be	9	6.000	0.005633	ppb
	Na	23	43570051.101	10967.667139	ppb
	Mg	24		81043735614.338409	ppb
	Mg	25	21018323.941	40593.345030	ppb
	Mg	26	25079015.524	39301.939558	ppb
	Al	27	31915.850	4.992975	ppb
	K	39	18874229.515	2084.049623	ppb
	Ca	44	33095994.799	94586.274387	ppb
>	Sc	45	570163.800		ppb
	Ti	47	1395.097	1.361638	ppb
	V	51	6006.700	0.292001	ppb
	Cr	52	23742.151	1.313096	ppb
	Mn	55	19879.741	0.824260	ppb
	Fe	54	48301.370	-21.323793	ppb
	Fe	56	2149654.109	-8.110300	ppb
	Fe	57	81137.837	219.202627	ppb
	Co	59	3468.601	0.202365	ppb
	Ni	60	177688.084	49.529477	ppb
	Cu	63	3233.856	0.334159	ppb
	Cu	65	2970.441	0.683703	ppb
	Zn	66	14553.916	7.690600	ppb
	As	75	392.786	0.207415	ppb
	Se	82	407.342	1.839633	ppb

⌈	Mo	96	5373.443	1.381144	ppb
|	Ag	107	33.333	-0.001441	ppb
|	Ag	109	23.333	-0.001621	ppb
|	Cd	111	57.468	0.021820	ppb
|	In	113	59456.228	1.099086	ppb
|>	In	115	1302559.676		ppb
⌊	Sn	118	505.013	0.042174	ppb
⌈	Sb	121	600.018	-0.005433	ppb
|	Ba	135	411583.247	167.963921	ppb
|	Ba	137	742476.963	173.472196	ppb
⌊>	Tb	159	2104512.306		ppb
⌈	Tl	205	280.004	0.006466	ppb
|	Pb	206	1350.091	0.091451	ppb
|	Pb	207	2235.130	0.078797	ppb
|	Pb	208	3385.352	0.073375	ppb
⌊>	Bi	209	1514346.439		ppb
	Cr	53	2608.340		ppb
	Pd	106	80.000		ppb
	Pd	108	50.000		ppb
	C	12	588728.515		ppb
	Kr	83	58.000		ppb
	Se	77	283.337		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		96.064			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		96.877			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		83.907			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		87.380			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		81.410			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: IBL

Sample Date/Time: Monday, November 09, 2009 22:15:17
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\IBL.931

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	114856.675	25.819	114856.675			ppb
|	Be	9	1.333	86.603	-0.000	-0.00476	87.85	ppb
|	Na	23	7069.567	20.291	0.002	0.05266	2276.74	ppb
|	Mg	24	713.028	41.557	0.003	0.10759	70.31	ppb
|	Mg	25	115.001	45.717	0.001	0.13138	64.15	ppb
|	Mg	26	193.002	22.038	0.000	0.08447	127.97	ppb
|	Al	27	1535.120	16.265	-0.014	-0.33522	49.93	ppb
|	K	39	291587.497	0.571	0.040	0.61408	2049.16	ppb
⌊	Ca	44	16127.017	5.224	-0.078	-30.03694	69.43	ppb
⌈>	Sc	45	440273.880	24.650	440273.880			ppb
|	Ti	47	35.000	37.797	-0.000	-0.04345	38.04	ppb
|	V	51	1967.043	2.864	0.001	0.04586	113.24	ppb
|	Cr	52	6112.537	4.649	0.000	0.01686	1406.28	ppb
|	Mn	55	1010.051	6.806	-0.009	-0.32119	9.60	ppb
|	Fe	54	52713.985	6.696	0.006	3.72028	462.33	ppb
|	Fe	56	1630948.664	0.797	-0.100	-3.79264	1092.75	ppb
|	Fe	57	2775.386	5.324	-0.001	-0.85620	343.22	ppb
|	Co	59	72.000	12.729	-0.000	-0.00185	48.29	ppb
|	Ni	60	151.112	49.144	0.000	0.04695	104.83	ppb
|	Cu	63	1104.506	9.838	0.002	0.13846	21.50	ppb
|	Cu	65	594.462	14.562	0.001	0.15738	16.59	ppb
|	Zn	66	220.002	12.946	-0.000	-0.01590	434.91	ppb
|	As	75	-42.023	128.537	-0.000	-0.01411	320.95	ppb
⌊	Se	82	51.111	24.828	0.000	0.05858	57.70	ppb
⌈	Mo	96	118.667	15.660	0.000	0.00340	161.11	ppb
|	Ag	107	38.889	26.186	-0.000	-0.00098	45.31	ppb
|	Ag	109	24.444	7.873	-0.000	-0.00146	28.77	ppb
|	Cd	111	1.030	776.693	-0.000	-0.00120	247.22	ppb
|	In	113	58124.278	19.346	0.001	0.78446	65.41	ppb
|>	In	115	1293868.868	21.083	1293868.868			ppb
⌊	Sn	118	216.669	11.384	0.000	0.00541	97.78	ppb
⌈	Sb	121	773.364	15.869	0.000	0.02246	79.52	ppb
|	Ba	135	52.667	21.925	0.000	0.01023	39.61	ppb
|	Ba	137	86.000	21.314	0.000	0.00913	14.78	ppb
⌊>	Tb	159	2018638.502	17.323	2018638.502			ppb
⌈	Tl	205	51.667	14.783	-0.000	-0.00057	57.07	ppb
|	Pb	206	73.334	43.835	-0.000	-0.02136	20.18	ppb
|	Pb	207	170.001	17.891	-0.000	-0.01881	16.74	ppb
|	Pb	208	261.669	3.978	-0.000	-0.01996	8.58	ppb
⌊>	Bi	209	1657869.296	19.393	1657869.296			ppb
	Cr	53	679.357	10.738	-2991.320			ppb
	Pd	106	1.667	173.205	-1.667			ppb
	Pd	108	3.333	86.603	-0.000			ppb
	C	12	385748.041	2.700	-1891.202			ppb
	Kr	83	38.667	10.767	-14.000			ppb
	Se	77	70.445	8.742	-44.445			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	80643.866		ppb
	Be	9	2.000	-0.000902	ppb
	Na	23	8725.805	1.436870	ppb
	Mg	24	510.013	0.111220	ppb
	Mg	25	77.000	0.120293	ppb
	Mg	26	178.002	0.181362	ppb
	Al	27	1820.166	-0.142232	ppb
	K	39	293062.259	15.142617	ppb
	Ca	44	17078.571	-5.980975	ppb
>	Sc	45	314978.665		ppb
	Ti	47	30.000	-0.035297	ppb
	V	51	1919.877	0.105648	ppb
	Cr	52	6420.060	0.290550	ppb
	Mn	55	1085.059	-0.285606	ppb
	Fe	54	48929.412	23.517802	ppb
	Fe	56	1621956.179	44.061629	ppb
	Fe	57	2730.373	2.501737	ppb
	Co	59	62.000	-0.000839	ppb
	Ni	60	236.669	0.103760	ppb
	Cu	63	983.382	0.172495	ppb
	Cu	65	500.013	0.185898	ppb
	Zn	66	250.003	0.063457	ppb
	As	75	-94.555	-0.063087	ppb
	Se	82	38.000	0.070543	ppb
	Mo	96	106.001	0.008459	ppb
	Ag	107	30.000	-0.000928	ppb
	Ag	109	23.333	-0.001002	ppb
	Cd	111	-1.545	-0.002336	ppb
	In	113	45176.817	1.360588	ppb
>	In	115	979167.934		ppb
	Sn	118	200.002	0.010995	ppb
	Sb	121	705.025	0.035522	ppb
	Ba	135	46.000	0.012109	ppb
	Ba	137	66.000	0.008357	ppb
>	Tb	159	1615306.491		ppb
	Tl	205	50.000	-0.000248	ppb
	Pb	206	110.001	-0.016407	ppb
	Pb	207	205.001	-0.015178	ppb
	Pb	208	265.002	-0.018023	ppb
>	Bi	209	1287826.877		ppb
	Cr	53	762.029		ppb
	Pd	106	5.000		ppb
	Pd	108	5.000		ppb
	C	12	374503.753		ppb
	Kr	83	40.000		ppb
	Se	77	74.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	133191.126		ppb
	Be	9	2.000	-0.004179	ppb
	Na	23	6220.934	-0.659753	ppb
	Mg	24	576.017	0.030195	ppb
	Mg	25	93.000	0.053192	ppb
	Mg	26	160.001	-0.032116	ppb
	Al	27	1355.092	-0.440929	ppb
	K	39	291919.555	-6.839291	ppb
	Ca	44	15475.966	-43.007050	ppb
>	Sc	45	504976.045		ppb

	Ti	47	25.000	-0.062467	ppb
	V	51	1951.842	0.012046	ppb
	Cr	52	6057.834	-0.112836	ppb
	Mn	55	995.050	-0.337683	ppb
	Fe	54	55915.894	-4.806769	ppb
	Fe	56	1645861.108	-27.438833	ppb
	Fe	57	2940.432	-2.112433	ppb
	Co	59	80.000	-0.002165	ppb
	Ni	60	113.334	0.019986	ppb
	Cu	63	1136.731	0.117271	ppb
	Cu	65	613.352	0.134661	ppb
	Zn	66	193.335	-0.063246	ppb
	As	75	13.362	0.026248	ppb
	Se	82	63.334	0.084771	ppb
	Mo	96	140.001	0.004170	ppb
	Ag	107	50.000	-0.000568	ppb
	Ag	109	23.333	-0.001826	ppb
	Cd	111	-5.365	-0.003441	ppb
	In	113	65443.444	0.616229	ppb
>	In	115	1462858.179		ppb
	Sn	118	245.003	0.004745	ppb
	Sb	121	915.042	0.029767	ppb
	Ba	135	46.000	0.005577	ppb
	Ba	137	90.000	0.008346	ppb
>	Tb	159	2203887.900		ppb
	Tl	205	45.000	-0.000894	ppb
	Pb	206	60.000	-0.023417	ppb
	Pb	207	150.001	-0.020646	ppb
	Pb	208	270.002	-0.020598	ppb
>	Bi	209	1816979.475		ppb
	Cr	53	652.021		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	387677.810		ppb
	Kr	83	42.000		ppb
	Se	77	63.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	130735.033		ppb
	Be	9	0.000	-0.009209	ppb
	Na	23	6261.960	-0.619137	ppb
	Mg	24	1053.055	0.181348	ppb
	Mg	25	175.002	0.220663	ppb
	Mg	26	241.003	0.104157	ppb
	Al	27	1430.102	-0.422498	ppb
	K	39	289780.677	-6.461084	ppb
	Ca	44	15826.514	-41.122793	ppb
>	Sc	45	500866.930		ppb
	Ti	47	50.000	-0.032575	ppb
	V	51	2029.410	0.019877	ppb
	Cr	52	5859.716	-0.127128	ppb
	Mn	55	950.045	-0.340286	ppb
	Fe	54	53296.649	-7.550196	ppb
	Fe	56	1625028.706	-28.000716	ppb
	Fe	57	2655.352	-2.957913	ppb
	Co	59	74.000	-0.002533	ppb
	Ni	60	103.334	0.017105	ppb
	Cu	63	1193.405	0.125616	ppb
	Cu	65	670.022	0.151579	ppb
	Zn	66	216.669	-0.047911	ppb
	As	75	-44.876	-0.005492	ppb
	Se	82	52.000	0.020421	ppb

⌈	Mo	96	110.001	-0.002422	ppb
|	Ag	107	36.667	-0.001454	ppb
|	Ag	109	26.667	-0.001557	ppb
|	Cd	111	10.000	0.002170	ppb
|	In	113	63752.574	0.376563	ppb
|>	In	115	1439580.492		ppb
⌊	Sn	118	205.002	0.000482	ppb
⌈	Sb	121	700.025	0.002106	ppb
|	Ba	135	66.000	0.012994	ppb
|	Ba	137	102.001	0.010690	ppb
⌊>	Tb	159	2236721.113		ppb
⌈	Tl	205	60.000	-0.000557	ppb
|	Pb	206	50.000	-0.024255	ppb
|	Pb	207	155.001	-0.020619	ppb
|	Pb	208	250.002	-0.021265	ppb
⌊>	Bi	209	1868801.535		ppb
	Cr	53	624.019		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	395062.559		ppb
	Kr	83	34.000		ppb
	Se	77	74.000		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		94.730			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		86.928			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		92.604			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		92.638			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		99.969			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCV

Sample Date/Time: Monday, November 09, 2009 22:17:16
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCV.932

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
>	Li	6	115073.845	24.564	115073.845			ppb
	Be	9	41399.380	26.077	0.359	120.14351	2.26	ppb
	Na	23	3950527.686	28.471	34.000	1159.21549	5.28	ppb
	Mg	24	3276917.911	28.869	28.229	1143.87495	5.29	ppb
	Mg	25	504932.167	29.820	4.341	1135.41386	6.65	ppb
	Mg	26	596593.703	27.740	5.150	1092.95079	3.90	ppb
	Al	27	4923349.809	24.464	42.784	1030.90407	2.59	ppb
	K	39	7874197.598	23.284	65.967	1005.39263	1.87	ppb
	Ca	44	329373.172	24.592	2.635	1020.66506	0.77	ppb
>	Sc	45	443023.668	26.435	443023.668			ppb
	Ti	47	85637.738	24.315	0.194	115.27821	2.74	ppb
	V	51	1141663.958	23.735	2.589	108.65506	3.37	ppb
	Cr	52	1027787.669	23.215	2.322	111.69762	4.27	ppb
	Mn	55	1429598.084	25.708	3.221	113.75485	1.34	ppb
	Fe	54	871397.912	25.655	1.852	1175.85916	1.48	ppb
	Fe	56	14438003.073	23.143	28.844	1091.13879	5.08	ppb
	Fe	57	324159.515	22.612	0.731	1184.89066	4.78	ppb
	Co	59	1414793.113	22.656	3.220	111.14632	4.76	ppb
	Ni	60	320373.633	20.641	0.732	116.42105	7.25	ppb
	Cu	63	758722.290	20.426	1.735	110.00866	7.65	ppb
	Cu	65	372613.983	21.230	0.850	116.87944	6.47	ppb
	Zn	66	173055.500	22.109	0.394	121.45231	5.67	ppb
	As	75	193047.671	22.801	0.439	120.14708	4.68	ppb
	Se	82	17840.036	23.430	0.040	120.47815	3.74	ppb
	Mo	96	428760.354	21.701	0.340	116.27204	3.88	ppb
	Ag	107	1406992.599	20.830	1.118	113.74939	3.34	ppb
	Ag	109	1371412.874	18.771	1.093	114.40666	2.03	ppb
	Cd	111	290778.364	17.562	0.232	122.75338	2.81	ppb
	In	113	342112.501	19.335	0.229	121.60174	2.23	ppb
>	In	115	1256653.918	19.928	1256653.918			ppb
	Sn	118	870642.197	20.950	0.692	117.54156	1.64	ppb
	Sb	121	883582.993	20.321	0.428	115.88148	1.57	ppb
	Ba	135	285948.081	19.752	0.139	119.21272	1.30	ppb
	Ba	137	503219.036	19.530	0.244	120.15090	1.26	ppb
>	Tb	159	2057779.598	18.999	2057779.598			ppb
	Tl	205	4233496.587	19.731	2.596	119.30171	1.19	ppb
	Pb	206	1429620.989	22.141	0.873	116.80507	2.10	ppb
	Pb	207	2684630.310	22.642	1.638	116.89885	2.57	ppb
	Pb	208	4318992.761	22.099	2.638	118.77088	2.12	ppb
>	Bi	209	1632893.056	20.458	1632893.056			ppb
	Cr	53	125523.146	22.845	121852.470			ppb
	Pd	106	25460.021	21.389	25456.688			ppb
	Pd	108	19564.687	21.111	19561.354			ppb
	C	12	390723.447	0.993	3084.204			ppb
	Kr	83	42.000	8.248	-10.667			ppb
	Se	77	14007.021	22.457	13892.131			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	82482.773		ppb
	Be	9	28933.798	117.497820	ppb
	Na	23	2652486.150	1094.152839	ppb
	Mg	24	2186978.577	1074.266651	ppb
	Mg	25	331069.096	1049.604701	ppb
	Mg	26	405882.179	1043.974252	ppb
	Al	27	3553462.654	1037.376901	ppb
	K	39	5766245.325	1025.225679	ppb
	Ca	44	235865.198	1019.685569	ppb
>	Sc	45	307949.750		ppb
	Ti	47	61664.541	118.859667	ppb
	V	51	828856.157	112.822349	ppb
	Cr	52	752358.727	116.826291	ppb
	Mn	55	1005216.248	114.889838	ppb
	Fe	54	613254.632	1189.250134	ppb
	Fe	56	10582894.354	1149.262817	ppb
	Fe	57	239560.498	1249.886229	ppb
	Co	59	1044663.997	117.092729	ppb
	Ni	60	244035.095	125.968221	ppb
	Cu	63	580013.377	119.393351	ppb
	Cu	65	281527.889	125.602675	ppb
	Zn	66	129202.642	129.206026	ppb
	As	75	142230.492	126.331240	ppb
	Se	82	13019.804	125.674597	ppb
	Mo	96	321355.825	113.124507	ppb
	Ag	107	1068694.642	112.007014	ppb
	Ag	109	1074526.825	115.866719	ppb
	Cd	111	232032.280	126.383210	ppb
	In	113	265801.182	122.342022	ppb
>	In	115	970475.641		ppb
	Sn	118	660836.867	115.709391	ppb
	Sb	121	676402.668	113.853068	ppb
	Ba	135	220780.593	118.032199	ppb
	Ba	137	389860.245	119.326612	ppb
>	Tb	159	1606411.016		ppb
	Tl	205	3272075.462	120.558087	ppb
	Pb	206	1065207.465	114.227372	ppb
	Pb	207	1983417.525	113.449080	ppb
	Pb	208	3220916.785	116.242737	ppb
>	Bi	209	1247407.014		ppb
	Cr	53	92513.971		ppb
	Pd	106	19208.430		ppb
	Pd	108	14795.938		ppb
	C	12	386503.645		ppb
	Kr	83	44.000		ppb
	Se	77	10391.396		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129827.321		ppb
	Be	9	47643.224	122.920458	ppb
	Na	23	4637380.787	1215.581012	ppb
	Mg	24	3758895.590	1173.086197	ppb
	Mg	25	591753.456	1191.931998	ppb
	Mg	26	681481.565	1113.649542	ppb
	Al	27	5400321.069	1001.593050	ppb
	K	39	8758038.956	987.895443	ppb
	Ca	44	374348.085	1028.928725	ppb
>	Sc	45	504949.767		ppb

	Ti	47	96023.826	112.873476	ppb
	V	51	1291606.801	107.213078	ppb
	Cr	52	1171177.181	110.874860	ppb
	Mn	55	1640608.844	114.354078	ppb
	Fe	54	999859.647	1182.079307	ppb
	Fe	56	16500613.528	1085.411616	ppb
	Fe	57	364255.437	1158.185556	ppb
	Co	59	1600535.182	109.407783	ppb
	Ni	60	360119.616	113.365564	ppb
	Cu	63	856209.989	107.484006	ppb
	Cu	65	412235.298	112.160763	ppb
	Zn	66	190330.884	116.060221	ppb
	As	75	219246.582	118.764522	ppb
	Se	82	20035.384	117.925296	ppb
	Mo	96	480130.024	114.254992	ppb
	Ag	107	1568538.462	111.130009	ppb
	Ag	109	1532710.818	111.723852	ppb
	Cd	111	324563.646	119.504777	ppb
	In	113	383074.405	118.595824	ppb
>	In	115	1435621.403		ppb
	Sn	118	991518.639	117.360296	ppb
	Sb	121	993997.554	117.372457	ppb
	Ba	135	316333.438	118.636124	ppb
	Ba	137	555305.694	119.231901	ppb
>	Tb	159	2289942.936		ppb
	Tl	205	4781105.112	119.585388	ppb
	Pb	206	1636297.754	119.118581	ppb
	Pb	207	3061680.244	118.885300	ppb
	Pb	208	4949825.252	121.271085	ppb
>	Bi	209	1837516.863		ppb
	Cr	53	144291.546		ppb
	Pd	106	27999.143		ppb
	Pd	108	21883.919		ppb
	C	12	391535.841		ppb
	Kr	83	44.000		ppb
	Se	77	15515.360		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	132911.441		ppb
	Be	9	47621.119	120.012246	ppb
	Na	23	4561716.120	1167.912625	ppb
	Mg	24	3884879.567	1184.271990	ppb
	Mg	25	591973.949	1164.704885	ppb
	Mg	26	702417.364	1121.228569	ppb
	Al	27	5816265.703	1053.742267	ppb
	K	39	9098308.514	1003.056778	ppb
	Ca	44	377906.233	1013.380892	ppb
>	Sc	45	516171.487		ppb
	Ti	47	99224.848	114.101487	ppb
	V	51	1304528.918	105.929753	ppb
	Cr	52	1159827.099	107.391722	ppb
	Mn	55	1642969.160	112.020648	ppb
	Fe	54	1001079.455	1156.248044	ppb
	Fe	56	16230501.337	1038.741951	ppb
	Fe	57	368662.609	1146.600204	ppb
	Co	59	1599180.161	106.938442	ppb
	Ni	60	356966.188	109.929370	ppb
	Cu	63	839943.503	103.148632	ppb
	Cu	65	424078.763	112.874869	ppb
	Zn	66	199632.973	119.090688	ppb
	As	75	217665.938	115.345483	ppb
	Se	82	20464.919	117.834560	ppb

⌈	Mo	96	484795.212	121.436624	ppb
|	Ag	107	1583744.692	118.111155	ppb
|	Ag	109	1507000.979	115.629408	ppb
|	Cd	111	315739.166	122.372155	ppb
|	In	113	377461.916	123.867386	ppb
|>	In	115	1363864.711		ppb
⌊	Sn	118	959571.083	119.554990	ppb
⌈	Sb	121	980348.756	116.418902	ppb
|	Ba	135	320730.213	120.969842	ppb
|	Ba	137	564491.170	121.894173	ppb
⌊>	Tb	159	2276984.842		ppb
⌈	Tl	205	4647309.187	117.761660	ppb
|	Pb	206	1587357.747	117.069256	ppb
|	Pb	207	3008793.160	118.362157	ppb
|	Pb	208	4786236.246	118.798822	ppb
⌊>	Bi	209	1813755.290		ppb
	Cr	53	139763.920		ppb
	Pd	106	29172.490		ppb
	Pd	108	22014.205		ppb
	C	12	394130.855		ppb
	Kr	83	38.000		ppb
	Se	77	16114.306		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6			94.909		
	Be	9	100.120				
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45			87.471		
	Ti	47					
	V	51	90.546				
	Cr	52	93.081				
	Mn	55	94.796				
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59	92.622				
	Ni	60	97.018				
	Cu	63	91.674				
	Cu	65	97.400				
	Zn	66	101.210				
	As	75	100.123				
	Se	82	100.398				
	Mo	96					
	Ag	107	94.791				
	Ag	109	95.339				
	Cd	111	102.294				
	In	113					
>	In	115			89.940		
	Sn	118	97.951				
	Sb	121	96.568				
	Ba	135	99.344				
	Ba	137	100.126				
>	Tb	159			94.434		
	Tl	205	99.418				
	Pb	206	97.338				
	Pb	207	97.416				
	Pb	208	98.976				
>	Bi	209			98.463		
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

EPA 6020 - Summary Report

Sample ID: CCB

Sample Date/Time: Monday, November 09, 2009 22:19:13
Sample Type: Sample
Sample Description:
Number of Replicates: 3
Batch ID:
Method File: C:\Elandata1\Method\6020\6020METHOD.mth
Dataset File: C:\Elandata1\DataSet\Default\CCB.933

Concentration Results

	Analyte	Mass	Meas. Intens. Mean	Meas. Intens. RSD	Net Intens. Mean	Conc. Mean	Conc. RSD	Sample Unit
⌈>	Li	6	115235.848	21.621	115235.848			ppb
|	Be	9	2.667	43.301	-0.000	-0.00060	996.57	ppb
|	Na	23	9612.395	18.952	0.023	0.78880	173.28	ppb
|	Mg	24	795.033	22.156	0.003	0.14119	49.22	ppb
|	Mg	25	118.667	23.601	0.001	0.14447	40.49	ppb
|	Mg	26	217.002	18.485	0.001	0.11851	52.68	ppb
|	Al	27	3577.335	25.752	0.003	0.07359	231.30	ppb
|	K	39	294140.622	0.436	0.008	0.12206	8313.95	ppb
⌊	Ca	44	15637.570	4.902	-0.086	-33.22103	46.82	ppb
⌈>	Sc	45	442685.057	17.700	442685.057			ppb
|	Ti	47	51.667	29.565	-0.000	-0.02043	126.17	ppb
|	V	51	2085.309	8.489	0.001	0.05413	104.31	ppb
|	Cr	52	6245.963	9.814	0.000	0.01385	1533.14	ppb
|	Mn	55	915.042	6.715	-0.009	-0.33294	3.54	ppb
|	Fe	54	50846.073	7.396	-0.002	-1.15718	759.06	ppb
|	Fe	56	1593050.423	0.650	-0.299	-11.29506	248.20	ppb
|	Fe	57	2898.754	2.143	-0.000	-0.70053	286.67	ppb
|	Co	59	132.001	25.035	0.000	0.00325	154.08	ppb
|	Ni	60	128.890	56.799	0.000	0.03523	111.56	ppb
|	Cu	63	747.806	9.616	0.001	0.08366	22.82	ppb
|	Cu	65	367.785	18.867	0.001	0.08181	5.21	ppb
|	Zn	66	286.671	37.481	0.000	0.03313	378.33	ppb
|	As	75	-20.453	184.275	0.000	0.00447	547.65	ppb
⌊	Se	82	43.111	12.969	0.000	0.01103	791.18	ppb
⌈	Mo	96	424.676	24.026	0.000	0.09230	57.73	ppb
|	Ag	107	188.891	5.391	0.000	0.01160	34.27	ppb
|	Ag	109	153.335	9.962	0.000	0.00932	13.73	ppb
|	Cd	111	10.908	73.897	0.000	0.00286	98.39	ppb
|	In	113	58532.187	16.420	0.003	1.45441	27.15	ppb
|>	In	115	1266201.271	17.822	1266201.271			ppb
⌊	Sn	118	451.677	23.906	0.000	0.04015	69.50	ppb
⌈	Sb	121	2880.420	13.597	0.001	0.30417	34.58	ppb
|	Ba	135	58.667	23.205	0.000	0.01201	32.44	ppb
|	Ba	137	107.334	25.367	0.000	0.01400	43.01	ppb
⌊>	Tb	159	2061806.978	12.714	2061806.978			ppb
⌈	Tl	205	265.004	6.803	0.000	0.00534	14.53	ppb
|	Pb	206	163.335	24.744	-0.000	-0.01422	39.21	ppb
|	Pb	207	320.003	14.905	-0.000	-0.01244	34.85	ppb
|	Pb	208	523.341	12.433	-0.000	-0.01280	30.76	ppb
⌊>	Bi	209	1667827.326	13.860	1667827.326			ppb
	Cr	53	665.356	7.390	-3005.321			ppb
	Pd	106	1.667	173.205	-1.667			ppb
	Pd	108	5.000	100.000	1.667			ppb
	C	12	399600.724	1.868	11961.481			ppb
	Kr	83	30.000	30.551	-22.667			ppb
	Se	77	63.778	14.269	-51.112			ppb

Raw Data

Replicate 1

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	86470.246		ppb
	Be	9	4.000	0.006286	ppb
	Na	23	11714.858	2.366851	ppb
	Mg	24	727.026	0.195650	ppb
	Mg	25	103.001	0.182106	ppb
	Mg	26	185.002	0.166981	ppb
	Al	27	3050.465	0.163954	ppb
	K	39	295490.159	11.838635	ppb
	Ca	44	16211.129	-15.394491	ppb
>	Sc	45	352241.329		ppb
	Ti	47	55.000	0.000879	ppb
	V	51	2254.224	0.118425	ppb
	Cr	52	6946.412	0.258711	ppb
	Mn	55	870.038	-0.320039	ppb
	Fe	54	46628.458	8.936835	ppb
	Fe	56	1599525.613	21.046030	ppb
	Fe	57	2860.409	1.613381	ppb
	Co	59	170.001	0.009027	ppb
	Ni	60	213.336	0.080592	ppb
	Cu	63	716.692	0.103551	ppb
	Cu	65	290.004	0.080885	ppb
	Zn	66	410.008	0.177649	ppb
	As	75	-43.547	-0.014799	ppb
	Se	82	46.667	0.105824	ppb
	Mo	96	534.014	0.152922	ppb
	Ag	107	200.002	0.016185	ppb
	Ag	109	136.668	0.010727	ppb
	Cd	111	4.635	0.000934	ppb
	In	113	47437.248	1.909101	ppb
>	In	115	1005653.903		ppb
	Sn	118	565.016	0.071770	ppb
	Sb	121	3290.541	0.423549	ppb
	Ba	135	48.000	0.011085	ppb
	Ba	137	98.000	0.015659	ppb
>	Tb	159	1759204.769		ppb
	Tl	205	250.003	0.006169	ppb
	Pb	206	210.002	-0.007781	ppb
	Pb	207	375.004	-0.007437	ppb
	Pb	208	590.010	-0.008327	ppb
>	Bi	209	1401093.174		ppb
	Cr	53	712.025		ppb
	Pd	106	0.000		ppb
	Pd	108	5.000		ppb
	C	12	401332.982		ppb
	Kr	83	32.000		ppb
	Se	77	72.000		ppb

Replicate 2

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	129187.110		ppb
	Be	9	2.000	-0.004023	ppb
	Na	23	8620.714	0.022938	ppb
	Mg	24	663.022	0.062918	ppb
	Mg	25	102.001	0.077072	ppb
	Mg	26	204.002	0.048064	ppb
	Al	27	4641.077	0.179558	ppb
	K	39	293995.047	-5.559112	ppb
	Ca	44	15934.686	-40.236558	ppb
>	Sc	45	490071.280		ppb

	Ti	47	65.000	-0.013086	ppb
	V	51	1901.180	0.012641	ppb
	Cr	52	5807.686	-0.119838	ppb
	Mn	55	890.040	-0.343135	ppb
	Fe	54	53849.600	-5.345574	ppb
	Fe	56	1581112.965	-28.686929	ppb
	Fe	57	2970.441	-1.725970	ppb
	Co	59	116.001	0.000537	ppb
	Ni	60	83.334	0.011339	ppb
	Cu	63	830.034	0.081932	ppb
	Cu	65	423.342	0.086455	ppb
	Zn	66	236.669	-0.032386	ppb
	As	75	-40.852	-0.003786	ppb
	Se	82	36.667	-0.065983	ppb
	Mo	96	408.008	0.071100	ppb
	Ag	107	186.668	0.009524	ppb
	Ag	109	156.668	0.008221	ppb
	Cd	111	8.090	0.001554	ppb
	In	113	64291.004	1.257151	ppb
>	In	115	1399357.048		ppb
	Sn	118	440.010	0.029721	ppb
	Sb	121	2840.403	0.263757	ppb
	Ba	135	74.000	0.016290	ppb
	Ba	137	86.000	0.007322	ppb
>	Tb	159	2219171.806		ppb
	Tl	205	260.003	0.004634	ppb
	Pb	206	140.001	-0.017385	ppb
	Pb	207	290.002	-0.014992	ppb
	Pb	208	460.006	-0.015733	ppb
>	Bi	209	1792495.819		ppb
	Cr	53	670.022		ppb
	Pd	106	5.000		ppb
	Pd	108	10.000		ppb
	C	12	406045.618		ppb
	Kr	83	38.000		ppb
	Se	77	65.334		ppb

Replicate 3

Internal Standard Symbol	Analyte	Mass	Meas. Intensity	Concentration	Report Unit
>	Li	6	130050.189		ppb
	Be	9	2.000	-0.004058	ppb
	Na	23	8501.612	-0.023385	ppb
	Mg	24	995.050	0.164993	ppb
	Mg	25	151.001	0.174242	ppb
	Mg	26	262.003	0.140486	ppb
	Al	27	3040.462	-0.122746	ppb
	K	39	292936.658	-5.913330	ppb
	Ca	44	14766.895	-44.032026	ppb
>	Sc	45	485742.563		ppb
	Ti	47	35.000	-0.049073	ppb
	V	51	2100.523	0.031317	ppb
	Cr	52	5983.790	-0.097320	ppb
	Mn	55	985.049	-0.335654	ppb
	Fe	54	52060.161	-7.062813	ppb
	Fe	56	1598512.692	-26.244274	ppb
	Fe	57	2865.410	-1.989005	ppb
	Co	59	110.001	0.000184	ppb
	Ni	60	90.000	0.013762	ppb
	Cu	63	696.691	0.065484	ppb
	Cu	65	390.008	0.078082	ppb
	Zn	66	213.336	-0.045873	ppb
	As	75	23.040	0.031984	ppb
	Se	82	46.000	-0.006749	ppb

⌈	Mo	96	332.006	0.052876	ppb
|	Ag	107	180.002	0.009094	ppb
|	Ag	109	166.668	0.009020	ppb
|	Cd	111	20.000	0.006084	ppb
|	In	113	63868.309	1.196975	ppb
|>	In	115	1393592.861		ppb
⌊	Sn	118	350.006	0.018966	ppb
⌈	Sb	121	2510.315	0.225191	ppb
|	Ba	135	54.000	0.008664	ppb
|	Ba	137	138.001	0.019012	ppb
⌊>	Tb	159	2207044.359		ppb
⌈	Tl	205	285.004	0.005205	ppb
|	Pb	206	140.001	-0.017485	ppb
|	Pb	207	295.002	-0.014906	ppb
|	Pb	208	520.008	-0.014352	ppb
⌊>	Bi	209	1809892.985		ppb
	Cr	53	614.019		ppb
	Pd	106	0.000		ppb
	Pd	108	0.000		ppb
	C	12	391423.571		ppb
	Kr	83	20.000		ppb
	Se	77	54.000		ppb

QC Calculated Values

	Analyte	Mass	QC Std % Recovery	Int Std % Recovery	Spike % Recovery	Dilution % Diff	Dup. Rel. % Diff
>	Li	6		95.043			
	Be	9					
	Na	23					
	Mg	24					
	Mg	25					
	Mg	26					
	Al	27					
	K	39					
	Ca	44					
>	Sc	45		87.404			
	Ti	47					
	V	51					
	Cr	52					
	Mn	55					
	Fe	54					
	Fe	56					
	Fe	57					
	Co	59					
	Ni	60					
	Cu	63					
	Cu	65					
	Zn	66					
	As	75					
	Se	82					
	Mo	96					
	Ag	107					
	Ag	109					
	Cd	111					
	In	113					
>	In	115		90.624			
	Sn	118					
	Sb	121					
	Ba	135					
	Ba	137					
>	Tb	159		94.619			
	Tl	205					
	Pb	206					
	Pb	207					
	Pb	208					
>	Bi	209		100.569			
	Cr	53					
	Pd	106					
	Pd	108					
	C	12					
	Kr	83					
	Se	77					

QC Out of Limits

Measurement Type	Analyte	Mass	Out of Limits Message

Maintenance: none

Method(s) (circle one): ILM04.1 (ILM05.4) Others (7470A)

Operator(s): NSS 1,57 Date/Time 10/29/09 1040 to 10/29/09 1415

Printed: 10/29/2009 2:58:17 PM

↑	Specified element(s) fail(s) high
↓	Specified element(s) fail(s) low
RR	Re-run sample(s) neat
RR #X	Re-run at a #-fold dilution
#X	Sample run at a #-fold dilution (aliquot of sample diluted with acidified water)
L	Matrix = leachate
W	Matrix = water
S	Matrix = solid
B	Matrix = biological tissue

SDG	Matrix	Comments
0910165	Water	Complete
0910214	Soil	
MB7GY7	Water	
MB7H07	Water	

Batch
9102229
9102720
9102808
9102828

HG Run Log (V4)

File Name: V410299A

Cup	Sample ID	Client ID	Sample Type	DF	Date	Time	Results	Comments
	S0	S0	CALIB STD	1.0	29 OCT 09	10:40:10	151	
	S0.2	S0.2	CALIB STD	1.0	29 OCT 09	10:42:06	1884	
	S0.5	S0.5	CALIB STD	1.0	29 OCT 09	10:44:03	4053	
	S1.0	S1.0	CALIB STD	1.0	29 OCT 09	10:45:59	7941	
	S5.0	S5.0	CALIB STD	1.0	29 OCT 09	10:47:55	40397	
	S10.0	S10.0	CALIB STD	1.0	29 OCT 09	10:49:50	78726	
	ICV1	ICV	ICV	1.0	29 OCT 09	10:51:55	3.80	
	ICB1	ICB	ICB	1.0	29 OCT 09	10:54:13	-.040	
	CRL1	CRI	CRI	1.0	29 OCT 09	10:56:22	.146	
	CCV1	CCV1	CCV	1.0	29 OCT 09	10:58:28	4.92	
	CCB1	CCB1	CCB	1.0	29 OCT 09	11:00:39	-.046	
	ZZZZZZ	ZZZZZZ	SAMPLE	1.0	29 OCT 09	11:02:34	.014	
	ZZZZZZ	ZZZZZZ	SAMPLE	1.0	29 OCT 09	11:04:31	5.15	
	ZZZZZZ	ZZZZZZ	SAMPLE	1.0	29 OCT 09	11:06:29	-.073	
	ZZZZZZ	ZZZZZZ	SAMPLE	1.0	29 OCT 09	11:08:25	-.009	
	~~0910214-01~~	~~BGLMW32SU-CC~~MF	SAMPLE	1.0	29 OCT 09	11:10:34	.864	

ZZZZZZ IBL 7nF110209

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Reviewed By: 2 Date: 11/02/09

HG Run Log (V4)

File Name: V410299A

Cup	Sample ID	Client ID	Sample Type	DF	Date	Time	Results	Comments
	9102229-BLK1	PBW	BLANK	1.0	29 OCT 09	11:12:44	-.044	
	0910150-14	MB7H00	SAMPLE	1.0	29 OCT 09	11:14:40	-.050	
	9102229-DUP1	MB7H00D	DUPLICATE	1.0	29 OCT 09	11:16:48	-.036	
	9102229-MS1	MB7H00S	MATRIX SPIKE	1.0	29 OCT 09	11:18:54	.834	
	0910150-01	MB7GY7	SAMPLE	1.0	29 OCT 09	11:20:56	-.060	
	CCV2	CCV2	CCV	1.0	29 OCT 09	11:23:12	5.21	
	CCB2	CCB2	CCB	1.0	29 OCT 09	11:25:29	-.031	
	0910150-02	MB7GY8	SAMPLE	1.0	29 OCT 09	11:27:26	-.056	
	0910150-03	MB7GY9	SAMPLE	1.0	29 OCT 09	11:29:32	-.020	
	0910150-04	MB7GZ0	SAMPLE	1.0	29 OCT 09	11:31:39	-.031	
	0910150-05	MB7GZ1	SAMPLE	1.0	29 OCT 09	11:33:48	-.053	
	0910150-06	MB7GZ2	SAMPLE	1.0	29 OCT 09	11:36:05	-.070	
	0910150-07	MB7GZ3	SAMPLE	1.0	29 OCT 09	11:38:05	-.041	
	0910150-08	MB7GZ4	SAMPLE	1.0	29 OCT 09	11:40:02	-.043	
	0910150-09	MB7GZ5	SAMPLE	1.0	29 OCT 09	11:41:59	-.025	
	CRL2	CRI	CRI	1.0	29 OCT 09	11:43:55	.216	
	CCV3	CCV3	CCV	1.0	29 OCT 09	11:46:01	5.24	
	CCB3	CCB3	CCB	1.0	29 OCT 09	11:47:58	-.051	
	0910150-10	MB7GZ6	SAMPLE	1.0	29 OCT 09	11:49:53	.005	
	0910150-11	MB7GZ7	SAMPLE	1.0	29 OCT 09	11:51:49	-.010	
	0910150-12	MB7GZ8	SAMPLE	1.0	29 OCT 09	11:54:05	-.001	
	0910150-13	MB7GZ9	SAMPLE	1.0	29 OCT 09	11:56:13	-.008	
	0910150-15	MB7H01	SAMPLE	1.0	29 OCT 09	11:58:15	-.052	
	0910150-16	MB7H02	SAMPLE	1.0	29 OCT 09	12:00:18	-.035	
	0910150-17	MB7H03	SAMPLE	1.0	29 OCT 09	12:02:20	-.067	
	0910150-18	MB7H04	SAMPLE	1.0	29 OCT 09	12:04:24	-.037	
	0910150-19	MB7H05	SAMPLE	1.0	29 OCT 09	12:06:24	-.008	
	0910150-20	MB7H06	SAMPLE	1.0	29 OCT 09	12:08:27	.010	
	CCV4	CCV4	CCV	1.0	29 OCT 09	12:10:24	5.32	
	CCB4	CCB4	CCB	1.0	29 OCT 09	12:12:22	-.096	

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Reviewed By: _____ Date: 11/02/09

HG Run Log (V4)

File Name: V410299A

Cup	Sample ID	Client ID	Sample Type	DF	Date	Time	Results	Comments
	9102808-BLK1	PBW	BLANK	1.0	29 OCT 09	12:14:20	.009	
	0910172-18	MB7H26	SAMPLE	1.0	29 OCT 09	12:16:40	-.034	
	9102808-DUP1	MB7H26D	DUPLICATE	1.0	29 OCT 09	12:18:56	-.068	
	9102808-MS1	MB7H26S	MATRIX SPIKE	1.0	29 OCT 09	12:21:05	.814	
	0910172-01	MB7H07	SAMPLE	1.0	29 OCT 09	12:23:02	-.031	
	0910172-02	MB7H08	SAMPLE	1.0	29 OCT 09	12:24:58	-.062	
	0910172-03	MB7H09	SAMPLE	1.0	29 OCT 09	12:26:56	-.004	
	0910172-04	MB7H10	SAMPLE	1.0	29 OCT 09	12:28:53	.003	
	CRL3	CRI	CRI	1.0	29 OCT 09	12:31:04	.221	
	CCV5	CCV5	CCV	1.0	29 OCT 09	12:33:12	5.33	
	CCB5	CCB5	CCB	1.0	29 OCT 09	12:35:11	-.090	
	0910172-05	MB7H11	SAMPLE	1.0	29 OCT 09	12:37:17	-.000	
	0910172-06	MB7H12	SAMPLE	1.0	29 OCT 09	12:39:24	-.087	
	0910172-07	MB7H13	SAMPLE	1.0	29 OCT 09	12:41:42	-.057	
	0910172-08	MB7H14	SAMPLE	1.0	29 OCT 09	12:43:39	-.074	
	0910172-09	MB7H15	SAMPLE	1.0	29 OCT 09	12:45:36	-.025	
	0910172-10	MB7H16	SAMPLE	1.0	29 OCT 09	12:47:34	-.027	
	0910172-11	MB7H17	SAMPLE	1.0	29 OCT 09	12:49:36	.010	
	0910172-12	MB7H18	SAMPLE	1.0	29 OCT 09	12:51:46	.020	
	CRL4	CRI	CRI	1.0	29 OCT 09	12:53:44	.226	
	CCV6	CCV6	CCV	1.0	29 OCT 09	12:56:15	5.28	
	CCB6	CCB6	CCB	1.0	29 OCT 09	12:58:11	-.123	
	0910172-13	MB7H20	SAMPLE	1.0	29 OCT 09	13:00:08	-.024	
	0910172-14	MB7H21	SAMPLE	1.0	29 OCT 09	13:02:35	-.078	
	0910172-15	MB7H22	SAMPLE	1.0	29 OCT 09	13:04:33	-.055	
	0910172-16	MB7H23	SAMPLE	1.0	29 OCT 09	13:06:29	-.017	
	0910172-17	MB7H24	SAMPLE	1.0	29 OCT 09	13:08:23	-.004	
	0910172-19	MB7H27	SAMPLE	1.0	29 OCT 09	13:10:18	.017	
	0910172-20	MB7H28	SAMPLE	1.0	29 OCT 09	13:12:13	.012	
	CRL5	CRI	CRI	1.0	29 OCT 09	13:14:34	.205	

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Reviewed By: _____ Date: 11/2/09

 600

HG Run Log (V4)

File Name: V410299A

Cup	Sample ID	Client ID	Sample Type	DF	Date	Time	Results	Comments
	CCV7	CCV7	CCV	1.0	29 OCT 09	13:16:31	5.34	
	CCB7	CCB7	CCB	1.0	29 OCT 09	13:18:30	-.042	
	9102828-BLK1	PBS	BLANK	1.0	29 OCT 09	13:20:26	-.033	
	9102828-BS1	LCSS	LCS	1.0	29 OCT 09	13:22:23	5.20	
	0910214-01	BCLMW32SU COMF	SAMPLE	1.0	29 OCT 09	13:24:25	-.115	
	9102828-DUP1	BCLMW32SU COMF	DUPLICATE	1.0	29 OCT 09	13:26:34	-.023	
	9102828-MS1	BCLMW32SU COMF	MATRIX SPIKE	1.0	29 OCT 09	13:28:31	.922	
	CRL6	CRI	CRI	1.0	29 OCT 09	13:30:50	.226	
	CCV8	CCV8	CCV	1.0	29 OCT 09	13:32:56	5.38	
	CCB8	CCB8	CCB	1.0	29 OCT 09	13:35:32	-.029	
	9102720-BLK1	PBW	BLANK	1.0	29 OCT 09	13:37:32	-.006	
	9102720-BS1	LCSW	LCS	1.0	29 OCT 09	13:39:34	2.55	
	ZZZZZZ	ZZZZZZ	SAMPLE	1.0	29 OCT 09	13:41:31	-.130	
	0910165-01	13MW5	SAMPLE	1.0	29 OCT 09	13:43:30	-.043	
	9102720-DUP1	13MW5D	DUPLICATE	1.0	29 OCT 09	13:45:46	-.031	
	9102720-MS1	13MW5S	MATRIX SPIKE	1.0	29 OCT 09	13:48:05	.901	
	9102720-MSD1	13MW5SD	MATRIX SPIKE	1.0	29 OCT 09	13:50:37	.881	
	SDI0910165-01	SDI0910165-01	SDI	5	29 OCT 09	13:52:34	-.025	
	CCV9	CCV9	CCV	1.0	29 OCT 09	13:54:32	5.43	
	CCB9	CCB9	CCB	1.0	29 OCT 09	13:56:30	-.096	
	0910165-02	13MW1	SAMPLE	1.0	29 OCT 09	13:58:29	-.019	
	0910165-03	13MW2	SAMPLE	1.0	29 OCT 09	14:00:42	-.063	
	0910165-04	13MW3	SAMPLE	1.0	29 OCT 09	14:02:42	-.039	
	0910165-05	13MW4	SAMPLE	1.0	29 OCT 09	14:04:41	-.023	
	0910165-06	13MWDUP	SAMPLE	1.0	29 OCT 09	14:06:48	-.019	
	0910165-07	13MW6	SAMPLE	1.0	29 OCT 09	14:09:02	.018	
	0910165-08	13MW7	SAMPLE	1.0	29 OCT 09	14:11:30	.018	
	CCV10	CCV10	CCV	1.0	29 OCT 09	14:13:31	5.31	
	CCB10	CCB10	CCB	1.0	29 OCT 09	14:15:32	-.073	

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Reviewed By: _____ Date: 11/2/09

Standards/QC Preparation Log for Analysis of Cold Vapor Mercury

COMPUCHEM a division of Liberty Analytical Corp. WORKSHEET 1 NNN

Seq. File Name: V410299A

602

REAGENTS	REF #[1]	MANUFACTURER	LOT #	EXPIRATION DATE
Sodium Chloride (NaCL)	1m2-187-26	JTBAKER	G47614	09/12
Hydrochloric Acid (HCL)	1m2-188-18	Caledon	70008	08/12
Hydroxylamine Hydrochloride (NH_2OH-HCL)	1m2-188-13	JT BAKER	H26621	08/12
Stannous Chloride ($SnCL_2$-$2H_2O$)	1m2-188-14	JT BAKER	H13589	08/12

STANDARD LOT NUMBER[2]	PREPARATION INSTRUCTIONS
$SnCL_2$– 10-23- 09 – NB Stannous chloride	Place in a 1000 mL volumetric flask containing 500 mL of reagent water: 100 g of $SnCl_2$-$2H_2O$ Baker Instra-analyzed or equivalent 250 mL of HCL Baker Instra-analyzed or equivalent Dilute to 1000 mL with reagent water. Prepare as needed
HCL– 10-28-09 – NB Hydrochloric Acid	Place in a 2 L volumetric flask: 1000 mL of deionized water 200 mL of concentrated HCL Baker Instra-analyzed or equivalent Dilute to 2000 mL with reagent water. Prepare as needed
NH_2OH-HCL– 10-23-09 – NB Hydroxylamine hydrochloride	Place in a 2000 mL volumetric flask: 240.0 g of NH_2OH-HCl Baker Instra-analyzed or equivalent 240.0 g NaCl Baker Instra-analyzed or equivalent Dilute to 2000 mL with reagent water. Place solution in a repipetor bottle. Prepare as needed

Standard Solutions Prepared By: [signature]

Entered By: [signature] Date: 10/29/09

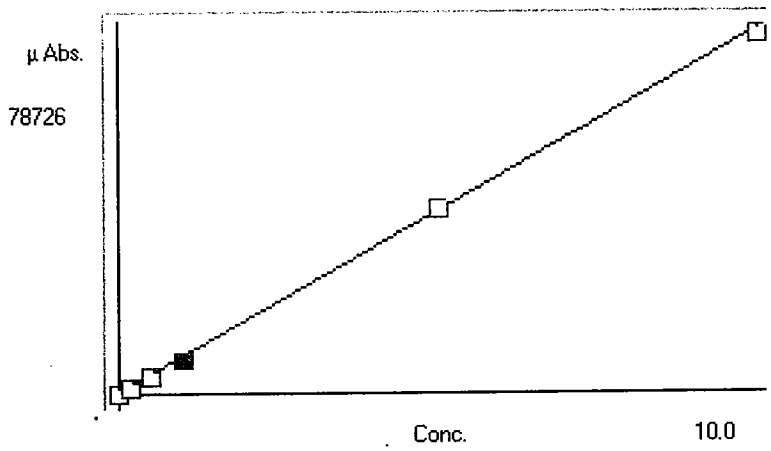
Reviewed By: [signature] Date: 11/02/09

[1]Ref# = Logbook ID, Page number, and item number from Materials Receipt Log

[2]Standard Lot Number consists of standard ID, date prepared, and initials of preparer.

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Protocol: INSTIDV4
Folder IV410299A



Calibrated : A
Accepted . B 1.26866e-4
: C -3.20783e-2
! Rhc .999926

Accepted Date: 29-Oct-09 10:49

S.	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
01	.00000	-.013	-.013	152	0	151				
02	.20000	.207	.007	1885	0%	1884				
03	.50000	.482	-.018	4053	0%	4053				
04	1.0000	.975	-.025	7942	0%	7941				
05	5.0000	5.09	.093	40397	0%	40397				
06	10.000	9.96	-.044	78727	0%	78726				
07										
08										
09										
10										

50.5 (.482 | .5) · 100 = 96.4%

51.0 (.975 | 1.0) · 100 = 97.5%

5 5.0 (5.09 | 5.0) · 100 = 101.8%

5 10.0 (9.96 | 10.0) · 100 = 99.6%

all standards are within ± 5% of true values.

MS 10/30/09

Folder: V410299A
Protocol: INSTIDV4
POST-RUN REPORT

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Standard: 1 Rep: 1				Seq: 1		10:40:10 29 Oct 09			HG
Hg	.000	ppb	151						
*** Standard: 2 Rep: 1				Seq: 2		10:42:06 29 Oct 09			HG
Hg	.200	ppb	1884						
*** Standard: 3 Rep: 1				Seq: 3		10:44:03 29 Oct 09			HG
Hg	.500	ppb	4053						
*** Standard: 4 Rep: 1				Seq: 4		10:45:59 29 Oct 09			HG
Hg	1.00	ppb	7941						
*** Standard: 5 Rep: 1				Seq: 5		10:47:55 29 Oct 09			HG
Hg	5.00	ppb	40397						
*** Standard: 6 Rep: 1				Seq: 6		10:49:50 29 Oct 09			HG
Hg	10.0	ppb	78726						

*** Check Standard: 3 Ck3 ICV Seq: 7 10:51:55 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		94.9	3.80	4.00	ppb	.000

*** Check Standard: 1 Ck1 ICB Seq: 8 10:54:13 29 Oct 09 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.040	.200	ppb	.000

*** Check Standard: 4 Ck4 CRI Seq: 9 10:56:22 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		73.1	.146	.200	ppb	.000

*** Check Standard: 2 Ck2 CCV Seq: 10 10:58:28 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		98.4	4.92	5.00	ppb	.000

*** Check Standard: 1 Ck1 CCB Seq: 11 11:00:39 29 Oct 09 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.046	.200	ppb	.000

*** ~~Sample ID: PBS~~ Seq: 12 11:02:34 29 Oct 09 HG
~~9102828-BLK1~~

Hg	.014	ppb	.000	.014

*** ~~Sample ID: LCSS~~ Seq: 13 11:04:31 29 Oct 09 HG
~~9102828-BS1~~

Hg	5.15	ppb	.000	5.15

*** ~~Sample ID: BCLMW32SU~~ Seq: 14 11:06:29 29 Oct 09 HG
~~9102828-DUP1~~

Hg	-.073	ppb	.000	-.073

*** ~~Sample ID: BCLMW32SU~~ Seq: 15 11:08:25 29 Oct 09 HG
~~9102828-MS1~~

Hg	-.009	ppb	.000	-.009

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: ~~BCLMW32SU~~ 222222 Midday Seq: 16 11:10:34 29 Oct 09 HG
~~0910214-01~~ 222222 Midday
Hg .864 ppb .000 .864

*** Sample ID: PBW Seq: 17 11:12:44 29 Oct 09 HG
9102229-BLK1
Hg -.044 ppb .000 -.044

*** Sample ID: MB7H00 Seq: 18 11:14:40 29 Oct 09 HG
0910150-14
Hg -.050 ppb .000 -.050

*** Sample ID: MB7H00D Seq: 19 11:16:48 29 Oct 09 HG
9102229-DUP1
Hg -.036 ppb .000 -.036

*** Sample ID: MB7H00S Seq: 20 11:18:54 29 Oct 09 HG
9102229-MS1
Hg .834 ppb .000 .834

*** Sample ID: MB7GY7 Seq: 21 11:20:56 29 Oct 09 HG
0910150-01
Hg -.060 ppb .000 -.060

*** Check Standard: 2 Ck2 CCV Seq: 22 11:23:12 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		104	5.21	5.00	ppb	.000

*** Check Standard: 1 Ck1 CCB Seq: 23 11:25:29 29 Oct 09 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.031	.200	ppb	.000

*** Sample ID: MB7GY8 Seq: 24 11:27:26 29 Oct 09 HG
0910150-02
Hg -.056 ppb .000 -.056

*** Sample ID: MB7GY9 Seq: 25 11:29:32 29 Oct 09 HG
0910150-03
Hg -.020 ppb .000 -.020

*** Sample ID: MB7GZ0 Seq: 26 11:31:39 29 Oct 09 HG
0910150-04
Hg -.031 ppb .000 -.031

*** Sample ID: MB7GZ1 Seq: 27 11:33:48 29 Oct 09 HG
0910150-05
Hg -.053 ppb .000 -.053

*** Sample ID: MB7GZ2 Seq: 28 11:36:05 29 Oct 09 HG
0910150-06
Hg -.070 ppb .000 -.070

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: MB7GZ3 Seq: 29 11:38:05 29 Oct 09 HG
0910150-07
Hg -.041 ppb .000 -.041

*** Sample ID: MB7GZ4 Seq: 30 11:40:02 29 Oct 09 HG
0910150-08
Hg -.043 ppb .000 -.043

*** Sample ID: MB7GZ5 Seq: 31 11:41:59 29 Oct 09 HG
0910150-09
Hg -.025 ppb .000 -.025

*** Check Standard: 4 Ck4 CRI Seq: 32 11:43:55 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		108.	.216	.200	ppb	.000

*** Check Standard: 2 Ck2 CCV Seq: 33 11:46:01 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		105.	5.24	5.00	ppb	.000

*** Check Standard: 1 Ck1 CCB Seq: 34 11:47:58 29 Oct 09 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.051	.200	ppb	.000

*** Sample ID: MB7GZ6 Seq: 35 11:49:53 29 Oct 09 HG
0910150-10
Hg .005 ppb .000 .005

*** Sample ID: MB7GZ7 Seq: 36 11:51:49 29 Oct 09 HG
0910150-11
Hg -.010 ppb .000 -.010

*** Sample ID: MB7GZ8 Seq: 37 11:54:05 29 Oct 09 HG
0910150-12
Hg -.001 ppb .000 -.001

*** Sample ID: MB7GZ9 Seq: 38 11:56:13 29 Oct 09 HG
0910150-13
Hg -.008 ppb .000 -.008

*** Sample ID: MB7H01 Seq: 39 11:58:15 29 Oct 09 HG
0910150-15
Hg -.052 ppb .000 -.052

*** Sample ID: MB7H02 Seq: 40 12:00:18 29 Oct 09 HG
0910150-16
Hg -.035 ppb .000 -.035

*** Sample ID: MB7H03 Seq: 41 12:02:20 29 Oct 09 HG
0910150-17
Hg -.067 ppb .000 -.067

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: MB7H04 Seq: 42 12:04:24 29 Oct 09 HG
0910150-18

Hg	-.037	ppb	.000	-.037				

*** Sample ID: MB7H05 Seq: 43 12:06:24 29 Oct 09 HG
0910150-19

Hg	-.008	ppb	.000	-.008				

*** Sample ID: MB7H06 Seq: 44 12:08:27 29 Oct 09 HG
0910150-20

Hg	.010	ppb	.000	.010				

*** Check Standard: 2 Ck2 CCV Seq: 45 12:10:24 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		106.	5.32	5.00	ppb	.000

*** Check Standard: 1 Ck1 CCB Seq: 46 12:12:22 29 Oct 09 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.096	.200	ppb	.000

*** Sample ID: PBW Seq: 47 12:14:20 29 Oct 09 HG
9102808-BLK1

Hg	.009	ppb	.000	.009				

*** Sample ID: MB7H26 Seq: 48 12:16:40 29 Oct 09 HG
0910172-18

Hg	-.034	ppb	.000	-.034				

*** Sample ID: MB7H26D Seq: 49 12:18:56 29 Oct 09 HG
9102808-DUP1

Hg	-.068	ppb	.000	-.068				

*** Sample ID: MB7H26S Seq: 50 12:21:05 29 Oct 09 HG
9102808-MS1

Hg	.814	ppb	.000	.814				

*** Sample ID: MB7H07 Seq: 51 12:23:02 29 Oct 09 HG
0910172-01

Hg	-.031	ppb	.000	-.031				

*** Sample ID: MB7H08 Seq: 52 12:24:58 29 Oct 09 HG
0910172-02

Hg	-.062	ppb	.000	-.062				

*** Sample ID: MB7H09 Seq: 53 12:26:56 29 Oct 09 HG
0910172-03

Hg	-.004	ppb	.000	-.004				

*** Sample ID: MB7H10 Seq: 54 12:28:53 29 Oct 09 HG
0910172-04

Hg	.003	ppb	.000	.003				

Line Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 4 Ck4 CRI Seq: 55 12:31:04 29 Oct 09 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 110. .221 .200 ppb .000

*** Check Standard: 2 Ck2 CCV Seq: 56 12:33:12 29 Oct 09 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 107. 5.33 5.00 ppb .000

*** Check Standard: 1 Ck1 CCB Seq: 57 12:35:11 29 Oct 09 HG
Line Flag Found Range(+/-) Units SD/RSD
Hg -.090 .200 ppb .000

*** Sample ID: MB7H11 Seq: 58 12:37:17 29 Oct 09 HG
0910172-05
Hg -.000 ppb .000 -.000

*** Sample ID: MB7H12 Seq: 59 12:39:24 29 Oct 09 HG
0910172-06
Hg -.087 ppb .000 -.087

*** Sample ID: MB7H13 Seq: 60 12:41:42 29 Oct 09 HG
0910172-07
Hg -.057 ppb .000 -.057

*** Sample ID: MB7H14 Seq: 61 12:43:39 29 Oct 09 HG
0910172-08
Hg -.074 ppb .000 -.074

*** Sample ID: MB7H15 Seq: 62 12:45:36 29 Oct 09 HG
0910172-09
Hg -.025 ppb .000 -.025

*** Sample ID: MB7H16 Seq: 63 12:47:34 29 Oct 09 HG
0910172-10
Hg -.027 ppb .000 -.027

*** Sample ID: MB7H17 Seq: 64 12:49:36 29 Oct 09 HG
0910172-11
Hg .010 ppb .000 .010

*** Sample ID: MB7H18 Seq: 65 12:51:46 29 Oct 09 HG
0910172-12
Hg .020 ppb .000 .020

*** Check Standard: 4 Ck4 CRI Seq: 66 12:53:44 29 Oct 09 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 113. .226 .200 ppb .000

*** Check Standard: 2 Ck2 CCV Seq: 67 12:56:15 29 Oct 09 HG
Line Flag %Rcv. Found True Units SD/RSD
Hg 106. 5.28 5.00 ppb .000

*** Check Standard: 1 Ck1 CCB Seq: 68 12:58:11 29 Oct 09 HG
Line Flag Found Range(+/-) Units SD/RSD
Hg -.123 .200 ppb .000

Line	Conc.	Units	SD/RSD	1	2	3	4	5

*** Sample ID: MB7H20 Seq: 69 13:00:08 29 Oct 09 HG
0910172-13

Hg	-.024	ppb	.000	-.024				

*** Sample ID: MB7H21 Seq: 70 13:02:35 29 Oct 09 HG
0910172-14

Hg	-.078	ppb	.000	-.078				

*** Sample ID: MB7H22 Seq: 71 13:04:33 29 Oct 09 HG
0910172-15

Hg	-.055	ppb	.000	-.055				

*** Sample ID: MB7H23 Seq: 72 13:06:29 29 Oct 09 HG
0910172-16

Hg	-.017	ppb	.000	-.017				

*** Sample ID: MB7H24 Seq: 73 13:08:23 29 Oct 09 HG
0910172-17

Hg	-.004	ppb	.000	-.004				

*** Sample ID: MB7H27 Seq: 74 13:10:18 29 Oct 09 HG
0910172-19

Hg	.017	ppb	.000	.017				

*** Sample ID: MB7H28 Seq: 75 13:12:13 29 Oct 09 HG
0910172-20

Hg	.012	ppb	.000	.012				

*** Check Standard: 4 Ck4 CRI Seq: 76 13:14:34 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		103.	.205	.200	ppb	.000

*** Check Standard: 2 Ck2 CCV Seq: 77 13:16:31 29 Oct 09 HG

Line	Flag	%Rcv.	Found	True	Units	SD/RSD
Hg		107.	5.34	5.00	ppb	.000

*** Check Standard: 1 Ck1 CCB Seq: 78 13:18:30 29 Oct 09 HG

Line	Flag	Found	Range(+/-)	Units	SD/RSD
Hg		-.042	.200	ppb	.000

*** Sample ID: PBS Seq: 79 13:20:26 29 Oct 09 HG
9102828-BLK1

Hg	-.033	ppb	.000	-.033				

*** Sample ID: LCSS Seq: 80 13:22:23 29 Oct 09 HG
9102828-BS1

Hg	5.20	ppb	.000	5.20				

*** Sample ID: BCLMW32SU Seq: 81 13:24:25 29 Oct 09 HG
0910214-01

Hg	-.115	ppb	.000	-.115				

*** Sample ID: BCLMW32SU Seq: 82 13:26:34 29 Oct 09 HG
9102828-DUP1

Hg	-.023	ppb	.000	-.023				

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: BCLMW32SU				Seq: 83	13:28:31 29 Oct 09				HG
				9102828-MS1					
Hg	.922	ppb	.000	.922					=
*** Check Standard: 4 Ck4 CRI				Seq: 84	13:30:50 29 Oct 09				HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		113.	.226	.200	ppb	.000			=
*** Check Standard: 2 Ck2 CCV				Seq: 85	13:32:56 29 Oct 09				HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		108.	5.38	5.00	ppb	.000			=
*** Check Standard: 1 Ck1 CCB				Seq: 86	13:35:32 29 Oct 09				HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.029	.200	ppb	.000				=
*** Sample ID: PBW				Seq: 87	13:37:32 29 Oct 09				HG
				9102720-BLK1					
Hg	-.006	ppb	.000	-.006					=
*** Sample ID: LCSW				Seq: 88	13:39:34 29 Oct 09				HG
				9102720-BS1					
Hg	2.55	ppb	.000	2.55					=
*** Sample ID: ZZZZZZ				Seq: 89	13:41:31 29 Oct 09				HG
				ZZZZZZ					
Hg	-.130	ppb	.000	-.130					=
*** Sample ID: 13MW5				Seq: 90	13:43:30 29 Oct 09				HG
				0910165-01					
Hg	-.043	ppb	.000	-.043					=
*** Sample ID: 13MW5D				Seq: 91	13:45:46 29 Oct 09				HG
				9102720-DUP1					
Hg	-.031	ppb	.000	-.031					=
*** Sample ID: 13MW5S				Seq: 92	13:48:05 29 Oct 09				HG
				9102720-MS1					
Hg	.901	ppb	.000	.901					=
*** Sample ID: 13MW5SD				Seq: 93	13:50:37 29 Oct 09				HG
				9102720-MSD1					
Hg	.881	ppb	.000	.881					=
*** Sample ID: 13MW5				Seq: 94	13:52:34 29 Oct 09				HG
				SDI0910165-01 5X					
Hg	-.025	ppb	.000	-.025					=
*** Check Standard: 2 Ck2 CCV				Seq: 95	13:54:32 29 Oct 09				HG
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		109.	5.43	5.00	ppb	.000			=
*** Check Standard: 1 Ck1 CCB				Seq: 96	13:56:30 29 Oct 09				HG
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.096	.200	ppb	.000				

Line	Conc.	Units	SD/RSD	1	2	3	4	5	
*** Sample ID: 13MW1				Seq: 97		13:58:29 29 Oct 09		HG	
				0910165-02					
Hg	-.019	ppb	.000	-.019					=
*** Sample ID: 13MW2				Seq: 98		14:00:42 29 Oct 09		HG	
				0910165-03					
Hg	-.063	ppb	.000	-.063					=
*** Sample ID: 13MW3				Seq: 99		14:02:42 29 Oct 09		HG	
				0910165-04					
Hg	-.039	ppb	.000	-.039					=
*** Sample ID: 13MW4				Seq: 100		14:04:41 29 Oct 09		HG	
				0910165-05					
Hg	-.023	ppb	.000	-.023					=
*** Sample ID: 13MWDUP				Seq: 101		14:06:48 29 Oct 09		HG	
				0910165-06					
Hg	-.019	ppb	.000	-.019					=
*** Sample ID: 13MW6				Seq: 102		14:09:02 29 Oct 09		HG	
				0910165-07					
Hg	.018	ppb	.000	.018					=
*** Sample ID: 13MW7				Seq: 103		14:11:30 29 Oct 09		HG	
				0910165-08					
Hg	.018	ppb	.000	.018					=
*** Check Standard: 2 Ck2 CCV				Seq: 104		14:13:31 29 Oct 09		HG	
Line	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg		106.	5.31	5.00	ppb	.000			=
*** Check Standard: 1 Ck1 CCB				Seq: 105		14:15:32 29 Oct 09		HG	
Line	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg		-.073	.200	ppb	.000				=

4. Digestion and Distillation Logs

The following logs shall be submitted, as appropriate, for each preparation procedure: digestion logs for ICP-AES, ICP-MS, mercury preparations, and cyanide. The logs shall include: (1) date; (2) sample weights and volumes, with initial sample weight/volume and final volume clearly indicated; (3) sufficient information to unequivocally identify which QC samples (i.e., LCS, PB) correspond to each batch digested; (4) comments describing any significant sample changes or reactions which occur during preparation shall be entered in the log and noted in the SDG Narrative; (5) indication of pH less than 2 or greater than 12, as applicable; (6) identification of the sample preparer(s) [signature (s)].

CompuChem, a Division of Liberty Analytical Corp.

METALS/MERCURY PREPARATION LOG

Purple Water

613

Metals Method: 6020/3005A

Mercury Method: 7470A

Prepared by: DB | JR

Date Prepped: 10-28-09

Batch No.: 9102718/20

COMPUCHEM SAMPLE NUMBER	CLIENT SAMPLE ID	SAMPLE TYPE	ICP Initial mL	ICP Final (mL)	HG Initial mL	HG Final (mL)	Description Before	Description After ICP	pH
0910165-01	13MW5	SAMPLE	50	50	100	100	CS / CL	CS / CL	<2
0910165-02	13MW1	SAMPLE	50		100		CS / CL	CS / CL	<2
0910165-03	13MW2	SAMPLE	50		100		CS / CL	CS / CL	<2
0910165-04	13MW3	SAMPLE	50		100		CS / CL	CS / CL	<2
0910165-05	13MW4	SAMPLE	50		100		CS / CL	CS / CL	<2
0910165-06	13MWDUP	SAMPLE	50		100		CS / CL	CS / CL	<2
0910165-07	13MW6	SAMPLE	50		100		CS / CL	CS / CL	<2
0910165-08	13MW7	SAMPLE	50		100		CS / CL	CS / CL	<2
9102718/20-BLK1	PBW	MB	50		100		CS / CL	CS / CL	N/A
9102718/20-BS1	LCSW	LCS	50		100		CS / CL	CS / CL	N/A
9102718/20-DUP1	13MW5D	DUP	50		100		CS / CL	CS / CL	<2
9102718/20-MS1	13MW5S	MS	50		100		CS / CL	CS / CL	<2
9102718/20-MSD1	13MW5SD	MSD	50		100		CS / CL	CS / CL	<2
							/	/	
							/	/	
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Mercury Standards and QC: S0 S0.2 S0.5 S1 S5 S10 ICV ICB CRI CCV CCB

NOTE: All standards and QC for mercury were prepared at the same day as the associated samples. Refer to the attached Standard/QC Preparation Log with date matching the above preparation date for preparation method and instruction.

Record of Tempature/Time

Hot Block Temp In:	95°	C
Hot Block Temp Out:	95°	C
Time Hg in water bath:	1:30	
Time Hg out water bath:	3:30	
Water Bath Temp In:	95°	C
Water Bath Temp Out:	95°	C

Sample Spike(SS) Ref:

ICAP: **1.0mL Water Spike D for 100mL prep**
0.5mL for 50mL prep
Ref #: Im3.186.28

HG: **1.0mL 100ppb Hg**
Ref# Hg100ppb102809D0

LCS Ref:

ICAP: **2.0mL ICV-1 (0307) for 100 mL prep**
1.0mL for 50mL prep
Ref #: Im3.187.5

HG: **3.0mL 100ppb Hg**
Ref #: Hg100ppb102809D0

* R=red, BL=blue, Y=yellow, G=green, O=orange, V=violet, W=white, CS=colorless, BR=brown, BK=black
GY= grey, F=fine, M=medium, C=coarse, CL=clear, CY=cloudy, OP=opaque

Shading has been applied to unused portions of this worksheet as a substitute for 'Z-out.

"The presence of the Chemist's/analyst's employee ID number, or signature, on this log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation."

Sample Verification Signature: [signature]
This signature corroborates that the sample identification numbers appearing on the digestion cups are the same as those appearing on the field sample containers.

Reviewed by: [signature]
Date: 11/05

Standards/QC Preparation Log for ICP/MS Metals

614

COMPUCHEM a division of Liberty Analytical Corp. WORKSHEET 1 YYY

Case/SDG: 0910165

REAGENTS	REF #[1]	MANUFACTURER	LOT #	EXPIRATION
Hydrochloric Acid - Distilled (HCl)	HCL-D-071409-DD	Caledon	68763	05/12
Nitric Acid – Distilled (HNO_3)	NHO3-D-082109-DD	JT Baker	H12022	07/12
STANDARDS				
ICV-1 (0307)	9C30001	EPA	0307	10/02/10
EPA LCS (0405)	1m2-184-27	EPA	0405	11/25/09
ERA PPT (540)	1m2-186-16	ERA	540	09/30/09
Water Spike Sample D	1m2-186-28	High Purity	0835021	12/17/09
Tin 10 ppm	7m1-42-12	NSI	102008-Sn	10/10
Molybdenum 10 ppm	7m1-42-13	NSI	102008-Mo	10/10

STANDARD LOT NUMBER[2]	PREPARATION INSTRUCTIONS
HNO_3– 10 12 09 – DD Nitric Acid	Place in a 100 mL volumetric flask: 25 mL of Deionized water 50 mL of **Distilled** concentrated HNO_3, Baker Instra-analyzed or equivalent Dilute to 100 mL with DI water. Prepare as needed.
HCl– 10 12 09 – DD Hydrochloric Acid	Place in a 100 mL volumetric flask: 25 mL of Deionized water 50 mL of **Distilled** concentrated HCl, Baker Instra-analyzed or equivalent Dilute to 100 mL with DI water. Prepare as needed.

Standard Solutions Prepared By: D. Dickens Date: 10-28-09

Entered By: D. Dickens Date: 10-28-09

Reviewed By: M Beam Date: 10/28/09

[1]Ref# = Logbook ID, Page number, and item number from Materials Receipt Log

[2]Standard Lot Number consists of standard ID, date prepared, and initials of preparer.

[3]Raw Material sub-boiled from specified lot # in accordance with SOP SPP.9.10

The presence of the Chemist's/Analyst's employee ID number, or signature, on this log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

9/13/05:jad

Lancaster Laboratories
2425 New Holland Pike, PO Box 12425, Lancaster, PA 17605-2425 • 717-656-2300 Fax: 717-656-2681 • www.lancasterlabs.com

Type I Data Package
for
Draper Aden Associates, Inc.

SDG# RAD23

Project: RAAP - Radford, VA - HWMU13/Open Burning Ground
Water Samples
Collected on 10/19/09-10/20/09

GROUP	SAMPLE NUMBERS
1167581	5813509-5813520

PA Cert. # 36-00037
NY Cert. # 10670
NJ Cert. # PA011
NC Cert. # 521
TX Cert. # T104704194-08A-TX

Prepared by _____

Reviewed by _____

Date 11/13/09

Lancaster Laboratories
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Sample Reference List for SDG Number RAD23 with a Data Package Type of I

11200 - Draper Aden Associates, Inc.

Project: RAAP - Radford, VA - HWMU13/Open Burning Ground

Lab Sample Number	Lab Sample Code	Client Sample Description
5813509	13MW1	13MW1 Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813510	13MW2	13MW2 Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813511	13MW3	13MW3 Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813512	13MW4	13MW4 Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813513	13MWD	13MWDUP Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813514	13MW5	13MW5 Unspiked Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813515	13MW5	13MW5_Matrix_Spike Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813516	13MW5	13MW5_Matrix_Spike_Dup Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813517	13MW6	13MW6 Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813518	13MW7	13MW7 Grab Groundwater Sample 2009 2nd Semiannual Monitoring
5813519	13MT1	Trip_Blank_1 Water Sample 2009 2nd Semiannual Monitoring
5813520	13MT2	Trip_Blank_2 Water Sample 2009 2nd Semiannual Monitoring

acct# 11200 Cap# 1167581

CHAIN OF CUSTODY RECORD

Sample# 5813509-20

Laboratory: Lancaster Laboratories, 2425 New Holland Pike, Lancaster, PA, 17605-2425/ Kay Hower, 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:** RAAP, Radford, Virginia **Location:** Open Burning Ground (OBG)/HWMU13 **Event:** 2009 2nd Semiannual Groundwater Monitoring Eve **DAA JN:** 803204-07 **Lab JN:**	**Project Specific (PS) QC:** ☑ YES ☐ NO **Sample Collection for Project Complete?** ☑ YES ☐ NO UPS# 1Z-237-301-01-5734-2530 **Carrier:** **Tracking Number:**		

Box 1: Matrix
SW 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 ☐ NO
Bill: ☐ Client ☑ Consultant
Preserved and shipped on ice: ☑ YES ☐ NO

Box 4 - Sample Type					G								
Box 3 - Filtered/Unfiltered					U								
Required pH of Sample					<2								
Box 2 - Preservative					A								
Box 5 - Sample Container Type					3-40 ml V								
Sample ID	Date: 2009	Time	Box 1: Matrix	Number of Bottles DS 10/14/09	8260B/5030B 25 ml Purge								
13MW1	10/20	1040	GW	3	X								
13MW2	10/20	0930	GW	3	X								
13MW3	10/19	0740	GW	3	X								
13MW4	10/20	0805	GW	3	X								
13MWDUP	10/20	0820	GW	3	X								
13MW5	10/19	0850	GW	3	X								
13MW6	10/19	1030	GW	3	X								
13MW7	10/19	1130	GW	3	X								
Trip Blank 1	10/19		GW	2	X								
Trip Blank 2	10/19		GW	2	X								

USE FOR QC

HCl pH<2 DS

GENERAL NOTES:
1. Level 1 deliverable with EDD and pdf.
2. REPORT DL/QL and estimated results.
3. See attached target analyte list.

Clients Special Instructions: level 1 with edd. See attached target analyte list.

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): Dale Slaughter	Date: 10/19/09	#1 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	#2 Relinquished by (Signature): Lee Eddington	Date: 10/21/09	Sample Storage Time Requested:		
Sampler Signature: Dale Slaughter	Time: 0600	Company Name: DAA	Time: 0800	Company Name: DAA	Time: 1700			
Sampler Name (Print): Tyler Emery	Date: 10/19/09	#1 Received by (Signature): Lee Eddington	Date: 10/21/09	#2 Received by (Signature): [signature]	Date: 10/22/09	30 DYS ORG/8 MTHS INORG		
Sampler Signature: Tyler Emery	Time: 0600	Company Name: DAA	Time: 0800	Company Name: LLI	Time: 930			

OK SLP 10/26/09

11/2 JYZ 10:00

acct# 11200
Cap# 1167581
sample# 5813509-20

HWMU13
Radford Army Ammunition Plant
2nd Semiannual 2009 Monitoring Event
DAA JN: B03204-07

2/2

ANALYTICAL METHOD: 8260B/5030B 25 ml purge volume
TYPE METHOD: GCMS
CLASS: VOLATILE

NO.	PARAMETER	CAS RN	Permit QL (ug/l)
1.	1,1-Dichloroethene	75-35-4	
2.	1,2-Dichloroethane	107-06-2	
3.	Benzene	71-43-2	
4.	Benzyl Chloride	100-44-7	
5.	Bromomethane	74-83-9	
6.	Carbon tetrachloride	56-23-5	
7.	Chlorobenzene	108-90-7	
8.	Chloroform	67-66-3	
9.	Hexachloroethane	67-72-1	
10.	Methyl chloride	74-87-3	
11.	Methylene chloride	75-09-2	
12.	Naphthalene	91-20-3	
13.	Tetrachloroethene	127-18-4	
14.	Toluene (methyl benzene)	108-88-3	
15.	Trichloroethene	79-01-6	
16.	Vinyl chloride	75-01-4	

OK
JCF
10.6.05

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

Environmental Sample Administration
Receipt Documentation Log

Client/Project: Draper Aden

Date of Receipt: 10/22/09

Time of Receipt: 930

Source Code: 60-1

Unpacker Emp. No.: 2316

Shipping Container Sealed: (YES) NO

Custody Seal Present * : (YES) NO

* Custody seal was intact unless otherwise noted in the discrepancy section

Package: (Chilled) Not Chilled

Temperature of Shipping Containers							
Cooler #	Thermometer ID	Temperature (°C)	Temp Bottle (TB) or Surface Temp (ST)	Wet Ice (WI) or Dry Ice (DI) or Ice Packs (IP)	Ice Present? Y/N	Loose (L) Bagged Ice (B) or NA	Comments
1	D129965	1.4°C	TB	WI	Y	B	
2	↓	2.5°C	↓	↓	↓	↓	
3							
4							
5							
6							

Number of Trip Blanks received NOT listed on chain of custody: 0

Paperwork Discrepancy/Unpacking Problems:

Sample Administration Internal Chain of Custody			
Name	Date	Time	Reason for Transfer
[signature]	10/22/09	1215	Unpacking to storage
[signature]	10/22/09	1441	Place in Storage or (Entry)
			Entry
			Entry

HAB23 0004

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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 5030B, December 1996.

02898 EPA SW846/8260 (water-25ml) #1

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: Test Methods for Evaluating Solid Wastes, SW-846 Method 8260B, December 1996.

Lancaster Laboratories

ANALYTICAL RESULTS

Prepared for:

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

540-552-0444

Prepared by:

Lancaster Laboratories
2425 New Holland Pike
Lancaster, PA 17605-2425

November 03, 2009

Project: RAAP - Radford, VA - HWMU13/Open Burning Ground

Samples arrived at the laboratory on Thursday, October 22, 2009. The group number for this submittal is 1167581.

Client Sample Description	Lancaster Labs (LLI) #
13MW1 Grab Groundwater Sample	5813509
13MW2 Grab Groundwater Sample	5813510
13MW3 Grab Groundwater Sample	5813511
13MW4 Grab Groundwater Sample	5813512
13MWDUP Grab Groundwater Sample	5813513
13MW5 Unspiked Grab Groundwater Sample	5813514
13MW5_Matrix_Spike Grab Groundwater Sample	5813515
13MW5_Matrix_Spike_Dup Grab Groundwater Sample	5813516
13MW6 Grab Groundwater Sample	5813517
13MW7 Grab Groundwater Sample	5813518
Trip_Blank_1 Water Sample	5813519
Trip_Blank_2 Water Sample	5813520

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

ELECTRONIC COPY TO	Draper Aden Associates, Inc.	Attn: Janet Frazier
1 COPY TO	Data Package Group	

RAD33 8886.

Lancaster Laboratories, Inc.
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Lancaster, PA 17605-2425
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Lancaster Laboratories

Questions? Contact your Client Services Representative
Barbara A Weyandt at (717) 656-2300

Respectfully Submitted,

Robin C. Runkle
Senior Specialist

RADZ3 8887

Lancaster Laboratories, Inc.
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717-656-2300 Fax: 717-656-2681

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

Explanation of Symbols and Abbreviations

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

RL	Reporting Limit	**BMQL**	Below Minimum Quantitation Level
N.D.	none detected	**MPN**	Most Probable Number
TNTC	Too Numerous To Count	**CP Units**	cobalt-chloroplatinate units
IU	International Units	**NTU**	nephelometric turbidity units
umhos/cm	micromhos/cm		
C	degrees Celsius	**F**	degrees Fahrenheit
meq	milliequivalents	**lb.**	pound(s)
g	gram(s)	**kg**	kilogram(s)
ug	microgram(s)	**mg**	milligram(s)
ml	milliliter(s)	**l**	liter(s)
m3	cubic meter(s)	**ul**	microliter(s)

< less than - The number following the sign is the limit of quantitation, the smallest amount of analyte which can be reliably determined using this specific test.

> greater than

J estimated value – The result is ≥ the Method Detection Limit (MDL) and < the Limit of Quantitation (LOQ).

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 of gas 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.

U.S. EPA CLP Data Qualifiers:

Organic Qualifiers

A	TIC is a possible aldol-condensation product
B	Analyte was also detected in the blank
C	Pesticide result confirmed by GC/MS
D	Compound quantitated on a diluted sample
E	Concentration exceeds the calibration range of the instrument
N	Presumptive evidence of a compound (TICs only)
P	Concentration difference between primary and confirmation columns >25%
U	Compound was not detected
X,Y,Z	Defined in case narrative

Inorganic Qualifiers

B	Value is <CRDL, but ≥IDL
E	Estimated due to interference
M	Duplicate injection precision not met
N	Spike sample not within control limits
S	Method of standard additions (MSA) used for calculation
U	Compound was not detected
W	Post digestion spike out of control limits
*****	Duplicate analysis not within control limits
+	Correlation coefficient for MSA <0.995

Analytical test results for methods listed on the laboratories' accreditation scope meet all requirements of NELAC 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.

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Lancaster Laboratories

Sample Description: 13MW1 Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813509
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/20/2009 10:40 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW1 SDG#: RAD23-01

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.6	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 06:32	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 06:32	Angela D Sneeringer	1

RAD23 0089

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

Lancaster Laboratories

Sample Description: 13MW2 Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813510
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/20/2009 09:30 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW2 SDG#: RAD23-02

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.8	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 06:54	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 06:54	Angela D Sneeringer	1

RAD23 0018

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Analysis Report

Lancaster Laboratories

Sample Description: 13MW3 Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813511
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/19/2009 07:40 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW3 SDG#: RAD23-03

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	5.7	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	0.7	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.5	0.1	0.5	1
02898	Trichloroethene	79-01-6	0.9	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 07:15	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 07:15	Angela D Sneeringer	1

RAD23 8011

Lancaster Laboratories, Inc.
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Lancaster Laboratories

Sample Description: 13MW4 Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813512
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/20/2009 08:05 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW4 SDG#: RAD23-04

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.7	0.1	0.5	1
02898	Trichloroethene	79-01-6	1.4	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 07:37	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 07:37	Angela D Sneeringer	1

RAD23 0612

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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Lancaster Laboratories

Sample Description: 13MWDUP Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813513
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/20/2009 08:20 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MWD SDG#: RAD23-05FD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.7	0.1	0.5	1
02898	Trichloroethene	79-01-6	1.4	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 07:59	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 07:59	Angela D Sneeringer	1

RAD23 5813

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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Analysis Report

Lancaster Laboratories

Sample Description: 13MW5 Unspiked Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813514
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/19/2009 08:50 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW5 SDG#: RAD23-06BKG

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	0.2 J	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.6	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 08:20	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 08:20	Angela D Sneeringer	1

RAD23 0814

Lancaster Laboratories, Inc.
2425 New Holland Pike
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Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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

Lancaster Laboratories

Sample Description: 13MW5_Matrix_Spike Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813515
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/19/2009 08:50 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW5 SDG#: RAD23-06MS

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	5.9	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	4.8	0.1	0.5	1
02898	Bromomethane	74-83-9	6.2	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.6	0.1	0.5	1
02898	Chlorobenzene	108-90-7	6.0	0.1	0.5	1
02898	Chloroform	67-66-3	6.2	0.1	0.5	1
02898	Chloromethane	74-87-3	6.5	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	6.0	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	6.1	0.1	0.5	1
02898	Hexachloroethane	67-72-1	5.2	0.1	0.5	1
02898	Methylene Chloride	75-09-2	5.9	0.2	0.5	1
02898	Naphthalene	91-20-3	5.3	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	6.0	0.1	0.5	1
02898	Toluene	108-88-3	6.6	0.1	0.5	1
02898	Trichloroethene	79-01-6	6.1	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	6.6	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 08:42	Angela D Sneeringer	1
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 09:26	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 08:42	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	C093012AA	10/29/2009 08:42	Angela D Sneeringer	1

RAD23 0815

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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

Analysis Report

Lancaster Laboratories

Sample Description: 13MW5_Matrix_Spike_Dup Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813516
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/19/2009 08:50 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW5 SDG#: RAD23-06MSD

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	5.8	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	4.7	0.1	0.5	1
02898	Bromomethane	74-83-9	5.9	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	6.5	0.1	0.5	1
02898	Chlorobenzene	108-90-7	5.9	0.1	0.5	1
02898	Chloroform	67-66-3	6.0	0.1	0.5	1
02898	Chloromethane	74-87-3	6.0	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	5.8	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	6.0	0.1	0.5	1
02898	Hexachloroethane	67-72-1	5.1	0.1	0.5	1
02898	Methylene Chloride	75-09-2	5.8	0.2	0.5	1
02898	Naphthalene	91-20-3	5.4	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	6.1	0.1	0.5	1
02898	Toluene	108-88-3	6.5	0.1	0.5	1
02898	Trichloroethene	79-01-6	6.0	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	6.2	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 09:04	Angela D Sneeringer	1
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 09:48	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 09:04	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	2	C093012AA	10/29/2009 09:04	Angela D Sneeringer	1

RAD23 5816

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

Analysis Report

Lancaster Laboratories

Sample Description: 13MW6 Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813517
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/19/2009 10:30 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW6 SDG#: RAD23-07

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	SW-846 8260B 25mL purge		ug/l	ug/l	ug/l	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	0.6	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093012AA	10/29/2009 10:10	Angela D Sneeringer	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093012AA	10/29/2009 10:10	Angela D Sneeringer	1

RAD23 0817

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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

Analysis Report

Lancaster Laboratories

Sample Description: 13MW7 Grab Groundwater Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813518
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/19/2009 11:30 by DS

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MW7 SDG#: RAD23-08

CAT No.	Analysis Name	CAS Number	As Received Result		As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**		**ug/l**	**ug/l**	
02898	Benzene	71-43-2	N.D.		0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.		0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.		0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.		0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.		0.1	0.5	1
02898	Chloroform	67-66-3	N.D.		0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.		0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.		0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.		0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.		0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.		0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.		0.1	0.5	1
02898	Tetrachloroethene	127-18-4	0.2	J	0.1	0.5	1
02898	Toluene	108-88-3	0.5		0.1	0.5	1
02898	Trichloroethene	79-01-6	2.1		0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.		0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093021AA	10/29/2009 14:59	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093021AA	10/29/2009 14:59	Jason M Long	1

RAD23 0818

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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

Lancaster Laboratories

Sample Description: Trip_Blank_1 Water Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813519
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/09/2009

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MT1 SDG#: RAD23-09TB

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	1.2	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093021AA	10/29/2009 15:21	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093021AA	10/29/2009 15:21	Jason M Long	1

RAD23 0019

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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

Lancaster Laboratories

Sample Description: Trip_Blank_2 Water Sample
2009 2nd Semiannual Monitoring
RAAP - Radford, VA - HWMU13/Open Burning Ground

LLI Sample # WW 5813520
LLI Group # 1167581
VA

Project Name: RAAP - Radford, VA - HWMU13/Open Burning Ground

Collected: 10/09/2009

Account Number: 11200

Submitted: 10/22/2009 09:30
Reported: 11/03/2009 at 17:03
Discard: 12/04/2009

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

13MT2 SDG#: RAD23-10TB*

CAT No.	Analysis Name	CAS Number	As Received Result	As Received Method Detection Limit*	As Received Limit of Quantitation	Dilution Factor
GC/MS Volatiles	**SW-846 8260B 25mL purge**		**ug/l**	**ug/l**	**ug/l**	
02898	Benzene	71-43-2	N.D.	0.1	0.5	1
02898	Benzyl Chloride	100-44-7	N.D.	0.1	0.5	1
02898	Bromomethane	74-83-9	N.D.	0.1	0.5	1
02898	Carbon Tetrachloride	56-23-5	N.D.	0.1	0.5	1
02898	Chlorobenzene	108-90-7	N.D.	0.1	0.5	1
02898	Chloroform	67-66-3	N.D.	0.1	0.5	1
02898	Chloromethane	74-87-3	N.D.	0.2	0.5	1
02898	1,2-Dichloroethane	107-06-2	N.D.	0.1	0.5	1
02898	1,1-Dichloroethene	75-35-4	N.D.	0.1	0.5	1
02898	Hexachloroethane	67-72-1	N.D.	0.1	0.5	1
02898	Methylene Chloride	75-09-2	N.D.	0.2	0.5	1
02898	Naphthalene	91-20-3	N.D.	0.1	0.5	1
02898	Tetrachloroethene	127-18-4	N.D.	0.1	0.5	1
02898	Toluene	108-88-3	1.5	0.1	0.5	1
02898	Trichloroethene	79-01-6	N.D.	0.1	0.5	1
02898	Vinyl Chloride	75-01-4	N.D.	0.1	0.5	1

General Sample Comments

All QC is compliant unless otherwise noted. Please refer to the Quality Control Summary for overall QC performance data and associated samples.

Laboratory Sample Analysis Record

CAT No.	Analysis Name	Method	Trial#	Batch#	Analysis Date and Time	Analyst	Dilution Factor
02898	EPA SW846/8260 (water-25ml) #1	SW-846 8260B 25mL purge	1	C093021AA	10/29/2009 15:43	Jason M Long	1
01163	GC/MS VOA Water Prep	SW-846 5030B	1	C093021AA	10/29/2009 15:43	Jason M Long	1

RAD23 0028

Lancaster Laboratories, Inc.
2425 New Holland Pike
PO Box 12425
Lancaster, PA 17605-2425
717-656-2300 Fax: 717-656-2681

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

Volatiles by GC/MS Data

Case Narrative
Conformance/Nonconformance Summary

CASE NARRATIVE
Client: Draper Aden Associates, Inc.
SDG#: RAD23

LANCASTER LABORATORIES
VOLATILES BY GC/MS

SAMPLE NUMBER(S):

LL #'s	Sample Code	Matrix Water	Comments
5813509	13MW1	X	
5813510	13MW2	X	
5813511	13MW3	X	
5813512	13MW4	X	
5813513	13MWD	X	
5813514	13MW5	X	Unspiked
5813515	13MW5MS	X	Matrix Spike
5813515	13MW5MS1	X	Matrix Spike
5813516	13MW5MSD	X	Matrix Spike Dup
5813516	13MW5MSD1	X	Matrix Spike Dup
5813517	13MW6	X	
5813518	13MW7	X	
5813519	13MT1	X	Client Blank
5813520	13MT2	X	Client Blank

LABORATORY SUBMITTED QC:

VBLKC10	VBLKC10	X	Method Blank
VBLKC11	VBLKC11	X	Method Blank
LCSC10	LCSC10	X	Lab Control Sample
LCS1C10	LCS1C10	X	Lab Control Sample
LCSC11	LCSC11	X	Lab Control Sample
LCS1C11	LCS1C11	X	Lab Control Sample

SAMPLE PREPARATION:

No sample preparation was necessary for the VOA fraction.

ANALYSIS:

No problems were encountered during the analysis of these samples.

RAD23 0023

QUALITY CONTROL and NONCONFORMANCE SUMMARY:

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

All QC is within specifications.

DATA INTERPRETATION:

No further interpretation is necessary for the data submitted.

Case Narrative reviewed and approved by:

Date 11/13/09

Dana M. Kauffman
Manager, Data Deliverables

RAD23 0824

QC Summary

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC10

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC10

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct28c.b/cc28b52.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/28/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
75-71-8	Dichlorodifluoromethane		0.1	U
115-10-6	Dimethyl ether		0.1	U
74-87-3	Chloromethane		0.2	U
75-01-4	Vinyl Chloride		0.1	U
74-83-9	Bromomethane		0.1	U
75-00-3	Chloroethane		0.1	U
75-43-4	Dichlorofluoromethane		0.2	U
75-69-4	Trichlorofluoromethane		0.1	U
60-29-7	Ethyl Ether		0.1	U
354-23-4	Freon 123a		0.2	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethene		0.1	U
76-13-1	Freon 113		0.2	U
67-64-1	Acetone		3.0	U
74-88-4	Methyl Iodide		0.1	U
75-15-0	Carbon Disulfide		0.4	U
75-05-8	Acetonitrile		7.0	U
107-05-1	Allyl Chloride		0.1	U
79-20-9	Methyl Acetate		0.3	U
75-09-2	Methylene Chloride		0.2	U
75-65-0	t-Butyl Alcohol		4.0	U
540-59-0	1,2-Dichloroethene (Total)		0.1	U
107-13-1	Acrylonitrile		1.0	U
156-60-5	trans-1,2-Dichloroethene		0.1	U
1634-04-4	Methyl Tertiary Butyl Ether		0.1	U
110-54-3	n-Hexane		0.1	U
75-34-3	1,1-Dichloroethane		0.1	U
108-05-4	Vinyl Acetate		0.2	U
108-20-3	di-Isopropyl Ether		0.1	U
126-99-8	2-Chloro-1,3-Butadiene		0.1	U

BAB23 0026

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC10

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC10

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct28c.b/cc28b52.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/28/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
637-92-3	Ethyl t-Butyl Ether		0.1	U
156-59-2	cis-1,2-Dichloroethene		0.1	U
78-93-3	2-Butanone		1.0	U
594-20-7	2,2-Dichloropropane		0.1	U
107-12-0	Propionitrile		2.0	U
126-98-7	Methacrylonitrile		1.0	U
74-97-5	Bromochloromethane		0.1	U
109-99-9	Tetrahydrofuran		2.0	U
67-66-3	Chloroform		0.1	U
71-55-6	1,1,1-Trichloroethane		0.1	U
110-82-7	Cyclohexane		0.1	U
563-58-6	1,1-Dichloropropene		0.1	U
56-23-5	Carbon Tetrachloride		0.1	U
78-83-1	Isobutyl Alcohol		10	U
71-43-2	Benzene		0.1	U
107-06-2	1,2-Dichloroethane		0.1	U
994-05-8	t-Amyl Methyl Ether		0.1	U
142-82-5	n-Heptane		0.2	U
71-36-3	n-Butanol		20	U
79-01-6	Trichloroethene		0.1	U
78-87-5	1,2-Dichloropropane		0.1	U
108-87-2	Methylcyclohexane		0.1	U
74-95-3	Dibromomethane		0.1	U
80-62-6	Methyl Methacrylate		0.1	U
123-91-1	1,4-Dioxane		20	U
75-27-4	Bromodichloromethane		0.1	U
79-46-9	2-Nitropropane		1.0	U
110-75-8	2-Chloroethyl Vinyl Ether		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.1	U
108-10-1	4-Methyl-2-Pentanone		1.0	U

RAD23 0027

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC10

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC10

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct28c.b/cc28b52.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/28/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
108-88-3	Toluene		0.1	U
10061-02-6	trans-1,3-Dichloropropene		0.1	U
97-63-2	Ethyl Methacrylate		0.1	U
79-00-5	1,1,2-Trichloroethane		0.1	U
142-28-9	1,3-Dichloropropane		0.1	U
127-18-4	Tetrachloroethene		0.1	U
591-78-6	2-Hexanone		1.0	U
124-48-1	Dibromochloromethane		0.1	U
106-93-4	1,2-Dibromoethane		0.1	U
108-90-7	Chlorobenzene		0.1	U
630-20-6	1,1,1,2-Tetrachloroethane		0.1	U
100-41-4	Ethylbenzene		0.1	U
1330-20-7	Xylene (Total)		0.1	U
179601-23-1	m+p-Xylene		0.1	U
95-47-6	o-Xylene		0.1	U
100-42-5	Styrene		0.1	U
75-25-2	Bromoform		0.1	U
98-82-8	Isopropylbenzene		0.1	U
108-94-1	Cyclohexanone		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.1	U
108-86-1	Bromobenzene		0.1	U
110-57-6	trans-1,4-Dichloro-2-Butene		1.0	U
96-18-4	1,2,3-Trichloropropane		0.3	U
103-65-1	n-Propylbenzene		0.1	U
95-49-8	2-Chlorotoluene		0.1	U
108-67-8	1,3,5-Trimethylbenzene		0.1	U
106-43-4	4-Chlorotoluene		0.1	U
98-06-6	tert-Butylbenzene		0.1	U
76-01-7	Pentachloroethane		0.2	U
95-63-6	1,2,4-Trimethylbenzene		0.1	U

RAD23 0028

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC10

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC10

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct28c.b/cc28b52.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/28/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
135-98-8	sec-Butylbenzene		0.1	U
541-73-1	1,3-Dichlorobenzene		0.1	U
99-87-6	p-Isopropyltoluene		0.1	U
106-46-7	1,4-Dichlorobenzene		0.1	U
526-73-8	1,2,3-Trimethylbenzene		0.1	U
100-44-7	Benzyl Chloride		0.1	U
104-51-8	n-Butylbenzene		0.1	U
95-50-1	1,2-Dichlorobenzene		0.1	U
67-72-1	Hexachloroethane		0.1	U
96-12-8	1,2-Dibromo-3-Chloropropane		0.2	U
120-82-1	1,2,4-Trichlorobenzene		0.1	U
87-68-3	Hexachlorobutadiene		0.1	U
91-20-3	Naphthalene		0.1	U
87-61-6	1,2,3-Trichlorobenzene		0.1	U

RAD23 0829

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC11

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC11

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct29a.b/cc29b01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/29/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
75-71-8	Dichlorodifluoromethane		0.1	U
115-10-6	Dimethyl ether		0.1	U
74-87-3	Chloromethane		0.2	U
75-01-4	Vinyl Chloride		0.1	U
74-83-9	Bromomethane		0.1	U
75-00-3	Chloroethane		0.1	U
75-43-4	Dichlorofluoromethane		0.2	U
75-69-4	Trichlorofluoromethane		0.1	U
60-29-7	Ethyl Ether		0.1	U
354-23-4	Freon 123a		0.2	U
107-02-8	Acrolein		5.0	U
75-35-4	1,1-Dichloroethene		0.1	U
76-13-1	Freon 113		0.2	U
67-64-1	Acetone		3.0	U
74-88-4	Methyl Iodide		0.1	U
75-15-0	Carbon Disulfide		0.4	U
75-05-8	Acetonitrile		7.0	U
107-05-1	Allyl Chloride		0.1	U
79-20-9	Methyl Acetate		0.3	U
75-09-2	Methylene Chloride		0.2	U
75-65-0	t-Butyl Alcohol		4.0	U
540-59-0	1,2-Dichloroethene (Total)		0.1	U
107-13-1	Acrylonitrile		1.0	U
156-60-5	trans-1,2-Dichloroethene		0.1	U
1634-04-4	Methyl Tertiary Butyl Ether		0.1	U
110-54-3	n-Hexane		0.1	U
75-34-3	1,1-Dichloroethane		0.1	U
108-05-4	Vinyl Acetate		0.2	U
108-20-3	di-Isopropyl Ether		0.1	U
126-99-8	2-Chloro-1,3-Butadiene		0.1	U

EAD23 0038

FORM I VOA

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC11

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC11

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct29a.b/cc29b01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/29/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
637-92-3	Ethyl t-Butyl Ether		0.1	U
156-59-2	cis-1,2-Dichloroethene		0.1	U
78-93-3	2-Butanone		1.0	U
594-20-7	2,2-Dichloropropane		0.1	U
107-12-0	Propionitrile		2.0	U
126-98-7	Methacrylonitrile		1.0	U
74-97-5	Bromochloromethane		0.1	U
109-99-9	Tetrahydrofuran		2.0	U
67-66-3	Chloroform		0.1	U
71-55-6	1,1,1-Trichloroethane		0.1	U
110-82-7	Cyclohexane		0.1	U
563-58-6	1,1-Dichloropropene		0.1	U
56-23-5	Carbon Tetrachloride		0.1	U
78-83-1	Isobutyl Alcohol		10	U
71-43-2	Benzene		0.1	U
107-06-2	1,2-Dichloroethane		0.1	U
994-05-8	t-Amyl Methyl Ether		0.1	U
142-82-5	n-Heptane		0.2	U
71-36-3	n-Butanol		20	U
79-01-6	Trichloroethene		0.1	U
78-87-5	1,2-Dichloropropane		0.1	U
108-87-2	Methylcyclohexane		0.1	U
74-95-3	Dibromomethane		0.1	U
80-62-6	Methyl Methacrylate		0.1	U
123-91-1	1,4-Dioxane		20	U
75-27-4	Bromodichloromethane		0.1	U
79-46-9	2-Nitropropane		1.0	U
110-75-8	2-Chloroethyl Vinyl Ether		0.1	U
10061-01-5	cis-1,3-Dichloropropene		0.1	U
108-10-1	4-Methyl-2-Pentanone		1.0	U

RAD23 6631

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC11

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC11

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct29a.b/cc29b01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/29/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
108-88-3	Toluene		0.1	U
10061-02-6	trans-1,3-Dichloropropene		0.1	U
97-63-2	Ethyl Methacrylate		0.1	U
79-00-5	1,1,2-Trichloroethane		0.1	U
142-28-9	1,3-Dichloropropane		0.1	U
127-18-4	Tetrachloroethene		0.1	U
591-78-6	2-Hexanone		1.0	U
124-48-1	Dibromochloromethane		0.1	U
106-93-4	1,2-Dibromoethane		0.1	U
108-90-7	Chlorobenzene		0.1	U
630-20-6	1,1,1,2-Tetrachloroethane		0.1	U
100-41-4	Ethylbenzene		0.1	U
1330-20-7	Xylene (Total)		0.1	U
179601-23-1	m+p-Xylene		0.1	U
95-47-6	o-Xylene		0.1	U
100-42-5	Styrene		0.1	U
75-25-2	Bromoform		0.1	U
98-82-8	Isopropylbenzene		0.1	U
108-94-1	Cyclohexanone		5.0	U
79-34-5	1,1,2,2-Tetrachloroethane		0.1	U
108-86-1	Bromobenzene		0.1	U
110-57-6	trans-1,4-Dichloro-2-Butene		1.0	U
96-18-4	1,2,3-Trichloropropane		0.3	U
103-65-1	n-Propylbenzene		0.1	U
95-49-8	2-Chlorotoluene		0.1	U
108-67-8	1,3,5-Trimethylbenzene		0.1	U
106-43-4	4-Chlorotoluene		0.1	U
98-06-6	tert-Butylbenzene		0.1	U
76-01-7	Pentachloroethane		0.2	U
95-63-6	1,2,4-Trimethylbenzene		0.1	U

RAD23 0032

1A

VOLATILE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

VBLKC11

Lab Name: Lancaster Laboratories Contract:_____

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

Matrix: (soil/water) WATER Lab Sample ID: VBLKC11

Sample wt/vol: 25.00(g/mL) mL Lab File ID: HP10193.i/09oct29a.b/cc29b01.d

Level: (low/med) LOW Date Received:

Moisture: not dec. _____ Date Analyzed: 10/29/09

Column: (pack/cap) CAP Dilution Factor: 1.0

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	MDL ug/L	Q
135-98-8	sec-Butylbenzene		0.1	U
541-73-1	1,3-Dichlorobenzene		0.1	U
99-87-6	p-Isopropyltoluene		0.1	U
106-46-7	1,4-Dichlorobenzene		0.1	U
526-73-8	1,2,3-Trimethylbenzene		0.1	U
100-44-7	Benzyl Chloride		0.1	U
104-51-8	n-Butylbenzene		0.1	U
95-50-1	1,2-Dichlorobenzene		0.1	U
67-72-1	Hexachloroethane		0.1	U
96-12-8	1,2-Dibromo-3-Chloropropane		0.2	U
120-82-1	1,2,4-Trichlorobenzene		0.1	U
87-68-3	Hexachlorobutadiene		0.1	U
91-20-3	Naphthalene		0.1	U
87-61-6	1,2,3-Trichlorobenzene		0.1	U

RAD23 0033

2A

WATER VOLATILE SURROGATE RECOVERY

Lab Name: Lancaster Laboratories Contract: _____

Lab Code: _____ Case No.: _____ SAS No.: _____ SDG No.: RAD23

	LL #'s	EPA SAMPLE NO.	S1 (DBF) #	S2 (DCA) #	S3 (TOL) #	S4 (BFB) #	TOT OUT
01	5813509	13MW1	97	95	95	89	0
02	5813510	13MW2	96	96	96	90	0
03	5813511	13MW3	96	94	96	89	0
04	5813512	13MW4	96	95	96	89	0
05	5813513	13MWD	97	93	96	90	0
06	5813514	13MW5	97	94	96	89	0
07	5813515	13MW5MS	97	95	97	93	0
08	5813515	13MW5MS1	95	94	98	93	0
09	5813516	13MW5MSD	96	94	96	93	0
10	5813516	13MW5MSD1	95	93	98	92	0
11	5813517	13MW6	96	95	96	89	0
12	5813518	13MW7	96	96	96	91	0
13	5813519	13MT1	96	93	96	90	0
14	5813520	13MT2	96	93	95	90	0
15	VBLKC10	VBLKC10	95	96	96	90	0
16	VBLKC11	VBLKC11	95	95	96	90	0
17	LCSC10	LCSC10	96	96	96	93	0
18	LCS1C10	LCS1C10	96	95	97	92	0
19	LCSC11	LCSC11	96	95	96	94	0
20	LCS1C11	LCS1C11	95	93	98	93	0

	QC LIMITS
S1 (DBF) = Dibromofluoromethane	(77-114)
S2 (DCA) = 1,2-Dichloroethane-d4	(74-113)
S3 (TOL) = Toluene-d8	(77-110)
S4 (BFB) = 4-Bromofluorobenzene	(78-110)

\# Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

RAD23 0034

Lancaster Laboratories, Inc.
GC/MS Volatiles Matrix Spike/Spike Duplicate Recoveries

Unspiked: cc28s68.d
13MW5 5813514
Method: SW-846 8260B (25ML)
Instrument: HP10193

Matrix Spike: cc28s69.d
13MW5MS 5813515
Matrix/Level: WL
Dilution Factor: 1.00

Spike Duplicate: cc28s70.d
13MW5MSD 5813516
Batch: C093012AA

COMPOUND NAME	MS SPIKE	MSD SPIKE	US CONC UG/L	MS CONC UG/L	MSD CONC UG/L	MS REC %	MSD REC %	Range LOWER-UPPER	INSPEC	RPD %	RPD MAX
Chloromethane	5.00	5.00	ND	6.46	6.04	129	121	55-152	YES	7	30
Vinyl Chloride	5.00	5.00	ND	6.57	6.23	131	125	57-150	YES	5	30
Bromomethane	5.00	5.00	ND	6.17	5.87	123	117	66-137	YES	5	30
1,1-Dichloroethene	5.00	5.00	ND	6.12	6.03	122	121	88-137	YES	1	30
Methylene Chloride	5.00	5.00	ND	5.87	5.79	117	116	84-122	YES	1	30
Chloroform	5.00	5.00	ND	6.19	5.99	124	120	86-136	YES	3	30
Carbon Tetrachloride	5.00	5.00	0.18	6.57	6.45	128	125	86-152	YES	2	30
Benzene	5.00	5.00	ND	5.95	5.76	119	115	87-126	YES	3	30
1,2-Dichloroethane	5.00	5.00	ND	6.01	5.80	120	116	83-143	YES	4	30
Trichloroethene	5.00	5.00	ND	6.15	6.03	123	121	85-131	YES	2	30
Toluene	5.00	5.00	0.62	6.60	6.48	120	117	83-127	YES	2	30
Tetrachloroethene	5.00	5.00	ND	6.03	6.05	121	121	86-129	YES	0	30
Chlorobenzene	5.00	5.00	ND	5.99	5.86	120	117	87-120	YES	2	30
Benzyl Chloride	5.00	5.00	ND	4.76	4.68	95	94	62-125	YES	2	30
Naphthalene	5.00	5.00	ND	5.34	5.35	107	107	55-132	YES	0	30

N/C = Could not calculate

Lab Chronicle: _____ Ent. by RMD23 0835

_____ Ver. by ____

_____

Lancaster Laboratories, Inc.
GC/MS Volatiles Matrix Spike/Spike Duplicate Recoveries

Unspiked: cc28s68.d
13MW5 5813514
Method: SW-846 8260B (25ML)
Instrument: HP10193

Matrix Spike: cc28s71.d
13MW5MS1 5813515
Matrix/Level: WL
Dilution Factor: 1.00

Spike Duplicate: cc28s72.d
13MW5MSD1 5813516
Batch: C093012AA

COMPOUND NAME	MS SPIKE	MSD SPIKE	US CONC UG/L	MS CONC UG/L	MSD CONC UG/L	MS REC %	MSD REC %	Range LOWER-UPPER	INSPEC	RPD %	RPD MAX
Hexachloroethane	5.00	5.00	ND	5.20	5.13	104	103	70-130	YES	1	30

N/C = Could not calculate

Lab Chronicle: _____ Ent. by ____

_____ Ver. by ____

RAD23 0035a

Lancaster Laboratories, Inc.
GC/MS Volatiles Laboratory Control Sample Recovery

File: cc28151.d
Inst: HP10193
Dilution Factor: 1.0

Injected: 10/29/09 at 00:18
Sample: LCSC10

Method: SW-846 8260B (25ML)
Matrix/Level: WL
Batch: C093012AA

COMPOUND NAME	SPIKE LEVEL	LCS CONC UG/L	LCS REC %	Range LOWER-UPPER	INSPEC
Dichlorodifluoromethane	5.00	2.88	58	34-140	YES
Chloromethane	5.00	4.18	84	55-135	YES
Vinyl Chloride	5.00	4.40	88	55-126	YES
Bromomethane	5.00	4.57	91	66-124	YES
Chloroethane	5.00	4.72	94	67-124	YES
Dichlorofluoromethane	5.00	5.40	108	76-131	YES
Trichlorofluoromethane	5.00	5.01	100	62-142	YES
Ethyl Ether	5.00	5.51	110	71-120	YES
Freon 123a	5.00	5.18	104	78-120	YES
Acrolein	37.50	36.95	99	32-129	YES
1,1-Dichloroethene	5.00	5.28	106	80-123	YES
Freon 113	5.00	5.21	104	78-132	YES
Acetone	37.50	47.29	126	74-137	YES
Methyl Iodide	5.00	4.89	98	71-120	YES
Carbon Disulfide	5.00	4.93	99	73-133	YES
Allyl Chloride	5.00	5.06	101	74-121	YES
Methyl Acetate	5.00	5.00	100	76-120	YES
Methylene Chloride	5.00	5.37	107	80-120	YES
t-Butyl Alcohol	50.00	55.34	111	61-127	YES
Acrylonitrile	25.00	30.27	121	76-135	YES
trans-1,2-Dichloroethene	5.00	5.33	107	80-120	YES
1,2-Dichloroethene (Total)	10.00	10.58	106	80-120	YES
Methyl Tertiary Butyl Ether	5.00	4.93	99	73-120	YES
n-Hexane	5.00	4.85	97	70-120	YES
1,1-Dichloroethane	5.00	5.32	106	80-120	YES
di-Isopropyl Ether	5.00	5.11	102	80-120	YES
2-Chloro-1,3-Butadiene	5.00	5.35	107	80-127	YES
Ethyl t-Butyl Ether	5.00	4.84	97	72-120	YES
2,2-Dichloropropane	5.00	5.26	105	80-120	YES
cis-1,2-Dichloroethene	5.00	5.26	105	80-120	YES
2-Butanone	37.50	43.92	117	71-149	YES
Propionitrile	37.50	44.81	120	76-133	YES
Methacrylonitrile	37.50	41.85	112	75-134	YES
Bromochloromethane	5.00	5.20	104	80-120	YES
Tetrahydrofuran	25.00	29.06	116	77-128	YES
Chloroform	5.00	5.48	110	80-120	YES
1,1,1-Trichloroethane	5.00	5.37	107	80-121	YES
Cyclohexane	5.00	5.01	100	77-122	YES
1,1-Dichloropropene	5.00	5.29	106	80-120	YES
Carbon Tetrachloride	5.00	5.45	109	80-129	YES
Isobutyl Alcohol	125.00	151.71	121	78-142	YES
Benzene	5.00	5.27	105	80-120	YES
1,2-Dichloroethane	5.00	5.52	110	80-127	YES
t-Amyl Methyl Ether	5.00	4.84	97	74-120	YES
n-Heptane	5.00	5.06	101	71-126	YES
n-Butanol	250.00	247.45	99	71-121	YES
Trichloroethene	5.00	5.37	107	80-120	YES
Methylcyclohexane	5.00	5.17	103	78-120	YES
1,2-Dichloropropane	5.00	5.29	106	80-120	YES
Dibromomethane	5.00	5.44	109	80-120	YES
1,4-Dioxane	125.00	141.95	114	58-160	YES
Methyl Methacrylate	5.00	5.34	107	58-139	YES
Bromodichloromethane	5.00	5.36	107	80-120	YES
2-Nitropropane	5.00	5.13	103	65-146	YES
cis-1,3-Dichloropropene	5.00	5.02	100	74-120	YES
4-Methyl-2-Pentanone	25.00	26.05	104	77-120	YES
Toluene	5.00	5.34	107	80-120	YES
trans-1,3-Dichloropropene	5.00	5.03	101	80-120	YES

N/C = Could not calculate

Lab Chronicle: _____ Ent. by 0823 0836

_____ Ver. by _____

Lancaster Laboratories, Inc.
GC/MS Volatiles Laboratory Control Sample Recovery

File: cc28l51.d
Inst: HP10193
Dilution Factor: 1.0

Injected: 10/29/09 at 00:18
Sample: LCSC10

Method: SW-846 8260B (25ML)
Matrix/Level: WL
Batch: C093012AA

COMPOUND NAME	SPIKE LEVEL	LCS CONC UG/L	LCS REC %	Range LOWER-UPPER	INSPEC
Ethyl Methacrylate	5.00	4.87	97	72-120	YES
1,1,2-Trichloroethane	5.00	5.34	107	80-120	YES
Tetrachloroethene	5.00	5.35	107	80-120	YES
1,3-Dichloropropane	5.00	5.36	107	80-120	YES
2-Hexanone	25.00	25.81	103	75-124	YES
Dibromochloromethane	5.00	5.19	104	80-120	YES
1,2-Dibromoethane	5.00	5.28	106	80-120	YES
Chlorobenzene	5.00	5.41	108	80-120	YES
1,1,1,2-Tetrachloroethane	5.00	5.35	107	80-120	YES
Ethylbenzene	5.00	5.31	106	80-120	YES
m+p-Xylene	10.00	10.86	109	80-120	YES
Xylene (Total)	15.00	16.18	108	80-120	YES
o-Xylene	5.00	5.32	106	80-120	YES
Styrene	5.00	5.31	106	80-120	YES
Bromoform	5.00	4.86	97	70-128	YES
Isopropylbenzene	5.00	5.39	108	80-120	YES
1,1,2,2-Tetrachloroethane	5.00	5.51	110	80-120	YES
Bromobenzene	5.00	5.24	105	80-120	YES
trans-1,4-Dichloro-2-Butene	25.00	23.08	92	14-166	YES
1,2,3-Trichloropropane	5.00	5.33	107	80-120	YES
n-Propylbenzene	5.00	5.23	105	80-120	YES
2-Chlorotoluene	5.00	5.27	105	80-120	YES
4-Chlorotoluene	5.00	5.28	106	80-120	YES
1,3,5-Trimethylbenzene	5.00	5.27	105	80-120	YES
Pentachloroethane	5.00	5.28	106	80-120	YES
tert-Butylbenzene	5.00	5.22	104	80-120	YES
1,2,4-Trimethylbenzene	5.00	5.31	106	80-120	YES
sec-Butylbenzene	5.00	5.30	106	80-120	YES
1,3-Dichlorobenzene	5.00	5.33	107	80-120	YES
p-Isopropyltoluene	5.00	5.26	105	80-120	YES
1,4-Dichlorobenzene	5.00	5.33	107	80-120	YES
1,2,3-Trimethylbenzene	5.00	5.17	103	49-143	YES
Benzyl Chloride	5.00	4.86	97	75-120	YES
n-Butylbenzene	5.00	5.34	107	80-120	YES
1,2-Dichlorobenzene	5.00	5.36	107	80-120	YES
1,2-Dibromo-3-Chloropropane	5.00	5.51	110	70-133	YES
1,2,4-Trichlorobenzene	5.00	5.14	103	71-120	YES
Hexachlorobutadiene	5.00	5.20	104	79-120	YES
Naphthalene	5.00	5.18	104	68-120	YES
1,2,3-Trichlorobenzene	5.00	5.28	106	71-120	YES

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

Lancaster Laboratories, Inc.
GC/MS Volatiles Laboratory Control Sample Recovery

File: cc28l53.d
Inst: HP10193
Dilution Factor: 1.0

Injected: 10/29/09 at 01:25
Sample: LCS1C10

Method: SW-846 8260B (25ML)
Matrix/Level: WL
Batch: C093012AA

COMPOUND NAME	SPIKE LEVEL	LCS CONC UG/L	LCS REC %	Range LOWER-UPPER	INSPEC
Dimethyl ether	5.00	5.11	102	71-120	YES
Acetonitrile	37.50	45.22	121	64-162	YES
Vinyl Acetate	12.50	13.62	109	45-128	YES
2-Chloroethyl Vinyl Ether	5.00	5.90	118	67-142	YES
Cyclohexanone	125.00	134.19	107	58-125	YES
cis-1,4-Dichloro-2-Butene	12.50	15.46	124	10-187	YES
Hexachloroethane	5.00	4.87	97	80-120	YES

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

RAD23 0037a

Lancaster Laboratories, Inc.
GC/MS Volatiles Laboratory Control Sample Recovery

File: cc29101.d
Inst: HP10193
Dilution Factor: 1.0

Injected: 10/29/09 at 14:03
Sample: LCSC11

Method: SW-846 8260B (25ML)
Matrix/Level: WL
Batch: C093021AA

COMPOUND NAME	SPIKE LEVEL	LCS CONC UG/L	LCS REC %	Range LOWER-UPPER	INSPEC
Dichlorodifluoromethane	5.00	4.73	95	34-140	YES
Chloromethane	5.00	5.23	105	55-135	YES
Vinyl Chloride	5.00	5.31	106	55-126	YES
Bromomethane	5.00	5.25	105	66-124	YES
Chloroethane	5.00	5.36	107	67-124	YES
Dichlorofluoromethane	5.00	5.81	116	76-131	YES
Trichlorofluoromethane	5.00	5.80	116	62-142	YES
Ethyl Ether	5.00	5.28	106	71-120	YES
Freon 123a	5.00	5.59	112	78-120	YES
Acrolein	37.50	39.25	105	32-129	YES
1,1-Dichloroethene	5.00	5.51	110	80-123	YES
Freon 113	5.00	5.56	111	78-132	YES
Acetone	37.50	49.26	131	74-137	YES
Methyl Iodide	5.00	5.09	102	71-120	YES
Carbon Disulfide	5.00	5.22	104	73-133	YES
Allyl Chloride	5.00	5.18	104	74-121	YES
Methyl Acetate	5.00	4.89	98	76-120	YES
Methylene Chloride	5.00	5.43	109	80-120	YES
t-Butyl Alcohol	50.00	55.98	112	61-127	YES
Acrylonitrile	25.00	30.48	122	76-135	YES
trans-1,2-Dichloroethene	5.00	5.49	110	80-120	YES
1,2-Dichloroethene (Total)	10.00	10.87	109	80-120	YES
Methyl Tertiary Butyl Ether	5.00	5.01	100	73-120	YES
n-Hexane	5.00	5.22	104	70-120	YES
1,1-Dichloroethane	5.00	5.52	110	80-120	YES
di-Isopropyl Ether	5.00	5.28	106	80-120	YES
2-Chloro-1,3-Butadiene	5.00	5.53	111	80-127	YES
Ethyl t-Butyl Ether	5.00	4.96	99	72-120	YES
2,2-Dichloropropane	5.00	5.37	107	80-120	YES
cis-1,2-Dichloroethene	5.00	5.38	108	80-120	YES
2-Butanone	37.50	45.07	120	71-149	YES
Propionitrile	37.50	45.30	121	76-133	YES
Methacrylonitrile	37.50	42.94	115	75-134	YES
Bromochloromethane	5.00	5.13	103	80-120	YES
Tetrahydrofuran	25.00	30.20	121	77-128	YES
Chloroform	5.00	5.67	113	80-120	YES
1,1,1-Trichloroethane	5.00	5.57	111	80-121	YES
Cyclohexane	5.00	5.34	107	77-122	YES
1,1-Dichloropropene	5.00	5.48	110	80-120	YES
Carbon Tetrachloride	5.00	5.69	114	80-129	YES
Isobutyl Alcohol	125.00	151.13	121	78-142	YES
Benzene	5.00	5.42	108	80-120	YES
1,2-Dichloroethane	5.00	5.61	112	80-127	YES
t-Amyl Methyl Ether	5.00	4.90	98	74-120	YES
n-Heptane	5.00	5.41	108	71-126	YES
n-Butanol	250.00	266.39	107	71-121	YES
Trichloroethene	5.00	5.54	111	80-120	YES
Methylcyclohexane	5.00	5.39	108	78-120	YES
1,2-Dichloropropane	5.00	5.49	110	80-120	YES
Dibromomethane	5.00	5.46	109	80-120	YES
1,4-Dioxane	125.00	152.47	122	58-160	YES
Methyl Methacrylate	5.00	5.52	110	58-139	YES
Bromodichloromethane	5.00	5.45	109	80-120	YES
2-Nitropropane	5.00	5.42	108	65-146	YES
cis-1,3-Dichloropropene	5.00	5.05	101	74-120	YES
4-Methyl-2-Pentanone	25.00	25.71	103	77-120	YES
Toluene	5.00	5.49	110	80-120	YES
trans-1,3-Dichloropropene	5.00	5.11	102	80-120	YES

N/C = Could not calculate

Lab Chronicle: _____ Ent. by [illegible] 6838

_____ Ver. by _____

Lancaster Laboratories, Inc.
GC/MS Volatiles Laboratory Control Sample Recovery

File: cc29l01.d
Inst: HP10193
Dilution Factor: 1.0

Injected: 10/29/09 at 14:03
Sample: LCSC11

Method: SW-846 8260B (25ML)
Matrix/Level: WL
Batch: C093021AA

COMPOUND NAME	SPIKE LEVEL	LCS CONC UG/L	LCS REC %	Range LOWER-UPPER	INSPEC
Ethyl Methacrylate	5.00	4.84	97	72-120	YES
1,1,2-Trichloroethane	5.00	5.45	109	80-120	YES
Tetrachloroethene	5.00	5.40	108	80-120	YES
1,3-Dichloropropane	5.00	5.44	109	80-120	YES
2-Hexanone	25.00	25.50	102	75-124	YES
Dibromochloromethane	5.00	5.22	104	80-120	YES
1,2-Dibromoethane	5.00	5.33	107	80-120	YES
Chlorobenzene	5.00	5.48	110	80-120	YES
1,1,1,2-Tetrachloroethane	5.00	5.43	109	80-120	YES
Ethylbenzene	5.00	5.43	109	80-120	YES
m+p-Xylene	10.00	10.96	110	80-120	YES
Xylene (Total)	15.00	16.39	109	80-120	YES
o-Xylene	5.00	5.43	109	80-120	YES
Styrene	5.00	5.37	107	80-120	YES
Bromoform	5.00	4.83	97	70-128	YES
Isopropylbenzene	5.00	5.44	109	80-120	YES
1,1,2,2-Tetrachloroethane	5.00	5.36	107	80-120	YES
Bromobenzene	5.00	5.35	107	80-120	YES
trans-1,4-Dichloro-2-Butene	25.00	23.02	92	14-166	YES
1,2,3-Trichloropropane	5.00	5.32	106	80-120	YES
n-Propylbenzene	5.00	5.38	108	80-120	YES
2-Chlorotoluene	5.00	5.41	108	80-120	YES
4-Chlorotoluene	5.00	5.35	107	80-120	YES
1,3,5-Trimethylbenzene	5.00	5.37	107	80-120	YES
Pentachloroethane	5.00	5.22	104	80-120	YES
tert-Butylbenzene	5.00	5.28	106	80-120	YES
1,2,4-Trimethylbenzene	5.00	5.43	109	80-120	YES
sec-Butylbenzene	5.00	5.41	108	80-120	YES
1,3-Dichlorobenzene	5.00	5.43	109	80-120	YES
p-Isopropyltoluene	5.00	5.39	108	80-120	YES
1,4-Dichlorobenzene	5.00	5.41	108	80-120	YES
1,2,3-Trimethylbenzene	5.00	5.09	102	49-143	YES
Benzyl Chloride	5.00	4.88	98	75-120	YES
n-Butylbenzene	5.00	5.48	110	80-120	YES
1,2-Dichlorobenzene	5.00	5.42	108	80-120	YES
1,2-Dibromo-3-Chloropropane	5.00	5.53	111	70-133	YES
1,2,4-Trichlorobenzene	5.00	5.16	103	71-120	YES
Hexachlorobutadiene	5.00	5.37	107	79-120	YES
Naphthalene	5.00	5.10	102	68-120	YES
1,2,3-Trichlorobenzene	5.00	5.27	105	71-120	YES

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

Lancaster Laboratories, Inc.
GC/MS Volatiles Laboratory Control Sample Recovery

File: cc28l52.d
Inst: HP10193
Dilution Factor: 1.0

Injected: 10/29/09 at 14:24
Sample: LCS1C11

Method: SW-846 8260B (25ML)
Matrix/Level: WL
Batch: C093021AA

COMPOUND NAME	SPIKE LEVEL	LCS CONC UG/L	LCS REC %	Range LOWER-UPPER	INSPEC
Dimethyl ether	5.00	4.19	84	71-120	YES
Acetonitrile	37.50	38.73	103	64-162	YES
Vinyl Acetate	12.50	12.88	103	45-128	YES
2-Chloroethyl Vinyl Ether	5.00	5.48	110	67-142	YES
Cyclohexanone	125.00	124.96	100	58-125	YES
cis-1,4-Dichloro-2-Butene	12.50	12.60	101	10-187	YES
Hexachloroethane	5.00	4.67	93	80-120	YES

N/C = Could not calculate

Lab Chronicle: _____ Ent. by _____

_____ Ver. by _____

RAD23 0039a

VOLATILE METHOD BLANK SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc28b52.d Lab Sample ID: VBLKC10

Date Analyzed: 10/28/09 Time Analyzed: 23:56

Matrix (soil/water) WATER Level: (low/med) LOW

Instrument ID: HP10193

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCSC10	LCSC10	cc28151.d	00:18
02	LCS1C10	LCS1C10	cc28153.d	01:25
03	O5TB1	5817106	cc28s51.d	02:09
04	O5FB1	5817107	cc28s52.d	02:31
05	O5H87	5817108	cc28s53.d	02:53
06	CHMEF	5808773	cc28s54.d	03:15
07	CHMEFDL	5808773	cc28s55.d	03:37
08	CHMIN	5808774	cc28s56.d	03:59
09	CHMINDL	5808774	cc28s57.d	04:20
10	ARINF	5813425	cc28s58.d	04:42
11	ARINFDL	5813425	cc28s59.d	05:04
12	AREFF	5813426	cc28s60.d	05:26
13	AREFFDL	5813426	cc28s61.d	05:48
14	ARTRB	5813427	cc28s62.d	06:10
15	13MW1	5813509	cc28s63.d	06:32
16	13MW2	5813510	cc28s64.d	06:54
17	13MW3	5813511	cc28s65.d	07:15
18	13MW4	5813512	cc28s66.d	07:37
19	13MWD	5813513	cc28s67.d	07:59
20	13MW5	5813514	cc28s68.d	08:20
21	13MW5MS	5813515	cc28s69.d	08:42
22	13MW5MSD	5813516	cc28s70.d	09:04
23	13MW5MS1	5813515	cc28s71.d	09:26
24	13MW5MSD1	5813516	cc28s72.d	09:48
25	13MW6	5813517	cc28s73.d	10:10

COMMENTS: C093012AA

RAD23 [illegible]

4A

VOLATILE METHOD BLANK SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc29b01.d Lab Sample ID: VBLKC11

Date Analyzed: 10/29/09 Time Analyzed: 13:41

Matrix (soil/water) WATER Level: (low/med) LOW

Instrument ID: HP10193

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS AND MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	LCSC11	LCSC11	cc29l01.d	14:03
02	LCS1C11	LCS1C11	cc28152.d	14:24
03	13MW7	5813518	cc29s01.d	14:59
04	13MT1	5813519	cc29s02.d	15:21
05	13MT2	5813520	cc29s03.d	15:43
06	10-D4	5813614	cc29s04.d	16:04
07	10MW1	5813615	cc29s05.d	16:26
08	10DDH	5813616	cc29s06.d	16:48
09	10DDHMS	5813617	cc29s07.d	17:09
10	10DDHMSD	5813618	cc29s08.d	17:31
11	10DDHMS1	5813617	cc29s09.d	17:53
12	10DDHMSD1	5813618	cc29s10.d	18:14
13	10-D3	5813619	cc29s11.d	18:36
14	10-FD	5813620	cc29s12.d	18:58
15	10D3D	5813621	cc29s13.d	19:20
16	ALINF	5816441	cc29s15.d	20:04
17	ALINFDL	5816441	cc29s16.d	20:26
18	ALEFF	5816442	cc29s17.d	20:48
19	ALEFFDL	5816442	cc29s18.d	21:10
20	ALEF1	5816443	cc29s19.d	21:32
21	ALEF1DL	5816443	cc29s20.d	21:53
22	ALTRB	5816444	cc29s21.d	22:15
23	38ATB	5818456	cc29s22.d	22:36
24	GW38A	5818457	cc29s23.d	22:58
25	GW38C	5818458	cc29s24.d	23:20

COMMENTS: C093021AA

HAB23 6841

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK

BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc23t01.d BFB Injection Date: 10/23/09

Instrument ID: HP10193 BFB Injection Time: 09:38

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	17.8
75	30.0 - 60.0% of mass 95	46.9
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.1
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	Greater than 50.0% of mass 95	86.3
175	5.0 - 9.0% of mass 174	6.2 (7.2)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.1 (98.7)1
177	5.0 - 9.0% of mass 176	5.5 (6.4)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD025	VSTD025	cc23i01.d	10/23/09	10:15
02	VSTD010	VSTD010	cc23i02.d	10/23/09	10:37
03	VSTD005	VSTD005	cc23i03.d	10/23/09	10:59
04	VSTD001	VSTD001	cc23i05.d	10/23/09	11:42
05	VSTD0.5	VSTD0.5	cc23i06.d	10/23/09	12:04
06	MDL0.1	MDL0.1	cc23m01.d	10/23/09	12:26
07	VSTD002	VSTD002	cc23i07.d	10/23/09	12:48
08	CICV	CICV	cc23cv1.d	10/23/09	13:31

RAD23 0042

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc28t02.d BFB Injection Date: 10/28/09

Instrument ID: HP10193 BFB Injection Time: 17:15

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	18.9
75	30.0 - 60.0% of mass 95	48.3
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.2
173	Less than 2.0% of mass 174	0.6 (0.6)1
174	Greater than 50.0% of mass 95	87.3
175	5.0 - 9.0% of mass 174	6.1 (7.0)1
176	Greater than 95.0%, but less than 101.0% of mass 174	85.4 (97.8)1
177	5.0 - 9.0% of mass 176	5.2 (6.1)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD025	VSTD025	cc28i01.d	10/28/09	18:22
02	VSTD010	VSTD010	cc28i02.d	10/28/09	18:44
03	VSTD005	VSTD005	cc28i03.d	10/28/09	19:05
04	VSTD002	VSTD002	cc28i04.d	10/28/09	19:27
05	VSTD001	VSTD001	cc28i05.d	10/28/09	20:34
06	VSTD0.5	VSTD0.5	cc28i06.d	10/28/09	20:56
07	MDL0.1	MDL0.1	cc28m01.d	10/28/09	21:17

RAD23 0042a

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc28t04.d BFB Injection Date: 10/28/09

Instrument ID: HP10193 BFB Injection Time: 22:27

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	18.9
75	30.0 - 60.0% of mass 95	48.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	Greater than 50.0% of mass 95	85.3
175	5.0 - 9.0% of mass 174	5.8 (6.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.5 (95.6)1
177	5.0 - 9.0% of mass 176	5.6 (6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD12.5	VSTD12.5	cc28c51.d	10/28/09	22:50
02	VSTD12.5	VSTD12.5	cc28c52.d	10/28/09	23:12
03	VBLKC10	VBLKC10	cc28b52.d	10/28/09	23:56
04	LCSC10	LCSC10	cc28l51.d	10/29/09	00:18
05	LCS1C10	LCS1C10	cc28l53.d	10/29/09	01:25

RAD23 00426

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc28t04.d BFB Injection Date: 10/28/09

Instrument ID: HP10193 BFB Injection Time: 22:27

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	18.9
75	30.0 - 60.0% of mass 95	48.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	Greater than 50.0% of mass 95	85.3
175	5.0 - 9.0% of mass 174	5.8 (6.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.5 (95.6)1
177	5.0 - 9.0% of mass 176	5.6 (6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD12.5	VSTD12.5	cc28c51.d	10/28/09	22:50
02	VSTD12.5	VSTD12.5	cc28c52.d	10/28/09	23:12
03	VBLKC10	VBLKC10	cc28b52.d	10/28/09	23:56
04	LCSC10	LCSC10	cc28l51.d	10/29/09	00:18
05	LCS1C10	LCS1C10	cc28l53.d	10/29/09	01:25
06	O5TB1	5817106	cc28s51.d	10/29/09	02:09
07	O5FB1	5817107	cc28s52.d	10/29/09	02:31
08	O5H87	5817108	cc28s53.d	10/29/09	02:53
09	CHMEF	5808773	cc28s54.d	10/29/09	03:15
10	CHMEFDL	5808773	cc28s55.d	10/29/09	03:37
11	CHMIN	5808774	cc28s56.d	10/29/09	03:59
12	CHMINDL	5808774	cc28s57.d	10/29/09	04:20
13	ARINF	5813425	cc28s58.d	10/29/09	04:42
14	ARINFDL	5813425	cc28s59.d	10/29/09	05:04
15	AREFF	5813426	cc28s60.d	10/29/09	05:26
16	AREFFDL	5813426	cc28s61.d	10/29/09	05:48
17	ARTRB	5813427	cc28s62.d	10/29/09	06:10
18	13MW1	5813509	cc28s63.d	10/29/09	06:32
19	13MW2	5813510	cc28s64.d	10/29/09	06:54
20	13MW3	5813511	cc28s65.d	10/29/09	07:15
21	13MW4	5813512	cc28s66.d	10/29/09	07:37
22	13MWD	5813513	cc28s67.d	10/29/09	07:59

RAD23 8843

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc28t04.d BFB Injection Date: 10/28/09

Instrument ID: HP10193 BFB Injection Time: 22:27

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	18.9
75	30.0 - 60.0% of mass 95	48.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	7.0
173	Less than 2.0% of mass 174	0.5 (0.6)1
174	Greater than 50.0% of mass 95	85.3
175	5.0 - 9.0% of mass 174	5.8 (6.8)1
176	Greater than 95.0%, but less than 101.0% of mass 174	81.5 (95.6)1
177	5.0 - 9.0% of mass 176	5.6 (6.8)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	13MW5	5813514	cc28s68.d	10/29/09	08:20
24	13MW5MS	5813515	cc28s69.d	10/29/09	08:42
25	13MW5MSD	5813516	cc28s70.d	10/29/09	09:04
26	13MW5MS1	5813515	cc28s71.d	10/29/09	09:26
27	13MW5MSD1	5813516	cc28s72.d	10/29/09	09:48
28	13MW6	5813517	cc28s73.d	10/29/09	10:10

RADZ3 0044

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc29t01.d BFB Injection Date: 10/29/09

Instrument ID: HP10193 BFB Injection Time: 12:08

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	19.2
75	30.0 - 60.0% of mass 95	50.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.6 (0.6)1
174	Greater than 50.0% of mass 95	93.3
175	5.0 - 9.0% of mass 174	6.2 (6.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	90.5 (97.0)1
177	5.0 - 9.0% of mass 176	5.6 (6.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	VSTD12.5	VSTD12.5	cc29c01.d	10/29/09	12:35
02	VSTD12.5	VSTD12.5	cc29c02.d	10/29/09	12:57
03	VBLKC11	VBLKC11	cc29b01.d	10/29/09	13:41
04	LCSC11	LCSC11	cc29l01.d	10/29/09	14:03
05	LCS1C11	LCS1C11	cc28l52.d	10/29/09	14:24
06	13MW7	5813518	cc29s01.d	10/29/09	14:59
07	13MT1	5813519	cc29s02.d	10/29/09	15:21
08	13MT2	5813520	cc29s03.d	10/29/09	15:43
09	10-D4	5813614	cc29s04.d	10/29/09	16:04
10	10MW1	5813615	cc29s05.d	10/29/09	16:26
11	10DDH	5813616	cc29s06.d	10/29/09	16:48
12	10DDHMS	5813617	cc29s07.d	10/29/09	17:09
13	10DDHMSD	5813618	cc29s08.d	10/29/09	17:31
14	10DDHMS1	5813617	cc29s09.d	10/29/09	17:53
15	10DDHMSD1	5813618	cc29s10.d	10/29/09	18:14
16	10-D3	5813619	cc29s11.d	10/29/09	18:36
17	10-FD	5813620	cc29s12.d	10/29/09	18:58
18	10D3D	5813621	cc29s13.d	10/29/09	19:20
19	ALINF	5816441	cc29s15.d	10/29/09	20:04
20	ALINFDL	5816441	cc29s16.d	10/29/09	20:26
21	ALEFF	5816442	cc29s17.d	10/29/09	20:48
22	ALEFFDL	5816442	cc29s18.d	10/29/09	21:10

RAB23 0045

5A

VOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
BROMOFLUOROBENZENE (BFB)

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID: cc29t01.d BFB Injection Date: 10/29/09

Instrument ID: HP10193 BFB Injection Time: 12:08

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	19.2
75	30.0 - 60.0% of mass 95	50.2
95	Base peak, 100% relative abundance	100.0
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0.6 (0.6)1
174	Greater than 50.0% of mass 95	93.3
175	5.0 - 9.0% of mass 174	6.2 (6.7)1
176	Greater than 95.0%, but less than 101.0% of mass 174	90.5 (97.0)1
177	5.0 - 9.0% of mass 176	5.6 (6.2)2

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

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
23	ALEF1	5816443	cc29s19.d	10/29/09	21:32
24	ALEF1DL	5816443	cc29s20.d	10/29/09	21:53
25	ALTRB	5816444	cc29s21.d	10/29/09	22:15
26	38ATB	5818456	cc29s22.d	10/29/09	22:36
27	GW38A	5818457	cc29s23.d	10/29/09	22:58
28	GW38C	5818458	cc29s24.d	10/29/09	23:20

RA023 0045

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID (Standard): cc28c52.d Date Analyzed: 10/28/09

Instrument ID: HP10193 Time Analyzed: 23:12

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	100999	4.639	2116443	8.090	1559710	11.449	937779	13.302
	UPPER LIMIT	201998	5.139	4232886	8.590	3119420	11.949	1875558	13.802
	LOWER LIMIT	50500	4.139	1058222	7.590	779855	10.949	468890	12.802
	EPA SAMPLE NO.								
01	VBLKC10	82902	4.626	2005076	8.089	1462161	11.448	826621	13.302
02	LCSC10	88233	4.627	2054326	8.090	1503993	11.448	898723	13.302
03	LCS1C10	92583	4.633	2041670	8.090	1516662	11.449	857378	13.302
04	O5TB1	91899	4.627	1967404	8.089	1445787	11.448	817519	13.302
05	O5FB1	85334	4.639	1953094	8.089	1433368	11.448	808162	13.302
06	O5H87	76914	4.639	1969800	8.089	1439050	11.448	818176	13.302
07	CHMEF	87799	4.620	1964619	8.089	1425161	11.448	799720	13.302
08	CHMEFDL	79938	4.627	1951127	8.089	1429853	11.448	804690	13.302
09	CHMIN	86542	4.633	2008130	8.089	1448205	11.448	812174	13.302
10	CHMINDL	79962	4.626	1969618	8.089	1427138	11.448	797318	13.302
11	ARINF	82817	4.633	1961962	8.089	1416051	11.448	797732	13.302
12	ARINFDL	78474	4.621	1922141	8.089	1391104	11.448	779018	13.302
13	AREFF	87279	4.639	1932201	8.089	1405823	11.448	782277	13.302
14	AREFFDL	81426	4.639	1918130	8.089	1404601	11.448	790506	13.302
15	ARTRB	77607	4.627	1865757	8.090	1360484	11.448	764065	13.302
16	13MW1	77715	4.626	1883141	8.089	1382337	11.448	784899	13.302
17	13MW2	79712	4.639	1886156	8.089	1378227	11.448	785670	13.302
18	13MW3	79683	4.633	1888087	8.089	1378780	11.448	781706	13.302
19	13MW4	78484	4.633	1887581	8.089	1381881	11.448	780374	13.302
20	13MWD	78718	4.621	1875834	8.083	1364683	11.449	777445	13.302
21	13MW5	74867	4.639	1859436	8.089	1367717	11.448	771809	13.302
22	13MW5MS	77840	4.633	1958665	8.089	1433072	11.448	855678	13.302

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.

RAD23 6847

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

FORM VIII VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID (Standard): cc28c52.d Date Analyzed: 10/28/09

Instrument ID: HP10193 Time Analyzed: 23:12

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	100999	4.639	2116443	8.090	1559710	11.449	937779	13.302
	UPPER LIMIT	201998	5.139	4232886	8.590	3119420	11.949	1875558	13.802
	LOWER LIMIT	50500	4.139	1058222	7.590	779855	10.949	468890	12.802
	EPA SAMPLE NO.								
23	13MW5MSD	89030	4.627	2053838	8.089	1492818	11.448	883812	13.302
24	13MW5MS1	88336	4.639	2044486	8.089	1498825	11.448	837604	13.302
25	13MW5MSD1	85436	4.639	2019705	8.089	1481190	11.448	829479	13.302
26	13MW6	82982	4.627	1943136	8.083	1416580	11.448	799384	13.302

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.

RAD23 0048

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

FORM VIII VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID (Standard): cc29c02.d Date Analyzed: 10/29/09

Instrument ID: HP10193 Time Analyzed: 12:57

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	97324	4.627	2068509	8.090	1514324	11.449	911811	13.302
UPPER LIMIT	194648	5.127	4137018	8.590	3028648	11.949	1823622	13.802
LOWER LIMIT	48662	4.127	1034254	7.590	757162	10.949	455906	12.802
EPA SAMPLE NO.								
01 VBLKC11	84497	4.620	1945895	8.089	1415910	11.448	791799	13.302
02 LCSC11	85858	4.633	2039181	8.089	1495556	11.448	884605	13.302
03 LCS1C11	87396	4.627	2057350	8.083	1510894	11.448	844618	13.302
04 13MW7	93922	4.633	2009919	8.089	1467108	11.448	831147	13.302
05 13MT1	85411	4.620	1967731	8.089	1432776	11.448	807186	13.302
06 13MT2	82403	4.639	1926891	8.089	1408750	11.448	784562	13.302
07 10-D4	82827	4.633	1929428	8.095	1408691	11.448	796622	13.302
08 10MW1	81214	4.627	1918620	8.090	1401291	11.449	797753	13.302
09 10DDH	80865	4.615	1941095	8.083	1409214	11.449	799893	13.302
10 10DDHMS	87141	4.626	2008157	8.089	1463545	11.448	876778	13.302
11 10DDHMSD	86255	4.621	2070288	8.089	1494492	11.448	887782	13.302
12 10DDHMS1	116724	4.620	2090688	8.089	1557546	11.448	885042	13.302
13 10DDHMSD1	88183	4.639	2034990	8.089	1492084	11.448	837945	13.302
14 10-D3	86591	4.626	1994726	8.089	1451245	11.448	818697	13.302
15 10-FD	87707	4.639	1942510	8.090	1411522	11.448	793670	13.302
16 10D3D	110926	4.620	1989841	8.089	1444020	11.448	818003	13.302
17 ALINF	92205	4.620	1962518	8.089	1413894	11.448	798655	13.302
18 ALINFDL	83377	4.633	1918994	8.090	1394977	11.448	782464	13.302
19 ALEFF	87690	4.627	1891223	8.089	1377747	11.448	773091	13.302
20 ALEFFDL	81562	4.627	1879897	8.083	1374243	11.448	772654	13.302
21 ALEF1	87699	4.626	1923917	8.089	1389159	11.448	778474	13.302
22 ALEF1DL	80249	4.626	1870109	8.089	1367001	11.448	774571	13.302

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.

RA823 6049

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

FORM VIII VOA

8A

VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: Lancaster Laboratories Contract:_____

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

Lab File ID (Standard): cc29c02.d Date Analyzed: 10/29/09

Instrument ID: HP10193 Time Analyzed: 12:57

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	97324	4.627	2068509	8.090	1514324	11.449	911811	13.302
	UPPER LIMIT	194648	5.127	4137018	8.590	3028648	11.949	1823622	13.802
	LOWER LIMIT	48662	4.127	1034254	7.590	757162	10.949	455906	12.802
	EPA SAMPLE NO.								
23	ALTRB	77640	4.633	1854315	8.089	1359357	11.448	762255	13.302
24	38ATB			1843384	8.089	1353261	11.448	763302	13.302
25	GW38A			1839177	8.090	1360683	11.455	772246	13.302
26	GW38C			1841928	8.089	1363180	11.448	767931	13.302

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.

RAD23 0850

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

FORM VIII VOA

Sample Data

Lancaster Laboratories

Component	MDL	LOQ	Units
02898: EPA SW846/8260 (water-25ml)			
Dichlorofluoromethane	0.20	0.50	ug/l
Methyl Acetate	0.30	1.0	ug/l
Methylcyclohexane	0.10	0.50	ug/l
Dichlorodifluoromethane	0.10	0.50	ug/l
Chloromethane	0.20	0.50	ug/l
Vinyl Chloride	0.10	0.50	ug/l
Bromomethane	0.10	0.50	ug/l
Chloroethane	0.10	0.50	ug/l
Trichlorofluoromethane	0.10	0.50	ug/l
Ethyl ether	0.10	0.50	ug/l
Freon 123a	0.20	0.50	ug/l
Acrolein	5.0	25.0	ug/l
1,1-Dichloroethene	0.10	0.50	ug/l
Freon 113	0.20	0.50	ug/l
Acetone	3.0	5.0	ug/l
Methyl Iodide	0.10	0.50	ug/l
Carbon Disulfide	0.40	0.50	ug/l
Acetonitrile	7.0	20.0	ug/l
Allyl Chloride	0.10	0.50	ug/l
Methylene Chloride	0.20	0.50	ug/l
t-Butyl Alcohol	4.0	10	ug/l
Acrylonitrile	1.0	5.0	ug/l
trans-1,2-Dichloroethene	0.10	0.50	ug/l
Methyl Tertiary Butyl Ether	0.10	0.50	ug/l
n-Hexane	0.10	0.50	ug/l
1,1-Dichloroethane	0.10	0.50	ug/l
di-Isopropyl Ether	0.10	0.50	ug/l
Vinyl Acetate	0.20	0.50	ug/l
2-Chloro-1,3-Butadiene	0.10	0.50	ug/l
Ethyl t-butyl ether	0.10	0.50	ug/l
2-Butanone	1.0	5.0	ug/l
cis-1,2-Dichloroethene	0.10	0.50	ug/l
2,2-Dichloropropane	0.10	0.50	ug/l
Propionitrile	2.0	10	ug/l
Methacrylonitrile	1.0	5.0	ug/l
Bromochloromethane	0.10	0.50	ug/l
Tetrahydrofuran	2.0	5.0	ug/l
Chloroform	0.10	0.50	ug/l
1,1,1-Trichloroethane	0.10	0.50	ug/l
Cyclohexane	0.10	0.50	ug/l
1,1-Dichloropropene	0.10	0.50	ug/l
Carbon Tetrachloride	0.10	0.50	ug/l
Isobutyl Alcohol	10	25.0	ug/l
Benzene	0.10	0.50	ug/l
1,2-Dichloroethane	0.10	0.50	ug/l
t-Amyl methyl ether	0.10	0.50	ug/l
n-Heptane	0.20	0.50	ug/l
n-Butanol	20.0	50	ug/l
Trichloroethene	0.10	0.50	ug/l
1,2-Dichloropropane	0.10	0.50	ug/l
Dibromomethane	0.10	0.50	ug/l
Methyl Methacrylate	0.10	0.50	ug/l
1,4-Dioxane	20.0	100	ug/l
Bromodichloromethane	0.10	0.50	ug/l
2-Nitropropane	1.0	5.0	ug/l

RAD23 6652

Lancaster Laboratories

Component	MDL	LOQ	Units
02898: EPA SW846/8260 (water-25ml)			
2-Chloroethyl vinyl ether	0.10	0.50	ug/l
cis-1,3-Dichloropropene	0.10	0.50	ug/l
4-Methyl-2-Pentanone	1.0	5.0	ug/l
Toluene	0.10	0.50	ug/l
trans-1,3-Dichloropropene	0.10	0.50	ug/l
Ethyl Methacrylate	0.10	0.50	ug/l
1,1,2-Trichloroethane	0.10	0.50	ug/l
Tetrachloroethene	0.10	0.50	ug/l
1,3-Dichloropropane	0.10	0.50	ug/l
2-Hexanone	1.0	5.0	ug/l
Dibromochloromethane	0.10	0.50	ug/l
1,2-Dibromoethane	0.10	0.50	ug/l
Chlorobenzene	0.10	0.50	ug/l
1,1,1,2-Tetrachloroethane	0.10	0.50	ug/l
Ethylbenzene	0.10	0.50	ug/l
m+p-Xylene	0.10	0.50	ug/l
o-Xylene	0.10	0.50	ug/l
Styrene	0.10	0.50	ug/l
Bromoform	0.10	0.50	ug/l
Isopropylbenzene	0.10	0.50	ug/l
Cyclohexanone	5.0	25.0	ug/l
cis-1,4-Dichloro-2-butene	0.40	1.0	ug/l
1,1,2,2-Tetrachloroethane	0.10	0.50	ug/l
Bromobenzene	0.10	0.50	ug/l
trans-1,4-Dichloro-2-butene	1.0	5.0	ug/l
1,2,3-Trichloropropane	0.30	1.0	ug/l
n-Propylbenzene	0.10	0.50	ug/l
2-Chlorotoluene	0.10	0.50	ug/l
1,3,5-Trimethylbenzene	0.10	0.50	ug/l
4-Chlorotoluene	0.10	0.50	ug/l
tert-Butylbenzene	0.10	0.50	ug/l
Pentachloroethane	0.20	0.50	ug/l
1,2,4-Trimethylbenzene	0.10	0.50	ug/l
sec-Butylbenzene	0.10	0.50	ug/l
1,3-Dichlorobenzene	0.10	0.50	ug/l
p-Isopropyltoluene	0.10	0.50	ug/l
1,4-Dichlorobenzene	0.10	0.50	ug/l
Benzyl Chloride	0.10	0.50	ug/l
1,2,3-Trimethylbenzene	0.10	0.50	ug/l
n-Butylbenzene	0.10	0.50	ug/l
1,2-Dichlorobenzene	0.10	0.50	ug/l
1,2-Dibromo-3-chloropropane	0.20	0.50	ug/l
1,2,4-Trichlorobenzene	0.10	0.50	ug/l
Hexachlorobutadiene	0.10	0.50	ug/l
Naphthalene	0.10	0.50	ug/l
1,2,3-Trichlorobenzene	0.10	0.50	ug/l
Hexachloroethane	0.10	0.50	ug/l
Dimethyl ether	0.10	0.50	ug/l

13MW1

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813509

File: /chem2/HP10193.i/09oct28c.b/cc28s63.d
Sample: 13MW1;5813509;1;0;;
Injected At:29-OCT-2009 06:32
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)

Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.627(0.012)	500	65	77715(-23)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1883141(-11)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1382337(-11)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	784899(-16)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	448751	9.658	97%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.614(0.002)	102	82257	9.503	95%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1937874	9.535	95%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	650556	8.921	89%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)				ND	ND			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	76622	0.613	0.61			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: MWB Date: 10/29/09

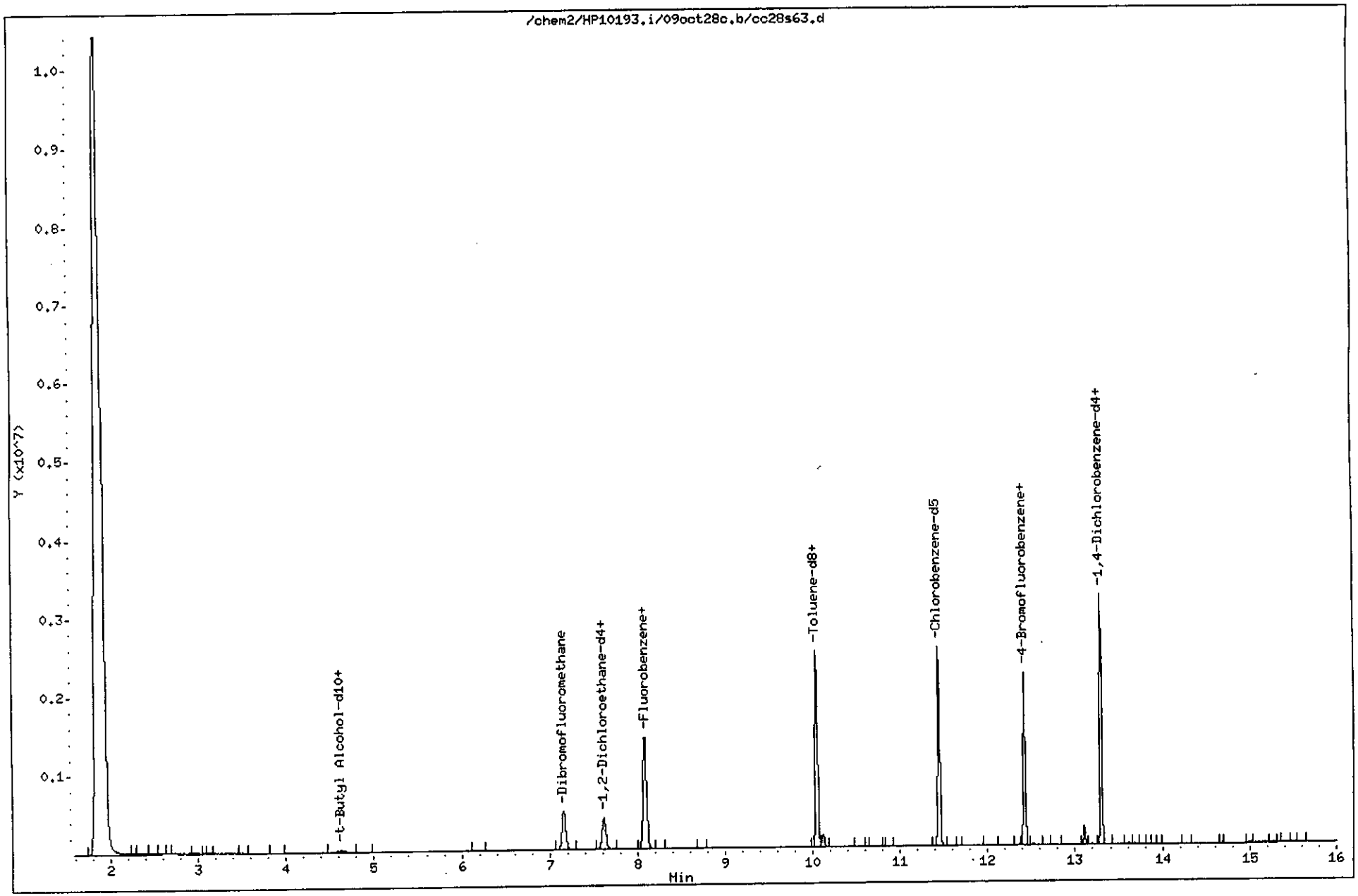
Auditor: [signature] Date: 10-29-09

Data File: /chem2/HP10193.i/09oct28c.b/cc28s63.d
Date : 29-OCT-2009 06:32
Client ID: 13MW1
Sample Info: 13MW1;5813509;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

RA823 6055



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s63.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 06:32 Analyst ID: ADS01731

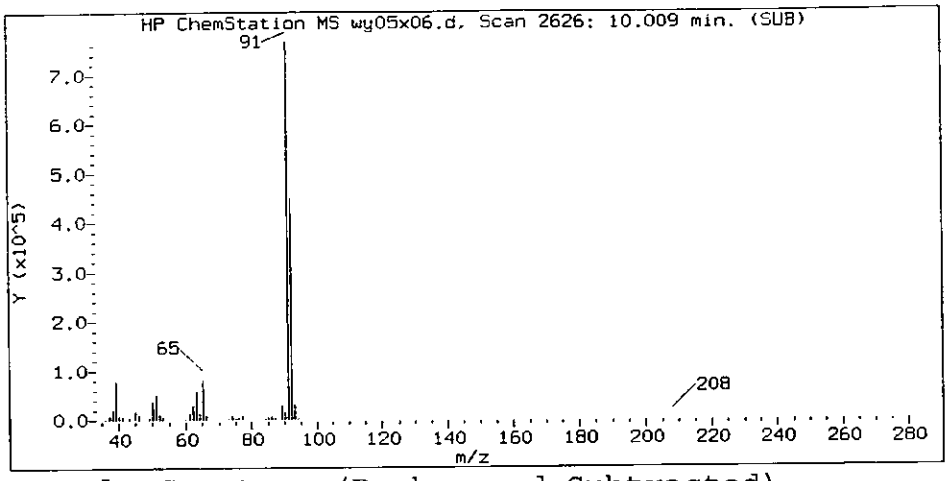
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:47 jml01693

Sample Name: 13MW1 Lab Sample ID: 5813509

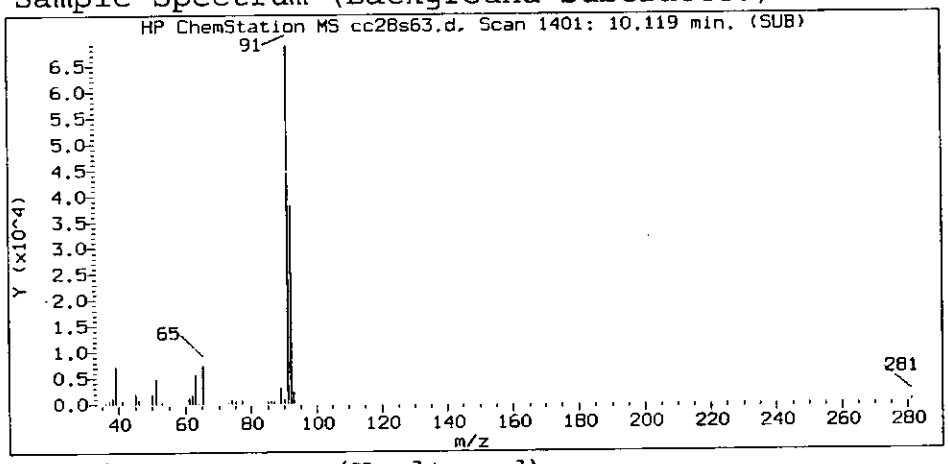
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.627	65	77715	50.000
78)*Fluorobenzene	(1)	8.089	96	1883141	10.000
100) Toluene	(2)	10.119	92	76622	0.613
110)*Chlorobenzene-d5	(2)	11.448	117	1382337	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	784899	10.000
60)$Dibromofluoromethane	(1)	7.163	113	448751	9.658
70)$1,2-Dichloroethane-d4	(1)	7.614	102	82257	9.503
98)$Toluene-d8	(2)	10.052	98	1937874	9.535
124)$4-Bromofluorobenzene	(2)	12.424	95	650556	8.921

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

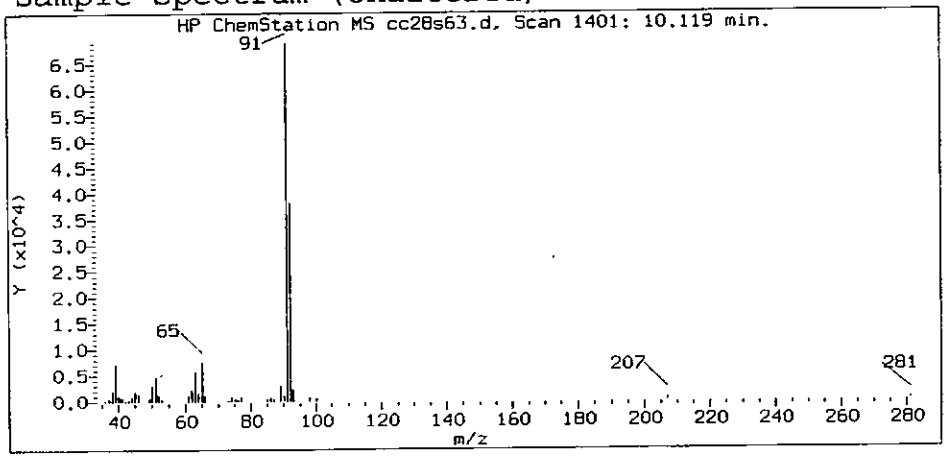
Reference Standard Spectrum for Toluene

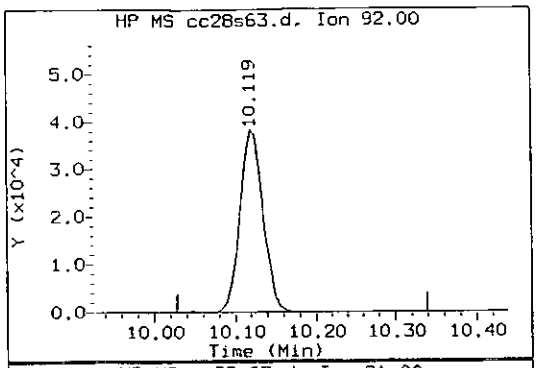


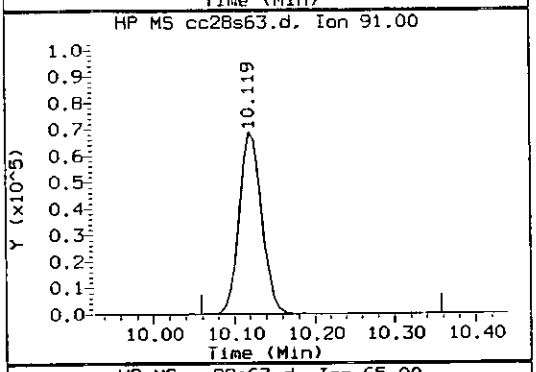
Sample Spectrum (Background Subtracted)

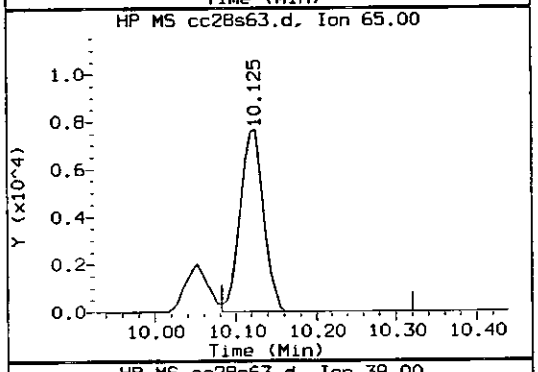


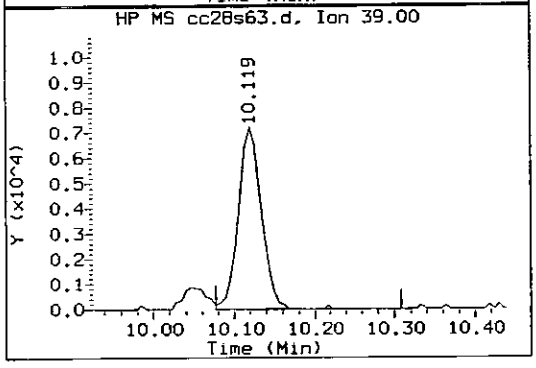
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s63.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 06:32 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:47 jml01693

Sample Name: 13MW1 Lab Sample ID: 5813509

Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.119
Quant Ion	: 92.0
Area (flag)	: 76622
Concentration (ug/L)	: 0.6134

RAD23 0057

13MW2

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813510

File: /chem2/HP10193.i/09oct28c.b/cc28s64.d
Sample: 13MW2;5813510;1;0;;
Injected At:29-OCT-2009 06:54
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)

Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.639(0.000)	502	65	79712(-21)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1886156(-11)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1378227(-12)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	785670(-16)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.169(-0.001)	113	446658	9.597	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	83561	9.639	96%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1936941	9.558	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	652879	8.979	90%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)				ND	ND			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	94207	0.756	0.76			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: _____

Analyst: _____ Date: 10/29/09

Auditor: _____ Date: 10/29/09

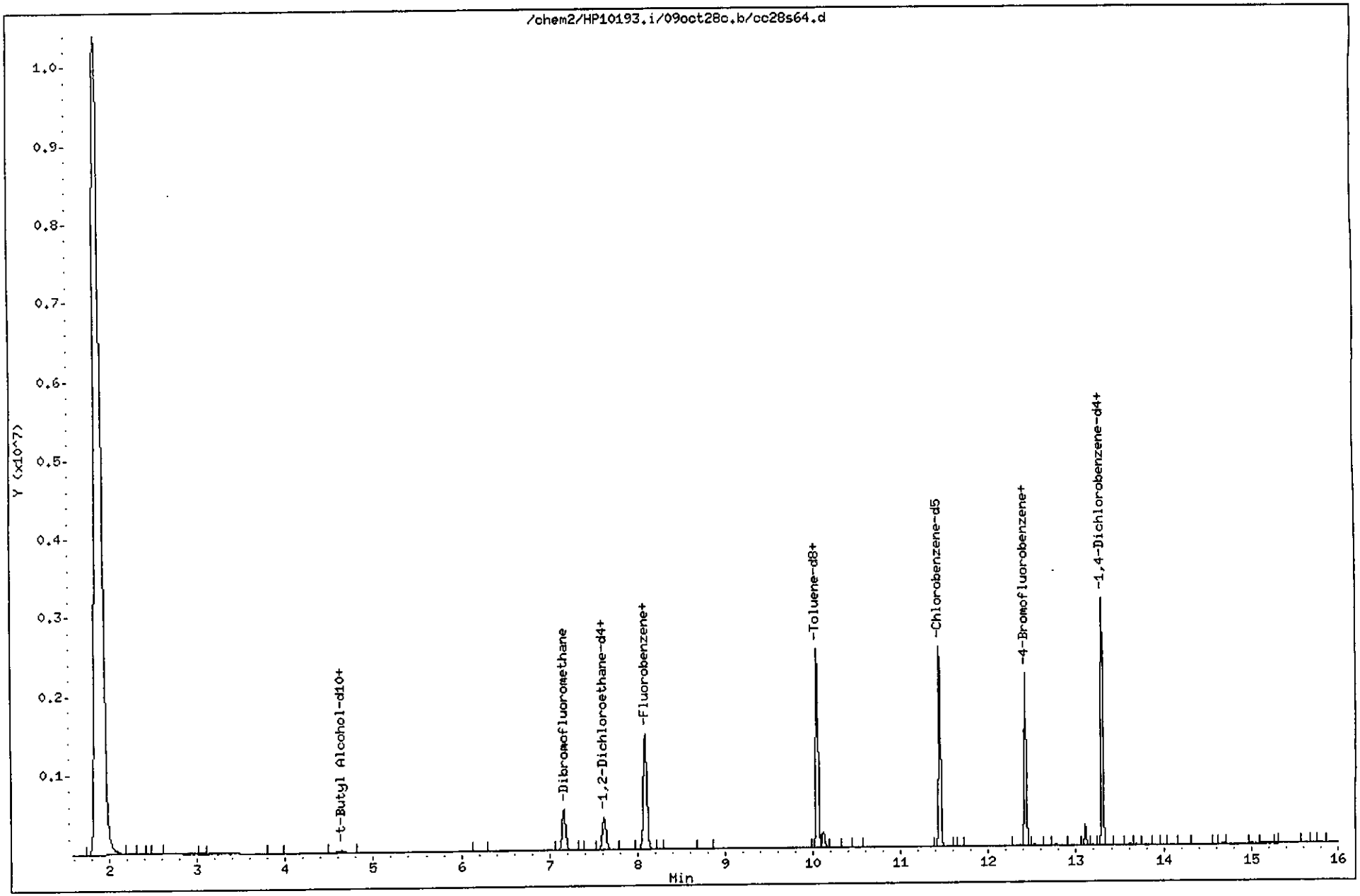
RAD23 8858

Data File: /chem2/HP10193.i/09oct28c.b/cc28s64.d
Date : 29-OCT-2009 06:54
Client ID: 13MW2
Sample Info: 13MW2;5813510;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

RAD23 8859



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s64.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 06:54 Analyst ID: ADS01731

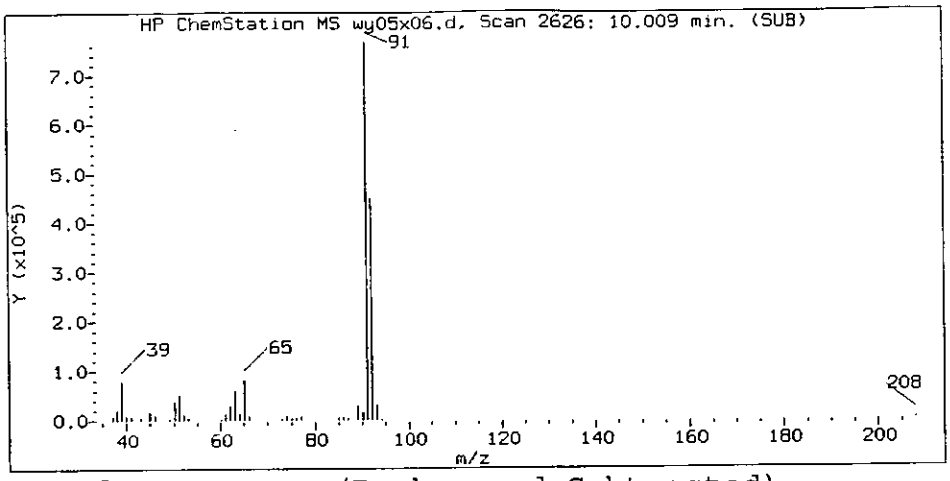
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW2 Lab Sample ID: 5813510

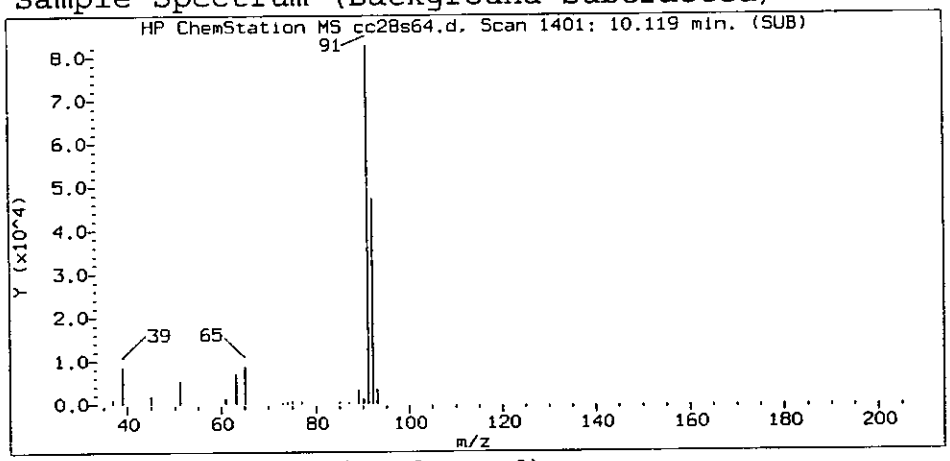
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.639	65	79712	50.000
78)*Fluorobenzene	(1)	8.089	96	1886156	10.000
100) Toluene	(2)	10.119	92	94207	0.756
110)*Chlorobenzene-d5	(2)	11.448	117	1378227	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	785670	10.000
60)$Dibromofluoromethane	(1)	7.169	113	446658	9.597
70)$1,2-Dichloroethane-d4	(1)	7.620	102	83561	9.639
98)$Toluene-d8	(2)	10.052	98	1936941	9.558
124)$4-Bromofluorobenzene	(2)	12.424	95	652879	8.979

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

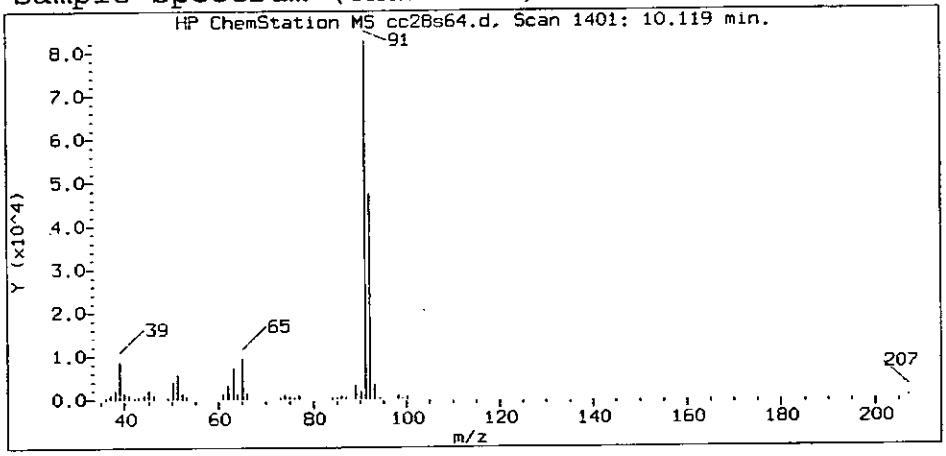
Reference Standard Spectrum for Toluene

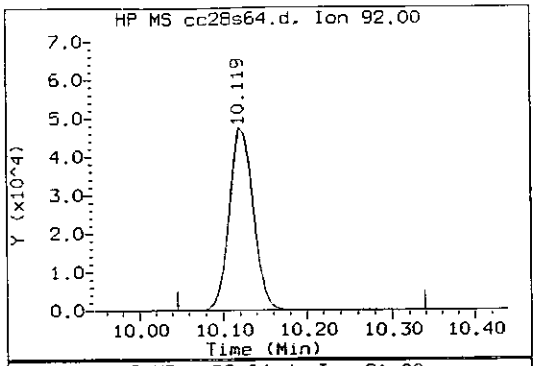


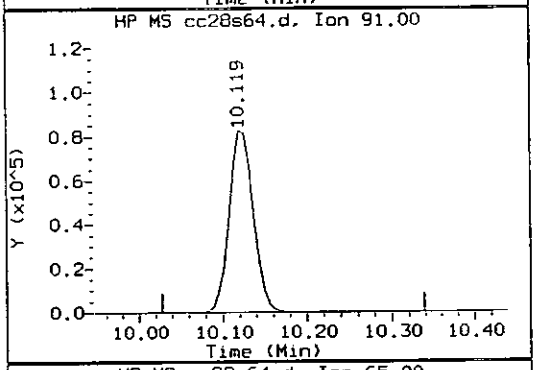
Sample Spectrum (Background Subtracted)

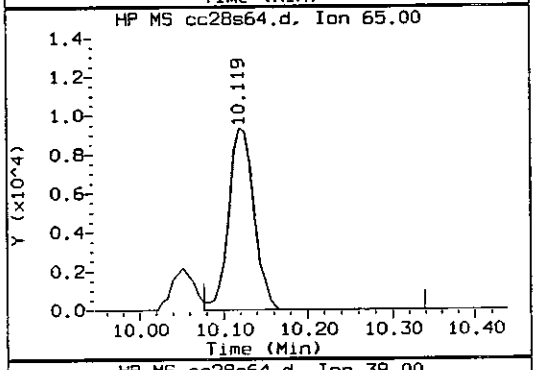


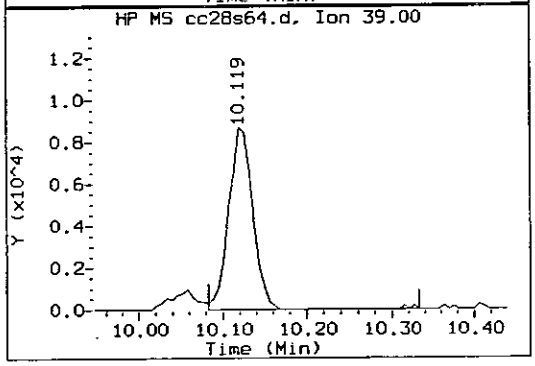
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s64.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 06:54 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW2 Lab Sample ID: 5813510

Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.119
Quant Ion	: 92.0
Area (flag)	: 94207
Concentration (ug/L)	: 0.7565

RAD23 6861

13MW3

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813511

File: /chem2/HP10193.i/09oct28c.b/cc28s65.d
Sample: 13MW3;5813511;1;0;;
Injected At:29-OCT-2009 07:15
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.633(0.006)	501	65	79683(-21)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1888087(-11)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1378780(-12)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	781706(-17)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	449494	9.648	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.626(0.000)	102	81671	9.411	94%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1946442	9.602	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	647637	8.904	89%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)	6.949(0.000)	83	52013	0.650	0.65			0.10	0.50
67) Carbon Tetrachloride	(1)	7.467(0.000)	117	334974	5.713	5.71			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)	8.577(0.000)	95	44838	0.899	0.90			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	63314	0.508	0.51			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: JMW3 Date: 10/29/09

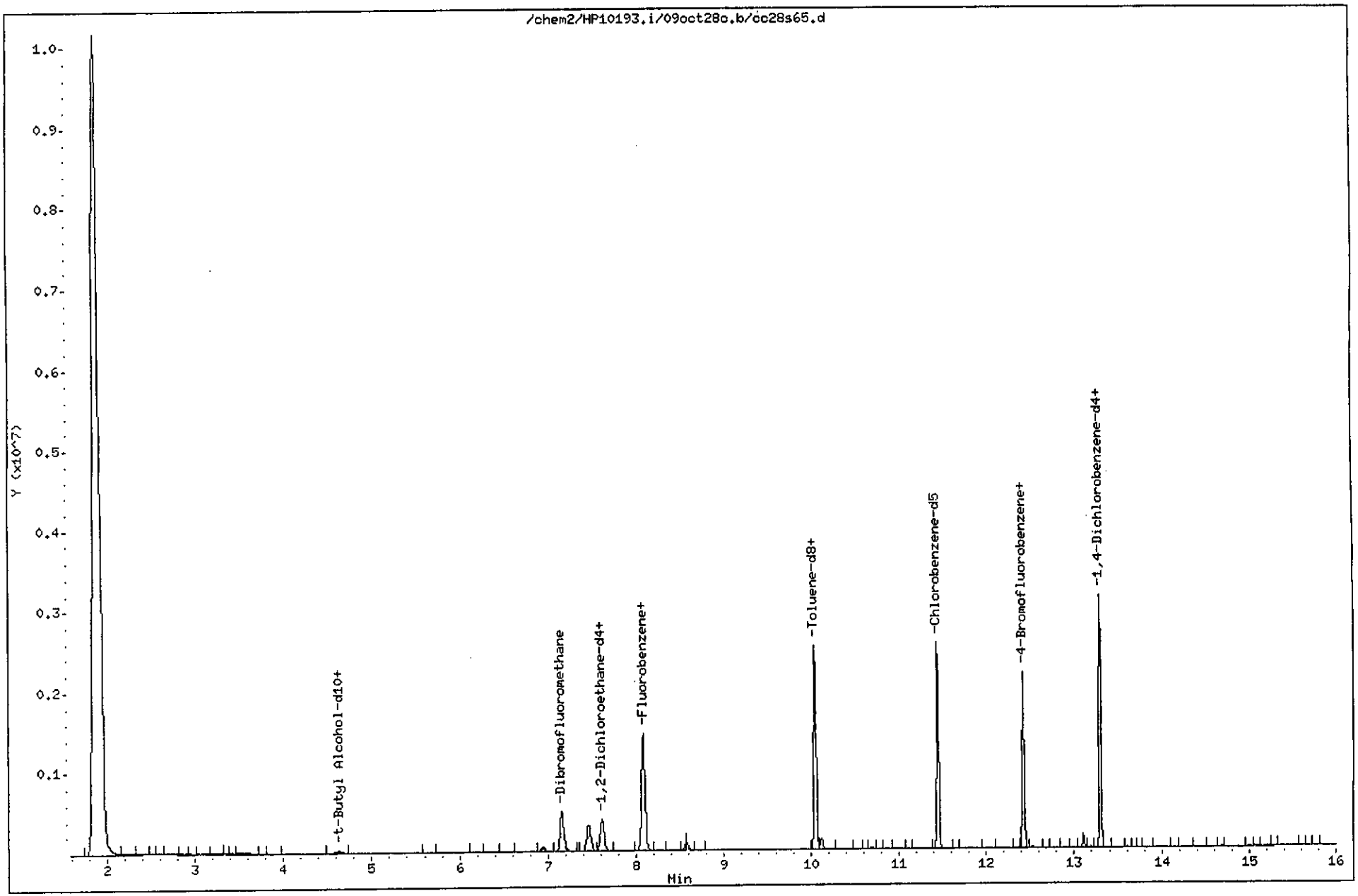
Auditor: Date: 10-29-09

Data File: /chem2/HP10193.i/09oct28c.b/cc28s65.d
Date : 29-OCT-2009 07:15
Client ID: 13MW3
Sample Info: 13MW3;5813511;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

RAB23 2863



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s65.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:15 Analyst ID: ADS01731

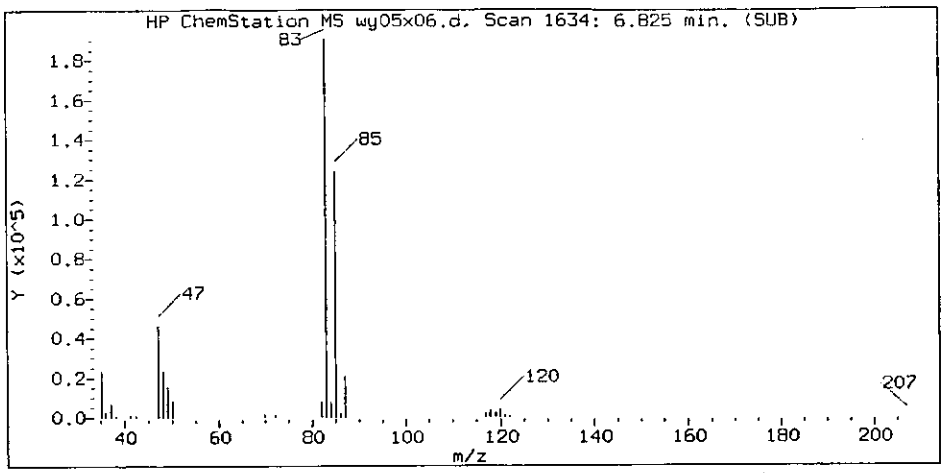
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

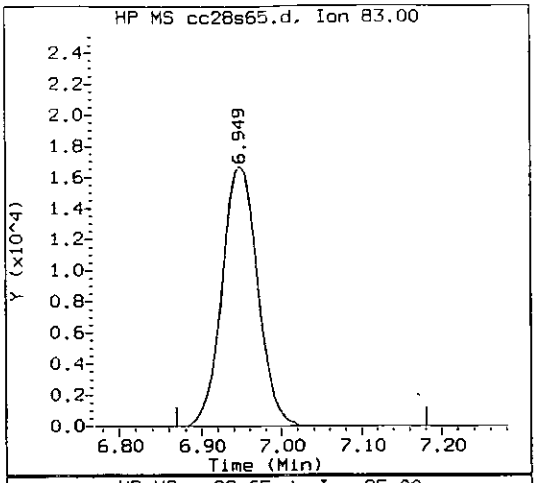
Sample Name: 13MW3 Lab Sample ID: 5813511

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.633	65	79683	50.000
59) Chloroform	(1)	6.949	83	52013	0.650
67) Carbon Tetrachloride	(1)	7.467	117	334974	5.713
78)*Fluorobenzene	(1)	8.089	96	1888087	10.000
82) Trichloroethene	(1)	8.577	95	44838	0.899
100) Toluene	(2)	10.119	92	63314	0.508
110)*Chlorobenzene-d5	(2)	11.448	117	1378780	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	781706	10.000
60)$Dibromofluoromethane	(1)	7.163	113	449494	9.648
70)$1,2-Dichloroethane-d4	(1)	7.626	102	81671	9.411
98)$Toluene-d8	(2)	10.052	98	1946442	9.602
124)$4-Bromofluorobenzene	(2)	12.424	95	647637	8.904

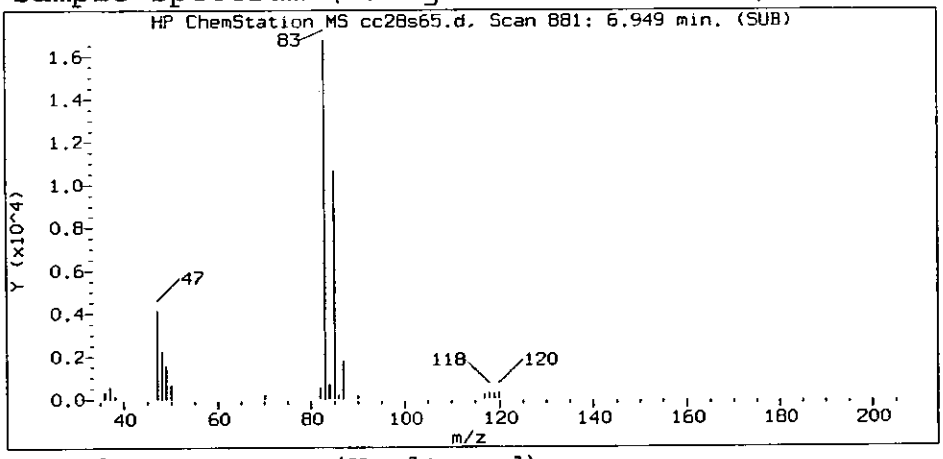
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

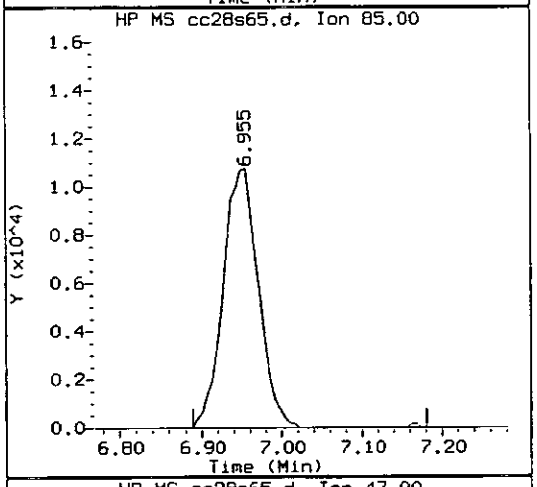
Reference Standard Spectrum for Chloroform



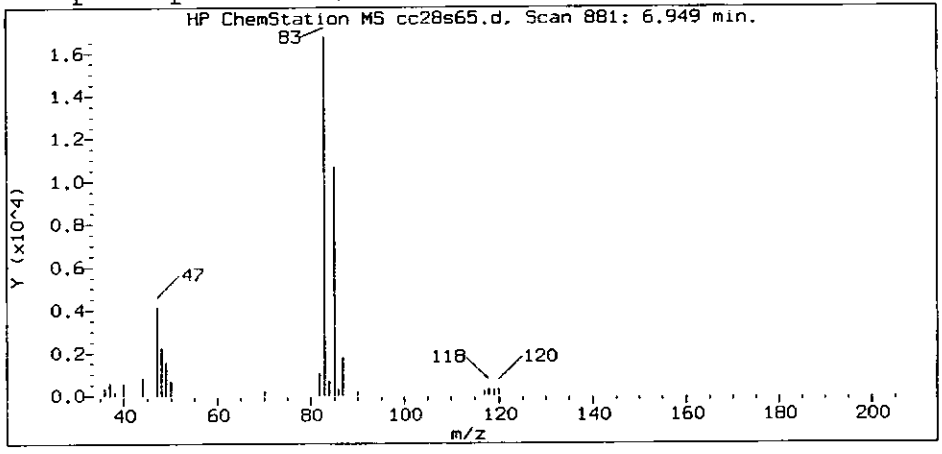


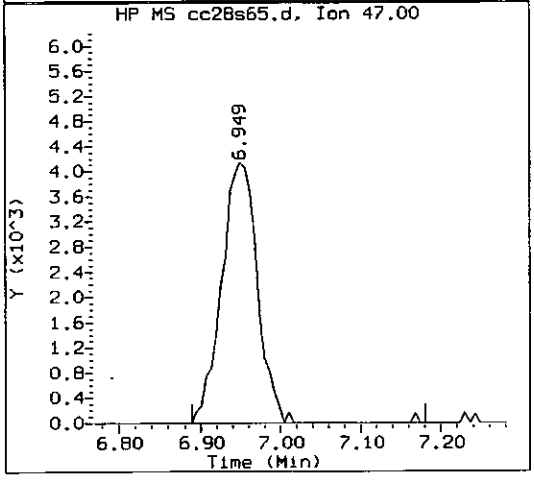
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP10193.i/09oct28c.b/cc28s65.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:15 Analyst ID: ADS01731

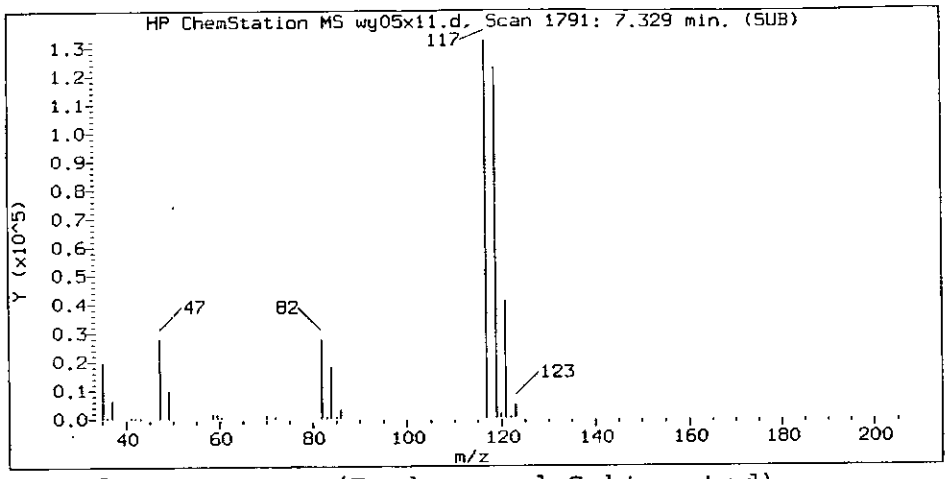
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

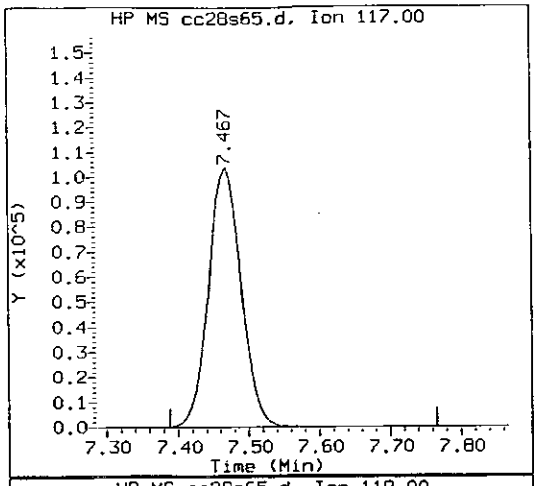
Sample Name: 13MW3 Lab Sample ID: 5813511

Compound Number	: 59
Compound Name	: Chloroform
Scan Number	: 881
Retention Time (minutes)	: 6.949
Quant Ion	: 83.0
Area (flag)	: 52013
Concentration (ug/L)	: 0.6504

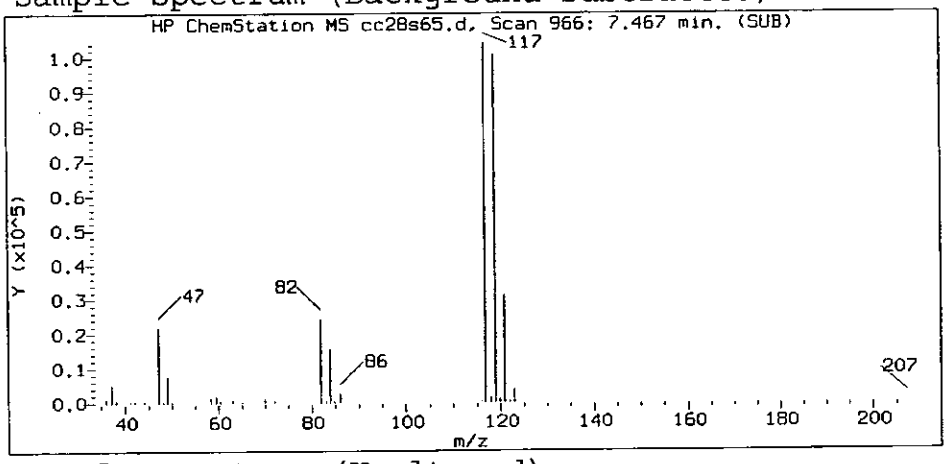
RAP23 0065

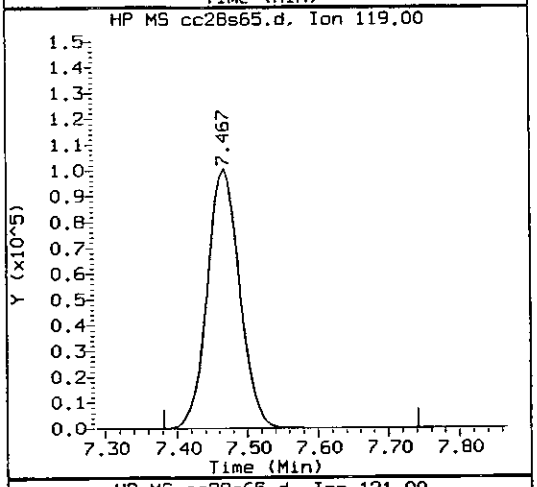
Reference Standard Spectrum for Carbon Tetrachloride



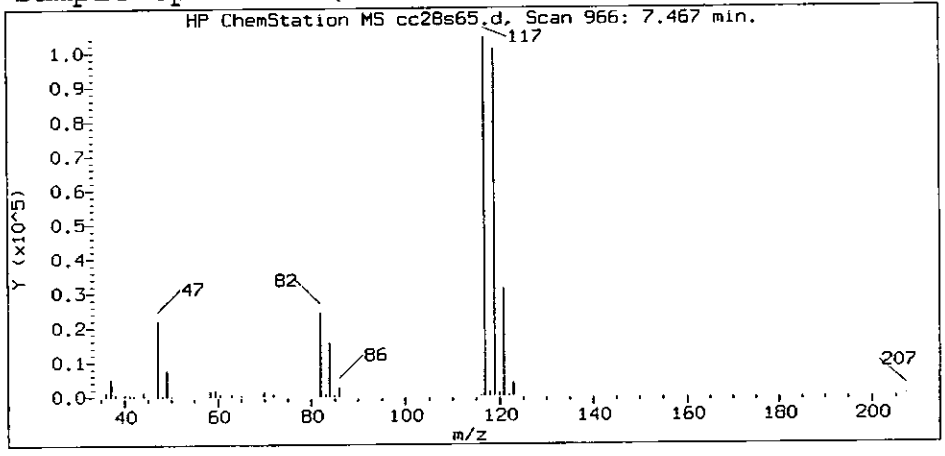


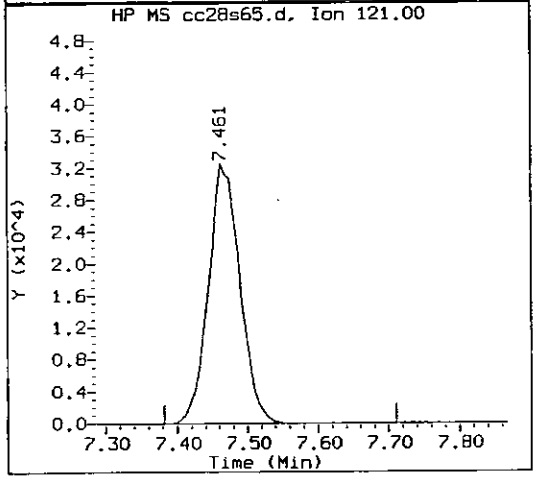
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP10193.i/09oct28c.b/cc28s65.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:15 Analyst ID: ADS01731

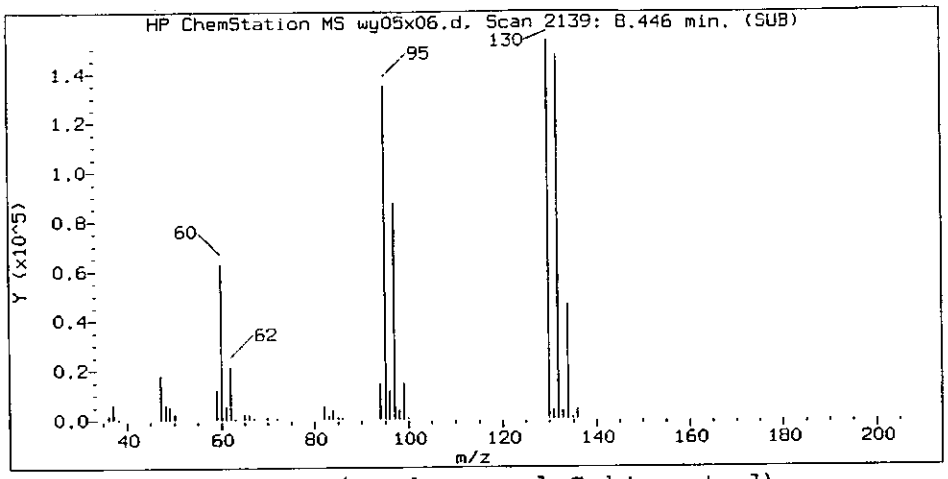
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW3 Lab Sample ID: 5813511

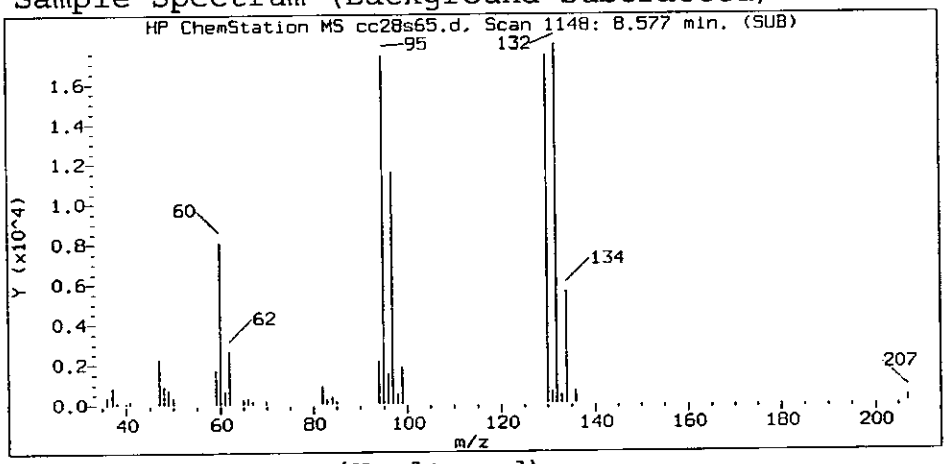
Compound Number	:	67
Compound Name	:	Carbon Tetrachloride
Scan Number	:	966
Retention Time (minutes)	:	7.467
Quant Ion	:	117.0
Area (flag)	:	334974
Concentration (ug/L)	:	5.7131

RAD23 0866

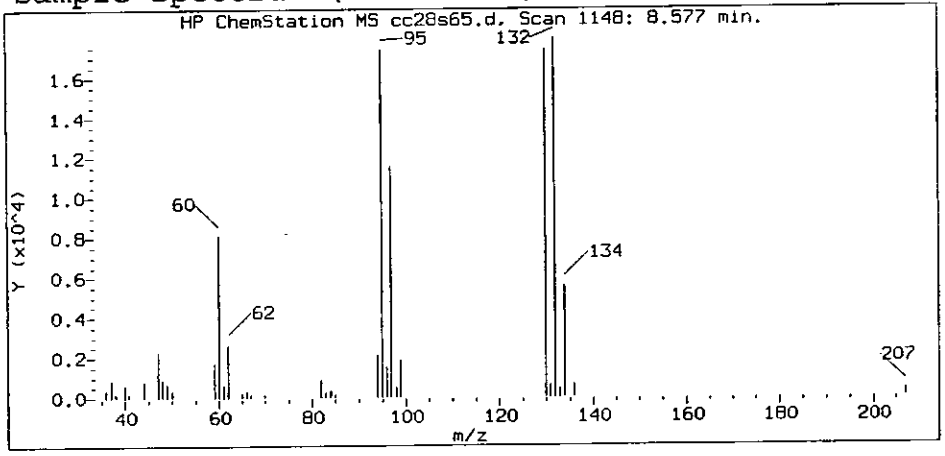
Reference Standard Spectrum for Trichloroethene

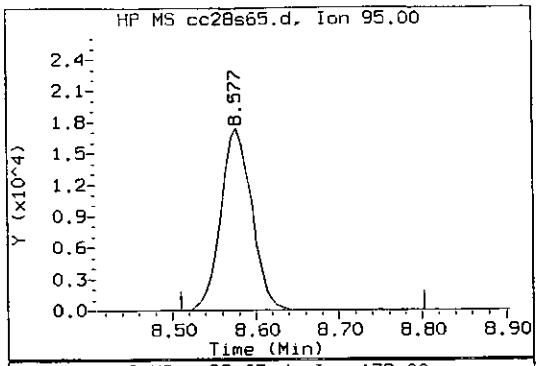


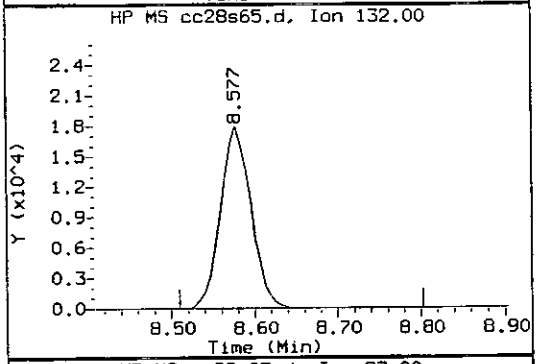
Sample Spectrum (Background Subtracted)

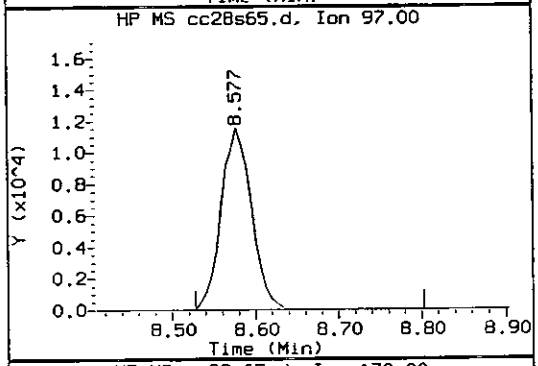


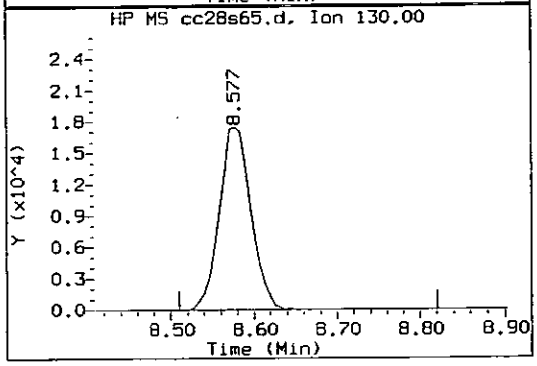
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s65.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:15 Analyst ID: ADS01731

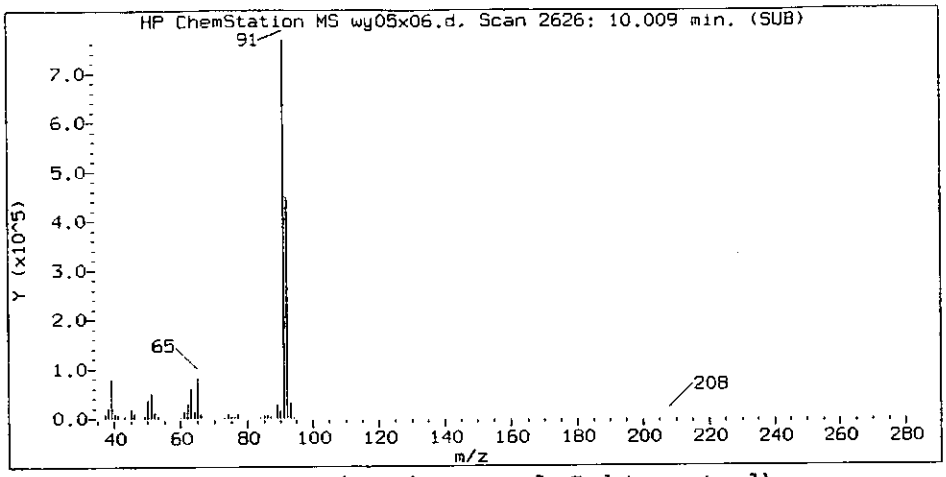
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW3 Lab Sample ID: 5813511

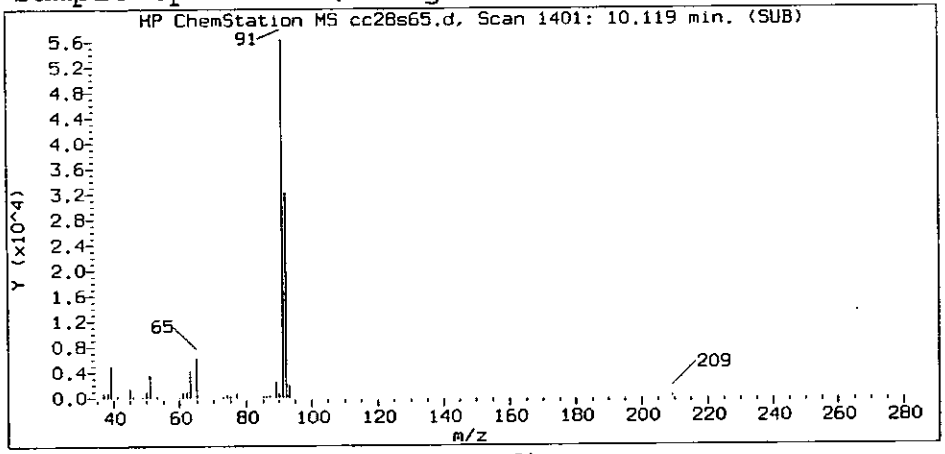
Compound Number	: 82
Compound Name	: Trichloroethene
Scan Number	: 1148
Retention Time (minutes)	: 8.577
Quant Ion	: 95.0
Area (flag)	: 44838
Concentration (ug/L)	: 0.8992

RAB23 0067

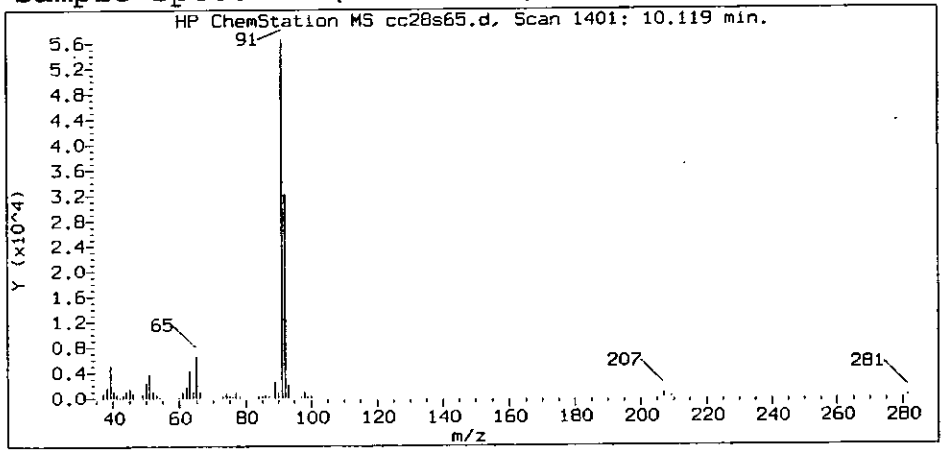
Reference Standard Spectrum for Toluene

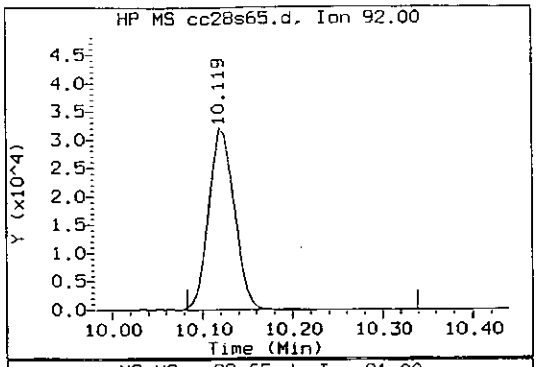


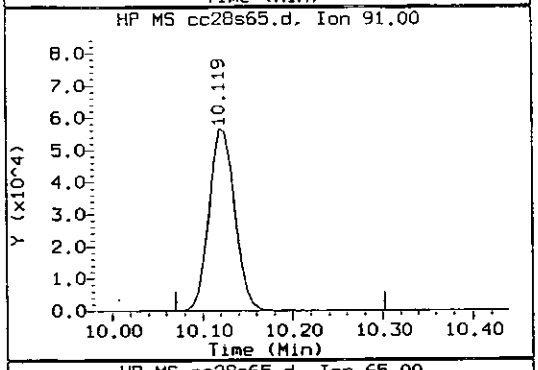
Sample Spectrum (Background Subtracted)

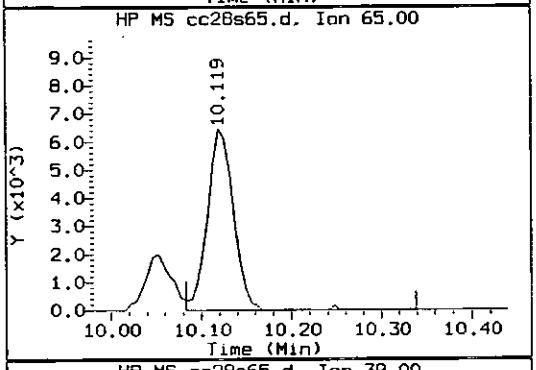


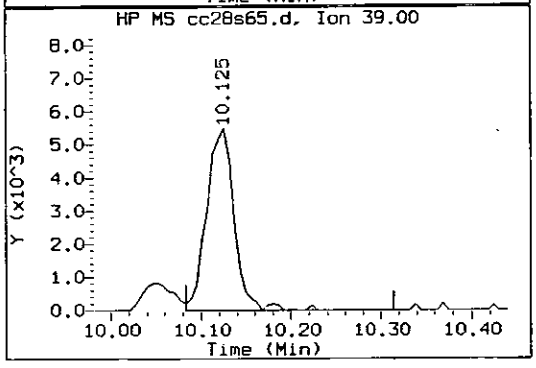
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s65.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:15 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW3 Lab Sample ID: 5813511

Compound Number	:	100
Compound Name	:	Toluene
Scan Number	:	1401
Retention Time (minutes)	:	10.119
Quant Ion	:	92.0
Area (flag)	:	63314
Concentration (ug/L)	:	0.5082

RAD23 6868

13MW4

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813512

File: /chem2/HP10193.i/09oct28c.b/cc28s66.d
Sample: 13MW4;5813512;1;0;;
Injected At:29-OCT-2009 07:37
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 141S

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)

Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.633(0.006)	501	65	78484(-22)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1887581(-11)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1381881(-11)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	780374(-17)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	448432	9.628	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	82818	9.546	95%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1951516	9.605	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	650780	8.927	89%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)	8.577(0.000)	95	69997	1.404	1.40			0.10	0.50
100) Toluene	(2)	10.120(0.001)	92	89956	0.720	0.72			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: _____ Date: 10/29/09

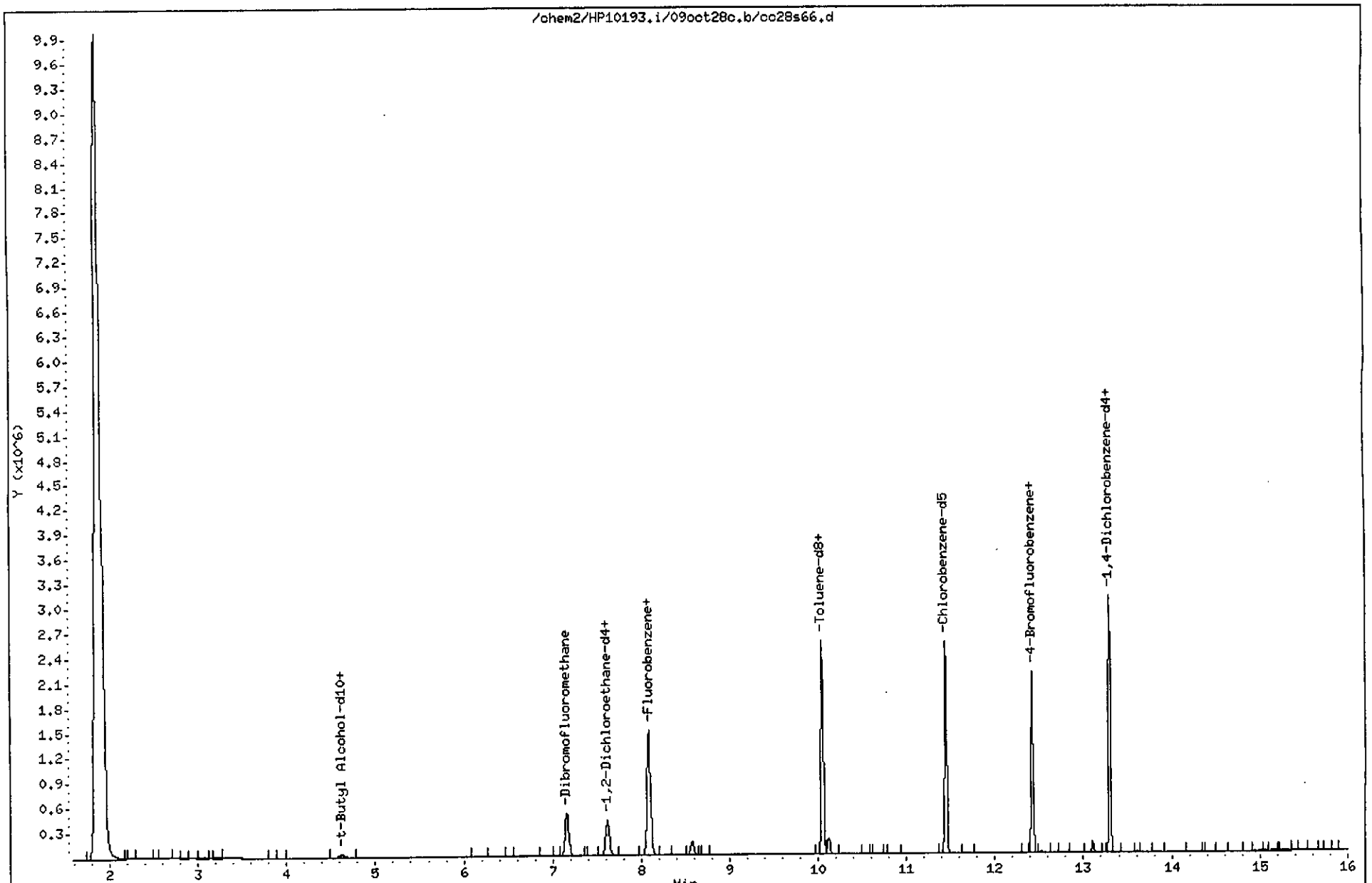
Auditor: _____ Date: 10-29-09

RAD23 0876

Data File: /chem2/HP10193.i/09oct28c.b/cc28s66.d
Date : 29-OCT-2009 07:37
Client ID: 13MW4
Sample Info: 13MW4;5813512;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s66.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:37 Analyst ID: ADS01731

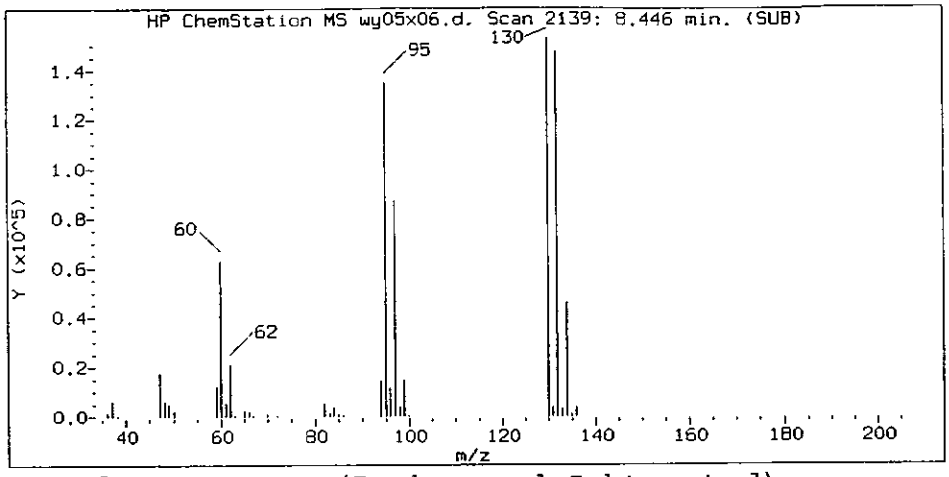
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW4 Lab Sample ID: 5813512

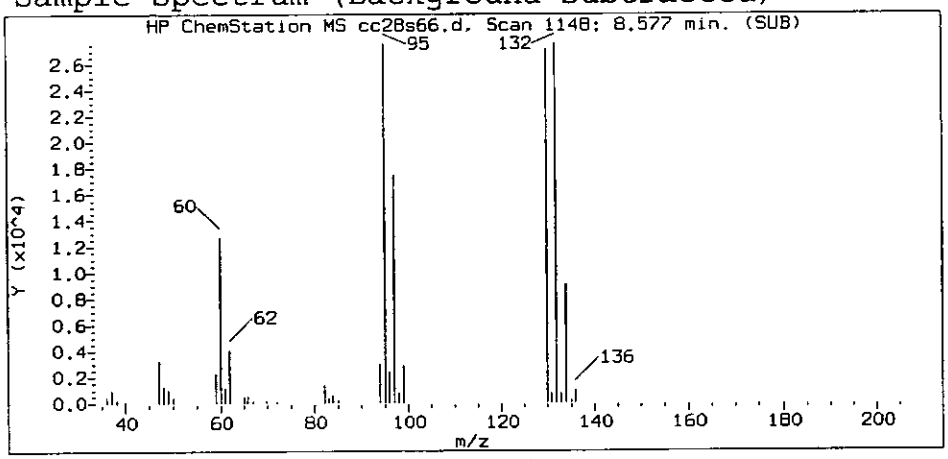
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.633	65	78484	50.000
78)*Fluorobenzene	(1)	8.089	96	1887581	10.000
82) Trichloroethene	(1)	8.577	95	69997	1.404
100) Toluene	(2)	10.120	92	89956	0.720
110)*Chlorobenzene-d5	(2)	11.449	117	1381881	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	780374	10.000
60)$Dibromofluoromethane	(1)	7.163	113	448432	9.628
70)$1,2-Dichloroethane-d4	(1)	7.620	102	82818	9.546
98)$Toluene-d8	(2)	10.052	98	1951516	9.605
124)$4-Bromofluorobenzene	(2)	12.424	95	650780	8.927

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

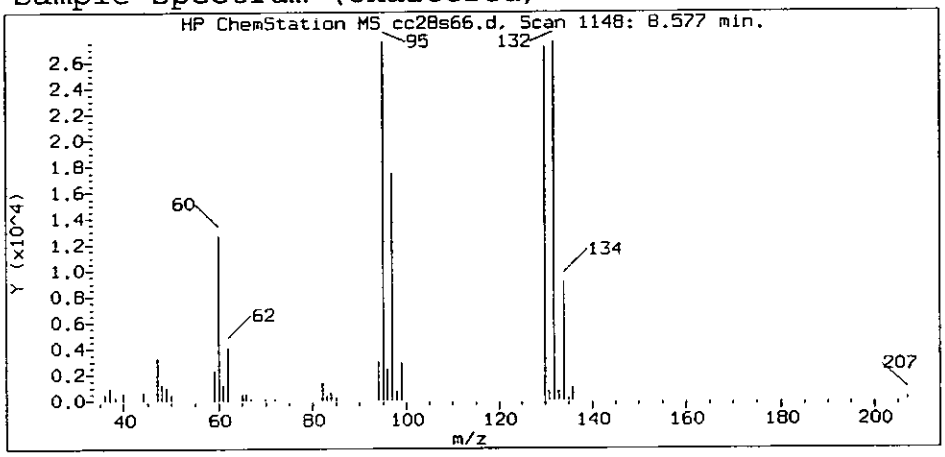
Reference Standard Spectrum for Trichloroethene

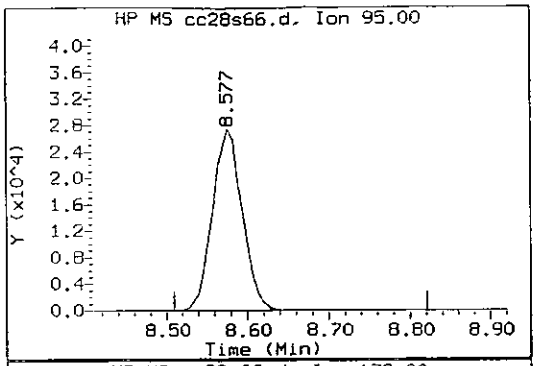


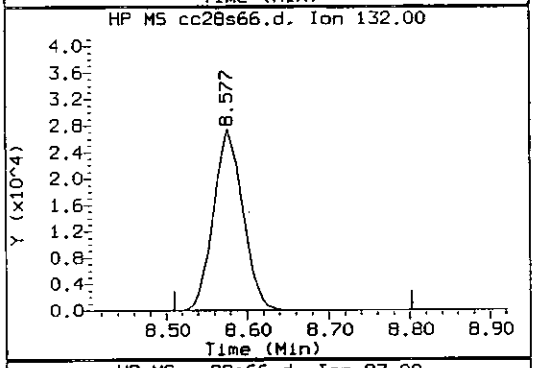
Sample Spectrum (Background Subtracted)

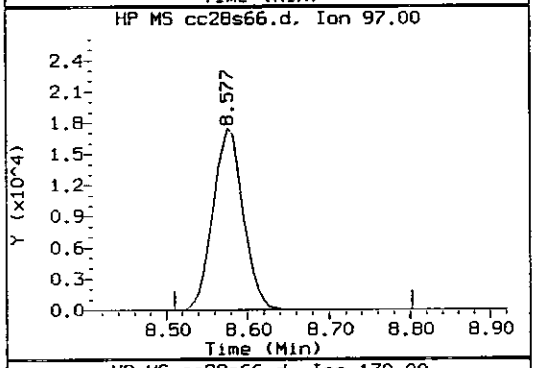


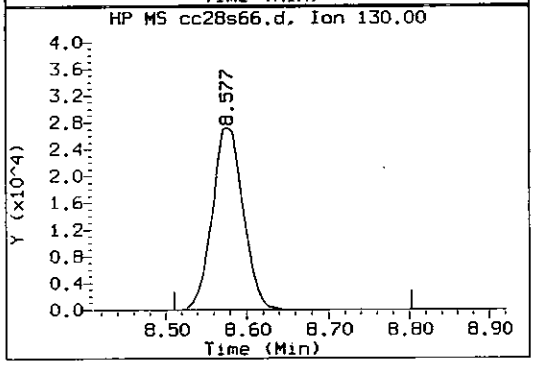
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s66.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:37 Analyst ID: ADS01731

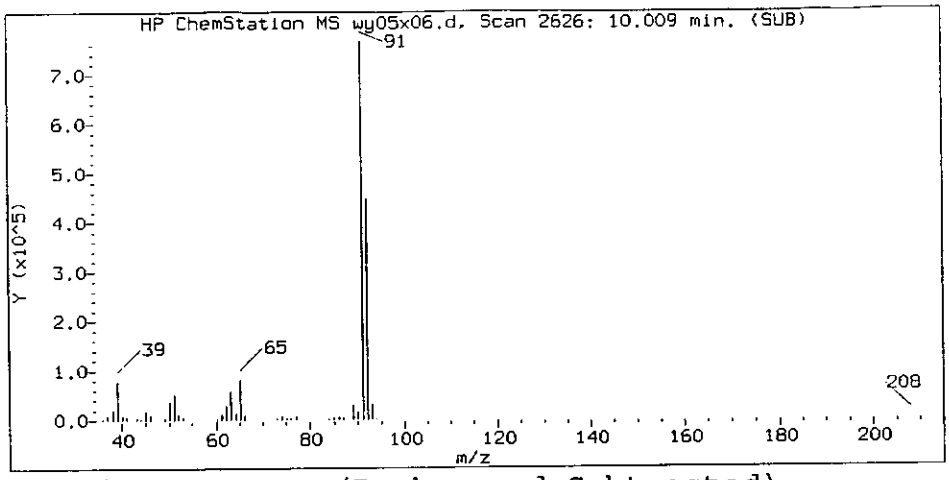
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW4 Lab Sample ID: 5813512

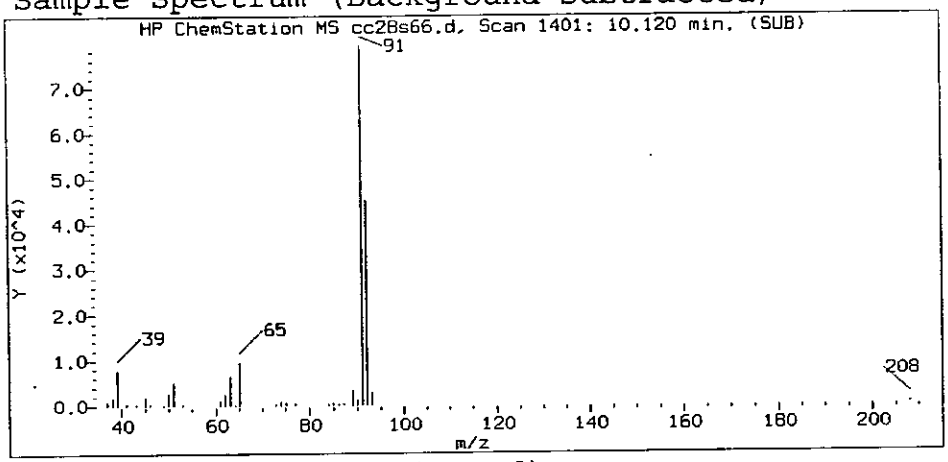
Compound Number	:	82
Compound Name	:	Trichloroethene
Scan Number	:	1148
Retention Time (minutes)	:	8.577
Quant Ion	:	95.0
Area (flag)	:	69997
Concentration (ug/L)	:	1.4040

RAD23 8572

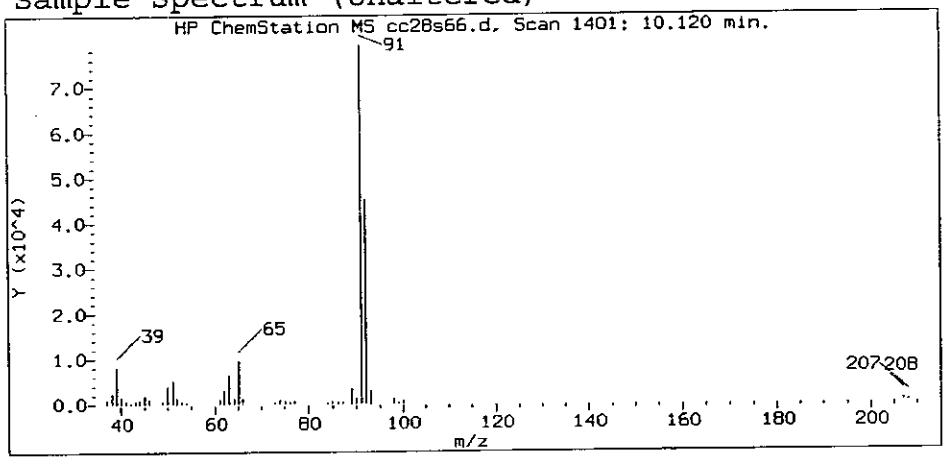
Reference Standard Spectrum for Toluene

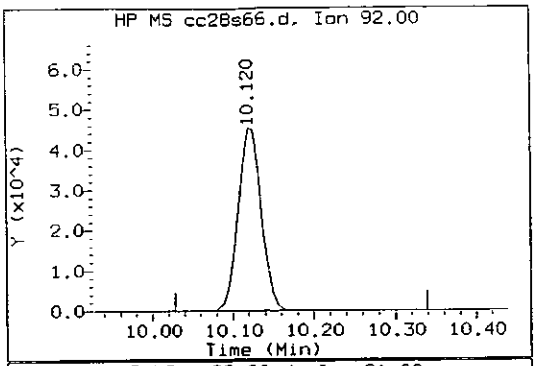


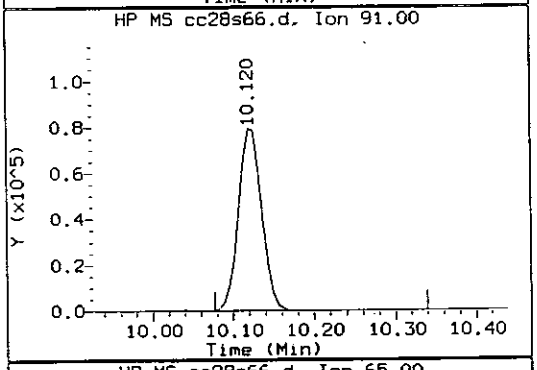
Sample Spectrum (Background Subtracted)

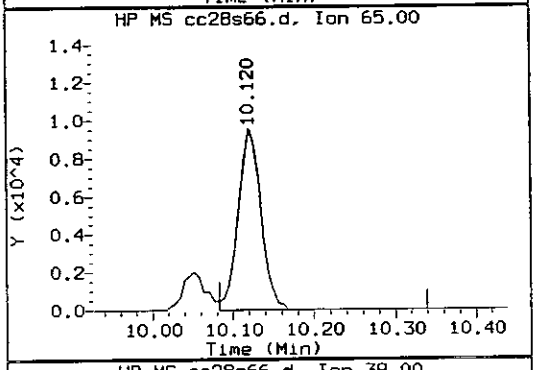


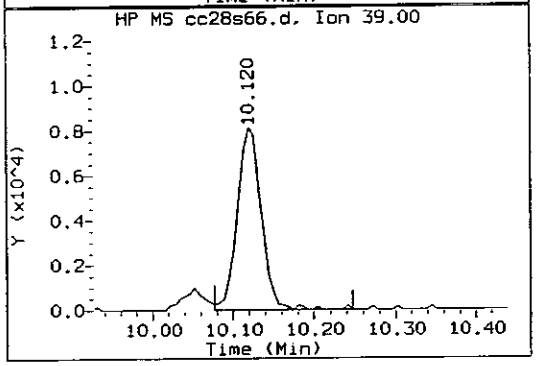
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s66.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:37 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:48 jml01693

Sample Name: 13MW4 Lab Sample ID: 5813512

Compound Number	:	100
Compound Name	:	Toluene
Scan Number	:	1401
Retention Time (minutes)	:	10.120
Quant Ion	:	92.0
Area (flag)	:	89956
Concentration (ug/L)	:	0.7204

RAD23 0873

13MWD

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813513

File: /chem2/HP10193.i/09oct28c.b/cc28s67.d
Sample: 13MWD;5813513;1;0;;
Injected At:29-OCT-2009 07:59
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.621(0.018)	499	65	78718(-22)	50.00	
78) Fluorobenzene	8.083(0.006)	1067	96	1875834(-11)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1364683(-13)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	777445(-17)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.157(0.000)	113	448125	9.682	97%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.614(0.001)	102	80577	9.346	93%		74 - 113
98) Toluene-d8	(2)	10.046(0.001)	98	1933798	9.638	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	645549	8.967	90%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)	8.571(0.000)	95	69073	1.394	1.39			0.10	0.50
100) Toluene	(2)	10.120(0.001)	92	85384	0.692	0.69			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: _____

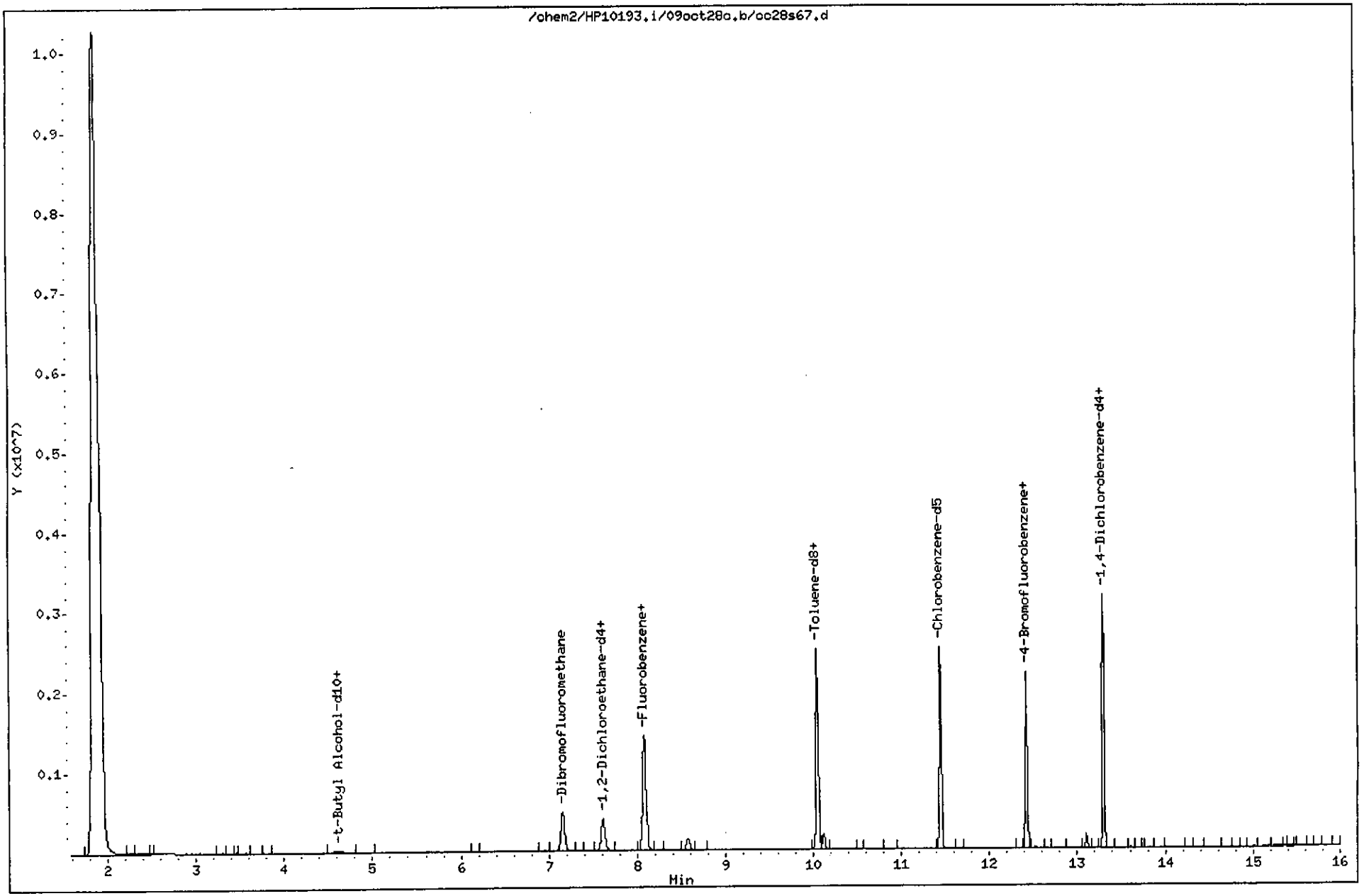
Analyst: _____ Date: 10/29/09

Auditor: _____ Date: 10-29-09

Data File: /chem2/HP10193.i/09oct28c.b/cc28s67.d
Date : 29-OCT-2009 07:59
Client ID: 13MWD
Sample Info: 13MWD;5813513;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s67.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:59 Analyst ID: ADS01731

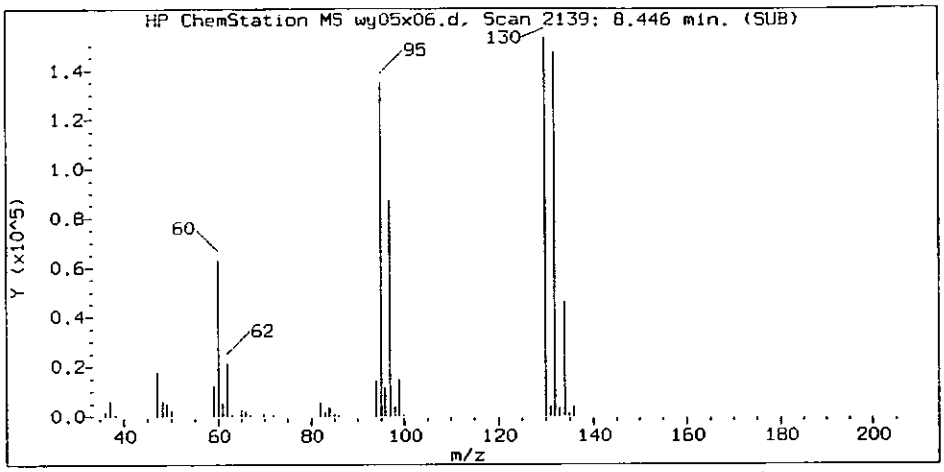
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:49 jml01693

Sample Name: 13MWD Lab Sample ID: 5813513

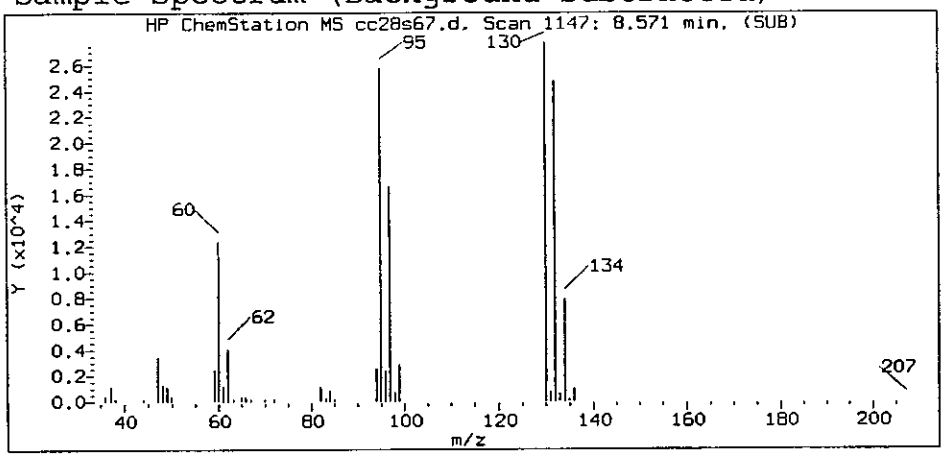
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.621	65	78718	50.000
78)*Fluorobenzene	(1)	8.083	96	1875834	10.000
82) Trichloroethene	(1)	8.571	95	69073	1.394
100) Toluene	(2)	10.120	92	85384	0.692
110)*Chlorobenzene-d5	(2)	11.449	117	1364683	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	777445	10.000
60)$Dibromofluoromethane	(1)	7.157	113	448125	9.682
70)$1,2-Dichloroethane-d4	(1)	7.614	102	80577	9.346
98)$Toluene-d8	(2)	10.046	98	1933798	9.638
124)$4-Bromofluorobenzene	(2)	12.424	95	645549	8.967

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

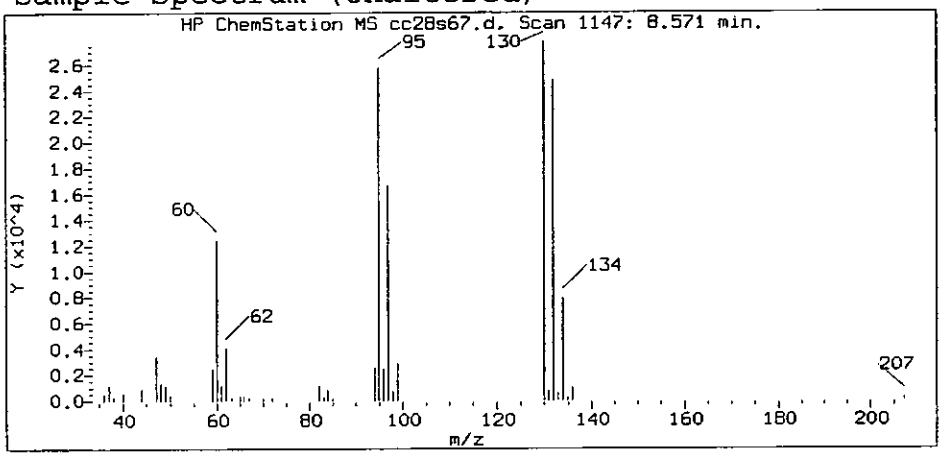
Reference Standard Spectrum for Trichloroethene

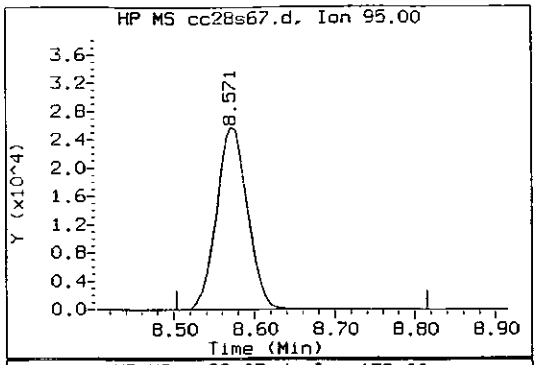


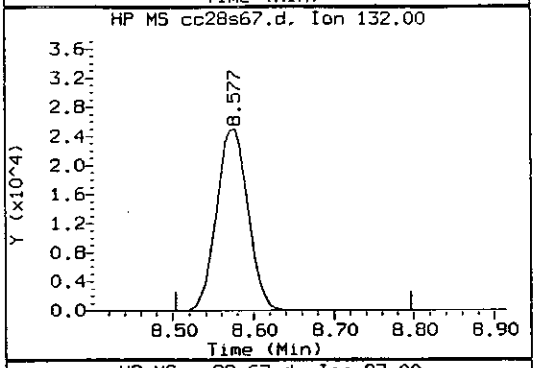
Sample Spectrum (Background Subtracted)

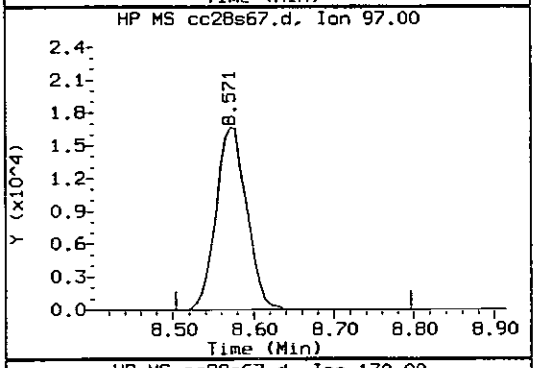


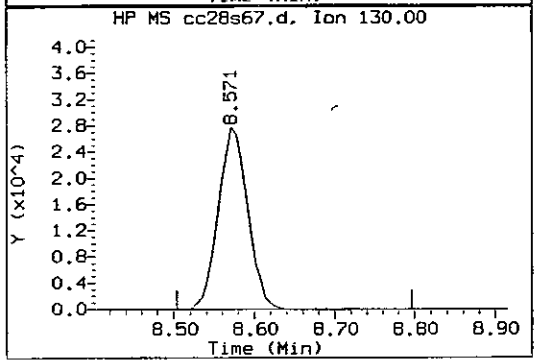
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s67.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:59 Analyst ID: ADS01731

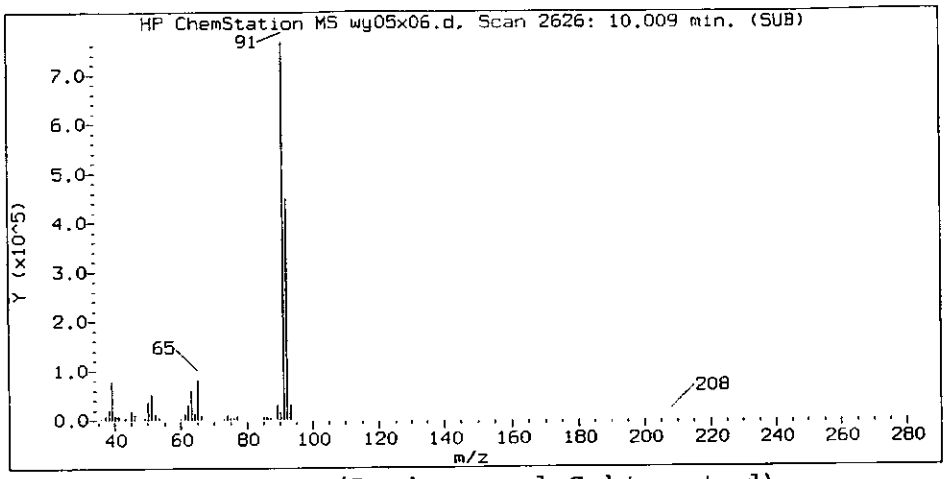
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:49 jml01693

Sample Name: 13MWD Lab Sample ID: 5813513

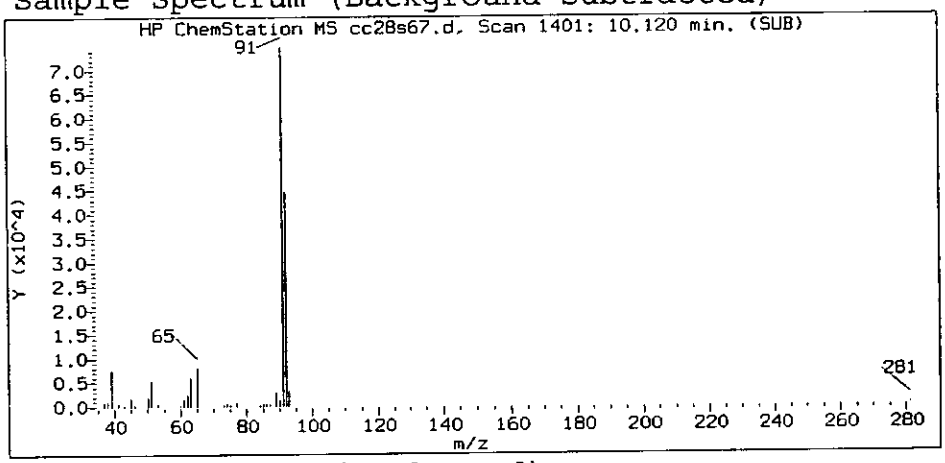
Compound Number	:	82
Compound Name	:	Trichloroethene
Scan Number	:	1147
Retention Time (minutes)	:	8.571
Quant Ion	:	95.0
Area (flag)	:	69073
Concentration (ug/L)	:	1.3942

RAD23 0077

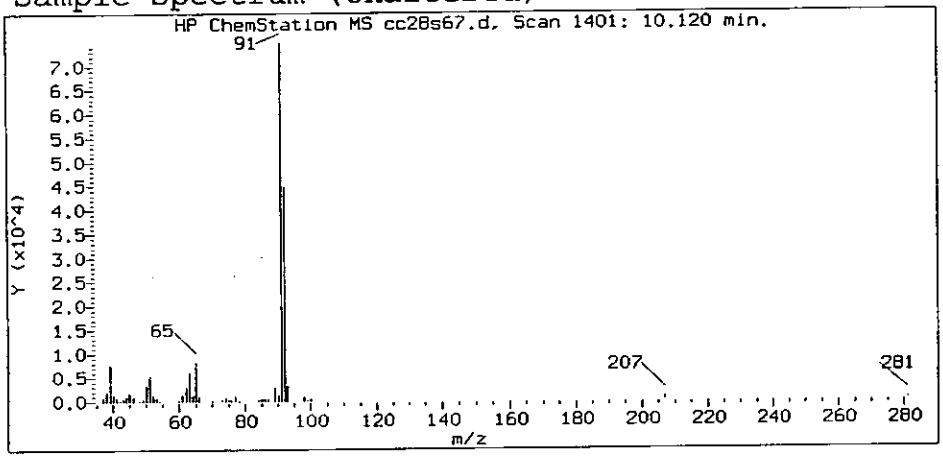
Reference Standard Spectrum for Toluene

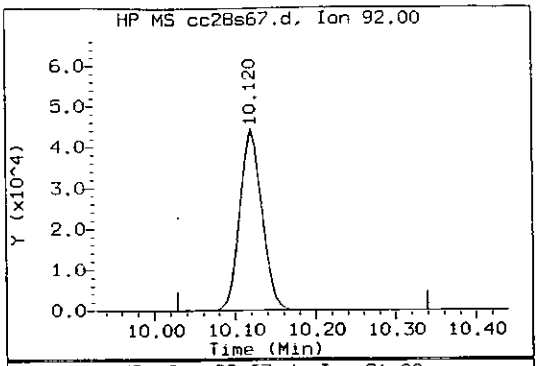


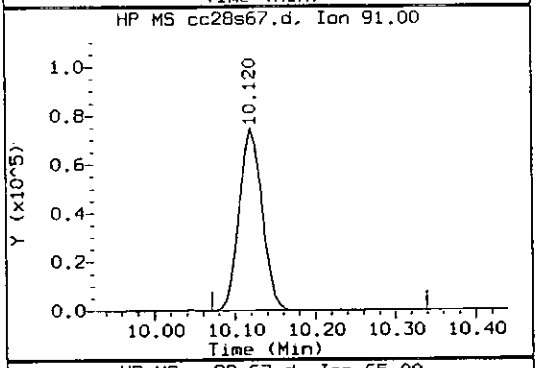
Sample Spectrum (Background Subtracted)

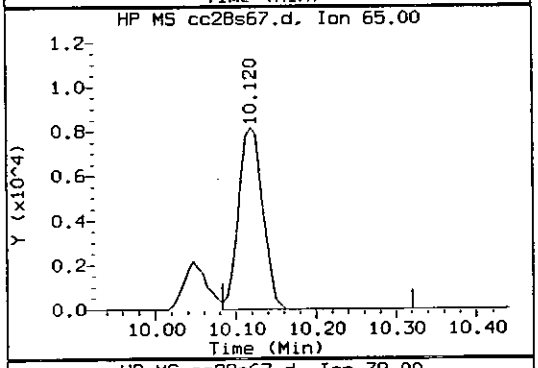


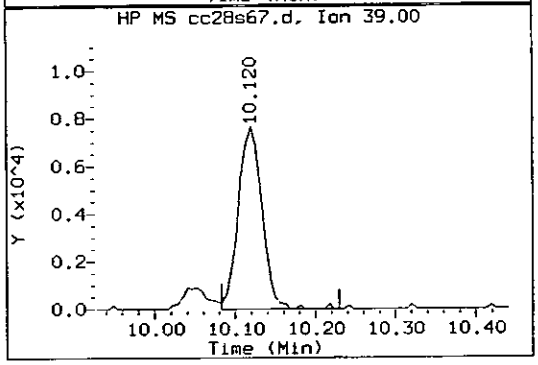
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s67.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 07:59 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:49 jml01693

Sample Name: 13MWD Lab Sample ID: 5813513

Compound Number	:	100
Compound Name	:	Toluene
Scan Number	:	1401
Retention Time (minutes)	:	10.120
Quant Ion	:	92.0
Area (flag)	:	85384
Concentration (ug/L)	:	0.6924

RAD23 0078

13MW5

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813514

File: /chem2/HP10193.i/09oct28c.b/cc28s68.d
Sample: 13MW5;5813514;1;0;;
Injected At:29-OCT-2009 08:20
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)

Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.639(0.000)	502	65	74867(-26)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1859436(-12)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1367717(-12)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	771809(-18)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	443973	9.677	97%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	80640	9.435	94%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1921234	9.554	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	641949	8.897	89%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)	7.461(0.001)	117	10311	0.179	0.18		J	0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)				ND	ND			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	76194	0.617	0.62			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: Client

Analyst: _____ Date: 10/29/09

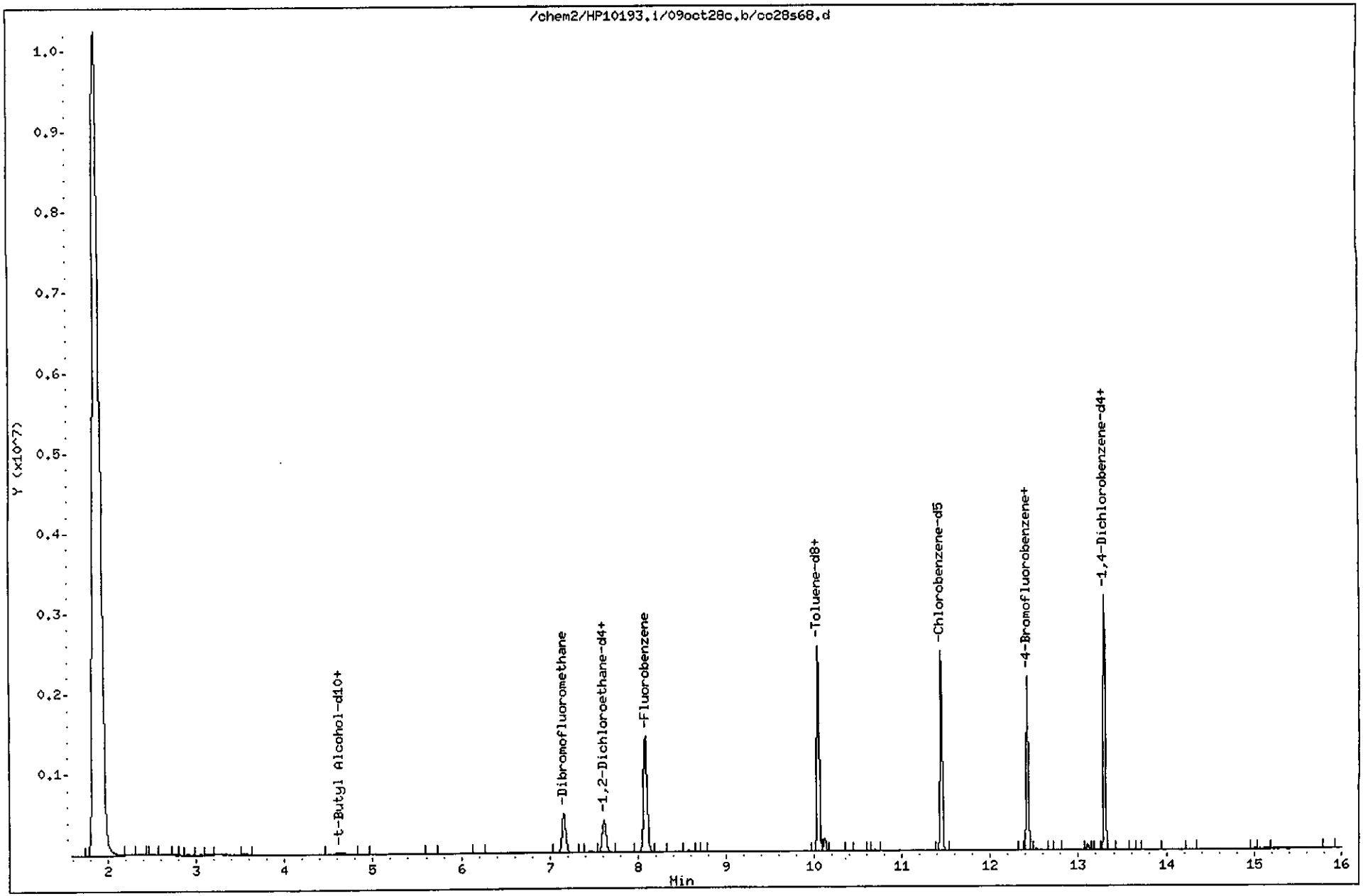
Auditor: _____ Date: 10/29/09

RAD23 8879

Data File: /chem2/HP10193.i/09oct28c.b/cc28s68.d
Date : 29-OCT-2009 08:20
Client ID: 13MW5
Sample Info: 13MW5;5813514;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s68.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 08:20 Analyst ID: ADS01731

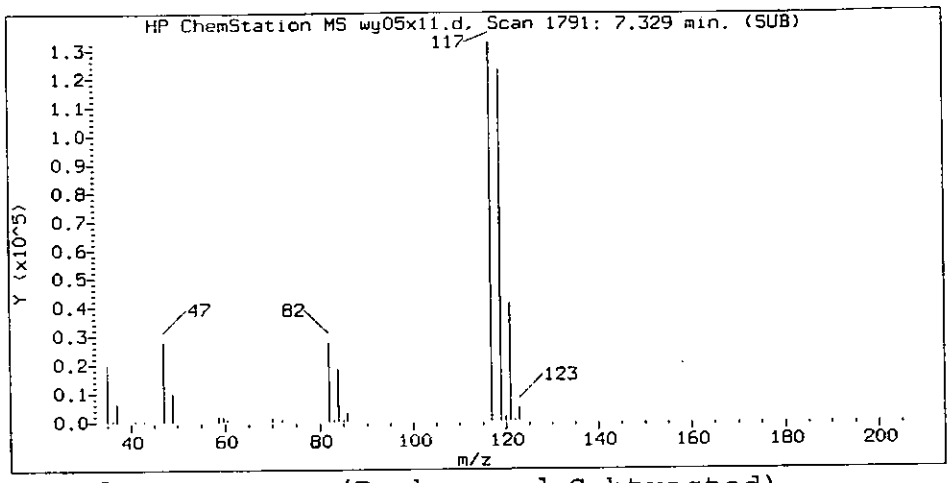
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:54 jml01693

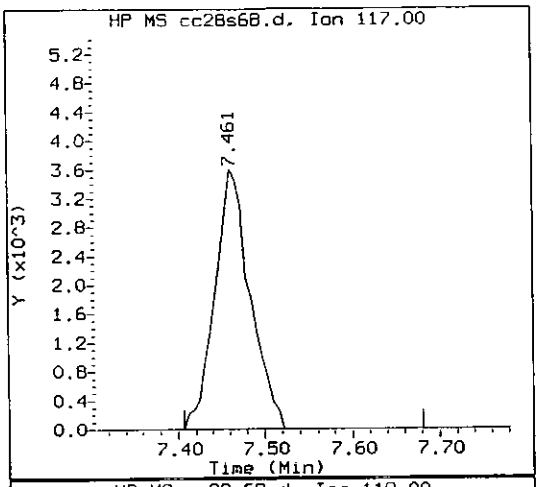
Sample Name: 13MW5 Lab Sample ID: 5813514

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.639	65	74867	50.000
67) Carbon Tetrachloride	(1)	7.461	117	10311	0.179
78)*Fluorobenzene	(1)	8.089	96	1859436	10.000
100) Toluene	(2)	10.119	92	76194	0.617
110)*Chlorobenzene-d5	(2)	11.448	117	1367717	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	771809	10.000
60)$Dibromofluoromethane	(1)	7.163	113	443973	9.677
70)$1,2-Dichloroethane-d4	(1)	7.620	102	80640	9.435
98)$Toluene-d8	(2)	10.052	98	1921234	9.554
124)$4-Bromofluorobenzene	(2)	12.424	95	641949	8.897

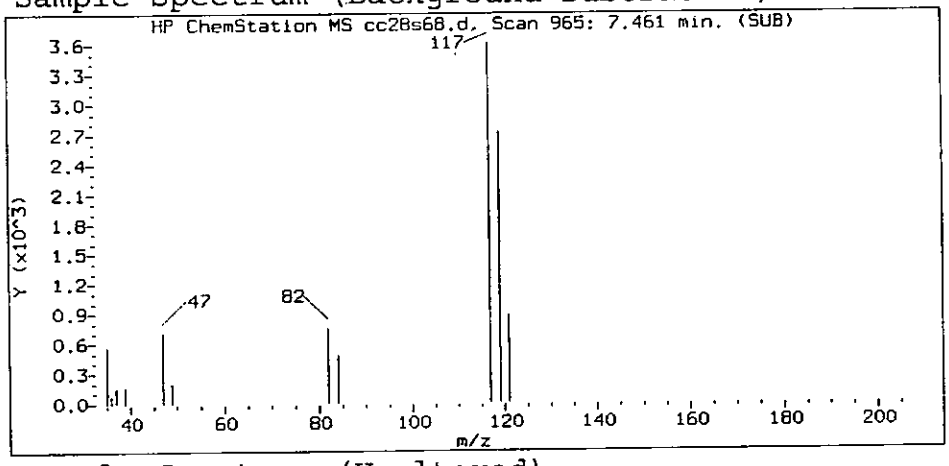
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

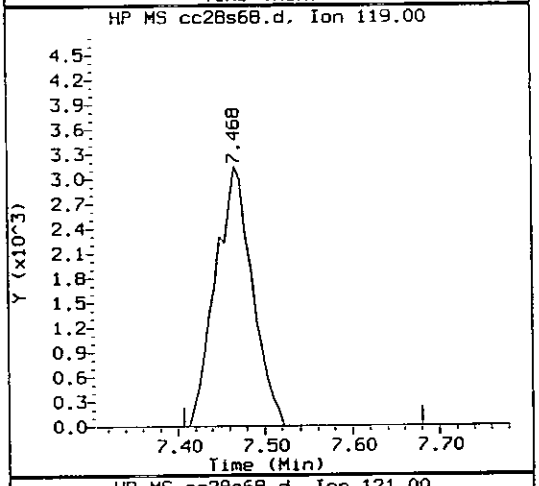
Reference Standard Spectrum for Carbon Tetrachloride



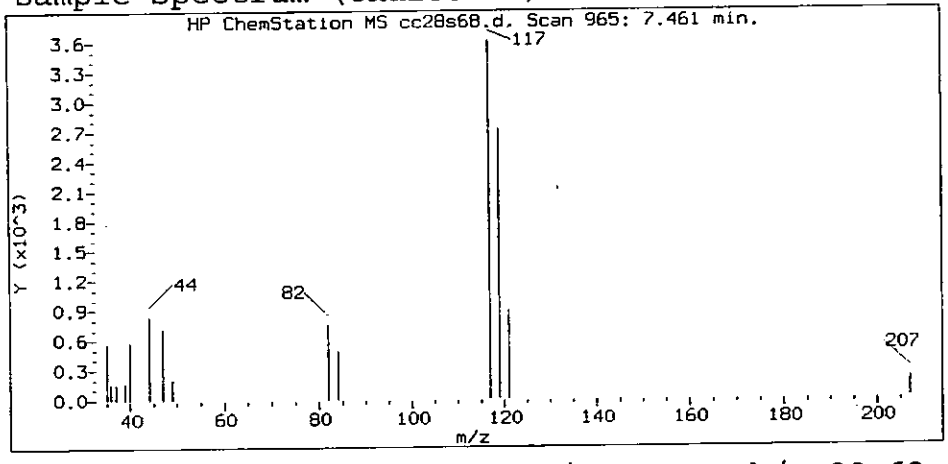


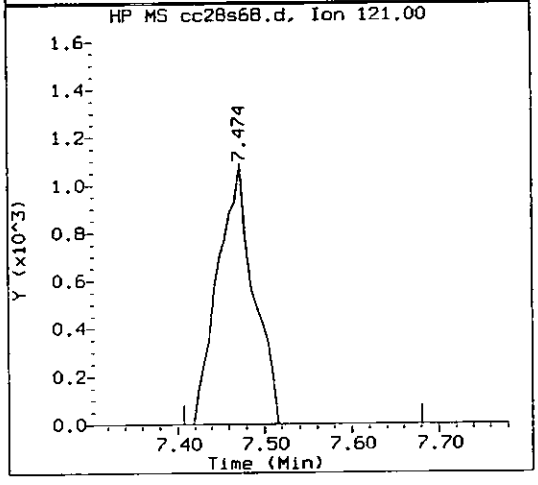
Sample Spectrum (Background Subtracted)





Sample Spectrum (Unaltered)





Data File: /chem2/HP10193.i/09oct28c.b/cc28s68.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 08:20 Analyst ID: ADS01731

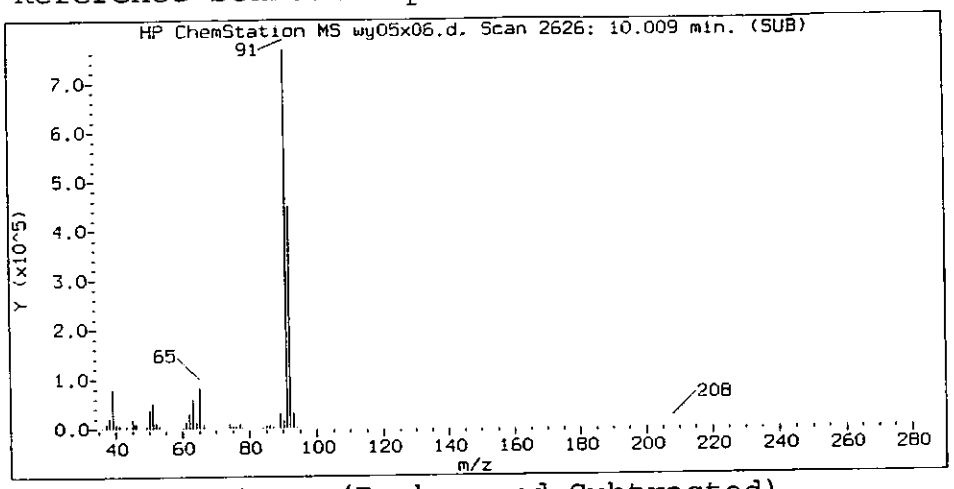
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:28
Date, time and analyst ID of latest file update: 29-Oct-2009 11:54 jml01693

Sample Name: 13MW5 Lab Sample ID: 5813514

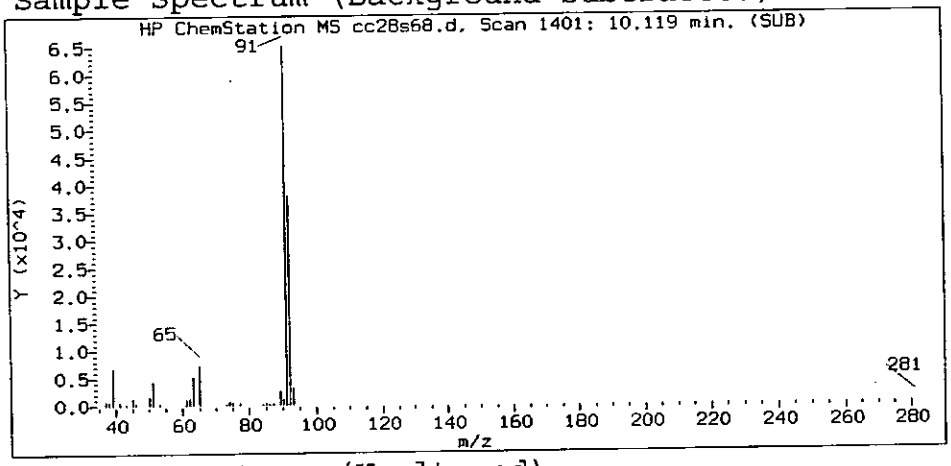
Compound Number	: 67
Compound Name	: Carbon Tetrachloride
Scan Number	: 965
Retention Time (minutes)	: 7.461
Quant Ion	: 117.0
Area (flag)	: 10311
Concentration (ug/L)	: 0.1786

RAD23 0082

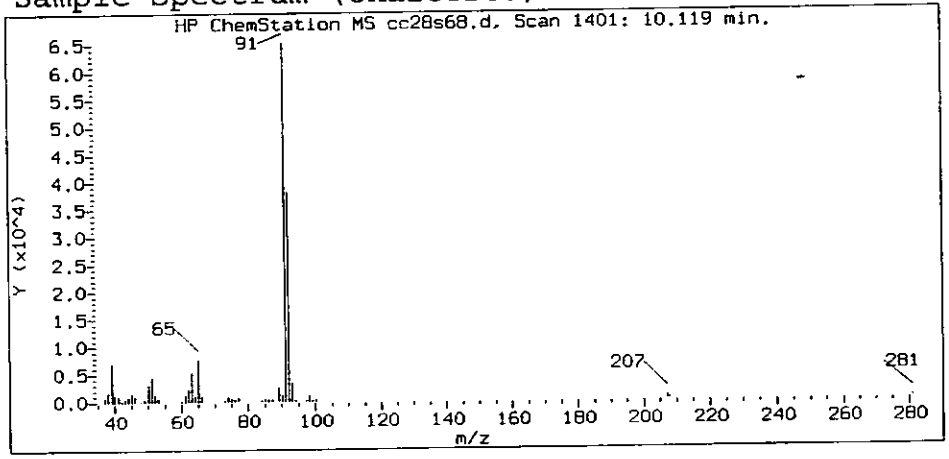
Reference Standard Spectrum for Toluene

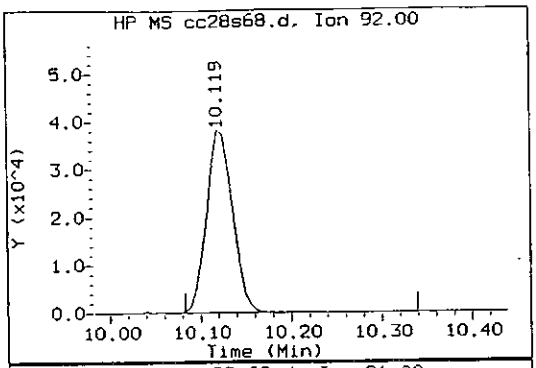


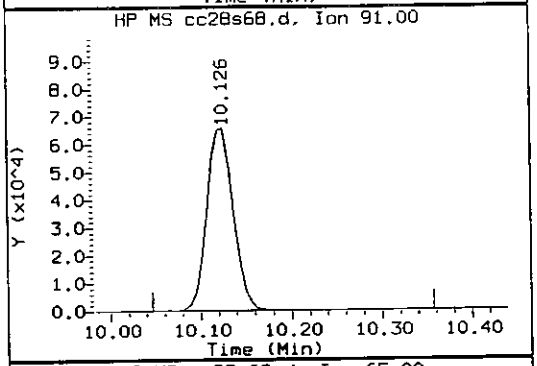
Sample Spectrum (Background Subtracted)

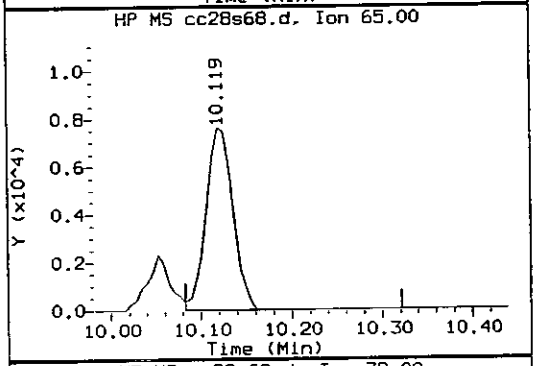


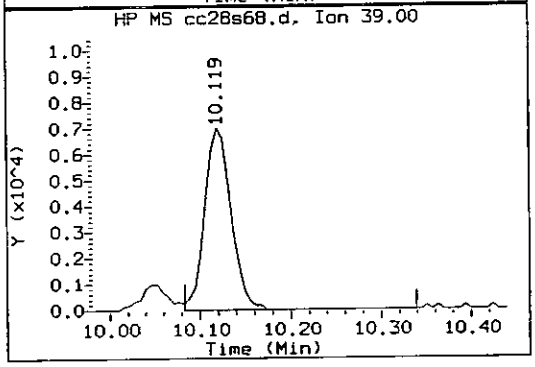
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s68.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 08:20 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:28
Date, time and analyst ID of latest file update: 29-Oct-2009 11:54 jml01693

Sample Name: 13MW5 Lab Sample ID: 5813514

Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.119
Quant Ion	: 92.0
Area (flag)	: 76194
Concentration (ug/L)	: 0.6165

RAD23 0003

13MW6

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813517

File: /chem2/HP10193.i/09oct28c.b/cc28s73.d
Sample: 13MW6;5813517;1;0;;
Injected At:29-OCT-2009 10:10
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.627(0.012)	500	65	82982(-18)	50.00	
78) Fluorobenzene	8.083(0.006)	1067	96	1943136(-8)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1416580(-9)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	799384(-15)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(-0.001)	113	458040	9.553	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.614(0.001)	102	84966	9.513	95%		74 - 113
98) Toluene-d8	(2)	10.053(0.000)	98	1989830	9.554	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	665316	8.903	89%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)				ND	ND			0.10	0.50
100) Toluene	(2)	10.120(0.001)	92	78790	0.616	0.62			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: _____

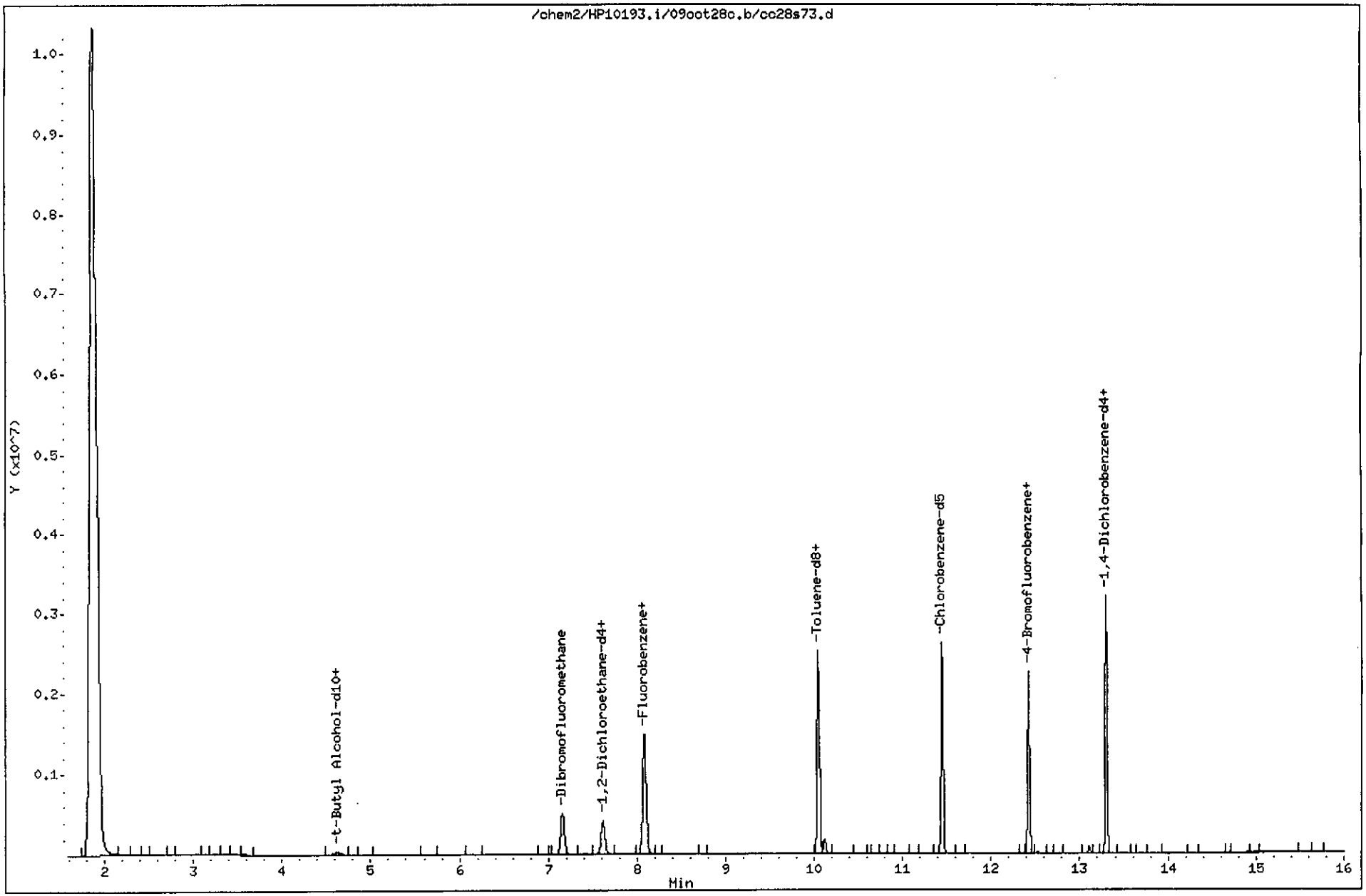
Analyst: _____ Date: 10/29/09

Auditor: _____ Date: 10-29-09

Data File: /chem2/HP10193.i/09oct28c.b/cc28s73.d
Date : 29-OCT-2009 10:10
Client ID: 13MW6
Sample Info: 13MW6;5813517;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s73.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 10:10 Analyst ID: ADS01731

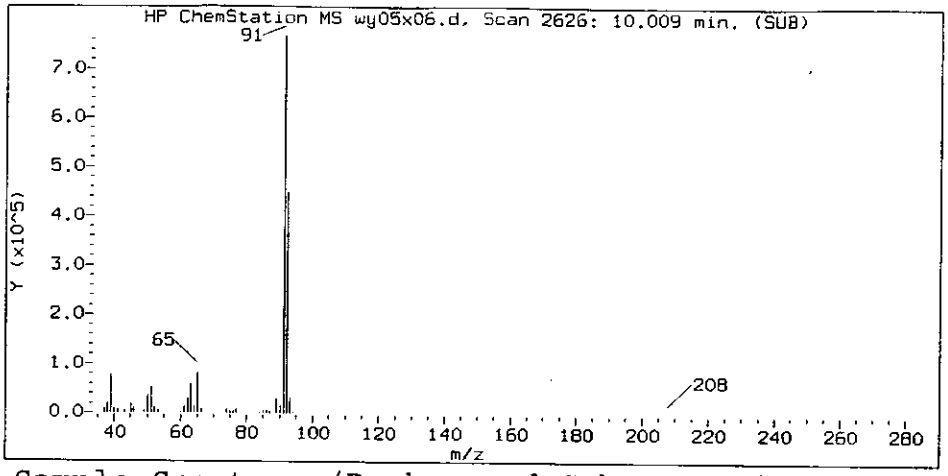
Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 12:26 jml01693

Sample Name: 13MW6 Lab Sample ID: 5813517

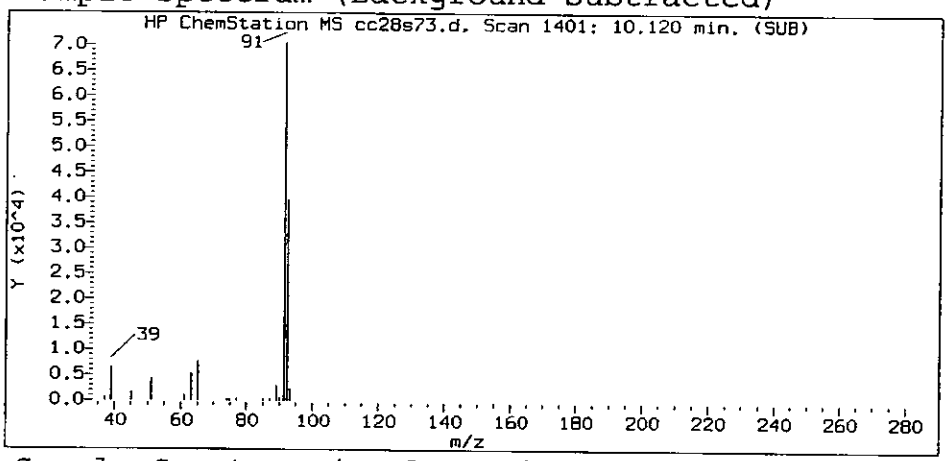
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.627	65	82982	50.000
78)*Fluorobenzene	(1)	8.083	96	1943136	10.000
100) Toluene	(2)	10.120	92	78790	0.616
110)*Chlorobenzene-d5	(2)	11.449	117	1416580	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	799384	10.000
60)$Dibromofluoromethane	(1)	7.163	113	458040	9.553
70)$1,2-Dichloroethane-d4	(1)	7.614	102	84966	9.513
98)$Toluene-d8	(2)	10.053	98	1989830	9.554
124)$4-Bromofluorobenzene	(2)	12.424	95	665316	8.903

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

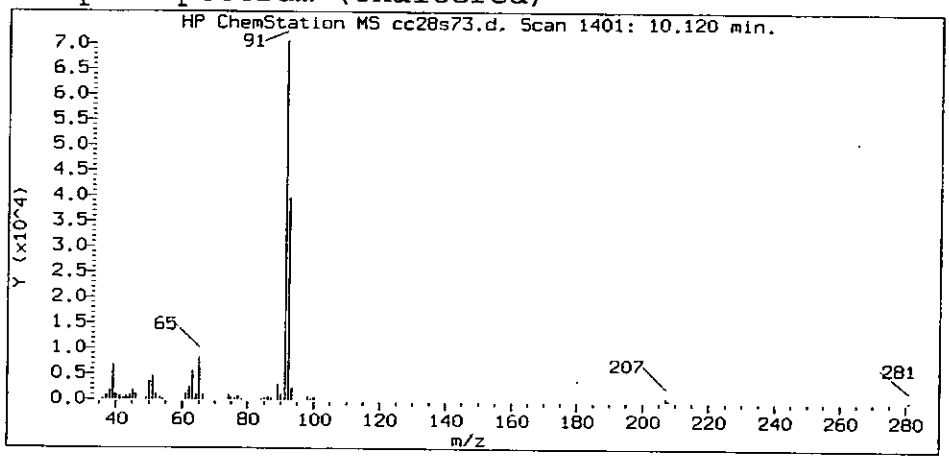
Reference Standard Spectrum for Toluene

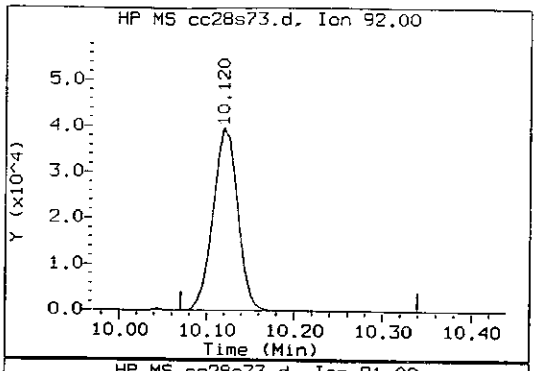


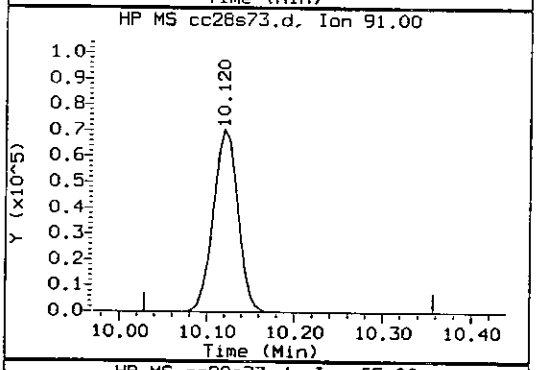
Sample Spectrum (Background Subtracted)

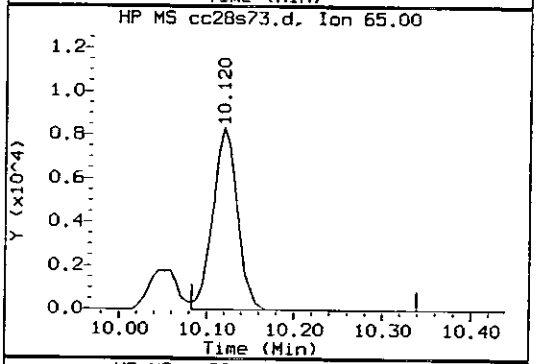


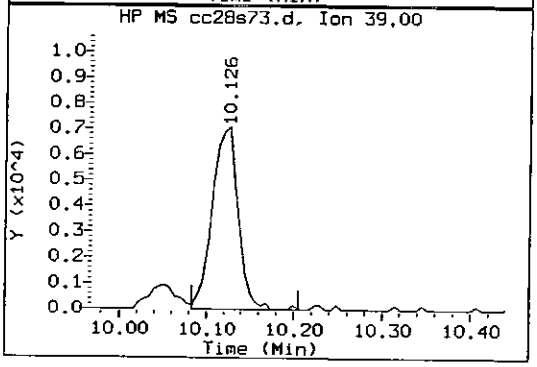
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct28c.b/cc28s73.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 10:10 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 12:26 jml01693

Sample Name: 13MW6 Lab Sample ID: 5813517

Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.120
Quant Ion	: 92.0
Area (flag)	: 78790
Concentration (ug/L)	: 0.6155

RAD23 0087

13MW7

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813518

File: /chem2/HP10193.i/09oct29a.b/cc29s01.d
Sample: 13MW7;5813518;1;0;;
Injected At:29-OCT-2009 14:59
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38B

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.633(-0.006)	501	65	93922(-3)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2009919(-3)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1467108(-3)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	831147(-9)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	478257	9.643	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.000)	102	89009	9.635	96%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2077249	9.630	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	705089	9.110	91%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)	8.577(0.000)	95	110575	2.083	2.08			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	67600	0.510	0.51			0.10	0.50
106) Tetrachloroethene	(2)	10.692(0.000)	166	10601	0.169	0.17		J	0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: AOS1731 Date: 10/29/09

Auditor: [signature] Date: 11/2/09

RAD31 6083

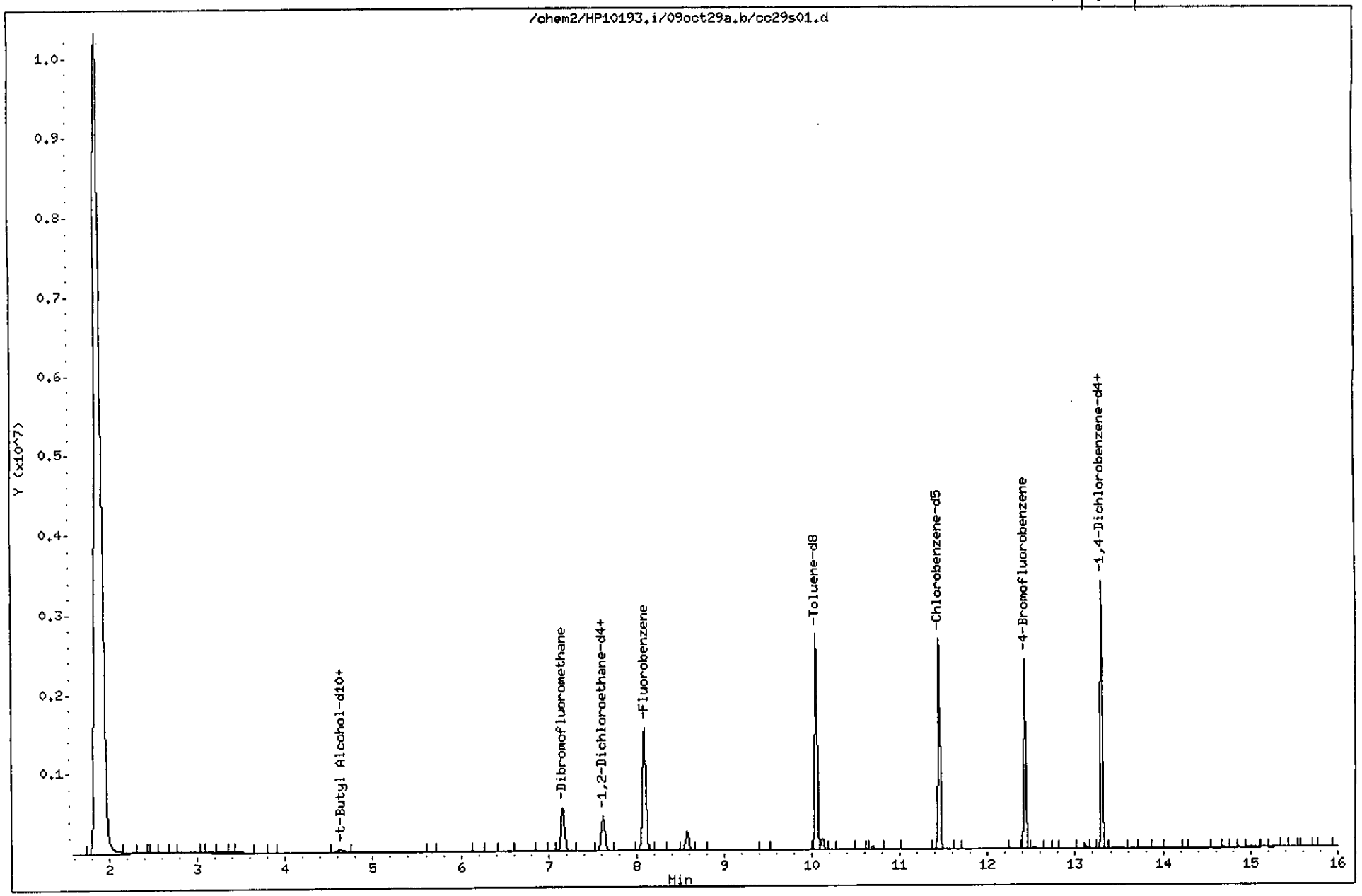
Data File: /chem2/HP10193.i/09oct29a.b/cc29s01.d
Date : 29-OCT-2009 14:59
Client ID: 13MW7
Sample Info: 13MW7;5813518;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

tos1731
10/29/09

RAD23 5813



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29s01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 15:18 Automation

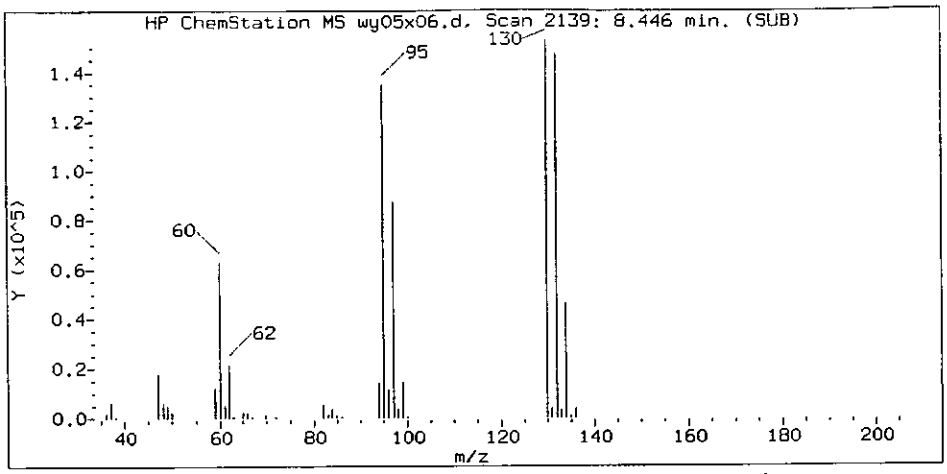
Sample Name: 13MW7 Lab Sample ID: 5813518

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.633	65	93922	50.000
78)*Fluorobenzene	(1)	8.089	96	2009919	10.000
82) Trichloroethene	(1)	8.577	95	110575	2.083
100) Toluene	(2)	10.119	92	67600	0.510
106) Tetrachloroethene	(2)	10.692	166	10601	0.169
110)*Chlorobenzene-d5	(2)	11.448	117	1467108	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	831147	10.000
60)$Dibromofluoromethane	(1)	7.163	113	478257	9.643
70)$1,2-Dichloroethane-d4	(1)	7.620	102	89009	9.635
98)$Toluene-d8	(2)	10.052	98	2077249	9.630
124)$4-Bromofluorobenzene	(2)	12.424	95	705089	9.110

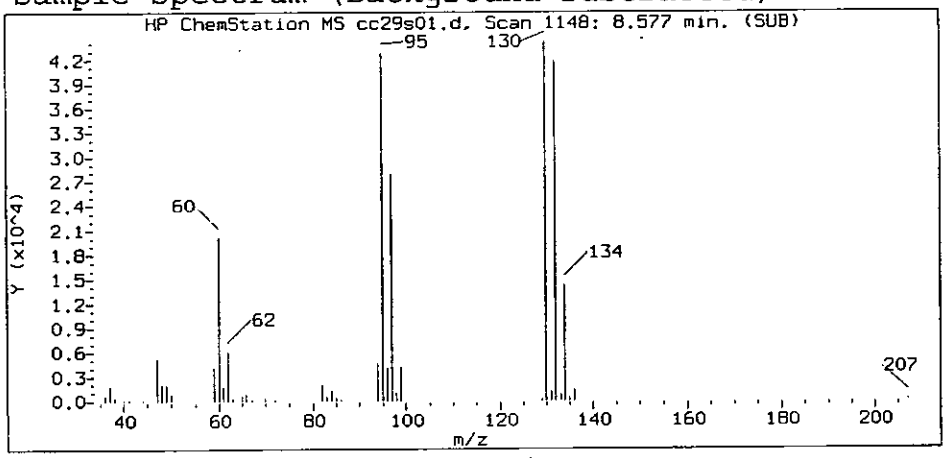
* = Compound is an internal standard.
$ = Compound is a surrogate standard.

RAD23 0090

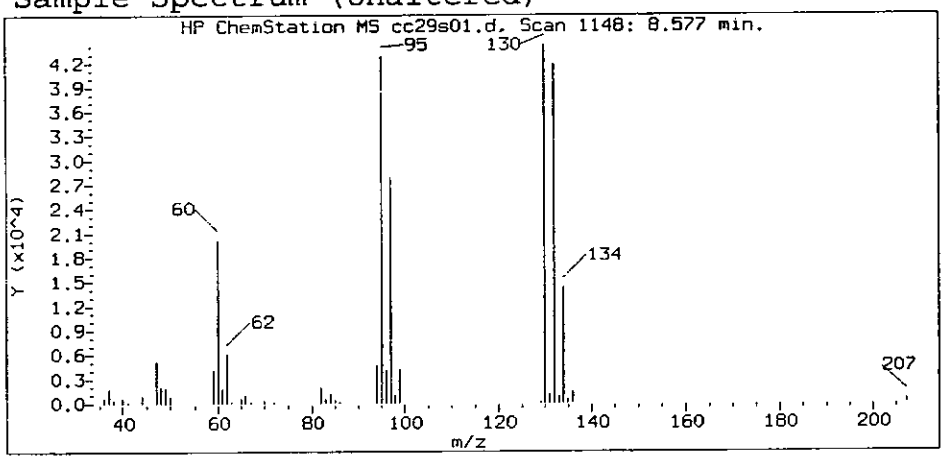
Reference Standard Spectrum for Trichloroethene

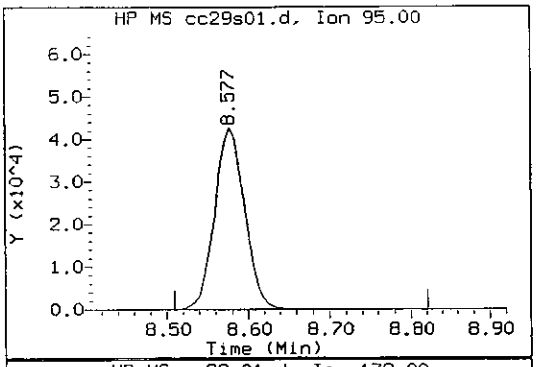


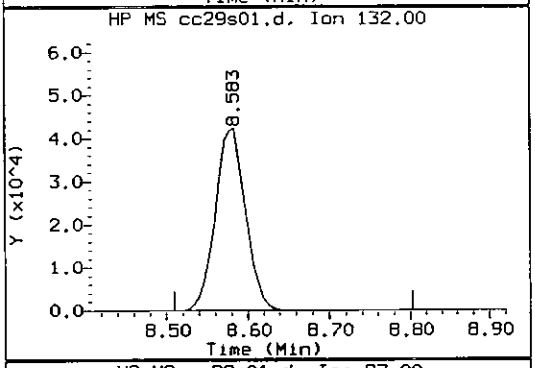
Sample Spectrum (Background Subtracted)

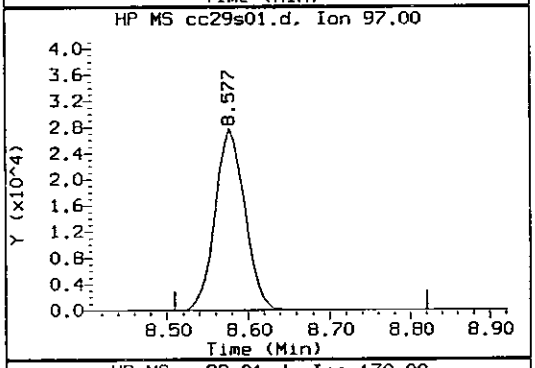


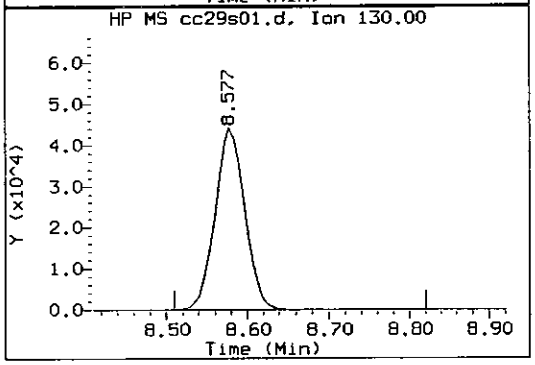
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct29a.b/cc29s01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:59 Analyst ID: JML01693

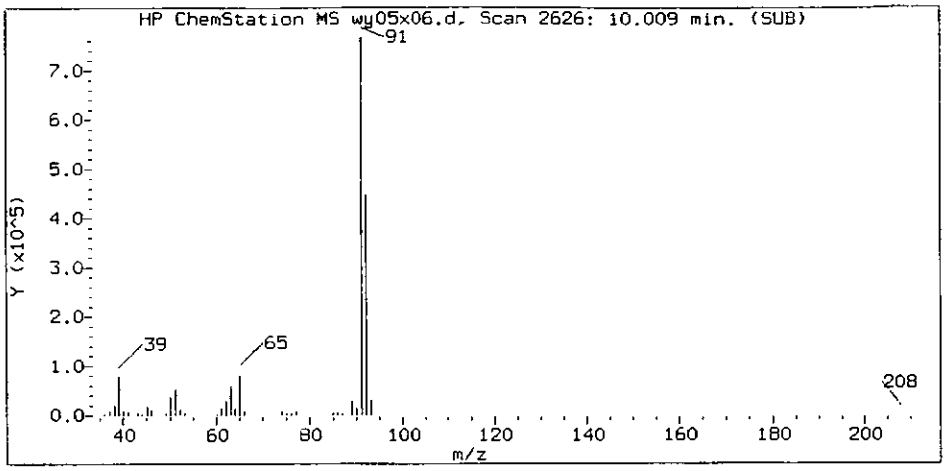
Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 15:18 Automation

Sample Name: 13MW7 Lab Sample ID: 5813518

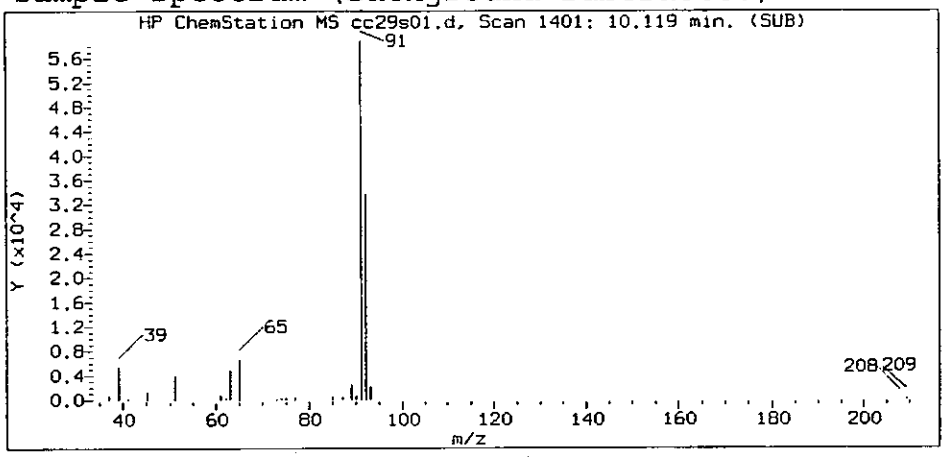
Compound Number	:	82
Compound Name	:	Trichloroethene
Scan Number	:	1148
Retention Time (minutes)	:	8.577
Quant Ion	:	95.0
Area (flag)	:	110575
Concentration (ug/L)	:	2.0830

RAD23 0091

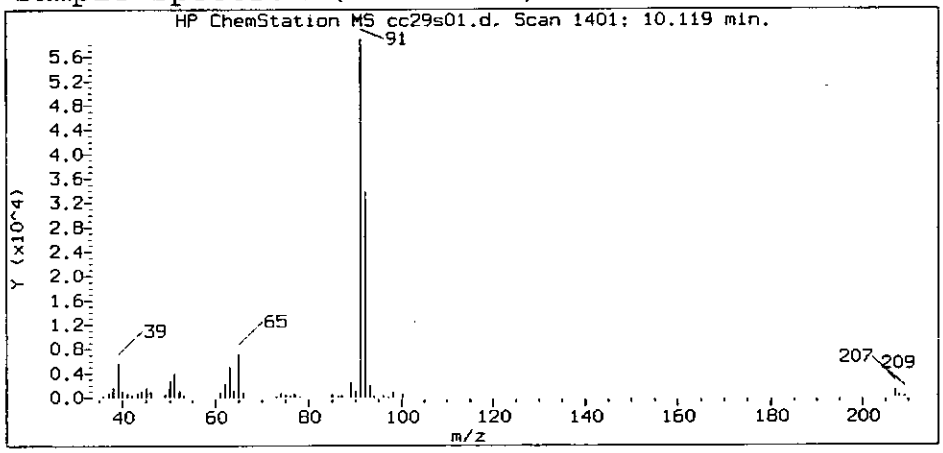
Reference Standard Spectrum for Toluene

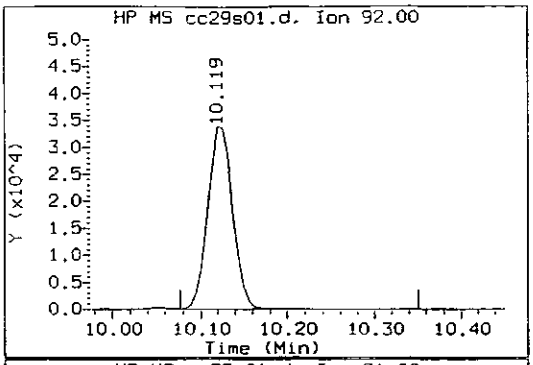


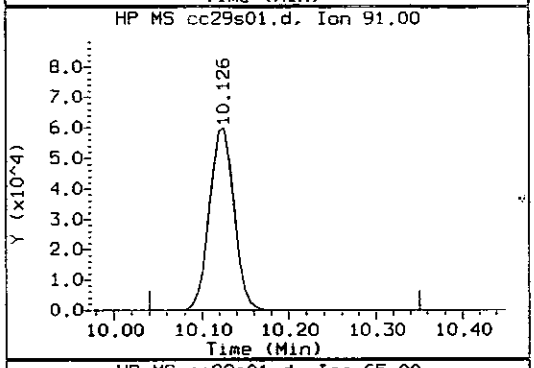
Sample Spectrum (Background Subtracted)

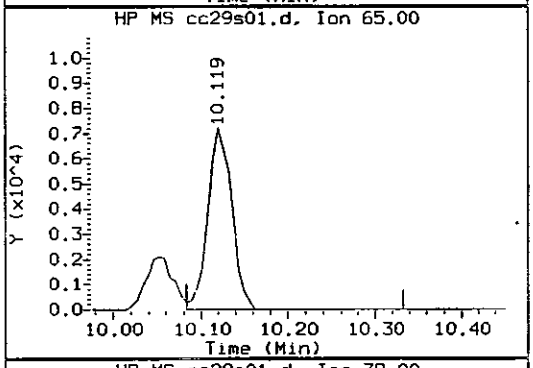


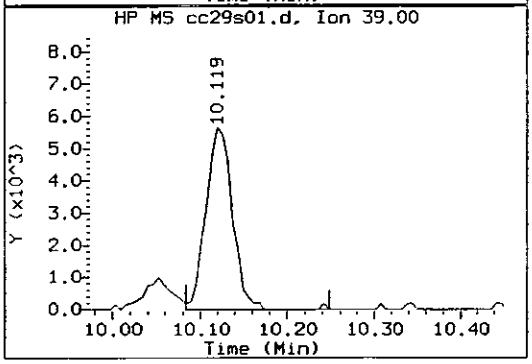
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct29a.b/cc29s01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:59 Analyst ID: JML01693

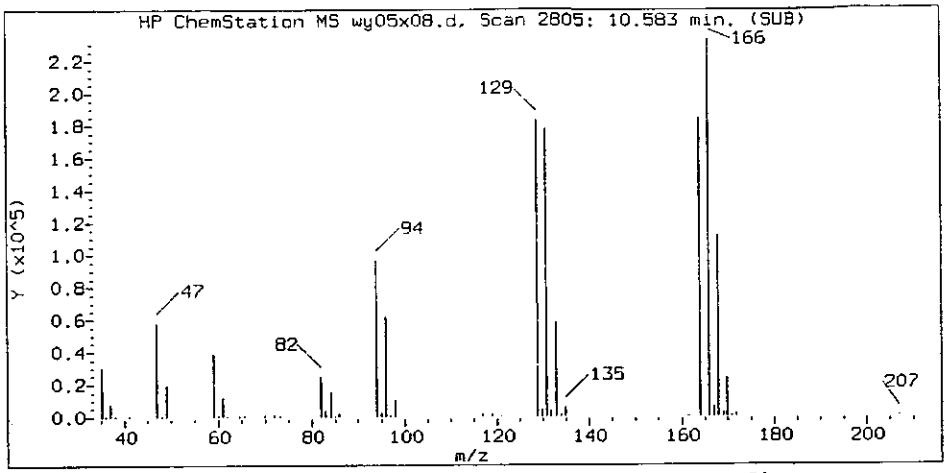
Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 15:18 Automation

Sample Name: 13MW7 Lab Sample ID: 5813518

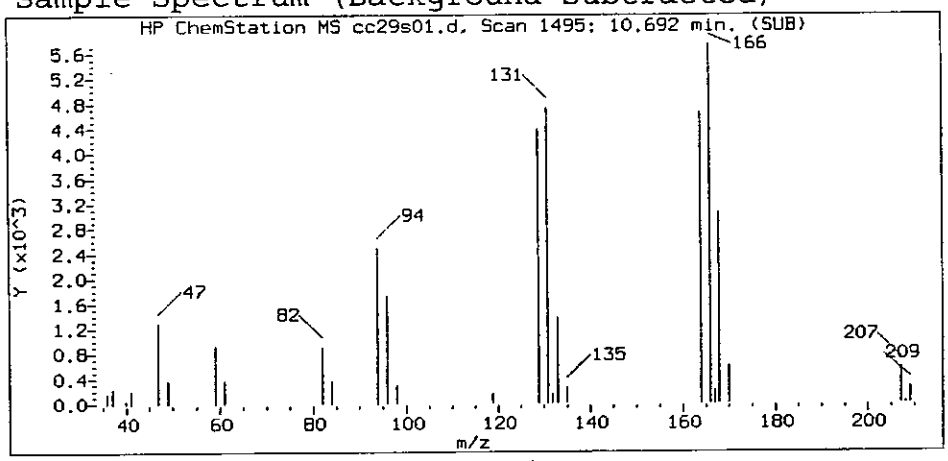
Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.119
Quant Ion	: 92.0
Area (flag)	: 67600
Concentration (ug/L)	: 0.5099

RAD23 0892

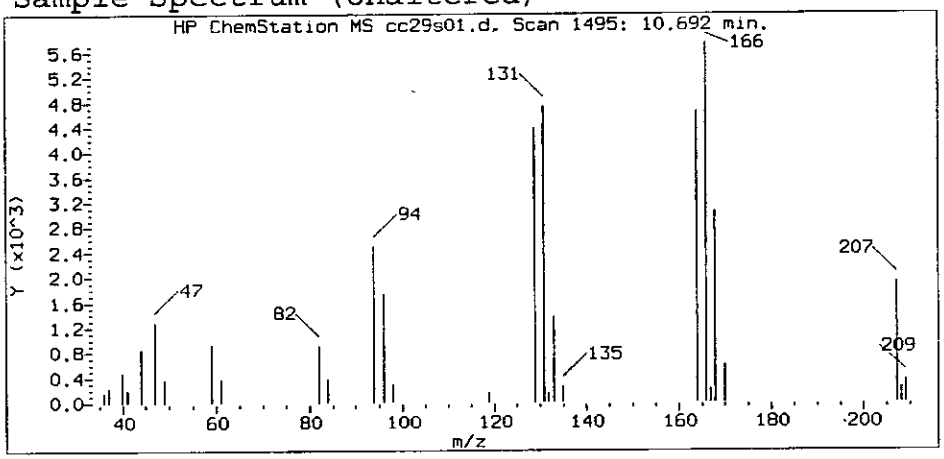
Reference Standard Spectrum for Tetrachloroethene

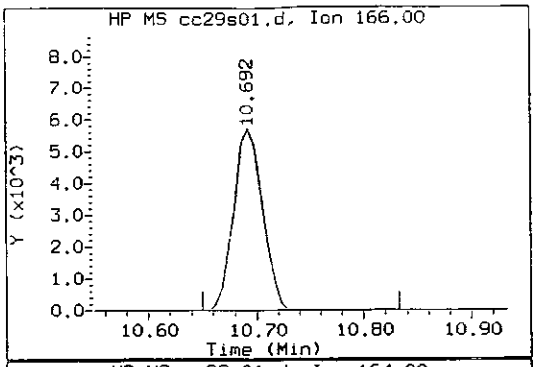


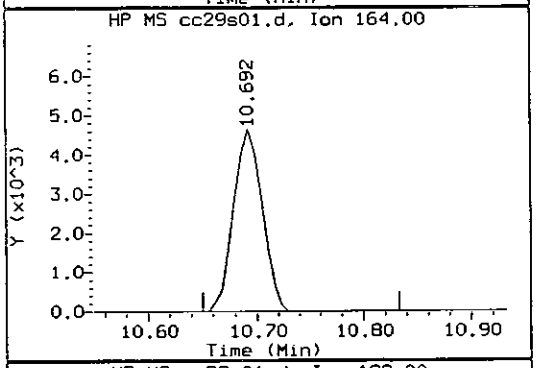
Sample Spectrum (Background Subtracted)

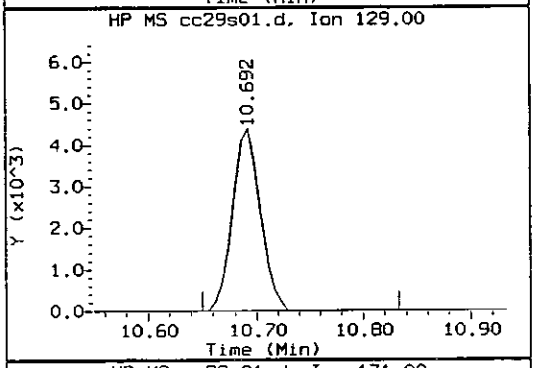


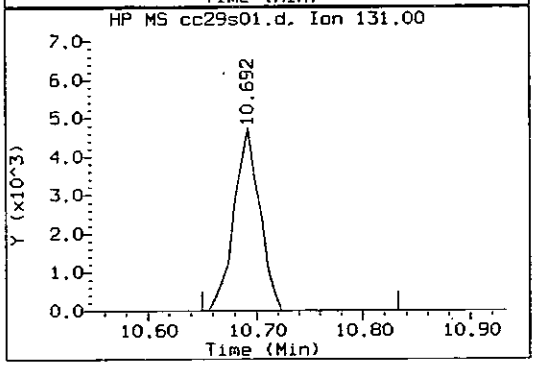
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct29a.b/cc29s01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 15:18 Automation

Sample Name: 13MW7 Lab Sample ID: 5813518

Compound Number	: 106
Compound Name	: Tetrachloroethene
Scan Number	: 1495
Retention Time (minutes)	: 10.692
Quant Ion	: 166.0
Area (flag)	: 10601
Concentration (ug/L)	: 0.1687

RAD23 0893

13MT1

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813519

File: /chem2/HP10193.i/09oct29a.b/cc29s02.d
Sample: 13MT1;5813519;1;0;;
Injected At:29-OCT-2009 15:21
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.621(0.006)	499	65	85411(-12)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1967731(-5)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1432776(-5)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	807186(-11)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	465468	9.587	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.000)	102	84314	9.322	93%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2021830	9.598	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	683860	9.047	90%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)				ND	ND			0.10	0.50
100) Toluene	(2)	10.120(0.001)	92	152662	1.179	1.18			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: _____

Analyst: AJS1731 Date: 10/29/09

Auditor: CMM Date: 11/2/09

RA023 8894

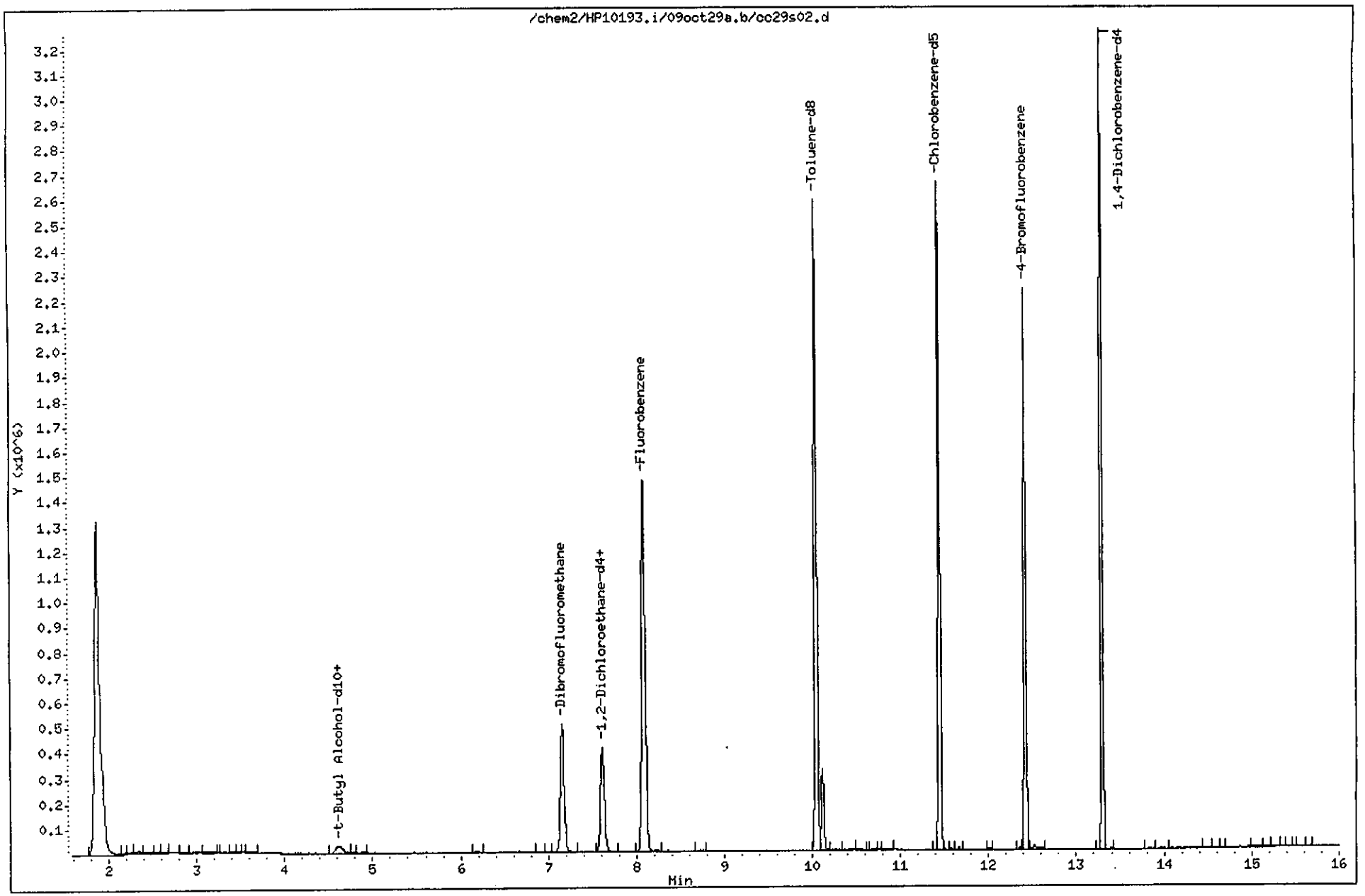
Data File: /chem2/HP10193.i/09oct29a.b/cc29s02.d
Date : 29-OCT-2009 15:21
Client ID: 13MT1
Sample Info: 13MT1;5813519;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

AD51731
10/29/09

RAD23 5935



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29s02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 15:21 Analyst ID: JML01693

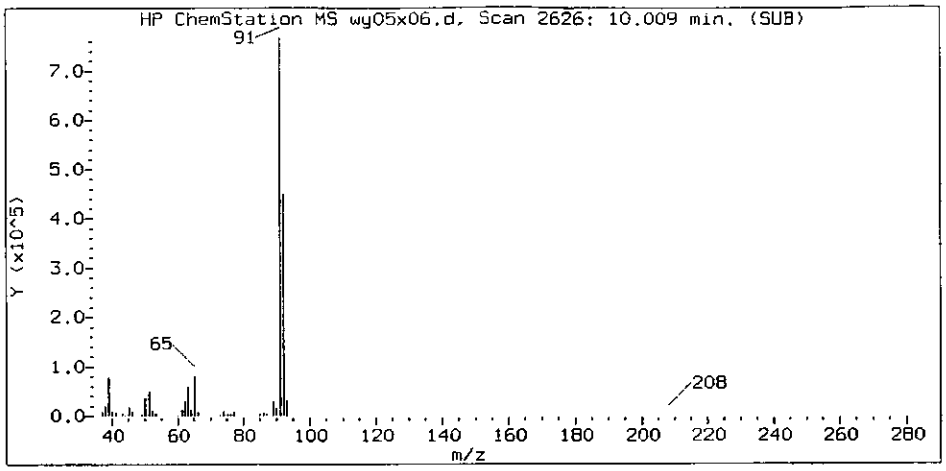
Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 15:39 Automation

Sample Name: 13MT1 Lab Sample ID: 5813519

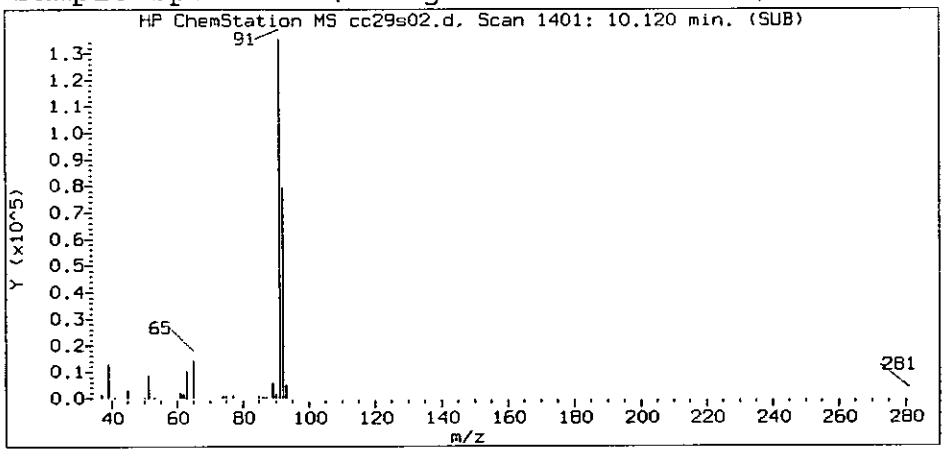
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.621	65	85411	50.000
78)*Fluorobenzene	(1)	8.089	96	1967731	10.000
100) Toluene	(2)	10.120	92	152662	1.179
110)*Chlorobenzene-d5	(2)	11.448	117	1432776	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	807186	10.000
60)$Dibromofluoromethane	(1)	7.163	113	465468	9.587
70)$1,2-Dichloroethane-d4	(1)	7.620	102	84314	9.322
98)$Toluene-d8	(2)	10.052	98	2021830	9.598
124)$4-Bromofluorobenzene	(2)	12.424	95	683860	9.047

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

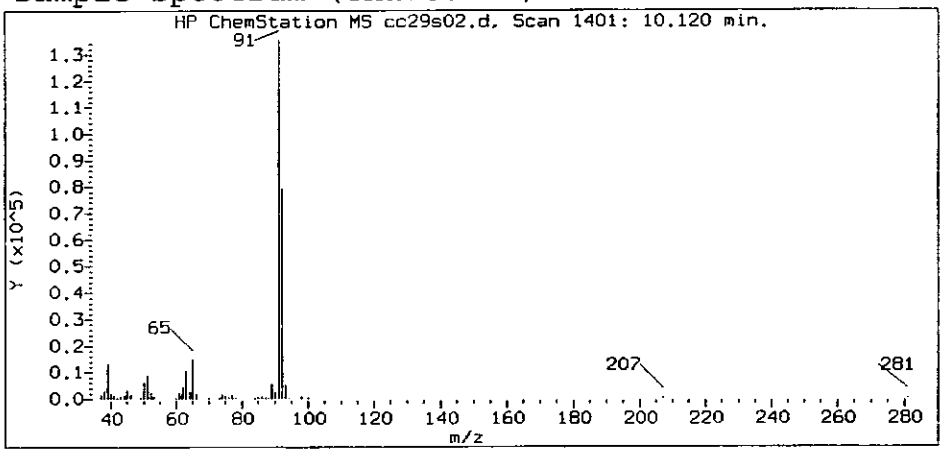
Reference Standard Spectrum for Toluene

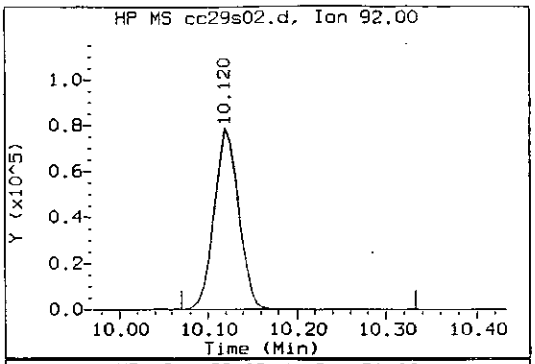


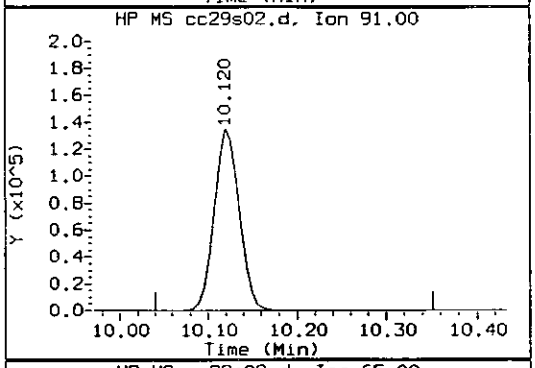
Sample Spectrum (Background Subtracted)

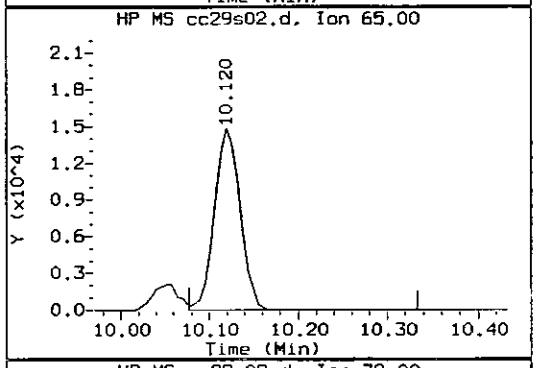


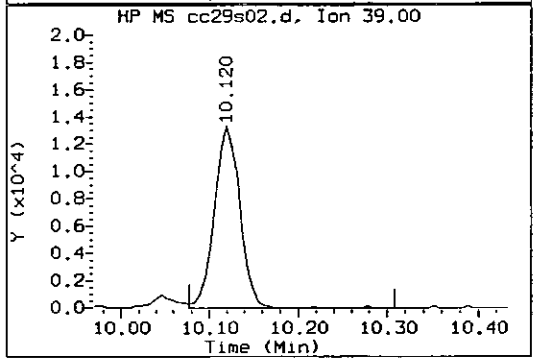
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct29a.b/cc29s02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 15:21 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 15:39 Automation

Sample Name: 13MT1 Lab Sample ID: 5813519

Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.120
Quant Ion	: 92.0
Area (flag)	: 152662
Concentration (ug/L)	: 1.1792

RAD23 0097

13MT2

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813520

File: /chem2/HP10193.i/09oct29a.b/cc29s03.d
Sample: 13MT2;5813520;1;0;;
Injected At:29-OCT-2009 15:43
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 1415

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)

Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.639(-0.012)	502	65	82403(-15)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1926891(-7)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1408750(-7)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	784562(-14)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	455616	9.583	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.000)	102	82669	9.334	93%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1976478	9.542	95%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	667733	8.985	90%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
59) Chloroform	(1)				ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)				ND	ND			0.10	0.50
73) Benzene	(1)				ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)				ND	ND			0.10	0.50
82) Trichloroethene	(1)				ND	ND			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	195636	1.537	1.54			0.10	0.50
106) Tetrachloroethene	(2)				ND	ND			0.10	0.50
112) Chlorobenzene	(2)				ND	ND			0.10	0.50
146) Benzyl Chloride	(3)				ND	ND			0.10	0.50
149) Hexachloroethane	(3)				ND	ND			0.10	0.50
155) Naphthalene	(3)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: _____

Analyst: AJS1731 Date: 10/29/09

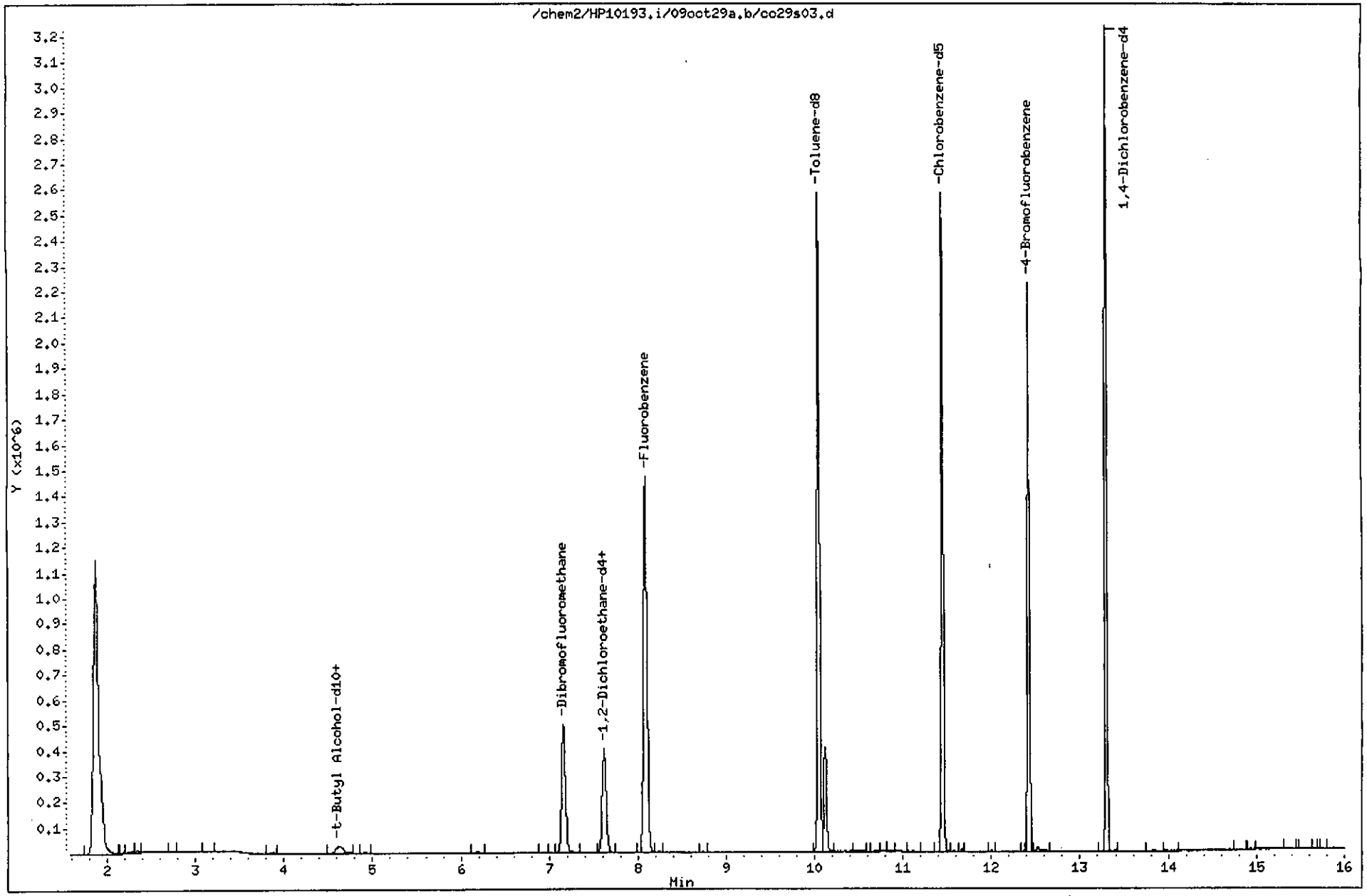
Auditor: Cmyrn Date: 11/2/09

Data File: /chem2/HP10193.i/09oct29a.b/cc29s03.d
Date : 29-OCT-2009 15:43
Client ID: 13MT2
Sample Info: 13MT2;5813520;1;0;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

A051731
10/29/09



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29s03.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 15:43 Analyst ID: JML01693

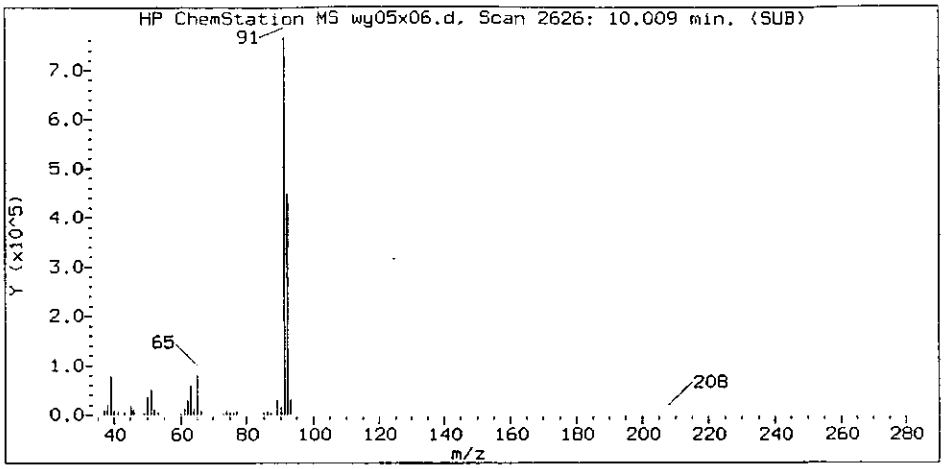
Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 16:01 Automation

Sample Name: 13MT2 Lab Sample ID: 5813520

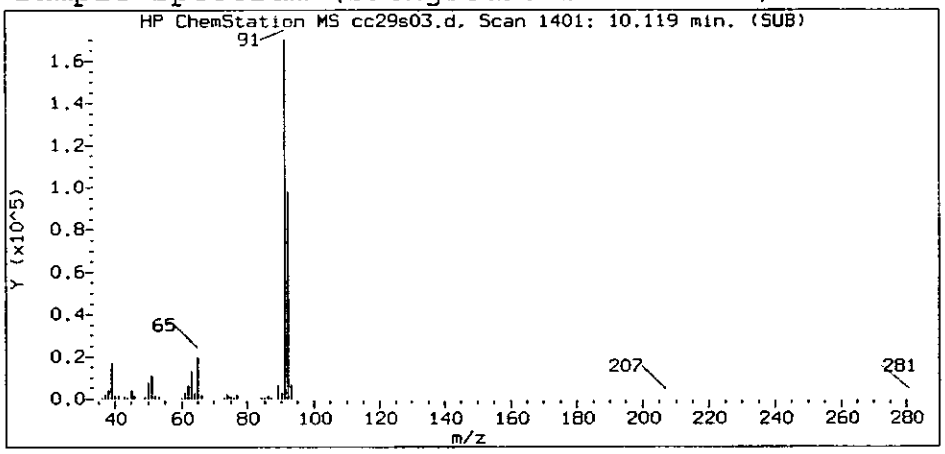
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.639	65	82403	50.000
78)*Fluorobenzene	(1)	8.089	96	1926891	10.000
100) Toluene	(2)	10.119	92	195636	1.537
110)*Chlorobenzene-d5	(2)	11.448	117	1408750	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	784562	10.000
60)$Dibromofluoromethane	(1)	7.163	113	455616	9.583
70)$1,2-Dichloroethane-d4	(1)	7.620	102	82669	9.334
98)$Toluene-d8	(2)	10.052	98	1976478	9.542
124)$4-Bromofluorobenzene	(2)	12.424	95	667733	8.985

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

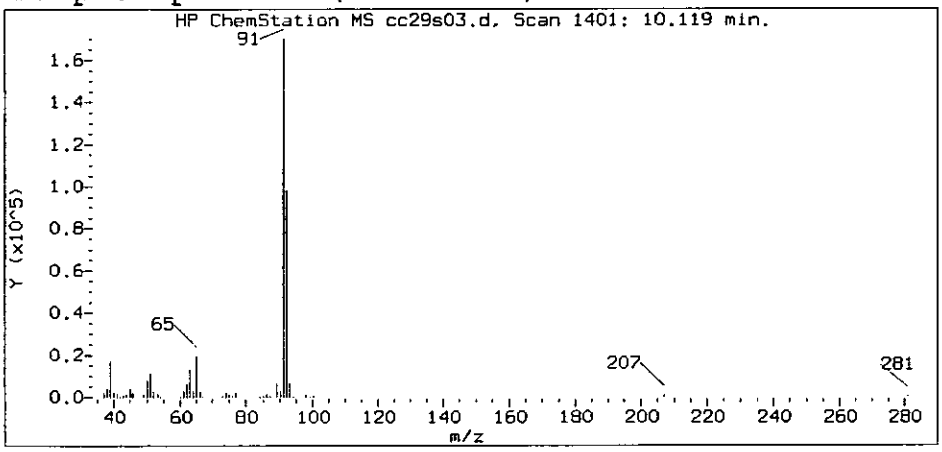
Reference Standard Spectrum for Toluene

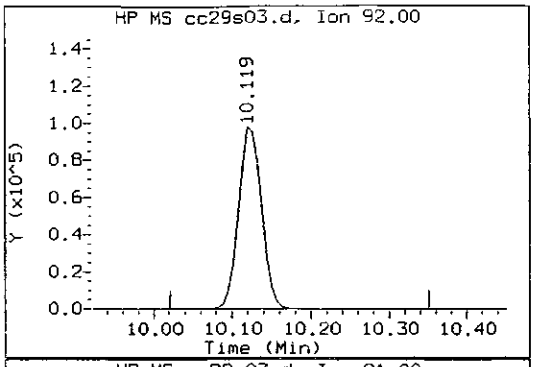


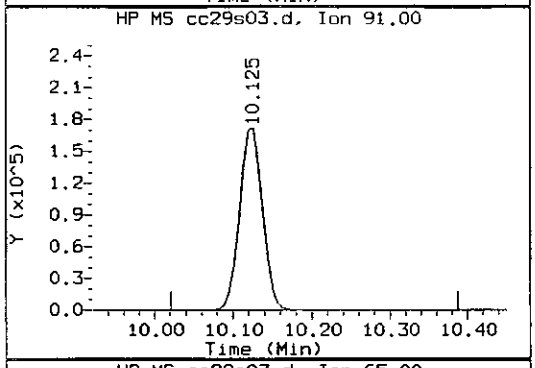
Sample Spectrum (Background Subtracted)

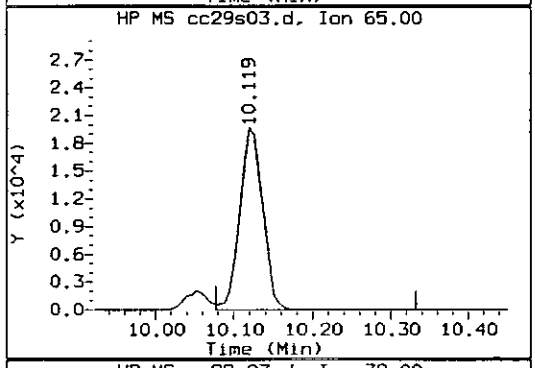


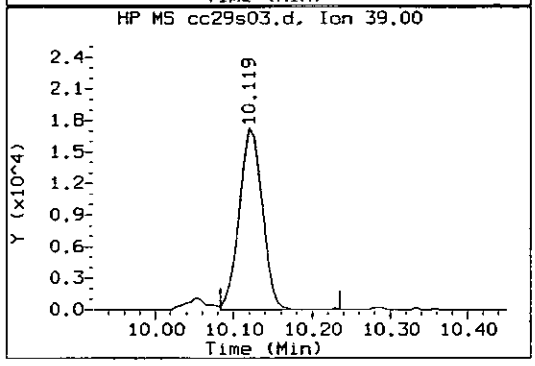
Sample Spectrum (Unaltered)











Data File: /chem2/HP10193.i/09oct29a.b/cc29s03.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 15:43 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 1415
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 16:01 Automation

Sample Name: 13MT2 Lab Sample ID: 5813520

Compound Number	: 100
Compound Name	: Toluene
Scan Number	: 1401
Retention Time (minutes)	: 10.119
Quant Ion	: 92.0
Area (flag)	: 195636
Concentration (ug/L)	: 1.5369

RAD23 6161

Standards Data

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date(s): 10/23/09 10/23/09

Heated Purge: (Y/N) Y Calibration Times: 10:15 12:48

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

LAB FILE ID: RRF 0.5 cc23i06.d RRF 1 = cc23i05.d RRF 2 = cc23i07.d
RRF 5 = cc23i03.d RRF 10= cc23i02.d RRF 25= cc23i01.d RRF =

COMPOUND	RRF 0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	$\overline{RRF}$	% RSD	CAL. METHOD	
Dichlorodifluoromethane	0.3505	0.3138	0.3414	0.2958	0.3005	0.3108		0.3188	7	AVG	
Chloromethane	#0.3699	0.3288	0.3470	0.3078	0.3166	0.3316		0.3336	7	AVG	#
Vinyl Chloride	*0.3537	0.3163	0.3420	0.3126	0.3231	0.3347		0.3304	5	AVG	*
1,3-Butadiene	0.2602	0.2158	0.2279	0.1994	0.2050	0.2053		0.2189	10	AVG	
Bromomethane	0.2681	0.2346	0.2353	0.2115	0.2160	0.2227		0.2314	9	AVG	
Chloroethane	0.2179	0.1950	0.2002	0.1775	0.1792	0.1832		0.1922	8	AVG	
Dichlorofluoromethane	0.5104	0.4591	0.4690	0.4280	0.4293	0.4426		0.4564	7	AVG	
Trichlorofluoromethane	0.4505	0.4064	0.4345	0.3974	0.4000	0.4168		0.4176	5	AVG	
Ethyl Ether	0.1798	0.1726	0.1685	0.1606	0.1643	0.1707		0.1694	4	AVG	
Freon 123a	0.3337	0.2907	0.2917	0.2705	0.2700	0.2814		0.2897	8	AVG	
Acrolein	2.6946	2.5858	2.5886	2.3264	2.3814	2.5436		2.5201	6	AVG	
1,1-Dichloroethene	*0.2295	0.1998	0.2079	0.1966	0.1979	0.2071		0.2065	6	AVG	*
Freon 113	0.2485	0.2179	0.2352	0.2220	0.2208	0.2313		0.2293	5	AVG	
Acetone	1.1192	1.0150	1.0182	0.8832	0.8861	0.9406		0.9771	9	AVG	
Methyl Iodide	0.4719	0.4235	0.4355	0.4160	0.4179	0.4400		0.4341	5	AVG	
Carbon Disulfide	0.6787	0.6106	0.6280	0.6405	0.6668	0.7157		0.6567	6	AVG	
Allyl Chloride	0.4292	0.3978	0.3992	0.3872	0.4059	0.4200		0.4065	4	AVG	
Methyl Acetate	0.1135	0.1007	0.0910	0.0867	0.0916	0.0968		0.0967	10	AVG	
Methylene Chloride	0.2698	0.2404	0.2331	0.2257	0.2223	0.2317		0.2372	7	AVG	
t-Butyl Alcohol	1.1718	1.0833	1.0771	0.9748	0.9697	1.0266		1.0505	7	AVG	
Acrylonitrile	4.7713	4.5153	4.5641	4.0850	4.1988	4.5647		4.4499	6	AVG	
trans-1,2-Dichloroethene	0.2647	0.2389	0.2450	0.2324	0.2333	0.2474		0.2436	5	AVG	
1,2-Dichloroethene (Total)	0.2731	0.2489	0.2540	0.2419	0.2421	0.2581		0.2530	5	AVG	
Methyl Tertiary Butyl Ether	0.5759	0.5481	0.5413	0.5347	0.5370	0.5572		0.5490	3	AVG	
n-Hexane	0.3958	0.3554	0.3884	0.3657	0.3604	0.3767		0.3737	4	AVG	
1,1-Dichloroethane	#0.4863	0.4424	0.4460	0.4248	0.4300	0.4538		0.4472	5	AVG	#
di-Isopropyl Ether	0.8845	0.8227	0.8469	0.8131	0.8139	0.8601		0.8402	3	AVG	
2-Chloro-1,3-Butadiene	0.4114	0.3753	0.4033	0.3830	0.3873	0.4109		0.3952	4	AVG	
Ethyl t-Butyl Ether	0.7759	0.7226	0.7368	0.7089	0.7187	0.7558		0.7364	3	AVG	
2,2-Dichloropropane	0.3648	0.3345	0.3443	0.3343	0.3438	0.3659		0.3479	4	AVG	
cis-1,2-Dichloroethene	0.2815	0.2589	0.2630	0.2514	0.2510	0.2689		0.2625	4	AVG	
2-Butanone	6.4675	5.9059	6.0168	5.3558	5.4485	5.8865		5.8468	7	AVG	
Propionitrile	1.6495	1.7387	1.7041	1.5802	1.5636	1.7423		1.6631	5	AVG	
Methacrylonitrile	6.2483	6.1446	6.2238	5.6535	5.8091	6.2819		6.0602	4	AVG	
Bromochloromethane	0.1206	0.1170	0.1112	0.1092	0.1131	0.1165		0.1146	4	AVG	
Tetrahydrofuran	1.6269	1.5071	1.5469	1.4314	1.4615	1.5878		1.5269	5	AVG	
Chloroform	*0.4467	0.4158	0.4231	0.4091	0.4106	0.4360		0.4236	4	AVG	*
1,1,1-Trichloroethane	0.3777	0.3513	0.3691	0.3528	0.3642	0.3888		0.3673	4	AVG	
Cyclohexane	0.4838	0.4314	0.4672	0.4383	0.4384	0.4634		0.4537	5	AVG	
1,1-Dichloropropene	0.3730	0.3306	0.3464	0.3307	0.3355	0.3591		0.3459	5	AVG	
Carbon Tetrachloride	0.3098	0.2886	0.3049	0.3023	0.3147	0.3428		0.3105	6	AVG	
Isobutyl Alcohol	0.4764	0.3721	0.4135	0.3649	0.3642	0.4009		0.3987	11	AVG	
Benzene	1.1341	1.0268	1.0534	0.9997	1.0061	1.0813		1.0502	5	AVG	
1,2-Dichloroethane	0.2829	0.2602	0.2693	0.2529	0.2538	0.2694		0.2648	4	AVG	
1,2-Dichloroethane(mz98)	0.0244	0.0229	0.0228	0.0221	0.0223	0.0235		0.0230	4	AVG	
t-Amyl Methyl Ether	0.6316	0.5929	0.5980	0.5891	0.6006	0.6370		0.6082	3	AVG	
n-Heptane	0.4607	0.4096	0.4430	0.3983	0.4049	0.4253		0.4236	6	AVG	
n-Butanol	0.3399	0.3256	0.3324	0.3223	0.3233	0.3485		0.3320	3	AVG	
Trichloroethene	0.2830	0.2569	0.2659	0.2517	0.2540	0.2733		0.2641	5	AVG	
Methylcyclohexane	0.4958	0.4529	0.4887	0.4629	0.4826	0.5017		0.4807	4	AVG	
1,2-Dichloropropane	*0.2821	0.2551	0.2620	0.2528	0.2558	0.2742		0.2637	4	AVG	*
Dibromomethane	0.1177	0.1033	0.1084	0.1051	0.1058	0.1122		0.1088	5	AVG	

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

RAD23 8103

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date(s): 10/23/09 10/23/09

Heated Purge: (Y/N) Y Calibration Times: 10:15 12:48

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

LAB FILE ID: RRF 0.5 cc23i06.d RRF 1 = cc23i05.d RRF 2 = cc23i07.d
RRF 5 = cc23i03.d RRF 10= cc23i02.d RRF 25= cc23i01.d RRF =

COMPOUND	RRF 0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	$\overline{RRF}$	% RSD	CAL. METHOD	
1,4-Dioxane	0.0961	0.0922	0.0903	0.0870	0.0800	0.0790		0.0874	8	AVG	
Methyl Methacrylate	10.849	10.750	11.053	10.122	10.738	11.884		10.899	5	AVG	
Bromodichloromethane	0.2708	0.2556	0.2644	0.2700	0.2807	0.3063		0.2747	6	AVG	
2-Nitropropane	3.0822	3.0656	3.2021	3.0146	3.2162	3.6286		3.2015	7	AVG	
cis-1,3-Dichloropropene	0.3583	0.3339	0.3410	0.3469	0.3581	0.3890		0.3545	5	AVG	
4-Methyl-2-Pentanone	0.1437	0.1372	0.1415	0.1360	0.1334	0.1421		0.1390	3	AVG	
Toluene	*0.9749	0.8758	0.9089	0.8584	0.8690	0.9344		0.9036	5	AVG	*
trans-1,3-Dichloropropene	0.3833	0.3667	0.3798	0.3870	0.4029	0.4361		0.3926	6	AVG	
Ethyl Methacrylate	0.3028	0.2852	0.3022	0.3000	0.3086	0.3297		0.3047	5	AVG	
1,1,2-Trichloroethane	0.2281	0.2134	0.2096	0.2057	0.2064	0.2154		0.2131	4	AVG	
Tetrachloroethene	0.4438	0.4153	0.4302	0.4094	0.4167	0.4539		0.4282	4	AVG	
1,3-Dichloropropane	0.4040	0.3746	0.3777	0.3715	0.3719	0.3952		0.3825	4	AVG	
2-Hexanone	0.1377	0.1320	0.1324	0.1286	0.1279	0.1331		0.1319	3	AVG	
Dibromochloromethane	0.2297	0.2202	0.2290	0.2440	0.2590	0.2868		0.2448	10	AVG	
1,2-Dibromoethane	0.2089	0.1993	0.1991	0.1984	0.2013	0.2115		0.2031	3	AVG	
Chlorobenzene	#1.0819	1.0113	1.0246	0.9760	0.9852	1.0573		1.0227	4	AVG	#
1,1,1,2-Tetrachloroethane	0.3170	0.2981	0.3079	0.3111	0.3252	0.3581		0.3196	7	AVG	
Ethylbenzene	*1.8921	1.7275	1.7846	1.7028	1.7412	1.8981		1.7910	5	AVG	*
m+p-Xylene	0.7412	0.6718	0.7059	0.6755	0.6908	0.7608		0.7077	5	AVG	
Xylene (Total)	0.7296	0.6671	0.6996	0.6687	0.6823	0.7512		0.6998	5	AVG	
o-Xylene	0.7065	0.6578	0.6868	0.6551	0.6655	0.7321		0.6840	4	AVG	
Styrene	1.0805	1.0222	1.0784	1.0525	1.0857	1.2029		1.0870	6	AVG	
Bromoform	#0.1185	0.1195	0.1206	0.1308	0.1448	0.1645		0.1331	14	AVG	#
Isopropylbenzene	1.8131	1.6506	1.7329	1.6463	1.6960	1.8451		1.7307	5	AVG	
1,1,2,2-Tetrachloroethane	#0.4173	0.4059	0.4182	0.4104	0.4071	0.4318		0.4151	2	AVG	#
Bromobenzene	0.7822	0.7167	0.7448	0.7268	0.7344	0.8080		0.7521	5	AVG	
trans-1,4-Dichloro-2-Butene	5.2686	5.4573	5.6715	5.3759	5.7255	6.3096		5.6347	7	AVG	
1,2,3-Trichloropropane	0.1232	0.1157	0.1195	0.1153	0.1149	0.1248		0.1189	4	AVG	
n-Propylbenzene	3.9452	3.6440	3.7446	3.5898	3.6220	3.8831		3.7381	4	AVG	
2-Chlorotoluene	0.7861	0.7319	0.7581	0.7211	0.7222	0.7799		0.7499	4	AVG	
4-Chlorotoluene	0.8385	0.7567	0.7883	0.7457	0.7450	0.8083		0.7804	5	AVG	
1,3,5-Trimethylbenzene	2.7455	2.5917	2.6794	2.5792	2.6143	2.8511		2.6769	4	AVG	
Pentachloroethane	0.4254	0.4151	0.4291	0.4642	0.4928	0.5455		0.4620	11	AVG	
tert-Butylbenzene	0.6431	0.5916	0.6111	0.5898	0.5986	0.6484		0.6138	4	AVG	
1,2,4-Trimethylbenzene	2.8276	2.6725	2.7706	2.6852	2.7259	3.0049		2.7811	4	AVG	
sec-Butylbenzene	3.5770	3.2939	3.4665	3.3269	3.3563	3.6553		3.4460	4	AVG	
1,3-Dichlorobenzene	1.6189	1.5344	1.5561	1.4915	1.5062	1.6646		1.5619	4	AVG	
p-Isopropyltoluene	3.1445	2.9065	3.0261	2.9259	3.0089	3.3271		3.0565	5	AVG	
1,4-Dichlorobenzene	1.6845	1.5488	1.5726	1.5035	1.5183	1.6341		1.5770	4	AVG	
1,2,3-Trimethylbenzene	1.3138	1.2583	1.2491	1.2111	1.2549	1.3387		1.2710	4	AVG	
Benzyl Chloride	0.1410	0.1530	0.1594	0.1801	0.1902	0.2123		0.1727	15	AVG	
n-Butylbenzene	1.6079	1.4698	1.5349	1.4594	1.4806	1.5950		1.5246	4	AVG	
1,2-Dichlorobenzene	1.4314	1.3332	1.3296	1.2967	1.2968	1.3936		1.3469	4	AVG	
1,2-Dibromo-3-Chloropropane	2.2535	2.3231	2.3764	2.3170	2.5414	2.9449		2.4594	10	AVG	
1,2,4-Trichlorobenzene	1.1546	1.0968	1.0803	1.0573	1.0666	1.1483		1.1007	4	AVG	
Hexachlorobutadiene	0.6678	0.6027	0.6257	0.6009	0.6283	0.6740		0.6332	5	AVG	
Naphthalene	1.6187	1.5598	1.5180	1.5646	1.5525	1.6111		1.5708	2	AVG	
1,2,3-Trichlorobenzene	0.9697	0.9156	0.8853	0.8731	0.8713	0.9147		0.9050	4	AVG	
Dibromofluoromethane	0.2691	0.2393	0.2379	0.2302	0.2539	0.2501		0.2467	6	AVG	
Dibromofluoromethane(mz111)	0.2683	0.2490	0.2460	0.2401	0.2604	0.2556		0.2532	4	AVG	
1,2-Dichloroethane-d4	0.0501	0.0470	0.0450	0.0417	0.0465	0.0454		0.0460	6	AVG	

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

RAD23 #104

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: HP10193 Calibration Date(s): 10/23/09 10/23/09

Heated Purge: (Y/N) Y Calibration Times: 10:15 12:48

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

LAB FILE ID: RRF 0.5 cc23i06.d RRF 1 = cc23i05.d RRF 2 = cc23i07.d
RRF 5 = cc23i03.d RRF 10= cc23i02.d RRF 25= cc23i01.d RRF =

COMPOUND	RRF 0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	$\overline{RRF}$	% RSD	CAL. METHOD
1,2-Dichloroethane-d4(mz65)	0.2538	0.2350	0.2275	0.2154	0.2327	0.2266		0.2318	5	AVG
1,2-Dichloroethane-d4(mz104)	0.0322	0.0298	0.0289	0.0272	0.0294	0.0286		0.0293	6	AVG
Toluene-d8	1.6007	1.4305	1.4468	1.3811	1.4882	1.4745		1.4703	5	AVG
Toluene-d8(mz100)	1.0350	0.9200	0.9348	0.8873	0.9566	0.9437		0.9462	5	AVG
4-Bromofluorobenzene	0.5753	0.5115	0.5182	0.4940	0.5334	0.5329		0.5275	5	AVG
4-Bromofluorobenzene(mz174)	0.5043	0.4580	0.4612	0.4391	0.4794	0.4815		0.4706	5	AVG

Average %RSD 5

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

RAD23 8185

FORM VI VOA

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP10193.i/09oct23a.b/cc23i01.d VSTD025
/chem2/HP10193.i/09oct23a.b/cc23i02.d VSTD010
/chem2/HP10193.i/09oct23a.b/cc23i03.d VSTD005
/chem2/HP10193.i/09oct23a.b/cc23i07.d VSTD002
/chem2/HP10193.i/09oct23a.b/cc23i05.d VSTD001
/chem2/HP10193.i/09oct23a.b/cc23i06.d VSTD0.5

Area Summary

File ID:

Internal Standard Name	cc23i01.d	cc23i02.d	cc23i03.d	cc23i07.d	cc23i05.d	cc23i06.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	93881	97754	100574	88191	90807	86932	93023	6	Yes
Fluorobenzene	2049263	2058742	2057278	1934727	1960322	1826805	1981190	5	Yes
Chlorobenzene-d5	1505931	1503927	1495680	1399768	1425709	1320270	1441881	5	Yes
1,4-Dichlorobenzene-d4	890477	877986	856500	805179	808803	755541	832414	6	Yes

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

RT Summary

File ID:

Internal Standard Name	cc23i01.d	cc23i02.d	cc23i03.d	cc23i07.d	cc23i05.d	cc23i06.d	Avg. RT
t-Butyl Alcohol-d10	4.657	4.639	4.633	4.639	4.633	4.639	4.640
Fluorobenzene	8.102	8.102	8.102	8.102	8.101	8.102	8.102
Chlorobenzene-d5	11.461	11.455	11.461	11.461	11.454	11.455	11.458
1,4-Dichlorobenzene-d4	13.308	13.308	13.308	13.308	13.308	13.308	13.308

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

Report generated on 10/23/2009 at 13:21.

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 ICV Date: 10/23/09 Time: 13:31

Lab File ID: cc23cv1.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Dichlorodifluoromethane	0.3188	0.3390	5.32	5	6	
#	Chloromethane	0.3336	0.3818	5.72	5	14	#
*	Vinyl Chloride	0.3304	0.3706	5.61	5	12	*
	1,3-Butadiene	0.2189	0.2283	5.21	5	4	
	Bromomethane	0.2314	0.2462	5.32	5	6	
	Chloroethane	0.1922	0.2076	5.40	5	8	
	Dichlorofluoromethane	0.4564	0.5131	5.62	5	12	
	Trichlorofluoromethane	0.4176	0.4499	5.39	5	8	
	Ethyl Ether	0.1694	0.1507	4.45	5	-11	
	Freon 123a	0.2897	0.3191	5.51	5	10	
	Acrolein	2.5201	2.8389	42.24	37.5	13	
*	1,1-Dichloroethene	0.2065	0.2292	5.55	5	11	*
	Freon 113	0.2293	0.2348	5.12	5	2	
	Acetone	0.9771	1.1178	42.90	37.5	14	
	Methyl Iodide	0.4341	0.4626	5.33	5	7	
	Carbon Disulfide	0.6567	0.6739	5.13	5	3	
	Allyl Chloride	0.4065	0.4479	5.51	5	10	
	Methyl Acetate	0.0967	0.1014	5.24	5	5	
	Methylene Chloride	0.2372	0.2572	5.42	5	8	
	t-Butyl Alcohol	1.0505	1.0704	50.94	50	2	
	Acrylonitrile	4.4499	5.1050	28.68	25	15	
	trans-1,2-Dichloroethene	0.2436	0.2682	5.50	5	10	
	1,2-Dichloroethene (Total)	0.2530	0.2793	11.04	10	10	
	Methyl Tertiary Butyl Ether	0.5490	0.6173	5.62	5	12	
	n-Hexane	0.3737	0.3712	4.97	5	-1	
#	1,1-Dichloroethane	0.4472	0.4978	5.57	5	11	#
	di-Isopropyl Ether	0.8402	0.9353	5.57	5	11	
	2-Chloro-1,3-Butadiene	0.3952	0.4564	5.77	5	15	
	Ethyl t-Butyl Ether	0.7364	0.8109	5.51	5	10	
	2,2-Dichloropropane	0.3479	0.3849	5.53	5	11	
	cis-1,2-Dichloroethene	0.2625	0.2904	5.53	5	11	
	2-Butanone	5.8468	6.7488	43.29	37.5	15	
	Propionitrile	1.6631	1.8015	40.62	37.5	8	
	Methacrylonitrile	6.0602	6.6785	41.33	37.5	10	
	Bromochloromethane	0.1146	0.1204	5.26	5	5	
	Tetrahydrofuran	1.5269	1.7870	29.26	25	17	

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane) RAD23 0187
Maximum %Drift for CCC(*)=20%

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 ICV Date: 10/23/09 Time: 13:31

Lab File ID: cc23cv1.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
*	Chloroform	0.4236	0.4788	5.65	5	13	*
	1,1,1-Trichloroethane	0.3673	0.4081	5.56	5	11	
	Cyclohexane	0.4537	0.4703	5.18	5	4	
	1,1-Dichloropropene	0.3459	0.3843	5.56	5	11	
	Carbon Tetrachloride	0.3105	0.3456	5.56	5	11	
	Isobutyl Alcohol	0.3987	0.4025	126.19	125	1	
	Benzene	1.0502	1.1420	5.44	5	9	
	1,2-Dichloroethane	0.2648	0.3002	5.67	5	13	
	t-Amyl Methyl Ether	0.6082	0.6735	5.54	5	11	
	n-Heptane	0.4236	0.4251	5.02	5	0	
	n-Butanol	0.3320	0.3452	259.97	250	4	
	Trichloroethene	0.2641	0.2958	5.60	5	12	
	Methylcyclohexane	0.4807	0.5056	5.26	5	5	
*	1,2-Dichloropropane	0.2637	0.2931	5.56	5	11	*
	Dibromomethane	0.1088	0.1233	5.67	5	13	
	1,4-Dioxane	0.0874	0.0999	142.83	125	14	
	Methyl Methacrylate	10.899	12.6984	5.83	5	17	
	Bromodichloromethane	0.2747	0.3124	5.69	5	14	
	2-Nitropropane	3.2015	3.3844	5.29	5	6	
	cis-1,3-Dichloropropene	0.3545	0.3961	5.59	5	12	
	4-Methyl-2-Pentanone	0.1390	0.1575	28.32	25	13	
*	Toluene	0.9036	1.0261	5.68	5	14	*
	trans-1,3-Dichloropropene	0.3926	0.4489	5.72	5	14	
	Ethyl Methacrylate	0.3047	0.3475	5.70	5	14	
	1,1,2-Trichloroethane	0.2131	0.2432	5.71	5	14	
	Tetrachloroethene	0.4282	0.4786	5.59	5	12	
	1,3-Dichloropropane	0.3825	0.4415	5.77	5	15	
	2-Hexanone	0.1319	0.1502	28.47	25	14	
	Dibromochloromethane	0.2448	0.2804	5.73	5	15	
	1,2-Dibromoethane	0.2031	0.2333	5.75	5	15	
#	Chlorobenzene	1.0227	1.1456	5.60	5	12	#
	1,1,1,2-Tetrachloroethane	0.3196	0.3609	5.65	5	13	
*	Ethylbenzene	1.7910	1.9990	5.58	5	12	*
	m+p-Xylene	0.7077	0.7974	11.27	10	13	
	Xylene (Total)	0.6998	0.7876	16.88	15	13	
	o-Xylene	0.6840	0.7681	5.62	5	12	

RAD23 8188

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 ICV Date: 10/23/09 Time: 13:31

Lab File ID: cc23cv1.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Styrene	1.0870	1.2354	5.68	5	14	
#	Bromoform	0.1331	0.1495	5.62	5	12	#
	Isopropylbenzene	1.7307	1.9481	5.63	5	13	
#	1,1,2,2-Tetrachloroethane	0.4151	0.4699	5.66	5	13	#
	Bromobenzene	0.7521	0.8376	5.57	5	11	
	trans-1,4-Dichloro-2-Butene	5.6347	6.2819	27.87	25	11	
	1,2,3-Trichloropropane	0.1189	0.1318	5.54	5	11	
	n-Propylbenzene	3.7381	4.1120	5.50	5	10	
	2-Chlorotoluene	0.7499	0.8334	5.56	5	11	
	4-Chlorotoluene	0.7804	0.8589	5.50	5	10	
	1,3,5-Trimethylbenzene	2.6769	2.9624	5.53	5	11	
	Pentachloroethane	0.4620	0.4974	5.38	5	8	
	tert-Butylbenzene	0.6138	0.6782	5.52	5	10	
	1,2,4-Trimethylbenzene	2.7811	3.1058	5.58	5	12	
	sec-Butylbenzene	3.4460	3.8174	5.54	5	11	
	1,3-Dichlorobenzene	1.5619	1.7319	5.54	5	11	
	p-Isopropyltoluene	3.0565	3.3889	5.54	5	11	
	1,4-Dichlorobenzene	1.5770	1.7438	5.53	5	11	
	1,2,3-Trimethylbenzene	1.2710	1.3354	5.25	5	5	
	Benzyl Chloride	0.1727	0.1932	5.59	5	12	
	n-Butylbenzene	1.5246	1.6596	5.44	5	9	
	1,2-Dichlorobenzene	1.3469	1.4945	5.55	5	11	
	1,2-Dibromo-3-Chloropropane	2.4594	2.7661	5.62	5	12	
	1,2,4-Trichlorobenzene	1.1007	1.1795	5.36	5	7	
	Hexachlorobutadiene	0.6332	0.6707	5.30	5	6	
	Naphthalene	1.5708	1.7288	5.50	5	10	
	1,2,3-Trichlorobenzene	0.9050	0.9703	5.36	5	7	

Average %Drift 10

RAD23 8109

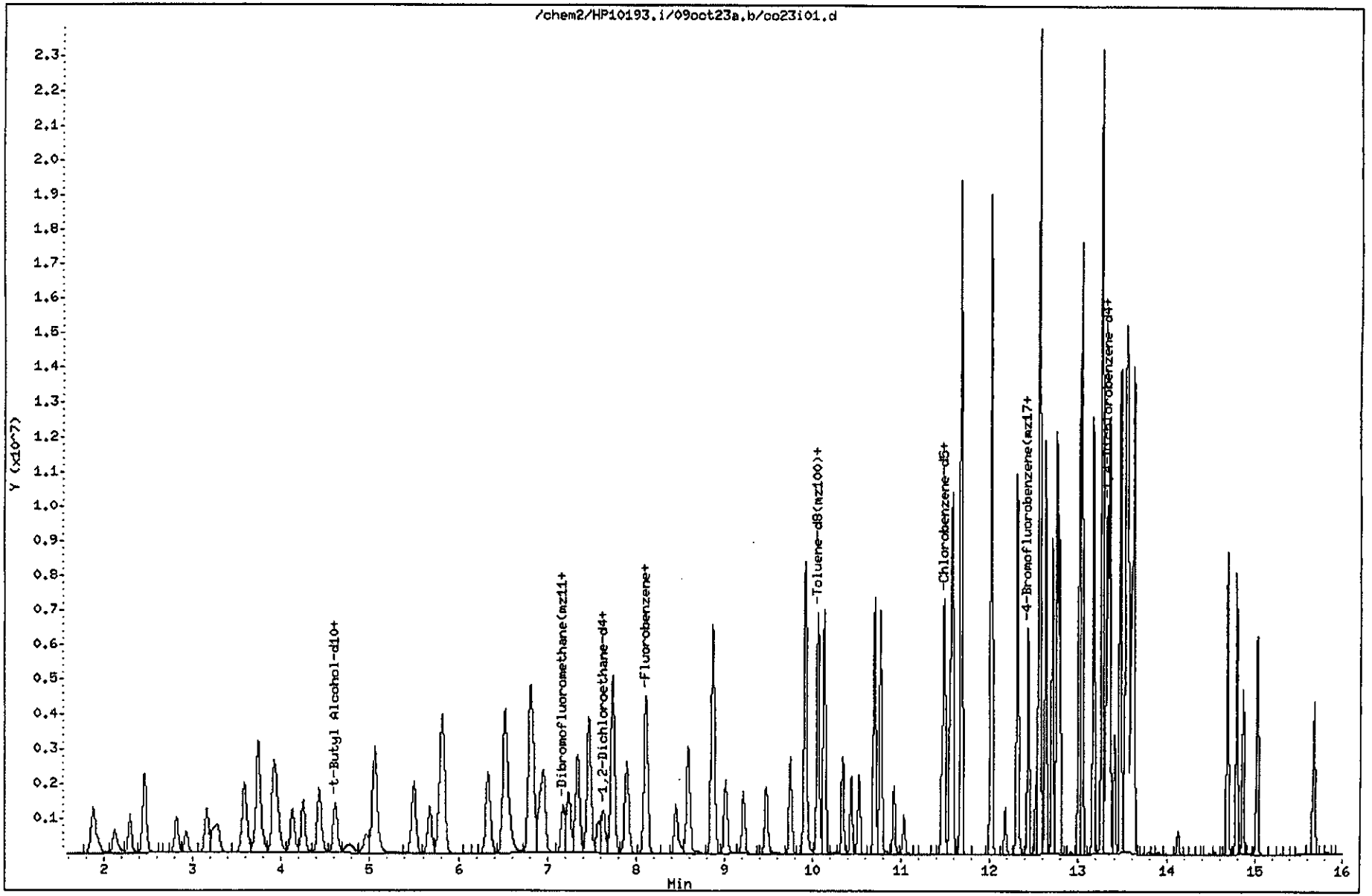
Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

Data File: /chem2/HP10193.i/09oct23a.b/oc23i01.d
Date : 23-OCT-2009 10:15
Client ID: VSTD025
Sample Info: VSTD025;VSTD025;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

RAD2 5116



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.121	85	1592427	24.015
5) Chloromethane	(1)	2.292	50	1698633	24.481
7) Vinyl Chloride	(1)	2.444	62	1714740	24.434
8) 1,3-Butadiene	(1)	2.462	39	1051760	23.010
9) Bromomethane	(1)	2.816	94	1141027	23.822
11) Chloroethane	(1)	2.926	64	938446	23.614
12) Dichlorofluoromethane	(1)	3.157	67	2267568	23.857
14) Trichlorofluoromethane	(1)	3.273	101	2135130	24.183
16) Ethyl Ether	(1)	3.584	59	874431	24.109
17) Freon 123a	(1)	3.590	67	1441486	23.935
23) Acrolein	(4)	3.737	56	5969831	1228.597
24) 1,1-Dichloroethene	(1)	3.913	96	1060813	24.076
25) Freon 113	(1)	3.944	101	1184914	24.077
26) Acetone	(4)	3.944	58	441543M	235.841
28) Methyl Iodide	(1)	4.127	142	2254073	24.327
29) Carbon Disulfide	(1)	4.249	76	3666731	25.292
31) Allyl Chloride	(1)	4.431	41	2151958	24.589
32) Methyl Acetate	(1)	4.450	43	495733	24.376
34) Methylene Chloride	(1)	4.608	84	1186867	23.848
35)*t-Butyl Alcohol-d10	(4)	4.657	65	93881	50.000
36) t-Butyl Alcohol	(4)	4.773	59	963758	479.427
39) Acrylonitrile	(4)	4.962	53	1071339	123.914
40) trans-1,2-Dichloroethene	(1)	5.053	96	1267488	24.354
38) 1,2-Dichloroethene (Total)	(1)		96	2644911	48.888
41) Methyl Tertiary Butyl Ether	(1)	5.059	73	2854846	24.018
44) n-Hexane	(1)	5.498	57	1929659	23.946
45) 1,1-Dichloroethane	(1)	5.675	63	2324822	24.321
47) di-Isopropyl Ether	(1)	5.803	45	4406680	24.283
48) 2-Chloro-1,3-Butadiene	(1)	5.828	53	2105132	24.658
49) Ethyl t-Butyl Ether	(1)	6.327	59	3871952	24.352
52) 2,2-Dichloropropane	(1)	6.535	77	1874548	24.771
50) cis-1,2-Dichloroethene	(1)	6.516	96	1377423	24.534
51) 2-Butanone	(4)	6.516	43	2763152	247.279
53) Propionitrile	(4)	6.584	54	1635678	502.112

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 8111

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	2948765	250.392
55) Bromochloromethane	(1)	6.846	128	596671	24.143
56) Tetrahydrofuran	(4)	6.925	71	745336	250.623
59) Chloroform	(1)	6.962	83	2233798	24.508
63) 1,1,1-Trichloroethane	(1)	7.242	97	1991740	24.987
64) Cyclohexane	(1)	7.339	56	2373819	24.253
66) 1,1-Dichloropropene	(1)	7.461	75	1839929	24.741
67) Carbon Tetrachloride	(1)	7.480	117	1756330	25.616
69) Isobutyl Alcohol	(4)	7.577	41	940807	1246.998
73) Benzene	(1)	7.736	78	5539698	24.626
74) 1,2-Dichloroethane	(1)	7.736	62	1380175	24.340
72) 1,2-Dichloroethane(mz98)	(1)	7.736	98	120505	24.373
77) t-Amyl Methyl Ether	(1)	7.894	73	3263497	24.530
78)*Fluorobenzene	(1)	8.102	96	2049263	10.000
79) n-Heptane	(1)	8.120	43	2179021	24.168
80) n-Butanol	(4)	8.449	56	1635676	2506.742
82) Trichloroethene	(1)	8.589	95	1400194	24.807
85) Methylcyclohexane	(1)	8.870	83	2570126	24.608
84) 1,2-Dichloropropane	(1)	8.870	63	1404527	24.762
87) Dibromomethane	(1)	9.016	93	574949	24.470
90) 1,4-Dioxane	(4)	9.034	88	185451	1123.821
88) Methyl Methacrylate	(4)	9.016	69	557854	25.982
91) Bromodichloromethane	(1)	9.217	83	1569435	25.601
92) 2-Nitropropane	(4)	9.473	41	1703267	265.756
94) cis-1,3-Dichloropropene	(1)	9.748	75	1993023	25.381
96) 4-Methyl-2-Pentanone	(1)	9.918	43	7282148	241.105
100) Toluene	(2)	10.138	92	3518031	24.622
102) trans-1,3-Dichloropropene	(2)	10.339	75	1642004	25.462
103) Ethyl Methacrylate	(2)	10.436	69	1241128	24.943
104) 1,1,2-Trichloroethane	(2)	10.528	97	810872	24.086
106) Tetrachloroethene	(2)	10.699	166	1708997	25.025
105) 1,3-Dichloropropane	(2)	10.692	76	1487860	24.282
107) 2-Hexanone	(2)	10.766	43	5010772	237.964
108) Dibromochloromethane	(2)	10.918	129	1079694	26.386

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
109) 1,2-Dibromoethane	(2)	11.034	107	796401	24.525
110)*Chlorobenzene-d5	(2)	11.461	117	1505931	10.000
112) Chlorobenzene	(2)	11.485	112	3980406	24.570
113) 1,1,1,2-Tetrachloroethane	(2)	11.552	131	1348171	25.801
114) Ethylbenzene	(2)	11.576	91	7146004	25.137
117) m+p-Xylene	(2)	11.674	106	5728423	50.713
116) Xylene (Total)	(2)		106	8484637	75.996
118) o-Xylene	(2)	12.015	106	2756214	25.283
119) Styrene	(2)	12.015	104	4528704	25.698
120) Bromoform	(2)	12.174	173	619438	27.547
121) Isopropylbenzene	(2)	12.308	105	6946334	25.147
127) 1,1,2,2-Tetrachloroethane	(3)	12.521	83	961183M	24.126
128) Bromobenzene	(3)	12.564	156	1798704	25.235
129) trans-1,4-Dichloro-2-Butene	(4)	12.564	53	2961741 A	360.052
130) 1,2,3-Trichloropropane	(3)	12.564	110	277767	24.596
132) n-Propylbenzene	(3)	12.631	91	8644610	24.645
133) 2-Chlorotoluene	(3)	12.710	126	1736298	24.626
136) 4-Chlorotoluene	(3)	12.784	126	1799328	24.752
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	6347090	25.045
138) Pentachloroethane	(3)	13.033	167	1214461	26.640
137) tert-Butylbenzene	(3)	13.009	134	1443366	24.958
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	6689470	25.273
140) sec-Butylbenzene	(3)	13.168	105	8137416	25.035
141) 1,3-Dichlorobenzene	(3)	13.265	146	3705641	25.222
143)*1,4-Dichlorobenzene-d4	(3)	13.308	152	890477	10.000
142) p-Isopropyltoluene	(3)	13.265	119	7406779	25.567
144) 1,4-Dichlorobenzene	(3)	13.326	146	3637766	24.671
145) 1,2,3-Trimethylbenzene	(3)	13.357	120	2980275	25.003
146) Benzyl Chloride	(3)	13.411	126	472692	26.792
147) n-Butylbenzene	(3)	13.558	92	3550718	24.770
148) 1,2-Dichlorobenzene	(3)	13.600	146	3102325	24.574
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	138237	27.298
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	2556415	24.617
154) Hexachlorobutadiene	(3)	14.795	225	1500420	25.125

M = Compound was manually integrated.
A = User selected an alternate hit.
* = Compound is an internal standard.

RAD23 0113

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

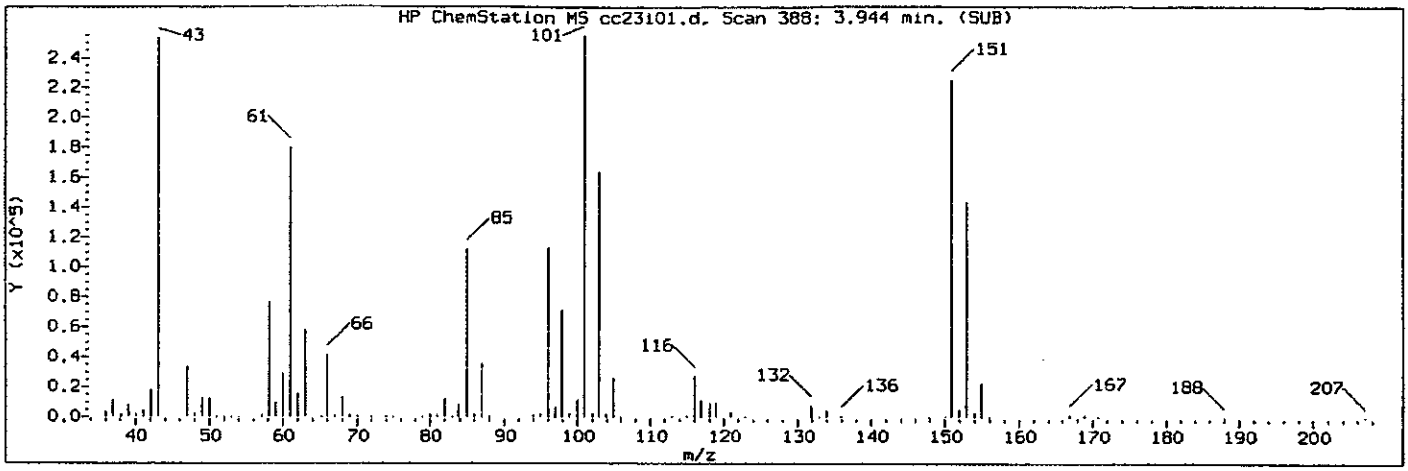
Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

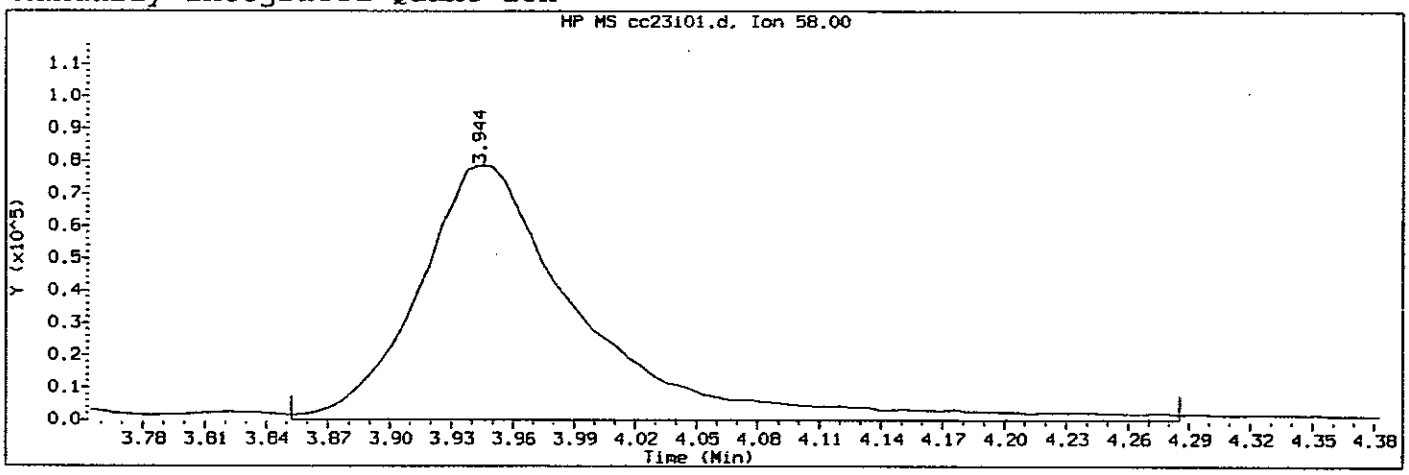
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
155) Naphthalene	(3)	14.868	128	3586642	23.878
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	2036216	24.081
60)$Dibromofluoromethane	(1)	7.175	113	1281066	24.270
61)$Dibromofluoromethane(mz111)	(1)	7.175	111	1309723	24.235
70)$1,2-Dichloroethane-d4	(1)	7.638	102	232587	24.192
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.638	104	146749	23.484
65)$1,2-Dichloroethane-d4(mz65)	(1)	7.632	65	1160743	23.765
98)$Toluene-d8	(2)	10.065	98	5551239	24.106
99)$Toluene-d8(mz100)	(2)	10.065	100	3552878	24.029
124)$4-Bromofluorobenzene	(2)	12.430	95	2006430	24.347
125)$4-Bromofluorobenzene(mz174)	(2)	12.430	174	1812584	24.528

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:56
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 26
Compound Name : Acetone
Scan Number : 388
Retention Time (minutes): 3.944
Quant Ion : 58
Area (flag) : 441543 M
Concentration (ug/L) : 235.8412
Integration start scan : 372 Integration stop scan: 443
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

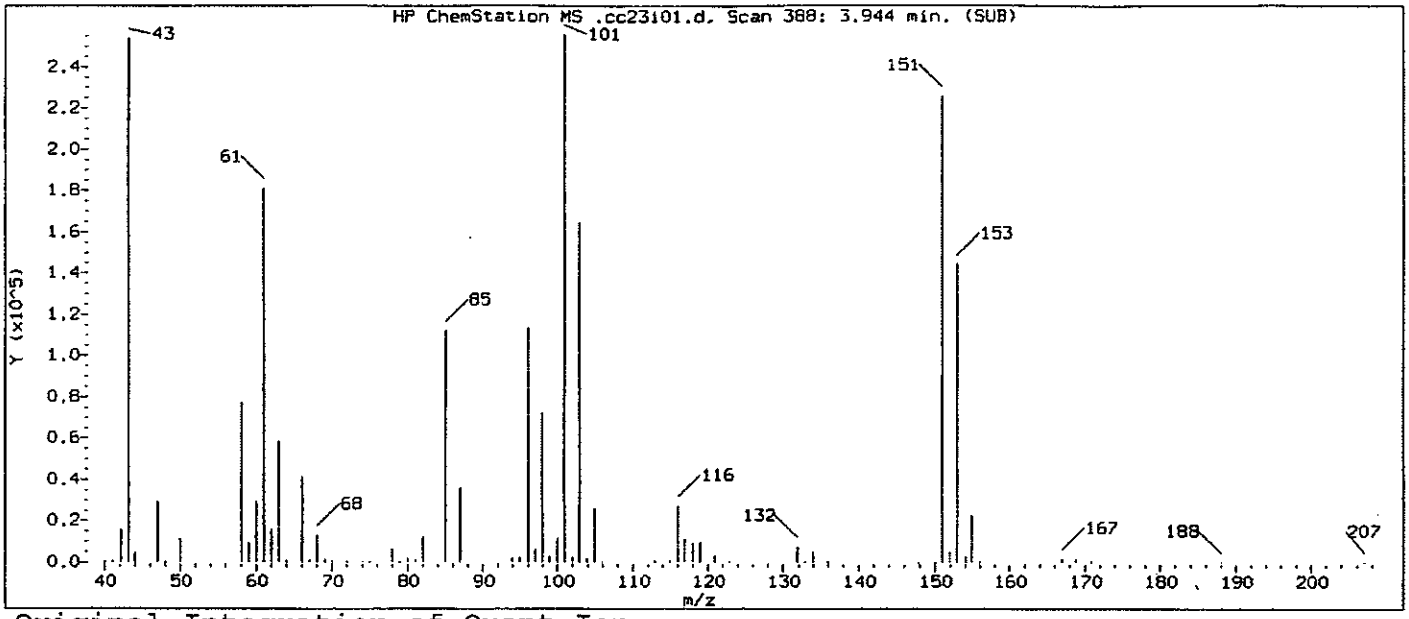
Analyst responsible for change: JMW 10/26/09

GC/MS audit/management approval: [signature] 10-26-09

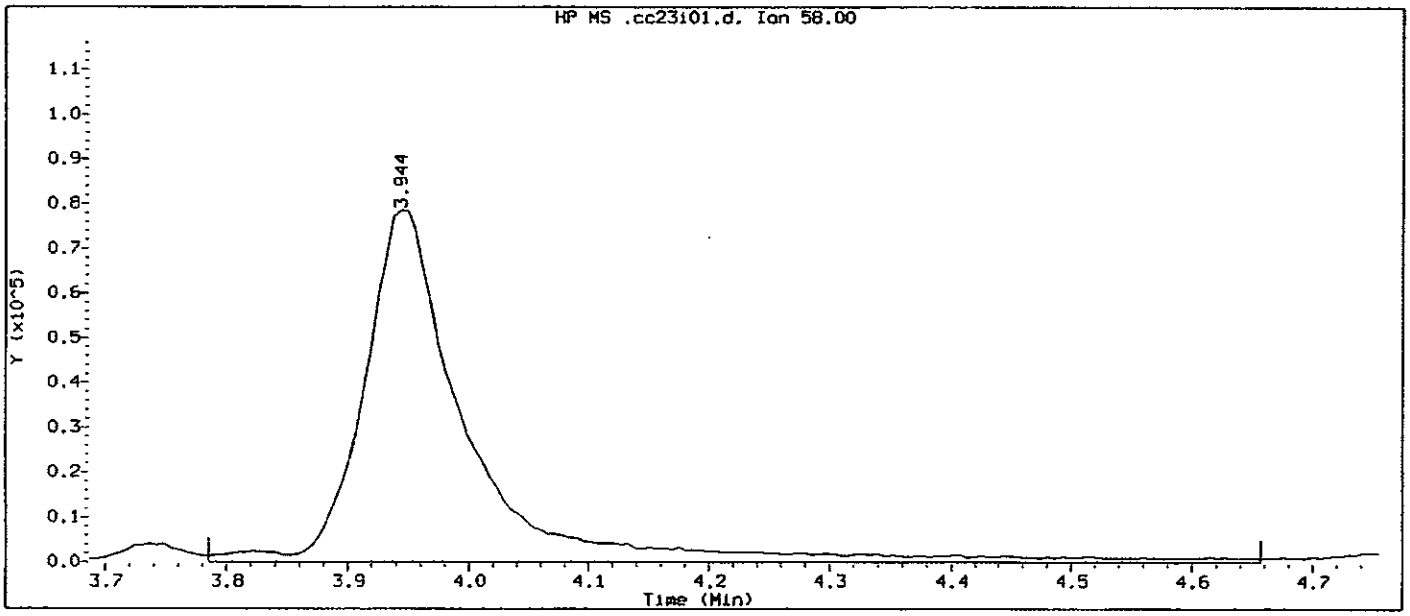
RAD23 0115

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i01.d, generated on 10/23/2009 at 12:00

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:56
Date, time and analyst ID of latest file update: 23-Oct-2009 11:56 jml01693

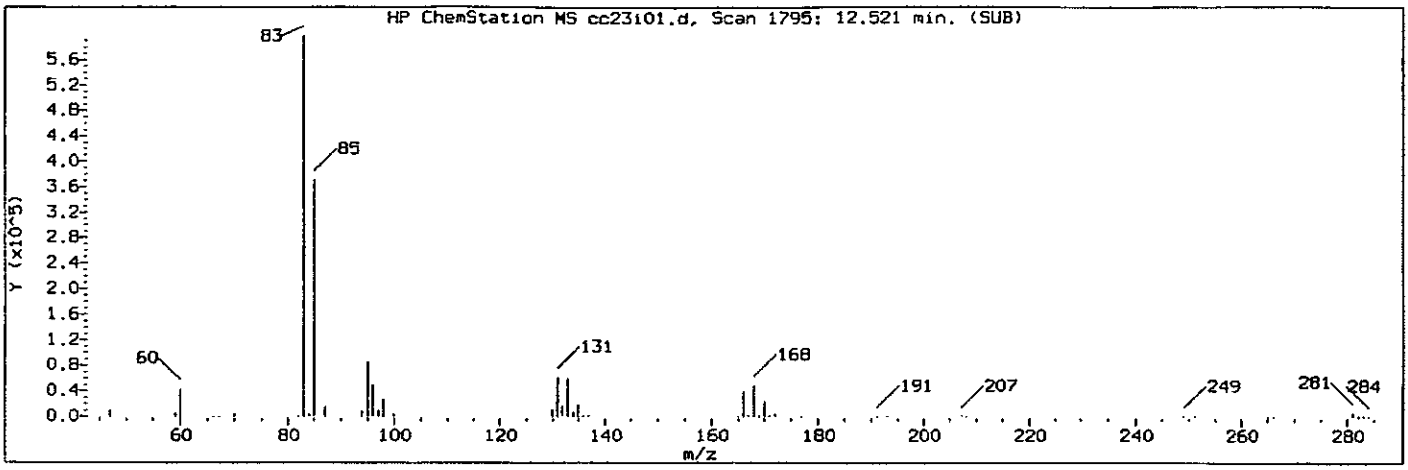
Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number	: 26
Compound Name	: Acetone
Scan Number	: 388
Retention Time (minutes)	: 3.944
Quant Ion	: 58
Area	: 476298
Concentration (ug/L)	: 249.7668
Integration start scan	: 361 Integration stop scan: 504
Y at integration start	: 0 Y at integration end: 0

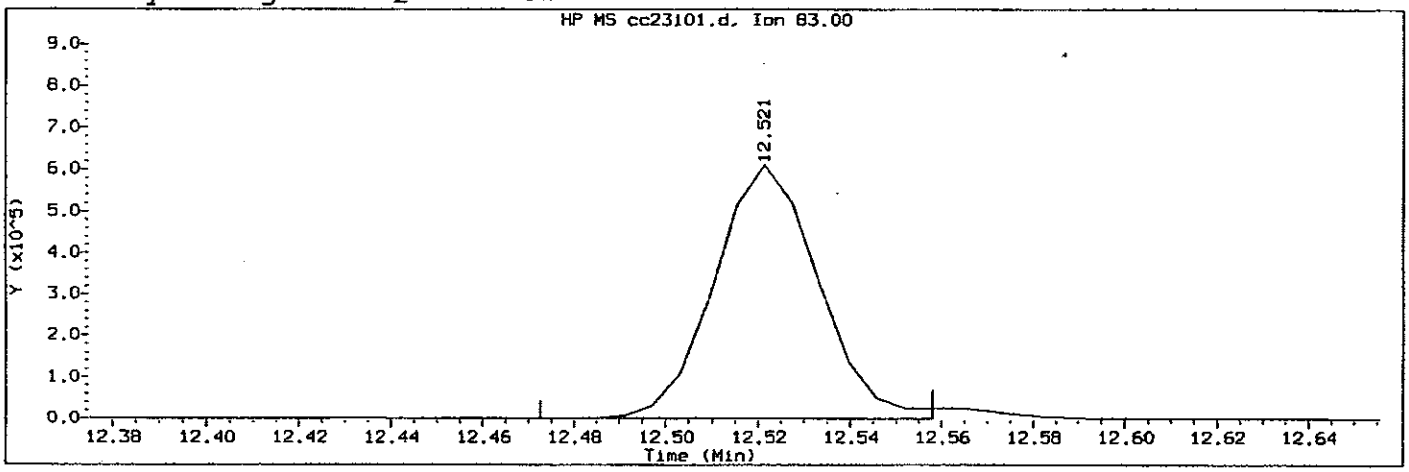
RAD23 0116

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i01.d, generated on 10/23/2009 at 12:00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:56
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 127
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1795
Retention Time (minutes): 12.521
Quant Ion : 83
Area (flag) : 961183 M
Concentration (ug/L) : 24.1257
Integration start scan : 1786 Integration stop scan: 1800
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

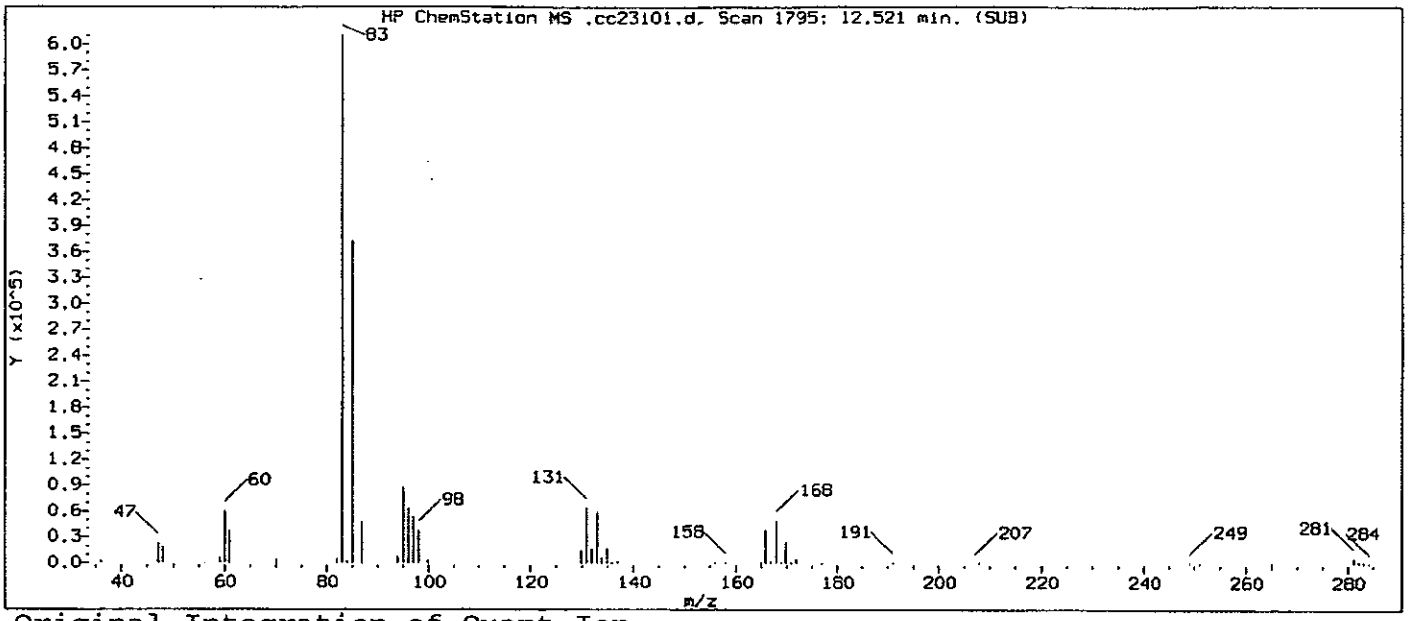
Analyst responsible for change: JML 10/23/09

GC/MS audit/management approval: [signature] 11/2/09

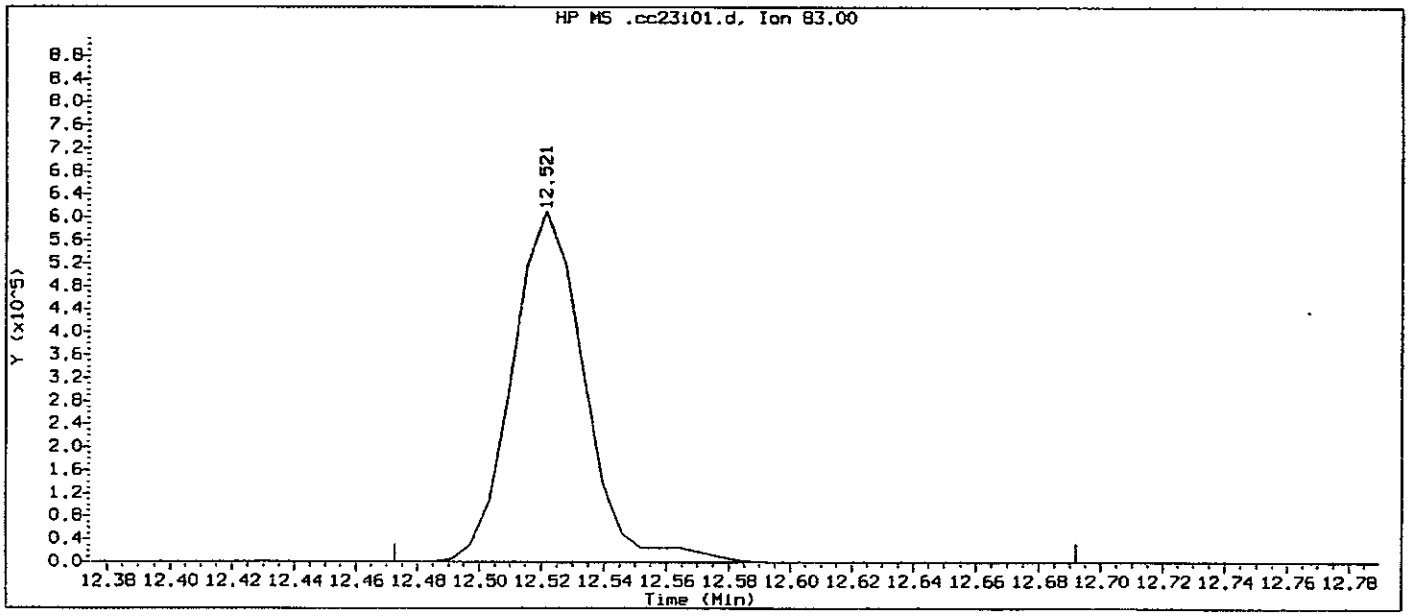
RAD23 6117

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i01.d, generated on 10/23/2009 at 12:00

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:56
Date, time and analyst ID of latest file update: 23-Oct-2009 11:56 jml01693

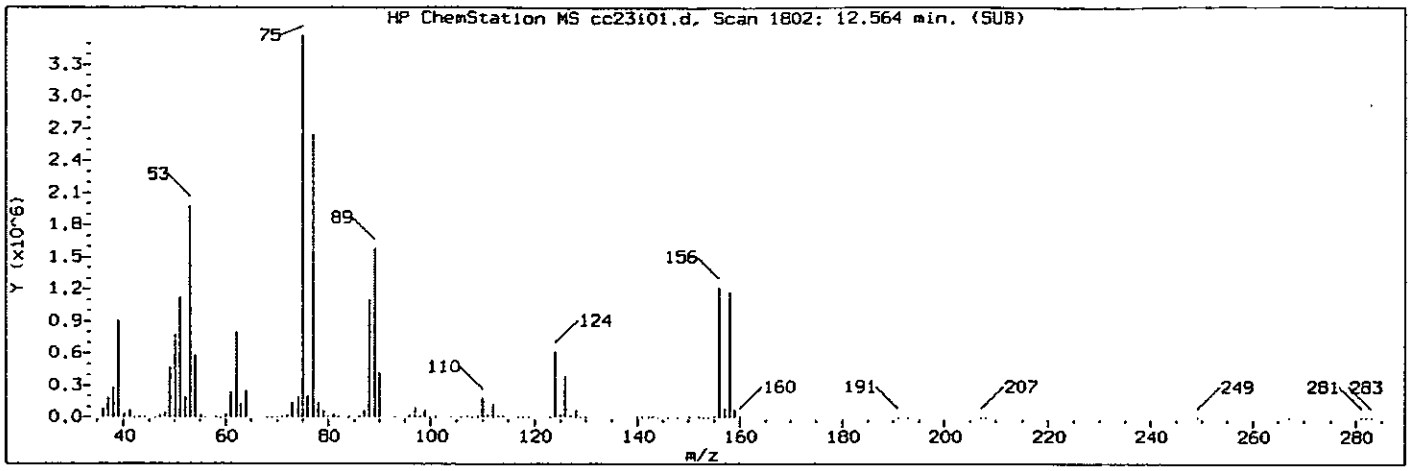
Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.521
Quant Ion	: 83
Area	: 983002
Concentration (ug/L)	: 24.5390
Integration start scan	: 1786 Integration stop scan: 1822
Y at integration start	: 0 Y at integration end: 0

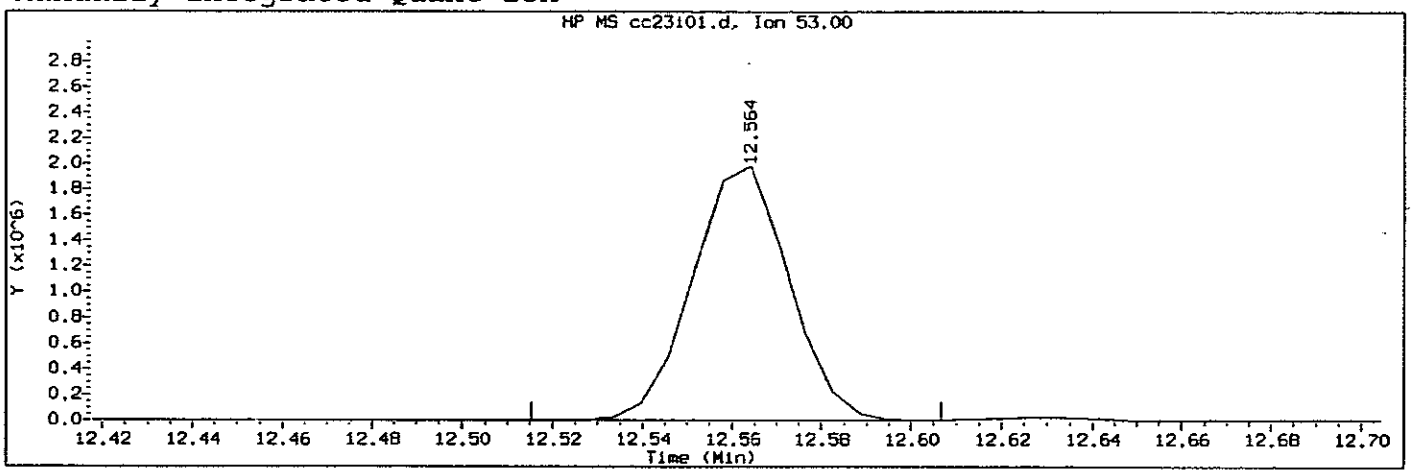
RAD23 0118

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i01.d, generated on 10/23/2009 at 12:00

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:56
Date, time and analyst ID of latest file update: 23-Oct-2009 12:00 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number : 129
Compound Name : trans-1,4-Dichloro-2-Butene
Scan Number : 1802
Retention Time (minutes): 12.564
Quant Ion : 53
Area (flag) : 2961741A
Concentration (ug/L) : 360.0517
Integration start scan : 1793 Integration stop scan: 1808
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

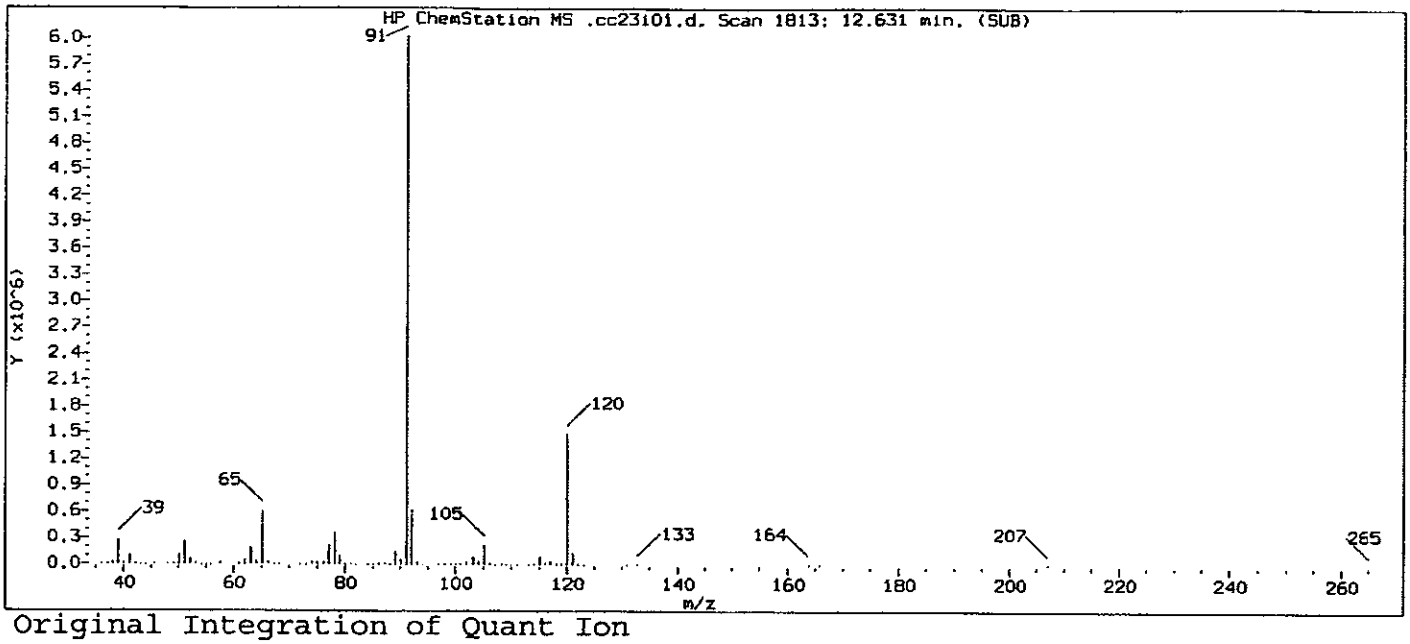
Analyst responsible for change: JML 10/23/09

GC/MS audit/management approval: [signature] 10/26/09

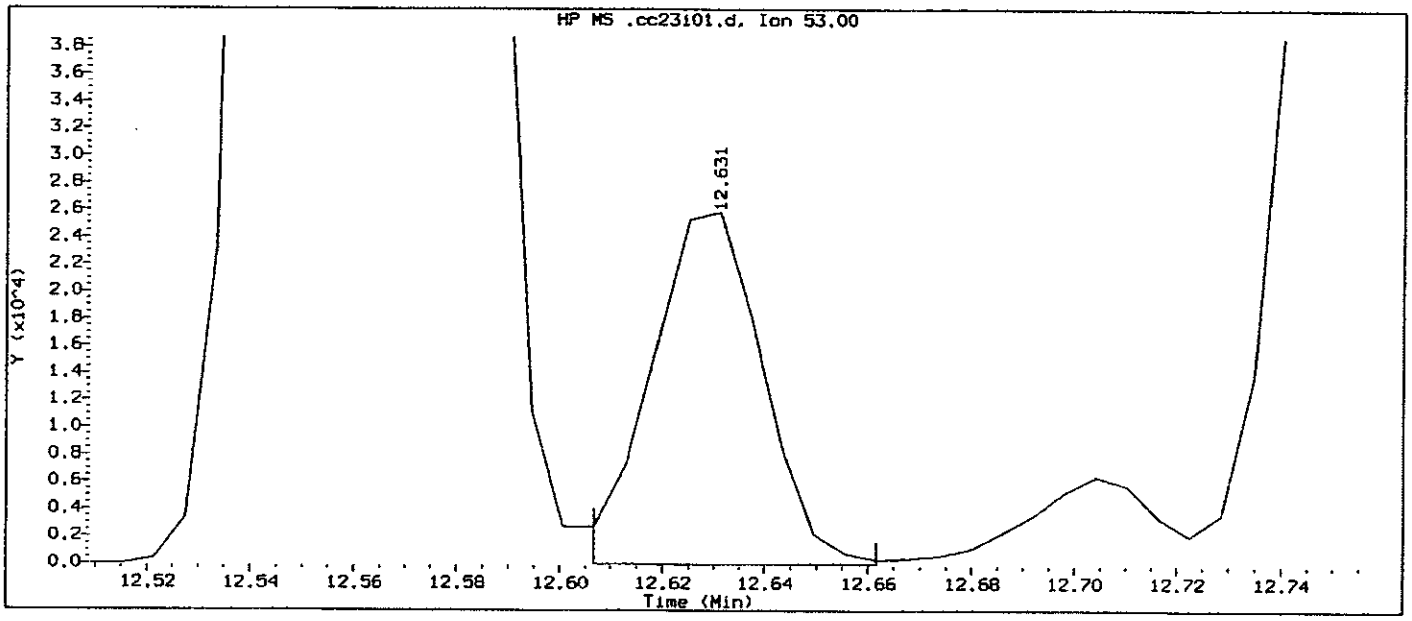
RAD23 0119

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i01.d, generated on 10/23/2009 at 12:00

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:15 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:56
Date, time and analyst ID of latest file update: 23-Oct-2009 11:56 jml01693

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compound Number	:	129
Compound Name	:	trans-1,4-Dichloro-2-Butene
Scan Number	:	1813
Retention Time (minutes)	:	12.631
Quant Ion	:	53
Area	:	38770
Concentration (ug/L)	:	7.3111
Integration start scan	:	1808 Integration stop scan: 1817
Y at integration start	:	0 Y at integration end: 0

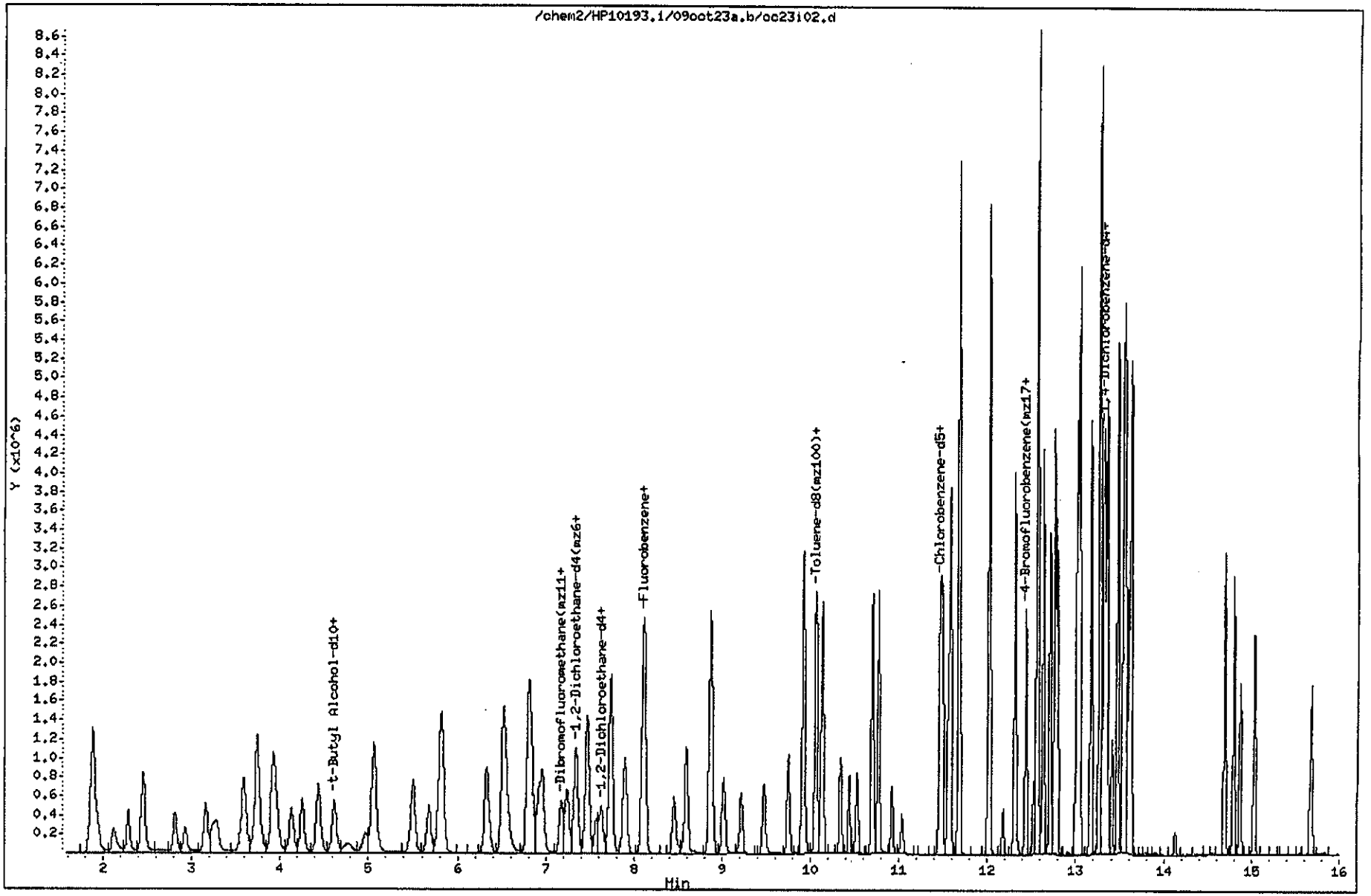
RAD23 8128

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i01.d, generated on 10/23/2009 at 12:00

Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d
Date : 23-OCT-2009 10:37
Client ID: VSTD010
Sample Info: VSTD010;VSTD010;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: JML01693
Column diameter: 0.25

RAD2 0121



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.121	85	618659	9.287
5) Chloromethane	(1)	2.286	50	651719	9.349
7) Vinyl Chloride	(1)	2.438	62	665086	9.433
8) 1,3-Butadiene	(1)	2.462	39	422535	9.311
9) Bromomethane	(1)	2.810	94	444660	9.241
11) Chloroethane	(1)	2.926	64	369004	9.243
12) Dichlorofluoromethane	(1)	3.157	67	883881	9.257
14) Trichlorofluoromethane	(1)	3.273	101	823992M	9.257
16) Ethyl Ether	(1)	3.584	59	338190	9.282
17) Freon 123a	(1)	3.590	67	555836	9.187
23) Acrolein	(4)	3.743	56	2327946	460.112
24) 1,1-Dichloroethene	(1)	3.913	96	407427	9.204
25) Freon 113	(1)	3.944	101	454507	9.193
26) Acetone	(4)	3.950	58	173245M	86.709
28) Methyl Iodide	(1)	4.127	142	860408	9.243
29) Carbon Disulfide	(1)	4.249	76	1372667	9.425
31) Allyl Chloride	(1)	4.432	41	835687	9.505
32) Methyl Acetate	(1)	4.450	43	188534	9.228
34) Methylene Chloride	(1)	4.614	84	457630	9.153
35)*t-Butyl Alcohol-d10	(4)	4.639	65	97754	50.000
36) t-Butyl Alcohol	(4)	4.773	59	379151	175.446
39) Acrylonitrile	(4)	4.962	53	410448	45.593
40) trans-1,2-Dichloroethene	(1)	5.059	96	480211	9.185
38) 1,2-Dichloroethene (Total)	(1)		96	996954	18.346
41) Methyl Tertiary Butyl Ether	(1)	5.059	73	1105446	9.257
44) n-Hexane	(1)	5.498	57	741872	9.164
45) 1,1-Dichloroethane	(1)	5.675	63	885167	9.218
47) di-Isopropyl Ether	(1)	5.803	45	1675640	9.191
48) 2-Chloro-1,3-Butadiene	(1)	5.828	53	797283	9.296
49) Ethyl t-Butyl Ether	(1)	6.327	59	1479531	9.262
52) 2,2-Dichloropropane	(1)	6.535	77	707816	9.310
50) cis-1,2-Dichloroethene	(1)	6.516	96	516743	9.161
51) 2-Butanone	(4)	6.510	43	1065217	91.551
53) Propionitrile	(4)	6.577	54	611404	180.250

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 8122

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	1135729	92.619
55) Bromochloromethane	(1)	6.846	128	232819	9.377
56) Tetrahydrofuran	(4)	6.919	71	285734	92.273
59) Chloroform	(1)	6.962	83	845276	9.231
63) 1,1,1-Trichloroethane	(1)	7.242	97	749753	9.363
64) Cyclohexane	(1)	7.340	56	902543	9.179
66) 1,1-Dichloropropene	(1)	7.461	75	690733	9.245
67) Carbon Tetrachloride	(1)	7.480	117	647988	9.407
69) Isobutyl Alcohol	(4)	7.571	41	356057	453.240
73) Benzene	(1)	7.736	78	2071294	9.165
74) 1,2-Dichloroethane	(1)	7.736	62	522575	9.173
72) 1,2-Dichloroethane(mz98)	(1)	7.736	98	45822	9.225
77) t-Amyl Methyl Ether	(1)	7.894	73	1236569	9.252
78)*Fluorobenzene	(1)	8.102	96	2058742	10.000
79) n-Heptane	(1)	8.120	43	833644	9.204
80) n-Butanol	(4)	8.455	56	632017	930.217
82) Trichloroethene	(1)	8.589	95	522916	9.222
85) Methylcyclohexane	(1)	8.870	83	993486	9.468
84) 1,2-Dichloropropane	(1)	8.870	63	526682	9.243
87) Dibromomethane	(1)	9.016	93	217820	9.228
90) 1,4-Dioxane	(4)	9.034	88	78243	455.362
88) Methyl Methacrylate	(4)	9.016	69	209944	9.391
91) Bromodichloromethane	(1)	9.217	83	577936	9.384
92) 2-Nitropropane	(4)	9.473	41	628802	94.223
94) cis-1,3-Dichloropropene	(1)	9.748	75	737271	9.346
96) 4-Methyl-2-Pentanone	(1)	9.918	43	2746808	90.525
100) Toluene	(2)	10.132	92	1306936	9.159
102) trans-1,3-Dichloropropene	(2)	10.339	75	605930	9.409
103) Ethyl Methacrylate	(2)	10.436	69	464152	9.341
104) 1,1,2-Trichloroethane	(2)	10.528	97	310428	9.233
106) Tetrachloroethene	(2)	10.699	166	626681	9.189
105) 1,3-Dichloropropane	(2)	10.693	76	559295	9.140
107) 2-Hexanone	(2)	10.766	43	1915605M	91.180
108) Dibromochloromethane	(2)	10.918	129	389448	9.530

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 0123

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
109) 1,2-Dibromoethane	(2)	11.028	107	302667	9.333
110)*Chlorobenzene-d5	(2)	11.455	117	1503927	10.000
112) Chlorobenzene	(2)	11.485	112	1481648	9.158
113) 1,1,1,2-Tetrachloroethane	(2)	11.552	131	489145	9.374
114) Ethylbenzene	(2)	11.576	91	2618600	9.223
117) m+p-Xylene	(2)	11.674	106	2077684	18.418
116) Xylene (Total)	(2)		106	3078542	27.611
118) o-Xylene	(2)	12.009	106	1000858	9.193
119) Styrene	(2)	12.015	104	1632777	9.278
120) Bromoform	(2)	12.174	173	217740	9.696
121) Isopropylbenzene	(2)	12.308	105	2550677	9.246
127) 1,1,2,2-Tetrachloroethane	(3)	12.521	83	357385M	8.984
128) Bromobenzene	(3)	12.564	156	644790	9.175
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	1119386	202.726
130) 1,2,3-Trichloropropane	(3)	12.564	110	100896	9.061
132) n-Propylbenzene	(3)	12.625	91	3180080	9.195
133) 2-Chlorotoluene	(3)	12.704	126	634123	9.122
136) 4-Chlorotoluene	(3)	12.784	126	654085	9.126
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	2295328	9.186
138) Pentachloroethane	(3)	13.034	167	432650	9.625
137) tert-Butylbenzene	(3)	13.009	134	525571	9.217
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	2393272	9.171
140) sec-Butylbenzene	(3)	13.168	105	2946797	9.195
141) 1,3-Dichlorobenzene	(3)	13.265	146	1322439	9.129
143)*1,4-Dichlorobenzene-d4	(3)	13.308	152	877986	10.000
142) p-Isopropyltoluene	(3)	13.265	119	2641812	9.249
144) 1,4-Dichlorobenzene	(3)	13.326	146	1333089	9.169
145) 1,2,3-Trimethylbenzene	(3)	13.351	120	1101812	9.375
146) Benzyl Chloride	(3)	13.411	126	167035	9.602
147) n-Butylbenzene	(3)	13.558	92	1299975	9.198
148) 1,2-Dichlorobenzene	(3)	13.600	146	1138576	9.147
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	49686	9.423
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	936489	9.146
154) Hexachlorobutadiene	(3)	14.795	225	551652	9.369

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 6124

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

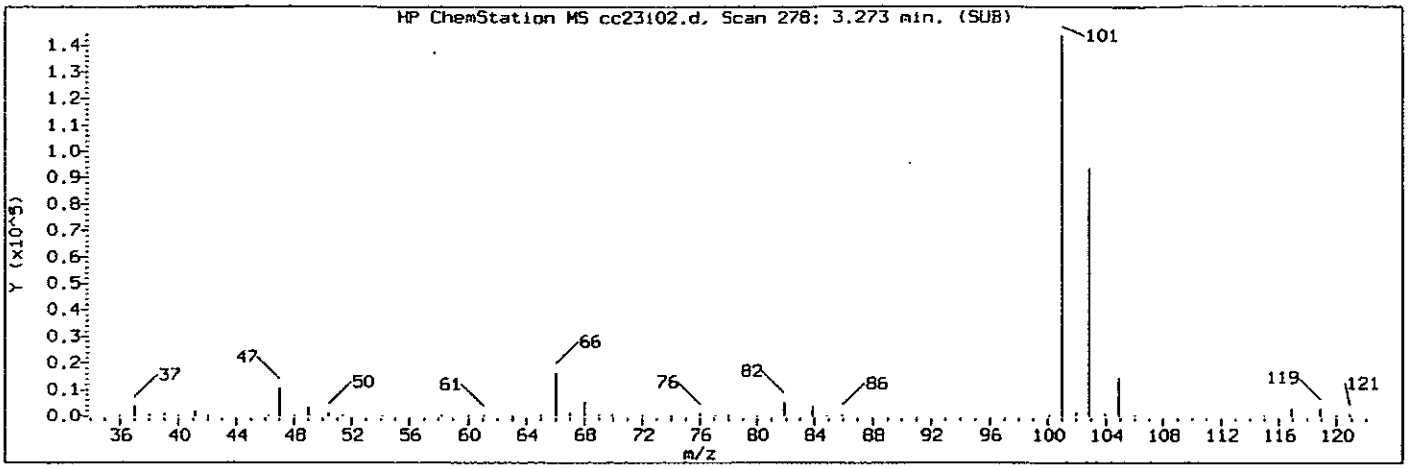
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
155) Naphthalene	(3)	14.869	128	1363048	9.204
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	764962	9.175
60)$Dibromofluoromethane	(1)	7.175	113	522701	9.857
61)$Dibromofluoromethane(mz111)	(1)	7.175	111	536180	9.876
70)$1,2-Dichloroethane-d4	(1)	7.632	102	95803	9.919
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.632	104	60471	9.633
65)$1,2-Dichloroethane-d4(mz65)	(1)	7.632	65	477640M	9.630
98)$Toluene-d8	(2)	10.058	98	2238147	9.732
99)$Toluene-d8(mz100)	(2)	10.058	100	1438656	9.743
124)$4-Bromofluorobenzene	(2)	12.430	95	802209	9.747
125)$4-Bromofluorobenzene(mz174)	(2)	12.430	174	720951	9.769

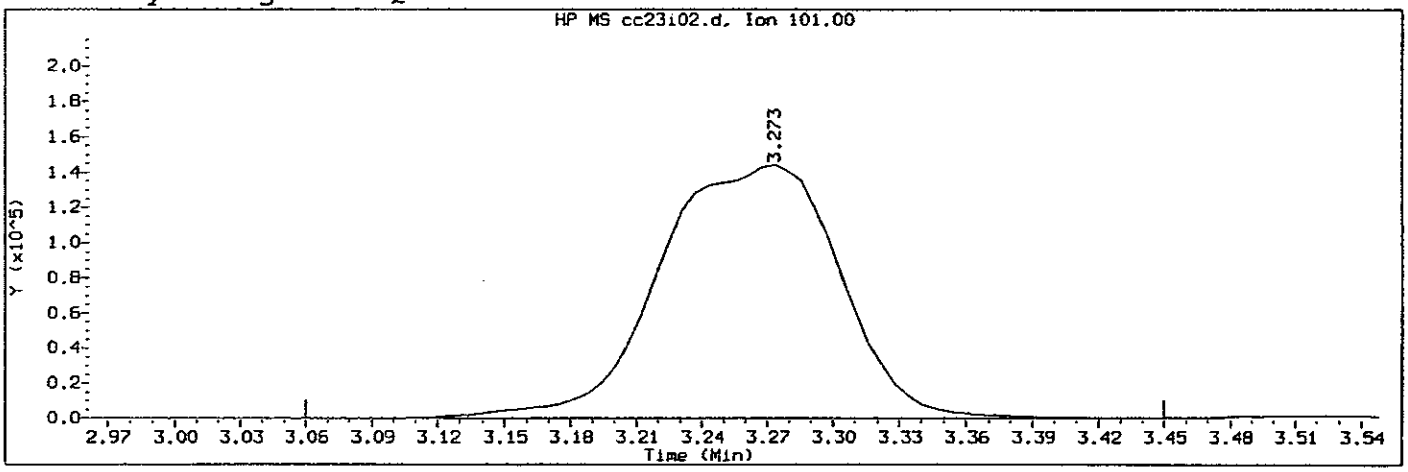
M = Compound was manually integrated.

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 14
Compound Name : Trichlorofluoromethane
Scan Number : 278
Retention Time (minutes) : 3.273
Quant Ion : 101
Area (flag) : 823992 M
Concentration (ug/L) : 9.2571
Integration start scan : 242 Integration stop scan: 306
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

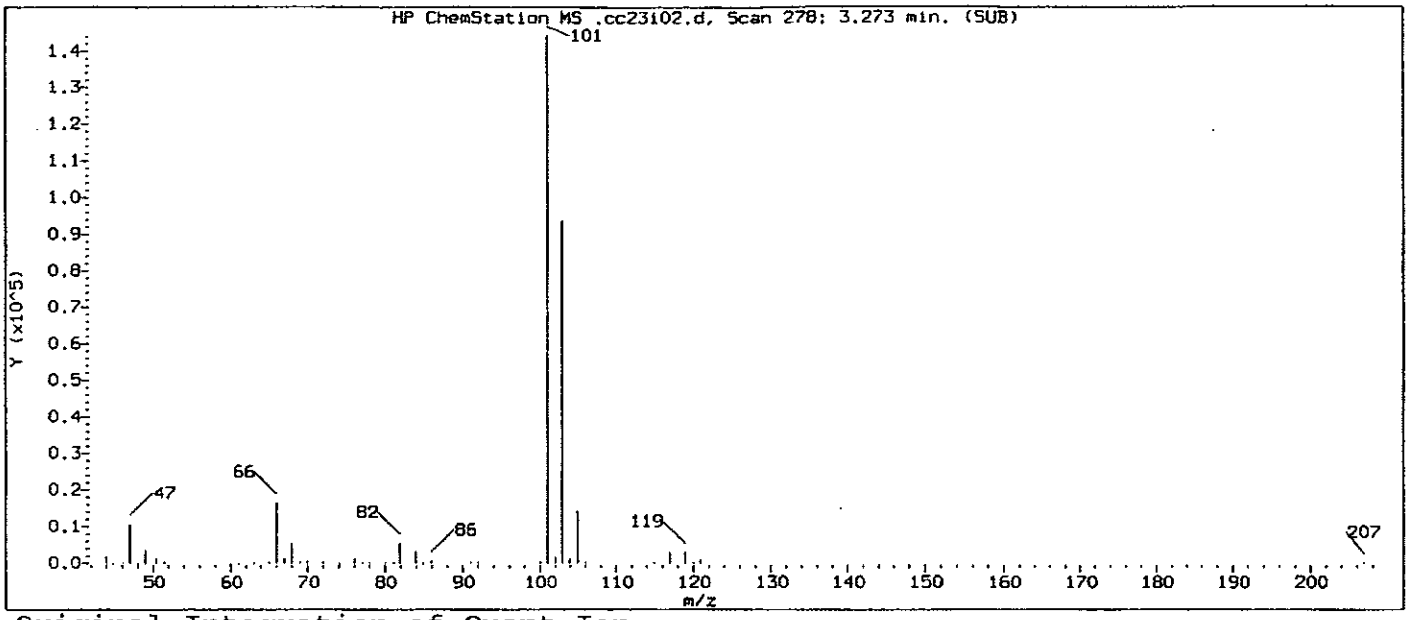
Analyst responsible for change: JM 10/23/09

GC/MS audit/management approval: 10-26-09

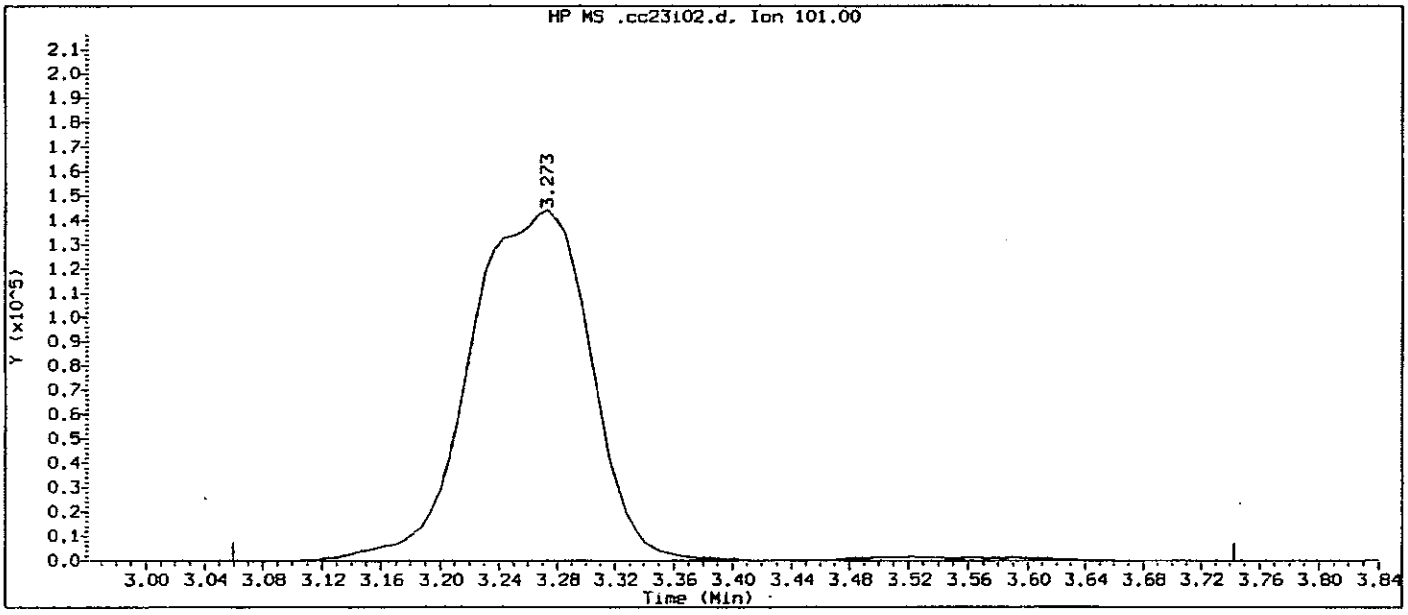
RAD23 6126

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

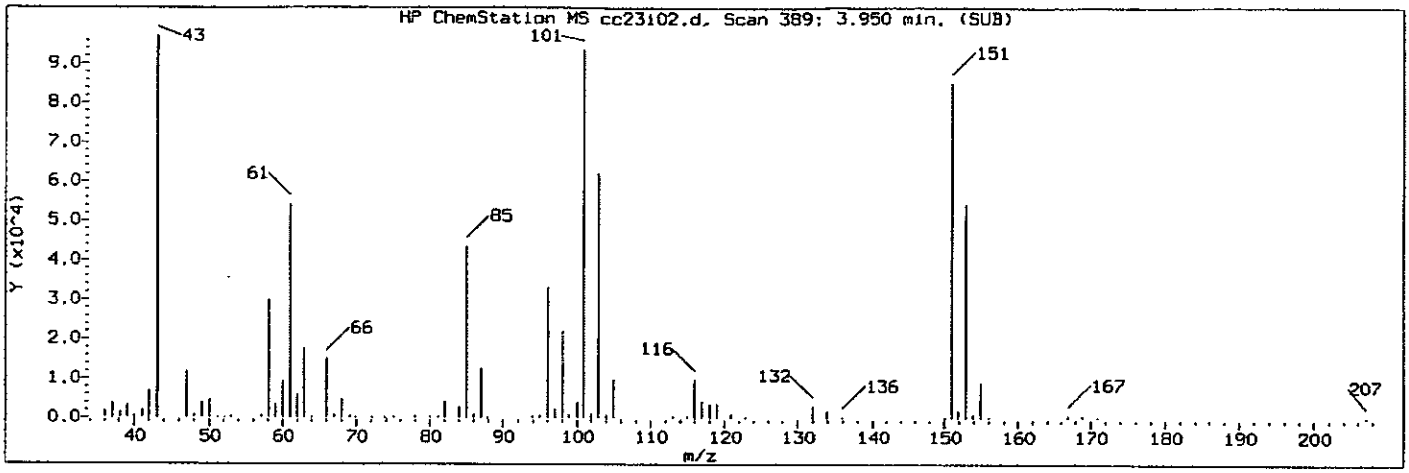
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 14
Compound Name	: Trichlorofluoromethane
Scan Number	: 278
Retention Time (minutes)	: 3.273
Quant Ion	: 101
Area	: 836229
Concentration (ug/L)	: 9.3940
Integration start scan	: 242 Integration stop scan: 354
Y at integration start	: 0 Y at integration end: 0

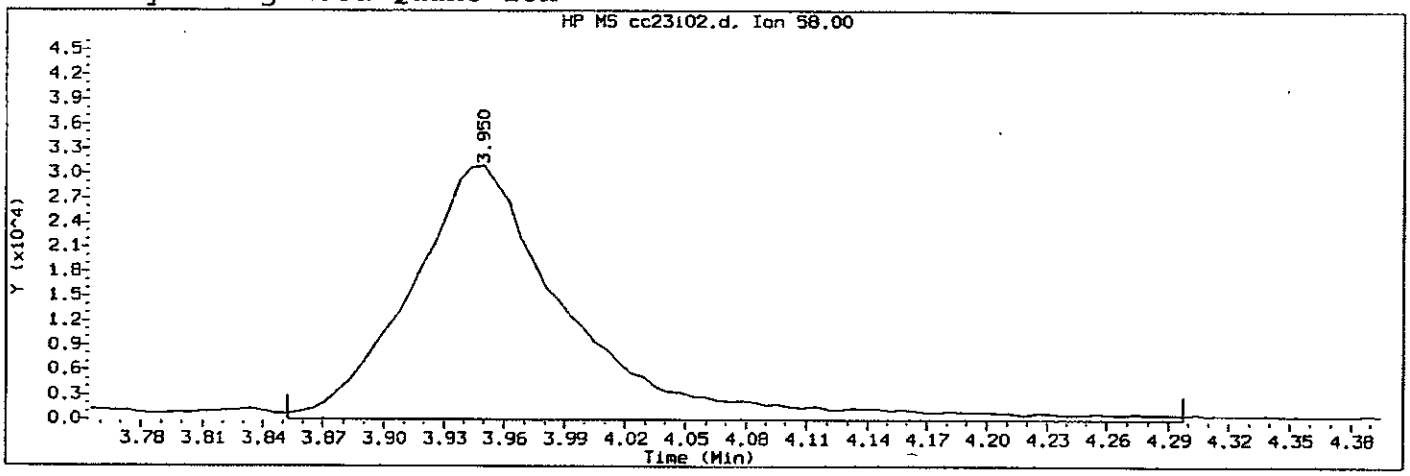
RAD23 #127

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 26
Compound Name : Acetone
Scan Number : 389
Retention Time (minutes): 3.950
Quant Ion : 58
Area (flag) : 173245 M
Concentration (ug/L) : 86.7087
Integration start scan : 372 Integration stop scan: 445
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

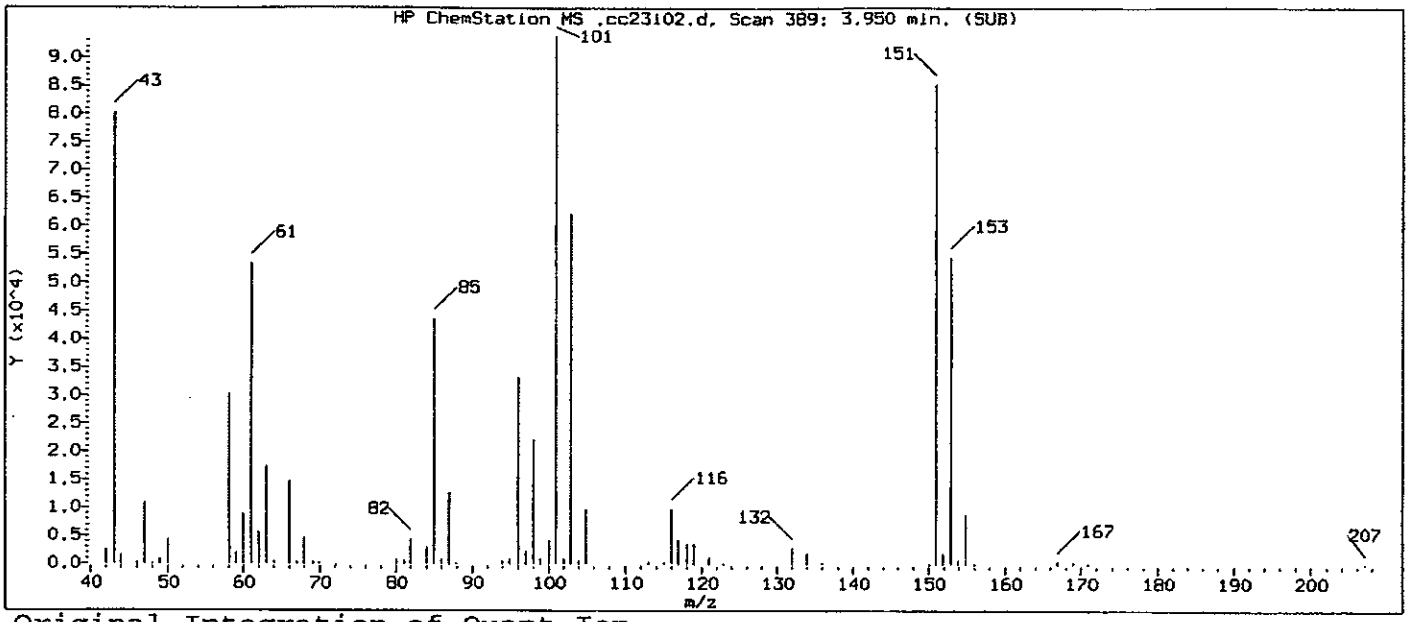
Analyst responsible for change: JMW3 10/23/09

GC/MS audit/management approval: 10-24-09

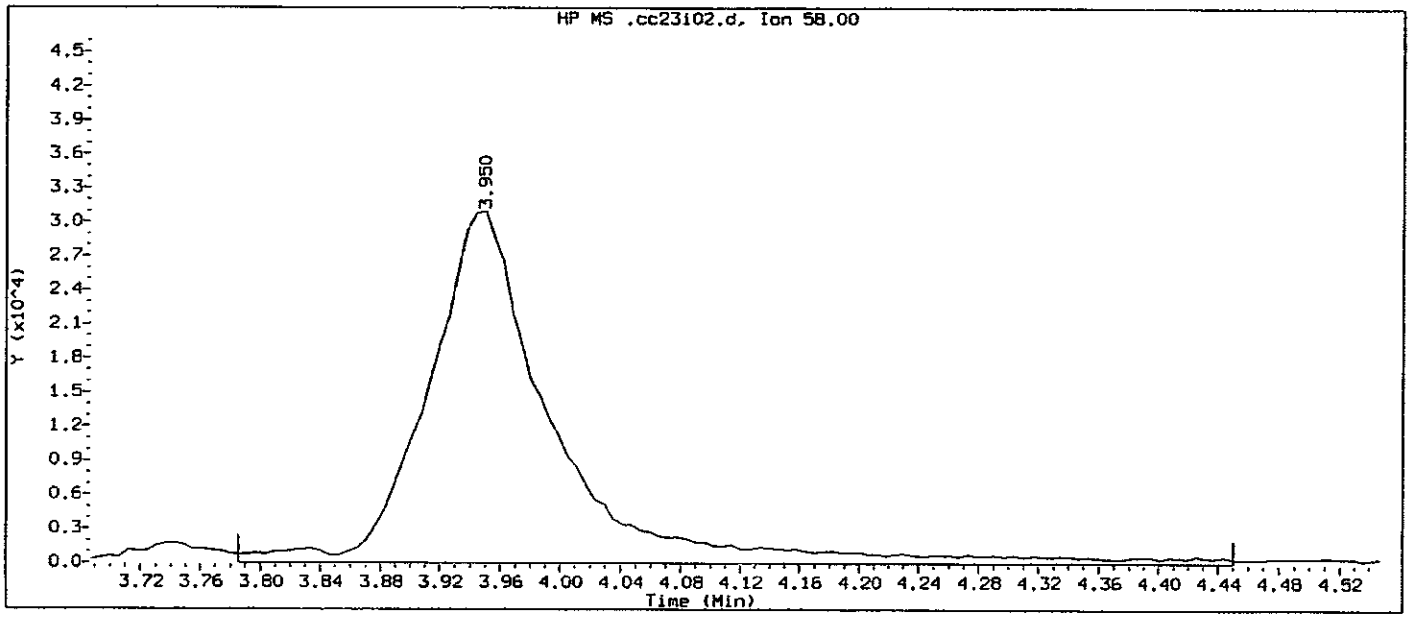
RAD23 0128

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

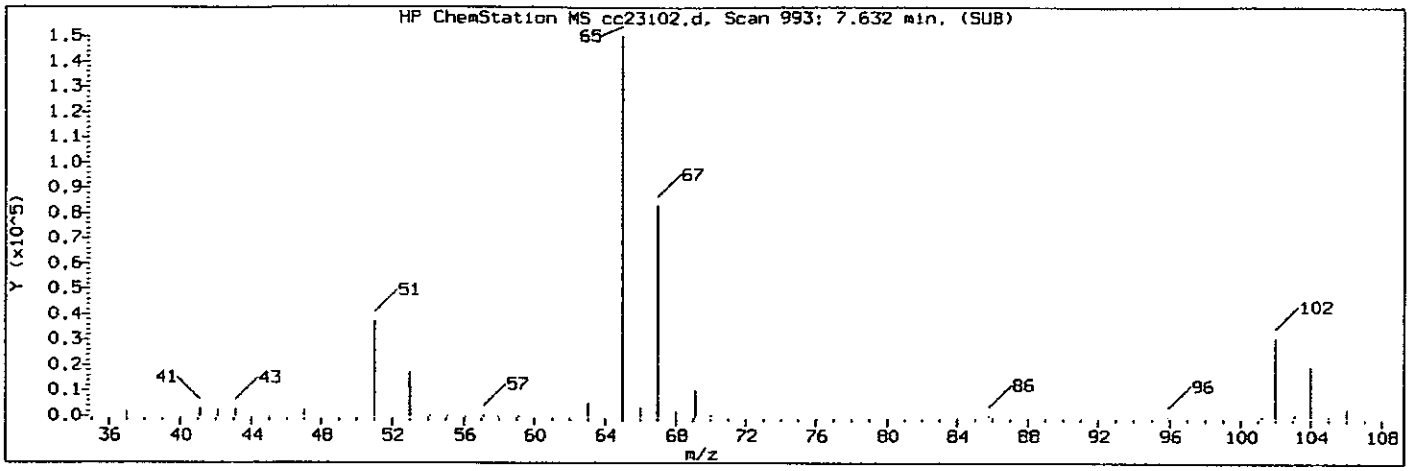
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 26
Compound Name : Acetone
Scan Number : 389
Retention Time (minutes): 3.950
Quant Ion : 58
Area : 181743
Concentration (ug/L) : 90.5599
Integration start scan : 361 Integration stop scan: 470
Y at integration start : 0 Y at integration end: 0

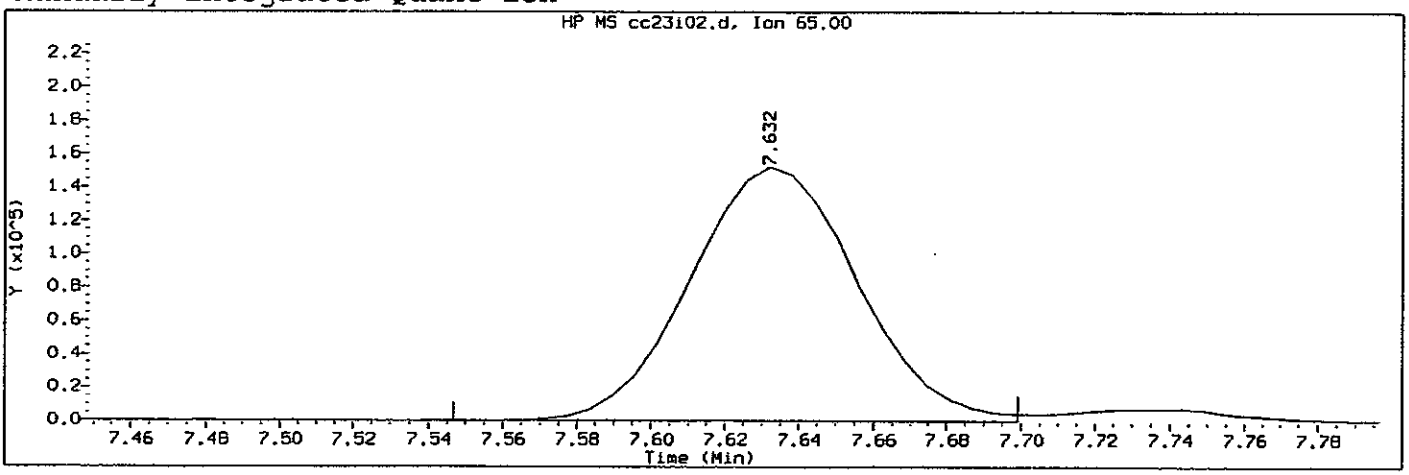
RAD23 0129

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area (flag) : 477640 M
Concentration (ug/L) : 9.6298
Integration start scan : 978 Integration stop scan: 1003
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

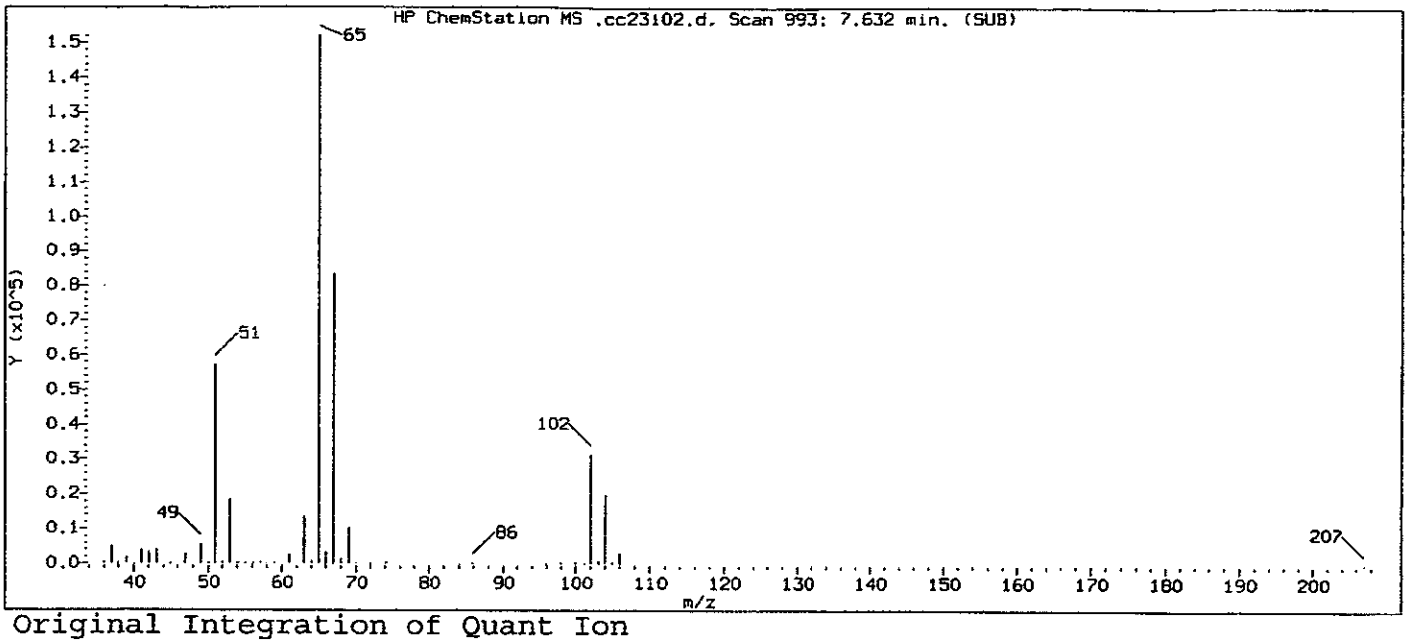
Analyst responsible for change: jmw 10/27/09

GC/MS audit/management approval: [signature] 10-27-09

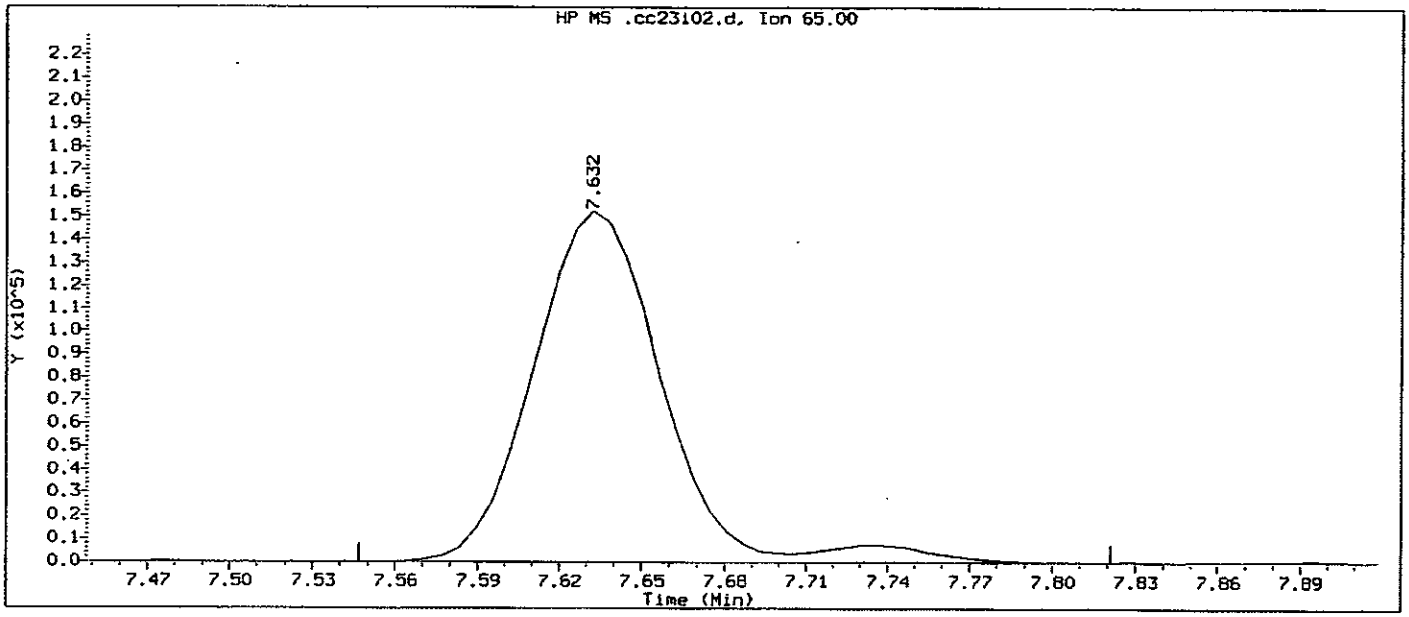
RAD23 0138

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

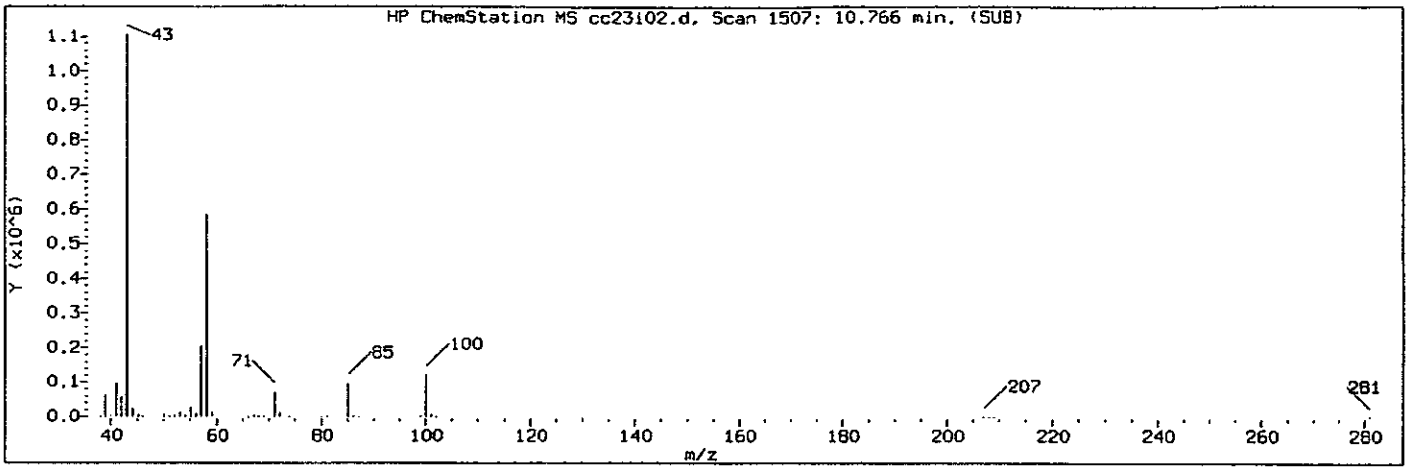
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area : 500893
Concentration (ug/L) : 10.0954
Integration start scan : 978 Integration stop scan: 1023
Y at integration start : 0 Y at integration end: 0

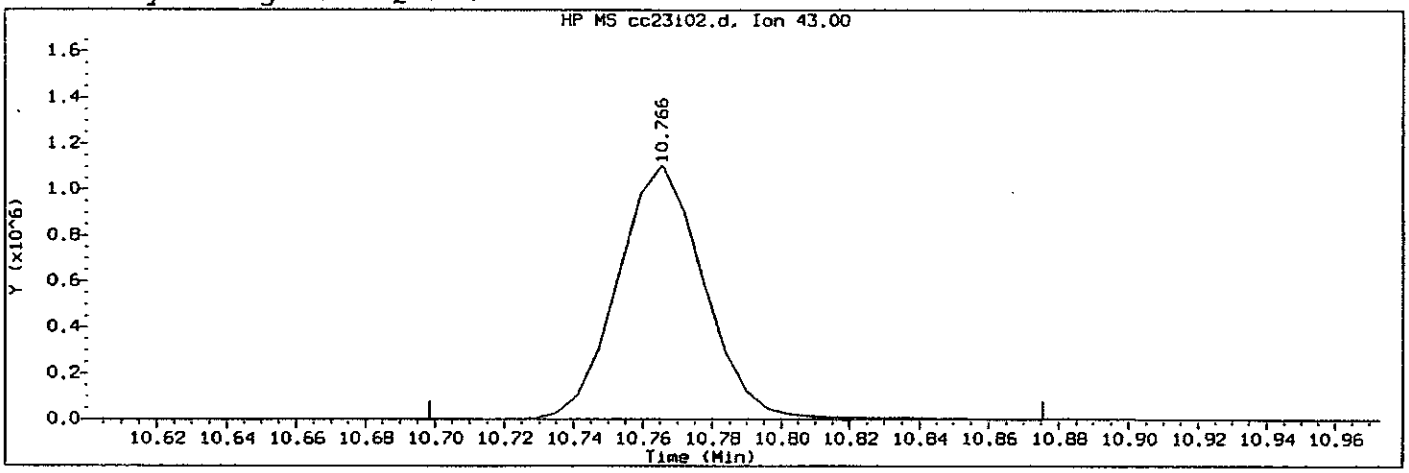
RAD23 8131

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	:	107
Compound Name	:	2-Hexanone
Scan Number	:	1507
Retention Time (minutes)	:	10.766
Quant Ion	:	43
Area (flag)	:	1915605 M
Concentration (ug/L)	:	91.1805
Integration start scan	:	1495 Integration stop scan: 1524
Y at integration start	:	285 Y at integration end: 285

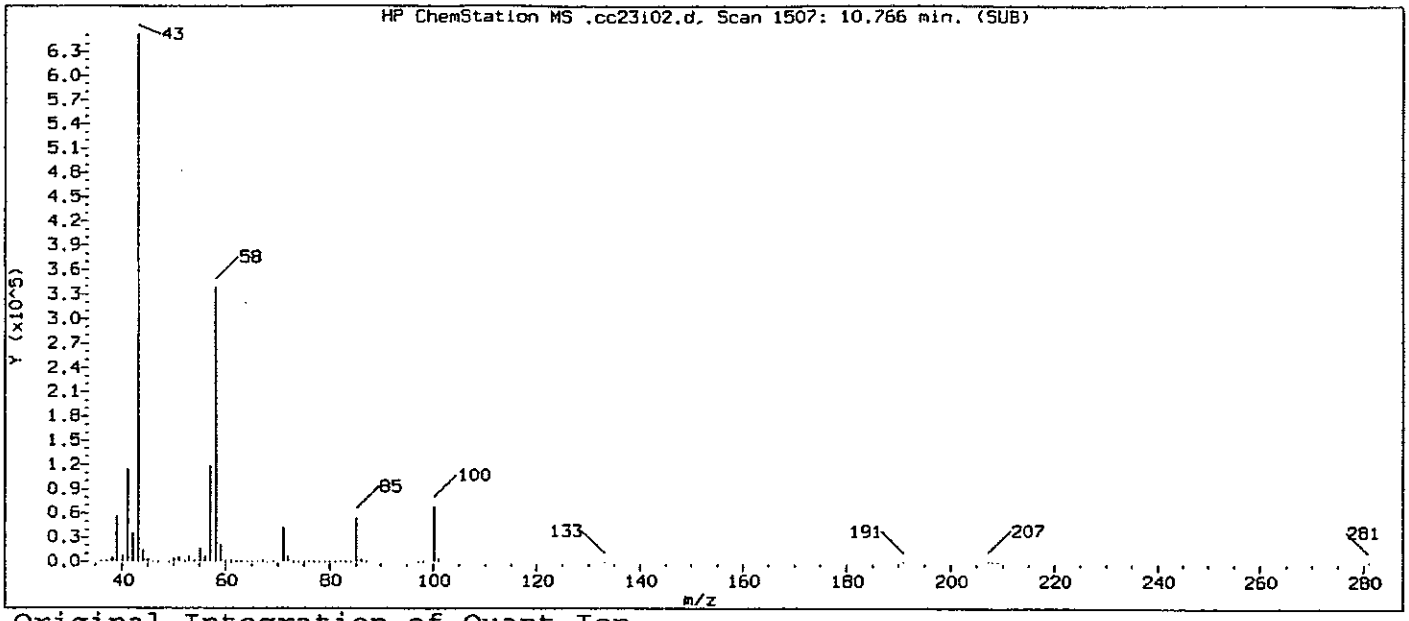
Reason for manual integration (circle one): missed peak (improper integration)

Analyst responsible for change: JML 10/23/09

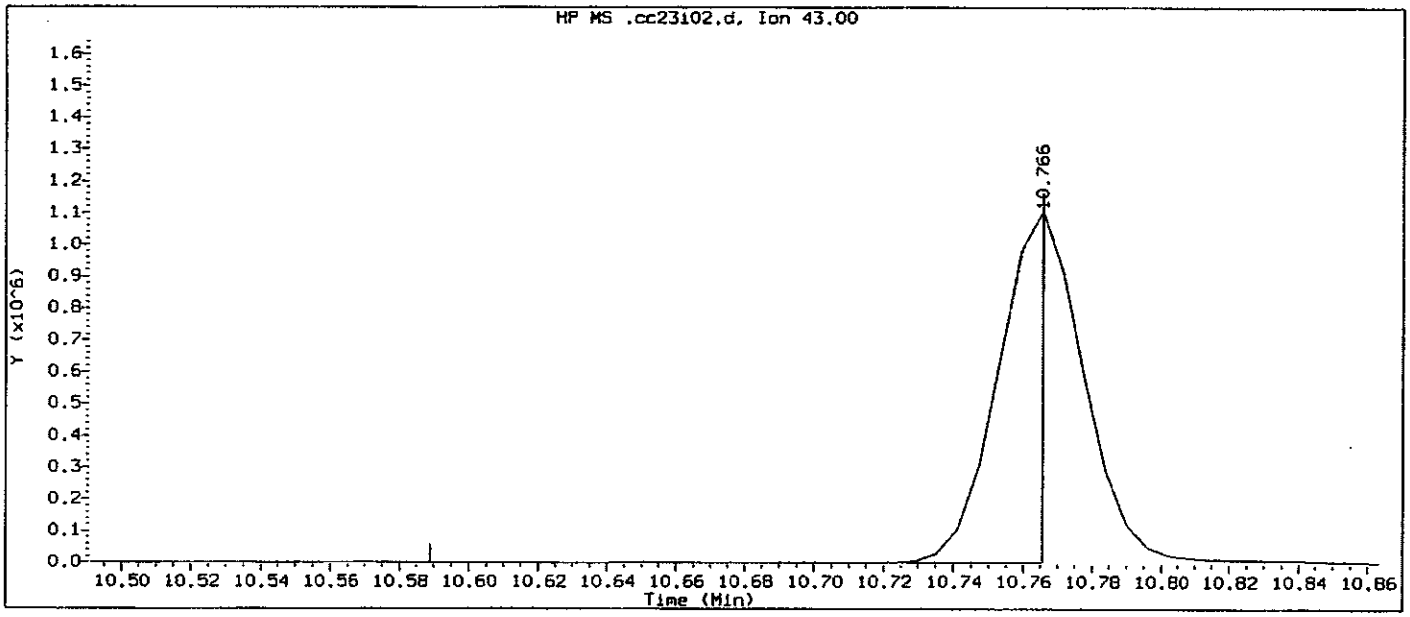
GC/MS audit/management approval: [signature] 10-26-09 RAD23 8132

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

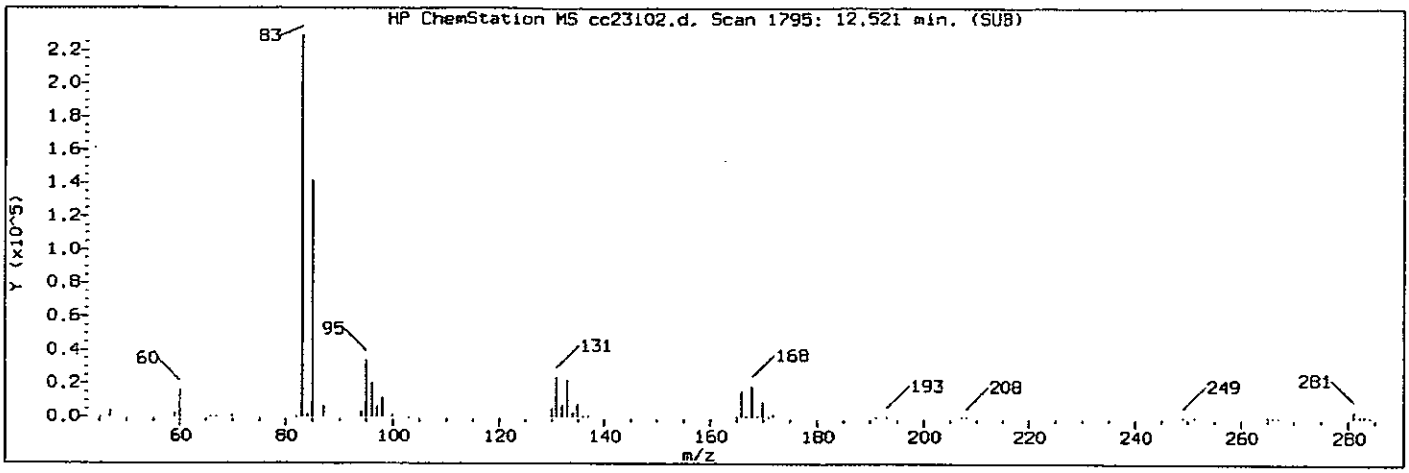
Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number : 107
Compound Name : 2-Hexanone
Scan Number : 1507
Retention Time (minutes): 10.766
Quant Ion : 43
Area : 968019
Concentration (ug/L) : 51.9325
Integration start scan : 1477 Integration stop scan: 1506
Y at integration start : 162 Y at integration end: 162

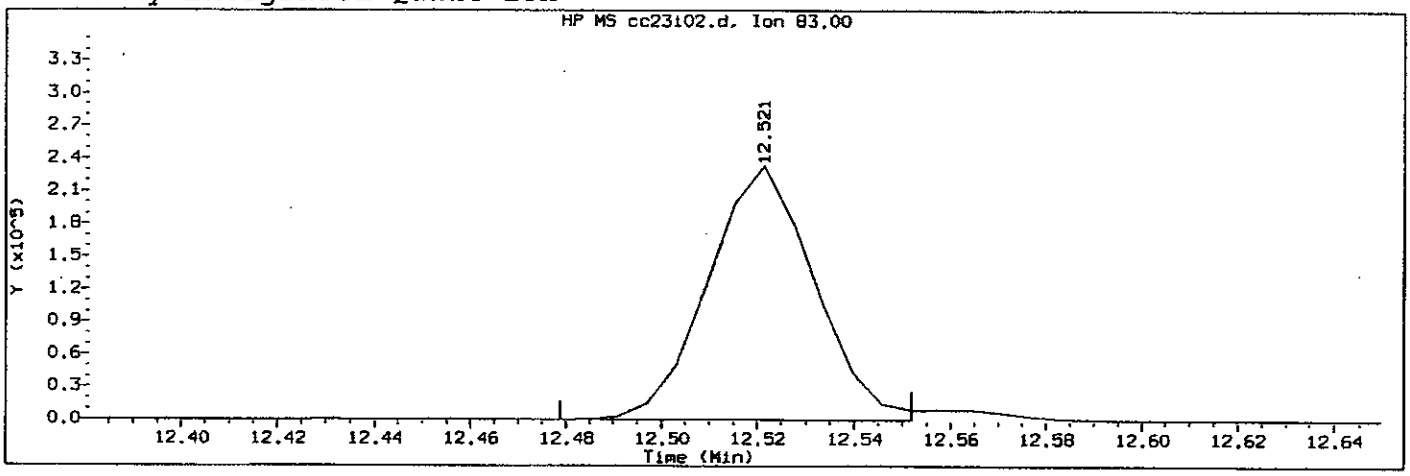
RAD23 0133

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	:	127
Compound Name	:	1,1,2,2-Tetrachloroethane
Scan Number	:	1795
Retention Time (minutes)	:	12.521
Quant Ion	:	83
Area (flag)	:	357385 M
Concentration (ug/L)	:	8.9843
Integration start scan	:	1787 Integration stop scan: 1799
Y at integration start	:	0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

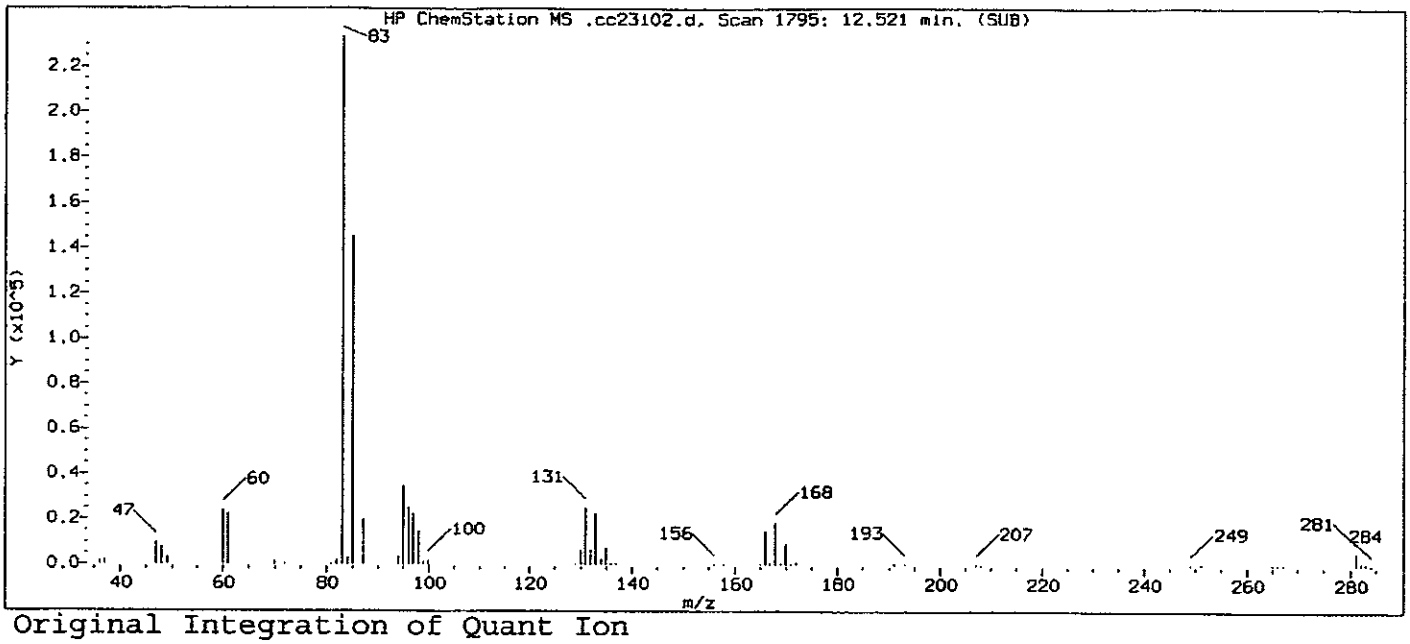
Analyst responsible for change: JM 10/28/09

GC/MS audit/management approval: 10-28-09

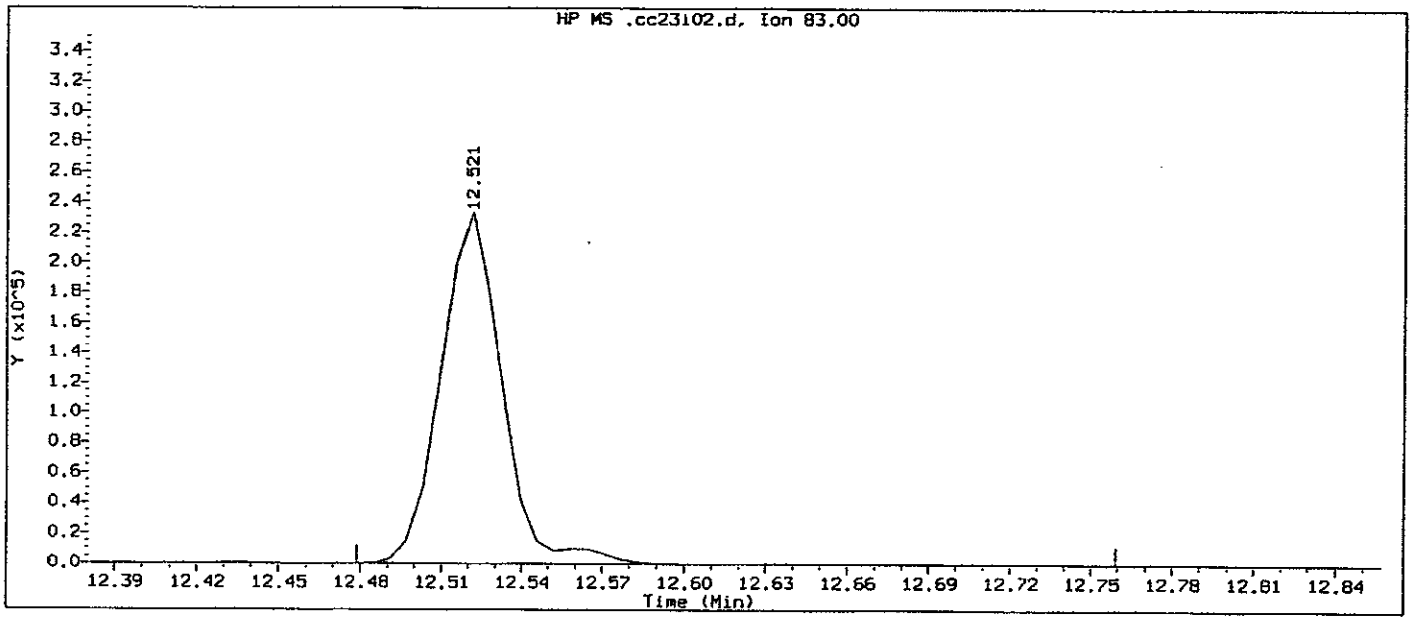
RAD23 8134

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i02.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:37 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.521
Quant Ion	: 83
Area	: 368665
Concentration (ug/L)	: 9.2679
Integration start scan	: 1787 Integration stop scan: 1833
Y at integration start	: 0 Y at integration end: 0

RAD23 8135

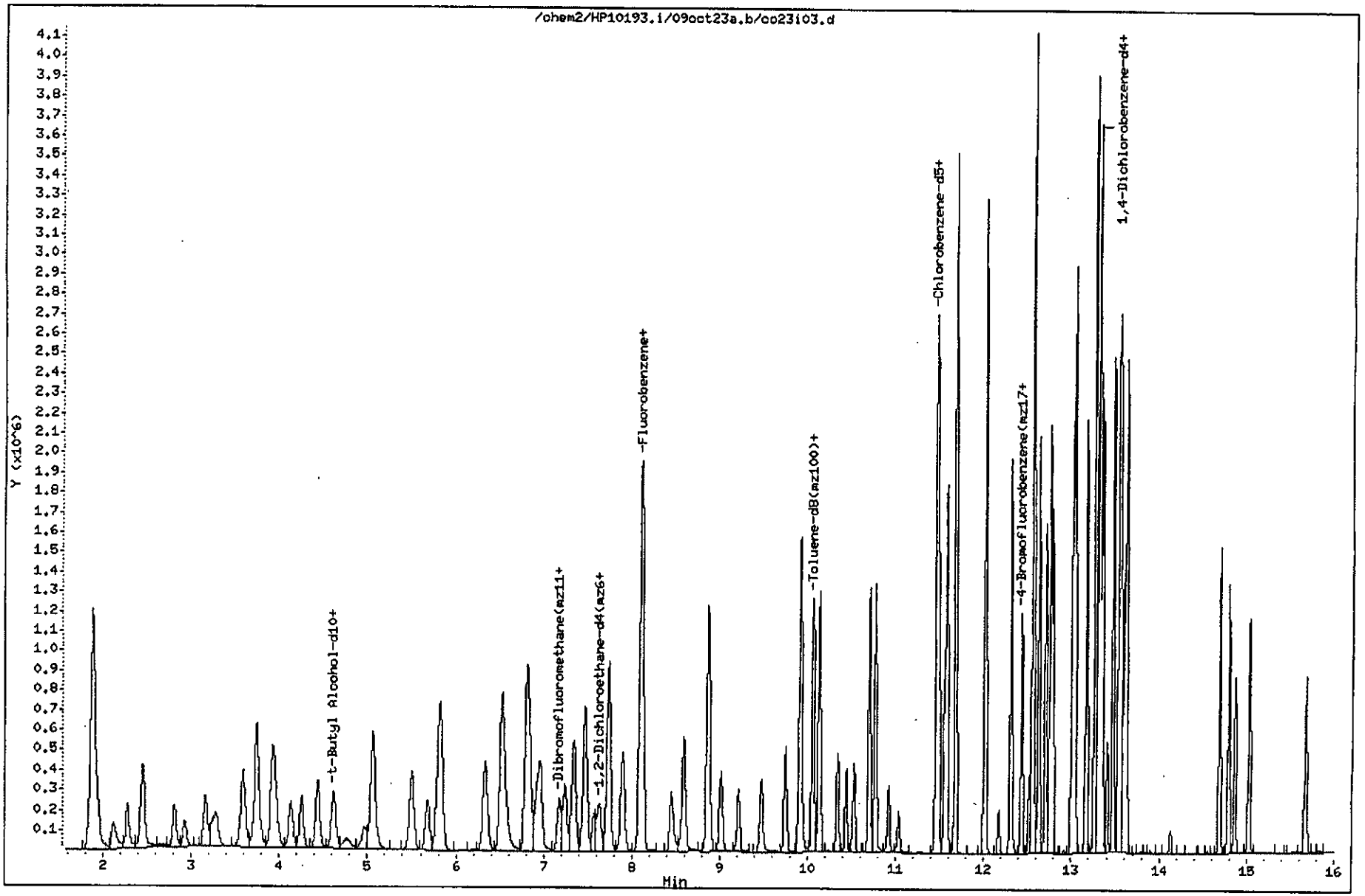
Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i02.d, generated on 10/23/2009 at 12:01

Data File: /chem2/HP10193.i/09oct23a.b/co23i03.d
Date : 23-OCT-2009 10:59
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

RAD2 8136



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.115	85	304307	4.599
5) Chloromethane	(1)	2.280	50	316578	4.571
7) Vinyl Chloride	(1)	2.432	62	321510	4.634
8) 1,3-Butadiene	(1)	2.456	39	205070	4.504
9) Bromomethane	(1)	2.810	94	217591	4.522
11) Chloroethane	(1)	2.926	64	182595	4.572
12) Dichlorofluoromethane	(1)	3.164	67	440285	4.624
14) Trichlorofluoromethane	(1)	3.279	101	408804M	4.660
16) Ethyl Ether	(1)	3.584	59	165158	4.559
17) Freon 123a	(1)	3.596	67	278282	4.613
23) Acrolein	(4)	3.743	56	1169860	224.772
24) 1,1-Dichloroethene	(1)	3.913	96	202276	4.639
25) Freon 113	(1)	3.944	101	228406	4.710
26) Acetone	(4)	3.950	58	88824M	44.143
28) Methyl Iodide	(1)	4.127	142	427924	4.659
29) Carbon Disulfide	(1)	4.249	76	658801	4.654
31) Allyl Chloride	(1)	4.432	41	398322	4.597
32) Methyl Acetate	(1)	4.456	43	89190	4.355
34) Methylene Chloride	(1)	4.615	84	232141	4.656
35)*t-Butyl Alcohol-d10	(4)	4.633	65	100574	50.000
36) t-Butyl Alcohol	(4)	4.767	59	196075M	90.901
39) Acrylonitrile	(4)	4.968	53	205422	22.265
40) trans-1,2-Dichloroethene	(1)	5.060	96	239045	4.630
38) 1,2-Dichloroethene (Total)	(1)		96	497644	9.269
41) Methyl Tertiary Butyl Ether	(1)	5.066	73	550047	4.661
44) n-Hexane	(1)	5.505	57	376140	4.741
45) 1,1-Dichloroethane	(1)	5.675	63	436928	4.601
47) di-Isopropyl Ether	(1)	5.803	45	836337	4.657
48) 2-Chloro-1,3-Butadiene	(1)	5.828	53	394015	4.690
49) Ethyl t-Butyl Ether	(1)	6.328	59	729192	4.632
52) 2,2-Dichloropropane	(1)	6.535	77	343925	4.614
50) cis-1,2-Dichloroethene	(1)	6.517	96	258599	4.639
51) 2-Butanone	(4)	6.517	43	538650	45.065
53) Propionitrile	(4)	6.584	54	317853	91.041

M = Compound was manually integrated.

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	568595	45.253
55) Bromochloromethane	(1)	6.846	128	112330	4.555
56) Tetrahydrofuran	(4)	6.919	71	143960	45.628
59) Chloroform	(1)	6.962	83	420832	4.660
63) 1,1,1-Trichloroethane	(1)	7.242	97	362902	4.624
64) Cyclohexane	(1)	7.340	56	450872	4.679
66) 1,1-Dichloropropene	(1)	7.462	75	340127	4.638
67) Carbon Tetrachloride	(1)	7.480	117	310962	4.645
69) Isobutyl Alcohol	(4)	7.577	41	183515	230.467
73) Benzene	(1)	7.736	78	1028357	4.613
74) 1,2-Dichloroethane	(1)	7.736	62	260110	4.624
72) 1,2-Dichloroethane(mz98)	(1)	7.736	98	22709	4.623
77) t-Amyl Methyl Ether	(1)	7.894	73	606011	4.617
78)*Fluorobenzene	(1)	8.102	96	2057278	10.000
79) n-Heptane	(1)	8.120	43	409696	4.590
80) n-Butanol	(4)	8.449	56	324109	469.589
82) Trichloroethene	(1)	8.589	95	258881	4.631
85) Methylcyclohexane	(1)	8.870	83	476174	4.645
84) 1,2-Dichloropropane	(1)	8.870	63	260041	4.639
87) Dibromomethane	(1)	9.010	93	108081	4.674
90) 1,4-Dioxane	(4)	9.028	88	43755	245.122
88) Methyl Methacrylate	(4)	9.016	69	101800	4.479
91) Bromodichloromethane	(1)	9.217	83	277752	4.649
92) 2-Nitropropane	(4)	9.473	41	303187	45.076
94) cis-1,3-Dichloropropene	(1)	9.748	75	356787	4.645
96) 4-Methyl-2-Pentanone	(1)	9.918	43	1399199	46.790
100) Toluene	(2)	10.132	92	641939	4.594
102) trans-1,3-Dichloropropene	(2)	10.339	75	289379	4.652
103) Ethyl Methacrylate	(2)	10.437	69	224322	4.667
104) 1,1,2-Trichloroethane	(2)	10.528	97	153822	4.643
106) Tetrachloroethene	(2)	10.699	166	306153	4.591
105) 1,3-Dichloropropane	(2)	10.693	76	277840	4.639
107) 2-Hexanone	(2)	10.766	43	961733	46.508
108) Dibromochloromethane	(2)	10.918	129	182484	4.667

* = Compound is an internal standard.

RAD23 0138

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
109) 1,2-Dibromoethane	(2)	11.028	107	148377	4.671
110)*Chlorobenzene-d5	(2)	11.461	117	1495680	10.000
112) Chlorobenzene	(2)	11.485	112	729898	4.591
113) 1,1,1,2-Tetrachloroethane	(2)	11.552	131	232660	4.613
114) Ethylbenzene	(2)	11.577	91	1273447	4.588
117) m+p-Xylene	(2)	11.674	106	1010397	9.198
116) Xylene (Total)	(2)		106	1500328	13.808
118) o-Xylene	(2)	12.009	106	489931	4.609
119) Styrene	(2)	12.016	104	787079	4.614
120) Bromoform	(2)	12.174	173	97847	4.564
121) Isopropylbenzene	(2)	12.308	105	1231173	4.579
127) 1,1,2,2-Tetrachloroethane	(3)	12.522	83	175743M	4.649
128) Bromobenzene	(3)	12.558	156	311261	4.637
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	540675	58.481
130) 1,2,3-Trichloropropane	(3)	12.564	110	49370	4.626
132) n-Propylbenzene	(3)	12.625	91	1537336	4.626
133) 2-Chlorotoluene	(3)	12.704	126	308813	4.624
136) 4-Chlorotoluene	(3)	12.784	126	319365	4.635
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	1104553	4.614
138) Pentachloroethane	(3)	13.034	167	198814	4.712
137) tert-Butylbenzene	(3)	13.009	134	252565	4.623
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	1149923	4.610
140) sec-Butylbenzene	(3)	13.168	105	1424746	4.648
141) 1,3-Dichlorobenzene	(3)	13.265	146	638749	4.584
143)*1,4-Dichlorobenzene-d4	(3)	13.308	152	856500	10.000
142) p-Isopropyltoluene	(3)	13.265	119	1253020	4.595
144) 1,4-Dichlorobenzene	(3)	13.326	146	643879	4.599
145) 1,2,3-Trimethylbenzene	(3)	13.351	120	518645	4.579
146) Benzyl Chloride	(3)	13.412	126	77114	4.761
147) n-Butylbenzene	(3)	13.558	92	624996	4.613
148) 1,2-Dichlorobenzene	(3)	13.601	146	555318	4.628
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	23303	4.418
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	452802	4.588
154) Hexachlorobutadiene	(3)	14.796	225	257356	4.573

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 0139

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

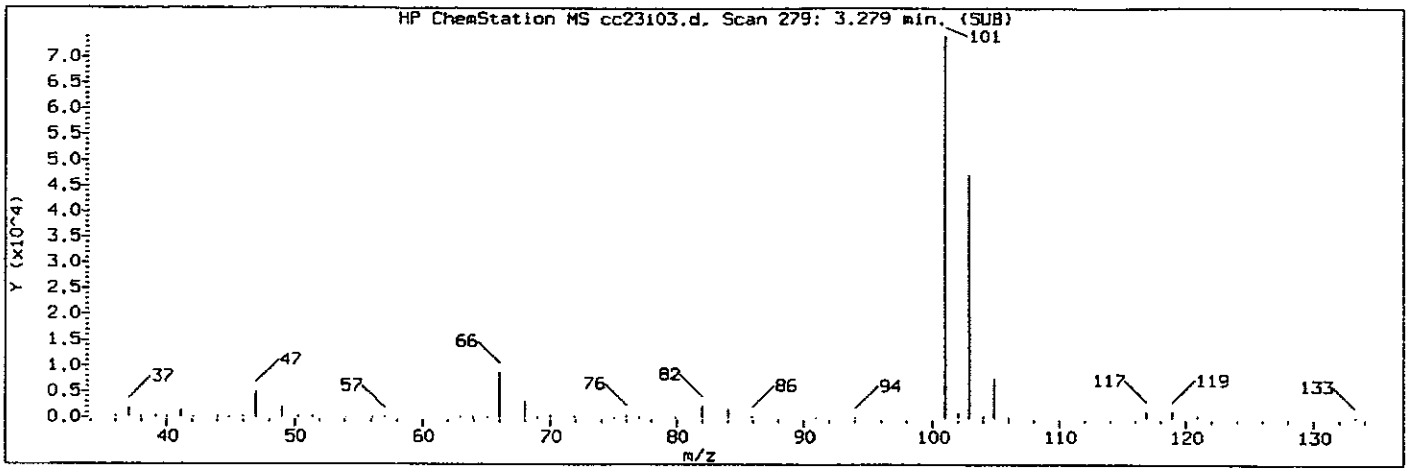
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
155) Naphthalene	(3)	14.869	128	670050	4.709
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	373909	4.631
60)$Dibromofluoromethane	(1)	7.175	113	236827	4.534
61)$Dibromofluoromethane(mz111)	(1)	7.181	111	246957	4.603
70)$1,2-Dichloroethane-d4	(1)	7.632	102	42946	4.448
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.632	104	27988	4.482
65)$1,2-Dichloroethane-d4(mz65)	(1)	7.632	65	221569M	4.486
98)$Toluene-d8	(2)	10.059	98	1032822	4.575
99)$Toluene-d8(mz100)	(2)	10.059	100	663521	4.576
124)$4-Bromofluorobenzene	(2)	12.430	95	369396	4.573
125)$4-Bromofluorobenzene(mz174)	(2)	12.430	174	328352	4.534

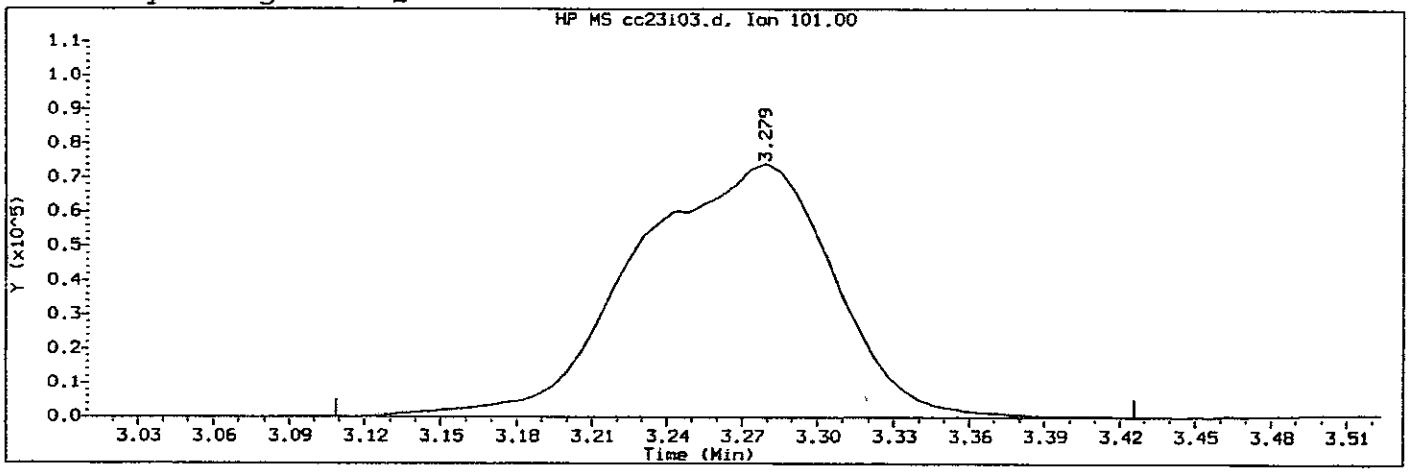
M = Compound was manually integrated.

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 14
Compound Name : Trichlorofluoromethane
Scan Number : 279
Retention Time (minutes): 3.279
Quant Ion : 101
Area (flag) : 408804 M
Concentration (ug/L) : 4.6603
Integration start scan : 250 Integration stop scan: 302
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

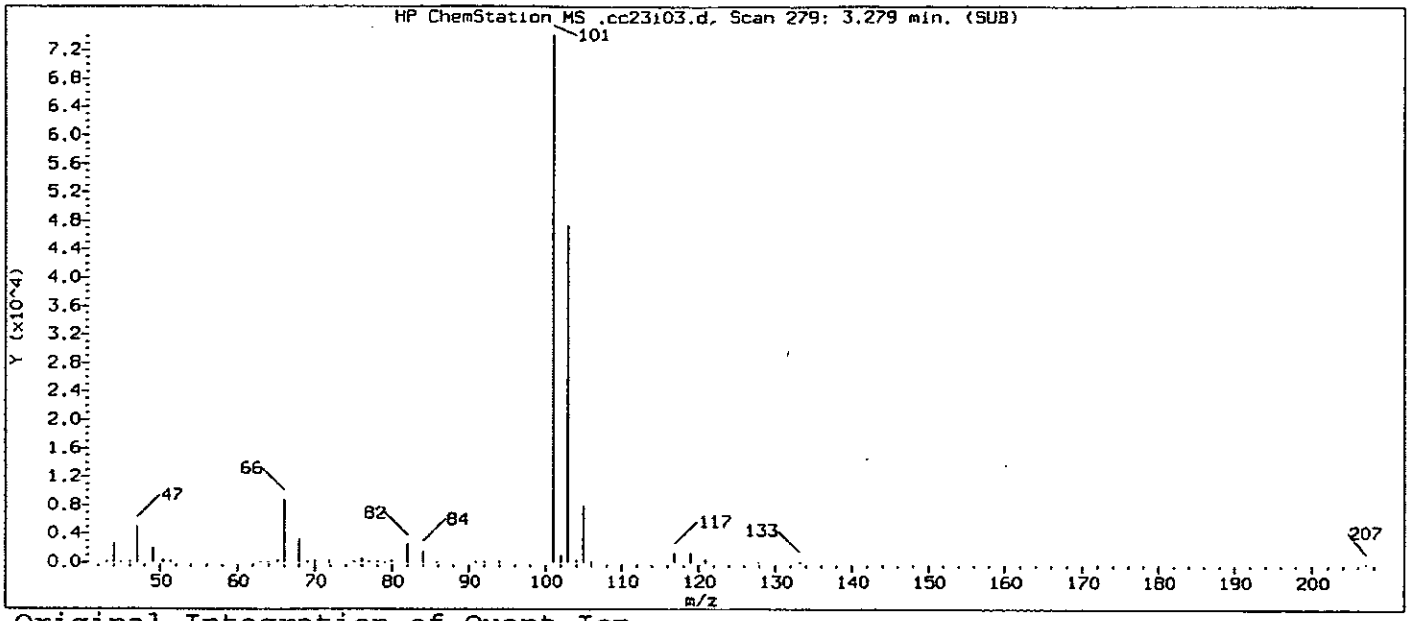
Analyst responsible for change: JMW 10/28/09

GC/MS audit/management approval: 10-28-09

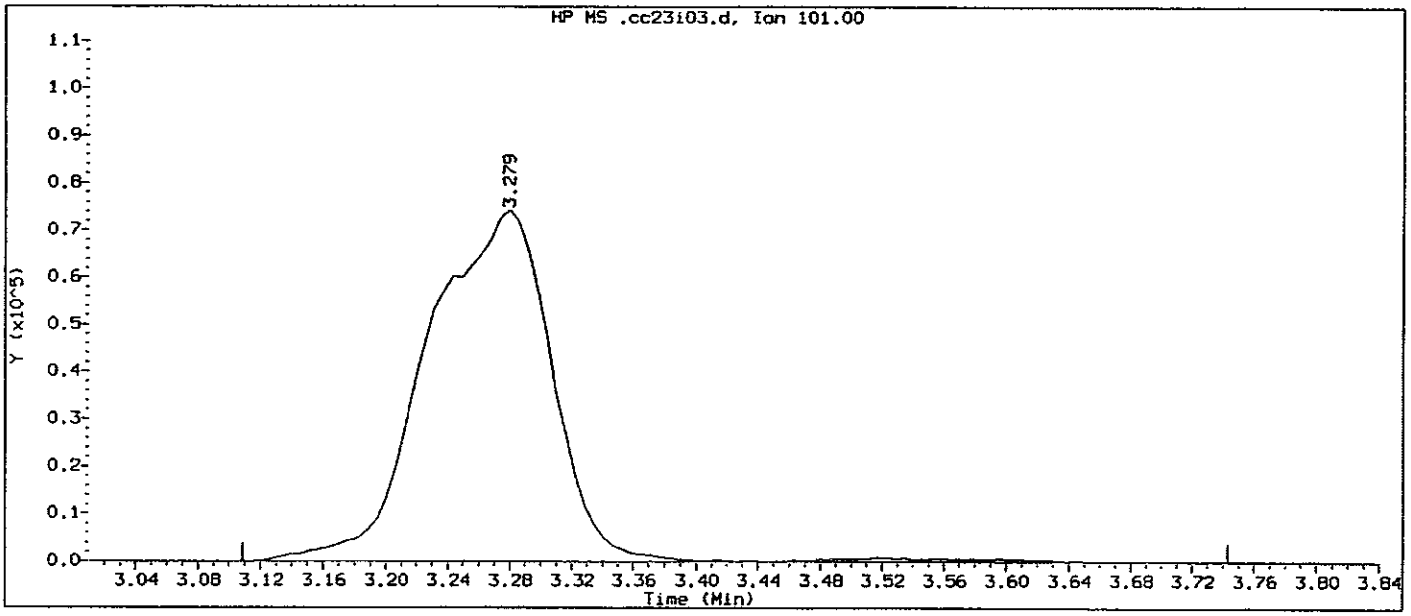
RAD23 6141

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

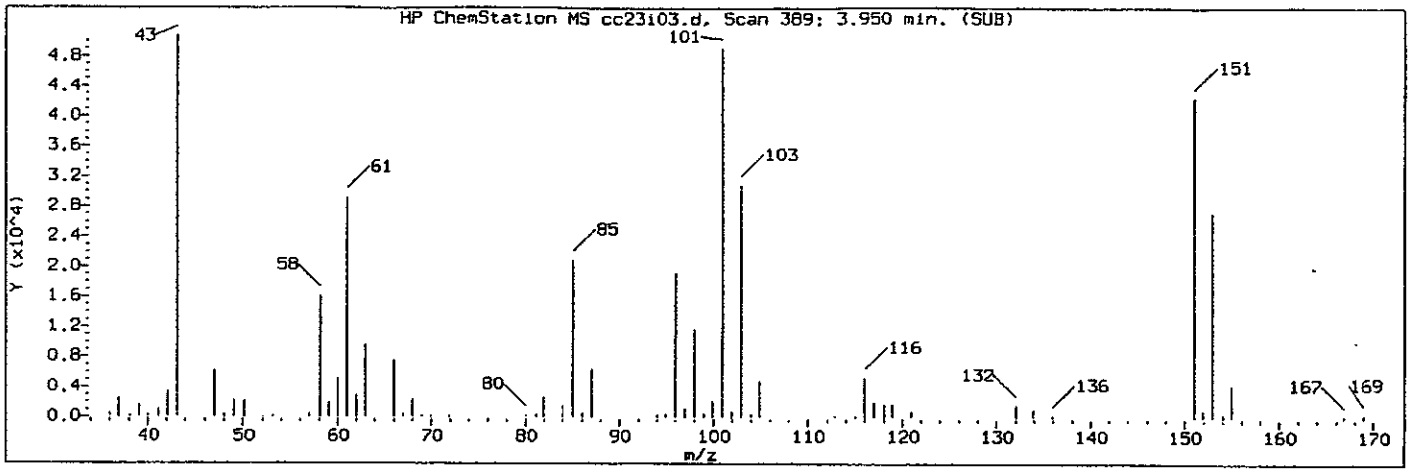
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 14
Compound Name : Trichlorofluoromethane
Scan Number : 279
Retention Time (minutes): 3.279
Quant Ion : 101
Area : 414819
Concentration (ug/L) : 4.6476
Integration start scan : 250 Integration stop scan: 354
Y at integration start : 0 Y at integration end: 0

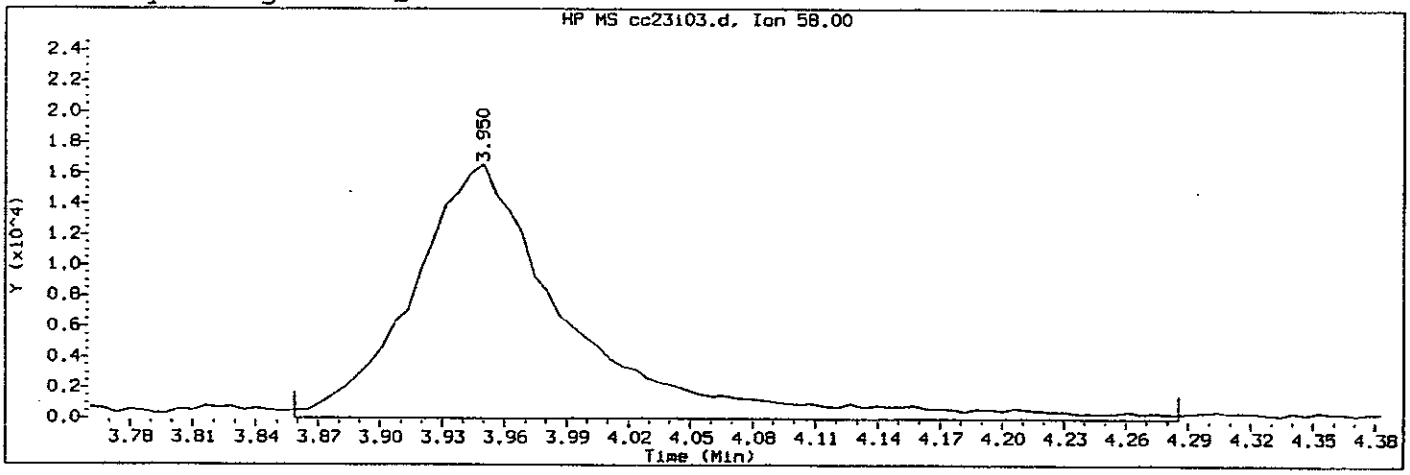
RAD23 6142

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 26
Compound Name : Acetone
Scan Number : 389
Retention Time (minutes): 3.950
Quant Ion : 58
Area (flag) : 88824 M
Concentration (ug/L) : 44.1428
Integration start scan : 373 Integration stop scan: 443
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

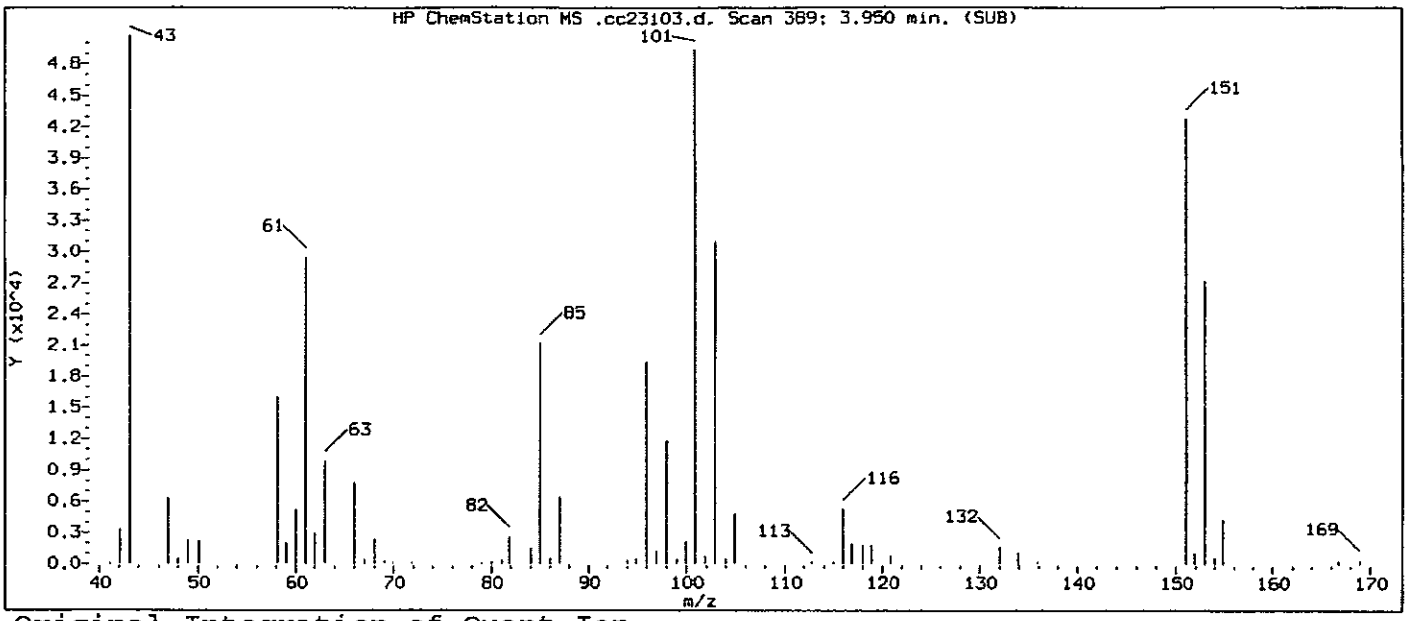
Analyst responsible for change: JMW3 10/24/09

GC/MS audit/management approval: 10/26/09

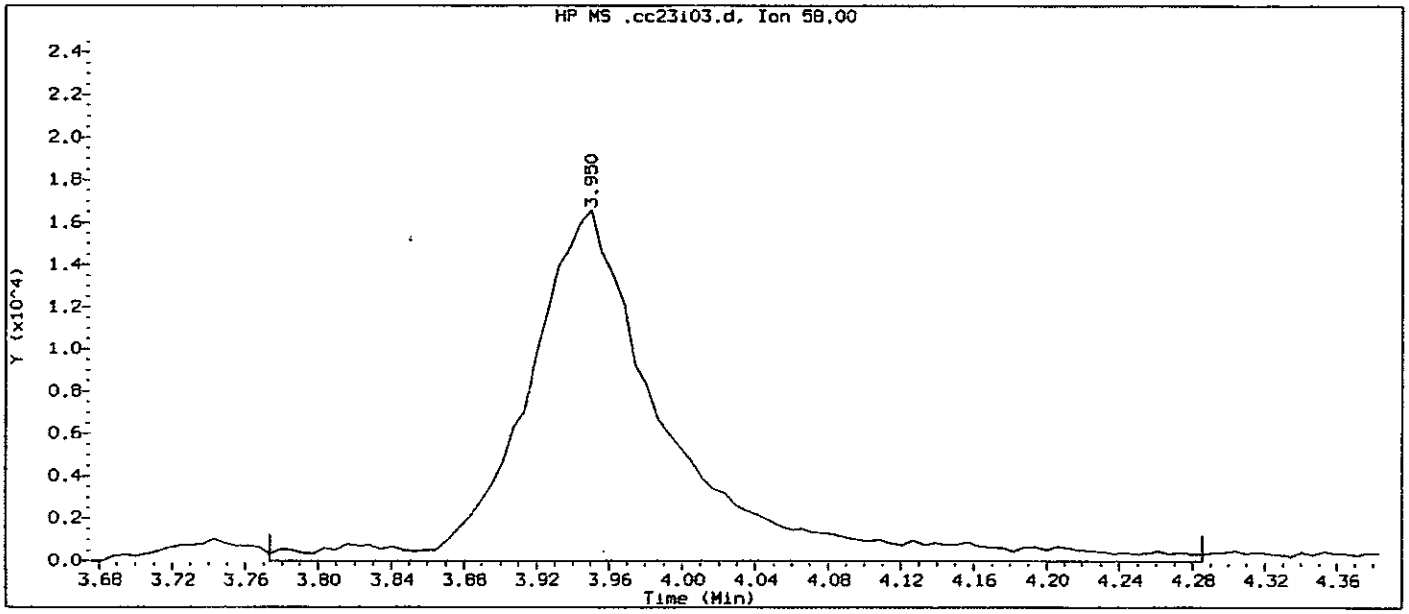
RAD23 0143

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

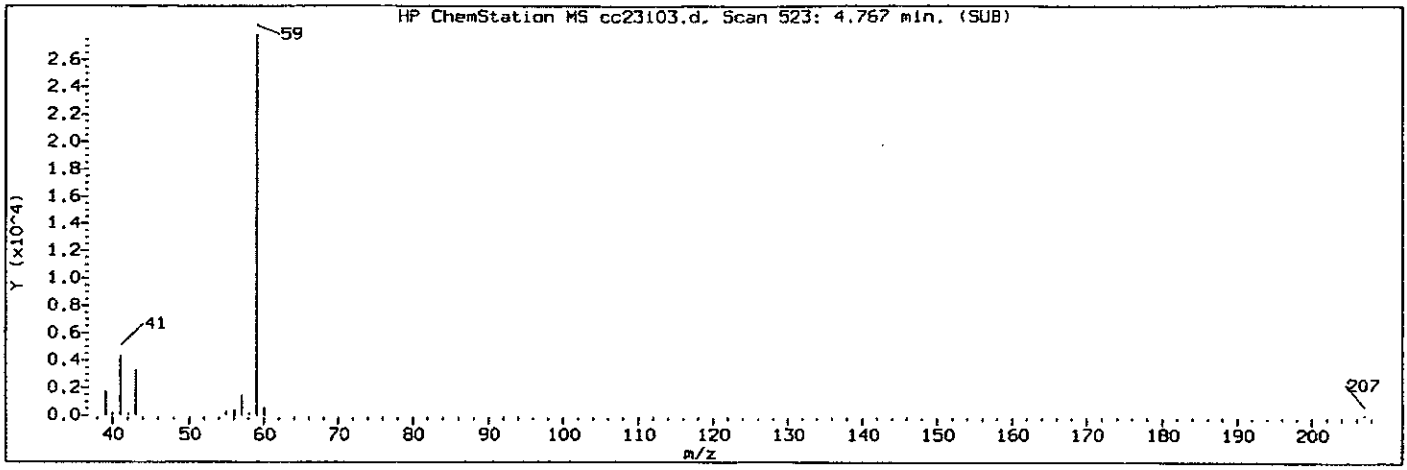
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number	:	26
Compound Name	:	Acetone
Scan Number	:	389
Retention Time (minutes)	:	3.950
Quant Ion	:	58
Area	:	91541
Concentration (ug/L)	:	44.0625
Integration start scan	:	359 Integration stop scan: 443
Y at integration start	:	0 Y at integration end: 0

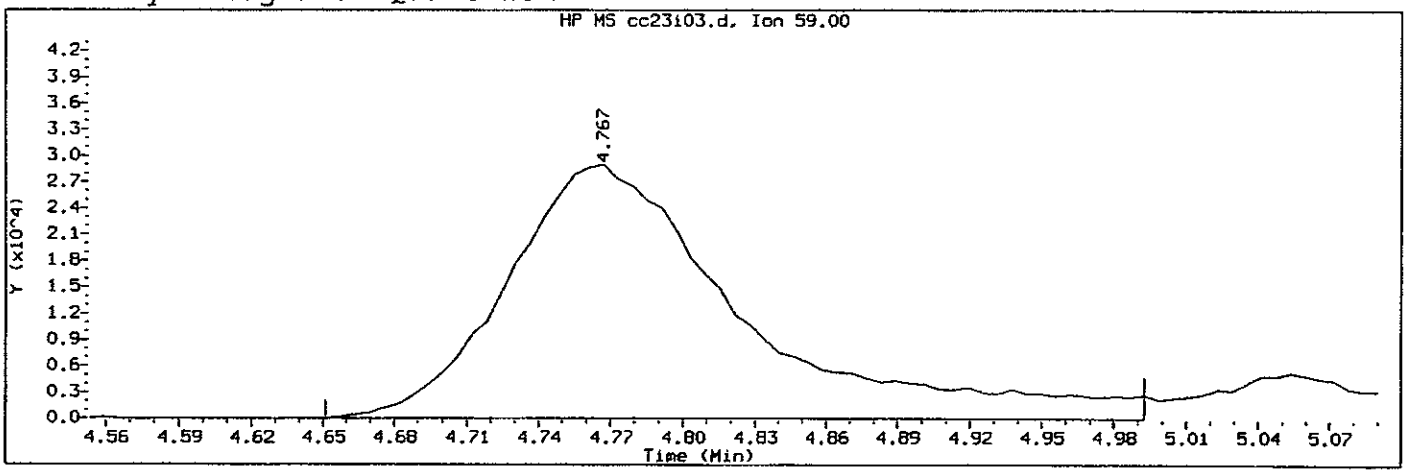
RAD23 8144

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 36
Compound Name : t-Butyl Alcohol
Scan Number : 523
Retention Time (minutes): 4.767
Quant Ion : 59
Area (flag) : 196075 M
Concentration (ug/L) : 90.9007
Integration start scan : 503 Integration stop scan: 559
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

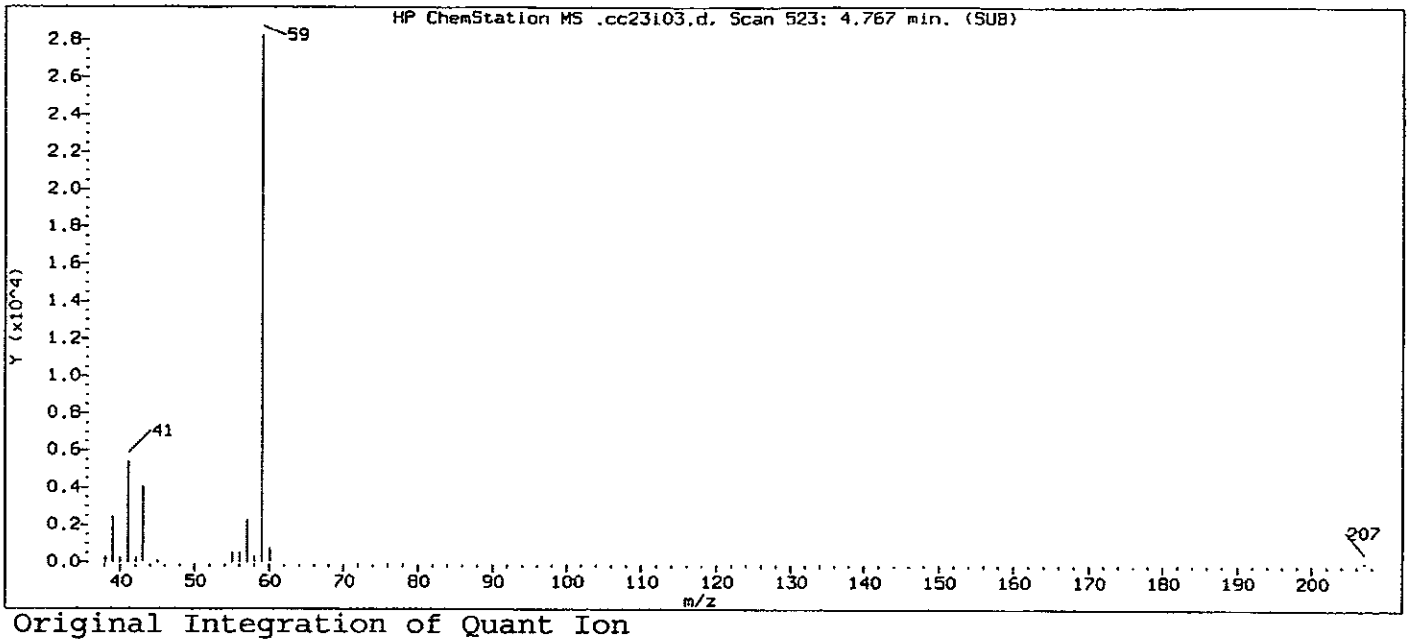
Analyst responsible for change: JM 10/23/09

GC/MS audit/management approval: 10-26-09

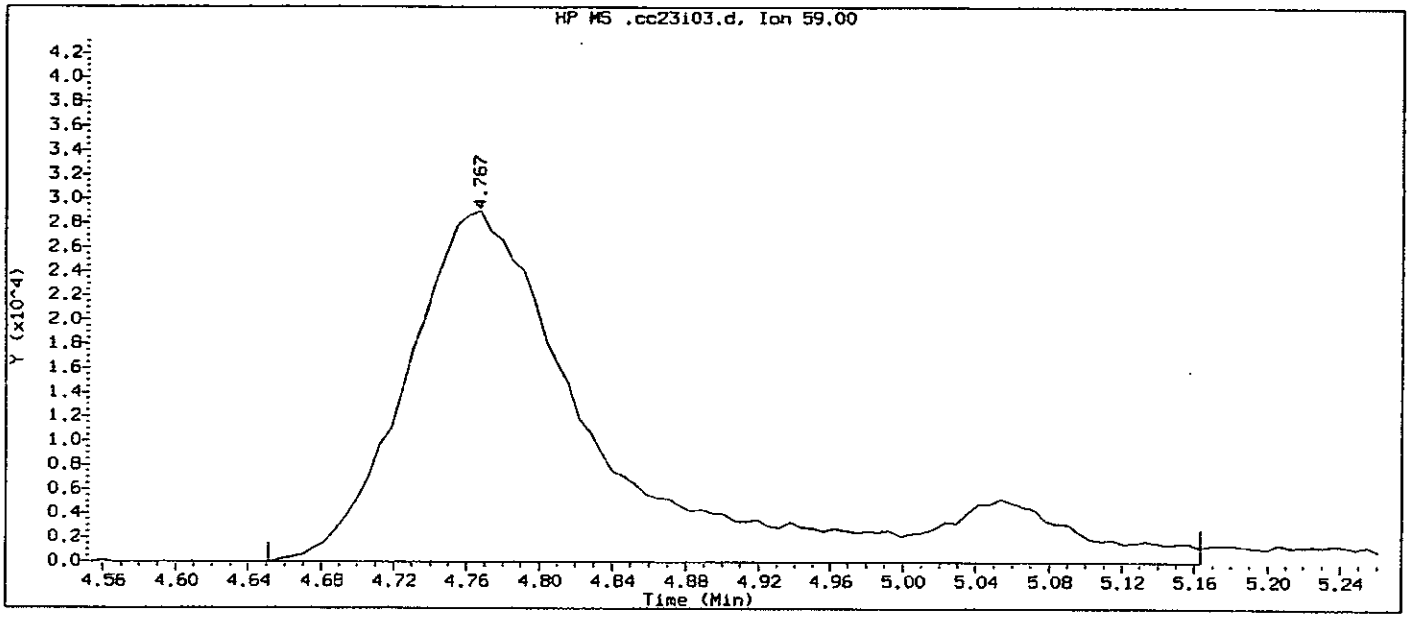
RAD23 0145

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

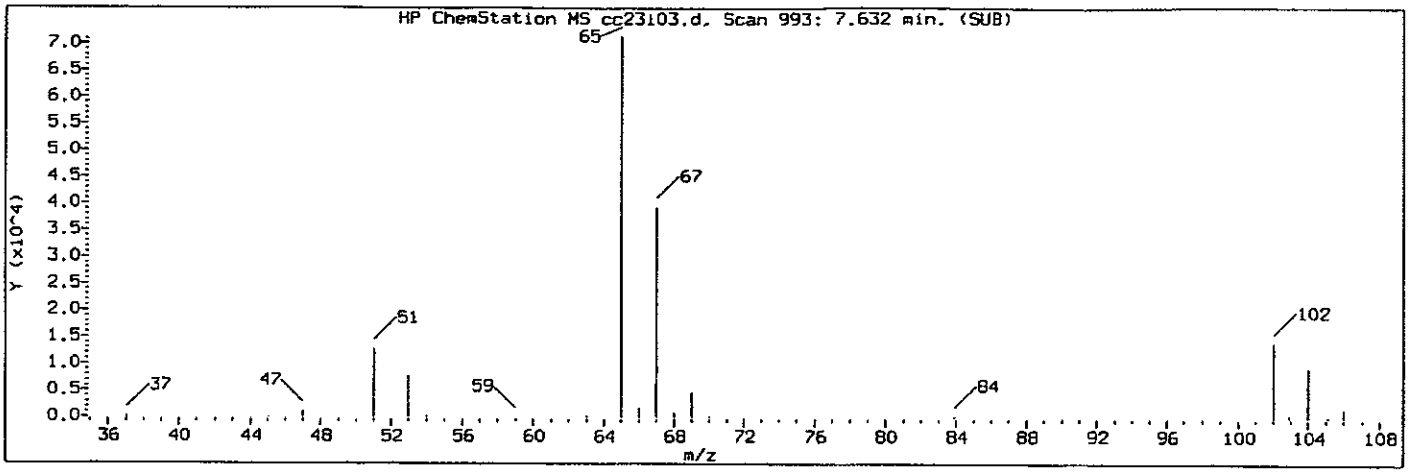
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 36
Compound Name : t-Butyl Alcohol
Scan Number : 523
Retention Time (minutes): 4.767
Quant Ion : 59
Area : 224823
Concentration (ug/L) : 101.1159
Integration start scan : 503 Integration stop scan: 587
Y at integration start : 0 Y at integration end: 0

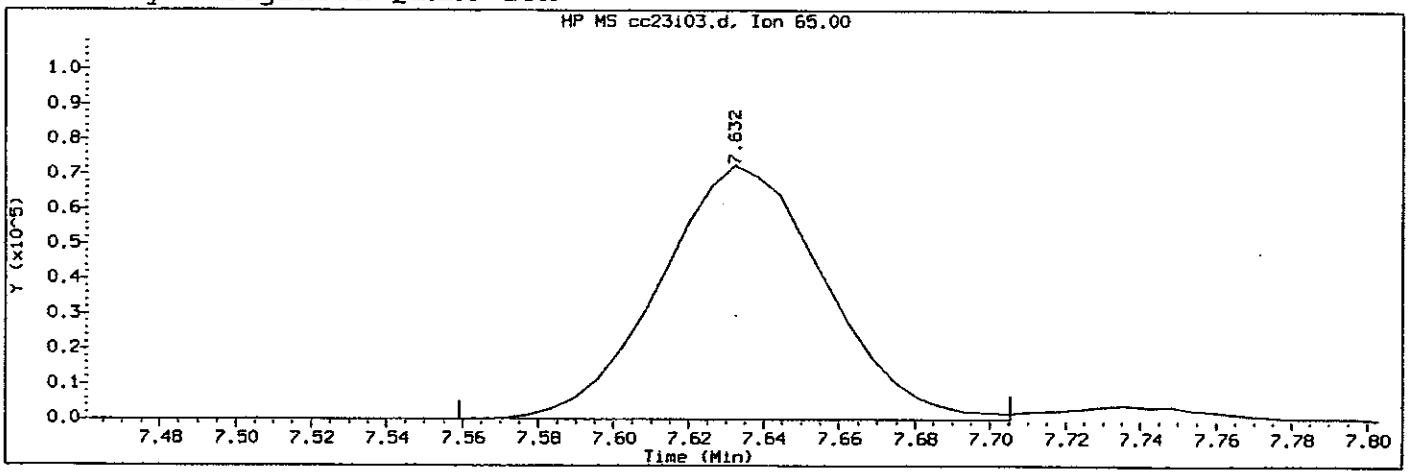
RAD23 0146

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area (flag) : 221569 M
Concentration (ug/L) : 4.4861
Integration start scan : 980 Integration stop scan: 1004
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

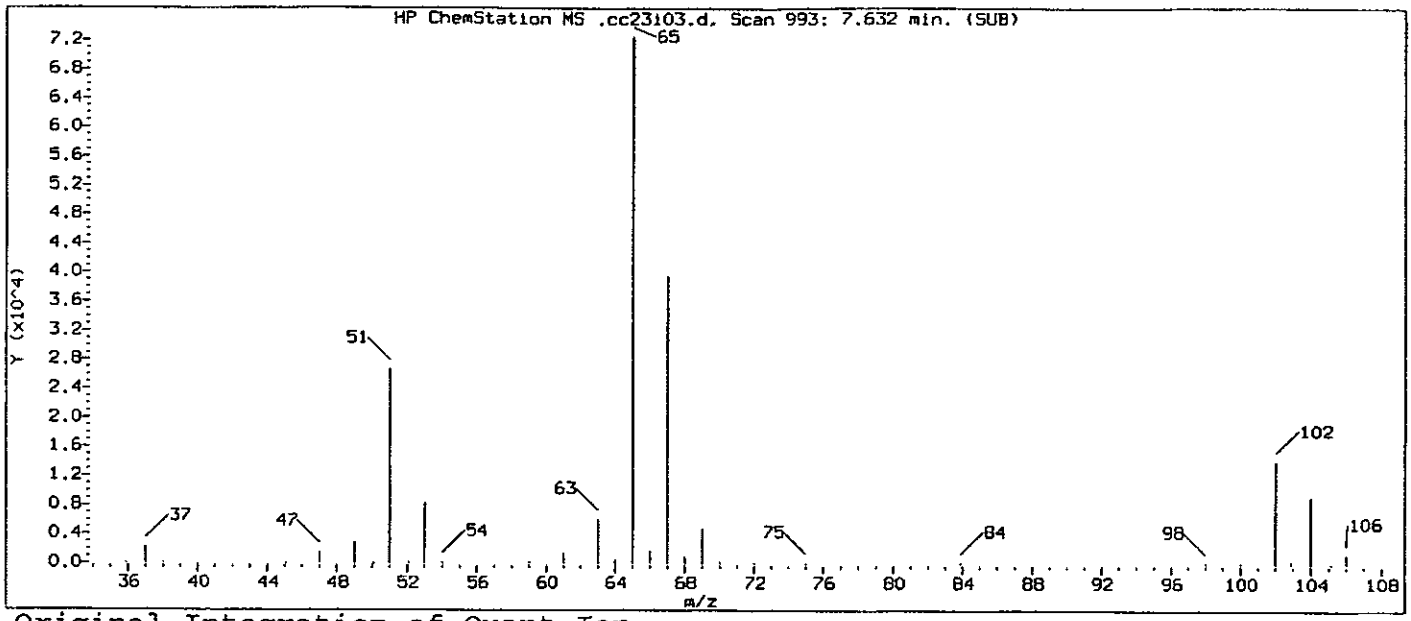
Analyst responsible for change: JML 10/23/09

GC/MS audit/management approval: [signature] 10-28-09

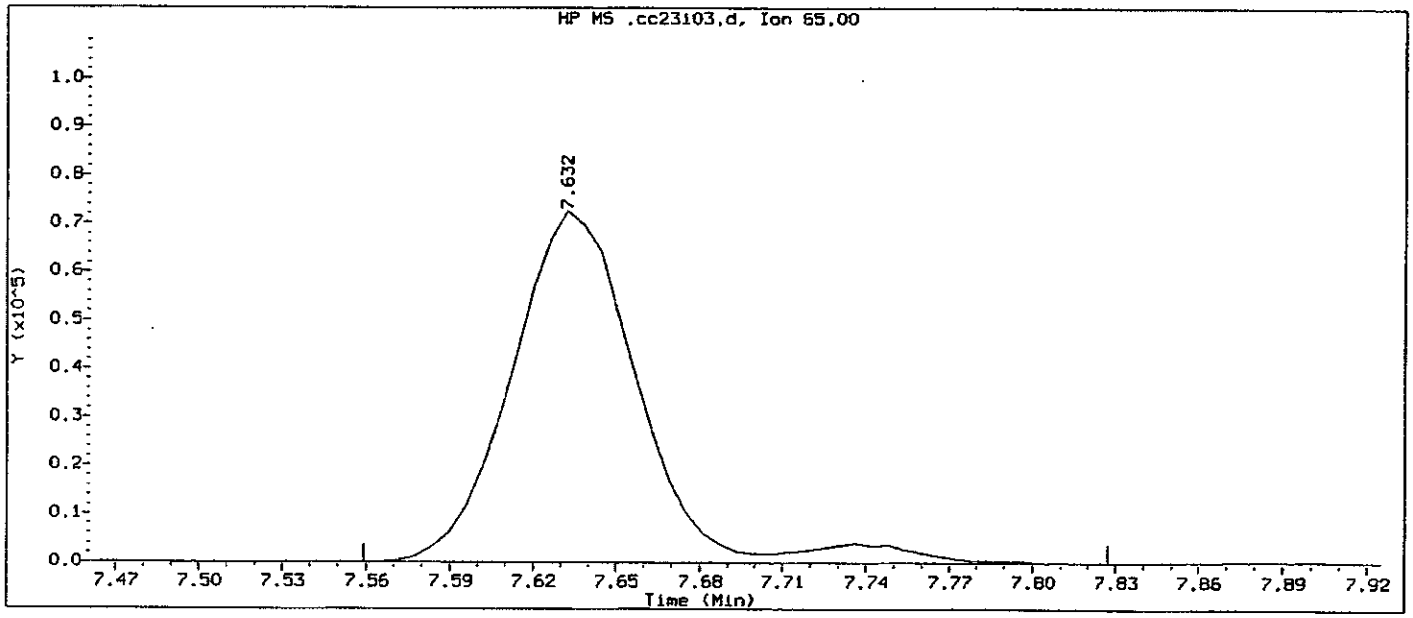
RAD23 5147

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

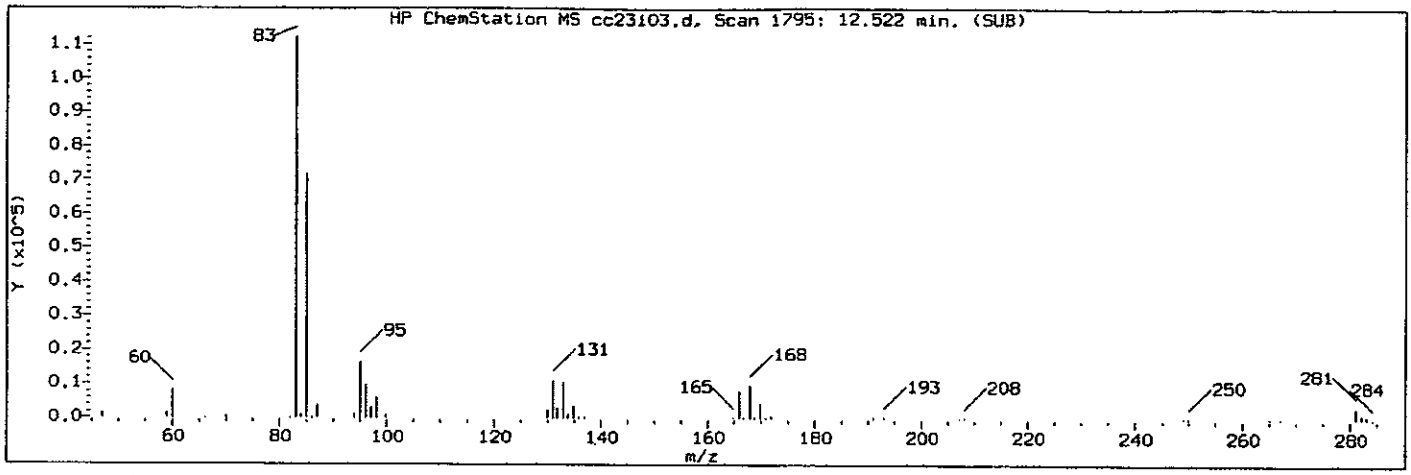
Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area : 232868
Concentration (ug/L) : 4.6438
Integration start scan : 980 Integration stop scan: 1024
Y at integration start : 0 Y at integration end: 0

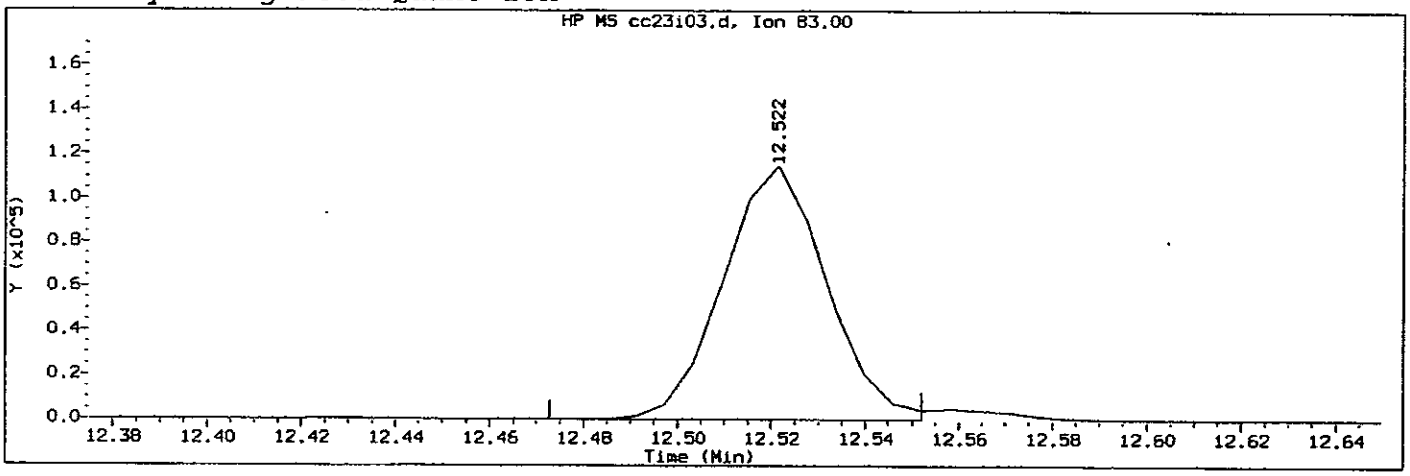
RAD23 8148

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 12:02 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number	:	127
Compound Name	:	1,1,2,2-Tetrachloroethane
Scan Number	:	1795
Retention Time (minutes)	:	12.522
Quant Ion	:	83
Area (flag)	:	175743 M
Concentration (ug/L)	:	4.6490
Integration start scan	:	1786 Integration stop scan: 1799
Y at integration start	:	0 Y at integration end: 0

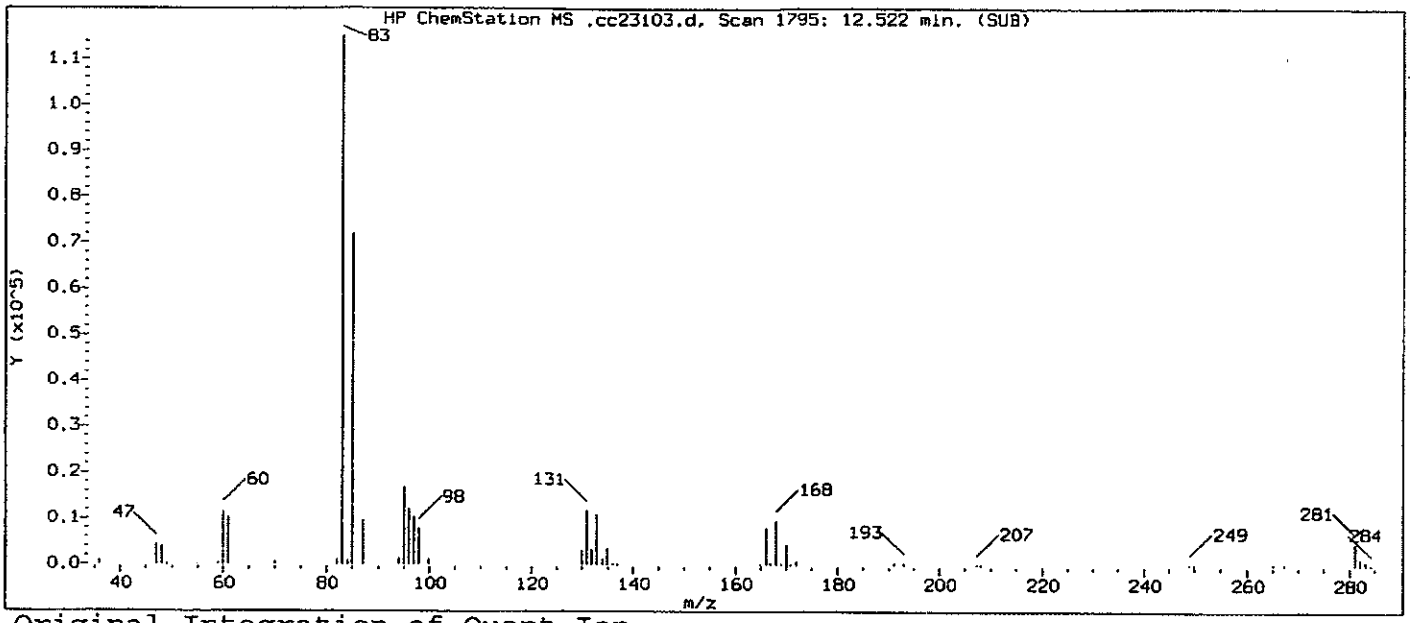
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: jm 10/23/09

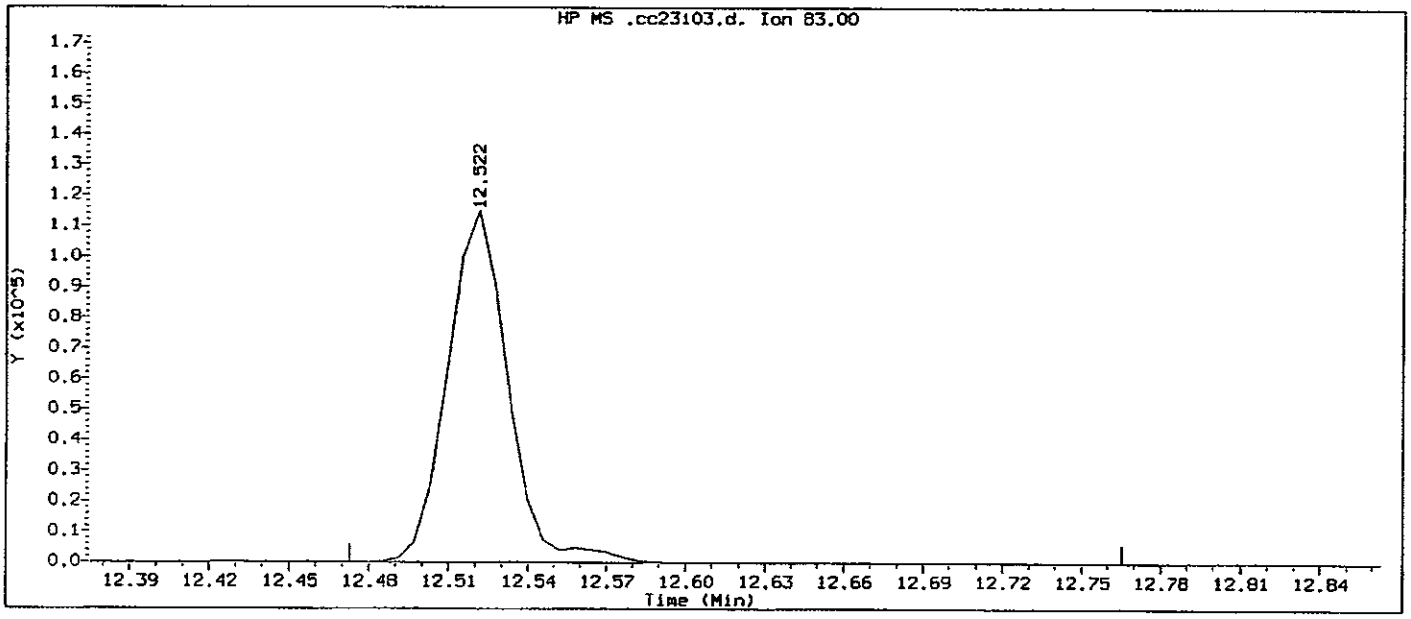
GC/MS audit/management approval: [signature] 10-26-09 RAD23 8149

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i03.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 10:59 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 11:57
Date, time and analyst ID of latest file update: 23-Oct-2009 11:57 jml01693

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.522
Quant Ion	: 83
Area	: 181243
Concentration (ug/L)	: 4.6377
Integration start scan	: 1786 Integration stop scan: 1834
Y at integration start	: 0 Y at integration end: 0

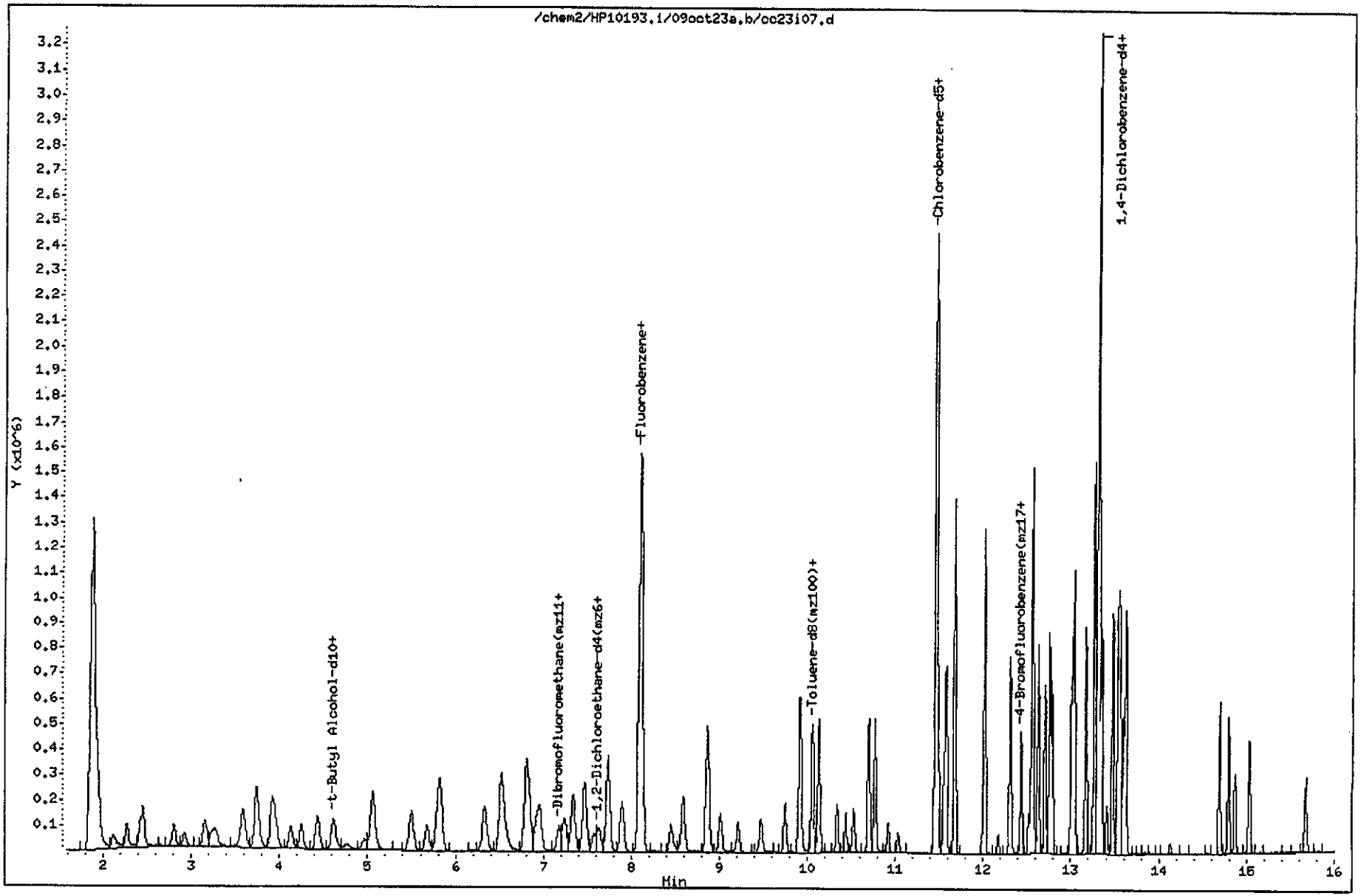
RAD23 8150

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i03.d, generated on 10/23/2009 at 12:02

Data File: /chem2/HP10193.i/09oct23a.b/oc23i07.d
Date : 23-OCT-2009 12:48
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:15 jml01693

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.115	85	132115	2.142
5) Chloromethane	(1)	2.274	50	134252	2.080
7) Vinyl Chloride	(1)	2.420	62	132347	2.070
8) 1,3-Butadiene	(1)	2.456	39	88194	2.082
9) Bromomethane	(1)	2.804	94	91034	2.034
11) Chloroethane	(1)	2.926	64	77475	2.084
12) Dichlorofluoromethane	(1)	3.151	67	181474	2.055
14) Trichlorofluoromethane	(1)	3.261	101	168116	2.081
16) Ethyl Ether	(1)	3.578	59	65184	1.989
17) Freon 123a	(1)	3.590	67	112880	2.014
23) Acrolein	(4)	3.743	56	456577	102.718
24) 1,1-Dichloroethene	(1)	3.913	96	80430	2.014
25) Freon 113	(1)	3.944	101	90995	2.051
26) Acetone	(4)	3.950	58	35920	20.843
28) Methyl Iodide	(1)	4.133	142	168498	2.006
29) Carbon Disulfide	(1)	4.249	76	243009	1.913
31) Allyl Chloride	(1)	4.432	41	154457	1.964
32) Methyl Acetate	(1)	4.456	43	35208	1.882
34) Methylene Chloride	(1)	4.608	84	90201	1.966
35)*t-Butyl Alcohol-d10	(4)	4.639	65	88191	50.000
36) t-Butyl Alcohol	(4)	4.773	59	75990	41.010
39) Acrylonitrile	(4)	4.968	53	80503	10.257
40) trans-1,2-Dichloroethene	(1)	5.060	96	94807	2.011
38) 1,2-Dichloroethene (Total)	(1)		96	196578	4.016
41) Methyl Tertiary Butyl Ether	(1)	5.066	73	209446	1.972
44) n-Hexane	(1)	5.498	57	150292	2.079
45) 1,1-Dichloroethane	(1)	5.675	63	172589	1.995
47) di-Isopropyl Ether	(1)	5.803	45	327694	2.016
48) 2-Chloro-1,3-Butadiene	(1)	5.828	53	156054	2.041
49) Ethyl t-Butyl Ether	(1)	6.328	59	285098	2.001
52) 2,2-Dichloropropane	(1)	6.535	77	133220	1.979
50) cis-1,2-Dichloroethene	(1)	6.523	96	101771	2.004
51) 2-Butanone	(4)	6.511	43	212250	20.581
53) Propionitrile	(4)	6.584	54	120232	40.988

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:15 jml01693

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	219554	20.540
55) Bromochloromethane	(1)	6.840	128	43034	1.941
56) Tetrahydrofuran	(4)	6.925	71	54568	20.261
59) Chloroform	(1)	6.962	83	163714	1.998
63) 1,1,1-Trichloroethane	(1)	7.242	97	142814	2.010
64) Cyclohexane	(1)	7.340	56	180788	2.059
66) 1,1-Dichloropropene	(1)	7.462	75	134039	2.003
67) Carbon Tetrachloride	(1)	7.480	117	117990	1.964
69) Isobutyl Alcohol	(4)	7.577	41	72937	103.723
73) Benzene	(1)	7.736	78	407610	2.006
74) 1,2-Dichloroethane	(1)	7.736	62	104223	2.035
72) 1,2-Dichloroethane(mz98)	(1)	7.736	98	8813	1.981
77) t-Amyl Methyl Ether	(1)	7.894	73	231392	1.966
78)*Fluorobenzene	(1)	8.102	96	1934727	10.000
79) n-Heptane	(1)	8.120	43	171409	2.091
80) n-Butanol	(4)	8.455	56	117273	186.638
82) Trichloroethene	(1)	8.589	95	102878	2.013
85) Methylcyclohexane	(1)	8.870	83	189094	2.033
84) 1,2-Dichloropropane	(1)	8.870	63	101383	1.987
87) Dibromomethane	(1)	9.010	93	41942	1.993
90) 1,4-Dioxane	(4)	9.047	88	15919	103.238
88) Methyl Methacrylate	(4)	9.010	69	38992	2.028
91) Bromodichloromethane	(1)	9.217	83	102326	1.926
92) 2-Nitropropane	(4)	9.473	41	112959	20.004
94) cis-1,3-Dichloropropene	(1)	9.748	75	131949	1.924
96) 4-Methyl-2-Pentanone	(1)	9.918	43	547536	20.360
100) Toluene	(2)	10.132	92	254441	2.012
102) trans-1,3-Dichloropropene	(2)	10.339	75	106319	1.935
103) Ethyl Methacrylate	(2)	10.437	69	84607	1.983
104) 1,1,2-Trichloroethane	(2)	10.528	97	58688	1.967
106) Tetrachloroethene	(2)	10.699	166	120427	2.009
105) 1,3-Dichloropropane	(2)	10.693	76	105750	1.975
107) 2-Hexanone	(2)	10.766	43	370550	20.065
108) Dibromochloromethane	(2)	10.918	129	64114	1.871

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:15 jml01693

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
109) 1,2-Dibromoethane	(2)	11.034	107	55731	1.961
110) *Chlorobenzene-d5	(2)	11.461	117	1399768	10.000
112) Chlorobenzene	(2)	11.485	112	286838	2.004
113) 1,1,1,2-Tetrachloroethane	(2)	11.552	131	86200	1.927
114) Ethylbenzene	(2)	11.577	91	499609	1.993
117) m+p-Xylene	(2)	11.674	106	395260	3.990
116) Xylene (Total)	(2)		106	587536	5.999
118) o-Xylene	(2)	12.009	106	192276	2.008
119) Styrene	(2)	12.016	104	301895	1.984
120) Bromoform	(2)	12.174	173	33756	1.812
121) Isopropylbenzene	(2)	12.308	105	485133	2.003
127) 1,1,2,2-Tetrachloroethane	(3)	12.522	83	67349M	2.015
128) Bromobenzene	(3)	12.564	156	119939	1.980
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	200070	20.131
130) 1,2,3-Trichloropropane	(3)	12.564	110	19248	2.010
132) n-Propylbenzene	(3)	12.625	91	603015	2.003
133) 2-Chlorotoluene	(3)	12.704	126	122088	2.022
136) 4-Chlorotoluene	(3)	12.784	126	126938	2.020
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	431483	2.002
138) Pentachloroethane	(3)	13.034	167	69099	1.857
137) tert-Butylbenzene	(3)	13.009	134	98414	1.991
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	446162	1.992
140) sec-Butylbenzene	(3)	13.168	105	558236	2.012
141) 1,3-Dichlorobenzene	(3)	13.265	146	250584	1.992
143) *1,4-Dichlorobenzene-d4	(3)	13.308	152	805179	10.000
142) p-Isopropyltoluene	(3)	13.265	119	487313	1.980
144) 1,4-Dichlorobenzene	(3)	13.326	146	253250	1.994
145) 1,2,3-Trimethylbenzene	(3)	13.351	120	201152	1.966
146) Benzyl Chloride	(3)	13.412	126	25669	1.846
147) n-Butylbenzene	(3)	13.558	92	247171	2.014
148) 1,2-Dichlorobenzene	(3)	13.601	146	214114	1.974
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	8383	1.933
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	173960	1.963
154) Hexachlorobutadiene	(3)	14.795	225	100765	1.976

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 0154

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:15 jml01693

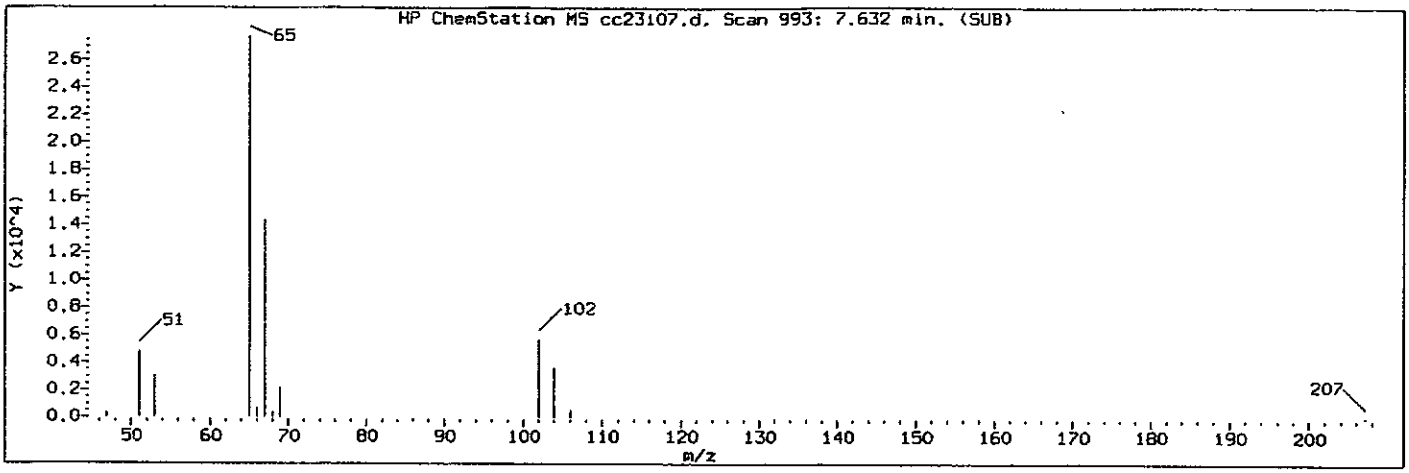
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
155) Naphthalene	(3)	14.869	128	244452	1.933
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	142569	1.957
60)$Dibromofluoromethane	(1)	7.175	113	92042	1.928
61)$Dibromofluoromethane(mz111)	(1)	7.175	111	95197	1.943
70)$1,2-Dichloroethane-d4	(1)	7.632	102	17431M	1.960
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.632	104	11181	1.969
65)$1,2-Dichloroethane-d4(mz65)	(1)	7.632	65	88023	1.963
98)$Toluene-d8	(2)	10.059	98	405044	1.968
99)$Toluene-d8(mz100)	(2)	10.059	100	261696	1.976
124)$4-Bromofluorobenzene	(2)	12.430	95	145072	1.965
125)$4-Bromofluorobenzene(mz174)	(2)	12.430	174	129112	1.960

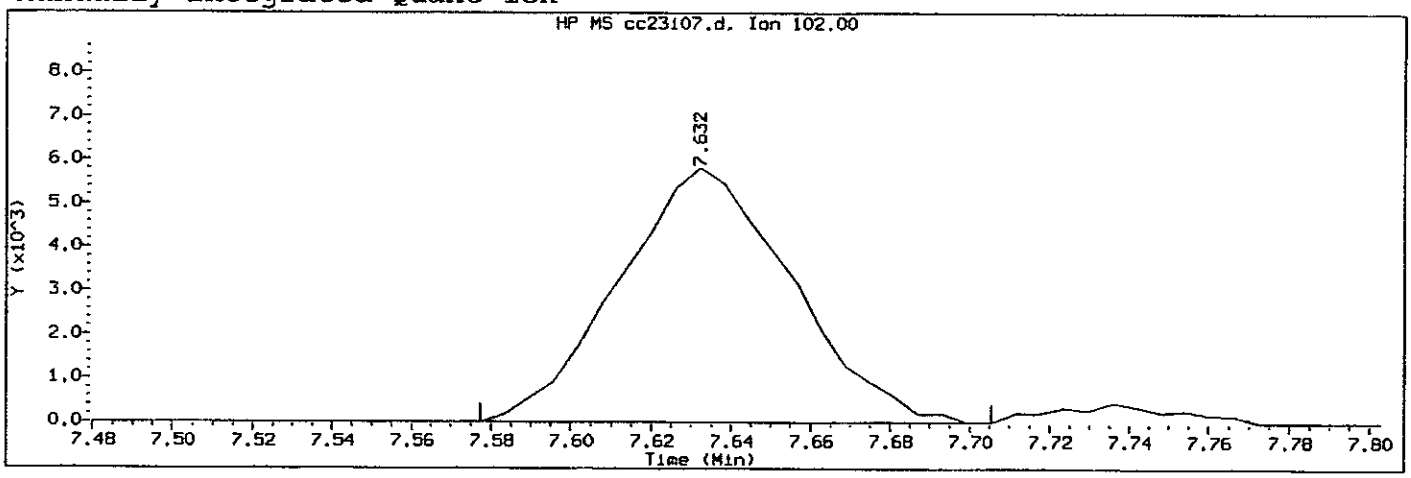
M = Compound was manually integrated.

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:06
Date, time and analyst ID of latest file update: 23-Oct-2009 13:15 jml01693

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 102
Area (flag) : 17431 M
Concentration (ug/L) : 1.9603
Integration start scan : 983 Integration stop scan: 1004
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

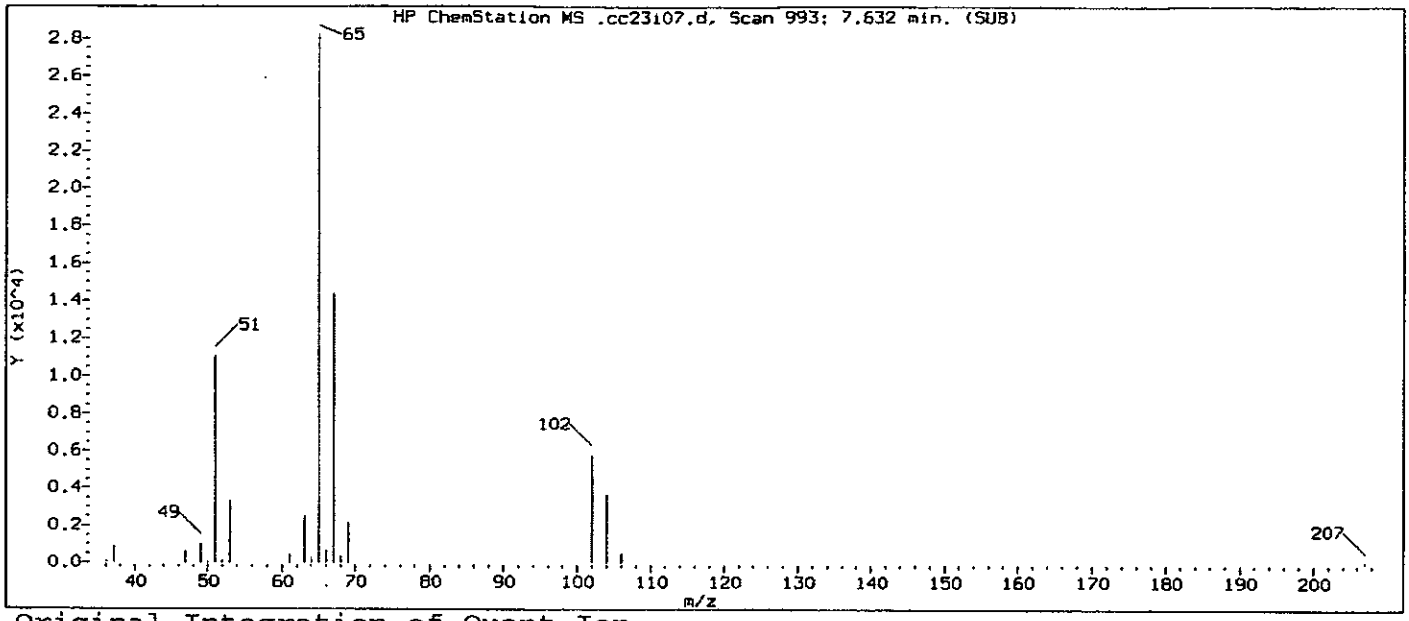
Analyst responsible for change: jml 10/23/9

GC/MS audit/management approval: 10-28-09

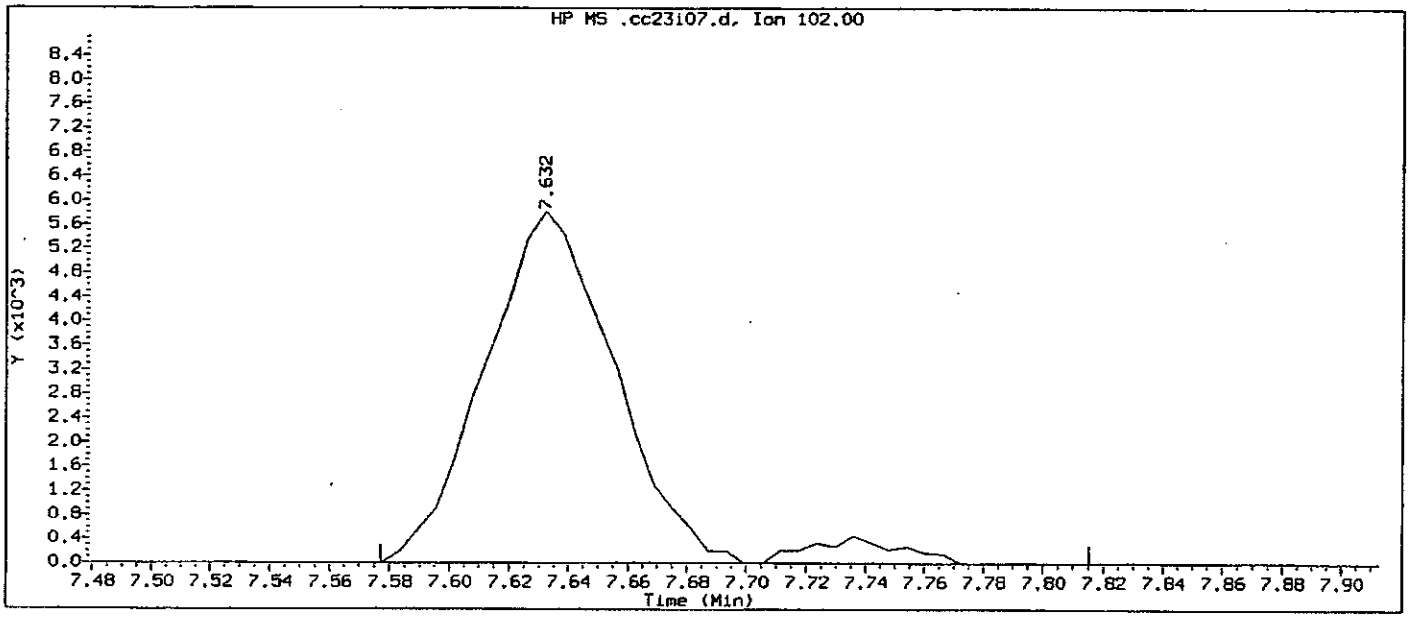
RAD23 0356

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i07.d, generated on 10/23/2009 at 13:15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:06
Date, time and analyst ID of latest file update: 23-Oct-2009 13:06 Automation

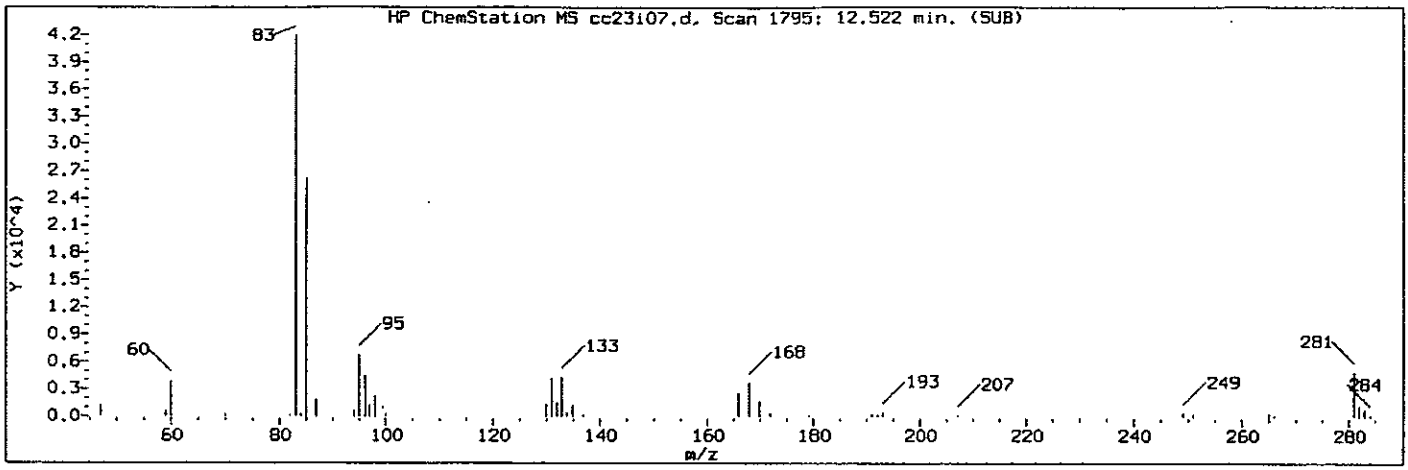
Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 102
Area : 18394
Concentration (ug/L) : 2.0500
Integration start scan : 983 Integration stop scan: 1022
Y at integration start : 0 Y at integration end: 0

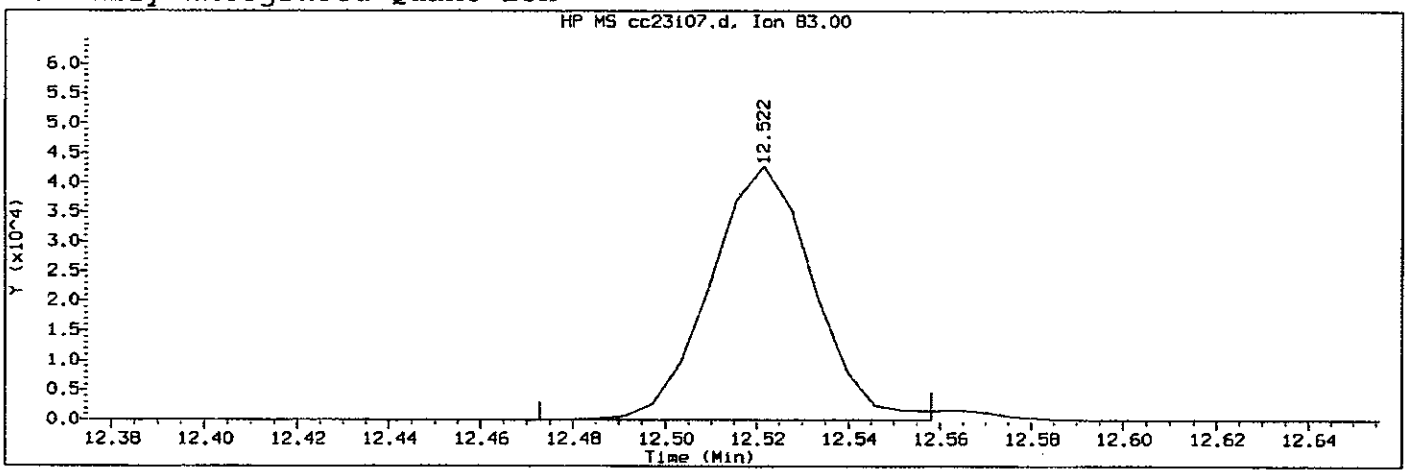
RAD23 8157

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i07.d, generated on 10/23/2009 at 13:15

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:06
Date, time and analyst ID of latest file update: 23-Oct-2009 13:15 jml01693

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 127
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1795
Retention Time (minutes): 12.522
Quant Ion : 83
Area (flag) : 67349 M
Concentration (ug/L) : 2.0150
Integration start scan : 1786 Integration stop scan: 1800
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

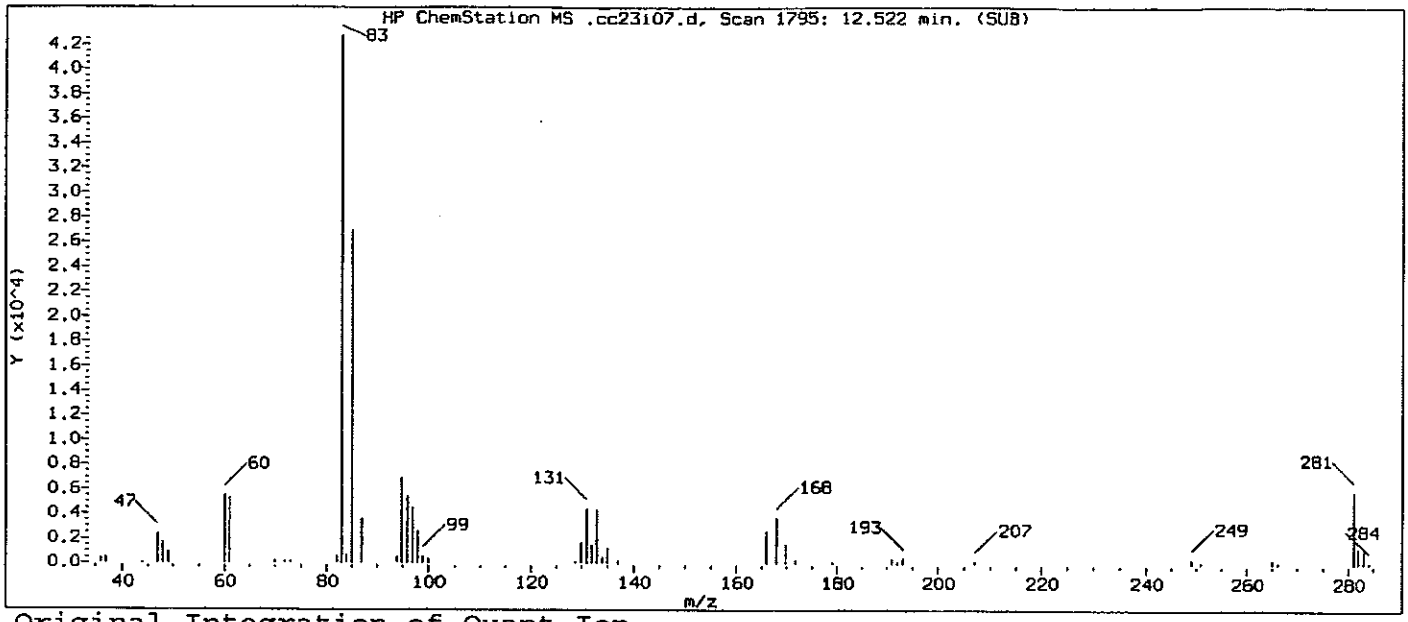
Analyst responsible for change: jm 10/23/09

GC/MS audit/management approval: 10/26/09

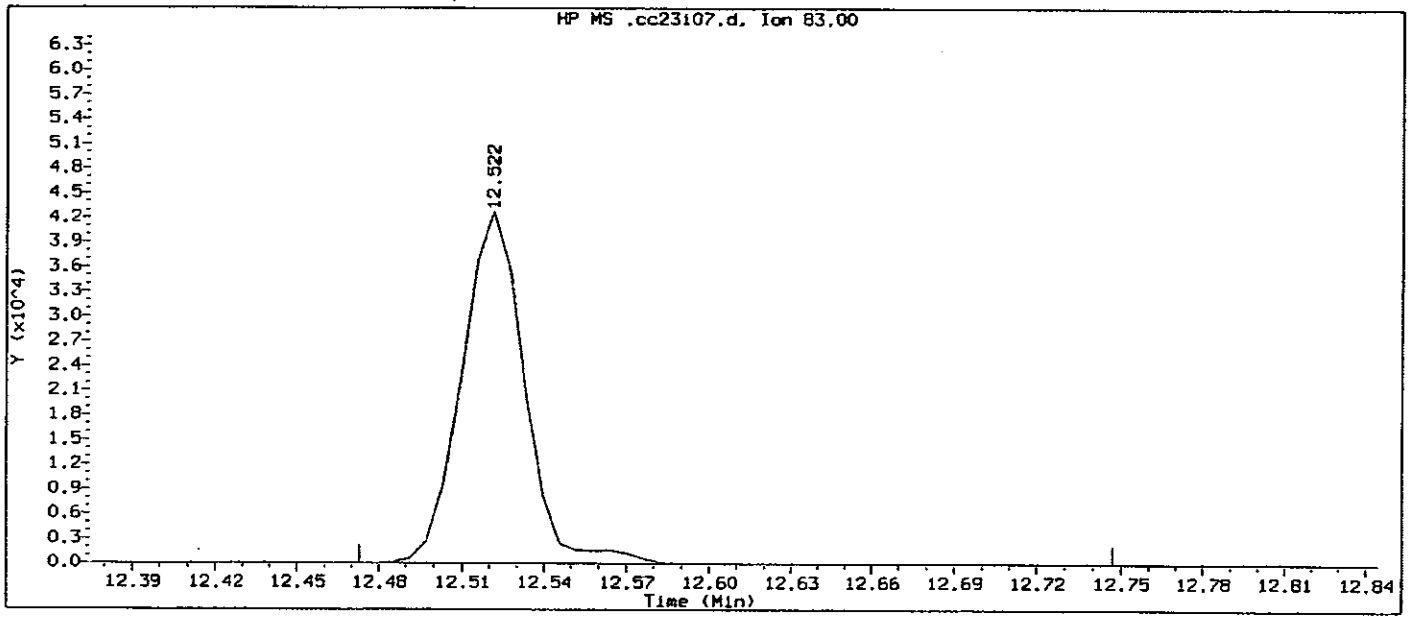
RAD23 0158

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i07.d, generated on 10/23/2009 at 13:15

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i07.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:48 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:06
Date, time and analyst ID of latest file update: 23-Oct-2009 13:06 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.522
Quant Ion	: 83
Area	: 68659
Concentration (ug/L)	: 2.0387
Integration start scan	: 1786 Integration stop scan: 1831
Y at integration start	: 0 Y at integration end: 0

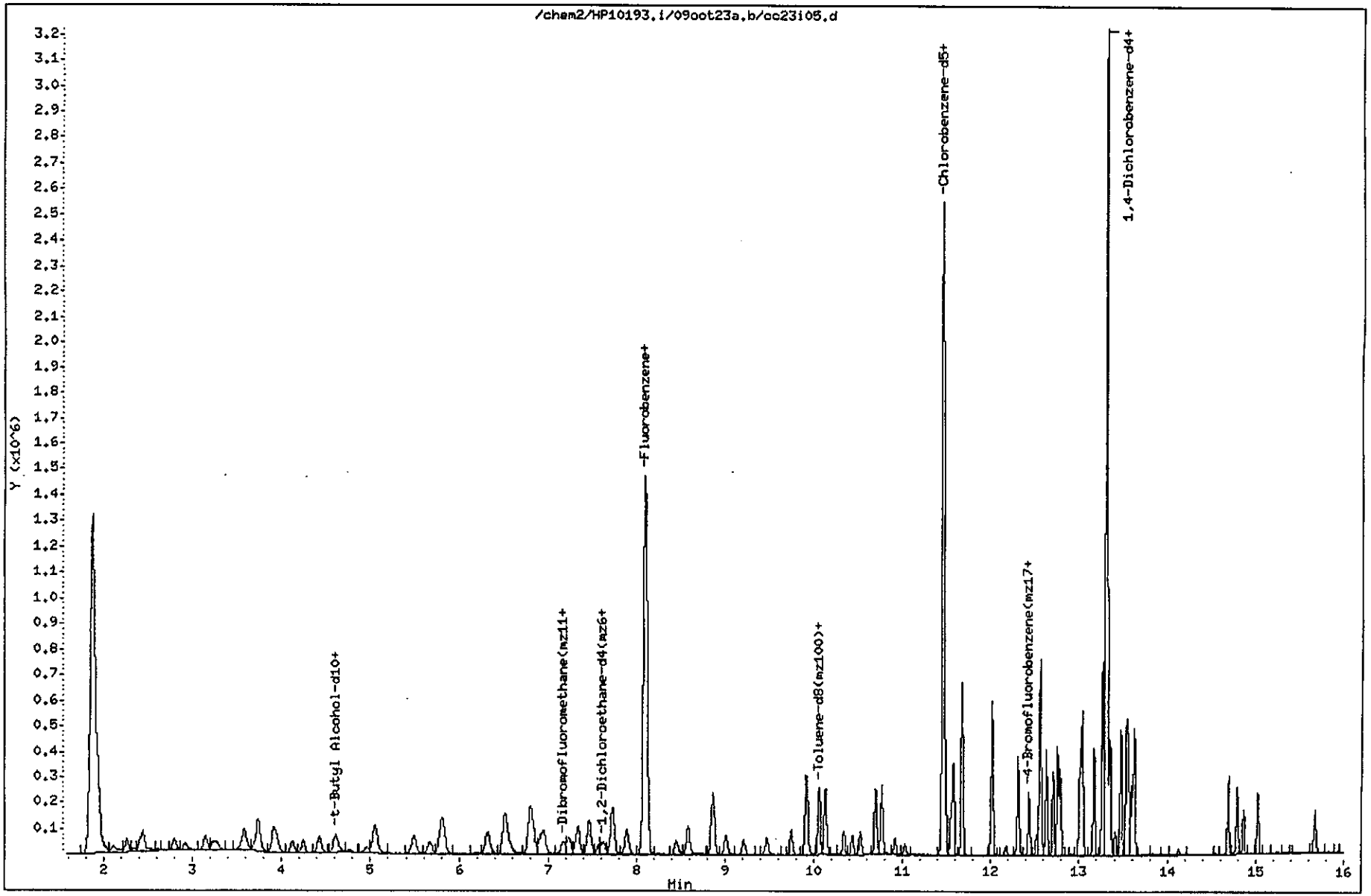
RAD23 0159

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i07.d, generated on 10/23/2009 at 13:15

Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d
Date : 23-OCT-2009 11:42
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.109	85	61508	0.976
5) Chloromethane	(1)	2.261	50	64464	0.977
7) Vinyl Chloride	(1)	2.413	62	62000	0.938
8) 1,3-Butadiene	(1)	2.444	39	42298	0.975
9) Bromomethane	(1)	2.798	94	45981	1.003
11) Chloroethane	(1)	2.913	64	38221	1.004
12) Dichlorofluoromethane	(1)	3.145	67	89990	0.992
14) Trichlorofluoromethane	(1)	3.255	101	79676M	0.954
16) Ethyl Ether	(1)	3.578	59	33835	0.980
17) Freon 123a	(1)	3.578	67	56992	0.991
23) Acrolein	(4)	3.736	56	234812	49.968
24) 1,1-Dichloroethene	(1)	3.913	96	39164	0.943
25) Freon 113	(1)	3.931	101	42712	0.924
26) Acetone	(4)	3.950	58	18434	10.146
28) Methyl Iodide	(1)	4.120	142	83013	0.949
29) Carbon Disulfide	(1)	4.242	76	119696	0.887
31) Allyl Chloride	(1)	4.425	41	77974	0.944
32) Methyl Acetate	(1)	4.437	43	19749	1.012
34) Methylene Chloride	(1)	4.602	84	47126	0.992
35)*t-Butyl Alcohol-d10	(4)	4.633	65	90807	50.000
36) t-Butyl Alcohol	(4)	4.767	59	39347	20.203
39) Acrylonitrile	(4)	4.962	53	41002	4.922
40) trans-1,2-Dichloroethene	(1)	5.053	96	46835	0.952
38) 1,2-Dichloroethene (Total)	(1)		96	97594	1.908
41) Methyl Tertiary Butyl Ether	(1)	5.059	73	107449	0.955
44) n-Hexane	(1)	5.492	57	69674	0.922
45) 1,1-Dichloroethane	(1)	5.669	63	86715	0.958
47) di-Isopropyl Ether	(1)	5.797	45	161272	0.942
48) 2-Chloro-1,3-Butadiene	(1)	5.821	53	73571	0.919
49) Ethyl t-Butyl Ether	(1)	6.321	59	141646	0.944
52) 2,2-Dichloropropane	(1)	6.535	77	65578	0.923
50) cis-1,2-Dichloroethene	(1)	6.516	96	50759	0.956
51) 2-Butanone	(4)	6.510	43	107259	9.939
53) Propionitrile	(4)	6.583	54	63153	20.034

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 0161

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	111595	9.837
55) Bromochloromethane	(1)	6.846	128	22934	0.976
56) Tetrahydrofuran	(4)	6.919	71	27371	9.608
59) Chloroform	(1)	6.955	83	81509	0.947
63) 1,1,1-Trichloroethane	(1)	7.242	97	68875	0.921
64) Cyclohexane	(1)	7.333	56	84561	0.921
66) 1,1-Dichloropropene	(1)	7.455	75	64802	0.927
67) Carbon Tetrachloride	(1)	7.473	117	56584	0.887
69) Isobutyl Alcohol	(4)	7.571	41	33786	46.994
73) Benzene	(1)	7.736	78	201281	0.948
74) 1,2-Dichloroethane	(1)	7.729	62	51007	0.952
72) 1,2-Dichloroethane(mz98)	(1)	7.729	98	4485	0.958
77) t-Amyl Methyl Ether	(1)	7.894	73	116237	0.929
78)*Fluorobenzene	(1)	8.101	96	1960322	10.000
79) n-Heptane	(1)	8.114	43	80286	0.944
80) n-Butanol	(4)	8.449	56	59127	94.881
82) Trichloroethene	(1)	8.589	95	50355	0.945
85) Methylcyclohexane	(1)	8.863	83	88775	0.909
84) 1,2-Dichloropropane	(1)	8.863	63	50015	0.936
87) Dibromomethane	(1)	9.010	93	20259	0.919
90) 1,4-Dioxane	(4)	9.034	88	8369	51.927
88) Methyl Methacrylate	(4)	9.010	69	19524	0.951
91) Bromodichloromethane	(1)	9.217	83	50100	0.880
92) 2-Nitropropane	(4)	9.473	41	55675	9.168
94) cis-1,3-Dichloropropene	(1)	9.747	75	65460	0.894
96) 4-Methyl-2-Pentanone	(1)	9.912	43	269024	9.441
100) Toluene	(2)	10.131	92	124867	0.937
102) trans-1,3-Dichloropropene	(2)	10.339	75	52277	0.882
103) Ethyl Methacrylate	(2)	10.436	69	40666	0.888
104) 1,1,2-Trichloroethane	(2)	10.522	97	30419	0.963
106) Tetrachloroethene	(2)	10.698	166	59204	0.931
105) 1,3-Dichloropropane	(2)	10.692	76	53402	0.935
107) 2-Hexanone	(2)	10.765	43	188168	9.546
108) Dibromochloromethane	(2)	10.918	129	31391	0.842

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
109) 1,2-Dibromoethane	(2)	11.028	107	28411	0.938
110) *Chlorobenzene-d5	(2)	11.454	117	1425709	10.000
112) Chlorobenzene	(2)	11.485	112	144177	0.951
113) 1,1,1,2-Tetrachloroethane	(2)	11.546	131	42495	0.884
114) Ethylbenzene	(2)	11.576	91	246292	0.931
117) m+p-Xylene	(2)	11.674	106	191551	1.829
116) Xylene (Total)	(2)		106	285327	2.755
118) o-Xylene	(2)	12.009	106	93776	0.926
119) Styrene	(2)	12.015	104	145735	0.896
120) Bromoform	(2)	12.174	173	17034	0.833
121) Isopropylbenzene	(2)	12.308	105	235325	0.918
127) 1,1,2,2-Tetrachloroethane	(3)	12.521	83	32832M	0.924
128) Bromobenzene	(3)	12.558	156	57965	0.914
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	99112	11.873
130) 1,2,3-Trichloropropane	(3)	12.558	110	9361	0.929
132) n-Propylbenzene	(3)	12.625	91	294730	0.939
133) 2-Chlorotoluene	(3)	12.704	126	59195	0.939
136) 4-Chlorotoluene	(3)	12.783	126	61202	0.941
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	209614	0.927
138) Pentachloroethane	(3)	13.033	167	33574	0.843
137) tert-Butylbenzene	(3)	13.009	134	47851	0.927
139) 1,2,4-Trimethylbenzene	(3)	13.039	105	216149	0.918
140) sec-Butylbenzene	(3)	13.167	105	266411	0.920
141) 1,3-Dichlorobenzene	(3)	13.265	146	124099	0.943
143) *1,4-Dichlorobenzene-d4	(3)	13.308	152	808803	10.000
142) p-Isopropyltoluene	(3)	13.265	119	235076	0.913
144) 1,4-Dichlorobenzene	(3)	13.326	146	125269	0.948
145) 1,2,3-Trimethylbenzene	(3)	13.350	120	101770	0.951
146) Benzyl Chloride	(3)	13.411	126	12376	0.809
147) n-Butylbenzene	(3)	13.558	92	118876	0.929
148) 1,2-Dichlorobenzene	(3)	13.600	146	107828	0.952
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	4219	0.886
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	88712	0.952
154) Hexachlorobutadiene	(3)	14.795	225	48745	0.917

M = Compound was manually integrated.

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

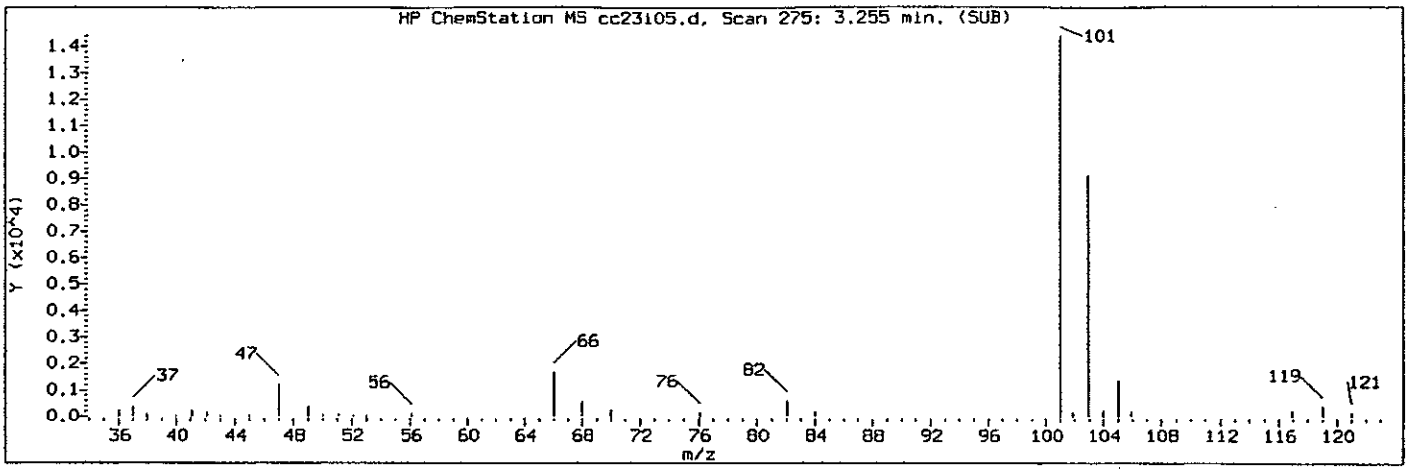
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
155) Naphthalene	(3)	14.868	128	126155	0.939
156) 1,2,3-Trichlorobenzene	(3)	15.027	180	74055	0.971
60)$Dibromofluoromethane	(1)	7.175	113	46910	0.942
61)$Dibromofluoromethane(mz111)	(1)	7.169	111	48805	0.955
70)$1,2-Dichloroethane-d4	(1)	7.632	102	9212	1.001
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.638	104	5839	0.981
65)$1,2-Dichloroethane-d4(mz65)	(1)	7.632	65	46069M	0.989
98)$Toluene-d8	(2)	10.058	98	203952	0.948
99)$Toluene-d8(mz100)	(2)	10.058	100	131166	0.949
124)$4-Bromofluorobenzene	(2)	12.430	95	72924	0.947
125)$4-Bromofluorobenzene(mz174)	(2)	12.430	174	65293	0.946

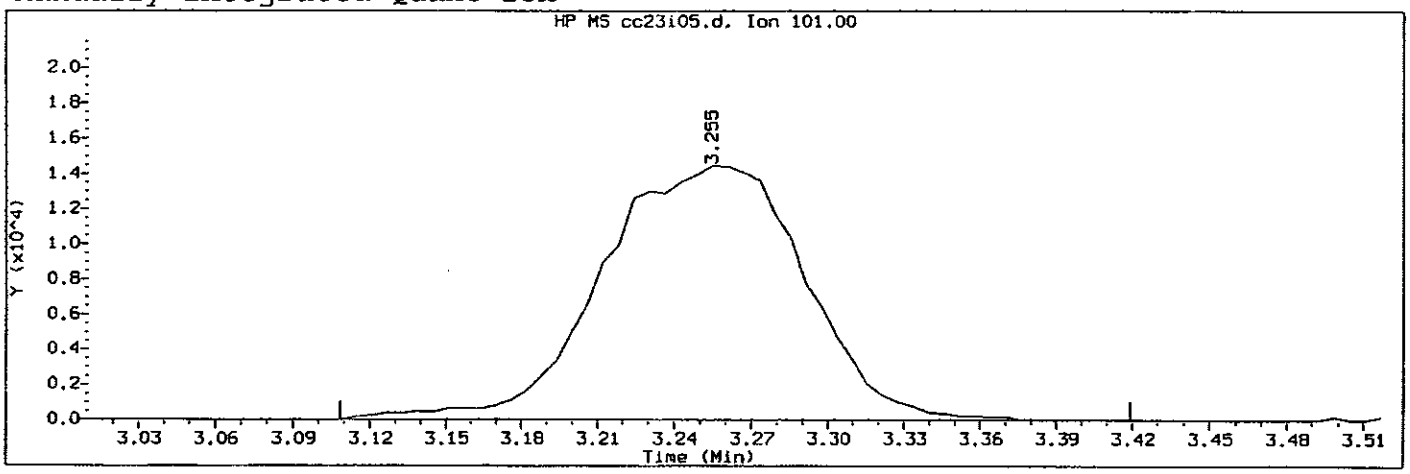
M = Compound was manually integrated.

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:01
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 14
Compound Name : Trichlorofluoromethane
Scan Number : 275
Retention Time (minutes): 3.255
Quant Ion : 101
Area (flag) : 79676 M
Concentration (ug/L) : 0.9542
Integration start scan : 250 Integration stop scan: 301
Y at integration start : 0 Y at integration end: 0

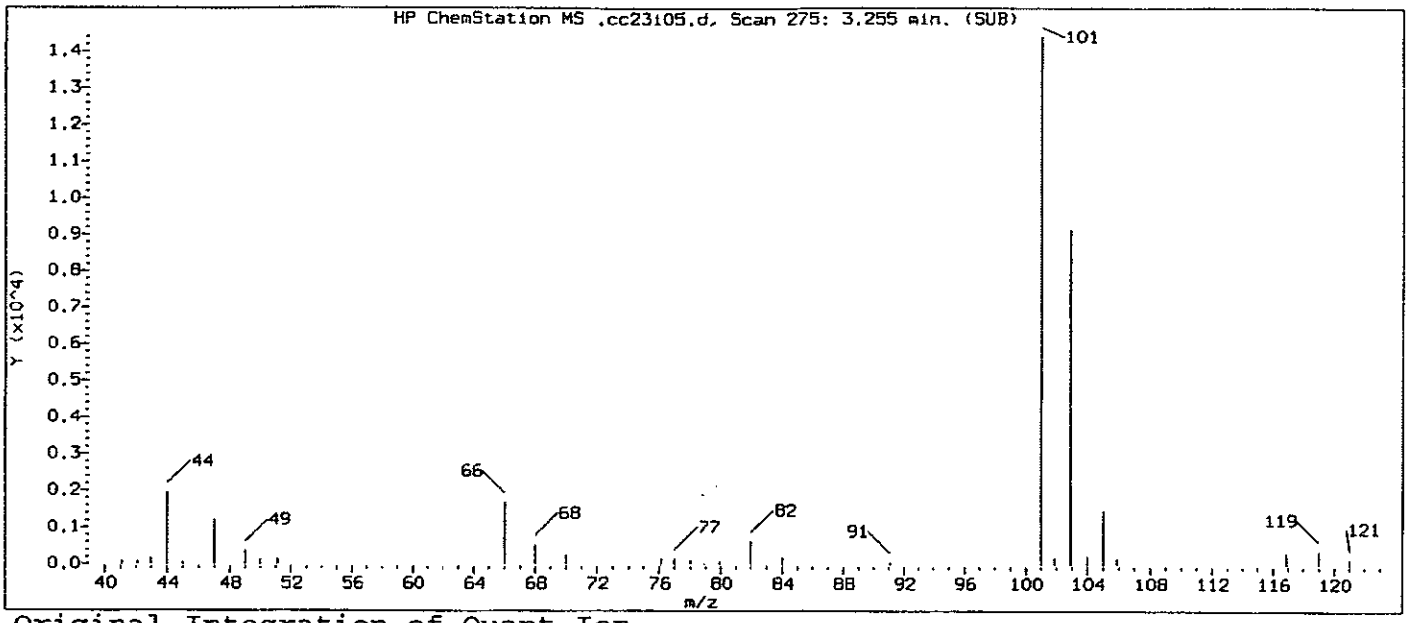
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: JMW3 10/23/09

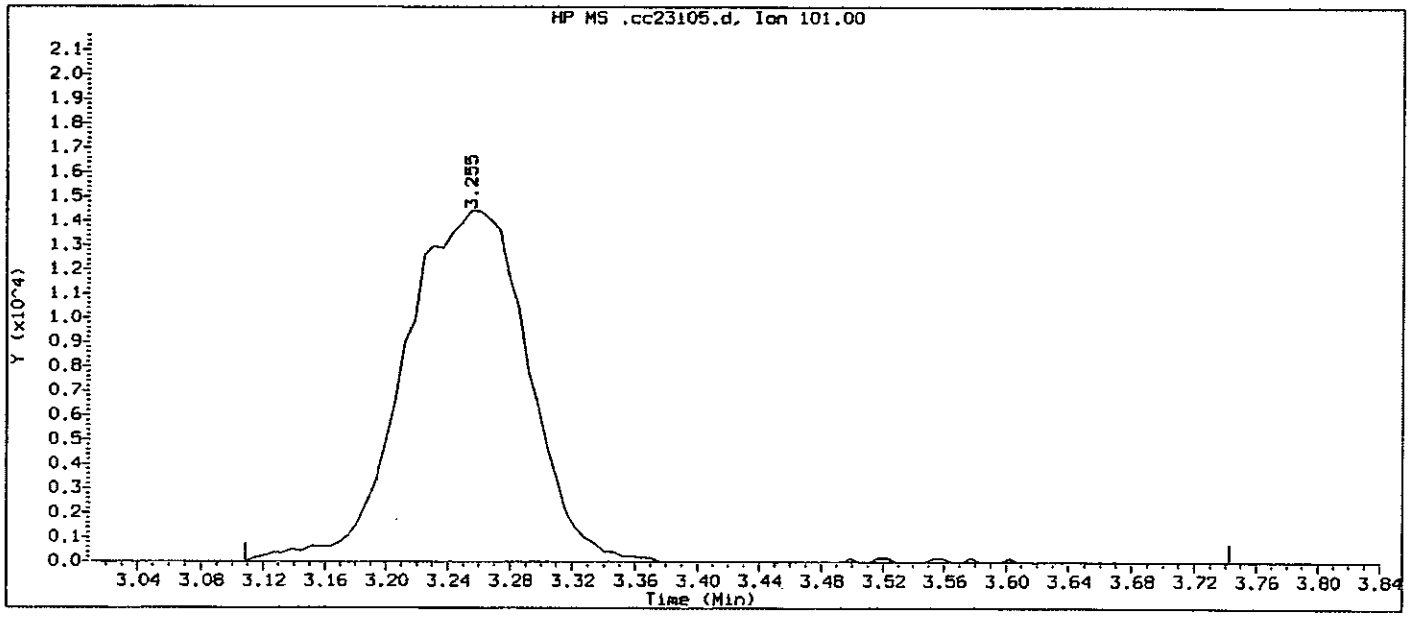
GC/MS audit/management approval: 10/26/09

RAD23 0165

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:01
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 Automation

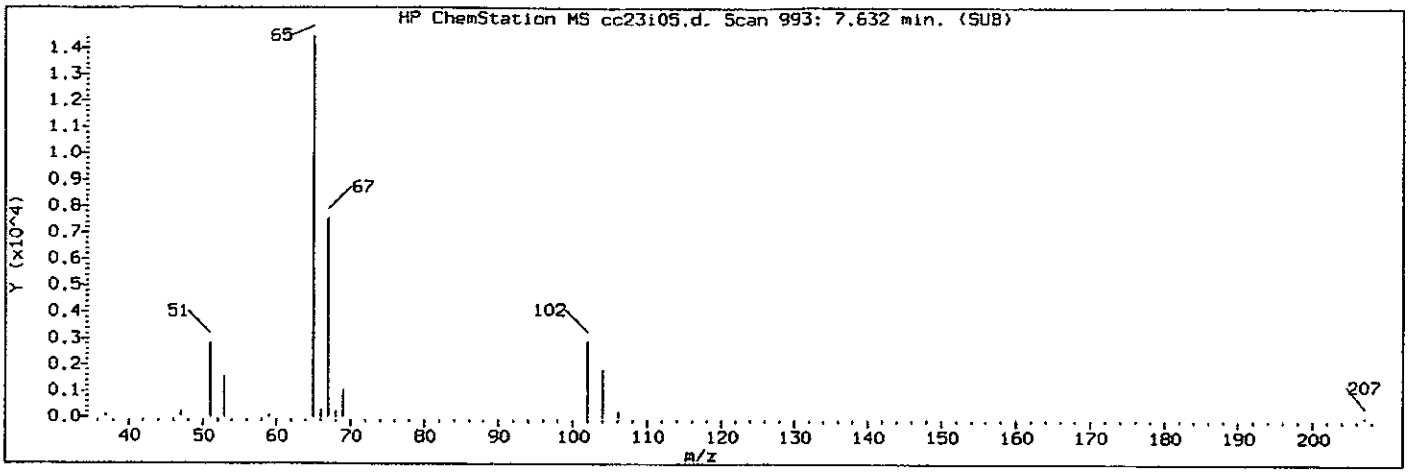
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	:	14
Compound Name	:	Trichlorofluoromethane
Scan Number	:	275
Retention Time (minutes)	:	3.255
Quant Ion	:	101
Area	:	80097
Concentration (ug/L)	:	0.9583
Integration start scan	:	250 Integration stop scan: 354
Y at integration start	:	0 Y at integration end: 0

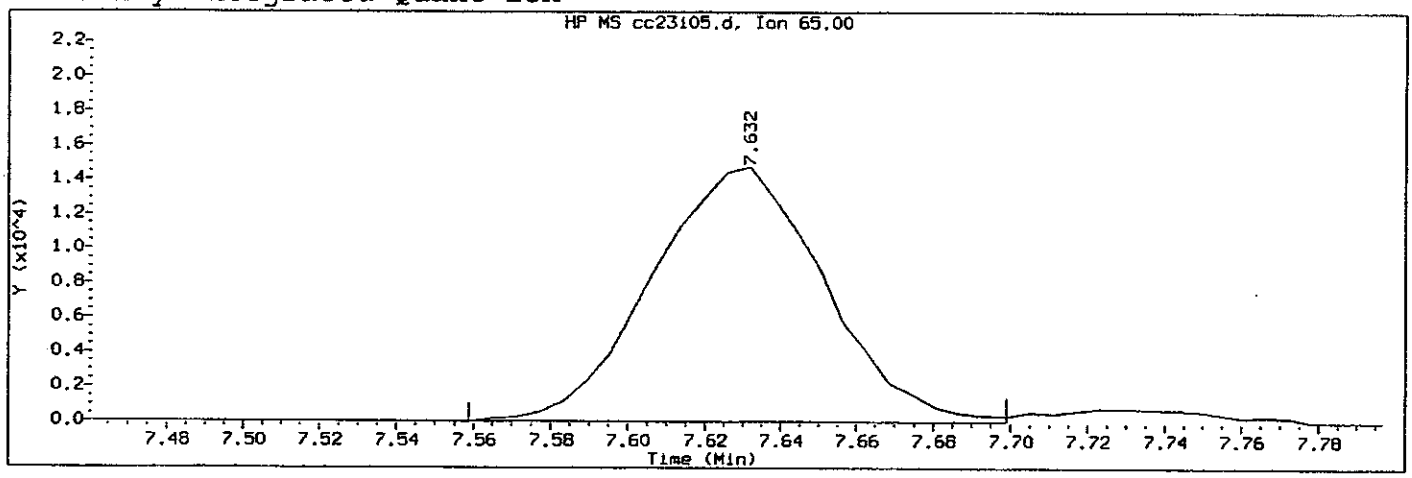
RAD23 0166

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i05.d, generated on 10/23/2009 at 12:04

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:01
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area (flag) : 46069 M
Concentration (ug/L) : 0.9888
Integration start scan : 980 Integration stop scan: 1003
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

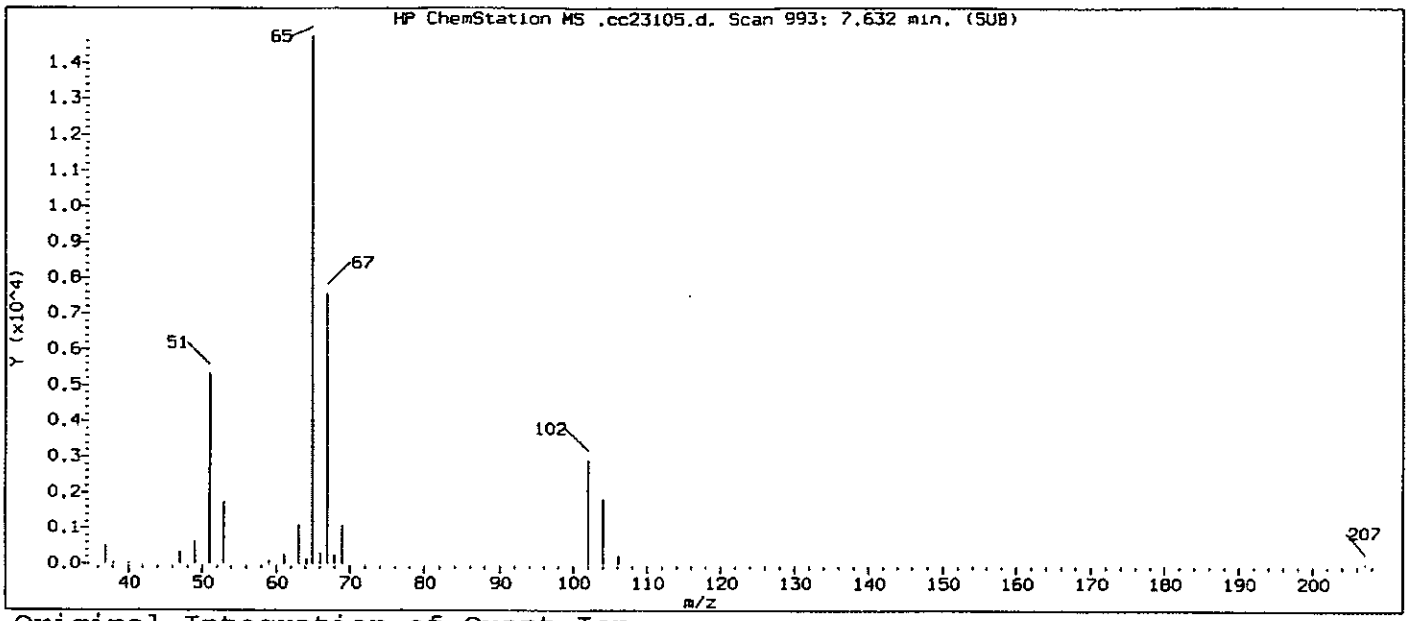
Analyst responsible for change: mr 10/23/09

GC/MS audit/management approval: 10-26-09

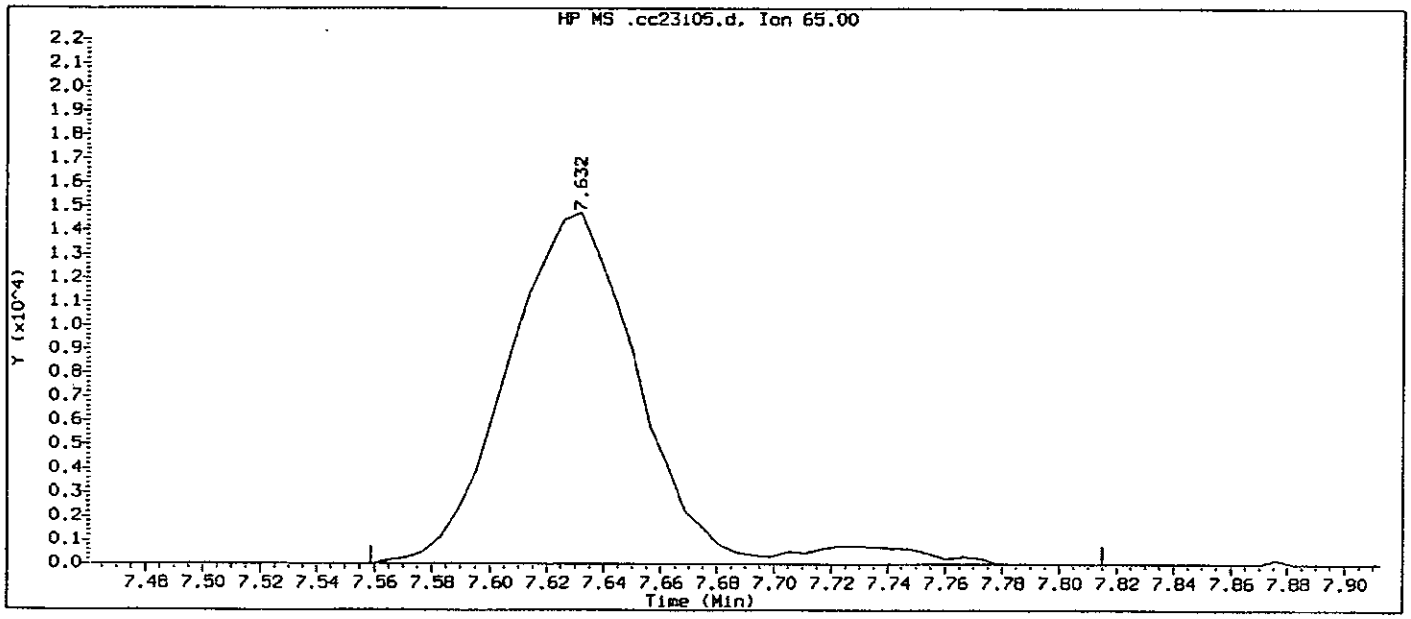
RAD23 #167

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i05.d, generated on 10/23/2009 at 12:04

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:01
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 Automation

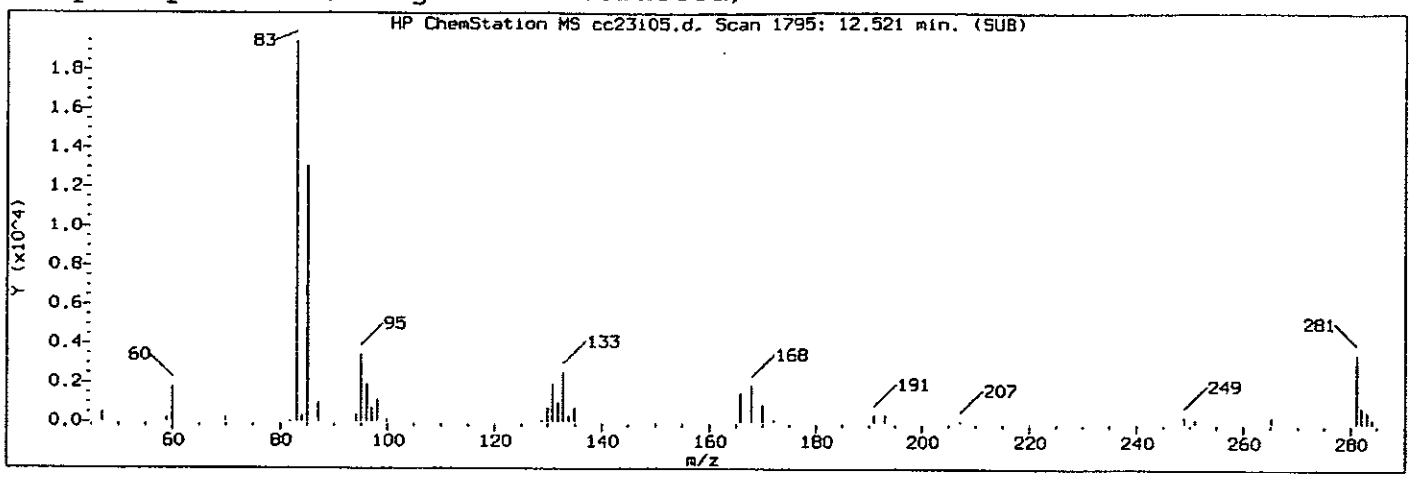
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area : 48424
Concentration (ug/L) : 1.0289
Integration start scan : 980 Integration stop scan: 1022
Y at integration start : 0 Y at integration end: 0

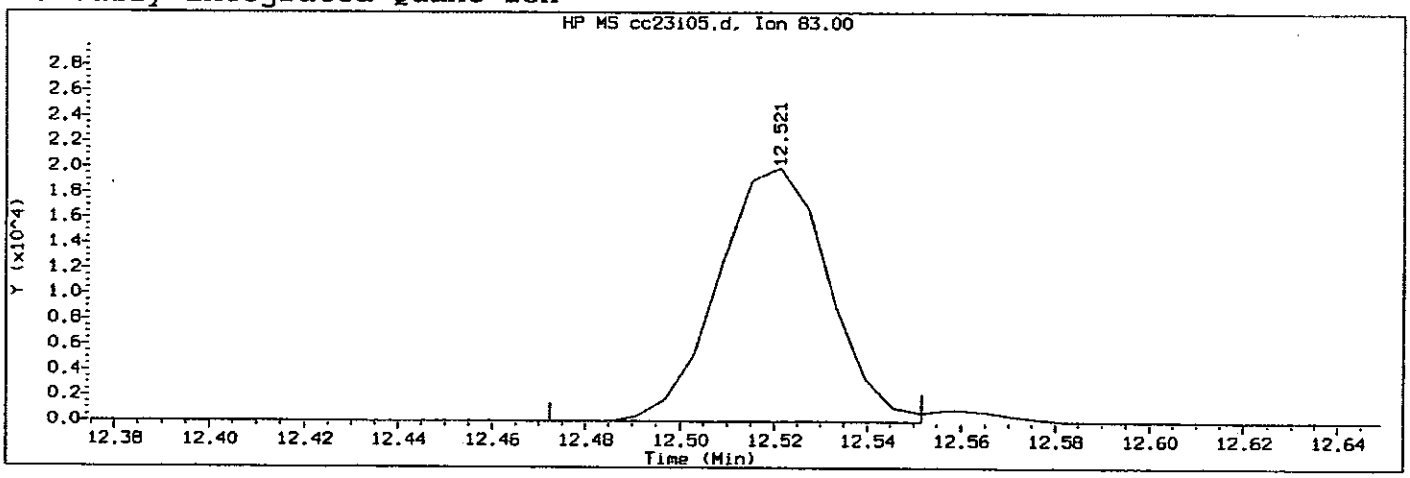
RAD23 0168

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i05.d, generated on 10/23/2009 at 12:04

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:01
Date, time and analyst ID of latest file update: 23-Oct-2009 12:04 jml01693

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 127
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1795
Retention Time (minutes): 12.521
Quant Ion : 83
Area (flag) : 32832 M
Concentration (ug/L) : 0.9244
Integration start scan : 1786 Integration stop scan: 1799
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

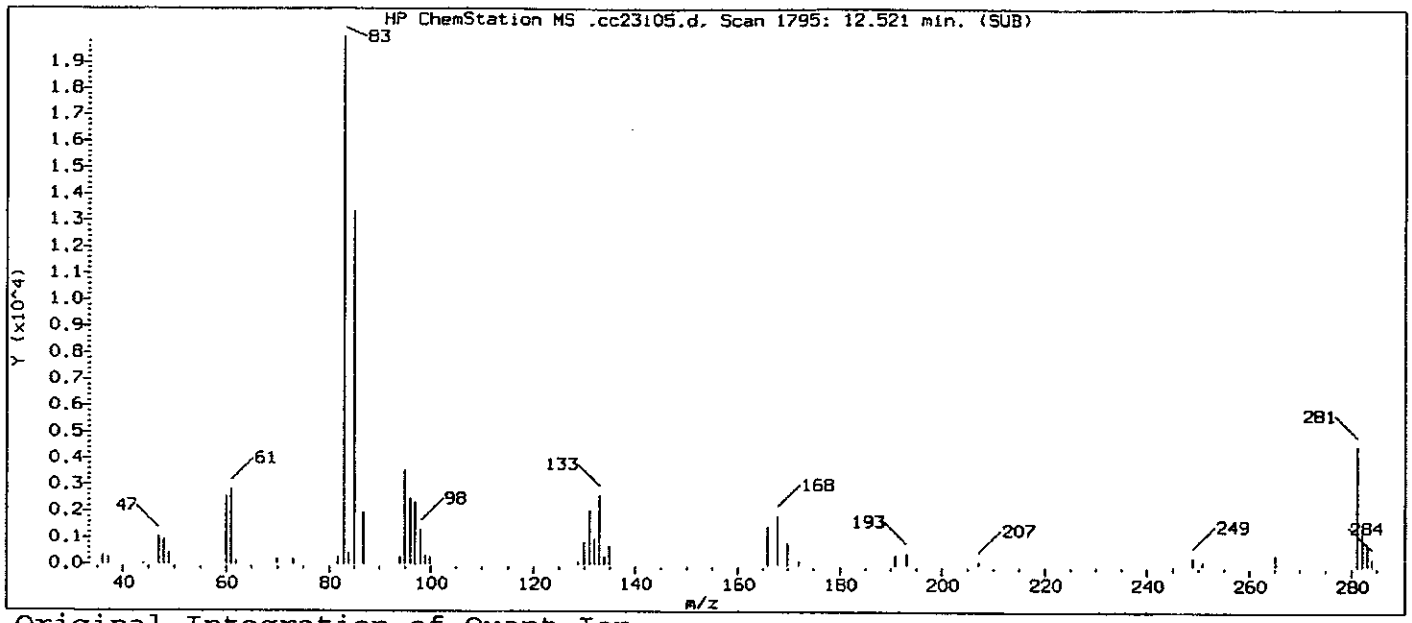
Analyst responsible for change: _____ 10/23/09

GC/MS audit/management approval: _____ 10-24-09

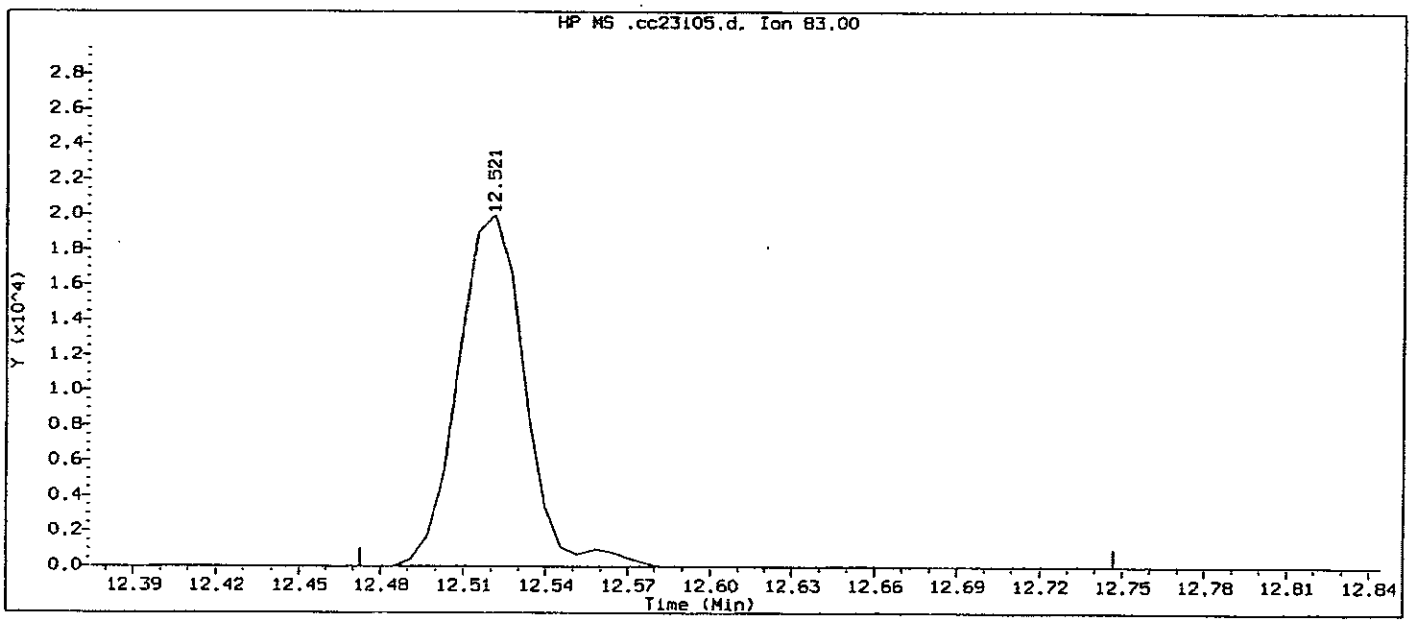
RAD23 0169

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i05.d, generated on 10/23/2009 at 12:04

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i05.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 11:42 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:01
Date, time and analyst ID of latest file update: 23-Oct-2009 12:01 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.521
Quant Ion	: 83
Area	: 33741
Concentration (ug/L)	: 0.9452
Integration start scan	: 1786 Integration stop scan: 1831
Y at integration start	: 0 Y at integration end: 0

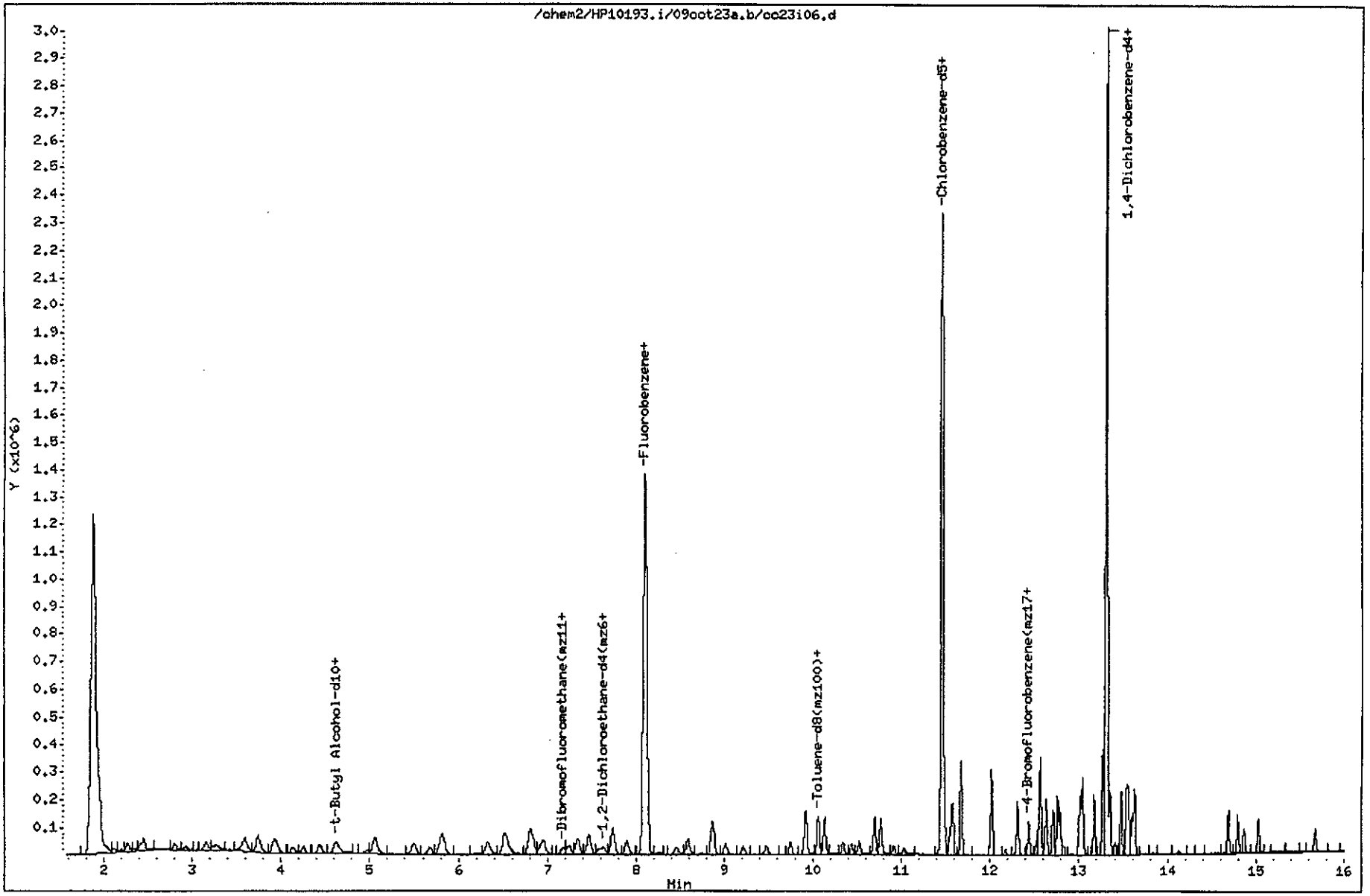
RAD23 0178

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i05.d, generated on 10/23/2009 at 12:04

RA0274 0171

Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d
Date : 23-OCT-2009 12:04
Client ID: VSTD0.5
Sample Info: VSTD0.5;VSTD0.5;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: JML01693
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.115	85	32015	0.550
5) Chloromethane	(1)	2.267	50	33790	0.554
7) Vinyl Chloride	(1)	2.420	62	32310	0.535
8) 1,3-Butadiene	(1)	2.450	39	23771	0.594
9) Bromomethane	(1)	2.804	94	24492	0.579
11) Chloroethane	(1)	2.926	64	19902	0.567
12) Dichlorofluoromethane	(1)	3.157	67	46619	0.559
14) Trichlorofluoromethane	(1)	3.267	101	41152	0.539
16) Ethyl Ether	(1)	3.590	59	16423	0.531
17) Freon 123a	(1)	3.584	67	30476	0.576
23) Acrolein	(4)	3.743	56	117125	26.732
24) 1,1-Dichloroethene	(1)	3.913	96	20959	0.556
25) Freon 113	(1)	3.950	101	22695	0.542
26) Acetone	(4)	3.956	58	9729	5.727
28) Methyl Iodide	(1)	4.133	142	43105	0.544
29) Carbon Disulfide	(1)	4.249	76	61989	0.517
31) Allyl Chloride	(1)	4.431	41	39201	0.528
32) Methyl Acetate	(1)	4.450	43	10365	0.587
34) Methylene Chloride	(1)	4.614	84	24647	0.569
35)*t-Butyl Alcohol-d10	(4)	4.639	65	86932	50.000
36) t-Butyl Alcohol	(4)	4.767	59	20374	11.155
39) Acrylonitrile	(4)	4.974	53	20739	2.681
40) trans-1,2-Dichloroethene	(1)	5.053	96	24178	0.543
38) 1,2-Dichloroethene (Total)	(1)		96	49890	1.080
41) Methyl Tertiary Butyl Ether	(1)	5.072	73	52604	0.524
44) n-Hexane	(1)	5.498	57	36148	0.529
45) 1,1-Dichloroethane	(1)	5.681	63	44418	0.544
47) di-Isopropyl Ether	(1)	5.803	45	80790	0.526
48) 2-Chloro-1,3-Butadiene	(1)	5.828	53	37576	0.520
49) Ethyl t-Butyl Ether	(1)	6.334	59	70871	0.527
52) 2,2-Dichloropropane	(1)	6.535	77	33319	0.524
50) cis-1,2-Dichloroethene	(1)	6.516	96	25712	0.536
51) 2-Butanone	(4)	6.516	43	56223	5.531
53) Propionitrile	(4)	6.596	54	28679	9.918

* = Compound is an internal standard.

RAB23 0172

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	54318	5.155
55) Bromochloromethane	(1)	6.846	128	11018	0.526
56) Tetrahydrofuran	(4)	6.919	71	14143	5.327
59) Chloroform	(1)	6.961	83	40806	0.527
63) 1,1,1-Trichloroethane	(1)	7.242	97	34498	0.514
64) Cyclohexane	(1)	7.339	56	44192	0.533
66) 1,1-Dichloropropene	(1)	7.461	75	34070	0.539
67) Carbon Tetrachloride	(1)	7.474	117	28296	0.499
69) Isobutyl Alcohol	(4)	7.577	41	20709	29.877
73) Benzene	(1)	7.736	78	103585	0.540
74) 1,2-Dichloroethane	(1)	7.736	62	25842	0.534
72) 1,2-Dichloroethane(mz98)	(1)	7.736	98	2231	0.531
77) t-Amyl Methyl Ether	(1)	7.894	73	57692	0.519
78)*Fluorobenzene	(1)	8.102	96	1826805	10.000
79) n-Heptane	(1)	8.120	43	42081	0.544
80) n-Butanol	(4)	8.455	56	29545M	51.188
82) Trichloroethene	(1)	8.589	95	25846	0.536
85) Methylcyclohexane	(1)	8.876	83	45291	0.516
84) 1,2-Dichloropropane	(1)	8.870	63	25765	0.535
87) Dibromomethane	(1)	9.016	93	10748	0.541
90) 1,4-Dioxane	(4)	9.040	88	4175	27.468
88) Methyl Methacrylate	(4)	9.016	69	9431	0.498
91) Bromodichloromethane	(1)	9.217	83	24736	0.493
92) 2-Nitropropane	(4)	9.473	41	26794	4.814
94) cis-1,3-Dichloropropene	(1)	9.748	75	32729	0.505
96) 4-Methyl-2-Pentanone	(1)	9.918	43	131238	5.168
100) Toluene	(2)	10.132	92	64359	0.539
102) trans-1,3-Dichloropropene	(2)	10.339	75	25302	0.488
103) Ethyl Methacrylate	(2)	10.436	69	19988	0.497
104) 1,1,2-Trichloroethane	(2)	10.528	97	15059	0.535
106) Tetrachloroethene	(2)	10.699	166	29297	0.518
105) 1,3-Dichloropropane	(2)	10.692	76	26669	0.528
107) 2-Hexanone	(2)	10.766	43	90871M	5.217
108) Dibromochloromethane	(2)	10.918	129	15161	0.469

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 8173

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
109) 1,2-Dibromoethane	(2)	11.034	107	13791	0.514
110) *Chlorobenzene-d5	(2)	11.455	117	1320270	10.000
112) Chlorobenzene	(2)	11.485	112	71421	0.529
113) 1,1,1,2-Tetrachloroethane	(2)	11.546	131	20929	0.496
114) Ethylbenzene	(2)	11.576	91	124905	0.528
117) m+p-Xylene	(2)	11.674	106	97854	1.047
116) Xylene (Total)	(2)		106	144495	1.564
118) o-Xylene	(2)	12.009	106	46641	0.516
119) Styrene	(2)	12.015	104	71327	0.497
120) Bromoform	(2)	12.174	173	7823	0.445
121) Isopropylbenzene	(2)	12.308	105	119691	0.524
127) 1,1,2,2-Tetrachloroethane	(3)	12.521	83	15766M	0.503
128) Bromobenzene	(3)	12.564	156	29548	0.520
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	45801	4.675
130) 1,2,3-Trichloropropane	(3)	12.564	110	4656	0.518
132) n-Propylbenzene	(3)	12.625	91	149038	0.528
133) 2-Chlorotoluene	(3)	12.704	126	29698	0.524
136) 4-Chlorotoluene	(3)	12.784	126	31675	0.537
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	103716	0.513
138) Pentachloroethane	(3)	13.033	167	16071	0.460
137) tert-Butylbenzene	(3)	13.009	134	24293	0.524
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	106817	0.508
140) sec-Butylbenzene	(3)	13.168	105	135129	0.519
141) 1,3-Dichlorobenzene	(3)	13.265	146	61159	0.518
143) *1,4-Dichlorobenzene-d4	(3)	13.308	152	755541	10.000
142) p-Isopropyltoluene	(3)	13.265	119	118789	0.514
144) 1,4-Dichlorobenzene	(3)	13.326	146	63635	0.534
145) 1,2,3-Trimethylbenzene	(3)	13.350	120	49630	0.517
146) Benzyl Chloride	(3)	13.411	126	5328	0.408
147) n-Butylbenzene	(3)	13.558	92	60740	0.527
148) 1,2-Dichlorobenzene	(3)	13.600	146	54074	0.531
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	1959	0.458
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	43619	0.525
154) Hexachlorobutadiene	(3)	14.795	225	25226	0.527

M = Compound was manually integrated.

* = Compound is an internal standard.

RADZ3 0174

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

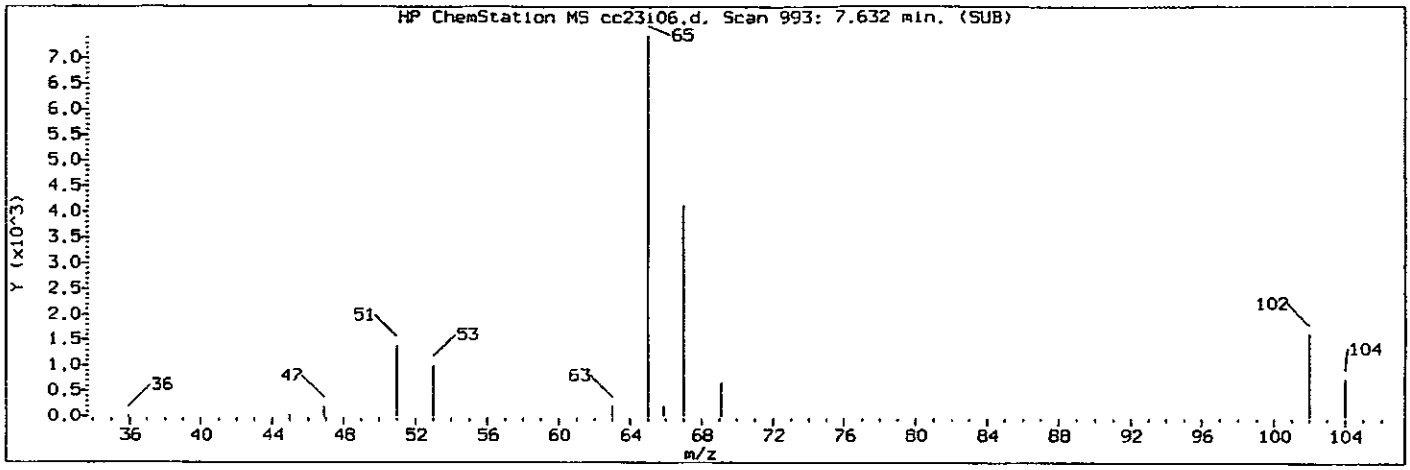
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
155) Naphthalene	(3)	14.868	128	61148	0.515
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	36634	0.536
60)$Dibromofluoromethane	(1)	7.181	113	24583	0.545
61)$Dibromofluoromethane(mz111)	(1)	7.181	111	24505	0.530
70)$1,2-Dichloroethane-d4	(1)	7.632	102	4572	0.545
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.626	104	2941	0.549
65)$1,2-Dichloroethane-d4(mz65)	(1)	7.632	65	23181M	0.547
98)$Toluene-d8	(2)	10.058	98	105666	0.544
99)$Toluene-d8(mz100)	(2)	10.065	100	68321	0.547
124)$4-Bromofluorobenzene	(2)	12.430	95	37979	0.545
125)$4-Bromofluorobenzene(mz174)	(2)	12.430	174	33289	0.536

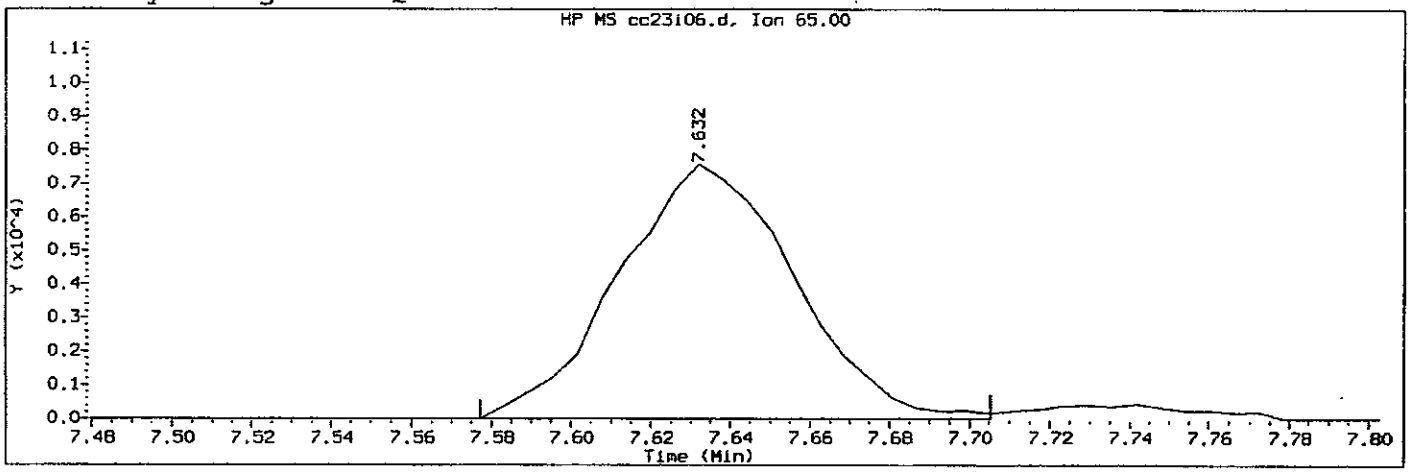
M = Compound was manually integrated.

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:16
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area (flag) : 23181 M
Concentration (ug/L) : 0.5474
Integration start scan : 983 Integration stop scan: 1004
Y at integration start : 0 Y at integration end: 0

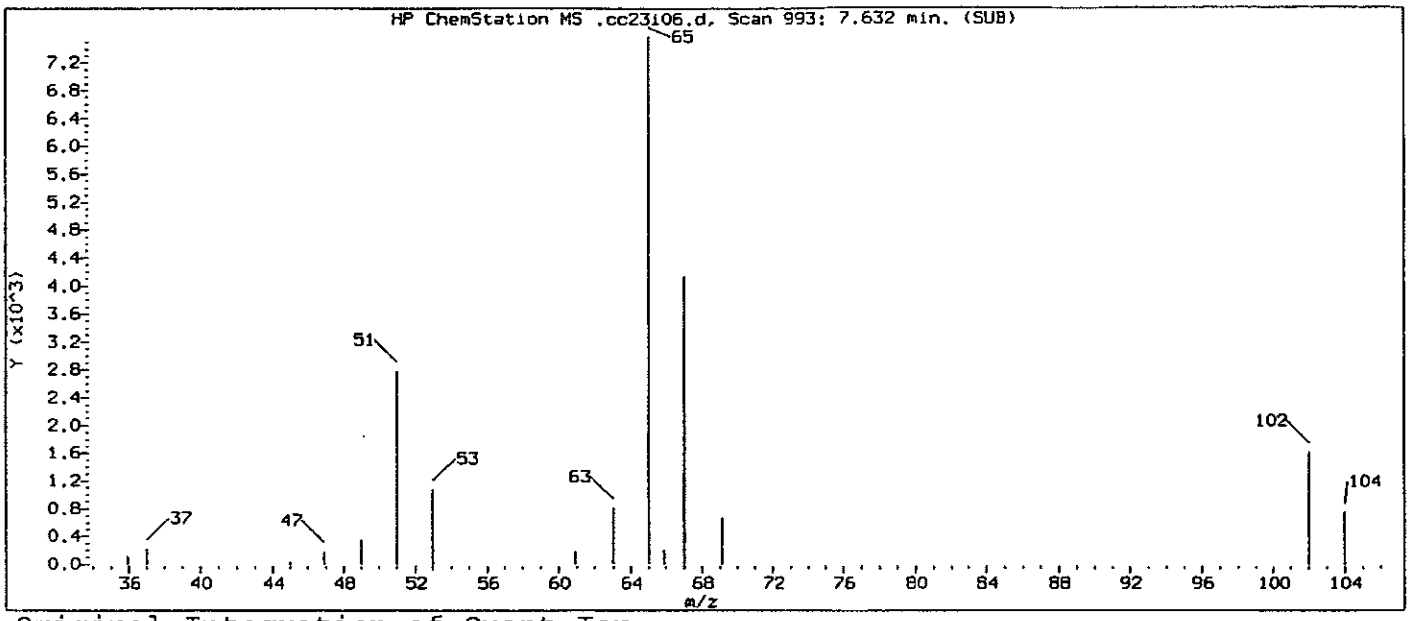
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: _____ 10/23/09

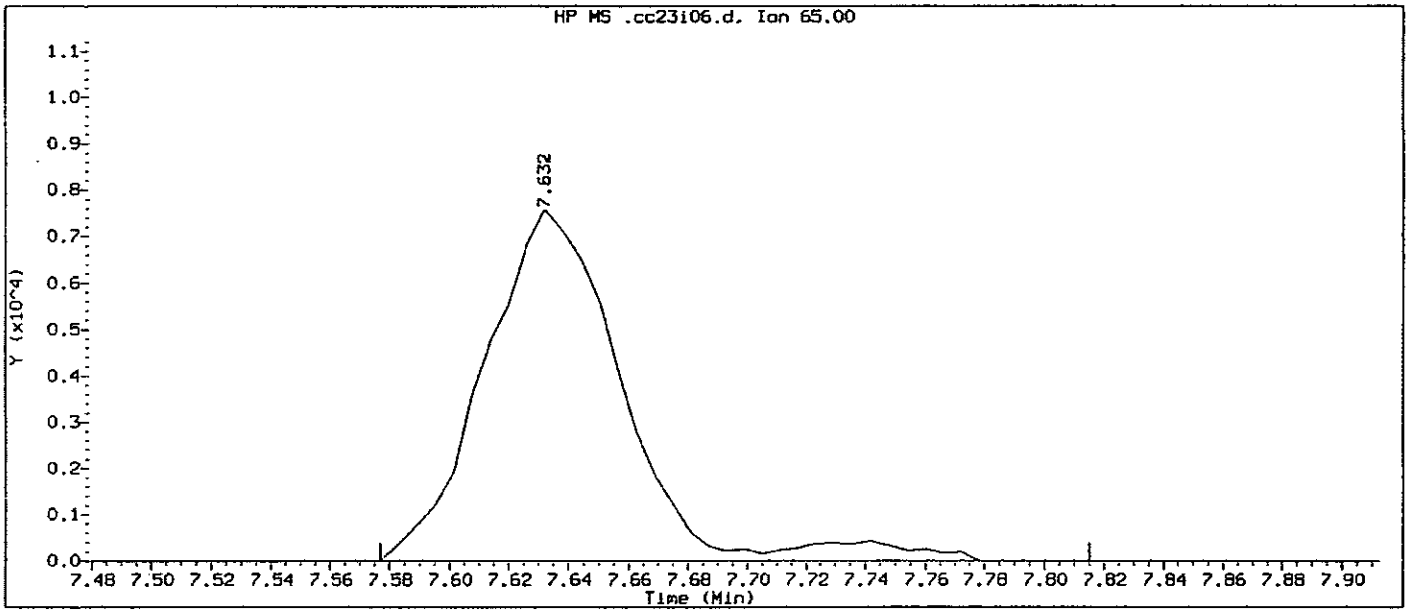
GC/MS audit/management approval: _____ 10/24/09 RAD23 0176

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 12:22 Automation

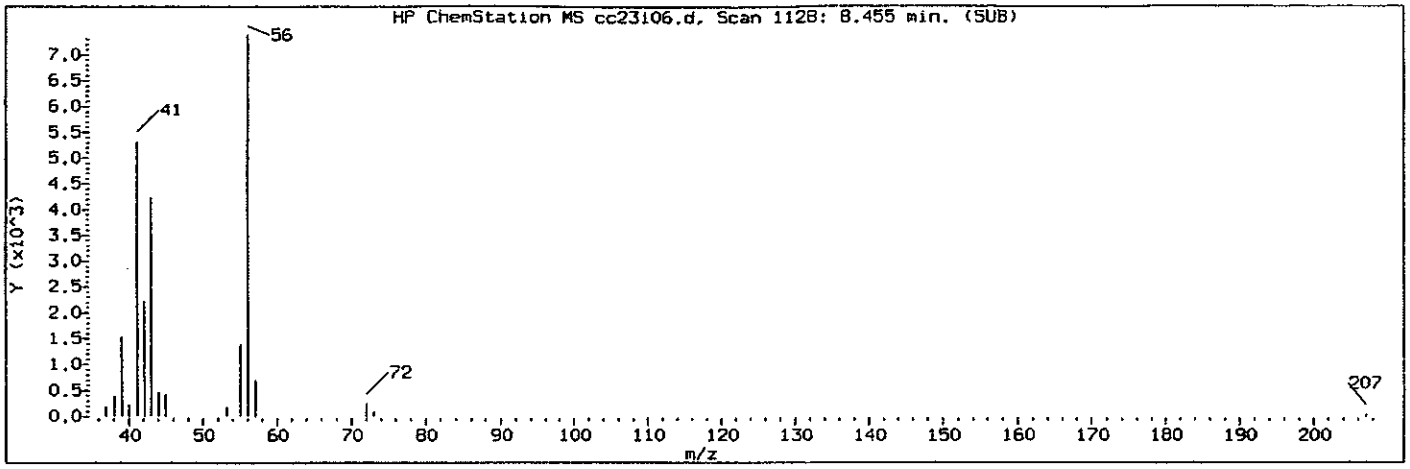
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 65
Compound Name : 1,2-Dichloroethane-d4(mz65)
Scan Number : 993
Retention Time (minutes): 7.632
Quant Ion : 65
Area : 24376
Concentration (ug/L) : 0.5502
Integration start scan : 983 Integration stop scan: 1022
Y at integration start : 0 Y at integration end: 0

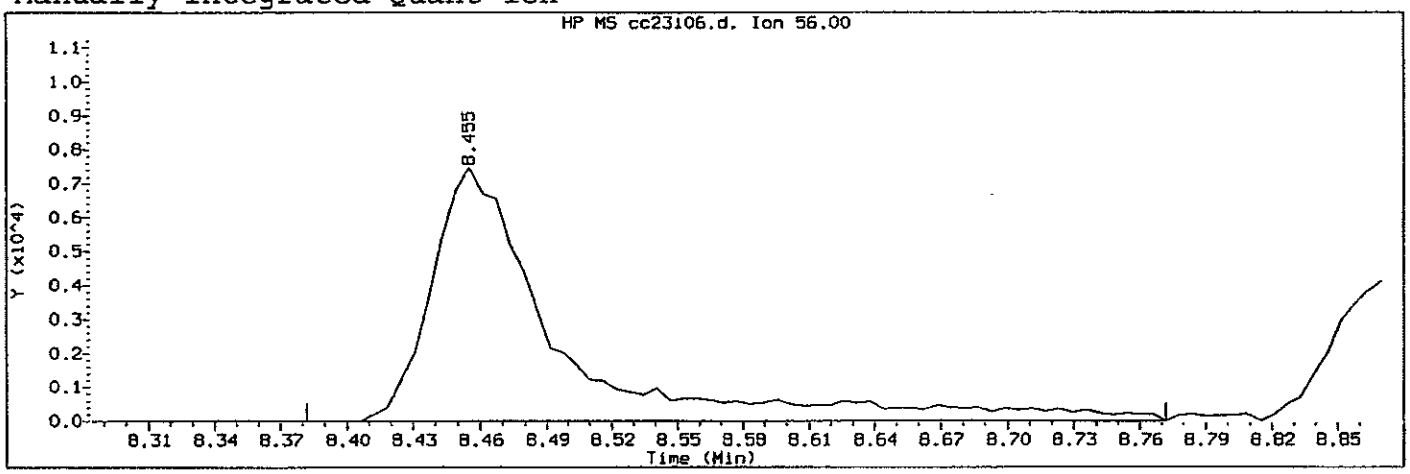
RAD23 0577

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:16
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

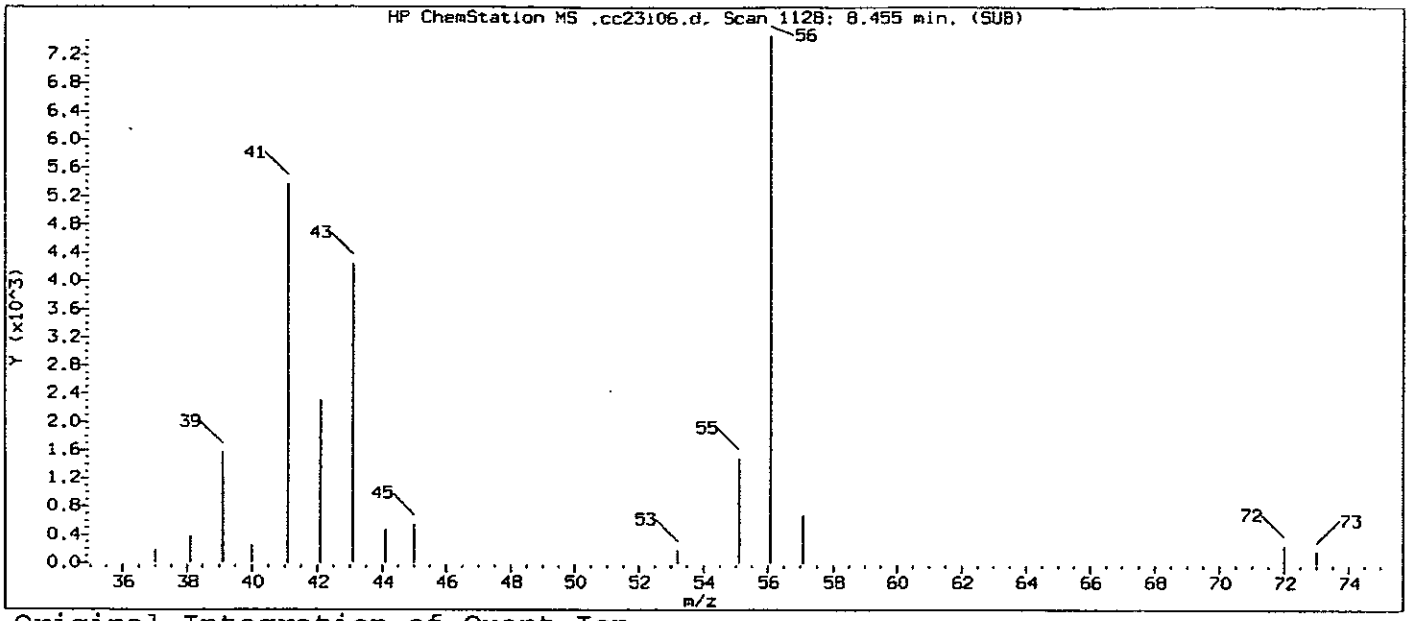
Compound Number : 80
Compound Name : n-Butanol
Scan Number : 1128
Retention Time (minutes): 8.455
Quant Ion : 56
Area (flag) : 29545 M
Concentration (ug/L) : 51.1880
Integration start scan : 1115 Integration stop scan: 1179
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

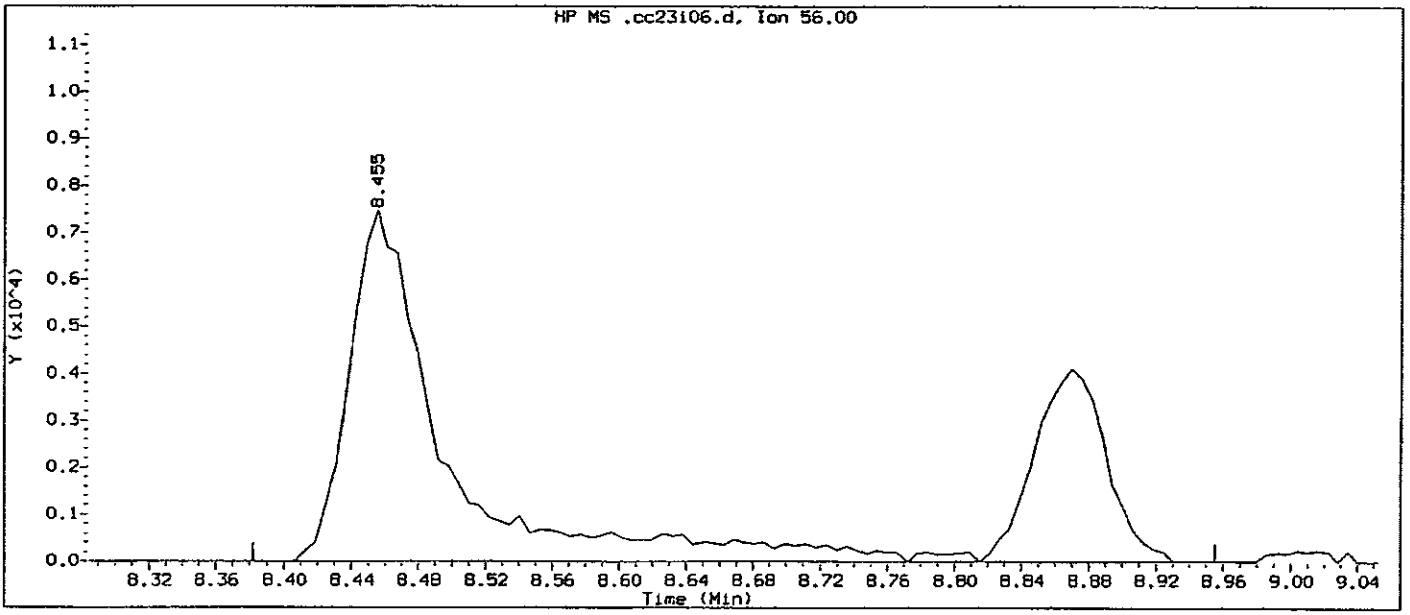
Analyst responsible for change: JML 10/23/09

GC/MS audit/management approval: [signature] 10/26/09 RAD23 8178

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 12:22 Automation

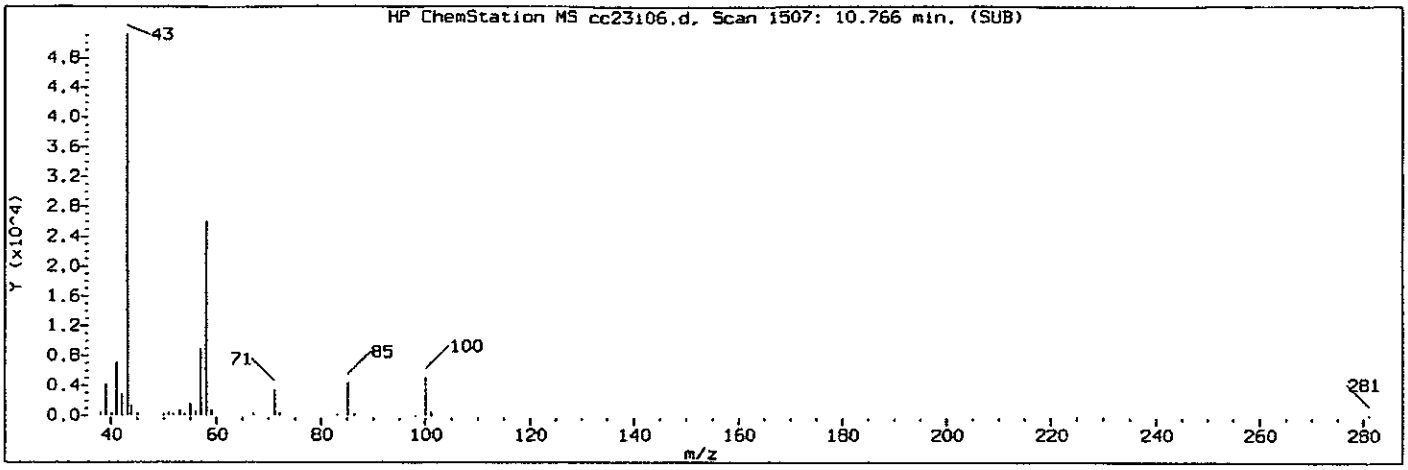
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number	: 80
Compound Name	: n-Butanol
Scan Number	: 1128
Retention Time (minutes)	: 8.455
Quant Ion	: 56
Area	: 42202
Concentration (ug/L)	: 66.1662
Integration start scan	: 1115 Integration stop scan: 1209
Y at integration start	: 0 Y at integration end: 0

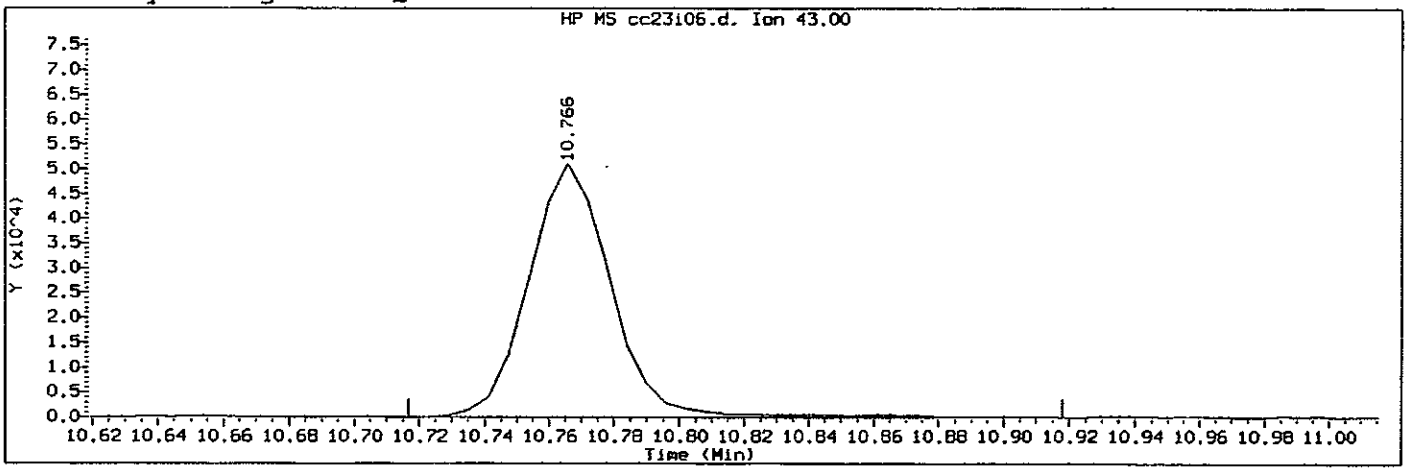
RAD23 #179

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:16
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 107
Compound Name : 2-Hexanone
Scan Number : 1507
Retention Time (minutes): 10.766
Quant Ion : 43
Area (flag) : 90871 M
Concentration (ug/L) : 5.2169
Integration start scan : 1498 Integration stop scan: 1531
Y at integration start : 0 Y at integration end: 0

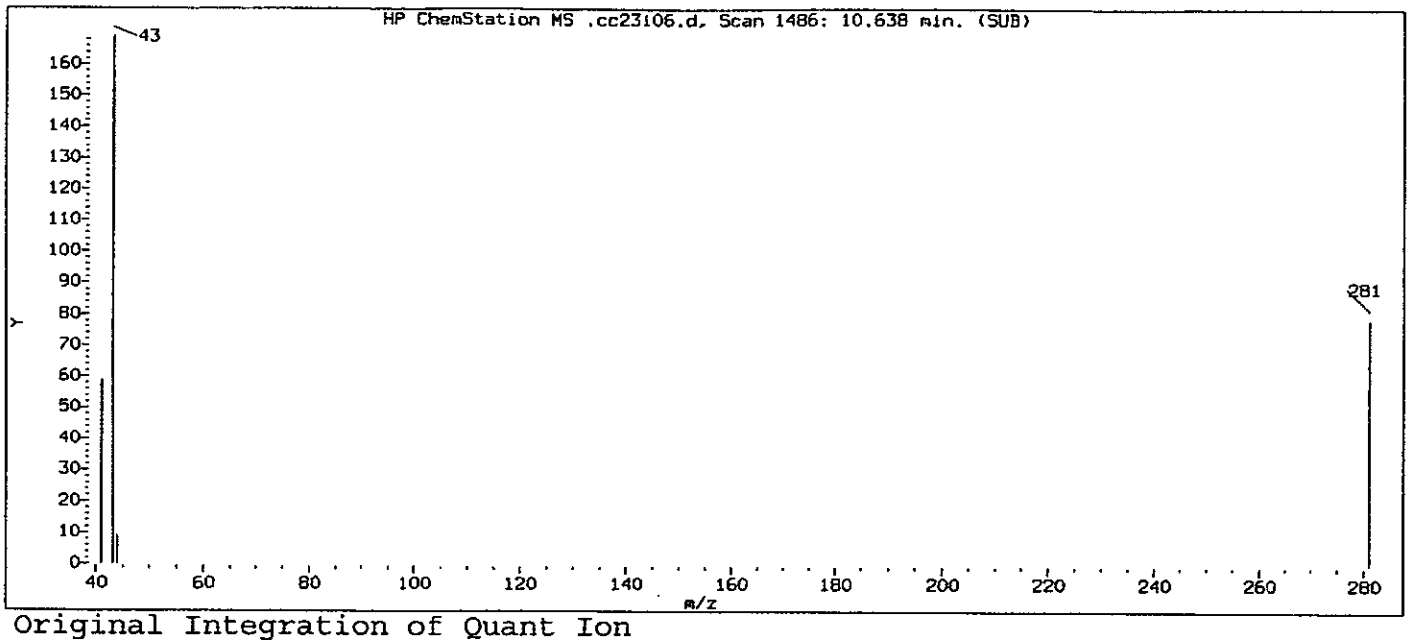
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: jml 10/23/09

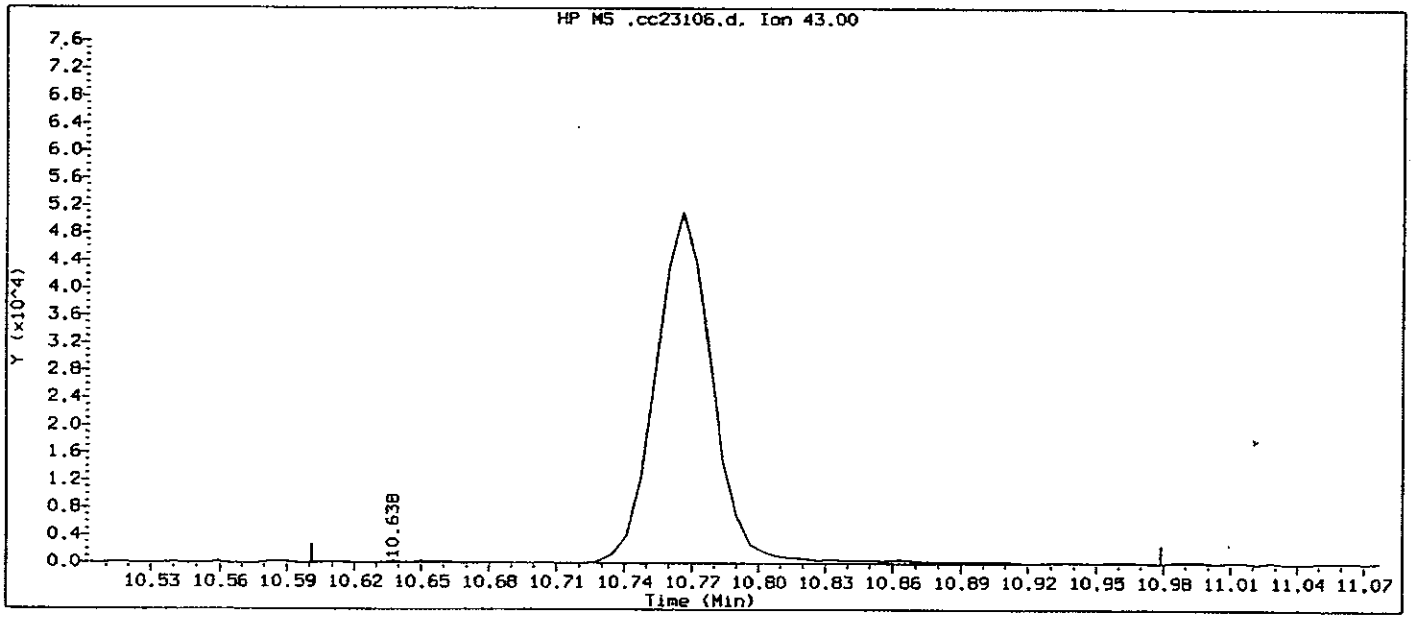
GC/MS audit/management approval: [signature] 10-24-09 RAD23 0186

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 12:22 Automation

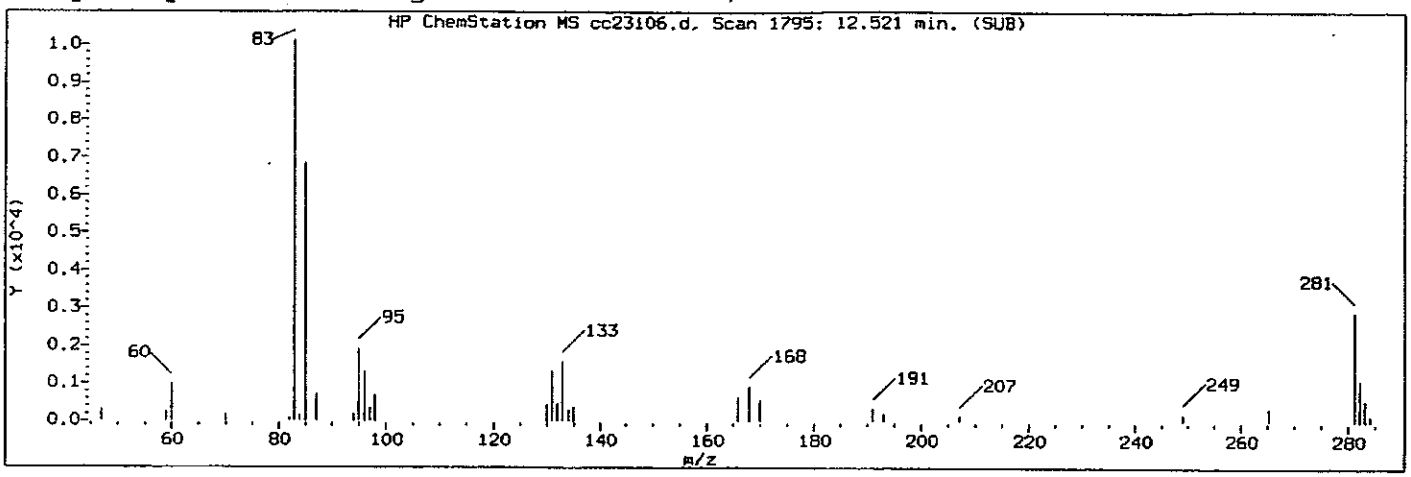
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number	: 107
Compound Name	: 2-Hexanone
Scan Number	: 1486
Retention Time (minutes)	: 10.638
Quant Ion	: 43
Area	: 91789
Concentration (ug/L)	: 5.0237
Integration start scan	: 1479 Integration stop scan: 1541
Y at integration start	: 0 Y at integration end: 0

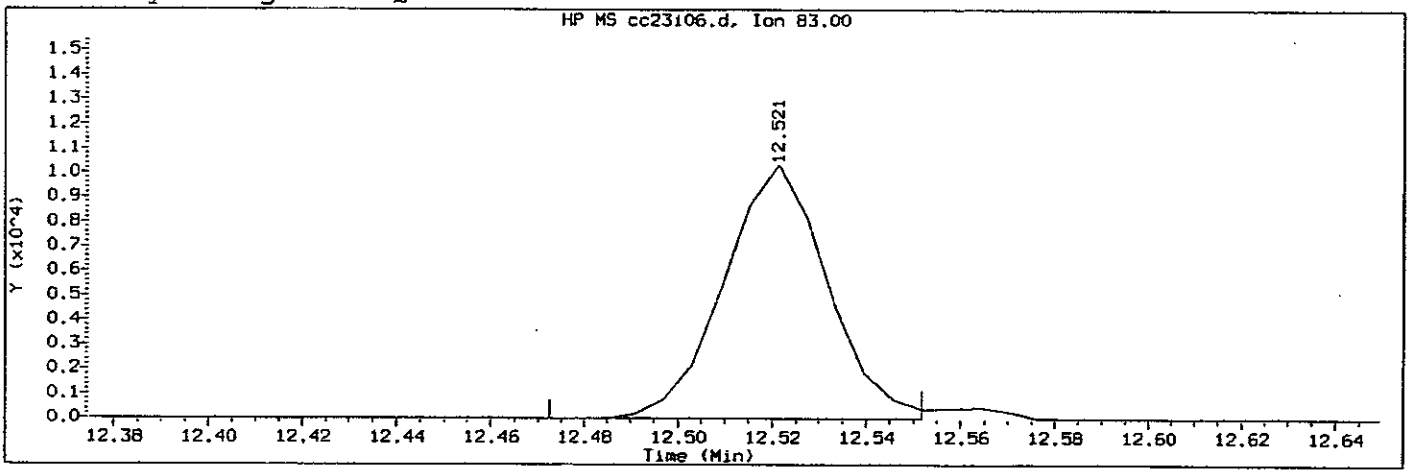
RAB23 8181

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 13:16
Date, time and analyst ID of latest file update: 23-Oct-2009 13:16 jml01693

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 127
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1795
Retention Time (minutes): 12.521
Quant Ion : 83
Area (flag) : 15766 M
Concentration (ug/L) : 0.5027
Integration start scan : 1786 Integration stop scan: 1799
Y at integration start : 0 Y at integration end: 0

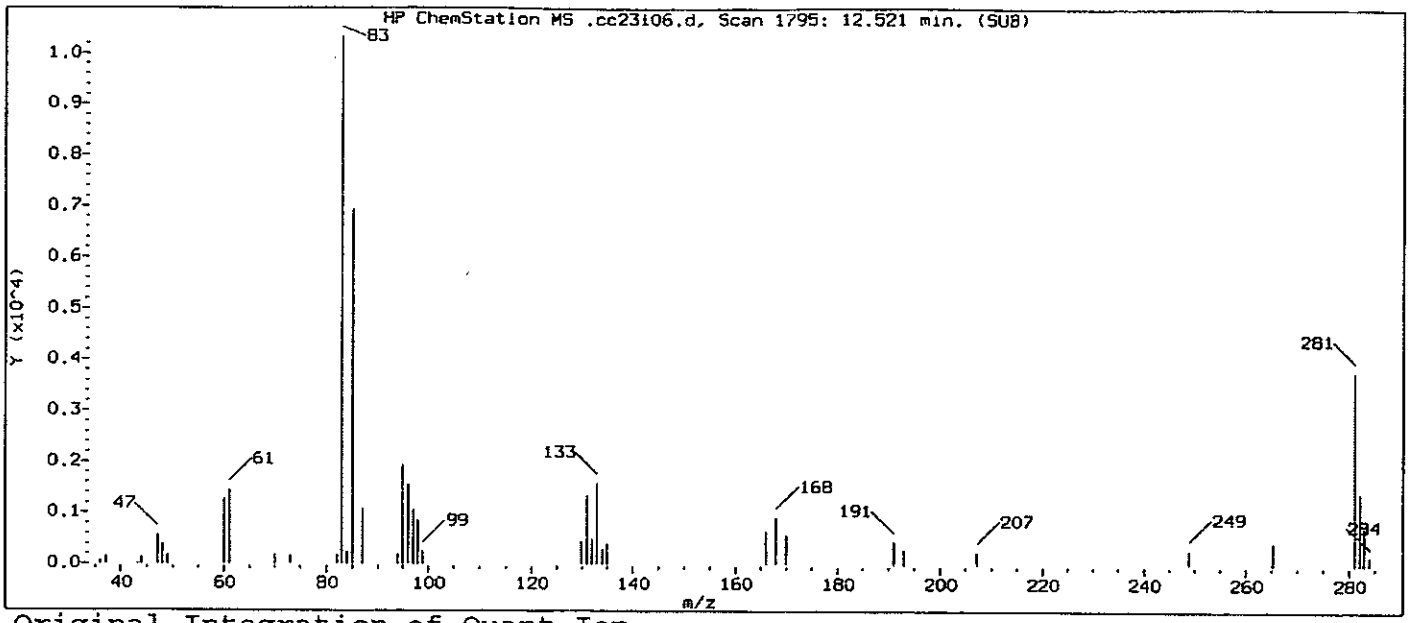
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: jml 10/23/09

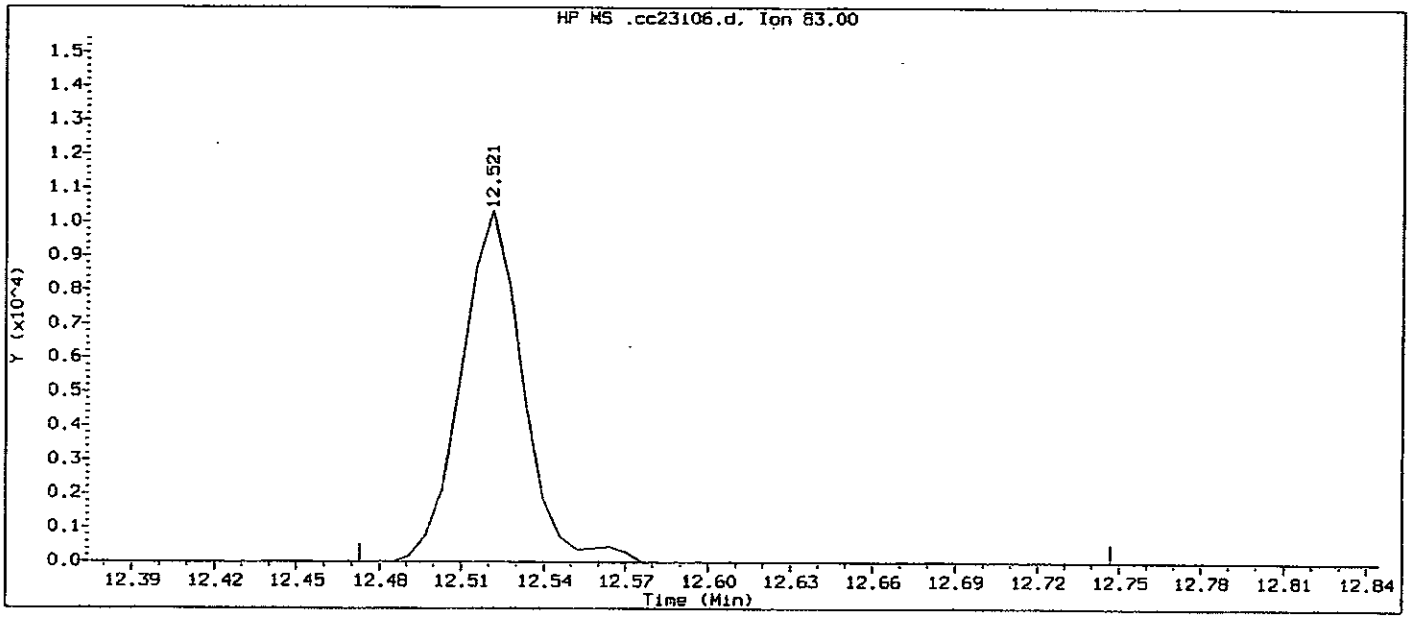
GC/MS audit/management approval: dws 10-24-09 RAD23 6182

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23i06.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:04 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260WI25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 12:22 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

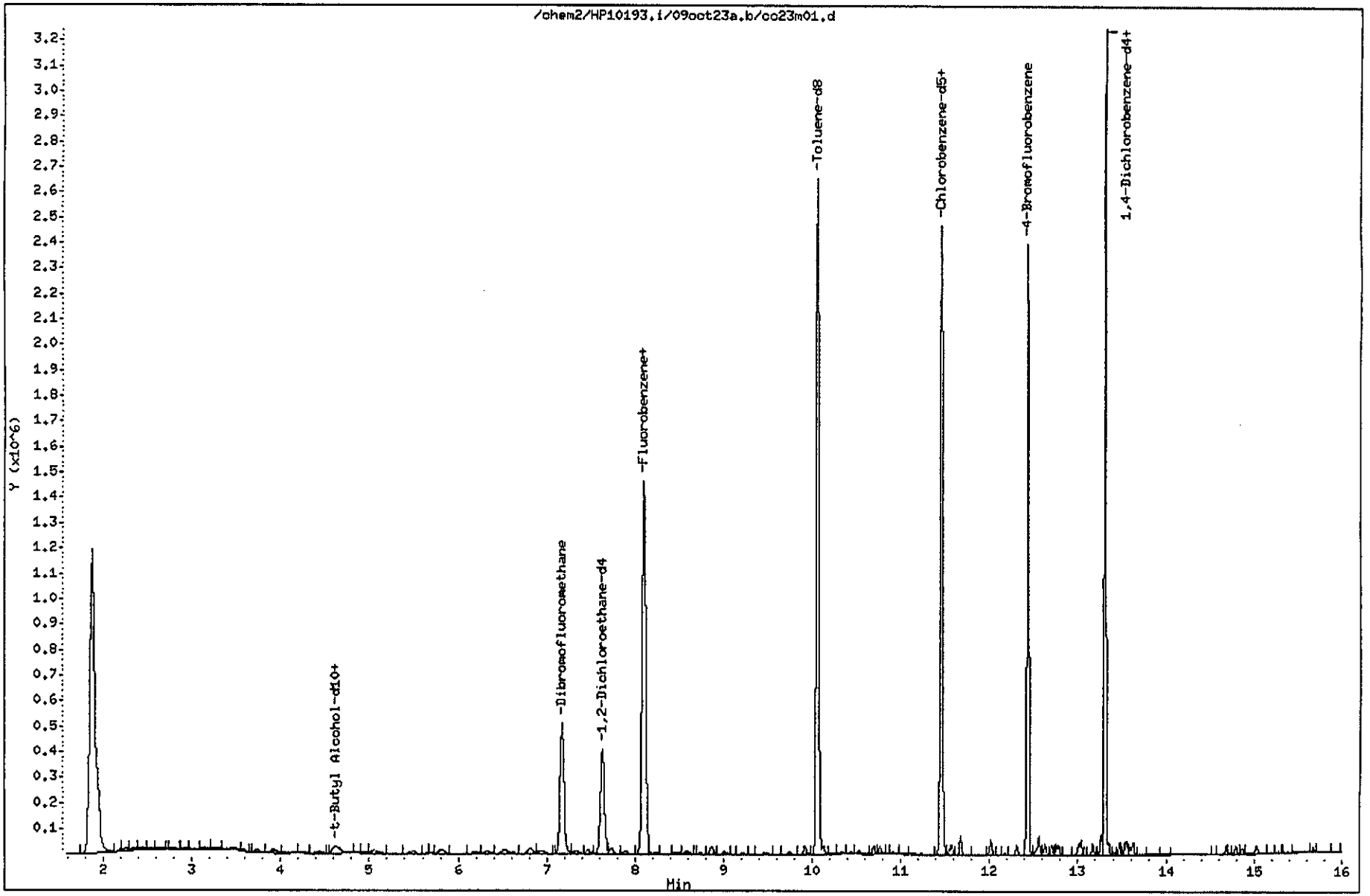
Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.521
Quant Ion	: 83
Area	: 16174
Concentration (ug/L)	: 0.4895
Integration start scan	: 1786 Integration stop scan: 1831
Y at integration start	: 0 Y at integration end: 0

RAD23 0133

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23i06.d, generated on 10/23/2009 at 13:16

Data File: /chem2/HP10193.i/09oct23a.b/co23m01.d
Date : 23-OCT-2009 12:26
Client ID: MDL0.1
Sample Info: MDL0.1;MDL0.1;1;3;MDL/LOQ;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: JHL01693
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:20 jml01693

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.115	85	7406	0.119
5) Chloromethane	(1)	2.261	50	10214	0.156
7) Vinyl Chloride	(1)	2.414	62	7196	0.111
8) 1,3-Butadiene	(1)	2.438	39	6720	0.157
9) Bromomethane	(1)	2.792	94	7433	0.164
11) Chloroethane	(1)	2.913	64	4667	0.124
12) Dichlorofluoromethane	(1)	3.145	67	12805	0.143
14) Trichlorofluoromethane	(1)	3.267	101	8806	0.108
16) Ethyl Ether	(1)	3.584	59	3448	0.104
17) Freon 123a	(1)	3.584	67	7032	0.124
23) Acrolein	(4)	3.736	56	25971	5.201
24) 1,1-Dichloroethene	(1)	3.907	96	4512	0.112
25) Freon 113	(1)	3.938	101	4899	0.109
26) Acetone	(4)	3.950	58	2097	1.083
28) Methyl Iodide	(1)	4.133	142	8568	0.101
29) Carbon Disulfide	(1)	4.249	76	14538	0.113
31) Allyl Chloride	(1)	4.425	41	12091	0.152
32) Methyl Acetate	(1)	4.462	43	4601	0.243
34) Methylene Chloride	(1)	4.614	84	7329	0.158
35)*t-Butyl Alcohol-d10	(4)	4.633	65	99070	50.000
36) t-Butyl Alcohol	(4)	4.761	59	4090	1.965
39) Acrylonitrile	(4)	4.968	53	4629	0.525
40) trans-1,2-Dichloroethene	(1)	5.047	96	5502	0.115
38) 1,2-Dichloroethene (Total)	(1)		96	11238	0.227
41) Methyl Tertiary Butyl Ether	(1)	5.047	73	11470	0.107
44) n-Hexane	(1)	5.498	57	8207	0.112
45) 1,1-Dichloroethane	(1)	5.669	63	9736	0.111
47) di-Isopropyl Ether	(1)	5.797	45	18105	0.110
48) 2-Chloro-1,3-Butadiene	(1)	5.821	53	7848	0.101
49) Ethyl t-Butyl Ether	(1)	6.327	59	14950	0.104
52) 2,2-Dichloropropane	(1)	6.535	77	7365	0.108
50) cis-1,2-Dichloroethene	(1)	6.516	96	5736	0.112
51) 2-Butanone	(4)	6.529	43	12637	1.091
53) Propionitrile	(4)	6.583	54	6454	1.959

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:20 jml01693

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.821	67	11396	0.949
55) Bromochloromethane	(1)	6.846	128	2176	0.097
56) Tetrahydrofuran	(4)	6.925	71	3003	0.993
59) Chloroform	(1)	6.955	83	8928	0.108
63) 1,1,1-Trichloroethane	(1)	7.248	97	7612	0.106
64) Cyclohexane	(1)	7.327	56	10154	0.114
66) 1,1-Dichloropropene	(1)	7.449	75	7200	0.106
67) Carbon Tetrachloride	(1)	7.467	117	6340	0.104
69) Isobutyl Alcohol	(4)	7.577	41	6448	8.163
73) Benzene	(1)	7.736	78	22687	0.110
74) 1,2-Dichloroethane	(1)	7.736	62	5754	0.111
77) t-Amyl Methyl Ether	(1)	7.894	73	12676	0.106
78) *Fluorobenzene	(1)	8.101	96	1959213	10.000
79) n-Heptane	(1)	8.108	43	10993	0.132
80) n-Butanol	(4)	8.461	56	6209	9.439
82) Trichloroethene	(1)	8.589	95	5723	0.111
85) Methylcyclohexane	(1)	8.864	83	9772	0.104
84) 1,2-Dichloropropane	(1)	8.864	63	5798	0.112
87) Dibromomethane	(1)	9.010	93	2027	0.095
90) 1,4-Dioxane	(4)	9.046	88	336	1.940
88) Methyl Methacrylate	(4)	9.010	69	1961M	0.091
91) Bromodichloromethane	(1)	9.211	83	5244	0.097
92) 2-Nitropropane	(4)	9.473	41	5919	0.933
94) cis-1,3-Dichloropropene	(1)	9.748	75	6857	0.099
96) 4-Methyl-2-Pentanone	(1)	9.912	43	28835	1.059
100) Toluene	(2)	10.132	92	14713	0.115
102) trans-1,3-Dichloropropene	(2)	10.333	75	5167	0.093
103) Ethyl Methacrylate	(2)	10.430	69	4143	0.096
104) 1,1,2-Trichloroethane	(2)	10.522	97	3391	0.112
106) Tetrachloroethene	(2)	10.699	166	6533	0.108
105) 1,3-Dichloropropane	(2)	10.692	76	5605	0.103
107) 2-Hexanone	(2)	10.766	43	20191	1.080
108) Dibromochloromethane	(2)	10.912	129	3219	0.093
109) 1,2-Dibromoethane	(2)	11.028	107	2828	0.098

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 0186

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:20 jml01693

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
110) *Chlorobenzene-d5	(2)	11.461	117	1417444	10.000
112) Chlorobenzene	(2)	11.485	112	15873	0.109
113) 1,1,1,2-Tetrachloroethane	(2)	11.546	131	4072	0.090
114) Ethylbenzene	(2)	11.576	91	26496	0.104
117) m+p-Xylene	(2)	11.674	106	20773	0.207
116) Xylene (Total)	(2)		106	30417	0.307
118) o-Xylene	(2)	12.009	106	9644	0.099
119) Styrene	(2)	12.015	104	13826	0.090
120) Bromoform	(2)	12.174	173	1530	0.081
121) Isopropylbenzene	(2)	12.308	105	24480	0.100
127) 1,1,2,2-Tetrachloroethane	(3)	12.521	83	3687	0.110
128) Bromobenzene	(3)	12.558	156	6239	0.102
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	9701	0.869
130) 1,2,3-Trichloropropane	(3)	12.564	110	1041	0.108
132) n-Propylbenzene	(3)	12.625	91	31161	0.103
133) 2-Chlorotoluene	(3)	12.704	126	6291	0.104
136) 4-Chlorotoluene	(3)	12.784	126	6573	0.104
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	21437	0.099
138) Pentachloroethane	(3)	13.027	167	2995	0.080
137) tert-Butylbenzene	(3)	13.009	134	5302	0.107
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	21401	0.095
140) sec-Butylbenzene	(3)	13.168	105	27070	0.097
141) 1,3-Dichlorobenzene	(3)	13.265	146	13184	0.104
143) *1,4-Dichlorobenzene-d4	(3)	13.308	152	809541	10.000
142) p-Isopropyltoluene	(3)	13.265	119	23167	0.094
144) 1,4-Dichlorobenzene	(3)	13.326	146	13540	0.106
145) 1,2,3-Trimethylbenzene	(3)	13.350	120	10166M	0.099
146) Benzyl Chloride	(3)	13.411	126	1024	0.073
147) n-Butylbenzene	(3)	13.558	92	12020	0.097
148) 1,2-Dichlorobenzene	(3)	13.600	146	11454	0.105
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	155	385	0.079
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	9982	0.112
154) Hexachlorobutadiene	(3)	14.795	225	5655	0.110
155) Naphthalene	(3)	14.868	128	14073	0.111

M = Compound was manually integrated.

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

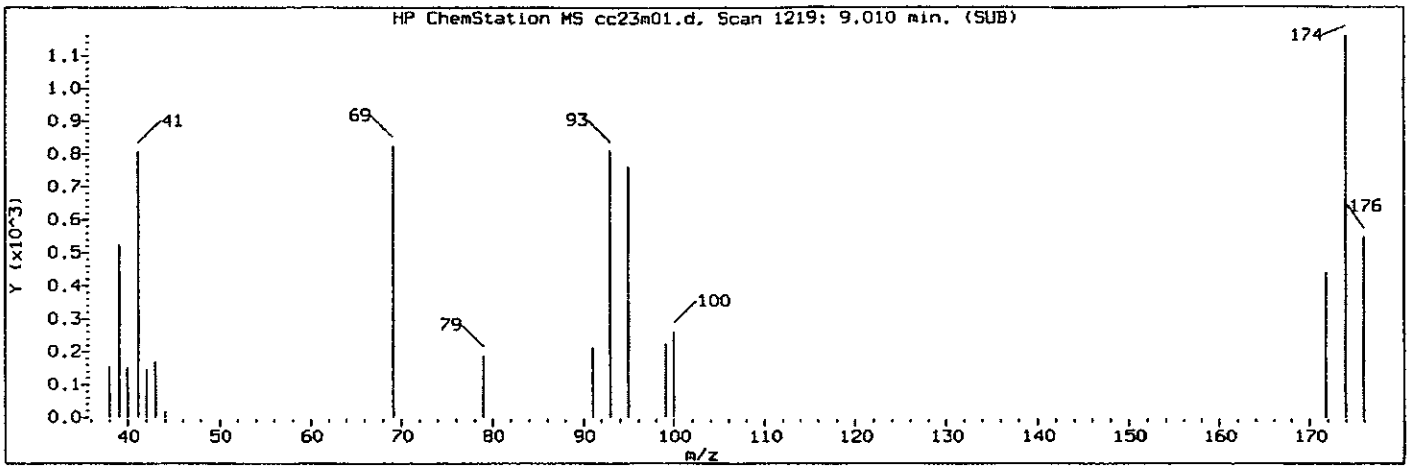
Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:20 jml01693

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

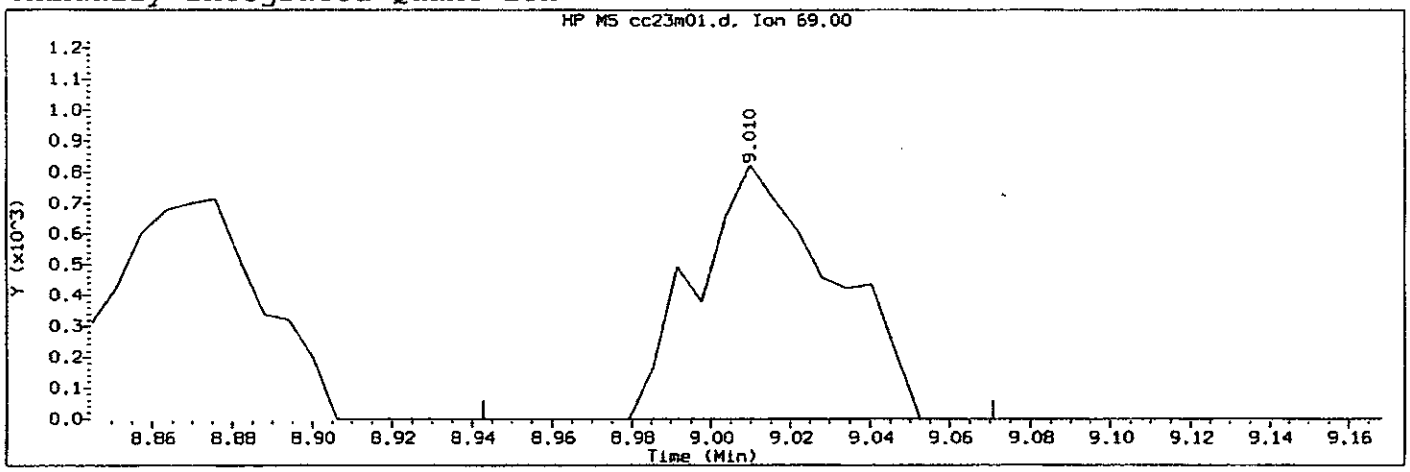
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	8826	0.120
60)$Dibromofluoromethane	(1)	7.175	113	479796	9.925
70)$1,2-Dichloroethane-d4	(1)	7.632	102	87925	9.764
98)$Toluene-d8	(2)	10.058	98	2062843	9.898
124)$4-Bromofluorobenzene	(2)	12.430	95	728451	9.742

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 13:20 jml01693

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number : 88
Compound Name : Methyl Methacrylate
Scan Number : 1219
Retention Time (minutes): 9.010
Quant Ion : 69
Area (flag) : 1961 M
Concentration (ug/L) : 0.0908
Integration start scan : 1207 Integration stop scan: 1228
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

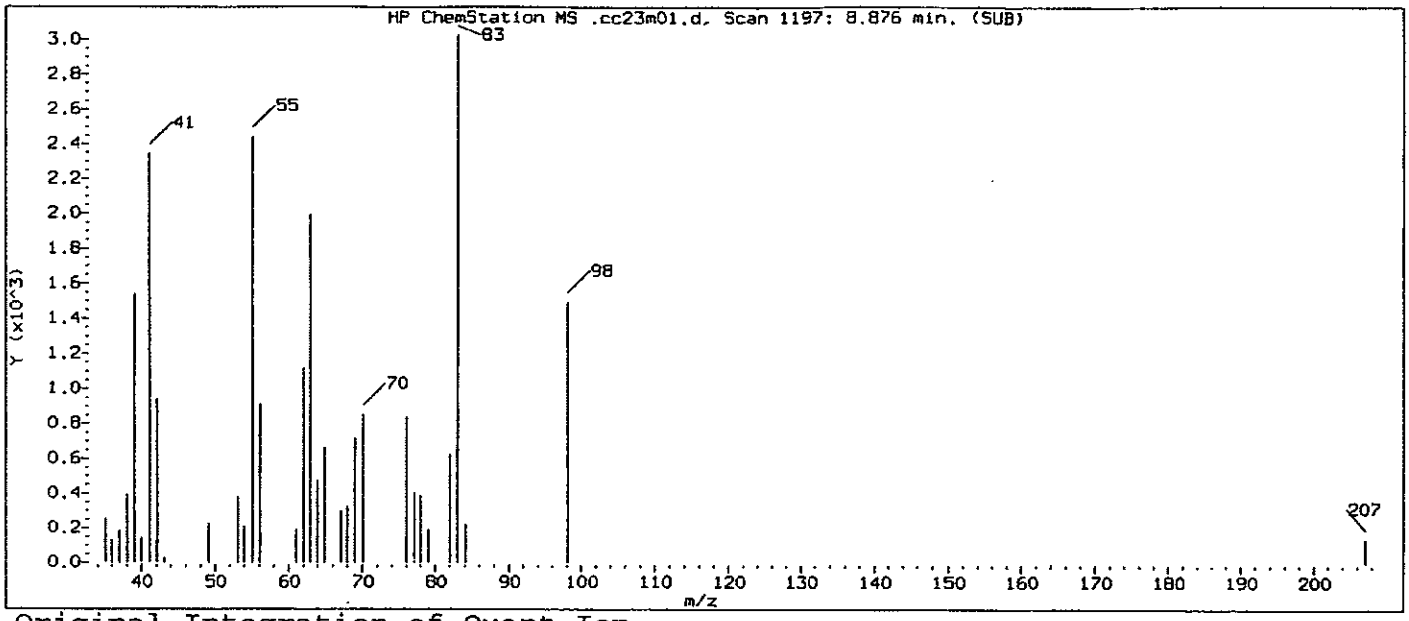
Analyst responsible for change: JML 10/23/09

GC/MS audit/management approval: [signature] 10-24-09

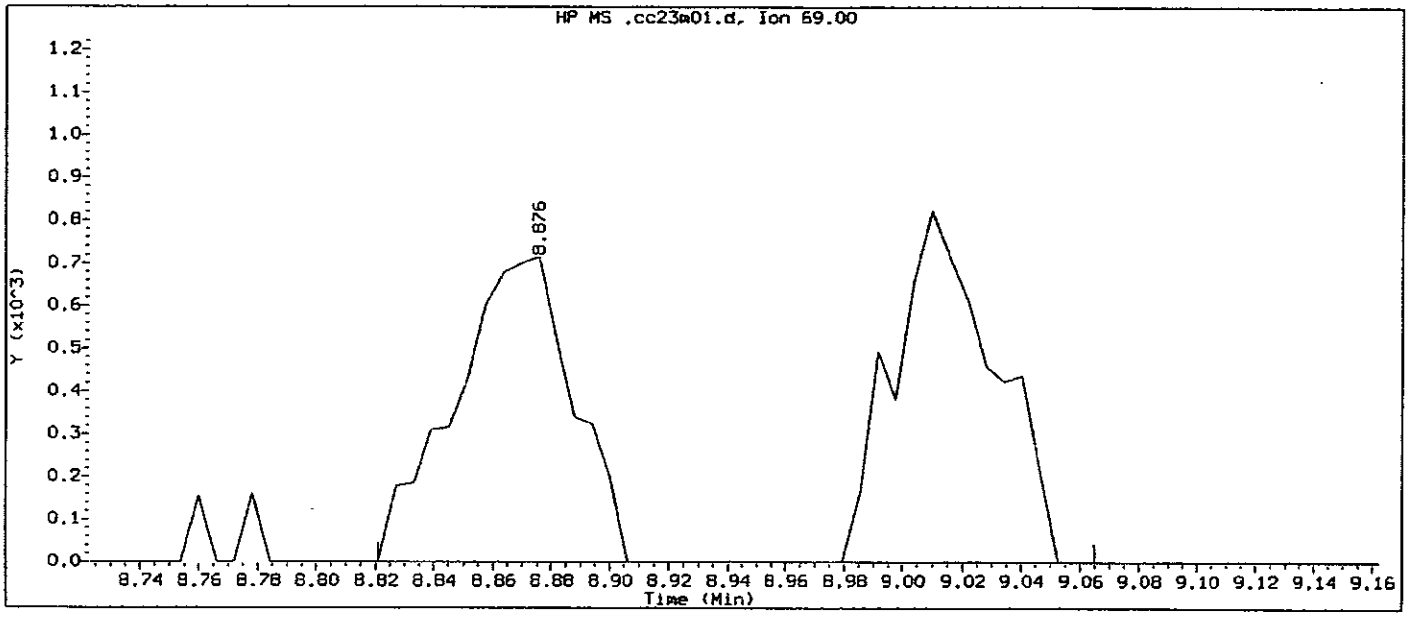
RAD23 0159

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23m01.d, generated on 10/23/2009 at 13:20

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 12:44 Automation

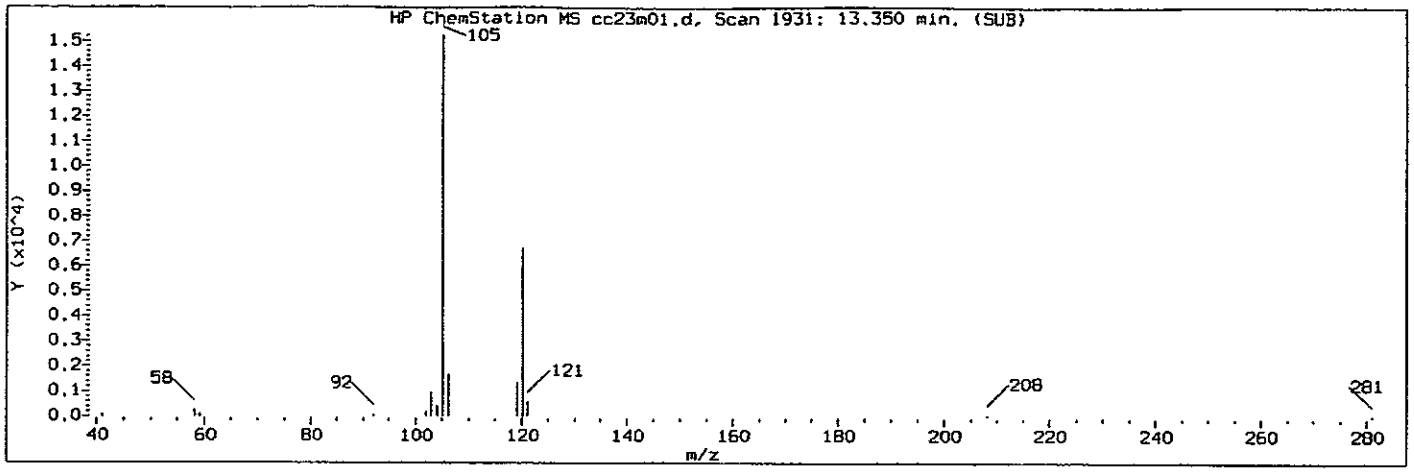
Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number : 88
Compound Name : Methyl Methacrylate
Scan Number : 1197
Retention Time (minutes): 8.876
Quant Ion : 69
Area : 3969
Concentration (ug/L) : 0.1785
Integration start scan : 1187 Integration stop scan: 1227
Y at integration start : 0 Y at integration end: 0

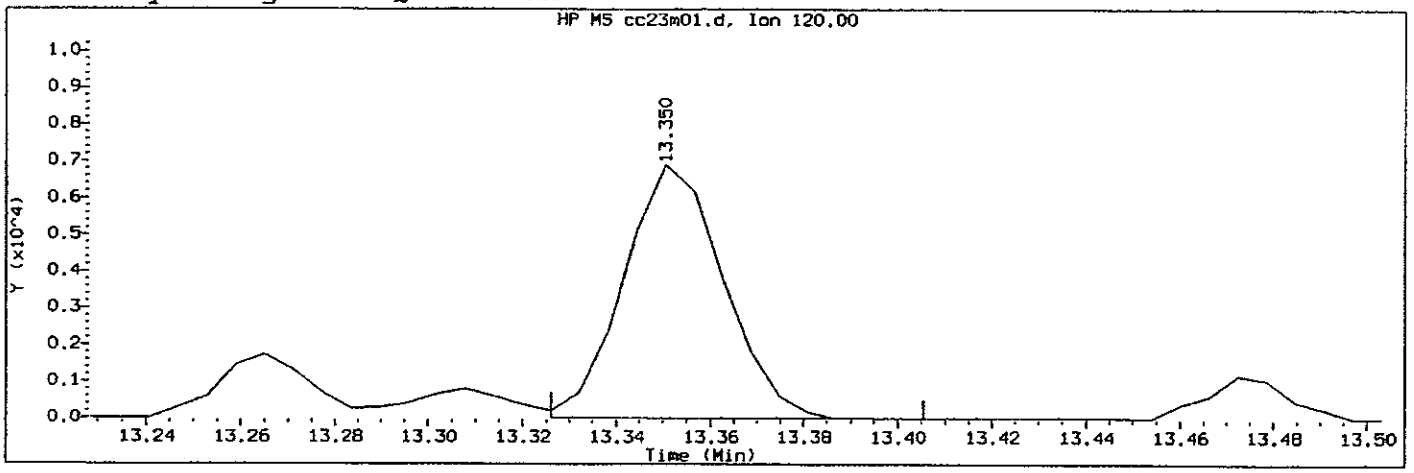
RAD23 8196

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23m01.d, generated on 10/23/2009 at 13:20

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 13:20 jml01693

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number : 145
Compound Name : 1,2,3-Trimethylbenzene
Scan Number : 1931
Retention Time (minutes): 13.350
Quant Ion : 120
Area (flag) : 10166 M
Concentration (ug/L) : 0.0988
Integration start scan : 1926 Integration stop scan: 1939
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

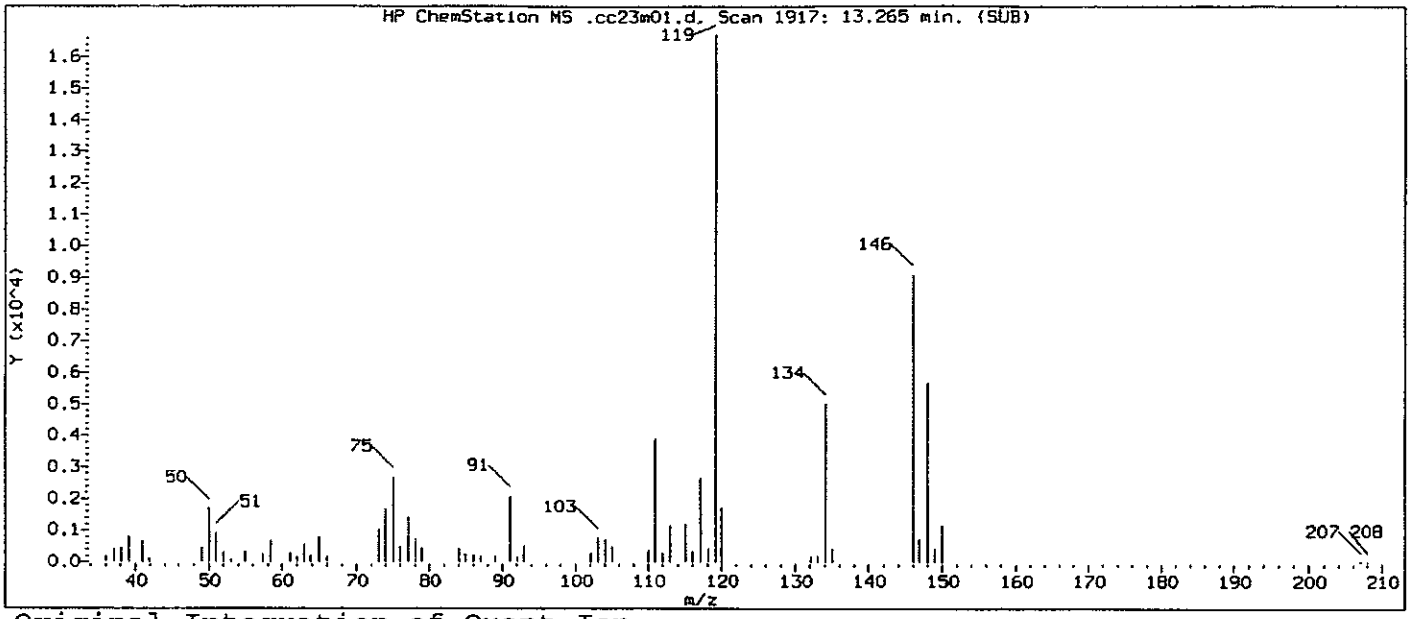
Analyst responsible for change: jm 10/23/9

GC/MS audit/management approval: 10/26/09

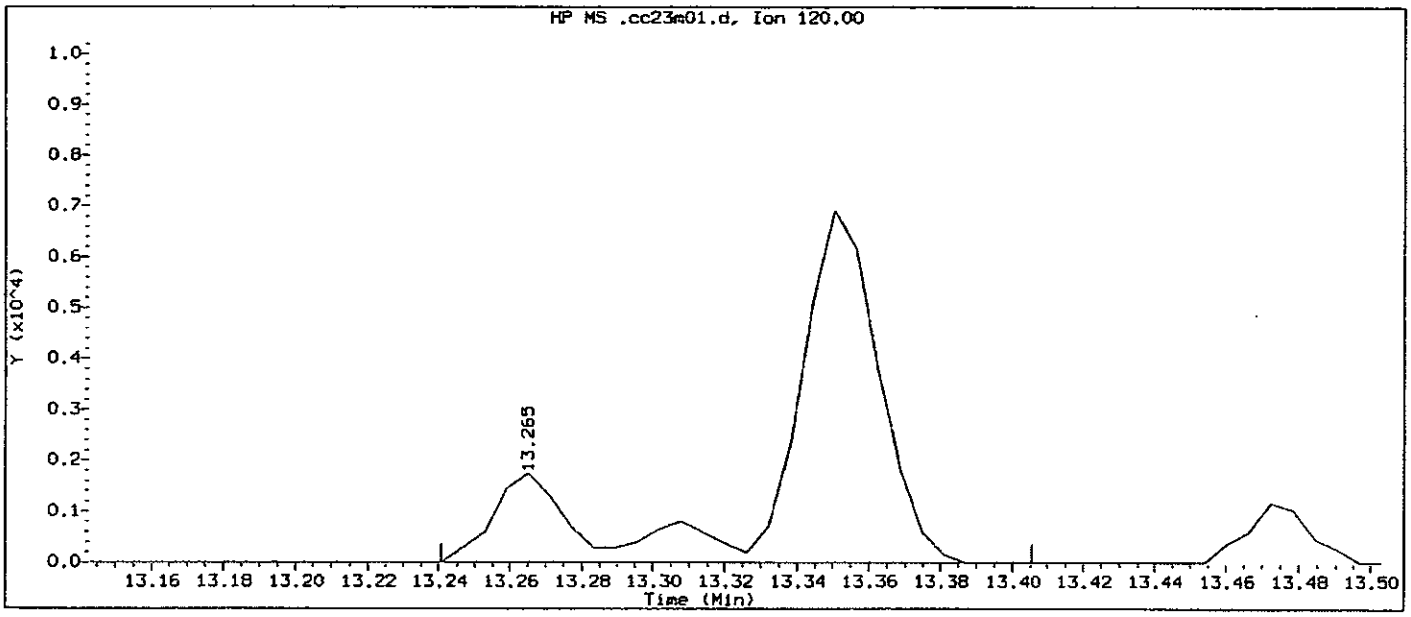
RAD23 8191

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23m01.d, generated on 10/23/2009 at 13:20

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23m01.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 12:26 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 12:22
Date, time and analyst ID of latest file update: 23-Oct-2009 12:44 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

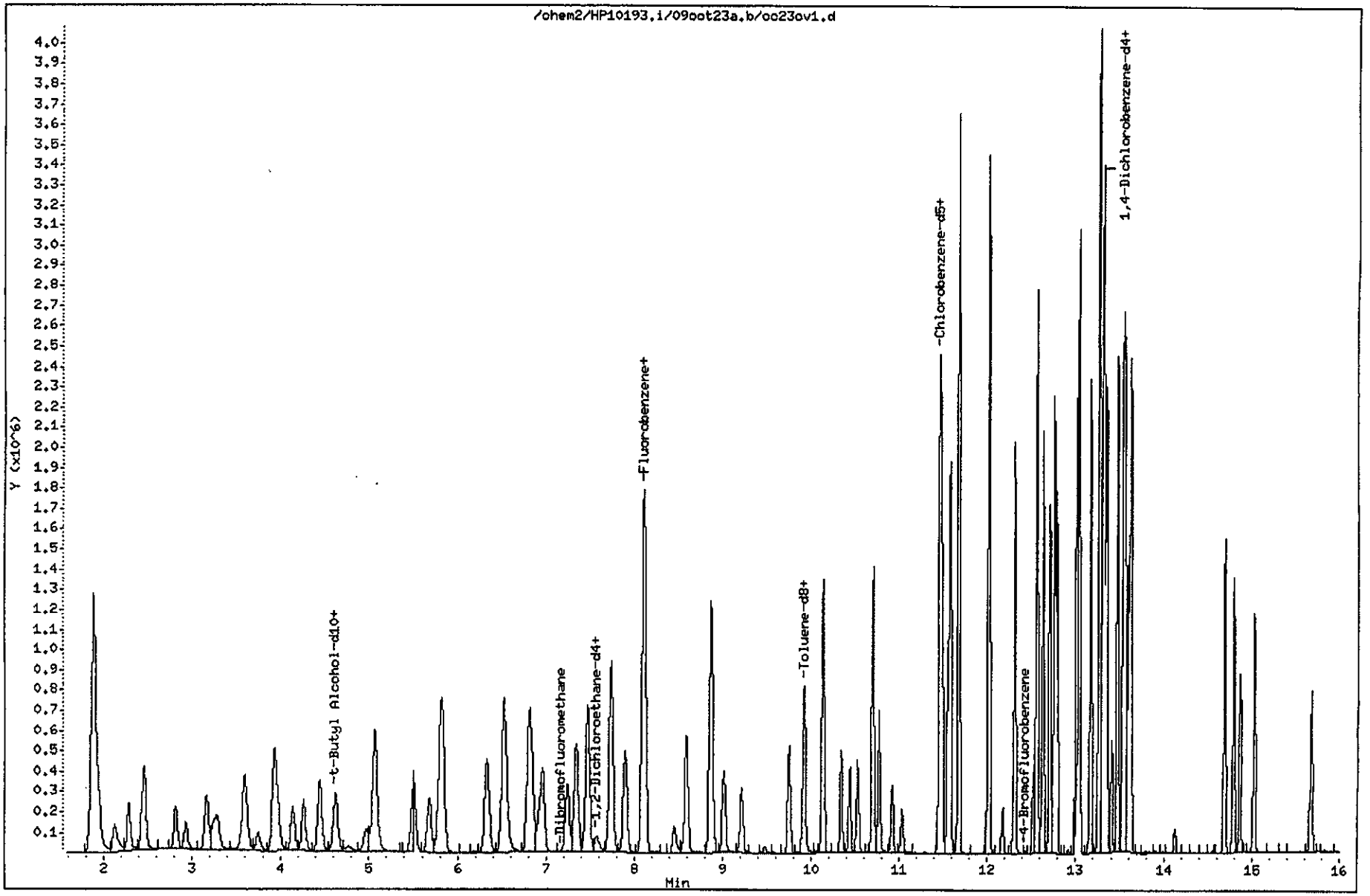
Compound Number	: 145
Compound Name	: 1,2,3-Trimethylbenzene
Scan Number	: 1917
Retention Time (minutes)	: 13.265
Quant Ion	: 120
Area	: 13605
Concentration (ug/L)	: 0.1272
Integration start scan	: 1912 Integration stop scan: 1939
Y at integration start	: 0 Y at integration end: 0

RAD23 0192

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23m01.d, generated on 10/23/2009 at 13:20

Data File: /ohem2/HP10193.i/09oct23a.b/cc23ov1.d
Date : 23-OCT-2009 13:31
Client ID: CICV
Sample Info: CICV;CICV;1;3;LCS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: JHL01693
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23cv1.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 13:31 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:52 jml01693

Sample Name: CICV Lab Sample ID: CICV

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.121	85	310029	5.317
5) Chloromethane	(1)	2.286	50	349163	5.722
7) Vinyl Chloride	(1)	2.432	62	338973	5.609
8) 1,3-Butadiene	(1)	2.462	39	208763	5.213
9) Bromomethane	(1)	2.816	94	225179	5.321
11) Chloroethane	(1)	2.926	64	189857	5.401
12) Dichlorofluoromethane	(1)	3.164	67	469234	5.621
14) Trichlorofluoromethane	(1)	3.279	101	411471	5.387
16) Ethyl Ether	(1)	3.590	59	137778	4.447
17) Freon 123a	(1)	3.590	67	291815	5.508
23) Acrolein	(4)	3.743	56	177136	42.244
24) 1,1-Dichloroethene	(1)	3.919	96	209616	5.551
25) Freon 113	(1)	3.956	101	214733	5.121
26) Acetone	(4)	3.944	58	69748	42.902
28) Methyl Iodide	(1)	4.133	142	423049	5.328
29) Carbon Disulfide	(1)	4.255	76	616340	5.131
31) Allyl Chloride	(1)	4.438	41	409606	5.508
32) Methyl Acetate	(1)	4.456	43	92728	5.242
34) Methylene Chloride	(1)	4.614	84	235264	5.423
35)*t-Butyl Alcohol-d10	(4)	4.633	65	83196	50.000
36) t-Butyl Alcohol	(4)	4.767	59	89050	50.944
39) Acrylonitrile	(4)	4.968	53	212359	28.681
40) trans-1,2-Dichloroethene	(1)	5.059	96	245248	5.504
38) 1,2-Dichloroethene (Total)	(1)		96	510826	11.036
41) Methyl Tertiary Butyl Ether	(1)	5.066	73	564558	5.622
44) n-Hexane	(1)	5.505	57	339472	4.966
45) 1,1-Dichloroethane	(1)	5.681	63	455234	5.565
47) di-Isopropyl Ether	(1)	5.809	45	855358	5.566
48) 2-Chloro-1,3-Butadiene	(1)	5.828	53	417416	5.775
49) Ethyl t-Butyl Ether	(1)	6.334	59	741575	5.505
52) 2,2-Dichloropropane	(1)	6.535	77	352042	5.532
50) cis-1,2-Dichloroethene	(1)	6.523	96	265578	5.532
51) 2-Butanone	(4)	6.510	43	421104	43.285
53) Propionitrile	(4)	6.577	54	112407	40.621

* = Compound is an internal standard.

RAD23 0194

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23cv1.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 13:31 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:52 jml01693

Sample Name: CICV Lab Sample ID: CICV

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
54) Methacrylonitrile	(4)	6.809	67	416718	41.326
55) Bromochloromethane	(1)	6.846	128	110155	5.255
56) Tetrahydrofuran	(4)	6.919	71	74337	29.259
59) Chloroform	(1)	6.962	83	437886	5.652
63) 1,1,1-Trichloroethane	(1)	7.242	97	373223	5.555
64) Cyclohexane	(1)	7.346	56	430105	5.182
66) 1,1-Dichloropropene	(1)	7.461	75	351496	5.556
67) Carbon Tetrachloride	(1)	7.480	117	316066	5.565
69) Isobutyl Alcohol	(4)	7.577	41	83708	126.187
73) Benzene	(1)	7.736	78	1044383	5.437
74) 1,2-Dichloroethane	(1)	7.736	62	274534	5.669
77) t-Amyl Methyl Ether	(1)	7.894	73	615928	5.536
78) *Fluorobenzene	(1)	8.102	96	1829083	10.000
79) n-Heptane	(1)	8.120	43	388801	5.018
80) n-Butanol	(4)	8.455	56	143600	259.966
82) Trichloroethene	(1)	8.589	95	270501	5.599
85) Methylcyclohexane	(1)	8.870	83	462437	5.259
84) 1,2-Dichloropropane	(1)	8.870	63	268048	5.558
87) Dibromomethane	(1)	9.016	93	112778	5.670
90) 1,4-Dioxane	(4)	9.034	88	20777	142.833
88) Methyl Methacrylate	(4)	9.016	69	105646	5.825
91) Bromodichloromethane	(1)	9.217	83	285738	5.688
92) 2-Nitropropane	(4)	9.473	41	28157	5.286
94) cis-1,3-Dichloropropene	(1)	9.748	75	362276	5.587
96) 4-Methyl-2-Pentanone	(1)	9.918	43	720013	28.320
100) Toluene	(2)	10.132	92	676282	5.678
102) trans-1,3-Dichloropropene	(2)	10.339	75	295882	5.717
103) Ethyl Methacrylate	(2)	10.437	69	228990	5.701
104) 1,1,2-Trichloroethane	(2)	10.528	97	160287	5.706
106) Tetrachloroethene	(2)	10.699	166	315416	5.588
105) 1,3-Dichloropropane	(2)	10.693	76	290985	5.772
107) 2-Hexanone	(2)	10.766	43	495054	28.467
108) Dibromochloromethane	(2)	10.918	129	184771	5.727
109) 1,2-Dibromoethane	(2)	11.034	107	153787	5.745

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23cv1.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 13:31 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:52 jml01693

Sample Name: CICV Lab Sample ID: CICV

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
110) *Chlorobenzene-d5	(2)	11.455	117	1318117	10.000
112) Chlorobenzene	(2)	11.485	112	755016	5.601
113) 1,1,1,2-Tetrachloroethane	(2)	11.552	131	237879	5.647
114) Ethylbenzene	(2)	11.577	91	1317431	5.580
117) m+p-Xylene	(2)	11.674	106	1051067	11.268
116) Xylene (Total)	(2)		106	1557319	16.883
118) o-Xylene	(2)	12.009	106	506252	5.615
119) Styrene	(2)	12.015	104	814175	5.682
120) Bromoform	(2)	12.174	173	98540	5.616
121) Isopropylbenzene	(2)	12.308	105	1283892	5.628
127) 1,1,2,2-Tetrachloroethane	(3)	12.521	83	180523M	5.660
128) Bromobenzene	(3)	12.564	156	321790	5.568
129) trans-1,4-Dichloro-2-Butene	(4)	12.558	53	261315	27.871
130) 1,2,3-Trichloropropane	(3)	12.564	110	50645	5.543
132) n-Propylbenzene	(3)	12.625	91	1579718	5.500
133) 2-Chlorotoluene	(3)	12.704	126	320187	5.557
136) 4-Chlorotoluene	(3)	12.784	126	329963	5.503
135) 1,3,5-Trimethylbenzene	(3)	12.753	105	1138063	5.533
138) Pentachloroethane	(3)	13.034	167	191090	5.383
137) tert-Butylbenzene	(3)	13.009	134	260545	5.525
139) 1,2,4-Trimethylbenzene	(3)	13.040	105	1193153	5.584
140) sec-Butylbenzene	(3)	13.168	105	1466521	5.539
141) 1,3-Dichlorobenzene	(3)	13.265	146	665355	5.544
143) *1,4-Dichlorobenzene-d4	(3)	13.308	152	768344	10.000
142) p-Isopropyltoluene	(3)	13.265	119	1301913	5.544
144) 1,4-Dichlorobenzene	(3)	13.326	146	669901	5.529
145) 1,2,3-Trimethylbenzene	(3)	13.351	120	513031	5.253
146) Benzyl Chloride	(3)	13.412	126	74220	5.594
147) n-Butylbenzene	(3)	13.558	92	637581	5.443
148) 1,2-Dichlorobenzene	(3)	13.601	146	574138	5.548
150) 1,2-Dibromo-3-Chloropropane	(4)	14.131	155	23013	5.624
153) 1,2,4-Trichlorobenzene	(3)	14.692	180	453112	5.358
154) Hexachlorobutadiene	(3)	14.795	225	257654	5.296
155) Naphthalene	(3)	14.869	128	664159	5.503

M = Compound was manually integrated.

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct23a.b/cc23cv1.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 13:31 Analyst ID: JML01693

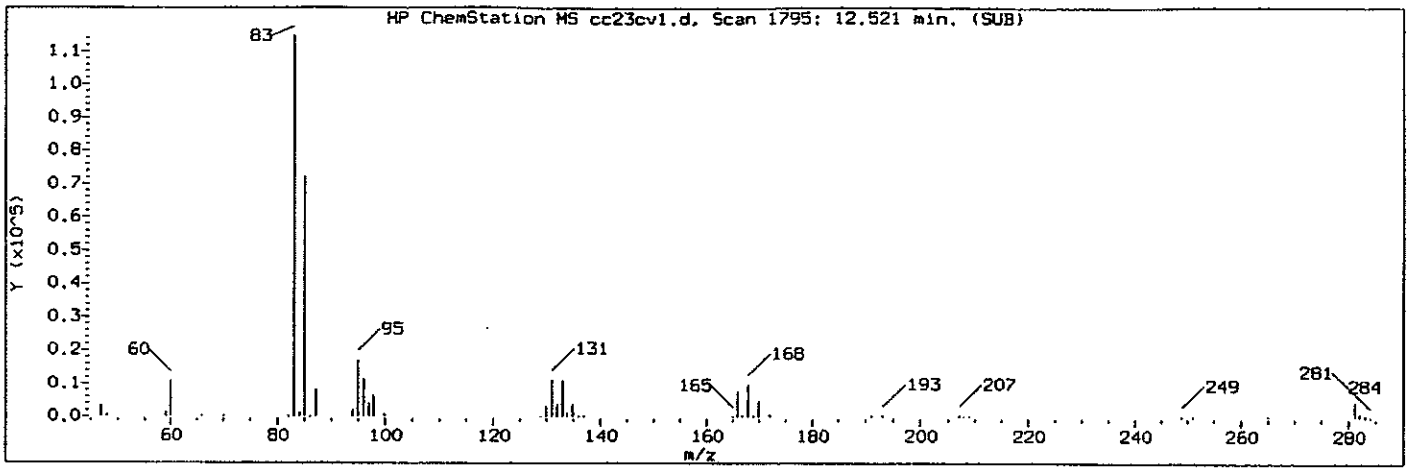
Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 23-Oct-2009 13:52 jml01693

Sample Name: CICV Lab Sample ID: CICV

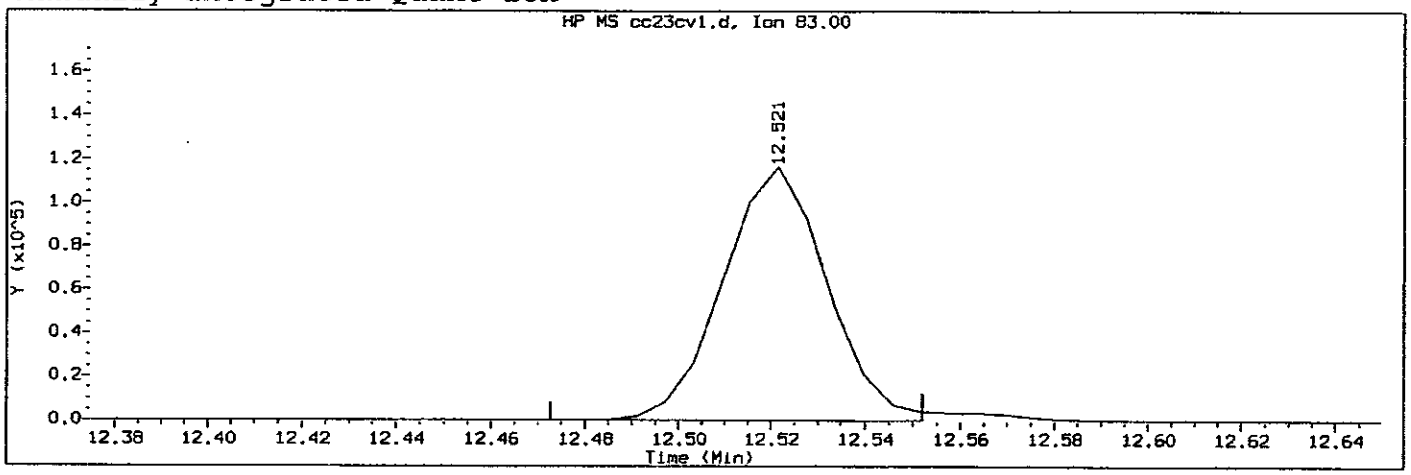
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
156) 1,2,3-Trichlorobenzene	(3)	15.033	180	372766	5.361
60)$Dibromofluoromethane	(1)	7.175	113	2220	0.049
70)$1,2-Dichloroethane-d4	(1)	7.620	102	2453	0.292
98)$Toluene-d8	(2)	9.924	98	9182	0.047
124)$4-Bromofluorobenzene	(2)	12.430	95	4192	0.060

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23cv1.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 13:31 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 13:16
Date, time and analyst ID of latest file update: 23-Oct-2009 13:52 jml01693

Sample Name: CICV Lab Sample ID: CICV

Compound Number : 127
Compound Name : 1,1,2,2-Tetrachloroethane
Scan Number : 1795
Retention Time (minutes): 12.521
Quant Ion : 83
Area (flag) : 180523 M
Concentration (ug/L) : 5.6599
Integration start scan : 1786 Integration stop scan: 1799
Y at integration start : 0 Y at integration end: 0

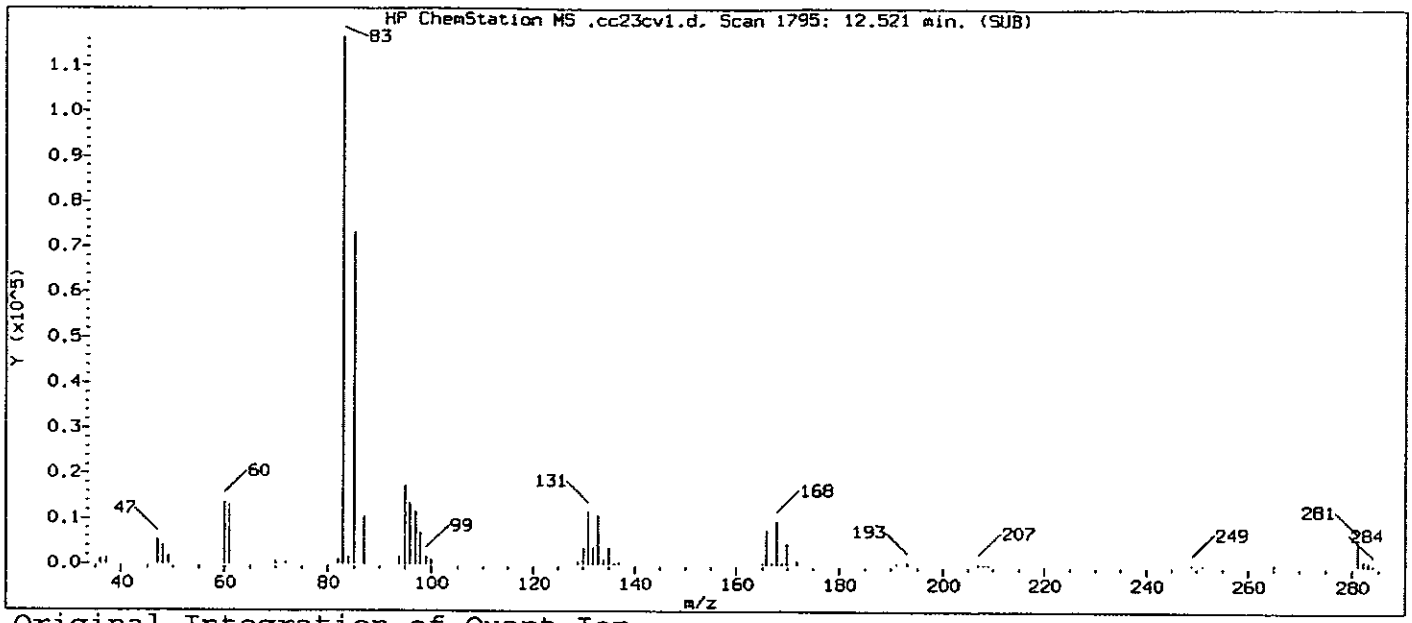
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: 10/23/09

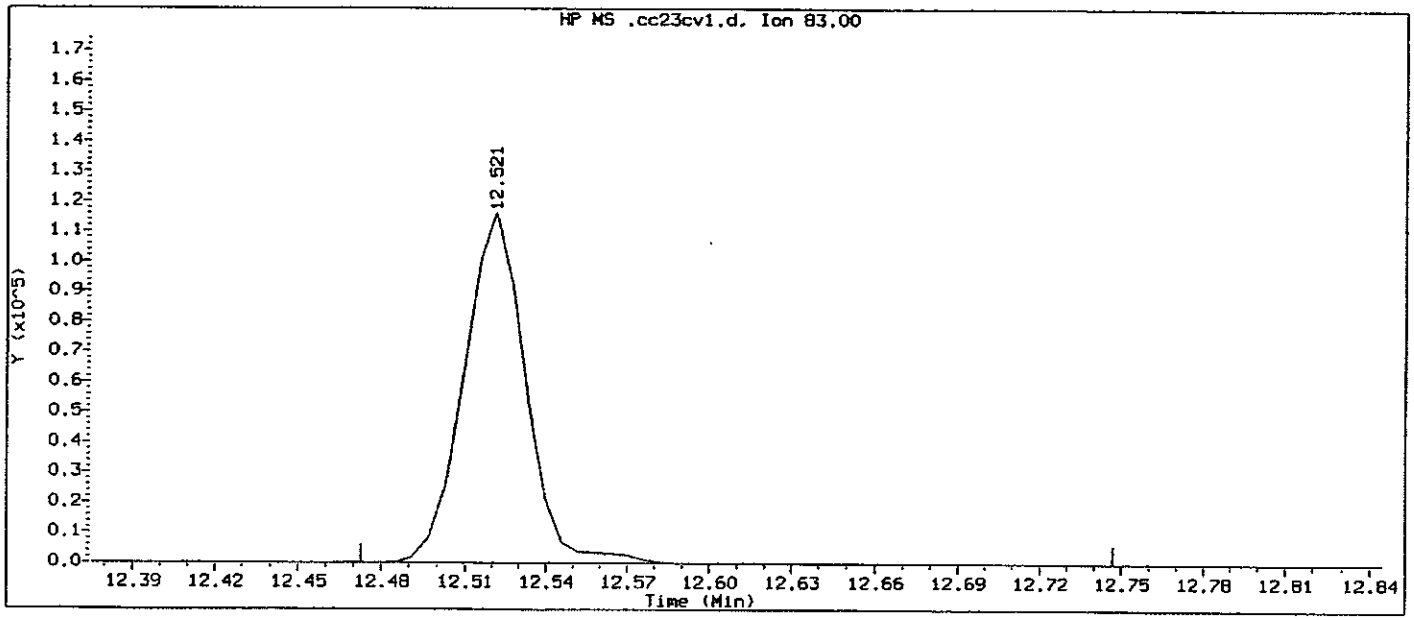
GC/MS audit/management approval: 10/26/09 RAD23 =198

Manual Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23cv1.d, generated on 10/23/2009 at 13:52

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct23a.b/cc23cv1.d Instrument ID: HP10193.i
Injection date and time: 23-OCT-2009 13:31 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct23a.b/C8260W25.m Sublist used: 8260W25+B
Calibration date and time: 23-OCT-2009 13:16
Date, time and analyst ID of latest file update: 23-Oct-2009 13:50 Automation

Sample Name: CICV Lab Sample ID: CICV

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1795
Retention Time (minutes)	: 12.521
Quant Ion	: 83
Area	: 184493
Concentration (ug/L)	: 5.7844
Integration start scan	: 1786 Integration stop scan: 1831
Y at integration start	: 0 Y at integration end: 0

RAD23 0199

Original Integration Report for data file /chem2/HP10193.i/09oct23a.b/cc23cv1.d, generated on 10/23/2009 at 13:52

6A

VOLATILE ORGANICS INITIAL CALIBRATION DATA

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date(s): 10/28/09 10/28/09

Heated Purge: (Y/N) Y Calibration Times: 18:22 20:56

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

LAB FILE ID: RRF 0.5 cc28i06.d RRF 1 = cc28i05.d RRF 2 = cc28i04.d
RRF 5 = cc28i03.d RRF 10= cc28i02.d RRF 25= cc28i01.d RRF =

COMPOUND	RRF 0.5	RRF 1	RRF 2	RRF 5	RRF 10	RRF 25	RRF	$\overline{RRF}$	% RSD	CAL. METHOD
Dimethyl ether	0.4328	0.3614	0.3810	0.3870	0.3850	0.3693		0.3861	6	AVG
Acetonitrile	1.7252	1.5763	1.8490	1.8823	1.7743	1.7932		1.7667	6	AVG
Vinyl Acetate	0.2550	0.2389	0.2821	0.3147	0.3437	0.3376		0.2953	15	AVG
2-Chloroethyl Vinyl Ether	0.0881	0.0926	0.1004	0.1125	0.1125	0.1174		0.1039	12	AVG
cis-1,4-Dichloro-2-Butene	2.6759	3.6806	3.4608	4.0888	4.8143	6.2304		4.1585	30	2NDDEG
Cyclohexanone	0.3392	0.3332	0.3975	0.4254	0.4698	0.4549		0.4033	14	AVG
Hexachloroethane	0.3640	0.3467	0.4096	0.4682	0.5091	0.5608		0.4430	19	2NDDEG

Average %RSD 15

Minimum RRF for SPCC(#) = 0.10
(0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %RSD for CCC(*) = 30%

FORM VI VOA

RAD.23 0199a

Internal Standard Area and Retention Time Summary

Initial Calibration Standards:

/chem2/HP10193.i/09oct28b.b/cc28i01.d VSTD025
/chem2/HP10193.i/09oct28b.b/cc28i02.d VSTD010
/chem2/HP10193.i/09oct28b.b/cc28i03.d VSTD005
/chem2/HP10193.i/09oct28b.b/cc28i04.d VSTD002
/chem2/HP10193.i/09oct28b.b/cc28i05.d VSTD001
/chem2/HP10193.i/09oct28b.b/cc28i06.d VSTD0.5

Area Summary

File ID:

Internal Standard Name	cc28i01.d	cc28i02.d	cc28i03.d	cc28i04.d	cc28i05.d	cc28i06.d	Avg. Area	%RSD	In Spec
t-Butyl Alcohol-d10	79366	82516	83560	81913	83370	76666	81232	3	Yes
Fluorobenzene	1926205	1925397	1997890	1991875	1904753	1909696	1942636	2	Yes
Chlorobenzene-d5	1461929	1430723	1486162	1466685	1399981	1406212	1441949	2	Yes
1,4-Dichlorobenzene-d4	837028	809561	836751	822939	792599	787281	814360	3	Yes

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

RT Summary

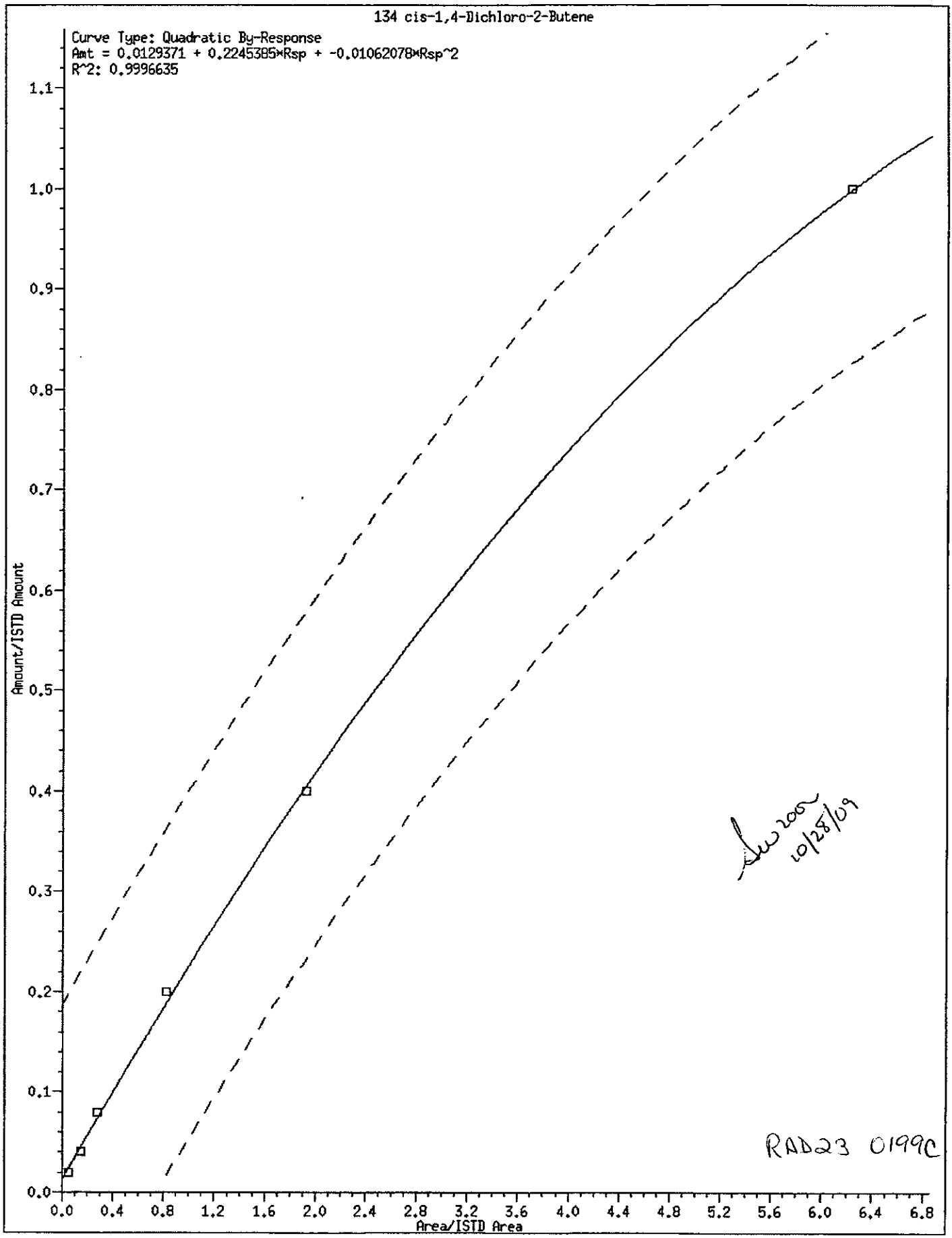
File ID:

Internal Standard Name	cc28i01.d	cc28i02.d	cc28i03.d	cc28i04.d	cc28i05.d	cc28i06.d	Avg. RT
t-Butyl Alcohol-d10	4.633	4.633	4.633	4.627	4.639	4.633	4.633
Fluorobenzene	8.089	8.095	8.089	8.089	8.089	8.089	8.090
Chlorobenzene-d5	11.448	11.448	11.448	11.449	11.448	11.449	11.448
1,4-Dichlorobenzene-d4	13.302	13.302	13.302	13.302	13.302	13.302	13.302

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

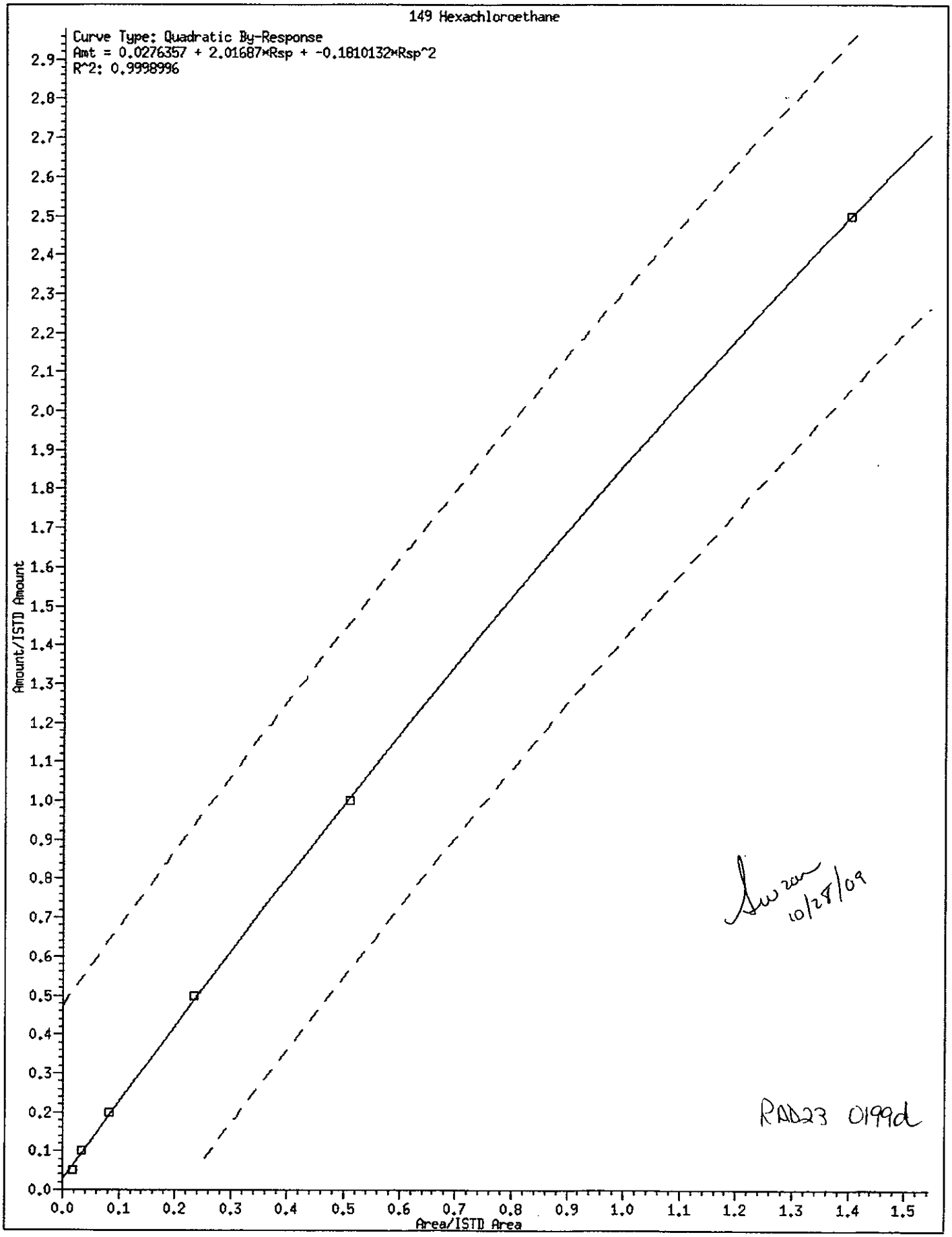
Report generated on 10/28/2009 at 21:29.

RAD23 0199b



10/28/09

RAD23 0199C



10/28/09

RAD23 0199d

INITIAL CALIBRATION VERIFICATION

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 ICV Date: 10/29/09 Time: 01:25

Lab File ID: cc28153.d Init. Calib. Date(s): 10/28/09 10/28/09

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

COMPOUND	RRF	RRF	ACTUAL CONC.	TRUE CONC.	% DRIFT
Dimethyl ether	0.3861	0.3944	5.11	5	2
Acetonitrile	1.7667	2.1302	45.22	37.5	21
Vinyl Acetate	0.2953	0.3219	13.62	12.5	9
2-Chloroethyl Vinyl Ether	0.1039	0.1226	5.90	5	18
Cyclohexanone	0.4033	0.4330	134.19	125	7
cis-1,4-Dichloro-2-Butene	4.1585	5.6543	15.46	12.5	24
Hexachloroethane	0.4430	0.4655	4.87	5	-3

Average %Drift 12

RAD23 0199e

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

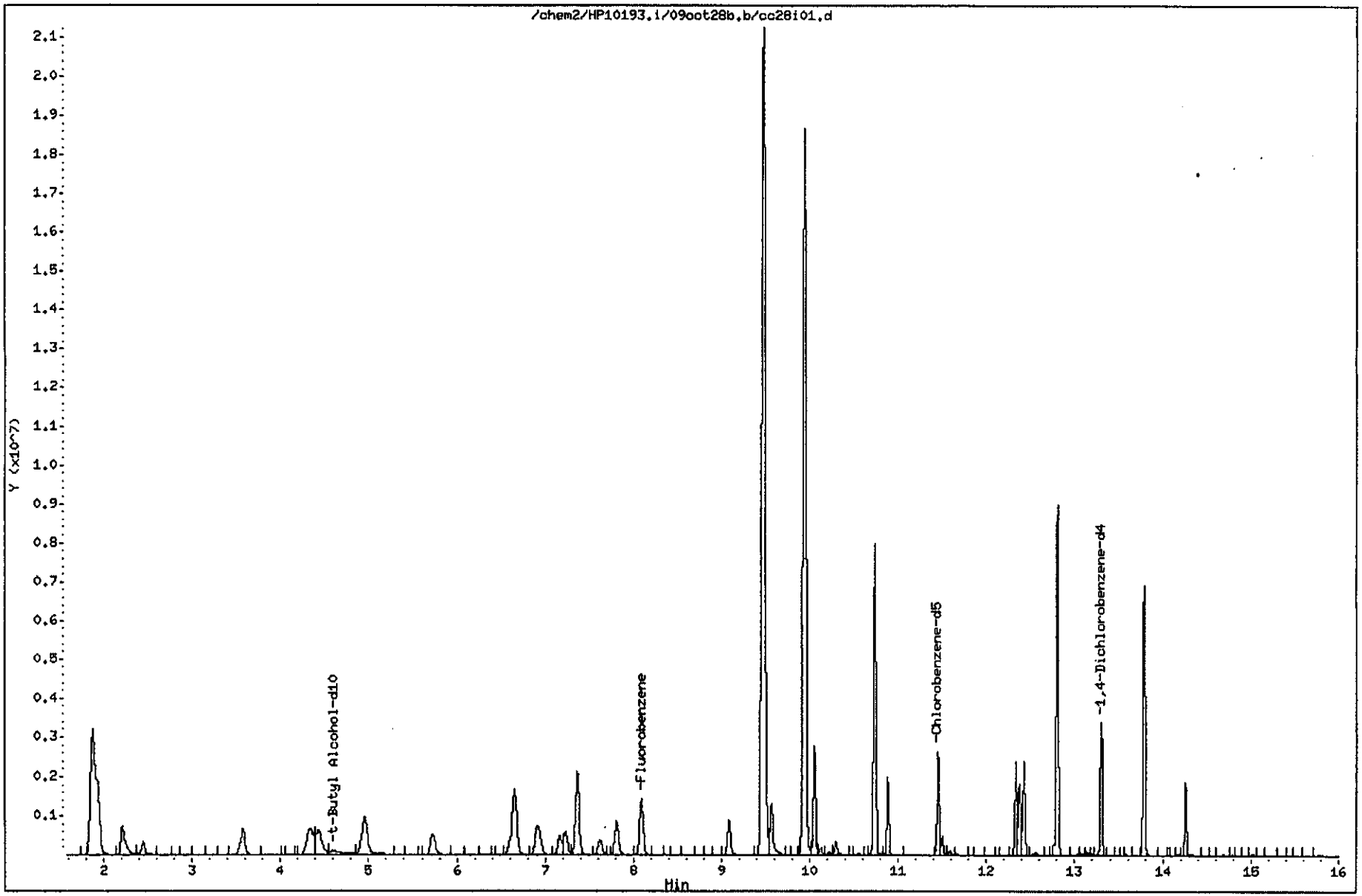
Aw 2cw 10/28/09

Data File: /chem2/HP10193.i/09oct28b.b/cc28i01.d
Date : 28-OCT-2009 18:22
Client ID: VSTD025
Sample Info: VSTD025;VSTD025;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: SEW02002
Column diameter: 0.25

RA1>23 01994



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28i01.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 18:22 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD025 Lab Sample ID: VSTD025

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.212	45	1778295	23.911
30) Acetonitrile	(4)	4.334	41	2846453	1015.002
35)*t-Butyl Alcohol-d10	(4)	4.633	65	79366	50.000
46) Vinyl Acetate	(1)	5.724	43	1625519	28.575
78)*Fluorobenzene	(1)	8.089	96	1926205	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	565328	28.248
110)*Chlorobenzene-d5	(2)	11.448	117	1461929	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.332	88	494478	49.981
122) Cyclohexanone	(4)	12.375	55	902516	1409.697
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	837028	10.000
149) Hexachloroethane	(3)	13.789	117	1173416	24.993

* = Compound is an internal standard.

RAD23 0199g

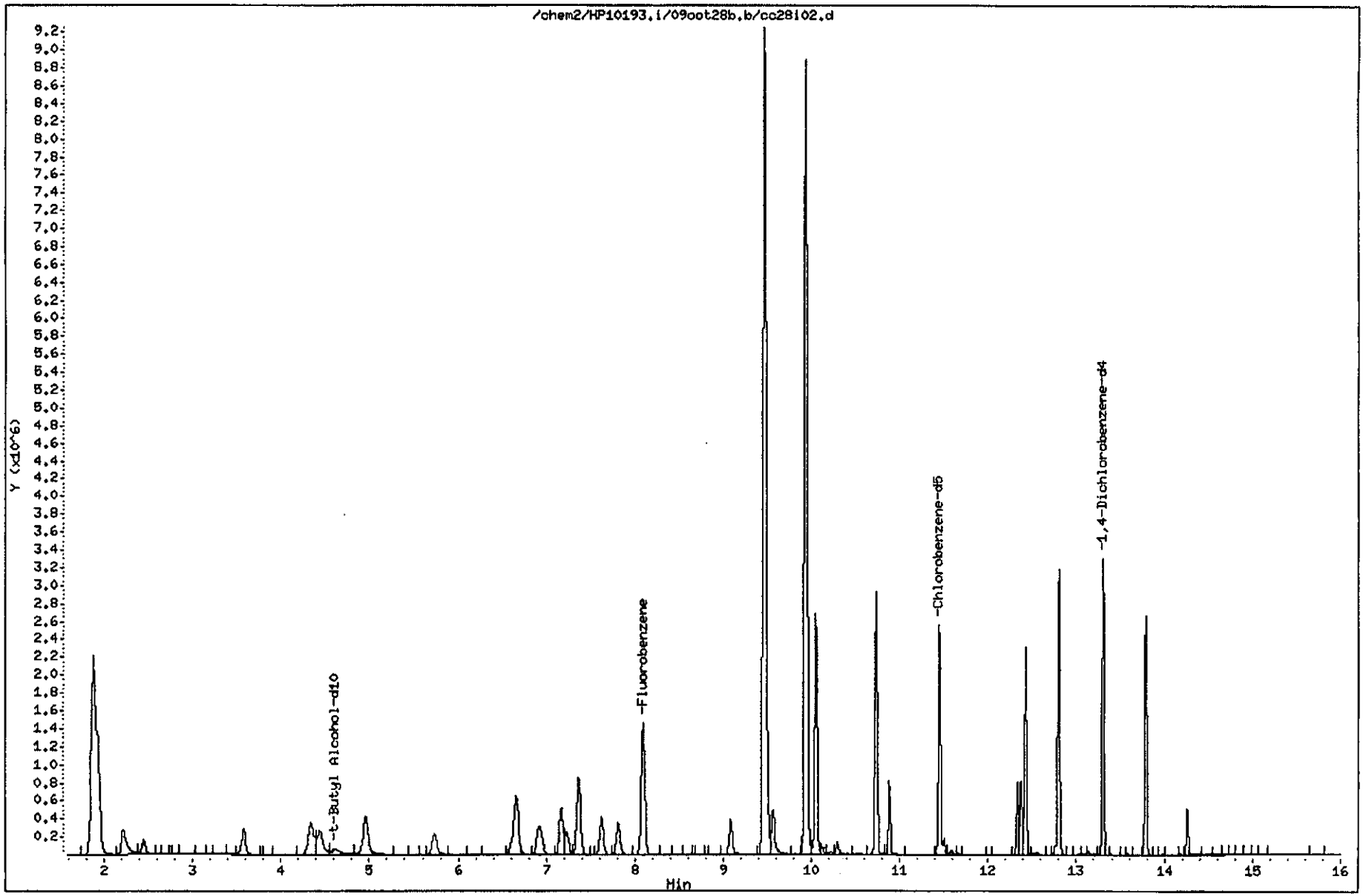
Lw 2057 10/28/09

Data File: /chem2/HP10193.i/09oct28b.b/cc28i02.d
Date : 28-OCT-2009 18:44
Client ID: VSTD010
Sample Info: VSTD010;VSTD010;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: SEW02002
Column diameter: 0.25

RAD23 0199h



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28i02.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 18:44 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD010 Lab Sample ID: VSTD010

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.212	45	741313	9.972
30) Acetonitrile	(4)	4.334	41	1171262	401.711
35)*t-Butyl Alcohol-d10	(4)	4.633	65	82516	50.000
46) Vinyl Acetate	(1)	5.736	43	661835	11.639
78)*Fluorobenzene	(1)	8.095	96	1925397	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	216625	10.829
110)*Chlorobenzene-d5	(2)	11.448	117	1430723	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.332	88	158902	20.297
122) Cyclohexanone	(4)	12.375	55	387637	582.361
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	809561	10.000
149) Hexachloroethane	(3)	13.789	117	412175	10.076

* = Compound is an internal standard.

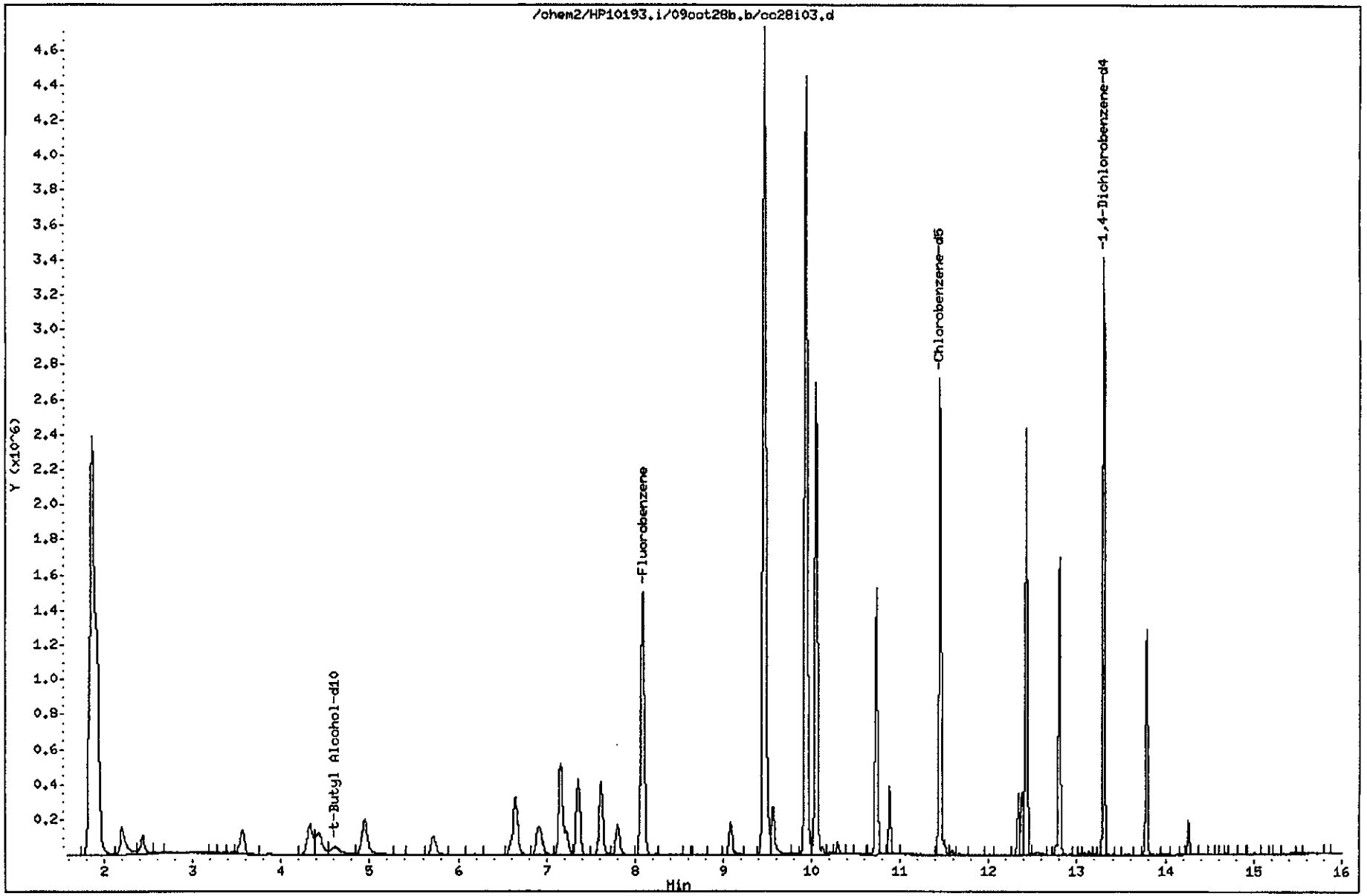
RAD23 0199

Lw 10/28/09

RAD23 0199.i

Data File: /chem2/HP10193.i/09oct28b.b/cc28i03.d
Date : 28-OCT-2009 19:05
Client ID: VSTD005
Sample Info: VSTD005;VSTD005;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: SEW02002
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28i03.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 19:05 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD005 Lab Sample ID: VSTD005

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.194	45	386616	5.012
30) Acetonitrile	(4)	4.328	41	629145	213.083
35)*t-Butyl Alcohol-d10	(4)	4.633	65	83560	50.000
46) Vinyl Acetate	(1)	5.718	43	314415	5.329
78)*Fluorobenzene	(1)	8.089	96	1997890	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	112338	5.412
110)*Chlorobenzene-d5	(2)	11.448	117	1486162	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.332	88	68332	9.473
122) Cyclohexanone	(4)	12.375	55	177721	263.661
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	836751	10.000
149) Hexachloroethane	(3)	13.789	117	195886	4.899

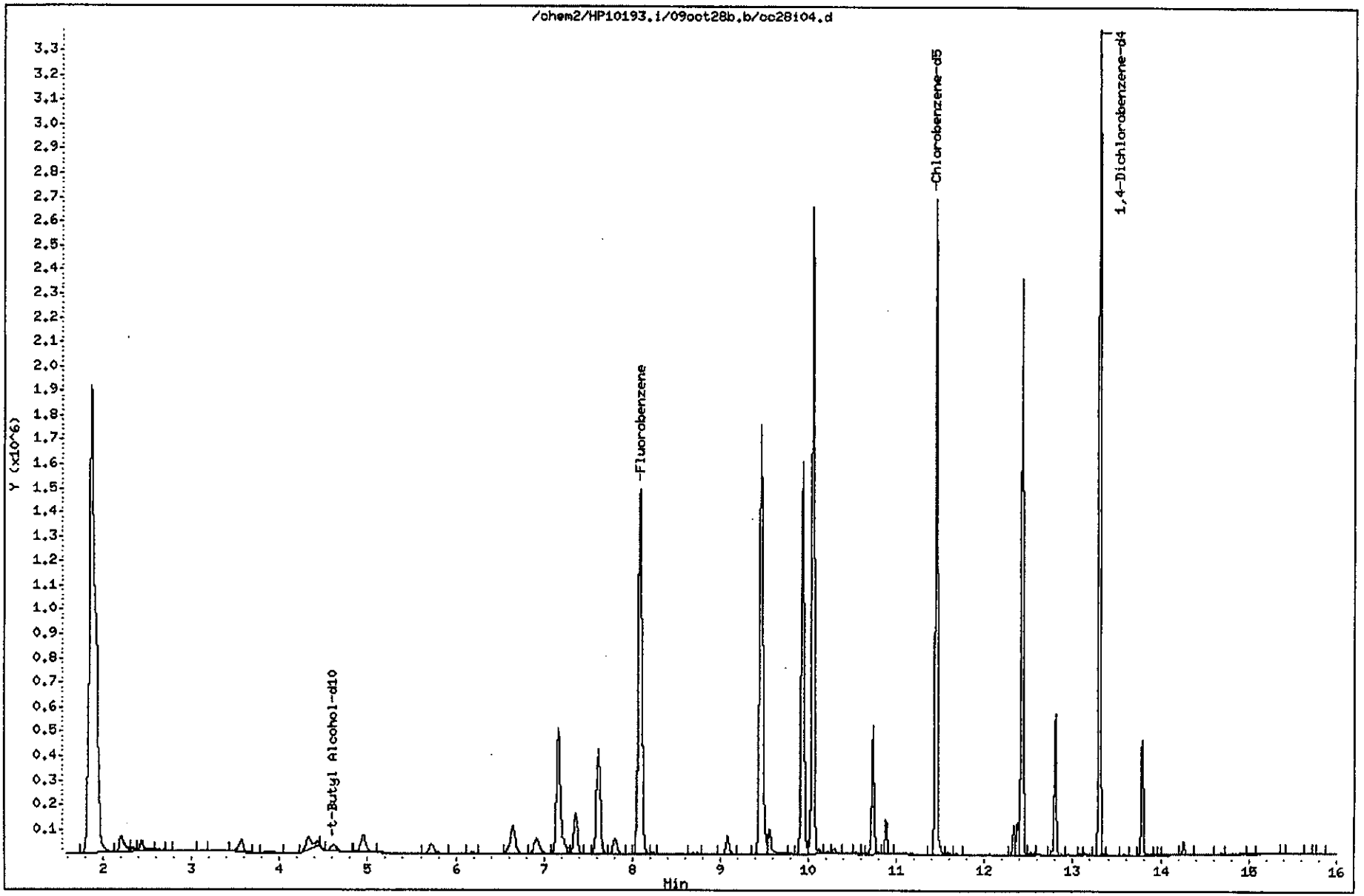
* = Compound is an internal standard.

RAD23 0199k

Data File: /chem2/HP10193.i/09oct28b.b/cc28i04.d
Date : 28-OCT-2009 19:27
Client ID: VSTD002
Sample Info: VSTD002;VSTD002;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: SEW02002
Column diameter: 0.25

RAD23 01991



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28i04.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 19:27 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD002 Lab Sample ID: VSTD002

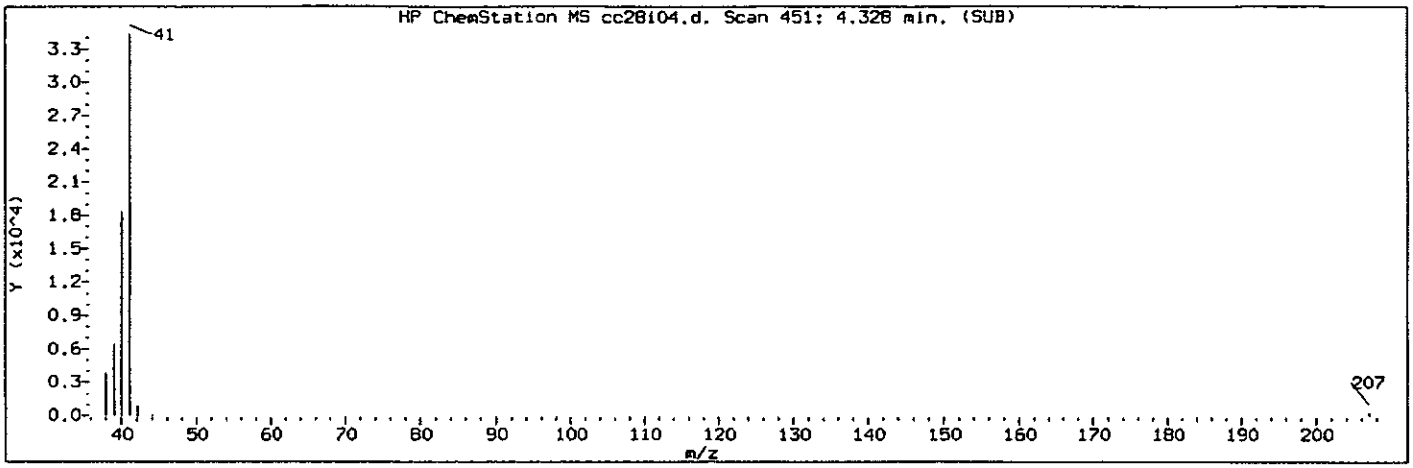
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.206	45	151790	1.974
30) Acetonitrile	(4)	4.328	41	242337M	83.727
35)*t-Butyl Alcohol-d10	(4)	4.627	65	81913	50.000
46) Vinyl Acetate	(1)	5.718	43	112388	1.911
78)*Fluorobenzene	(1)	8.089	96	1991875	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	39986	1.932
110)*Chlorobenzene-d5	(2)	11.449	117	1466685	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.332	88	22679	3.715
122) Cyclohexanone	(4)	12.375	55	65122	98.555
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	822939	10.000
149) Hexachloroethane	(3)	13.790	117	67407	1.916

M = Compound was manually integrated.

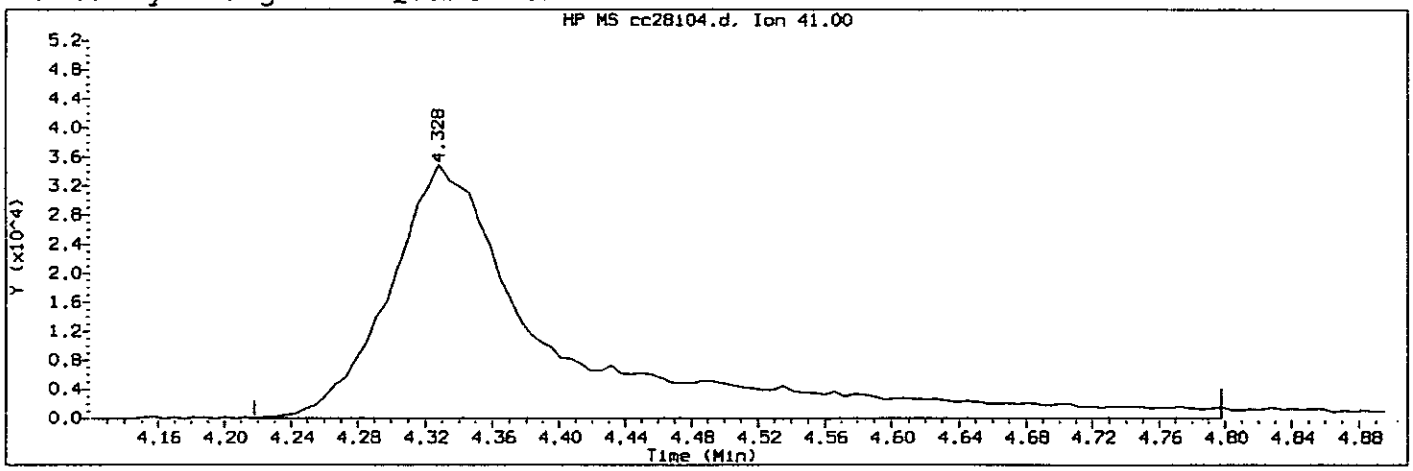
* = Compound is an internal standard.

RAD23 0199m

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i04.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 19:27 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:28
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number : 30
Compound Name : Acetonitrile
Scan Number : 451
Retention Time (minutes): 4.328
Quant Ion : 41
Area (flag) : 242337 M
Concentration (ug/L) : 83.7268
Integration start scan : 432 Integration stop scan: 527
Y at integration start : 0 Y at integration end: 0

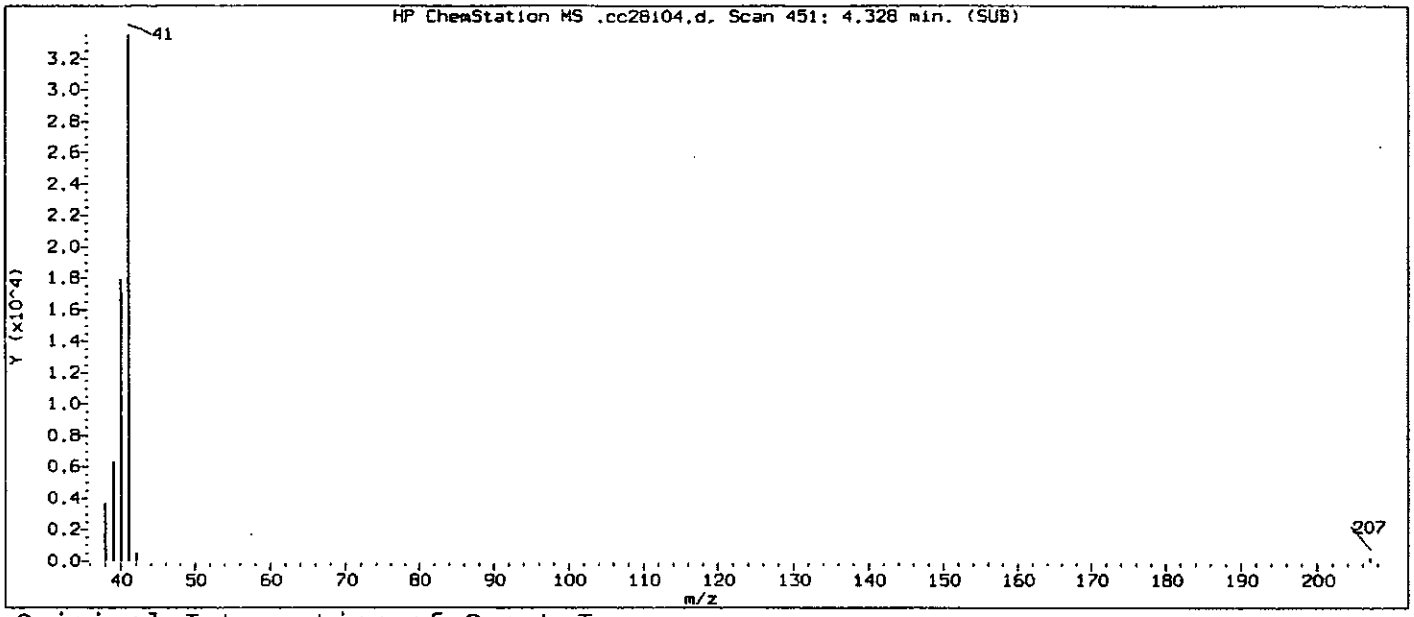
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: [signature] 10/28/09

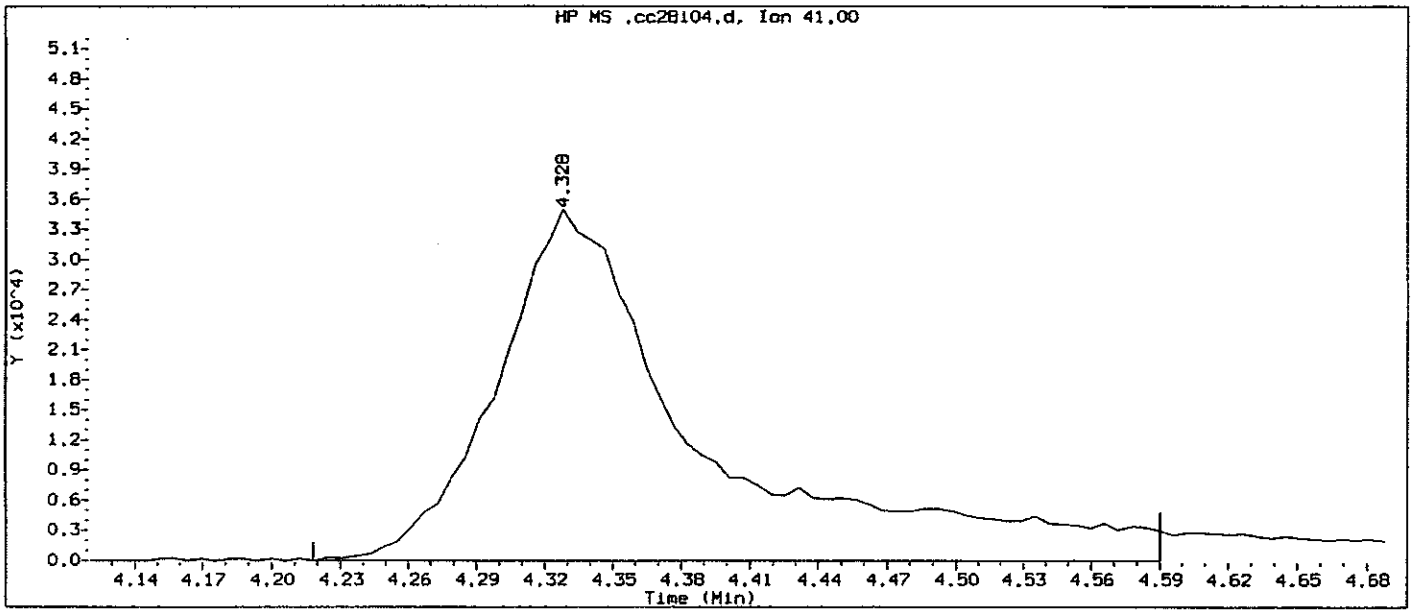
GC/MS audit/management approval: [signature] 10-29-09 RAD23 0199h

Manual Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i04.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i04.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 19:27 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 19:46
Date, time and analyst ID of latest file update: 28-Oct-2009 19:46 Automation

Sample Name: VSTD002 Lab Sample ID: VSTD002

Compound Number	: 30
Compound Name	: Acetonitrile
Scan Number	: 451
Retention Time (minutes)	: 4.328
Quant Ion	: 41
Area	: 217388
Concentration (ug/L)	: 74.6673
Integration start scan	: 432 Integration stop scan: 493
Y at integration start	: 0 Y at integration end: 0

RAD23 01990

Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i04.d, generated on 10/28/2009 at 21:28

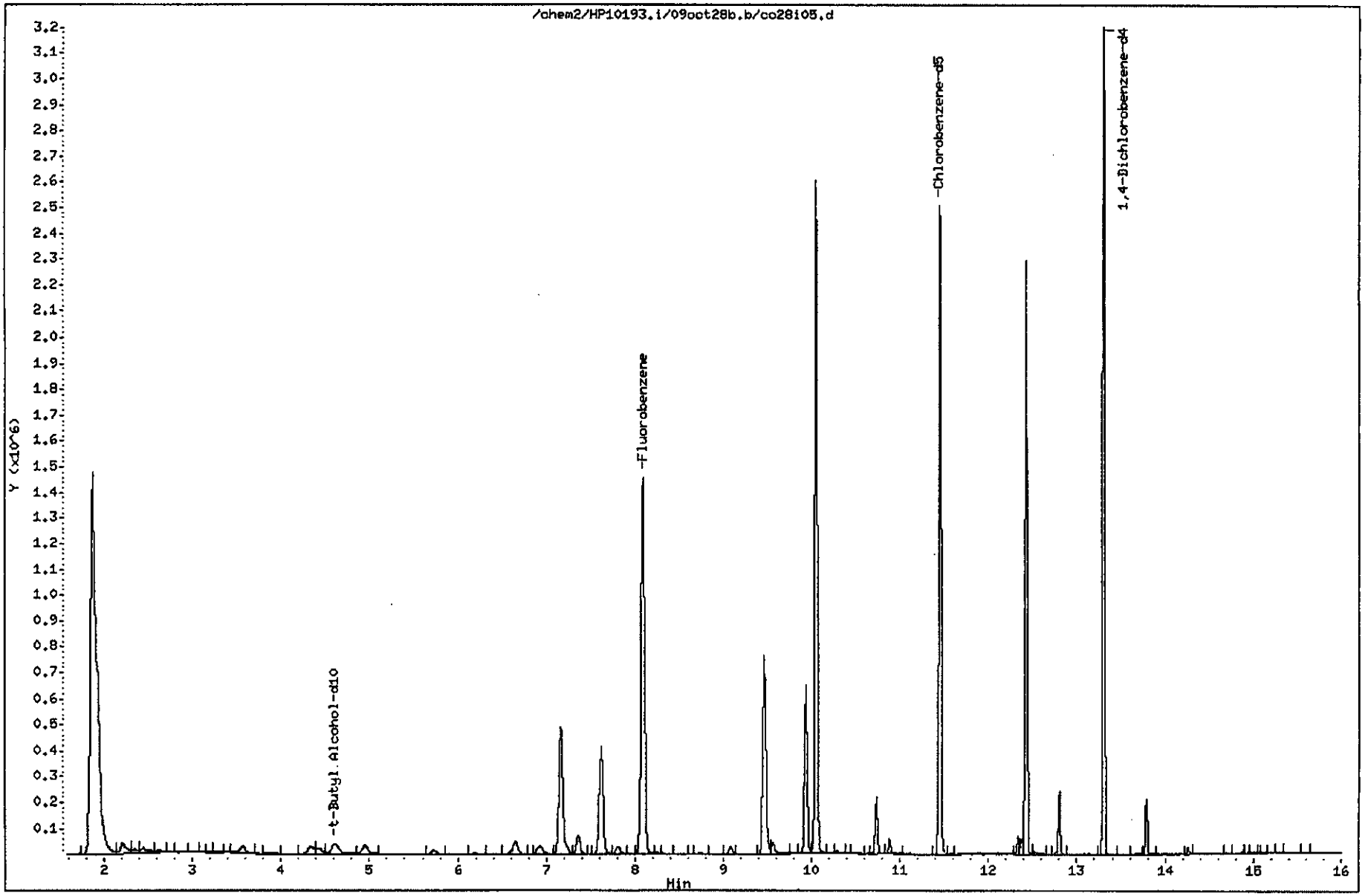
Lwren 10/28/09

Data File: /chem2/HP10193.i/09oct28b.b/co28i05.d
Date : 28-OCT-2009 20:34
Client ID: VSTD001
Sample Info: VSTD001;VSTD001;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: SEW02002
Column diameter: 0.25

RAD23 01990



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

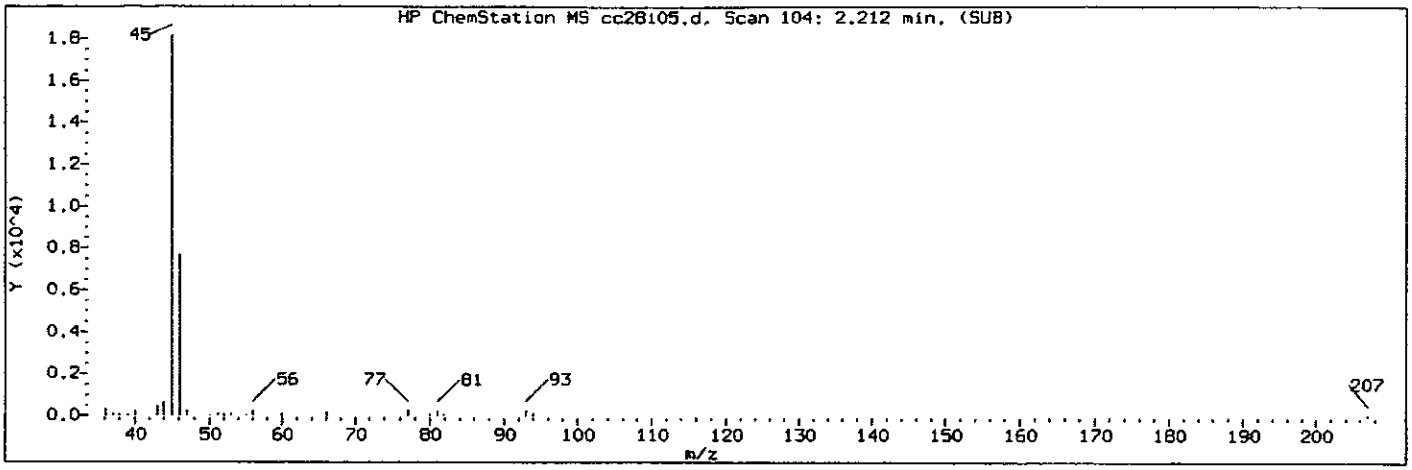
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.212	45	68838M	0.936
30) Acetonitrile	(4)	4.334	41	105135	35.689
35)*t-Butyl Alcohol-d10	(4)	4.639	65	83370M	50.000
46) Vinyl Acetate	(1)	5.730	43	45498	0.809
78)*Fluorobenzene	(1)	8.089	96	1904753	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	17633	0.891
110)*Chlorobenzene-d5	(2)	11.448	117	1399981	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.339	88	12274	2.288
122) Cyclohexanone	(4)	12.369	55	27783M	41.312
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	792599	10.000
149) Hexachloroethane	(3)	13.789	117	27478	0.973

M = Compound was manually integrated.

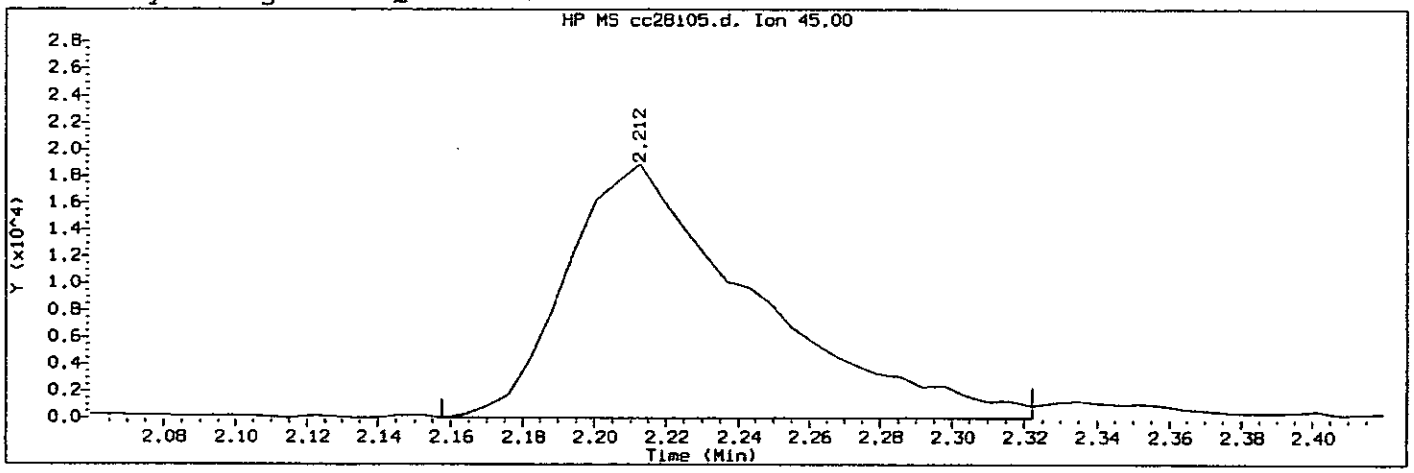
* = Compound is an internal standard.

RAD23 01999

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:28
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 104
Retention Time (minutes): 2.212
Quant Ion : 45
Area (flag) : 68838 M
Concentration (ug/L) : 0.9360
Integration start scan : 94 Integration stop scan: 121
Y at integration start : 0 Y at integration end: 0

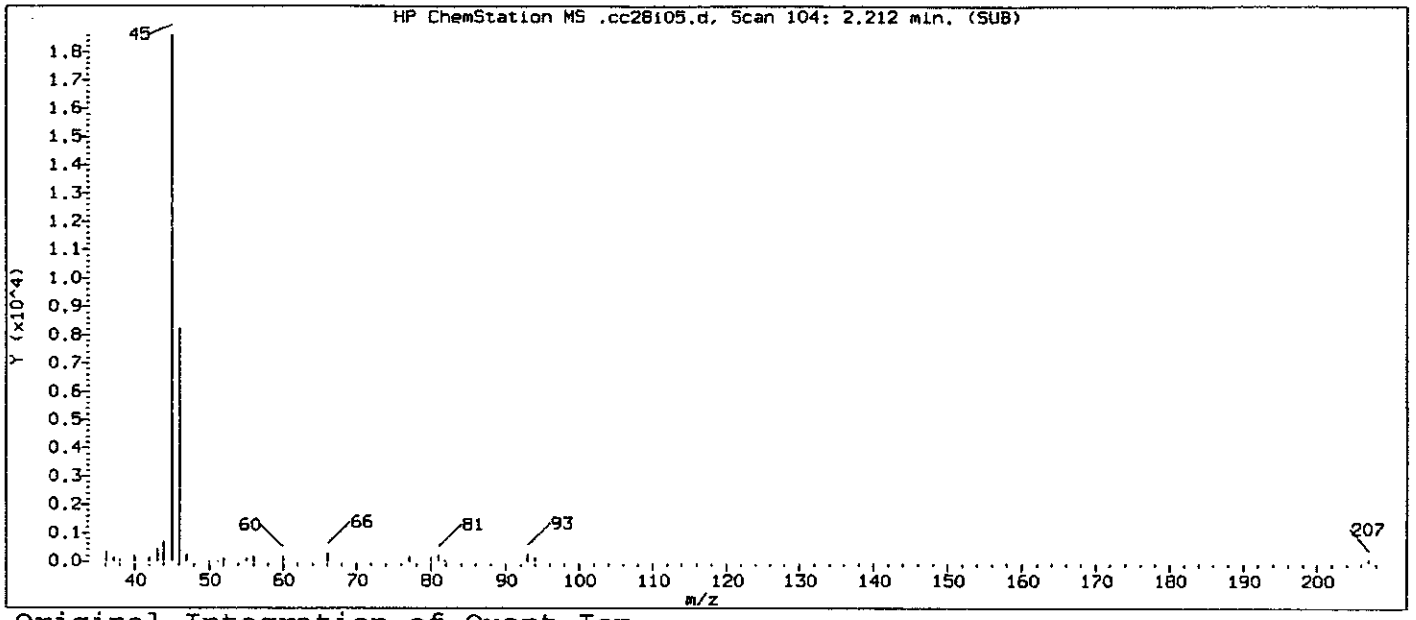
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: [signature] 10/30/09

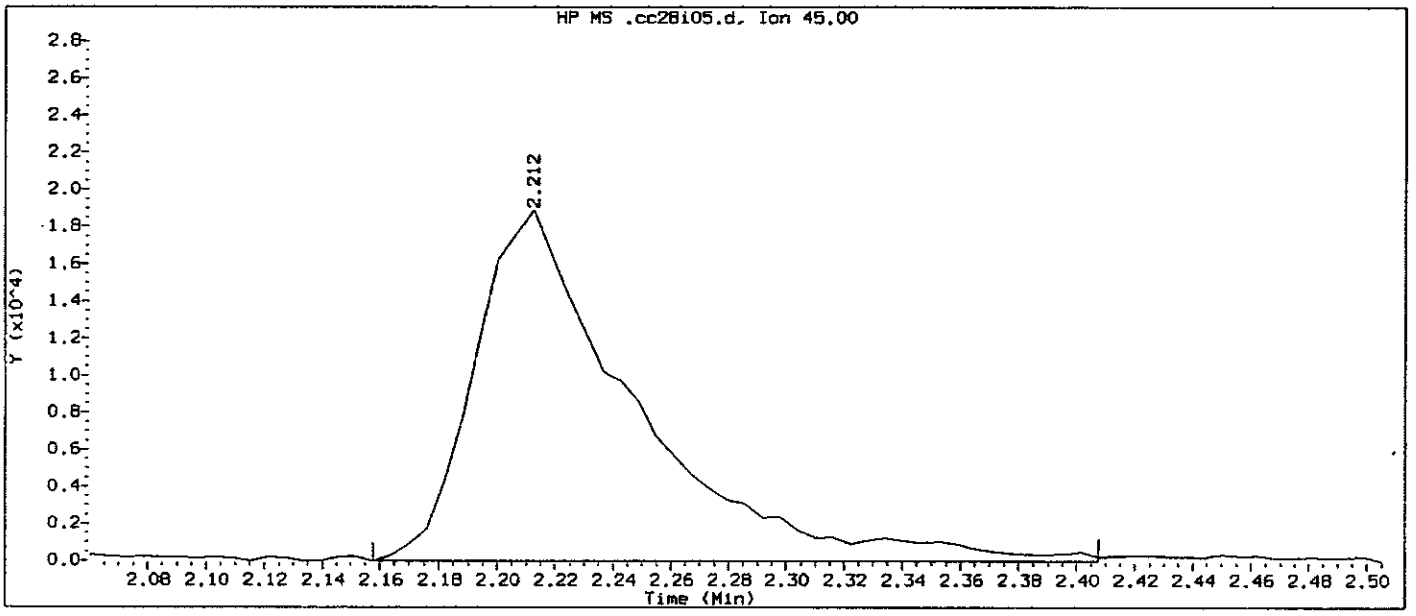
GC/MS audit/management approval: [signature] 10-29-09 RAD23 0199r

Manual Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i05.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 20:52
Date, time and analyst ID of latest file update: 28-Oct-2009 20:52 Automation

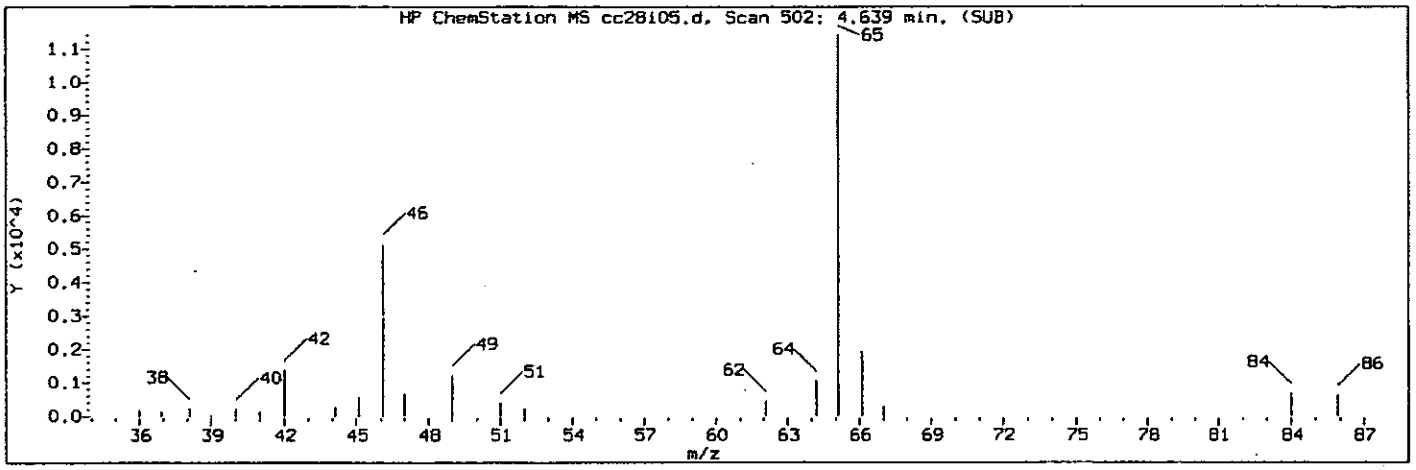
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 4
Compound Name	: Dimethyl ether
Scan Number	: 104
Retention Time (minutes)	: 2.212
Quant Ion	: 45
Area	: 72403
Concentration (ug/L)	: 0.9990
Integration start scan	: 94 Integration stop scan: 135
Y at integration start	: 0 Y at integration end: 0

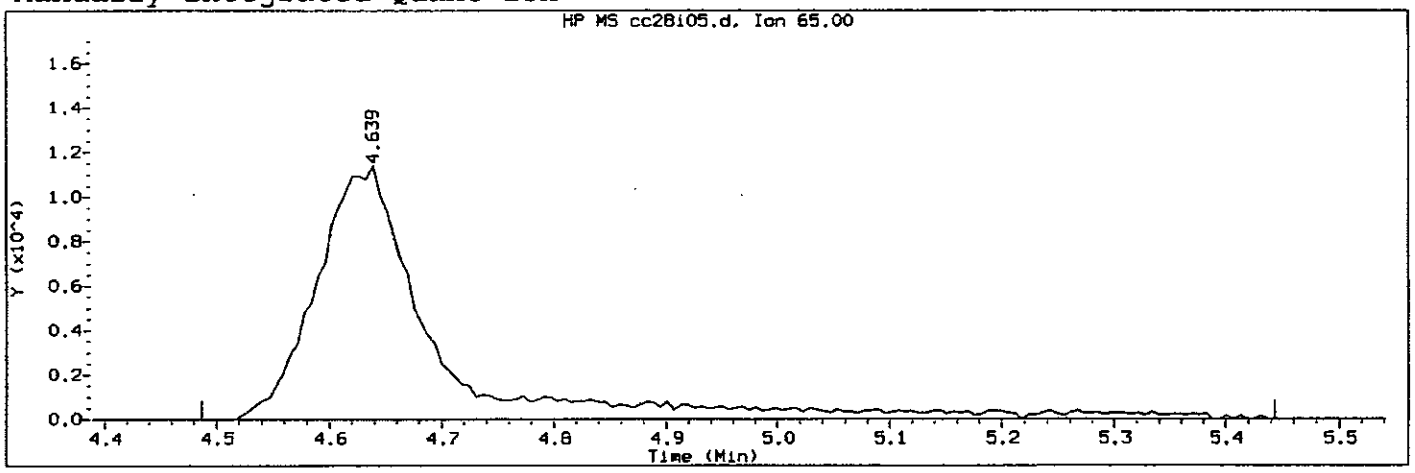
RAD23 0199S

Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i05.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:28
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

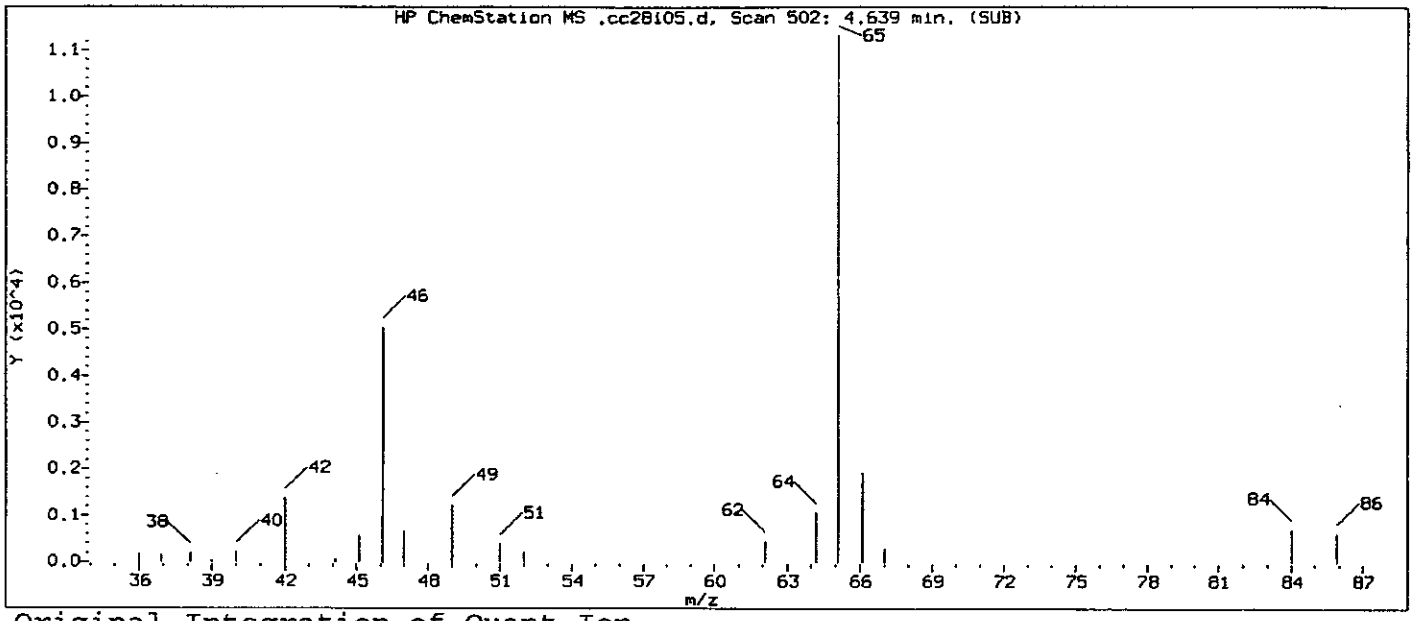
Compound Number : 35
Compound Name : t-Butyl Alcohol-d10
Scan Number : 502
Retention Time (minutes): 4.639
Quant Ion : 65
Area (flag) : 83370 M
Concentration (ug/L) : 50.0000
Integration start scan : 476 Integration stop scan: 633
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

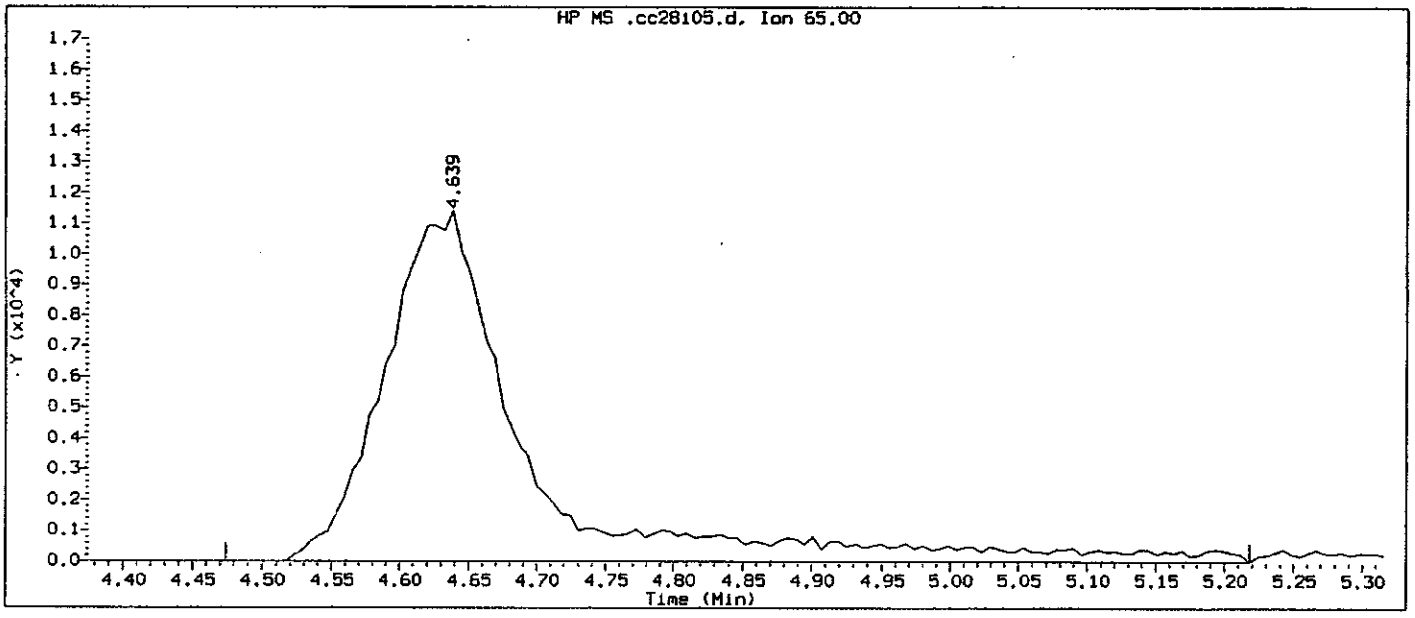
Analyst responsible for change: [signature] 10/28/09

GC/MS audit/management approval: [signature] 10-29-09 RAD23 0194

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 20:52
Date, time and analyst ID of latest file update: 28-Oct-2009 20:52 Automation

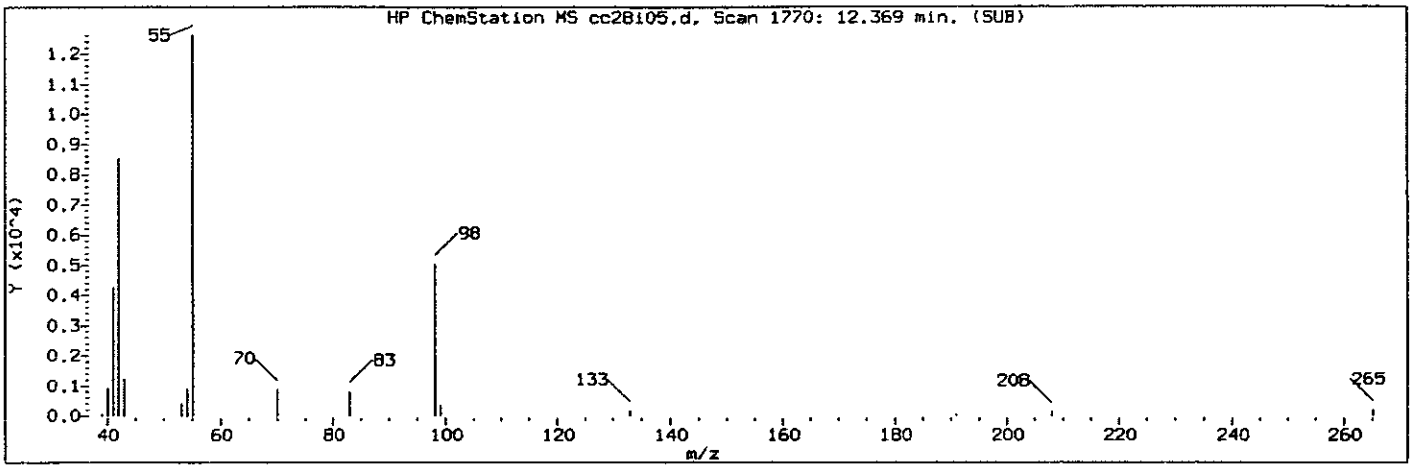
Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 35
Compound Name	: t-Butyl Alcohol-d10
Scan Number	: 502
Retention Time (minutes)	: 4.639
Quant Ion	: 65
Area	: 80727
Concentration (ug/L)	: 50.0000
Integration start scan	: 474 Integration stop scan: 596
Y at integration start	: 0 Y at integration end: 0

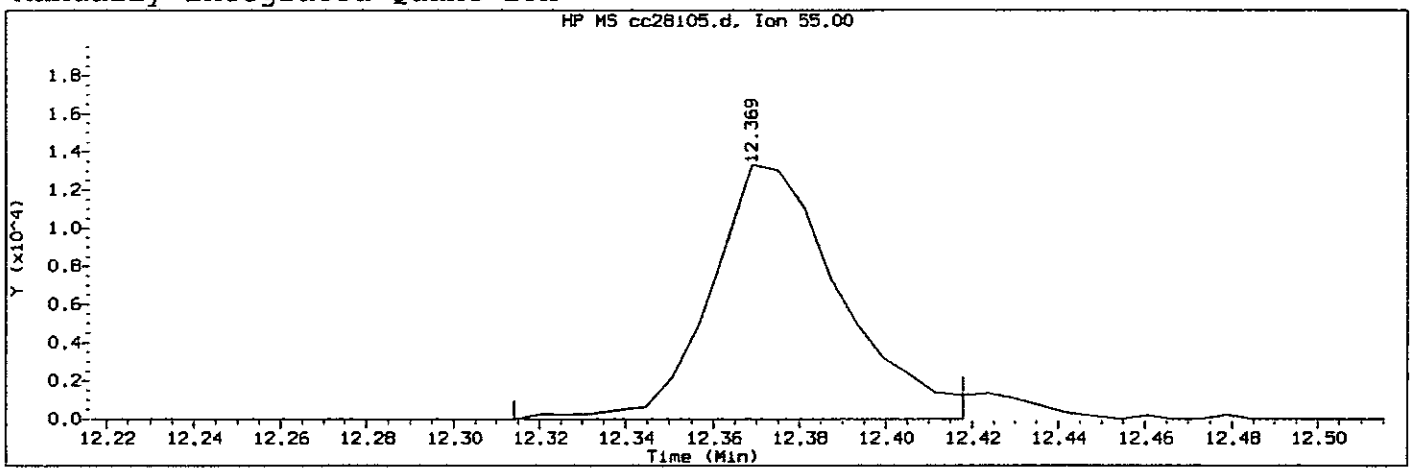
RAD23 0199u

Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i05.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:28
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number : 122
Compound Name : Cyclohexanone
Scan Number : 1770
Retention Time (minutes): 12.369
Quant Ion : 55
Area (flag) : 27783 M
Concentration (ug/L) : 41.3119
Integration start scan : 1760 Integration stop scan: 1777
Y at integration start : 0 Y at integration end: 0

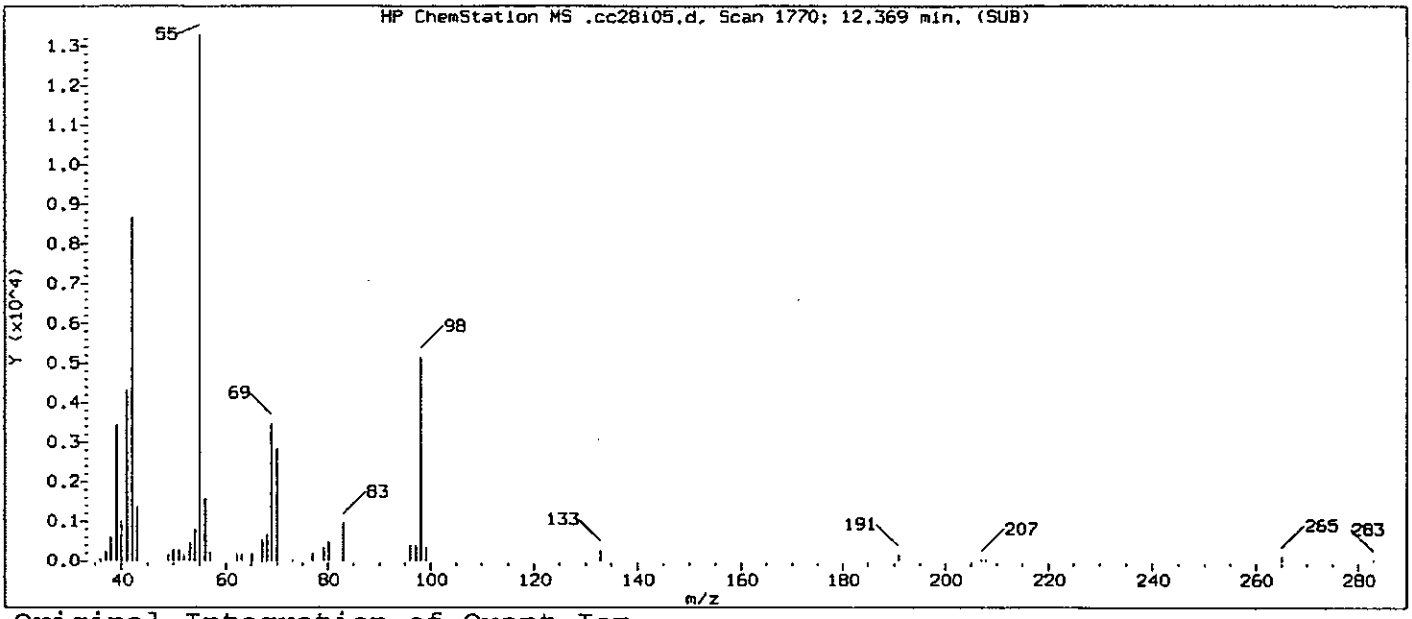
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: SEW 10/28/09

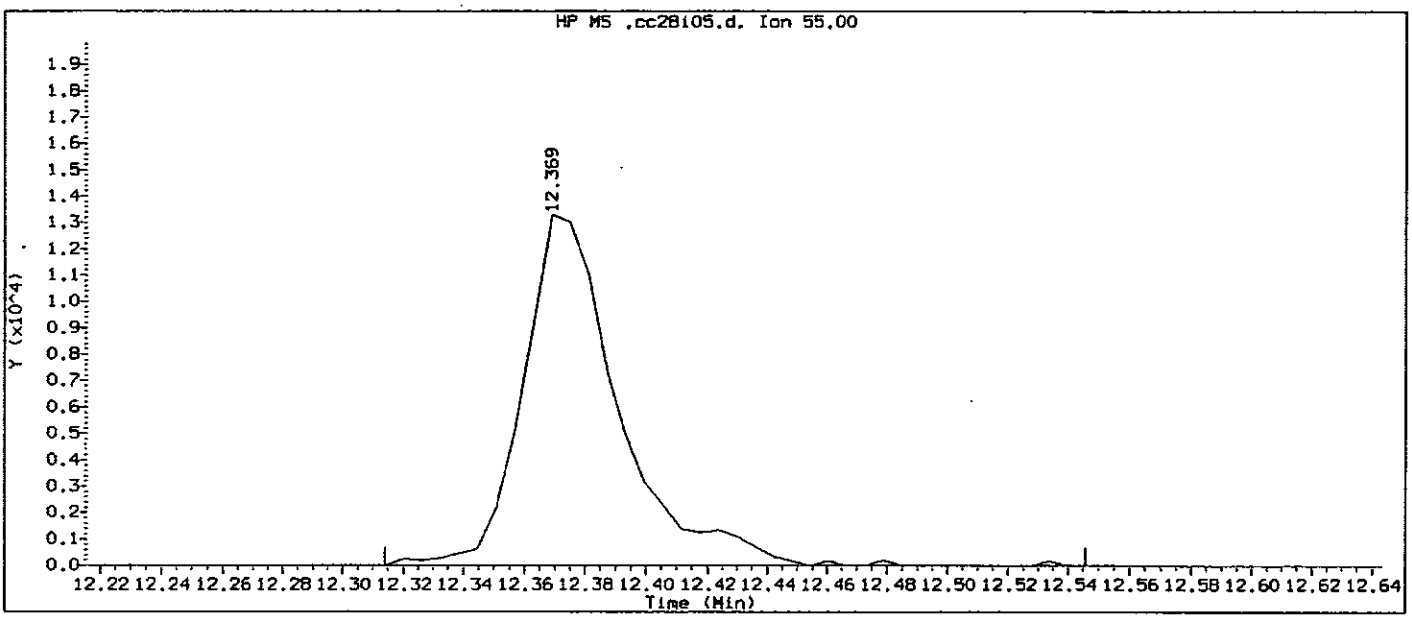
GC/MS audit/management approval: 10-29-09 RAD23 0199v

Manual Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i05.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i05.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:34 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 20:52
Date, time and analyst ID of latest file update: 28-Oct-2009 20:52 Automation

Sample Name: VSTD001 Lab Sample ID: VSTD001

Compound Number	: 122
Compound Name	: Cyclohexanone
Scan Number	: 1770
Retention Time (minutes)	: 12.369
Quant Ion	: 55
Area	: 29326
Concentration (ug/L)	: 43.0256
Integration start scan	: 1760 Integration stop scan: 1798
Y at integration start	: 0 Y at integration end: 0

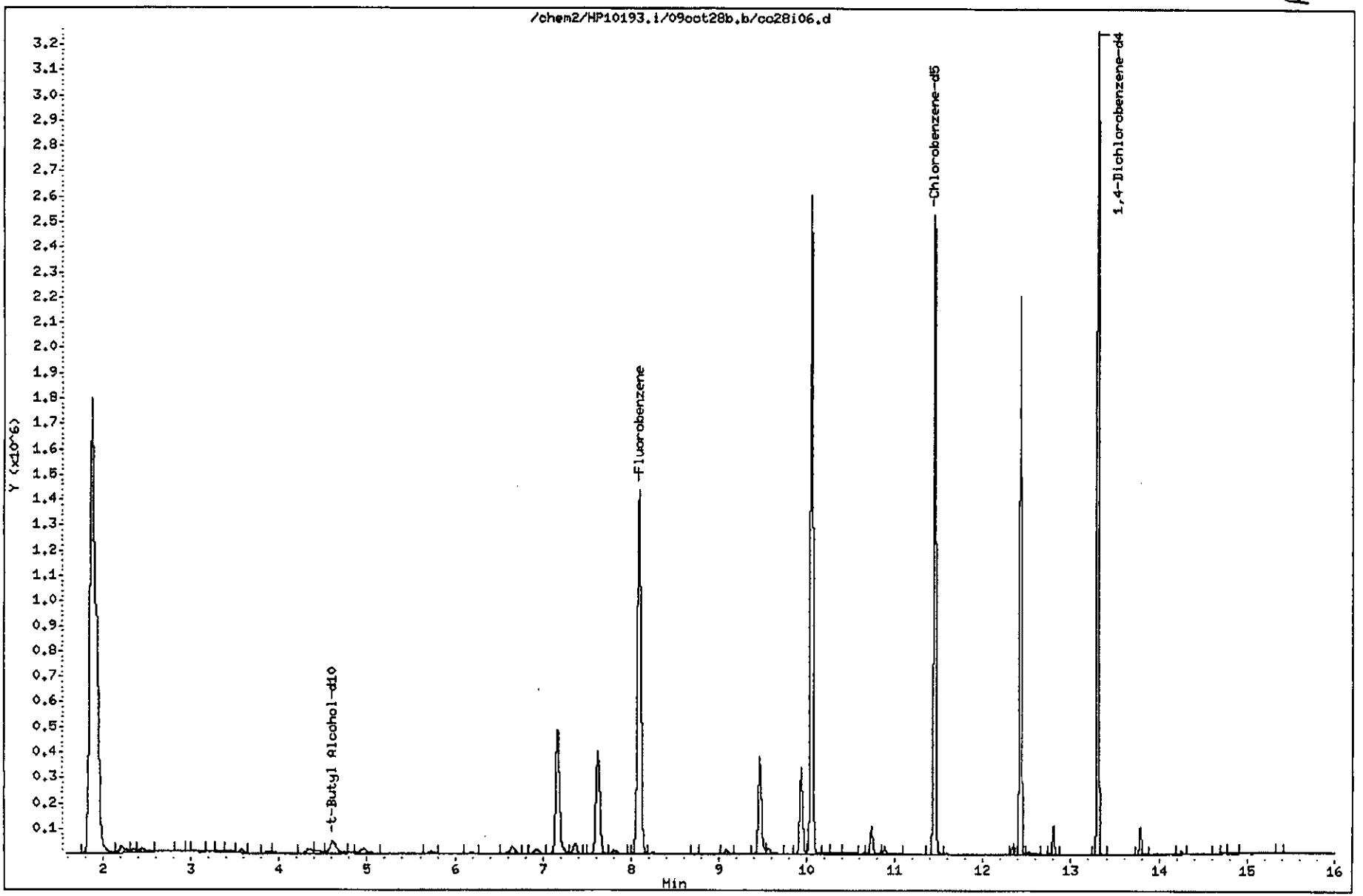
RAD23 0199W

Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i05.d, generated on 10/28/2009 at 21:28

Data File: /chem2/HP10193.i/09oct28b.b/co28i06.d
Date : 28-OCT-2009 20:56
Client ID: VSTD0.5
Sample Info: VSTD0.5;VSTD0.5;1;1;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: SEW02002
Column diameter: 0.25

RAD23 0199X



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28i06.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:56 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

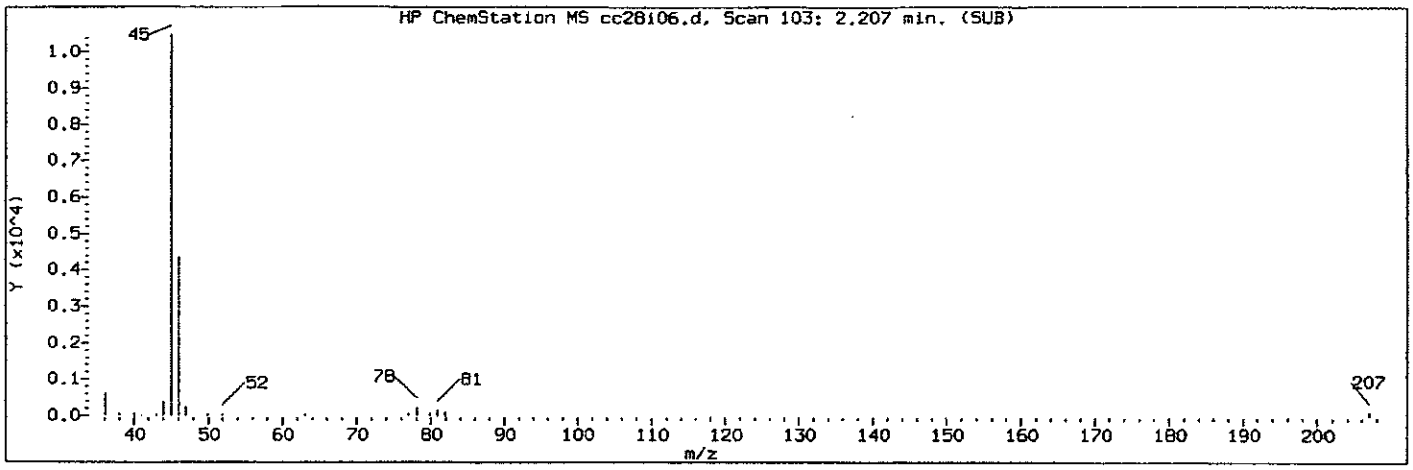
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.207	45	41330M	0.561
30) Acetonitrile	(4)	4.346	41	52906	19.530
35)*t-Butyl Alcohol-d10	(4)	4.633	65	76666	50.000
46) Vinyl Acetate	(1)	5.724	43	24344	0.432
78)*Fluorobenzene	(1)	8.089	96	1909696	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	8411	0.424
110)*Chlorobenzene-d5	(2)	11.449	117	1406212	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.333	88	4103	1.246
122) Cyclohexanone	(4)	12.369	55	13004M	21.027
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	787281	10.000
149) Hexachloroethane	(3)	13.790	117	14329	0.643

M = Compound was manually integrated.

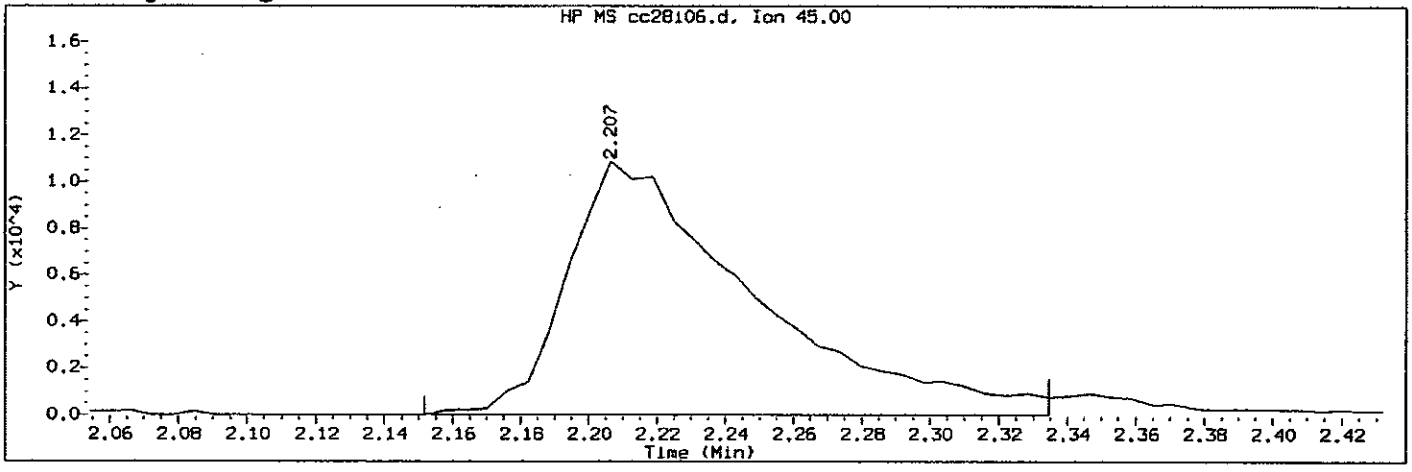
* = Compound is an internal standard.

RAD23 0199y

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i06.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:56 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:28
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 4
Compound Name : Dimethyl ether
Scan Number : 103
Retention Time (minutes): 2.207
Quant Ion : 45
Area (flag) : 41330 M
Concentration (ug/L) : 0.5605
Integration start scan : 93 Integration stop scan: 123
Y at integration start : 0 Y at integration end: 0

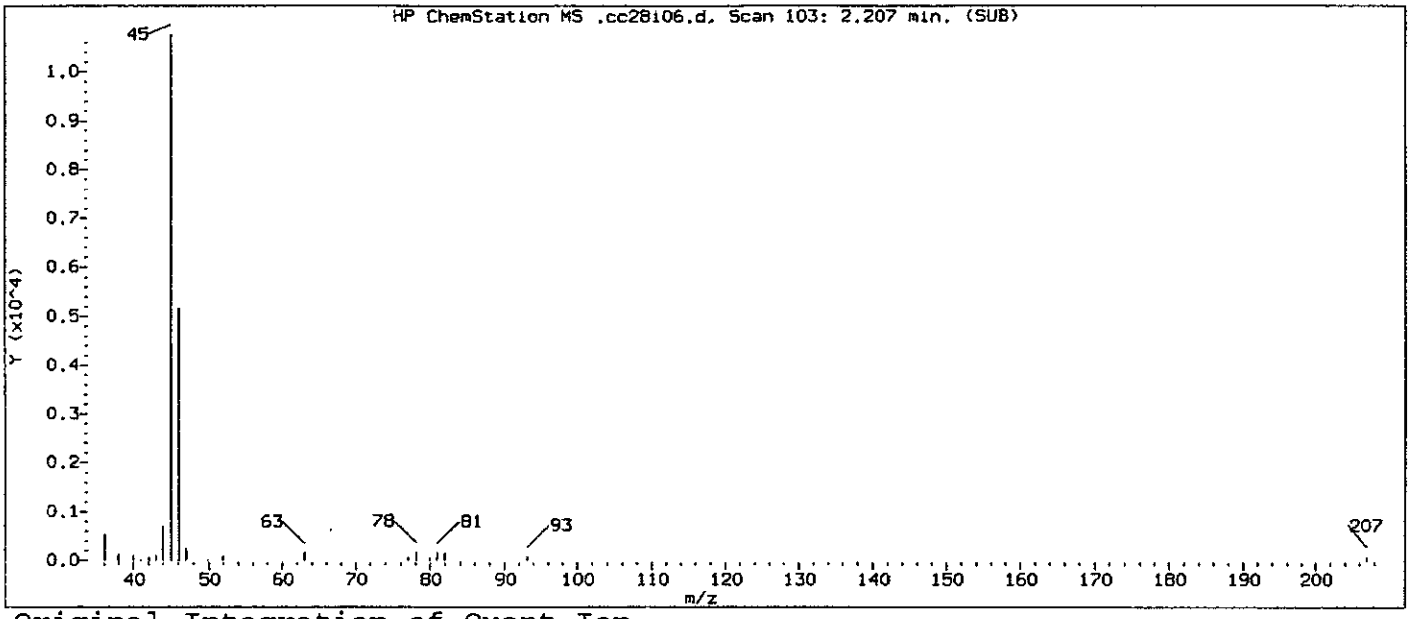
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: Sew 10/28/09

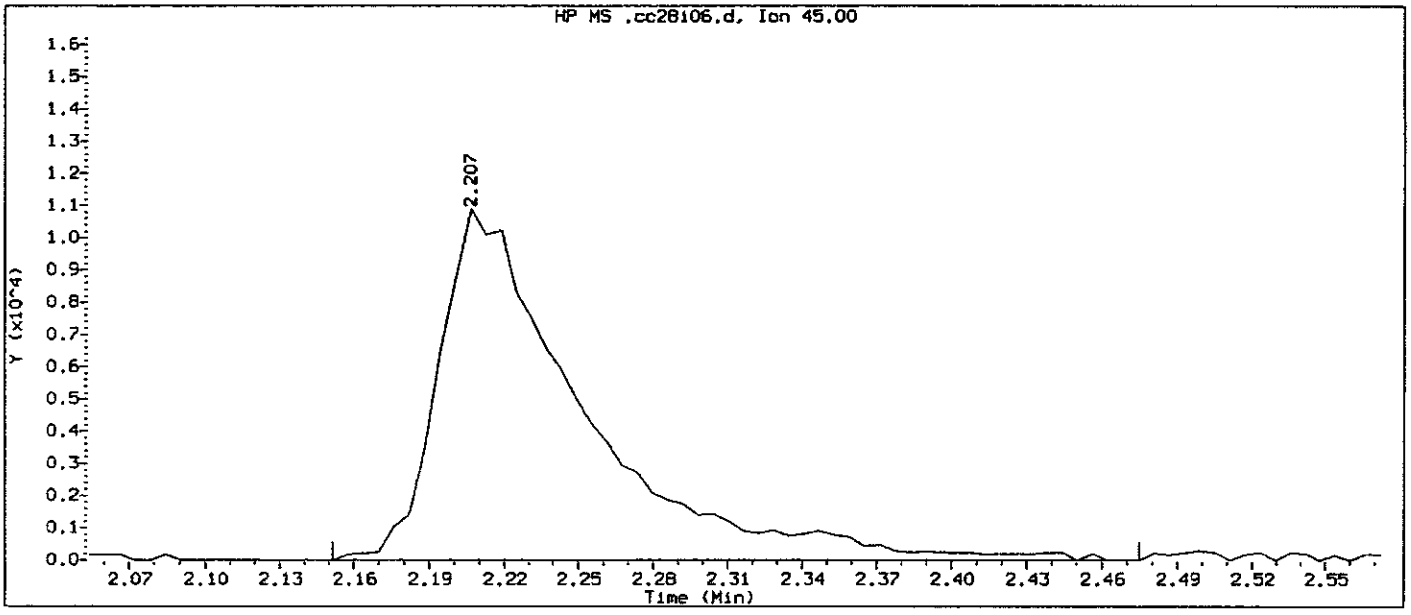
GC/MS audit/management approval: 10-29-09 RAD23 0199z

Manual Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i06.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i06.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:56 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:14
Date, time and analyst ID of latest file update: 28-Oct-2009 21:14 Automation

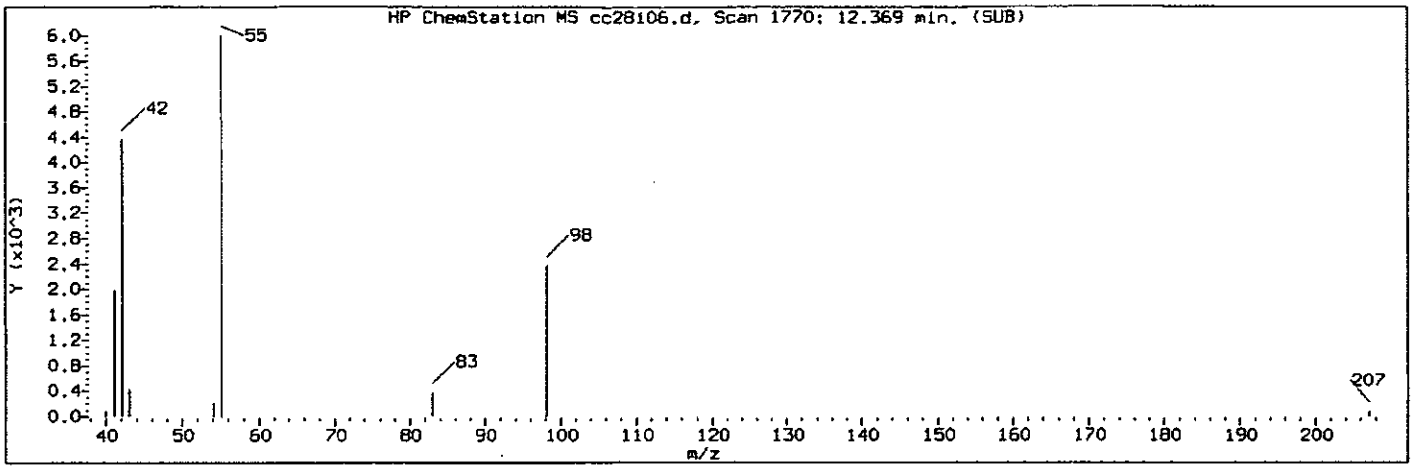
Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number	: 4
Compound Name	: Dimethyl ether
Scan Number	: 103
Retention Time (minutes)	: 2.207
Quant Ion	: 45
Area	: 43885
Concentration (ug/L)	: 0.5884
Integration start scan	: 93 Integration stop scan: 146
Y at integration start	: 0 Y at integration end: 0

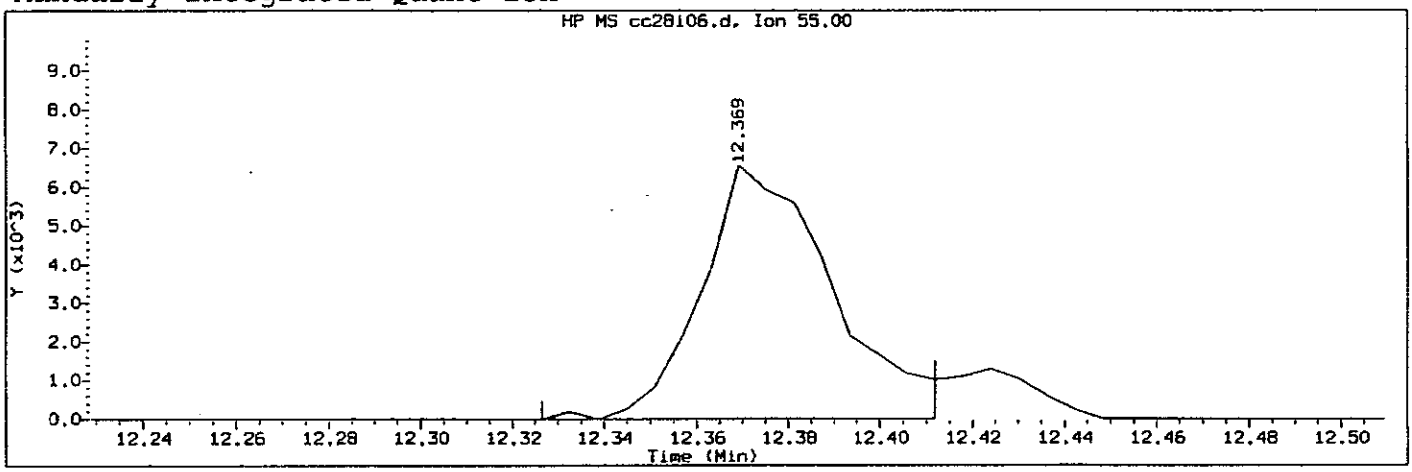
RAD23 0199aa

Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i06.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i06.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:56 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:28
Date, time and analyst ID of latest file update: 28-Oct-2009 21:28 sew02002

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 122
Compound Name : Cyclohexanone
Scan Number : 1770
Retention Time (minutes): 12.369
Quant Ion : 55
Area (flag) : 13004 M
Concentration (ug/L) : 21.0271
Integration start scan : 1762 Integration stop scan: 1776
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

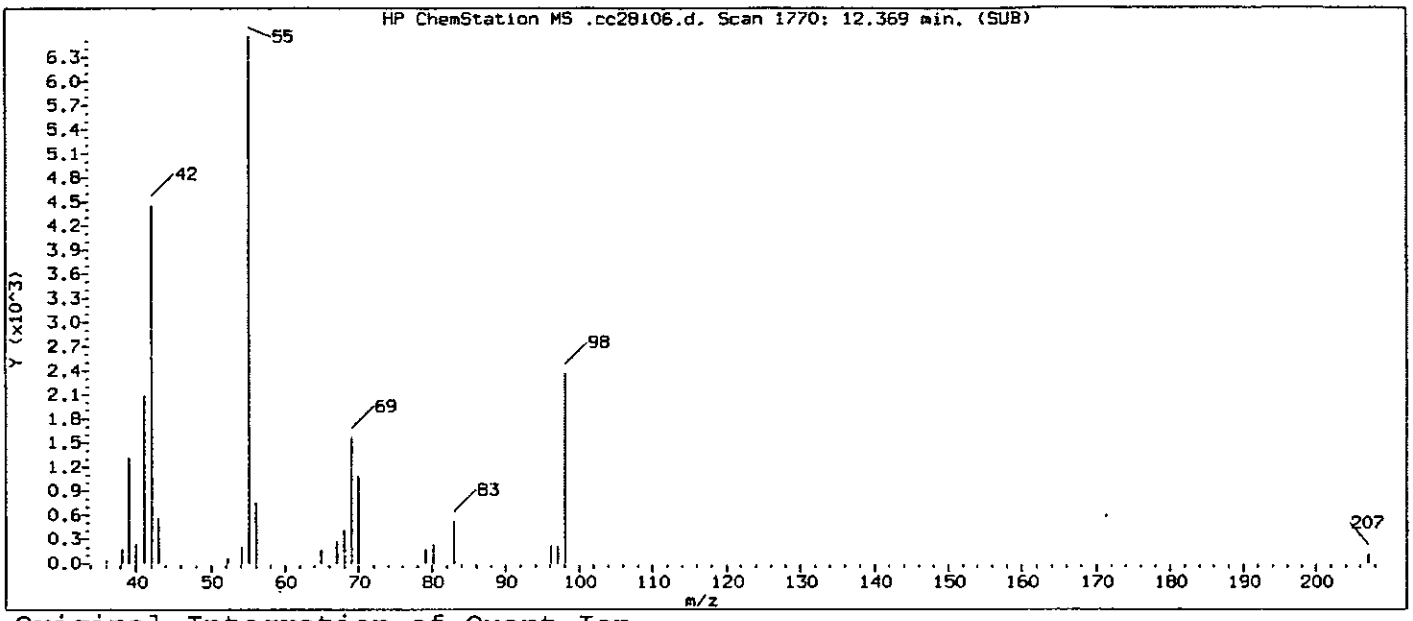
Analyst responsible for change: sew 10/28/09

GC/MS audit/management approval: 10-29-09

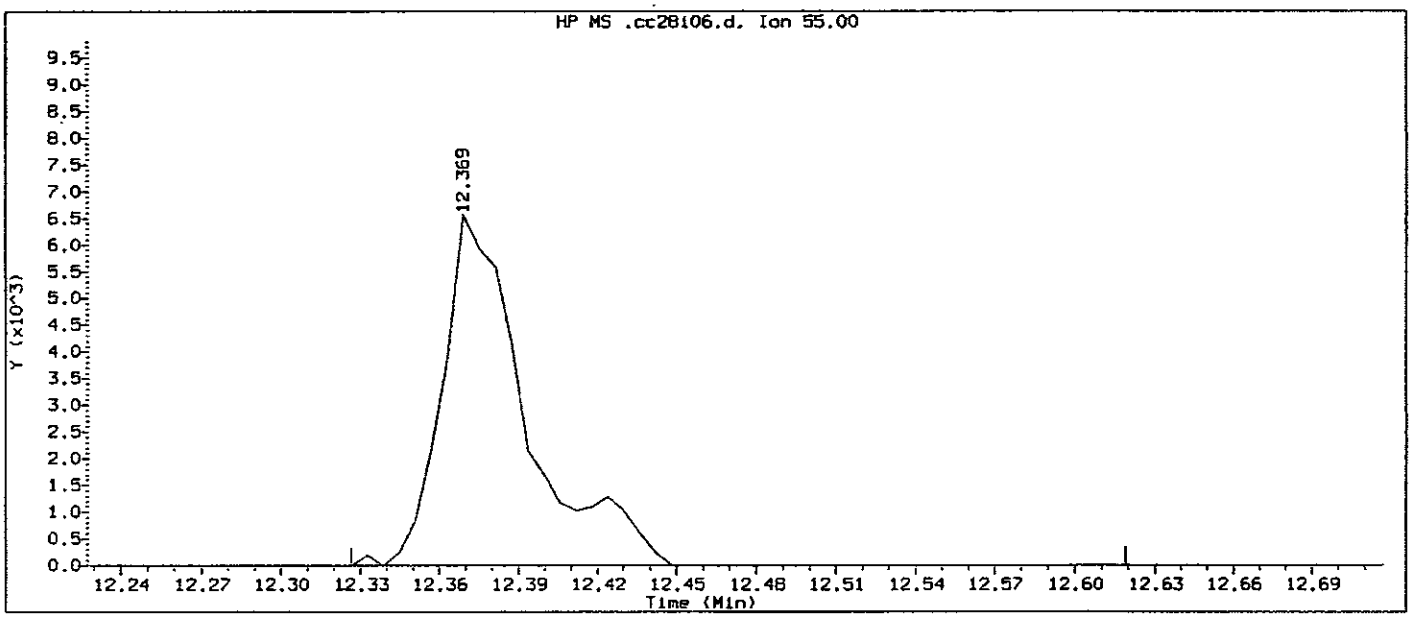
RAD23 019966

Manual Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i06.d, generated on 10/28/2009 at 21:28

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28i06.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 20:56 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:14
Date, time and analyst ID of latest file update: 28-Oct-2009 21:14 Automation

Sample Name: VSTD0.5 Lab Sample ID: VSTD0.5

Compound Number : 122
Compound Name : Cyclohexanone
Scan Number : 1770
Retention Time (minutes): 12.369
Quant Ion : 55
Area : 14561
Concentration (ug/L) : 23.1564
Integration start scan : 1762 Integration stop scan: 1810
Y at integration start : 0 Y at integration end: 0

RAD23 0199cc

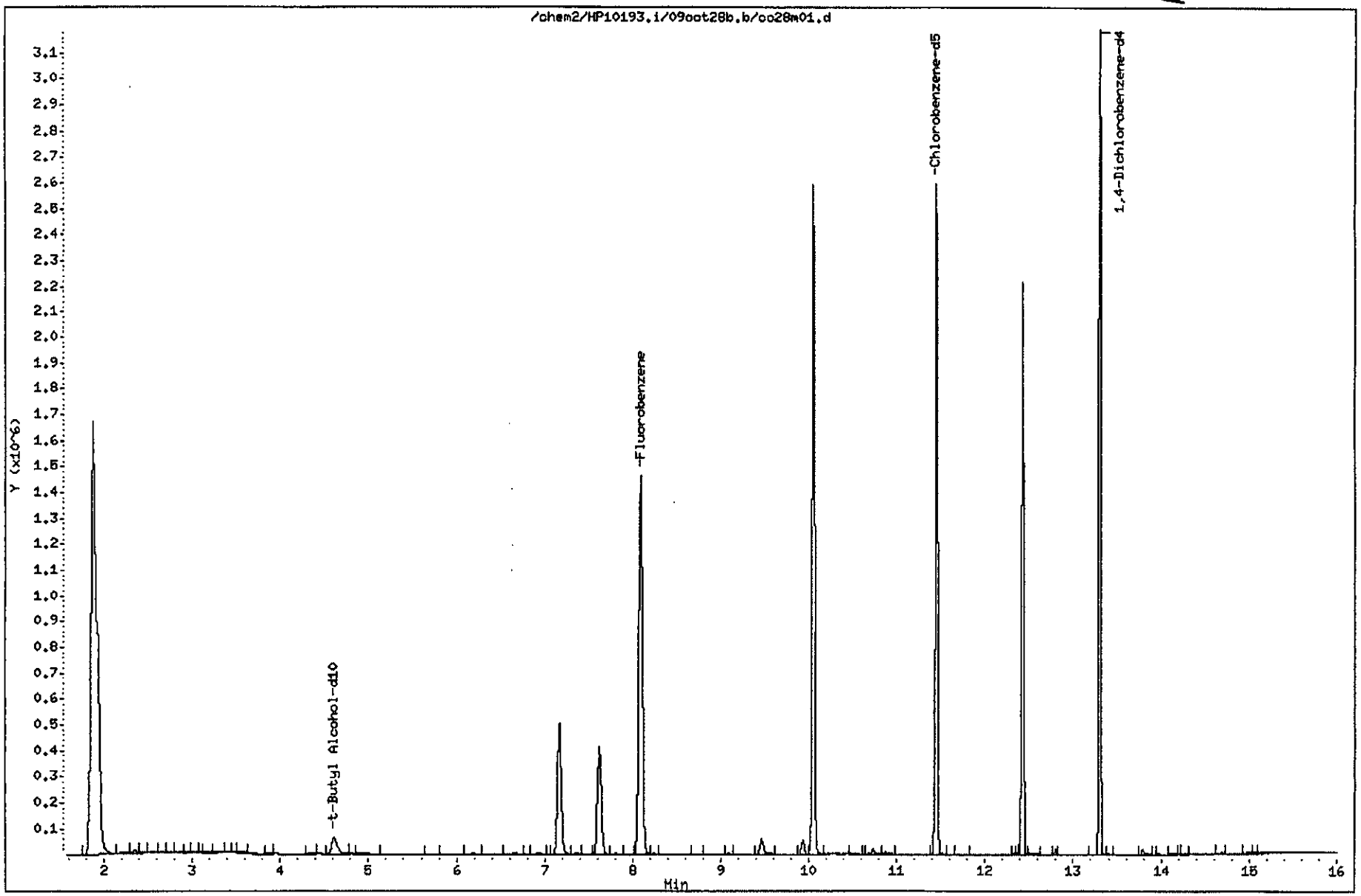
Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28i06.d, generated on 10/28/2009 at 21:28

lw ras 10/28/09

Data File: /chem2/HP10193.i/09oct28b.b/oc28m01.d
Date : 28-OCT-2009 21:17
Client ID: MDL0.1
Sample Info: MDL0.1;MDL0.1;1;3;MDL/LOQ;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: SEW02002
Column diameter: 0.25

RAD23 01994d



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28b.b/cc28m01.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 21:17 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 21:37 sew02002

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

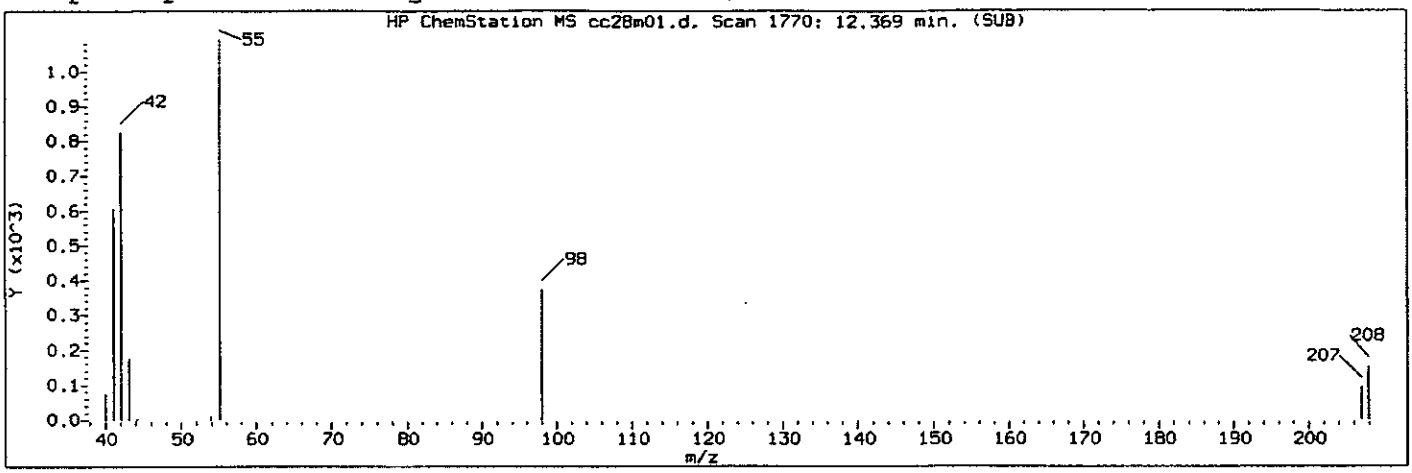
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.213	45	8385	0.113
30) Acetonitrile	(4)	4.340	41	11915	4.183
35)*t-Butyl Alcohol-d10	(4)	4.645	65	80605	50.000
46) Vinyl Acetate	(1)	5.736	43	4809	0.085
78)*Fluorobenzene	(1)	8.089	96	1924592	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.571	63	1358	0.068
110)*Chlorobenzene-d5	(2)	11.449	117	1411130	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.326	88	661	0.739
122) Cyclohexanone	(4)	12.369	55	2714M	4.175
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	794331	10.000
149) Hexachloroethane	(3)	13.790	117	2370	0.337

M = Compound was manually integrated.

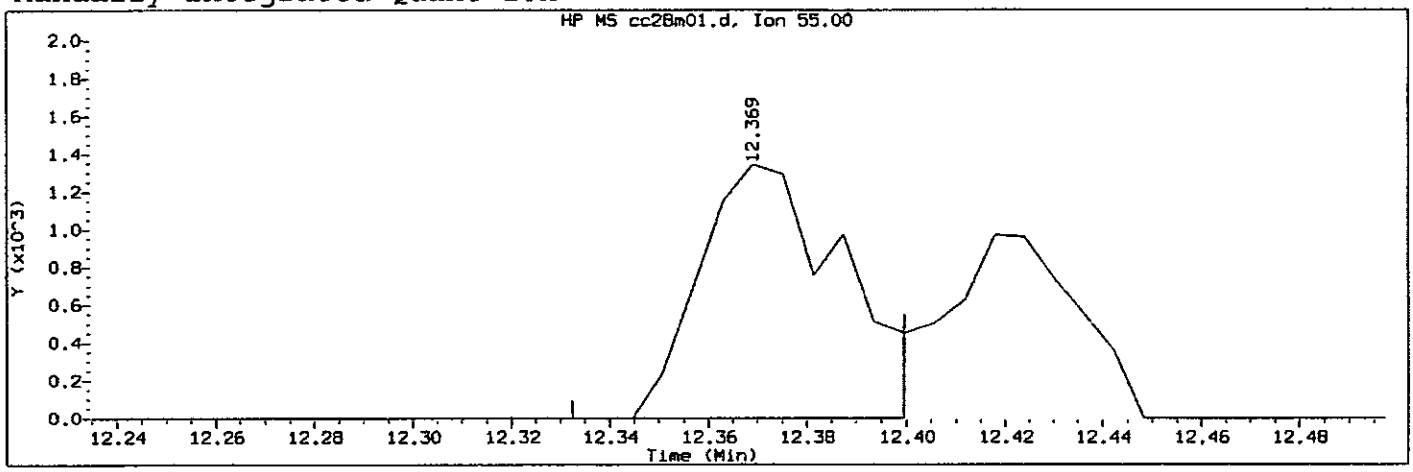
* = Compound is an internal standard.

RAD23 0199ee

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28m01.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 21:17 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:29
Date, time and analyst ID of latest file update: 28-Oct-2009 21:37 sew02002

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number : 122
Compound Name : Cyclohexanone
Scan Number : 1770
Retention Time (minutes): 12.369
Quant Ion : 55
Area (flag) : 2714 M
Concentration (ug/L) : 4.1753
Integration start scan : 1763 Integration stop scan: 1774
Y at integration start : 0 Y at integration end: 0

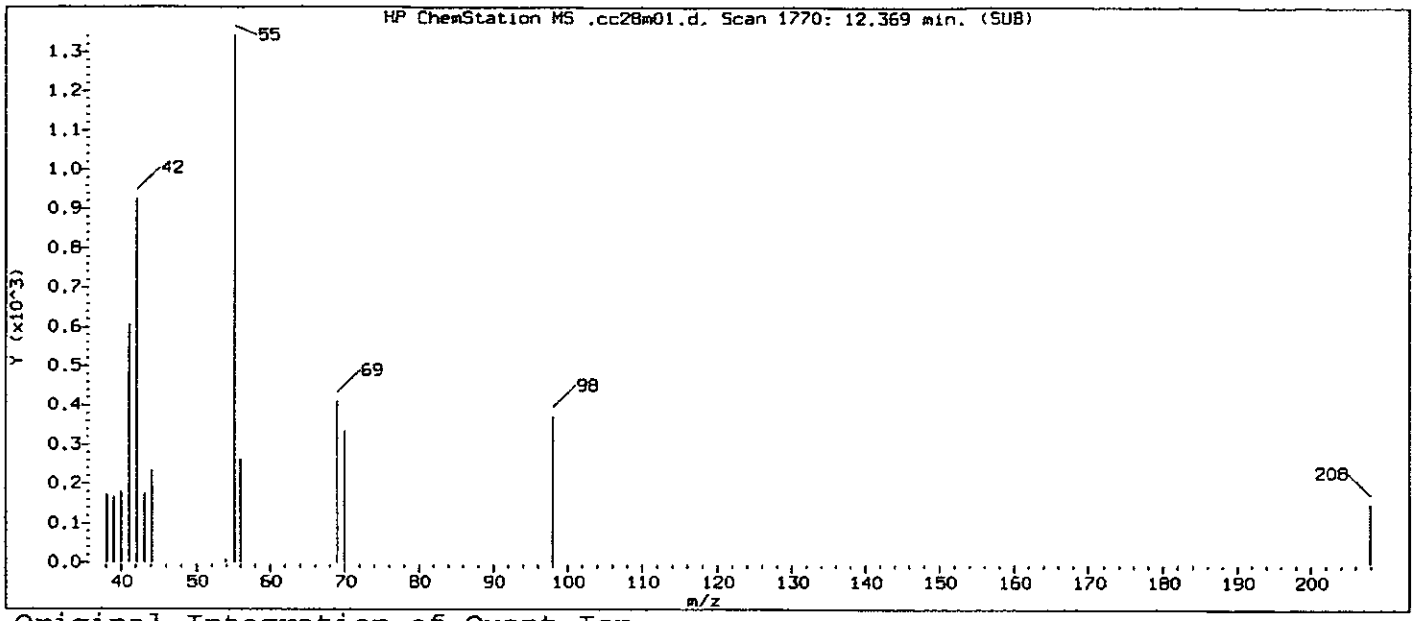
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: [signature] 10/28/09

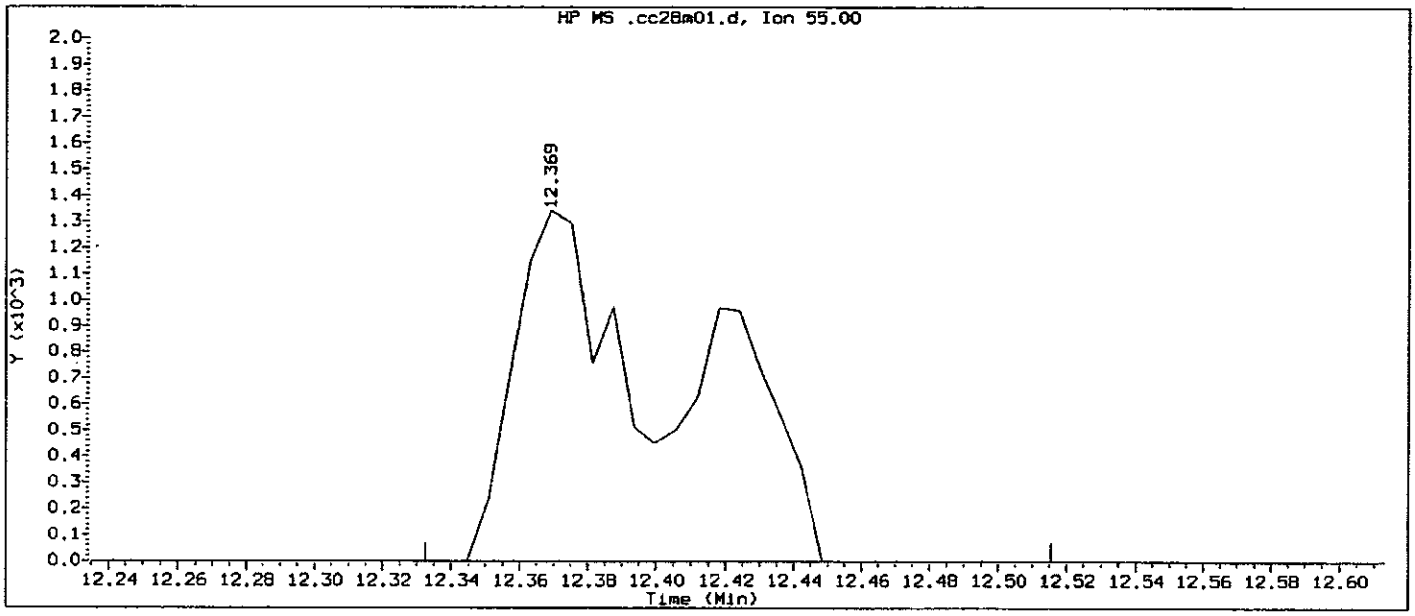
GC/MS audit/management approval: [signature] 10-29-09 RAD23 0199ff

Manual Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28m01.d, generated on 10/28/2009 at 21:37

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28b.b/cc28m01.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 21:17 Analyst ID: SEW02002

Method used: /chem2/HP10193.i/09oct28b.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 28-OCT-2009 21:29
Date, time and analyst ID of latest file update: 28-Oct-2009 21:36 Automation

Sample Name: MDL0.1 Lab Sample ID: MDL0.1

Compound Number	: 122
Compound Name	: Cyclohexanone
Scan Number	: 1770
Retention Time (minutes)	: 12.369
Quant Ion	: 55
Area	: 4439
Concentration (ug/L)	: 6.8282
Integration start scan	: 1763 Integration stop scan: 1793
Y at integration start	: 0 Y at integration end: 0

RAD23 0199gg

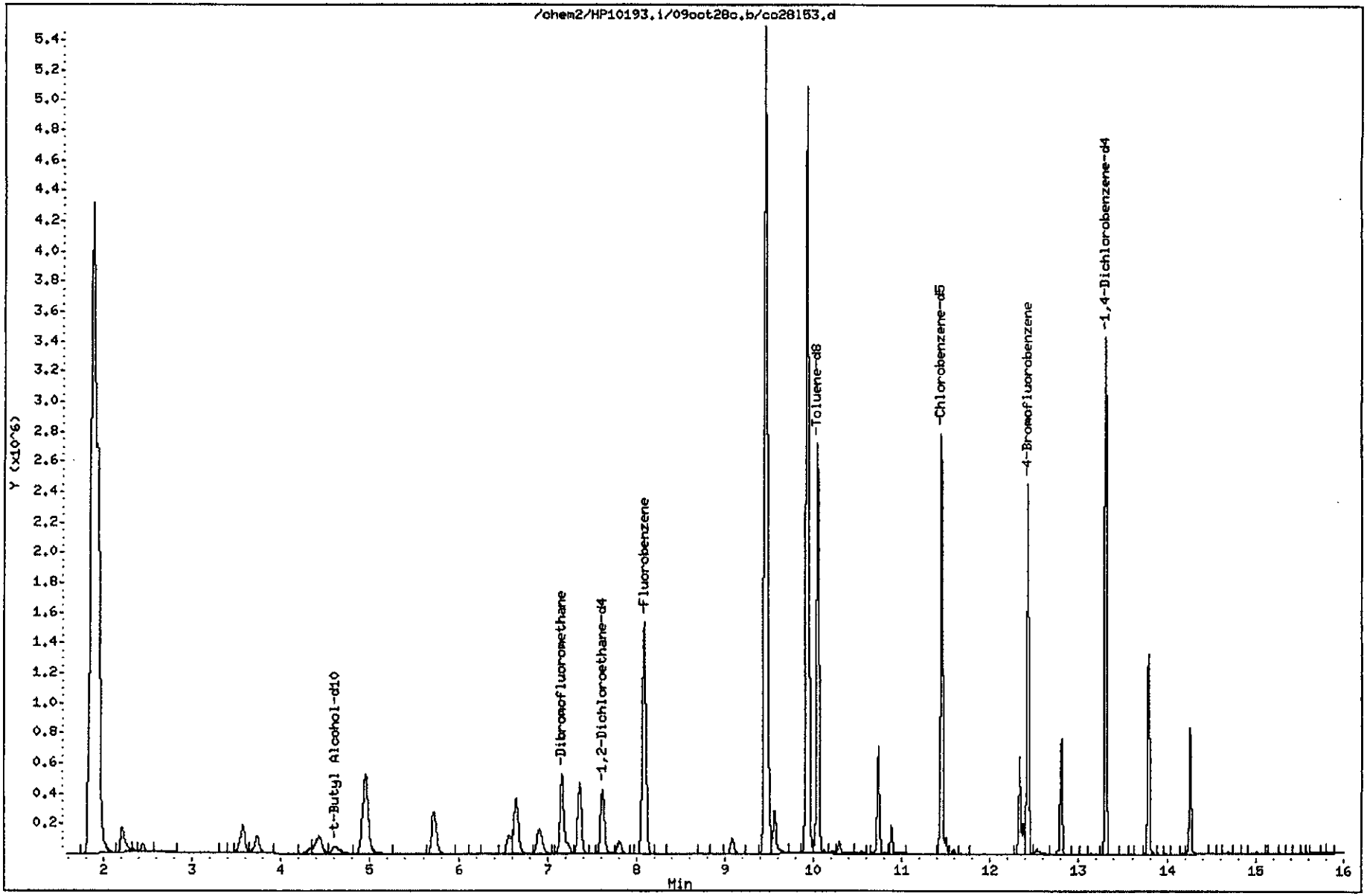
Original Integration Report for data file /chem2/HP10193.i/09oct28b.b/cc28m01.d, generated on 10/28/2009 at 21:37

Data File: /ohem2/HP10193.i/09oct28o.b/cc28153.d
Date : 29-OCT-2009 01:25
Client ID: LCS1C10
Sample Info: LCS1C10;LCS1C10;1;3;LCS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: ADS01731
Column diameter: 0.25

ADS1731
10/28/09

RAD23 01994h



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28153.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 01:25 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: SMQC
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 01:43 Automation

Sample Name: LCS1C10 Lab Sample ID: LCS1C10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.213	45	402632	5.108
30) Acetonitrile	(4)	4.328	41	147918	45.216
35)*t-Butyl Alcohol-d10	(4)	4.633	65	92583	50.000
46) Vinyl Acetate	(1)	5.718	43	821421	13.623
78)*Fluorobenzene	(1)	8.090	96	2041670	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	125110	5.898
110)*Chlorobenzene-d5	(2)	11.449	117	1516662	10.000
122) Cyclohexanone	(4)	12.369	55	100216	134.187
134) cis-1,4-Dichloro-2-Butene	(4)	12.333	88	130873	15.456
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	857378	10.000
149) Hexachloroethane	(3)	13.790	117	199563	4.873
60)$Dibromofluoromethane	(1)	7.163	113	485452	9.636
70)$1,2-Dichloroethane-d4	(1)	7.620	102	89098	9.495
98)$Toluene-d8	(2)	10.053	98	2164630	9.707
124)$4-Bromofluorobenzene	(2)	12.424	95	740016	9.249

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

RAD23 01991i

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/28/09 Time: 22:50

Lab File ID: cc28c51.d Init. Calib. Date(s): 10/28/09 10/28/09

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

COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT
Dimethyl ether	0.3861	0.3428	11.10	12.5	-11
Acetonitrile	1.7667	1.7076	483.27	500	-3
Vinyl Acetate	0.2953	0.3075	13.01	12.5	4
2-Chloroethyl Vinyl Ether	0.1039	0.1098	13.21	12.5	6
Cyclohexanone	0.4033	0.4716	730.78	625	17
cis-1,4-Dichloro-2-Butene	4.1585	6.0243	29.65	25	19
Hexachloroethane	0.4430	0.4938	12.04	12.5	-4

Average %Drift 9

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

RAD23 0199jj

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP10193.i/09oct28b.b/cc28i06.d
/chem2/HP10193.i/09oct28b.b/cc28i05.d
/chem2/HP10193.i/09oct28b.b/cc28i04.d
/chem2/HP10193.i/09oct28b.b/cc28i03.d
/chem2/HP10193.i/09oct28b.b/cc28i02.d
/chem2/HP10193.i/09oct28b.b/cc28i01.d

File /chem2/HP10193.i/09oct28b.b/cc28i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP10193.i/09oct28c.b/cc28c51.d

RT Summary

File ID:

Internal Standard Name	cc28c51.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	4.627	4.633	Yes
Fluorobenzene	8.089	8.089	Yes
Chlorobenzene-d5	11.449	11.448	Yes
1,4-Dichlorobenzene-d4	13.302	13.302	Yes

A "No" indicates the retention time is greater than 30 seconds from the referenced ICAL standard.

Area Summary

File ID:

Internal Standard Name	cc28c51.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	91220	83560	41780	167120	Yes
Fluorobenzene	2039769	1997890	998945	3995780	Yes
Chlorobenzene-d5	1524204	1486162	743081	2972324	Yes
1,4-Dichlorobenzene-d4	866009	836751	418376	1673502	Yes

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

Comments: RAD23 0199kk

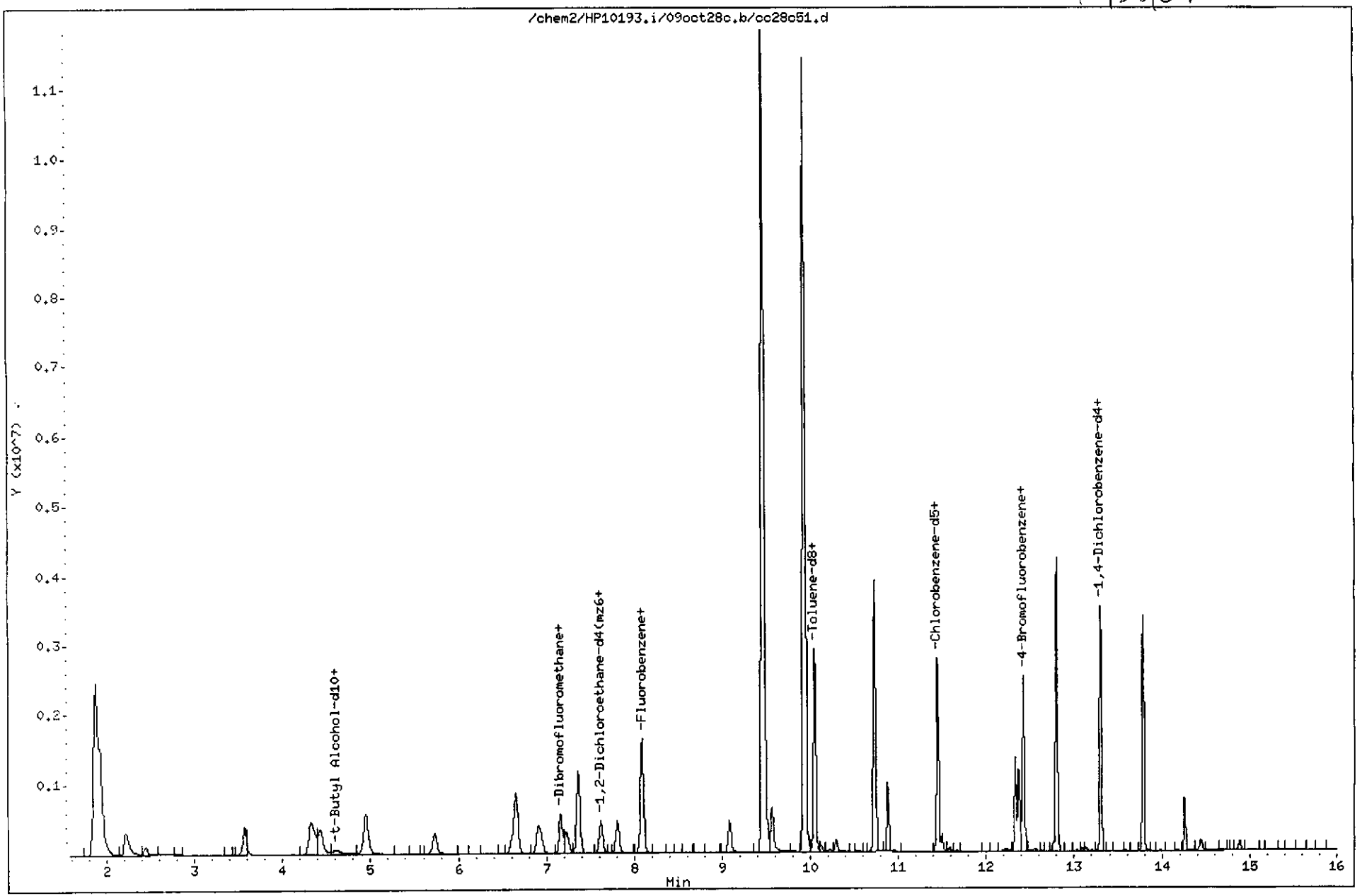
Data File: /chem2/HP10193.i/09oct28c.b/cc28c51.d
Date : 28-OCT-2009 22:50
Client ID: VSTD12.5
Sample Info: VSTD12.5;VSTD12.5;1;2;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

ADS01731
10/28/09

RAD23 09911



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28c51.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 22:50 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: SMONLY
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 23:16 ads01731

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.219	45	874122	11.099
30) Acetonitrile	(4)	4.328	41	1557705	483.272
35)*t-Butyl Alcohol-d10	(4)	4.627	65	91220	50.000
46) Vinyl Acetate	(1)	5.730	43	784013	13.015
78)*Fluorobenzene	(1)	8.089	96	2039769	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	279877	13.206
110)*Chlorobenzene-d5	(2)	11.449	117	1524204	10.000
134) cis-1,4-Dichloro-2-Butene	(4)	12.332	88	274769	29.646
122) Cyclohexanone	(4)	12.369	55	537739	730.780
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	866009	10.000
149) Hexachloroethane	(3)	13.790	117	534586	12.037

* = Compound is an internal standard.

RAD23 0199mm

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP10193.i/09oct23a.b/cc23i06.d
/chem2/HP10193.i/09oct23a.b/cc23i05.d
/chem2/HP10193.i/09oct23a.b/cc23i07.d
/chem2/HP10193.i/09oct23a.b/cc23i03.d
/chem2/HP10193.i/09oct23a.b/cc23i02.d
/chem2/HP10193.i/09oct23a.b/cc23i01.d

File /chem2/HP10193.i/09oct23a.b/cc23i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP10193.i/09oct28c.b/cc28c52.d

RT Summary

Internal Standard Name	File ID: cc28c52.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	4.639	4.633	Yes
Fluorobenzene	8.090	8.102	Yes
Chlorobenzene-d5	11.449	11.461	Yes
1,4-Dichlorobenzene-d4	13.302	13.308	Yes

A "No" indicates the retention time is greater than 30 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: cc28c52.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	100999	100574	50287	201148	Yes
Fluorobenzene	2116443	2057278	1028639	4114556	Yes
Chlorobenzene-d5	1559710	1495680	747840	2991360	Yes
1,4-Dichlorobenzene-d4	937779	856500	428250	1713000	Yes

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

RAD23 0200

Comments: _____

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/28/09 Time: 23:12

Lab File ID: cc28c52.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Dichlorodifluoromethane	0.3188	0.2539	9.95	12.5	-20	
#	Chloromethane	0.3336	0.3118	11.68	12.5	-7	#
*	Vinyl Chloride	0.3304	0.3192	12.08	12.5	-3	*
	Bromomethane	0.2314	0.2281	12.32	12.5	-1	
	Chloroethane	0.1922	0.1892	12.31	12.5	-2	
	Dichlorofluoromethane	0.4564	0.4778	13.09	12.5	5	
	Trichlorofluoromethane	0.4176	0.4347	13.01	12.5	4	
	Ethyl Ether	0.1694	0.1698	12.53	12.5	0	
	Freon 123a	0.2897	0.2987	12.89	12.5	3	
	Acrolein	2.5201	2.1378	530.20	625	-15	
*	1,1-Dichloroethene	0.2065	0.1903	11.52	12.5	-8	*
	Freon 113	0.2293	0.2207	12.03	12.5	-4	
	Acetone	0.9771	1.0931	139.85	125	12	
	Methyl Iodide	0.4341	0.3983	11.47	12.5	-8	
	Carbon Disulfide	0.6567	0.5910	11.25	12.5	-10	
	Allyl Chloride	0.4065	0.3775	11.61	12.5	-7	
	Methyl Acetate	0.0967	0.0895	11.57	12.5	-7	
	Methylene Chloride	0.2372	0.2254	11.88	12.5	-5	
	t-Butyl Alcohol	1.0505	1.1694	278.28	250	11	
	Acrylonitrile	4.4499	4.4369	62.32	62.5	0	
	trans-1,2-Dichloroethene	0.2436	0.2321	11.91	12.5	-5	
	1,2-Dichloroethene (Total)	0.2530	0.2436	24.06	25	-4	
	Methyl Tertiary Butyl Ether	0.5490	0.5183	11.80	12.5	-6	
	n-Hexane	0.3737	0.3332	11.15	12.5	-11	
#	1,1-Dichloroethane	0.4472	0.4301	12.02	12.5	-4	#
	di-Isopropyl Ether	0.8402	0.8081	12.02	12.5	-4	
	2-Chloro-1,3-Butadiene	0.3952	0.3770	11.92	12.5	-5	
	Ethyl t-Butyl Ether	0.7364	0.6835	11.60	12.5	-7	
	2,2-Dichloropropane	0.3479	0.3386	12.17	12.5	-3	
	cis-1,2-Dichloroethene	0.2625	0.2550	12.15	12.5	-3	
	2-Butanone	5.8468	5.8314	124.67	125	0	
	Propionitrile	1.6631	1.7911	269.25	250	8	
	Methacrylonitrile	6.0602	6.0367	124.51	125	0	
	Bromochloromethane	0.1146	0.1154	12.59	12.5	1	
	Tetrahydrofuran	1.5269	1.5176	124.23	125	-1	
*	Chloroform	0.4236	0.4259	12.57	12.5	1	*

RAD23 0281

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/28/09 Time: 23:12

Lab File ID: cc28c52.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	1,1,1-Trichloroethane	0.3673	0.3643	12.40	12.5	-1	
	Cyclohexane	0.4537	0.4213	11.61	12.5	-7	
	1,1-Dichloropropene	0.3459	0.3360	12.14	12.5	-3	
	Carbon Tetrachloride	0.3105	0.3182	12.81	12.5	2	
	Isobutyl Alcohol	0.3987	0.4747	744.23	625	19	
	Benzene	1.0502	1.0280	12.24	12.5	-2	
	1,2-Dichloroethane	0.2648	0.2689	12.69	12.5	2	
	1,2-Dichloroethane(mz98)	0.0230	0.0221	12.03	12.5	-4	
	t-Amyl Methyl Ether	0.6082	0.5790	11.90	12.5	-5	
	n-Heptane	0.4236	0.3831	11.30	12.5	-10	
	n-Butanol	0.3320	0.3813	1435.75	1250	15	
	Trichloroethene	0.2641	0.2613	12.37	12.5	-1	
	Methylcyclohexane	0.4807	0.4628	12.03	12.5	-4	
*	1,2-Dichloropropane	0.2637	0.2621	12.43	12.5	-1	*
	Dibromomethane	0.1088	0.1111	12.77	12.5	2	
	1,4-Dioxane	0.0874	0.0943	674.42	625	8	
	Methyl Methacrylate	10.899	10.4462	11.98	12.5	-4	
	Bromodichloromethane	0.2747	0.2847	12.96	12.5	4	
	2-Nitropropane	3.2015	3.4779	135.79	125	9	
	cis-1,3-Dichloropropene	0.3545	0.3543	12.49	12.5	0	
	4-Methyl-2-Pentanone	0.1390	0.1440	129.47	125	4	
*	Toluene	0.9036	0.8861	12.26	12.5	-2	*
	trans-1,3-Dichloropropene	0.3926	0.3976	12.66	12.5	1	
	Ethyl Methacrylate	0.3047	0.3005	12.33	12.5	-1	
	1,1,2-Trichloroethane	0.2131	0.2147	12.60	12.5	1	
	Tetrachloroethene	0.4282	0.4245	12.39	12.5	-1	
	1,3-Dichloropropane	0.3825	0.3888	12.71	12.5	2	
	2-Hexanone	0.1318	0.1366	129.52	125	4	
	Dibromochloromethane	0.2448	0.2592	13.24	12.5	6	
	1,2-Dibromoethane	0.2031	0.2056	12.65	12.5	1	
#	Chlorobenzene	1.0227	1.0278	12.56	12.5	1	#
	1,1,1,2-Tetrachloroethane	0.3196	0.3367	13.17	12.5	5	
*	Ethylbenzene	1.7910	1.8074	12.61	12.5	1	*
	m+p-Xylene	0.7077	0.7264	25.66	25	3	
	Xylene (Total)	0.6998	0.7173	38.44	37.5	2	
	o-Xylene	0.6840	0.6990	12.77	12.5	2	

RAD23 8282

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/28/09 Time: 23:12

Lab File ID: cc28c52.d Init. Calib. Date(s): 10/23/09 10/23/09

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

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF13	CONC.	CONC.	DRIFT	
Styrene	1.0870	1.1265	12.95	12.5	4	
# Bromoform	0.1331	0.1382	12.97	12.5	4	#
Isopropylbenzene	1.7307	1.7475	12.62	12.5	1	
# 1,1,2,2-Tetrachloroethane	0.4151	0.4342	13.08	12.5	5	#
Bromobenzene	0.7521	0.7643	12.70	12.5	2	
trans-1,4-Dichloro-2-Butene	5.6347	5.1721	114.74	125	-8	
1,2,3-Trichloropropane	0.1189	0.1233	12.96	12.5	4	
n-Propylbenzene	3.7381	3.6776	12.30	12.5	-2	
2-Chlorotoluene	0.7499	0.7386	12.31	12.5	-2	
4-Chlorotoluene	0.7804	0.7693	12.32	12.5	-1	
1,3,5-Trimethylbenzene	2.6769	2.6689	12.46	12.5	0	
Pentachloroethane	0.4620	0.5031	13.61	12.5	9	
tert-Butylbenzene	0.6138	0.6062	12.35	12.5	-1	
1,2,4-Trimethylbenzene	2.7811	2.8250	12.70	12.5	2	
sec-Butylbenzene	3.4460	3.4163	12.39	12.5	-1	
1,3-Dichlorobenzene	1.5619	1.5882	12.71	12.5	2	
p-Isopropyltoluene	3.0565	3.1014	12.68	12.5	1	
1,4-Dichlorobenzene	1.5770	1.5695	12.44	12.5	0	
1,2,3-Trimethylbenzene	1.2710	1.2815	12.60	12.5	1	
Benzyl Chloride	0.1727	0.1815	13.14	12.5	5	
n-Butylbenzene	1.5246	1.5130	12.40	12.5	-1	
1,2-Dichlorobenzene	1.3469	1.3501	12.53	12.5	0	
1,2-Dibromo-3-Chloropropane	2.4594	2.6113	13.27	12.5	6	
1,2,4-Trichlorobenzene	1.1007	1.1096	12.60	12.5	1	
Hexachlorobutadiene	0.6332	0.6205	12.25	12.5	-2	
Naphthalene	1.5708	1.6227	12.91	12.5	3	
1,2,3-Trichlorobenzene	0.9050	0.9171	12.67	12.5	1	
Dibromofluoromethane	0.2467	0.2352	9.53	10	-5	
Dibromofluoromethane(mz111)	0.2532	0.2397	9.46	10	-5	
1,2-Dichloroethane-d4	0.0460	0.0439	9.55	10	-4	
1,2-Dichloroethane-d4(mz104)	0.0293	0.0281	9.57	10	-4	
Toluene-d8	1.4703	1.3999	9.52	10	-5	
Toluene-d8(mz100)	0.9462	0.8908	9.41	10	-6	
4-Bromofluorobenzene	0.5275	0.4933	9.35	10	-6	
4-Bromofluorobenzene(mz174)	0.4706	0.4453	9.46	10	-5	

RAD23 8263

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/28/09 Time: 23:12

Lab File ID: cc28c52.d Init. Calib. Date(s): 10/23/09 10/23/09

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

COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT

Average %Drift 4

RAD23 6204

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

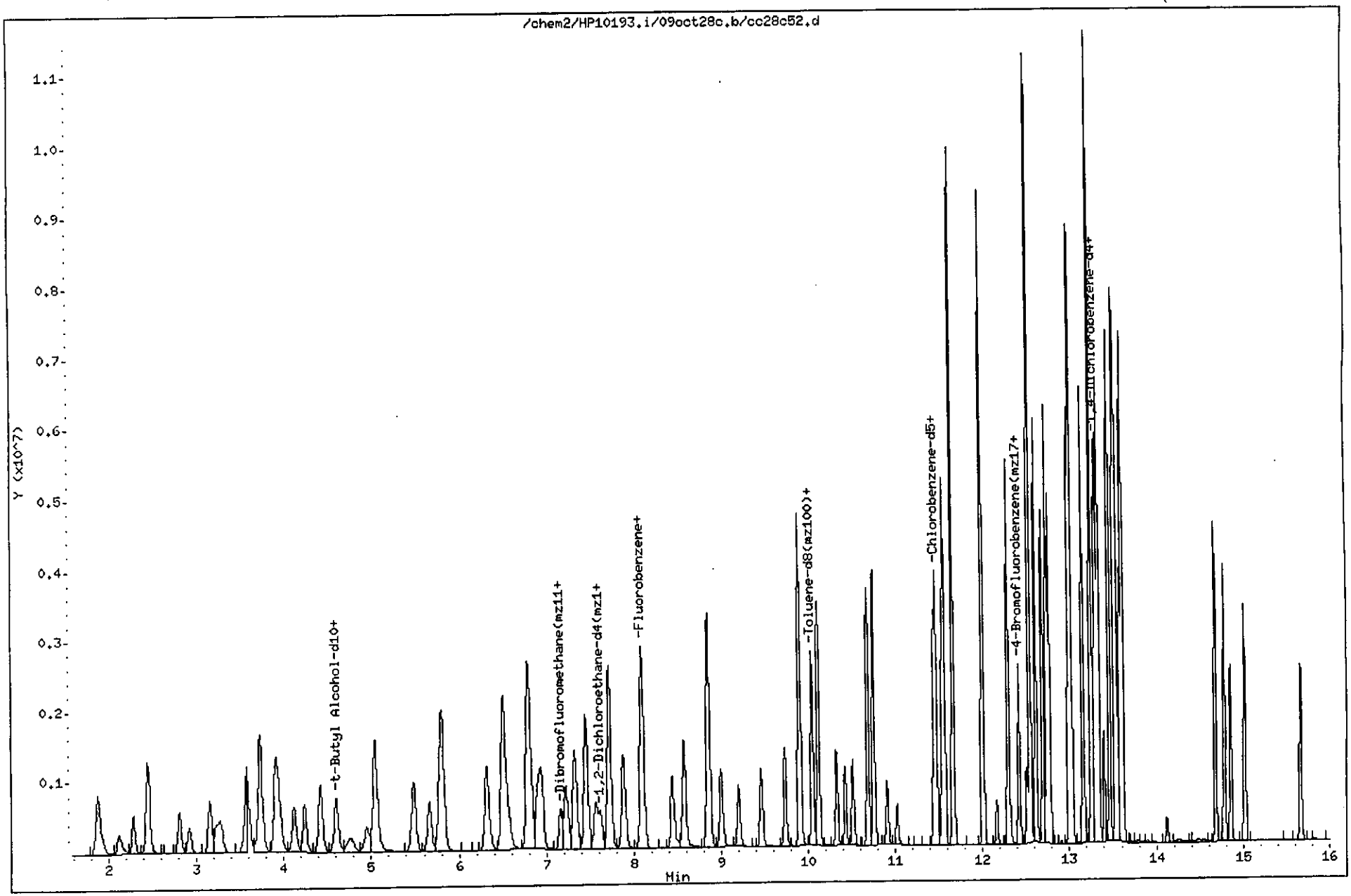
Data File: /chem2/HP10193.i/09oct28c.b/cc28c52.d
Date : 28-OCT-2009 23:12
Client ID: VSTD12.5
Sample Info: VSTD12.5;VSTD12.5;1;2;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

ADS1731
10/28/09

MAD23 0285



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28c52.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 23:12 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 23:37 ads01731

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.121	85	671678	9.955
5) Chloromethane	(1)	2.286	50	824950	11.684
7) Vinyl Chloride	(1)	2.432	62	844379	12.075
9) Bromomethane	(1)	2.810	94	603461	12.324
11) Chloroethane	(1)	2.920	64	500510	12.306
12) Dichlorofluoromethane	(1)	3.158	67	1264120	13.087
14) Trichlorofluoromethane	(1)	3.273	101	1150126	13.012
16) Ethyl Ether	(1)	3.578	59	449151	12.528
17) Freon 123a	(1)	3.584	67	790305	12.891
23) Acrolein	(4)	3.731	56	2698971	530.195
24) 1,1-Dichloroethene	(1)	3.901	96	503566	11.525
25) Freon 113	(1)	3.938	101	583824	12.032
26) Acetone	(4)	3.938	58	276011	139.848
28) Methyl Iodide	(1)	4.121	142	1053729	11.468
29) Carbon Disulfide	(1)	4.237	76	1563461	11.249
31) Allyl Chloride	(1)	4.420	41	998720	11.607
32) Methyl Acetate	(1)	4.438	43	236796	11.569
34) Methylene Chloride	(1)	4.602	84	596401	11.882
35) *t-Butyl Alcohol-d10	(4)	4.639	65	100999	50.000
36) t-Butyl Alcohol	(4)	4.761	59	590530	278.282
39) Acrylonitrile	(4)	4.950	53	560148	62.317
40) trans-1,2-Dichloroethene	(1)	5.047	96	614092	11.910
38) 1,2-Dichloroethene (Total)	(1)		96	1288715	24.056
41) Methyl Tertiary Butyl Ether	(1)	5.047	73	1371175	11.800
44) n-Hexane	(1)	5.486	57	881577	11.146
45) 1,1-Dichloroethane	(1)	5.663	63	1137762	12.021
47) di-Isopropyl Ether	(1)	5.791	45	2137827	12.022
48) 2-Chloro-1,3-Butadiene	(1)	5.816	53	997383	11.924
49) Ethyl t-Butyl Ether	(1)	6.322	59	1808275	11.602
52) 2,2-Dichloropropane	(1)	6.529	77	895892	12.166
50) cis-1,2-Dichloroethene	(1)	6.504	96	674623	12.145
51) 2-Butanone	(4)	6.498	43	1472424	124.671
53) Propionitrile	(4)	6.565	54	904504	269.247
54) Methacrylonitrile	(4)	6.797	67	1524246	124.514

* = Compound is an internal standard.

RAD23 0286

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28c52.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 23:12 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 23:37 ads01731

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
55) Bromochloromethane	(1)	6.834	128	305376	12.591
56) Tetrahydrofuran	(4)	6.907	71	383178	124.232
59) Chloroform	(1)	6.949	83	1126683	12.568
63) 1,1,1-Trichloroethane	(1)	7.230	97	963825	12.398
64) Cyclohexane	(1)	7.327	56	1114585	11.606
66) 1,1-Dichloropropene	(1)	7.449	75	888852	12.142
67) Carbon Tetrachloride	(1)	7.468	117	841840	12.809
69) Isobutyl Alcohol	(4)	7.565	41	599337	744.223
73) Benzene	(1)	7.724	78	2719644	12.236
74) 1,2-Dichloroethane	(1)	7.724	62	711306	12.694
72) 1,2-Dichloroethane(mz98)	(1)	7.724	98	58534	12.030
77) t-Amyl Methyl Ether	(1)	7.882	73	1531777	11.899
78)*Fluorobenzene	(1)	8.090	96	2116443	10.000
79) n-Heptane	(1)	8.108	43	1013429	11.303
80) n-Butanol	(4)	8.443	56	962790	1435.739
82) Trichloroethene	(1)	8.577	95	691317	12.367
85) Methylcyclohexane	(1)	8.858	83	1224243	12.032
84) 1,2-Dichloropropane	(1)	8.858	63	693403	12.426
87) Dibromomethane	(1)	9.004	93	293887	12.768
90) 1,4-Dioxane	(4)	9.022	88	119097	674.418
88) Methyl Methacrylate	(4)	9.004	69	263765	11.980
91) Bromodichloromethane	(1)	9.205	83	753296	12.959
92) 2-Nitropropane	(4)	9.461	41	878167	135.790
94) cis-1,3-Dichloropropene	(1)	9.742	75	937288	12.491
96) 4-Methyl-2-Pentanone	(1)	9.906	43	3808970	129.474
100) Toluene	(2)	10.126	92	1727525	12.258
102) trans-1,3-Dichloropropene	(2)	10.327	75	775085	12.657
103) Ethyl Methacrylate	(2)	10.424	69	585884	12.326
104) 1,1,2-Trichloroethane	(2)	10.516	97	418670	12.596
106) Tetrachloroethene	(2)	10.693	166	827547	12.391
105) 1,3-Dichloropropane	(2)	10.687	76	758029	12.707
107) 2-Hexanone	(2)	10.760	43	2663426	129.519
108) Dibromochloromethane	(2)	10.912	129	505423	13.239
109) 1,2-Dibromoethane	(2)	11.022	107	400776	12.653

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28c52.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 23:12 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 23:37 ads01731

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
110) *Chlorobenzene-d5	(2)	11.449	117	1559710	10.000
112) Chlorobenzene	(2)	11.473	112	2003924	12.563
113) 1,1,1,2-Tetrachloroethane	(2)	11.540	131	656514	13.171
114) Ethylbenzene	(2)	11.571	91	3523687	12.614
117) m+p-Xylene	(2)	11.668	106	2832513	25.663
116) Xylene (Total)	(2)		106	4195244	38.437
118) o-Xylene	(2)	12.003	106	1362730	12.774
119) Styrene	(2)	12.009	104	2196357	12.955
120) Bromoform	(2)	12.168	173	269369	12.974
121) Isopropylbenzene	(2)	12.302	105	3406987	12.622
127) 1,1,2,2-Tetrachloroethane	(3)	12.515	83	509008	13.075
128) Bromobenzene	(3)	12.552	156	895929	12.702
129) trans-1,4-Dichloro-2-Butene	(4)	12.552	53	1305949	114.737
130) 1,2,3-Trichloropropane	(3)	12.558	110	144525	12.960
132) n-Propylbenzene	(3)	12.619	91	4310913	12.297
133) 2-Chlorotoluene	(3)	12.698	126	865860	12.312
136) 4-Chlorotoluene	(3)	12.778	126	901817	12.323
135) 1,3,5-Trimethylbenzene	(3)	12.747	105	3128547	12.463
138) Pentachloroethane	(3)	13.028	167	589712	13.610
137) tert-Butylbenzene	(3)	13.003	134	710642	12.347
139) 1,2,4-Trimethylbenzene	(3)	13.034	105	3311505	12.697
140) sec-Butylbenzene	(3)	13.162	105	4004653	12.392
141) 1,3-Dichlorobenzene	(3)	13.259	146	1861732	12.710
143) *1,4-Dichlorobenzene-d4	(3)	13.302	152	937779	10.000
142) p-Isopropyltoluene	(3)	13.259	119	3635555	12.684
144) 1,4-Dichlorobenzene	(3)	13.320	146	1839789	12.441
145) 1,2,3-Trimethylbenzene	(3)	13.345	120	1502152	12.603
146) Benzyl Chloride	(3)	13.406	126	212806	13.141
147) n-Butylbenzene	(3)	13.552	92	1773543	12.405
148) 1,2-Dichlorobenzene	(3)	13.595	146	1582653	12.530
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	155	65935	13.272
153) 1,2,4-Trichlorobenzene	(3)	14.686	180	1300658	12.601
154) Hexachlorobutadiene	(3)	14.789	225	727371	12.249
155) Naphthalene	(3)	14.863	128	1902122	12.913

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28c52.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 23:12 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 28-Oct-2009 23:37 ads01731

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
156) 1,2,3-Trichlorobenzene	(3)	15.027	180	1074997	12.667
60)$Dibromofluoromethane	(1)	7.163	113	497747	9.531
61)$Dibromofluoromethane(mz111)	(1)	7.163	111	507231	9.464
70)$1,2-Dichloroethane-d4	(1)	7.626	102	92929	9.553
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.626	104	59421	9.566
98)$Toluene-d8	(2)	10.053	98	2183386	9.521
99)$Toluene-d8(mz100)	(2)	10.053	100	1389393	9.414
124)$4-Bromofluorobenzene	(2)	12.424	95	769397	9.351
125)$4-Bromofluorobenzene(mz174)	(2)	12.424	174	694542	9.463

$ = Compound is a surrogate standard.

Lancaster Laboratories
Continuing Calibration Internal Standard Check

Initial Calibration Standards:

/chem2/HP10193.i/09oct23a.b/cc23i06.d
/chem2/HP10193.i/09oct23a.b/cc23i05.d
/chem2/HP10193.i/09oct23a.b/cc23i07.d
/chem2/HP10193.i/09oct23a.b/cc23i03.d
/chem2/HP10193.i/09oct23a.b/cc23i02.d
/chem2/HP10193.i/09oct23a.b/cc23i01.d

File /chem2/HP10193.i/09oct23a.b/cc23i03.d is Mid Level Calibration Standard used for comparison.

Current Continuing Calibration Standard:

/chem2/HP10193.i/09oct29a.b/cc29c02.d

RT Summary

Internal Standard Name	File ID: cc29c02.d	ICAL RT	In Spec
t-Butyl Alcohol-d10	4.627	4.633	Yes
Fluorobenzene	8.090	8.102	Yes
Chlorobenzene-d5	11.449	11.461	Yes
1,4-Dichlorobenzene-d4	13.302	13.308	Yes

A "No" indicates the retention time is greater than 30 seconds from the referenced ICAL standard.

Area Summary

Internal Standard Name	File ID: cc29c02.d	ICAL Area	Low Limit	High Limit	In Spec
t-Butyl Alcohol-d10	97324	100574	50287	201148	Yes
Fluorobenzene	2068509	2057278	1028639	4114556	Yes
Chlorobenzene-d5	1514324	1495680	747840	2991360	Yes
1,4-Dichlorobenzene-d4	911811	856500	428250	1713000	Yes

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

RAD23 0210

Comments: _____

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/29/09 Time: 12:57

Lab File ID: cc29c02.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	Dichlorodifluoromethane	0.3188	0.3938	15.44	12.5	24	
#	Chloromethane	0.3336	0.3853	14.44	12.5	16	#
*	Vinyl Chloride	0.3304	0.3811	14.42	12.5	15	*
	Bromomethane	0.2314	0.2564	13.85	12.5	11	
	Chloroethane	0.1922	0.2143	13.94	12.5	12	
	Dichlorofluoromethane	0.4564	0.5202	14.25	12.5	14	
	Trichlorofluoromethane	0.4176	0.4983	14.91	12.5	19	
	Ethyl Ether	0.1694	0.1646	12.14	12.5	-3	
	Freon 123a	0.2897	0.3217	13.88	12.5	11	
	Acrolein	2.5201	2.4558	609.06	625	-3	
*	1,1-Dichloroethene	0.2065	0.2003	12.13	12.5	-3	*
	Freon 113	0.2293	0.2318	12.64	12.5	1	
	Acetone	0.9771	1.0725	137.21	125	10	
	Methyl Iodide	0.4341	0.4113	11.84	12.5	-5	
	Carbon Disulfide	0.6567	0.6172	11.75	12.5	-6	
	Allyl Chloride	0.4065	0.3847	11.83	12.5	-5	
	Methyl Acetate	0.0967	0.0908	11.74	12.5	-6	
	Methylene Chloride	0.2372	0.2309	12.17	12.5	-3	
	t-Butyl Alcohol	1.0505	1.1216	266.90	250	7	
	Acrylonitrile	4.4499	4.5674	64.15	62.5	3	
	trans-1,2-Dichloroethene	0.2436	0.2403	12.33	12.5	-1	
	1,2-Dichloroethene (Total)	0.2530	0.2514	24.84	25	-1	
	Methyl Tertiary Butyl Ether	0.5490	0.5225	11.90	12.5	-5	
	n-Hexane	0.3737	0.3558	11.90	12.5	-5	
#	1,1-Dichloroethane	0.4472	0.4428	12.38	12.5	-1	#
	di-Isopropyl Ether	0.8402	0.8301	12.35	12.5	-1	
	2-Chloro-1,3-Butadiene	0.3952	0.3950	12.49	12.5	0	
	Ethyl t-Butyl Ether	0.7364	0.6944	11.79	12.5	-6	
	2,2-Dichloropropane	0.3479	0.3526	12.67	12.5	1	
	cis-1,2-Dichloroethene	0.2625	0.2625	12.50	12.5	0	
	2-Butanone	5.8468	5.9348	126.88	125	2	
	Propionitrile	1.6631	1.7967	270.09	250	8	
	Methacrylonitrile	6.0602	6.1514	126.88	125	2	
	Bromochloromethane	0.1146	0.1152	12.57	12.5	1	
	Tetrahydrofuran	1.5269	1.5434	126.35	125	1	
*	Chloroform	0.4236	0.4392	12.96	12.5	4	*

RAD23 0211

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/29/09 Time: 12:57

Lab File ID: cc29c02.d Init. Calib. Date(s): 10/23/09 10/23/09

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

	COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT	
	1,1,1-Trichloroethane	0.3673	0.3750	12.76	12.5	2	
	Cyclohexane	0.4537	0.4469	12.31	12.5	-2	
	1,1-Dichloropropene	0.3459	0.3468	12.53	12.5	0	
	Carbon Tetrachloride	0.3105	0.3342	13.45	12.5	8	
	Isobutyl Alcohol	0.3987	0.4620	724.32	625	16	
	Benzene	1.0502	1.0599	12.62	12.5	1	
	1,2-Dichloroethane	0.2648	0.2752	12.99	12.5	4	
	1,2-Dichloroethane(mz98)	0.0230	0.0230	12.50	12.5	0	
	t-Amyl Methyl Ether	0.6082	0.5830	11.98	12.5	-4	
	n-Heptane	0.4236	0.4152	12.25	12.5	-2	
	n-Butanol	0.3320	0.3453	1300.30	1250	4	
	Trichloroethene	0.2641	0.2690	12.73	12.5	2	
	Methylcyclohexane	0.4807	0.4785	12.44	12.5	0	
*	1,2-Dichloropropane	0.2637	0.2709	12.85	12.5	3	*
	Dibromomethane	0.1088	0.1135	13.04	12.5	4	
	1,4-Dioxane	0.0874	0.0953	681.10	625	9	
	Methyl Methacrylate	10.899	10.7480	12.33	12.5	-1	
	Bromodichloromethane	0.2747	0.2923	13.30	12.5	6	
	2-Nitropropane	3.2015	3.5446	138.39	125	11	
	cis-1,3-Dichloropropene	0.3545	0.3626	12.78	12.5	2	
	4-Methyl-2-Pentanone	0.1390	0.1437	129.26	125	3	
*	Toluene	0.9036	0.9200	12.73	12.5	2	*
	trans-1,3-Dichloropropene	0.3926	0.4082	13.00	12.5	4	
	Ethyl Methacrylate	0.3047	0.3057	12.54	12.5	0	
	1,1,2-Trichloroethane	0.2131	0.2198	12.90	12.5	3	
	Tetrachloroethene	0.4282	0.4402	12.85	12.5	3	
	1,3-Dichloropropane	0.3825	0.3975	12.99	12.5	4	
	2-Hexanone	0.1318	0.1357	128.68	125	3	
	Dibromochloromethane	0.2448	0.2634	13.45	12.5	8	
	1,2-Dibromoethane	0.2031	0.2094	12.89	12.5	3	
#	Chlorobenzene	1.0227	1.0567	12.92	12.5	3	#
	1,1,1,2-Tetrachloroethane	0.3196	0.3455	13.51	12.5	8	
*	Ethylbenzene	1.7910	1.8688	13.04	12.5	4	*
	m+p-Xylene	0.7077	0.7487	26.45	25	6	
	Xylene (Total)	0.6998	0.7384	39.57	37.5	6	
	o-Xylene	0.6840	0.7177	13.12	12.5	5	

RAD23 0212

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/29/09 Time: 12:57

Lab File ID: cc29c02.d Init. Calib. Date(s): 10/23/09 10/23/09

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

			ACTUAL	TRUE	%	
COMPOUND	RRF	RRF13	CONC.	CONC.	DRIFT	
Styrene	1.0870	1.1574	13.31	12.5	6	
# Bromoform	0.1331	0.1367	12.83	12.5	3	#
Isopropylbenzene	1.7307	1.8185	13.13	12.5	5	
# 1,1,2,2-Tetrachloroethane	0.4151	0.4203	12.66	12.5	1	#
Bromobenzene	0.7521	0.7752	12.88	12.5	3	
trans-1,4-Dichloro-2-Butene	5.6347	5.2309	116.04	125	-7	
1,2,3-Trichloropropane	0.1189	0.1236	12.99	12.5	4	
n-Propylbenzene	3.7381	3.7860	12.66	12.5	1	
2-Chlorotoluene	0.7499	0.7598	12.66	12.5	1	
4-Chlorotoluene	0.7804	0.7928	12.70	12.5	2	
1,3,5-Trimethylbenzene	2.6769	2.7491	12.84	12.5	3	
Pentachloroethane	0.4620	0.5077	13.74	12.5	10	
tert-Butylbenzene	0.6138	0.6253	12.73	12.5	2	
1,2,4-Trimethylbenzene	2.7811	2.8932	13.00	12.5	4	
sec-Butylbenzene	3.4460	3.5299	12.80	12.5	2	
1,3-Dichlorobenzene	1.5619	1.6031	12.83	12.5	3	
p-Isopropyltoluene	3.0565	3.1826	13.02	12.5	4	
1,4-Dichlorobenzene	1.5770	1.5904	12.61	12.5	1	
1,2,3-Trimethylbenzene	1.2710	1.2851	12.64	12.5	1	
Benzyl Chloride	0.1727	0.1825	13.21	12.5	6	
n-Butylbenzene	1.5246	1.5718	12.89	12.5	3	
1,2-Dichlorobenzene	1.3469	1.3718	12.73	12.5	2	
1,2-Dibromo-3-Chloropropane	2.4594	2.6340	13.39	12.5	7	
1,2,4-Trichlorobenzene	1.1007	1.1009	12.50	12.5	0	
Hexachlorobutadiene	0.6332	0.6512	12.85	12.5	3	
Naphthalene	1.5708	1.5784	12.56	12.5	0	
1,2,3-Trichlorobenzene	0.9050	0.9084	12.55	12.5	0	
Dibromofluoromethane	0.2467	0.2382	9.65	10	-3	
Dibromofluoromethane(mz111)	0.2532	0.2426	9.58	10	-4	
1,2-Dichloroethane-d4	0.0460	0.0428	9.31	10	-7	
1,2-Dichloroethane-d4(mz104)	0.0293	0.0272	9.27	10	-7	
Toluene-d8	1.4703	1.4156	9.63	10	-4	
Toluene-d8(mz100)	0.9462	0.9030	9.54	10	-5	
4-Bromofluorobenzene	0.5275	0.4960	9.40	10	-6	
4-Bromofluorobenzene(mz174)	0.4706	0.4458	9.47	10	-5	

RADZ3 0213

Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

7A

VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: Lancaster Laboratories Contract:_____

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

Instrument ID: HP10193 Calibration Date: 10/29/09 Time: 12:57

Lab File ID: cc29c02.d Init. Calib. Date(s): 10/23/09 10/23/09

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

COMPOUND	RRF	RRF13	ACTUAL CONC.	TRUE CONC.	% DRIFT

Average %Drift 5

RAD23 0214

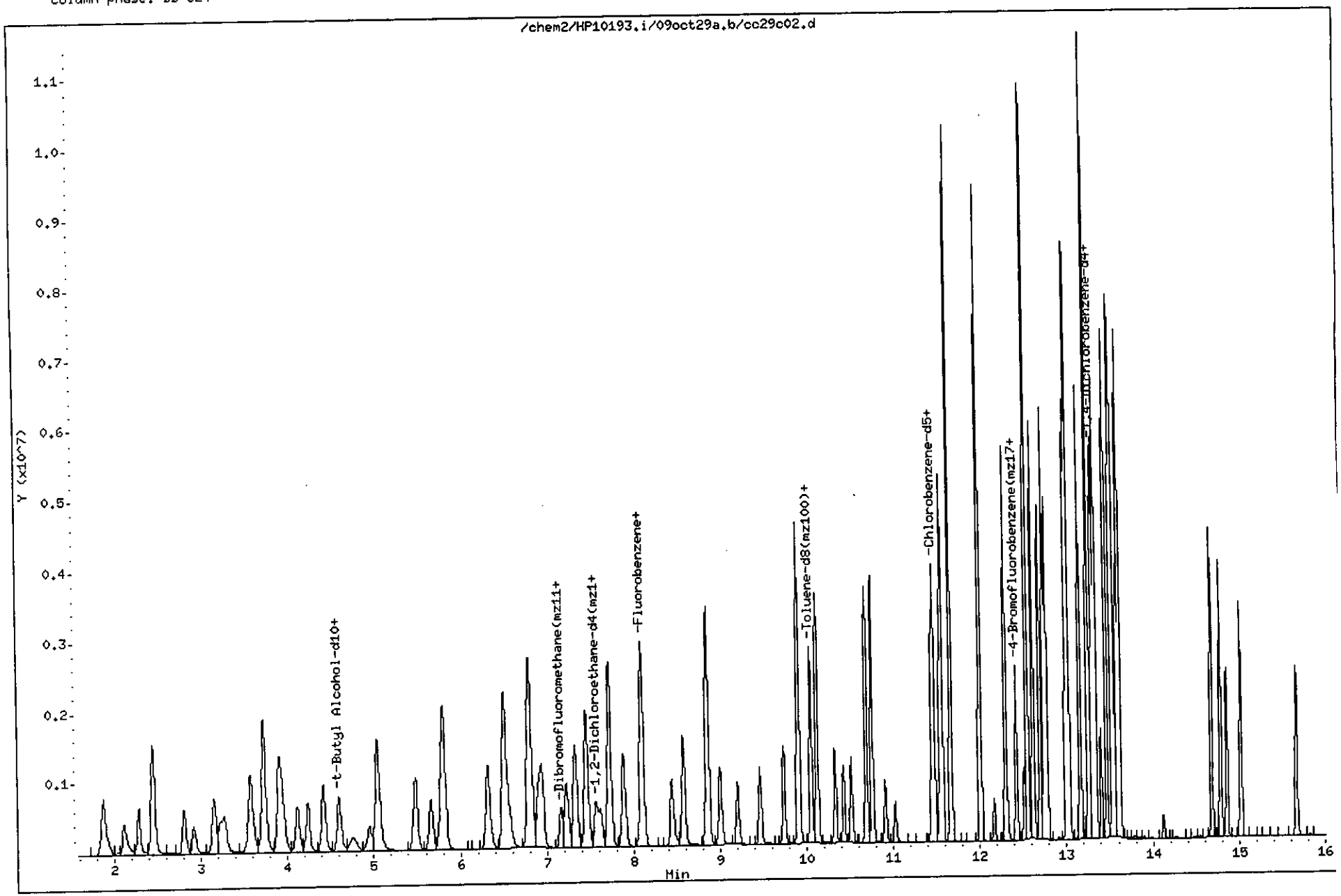
Minimum RRF for SPCC(#)=0.10 (0.30 for Chlorobenzene, 1,1,2,2-Tetrachloroethane)
Maximum %Drift for CCC(*)=20%

Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d
Date : 29-OCT-2009 12:57
Client ID: VSTD12.5
Sample Info: VSTD12.5;VSTD12.5;1;2;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

RAD23 8215



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 13:36 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.115	85	1018344	15.442
5) Chloromethane	(1)	2.286	50	996374	14.439
7) Vinyl Chloride	(1)	2.432	62	985449	14.419
9) Bromomethane	(1)	2.810	94	662866	13.851
11) Chloroethane	(1)	2.920	64	554120	13.940
12) Dichlorofluoromethane	(1)	3.151	67	1345052	14.247
14) Trichlorofluoromethane	(1)	3.261	101	1288434	14.914
16) Ethyl Ether	(1)	3.572	59	425536	12.144
17) Freon 123a	(1)	3.578	67	831680M	13.880
23) Acrolein	(4)	3.731	56	2987613	609.063
24) 1,1-Dichloroethene	(1)	3.901	96	518001	12.130
25) Freon 113	(1)	3.938	101	599375	12.639
26) Acetone	(4)	3.938	58	260955	137.213
28) Methyl Iodide	(1)	4.115	142	1063383	11.842
29) Carbon Disulfide	(1)	4.237	76	1595875	11.748
31) Allyl Chloride	(1)	4.420	41	994741	11.829
32) Methyl Acetate	(1)	4.438	43	234894	11.742
34) Methylene Chloride	(1)	4.596	84	597134	12.172
35) *t-Butyl Alcohol-d10	(4)	4.627	65	97324	50.000
36) t-Butyl Alcohol	(4)	4.761	59	545771	266.903
39) Acrylonitrile	(4)	4.950	53	555643	64.150
40) trans-1,2-Dichloroethene	(1)	5.041	96	621380	12.331
38) 1,2-Dichloroethene (Total)	(1)		96	1300219	24.835
41) Methyl Tertiary Butyl Ether	(1)	5.047	73	1351099	11.897
44) n-Hexane	(1)	5.480	57	919888	11.900
45) 1,1-Dichloroethane	(1)	5.663	63	1144942	12.377
47) di-Isopropyl Ether	(1)	5.791	45	2146451	12.350
48) 2-Chloro-1,3-Butadiene	(1)	5.809	53	1021397	12.495
49) Ethyl t-Butyl Ether	(1)	6.322	59	1795447	11.786
52) 2,2-Dichloropropane	(1)	6.523	77	911788	12.669
50) cis-1,2-Dichloroethene	(1)	6.504	96	678839	12.504
51) 2-Butanone	(4)	6.498	43	1443985	126.880
53) Propionitrile	(4)	6.572	54	874322	270.091
54) Methacrylonitrile	(4)	6.797	67	1496696	126.881

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 8216

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 13:36 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
55) Bromochloromethane	(1)	6.834	128	297978	12.570
56) Tetrahydrofuran	(4)	6.907	71	375520	126.347
59) Chloroform	(1)	6.949	83	1135686	12.962
63) 1,1,1-Trichloroethane	(1)	7.230	97	969588	12.761
64) Cyclohexane	(1)	7.327	56	1155447	12.311
66) 1,1-Dichloropropene	(1)	7.449	75	896609	12.532
67) Carbon Tetrachloride	(1)	7.468	117	864111	13.452
69) Isobutyl Alcohol	(4)	7.571	41	562078	724.316
73) Benzene	(1)	7.724	78	2740494	12.615
74) 1,2-Dichloroethane	(1)	7.724	62	711573	12.993
72) 1,2-Dichloroethane(mz98)	(1)	7.730	98	59456	12.503
77) t-Amyl Methyl Ether	(1)	7.882	73	1507409	11.981
78) *Fluorobenzene	(1)	8.090	96	2068509	10.000
79) n-Heptane	(1)	8.108	43	1073520	12.251
80) n-Butanol	(4)	8.443	56	840232	1300.299
82) Trichloroethene	(1)	8.577	95	695431	12.729
85) Methylcyclohexane	(1)	8.858	83	1237183	12.441
84) 1,2-Dichloropropane	(1)	8.858	63	700574	12.845
87) Dibromomethane	(1)	8.998	93	293352	13.041
90) 1,4-Dioxane	(4)	9.022	88	115900	681.100
88) Methyl Methacrylate	(4)	9.004	69	261510	12.326
91) Bromodichloromethane	(1)	9.205	83	755783	13.303
92) 2-Nitropropane	(4)	9.461	41	862428	138.393
94) cis-1,3-Dichloropropene	(1)	9.742	75	937574	12.784
96) 4-Methyl-2-Pentanone	(1)	9.906	43	3716554	129.260
100) Toluene	(2)	10.126	92	1741434	12.727
102) trans-1,3-Dichloropropene	(2)	10.327	75	772732	12.997
103) Ethyl Methacrylate	(2)	10.424	69	578751	12.541
104) 1,1,2-Trichloroethane	(2)	10.516	97	416152	12.896
106) Tetrachloroethene	(2)	10.693	166	833333	12.851
105) 1,3-Dichloropropane	(2)	10.687	76	752442	12.991
107) 2-Hexanone	(2)	10.760	43	2569079	128.676
108) Dibromochloromethane	(2)	10.912	129	498534	13.450
109) 1,2-Dibromoethane	(2)	11.022	107	396371	12.889

* = Compound is an internal standard.

RAD23 0217

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 13:36 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
110) *Chlorobenzene-d5	(2)	11.449	117	1514324	10.000
112) Chlorobenzene	(2)	11.473	112	2000176	12.915
113) 1,1,1,2-Tetrachloroethane	(2)	11.546	131	653956	13.513
114) Ethylbenzene	(2)	11.571	91	3537478	13.043
117) m+p-Xylene	(2)	11.668	106	2834573	26.451
116) Xylene (Total)	(2)		106	4193185	39.568
118) o-Xylene	(2)	12.003	106	1358612	13.117
119) Styrene	(2)	12.009	104	2190939	13.310
120) Bromoform	(2)	12.168	173	258676	12.832
121) Isopropylbenzene	(2)	12.302	105	3442319	13.135
127) 1,1,2,2-Tetrachloroethane	(3)	12.515	83	479042M	12.656
128) Bromobenzene	(3)	12.552	156	883523	12.883
129) trans-1,4-Dichloro-2-Butene	(4)	12.552	53	1272735	116.042
130) 1,2,3-Trichloropropane	(3)	12.558	110	140854	12.991
132) n-Propylbenzene	(3)	12.619	91	4315192	12.660
133) 2-Chlorotoluene	(3)	12.698	126	865988	12.665
136) 4-Chlorotoluene	(3)	12.778	126	903597	12.698
135) 1,3,5-Trimethylbenzene	(3)	12.747	105	3133276	12.837
138) Pentachloroethane	(3)	13.028	167	578658	13.736
137) tert-Butylbenzene	(3)	13.003	134	712659	12.734
139) 1,2,4-Trimethylbenzene	(3)	13.034	105	3297608	13.004
140) sec-Butylbenzene	(3)	13.162	105	4023253	12.804
141) 1,3-Dichlorobenzene	(3)	13.259	146	1827158	12.829
143) *1,4-Dichlorobenzene-d4	(3)	13.302	152	911811	10.000
142) p-Isopropyltoluene	(3)	13.259	119	3627434	13.016
144) 1,4-Dichlorobenzene	(3)	13.320	146	1812671	12.606
145) 1,2,3-Trimethylbenzene	(3)	13.345	120	1464671	12.639
146) Benzyl Chloride	(3)	13.406	126	207998	13.210
147) n-Butylbenzene	(3)	13.552	92	1791530	12.887
148) 1,2-Dichlorobenzene	(3)	13.588	146	1563553	12.732
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	155	64087	13.387
153) 1,2,4-Trichlorobenzene	(3)	14.686	180	1254813	12.503
154) Hexachlorobutadiene	(3)	14.789	225	742176	12.854
155) Naphthalene	(3)	14.863	128	1799043	12.561

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 #218

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

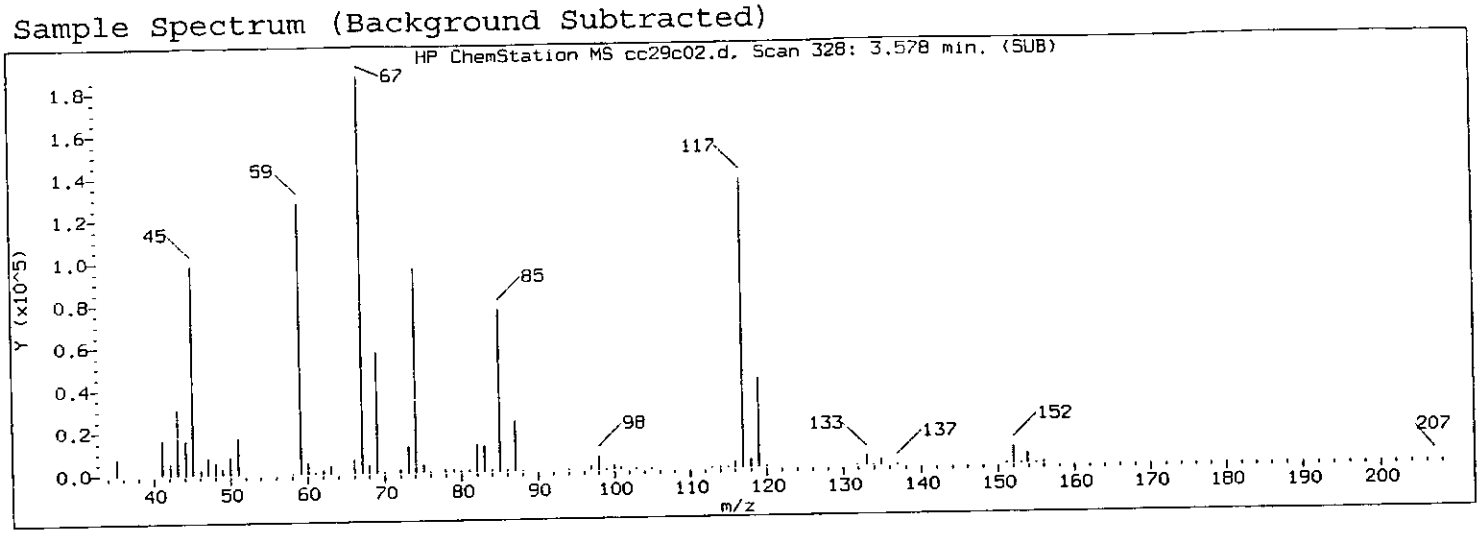
Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 13:36 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

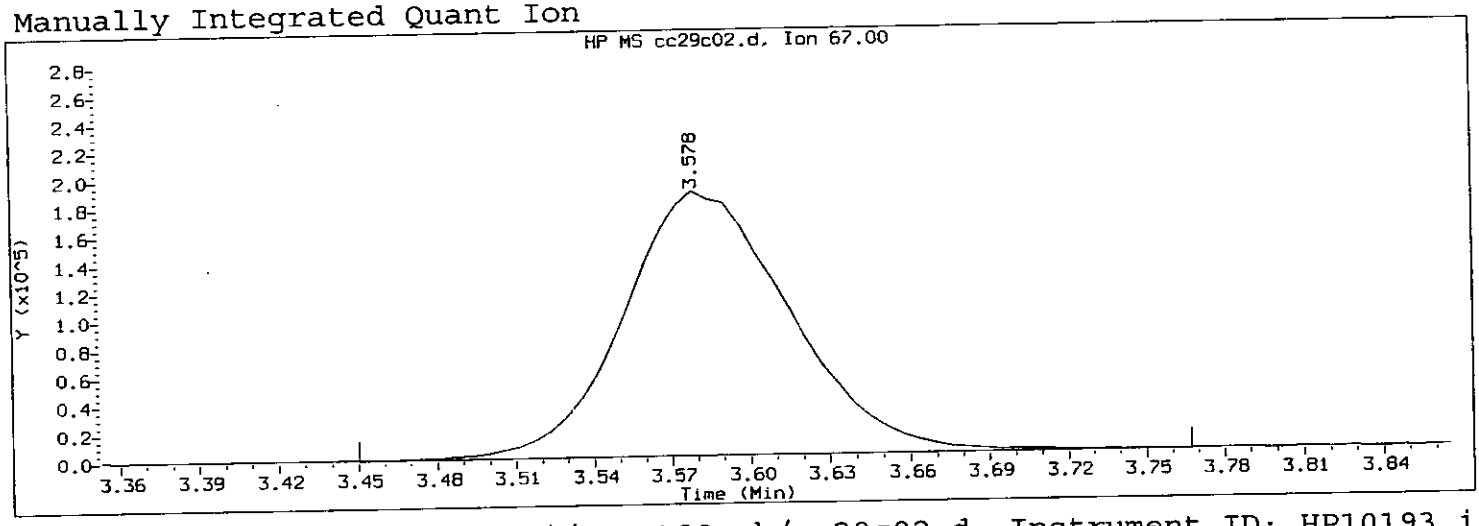
Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
156) 1,2,3-Trichlorobenzene	(3)	15.027	180	1035326	12.547
60)$Dibromofluoromethane	(1)	7.163	113	492634	9.652
61)$Dibromofluoromethane(mz111)	(1)	7.163	111	501833	9.580
70)$1,2-Dichloroethane-d4	(1)	7.620	102	88539	9.313
71)$1,2-Dichloroethane-d4(mz104)	(1)	7.620	104	56261	9.267
98)$Toluene-d8	(2)	10.053	98	2143731	9.628
99)$Toluene-d8(mz100)	(2)	10.053	100	1367379	9.543
124)$4-Bromofluorobenzene	(2)	12.424	95	751101	9.402
125)$4-Bromofluorobenzene(mz174)	(2)	12.424	174	675062	9.474

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 29-OCT-2009 13:35
Date, time and analyst ID of latest file update: 29-Oct-2009 13:36 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compound Number	:	17
Compound Name	:	Freon 123a
Scan Number	:	328
Retention Time (minutes)	:	3.578
Quant Ion	:	67
Area (flag)	:	831680 M
Concentration (ug/L)	:	13.8804
Integration start scan	:	306 Integration stop scan: 358
Y at integration start	:	0 Y at integration end: 0

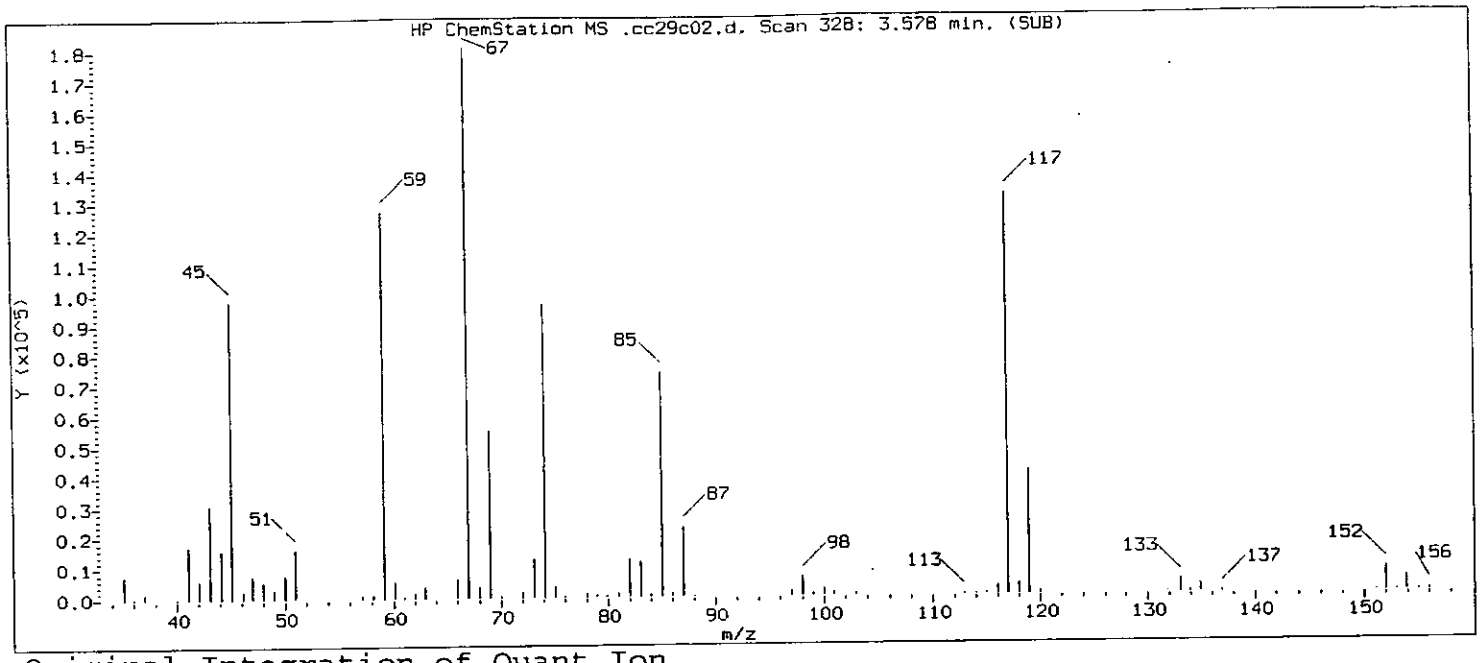
Reason for manual integration (circle one): missed peak improper integratio

Analyst responsible for change: _____ 10/29/09

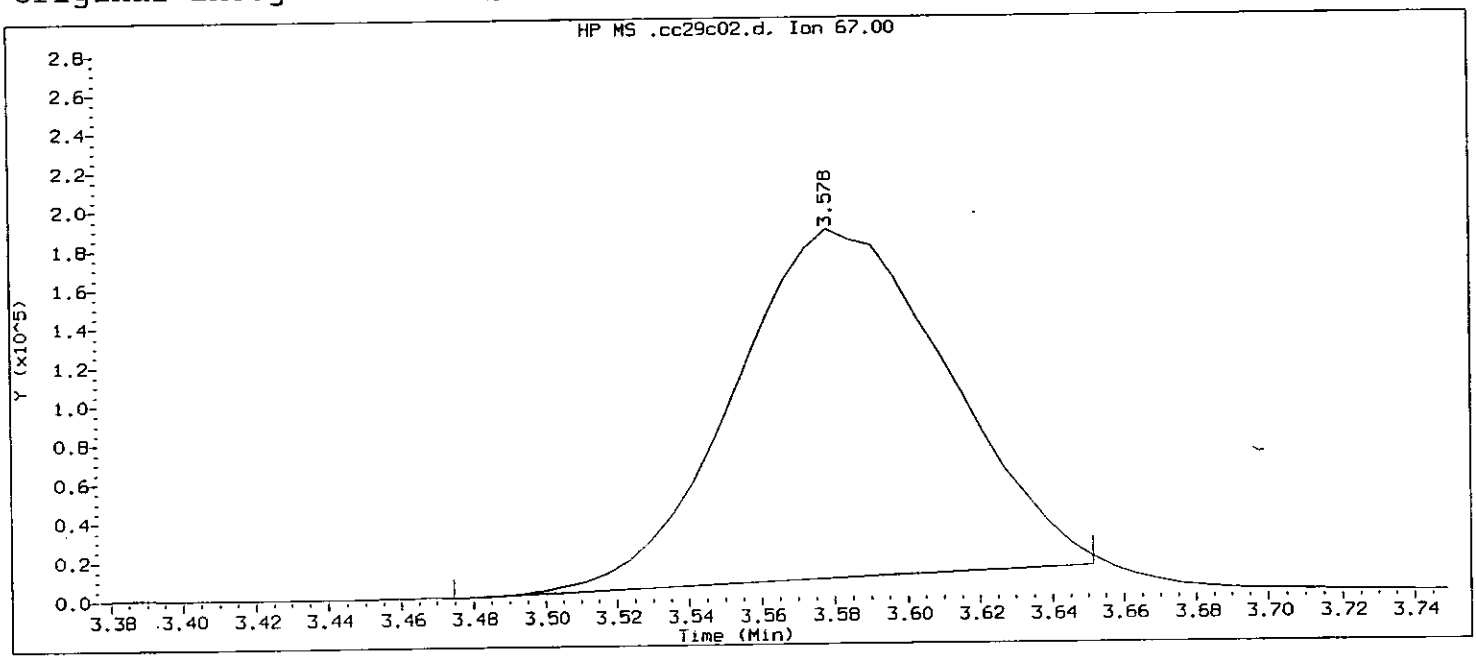
RAB23 0228

GC/MS audit/management approval: _____ 11/2/09

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 29-OCT-2009 13:35
Date, time and analyst ID of latest file update: 29-Oct-2009 13:35 jml01693

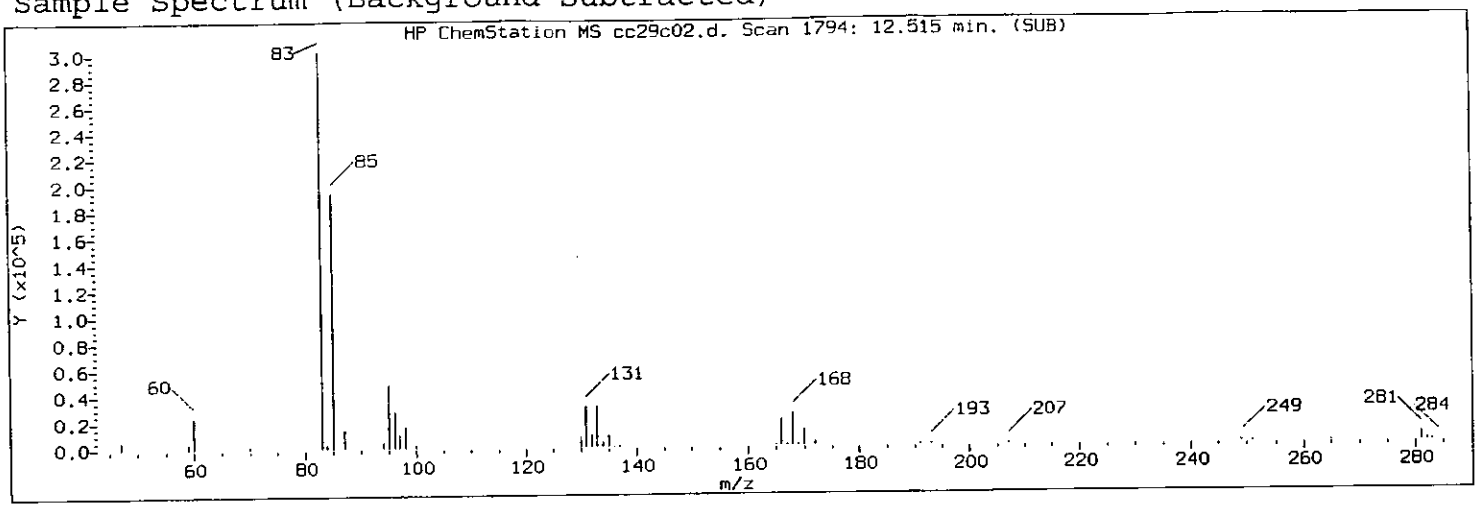
Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compound Number	:	17
Compound Name	:	Freon 123a
Scan Number	:	328
Retention Time (minutes)	:	3.578
Quant Ion	:	67
Area	:	730769
Concentration (ug/L)	:	12.1962
Integration start scan	:	310 Integration stop scan: 339
Y at integration start	:	314 Y at integration end: 14291

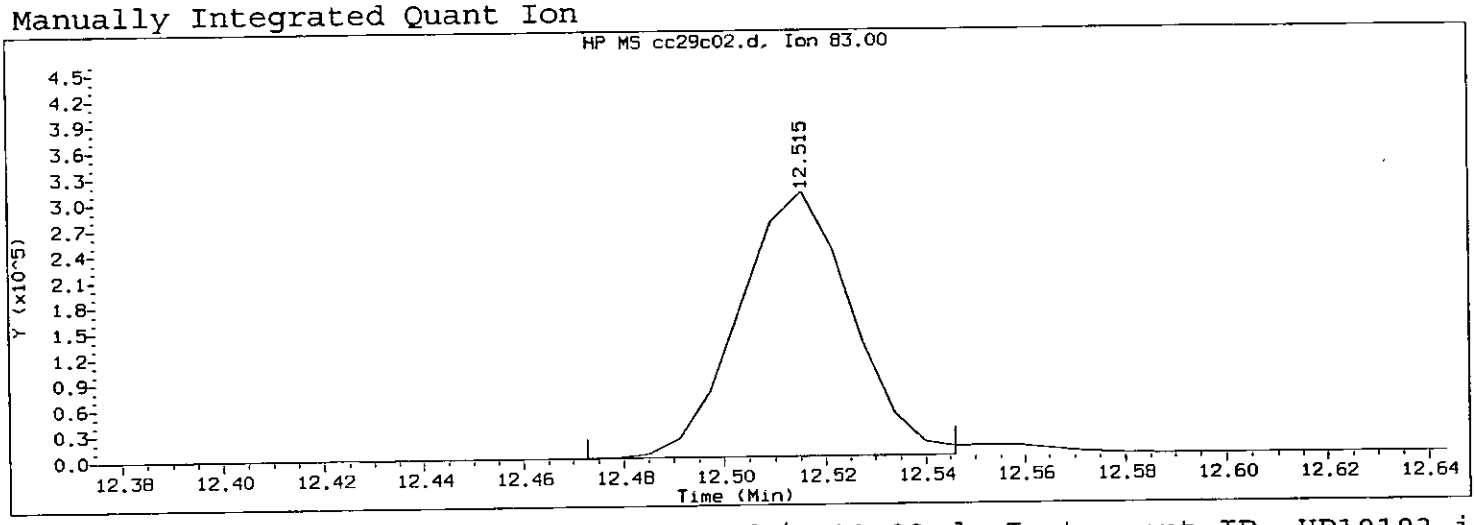
RAD23 8221

Original Integration Report for data file /chem2/HP10193.i/09oct29a.b/cc29c02.d, generated on 10/29/2009 at 13:36

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 29-OCT-2009 13:35
Date, time and analyst ID of latest file update: 29-Oct-2009 13:36 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compound Number	: 127
Compound Name	: 1,1,2,2-Tetrachloroethane
Scan Number	: 1794
Retention Time (minutes)	: 12.515
Quant Ion	: 83
Area (flag)	: 479042 M
Concentration (ug/L)	: 12.6561
Integration start scan	: 1786 Integration stop scan: 1798
Y at integration start	: 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integratio

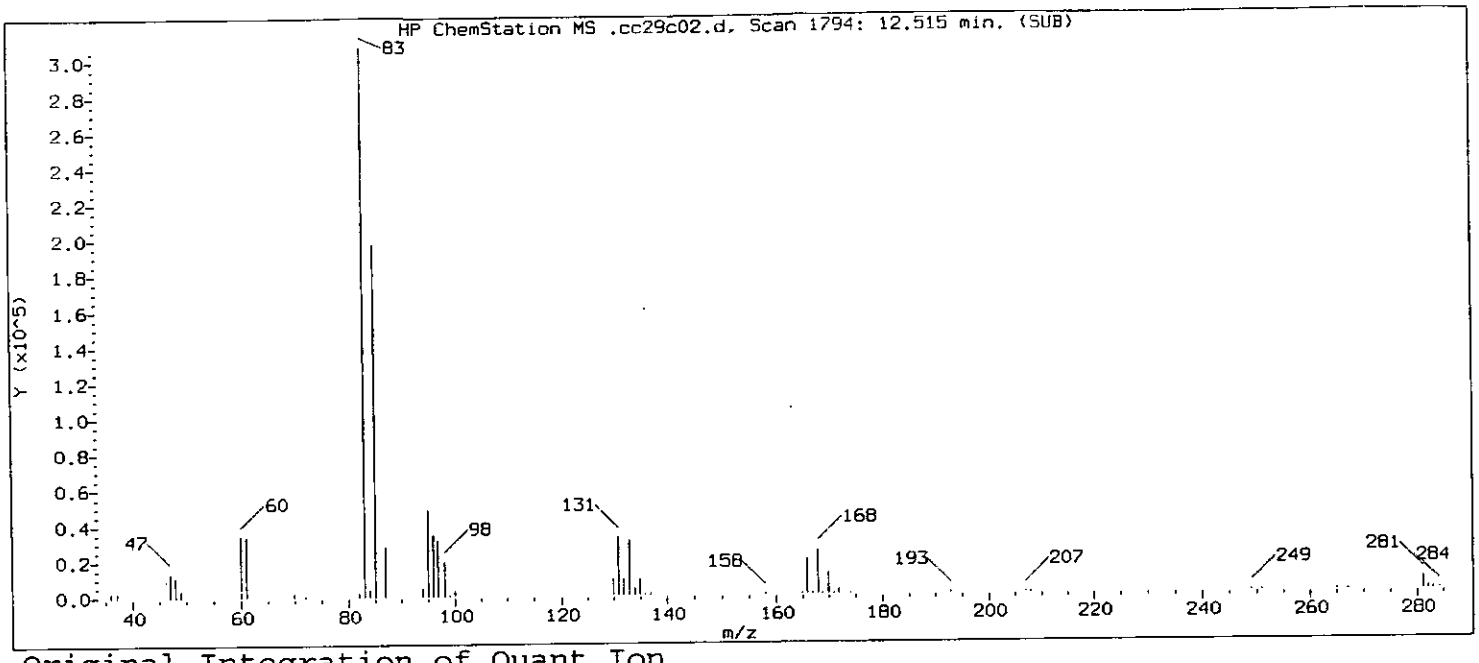
Analyst responsible for change: JML 10/29/09

RAD23 8222

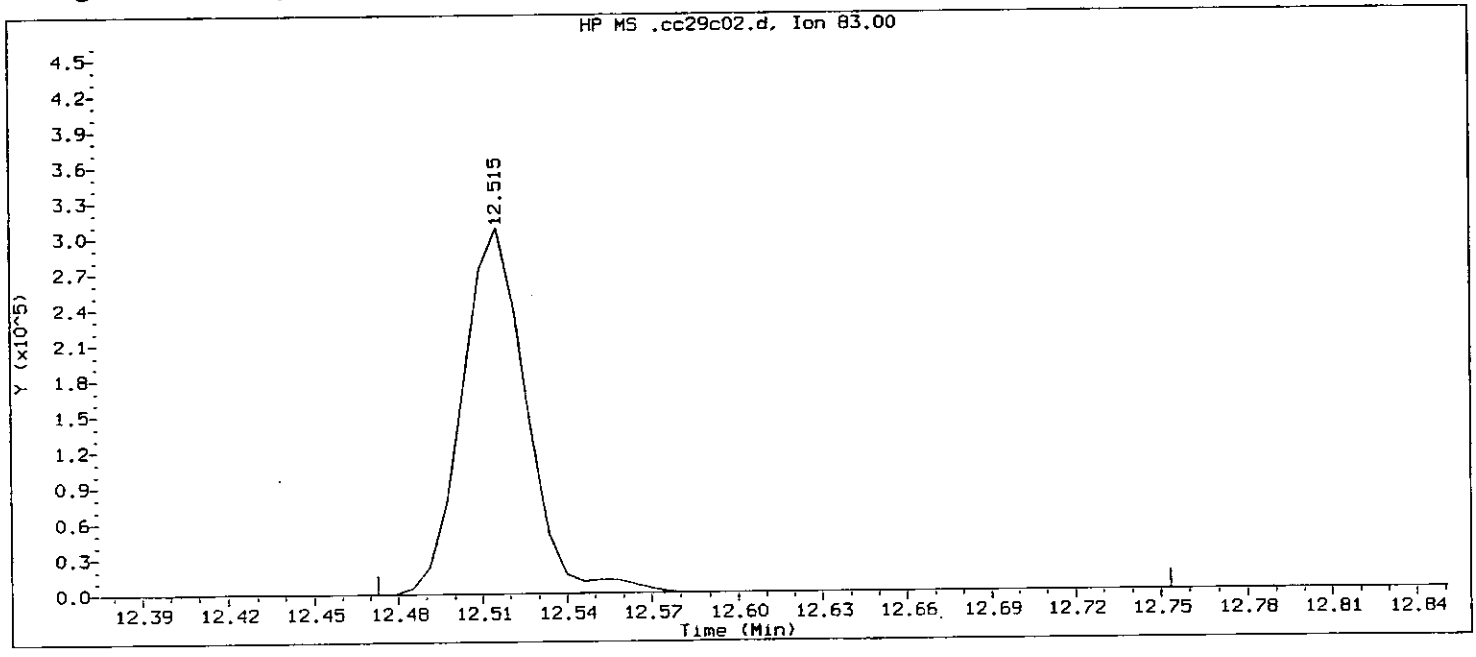
GC/MS audit/management approval: 11/2/09

Manual Integration Report for data file /chem2/HP10193.i/09oct29a.b/cc29c02.d, generated on 10/29/2009 at 13:36

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29c02.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 12:57 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260WI25
Calibration date and time: 29-OCT-2009 13:35
Date, time and analyst ID of latest file update: 29-Oct-2009 13:35 jml01693

Sample Name: VSTD12.5 Lab Sample ID: VSTD12.5

Compound Number	:	127
Compound Name	:	1,1,2,2-Tetrachloroethane
Scan Number	:	1794
Retention Time (minutes)	:	12.515
Quant Ion	:	83
Area	:	492271
Concentration (ug/L)	:	13.0057
Integration start scan	:	1786 Integration stop scan: 1832
Y at integration start	:	0 Y at integration end: 0

RAD23 0223

Original Integration Report for data file /chem2/HP10193.i/09oct29a.b/cc29c02.d, generated on 10/29/2009 at 13:36

Raw QC Data

Data File: /chem2/HP10193.i/09oct23a.b/cc23t01.d

Date : 23-OCT-2009 09:38

Client ID: BFB MAY27-09

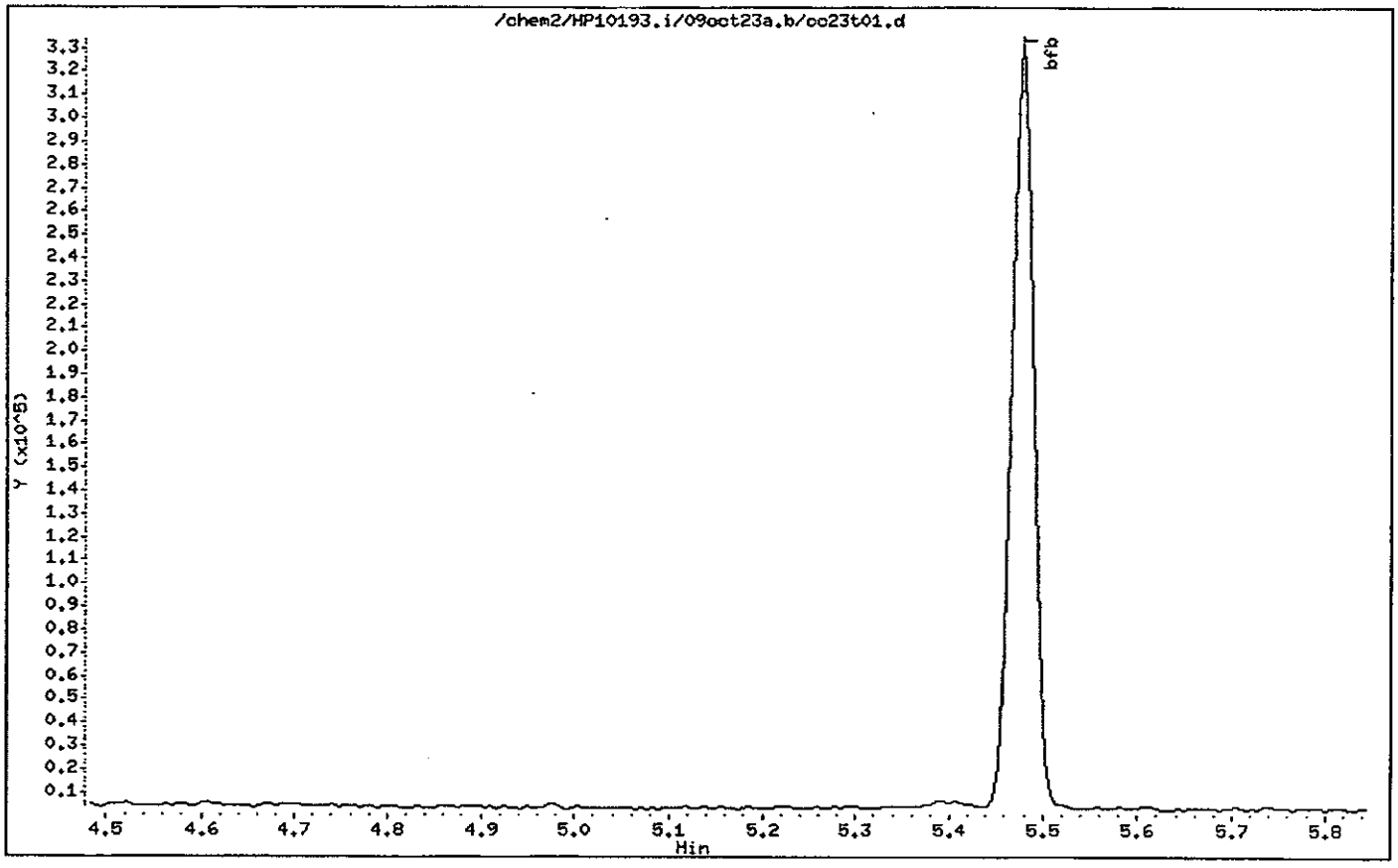
Instrument: HP10193.i

Sample Info: BFB MAY27-09;50NG BFB;1;3;;

Operator: JML01693

Column phase: DB-624

Column diameter: 0.25



JN 10/26/09

Data File: /chem2/HP10193.i/09oct23a.b/cc23t01.d

Date : 23-OCT-2009 09:38

Client ID: BFB MAY27-09

Instrument: HP10193.i

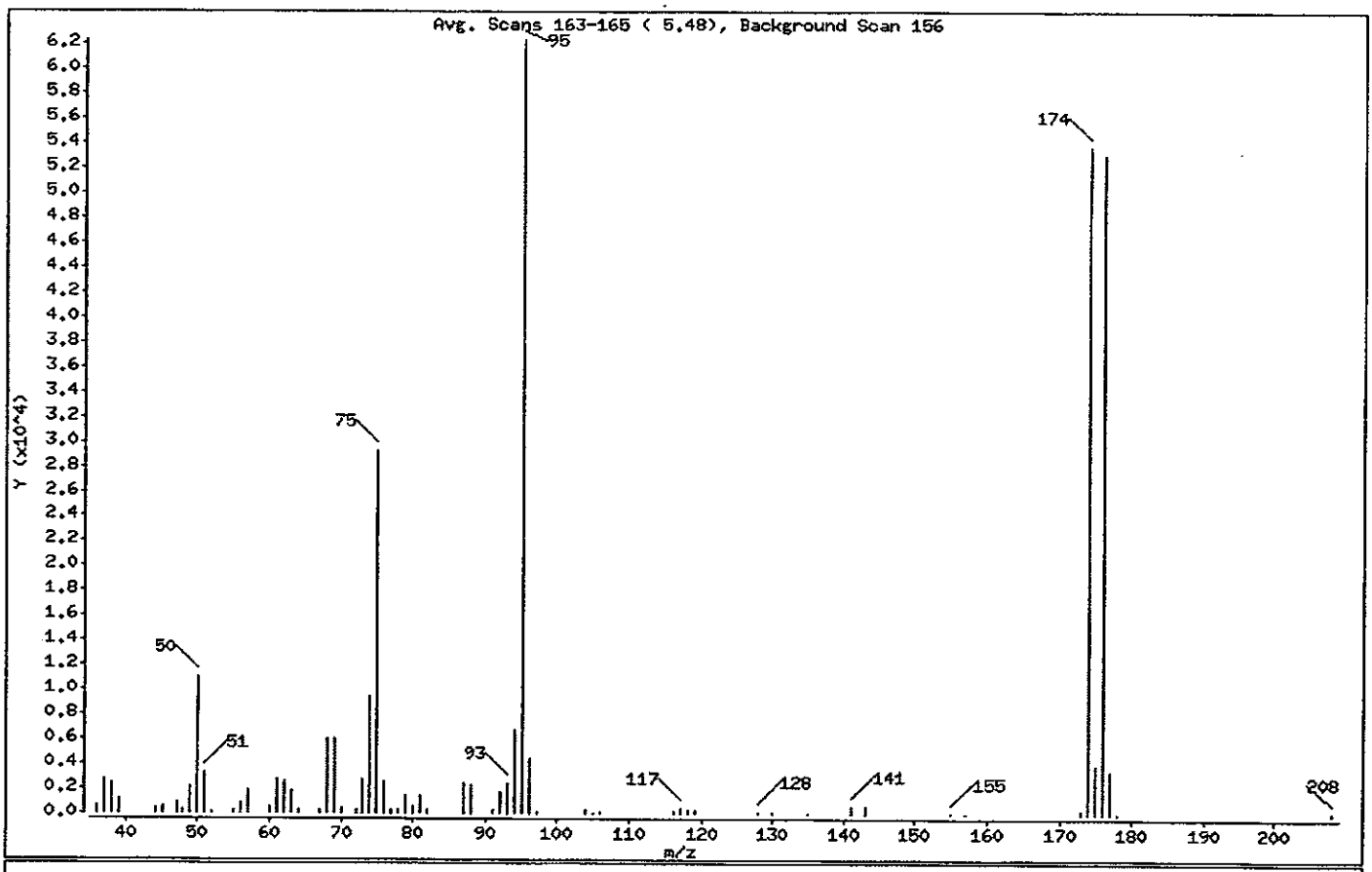
Sample Info: BFB MAY27-09;50NG BFB;1;3;;

Operator: JML01693

Column phase: DB-624

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	17.80
75	30.00 - 60.00% of mass 95	46.89
96	5.00 - 9.00% of mass 95	7.09
173	Less than 2.00% of mass 174	0.49 (0.57)
174	50.00 - 100.00% of mass 95	86.25
175	5.00 - 9.00% of mass 174	6.24 (7.23)
176	95.00 - 101.00% of mass 174	85.11 (98.68)
177	5.00 - 9.00% of mass 176	5.46 (6.42)

Data File: /chem2/HP10193.i/09oct23a.b/cc23t01.d

Date : 23-OCT-2009 09:38

Client ID: BFB MAY27-09

Instrument: HP10193.i

Sample Info: BFB MAY27-09;50NG BFB;1;3;;

Operator: JML01693

Column phase: DB-624

Column diameter: 0.25

Data File: cc23t01.d

Spectrum: Avg. Scans 163-165 (5.48), Background Scan 156

Location of Maximum: 95.00

Number of points: 65

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	643	62.00	2638	82.00	351	128.00	191
37.00	2792	63.00	1900	87.00	2430	130.00	187
38.00	2470	64.00	284	88.00	2238	135.00	50
39.00	1147	67.00	233	91.00	242	141.00	551
44.00	450	68.00	5961	92.00	1722	143.00	523
45.00	522	69.00	6062	93.00	2471	155.00	65
47.00	812	70.00	495	94.00	6698	157.00	59
48.00	325	72.00	295	95.00	62320	173.00	307
49.00	2186	73.00	2667	96.00	4418	174.00	53744
50.00	11092	74.00	9444	97.00	108	175.00	3887
51.00	3336	75.00	29216	104.00	247	176.00	53040
52.00	193	76.00	2552	105.00	51	177.00	3405
55.00	299	77.00	337	106.00	194	178.00	51
56.00	858	78.00	283	116.00	144	208.00	80
57.00	1791	79.00	1472	117.00	399		
60.00	507	80.00	526	118.00	221		
61.00	2654	81.00	1499	119.00	339		

Data File: /chem2/HP10193.i/09oct28b.b/cc28t02.d

Date : 28-OCT-2009 17:15

Client ID: BFB MAY27-09

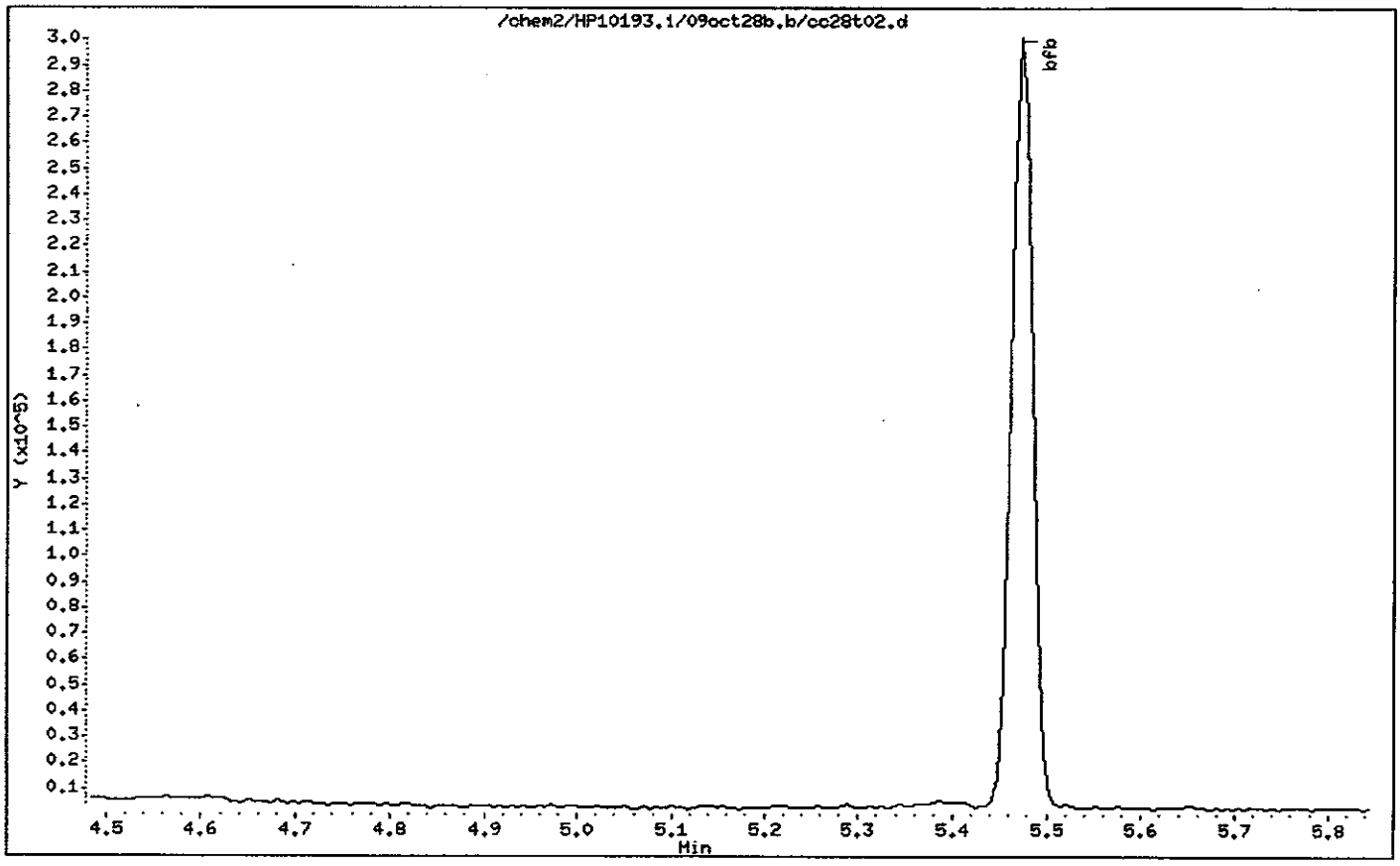
Instrument: HP10193.i

Sample Info: BFB MAY27-09;50NG BFB;1;3;;

Operator: SEW02002

Column phase: DB-624

Column diameter: 0.25



10/28/09

RAD23 0227a

Data File: /chem2/HP10193.i/09oct28b.b/cc28t02.d

Date : 28-OCT-2009 17:15

Client ID: BFB MAY27-09

Instrument: HP10193.i

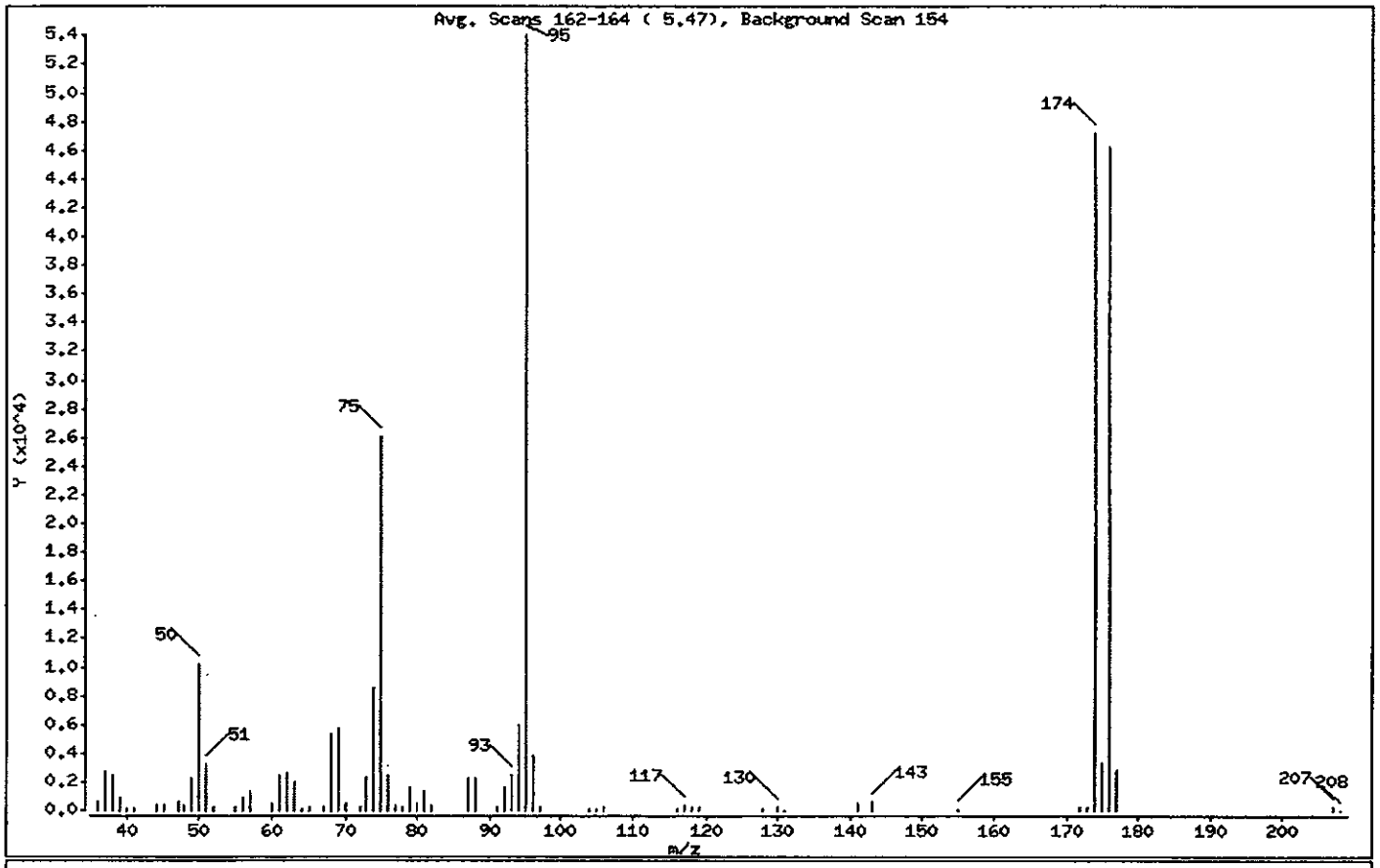
Sample Info: BFB MAY27-09;50NG BFB;1;3;;

Operator: SEW02002

Column phase: DB-624

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	18.92
75	30.00 - 60.00% of mass 95	48.28
96	5.00 - 9.00% of mass 95	7.16
173	Less than 2.00% of mass 174	0.55 (0.63)
174	50.00 - 100.00% of mass 95	87.33
175	5.00 - 9.00% of mass 174	6.12 (7.01)
176	95.00 - 101.00% of mass 174	85.43 (97.82)
177	5.00 - 9.00% of mass 176	5.22 (6.11)

RAD23 0227b

Data File: /chem2/HP10193.i/09oct28b.b/cc28t02.d

Date : 28-OCT-2009 17:15

Client ID: BFB MAY27-09

Instrument: HP10193.i

Sample Info: BFB MAY27-09;50NG BFB;1;3;;

Operator: SEW02002

Column phase: DB-624

Column diameter: 0.25

Data File: cc28t02.d

Spectrum: Avg. Scans 162-164 (5.47), Background Scan 154

Location of Maximum: 95.00

Number of points: 68

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	645	61.00	2528	81.00	1393	128.00	161
37.00	2721	62.00	2614	82.00	351	130.00	197
38.00	2440	63.00	1927	87.00	2243	131.00	52
39.00	930	64.00	158	88.00	2262	141.00	482
40.00	122	65.00	216	91.00	238	143.00	564
41.00	113	67.00	274	92.00	1565	155.00	64
44.00	404	68.00	5336	93.00	2432	172.00	292
45.00	366	69.00	5699	94.00	5999	173.00	298
47.00	676	70.00	513	95.00	54048	174.00	47200
48.00	328	72.00	260	96.00	3872	175.00	3309
49.00	2214	73.00	2394	97.00	195	176.00	46168
50.00	10224	74.00	8567	104.00	142	177.00	2821
51.00	3190	75.00	26088	105.00	115	207.00	202
52.00	204	76.00	2465	106.00	199	208.00	51
55.00	206	77.00	394	116.00	131		
56.00	817	78.00	293	117.00	314		
57.00	1379	79.00	1576	118.00	194		
60.00	445	80.00	461	119.00	291		

RAD23 0227C

Data File: /chem2/HP10193.i/09oct28c.b/cc28t04.d

Date : 28-OCT-2009 22:27

Client ID: 50 NG BFB

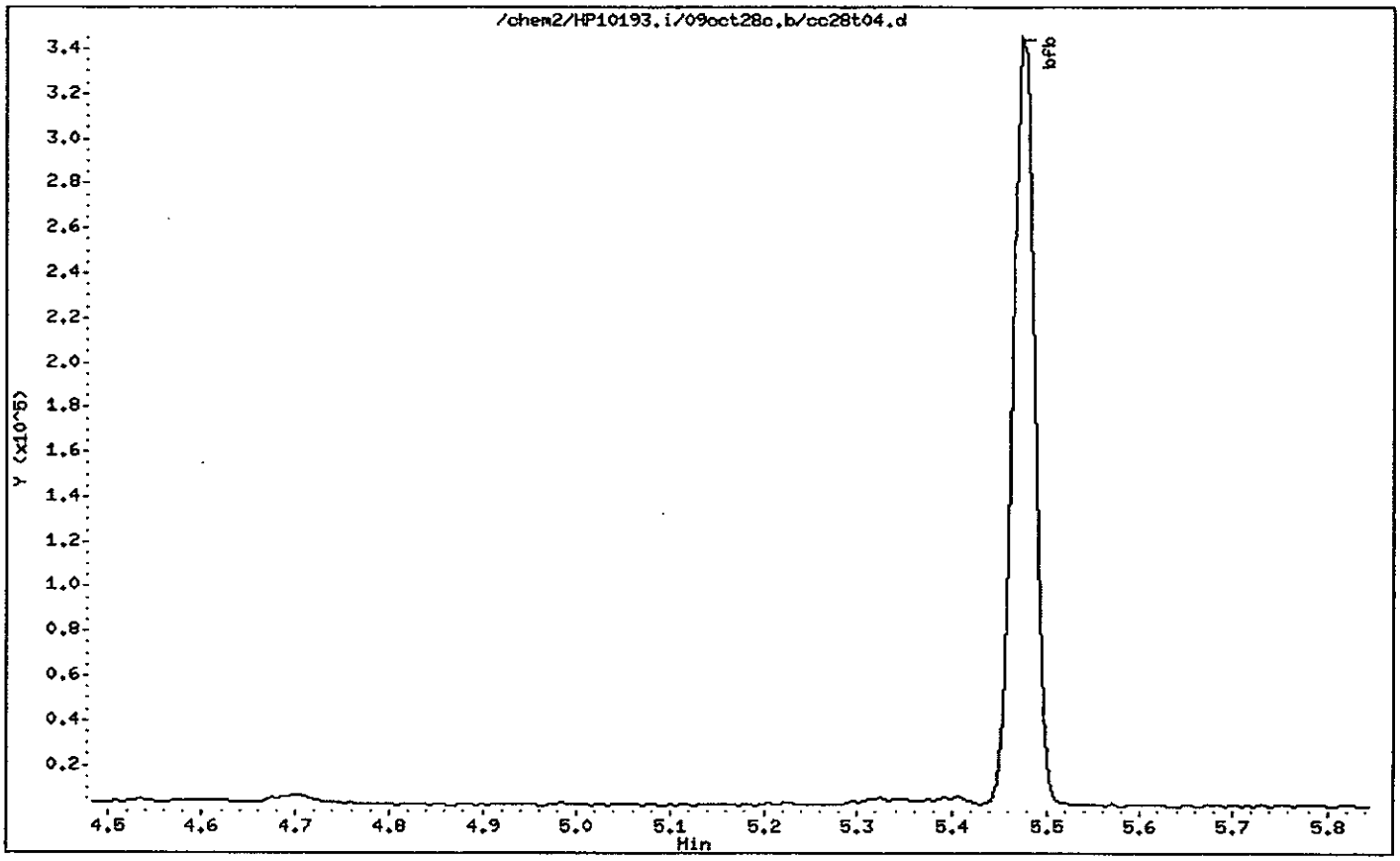
Instrument: HP10193.i

Sample Info: 50 NG BFB;2 uL BFB;1;2;;

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.25



ADS1731
10/28/09

RAD23 0227d

Data File: /chem2/HP10193.i/09oct28c.b/cc28t04.d

Date : 28-OCT-2009 22:27

Client ID: 50 NG BFB

Instrument: HP10193.i

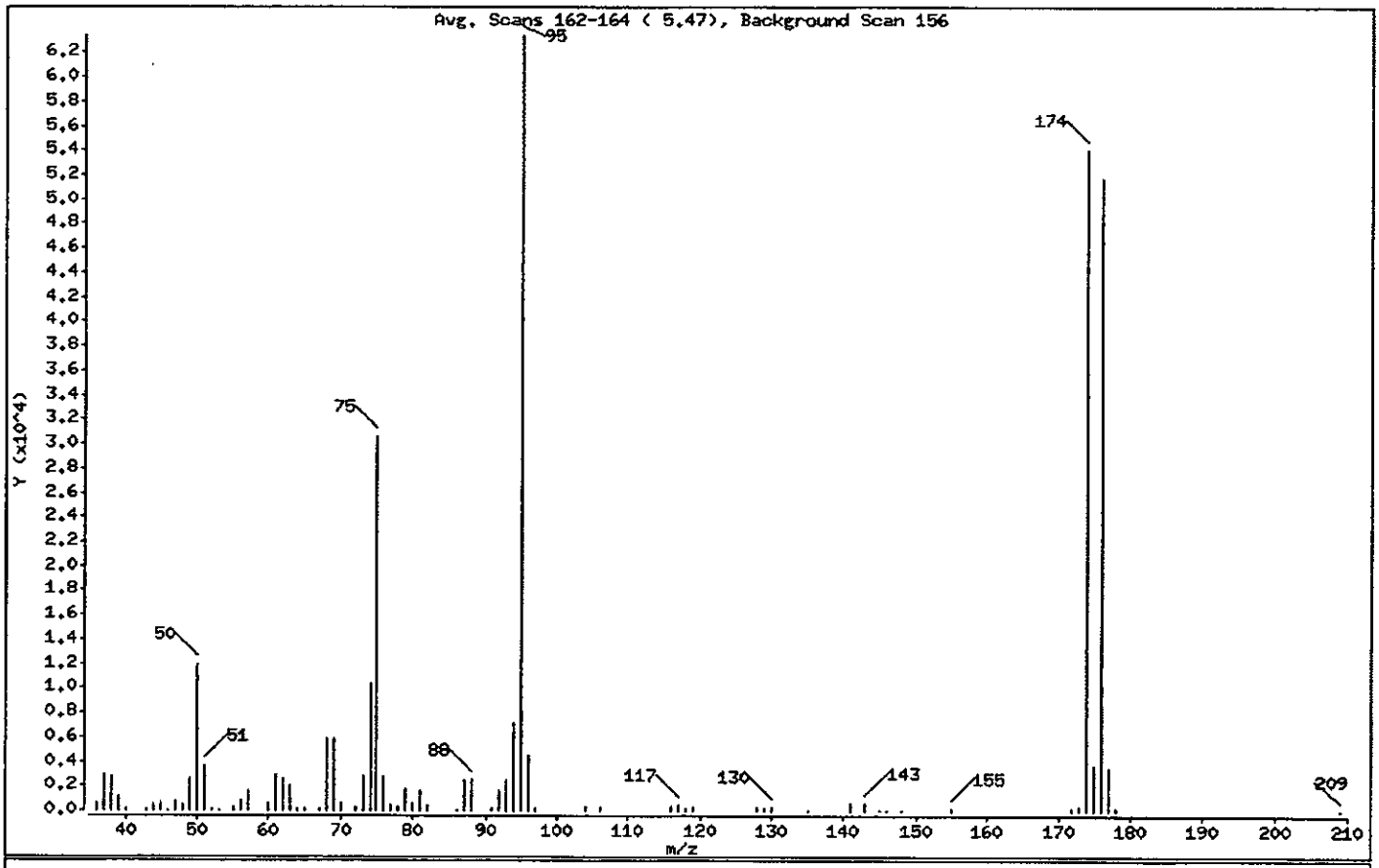
Sample Info: 50 NG BFB;2 uL BFB;1;2;;

Operator: ADS01731

Column phase: DB-624

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	18.93
75	30.00 - 60.00% of mass 95	48.21
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.52 (0.61)
174	50.00 - 100.00% of mass 95	85.29
175	5.00 - 9.00% of mass 174	5.75 (6.75)
176	95.00 - 101.00% of mass 174	81.53 (95.59)
177	5.00 - 9.00% of mass 176	5.59 (6.85)

RAD23 0227e

Data File: /chem2/HP10193.i/09oct28c.b/cc28t04.d

Date : 28-OCT-2009 22:27

Client ID: 50 NG BFB

Instrument: HP10193.i

Sample Info: 50 NG BFB;2 uL BFB;1;2;;

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.25

Data File: cc28t04.d
Spectrum: Avg. Scans 162-164 (5.47), Background Scan 156
Location of Maximum: 95.00
Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	555	60.00	604	81.00	1629	129.00	73
37.00	2945	61.00	2850	82.00	445	130.00	266
38.00	2733	62.00	2658	86.00	60	135.00	51
39.00	1232	63.00	2085	87.00	2479	141.00	566
40.00	80	64.00	203	88.00	2543	143.00	573
43.00	179	65.00	117	91.00	203	145.00	63
44.00	387	67.00	120	92.00	1619	146.00	61
45.00	582	68.00	5850	93.00	2448	148.00	52
46.00	54	69.00	5758	94.00	7204	155.00	207
47.00	801	70.00	646	95.00	63368	172.00	146
48.00	450	72.00	278	96.00	4460	173.00	328
49.00	2563	73.00	2780	97.00	120	174.00	54048
50.00	11995	74.00	10352	104.00	306	175.00	3646
51.00	3684	75.00	30544	106.00	228	176.00	51664
52.00	134	76.00	2819	116.00	234	177.00	3541
53.00	56	77.00	465	117.00	432	178.00	120
55.00	234	78.00	254	118.00	161	209.00	59
56.00	942	79.00	1732	119.00	311		
57.00	1625	80.00	556	128.00	229		

RAD23 0227f

Data File: /chem2/HP10193.i/09oct28c.b/cc28t04.d

Date : 28-OCT-2009 22:27

Client ID: BFB May27-09

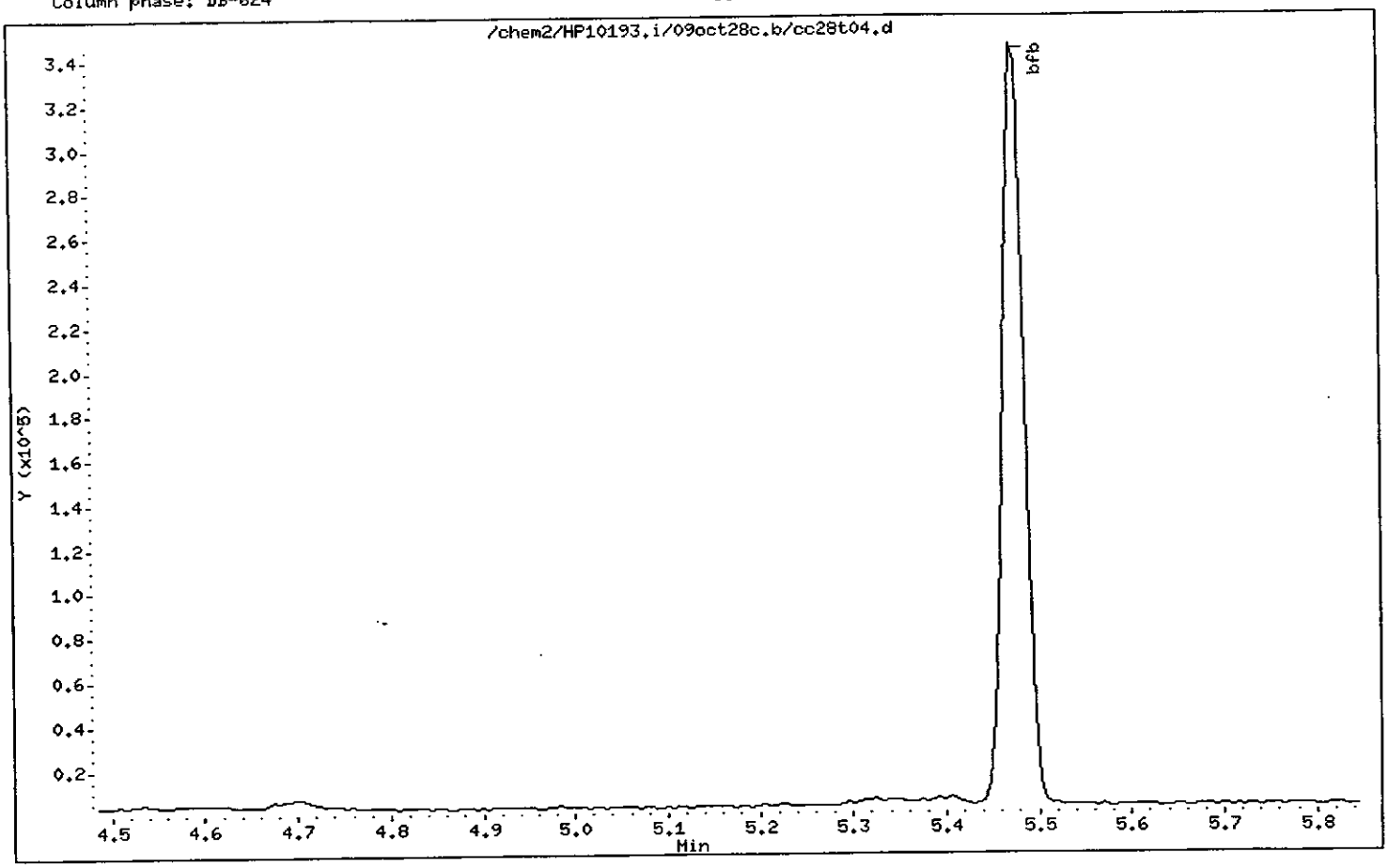
Instrument: HP10193.i

Sample Info: BFB May27-09;50ng BFB;1;2;;

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.25



10/29/09

Data File: /chem2/HP10193.i/09oct28c.b/cc28t04.d

Date : 28-OCT-2009 22:27

Client ID: BFB May27-09

Instrument: HP10193.i

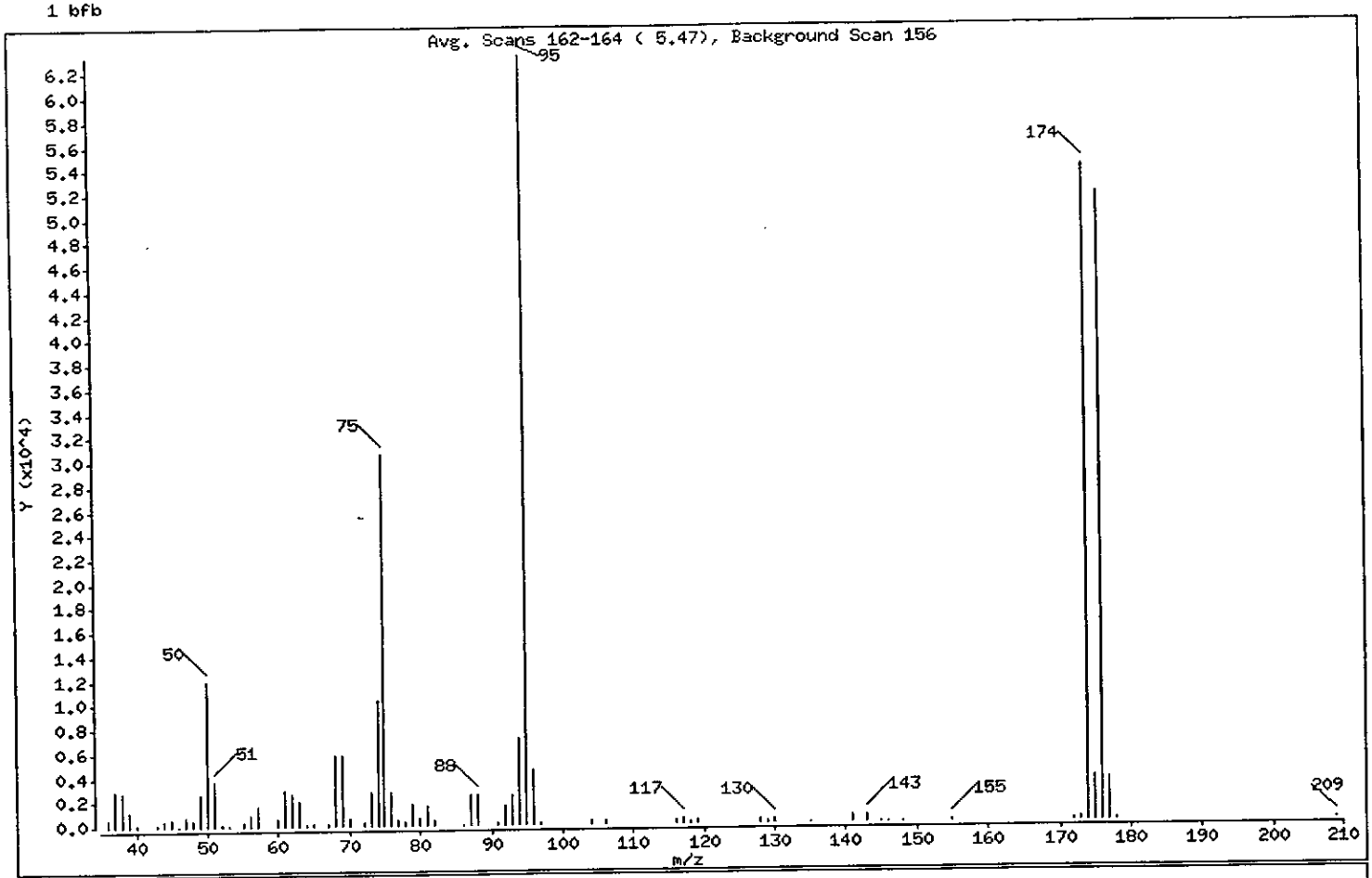
Sample Info: BFB May27-09;50ng BFB;1;2;;

Operator: ADS01731

Column phase: DB-624

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	18.93
75	30.00 - 60.00% of mass 95	48.21
96	5.00 - 9.00% of mass 95	7.04
173	Less than 2.00% of mass 174	0.52 (0.61)
174	50.00 - 100.00% of mass 95	85.29
175	5.00 - 9.00% of mass 174	5.75 (6.75)
176	95.00 - 101.00% of mass 174	81.53 (95.59)
177	5.00 - 9.00% of mass 176	5.59 (6.85)

Data File: /chem2/HP10193.i/09oct28c.b/cc28t04.d

Date : 28-OCT-2009 22:27

Client ID: BFB May27-09

Instrument: HP10193.i

Sample Info: BFB May27-09;50ng BFB;1;2;;

Operator: ADS01731

Column phase: DB-624

Column diameter: 0.25

Data File: cc28t04.d

Spectrum: Avg. Scans 162-164 (5.47), Background Scan 156

Location of Maximum: 95.00

Number of points: 74

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	555	60.00	604	81.00	1629	129.00	73
37.00	2945	61.00	2850	82.00	445	130.00	266
38.00	2733	62.00	2658	86.00	60	135.00	51
39.00	1232	63.00	2085	87.00	2479	141.00	566
40.00	80	64.00	203	88.00	2543	143.00	573
43.00	179	65.00	117	91.00	203	145.00	63
44.00	387	67.00	120	92.00	1619	146.00	61
45.00	582	68.00	5850	93.00	2448	148.00	52
46.00	54	69.00	5758	94.00	7204	155.00	207
47.00	801	70.00	646	95.00	63368	172.00	146
48.00	450	72.00	278	96.00	4460	173.00	328
49.00	2563	73.00	2780	97.00	120	174.00	54048
50.00	11995	74.00	10352	104.00	306	175.00	3646
51.00	3684	75.00	30544	106.00	228	176.00	51664
52.00	134	76.00	2819	116.00	234	177.00	3541
53.00	56	77.00	465	117.00	432	178.00	120
55.00	234	78.00	254	118.00	161	209.00	59
56.00	942	79.00	1732	119.00	311		
57.00	1625	80.00	556	128.00	229		

Data File: /chem2/HP10193.i/09oct29a.b/cc29t01.d

Date : 29-OCT-2009 12:08

Client ID: 50 NG BFB

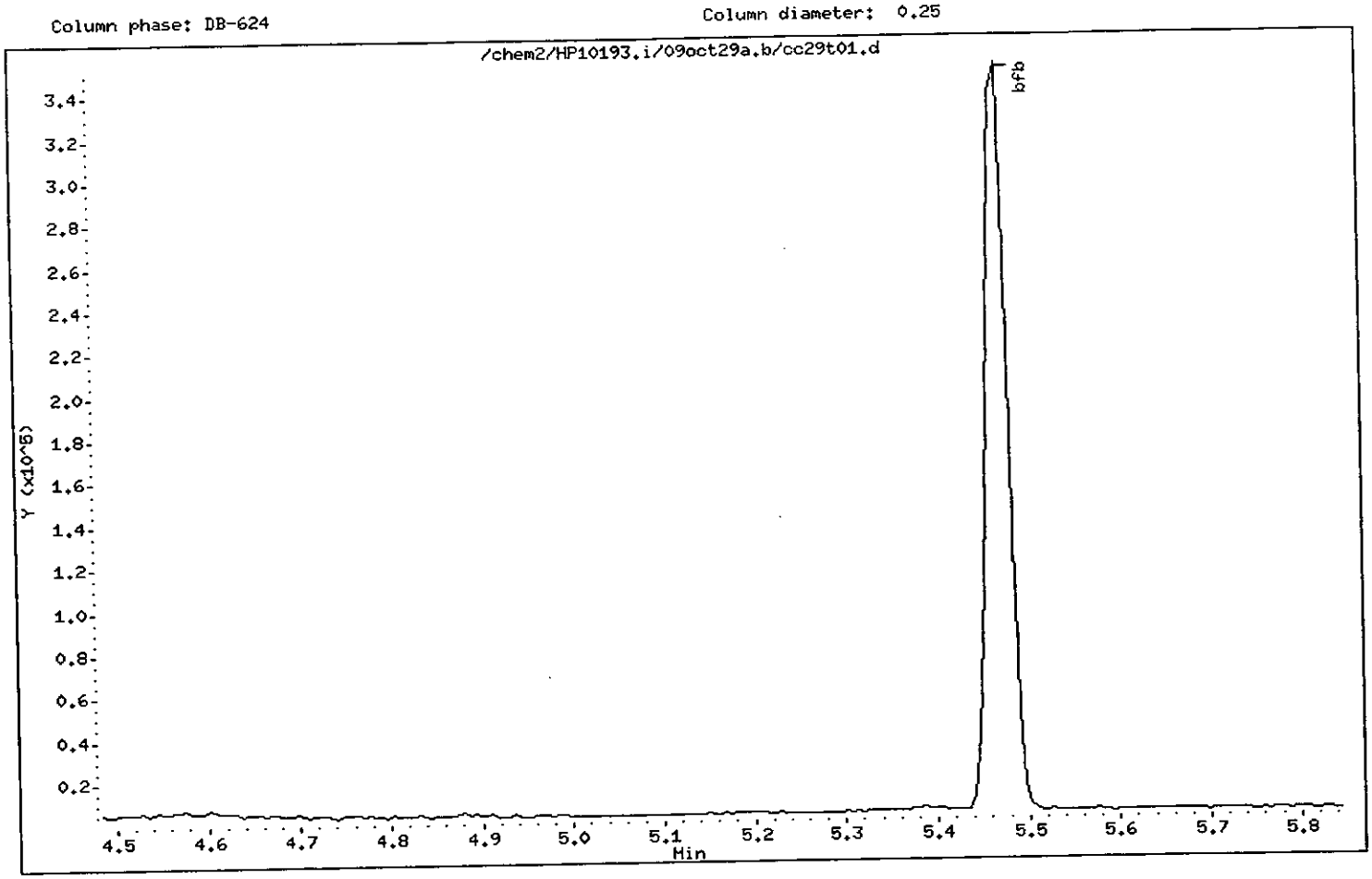
Instrument: HP10193.i

Sample Info: 50 NG BFB;BFB MAY27-09;1;2;;

Operator: JML01693

Column phase: DB-624

Column diameter: 0.25



10/29/09

Data File: /chem2/HP10193.i/09oct29a.b/cc29t01.d

Date : 29-OCT-2009 12:08

Client ID: 50 NG BFB

Instrument: HP10193.i

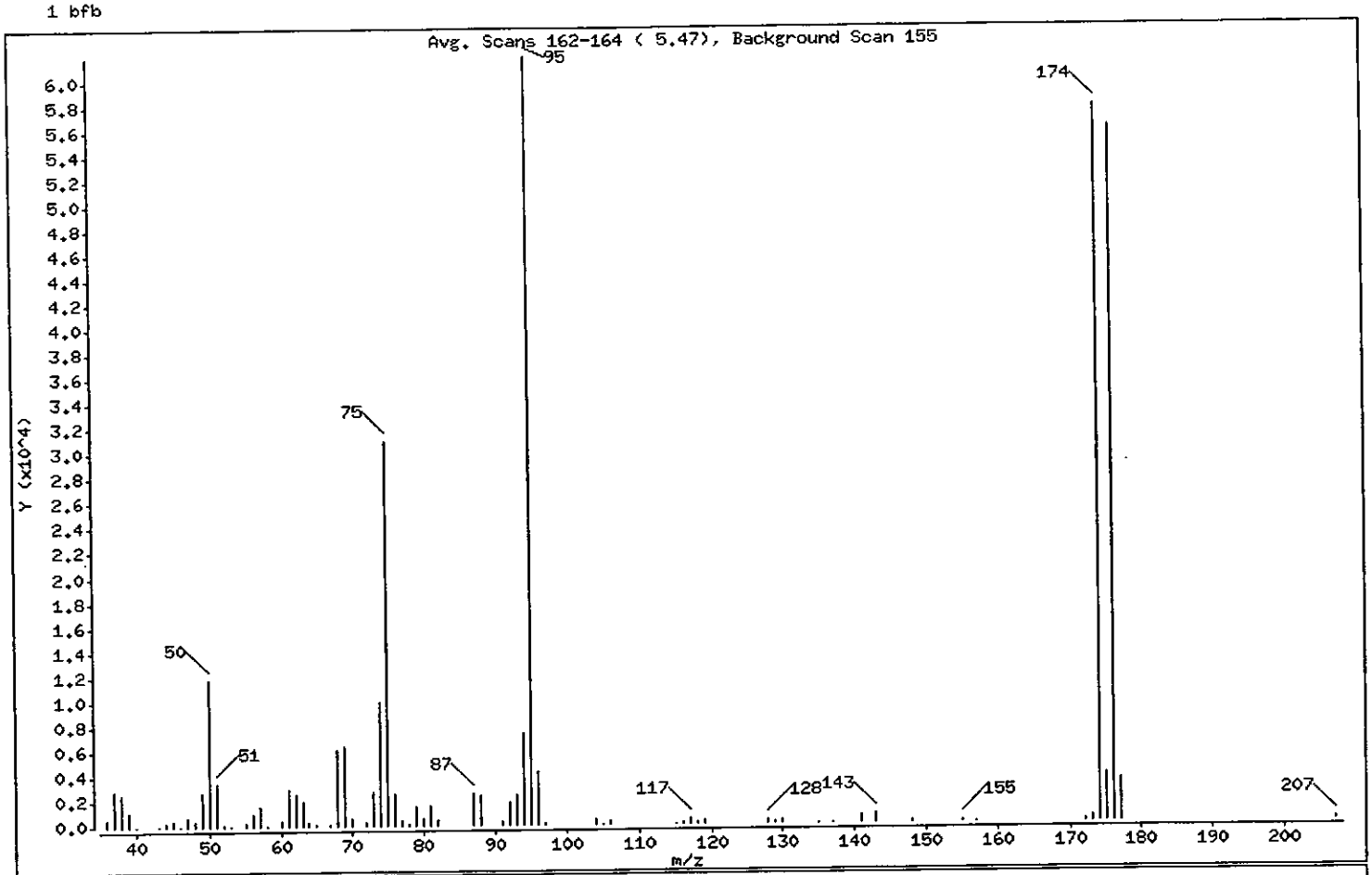
Sample Info: 50 NG BFB;BFB MAY27-09;1;2;;

Operator: JHL01693

Column phase: DB-624

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	19.18
75	30.00 - 60.00% of mass 95	50.21
96	5.00 - 9.00% of mass 95	6.89
173	Less than 2.00% of mass 174	0.60 (0.65)
174	50.00 - 100.00% of mass 95	93.26
175	5.00 - 9.00% of mass 174	6.22 (6.66)
176	95.00 - 101.00% of mass 174	90.47 (97.00)
177	5.00 - 9.00% of mass 176	5.60 (6.19)

Data File: /chem2/HP10193.i/09oct29a.b/cc29t01.d

Date : 29-OCT-2009 12:08

Client ID: 50 NG BFB

Instrument: HP10193.i

Sample Info: 50 NG BFB;BFB MAY27-09;1;2;;

Operator: JML01693

Column phase: DB-624

Column diameter: 0.25

Data File: cc29t01.d

Spectrum: Avg. Scans 162-164 (5.47), Background Scan 155

Location of Maximum: 95.00

Number of points: 75

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	608	58.00	53	80.00	558	119.00	352
37.00	2791	60.00	461	81.00	1588	128.00	269
38.00	2623	61.00	2994	82.00	382	129.00	128
39.00	1072	62.00	2595	87.00	2519	130.00	227
40.00	3	63.00	2043	88.00	2468	135.00	66
43.00	66	64.00	225	91.00	265	137.00	51
44.00	318	65.00	207	92.00	1781	141.00	509
45.00	498	67.00	157	93.00	2418	143.00	691
46.00	51	68.00	6155	94.00	7341	148.00	211
47.00	736	69.00	6432	95.00	61936	155.00	172
48.00	401	70.00	605	96.00	4269	157.00	63
49.00	2654	72.00	335	97.00	135	172.00	153
50.00	11883	73.00	2720	104.00	377	173.00	373
51.00	3441	74.00	9967	105.00	54	174.00	57768
52.00	178	75.00	31096	106.00	278	175.00	3850
53.00	63	76.00	2563	115.00	54	176.00	56032
55.00	262	77.00	414	116.00	154	177.00	3471
56.00	946	78.00	121	117.00	367	207.00	79
57.00	1594	79.00	1587	118.00	147		

VBLKC10

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC10

File: /chem2/HP10193.i/09oct28c.b/cc28b52.d
Sample: VBLKC10;VBLKC10;1;3;;
Injected At:28-OCT-2009 23:56
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.627(0.012)	500	65	82902(-18)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2005076(-5)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1462161(-6)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	826621(-12)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	471239	9.525	95%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	88516	9.605	96%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2062156	9.592	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	695288	9.014	90%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Reporting Qual.	Limit	LOQ
2) Dichlorodifluoromethane	(1)				ND	ND			0.10	0.50
4) Dimethyl ether	(1)				ND	ND			0.10	0.50
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
11) Chloroethane	(1)				ND	ND			0.10	0.50
12) Dichlorofluoromethane	(1)				ND	ND			0.20	0.50
14) Trichlorofluoromethane	(1)				ND	ND			0.10	0.50
16) Ethyl Ether	(1)				ND	ND			0.10	0.50
17) Freon 123a	(1)				ND	ND			0.20	0.50
23) Acrolein	(4)				ND	ND			5.00	25.00
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
25) Freon 113	(1)				ND	ND			0.20	0.50
26) Acetone	(4)				ND	ND			3.00	5.00
28) Methyl Iodide	(1)				ND	ND			0.10	0.50
29) Carbon Disulfide	(1)				ND	ND			0.40	0.50
31) Allyl Chloride	(1)				ND	ND			0.10	0.50
32) Methyl Acetate	(1)				ND	ND			0.30	1.00
30) Acetonitrile	(4)				ND	ND			7.00	20.00
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
36) t-Butyl Alcohol	(4)				ND	ND			4.00	10.00
39) Acrylonitrile	(4)				ND	ND			1.00	5.00
40) trans-1,2-Dichloroethene	(1)				ND	ND			0.10	0.50
38) 1,2-Dichloroethene (Total)	(1)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0234

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC10

File: /chem2/HP10193.i/09oct28c.b/cc28b52.d
Sample: VBLKC10;VBLKC10;1;3;;
Injected At:28-OCT-2009 23:56
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
41) Methyl Tertiary Butyl Ether	(1)					ND	ND			0.10	0.50
44) n-Hexane	(1)					ND	ND			0.10	0.50
45) 1,1-Dichloroethane	(1)					ND	ND			0.10	0.50
46) Vinyl Acetate	(1)					ND	ND			0.20	0.50
47) di-Isopropyl Ether	(1)					ND	ND			0.10	0.50
48) 2-Chloro-1,3-Butadiene	(1)					ND	ND			0.10	0.50
49) Ethyl t-Butyl Ether	(1)					ND	ND			0.10	0.50
52) 2,2-Dichloropropane	(1)					ND	ND			0.10	0.50
50) cis-1,2-Dichloroethene	(1)					ND	ND			0.10	0.50
51) 2-Butanone	(4)					ND	ND			1.00	5.00
53) Propionitrile	(4)					ND	ND			2.00	10.00
54) Methacrylonitrile	(4)					ND	ND			1.00	5.00
55) Bromochloromethane	(1)					ND	ND			0.10	0.50
56) Tetrahydrofuran	(4)					ND	ND			2.00	5.00
59) Chloroform	(1)					ND	ND			0.10	0.50
63) 1,1,1-Trichloroethane	(1)					ND	ND			0.10	0.50
64) Cyclohexane	(1)					ND	ND			0.10	0.50
66) 1,1-Dichloropropene	(1)					ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)					ND	ND			0.10	0.50
69) Isobutyl Alcohol	(4)					ND	ND			10.00	25.00
73) Benzene	(1)					ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)					ND	ND			0.10	0.50
77) t-Amyl Methyl Ether	(1)					ND	ND			0.10	0.50
79) n-Heptane	(1)					ND	ND			0.20	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0235

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC10

File: /chem2/HP10193.i/09oct28c.b/cc28b52.d
Sample: VBLKC10;VBLKC10;1;3;;
Injected At:28-OCT-2009 23:56
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
80) n-Butanol	(4)					ND	ND			20.00	50.00
82) Trichloroethene	(1)					ND	ND			0.10	0.50
85) Methylcyclohexane	(1)					ND	ND			0.10	0.50
84) 1,2-Dichloropropane	(1)					ND	ND			0.10	0.50
87) Dibromomethane	(1)					ND	ND			0.10	0.50
90) 1,4-Dioxane	(4)					ND	ND			20.00	100.00
88) Methyl Methacrylate	(4)					ND	ND			0.10	0.50
91) Bromodichloromethane	(1)					ND	ND			0.10	0.50
92) 2-Nitropropane	(4)					ND	ND			1.00	5.00
93) 2-Chloroethyl Vinyl Ether	(1)					ND	ND			0.10	0.50
94) cis-1,3-Dichloropropene	(1)					ND	ND			0.10	0.50
96) 4-Methyl-2-Pentanone	(1)					ND	ND			1.00	5.00
100) Toluene	(2)					ND	ND			0.10	0.50
102) trans-1,3-Dichloropropene	(2)					ND	ND			0.10	0.50
103) Ethyl Methacrylate	(2)					ND	ND			0.10	0.50
104) 1,1,2-Trichloroethane	(2)					ND	ND			0.10	0.50
106) Tetrachloroethene	(2)					ND	ND			0.10	0.50
105) 1,3-Dichloropropane	(2)					ND	ND			0.10	0.50
107) 2-Hexanone	(2)					ND	ND			1.00	5.00
108) Dibromochloromethane	(2)					ND	ND			0.10	0.50
109) 1,2-Dibromoethane	(2)					ND	ND			0.10	0.50
112) Chlorobenzene	(2)					ND	ND			0.10	0.50
113) 1,1,1,2-Tetrachloroethane	(2)					ND	ND			0.10	0.50
114) Ethylbenzene	(2)					ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 8236

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC10

File: /chem2/HP10193.i/09oct28c.b/cc28b52.d
Sample: VBLKC10;VBLKC10;1;3;;
Injected At:28-OCT-2009 23:56
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
117) m+p-Xylene	(2)					ND	ND			0.10	0.50
116) Xylene (Total)	(2)					ND	ND			0.10	0.50
118) o-Xylene	(2)					ND	ND			0.10	0.50
119) Styrene	(2)					ND	ND			0.10	0.50
120) Bromoform	(2)					ND	ND			0.10	0.50
121) Isopropylbenzene	(2)					ND	ND			0.10	0.50
122) Cyclohexanone	(4)					ND	ND			5.00	25.00
127) 1,1,2,2-Tetrachloroethane	(3)					ND	ND			0.10	0.50
128) Bromobenzene	(3)					ND	ND			0.10	0.50
129) trans-1,4-Dichloro-2-Butene	(4)					ND	ND			1.00	5.00
130) 1,2,3-Trichloropropane	(3)					ND	ND			0.30	1.00
132) n-Propylbenzene	(3)					ND	ND			0.10	0.50
133) 2-Chlorotoluene	(3)					ND	ND			0.10	0.50
136) 4-Chlorotoluene	(3)					ND	ND			0.10	0.50
135) 1,3,5-Trimethylbenzene	(3)					ND	ND			0.10	0.50
138) Pentachloroethane	(3)					ND	ND			0.20	0.50
137) tert-Butylbenzene	(3)					ND	ND			0.10	0.50
139) 1,2,4-Trimethylbenzene	(3)					ND	ND			0.10	0.50
140) sec-Butylbenzene	(3)					ND	ND			0.10	0.50
141) 1,3-Dichlorobenzene	(3)					ND	ND			0.10	0.50
142) p-Isopropyltoluene	(3)					ND	ND			0.10	0.50
144) 1,4-Dichlorobenzene	(3)					ND	ND			0.10	0.50
145) 1,2,3-Trimethylbenzene	(3)					ND	ND			0.10	0.50
146) Benzyl Chloride	(3)					ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0237

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC10

File: /chem2/HP10193.i/09oct28c.b/cc28b52.d
Sample: VBLKC10;VBLKC10;1;3;;
Injected At:28-OCT-2009 23:56
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
147) n-Butylbenzene	(3)					ND	ND			0.10	0.50
148) 1,2-Dichlorobenzene	(3)					ND	ND			0.10	0.50
149) Hexachloroethane	(3)					ND	ND			0.10	0.50
150) 1,2-Dibromo-3-Chloropropane	(4)					ND	ND			0.20	0.50
153) 1,2,4-Trichlorobenzene	(3)					ND	ND			0.10	0.50
154) Hexachlorobutadiene	(3)					ND	ND			0.10	0.50
155) Naphthalene	(3)					ND	ND			0.10	0.50
156) 1,2,3-Trichlorobenzene	(3)					ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: ADS1731 Date: 10/28/09

Auditor: [redacted] Date: 10-29-09

RAD23 0238

Data File: /chem2/HP10193.i/09oct28c.b/cc28b52.d
Date : 28-OCT-2009 23:56
Client ID: VBLKC10
Sample Info: VBLKC10;VBLKC10;1;3;;
Purge Volume: 25.0
Column phase: DB-624

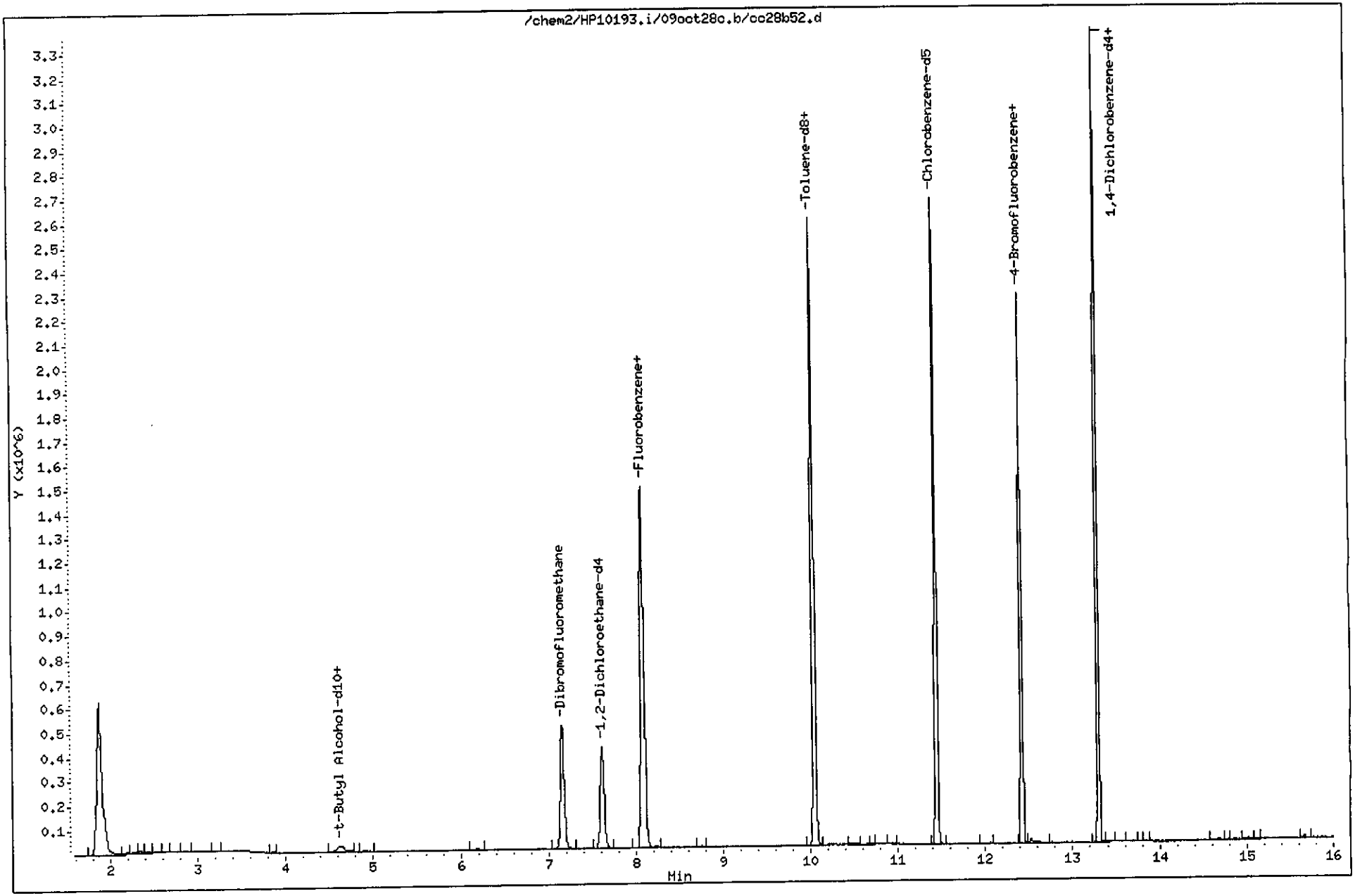
Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

ADS1731
10/28/09

RAD23 6735

/chem2/HP10193.i/09oct28c.b/cc28b52.d



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28b52.d Instrument ID: HP10193.i
Injection date and time: 28-OCT-2009 23:56 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25+SM
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 00:37 ads01731

Sample Name: VBLKC10 Lab Sample ID: VBLKC10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.627	65	82902	50.000
78)*Fluorobenzene	(1)	8.089	96	2005076	10.000
110)*Chlorobenzene-d5	(2)	11.448	117	1462161	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	826621	10.000
60)$Dibromofluoromethane	(1)	7.163	113	471239	9.525
70)$1,2-Dichloroethane-d4	(1)	7.620	102	88516	9.605
98)$Toluene-d8	(2)	10.052	98	2062156	9.592
124)$4-Bromofluorobenzene	(2)	12.424	95	695288	9.014

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

VBLKC11

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC11

File: /chem2/HP10193.i/09oct29a.b/cc29b01.d
Sample: VBLKC11;VBLKC11;1;3;;
Injected At:29-OCT-2009 13:41
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.620(0.006)	499	65	84497(-13)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1945895(-6)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1415910(-6)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	791799(-13)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	457880	9.536	95%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.000)	102	84532	9.451	95%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	1989721	9.558	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	669656	8.965	90%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
2) Dichlorodifluoromethane	(1)				ND	ND			0.10	0.50
4) Dimethyl ether	(1)				ND	ND			0.10	0.50
5) Chloromethane	(1)				ND	ND			0.20	0.50
7) Vinyl Chloride	(1)				ND	ND			0.10	0.50
9) Bromomethane	(1)				ND	ND			0.10	0.50
11) Chloroethane	(1)				ND	ND			0.10	0.50
12) Dichlorofluoromethane	(1)				ND	ND			0.20	0.50
14) Trichlorofluoromethane	(1)				ND	ND			0.10	0.50
16) Ethyl Ether	(1)				ND	ND			0.10	0.50
17) Freon 123a	(1)				ND	ND			0.20	0.50
23) Acrolein	(4)				ND	ND			5.00	25.00
24) 1,1-Dichloroethene	(1)				ND	ND			0.10	0.50
25) Freon 113	(1)				ND	ND			0.20	0.50
26) Acetone	(4)				ND	ND			3.00	5.00
28) Methyl Iodide	(1)				ND	ND			0.10	0.50
29) Carbon Disulfide	(1)				ND	ND			0.40	0.50
31) Allyl Chloride	(1)				ND	ND			0.10	0.50
32) Methyl Acetate	(1)				ND	ND			0.30	1.00
30) Acetonitrile	(4)				ND	ND			7.00	20.00
34) Methylene Chloride	(1)				ND	ND			0.20	0.50
36) t-Butyl Alcohol	(4)				ND	ND			4.00	10.00
39) Acrylonitrile	(4)				ND	ND			1.00	5.00
40) trans-1,2-Dichloroethene	(1)				ND	ND			0.10	0.50
38) 1,2-Dichloroethene (Total)	(1)				ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 €241

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC11

File: /chem2/HP10193.i/09oct29a.b/cc29b01.d
Sample: VBLKC11;VBLKC11;1;3;;
Injected At:29-OCT-2009 13:41
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
41) Methyl Tertiary Butyl Ether	(1)					ND	ND			0.10	0.50
44) n-Hexane	(1)					ND	ND			0.10	0.50
45) 1,1-Dichloroethane	(1)					ND	ND			0.10	0.50
46) Vinyl Acetate	(1)					ND	ND			0.20	0.50
47) di-Isopropyl Ether	(1)					ND	ND			0.10	0.50
48) 2-Chloro-1,3-Butadiene	(1)					ND	ND			0.10	0.50
49) Ethyl t-Butyl Ether	(1)					ND	ND			0.10	0.50
52) 2,2-Dichloropropane	(1)					ND	ND			0.10	0.50
50) cis-1,2-Dichloroethene	(1)					ND	ND			0.10	0.50
51) 2-Butanone	(4)					ND	ND			1.00	5.00
53) Propionitrile	(4)					ND	ND			2.00	10.00
54) Methacrylonitrile	(4)					ND	ND			1.00	5.00
55) Bromochloromethane	(1)					ND	ND			0.10	0.50
56) Tetrahydrofuran	(4)					ND	ND			2.00	5.00
59) Chloroform	(1)					ND	ND			0.10	0.50
63) 1,1,1-Trichloroethane	(1)					ND	ND			0.10	0.50
64) Cyclohexane	(1)					ND	ND			0.10	0.50
66) 1,1-Dichloropropene	(1)					ND	ND			0.10	0.50
67) Carbon Tetrachloride	(1)					ND	ND			0.10	0.50
69) Isobutyl Alcohol	(4)					ND	ND			10.00	25.00
73) Benzene	(1)					ND	ND			0.10	0.50
74) 1,2-Dichloroethane	(1)					ND	ND			0.10	0.50
77) t-Amyl Methyl Ether	(1)					ND	ND			0.10	0.50
79) n-Heptane	(1)					ND	ND			0.20	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 6242

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC11

File: /chem2/HP10193.i/09oct29a.b/cc29b01.d
Sample: VBLKC11;VBLKC11;1;3;;
Injected At:29-OCT-2009 13:41
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
80) n-Butanol	(4)					ND	ND			20.00	50.00
82) Trichloroethene	(1)					ND	ND			0.10	0.50
85) Methylcyclohexane	(1)					ND	ND			0.10	0.50
84) 1,2-Dichloropropane	(1)					ND	ND			0.10	0.50
87) Dibromomethane	(1)					ND	ND			0.10	0.50
90) 1,4-Dioxane	(4)					ND	ND			20.00	100.00
88) Methyl Methacrylate	(4)					ND	ND			0.10	0.50
91) Bromodichloromethane	(1)					ND	ND			0.10	0.50
92) 2-Nitropropane	(4)					ND	ND			1.00	5.00
93) 2-Chloroethyl Vinyl Ether	(1)					ND	ND			0.10	0.50
94) cis-1,3-Dichloropropene	(1)					ND	ND			0.10	0.50
96) 4-Methyl-2-Pentanone	(1)					ND	ND			1.00	5.00
100) Toluene	(2)					ND	ND			0.10	0.50
102) trans-1,3-Dichloropropene	(2)					ND	ND			0.10	0.50
103) Ethyl Methacrylate	(2)					ND	ND			0.10	0.50
104) 1,1,2-Trichloroethane	(2)					ND	ND			0.10	0.50
106) Tetrachloroethene	(2)					ND	ND			0.10	0.50
105) 1,3-Dichloropropane	(2)					ND	ND			0.10	0.50
107) 2-Hexanone	(2)					ND	ND			1.00	5.00
108) Dibromochloromethane	(2)					ND	ND			0.10	0.50
109) 1,2-Dibromoethane	(2)					ND	ND			0.10	0.50
112) Chlorobenzene	(2)					ND	ND			0.10	0.50
113) 1,1,1,2-Tetrachloroethane	(2)					ND	ND			0.10	0.50
114) Ethylbenzene	(2)					ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

VBLKC11

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC11

File: /chem2/HP10193.i/09oct29a.b/cc29b01.d
Sample: VBLKC11;VBLKC11;1;3;;
Injected At:29-OCT-2009 13:41
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
117) m+p-Xylene	(2)					ND	ND			0.10	0.50
116) Xylene (Total)	(2)					ND	ND			0.10	0.50
118) o-Xylene	(2)					ND	ND			0.10	0.50
119) Styrene	(2)					ND	ND			0.10	0.50
120) Bromoform	(2)					ND	ND			0.10	0.50
121) Isopropylbenzene	(2)					ND	ND			0.10	0.50
122) Cyclohexanone	(4)					ND	ND			5.00	25.00
127) 1,1,2,2-Tetrachloroethane	(3)					ND	ND			0.10	0.50
128) Bromobenzene	(3)					ND	ND			0.10	0.50
129) trans-1,4-Dichloro-2-Butene	(4)					ND	ND			1.00	5.00
130) 1,2,3-Trichloropropane	(3)					ND	ND			0.30	1.00
132) n-Propylbenzene	(3)					ND	ND			0.10	0.50
133) 2-Chlorotoluene	(3)					ND	ND			0.10	0.50
136) 4-Chlorotoluene	(3)					ND	ND			0.10	0.50
135) 1,3,5-Trimethylbenzene	(3)					ND	ND			0.10	0.50
138) Pentachloroethane	(3)					ND	ND			0.20	0.50
137) tert-Butylbenzene	(3)					ND	ND			0.10	0.50
139) 1,2,4-Trimethylbenzene	(3)					ND	ND			0.10	0.50
140) sec-Butylbenzene	(3)					ND	ND			0.10	0.50
141) 1,3-Dichlorobenzene	(3)					ND	ND			0.10	0.50
142) p-Isopropyltoluene	(3)					ND	ND			0.10	0.50
144) 1,4-Dichlorobenzene	(3)					ND	ND			0.10	0.50
145) 1,2,3-Trimethylbenzene	(3)					ND	ND			0.10	0.50
146) Benzyl Chloride	(3)					ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0244

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

VBLKC11

File: /chem2/HP10193.i/09oct29a.b/cc29b01.d
Sample: VBLKC11;VBLKC11;1;3;;
Injected At:29-OCT-2009 13:41
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference:
Sublist: 8260W25+SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
147) n-Butylbenzene	(3)					ND	ND			0.10	0.50
148) 1,2-Dichlorobenzene	(3)					ND	ND			0.10	0.50
149) Hexachloroethane	(3)					ND	ND			0.10	0.50
150) 1,2-Dibromo-3-Chloropropane	(4)					ND	ND			0.20	0.50
153) 1,2,4-Trichlorobenzene	(3)					ND	ND			0.10	0.50
154) Hexachlorobutadiene	(3)					ND	ND			0.10	0.50
155) Naphthalene	(3)					ND	ND			0.10	0.50
156) 1,2,3-Trichlorobenzene	(3)					ND	ND			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: [signature] Date: 10/29/09

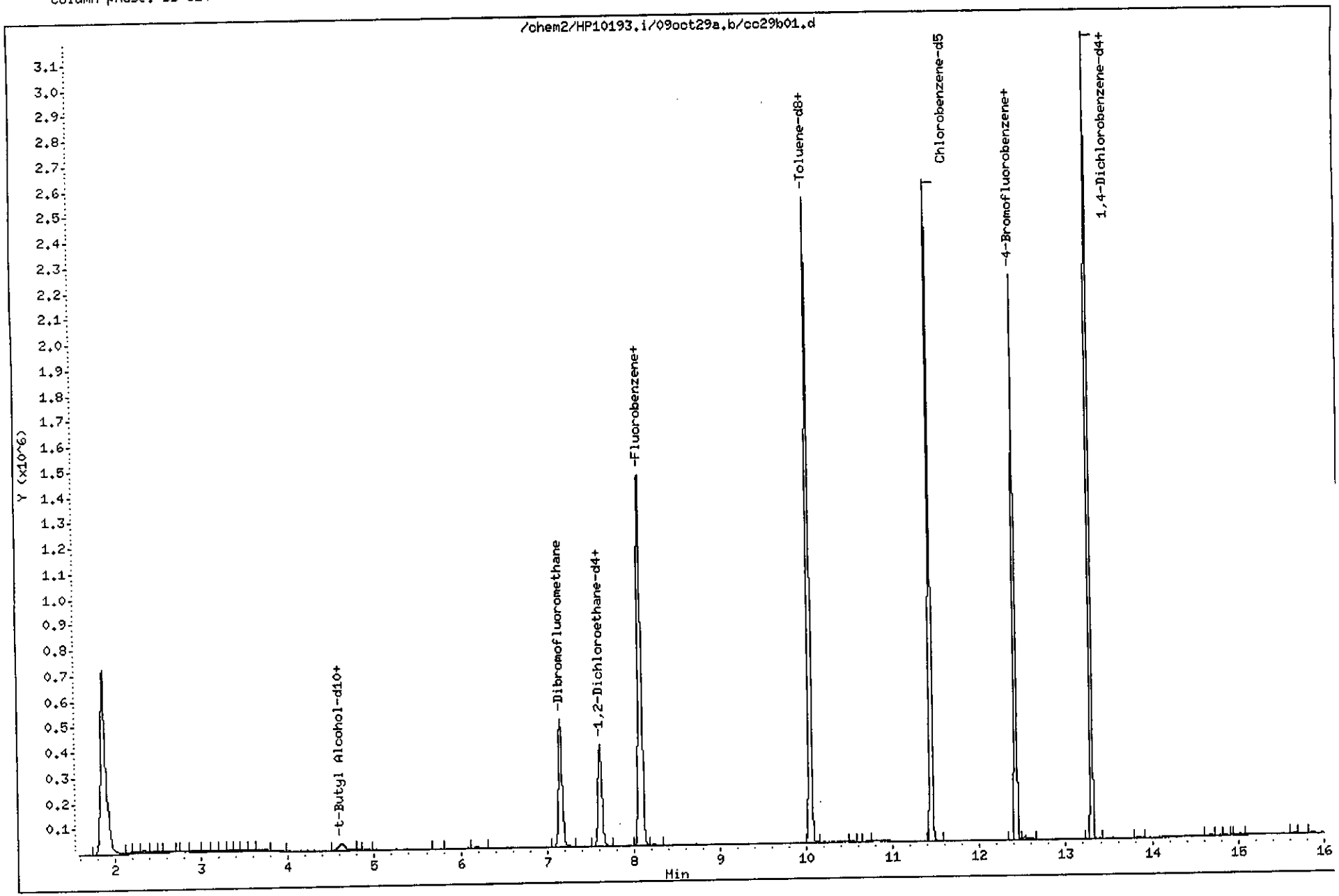
Auditor: [signature] Date: 11/2/09

Data File: /chem2/HP10193.i/09oct29a.b/cc29b01.d
Date : 29-OCT-2009 13:41
Client ID: VBLKC11
Sample Info: VBLKC11;VBLKC11;1;3;;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JML01693
Column diameter: 0.25

RAD23 02of6



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29b01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 13:41 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25+SM
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 14:07 jml01693

Sample Name: VBLKC11 Lab Sample ID: VBLKC11

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.620	65	84497	50.000
78)*Fluorobenzene	(1)	8.089	96	1945895	10.000
110)*Chlorobenzene-d5	(2)	11.448	117	1415910	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	791799	10.000
60)$Dibromofluoromethane	(1)	7.163	113	457880	9.536
70)$1,2-Dichloroethane-d4	(1)	7.620	102	84532	9.451
98)$Toluene-d8	(2)	10.052	98	1989721	9.558
124)$4-Bromofluorobenzene	(2)	12.424	95	669656	8.965

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

13MW5MS

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813515

File: /chem2/HP10193.i/09oct28c.b/cc28s69.d
Sample: 13MW5MS;5813515;1;3;MS;
Injected At:29-OCT-2009 08:42
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W2S.m
Blank Reference: cc28b52.d
Sublist: 1415-SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)

Bottle Code:38A

Internal Standards	RT (+/-RT)	Scan	QIon	Area (+/- %Area)	Conc (ext)	QC Flag
35) t-Butyl Alcohol-d10	4.633(0.006)	501	65	77840(-23)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	1958665(-7)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1433072(-8)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	855678(-9)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	468339	9.691	97%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	85774	9.528	95%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2044747	9.704	97%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	704305	9.316	93%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)	2.279(0.001)	50	422023	6.459	6.46			0.20	0.50
7) Vinyl Chloride	(1)	2.426(0.001)	62	425074	6.569	6.57			0.10	0.50
9) Bromomethane	(1)	2.798(0.002)	94	279449	6.167	6.17			0.10	0.50
24) 1,1-Dichloroethene	(1)	3.901(0.000)	96	247591	6.123	6.12			0.10	0.50
34) Methylene Chloride	(1)	4.596(0.001)	84	272470	5.866	5.87			0.20	0.50
59) Chloroform	(1)	6.943(0.001)	83	513177	6.186	6.19			0.10	0.50
67) Carbon Tetrachloride	(1)	7.461(0.001)	117	399578	6.569	6.57			0.10	0.50
73) Benzene	(1)	7.724(0.000)	78	1223273	5.947	5.95			0.10	0.50
74) 1,2-Dichloroethane	(1)	7.717(0.001)	62	311739	6.011	6.01			0.10	0.50
82) Trichloroethene	(1)	8.577(0.000)	95	318107	6.149	6.15			0.10	0.50
100) Toluene	(2)	10.119(0.001)	92	854792	6.601	6.60			0.10	0.50
106) Tetrachloroethene	(2)	10.692(0.000)	166	370036	6.030	6.03			0.10	0.50
112) Chlorobenzene	(2)	11.473(0.000)	112	877624	5.988	5.99			0.10	0.50
146) Benzyl Chloride	(3)	13.405(0.000)	126	70312	4.758	4.76			0.10	0.50
155) Naphthalene	(3)	14.862(0.000)	128	717524	5.338	5.34			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: Client

Analyst: _____ Date: 10/29/09

Auditor: _____ Date: 10-29-09

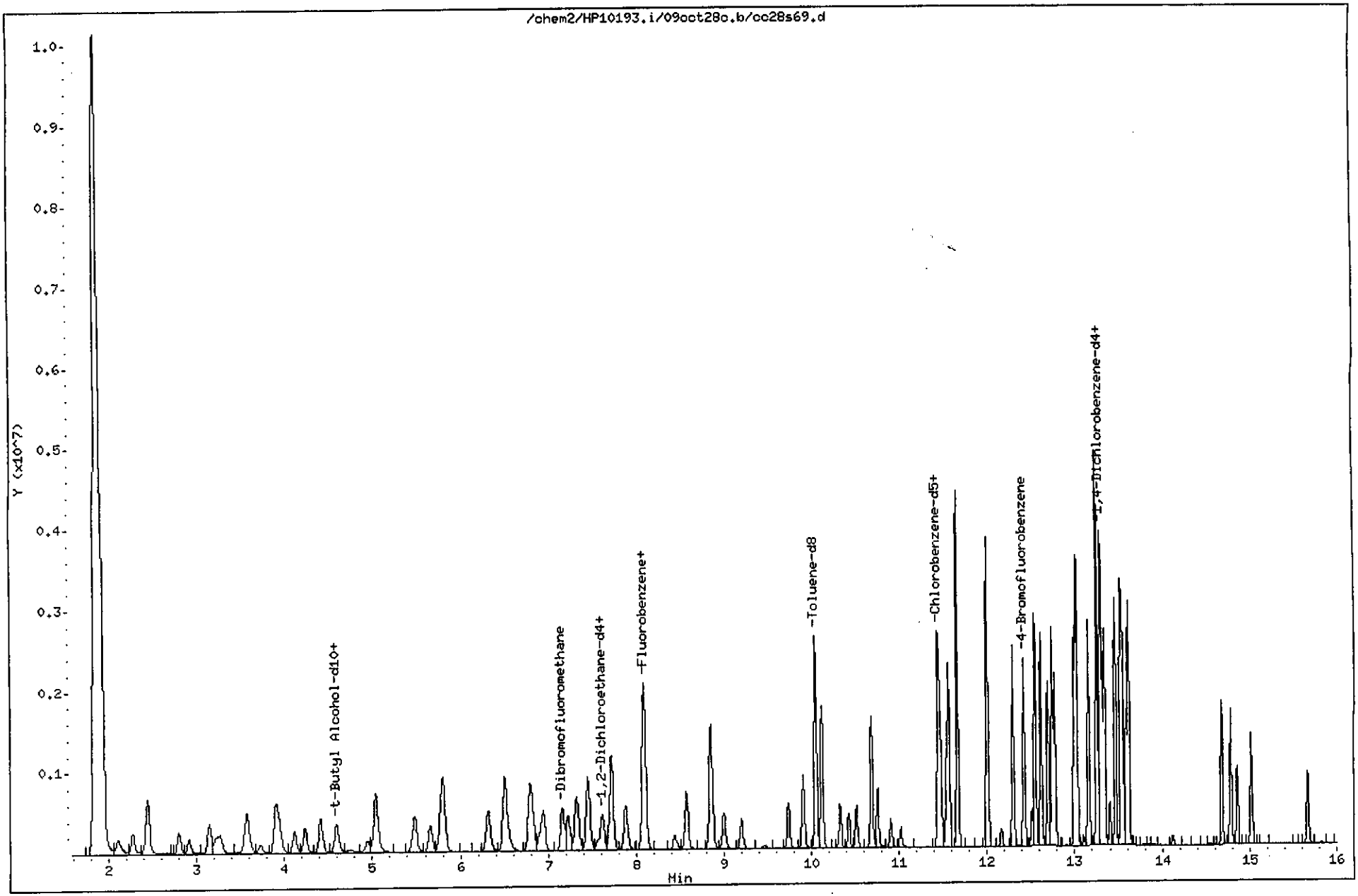
RAD23 8248

RA823 87449

Data File: /chem2/HP10193.i/09oct28c.b/cc28s69.d
Date : 29-OCT-2009 08:42
Client ID: 13HW5MS
Sample Info: 13HW5MS;5813515;1;3;MS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s69.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 08:42 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415-SM
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:55 jm101693

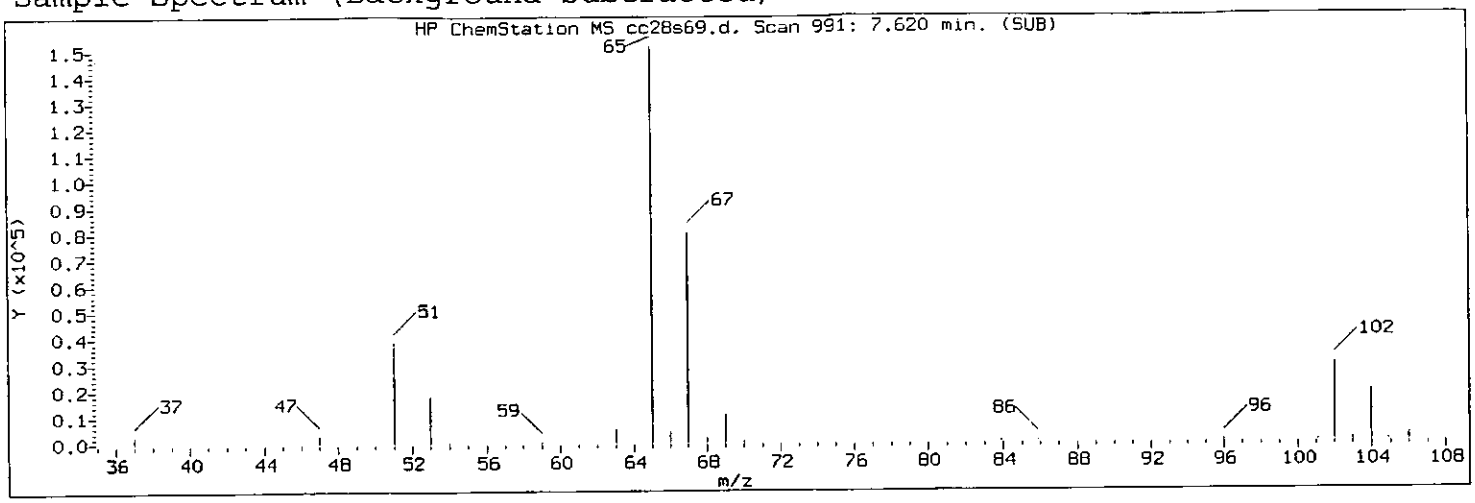
Sample Name: 13MW5MS Lab Sample ID: 5813515

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
5) Chloromethane	(1)	2.279	50	422023	6.459
7) Vinyl Chloride	(1)	2.426	62	425074	6.569
9) Bromomethane	(1)	2.798	94	279449	6.167
24) 1,1-Dichloroethene	(1)	3.901	96	247591	6.123
34) Methylene Chloride	(1)	4.596	84	272470	5.866
35)*t-Butyl Alcohol-d10	(4)	4.633	65	77840	50.000
59) Chloroform	(1)	6.943	83	513177	6.186
67) Carbon Tetrachloride	(1)	7.461	117	399578	6.569
73) Benzene	(1)	7.724	78	1223273	5.947
74) 1,2-Dichloroethane	(1)	7.717	62	311739	6.011
78)*Fluorobenzene	(1)	8.089	96	1958665	10.000
82) Trichloroethene	(1)	8.577	95	318107	6.149
100) Toluene	(2)	10.119	92	854792	6.601
106) Tetrachloroethene	(2)	10.692	166	370036	6.030
110)*Chlorobenzene-d5	(2)	11.448	117	1433072	10.000
112) Chlorobenzene	(2)	11.473	112	877624	5.988
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	855678	10.000
146) Benzyl Chloride	(3)	13.405	126	70312	4.758
155) Naphthalene	(3)	14.862	128	717524	5.338
60)$Dibromofluoromethane	(1)	7.163	113	468339	9.691
70)$1,2-Dichloroethane-d4	(1)	7.620	102	85774M	9.528
98)$Toluene-d8	(2)	10.052	98	2044747	9.704
124)$4-Bromofluorobenzene	(2)	12.424	95	704305	9.316

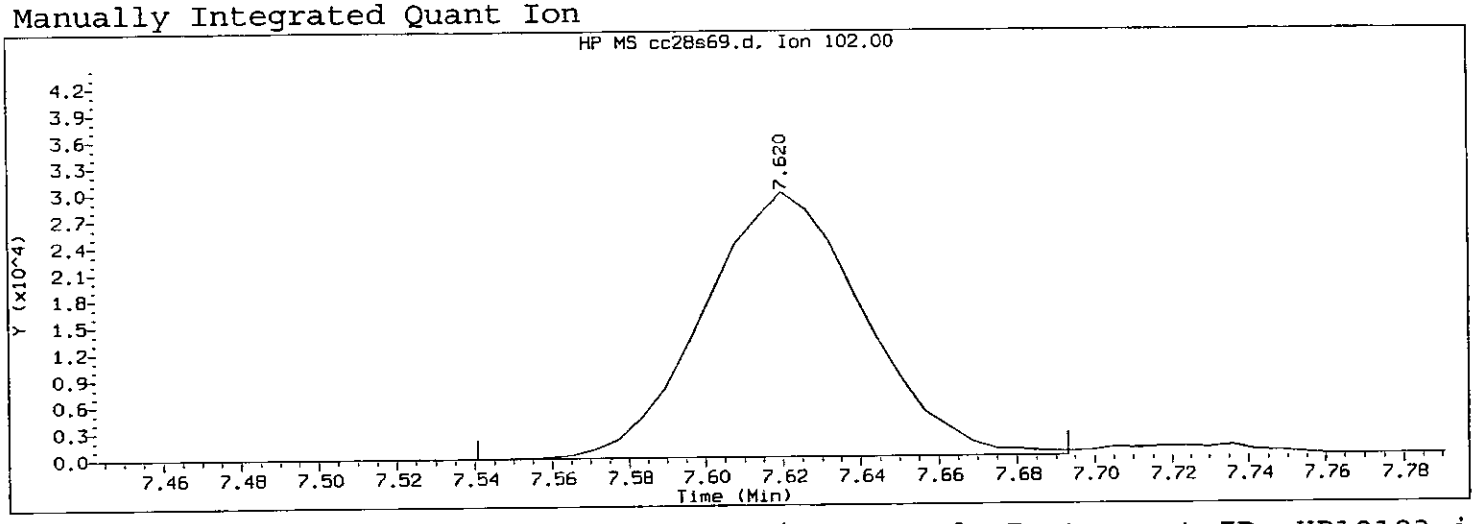
M = Compound was manually integrated.

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

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28c.b/cc28s69.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 08:42 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415-SM
Calibration date and time: 29-OCT-2009 11:28
Date, time and analyst ID of latest file update: 29-Oct-2009 11:55 jml01693

Sample Name: 13MW5MS Lab Sample ID: 5813515

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 991
Retention Time (minutes): 7.620
Quant Ion : 102
Area (flag) : 85774 M
Concentration (ug/L) : 9.5277
Integration start scan : 977 Integration stop scan: 1002
Y at integration start : 0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

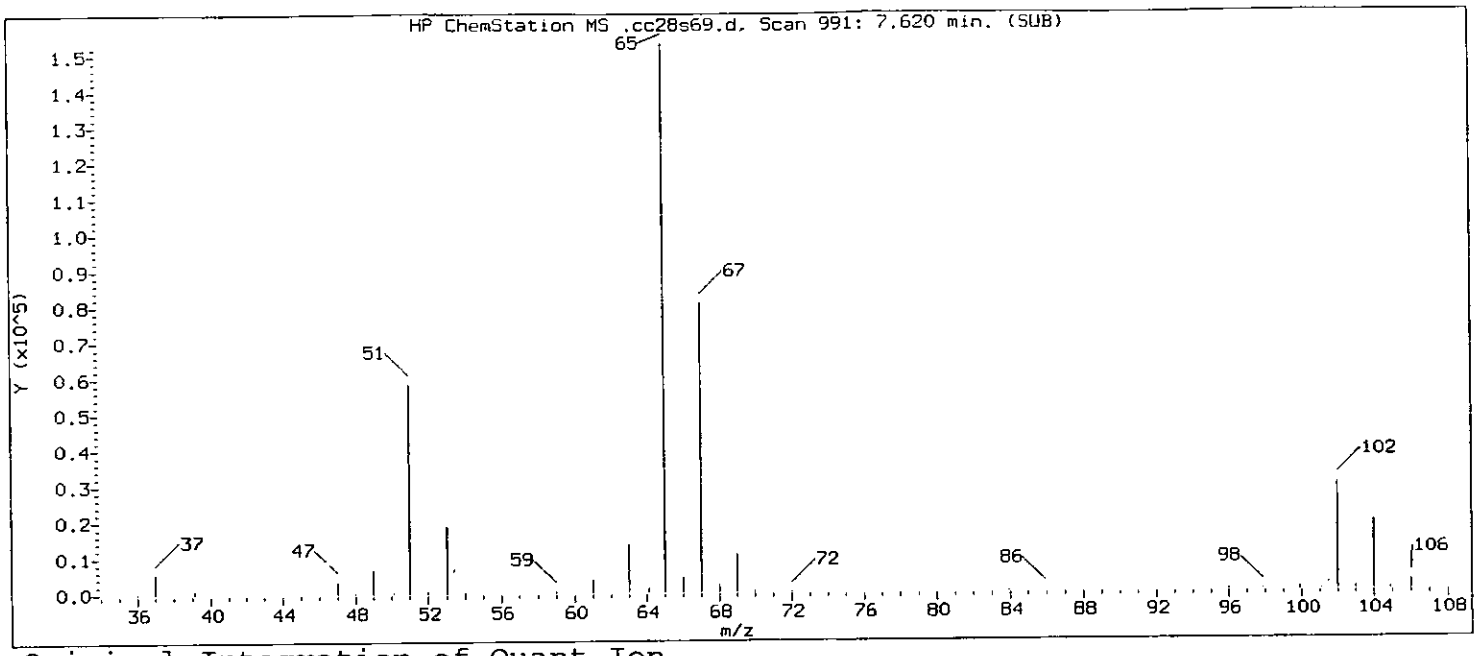
Analyst responsible for change: 10/29/09

GC/MS audit/management approval: 10/29/09

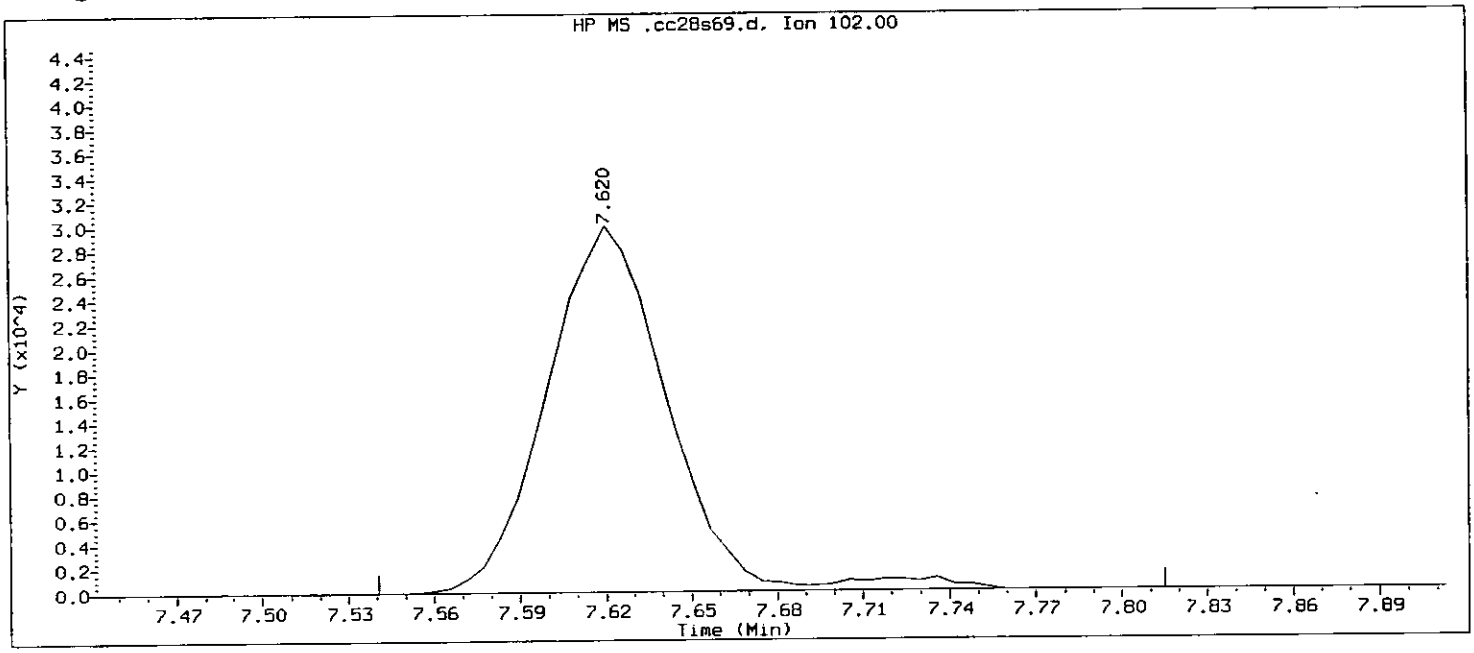
RAD23 0851

Manual Integration Report for data file /chem2/HP10193.i/09oct28c.b/cc28s69.d, generated on 10/29/2009 at 11:55

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28c.b/cc28s69.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 08:42 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:17 jml01693

Sample Name: 13MW5MS Lab Sample ID: 5813515

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 991
Retention Time (minutes): 7.620
Quant Ion : 102
Area : 88337
Concentration (ug/L) : 9.8124
Integration start scan : 977 Integration stop scan: 1022
Y at integration start : 0 Y at integration end: 0

RA823 0252

Original Integration Report for data file /chem2/HP10193.i/09oct28c.b/cc28s69.d, generated on 10/29/2009 at 11:55

13MW5MSD

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813516

File: /chem2/HP10193.i/09oct28c.b/cc28s70.d
Sample: 13MW5MSD;5813516;1;3;MSD;
Injected At:29-OCT-2009 09:04
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 1415-SM

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38A

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.627(0.012)	500	65	89030(-12)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2053838(-3)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1492818(-4)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	883812(-6)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.169(-0.001)	113	485197	9.574	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.626(0.000)	102	89153	9.444	94%		74 - 113
98) Toluene-d8	(2)	10.053(0.000)	98	2110535	9.616	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	734301	9.324	93%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
5) Chloromethane	(1)	2.280(0.001)	50	413887	6.041	6.04			0.20	0.50
7) Vinyl Chloride	(1)	2.432(0.000)	62	422691	6.229	6.23			0.10	0.50
9) Bromomethane	(1)	2.804(0.001)	94	278787	5.867	5.87			0.10	0.50
24) 1,1-Dichloroethene	(1)	3.907(-0.001)	96	255860	6.034	6.03			0.10	0.50
34) Methylene Chloride	(1)	4.602(0.000)	84	281991	5.789	5.79			0.20	0.50
59) Chloroform	(1)	6.949(0.000)	83	521405	5.994	5.99			0.10	0.50
67) Carbon Tetrachloride	(1)	7.468(0.000)	117	411550	6.453	6.45			0.10	0.50
73) Benzene	(1)	7.724(0.000)	78	1242595	5.761	5.76			0.10	0.50
74) 1,2-Dichloroethane	(1)	7.724(0.000)	62	315636	5.805	5.80			0.10	0.50
82) Trichloroethene	(1)	8.577(0.000)	95	327257	6.033	6.03			0.10	0.50
100) Toluene	(2)	10.126(0.000)	92	874324	6.482	6.48			0.10	0.50
106) Tetrachloroethene	(2)	10.693(0.000)	166	386837	6.052	6.05			0.10	0.50
112) Chlorobenzene	(2)	11.473(0.000)	112	894398	5.858	5.86			0.10	0.50
146) Benzyl Chloride	(3)	13.406(0.000)	126	71404	4.679	4.68			0.10	0.50
155) Naphthalene	(3)	14.863(0.000)	128	743260	5.354	5.35			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: Client

Analyst: [signature] Date: 10/29/09

Auditor: [signature] Date: 10-29-09

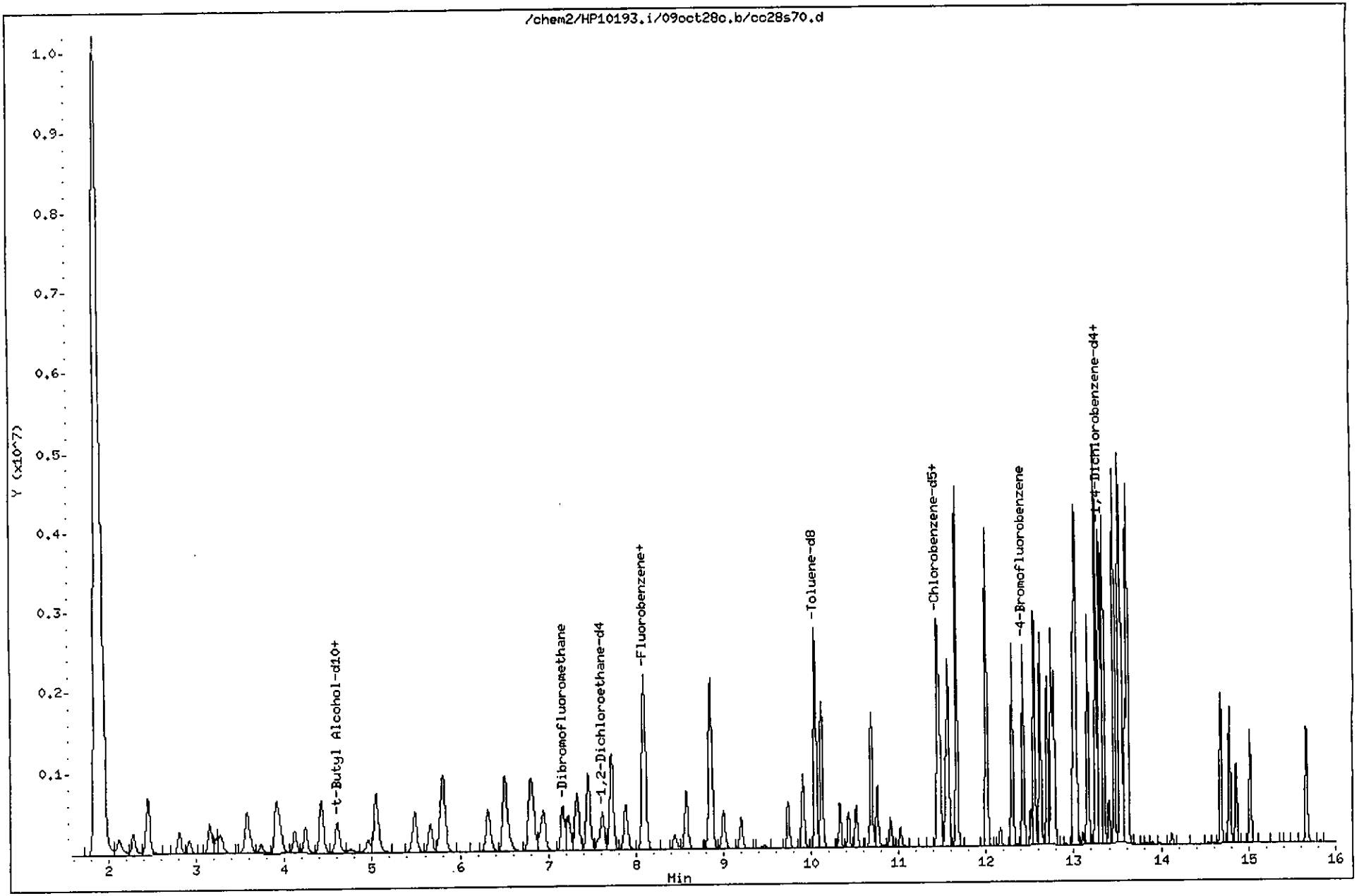
RAD23 0253

RADZ3 0254

Data File: /chem2/HP10193.i/09oct28c.b/cc28s70.d
Date : 29-OCT-2009 09:04
Client ID: 13MW5MSD
Sample Info: 13MW5MSD;5813516;1;3;MSD;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s70.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 09:04 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415-SM
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:55 jml01693

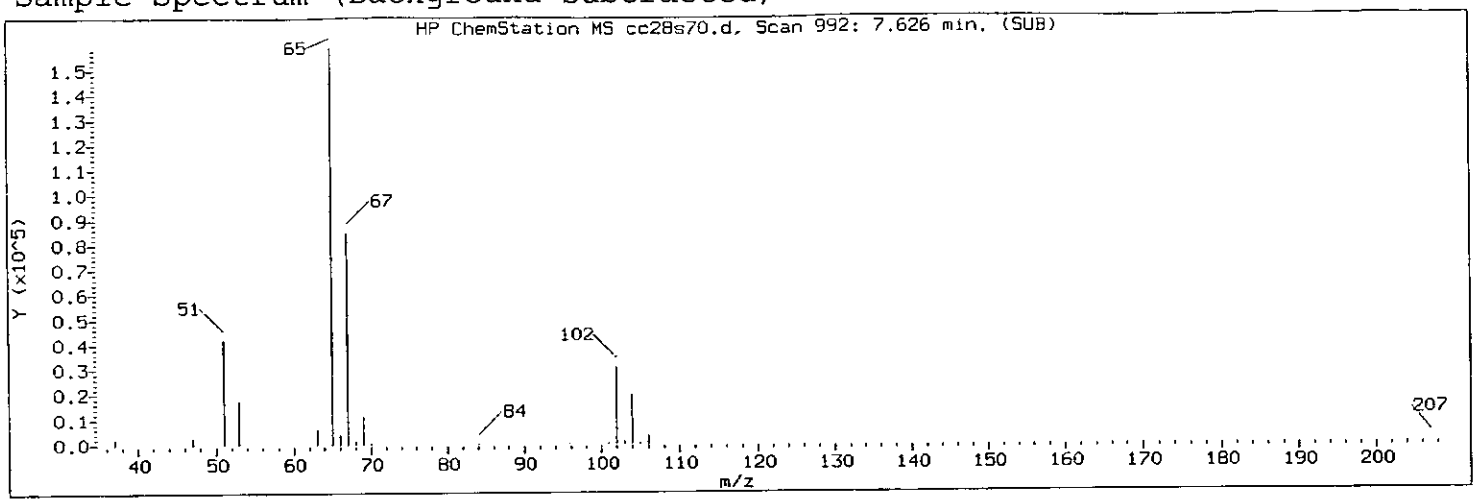
Sample Name: 13MW5MSD Lab Sample ID: 5813516

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
5) Chloromethane	(1)	2.280	50	413887	6.041
7) Vinyl Chloride	(1)	2.432	62	422691	6.229
9) Bromomethane	(1)	2.804	94	278787	5.867
24) 1,1-Dichloroethene	(1)	3.907	96	255860	6.034
34) Methylene Chloride	(1)	4.602	84	281991	5.789
35)*t-Butyl Alcohol-d10	(4)	4.627	65	89030	50.000
59) Chloroform	(1)	6.949	83	521405	5.994
67) Carbon Tetrachloride	(1)	7.468	117	411550	6.453
73) Benzene	(1)	7.724	78	1242595	5.761
74) 1,2-Dichloroethane	(1)	7.724	62	315636	5.805
78)*Fluorobenzene	(1)	8.089	96	2053838	10.000
82) Trichloroethene	(1)	8.577	95	327257	6.033
100) Toluene	(2)	10.126	92	874324	6.482
106) Tetrachloroethene	(2)	10.693	166	386837	6.052
110)*Chlorobenzene-d5	(2)	11.449	117	1492818	10.000
112) Chlorobenzene	(2)	11.473	112	894398	5.858
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	883812	10.000
146) Benzyl Chloride	(3)	13.406	126	71404	4.679
155) Naphthalene	(3)	14.863	128	743260	5.354
60)$Dibromofluoromethane	(1)	7.169	113	485197	9.574
70)$1,2-Dichloroethane-d4	(1)	7.626	102	89153M	9.444
98)$Toluene-d8	(2)	10.053	98	2110535	9.616
124)$4-Bromofluorobenzene	(2)	12.424	95	734301	9.324

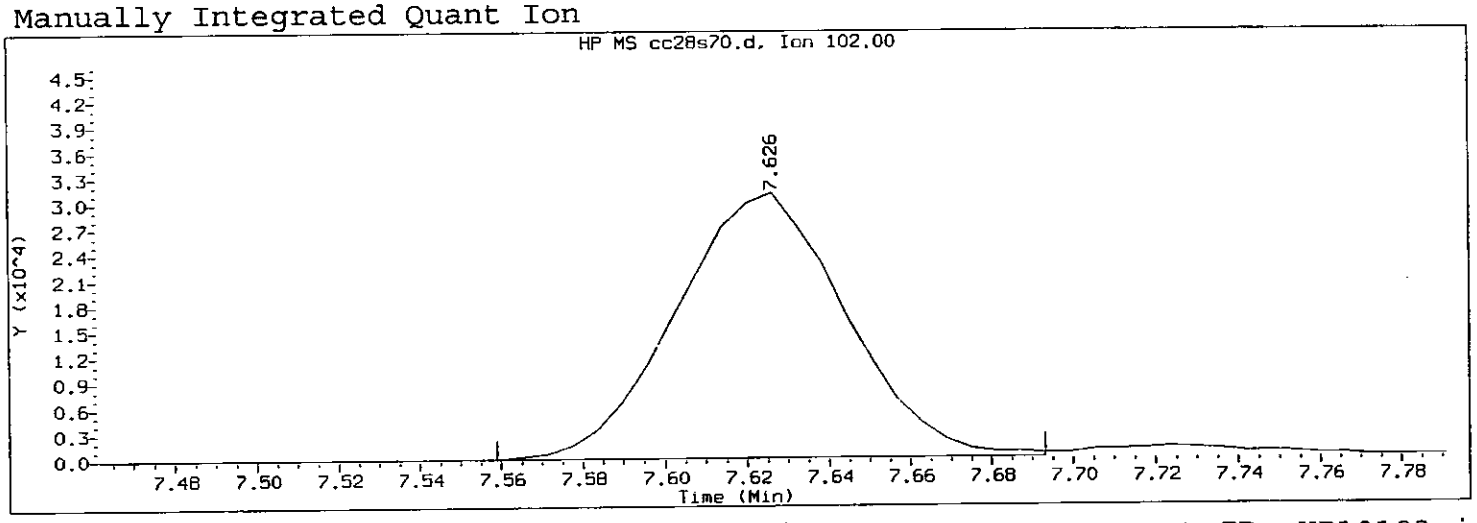
M = Compound was manually integrated.

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

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct28c.b/cc28s70.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 09:04 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 1415-SM
Calibration date and time: 29-OCT-2009 11:28
Date, time and analyst ID of latest file update: 29-Oct-2009 11:55 jm101693

Sample Name: 13MW5MSD Lab Sample ID: 5813516

Compound Number	:	70
Compound Name	:	1,2-Dichloroethane-d4
Scan Number	:	992
Retention Time (minutes)	:	7.626
Quant Ion	:	102
Area (flag)	:	89153 M
Concentration (ug/L)	:	9.4441
Integration start scan	:	980 Integration stop scan: 1002
Y at integration start	:	0 Y at integration end: 0

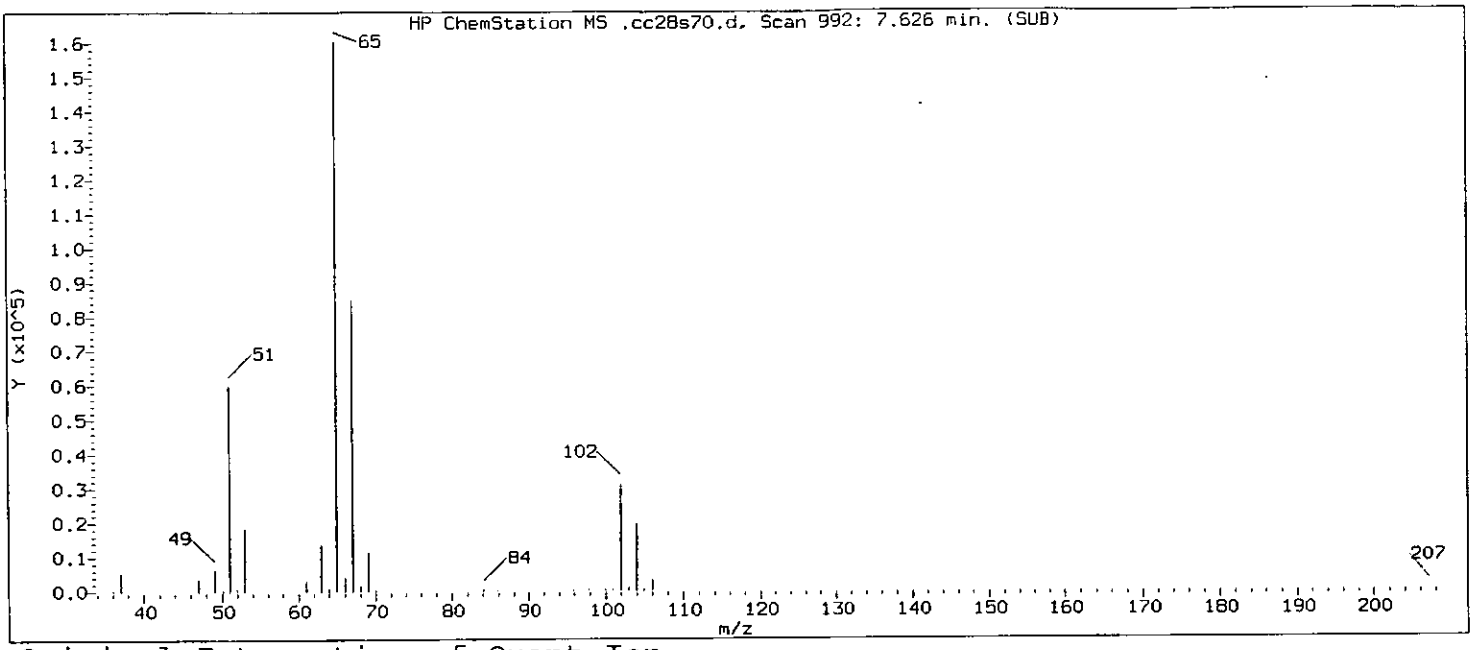
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: [signature] 10/29/09

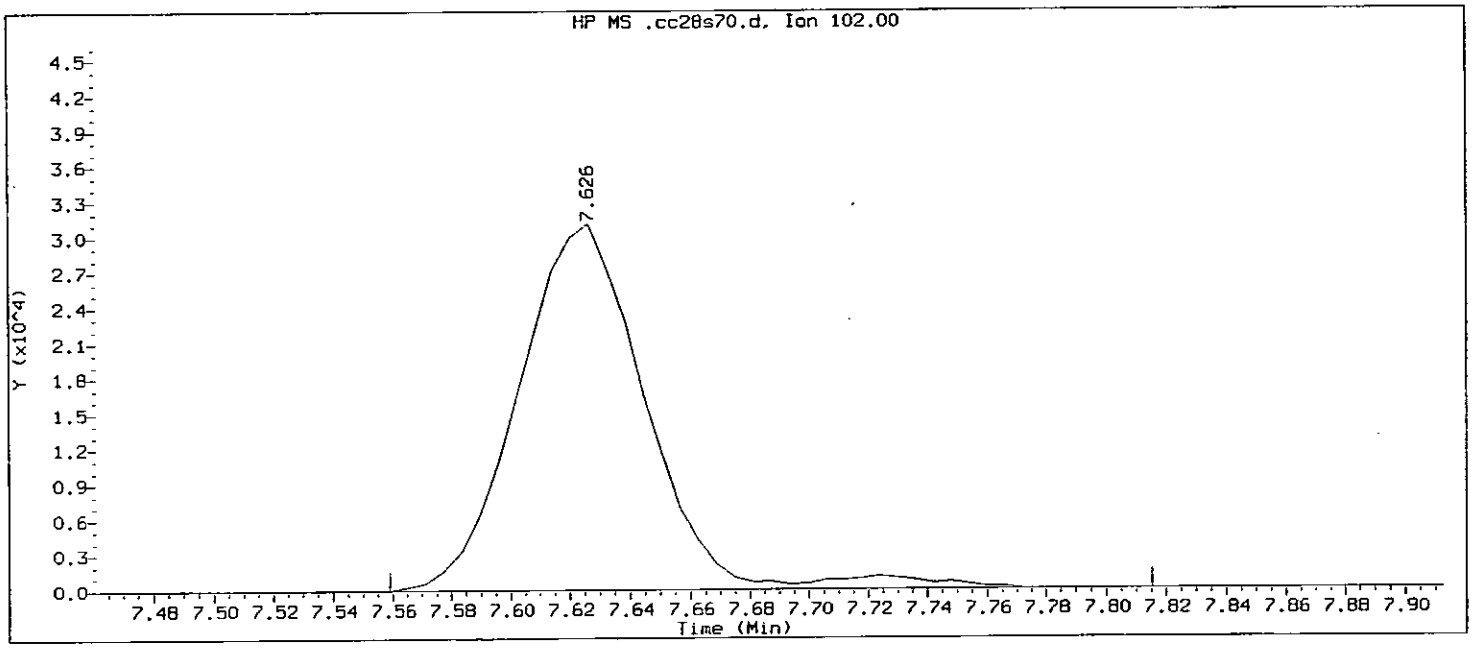
GC/MS audit/management approval: [signature] 10/29/09 RAD23 0256

Manual Integration Report for data file /chem2/HP10193.i/09oct28c.b/cc28s70.d, generated on 10/29/2009 at 11:55

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct28c.b/cc28s70.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 09:04 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 29-OCT-2009 11:15
Date, time and analyst ID of latest file update: 29-Oct-2009 11:17 jml01693

Sample Name: 13MW5MSD Lab Sample ID: 5813516

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 992
Retention Time (minutes): 7.626
Quant Ion : 102
Area : 92072
Concentration (ug/L) : 9.7534
Integration start scan : 980 Integration stop scan: 1022
Y at integration start : 0 Y at integration end: 0

RAD23 8257

Original Integration Report for data file /chem2/HP10193.i/09oct28c.b/cc28s70.d, generated on 10/29/2009 at 11:55

13MW5MS1

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813515

File: /chem2/HP10193.i/09oct28c.b/cc28s71.d
Sample: 13MW5MS1;5813515;1;3;MS;
Injected At:29-OCT-2009 09:26
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: HXCL

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38B

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.639(0.000)	502	65	88336(-13)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2044486(-3)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1498825(-4)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	837604(-11)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.169(-0.001)	113	479013	9.495	95%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.626(0.000)	102	88456	9.413	94%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2156750	9.787	98%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	736136	9.310	93%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
149) Hexachloroethane	(3)	13.790(0.000)	117	208969	5.195	5.20			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: Client

Analyst: _____ Date: 10/29/09

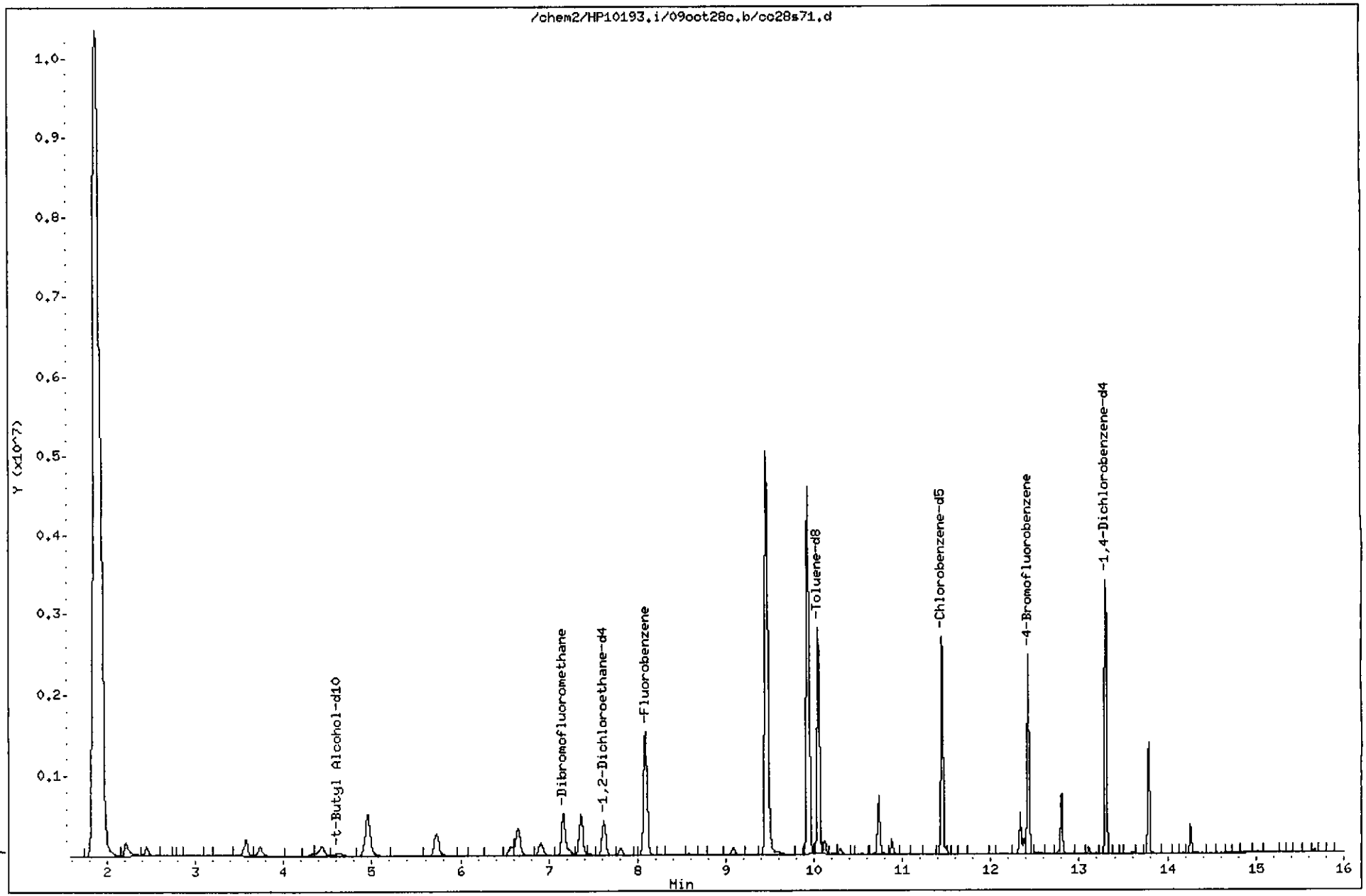
Auditor: _____ Date: 10-29-09

RAD23 0257a

Data File: /chem2/HP10193.i/09oct28c.b/cc28s71.d
Date : 29-OCT-2009 09:26
Client ID: 13MW5MS1
Sample Info: 13MW5MS1;5813515;1;3;MS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



RAD23 02576

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s71.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 09:26 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: HXCL
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 12:10 jml01693

Sample Name: 13MW5MS1 Lab Sample ID: 5813515

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.639	65	88336	50.000
78)*Fluorobenzene	(1)	8.089	96	2044486	10.000
110)*Chlorobenzene-d5	(2)	11.449	117	1498825	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	837604	10.000
149) Hexachloroethane	(3)	13.790	117	208969	5.195
60)$Dibromofluoromethane	(1)	7.169	113	479013	9.495
70)$1,2-Dichloroethane-d4	(1)	7.626	102	88456	9.413
98)$Toluene-d8	(2)	10.052	98	2156750	9.787
124)$4-Bromofluorobenzene	(2)	12.424	95	736136	9.310

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

RAD23 0257C

13MW5MSD1

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

5813516

File: /chem2/HP10193.i/09oct28c.b/cc28s72.d
Sample: 13MW5MSD1;5813516;1;3;MSD;
Injected At:29-OCT-2009 09:48
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: HXCL

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:38B

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.639(0.000)	502	65	85436(-15)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2019705(-5)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1481190(-5)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	829479(-12)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	473282	9.497	95%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	86629	9.332	93%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2136376	9.810	98%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	720846	9.225	92%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
149) Hexachloroethane	(3)	13.789(0.000)	117	204194	5.132	5.13			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments: Client

Analyst: _____ Date: 10/29/09

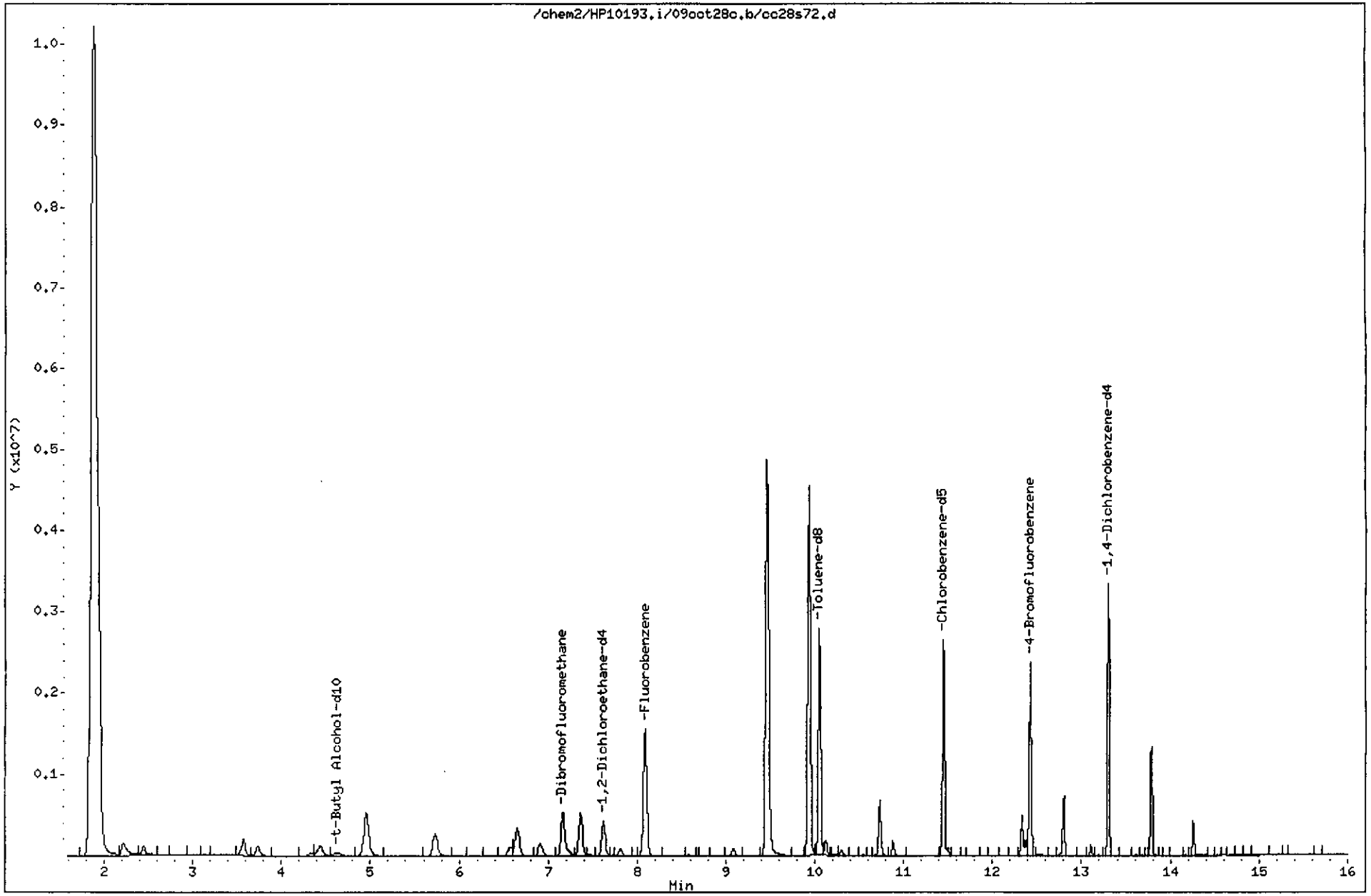
Auditor: _____ Date: 10-29-09

RAD23 0257d

Data File: /chem2/HP10193.i/09oct28c.b/cc28s72.d
Date : 29-OCT-2009 09:48
Client ID: 13MW5MSD1
Sample Info: 13MW5MSD1;5813516;1;3;MSD;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25



RAD23 0257L

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28s72.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 09:48 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: HXCL
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 12:10 jm101693

Sample Name: 13MW5MSD1 Lab Sample ID: 5813516

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
35)*t-Butyl Alcohol-d10	(4)	4.639	65	85436	50.000
78)*Fluorobenzene	(1)	8.089	96	2019705	10.000
110)*Chlorobenzene-d5	(2)	11.448	117	1481190	10.000
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	829479	10.000
149) Hexachloroethane	(3)	13.789	117	204194	5.132
60)$Dibromofluoromethane	(1)	7.163	113	473282	9.497
70)$1,2-Dichloroethane-d4	(1)	7.620	102	86629	9.332
98)$Toluene-d8	(2)	10.052	98	2136376	9.810
124)$4-Bromofluorobenzene	(2)	12.424	95	720846	9.225

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

RAD23 0257f

LCSC10

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC10

File: /chem2/HP10193.i/09oct28c.b/cc28151.d
Sample: LCSC10;LCSC10;1;3;LCS;
Injected At:29-OCT-2009 00:18
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.627(0.012)	500	65	88233(-13)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2054326(-3)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1503993(-4)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	898723(-4)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	484160	9.551	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	91024	9.640	96%		74 - 113
98) Toluene-d8	(2)	10.053(0.000)	98	2118499	9.580	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	735436	9.269	93%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
2) Dichlorodifluoromethane	(1)	2.109(0.002)	85	188750	2.882	2.88			0.10	0.50
5) Chloromethane	(1)	2.267(0.002)	50	286444	4.180	4.18			0.20	0.50
7) Vinyl Chloride	(1)	2.420(0.002)	62	298729	4.401	4.40			0.10	0.50
9) Bromomethane	(1)	2.798(0.002)	94	217345	4.573	4.57			0.10	0.50
11) Chloroethane	(1)	2.914(0.001)	64	186263	4.718	4.72			0.10	0.50
12) Dichlorofluoromethane	(1)	3.145(0.002)	67	506315	5.400	5.40			0.20	0.50
14) Trichlorofluoromethane	(1)	3.255(0.002)	101	429434	5.005	5.01			0.10	0.50
16) Ethyl Ether	(1)	3.572(0.001)	59	191652	5.507	5.51			0.10	0.50
17) Freon 123a	(1)	3.578(0.001)	67	307974	5.175	5.18			0.20	0.50
23) Acrolein	(4)	3.731(-0.002)	56	164331	36.953	36.95			5.00	25.00
24) 1,1-Dichloroethene	(1)	3.901(0.000)	96	223849	5.278	5.28			0.10	0.50
25) Freon 113	(1)	3.932(0.001)	101	245162	5.205	5.21			0.20	0.50
26) Acetone	(4)	3.932(-0.001)	58	81543	47.294	47.29			3.00	5.00
28) Methyl Iodide	(1)	4.115(0.001)	142	435972	4.888	4.89			0.10	0.50
29) Carbon Disulfide	(1)	4.237(0.000)	76	665100	4.930	4.93			0.40	0.50
31) Allyl Chloride	(1)	4.413(0.001)	41	422693	5.061	5.06			0.10	0.50
32) Methyl Acetate	(1)	4.426(0.002)	43	99249	4.996	5.00			0.30	1.00
34) Methylene Chloride	(1)	4.596(0.001)	84	261740	5.372	5.37			0.20	0.50
36) t-Butyl Alcohol	(4)	4.761(-0.003)	59	102597	55.343	55.34			4.00	10.00
39) Acrylonitrile	(4)	4.950(-0.003)	53	237698	30.270	30.27			1.00	5.00
40) trans-1,2-Dichloroethene	(1)	5.041(0.001)	96	266518	5.325	5.33			0.10	0.50
38) 1,2-Dichloroethene (Total)	(1)		96	549978	10.583	10.58			0.10	0.50
41) Methyl Tertiary Butyl Ether	(1)	5.047(0.000)	73	556341	4.933	4.93			0.10	0.50
44) n-Hexane	(1)	5.480(0.001)	57	372687	4.854	4.85			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 8258

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC10

File: /chem2/HP10193.i/09oct28c.b/cc28151.d
Sample: LCSC10;LCSC10;1;3;LCS;
Injected At:29-OCT-2009 00:18
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
45) 1,1-Dichloroethane	(1)	5.657	(0.001)	63	489025	5.323	5.32			0.10	0.50
47) di-Isopropyl Ether	(1)	5.791	(0.000)	45	881743	5.108	5.11			0.10	0.50
48) 2-Chloro-1,3-Butadiene	(1)	5.816	(0.000)	53	434638	5.354	5.35			0.10	0.50
49) Ethyl t-Butyl Ether	(1)	6.315	(0.001)	59	732166	4.840	4.84			0.10	0.50
52) 2,2-Dichloropropane	(1)	6.523	(0.001)	77	375824	5.258	5.26			0.10	0.50
50) cis-1,2-Dichloroethene	(1)	6.504	(0.000)	96	283460	5.257	5.26			0.10	0.50
51) 2-Butanone	(4)	6.498	(-0.004)	43	453150	43.920	43.92			1.00	5.00
53) Propionitrile	(4)	6.572	(-0.005)	54	131520	44.815	44.81			2.00	10.00
54) Methacrylonitrile	(4)	6.797	(-0.004)	67	447606	41.855	41.85			1.00	5.00
55) Bromochloromethane	(1)	6.828	(0.001)	128	122306	5.195	5.20			0.10	0.50
56) Tetrahydrofuran	(4)	6.907	(-0.004)	71	78314	29.064	29.06			2.00	5.00
59) Chloroform	(1)	6.949	(0.000)	83	477204	5.484	5.48			0.10	0.50
63) 1,1,1-Trichloroethane	(1)	7.230	(0.000)	97	405285	5.371	5.37			0.10	0.50
64) Cyclohexane	(1)	7.327	(0.000)	56	467009	5.010	5.01			0.10	0.50
66) 1,1-Dichloropropene	(1)	7.449	(0.000)	75	375585	5.286	5.29			0.10	0.50
67) Carbon Tetrachloride	(1)	7.468	(0.000)	117	347890	5.453	5.45			0.10	0.50
69) Isobutyl Alcohol	(4)	7.571	(-0.006)	41	106731	151.709	151.71			10.00	25.00
73) Benzene	(1)	7.724	(0.000)	78	1137373	5.272	5.27			0.10	0.50
74) 1,2-Dichloroethane	(1)	7.718	(0.001)	62	300499	5.525	5.52			0.10	0.50
77) t-Amyl Methyl Ether	(1)	7.888	(-0.001)	73	605028	4.842	4.84			0.10	0.50
79) n-Heptane	(1)	8.102	(0.001)	43	440590	5.063	5.06			0.20	0.50
80) n-Butanol	(4)	8.443	(-0.005)	56	144964	247.453	247.45			20.00	50.00
82) Trichloroethene	(1)	8.577	(0.000)	95	291473	5.372	5.37			0.10	0.50
85) Methylcyclohexane	(1)	8.858	(0.000)	83	510733	5.171	5.17			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0259

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC10

File: /chem2/HP10193.i/09oct28c.b/cc28l51.d
Sample: LCSC10;LCSC10;1;3;LCS;
Injected At:29-OCT-2009 00:18
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
84) 1,2-Dichloropropane	(1)	8.858(0.000)	63	286721	5.293	5.29			0.10	0.50
87) Dibromomethane	(1)	8.998(0.001)	93	121536	5.440	5.44			0.10	0.50
90) 1,4-Dioxane	(4)	9.022(-0.005)	88	21899	141.952	141.95			20.00	100.00
88) Methyl Methacrylate	(4)	9.004(-0.005)	69	102689	5.339	5.34			0.10	0.50
91) Bromodichloromethane	(1)	9.205(0.000)	83	302449	5.360	5.36			0.10	0.50
92) 2-Nitropropane	(4)	9.461(-0.005)	41	28996	5.132	5.13			1.00	5.00
94) cis-1,3-Dichloropropene	(1)	9.742(0.000)	75	365531	5.019	5.02			0.10	0.50
96) 4-Methyl-2-Pentanone	(1)	9.906(0.000)	43	743754	26.046	26.05			1.00	5.00
100) Toluene	(2)	10.126(0.000)	92	725708	5.340	5.34			0.10	0.50
102) trans-1,3-Dichloropropene	(2)	10.327(0.000)	75	297030	5.030	5.03			0.10	0.50
103) Ethyl Methacrylate	(2)	10.424(0.000)	69	223051	4.867	4.87			0.10	0.50
104) 1,1,2-Trichloroethane	(2)	10.516(0.000)	97	171067	5.338	5.34			0.10	0.50
106) Tetrachloroethene	(2)	10.693(0.000)	166	344422	5.348	5.35			0.10	0.50
105) 1,3-Dichloropropane	(2)	10.687(0.000)	76	308516	5.363	5.36			0.10	0.50
107) 2-Hexanone	(2)	10.760(0.000)	43	511806	25.811	25.81			1.00	5.00
108) Dibromochloromethane	(2)	10.912(0.000)	129	190968	5.188	5.19			0.10	0.50
109) 1,2-Dibromoethane	(2)	11.022(0.000)	107	161168	5.277	5.28			0.10	0.50
112) Chlorobenzene	(2)	11.473(0.000)	112	831617	5.407	5.41			0.10	0.50
113) 1,1,1,2-Tetrachloroethane	(2)	11.540(0.000)	131	257190	5.351	5.35			0.10	0.50
114) Ethylbenzene	(2)	11.571(0.000)	91	1430182	5.309	5.31			0.10	0.50
117) m+p-Xylene	(2)	11.668(0.000)	106	1155667	10.858	10.86			0.10	0.50
116) Xylene (Total)	(2)		106	1703392	16.183	16.18			0.10	0.50
118) o-Xylene	(2)	12.003(0.000)	106	547725	5.325	5.32			0.10	0.50
119) Styrene	(2)	12.009(0.000)	104	867889	5.309	5.31			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0268

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC10

File: /chem2/HP10193.i/09oct28c.b/cc28l51.d
Sample: LCSC10;LCSC10;1;3;LCS;
Injected At:29-OCT-2009 00:18
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
120) Bromoform	(2)	12.168	(0.000)	173	97315	4.861	4.86			0.10	0.50
121) Isopropylbenzene	(2)	12.302	(0.000)	105	1403667	5.393	5.39			0.10	0.50
127) 1,1,2,2-Tetrachloroethane	(3)	12.515	(0.000)	83	205618	5.511	5.51			0.10	0.50
128) Bromobenzene	(3)	12.552	(0.000)	156	354206	5.240	5.24			0.10	0.50
129) trans-1,4-Dichloro-2-Butene	(4)	12.552	(-0.007)	53	229488	23.079	23.08			1.00	5.00
130) 1,2,3-Trichloropropane	(3)	12.558	(0.000)	110	56972	5.331	5.33			0.30	1.00
132) n-Propylbenzene	(3)	12.619	(0.000)	91	1757182	5.230	5.23			0.10	0.50
133) 2-Chlorotoluene	(3)	12.698	(0.000)	126	355444	5.274	5.27			0.10	0.50
136) 4-Chlorotoluene	(3)	12.778	(0.000)	126	370517	5.283	5.28			0.10	0.50
135) 1,3,5-Trimethylbenzene	(3)	12.747	(0.000)	105	1266839	5.266	5.27			0.10	0.50
138) Pentachloroethane	(3)	13.028	(0.000)	167	219345	5.282	5.28			0.20	0.50
137) tert-Butylbenzene	(3)	13.003	(0.000)	134	288096	5.223	5.22			0.10	0.50
139) 1,2,4-Trimethylbenzene	(3)	13.034	(0.000)	105	1326628	5.308	5.31			0.10	0.50
140) sec-Butylbenzene	(3)	13.162	(0.000)	105	1641391	5.300	5.30			0.10	0.50
141) 1,3-Dichlorobenzene	(3)	13.259	(0.000)	146	748325	5.331	5.33			0.10	0.50
142) p-Isopropyltoluene	(3)	13.259	(0.000)	119	1445878	5.264	5.26			0.10	0.50
144) 1,4-Dichlorobenzene	(3)	13.320	(0.000)	146	755666	5.332	5.33			0.10	0.50
145) 1,2,3-Trimethylbenzene	(3)	13.345	(0.000)	120	590253	5.167	5.17			0.10	0.50
146) Benzyl Chloride	(3)	13.406	(0.000)	126	75386	4.858	4.86			0.10	0.50
147) n-Butylbenzene	(3)	13.552	(0.000)	92	732322	5.345	5.34			0.10	0.50
148) 1,2-Dichlorobenzene	(3)	13.595	(0.000)	146	648248	5.355	5.36			0.10	0.50
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	(-0.008)	155	23932	5.514	5.51			0.20	0.50
153) 1,2,4-Trichlorobenzene	(3)	14.686	(0.000)	180	508787	5.143	5.14			0.10	0.50
154) Hexachlorobutadiene	(3)	14.789	(0.000)	225	295866	5.199	5.20			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0261

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC10

File: /chem2/HP10193.i/09oct28c.b/cc28151.d
Sample: LCSC10;LCSC10;1;3;LCS;
Injected At:29-OCT-2009 00:18
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
155) Naphthalene	(3)	14.863	(0.000)	128	730955	5.178	5.18			0.10	0.50
156) 1,2,3-Trichlorobenzene	(3)	15.027	(0.000)	180	429451	5.280	5.28			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: ADS1731 Date: 10/28/09

Auditor: Date: 10-29-09

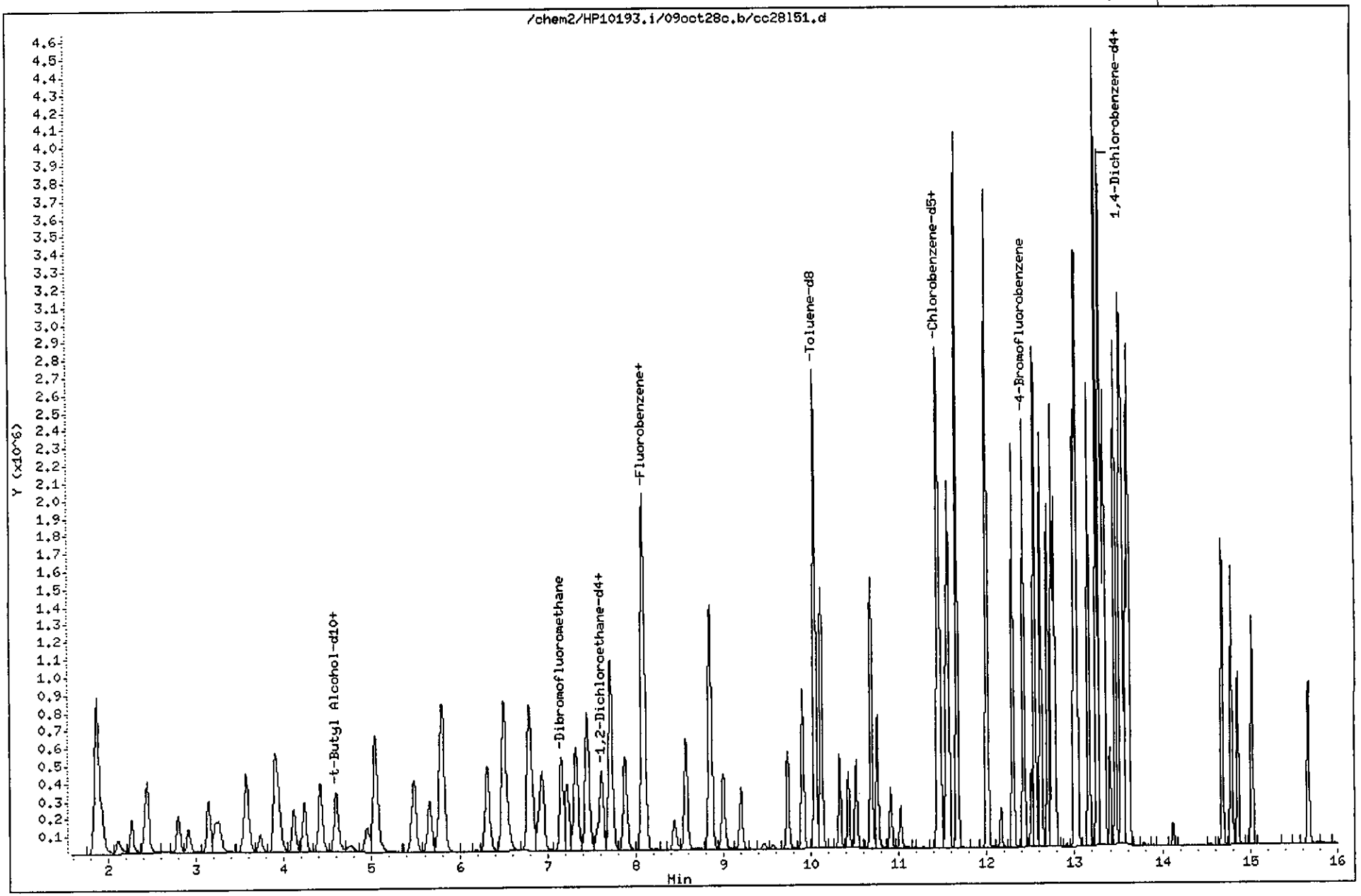
Data File: /chem2/HP10193.i/09oct28c.b/cc28151.d
Date : 29-OCT-2009 00:18
Client ID: LCSC10
Sample Info: LCSC10;LCSC10;1;3;LCS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: ADS01731
Column diameter: 0.25

ADS1731
10/28/09

RAD23 0763



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28151.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 00:18 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 00:38 ads01731

Sample Name: LCSC10 Lab Sample ID: LCSC10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.109	85	188750	2.882
5) Chloromethane	(1)	2.267	50	286444	4.180
7) Vinyl Chloride	(1)	2.420	62	298729	4.401
9) Bromomethane	(1)	2.798	94	217345	4.573
11) Chloroethane	(1)	2.914	64	186263	4.718
12) Dichlorofluoromethane	(1)	3.145	67	506315	5.400
14) Trichlorofluoromethane	(1)	3.255	101	429434	5.005
16) Ethyl Ether	(1)	3.572	59	191652	5.507
17) Freon 123a	(1)	3.578	67	307974	5.175
23) Acrolein	(4)	3.731	56	164331	36.953
24) 1,1-Dichloroethene	(1)	3.901	96	223849	5.278
25) Freon 113	(1)	3.932	101	245162	5.205
26) Acetone	(4)	3.932	58	81543	47.294
28) Methyl Iodide	(1)	4.115	142	435972	4.888
29) Carbon Disulfide	(1)	4.237	76	665100	4.930
31) Allyl Chloride	(1)	4.413	41	422693	5.061
32) Methyl Acetate	(1)	4.426	43	99249	4.996
34) Methylene Chloride	(1)	4.596	84	261740	5.372
35)*t-Butyl Alcohol-d10	(4)	4.627	65	88233	50.000
36) t-Butyl Alcohol	(4)	4.761	59	102597	55.343
39) Acrylonitrile	(4)	4.950	53	237698	30.270
40) trans-1,2-Dichloroethene	(1)	5.041	96	266518	5.325
38) 1,2-Dichloroethene (Total)	(1)		96	549978	10.583
41) Methyl Tertiary Butyl Ether	(1)	5.047	73	556341	4.933
44) n-Hexane	(1)	5.480	57	372687	4.854
45) 1,1-Dichloroethane	(1)	5.657	63	489025	5.323
47) di-Isopropyl Ether	(1)	5.791	45	881743	5.108
48) 2-Chloro-1,3-Butadiene	(1)	5.816	53	434638	5.354
49) Ethyl t-Butyl Ether	(1)	6.315	59	732166	4.840
52) 2,2-Dichloropropane	(1)	6.523	77	375824	5.258
50) cis-1,2-Dichloroethene	(1)	6.504	96	283460	5.257
51) 2-Butanone	(4)	6.498	43	453150	43.920
53) Propionitrile	(4)	6.572	54	131520	44.815
54) Methacrylonitrile	(4)	6.797	67	447606	41.855

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28151.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 00:18 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 00:38 ads01731

Sample Name: LCSC10 Lab Sample ID: LCSC10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
55) Bromochloromethane	(1)	6.828	128	122306	5.195
56) Tetrahydrofuran	(4)	6.907	71	78314	29.064
59) Chloroform	(1)	6.949	83	477204	5.484
63) 1,1,1-Trichloroethane	(1)	7.230	97	405285	5.371
64) Cyclohexane	(1)	7.327	56	467009	5.010
66) 1,1-Dichloropropene	(1)	7.449	75	375585	5.286
67) Carbon Tetrachloride	(1)	7.468	117	347890	5.453
69) Isobutyl Alcohol	(4)	7.571	41	106731	151.709
73) Benzene	(1)	7.724	78	1137373	5.272
74) 1,2-Dichloroethane	(1)	7.718	62	300499	5.525
77) t-Amyl Methyl Ether	(1)	7.888	73	605028	4.842
78) *Fluorobenzene	(1)	8.089	96	2054326	10.000
79) n-Heptane	(1)	8.102	43	440590	5.063
80) n-Butanol	(4)	8.443	56	144964	247.453
82) Trichloroethene	(1)	8.577	95	291473	5.372
85) Methylcyclohexane	(1)	8.858	83	510733	5.171
84) 1,2-Dichloropropane	(1)	8.858	63	286721	5.293
87) Dibromomethane	(1)	8.998	93	121536	5.440
90) 1,4-Dioxane	(4)	9.022	88	21899	141.952
88) Methyl Methacrylate	(4)	9.004	69	102689	5.339
91) Bromodichloromethane	(1)	9.205	83	302449	5.360
92) 2-Nitropropane	(4)	9.461	41	28996	5.132
94) cis-1,3-Dichloropropene	(1)	9.742	75	365531	5.019
96) 4-Methyl-2-Pentanone	(1)	9.906	43	743754	26.046
100) Toluene	(2)	10.126	92	725708	5.340
102) trans-1,3-Dichloropropene	(2)	10.327	75	297030	5.030
103) Ethyl Methacrylate	(2)	10.424	69	223051	4.867
104) 1,1,2-Trichloroethane	(2)	10.516	97	171067	5.338
106) Tetrachloroethene	(2)	10.693	166	344422	5.348
105) 1,3-Dichloropropane	(2)	10.687	76	308516	5.363
107) 2-Hexanone	(2)	10.760	43	511806	25.811
108) Dibromochloromethane	(2)	10.912	129	190968	5.188
109) 1,2-Dibromoethane	(2)	11.022	107	161168	5.277
110) *Chlorobenzene-d5	(2)	11.449	117	1503993	10.000

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28l51.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 00:18 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 00:38 ads01731

Sample Name: LCSC10 Lab Sample ID: LCSC10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
112) Chlorobenzene	(2)	11.473	112	831617	5.407
113) 1,1,1,2-Tetrachloroethane	(2)	11.540	131	257190	5.351
114) Ethylbenzene	(2)	11.571	91	1430182	5.309
117) m+p-Xylene	(2)	11.668	106	1155667	10.858
116) Xylene (Total)	(2)		106	1703392	16.183
118) o-Xylene	(2)	12.003	106	547725	5.325
119) Styrene	(2)	12.009	104	867889	5.309
120) Bromoform	(2)	12.168	173	97315	4.861
121) Isopropylbenzene	(2)	12.302	105	1403667	5.393
127) 1,1,2,2-Tetrachloroethane	(3)	12.515	83	205618	5.511
128) Bromobenzene	(3)	12.552	156	354206	5.240
129) trans-1,4-Dichloro-2-Butene	(4)	12.552	53	229488	23.079
130) 1,2,3-Trichloropropane	(3)	12.558	110	56972	5.331
132) n-Propylbenzene	(3)	12.619	91	1757182	5.230
133) 2-Chlorotoluene	(3)	12.698	126	355444	5.274
136) 4-Chlorotoluene	(3)	12.778	126	370517	5.283
135) 1,3,5-Trimethylbenzene	(3)	12.747	105	1266839	5.266
138) Pentachloroethane	(3)	13.028	167	219345	5.282
137) tert-Butylbenzene	(3)	13.003	134	288096	5.223
139) 1,2,4-Trimethylbenzene	(3)	13.034	105	1326628	5.308
140) sec-Butylbenzene	(3)	13.162	105	1641391	5.300
141) 1,3-Dichlorobenzene	(3)	13.259	146	748325	5.331
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	898723	10.000
142) p-Isopropyltoluene	(3)	13.259	119	1445878	5.264
144) 1,4-Dichlorobenzene	(3)	13.320	146	755666	5.332
145) 1,2,3-Trimethylbenzene	(3)	13.345	120	590253	5.167
146) Benzyl Chloride	(3)	13.406	126	75386	4.858
147) n-Butylbenzene	(3)	13.552	92	732322	5.345
148) 1,2-Dichlorobenzene	(3)	13.595	146	648248	5.355
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	155	23932	5.514
153) 1,2,4-Trichlorobenzene	(3)	14.686	180	508787	5.143
154) Hexachlorobutadiene	(3)	14.789	225	295866	5.199
155) Naphthalene	(3)	14.863	128	730955	5.178
156) 1,2,3-Trichlorobenzene	(3)	15.027	180	429451	5.280

* = Compound is an internal standard.

RAD23 8266

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28l51.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 00:18 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 00:38 ads01731

Sample Name: LCSC10 Lab Sample ID: LCSC10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
60)$Dibromofluoromethane	(1)	7.163	113	484160	9.551
70)$1,2-Dichloroethane-d4	(1)	7.620	102	91024	9.640
98)$Toluene-d8	(2)	10.053	98	2118499	9.580
124)$4-Bromofluorobenzene	(2)	12.424	95	735436	9.269

$ = Compound is a surrogate standard.

LCS1C10

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCS1C10

File: /chem2/HP10193.i/09oct28c.b/cc28l53.d
Sample: LCS1C10;LCS1C10;1;3;LCS;
Injected At:29-OCT-2009 01:25
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc28b52.d
Sublist: SMQC

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093012AA
Analyst:ADS01731
Instrument ID:HP10193.i
Standard Reference: cc28c52.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.633(0.006)	501	65	92583(-8)	50.00	
78) Fluorobenzene	8.090(0.000)	1068	96	2041670(-4)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1516662(-3)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	857378(-9)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(0.000)	113	485452	9.636	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(0.001)	102	89098	9.495	95%		74 - 113
98) Toluene-d8	(2)	10.053(0.000)	98	2164630	9.707	97%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	740016	9.249	92%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
4) Dimethyl ether	(1)	2.213(0.001)	45	402632	5.108	5.11			0.10	0.50
30) Acetonitrile	(4)	4.328(-0.001)	41	147918	45.216	45.22			7.00	20.00
46) Vinyl Acetate	(1)	5.718(0.001)	43	821421	13.623	13.62			0.20	0.50
93) 2-Chloroethyl Vinyl Ether	(1)	9.565(0.000)	63	125110	5.898	5.90			0.10	0.50
122) Cyclohexanone	(4)	12.369(-0.004)	55	100216	134.187	134.19			5.00	25.00
134) cis-1,4-Dichloro-2-Butene	(4)	12.333(-0.004)	88	130873	15.456	15.46			0.40	1.00
149) Hexachloroethane	(3)	13.790(0.000)	117	199563	4.873	4.87			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: ADS1731 Date: 10/28/09

Auditor: Date: 10-29-09

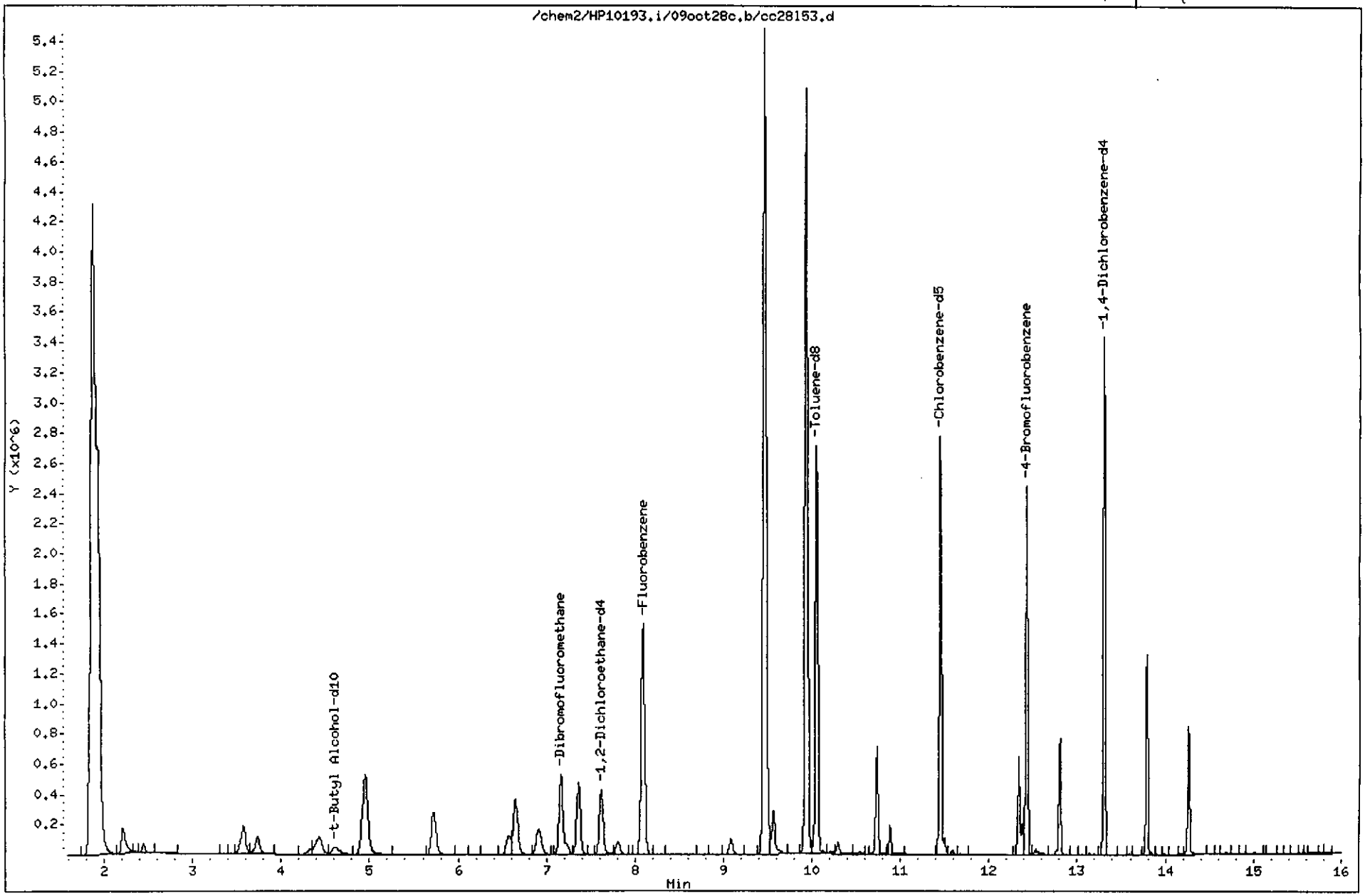
RAD23 0267a

Data File: /chem2/HP10193.i/09oct28c.b/cc28153.d
Date : 29-OCT-2009 01:25
Client ID: LCS1C10
Sample Info: LCS1C10;LCS1C10;1;3;LCS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: ADS01731
Column diameter: 0.25

ADS1731
10/28/09

RAD23 02676



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct28c.b/cc28153.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 01:25 Analyst ID: ADS01731

Method used: /chem2/HP10193.i/09oct28c.b/C8260W25.m Sublist used: SMQC
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 01:43 Automation

Sample Name: LCS1C10 Lab Sample ID: LCS1C10

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.213	45	402632	5.108
30) Acetonitrile	(4)	4.328	41	147918	45.216
35)*t-Butyl Alcohol-d10	(4)	4.633	65	92583	50.000
46) Vinyl Acetate	(1)	5.718	43	821421	13.623
78)*Fluorobenzene	(1)	8.090	96	2041670	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	125110	5.898
110)*Chlorobenzene-d5	(2)	11.449	117	1516662	10.000
122) Cyclohexanone	(4)	12.369	55	100216	134.187
134) cis-1,4-Dichloro-2-Butene	(4)	12.333	88	130873	15.456
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	857378	10.000
149) Hexachloroethane	(3)	13.790	117	199563	4.873
60)$Dibromofluoromethane	(1)	7.163	113	485452	9.636
70)$1,2-Dichloroethane-d4	(1)	7.620	102	89098	9.495
98)$Toluene-d8	(2)	10.053	98	2164630	9.707
124)$4-Bromofluorobenzene	(2)	12.424	95	740016	9.249

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

RAD23 0267C

LCSC11

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC11

File: /chem2/HP10193.i/09oct29a.b/cc29l01.d
Sample: LCSC11;LCSC11;1;3;LCS;
Injected At:29-OCT-2009 14:03
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.633(-0.006)	501	65	85858(-12)	50.00	
78) Fluorobenzene	8.089(0.000)	1068	96	2039181(-1)	10.00	
110) Chlorobenzene-d5	11.448(0.000)	1619	117	1495556(-1)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	884605(-3)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.169(-0.001)	113	480928	9.558	96%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.626(-0.001)	102	89104	9.507	95%		74 - 113
98) Toluene-d8	(2)	10.052(0.000)	98	2119233	9.638	96%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	739794	9.377	94%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
2) Dichlorodifluoromethane	(1)	2.115(0.000)	85	307514	4.730	4.73			0.10	0.50
5) Chloromethane	(1)	2.280(0.001)	50	355840	5.231	5.23			0.20	0.50
7) Vinyl Chloride	(1)	2.426(0.001)	62	357696	5.309	5.31			0.10	0.50
9) Bromomethane	(1)	2.810(0.000)	94	247540	5.247	5.25			0.10	0.50
11) Chloroethane	(1)	2.920(0.000)	64	210156	5.363	5.36			0.10	0.50
12) Dichlorofluoromethane	(1)	3.157(-0.001)	67	541008	5.813	5.81			0.20	0.50
14) Trichlorofluoromethane	(1)	3.273(-0.001)	101	493928	5.800	5.80			0.10	0.50
16) Ethyl Ether	(1)	3.578(-0.001)	59	182438	5.282	5.28			0.10	0.50
17) Freon 123a	(1)	3.590(-0.001)	67	330084	5.588	5.59			0.20	0.50
23) Acrolein	(4)	3.737(0.000)	56	169858	39.252	39.25			5.00	25.00
24) 1,1-Dichloroethene	(1)	3.907(-0.001)	96	231793	5.506	5.51			0.10	0.50
25) Freon 113	(1)	3.938(0.000)	101	259959	5.560	5.56			0.20	0.50
26) Acetone	(4)	3.944(0.000)	58	82650	49.262	49.26			3.00	5.00
28) Methyl Iodide	(1)	4.121(-0.001)	142	450413	5.088	5.09			0.10	0.50
29) Carbon Disulfide	(1)	4.243(-0.001)	76	698513	5.216	5.22			0.40	0.50
31) Allyl Chloride	(1)	4.425(-0.001)	41	429102	5.176	5.18			0.10	0.50
32) Methyl Acetate	(1)	4.444(-0.001)	43	96382	4.887	4.89			0.30	1.00
34) Methylene Chloride	(1)	4.602(-0.001)	84	262491	5.428	5.43			0.20	0.50
36) t-Butyl Alcohol	(4)	4.767(0.000)	59	100985	55.981	55.98			4.00	10.00
39) Acrylonitrile	(4)	4.950(0.001)	53	232919	30.482	30.48			1.00	5.00
40) trans-1,2-Dichloroethene	(1)	5.047(-0.001)	96	272619	5.488	5.49			0.10	0.50
38) 1,2-Dichloroethene (Total)	(1)		96	560628	10.869	10.87			0.10	0.50
41) Methyl Tertiary Butyl Ether	(1)	5.053(-0.001)	73	560673	5.008	5.01			0.10	0.50
44) n-Hexane	(1)	5.486(-0.001)	57	397758	5.220	5.22			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 8268

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC11

File: /chem2/HP10193.i/09oct29a.b/cc29101.d
Sample: LCSC11;LCSC11;1;3;LCS;
Injected At:29-OCT-2009 14:03
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
45) 1,1-Dichloroethane	(1)	5.669(-0.001)	63	503774	5.524	5.52			0.10	0.50
47) di-Isopropyl Ether	(1)	5.797(-0.001)	45	904897	5.282	5.28			0.10	0.50
48) 2-Chloro-1,3-Butadiene	(1)	5.815(-0.001)	53	445848	5.532	5.53			0.10	0.50
49) Ethyl t-Butyl Ether	(1)	6.321(0.000)	59	744193	4.956	4.96			0.10	0.50
52) 2,2-Dichloropropane	(1)	6.529(-0.001)	77	381012	5.370	5.37			0.10	0.50
50) cis-1,2-Dichloroethene	(1)	6.510(-0.001)	96	288009	5.382	5.38			0.10	0.50
51) 2-Butanone	(4)	6.504(0.001)	43	452526	45.073	45.07			1.00	5.00
53) Propionitrile	(4)	6.571(0.002)	54	129377	45.304	45.30			2.00	10.00
54) Methacrylonitrile	(4)	6.797(0.002)	67	446848	42.940	42.94			1.00	5.00
55) Bromochloromethane	(1)	6.840(-0.001)	128	119943	5.133	5.13			0.10	0.50
56) Tetrahydrofuran	(4)	6.913(0.001)	71	79195	30.204	30.20			2.00	5.00
59) Chloroform	(1)	6.949(0.000)	83	489691	5.670	5.67			0.10	0.50
63) 1,1,1-Trichloroethane	(1)	7.230(0.000)	97	417384	5.572	5.57			0.10	0.50
64) Cyclohexane	(1)	7.333(-0.001)	56	494547	5.345	5.34			0.10	0.50
66) 1,1-Dichloropropene	(1)	7.449(0.000)	75	386854	5.485	5.48			0.10	0.50
67) Carbon Tetrachloride	(1)	7.468(0.000)	117	360228	5.689	5.69			0.10	0.50
69) Isobutyl Alcohol	(4)	7.565(0.003)	41	103459	151.126	151.13			10.00	25.00
73) Benzene	(1)	7.724(0.000)	78	1160952	5.421	5.42			0.10	0.50
74) 1,2-Dichloroethane	(1)	7.724(0.000)	62	302889	5.610	5.61			0.10	0.50
77) t-Amyl Methyl Ether	(1)	7.888(-0.001)	73	607753	4.900	4.90			0.10	0.50
79) n-Heptane	(1)	8.108(0.000)	43	467567	5.413	5.41			0.20	0.50
80) n-Butanol	(4)	8.443(0.002)	56	151858	266.392	266.39			20.00	50.00
82) Trichloroethene	(1)	8.577(0.000)	95	298498	5.542	5.54			0.10	0.50
85) Methylcyclohexane	(1)	8.858(0.000)	83	528548	5.391	5.39			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 8269

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC11

File: /chem2/HP10193.i/09oct29a.b/cc29l01.d
Sample: LCSC11;LCSC11;1;3;LCS;
Injected At:29-OCT-2009 14:03
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
84) 1,2-Dichloropropane	(1)	8.858(0.000)	63	295185	5.490	5.49			0.10	0.50
87) Dibromomethane	(1)	8.998(0.000)	93	120989	5.456	5.46			0.10	0.50
90) 1,4-Dioxane	(4)	9.028(0.001)	88	22889	152.473	152.47			20.00	100.00
88) Methyl Methacrylate	(4)	9.004(0.003)	69	103398	5.525	5.52			0.10	0.50
91) Bromodichloromethane	(1)	9.205(0.000)	83	305199	5.449	5.45			0.10	0.50
92) 2-Nitropropane	(4)	9.461(0.003)	41	29812	5.423	5.42			1.00	5.00
94) cis-1,3-Dichloropropene	(1)	9.741(0.000)	75	364834	5.046	5.05			0.10	0.50
96) 4-Methyl-2-Pentanone	(1)	9.906(0.000)	43	728789	25.712	25.71			1.00	5.00
100) Toluene	(2)	10.126(0.000)	92	741804	5.489	5.49			0.10	0.50
102) trans-1,3-Dichloropropene	(2)	10.333(-0.001)	75	300325	5.115	5.11			0.10	0.50
103) Ethyl Methacrylate	(2)	10.430(-0.001)	69	220616	4.841	4.84			0.10	0.50
104) 1,1,2-Trichloroethane	(2)	10.516(0.000)	97	173766	5.452	5.45			0.10	0.50
106) Tetrachloroethene	(2)	10.693(0.000)	166	346113	5.405	5.40			0.10	0.50
105) 1,3-Dichloropropane	(2)	10.686(0.000)	76	311142	5.439	5.44			0.10	0.50
107) 2-Hexanone	(2)	10.760(0.000)	43	502835	25.501	25.50			1.00	5.00
108) Dibromochloromethane	(2)	10.912(0.000)	129	191183	5.223	5.22			0.10	0.50
109) 1,2-Dibromoethane	(2)	11.022(0.000)	107	161974	5.333	5.33			0.10	0.50
112) Chlorobenzene	(2)	11.479(-0.001)	112	838164	5.480	5.48			0.10	0.50
113) 1,1,1,2-Tetrachloroethane	(2)	11.546(0.000)	131	259588	5.431	5.43			0.10	0.50
114) Ethylbenzene	(2)	11.570(0.000)	91	1453747	5.427	5.43			0.10	0.50
117) m+p-Xylene	(2)	11.668(0.000)	106	1160139	10.962	10.96			0.10	0.50
116) Xylene (Total)	(2)		106	1715089	16.387	16.39			0.10	0.50
118) o-Xylene	(2)	12.003(0.000)	106	554950	5.425	5.43			0.10	0.50
119) Styrene	(2)	12.009(0.000)	104	872474	5.367	5.37			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 8270

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC11

File: /chem2/HP10193.i/09oct29a.b/cc29101.d
Sample: LCSC11;LCSC11;1;3;LCS;
Injected At:29-OCT-2009 14:03
Calibration Time:, 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
120) Bromoform	(2)	12.168	(0.000)	173	96224	4.833	4.83			0.10	0.50
121) Isopropylbenzene	(2)	12.302	(0.000)	105	1408691	5.443	5.44			0.10	0.50
127) 1,1,2,2-Tetrachloroethane	(3)	12.515	(0.000)	83	196865	5.361	5.36			0.10	0.50
128) Bromobenzene	(3)	12.552	(0.000)	156	356098	5.352	5.35			0.10	0.50
129) trans-1,4-Dichloro-2-Butene	(4)	12.552	(0.004)	53	222742	23.021	23.02			1.00	5.00
130) 1,2,3-Trichloropropane	(3)	12.558	(0.000)	110	55961	5.320	5.32			0.30	1.00
132) n-Propylbenzene	(3)	12.619	(0.000)	91	1779459	5.381	5.38			0.10	0.50
133) 2-Chlorotoluene	(3)	12.698	(0.000)	126	358875	5.410	5.41			0.10	0.50
136) 4-Chlorotoluene	(3)	12.777	(0.000)	126	369571	5.353	5.35			0.10	0.50
135) 1,3,5-Trimethylbenzene	(3)	12.747	(0.000)	105	1272116	5.372	5.37			0.10	0.50
138) Pentachloroethane	(3)	13.027	(0.000)	167	213456	5.223	5.22			0.20	0.50
137) tert-Butylbenzene	(3)	13.003	(0.000)	134	286495	5.277	5.28			0.10	0.50
139) 1,2,4-Trimethylbenzene	(3)	13.034	(0.000)	105	1336543	5.433	5.43			0.10	0.50
140) sec-Butylbenzene	(3)	13.162	(0.000)	105	1649412	5.411	5.41			0.10	0.50
141) 1,3-Dichlorobenzene	(3)	13.259	(0.000)	146	750444	5.431	5.43			0.10	0.50
142) p-Isopropyltoluene	(3)	13.259	(0.000)	119	1457764	5.392	5.39			0.10	0.50
144) 1,4-Dichlorobenzene	(3)	13.320	(0.000)	146	754763	5.410	5.41			0.10	0.50
145) 1,2,3-Trimethylbenzene	(3)	13.351	(0.000)	120	572384	5.091	5.09			0.10	0.50
146) Benzyl Chloride	(3)	13.405	(0.000)	126	74530	4.879	4.88			0.10	0.50
147) n-Butylbenzene	(3)	13.552	(0.000)	92	738665	5.477	5.48			0.10	0.50
148) 1,2-Dichlorobenzene	(3)	13.594	(0.000)	146	645199	5.415	5.42			0.10	0.50
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	(0.004)	155	23360	5.531	5.53			0.20	0.50
153) 1,2,4-Trichlorobenzene	(3)	14.686	(0.000)	180	502007	5.156	5.16			0.10	0.50
154) Hexachlorobutadiene	(3)	14.789	(0.000)	225	301017	5.374	5.37			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

RAD23 0271

LCSC11

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCSC11

File: /chem2/HP10193.i/09oct29a.b/cc29l01.d
Sample: LCSC11;LCSC11;1;3;LCS;
Injected At:29-OCT-2009 14:03
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: 8260W25

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Target Compounds	I.S. Ref.	RT	(+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Qual.	Reporting Limit	LOQ
155) Naphthalene	(3)	14.862	(0.000)	128	708894	5.102	5.10			0.10	0.50
156) 1,2,3-Trichlorobenzene	(3)	15.027	(0.000)	180	421507	5.265	5.27			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

Analyst: JMW Date: 11/2/09

Auditor: [signature] Date: 11/2/09

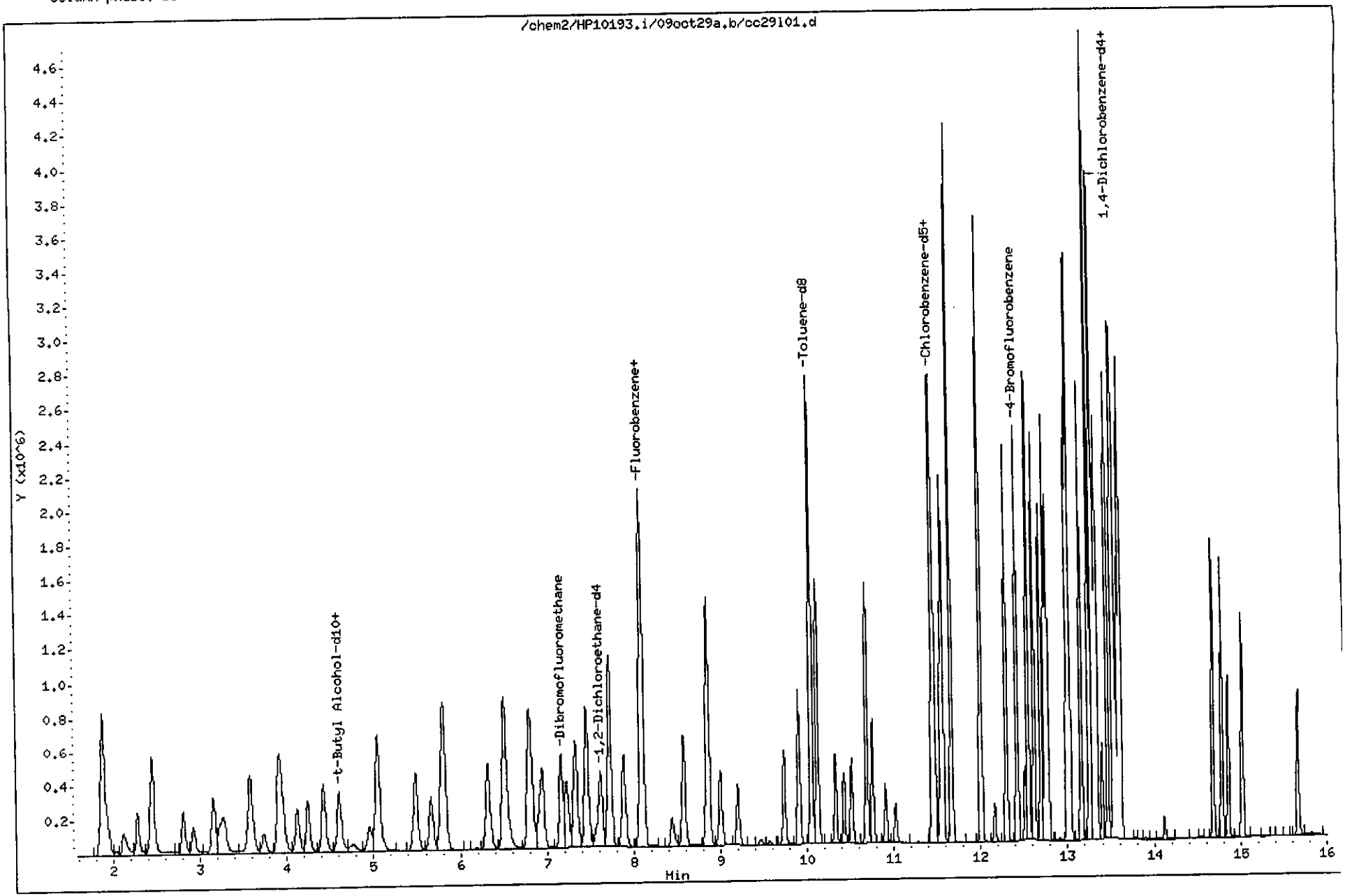
RAD23 0272

RAD23 0373

Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d
Date : 29-OCT-2009 14:03
Client ID: LCSC11
Sample Info: LCSC11;LCSC11;1;3;LCS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i

Operator: JHL01693
Column diameter: 0.25



Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 14:31 jml01693

Sample Name: LCSC11 Lab Sample ID: LCSC11

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
2) Dichlorodifluoromethane	(1)	2.115	85	307514	4.730
5) Chloromethane	(1)	2.280	50	355840	5.231
7) Vinyl Chloride	(1)	2.426	62	357696	5.309
9) Bromomethane	(1)	2.810	94	247540	5.247
11) Chloroethane	(1)	2.920	64	210156	5.363
12) Dichlorofluoromethane	(1)	3.157	67	541008	5.813
14) Trichlorofluoromethane	(1)	3.273	101	493928	5.800
16) Ethyl Ether	(1)	3.578	59	182438	5.282
17) Freon 123a	(1)	3.590	67	330084	5.588
23) Acrolein	(4)	3.737	56	169858	39.252
24) 1,1-Dichloroethene	(1)	3.907	96	231793	5.506
25) Freon 113	(1)	3.938	101	259959	5.560
26) Acetone	(4)	3.944	58	82650	49.262
28) Methyl Iodide	(1)	4.121	142	450413	5.088
29) Carbon Disulfide	(1)	4.243	76	698513	5.216
31) Allyl Chloride	(1)	4.425	41	429102	5.176
32) Methyl Acetate	(1)	4.444	43	96382	4.887
34) Methylene Chloride	(1)	4.602	84	262491	5.428
35) *t-Butyl Alcohol-d10	(4)	4.633	65	85858	50.000
36) t-Butyl Alcohol	(4)	4.767	59	100985	55.981
39) Acrylonitrile	(4)	4.950	53	232919	30.482
40) trans-1,2-Dichloroethene	(1)	5.047	96	272619	5.488
38) 1,2-Dichloroethene (Total)	(1)		96	560628	10.869
41) Methyl Tertiary Butyl Ether	(1)	5.053	73	560673	5.008
44) n-Hexane	(1)	5.486	57	397758	5.220
45) 1,1-Dichloroethane	(1)	5.669	63	503774	5.524
47) di-Isopropyl Ether	(1)	5.797	45	904897	5.282
48) 2-Chloro-1,3-Butadiene	(1)	5.815	53	445848	5.532
49) Ethyl t-Butyl Ether	(1)	6.321	59	744193	4.956
52) 2,2-Dichloropropane	(1)	6.529	77	381012	5.370
50) cis-1,2-Dichloroethene	(1)	6.510	96	288009	5.382
51) 2-Butanone	(4)	6.504	43	452526	45.073
53) Propionitrile	(4)	6.571	54	129377	45.304
54) Methacrylonitrile	(4)	6.797	67	446848	42.940

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 14:31 jml01693

Sample Name: LCSC11 Lab Sample ID: LCSC11

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
55) Bromochloromethane	(1)	6.840	128	119943	5.133
56) Tetrahydrofuran	(4)	6.913	71	79195	30.204
59) Chloroform	(1)	6.949	83	489691	5.670
63) 1,1,1-Trichloroethane	(1)	7.230	97	417384	5.572
64) Cyclohexane	(1)	7.333	56	494547	5.345
66) 1,1-Dichloropropene	(1)	7.449	75	386854	5.485
67) Carbon Tetrachloride	(1)	7.468	117	360228	5.689
69) Isobutyl Alcohol	(4)	7.565	41	103459	151.126
73) Benzene	(1)	7.724	78	1160952	5.421
74) 1,2-Dichloroethane	(1)	7.724	62	302889	5.610
77) t-Amyl Methyl Ether	(1)	7.888	73	607753	4.900
78) *Fluorobenzene	(1)	8.089	96	2039181	10.000
79) n-Heptane	(1)	8.108	43	467567	5.413
80) n-Butanol	(4)	8.443	56	151858	266.392
82) Trichloroethene	(1)	8.577	95	298498	5.542
85) Methylcyclohexane	(1)	8.858	83	528548	5.391
84) 1,2-Dichloropropane	(1)	8.858	63	295185	5.490
87) Dibromomethane	(1)	8.998	93	120989	5.456
90) 1,4-Dioxane	(4)	9.028	88	22889	152.473
88) Methyl Methacrylate	(4)	9.004	69	103398	5.525
91) Bromodichloromethane	(1)	9.205	83	305199	5.449
92) 2-Nitropropane	(4)	9.461	41	29812	5.423
94) cis-1,3-Dichloropropene	(1)	9.741	75	364834	5.046
96) 4-Methyl-2-Pentanone	(1)	9.906	43	728789	25.712
100) Toluene	(2)	10.126	92	741804	5.489
102) trans-1,3-Dichloropropene	(2)	10.333	75	300325	5.115
103) Ethyl Methacrylate	(2)	10.430	69	220616	4.841
104) 1,1,2-Trichloroethane	(2)	10.516	97	173766	5.452
106) Tetrachloroethene	(2)	10.693	166	346113	5.405
105) 1,3-Dichloropropane	(2)	10.686	76	311142	5.439
107) 2-Hexanone	(2)	10.760	43	502835	25.501
108) Dibromochloromethane	(2)	10.912	129	191183	5.223
109) 1,2-Dibromoethane	(2)	11.022	107	161974	5.333
110) *Chlorobenzene-d5	(2)	11.448	117	1495556	10.000

* = Compound is an internal standard.

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29l01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 14:31 jml01693

Sample Name: LCSC11 Lab Sample ID: LCSC11

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
112) Chlorobenzene	(2)	11.479	112	838164	5.480
113) 1,1,1,2-Tetrachloroethane	(2)	11.546	131	259588	5.431
114) Ethylbenzene	(2)	11.570	91	1453747	5.427
117) m+p-Xylene	(2)	11.668	106	1160139	10.962
116) Xylene (Total)	(2)		106	1715089	16.387
118) o-Xylene	(2)	12.003	106	554950	5.425
119) Styrene	(2)	12.009	104	872474	5.367
120) Bromoform	(2)	12.168	173	96224	4.833
121) Isopropylbenzene	(2)	12.302	105	1408691	5.443
127) 1,1,2,2-Tetrachloroethane	(3)	12.515	83	196865M	5.361
128) Bromobenzene	(3)	12.552	156	356098	5.352
129) trans-1,4-Dichloro-2-Butene	(4)	12.552	53	222742	23.021
130) 1,2,3-Trichloropropane	(3)	12.558	110	55961	5.320
132) n-Propylbenzene	(3)	12.619	91	1779459	5.381
133) 2-Chlorotoluene	(3)	12.698	126	358875	5.410
136) 4-Chlorotoluene	(3)	12.777	126	369571	5.353
135) 1,3,5-Trimethylbenzene	(3)	12.747	105	1272116	5.372
138) Pentachloroethane	(3)	13.027	167	213456	5.223
137) tert-Butylbenzene	(3)	13.003	134	286495	5.277
139) 1,2,4-Trimethylbenzene	(3)	13.034	105	1336543	5.433
140) sec-Butylbenzene	(3)	13.162	105	1649412	5.411
141) 1,3-Dichlorobenzene	(3)	13.259	146	750444	5.431
143) *1,4-Dichlorobenzene-d4	(3)	13.302	152	884605	10.000
142) p-Isopropyltoluene	(3)	13.259	119	1457764	5.392
144) 1,4-Dichlorobenzene	(3)	13.320	146	754763	5.410
145) 1,2,3-Trimethylbenzene	(3)	13.351	120	572384	5.091
146) Benzyl Chloride	(3)	13.405	126	74530	4.879
147) n-Butylbenzene	(3)	13.552	92	738665	5.477
148) 1,2-Dichlorobenzene	(3)	13.594	146	645199	5.415
150) 1,2-Dibromo-3-Chloropropane	(4)	14.125	155	23360	5.531
153) 1,2,4-Trichlorobenzene	(3)	14.686	180	502007	5.156
154) Hexachlorobutadiene	(3)	14.789	225	301017	5.374
155) Naphthalene	(3)	14.862	128	708894	5.102
156) 1,2,3-Trichlorobenzene	(3)	15.027	180	421507	5.265

M = Compound was manually integrated.

* = Compound is an internal standard.

RAD23 8276

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc29l01.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 14:31 jml01693

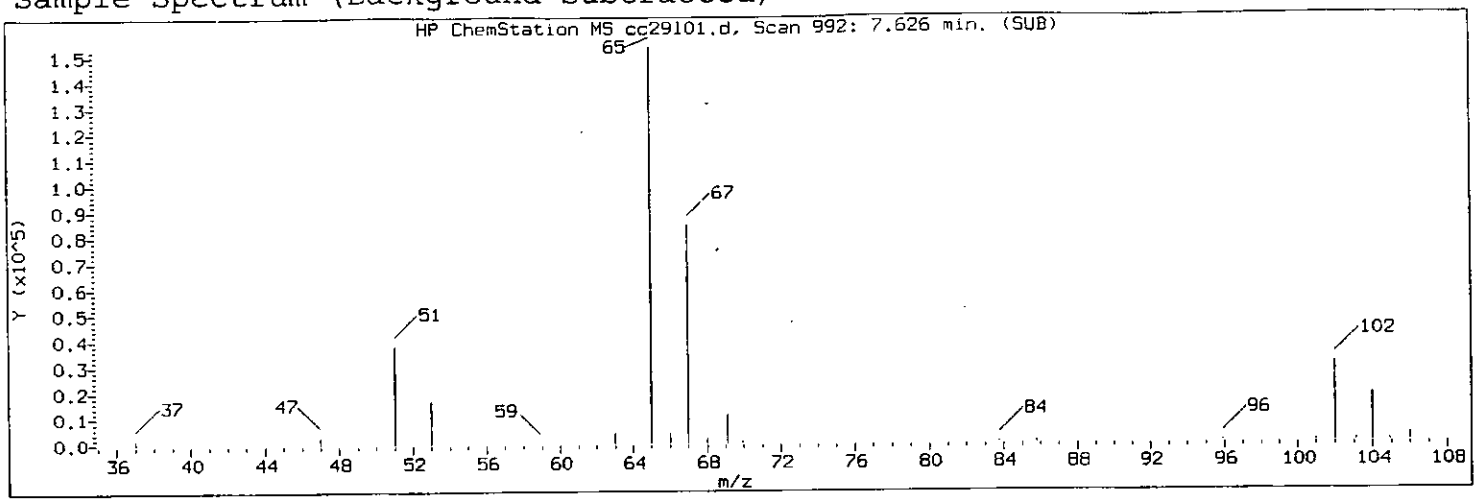
Sample Name: LCSC11 Lab Sample ID: LCSC11

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
60)$Dibromofluoromethane	(1)	7.169	113	480928	9.558
70)$1,2-Dichloroethane-d4	(1)	7.626	102	89104M	9.507
98)$Toluene-d8	(2)	10.052	98	2119233	9.638
124)$4-Bromofluorobenzene	(2)	12.424	95	739794	9.377

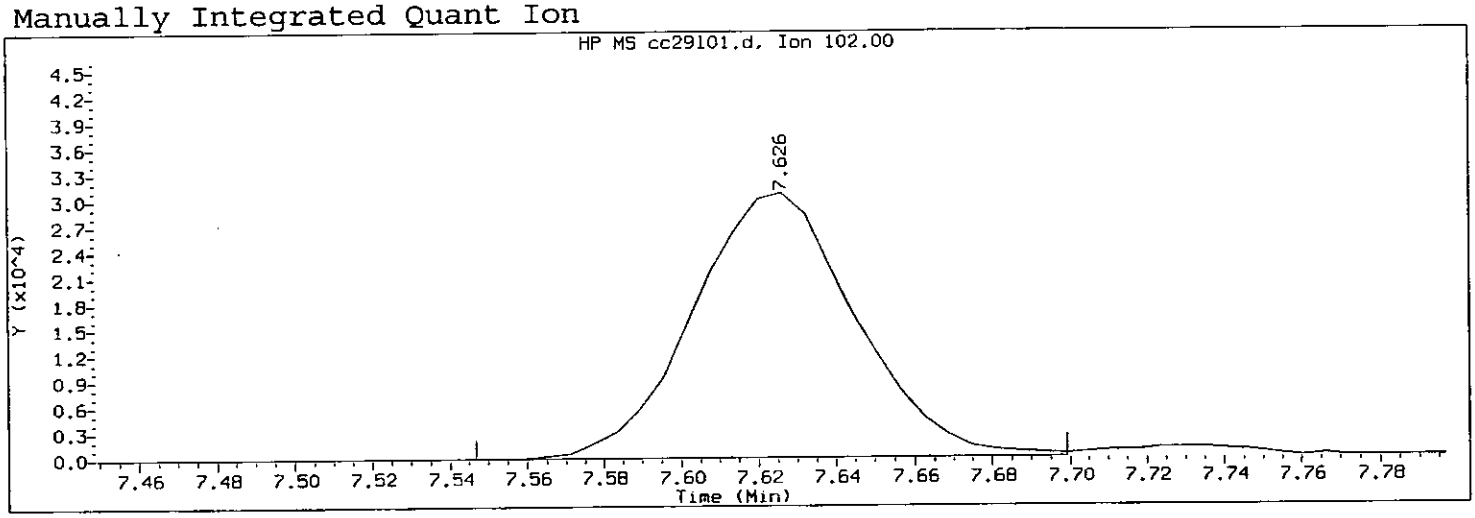
M = Compound was manually integrated.

$ = Compound is a surrogate standard.

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 14:31 jml01693

Sample Name: LCSC11 Lab Sample ID: LCSC11

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 992
Retention Time (minutes): 7.626
Quant Ion : 102
Area (flag) : 89104 M
Concentration (ug/L) : 9.5068
Integration start scan : 978 Integration stop scan: 1003
Y at integration start : 0 Y at integration end: 0

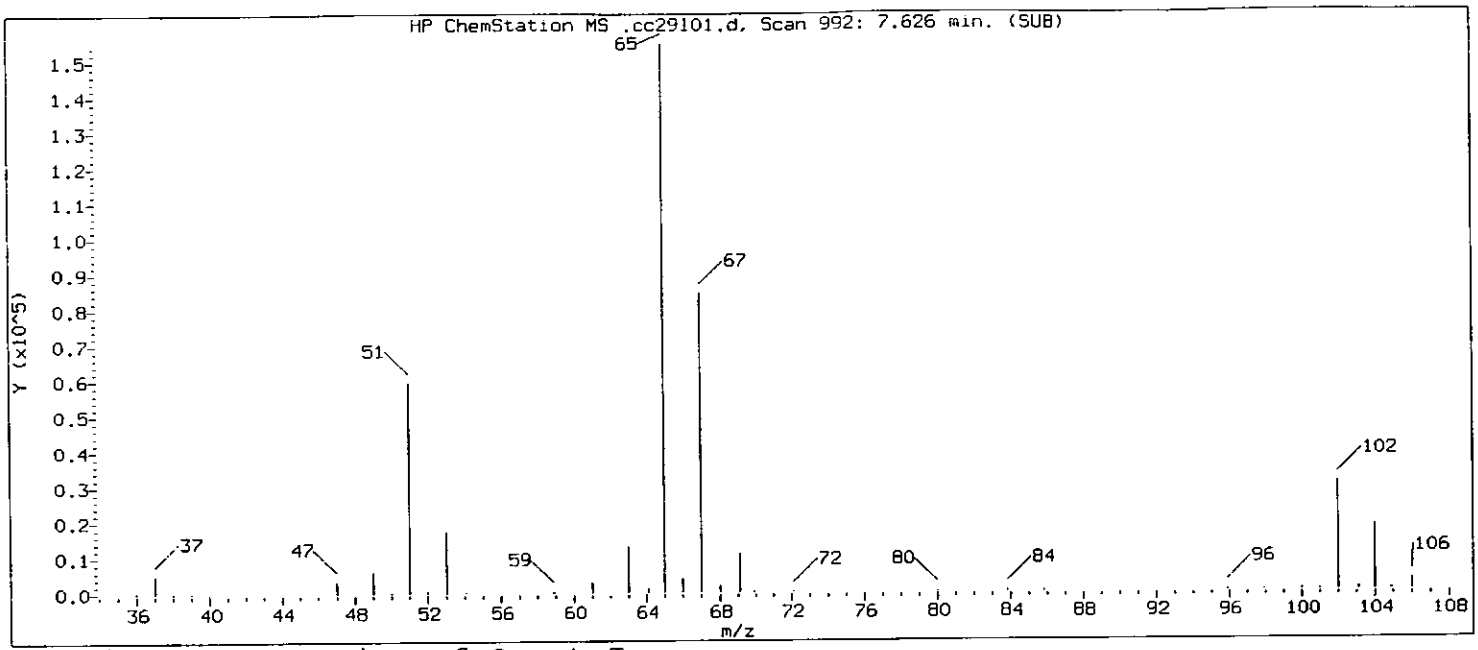
Reason for manual integration (circle one): missed peak improper integration

Analyst responsible for change: _____

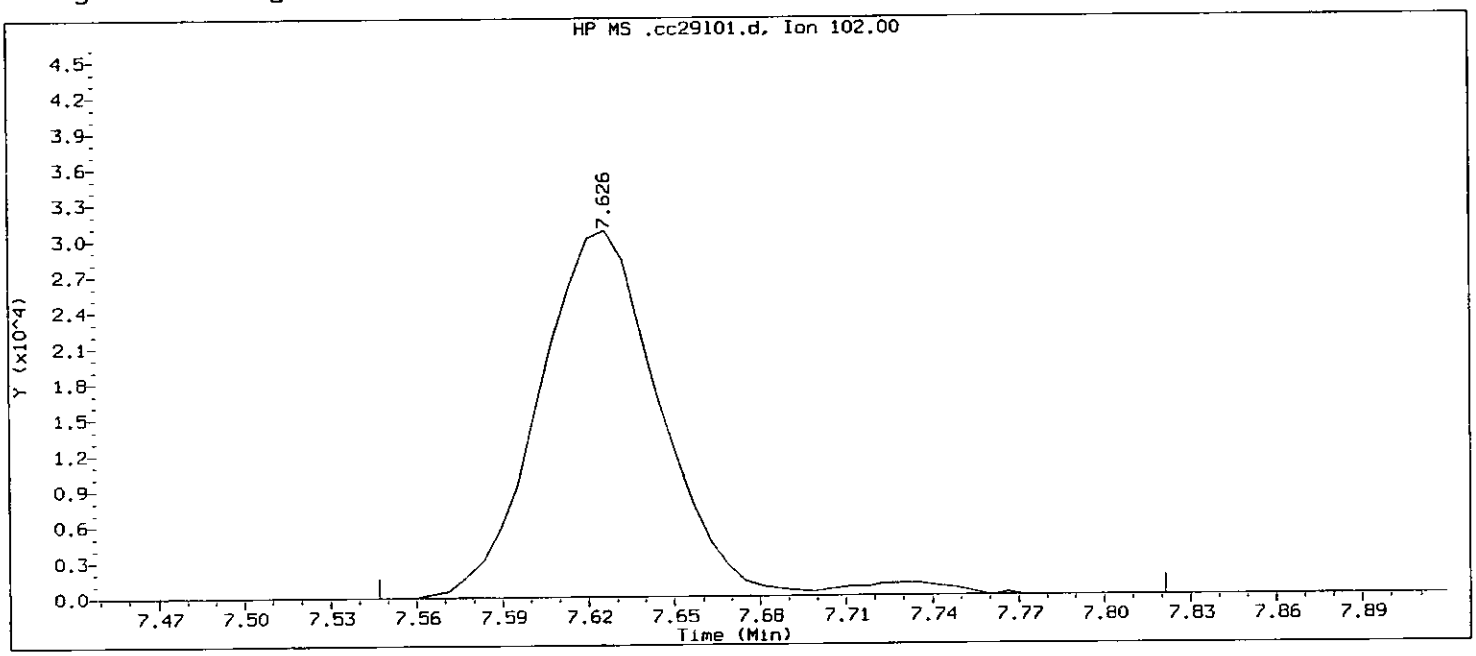
RAD23 0278

GC/MS audit/management approval: _____

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 14:21 Automation

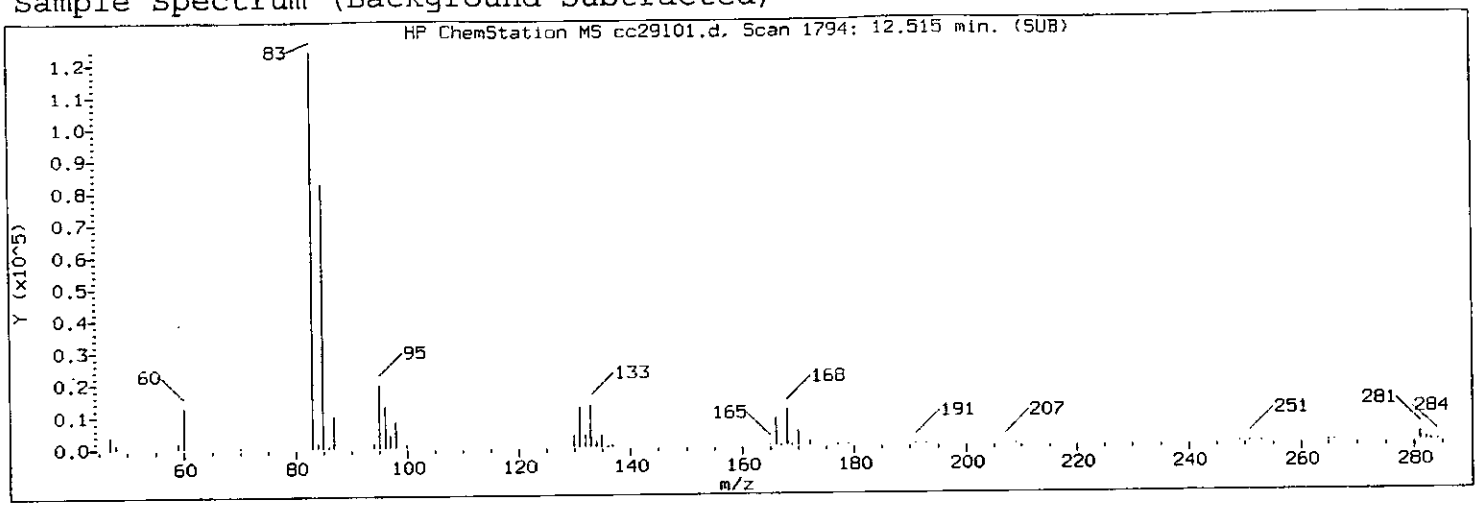
Sample Name: LCSC11 Lab Sample ID: LCSC11

Compound Number : 70
Compound Name : 1,2-Dichloroethane-d4
Scan Number : 992
Retention Time (minutes): 7.626
Quant Ion : 102
Area : 91675
Concentration (ug/L) : 9.7811
Integration start scan : 978 Integration stop scan: 1023
Y at integration start : 0 Y at integration end: 0

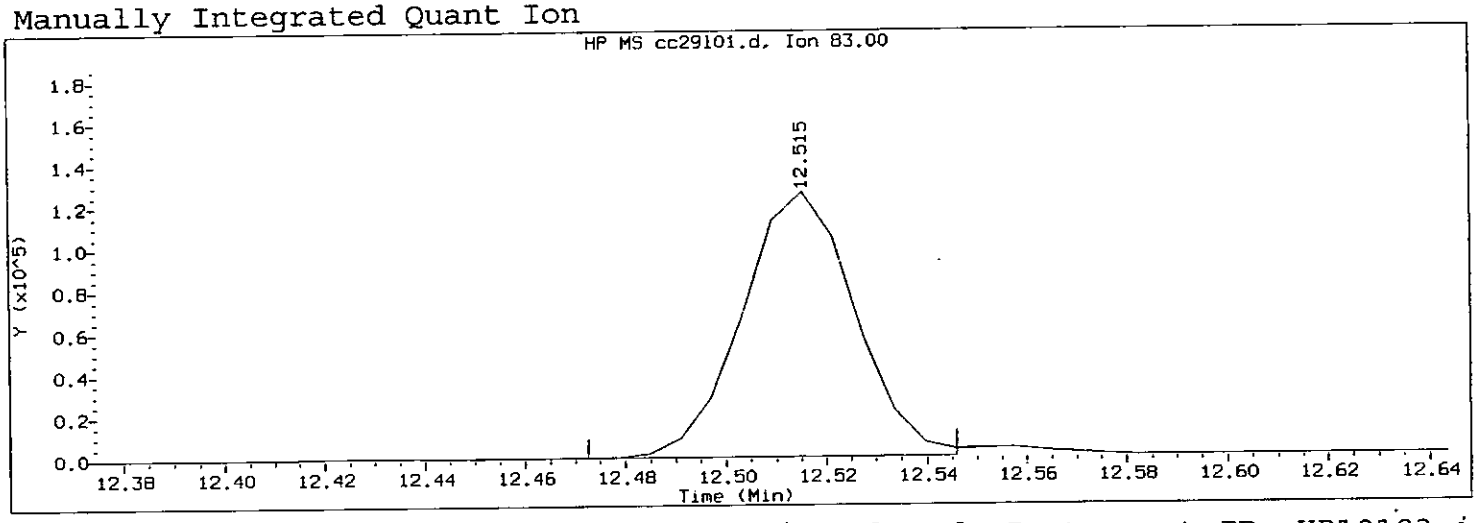
RAD23 8279

Original Integration Report for data file /chem2/HP10193.i/09oct29a.b/cc29101.d, generated on 10/29/2009 at 14:31

Sample Spectrum (Background Subtracted)



Manually Integrated Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 14:31 jml01693

Sample Name: LCSC11 Lab Sample ID: LCSC11

Compound Number	:	127
Compound Name	:	1,1,2,2-Tetrachloroethane
Scan Number	:	1794
Retention Time (minutes)	:	12.515
Quant Ion	:	83
Area (flag)	:	196865 M
Concentration (ug/L)	:	5.3611
Integration start scan	:	1786 Integration stop scan: 1798
Y at integration start	:	0 Y at integration end: 0

Reason for manual integration (circle one): missed peak improper integration

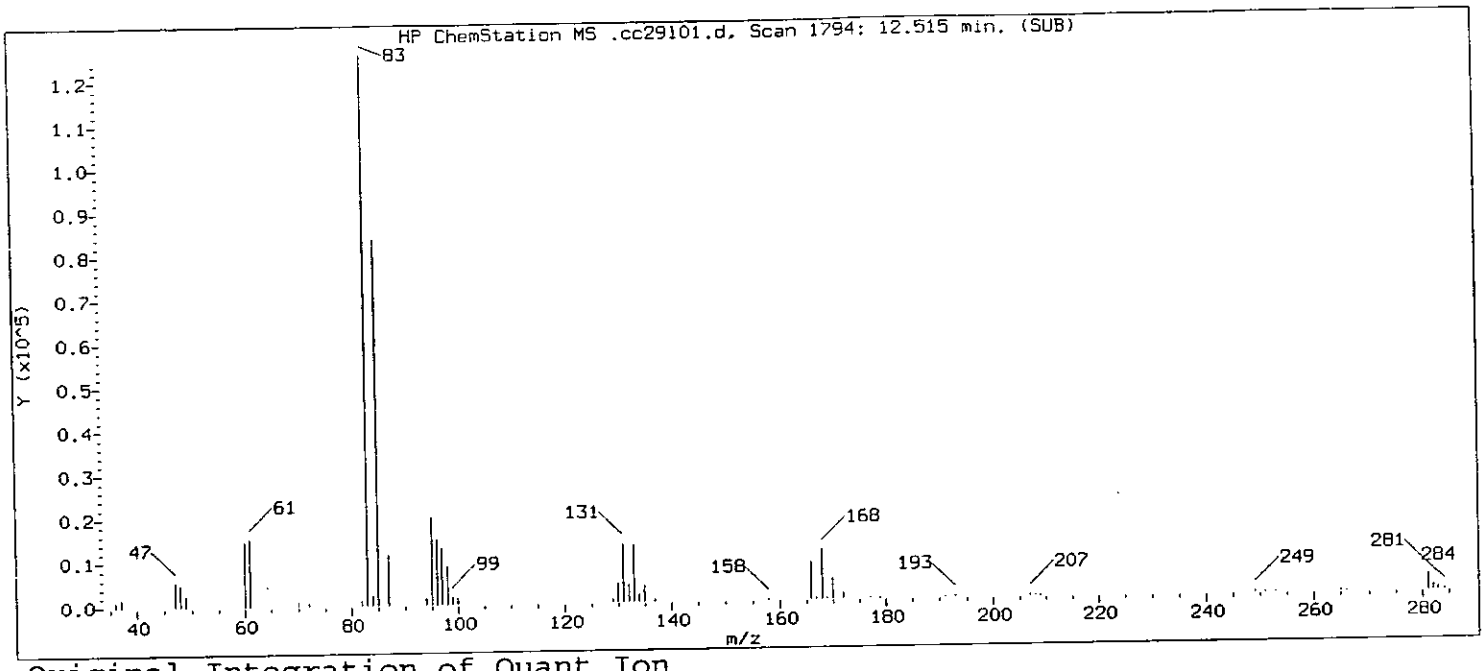
Analyst responsible for change: [signature] 10/29/09

GC/MS audit/management approval: [signature] 11/2/09

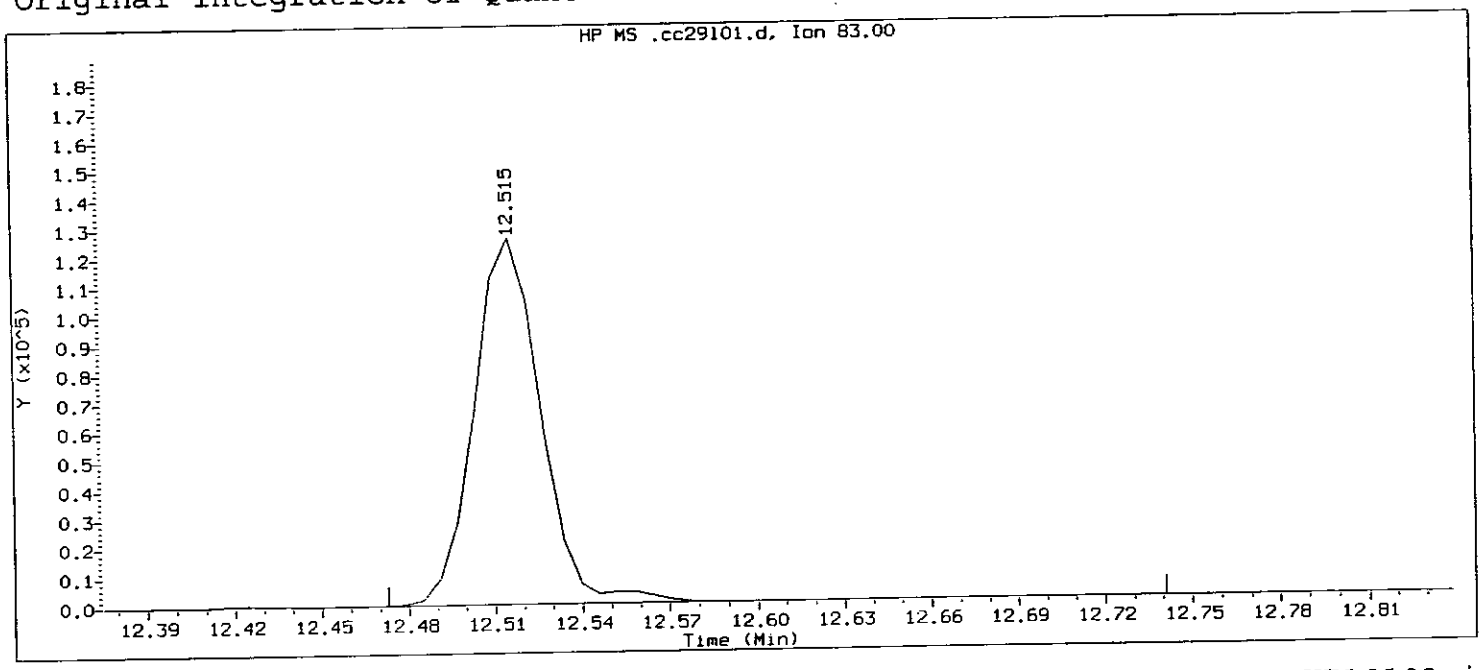
RAD23 0288

Manual Integration Report for data file /chem2/HP10193.i/09oct29a.b/cc29101.d, generated on 10/29/2009 at 14:31

Sample Spectrum (Background Subtracted)



Original Integration of Quant Ion



Data File: /chem2/HP10193.i/09oct29a.b/cc29101.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:03 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: 8260W25
Calibration date and time: 29-OCT-2009 14:06
Date, time and analyst ID of latest file update: 29-Oct-2009 14:21 Automation

Sample Name: LCSC11 Lab Sample ID: LCSC11

Compound Number	:	127
Compound Name	:	1,1,2,2-Tetrachloroethane
Scan Number	:	1794
Retention Time (minutes)	:	12.515
Quant Ion	:	83
Area	:	201333
Concentration (ug/L)	:	5.4827
Integration start scan	:	1786 Integration stop scan: 1830
Y at integration start	:	0 Y at integration end: 0

RAD23 0281

Original Integration Report for data file /chem2/HP10193.i/09oct29a.b/cc29101.d, generated on 10/29/2009 at 14:31

LCS1C11

Lancaster Laboratories
Quantitation Report GC/MS Volatiles

LCS1C11

File: /chem2/HP10193.i/09oct29a.b/cc28152.d
Sample: LCS1C11;LCS1C11;1;3;LCS;
Injected At:29-OCT-2009 14:24
Calibration Time: 23-OCT-2009 10:15
Target Method: C8260W25.m
Blank Reference: cc29b01.d
Sublist: SMQC

Sample Concentration Formula: On-Column Amount * (Vt/Vo)
Batch:C093021AA
Analyst:JML01693
Instrument ID:HP10193.i
Standard Reference: cc29c02.d
Prep Factor:1.00
Units: ug/L

Matrix: WATER
Level: Low
Sample Wt./Vol.: 25.0000 ml (Vo)
Volume Purged: 25.0 ml (Vt)
Bottle Code:

Internal Standards	RT(+/-RT)	Scan	QIon	Area(+/- %Area)	Conc(ext)	QC Flag
35) t-Butyl Alcohol-d10	4.627(0.000)	500	65	87396(-10)	50.00	
78) Fluorobenzene	8.083(0.006)	1067	96	2057350(-1)	10.00	
110) Chlorobenzene-d5	11.449(0.000)	1619	117	1510894(0)	10.00	
143) 1,4-Dichlorobenzene-d4	13.302(0.000)	1923	152	844618(-7)	10.00	

= RETENTION TIME OUT OF RANGE * = INTERNAL STANDARD OUT OF RANGE NC = NOT ABLE TO CALCULATE

Surrogate Standards	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	%Rec.	QC flags	QC Limits
60) Dibromofluoromethane	(1)	7.163(-0.001)	113	481529	9.486	95%		77 - 114
70) 1,2-Dichloroethane-d4	(1)	7.620(-0.001)	102	88059	9.312	93%		74 - 113
98) Toluene-d8	(2)	10.053(0.000)	98	2175176	9.792	98%		77 - 110
124) 4-Bromofluorobenzene	(2)	12.424(0.000)	95	740681	9.292	93%		78 - 110

= RELATIVE RETENTION TIME OUT OF RANGE * = PERCENT REC.OUT OF RANGE D = DILUTED OUT NC = NOT ABLE TO CALCULATE

Target Compounds	I.S. Ref.	RT (+/-RRT)	QIon	Area	Conc. (on column)	Conc. (in sample)	Blank Conc.	Reporting Qual.	Limit	LOQ
4) Dimethyl ether	(1)	2.207(-0.001)	45	332949	4.192	4.19			0.10	0.50
30) Acetonitrile	(4)	4.328(-0.001)	41	119595	38.727	38.73			7.00	20.00
46) Vinyl Acetate	(1)	5.724(-0.001)	43	782748	12.883	12.88			0.20	0.50
93) 2-Chloroethyl Vinyl Ether	(1)	9.565(-0.001)	63	117117	5.479	5.48			0.10	0.50
122) Cyclohexanone	(4)	12.369(0.000)	55	88094	124.957	124.96			5.00	25.00
134) cis-1,4-Dichloro-2-Butene	(4)	12.333(0.000)	88	98254	12.597	12.60			0.40	1.00
149) Hexachloroethane	(3)	13.790(0.000)	117	187699	4.669	4.67			0.10	0.50

E = CONC. OUT OF CAL. RANGE # = RELATIVE RETENTION TIME OUT OF RANGE

Comments:

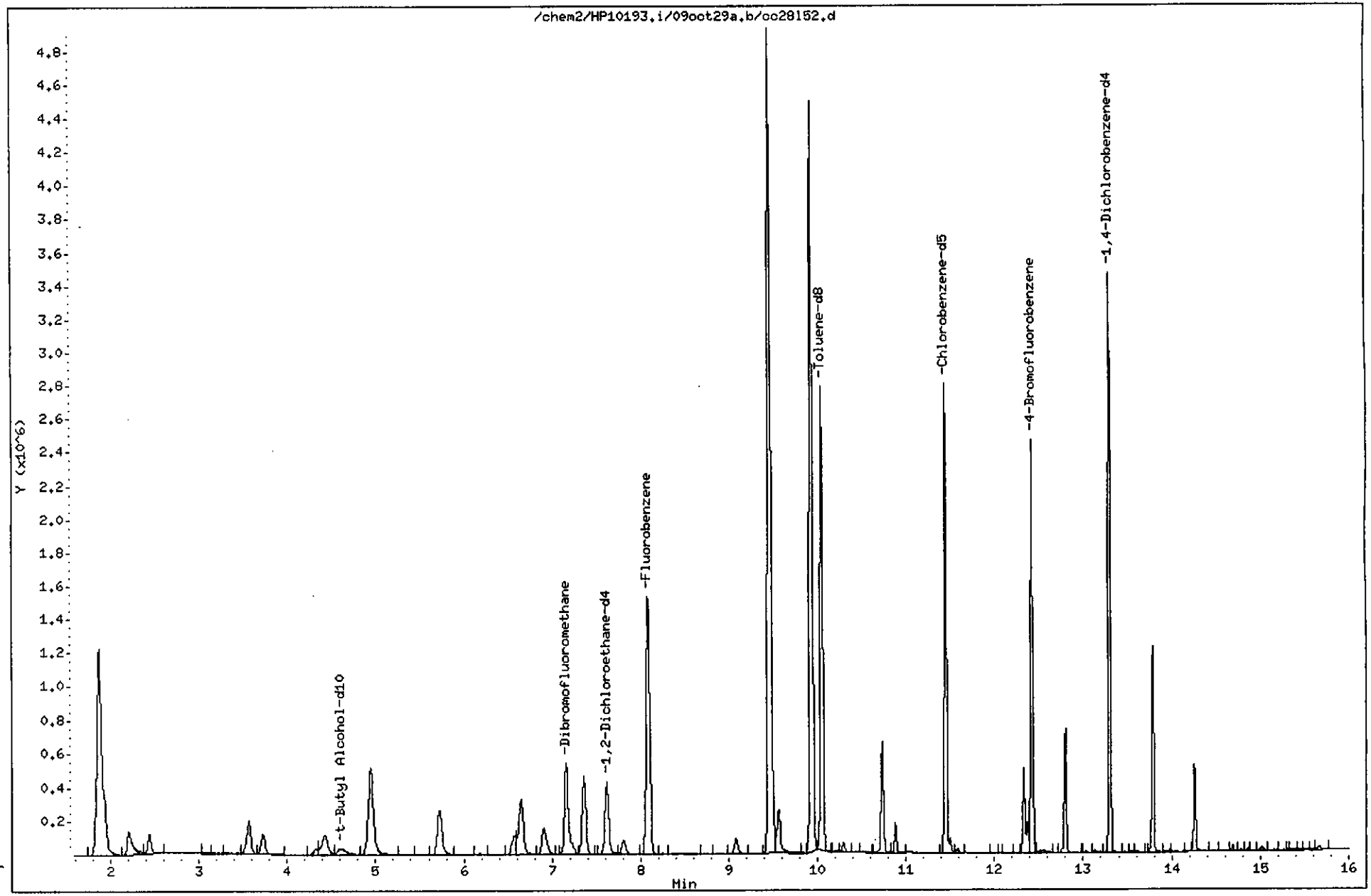
Analyst: JML03 Date: 11/29/09

Auditor: [signature] Date: 11/29/09

RAD23 0281a

Data File: /chem2/HP10193.i/09oct29a.b/cc28152.d
Date : 29-OCT-2009 14:24
Client ID: LCS1C11
Sample Info: LCS1C11;LCS1C11;1;3;LCS;
Purge Volume: 25.0
Column phase: DB-624

Instrument: HP10193.i
Operator: JML01693
Column diameter: 0.25



RAD23 02816

Quant Report

Target Revision 3.5

Data File: /chem2/HP10193.i/09oct29a.b/cc28152.d Instrument ID: HP10193.i
Injection date and time: 29-OCT-2009 14:24 Analyst ID: JML01693

Method used: /chem2/HP10193.i/09oct29a.b/C8260W25.m Sublist used: SMQC
Calibration date and time: 23-OCT-2009 10:15
Date, time and analyst ID of latest file update: 29-Oct-2009 14:43 Automation

Sample Name: LCS1C11 Lab Sample ID: LCS1C11

Compounds	I.S. Ref.	RT	QIon	Area	Conc. (on column)
4) Dimethyl ether	(1)	2.207	45	332949	4.192
30) Acetonitrile	(4)	4.328	41	119595	38.727
35)*t-Butyl Alcohol-d10	(4)	4.627	65	87396	50.000
46) Vinyl Acetate	(1)	5.724	43	782748	12.883
78)*Fluorobenzene	(1)	8.083	96	2057350	10.000
93) 2-Chloroethyl Vinyl Ether	(1)	9.565	63	117117	5.479
110)*Chlorobenzene-d5	(2)	11.449	117	1510894	10.000
122) Cyclohexanone	(4)	12.369	55	88094	124.957
134) cis-1,4-Dichloro-2-Butene	(4)	12.333	88	98254	12.597
143)*1,4-Dichlorobenzene-d4	(3)	13.302	152	844618	10.000
149) Hexachloroethane	(3)	13.790	117	187699	4.669
60)$Dibromofluoromethane	(1)	7.163	113	481529	9.486
70)$1,2-Dichloroethane-d4	(1)	7.620	102	88059	9.312
98)$Toluene-d8	(2)	10.053	98	2175176	9.792
124)$4-Bromofluorobenzene	(2)	12.424	95	740681	9.292

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

RAD23 0281C

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

GC/MS Volatiles pH Log

Batch: C093012AA

LLI#	pH	Date Checked	Initials/ Employee #	Comments
5817106	≤2	10/29/2009	JML 1693	38A
5817107	≤2	10/29/2009	JML 1693	38A
5817108	≤2	10/29/2009	JML 1693	38A
5808773	≤2	10/29/2009	JML 1693	38A
5808774	≤2	10/29/2009	JML 1693	38A
5813425	≤2	10/29/2009	JML 1693	38A
5813426	≤2	10/29/2009	JML 1693	38A
5813427	≤2	10/29/2009	JML 1693	38A
5813509	≤2	10/29/2009	JML 1693	38A
5813510	≤2	10/29/2009	JML 1693	38A
5813511	≤2	10/29/2009	JML 1693	38A
5813512	≤2	10/29/2009	JML 1693	38A
5813513	≤2	10/29/2009	JML 1693	38A
5813514	≤2	10/29/2009	JML 1693	38A
5813515	≤2	10/29/2009	JML 1693	38A
5813516	≤2	10/29/2009	JML 1693	38A
5813515	≤2	10/29/2009	JML 1693	38B
5813516	≤2	10/29/2009	JML 1693	38B
5813517	≤2	10/29/2009	JML 1693	38A

RAD23 6282

Lancaster Laboratories
2425 New Holland Pike • Lancaster, PA 17601

GC/MS Volatiles pH Log

Batch: C093021AA

LLI#	pH	Date Checked	Initials/ Employee #	Comments
5813518	<2	10/30/2009	ADS 1731	38B
5813519	<2	10/30/2009	ADS 1731	38A
5813520	<2	10/30/2009	ADS 1731	38A
5813614	<2	10/30/2009	ADS 1731	38A
5813615	<2	10/30/2009	ADS 1731	38A
5813616	<2	10/30/2009	ADS 1731	38A
5813617	<2	10/30/2009	ADS 1731	38A
5813618	<2	10/30/2009	ADS 1731	38A
5813617	<2	10/30/2009	ADS 1731	38B
5813618	<2	10/30/2009	ADS 1731	38C
5813619	<2	10/30/2009	ADS 1731	38A
5813620	<2	10/30/2009	ADS 1731	38A
5813621	<2	10/30/2009	ADS 1731	38A
5816441	<2	10/30/2009	ADS 1731	38A
5816442	<2	10/30/2009	ADS 1731	38A
5816443	<2	10/30/2009	ADS 1731	38A
5816444	<2	10/30/2009	ADS 1731	38A
5818456	7	10/30/2009	ADS 1731	40A
5818457	7	10/30/2009	ADS 1731	40A
5818458	7	10/30/2009	ADS 1731	40A

RAD23 #283

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP10193 **HP #25**

** Shift #1 Analyst:___JML_____** Shift #2 Analyst:_____** Shift #3 Analyst:_____*

Comment Code:

R =	Reinjection necessary	X =	Sample sent to be reextracted
S =	Surrogate problem	I =	Internal Standard problem
NU =	Not used	F =	Further dilution required
MR =	Meets requirements	IUO =	Internal use only
Cz =	Confirms z, (z = S, I or X)	T =	Injected outside valid tune period

Other problems or comments are as follows:

_____

_____8260_25ML_WATERS_ICAL_____

_____

_____

Data Directory Path is - C:\MSDChem\1\data\09OCT23A\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
CC23T01.D	BFB MAY27-09	50NG BFB	23 Oct 09	09:38			MR
CC23X01.D	BLANK	BLANK	23 Oct 09	09:53			NU
CC23I01.D	VSTD025	VSTD025	23 Oct 09	10:15			MR
CC23I02.D	VSTD010	VSTD010	23 Oct 09	10:37			MR
CC23I03.D	VSTD005	VSTD005	23 Oct 09	10:59			MR
CC23I04.D	VSTD002	VSTD002	23 Oct 09	11:20			NU
CC23I05.D	VSTD001	VSTD001	23 Oct 09	11:42			MR
CC23I06.D	VSTD0.5	VSTD0.5	23 Oct 09	12:04			MR
CC23M01.D	MDL0.1	MDL0.1	23 Oct 09	12:26			MR
CC23I07.D	VSTD002	VSTD002	23 Oct 09	12:48			MR
CC23M02.D	MDL20	MDL20	23 Oct 09	13:09			NU
CC23CV1.D	CICV	CICV	23 Oct 09	13:31			MR

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP10193 **HP #25**

** Shift #1 Analyst:____JML____** Shift #2 Analyst:____ADS____** Shift #3 Analyst:_____*

Comment Code:
R = Reinjection necessary
S = Surrogate problem
NU = Not used
MR = Meets requirements
Cz = Confirms z, (z = S, I or X)
X = Sample sent to be reextracted
I = Internal Standard problem
F = Further dilution required
IUO = Internal use only
T = Injected outside valid tune period

Other problems or comments are as follows:

_____

_____8260_25ML_WATERS_____

___!LINE WAS MANUALLY EDITED_____

_____

Data Directory Path is - C:\MSDChem\1\data\09OCT28C\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
CC28T04.D	50 NG BFB	2 uL BFB	28 Oct 09	22:27			MR
CC28C51.D	VSTD12.5	VSTD12.5	28 Oct 09	22:50			MR
CC28C52.D	VSTD12.5	VSTD12.5	28 Oct 09	23:12			MR
CC28B51.D	VBLKC10	VBLKC10	28 Oct 09	23:34	C093012AA		NU
CC28B52.D	VBLKC10	VBLKC10	28 Oct 09	23:56	C093012AA		MR
CC28L51.D	LCSC10	LCSC10	29 Oct 09	00:18	C093012AA		MR
CC28L52.D	LCDC10	LCDC10	29 Oct 09	00:40	C093012AA		NU
CC28L53.D	LCS1C10	LCS1C10	29 Oct 09	01:25	C093012AA		MR
CC28S51.D	O5TB1	5817106	29 Oct 09	02:09	C093012AA		MR!
CC28S52.D	O5FB1	5817107	29 Oct 09	02:31	C093012AA		MR
CC28S53.D	O5H87	5817108	29 Oct 09	02:53	C093012AA		MR
CC28S54.D	CHMEF	5808773	29 Oct 09	03:15	C093012AA	10	F
CC28S55.D	CHMEFDL	5808773	29 Oct 09	03:37	C093012AA	100	MR
CC28S56.D	CHMIN	5808774	29 Oct 09	03:59	C093012AA	50	F
CC28S57.D	CHMINDL	5808774	29 Oct 09	04:20	C093012AA	500	MR
CC28S58.D	ARINF	5813425	29 Oct 09	04:42	C093012AA	100	F
CC28S59.D	ARINFDL	5813425	29 Oct 09	05:04	C093012AA	1000	MR
CC28S60.D	AREFF	5813426	29 Oct 09	05:26	C093012AA	10	F
CC28S61.D	AREFFDL	5813426	29 Oct 09	05:48	C093012AA	100	MR
CC28S62.D	ARTRB	5813427	29 Oct 09	06:10	C093012AA		MR
CC28S63.D	13MW1	5813509	29 Oct 09	06:32	C093012AA		MR
CC28S64.D	13MW2	5813510	29 Oct 09	06:54	C093012AA		MR
CC28S65.D	13MW3	5813511	29 Oct 09	07:15	C093012AA		MR
CC28S66.D	13MW4	5813512	29 Oct 09	07:37	C093012AA		MR
CC28S67.D	13MWD	5813513	29 Oct 09	07:59	C093012AA		MR
CC28S68.D	13MW5	5813514	29 Oct 09	08:20	C093012AA		MR
CC28S69.D	13MW5MS	5813515	29 Oct 09	08:42	C093012AA		MR
CC28S70.D	13MW5MSD	5813516	29 Oct 09	09:04	C093012AA		MR
CC28S71.D	13MW5MS1	5813515	29 Oct 09	09:26	C093012AA		MR
CC28S72.D	13MW5MSD1	5813516	29 Oct 09	09:48	C093012AA	RAD23 8285	MR
CC28S73.D	13MW6	5813517	29 Oct 09	10:10	C093012AA		MR
CC28S74.D	13MW7	5813518	29 Oct 09	10:31	C093012AA		NUT

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP10193 **HP #25**

** Shift #1 Analyst:____JML____** Shift #2 Analyst:__ADS_____** Shift #3 Analyst:_____*

Comment Code:
R = Reinjection necessary
S = Surrogate problem
NU = Not used
MR = Meets requirements
Cz = Confirms z, (z = S, I or X)
X = Sample sent to be reextracted
I = Internal Standard problem
F = Further dilution required
IUO = Internal use only
T = Injected outside valid tune period

Other problems or comments are as follows:

_____
_____8260_25ML_WATERS_____
_____
_____

Data Directory Path is - C:\MSDChem\1\data\09OCT29A\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
CC29T01.D	50 NG BFB	2 uL BFB	29 Oct 09	12:08			MR
CC29C01.D	VSTD12.5	VSTD12.5	29 Oct 09	12:35			MR
CC29C02.D	VSTD12.5	VSTD12.5	29 Oct 09	12:57			MR
CC29BA1.D	VBLKC11	VBLKC11	29 Oct 09	13:19	C093021AA		NU
CC29B01.D	VBLKC11	VBLKC11	29 Oct 09	13:41	C093021AA		MR
CC29L01.D	LCSC11	LCSC11	29 Oct 09	14:03	C093021AA		MR
CC28L52.D	LCS1C11	LCS1C11	29 Oct 09	14:24	C0930212AA		MR
CC29S01.D	13MW7	5813518	29 Oct 09	14:59	C093021AA		MR
CC29S02.D	13MT1	5813519	29 Oct 09	15:21	C093021AA		MR
CC29S03.D	13MT2	5813520	29 Oct 09	15:43	C093021AA		MR
CC29S04.D	10-D4	5813614	29 Oct 09	16:04	C093021AA		F
CC29S05.D	10MW1	5813615	29 Oct 09	16:26	C093021AA		MR
CC29S06.D	10DDH	5813616	29 Oct 09	16:48	C093021AA		MR
CC29S07.D	10DDHMS	5813617	29 Oct 09	17:09	C093021AA		MR
CC29S08.D	10DDHMSD	5813618	29 Oct 09	17:31	C093021AA		MR
CC29S09.D	10DDHMS1	5813617	29 Oct 09	17:53	C093021AA		MR
CC29S10.D	10DDHMSD1	5813618	29 Oct 09	18:14	C093021AA		MR
CC29S11.D	10-D3	5813619	29 Oct 09	18:36	C093021AA		MR
CC29S12.D	10-FD	5813620	29 Oct 09	18:58	C093021AA		MR
CC29S13.D	10D3D	5813621	29 Oct 09	19:20	C093021AA		F
CC29S14.D	10DTB	5813622	29 Oct 09	19:42	C093021AA		NU
CC29S15.D	ALINF	5816441	29 Oct 09	20:04	C093021AA	100	F
CC29S16.D	ALINFDL	5816441	29 Oct 09	20:26	C093021AA	1000	MR
CC29S17.D	ALEEF	5816442	29 Oct 09	20:48	C093021AA	10	F
CC29S18.D	ALEEFDL	5816442	29 Oct 09	21:10	C093021AA	100	MR
CC29S19.D	ALEF1	5816443	29 Oct 09	21:32	C093021AA	10	F
CC29S20.D	ALEF1DL	5816443	29 Oct 09	21:53	C093021AA	100	MR
CC29S21.D	ALTRB	5816444	29 Oct 09	22:15	C093021AA		MR
CC29S22.D	38ATB	5818456	29 Oct 09	22:36	C093021AA		MR
CC29S23.D	GW38A	5818457	29 Oct 09	22:58	C093021AA	RAD23 0286	MR
CC29S24.D	GW38C	5818458	29 Oct 09	23:20	C093021AA		MR

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP10193 **HP #25**

** Shift #1 Analyst:_____** Shift #2 Analyst:__SEW_____** Shift #3 Analyst:_____*

Comment Code:

R =	Reinjection necessary	X =	Sample sent to be reextracted
S =	Surrogate problem	I =	Internal Standard problem
NU =	Not used	F =	Further dilution required
MR =	Meets requirements	IUO =	Internal use only
Cz =	Confirms z, (z = S, I or X)	T =	Injected outside valid tune period

Other problems or comments are as follows:

_____8260 25ML ICAL_____

_____

_____

_____

Data Directory Path is - C:\MSDChem\1\data\09OCT28B\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
CC28T02.D	BFB MAY27-09	50NG BFB	28 Oct 09	17:15			MR
CC28X08.D	CLBLK	CLBLK	28 Oct 09	17:39			NU
CC28X09.D	CLBLK	CLBLK	28 Oct 09	18:00			NU
CC28I01.D	VSTD025	VSTD025	28 Oct 09	18:22			MR
CC28I02.D	VSTD010	VSTD010	28 Oct 09	18:44			MR
CC28I03.D	VSTD005	VSTD005	28 Oct 09	19:05			MR
CC28I04.D	VSTD002	VSTD002	28 Oct 09	19:27			MR
CC28I05.D	VSTD001	VSTD001	28 Oct 09	20:34			MR
CC28I06.D	VSTD0.5	VSTD0.5	28 Oct 09	20:56			MR
CC28M01.D	MDL0.1	MDL0.1	28 Oct 09	21:17			MR

Lancaster Laboratories
Runlog for Hewelet Packard GC/MS System HP10193 **HP #25**

** Shift #1 Analyst:_____** Shift #2 Analyst:____ADS____** Shift #3 Analyst:_____*

Comment Code:	R	= Reinjection necessary	X	=	Sample sent to be reextracted
	S	= Surrogate problem	I	=	Internal Standard problem
	NU	= Not used	F	=	Further dilution required
	MR	= Meets requirements	IUO	=	Internal use only
	Cz	= Confirms z, (z = S, I or X)	T	=	Injected outside valid tune period

Other problems or comments are as follows:

_____

_____

_____

_____

Data Directory Path is - C:\MSDChem\1\data\09OCT28C\

FILE	SAMPLE	LLI#	DATE	TIME	BATCH	D.F.	NOTES
CC28T04.D	50 NG BFB	2 uL BFB	28 Oct 09	22:27			MR
CC28C51.D	VSTD12.5	VSTD12.5	28 Oct 09	22:50			MR
CC28C52.D	VSTD12.5	VSTD12.5	28 Oct 09	23:12			MR
CC28B51.D	VBLKC10	VBLKC10	28 Oct 09	23:34	C093012AA		NU
CC28B52.D	VBLKC10	VBLKC10	28 Oct 09	23:56	C093012AA		MR
CC28L51.D	LCSC10	LCSC10	29 Oct 09	00:18	C093012AA		MR
CC28L52.D	LCDC10	LCDC10	29 Oct 09	00:40	C093012AA		NU
CC28L53.D	LCS1C10	LCS1C10	29 Oct 09	01:25	C093012AA		MR

CompuChem

A Division Of

Liberty Analytical Corp.

11/16/2009

JANET FRAZIER

DRAPER

2206 SOUTH MAIN STREET

BLACKSBURG, VA 24060

Subject:

Report of Data - Project: RAAP SEMI-ANNUAL MONITORING 2009, WorkOrder: 0910165

Attn.: JANET FRAZIER

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES _____

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem, a division of Liberty Analytical

Client: DRAPER **Work:** 0910165

Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07 **Sdg:** 0910165

Lab ID	Client ID	Matrix	Date Sampled	Date Received
0910165-01	13MW5	Water	10/19/2009 08:50	10/21/2009 16:00
0910165-02	13MW1	Water	10/20/2009 08:50	10/21/2009 16:00
0910165-03	13MW2	Water	10/20/2009 09:30	10/21/2009 16:00
0910165-04	13MW3	Water	10/19/2009 07:40	10/21/2009 16:00
0910165-05	13MW4	Water	10/20/2009 08:05	10/21/2009 16:00
0910165-06	13MWDUP	Water	10/20/2009 08:20	10/21/2009 16:00
0910165-07	13MW6	Water	10/19/2009 10:30	10/21/2009 16:00
0910165-08	13MW7	Water	10/19/2009 11:30	10/21/2009 16:00

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA SUMMARY PACKAGE

GC/MS by SW-846

The sample data summary package shall contain data for all samples in one Sample Delivery Group (SDG) of the Case, as follows:

A. SDG Narrative

B. Tabulated target compound results (Form I)
Tentatively identified compounds (Form I, TIC)
In order by sample.

C. Surrogate spike analysis results (Form II)
By matrix (Water or Soil), and
by concentration (Low, Medium, or High)

D. Spike results MS / MSD / LCS (Form III)

E. Blank data (Form IV)
Tabulated blank results (Form I)
Tentatively identified compounds (Form I, TIC)

F. Internal standard area response and retention time data (Form VIII)

LAB CODE : LIBRTY

METHOD: 8270C

SDG # : 0910165

A. SDG Narrative

CompuChem
A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE

SDG # 0910165
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: 13MW5, 13MW1, 13MW2, 13MW3, 13MW4, 13MWDUP, 13MW6, 13MW7.

The 8 water samples listed above were received intact, properly refrigerated at 4.7°C, with proper documentation, in sealed shipping containers, on October 21, 2009. The samples were scheduled for the requested analyses of the semivolatile fraction. SW-846, 3rd Edition, Update 3, Separatory Funnel extraction (Method 3510C), and Method 8270C were used to prepare and analyze these samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance Notices are included in the narrative section and all pertinent Laboratory Notices for SDG #0910165 are included in the sample data sections. Extraction and analysis holding time requirements were met for all of these samples.

There were no semivolatile project analytes identified above the quantitation limit in any of these samples. Manual quantitations were performed on one or more of the process files associated with this SDG, including the laboratory control spike and the matrix duplicates. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

Between 900 mL and 975 mL of raw sample were used to extract 13MW2, 13MWDUP and the matrix spike duplicate, rather than the method-specified amount of 1000 mL. Low sample volume was received for these samples. The use of this lower volume of raw sample resulted in slightly higher detection limits for the samples 13MW2 and 13MWDUP.

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated with this SDG. Tailing factor criteria were met for pentachlorophenol and benzidine. The breakdown criterion was met for DDT. These three compounds have been added to the DFTPP solution and analyzed together. Overall quality control criteria were met for all initial and continuing calibration standards associated to this SDG. All of the surrogates met recovery criteria in the analyses of these samples. All of the internal standards met response and retention time criteria in the analyses of these samples. The associated method blank met all quality control criteria. 13MW5 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes met all advisory accuracy and precision criteria. The associated Laboratory Control Samples (LCS) met all accuracy criteria.

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 his/her designee, as verified by the following signature.

Rebecca K. Mead

Rebecca K. Mead, Ph.D.
Laboratory Technical Manager
November 13, 2009

Laboratory Notice

Calibration Date(s): 11-NOV-2009 13:14 11-NOV-2009 17:10

Instrument ID: 5972hp60

An initial calibration was analyzed by Method 8270C. Per the methodology, all compounds are to meet a Percent Relative Standard Deviation (%RSD) limit of no more than 15%. Additional calibration options are provided in the method when the RSD exceeds 15%. CompuChem has chosen to apply the option of determining the mean RSD values for all analytes in the initial calibration.

When there are analytes with %RSDs greater than the limit, proof of calibration linearity can be shown if the average of all compounds in the initial calibration meet the same 15% limit. Based on Method 8270C, Sec. 7.3.7.1, and Method 8000B, Section 7.5.1.2, we are providing a list of the compounds which failed to meet the limit, and their associated %RSDs. Finally, the average of all %RSDs from all compounds in the initial calibration is shown, confirming the usability of the initial calibration and any data that follows it.

Compound Name	RSD
1,4-Napthoquinone	28.0
Dimethoate	15.8
a,a-Dimethylphenethylamine	18.4

Average %RSD for all compounds in the Initial Calibration: 4.7 %

Data Reviewer/ID: _____ / 6-24

Date: 11/13/9

Exception Report

Date: November 13, 2009

From: Elsie Byrd

RE: DF091111A60 APPENDIX IX Second Source Standards

The following compounds did not meet criteria in the second source analysis.

Acetophenone: 55%

4,6-dinitro-2-methylphenol: 135%/142%

Carbazole: 24%/24%

Benzidine: 46%/180%

Dimethoate: 156%

Methyl parathion: 149%

1,3,5-tinitrobenzene: 135%

GC and GC/MS Column and Trap Specifications Table

SDG #:	

COLUMNS*

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	GC Laboratory				
	Restek	RTX-5	0.53	1.0	30
	Restek	RTX-SMS	0.53	1.0	30
√	Restek	clpest	0.32	0.5	30
√	Restek	clpest2	0.32	0.42	30
	J&W	DB-210	0.53	1.0	30
	J&W	GS-GASPRO	0.32	N/A	30
	GC Volatiles Laboratory				
	Restek	RTX-Volatiles	0.53	2.0	30
	GC/MS Volatiles Laboratory				
	Restek	RTX-VMS	0.18	1.0	20
√	Supelco	SPB-624	0.32	1.8	60
	Supelco	SPB-624	0.53	3.0	75
	Phenomonex	ZB-624	0.32	1.8	60
	GC/MS Semivolatiles Laboratory				
√	Restek	RTX-5MS	0.32	0.25	30
	Phenomonex	ZB-5MS	0.32	0.25	30
	HPLC Laboratory				
	Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
	Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
	Restek	Pinnacle Cyano	4.6	5.0	25 cm
	Restek	Allure C18	4.6	5.0	25 cm

TRAPS*

	GC and GC/MS Volatiles Laboratory	
	Supelco J (BETXTRAP™)	* 7.7 cm Carbopack C
		* 1.2 cm Carbopack B
√	Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons)
		* 6 cm of Carboxen 1000 (Carbon molecular sieves)
		* 1 cm of Carboxen 1001 (Carbon molecular sieves)

Rev. 28

* This table contains the GC columns (and volatile organic trap) used for the analysis of volatiles, semi-volatiles, pesticides, and Aroclors by the SOM01.2 SOW. Please see the SDG Narratives(s) for the specific fraction(s) relative to this SDG.

CompuChem

a division of Liberty Analytical Corporation

CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

H - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

M1 - The compound was not found by the automatic integration routine.

M2 - The compound was incorrectly integrated by the automatic integration routine.

M3 - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the higher of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the higher of the two values, although the choice could be a project specific issue. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses <u>are not combined</u> on a single Form I.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

B. Form I and Form I - TIC

Organic Analysis Data Sheet (OADS) and Tentatively Identified Compounds (TICs)

- All samples in alphanumeric order
- Matrix Spike/Matrix Spike Duplicate
- Laboratory Control Sample(s)

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-02A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW2

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03

Sample wt/vol: 975 (g/mL) ML Lab File ID: 0910165-03A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.13	U
95-57-8	2-Chlorophenol	5.13	U
108-39-4	3-Methylphenol	10.2	U
106-44-5	4-Methylphenol	10.2	U
98-86-2	Acetophenone	5.13	U
67-72-1	Hexachloroethane	5.13	U
98-95-3	Nitrobenzene	5.13	U
120-83-2	2,4-Dichlorophenol	5.13	U
131-11-3	Dimethylphthalate	5.13	U
100-02-7	4-Nitrophenol	10.2	U
132-64-9	Dibenzofuran	5.13	U
84-66-2	Diethylphthalate	5.13	U
86-30-6	N-Nitrosodiphenylamine (1)	5.13	U
84-74-2	Di-n-butylphthalate	5.13	U
206-44-0	Fluoranthene	5.13	U
129-00-0	Pyrene	5.13	U
85-68-7	Butylbenzylphthalate	5.13	U
119-93-7	3,3'-Dimethylbenzidine	5.13	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.13	U
56-55-3	Benzo(a)anthracene	5.13	U
117-84-0	Di-n-octylphthalate	5.13	U
205-99-2	Benzo(b)fluoranthene	5.13	U
207-08-9	Benzo(k)fluoranthene	5.13	U
50-32-8	Benzo(a)pyrene	5.13	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.13	U
53-70-3	Dibenzo(a,h)anthracene	5.13	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW3

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-04A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW4

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-05A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW5

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-01A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-07A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW7

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-08A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/13/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-06

Sample wt/vol: 900 (g/mL) ML Lab File ID: 0910165-06A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.56	U
95-57-8	2-Chlorophenol	5.56	U
108-39-4	3-Methylphenol	11.1	U
106-44-5	4-Methylphenol	11.1	U
98-86-2	Acetophenone	5.56	U
67-72-1	Hexachloroethane	5.56	U
98-95-3	Nitrobenzene	5.56	U
120-83-2	2,4-Dichlorophenol	5.56	U
131-11-3	Dimethylphthalate	5.56	U
100-02-7	4-Nitrophenol	11.1	U
132-64-9	Dibenzofuran	5.56	U
84-66-2	Diethylphthalate	5.56	U
86-30-6	N-Nitrosodiphenylamine (1)	5.56	U
84-74-2	Di-n-butylphthalate	5.56	U
206-44-0	Fluoranthene	5.56	U
129-00-0	Pyrene	5.56	U
85-68-7	Butylbenzylphthalate	5.56	U
119-93-7	3,3'-Dimethylbenzidine	5.56	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.56	U
56-55-3	Benzo(a)anthracene	5.56	U
117-84-0	Di-n-octylphthalate	5.56	U
205-99-2	Benzo(b)fluoranthene	5.56	U
207-08-9	Benzo(k)fluoranthene	5.56	U
50-32-8	Benzo(a)pyrene	5.56	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.56	U
53-70-3	Dibenzo(a,h)anthracene	5.56	U

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SKVLCS

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-BS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102249-BSA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	16.2	
95-57-8	2-Chlorophenol	29.4	
108-39-4	3-Methylphenol	27.7	
106-44-5	4-Methylphenol	27.7	
98-86-2	Acetophenone	32.6	
67-72-1	Hexachloroethane	28.6	
98-95-3	Nitrobenzene	30.8	
120-83-2	2,4-Dichlorophenol	32.2	
131-11-3	Dimethylphthalate	33.1	
100-02-7	4-Nitrophenol	14.3	
132-64-9	Dibenzofuran	34.2	
84-66-2	Diethylphthalate	33.7	
86-30-6	N-Nitrosodiphenylamine (1)	37.6	
84-74-2	Di-n-butylphthalate	34.8	
206-44-0	Fluoranthene	37.4	
129-00-0	Pyrene	37.5	
85-68-7	Butylbenzylphthalate	37.1	
119-93-7	3,3'-Dimethylbenzidine	33.2	
117-81-7	bis(2-ethylhexyl)Phthalate	38.9	
56-55-3	Benzo(a)anthracene	36.8	
117-84-0	Di-n-octylphthalate	39.3	
205-99-2	Benzo(b)fluoranthene	35.4	
207-08-9	Benzo(k)fluoranthene	36.3	
50-32-8	Benzo(a)pyrene	37.4	
193-39-5	Indeno(1,2,3-c,d)pyrene	31.9	
53-70-3	Dibenzo(a,h)anthracene	30.8	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW5MS

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-MS

Sample wt/vol: 975 (g/mL) ML Lab File ID: 9102249-MSA60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	16.0	
95-57-8	2-Chlorophenol	30.7	
108-39-4	3-Methylphenol	28.0	
106-44-5	4-Methylphenol	28.0	
98-86-2	Acetophenone	34.0	
67-72-1	Hexachloroethane	25.7	
98-95-3	Nitrobenzene	33.0	
120-83-2	2,4-Dichlorophenol	34.9	
131-11-3	Dimethylphthalate	36.9	
100-02-7	4-Nitrophenol	17.2	
132-64-9	Dibenzofuran	37.0	
84-66-2	Diethylphthalate	37.4	
86-30-6	N-Nitrosodiphenylamine (1)	39.5	
84-74-2	Di-n-butylphthalate	37.1	
206-44-0	Fluoranthene	42.8	
129-00-0	Pyrene	39.1	
85-68-7	Butylbenzylphthalate	37.9	
119-93-7	3,3'-Dimethylbenzidine	37.1	
117-81-7	bis(2-ethylhexyl)Phthalate	39.4	
56-55-3	Benzo(a)anthracene	40.2	
117-84-0	Di-n-octylphthalate	39.0	
205-99-2	Benzo(b)fluoranthene	36.9	
207-08-9	Benzo(k)fluoranthene	40.4	
50-32-8	Benzo(a)pyrene	41.0	
193-39-5	Indeno(1,2,3-c,d)pyrene	38.4	
53-70-3	Dibenzo(a,h)anthracene	40.7	

(1) - Cannot be separated from Diphenylamine

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW5MSD

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102249-MSDA60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	15.5	
95-57-8	2-Chlorophenol	30.5	
108-39-4	3-Methylphenol	27.6	
106-44-5	4-Methylphenol	27.6	
98-86-2	Acetophenone	33.3	
67-72-1	Hexachloroethane	26.1	
98-95-3	Nitrobenzene	32.2	
120-83-2	2,4-Dichlorophenol	33.4	
131-11-3	Dimethylphthalate	34.6	
100-02-7	4-Nitrophenol	16.1	
132-64-9	Dibenzofuran	35.1	
84-66-2	Diethylphthalate	34.8	
86-30-6	N-Nitrosodiphenylamine (1)	37.4	
84-74-2	Di-n-butylphthalate	35.1	
206-44-0	Fluoranthene	40.0	
129-00-0	Pyrene	38.7	
85-68-7	Butylbenzylphthalate	37.0	
119-93-7	3,3'-Dimethylbenzidine	36.8	
117-81-7	bis(2-ethylhexyl)Phthalate	37.3	
56-55-3	Benzo(a)anthracene	38.7	
117-84-0	Di-n-octylphthalate	37.1	
205-99-2	Benzo(b)fluoranthene	35.2	
207-08-9	Benzo(k)fluoranthene	39.4	
50-32-8	Benzo(a)pyrene	39.2	
193-39-5	Indeno(1,2,3-c,d)pyrene	39.6	
53-70-3	Dibenzo(a,h)anthracene	39.3	

(1) - Cannot be separated from Diphenylamine

C. Form II

Surrogate spike analysis

- By level (low, medium, high) -

FORM 2
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

	CLIENT SAMPLE NO.	S1 (2FP)#	S2 (PHL)#	S3 (NBZ)#	S4 (FBP)#	S5 (TBP)#	S6 (TPH)#	S7 #	S8 #	TOT OUT
01	SBLKKV	69	42	90	85	88	101			0
02	SKVLCS	61	41	85	84	96	92			0
03	13MW5	57	34	84	73	96	94			0
04	13MW5MS	58	39	84	83	111	90			0
05	13MW5MSD	58	38	83	80	102	90			0
06	13MW1	56	33	81	71	86	91			0
07	13MW2	59	36	86	77	91	94			0
08	13MW3	59	35	85	77	89	96			0
09	13MW4	54	34	82	74	93	94			0
10	13MWDUP	56	35	82	71	87	89			0
11	13MW6	56	36	84	74	96	95			0
12	13MW7	52	32	79	72	91	88			0
13										
14										
15										
16										
17										
18										
19										
20										
21										
22										
23										
24										
25										
26										
27										
28										

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(11-110)
S2 (PHL) = Phenol-d5	(10-110)
S3 (NBZ) = Nitrobenzene-d5	(35-110)
S4 (FBP) = 2-Fluorobiphenyl	(45-110)
S5 (TBP) = 2,4,6-Tribromophenol	(44-131)
S6 (TPH) = Terphenyl-d14	(49-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

D. Form III

Matrix Spike/Matrix Spike Duplicate results
- By level (low, medium, high) -
Laboratory Control Sample(s)

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix Spike - Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	41.03	0	15.97	39	20-100
2-Chlorophenol	41.03	0	30.72	75	23-100
3-Methylphenol	82.05	0	28.03	34	24-100
4-Methylphenol	82.05	0	28.03	34	24-100
Acetophenone	41.03	0	34.06	83	39-100
Hexachloroethane	41.03	0	25.7	63	50-150
Nitrobenzene	41.03	0	33.04	81	20-131
2,4-Dichlorophenol	41.03	0	34.91	85	39-103
Dimethylphthalate	41.03	0	36.89	90	53-116
4-Nitrophenol	41.03	0	17.19	42	10-100
Dibenzofuran	41.03	0	37.05	90	50-107
Diethylphthalate	41.03	0	37.41	91	52-118
N-Nitrosodiphenylamine	41.03	0	39.47	96	52-117
Di-n-butylphthalate	41.03	0	37.11	90	51-114
Fluoranthene	41.03	0	42.81	104	58-124
Pyrene	41.03	0	39.12	95	48-131
Butylbenzylphthalate	41.03	0	37.89	92	41-118
3,3'-Dimethylbenzidine	41.03	0	37.11	90	20-150
bis(2-ethylhexyl)Phthal	41.03	0	39.36	96	47-121
Benzo(a)anthracene	41.03	0	40.22	98	53-128
Di-n-octylphthalate	41.03	0	38.98	95	30-148
Benzo(b)fluoranthene	41.03	0	36.92	90	41-130
Benzo(k)fluoranthene	41.03	0	40.45	99	39-150
Benzo(a)pyrene	41.03	0	40.97	100	46-135
Indeno(1,2,3-c,d)pyrene	41.03	0	38.38	94	47-138
Dibenzo(a,h)anthracene	41.03	0	40.74	99	47-134

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix Spike - Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	40	15.49	39	3	30	20-100
2-Chlorophenol	40	30.47	76	1	30	23-100
3-Methylphenol	80	27.58	34	2	30	24-100
4-Methylphenol	80	27.58	34	2	30	24-100
Acetophenone	40	33.35	83	2	30	39-100
Hexachloroethane	40	26.08	65	1	40	50-150
Nitrobenzene	40	32.26	81	2	30	20-131
2,4-Dichlorophenol	40	33.41	84	4	30	39-103
Dimethylphthalate	40	34.59	86	6	30	53-116
4-Nitrophenol	40	16.12	40	6	30	10-100
Dibenzofuran	40	35.12	88	5	30	50-107
Diethylphthalate	40	34.8	87	7	30	52-118
N-Nitrosodiphenylamine	40	37.43	94	5	30	52-117
Di-n-butylphthalate	40	35.09	88	6	30	51-114
Fluoranthene	40	40	100	7	30	58-124
Pyrene	40	38.74	97	1	30	48-131
Butylbenzylphthalate	40	37	93	2	30	41-118
3,3'-Dimethylbenzidine	40	36.78	92	1	30	20-150
bis(2-ethylhexyl)Phthal	40	37.35	93	5	30	47-121
Benzo(a)anthracene	40	38.68	97	4	30	53-128
Di-n-octylphthalate	40	37.1	93	5	30	30-148
Benzo(b)fluoranthene	40	35.18	88	5	30	41-130
Benzo(k)fluoranthene	40	39.44	99	2	30	39-150
Benzo(a)pyrene	40	39.17	98	4	30	46-135
Indeno(1,2,3-c,d)pyrene	40	39.57	99	3	30	47-138
Dibenzo(a,h)anthracene	40	39.35	98	3	30	47-134

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 26 outside limits
Spike Recovery: 0 out of 52 outside limits

COMMENTS: _____

3C
WATER SEMIVOLATILE LAB CONTROL SAMPLE

SKVLCS

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	40	16.24	41	20-100
2-Chlorophenol	40	29.42	74	23-100
3-Methylphenol	80	27.67	35	24-100
4-Methylphenol	80	27.67	35	24-100
Acetophenone	40	32.56	81	39-100
Hexachloroethane	40	28.55	71	50-150
Nitrobenzene	40	30.82	77	20-131
2,4-Dichlorophenol	40	32.2	81	39-103
Dimethylphthalate	40	33.09	83	53-116
4-Nitrophenol	40	14.35	36	10-100
Dibenzofuran	40	34.18	85	50-107
Diethylphthalate	40	33.69	84	52-118
N-Nitrosodiphenylamine	40	37.61	94	52-117
Di-n-butylphthalate	40	34.81	87	51-114
Fluoranthene	40	37.37	93	58-124
Pyrene	40	37.46	94	48-131
Butylbenzylphthalate	40	37.11	93	41-118
3,3'-Dimethylbenzidine	40	33.15	83	20-150
bis(2-ethylhexyl)Phthal	40	38.88	97	47-121
Benzo(a)anthracene	40	36.8	92	53-128
Di-n-octylphthalate	40	39.35	98	30-148
Benzo(b)fluoranthene	40	35.36	88	41-130
Benzo(k)fluoranthene	40	36.33	91	39-150
Benzo(a)pyrene	40	37.37	93	46-135
Indeno(1,2,3-c,d)pyrene	40	31.9	80	47-138
Dibenzo(a,h)anthracene	40	30.78	77	47-134

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 26 outside limits

COMMENTS: _____

E. Form IV

Method Blank Results
Form IV, Form I, and Form I - TIC

Method blank summary, OADS, and TICs
- In chronological order of analysis

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO

SBLKKV

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID: 9102249-BLKA60 Lab Sample ID: 9102249-BLK1

Instrument ID: 5972HP60 Date Extracted: 10/23/09

Matrix: (soil/water) WATER Date Analyzed: 11/12/09

Level: (low/med) LOW Time Analyzed: 1532

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SKVLCS	9102249-BS	9102249-BSA6	11/12/09
02	13MW5	0910165-01	0910165-01A6	11/12/09
03	13MW5MS	9102249-MS	9102249-MSA6	11/12/09
04	13MW5MSD	9102249-MSD	9102249-MSDA	11/12/09
05	13MW1	0910165-02	0910165-02A6	11/12/09
06	13MW2	0910165-03	0910165-03A6	11/12/09
07	13MW3	0910165-04	0910165-04A6	11/12/09
08	13MW4	0910165-05	0910165-05A6	11/12/09
09	13MWDUP	0910165-06	0910165-06A6	11/12/09
10	13MW6	0910165-07	0910165-07A6	11/12/09
11	13MW7	0910165-08	0910165-08A6	11/13/09
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				
27				
28				
29				
30				

COMMENTS:

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLKKV

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-BLK1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102249-BLKA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

F. Form VIII

Internal standard area and retention time data

(VOA and SV only)

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID (Standard): HG091112A60 Date Analyzed: 11/12/09

Instrument ID: 5972HP60 Time Analyzed: 1444

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	101712	9.11	291701	12.31	223842	16.75
	UPPER LIMIT	203424	9.61	583402	12.81	447684	17.25
	LOWER LIMIT	50856	8.61	145851	11.81	111921	16.25
	CLIENT SAMPLE NO.						
01	SBLKKV	95300	9.11	258227	12.30	191829	16.74
02	SKVLCS	162944	9.13	459587	12.31	340236	16.75
03	13MW5	133772	9.11	374564	12.29	296256	16.74
04	13MW5MS	119070	9.11	337197	12.31	259591	16.75
05	13MW5MSD	121523	9.12	346489	12.30	266954	16.75
06	13MW1	116845	9.12	315342	12.30	236038	16.74
07	13MW2	88804	9.12	243636	12.30	186264	16.74
08	13MW3	76925	9.12	203831	12.30	151844	16.74
09	13MW4	127544	9.13	355835	12.31	273181	16.74
10	13MWDUP	99086	9.13	270403	12.30	210576	16.74
11	13MW6	115178	9.12	322387	12.31	251571	16.75
12	13MW7	117894	9.13	325127	12.31	256836	16.74
13							
14							
15							
16							
17							
18							
19							
20							

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 area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID (Standard): HG091112A60 Date Analyzed: 11/12/09

Instrument ID: 5972HP60 Time Analyzed: 1444

		IS4(PHN)		IS5(CRY)		IS6(PRY)	
		AREA #	RT #	AREA #	RT #	AREA #	RT #
	12 HOUR STD	481241	20.41	411285	26.61	377260	29.87
	UPPER LIMIT	962482	20.91	822570	27.11	754520	30.37
	LOWER LIMIT	240621	19.91	205643	26.11	188630	29.37
	CLIENT SAMPLE NO.						
01	SBLKKV	399067	20.39	333606	26.59	353705	29.87
02	SKVLCS	682696	20.40	552667	26.61	524390	29.88
03	13MW5	628985	20.40	548313	26.60	527718	29.87
04	13MW5MS	556199	20.41	505054	26.61	489806	29.88
05	13MW5MSD	560205	20.40	471020	26.60	456705	29.88
06	13MW1	498284	20.39	427008	26.59	409247	29.87
07	13MW2	393928	20.39	347131	26.59	335421	29.87
08	13MW3	321733	20.39	282153	26.58	268250	29.86
09	13MW4	575910	20.39	483395	26.59	447545	29.87
10	13MWDUP	451903	20.39	407286	26.59	386977	29.87
11	13MW6	542406	20.40	467459	26.59	419876	29.87
12	13MW7	569887	20.39	504598	26.59	490360	29.87
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
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 area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA PACKAGE

GC/MS by SW-846

The sample data package shall include data for all analyses of all samples in one Sample Delivery Group (SDG), including field samples, dilutions, reanalyses, blanks, matrix spikes, matrix spike duplicates, and laboratory control samples. The sample data package consists of the following:

A. SDG Narrative

B. Chain-of-Custody Documentation

C. SDG Data

LAB CODE : LIBRTY

METHOD: 8270C

SDG # : 0910165

A. SDG Narrative

CompuChem
A division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE

SDG # 0910165
PROTOCOL: SW-846

SAMPLE IDENTIFICATIONS: 13MW5, 13MW1, 13MW2, 13MW3, 13MW4, 13MWDUP, 13MW6, 13MW7.

The 8 water samples listed above were received intact, properly refrigerated at 4.7°C, with proper documentation, in sealed shipping containers, on October 21, 2009. The samples were scheduled for the requested analyses of the semivolatile fraction. SW-846, 3rd Edition, Update 3, Separatory Funnel extraction (Method 3510C), and Method 8270C were used to prepare and analyze these samples, with the exceptions and/or additions requested by the client. All pertinent Quality Assurance Notices are included in the narrative section and all pertinent Laboratory Notices for SDG #0910165 are included in the sample data sections. Extraction and analysis holding time requirements were met for all of these samples.

There were no semivolatile project analytes identified above the quantitation limit in any of these samples. Manual quantitations were performed on one or more of the process files associated with this SDG, including the laboratory control spike and the matrix duplicates. The reasons have been coded with explanations provided in the notice included in the narrative section of the SDG.

Between 900 mL and 975 mL of raw sample were used to extract 13MW2, 13MWDUP and the matrix spike duplicate, rather than the method-specified amount of 1000 mL. Low sample volume was received for these samples. The use of this lower volume of raw sample resulted in slightly higher detection limits for the samples 13MW2 and 13MWDUP.

All decafluorotriphenylphosphine (DFTPP) abundance criteria were met for tunes associated with this SDG. Tailing factor criteria were met for pentachlorophenol and benzidine. The breakdown criterion was met for DDT. These three compounds have been added to the DFTPP solution and analyzed together. Overall quality control criteria were met for all initial and continuing calibration standards associated to this SDG. All of the surrogates met recovery criteria in the analyses of these samples. All of the internal standards met response and retention time criteria in the analyses of these samples. The associated method blank met all quality control criteria. 13MW5 was used as the original to prepare the duplicate matrix spikes as requested. The associated duplicate matrix spikes met all advisory accuracy and precision criteria. The associated Laboratory Control Samples (LCS) met all accuracy criteria.

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 his/her designee, as verified by the following signature.

Rebecca K Mead

Rebecca K. Mead, Ph.D.
Laboratory Technical Manager
November 13, 2009

Laboratory Notice

Calibration Date(s): 11-NOV-2009 13:14 11-NOV-2009 17:10

Instrument ID: 5972hp60

An initial calibration was analyzed by Method 8270C. Per the methodology, all compounds are to meet a Percent Relative Standard Deviation (%RSD) limit of no more than 15%. Additional calibration options are provided in the method when the RSD exceeds 15%. CompuChem has chosen to apply the option of determining the mean RSD values for all analytes in the initial calibration.

When there are analytes with %RSDs greater than the limit, proof of calibration linearity can be shown if the average of all compounds in the initial calibration meet the same 15% limit. Based on Method 8270C, Sec. 7.3.7.1, and Method 8000B, Section 7.5.1.2, we are providing a list of the compounds which failed to meet the limit, and their associated %RSDs. Finally, the average of all %RSDs from all compounds in the initial calibration is shown, confirming the usability of the initial calibration and any data that follows it.

Compound Name	RSD
1,4-Napthoquinone	28.0
Dimethoate	15.8
a,a-Dimethylphenethylamine	18.4

Average %RSD for all compounds in the Initial Calibration: 4.7 %

Data Reviewer/ID: [signature] / [signature]

Date: 11/13/5

Exception Report

Date: November 13, 2009

From: Elsie Byrd

RE: DF091111A60 APPENDIX IX Second Source Standards

The following compounds did not meet criteria in the second source analysis.

Acetophenone: 55%

4,6-dinitro-2-methylphenol: 135%/142%

Carbazole: 24%/24%

Benzidine: 46%/180%

Dimethoate: 156%

Methyl parathion: 149%

1,3,5-tinitrobenzene: 135%

GC and GC/MS Column and Trap Specifications Table

SDG #:	

COLUMNS*

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	GC Laboratory				
	Restek	RTX-5	0.53	1.0	30
	Restek	RTX-SMS	0.53	1.0	30
√	Restek	clpest	0.32	0.5	30
√	Restek	clpest2	0.32	0.42	30
	J&W	DB-210	0.53	1.0	30
	J&W	GS-GASPRO	0.32	N/A	30
	GC Volatiles Laboratory				
	Restek	RTX-Volatiles	0.53	2.0	30
	GC/MS Volatiles Laboratory				
	Restek	RTX-VMS	0.18	1.0	20
√	Supelco	SPB-624	0.32	1.8	60
	Supelco	SPB-624	0.53	3.0	75
	Phenomonex	ZB-624	0.32	1.8	60
	GC/MS Semivolatiles Laboratory				
√	Restek	RTX-5MS	0.32	0.25	30
	Phenomonex	ZB-5MS	0.32	0.25	30
	HPLC Laboratory				
	Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
	Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
	Restek	Pinnacle Cyano	4.6	5.0	25 cm
	Restek	Allure C18	4.6	5.0	25 cm

TRAPS*

	GC and GC/MS Volatiles Laboratory	
	Supelco J (BETXTRAP™)	* 7.7 cm Carbopack C
		* 1.2 cm Carbopack B
√	Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons)
		* 6 cm of Carboxen 1000 (Carbon molecular sieves)
		* 1 cm of Carboxen 1001 (Carbon molecular sieves)

Rev. 28

* This table contains the GC columns (and volatile organic trap) used for the analysis of volatiles, semi-volatiles, pesticides, and Aroclors by the SOM01.2 SOW. Please see the SDG Narratives(s) for the specific fraction(s) relative to this SDG.

CompuChem

a division of Liberty Analytical Corporation

CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

H - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

M1 - The compound was not found by the automatic integration routine.

M2 - The compound was incorrectly integrated by the automatic integration routine.

M3 - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the higher of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the higher of the two values, although the choice could be a project specific issue. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and all reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses are not combined on a single Form I.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

B. Chains-of-Custody

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the SDG. The CoC documents shall be arranged in increasing Client Sample ID number order, considering both letters and numbers.

CHAIN OF CUSTODY RECORD

Laboratory: CompuChem Environmental, 501 Madison Avenue, Cary, NC 27513/Cathy Dover, Manager/1-800-833-5097

Client:	Draper Aden Associates	**Consultant:**	Draper Aden Associates	**Sample Site:**	RAAP, Radford, Virginia
Attn:	0	**Attn:**	Janet C. Frazier	**Location:**	HWMU13/Open Burning Ground
Address:	0	**Address:**	2206 South Main Street, Blacksburg, Virginia 24060	**Event:**	2009 2nd Semi Annual Ground Water Monitoi
	0			**DAA JN:**	B03204-07
Phone:	0	**Phone:**	(540) 552-0444	**Lab JN:**	
Fax:	0	**Fax:**	(540) 552-0291		
Fax:	0				

Project Specific (PS) QC: ☑YES ☐NO
Sample Collection for Project Complete? ☑YES ☐NO
Carrier: NC Courier Service
Tracking Number: _____

Box 1: Matrix
SW 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 ☐NO
Bill: ☐Client ☑Consultant
Preserved and shipped on ice: ☑YES ☐NO

Box 4 - Sample Type	G	G	G	G	G	G							
Box 3 - Filtered/Unfiltered	U	U	U	U	U	U							
Required pH of Sample					<2	<2							
Box 2 - Preservative	H	H	H	H	B	B							
Box 5 - Sample Container Type	2-1L A	[redacted]	1-500ml P 250ml	2-1L A	1-500 ml P (plastic liters)								

Sample ID	Date: 2009	Time	Box 1: Matrix	Number of Bottles 4r 10/19/09	8332/3535 - Nitroglycerine	8330 - Explosives	EPA 314.0 - Perchlorate	8270C/3520C - Semivolatile	ICP 6010B/3005A (Metals-Total)	7470A (Mercury-Total)	Metals/Hg pH	
13MW1	10/20	1040	GW	7	X	X	X	X	X	X	L2	0910165-02
13MW2	10/20	0930	GW	7	X	X	X	X	X	X	L2	-03
13MW3	10/19	0740	GW	7	X	X	X	X	X	X	L2	-04
13MW4	10/20	0805	GW	7	X	X	X	X	X	X	L2	-05
13MWDUP	10/20	0820	GW	7	X	X	X	X	X	X	L2	-06
13MW5	10/19	0850	GW	42	X	X	X	X	X	X	L2	0910165-01 USE FOR QC
13MW6	10/19	1030	GW	7	X	X	X	X	X	X	L2	-07
13MW7	10/19	1130	GW	7	X	X	X	X	X	X	L2	-08

GENERAL NOTES:
1. **Only report results at or above this permit limit.**
2. **Level 4 with EDD & PDF**

Residual Chlorine Present?
Yes _____ No ✓

Clients Special Instructions: level 4 with edd and PDF. -1.2°C, 2.3°C, 0.1°C, 1.7°C, -1.1°C, 0.2°C, -0.1°C

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): Dale Slaughter	Date: 10/19/09	#1 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	#2 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	Sample Storage Time Requested: 30 DYS ORG/6 MTHS INORG
Sampler Signature: Dale Slaughter	Time: 0600	Company Name: DAA	Time: 0800	Company Name: DAA	Time: 1110	
Sampler Name (Print): Tyler Emery	Date: 10/19/09	#1 Received by (Signature): Dale Slaughter	Date: 10/21/09	#2 Received by (Signature): Eli Cuvler	Date: 10/21/09	
Sampler Signature: Tyler Emery	Time: 0600	Company Name: DAA	Time: 0800	Company Name: N.C. COURIER	Time: 1110	

Cathy Dover CompuChem 10/21/09 1110

~~BMWF~~ HWMU13q.sub

ANALYTICAL METHOD: 8270C
TYPE METHOD: GCMS
CLASS: SEMIVOLATILE

No.	PARAMETER	CAS RN	Permit QL (ug/l)
1.	✓ 2,4-dichlorophenol	120-83-2	
2.	✓ 3,3'-dimethylbenzidine	119-93-7	
3.	✓ 2-chlorophenol	95-57-8	
4.	✓ 3-methylphenol	108-39-4	
5.	✓ 4-methylphenol	106-44-5	
6.	✓ 4-nitrophenol	100-02-7	
7.	✓ acetophenone	98-86-2	
8.	✓ benzo(a)anthracene	56-55-3	
9.	✓ benzo(a)pyrene	50-32-8	
10.	✓ benzo[b]fluoranthene	205-99-2	
11.	✓ benzo[k]fluoranthene	207-08-9	
12.	✓ bis(2-Ethylhexyl)phthalate	117-81-7	
13.	✓ butyl benzyl phthalate	85-68-7	
14.	✓ dibenz(a,h)anthracene	53-70-3	
15.	✓ dibenzofuran	132-64-9	
16.	✓ di-n-butyl phthalate	84-74-2	
17.	✓ diethyl phthalate	84-66-2	
18.	✓ dimethyl phthalate	131-11-3	
19.	✓ di-n-octyl phthalate	117-84-0	
20.	diphenylamine n-nitrosodiphenylamine	122-39-4	
21.	✓ fluoranthene	206-44-0	
22.	✓ indeno[1,2,3-cd]pyrene	193-39-5	
23.	✓ nitrobenzene	98-95-3	
24.	✓ phenol	108-95-2	
25.	✓ pyrene	129-00-0	

26. ✓ Hexachloroethane.

JCF
10-6-09

WO#0910165

ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: SEE BELOW
CLASS: TOTAL

Method SW 846-6010B

No.	PARAMETER	CAS RN	Permit QL (ug/l)	for 6020 use	6010
1.	Antimony	7440-36-0	5		10
2.	Arsenic	7440-38-2	5		10
3.	Barium	7440-39-3	1		200
4.	Cadmium	7440-43-9	1		5
5.	Chromium	7440-47-3	5		10
6.	Lead	7440-92-1	5		3
7.	Nickel	7440-02-0	5		40
8.	Selenium	7782-49-2	5		5
9.	Silver	7440-22-4	2		5
10.	Zinc	7440-66-6	5		20

Method SW 7470A/CVAA

11.	Mercury	7439-97-6	0.5

.p:\admin\divisions\envr\templates\bburg eteam temp\field events\raap\sample event set up\semi-annual events\hwmu-13\hwmu13-target analyte list gw (new) 2007 10.doc
Revised July 18, 2005 - JCF
Revised November, 2005 - new permit - JCF
Revised Oct 10, 2009

ANALYTICAL METHOD: 314.0
TYPE METHOD: GC

No.	PARAMETER	CAS RN
1.	Perchlorate	14797-73-0

ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: GC/ HPLC

Method 8330:

No.	PARAMETER	CAS RN
1.	1,3,5-trinitrobenzene (1,3,5-TNB)	99-35-4
2.	1,3-dinitrobenzene (1,3-DNB)	99-65-0
3.	2,4-dinitrotoluene (2,4-DNT)	121-14-2
4.	2,6-dinitrotoluene (2,6-DNT)	606-20-2

Method 8332:

No.	PARAMETER	CAS RN
1.	Nitroglycerin	55-63-0

Unit 13/0B67

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

2206 S. Main Street
Blacksburg, Virginia 24060
(540) 552-0444 Fax: (540) 552-0291
daa@daa.com www.daa.com

MEMORANDUM

To:	Cathy Dover, CompuChem
From:	~~Kathy Olsen, DAA~~ Ken C. / DAA
Date:	Oct. 1st, 2009
Project Name:	RAAP-Radford Arsenal
Job No.:	B03204-07
Subject:	Sample kit order-Second Semi Annual 2009 Semiannual Monitoring
cc:	***Please deliver on or before October 14th, 2009*** ✓

Please separate samples by landfill unit.

HWMU-13:
8 wells plus MS/MSD:

- 8330 (2-1L ambers no preservative) ✓
- 8332/3535 (2-1L ambers no preservative) ✓
- EPA 314 (perchlorate only) ✓
- 8270C/3520C SV/no preservative (2-1L ambers) ✓
- ICP 6010B/3005A/7470A (1-Total Metals & Mercury w/ HNO3 pH<2) ✓

Radford AAP/Solid/Hazardous Waste Management Units and Well Identifications

HWMU-13

13MW1
13MW2
13MW3
13MW4
13MWDUP
13MW5 (QC Well)
13MW6
13MW7

OK
JUC
9-6-05

WORK ORDER

0910165

Printed: 11/13/2009 5:04:37PM

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Reported**

Report To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone: (540)552-0444
Fax: -

Invoice To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone :(540)552-0444
Fax: -

Date Due:	11/10/2009 00:00 (20 day TAT)		
Received By:	Cathy Dover	Date Received:	10/21/2009 16:00
Logged In By:	Cathy Dover	Date Logged In:	10/21/2009 21:04

J & B Flags?: NO	TICS?:NO	Spike Level: FULL Spike	Deliverable: **Style 9**	EDD : DRAPER ACCESS + ERIS

USE 0910165-01 FOR QC*SVOC 8270C=HWMU13a.SUB*6020MTL=Sb,As,Ba,Cd,Cr,Pb,Ni,Se,Ag & Zn + Hg 7470 (SPECIAL LIMITS-Ba & Cd @ 1 ppb)*PERCHLORATE NEEDS 4 ug/L STD.*8330=HWMU13.SUB*8332=NITROGLYCERIN ONLY*NEEDS UNIT 13 NOTED ON FORM 1s

Analysis	Due	TAT	Expires	Received	Comments
0910165-01 13MW5 [Water] Sampled 10/19/2009 08:50 Eastern					**USE FOR QC**
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
0910165-02 13MW1 [Water] Sampled 10/20/2009 08:50 Eastern					
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Reported**

Analysis	Due	TAT	Expires	Comments
0910165-03 13MW2 [Water] Sampled 10/20/2009 09:30 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 09:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
0910165-04 13MW3 [Water] Sampled 10/19/2009 07:40 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 07:40	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
0910165-05 13MW4 [Water] Sampled 10/20/2009 08:05 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:05	10/21/2009 16:00
0910165-06 13MWDUP [Water] Sampled 10/20/2009 08:20 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:20	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Reported**

Analysis	Due	TAT	Expires	Comments
0910165-07 13MW6 [Water] Sampled 10/19/2009 10:30 Eastern				
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 10:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
0910165-08 13MW7 [Water] Sampled 10/19/2009 11:30 Eastern				
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 11:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00

CompuChem, a Division of Liberty Analytical Corp.

EXTRACT COC

10-23-2

DEPT: EXTR **DATE:** 10/23/09

BATCH: 9102249

	COMPUCHEM SAMPLE NUMBER	CLIENT SAMPLE ID	PARAMETER	
1	0910165-01	13MW5		
2	0910165-02	13MW1		
3	0910165-03	13MW2		
4	0910165-04	13MW3		
5	0910165-05	13MW4		
6	0910165-06	13MWDUP		
7	0910165-07	13MW6		
8	0910165-08	13MW7		
9	9102249-BLK1	SBLKKV		
10	9102249-BS1	SKVLCS		
11	9102249-MS1	13MW5MS		
12	9102249-MSD1	13MW5MSD		
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28				

pm 11/13/09

AA 10/23/09

RELINQUISHED BY	DATE/TIME	REC. BY	REASON
	10/23/09 1200	GC refrig. #3	Storage
GCMS#3	11/9/09 2300	B	Anal
B	11/9/09 2350	GCMS#3	Stor
GCMS#3	11/10 900	DMP	Analysis
DMP	11/10 1500	GCMS#3	Storage
GCMS#3	11/12 1300	DMP	Analysis
DMP	11/12 1500	GCMS#3	Storage

C. SDG Data

1. QC Summary
2. Sample Data
3. Standards Data
4. Raw QC Data

LAB CODE :LIBRTY

METHOD: 8270C

SDG # : 0910165

1. QC Summary

a. Surrogate Percent Recovery Summary (Form II SV)

b. Spike Summary - MS / MSD / LCS
(Form III SV)

c. Method Blank Summary (Form IV SV)

d. GC/MS Instrument Performance Check
(Form V SV)

e. Internal Standard Area and RT Summary
(Form VIII SV)

a. Surrogate Percent Recovery Summary

(Form II SV)

FORM 2
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

	CLIENT SAMPLE NO.	S1 (2FP)#	S2 (PHL)#	S3 (NBZ)#	S4 (FBP)#	S5 (TBP)#	S6 (TPH)#	S7 #	S8 #	TOT OUT
01	SBLKKV	69	42	90	85	88	101			0
02	SKVLCS	61	41	85	84	96	92			0
03	13MW5	57	34	84	73	96	94			0
04	13MW5MS	58	39	84	83	111	90			0
05	13MW5MSD	58	38	83	80	102	90			0
06	13MW1	56	33	81	71	86	91			0
07	13MW2	59	36	86	77	91	94			0
08	13MW3	59	35	85	77	89	96			0
09	13MW4	54	34	82	74	93	94			0
10	13MWDUP	56	35	82	71	87	89			0
11	13MW6	56	36	84	74	96	95			0
12	13MW7	52	32	79	72	91	88			0
13										
14										
15										
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19										
20										
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23										
24										
25										
26										
27										
28										

	QC LIMITS
S1 (2FP) = 2-Fluorophenol	(11-110)
S2 (PHL) = Phenol-d5	(10-110)
S3 (NBZ) = Nitrobenzene-d5	(35-110)
S4 (FBP) = 2-Fluorobiphenyl	(45-110)
S5 (TBP) = 2,4,6-Tribromophenol	(44-131)
S6 (TPH) = Terphenyl-d14	(49-120)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

b. Spike Summary - MS / MSD / LCS
(Form III SV)

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix Spike - Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Phenol	41.03	0	15.97	39	20-100
2-Chlorophenol	41.03	0	30.72	75	23-100
3-Methylphenol	82.05	0	28.03	34	24-100
4-Methylphenol	82.05	0	28.03	34	24-100
Acetophenone	41.03	0	34.06	83	39-100
Hexachloroethane	41.03	0	25.7	63	50-150
Nitrobenzene	41.03	0	33.04	81	20-131
2,4-Dichlorophenol	41.03	0	34.91	85	39-103
Dimethylphthalate	41.03	0	36.89	90	53-116
4-Nitrophenol	41.03	0	17.19	42	10-100
Dibenzofuran	41.03	0	37.05	90	50-107
Diethylphthalate	41.03	0	37.41	91	52-118
N-Nitrosodiphenylamine	41.03	0	39.47	96	52-117
Di-n-butylphthalate	41.03	0	37.11	90	51-114
Fluoranthene	41.03	0	42.81	104	58-124
Pyrene	41.03	0	39.12	95	48-131
Butylbenzylphthalate	41.03	0	37.89	92	41-118
3,3'-Dimethylbenzidine	41.03	0	37.11	90	20-150
bis(2-ethylhexyl)Phthal	41.03	0	39.36	96	47-121
Benzo(a)anthracene	41.03	0	40.22	98	53-128
Di-n-octylphthalate	41.03	0	38.98	95	30-148
Benzo(b)fluoranthene	41.03	0	36.92	90	41-130
Benzo(k)fluoranthene	41.03	0	40.45	99	39-150
Benzo(a)pyrene	41.03	0	40.97	100	46-135
Indeno(1,2,3-c,d)pyrene	41.03	0	38.38	94	47-138
Dibenzo(a,h)anthracene	41.03	0	40.74	99	47-134

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

COMMENTS: _____

FORM 3
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Matrix Spike - Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	40	15.49	39	3	30	20-100
2-Chlorophenol	40	30.47	76	1	30	23-100
3-Methylphenol	80	27.58	34	2	30	24-100
4-Methylphenol	80	27.58	34	2	30	24-100
Acetophenone	40	33.35	83	2	30	39-100
Hexachloroethane	40	26.08	65	1	40	50-150
Nitrobenzene	40	32.26	81	2	30	20-131
2,4-Dichlorophenol	40	33.41	84	4	30	39-103
Dimethylphthalate	40	34.59	86	6	30	53-116
4-Nitrophenol	40	16.12	40	6	30	10-100
Dibenzofuran	40	35.12	88	5	30	50-107
Diethylphthalate	40	34.8	87	7	30	52-118
N-Nitrosodiphenylamine	40	37.43	94	5	30	52-117
Di-n-butylphthalate	40	35.09	88	6	30	51-114
Fluoranthene	40	40	100	7	30	58-124
Pyrene	40	38.74	97	1	30	48-131
Butylbenzylphthalate	40	37	93	2	30	41-118
3,3'-Dimethylbenzidine	40	36.78	92	1	30	20-150
bis(2-ethylhexyl)Phthal	40	37.35	93	5	30	47-121
Benzo(a)anthracene	40	38.68	97	4	30	53-128
Di-n-octylphthalate	40	37.1	93	5	30	30-148
Benzo(b)fluoranthene	40	35.18	88	5	30	41-130
Benzo(k)fluoranthene	40	39.44	99	2	30	39-150
Benzo(a)pyrene	40	39.17	98	4	30	46-135
Indeno(1,2,3-c,d)pyrene	40	39.57	99	3	30	47-138
Dibenzo(a,h)anthracene	40	39.35	98	3	30	47-134

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 26 outside limits
Spike Recovery: 0 out of 52 outside limits

COMMENTS: _____

3C
WATER SEMIVOLATILE LAB CONTROL SAMPLE

SKVLCS

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Phenol	40	16.24	41	20-100
2-Chlorophenol	40	29.42	74	23-100
3-Methylphenol	80	27.67	35	24-100
4-Methylphenol	80	27.67	35	24-100
Acetophenone	40	32.56	81	39-100
Hexachloroethane	40	28.55	71	50-150
Nitrobenzene	40	30.82	77	20-131
2,4-Dichlorophenol	40	32.2	81	39-103
Dimethylphthalate	40	33.09	83	53-116
4-Nitrophenol	40	14.35	36	10-100
Dibenzofuran	40	34.18	85	50-107
Diethylphthalate	40	33.69	84	52-118
N-Nitrosodiphenylamine	40	37.61	94	52-117
Di-n-butylphthalate	40	34.81	87	51-114
Fluoranthene	40	37.37	93	58-124
Pyrene	40	37.46	94	48-131
Butylbenzylphthalate	40	37.11	93	41-118
3,3'-Dimethylbenzidine	40	33.15	83	20-150
bis(2-ethylhexyl)Phthal	40	38.88	97	47-121
Benzo(a)anthracene	40	36.8	92	53-128
Di-n-octylphthalate	40	39.35	98	30-148
Benzo(b)fluoranthene	40	35.36	88	41-130
Benzo(k)fluoranthene	40	36.33	91	39-150
Benzo(a)pyrene	40	37.37	93	46-135
Indeno(1,2,3-c,d)pyrene	40	31.9	80	47-138
Dibenzo(a,h)anthracene	40	30.78	77	47-134

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

Spike Recovery: 0 out of 26 outside limits

COMMENTS: _____

c. Method Blank Summary (Form IV SV)

If more than a single form is necessary, forms shall be arranged in chronological order by date of analysis of the blanks and by instrument.

FORM 4
SEMIVOLATILE METHOD BLANK SUMMARY

CLIENT SAMPLE NO

SBLKKV

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID: 9102249-BLKA60 Lab Sample ID: 9102249-BLK1

Instrument ID: 5972HP60 Date Extracted: 10/23/09

Matrix: (soil/water) WATER Date Analyzed: 11/12/09

Level: (low/med) LOW Time Analyzed: 1532

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED
01	SKVLCS	9102249-BS	9102249-BSA6	11/12/09
02	13MW5	0910165-01	0910165-01A6	11/12/09
03	13MW5MS	9102249-MS	9102249-MSA6	11/12/09
04	13MW5MSD	9102249-MSD	9102249-MSDA	11/12/09
05	13MW1	0910165-02	0910165-02A6	11/12/09
06	13MW2	0910165-03	0910165-03A6	11/12/09
07	13MW3	0910165-04	0910165-04A6	11/12/09
08	13MW4	0910165-05	0910165-05A6	11/12/09
09	13MWDUP	0910165-06	0910165-06A6	11/12/09
10	13MW6	0910165-07	0910165-07A6	11/12/09
11	13MW7	0910165-08	0910165-08A6	11/13/09
12				
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COMMENTS:

d. GC/MS Instrument Performance Check (Form V SV)

If more than a single form is necessary, forms shall be arranged in chronological order, by instrument.

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID: DF091111A60 DFTPP Injection Date: 11/11/09

Instrument ID: 5972HP60 DFTPP Injection Time: 1250

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	46.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	59.2
70	Less than 2.0% of mass 69	0.3 (0.6)1
127	25.0 - 75.0% of mass 198	37.6
197	Less than 1.0% of mass 198	0.1
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	22.0
365	Greater than 0.75% of mass 198	2.61
441	Present, but less than mass 443	8.4
442	40.0 - 110.0% of mass 198	54.7
443	15.0 - 24.0% of mass 442	10.8 (19.7)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	HG091111A60	11/11/09	1314
02	SSTD160	SSTD160	HH091111A60	11/11/09	1401
03	SSTD010	SSTD010	HI091111A60	11/11/09	1449
04	SSTD120	SSTD120	HJ091111A60	11/11/09	1536
05	SSTD020	SSTD020	HK091111A60	11/11/09	1623
06	SSTD050	SSTD050	HL091111A60	11/11/09	1710
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08					
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22					

FORM V SV

FORM 5
SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID: DF091112A60 DFTPP Injection Date: 11/12/09

Instrument ID: 5972HP60 DFTPP Injection Time: 1421

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 80.0% of mass 198	41.9
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	Mass 69 relative abundance	52.5
70	Less than 2.0% of mass 69	0.1 (0.3)1
127	25.0 - 75.0% of mass 198	35.3
197	Less than 1.0% of mass 198	0.1
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	20.9
365	Greater than 0.75% of mass 198	2.46
441	Present, but less than mass 443	7.3
442	40.0 - 110.0% of mass 198	49.6
443	15.0 - 24.0% of mass 442	8.8 (17.8)2

1-Value is % mass 69 2-Value is % mass 442

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

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	SSTD080	SSTD080	HG091112A60	11/12/09	1444
02	SBLKKV	9102249-BLK1	9102249-BLKA60	11/12/09	1532
03	SKVLCS	9102249-BS	9102249-BSA60	11/12/09	1619
04	13MW5	0910165-01	0910165-01A60	11/12/09	1706
05	13MW5MS	9102249-MS	9102249-MSA60	11/12/09	1754
06	13MW5MSD	9102249-MSD	9102249-MSDA60	11/12/09	1841
07	13MW1	0910165-02	0910165-02A60	11/12/09	1929
08	13MW2	0910165-03	0910165-03A60	11/12/09	2022
09	13MW3	0910165-04	0910165-04A60	11/12/09	2112
10	13MW4	0910165-05	0910165-05A60	11/12/09	2159
11	13MWDUP	0910165-06	0910165-06A60	11/12/09	2247
12	13MW6	0910165-07	0910165-07A60	11/12/09	2335
13	13MW7	0910165-08	0910165-08A60	11/13/09	0022
14					
15					
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22					

FORM V SV

e. Internal Standard Area and RT Summary (Form VIII SV)

If more than a single form is necessary, forms shall be arranged in chronological order, by instrument.

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID (Standard): HG091112A60 Date Analyzed: 11/12/09

Instrument ID: 5972HP60 Time Analyzed: 1444

		IS1(DCB) AREA #	RT #	IS2(NPT) AREA #	RT #	IS3(ANT) AREA #	RT #
	12 HOUR STD	101712	9.11	291701	12.31	223842	16.75
	UPPER LIMIT	203424	9.61	583402	12.81	447684	17.25
	LOWER LIMIT	50856	8.61	145851	11.81	111921	16.25
	CLIENT SAMPLE NO.						
01	SBLKKV	95300	9.11	258227	12.30	191829	16.74
02	SKVLCS	162944	9.13	459587	12.31	340236	16.75
03	13MW5	133772	9.11	374564	12.29	296256	16.74
04	13MW5MS	119070	9.11	337197	12.31	259591	16.75
05	13MW5MSD	121523	9.12	346489	12.30	266954	16.75
06	13MW1	116845	9.12	315342	12.30	236038	16.74
07	13MW2	88804	9.12	243636	12.30	186264	16.74
08	13MW3	76925	9.12	203831	12.30	151844	16.74
09	13MW4	127544	9.13	355835	12.31	273181	16.74
10	13MWDUP	99086	9.13	270403	12.30	210576	16.74
11	13MW6	115178	9.12	322387	12.31	251571	16.75
12	13MW7	117894	9.13	325127	12.31	256836	16.74
13							
14							
15							
16							
17							
18							
19							
20							

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 area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

FORM 8
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Lab File ID (Standard): HG091112A60 Date Analyzed: 11/12/09

Instrument ID: 5972HP60 Time Analyzed: 1444

		IS4(PHN) AREA #	RT #	IS5(CRY) AREA #	RT #	IS6(PRY) AREA #	RT #
	12 HOUR STD	481241	20.41	411285	26.61	377260	29.87
	UPPER LIMIT	962482	20.91	822570	27.11	754520	30.37
	LOWER LIMIT	240621	19.91	205643	26.11	188630	29.37
	CLIENT SAMPLE NO.						
01	SBLKKV	399067	20.39	333606	26.59	353705	29.87
02	SKVLCS	682696	20.40	552667	26.61	524390	29.88
03	13MW5	628985	20.40	548313	26.60	527718	29.87
04	13MW5MS	556199	20.41	505054	26.61	489806	29.88
05	13MW5MSD	560205	20.40	471020	26.60	456705	29.88
06	13MW1	498284	20.39	427008	26.59	409247	29.87
07	13MW2	393928	20.39	347131	26.59	335421	29.87
08	13MW3	321733	20.39	282153	26.58	268250	29.86
09	13MW4	575910	20.39	483395	26.59	447545	29.87
10	13MWDUP	451903	20.39	407286	26.59	386977	29.87
11	13MW6	542406	20.40	467459	26.59	419876	29.87
12	13MW7	569887	20.39	504598	26.59	490360	29.87
13							
14							
15							
16							
17							
18							
19							
20							

IS4 (PHN) = Phenanthrene-d10
IS5 (CRY) = Chrysene-d12
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 area values with an asterisk.
* Values outside of QC limits.

FORM VIII SV

2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I SV and Form I SV-TIC), followed by the raw data for semivolatile samples. These sample packets shall be placed in increasing Client Sample ID number order, considering both letters and numbers.

a. Target Analyte Results (Form I SV)
   Tabulated results (identification and quantitation) shall be included.

b. Tentatively Identified Compounds (Form I SV-TIC)
   Lists the client specified number of organic compounds that are non-surrogate/non-internal standard compounds and are not listed on the target compound list. This form shall be included even if no compounds are found.

c. Reconstructed Ion Chromatograms
   Include for each sample or sample extract, including dilutions and reanalyses. The RIC shall contain the following header information: Client Sample ID number, date and time of analysis, GC/MS instrument identifier, lab file identifier, and analyst ID.

d. Quantitation Report showing calculations for target analytes
   - Include a printout of the Enhanced Ion Current Profile (EICP) for all manual changes to all compounds, internal standards, and surrogate compounds.

e. Copies of raw spectra and copies of background-subtracted mass spectra of target analytes identified in the sample.
   - The spectra shall include the following information: Client Sample ID number, Lab file ID, date and time of analysis, and instrument ID.
   - The compound name must be clearly marked.

f. Quantitation Report showing calculations for TICs

g. Copies of mass spectra of organic compounds not listed on the target compound list (TICs) with associated best-match spectra.
   - The spectra shall be labeled as follows: Client Sample ID number, lab file ID, date and time of analysis, and instrument ID.
   - The compound name must be clearly marked.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-02

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-02A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

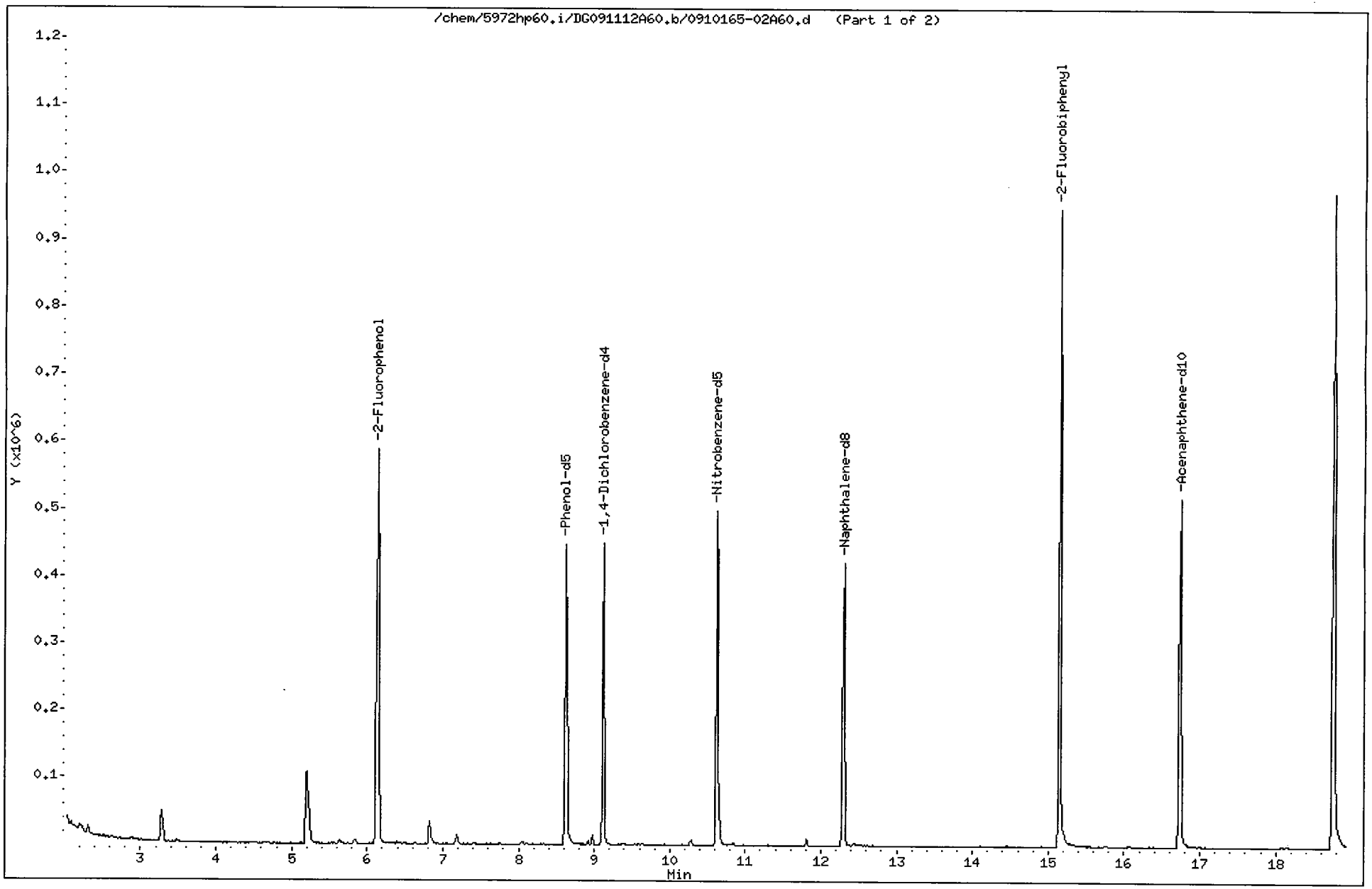
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

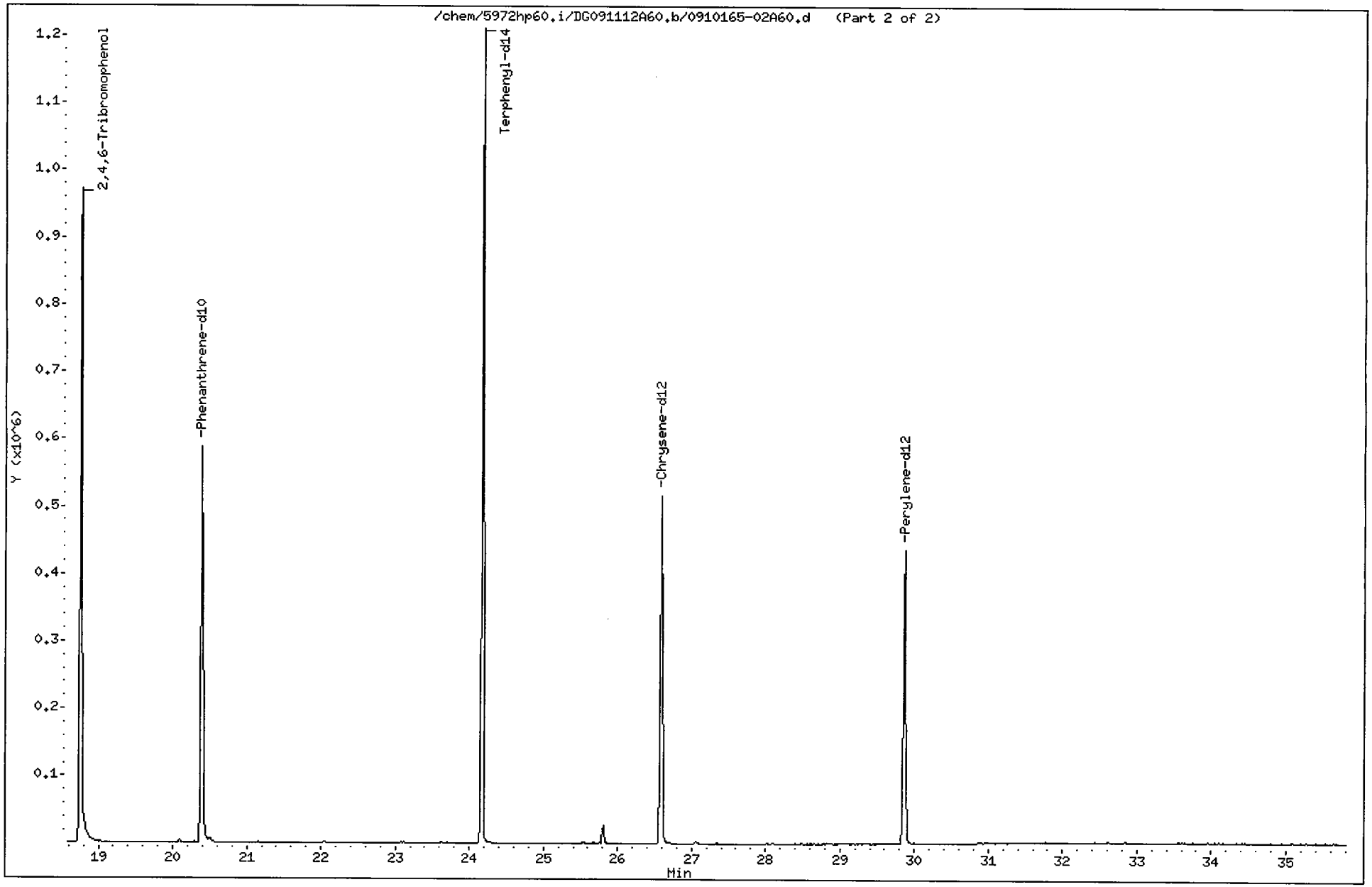
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Date : 12-NOV-2009 19:29
Client ID: 13MW1
Sample Info: 0910165-02:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-02A60.d
Date : 12-NOV-2009 19:29
Client ID: 13MW1
Sample Info: 0910165-02:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-02A60.d
Report Date: 13-Nov-2009 16:02

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Data file : /chem/5972hp60.i/DG091112A60.b/0910165-02A60.d
Lab Smp Id: 0910165-02 Client Smp ID: 13MW1
Inj Date : 12-NOV-2009 19:29
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-02:2650
Misc Info : 13MW1
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.118	9.114	(1.000)	116845	40.0000		
*	2 Naphthalene-d8	136	12.299	12.306	(1.000)	315342	40.0000		
*	3 Acenaphthene-d10	164	16.739	16.746	(1.000)	236038	40.0000		
*	4 Phenanthrene-d10	188	20.392	20.408	(1.000)	498284	40.0000		
*	5 Chrysene-d12	240	26.591	26.608	(1.000)	427008	40.0000		
*	6 Perylene-d12	264	29.865	29.872	(1.000)	409247	40.0000		
$	7 2-Fluorophenol	112	6.141	6.147	(0.673)	300371	111.706	55.8	
$	8 Phenol-d5	99	8.627	8.633	(0.946)	218297	65.6958	32.8	
$	11 Nitrobenzene-d5	82	10.621	10.628	(0.864)	257846	80.9652	40.5	
$	12 2-Fluorobiphenyl	172	15.154	15.160	(0.905)	555091	71.2907	35.6	
$	13 2,4,6-Tribromophenol	330	18.765	18.782	(1.121)	226016	172.079	86.0	(A)
$	14 Terphenyl-d14	244	24.177	24.173	(0.909)	711572	91.0201	45.5	
	23 Phenol	94	Compound Not Detected.						
	27 2-Chlorophenol	128	Compound Not Detected.						
	35 3-Methylphenol	108	Compound Not Detected.						

11/13/09

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-02A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW2

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03

Sample wt/vol: 975 (g/mL) ML Lab File ID: 0910165-03A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

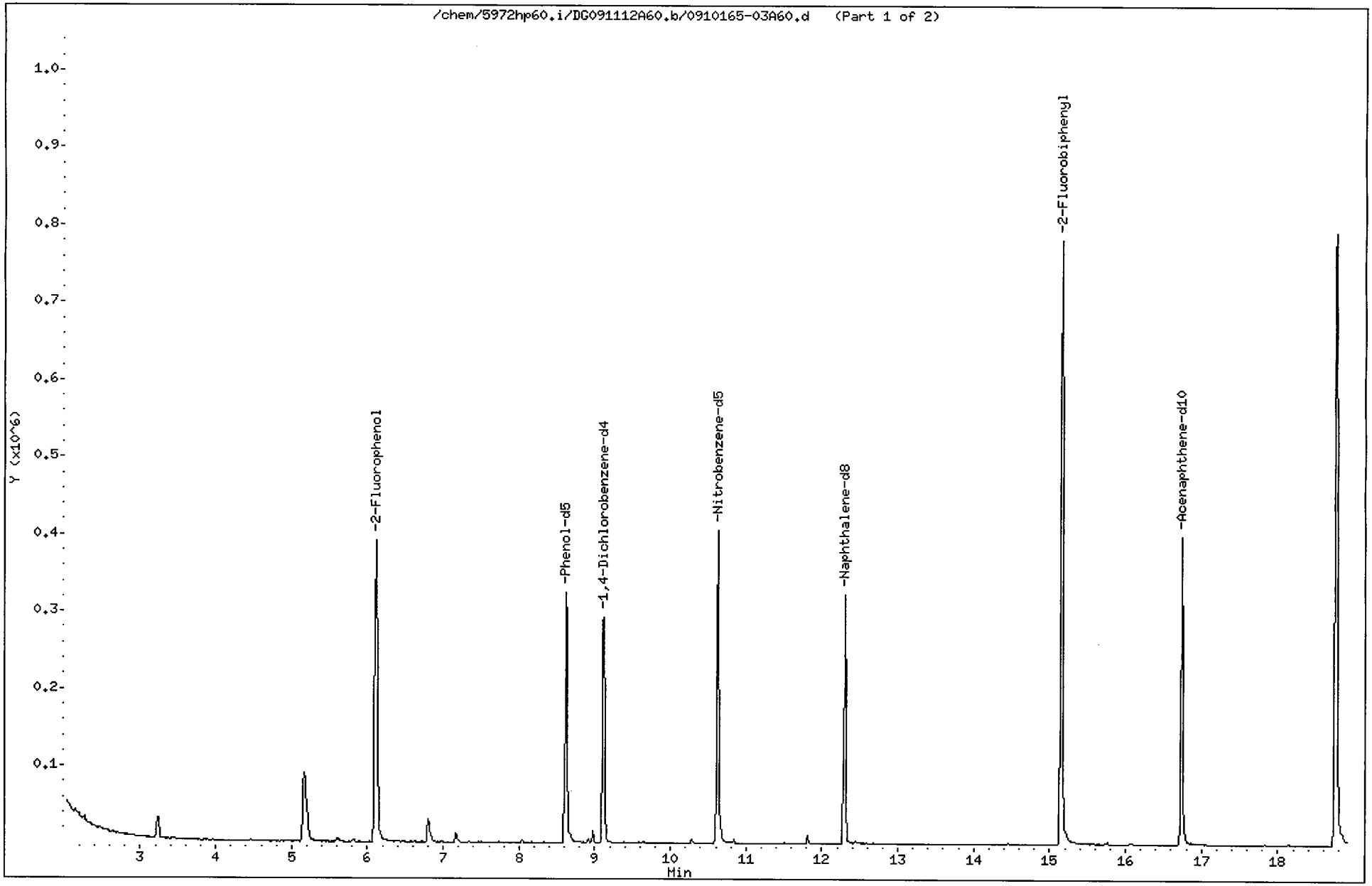
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.13	U
95-57-8	2-Chlorophenol	5.13	U
108-39-4	3-Methylphenol	10.2	U
106-44-5	4-Methylphenol	10.2	U
98-86-2	Acetophenone	5.13	U
67-72-1	Hexachloroethane	5.13	U
98-95-3	Nitrobenzene	5.13	U
120-83-2	2,4-Dichlorophenol	5.13	U
131-11-3	Dimethylphthalate	5.13	U
100-02-7	4-Nitrophenol	10.2	U
132-64-9	Dibenzofuran	5.13	U
84-66-2	Diethylphthalate	5.13	U
86-30-6	N-Nitrosodiphenylamine (1)	5.13	U
84-74-2	Di-n-butylphthalate	5.13	U
206-44-0	Fluoranthene	5.13	U
129-00-0	Pyrene	5.13	U
85-68-7	Butylbenzylphthalate	5.13	U
119-93-7	3,3'-Dimethylbenzidine	5.13	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.13	U
56-55-3	Benzo(a)anthracene	5.13	U
117-84-0	Di-n-octylphthalate	5.13	U
205-99-2	Benzo(b)fluoranthene	5.13	U
207-08-9	Benzo(k)fluoranthene	5.13	U
50-32-8	Benzo(a)pyrene	5.13	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.13	U
53-70-3	Dibenzo(a,h)anthracene	5.13	U

(1) - Cannot be separated from Diphenylamine

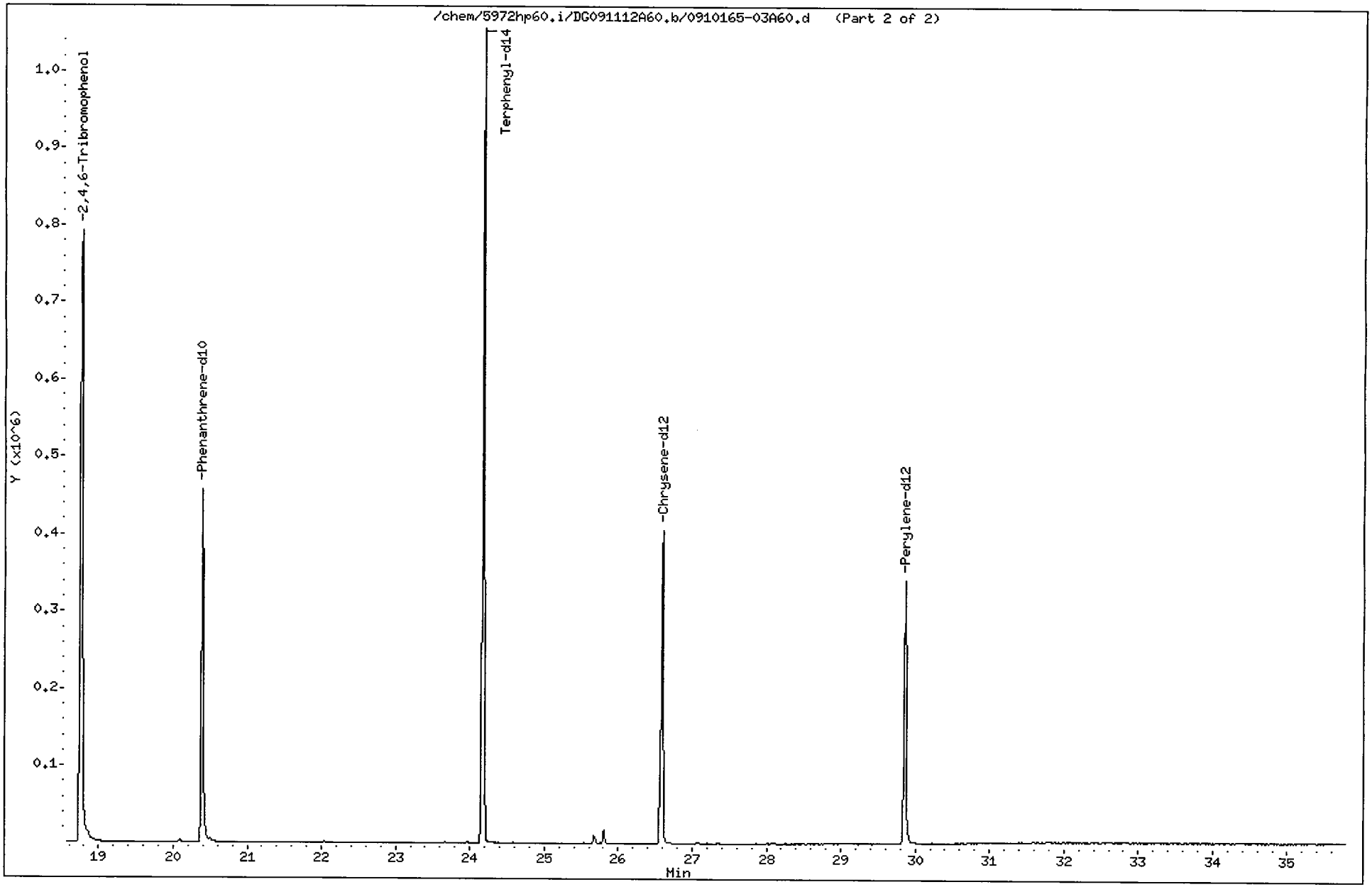
Data File: /chem/5972hp60.i/DG091112A60.b/0910165-03A60.d
Date : 12-NOV-2009 20:22
Client ID: 13MW2
Sample Info: 0910165-03:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-03A60.d
Date : 12-NOV-2009 20:22
Client ID: 13MW2
Sample Info: 0910165-03:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-03A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

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Data file : /chem/5972hp60.i/DG091112A60.b/0910165-03A60.d
Lab Smp Id: 0910165-03 Client Smp ID: 13MW2
Inj Date : 12-NOV-2009 20:22
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-03:2650
Misc Info : 13MW2
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	975.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.118	9.114	(1.000)	88804	40.0000		
*	2 Naphthalene-d8	136	12.300	12.306	(1.000)	243636	40.0000		
*	3 Acenaphthene-d10	164	16.740	16.746	(1.000)	186264	40.0000		
*	4 Phenanthrene-d10	188	20.392	20.408	(1.000)	393928	40.0000		
*	5 Chrysene-d12	240	26.592	26.608	(1.000)	347131	40.0000		
*	6 Perylene-d12	264	29.866	29.872	(1.000)	335421	40.0000		
$	7 2-Fluorophenol	112	6.111	6.147	(0.670)	239796	117.338	60.2	
$	8 Phenol-d5	99	8.617	8.633	(0.945)	179897	71.2347	36.5	
$	11 Nitrobenzene-d5	82	10.622	10.628	(0.864)	211730	86.0519	44.1	
$	12 2-Fluorobiphenyl	172	15.154	15.160	(0.905)	472182	76.8478	39.4	
$	13 2,4,6-Tribromophenol	330	18.766	18.782	(1.121)	189402	182.737	93.7	(A)
$	14 Terphenyl-d14	244	24.178	24.173	(0.909)	598736	94.2099	48.3	
	23 Phenol	94	Compound Not Detected.						
	27 2-Chlorophenol	128	Compound Not Detected.						
	35 3-Methylphenol	108	Compound Not Detected.						

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-03A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW3

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-04

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-04A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

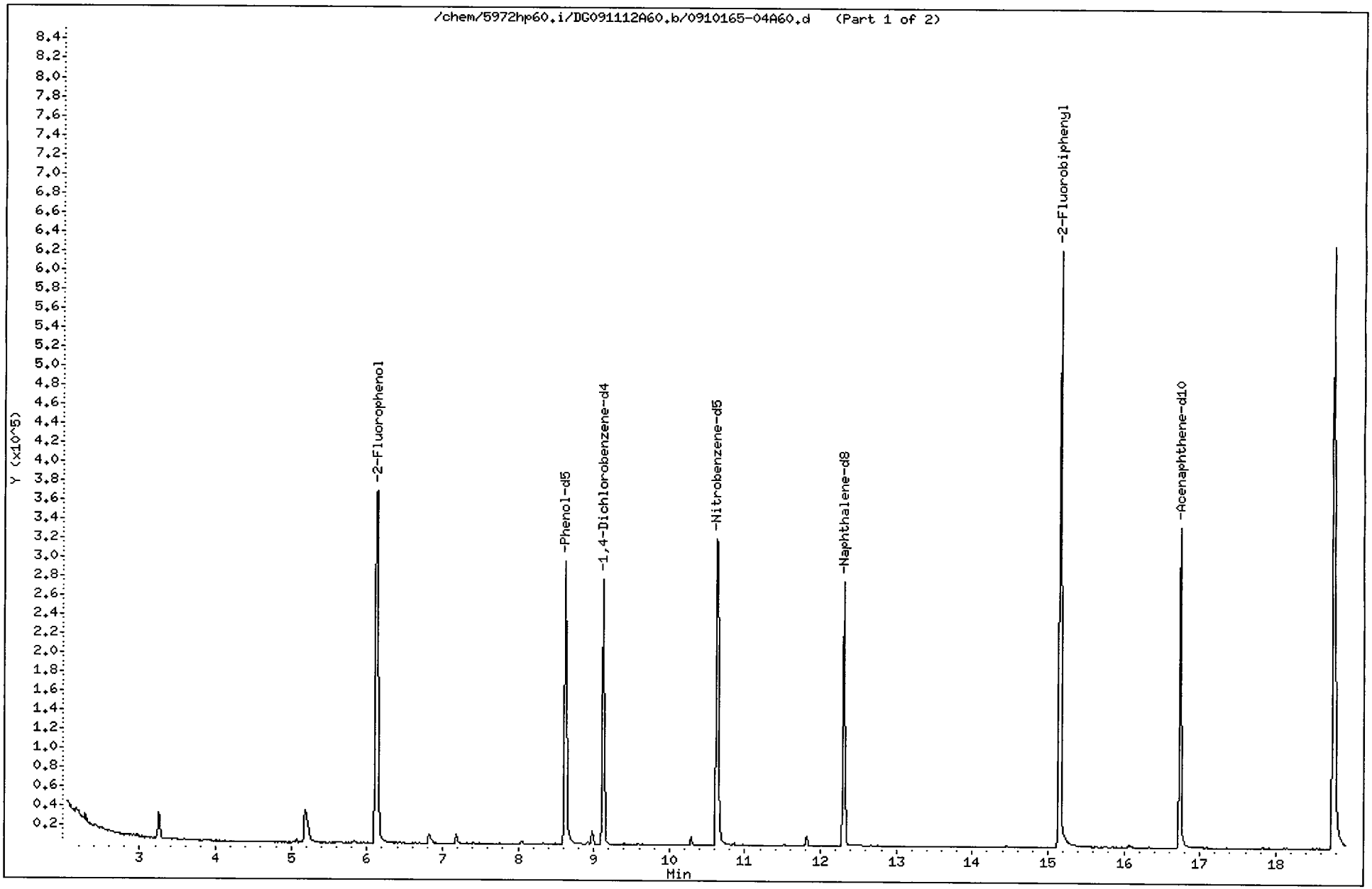
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

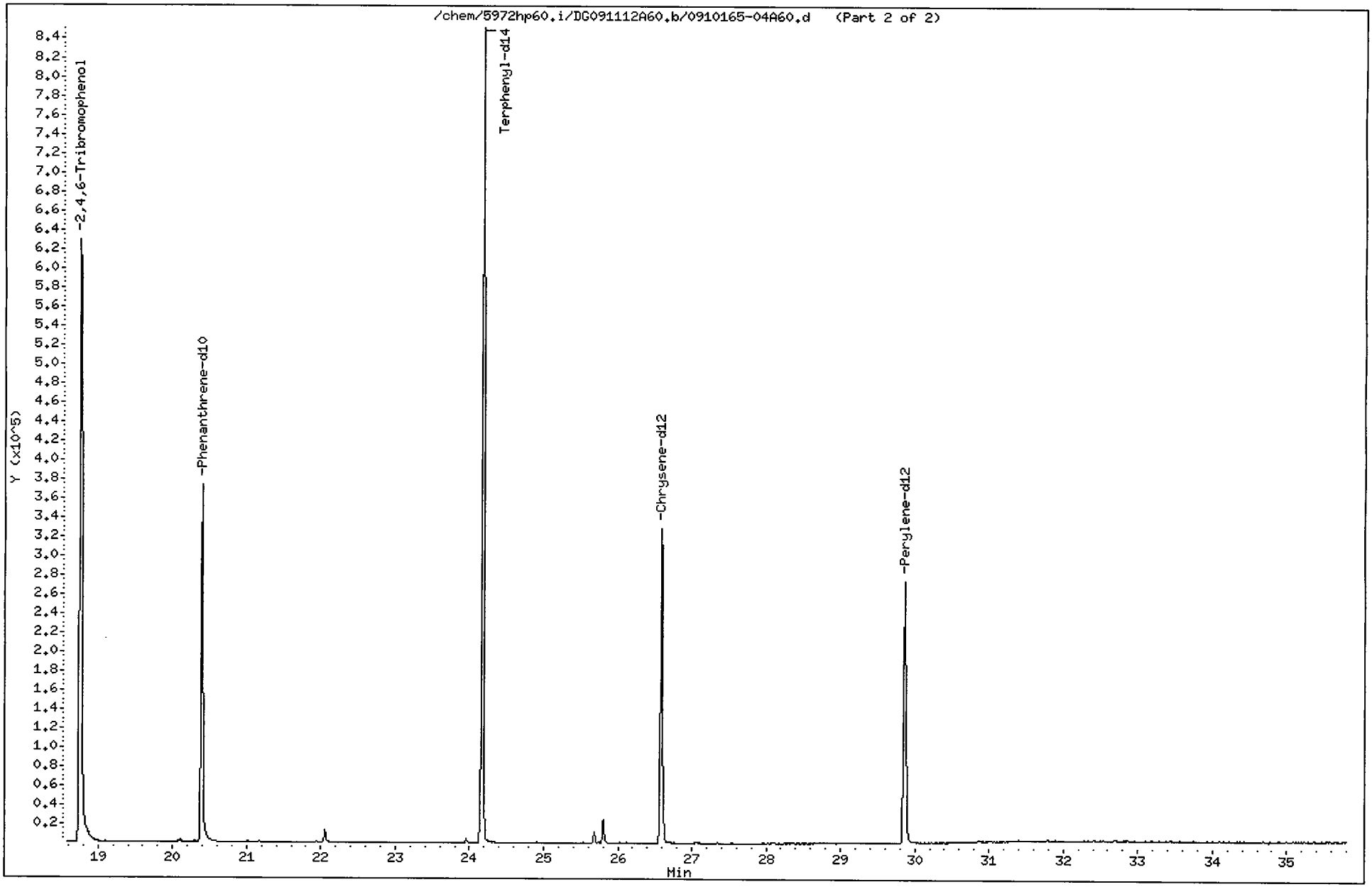
Data File: /chem/5972hp60.i/DG091112A60.b/0910165-04A60.d
Date : 12-NOV-2009 21:12
Client ID: 13MW3
Sample Info: 0910165-04;2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-04A60.d
Date : 12-NOV-2009 21:12
Client ID: 13MW3
Sample Info: 0910165-04:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-04A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/0910165-04A60.d
Lab Smp Id: 0910165-04 Client Smp ID: 13MW3
Inj Date : 12-NOV-2009 21:12
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-04:2650
Misc Info : 13MW3
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 10
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY	
*	1 1,4-Dichlorobenzene-d4	152	9.119	9.114	(1.000)	76925	40.0000			
*	2 Naphthalene-d8	136	12.301	12.306	(1.000)	203831	40.0000			
*	3 Acenaphthene-d10	164	16.741	16.746	(1.000)	151844	40.0000			
*	4 Phenanthrene-d10	188	20.393	20.408	(1.000)	321733	40.0000			
*	5 Chrysene-d12	240	26.583	26.608	(1.000)	282153	40.0000			
*	6 Perylene-d12	264	29.857	29.872	(1.000)	268250	40.0000			
$	7 2-Fluorophenol	112	6.132	6.147	(0.672)	209812	118.520	59.3		
$	8 Phenol-d5	99	8.628	8.633	(0.946)	154802	70.7635	35.4		
$	11 Nitrobenzene-d5	82	10.623	10.628	(0.864)	174965	84.9964	42.5		
$	12 2-Fluorobiphenyl	172	15.155	15.160	(0.905)	387165	77.2946	38.6		
$	13 2,4,6-Tribromophenol	330	18.767	18.782	(1.121)	149740	177.220	88.6		(A)
$	14 Terphenyl-d14	244	24.179	24.173	(0.910)	496411	96.0973	48.0		
	23 Phenol	94	Compound Not Detected.							
	27 2-Chlorophenol	128	Compound Not Detected.							
	35 3-Methylphenol	108	Compound Not Detected.							

11/13/09

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-04A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW4

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-05

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-05A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

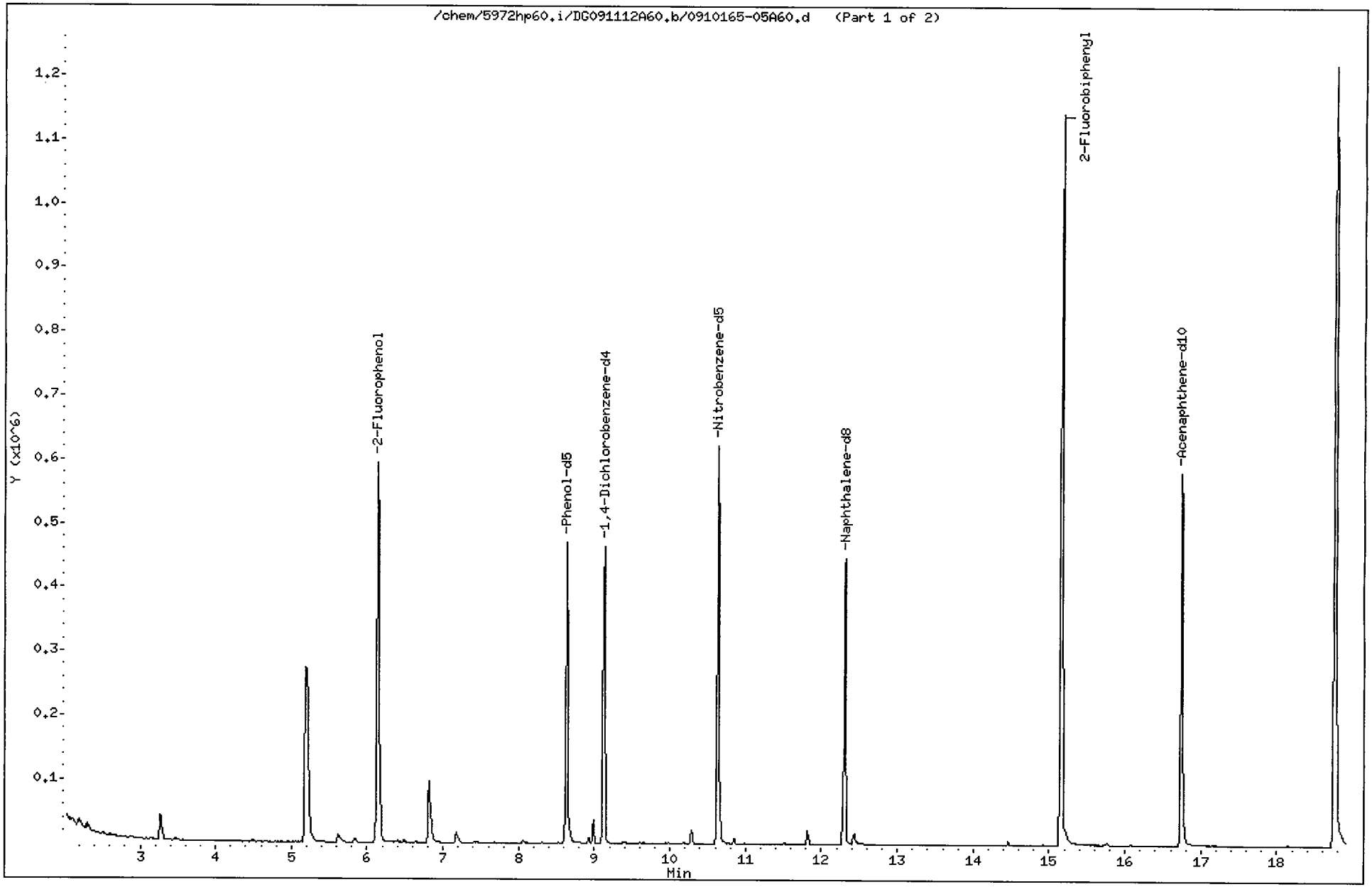
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

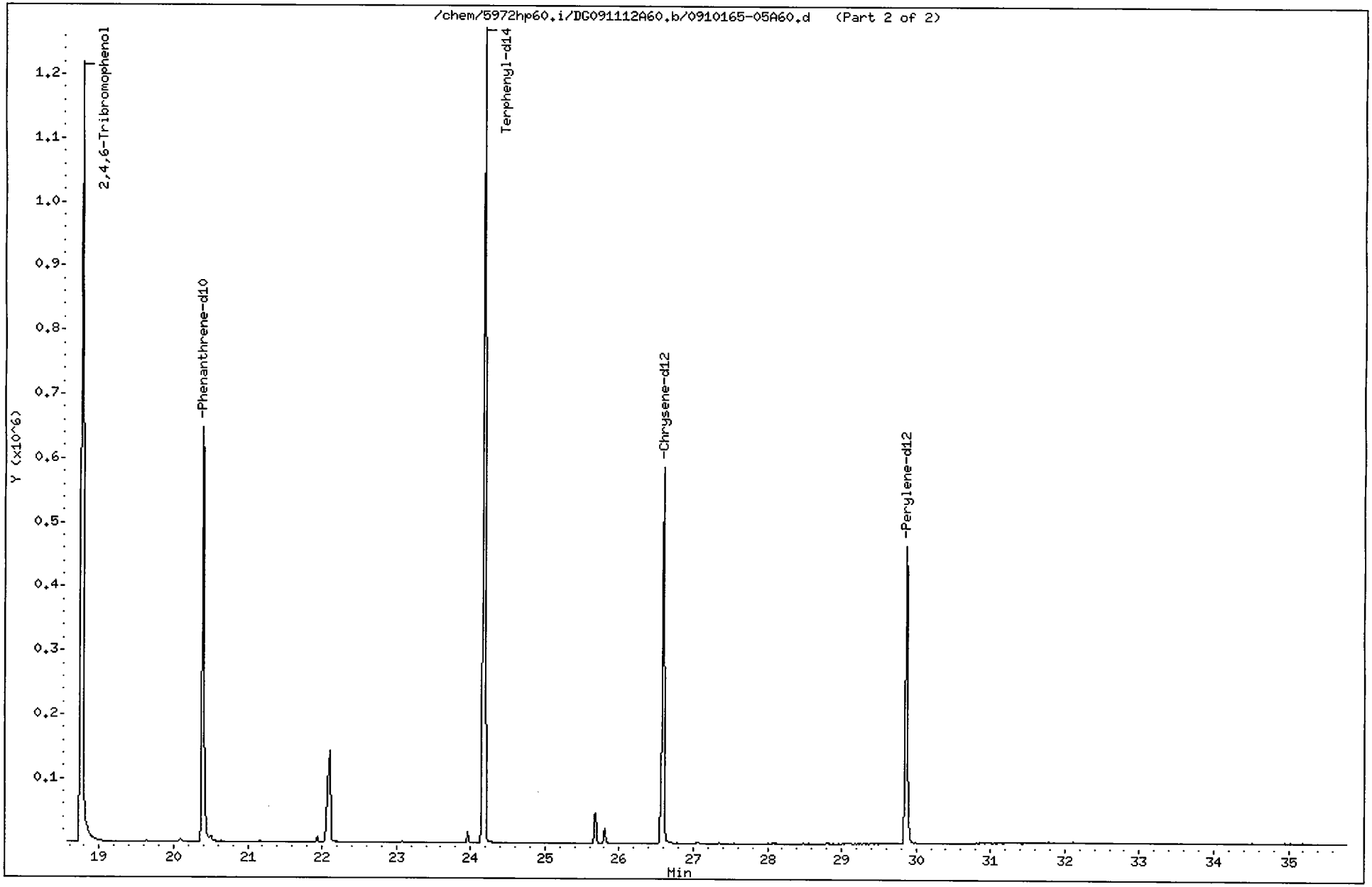
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Date : 12-NOV-2009 21:59
Client ID: 13MW4
Sample Info: 0910165-05:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-05A60.d
Date : 12-NOV-2009 21:59
Client ID: 13MW4
Sample Info: 0910165-05:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-05A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

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Data file : /chem/5972hp60.i/DG091112A60.b/0910165-05A60.d
Lab Smp Id: 0910165-05 Client Smp ID: 13MW4
Inj Date : 12-NOV-2009 21:59
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-05:2650
Misc Info : 13MW4
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.128	9.114	(1.000)	127544	40.0000		
*	2 Naphthalene-d8	136	12.310	12.306	(1.000)	355835	40.0000		
*	3 Acenaphthene-d10	164	16.740	16.746	(1.000)	273181	40.0000		
*	4 Phenanthrene-d10	188	20.392	20.408	(1.000)	575910	40.0000		
*	5 Chrysene-d12	240	26.592	26.608	(1.000)	483395	40.0000		
*	6 Perylene-d12	264	29.865	29.872	(1.000)	447545	40.0000		
$	7 2-Fluorophenol	112	6.141	6.147	(0.673)	317489	108.168	54.1	
$	8 Phenol-d5	99	8.637	8.633	(0.946)	244180	67.3210	33.7	
$	11 Nitrobenzene-d5	82	10.632	10.628	(0.864)	295460	82.2185	41.1	
$	12 2-Fluorobiphenyl	172	15.164	15.160	(0.906)	666727	73.9858	37.0	
$	13 2,4,6-Tribromophenol	330	18.776	18.782	(1.122)	282590	185.899	92.9	(A)
$	14 Terphenyl-d14	244	24.188	24.173	(0.910)	828075	93.5668	46.8	
	23 Phenol	94	Compound Not Detected.						
	27 2-Chlorophenol	128	Compound Not Detected.						
	35 3-Methylphenol	108	Compound Not Detected.						

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-05A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW5

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-01

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-01A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

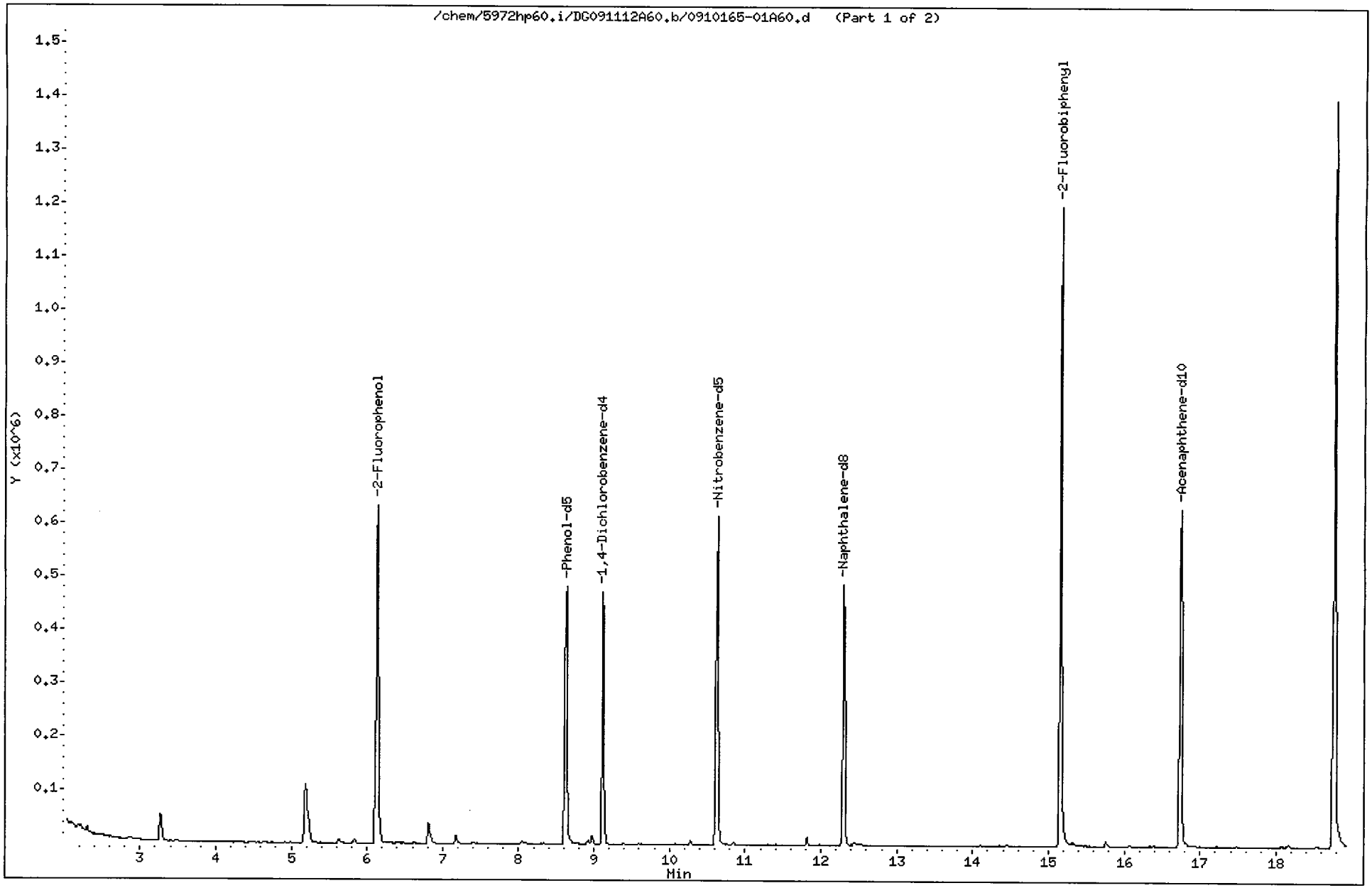
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

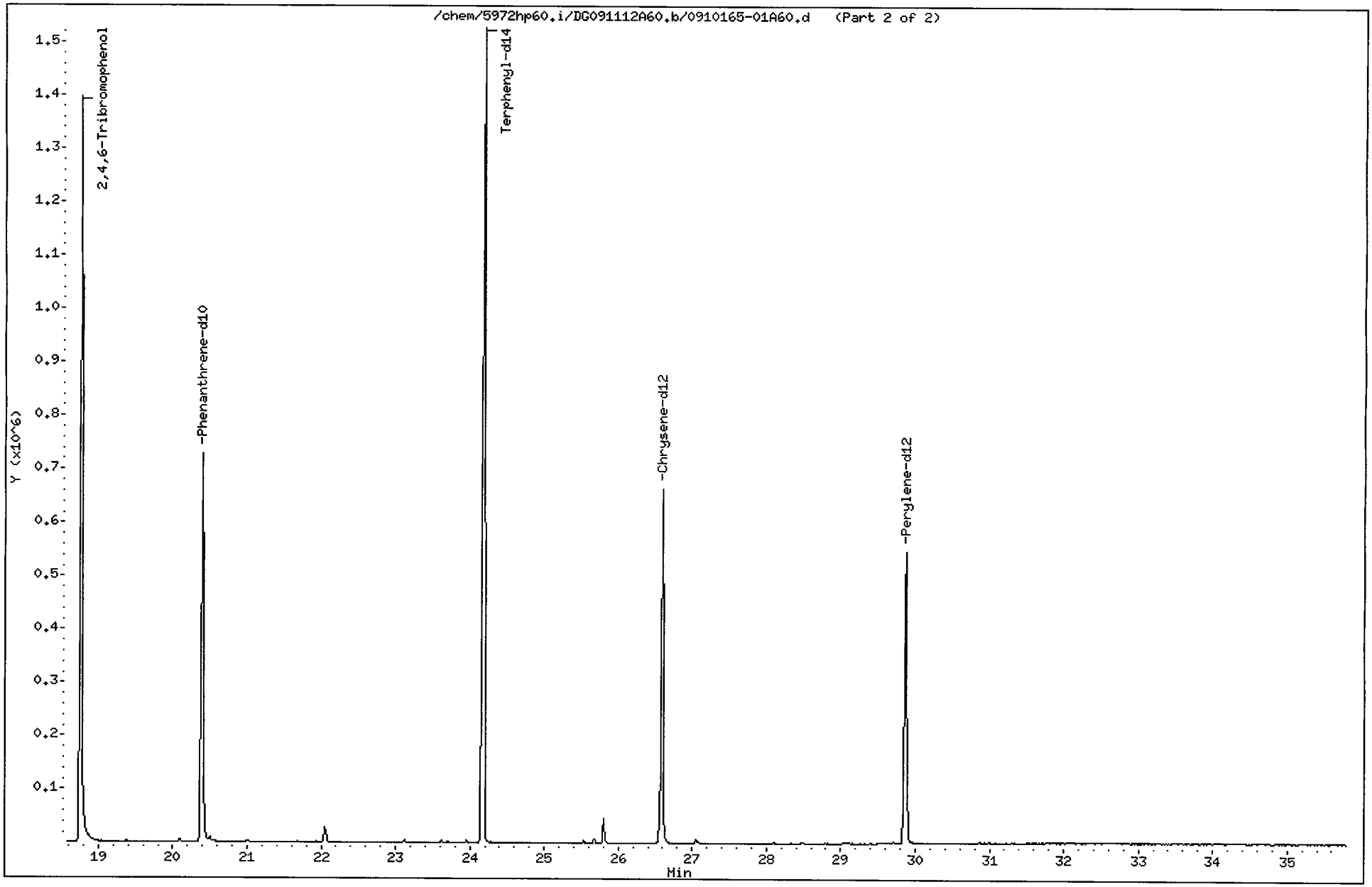
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Date : 12-NOV-2009 17:06
Client ID: 13MW5
Sample Info: 0910165-01:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-01A60.d
Date : 12-NOV-2009 17:06
Client ID: 13MW5
Sample Info: 0910165-01:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-01A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

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Data file : /chem/5972hp60.i/DG091112A60.b/0910165-01A60.d
Lab Smp Id: 0910165-01 Client Smp ID: 13MW5
Inj Date : 12-NOV-2009 17:06
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-01:2650
Misc Info : 13MW5
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.112	9.114	(1.000)	133772	40.0000		
*	2 Naphthalene-d8	136	12.294	12.306	(1.000)	374564	40.0000		
*	3 Acenaphthene-d10	164	16.744	16.746	(1.000)	296256	40.0000		
*	4 Phenanthrene-d10	188	20.397	20.408	(1.000)	628985	40.0000		
*	5 Chrysene-d12	240	26.596	26.608	(1.000)	548313	40.0000		
*	6 Perylene-d12	264	29.870	29.872	(1.000)	527718	40.0000		
$	7 2-Fluorophenol	112	6.135	6.147	(0.673)	351555	114.198	57.1	
$	8 Phenol-d5	99	8.632	8.633	(0.947)	260660	68.5188	34.2	
$	11 Nitrobenzene-d5	82	10.626	10.628	(0.864)	315976	83.5310	41.8	
$	12 2-Fluorobiphenyl	172	15.159	15.160	(0.905)	711540	72.8086	36.4	
$	13 2,4,6-Tribromophenol	330	18.770	18.782	(1.121)	317656	192.691	96.3	(A)
$	14 Terphenyl-d14	244	24.182	24.173	(0.909)	947386	94.3741	47.2	
	23 Phenol	94	Compound Not Detected.						
	27 2-Chlorophenol	128	Compound Not Detected.						
	35 3-Methylphenol	108	Compound Not Detected.						

6/11/13

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-01A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-07

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-07A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

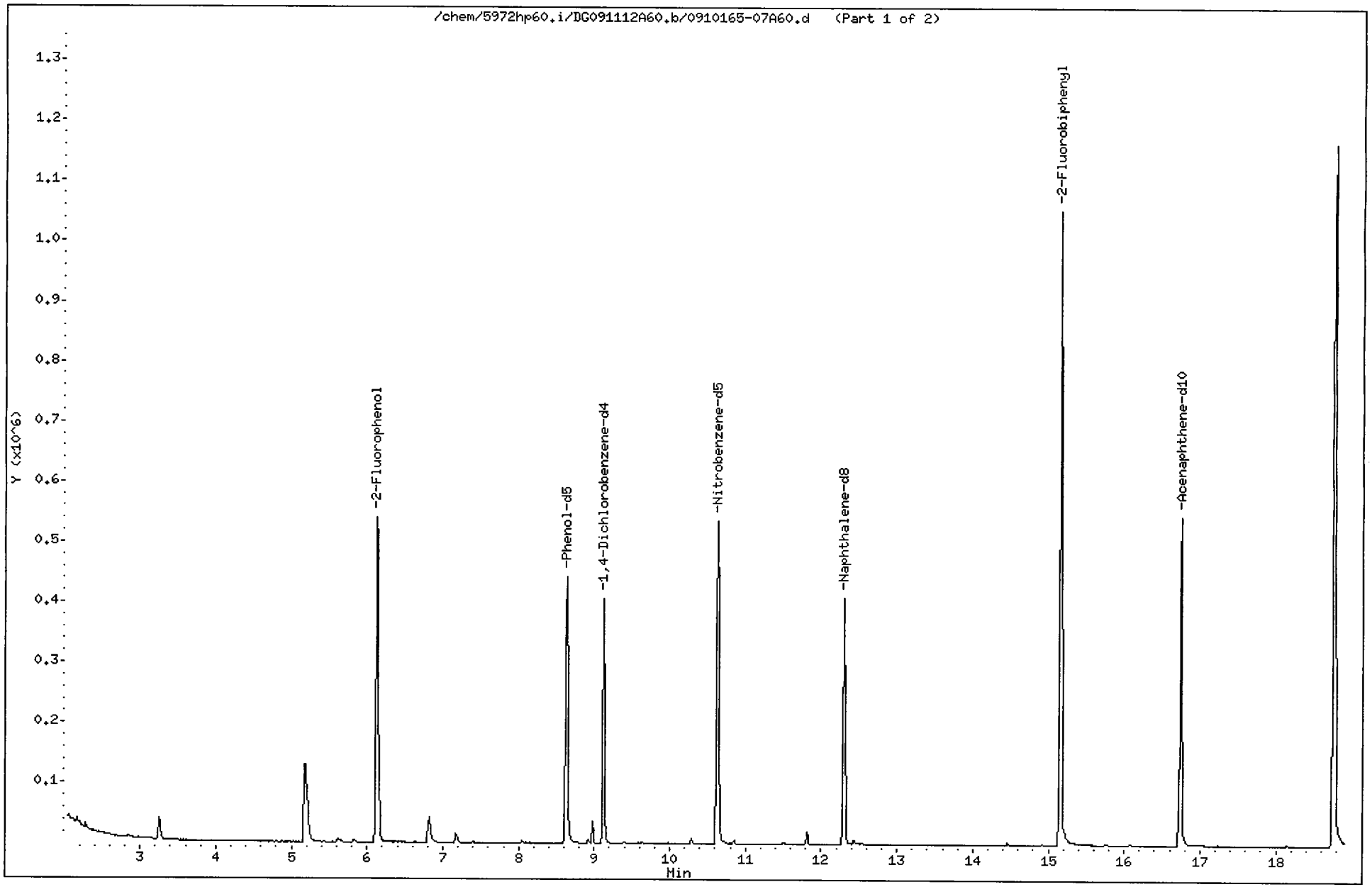
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

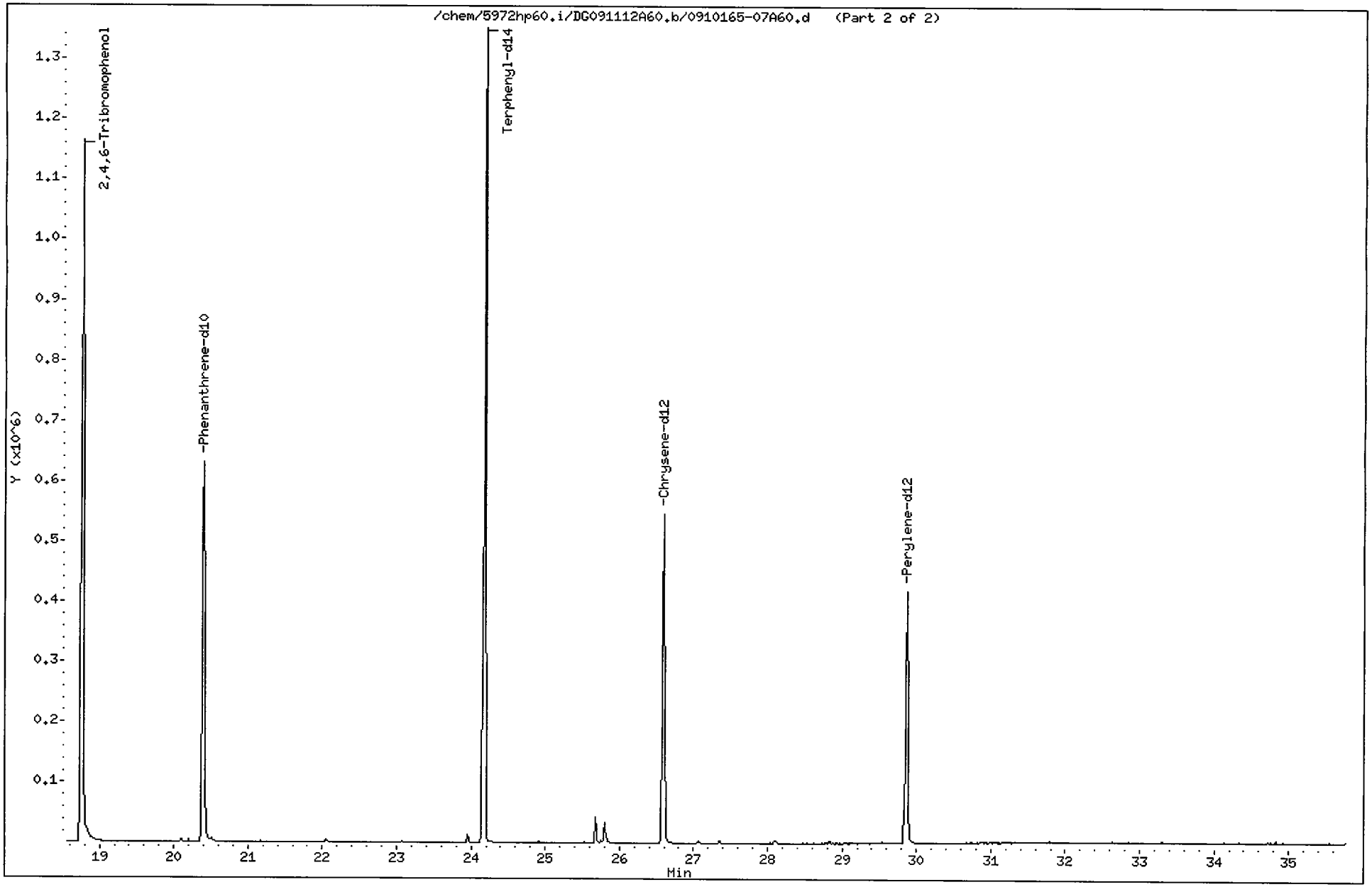
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Date : 12-NOV-2009 23:35
Client ID: 13MW6
Sample Info: 0910165-07:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-07A60.d
Date : 12-NOV-2009 23:35
Client ID: 13MW6
Sample Info: 0910165-07:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-07A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/0910165-07A60.d
Lab Smp Id: 0910165-07 Client Smp ID: 13MW6
Inj Date : 12-NOV-2009 23:35
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-07:2650
Misc Info : 13MW6
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 13
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY	
* 1 1,4-Dichlorobenzene-d4	152	9.125	9.114	(1.000)	115178	40.0000			
* 2 Naphthalene-d8	136	12.306	12.306	(1.000)	322387	40.0000			
* 3 Acenaphthene-d10	164	16.746	16.746	(1.000)	251571	40.0000			
* 4 Phenanthrene-d10	188	20.399	20.408	(1.000)	542406	40.0000			
* 5 Chrysene-d12	240	26.588	26.608	(1.000)	467459	40.0000			
* 6 Perylene-d12	264	29.872	29.872	(1.000)	419876	40.0000			
$ 7 2-Fluorophenol	112	6.127	6.147	(0.671)	295437	111.462	55.7		
$ 8 Phenol-d5	99	8.634	8.633	(0.946)	232759	71.0620	35.5		
$ 11 Nitrobenzene-d5	82	10.629	10.628	(0.864)	274086	84.1839	42.1		
$ 12 2-Fluorobiphenyl	172	15.161	15.160	(0.905)	613827	73.9667	37.0		
$ 13 2,4,6-Tribromophenol	330	18.772	18.782	(1.121)	267458	191.059	95.5		(A)
$ 14 Terphenyl-d14	244	24.184	24.173	(0.910)	810777	94.7354	47.4		
23 Phenol	94	Compound Not Detected.							
27 2-Chlorophenol	128	Compound Not Detected.							
35 3-Methylphenol	108	Compound Not Detected.							

on 11/17/09

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-07A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW7

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-08

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 0910165-08A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/13/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

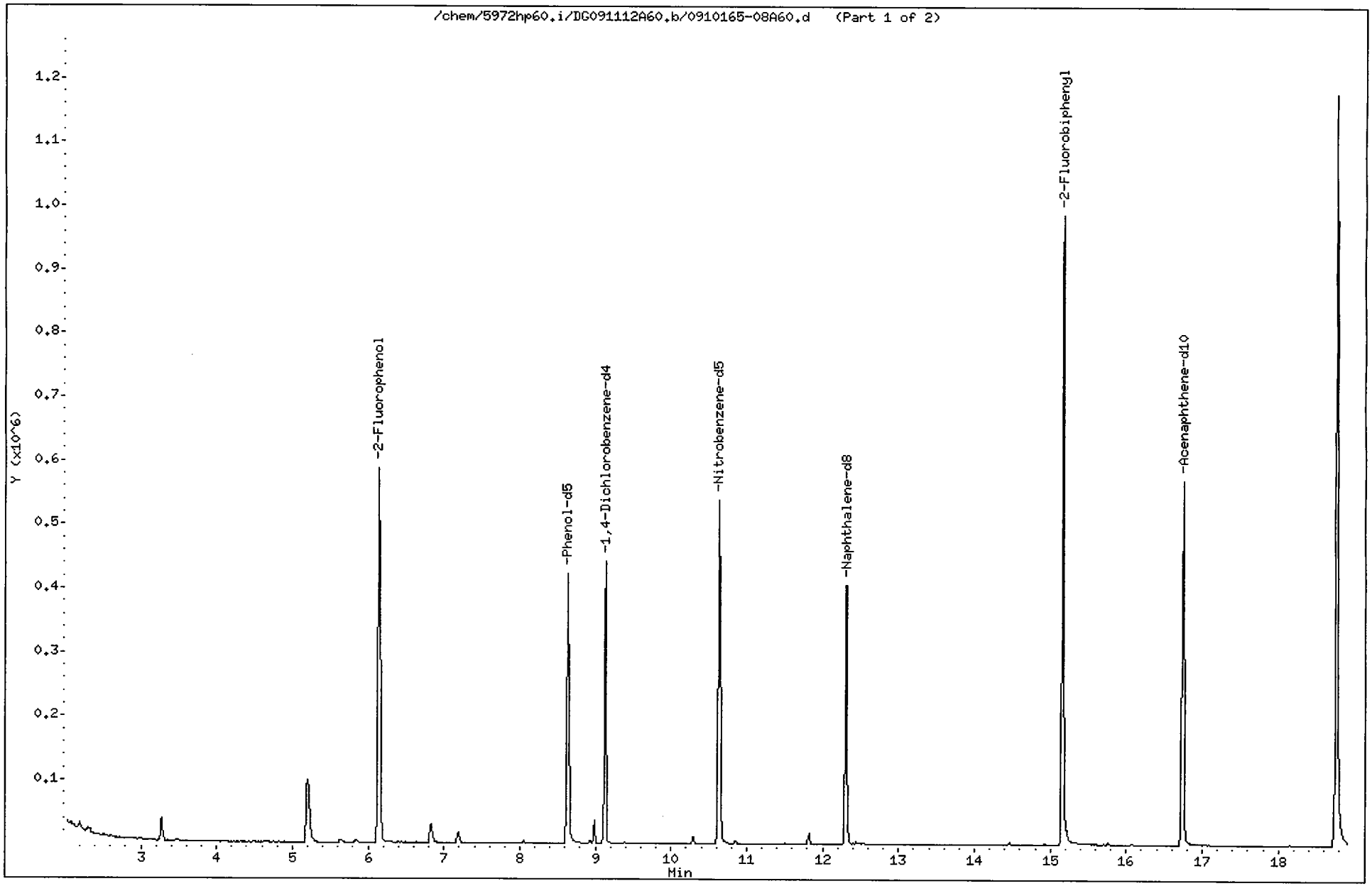
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

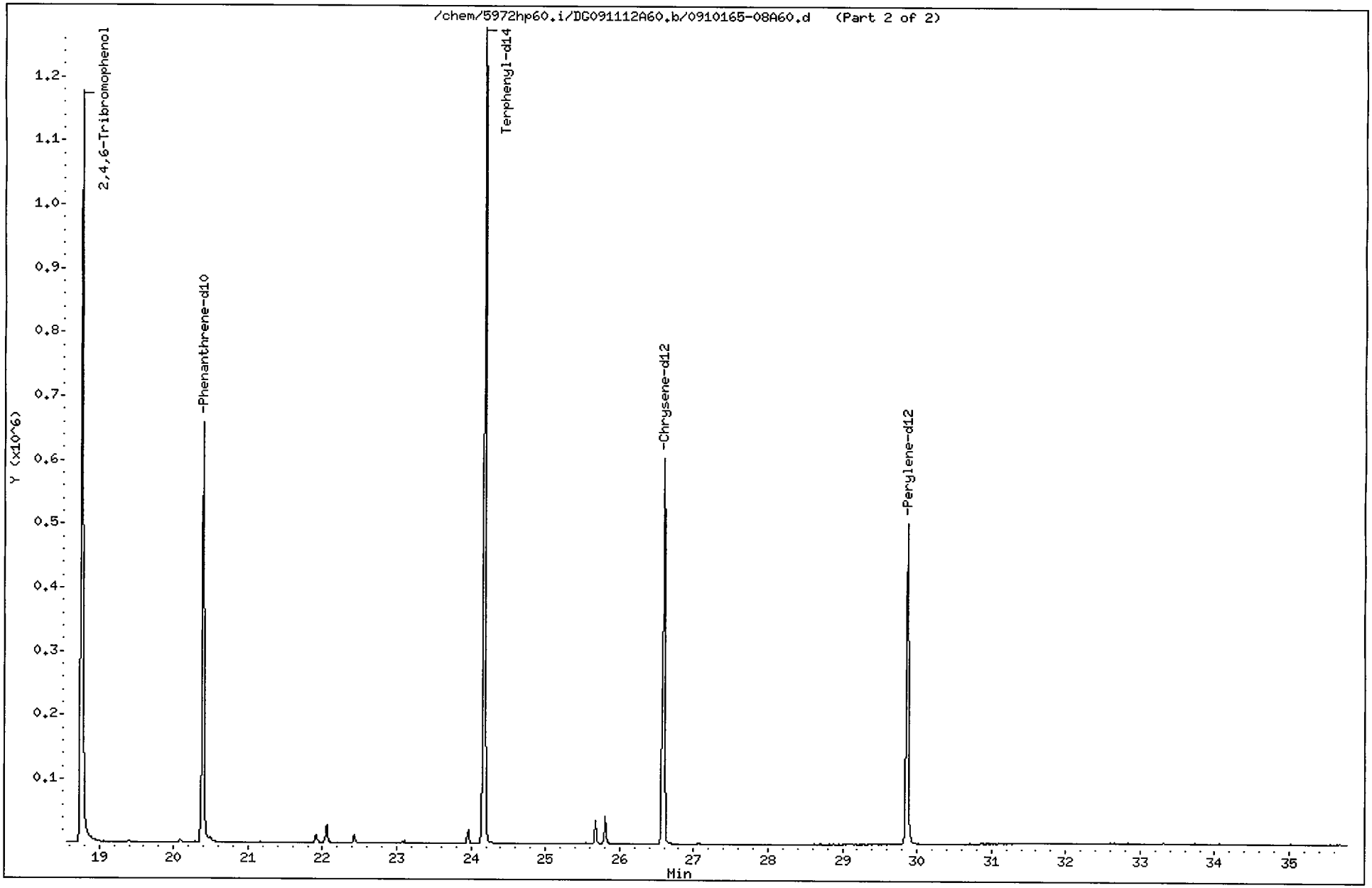
Data File: /chem/5972hp60.i/DG091112A60.b/0910165-08A60.d
Date : 13-NOV-2009 00:22
Client ID: 13MW7
Sample Info: 0910165-08:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DC091112A60.b/0910165-08A60.d
Date : 13-NOV-2009 00:22
Client ID: 13MW7
Sample Info: 0910165-08:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-08A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/0910165-08A60.d
Lab Smp Id: 0910165-08 Client Smp ID: 13MW7
Inj Date : 13-NOV-2009 00:22
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-08:2650
Misc Info : 13MW7
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 14
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.128	9.114	(1.000)	117894	40.0000		
* 2 Naphthalene-d8	136	12.310	12.306	(1.000)	325127	40.0000		
* 3 Acenaphthene-d10	164	16.740	16.746	(1.000)	256836	40.0000		
* 4 Phenanthrene-d10	188	20.392	20.408	(1.000)	569887	40.0000		
* 5 Chrysene-d12	240	26.592	26.608	(1.000)	504598	40.0000		
* 6 Perylene-d12	264	29.866	29.872	(1.000)	490360	40.0000		
$ 7 2-Fluorophenol	112	6.141	6.147	(0.673)	284525	104.872	52.4	
$ 8 Phenol-d5	99	8.637	8.633	(0.946)	217551	64.8888	32.4	
$ 11 Nitrobenzene-d5	82	10.632	10.628	(0.864)	260540	79.3489	39.7	
$ 12 2-Fluorobiphenyl	172	15.164	15.160	(0.906)	607978	71.7601	35.9	
$ 13 2,4,6-Tribromophenol	330	18.766	18.782	(1.121)	261360	182.875	91.4	(A)
$ 14 Terphenyl-d14	244	24.177	24.173	(0.909)	812768	87.9783	44.0	
23 Phenol	94	Compound Not Detected.						
27 2-Chlorophenol	128	Compound Not Detected.						
35 3-Methylphenol	108	Compound Not Detected.						

11/13/09

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-08A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-06

Sample wt/vol: 900 (g/mL) ML Lab File ID: 0910165-06A60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

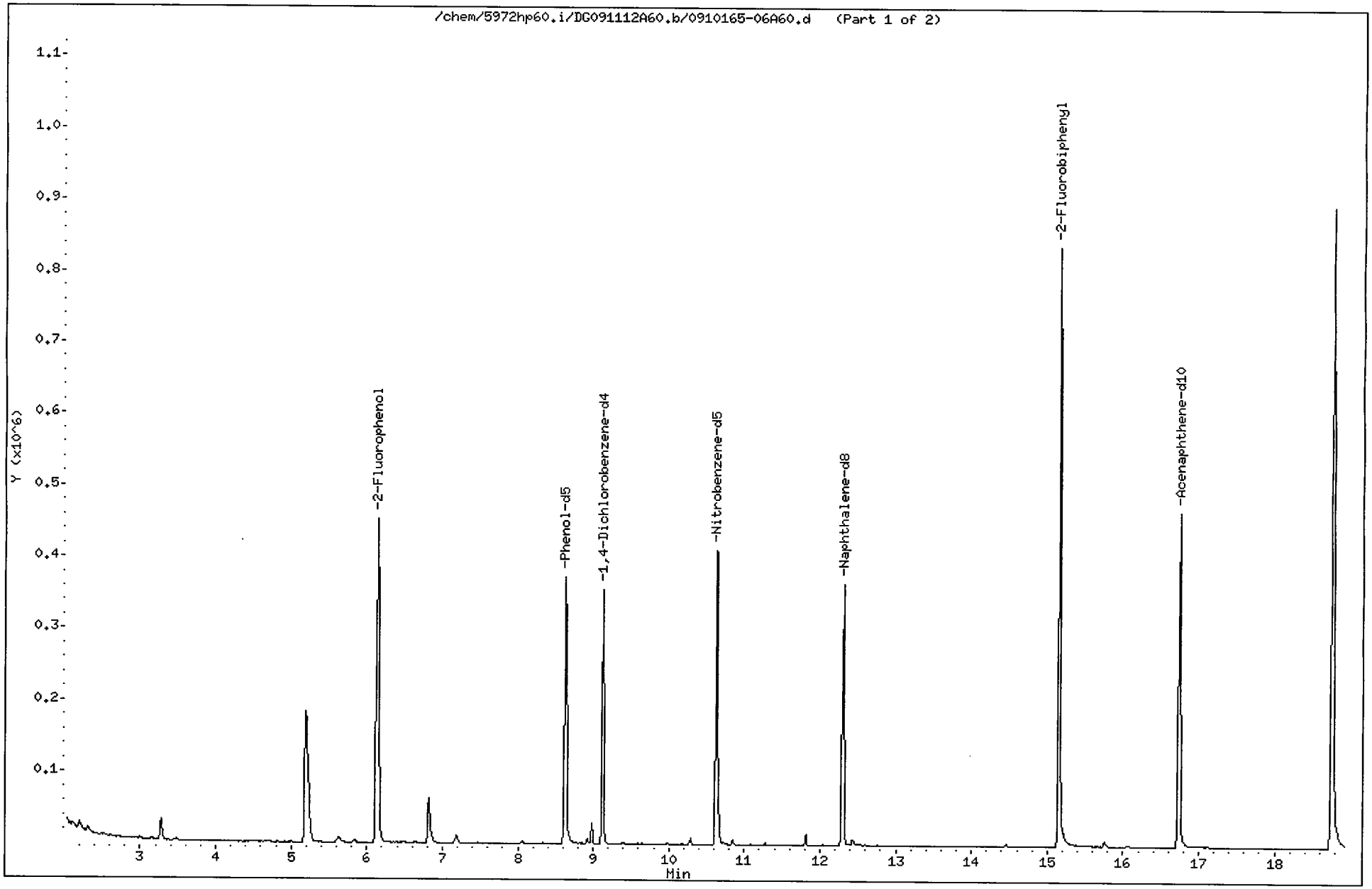
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.56	U
95-57-8	2-Chlorophenol	5.56	U
108-39-4	3-Methylphenol	11.1	U
106-44-5	4-Methylphenol	11.1	U
98-86-2	Acetophenone	5.56	U
67-72-1	Hexachloroethane	5.56	U
98-95-3	Nitrobenzene	5.56	U
120-83-2	2,4-Dichlorophenol	5.56	U
131-11-3	Dimethylphthalate	5.56	U
100-02-7	4-Nitrophenol	11.1	U
132-64-9	Dibenzofuran	5.56	U
84-66-2	Diethylphthalate	5.56	U
86-30-6	N-Nitrosodiphenylamine (1)	5.56	U
84-74-2	Di-n-butylphthalate	5.56	U
206-44-0	Fluoranthene	5.56	U
129-00-0	Pyrene	5.56	U
85-68-7	Butylbenzylphthalate	5.56	U
119-93-7	3,3'-Dimethylbenzidine	5.56	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.56	U
56-55-3	Benzo(a)anthracene	5.56	U
117-84-0	Di-n-octylphthalate	5.56	U
205-99-2	Benzo(b)fluoranthene	5.56	U
207-08-9	Benzo(k)fluoranthene	5.56	U
50-32-8	Benzo(a)pyrene	5.56	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.56	U
53-70-3	Dibenzo(a,h)anthracene	5.56	U

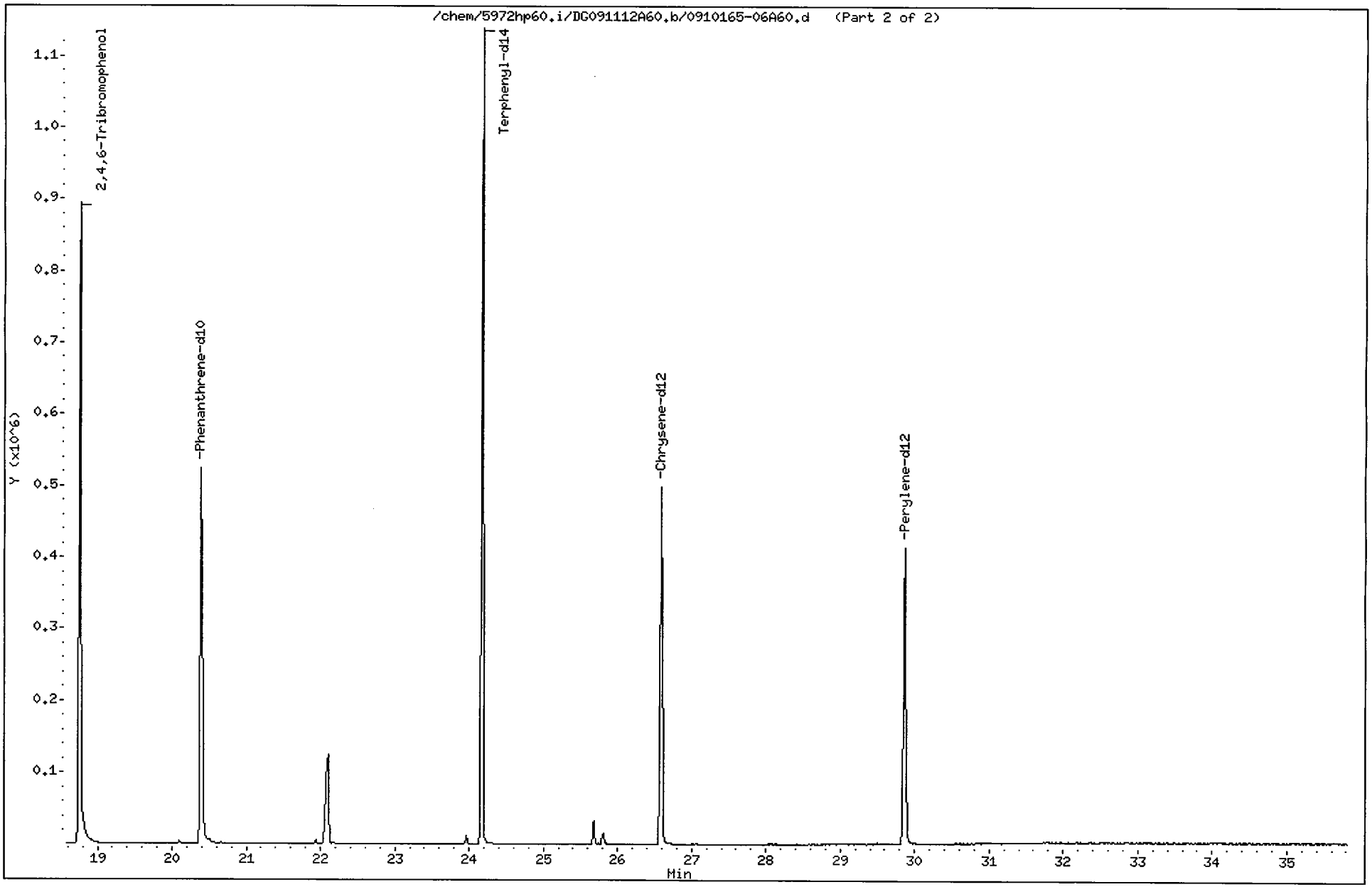
(1) - Cannot be separated from Diphenylamine

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-06A60.d
Date : 12-NOV-2009 22:47
Client ID: 13MWDUP
Sample Info: 0910165-06:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-06A60.d
Date : 12-NOV-2009 22:47
Client ID: 13MWDUP
Instrument: 5972hp60.i
Sample Info: 0910165-06:2650
Volume Injected (uL): 2.0
Operator: 2650
Column phase: RTX-5MS
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/0910165-06A60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/0910165-06A60.d
Lab Smp Id: 0910165-06 Client Smp ID: 13MWDUP
Inj Date : 12-NOV-2009 22:47
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 0910165-06:2650
Misc Info : 13MWDUP
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	900.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.128	9.114	(1.000)	99086	40.0000		
*	2 Naphthalene-d8	136	12.300	12.306	(1.000)	270403	40.0000		
*	3 Acenaphthene-d10	164	16.740	16.746	(1.000)	210576	40.0000		
*	4 Phenanthrene-d10	188	20.392	20.408	(1.000)	451903	40.0000		
*	5 Chrysene-d12	240	26.592	26.608	(1.000)	407286	40.0000		
*	6 Perylene-d12	264	29.866	29.872	(1.000)	386977	40.0000		
$	7 2-Fluorophenol	112	6.141	6.147	(0.673)	257387	112.877	62.7	
$	8 Phenol-d5	99	8.627	8.633	(0.945)	196904	69.8783	38.8	
$	11 Nitrobenzene-d5	82	10.622	10.628	(0.864)	223641	81.8954	45.5	
$	12 2-Fluorobiphenyl	172	15.154	15.160	(0.905)	493829	71.0916	39.5	
$	13 2,4,6-Tribromophenol	330	18.766	18.782	(1.121)	203013	173.255	96.2	(A)
$	14 Terphenyl-d14	244	24.177	24.173	(0.909)	662581	88.8575	49.4	
	23 Phenol	94	Compound Not Detected.						
	27 2-Chlorophenol	128	Compound Not Detected.						
	35 3-Methylphenol	108	Compound Not Detected.						

ga/13/09

Data File: /chem/5972hp60.i/DG091112A60.b/0910165-06A60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

3. Standards Data

a. Initial Calibration Data (Form VI SV)

b. Continuing Calibration Data (Form VII SV)

a. Initial Calibration Data (Form VI SV)

If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order. Within each initial calibration, the standards are in order by level, from lowest to highest.

(1) Reconstructed Ion Chromatograms and quantitation reports for the initial (five-point) calibration. Spectra not required.

(2) EICPs displaying each manual integration.

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID: 5972HP60 Calibration Date(s): 11/11/09 11/11/09

Column: RTX-5MS ID: 0.32 (mm) Calibration Time(s): 1314 1710

LAB FILE ID: RF10: HI091111A60 RF20: HK091111A60 RF50: HL091111A60
RF80: HG091111A60 RF120: HJ091111A60RF160: HH091111A60

COMPOUND	RF10	RF20	RF50	RF80	RF120	RF160
Phenol	1.099	1.118	1.165	1.124	1.132	1.195
2-Chlorophenol	0.896	0.924	0.930	0.894	0.881	0.946
3-Methylphenol	0.827	0.829	0.855	0.806	0.818	0.869
4-Methylphenol	0.827	0.829	0.855	0.806	0.818	0.869
Acetophenone	0.497	0.486	0.449	0.426	0.433	0.426
Hexachloroethane	0.559	0.551	0.556	0.524	0.529	0.516
Nitrobenzene	0.442	0.448	0.403	0.387	0.382	0.362
2,4-Dichlorophenol	0.378	0.391	0.395	0.377	0.395	0.390
Dimethylphthalate	1.412	1.360	1.387	1.317	1.334	1.329
4-Nitrophenol	0.206	0.223	0.237	0.230	0.235	0.229
Dibenzofuran	1.645	1.594	1.595	1.524	1.544	1.542
Diethylphthalate	1.338	1.309	1.324	1.258	1.270	1.293
N-Nitrosodiphenylamine	0.530	0.507	0.485	0.484	0.485	0.483
Di-n-butylphthalate	1.090	1.028	0.982	0.978	0.963	0.934
Fluoranthene	0.962	0.919	0.872	0.842	0.858	0.814
Pyrene	1.261	1.174	1.142	1.084	1.101	1.070
Butylbenzylphthalate	0.620	0.566	0.553	0.547	0.546	0.553
3,3'-Dimethylbenzidine	0.550	0.550	0.542	0.519	0.508	0.520
bis(2-ethylhexyl)Phthalate	0.796	0.738	0.764	0.761	0.746	0.774
Benzo(a)anthracene	1.033	0.975	0.959	0.920	0.943	0.917
Di-n-octylphthalate	1.399	1.312	1.376	1.384	1.449	1.446
Benzo(b)fluoranthene	1.023	1.028	1.093	1.012	1.211	1.357
Benzo(k)fluoranthene	1.131	1.062	1.031	1.030	0.956	0.755
Benzo(a)pyrene	0.953	0.946	0.944	0.902	0.933	0.915
Indeno(1,2,3-c,d)pyrene	0.848	0.831	0.868	0.849	0.948	1.018
Dibenzo(a,h)anthracene	0.913	0.841	0.874	0.849	0.865	0.927
2-Fluorophenol	0.982	0.981	0.916	0.903	0.872	0.868
Phenol-d5	1.120	1.125	1.125	1.135	1.138	1.181
Nitrobenzene-d5	0.444	0.420	0.399	0.390	0.394	0.377
2-Fluorobiphenyl	1.372	1.348	1.332	1.272	1.290	1.302
2,4,6-Tribromophenol	0.218	0.212	0.224	0.217	0.226	0.239
Terphenyl-d14	0.838	0.742	0.718	0.700	0.709	0.685

FORM VI SV

FORM 6
SEMIVOLATILE INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID: 5972HP60 Calibration Date(s): 11/11/09 11/11/09

Column: RTX-5MS ID: 0.32 (mm) Calibration Time(s): 1314 1710

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2	MAX %RSD OR R^2
Phenol	AVRG	1.13894561	3.060	30.000
2-Chlorophenol	AVRG	0.91197951	2.779	90.000
3-Methylphenol	AVRG	0.83391902	2.854	90.000
4-Methylphenol	AVRG	0.83391902	2.854	90.000
Acetophenone	AVRG	0.45297282	6.945	90.000
Hexachloroethane	AVRG	0.53919389	3.426	90.000
Nitrobenzene	AVRG	0.40422172	8.508	90.000
2,4-Dichlorophenol	AVRG	0.38772645	2.085	30.000
Dimethylphthalate	AVRG	1.35660336	2.719	90.000
4-Nitrophenol	AVRG	0.22678519	4.925	90.000
Dibenzofuran	AVRG	1.57421004	2.874	90.000
Diethylphthalate	AVRG	1.29871135	2.365	90.000
N-Nitrosodiphenylamine	AVRG	0.49550531	3.828	30.000
Di-n-butylphthalate	AVRG	0.99597253	5.559	90.000
Fluoranthene	AVRG	0.87792444	6.145	30.000
Pyrene	AVRG	1.13868118	6.269	90.000
Butylbenzylphthalate	AVRG	0.56409516	4.998	90.000
3,3'-Dimethylbenzidine	AVRG	0.53142879	3.439	90.000
bis(2-ethylhexyl)Phthalate	AVRG	0.76329668	2.704	90.000
Benzo(a)anthracene	AVRG	0.95773744	4.487	90.000
Di-n-octylphthalate	AVRG	1.39432484	3.636	30.000
Benzo(b)fluoranthene	AVRG	1.12086024	12.282	90.000
Benzo(k)fluoranthene	AVRG	0.99417612	13.087	90.000
Benzo(a)pyrene	AVRG	0.93204751	2.117	30.000
Indeno(1,2,3-c,d)pyrene	AVRG	0.89372549	8.217	90.000
Dibenzo(a,h)anthracene	AVRG	0.87811556	3.936	90.000
2-Fluorophenol	AVRG	0.92051223	5.523	90.000
Phenol-d5	AVRG	1.13752176	1.967	90.000
Nitrobenzene-d5	AVRG	0.40396193	5.916	90.000
2-Fluorobiphenyl	AVRG	1.31949942	2.859	90.000
2,4,6-Tribromophenol	AVRG	0.22258110	4.302	90.000
Terphenyl-d14	AVRG	0.73232791	7.555	90.000

Average %RSD test result.

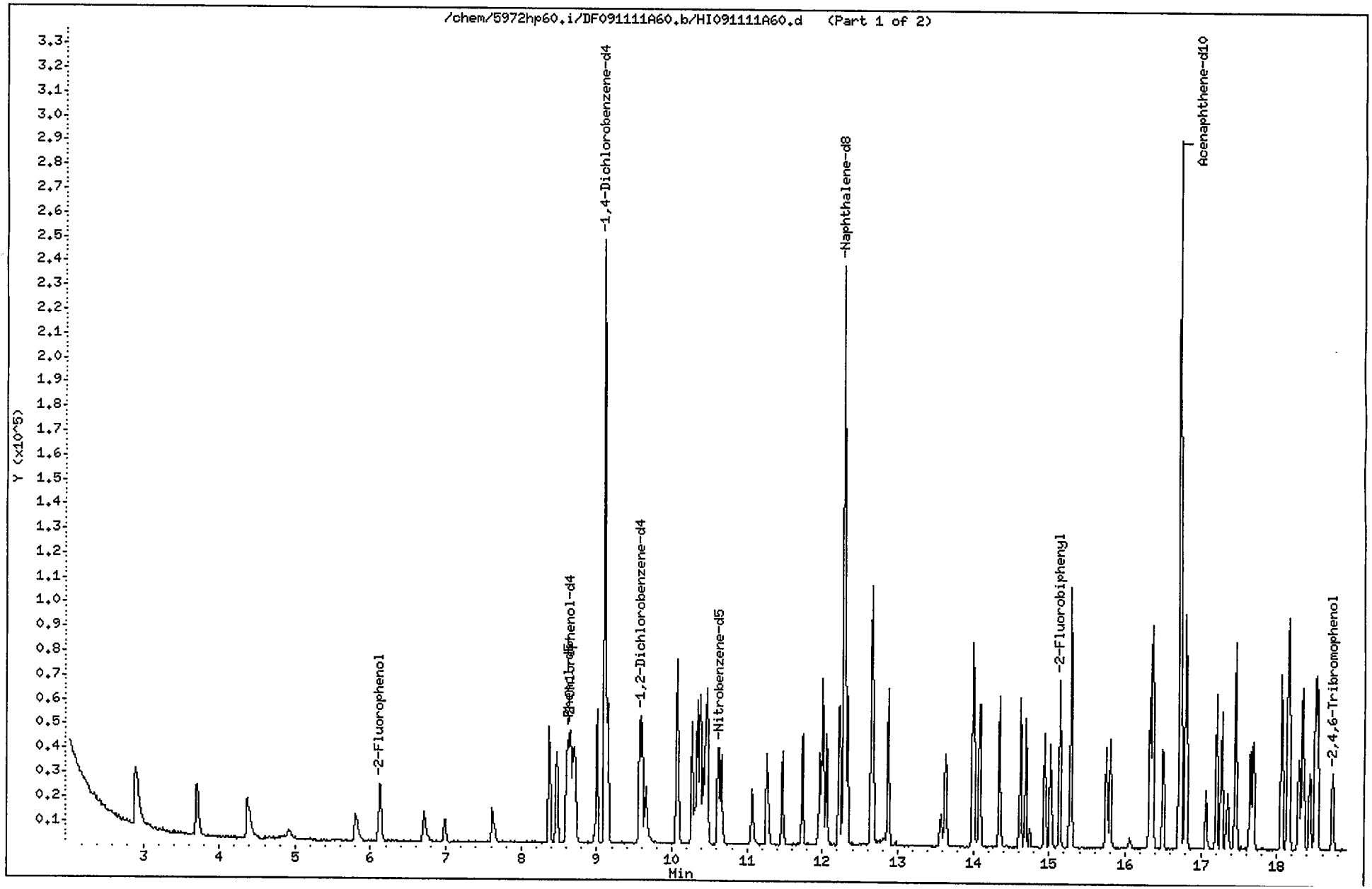
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Maximum Average %RSD: 15.00000000

Note: Passes Average %RSD Test.

FORM VI SV

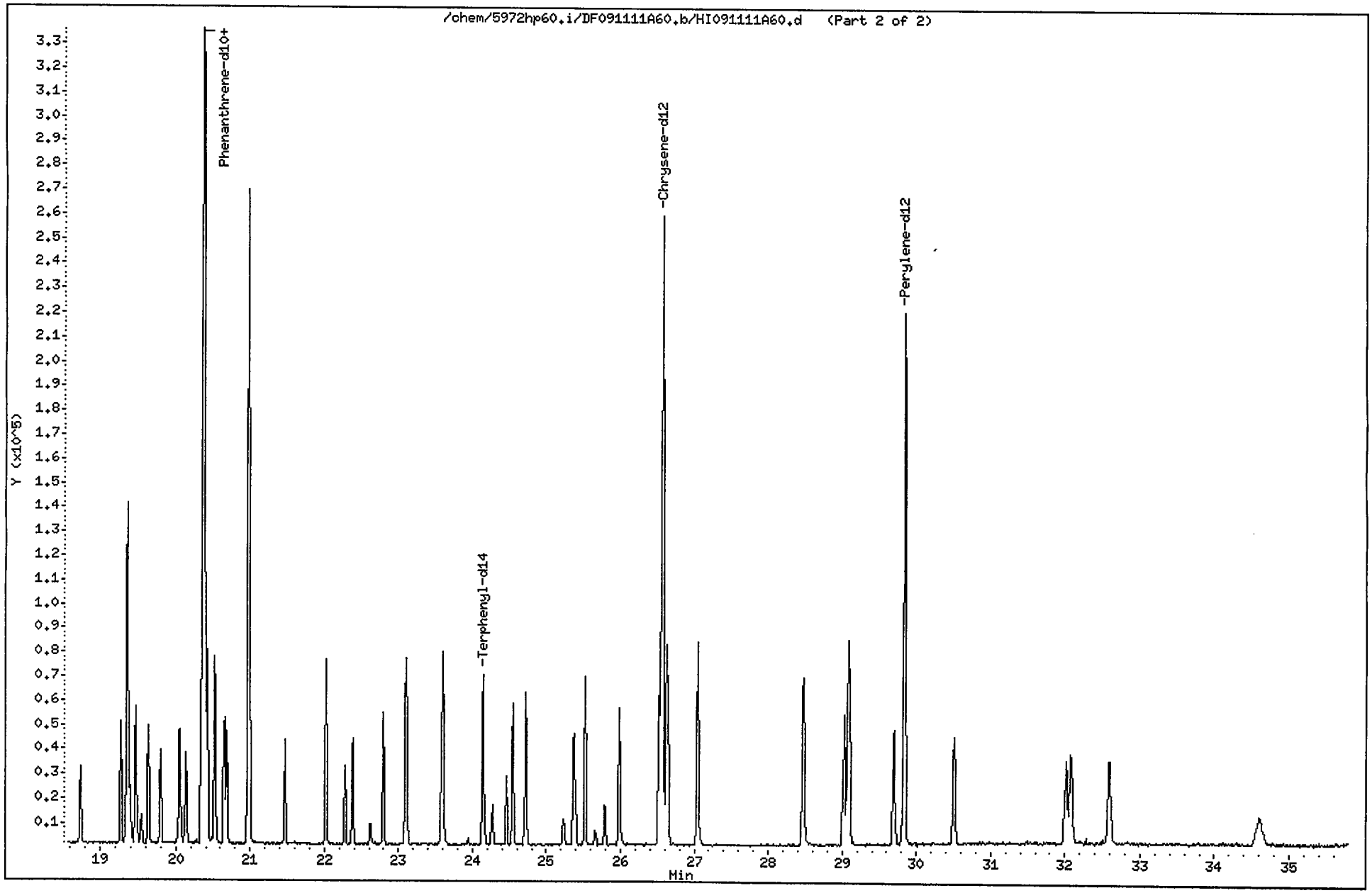
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Date : 11-NOV-2009 14:49
Client ID: SSTD010
Sample Info: SSTD010;2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Date : 11-NOV-2009 14:49
Client ID: SSTD010
Sample Info: SSTD010:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Report Date: 12-Nov-2009 17:32

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Lab Smp Id: SSTD010 Client Smp ID: SSTD010
Inj Date : 11-NOV-2009 14:49
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD010:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 12-Nov-2009 17:31 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 14:49 Cal File: HI091111A60.d
Als bottle: 4 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.107	9.104	(1.000)	65354	40.0000		
* 2 Naphthalene-d8	136	12.289	12.296	(1.000)	171818	40.0000		
* 3 Acenaphthene-d10	164	16.719	16.736	(1.000)	123469	40.0000		
* 4 Phenanthrene-d10	188	20.371	20.388	(1.000)	252587	40.0000		
* 5 Chrysene-d12	240	26.571	26.588	(1.000)	203612	40.0000		
* 6 Perylene-d12	264	29.834	29.852	(1.000)	188733	40.0000		
$ 7 2-Fluorophenol	112	6.130	6.137	(0.673)	16045	10.0000	10.7	
$ 8 Phenol-d5	99	8.606	8.623	(0.945)	18307	10.0000	9.78	(H)
$ 9 2-Chlorophenol-d4	132	8.657	8.664	(0.951)	15387	10.0000	10.1	2775
$ 10 1,2-Dichlorobenzene-d4	152	9.578	9.565	(1.052)	14565	10.0000	10.6	8536
$ 11 Nitrobenzene-d5	82	10.611	10.618	(0.863)	19055	10.0000	11.0	
$ 12 2-Fluorobiphenyl	172	15.143	15.150	(0.906)	42353	10.0000	10.4	(M)
$ 13 2,4,6-Tribromophenol	330	18.734	18.752	(1.121)	6715	10.0000	9.70	
$ 14 Terphenyl-d14	244	24.146	24.153	(0.909)	42675	10.0000	11.3	
15 N-Nitrosodimethylamine	42	2.907	2.935	(0.319)	14307	10.0000	10.6	9635

jm 11/12/09

RM 11/13/09

Data File: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.897	2.884	(0.318)	16625	10.0000	10.3	9254 (M)
17 Ethylmethacrylate	69	3.705	3.723	(0.407)	15097	10.0000	10.9	9107
18 2-Picoline	93	4.370	4.357	(0.480)	15483	10.0000	9.93	9509
19 Nitrosomethylethylamine	88	4.923	4.899	(0.541)	4804	10.0000	8.13	8049 (M)
20 Methyl Methanesulfonate	80	5.803	5.789	(0.637)	12685	10.0000	10.0	9143
21 N-Nitrosodiethylamine	102	6.703	6.680	(0.736)	5492	10.0000	8.99	8820
22 Ethyl Methanesulfonate	79	7.613	7.590	(0.836)	13481	10.0000	9.98	9291
23 Phenol	94	8.626	8.654	(0.947)	17960	10.0000	9.65	(H)
24 Aniline	93	8.473	8.480	(0.930)	20941	10.0000	10.1	9657
25 Bis(2-chloroethyl)ether	93	8.718	8.715	(0.957)	14321	10.0000	9.79	
26 Pentachloroethane	167	8.371	8.368	(0.919)	12206	10.0000	10.8	9287
27 2-Chlorophenol	128	8.698	8.695	(0.955)	14639	10.0000	9.82	9148
28 1,3-Dichlorobenzene	146	9.005	9.002	(0.989)	21423	10.0000	10.5	
29 1,4-Dichlorobenzene	146	9.148	9.145	(1.004)	22294	10.0000	10.5	
30 Benzyl Alcohol	108	9.649	9.657	(1.060)	7646	10.0000	9.10	
31 1,2-Dichlorobenzene	146	9.608	9.605	(1.055)	19854	10.0000	10.3	
32 2-Methylphenol	108	10.079	10.086	(1.107)	12664	10.0000	11.1	
33 2,2'-oxybis(1-Chloropropane)	45	10.069	10.056	(1.106)	25820	10.0000	10.3	8800
34 N-Nitrosopyrrolidine	100	10.304	10.332	(1.131)	5241	10.0000	8.29	5573
35 3-Methylphenol	108	10.468	10.495	(1.149)	27015	20.0000	19.8	
36 4-Methylphenol	108	10.468	10.495	(1.149)	27015	20.0000	19.8	
37 3-4-Methylphenol	108	10.468	10.495	(1.149)	27015	20.0000	19.8	8652
38 N-Nitroso-di-N-propylamine	70	10.417	10.424	(1.144)	10433	10.0000	9.40	8481
39 Acetophenone	105	10.263	10.270	(0.835)	21354	10.0000	11.0	0 (M)
40 N-Nitrosomorpholine	116	10.365	10.383	(1.138)	2142	10.0000	8.23	8519
41 o-Toluidine	106	10.376	10.383	(1.139)	21158	10.0000	9.85	8945
42 Hexachloroethane	117	10.335	10.332	(1.135)	9140	10.0000	10.5	9334
43 Nitrobenzene	77	10.662	10.659	(0.868)	19011	10.0000	11.1	9488
44 N-Nitrosopiperidine	114	11.061	11.068	(0.900)	5942	10.0000	9.60	9367
45 Isophorone	82	11.266	11.273	(0.917)	30231	10.0000	10.6	9722
46 2-Nitrophenol	139	11.470	11.467	(0.933)	9193	10.0000	10.2	8680
47 2,4-Dimethylphenol	122	11.736	11.754	(0.955)	11052	10.0000	10.1	8616
49 o,o,o-Triethylphosphorothioat	198	12.002	12.010	(0.977)	10630	10.0000	10.6	9197
50 Bis(2-chloroethoxy)methane	93	11.961	11.969	(0.973)	18727	10.0000	10.8	9079
51 2,4-Dichlorophenol	162	12.053	12.071	(0.981)	16262	10.0000	9.92	(H)
52 1,2,4-Trichlorobenzene	180	12.227	12.224	(0.995)	21468	10.0000	10.6	
53 Naphthalene	128	12.330	12.337	(1.003)	36983	10.0000	10.4	9146
54 4-Chloroaniline	127	12.667	12.664	(1.031)	16110	10.0000	9.86	9005
55 2,6-Dichlorophenol	162	12.647	12.644	(1.029)	17098	10.0000	10.1	
56 Hexachloropropene	213	12.667	12.664	(1.031)	15405	10.0000	10.5	9377
57 Hexachlorobutadiene	225	12.872	12.869	(1.047)	12099	10.0000	10.6	9283
58 N-Nitroso-di-n-butylamine	84	13.629	13.636	(1.109)	9095	10.0000	10.0	9638
60 4-Chloro-3-methylphenol	107	13.987	13.994	(1.138)	12805	10.0000	9.75	8890
61 Safrole	162	14.008	14.015	(1.140)	15061	10.0000	10.2	9472
62 2-Methylnaphthalene	141	14.089	14.097	(1.147)	25373	10.0000	10.6	
63 1-Methylnaphthalene	142	14.345	14.352	(1.167)	27089	10.0000	10.3	
64 Hexachlorocyclopentadiene	237	14.693	14.700	(0.879)	15050	10.0000	10.4	9299

Data File: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
65 1,2,4,5-Tetrachlorobenzene	216	14.621	14.629	(0.875)	19384	10.0000	10.5	9353
66 2,4,6-Trichlorophenol	196	14.949	14.946	(0.894)	13974	10.0000	10.2	
67 2,4,5-Trichlorophenol	196	15.020	15.028	(0.898)	14468	10.0000	9.79	
68 Isosafrole	162	14.744	14.741	(0.882)	2476	10.0000	10.2	
69 2-Chloronaphthalene	162	15.286	15.294	(0.914)	48821	10.0000	10.4	
70 2-Nitroaniline	65	15.747	15.764	(0.942)	11470	10.0000	10.6	9032
71 1,4-Napthoquinone	158	15.808	15.815	(0.946)	15236	10.0000	13.9	9336
72 Dimethylphthalate	163	16.361	16.378	(0.979)	43576	10.0000	10.4	8924
73 1,3-Dinitrobenzene	168	16.361	16.368	(0.979)	7855	10.0000	9.83	0 (M)
74 2,6-Dinitrotoluene	165	16.504	16.521	(0.987)	10628	10.0000	10.2	9397
75 Acenaphthylene	152	16.320	16.327	(0.976)	48582	10.0000	10.4	9740
76 3-Nitroaniline	138	16.811	16.828	(1.006)	7870	10.0000	9.86	9336 (a)
77 Acenaphthene	154	16.800	16.808	(1.005)	28958	10.0000	10.4	9118
78 2,4-Dinitrophenol	184	17.066	17.084	(1.021)	6907	10.0000	8.37	(a)
79 4-Nitrophenol	139	17.343	17.391	(1.037)	6368	10.0000	9.30	9291 (a)
80 Pentachlorobenzene	250	17.271	17.289	(1.033)	16122	10.0000	10.2	9464
81 2,4-Dinitrotoluene	165	17.455	17.483	(1.044)	14254	10.0000	10.1	7643
82 Dibenzofuran	168	17.199	17.217	(1.029)	50783	10.0000	10.5	9378
83 1-Naphthylamine	143	17.455	17.473	(1.044)	25672	10.0000	10.4	
84 2,3,4,6-Tetrachlorophenol	232	17.690	17.708	(1.058)	10810	10.0000	9.88	9445
85 2-Naphthylamine	143	17.650	17.667	(1.056)	27585	10.0000	10.5	
86 Diethylphthalate	149	18.141	18.168	(1.085)	41293	10.0000	10.3	9090
87 Zinophos	97	18.325	18.363	(1.096)	8972	10.0000	10.5	9108
88 4-Chlorophenyl-phenylether	204	18.161	18.168	(1.086)	21165	10.0000	10.4	7412
89 5-Nitro-o-toluidine	152	18.284	18.322	(1.094)	10118	10.0000	9.74	7496
90 Fluorene	166	18.059	18.076	(1.080)	39073	10.0000	10.3	7710
91 4-Nitroaniline	138	18.345	18.404	(1.097)	7980	10.0000	10.1	8274
92 4,6-Dinitro-2-methylphenol	198	18.437	18.465	(0.905)	9387	10.0000	9.64	8690 (a)
93 N-Nitrosodiphenylamine	169	18.499	18.526	(0.908)	33438	10.0000	10.6	9333
95 1,2-Diphenylhydrazine	77	18.529	18.547	(1.108)	42033	10.0000	10.6	9174
96 Sulfotep	322	19.276	19.294	(1.153)	5194	10.0000	9.18	9046
98 Diallate (trans isomer)	86	19.358	19.365	(0.950)	11162	5.00000	5.31	
99 Diallate (trans) part of total	86	19.358	19.365	(0.950)	11162	5.00000	5.31	9259
100 Phorate	75	19.368	19.376	(0.951)	25580	10.0000	11.8	8851
101 Phenacetin	108	19.471	19.539	(0.956)	17600	10.0000	10.5	9060
102 Diallate (cis isomer)	86	19.542	19.549	(0.959)	3066	5.00000	5.49	
103 Diallate (cis) part of total	86	19.542	19.549	(0.959)	3066	5.00000	5.48	9148
104 4-Bromophenyl-phenylether	248	19.358	19.365	(0.950)	11253	10.0000	10.4	8226
105 Hexachlorobenzene	284	19.645	19.652	(0.964)	13682	10.0000	10.6	9329
106 Dimethoate	87	19.798	19.856	(0.972)	9996	10.0000	11.4	9675
107 4-Aminobiphenyl	169	20.054	20.071	(0.984)	36299	10.0000	10.0	0 (M)
108 Pentachlorophenol	266	20.136	20.163	(0.988)	8124	10.0000	9.50	8636 (a)
109 Pentachloronitrobenzene	237	20.340	20.368	(0.998)	5412	10.0000	10.4	7535
110 Pronamide	173	20.391	20.419	(1.001)	21344	10.0000	10.4	9390
111 Disulfoton	88	20.657	20.665	(1.014)	13475	10.0000	10.4	9390
112 Phenanthrene	178	20.422	20.450	(1.002)	60616	10.0000	10.6	
113 Anthracene	178	20.524	20.552	(1.008)	60305	10.0000	10.6	

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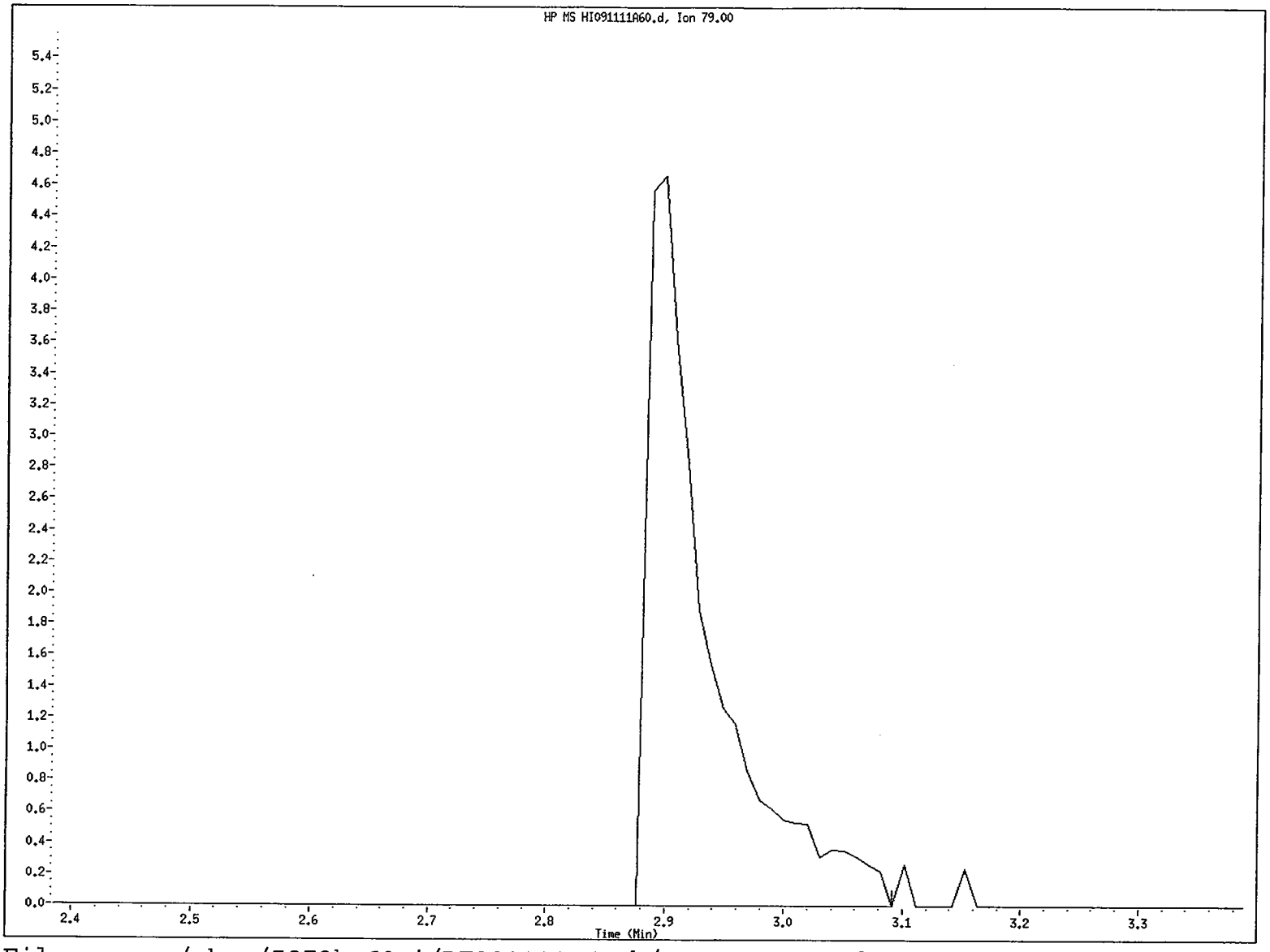
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
114 Carbazole	167	20.985	21.033	(1.030)	219125	10.0000	8.95	9349
115 Methyl Parathion	109	21.466	21.483	(1.054)	10103	10.0000	10.8	9616
116 Di-n-butylphthalate	149	22.028	22.046	(1.081)	68861	10.0000	10.9	9691
117 Parathion	109	22.386	22.394	(1.099)	7077	10.0000	10.3	8331
118 4-Nitroquinoline-1-oxide	190	22.284	22.312	(1.094)	5174	10.0000	7.88	8928
120 Isodrin	193	22.796	22.803	(1.119)	7958	10.0000	10.6	9488
121 Fluoranthene	202	23.102	23.120	(1.134)	60759	10.0000	11.0	9217
122 Benzidine	184	23.573	23.591	(0.887)	22613	10.0000	9.90	8361(a)
123 Pyrene	202	23.604	23.621	(0.888)	64202	10.0000	11.1	9326
124 p-Dimethylaminoazobenzene	225	24.545	24.562	(0.924)	10785	10.0000	10.9	9394
125 Chlorobenzilate	251	24.719	24.736	(0.930)	17124	10.0000	10.6	9693
126 Kepone	272	Compound Not Detected.						
127 Famfur	218	Compound Not Detected.						
128 Butylbenzylphthalate	149	25.527	25.534	(0.961)	31542	10.0000	10.8	9352
129 3,3'-Dimethylbenzidine	212	25.363	25.381	(0.955)	27995	10.0000	10.4	9638
130 2-Acetylaminofluorene	181	25.987	26.025	(0.978)	25818	10.0000	10.1	9348
131 3,3'-Dichlorobenzidine	252	26.642	26.660	(1.003)	18413	10.0000	9.57	8232
132 bis(2-ethylhexyl)Phthalate	149	27.041	27.048	(1.018)	40525	10.0000	10.2	9449
133 Benzo(a)anthracene	228	26.519	26.547	(0.998)	52574	10.0000	10.8	
134 Chrysene	228	26.622	26.649	(1.002)	50612	10.0000	10.8	
135 Di-n-octylphthalate	149	28.473	28.481	(0.954)	65991	10.0000	9.92	
136 7,12-Dimethylbenz(a)anthracene	256	29.098	29.125	(0.975)	22875	10.0000	10.1	8409
137 Benzo(b)fluoranthene	252	29.026	29.054	(0.973)	48260	10.0000	9.04	(H)
138 Benzo(k)fluoranthene	252	29.077	29.115	(0.975)	53386	10.0000	11.6	
139 Benzo(a)pyrene	252	29.701	29.729	(0.996)	44956	10.0000	10.3	
140 3-Methylcholanthrene	268	30.509	30.537	(1.023)	22595	10.0000	9.88	9149
141 Indeno(1,2,3-c,d)pyrene	276	32.013	32.051	(1.073)	40013	10.0000	9.37	0(M)
142 Dibenzo(a,h)anthracene	278	32.075	32.113	(1.075)	43075	10.0000	10.2	7247
143 Benzo(g,h,i)perylene	276	32.596	32.645	(1.093)	42811	10.0000	10.2	8177
198 4-Chlorophenol	128	Compound Not Detected.						
199 2,5-Dichlorophenol	162	Compound Not Detected.						
M 144 Diallate Total	86				14228	10.0000	10.7	0
201 a,a-Dimethylphenethylamine	58	12.811	13.882	(1.042)	24632	10.0000	12.1	0(aM)
202 Aramite	185	24.463	24.470	(0.921)	5466	10.0000	10.5	0(M)

11/13/09

QC Flag Legend

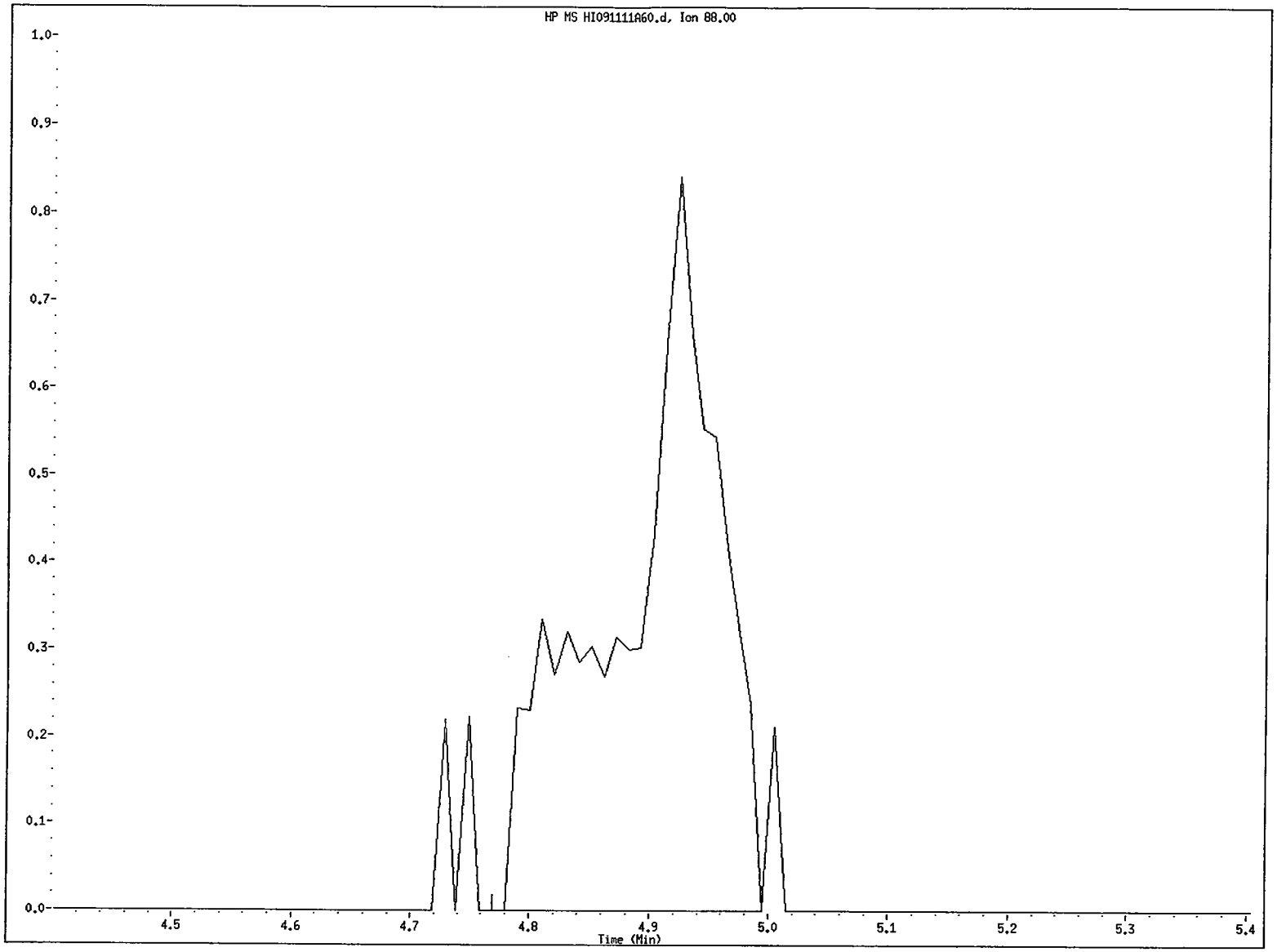
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Pyridine CAS Number 110-86-1 Area = 16625 Manually integrated



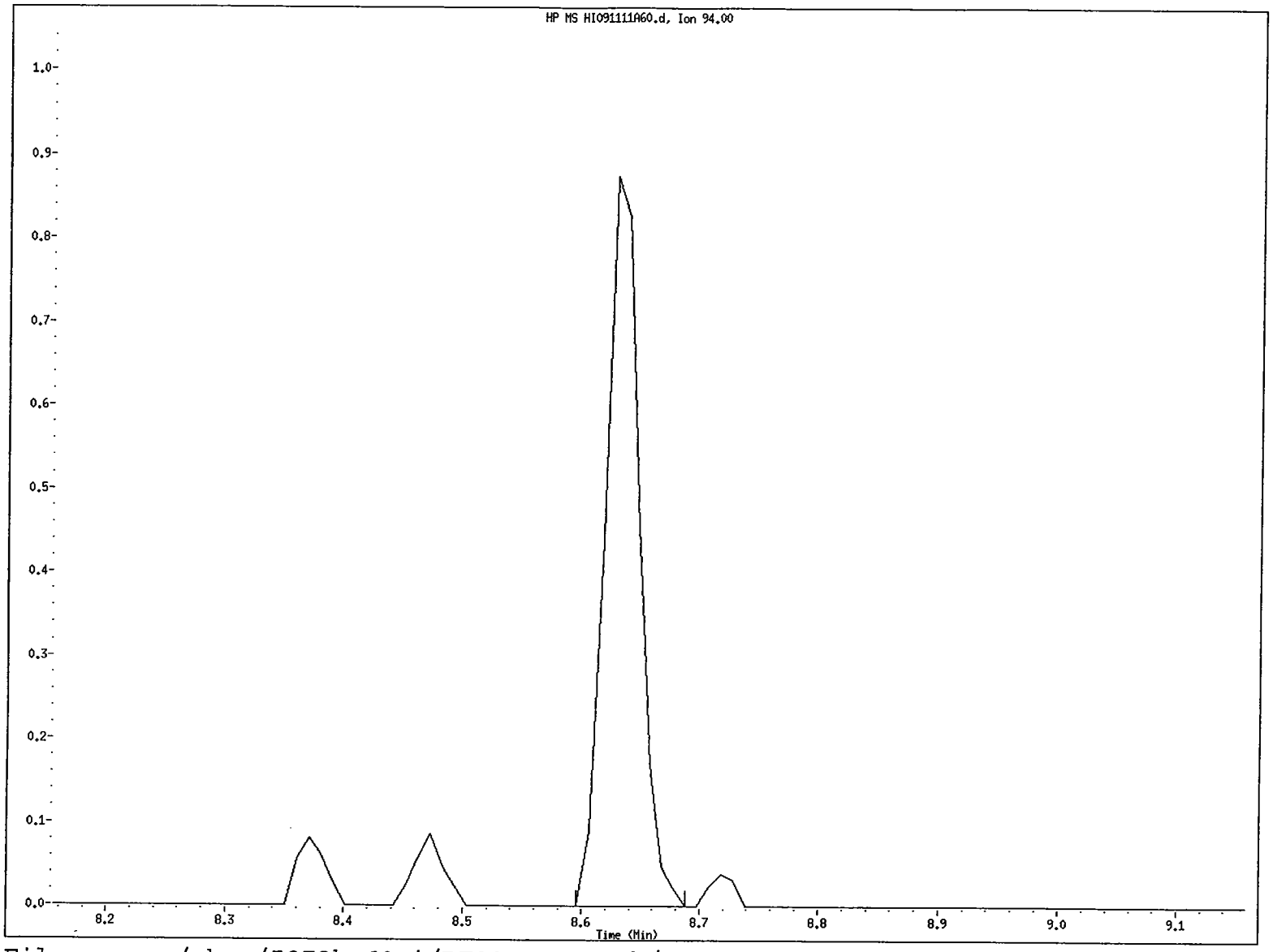
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Client ID: SSTD010
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 2.90
Operator ID: 2650

Nitrosomethylethylamine CAS Number 10595-95-6 Area = 4804 Manually integrated



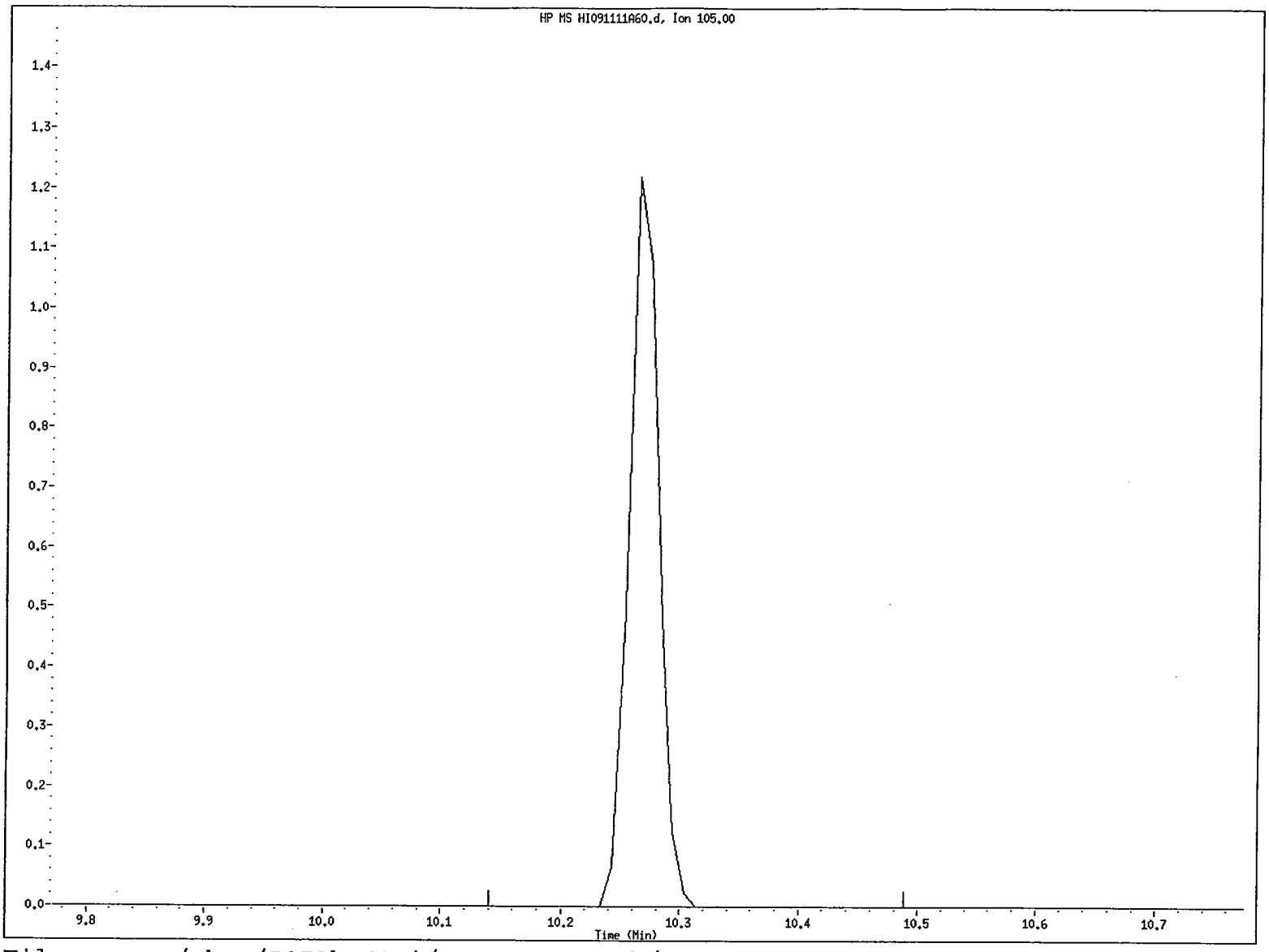
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 4.92
Operator ID: 2650

Phenol CAS Number 108-95-2 Area = 17960 User selected hit



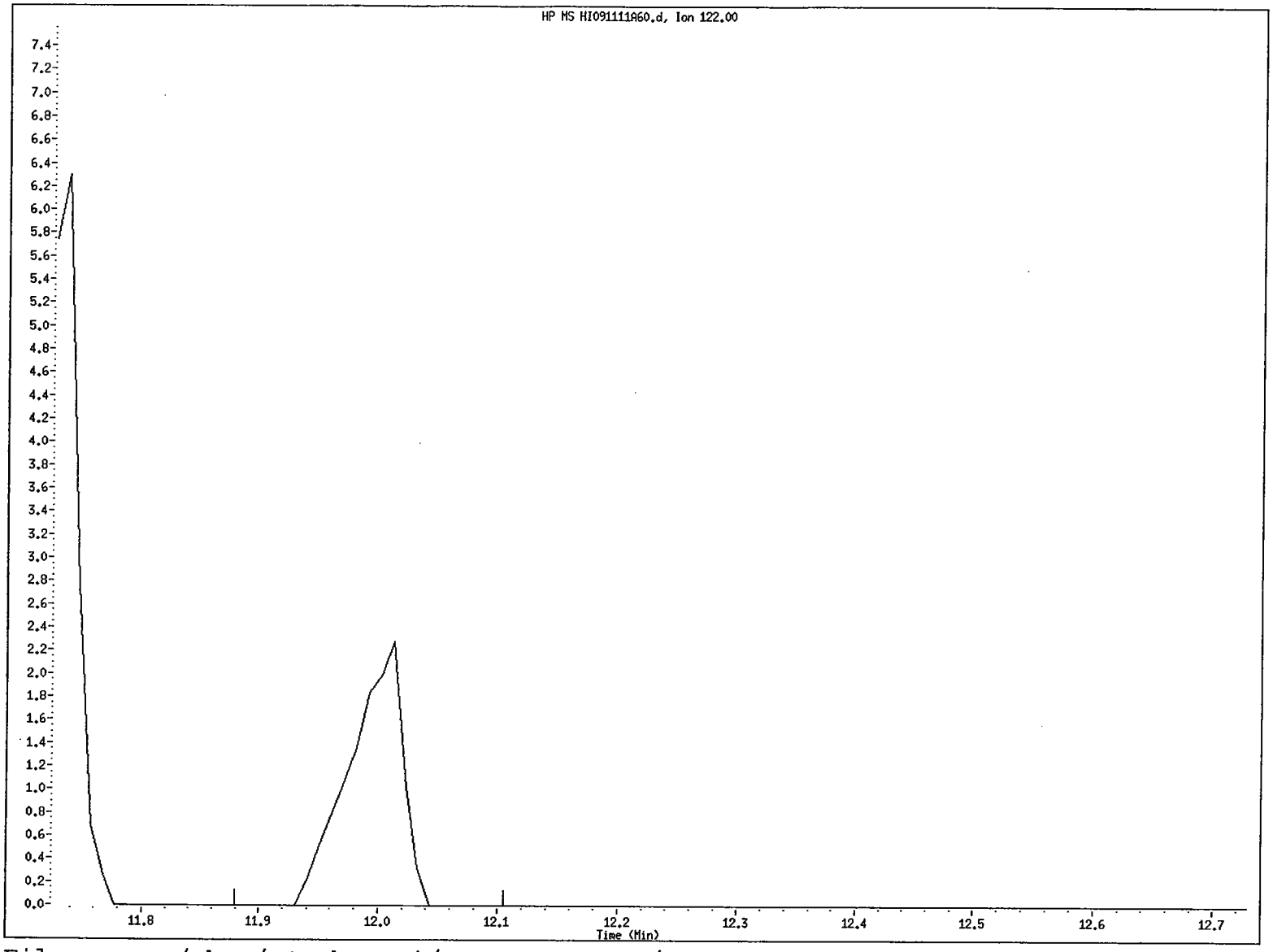
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 8.63
Operator ID: 2650

Acetophenone CAS Number 98-86-2 Area = 21354 Manually integrated



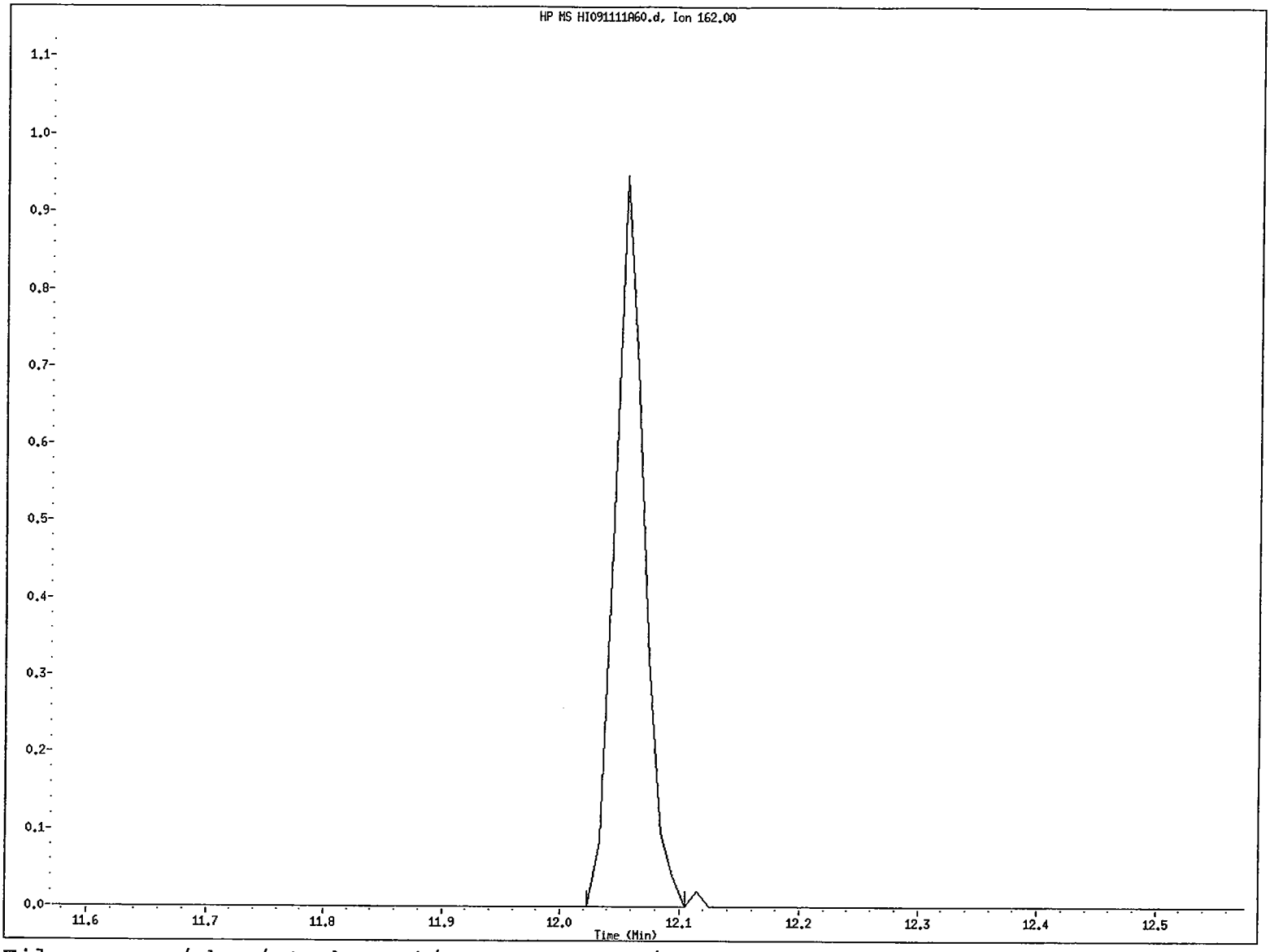
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 10.26
Operator ID: 2650

Benzoic Acid CAS Number 65-85-0 Area = 7028 Manually integrated



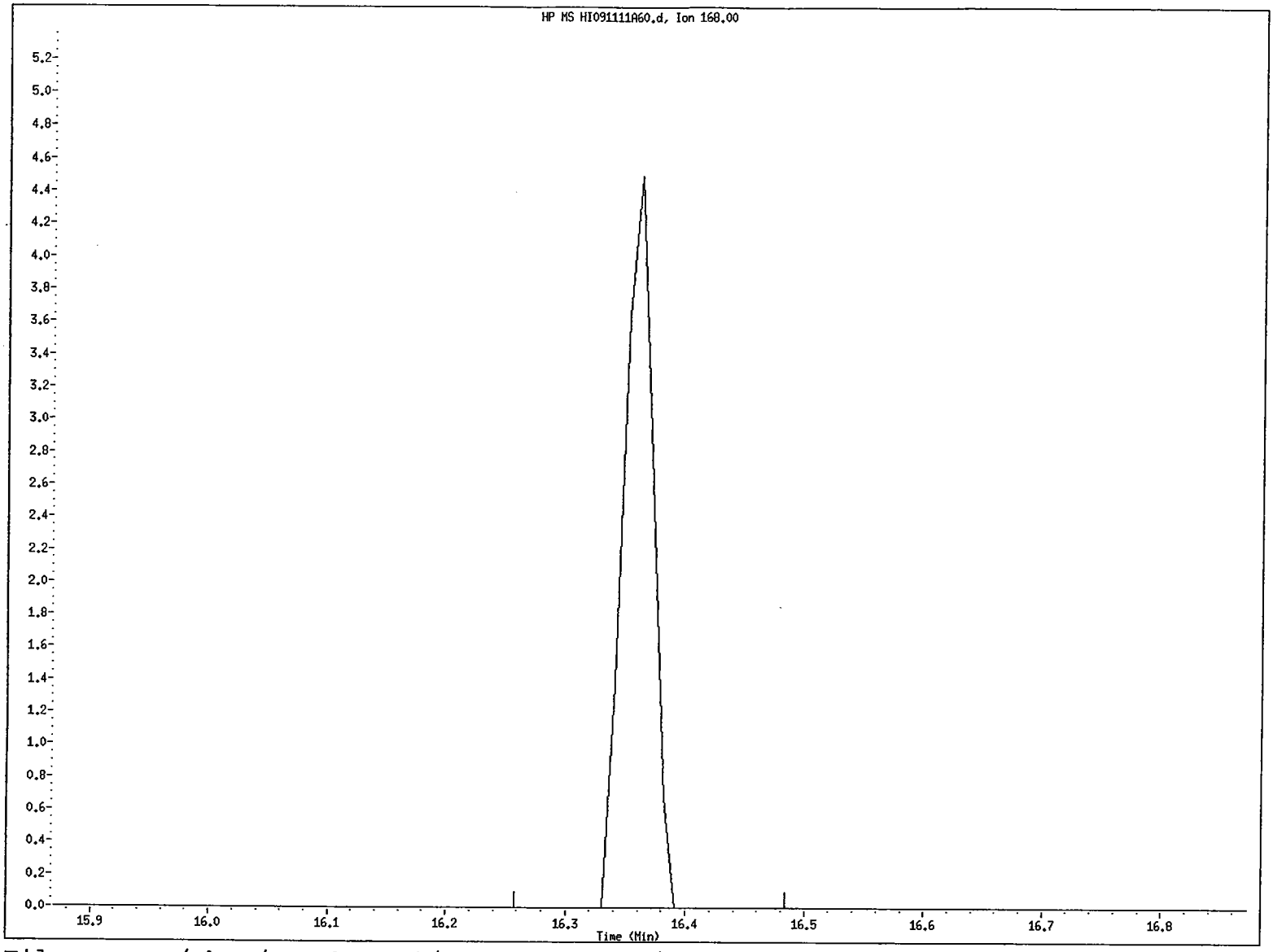
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 12.01
Operator ID: 2650

2,4-Dichlorophenol CAS Number 120-83-2 Area = 16262 User selected hit



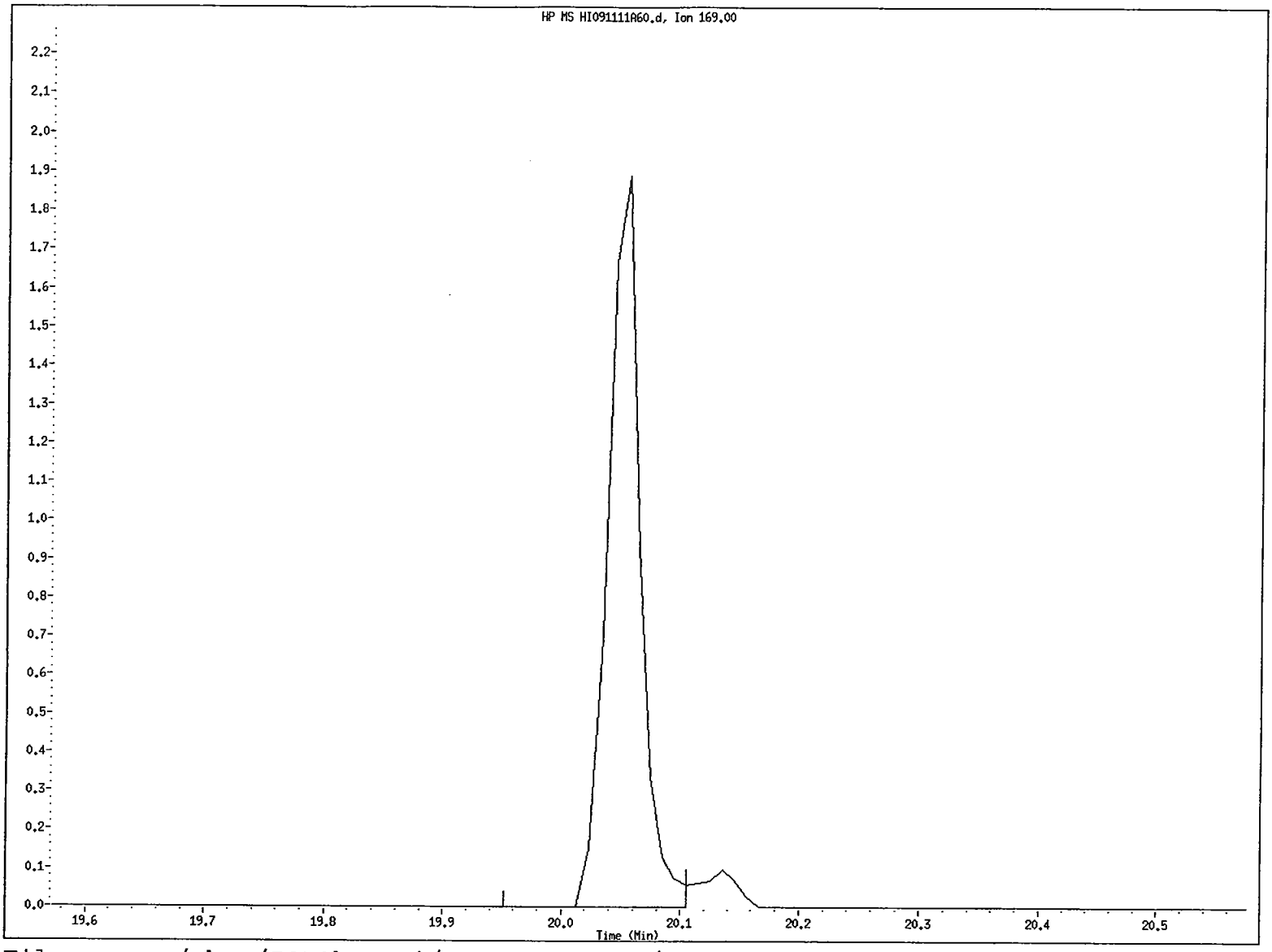
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 12.05
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 7855 Manually integrated



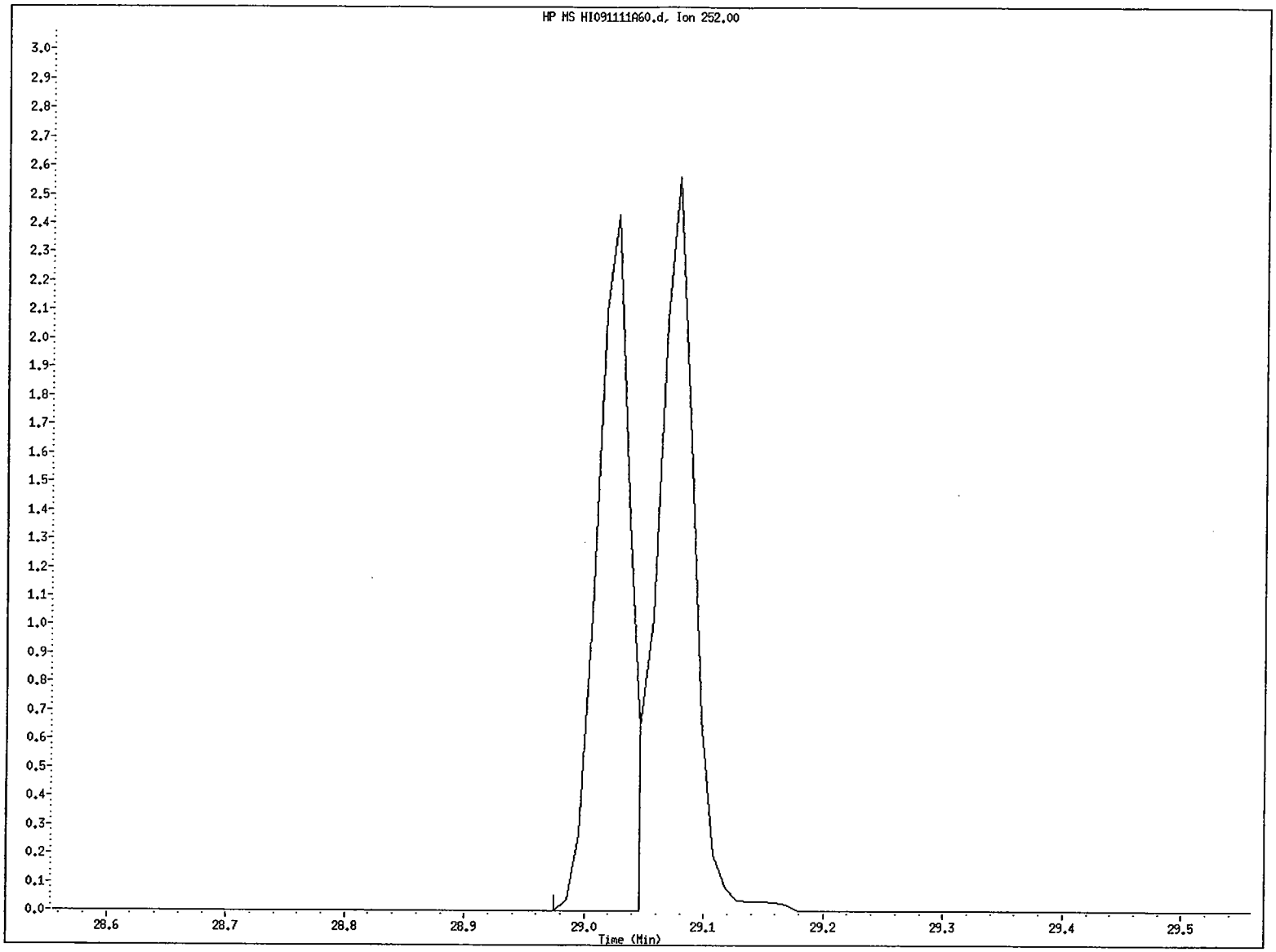
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Client ID: SSTD010
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 16.36
Operator ID: 2650

4-Aminobiphenyl CAS Number 92-67-1 Area = 36299 Manually integrated



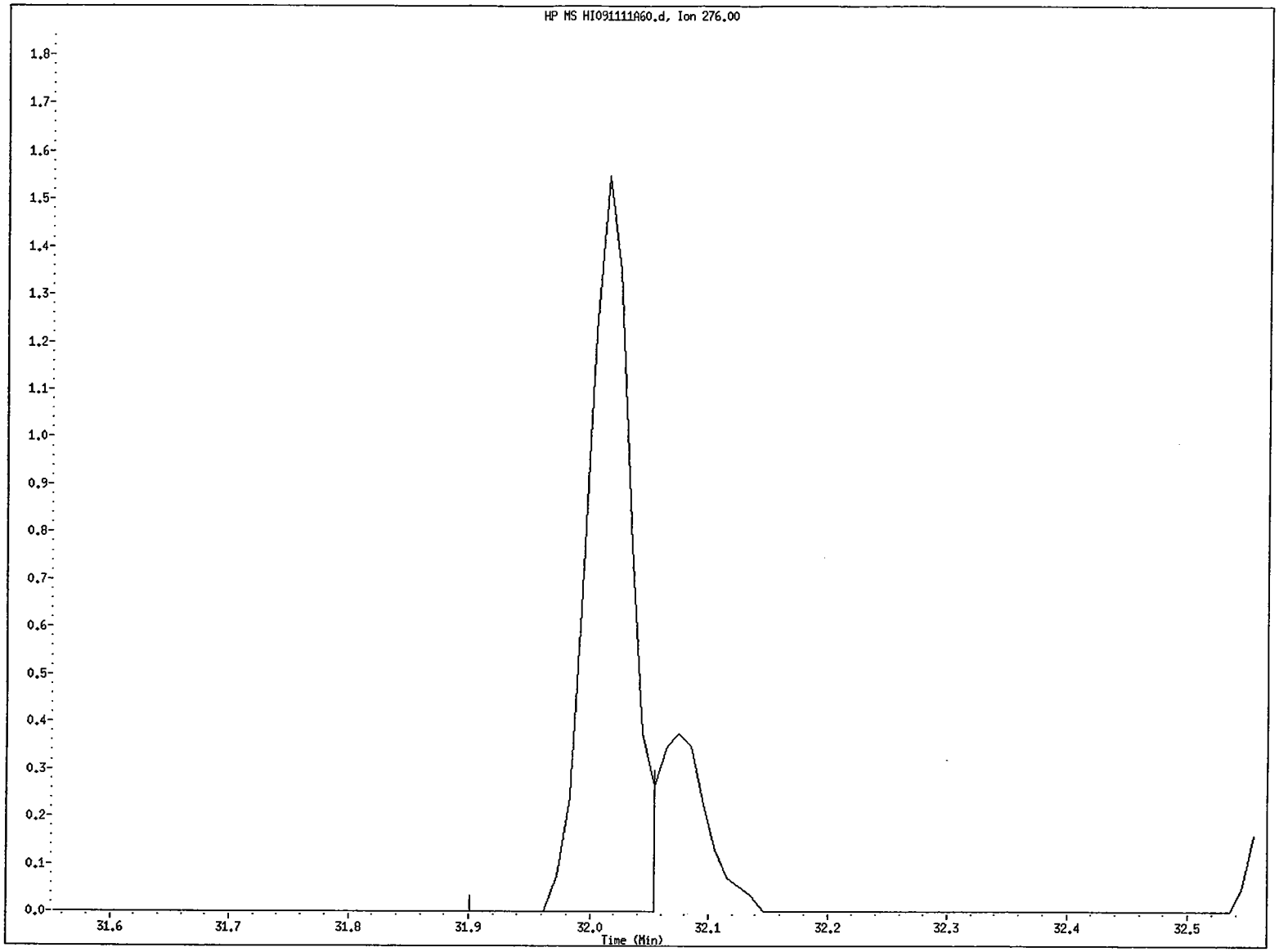
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 20.05
Operator ID: 2650

Benzo(b)fluoranthene CAS Number 205-99-2 Area = 48260 User selected hit



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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 29.03
Operator ID: 2650

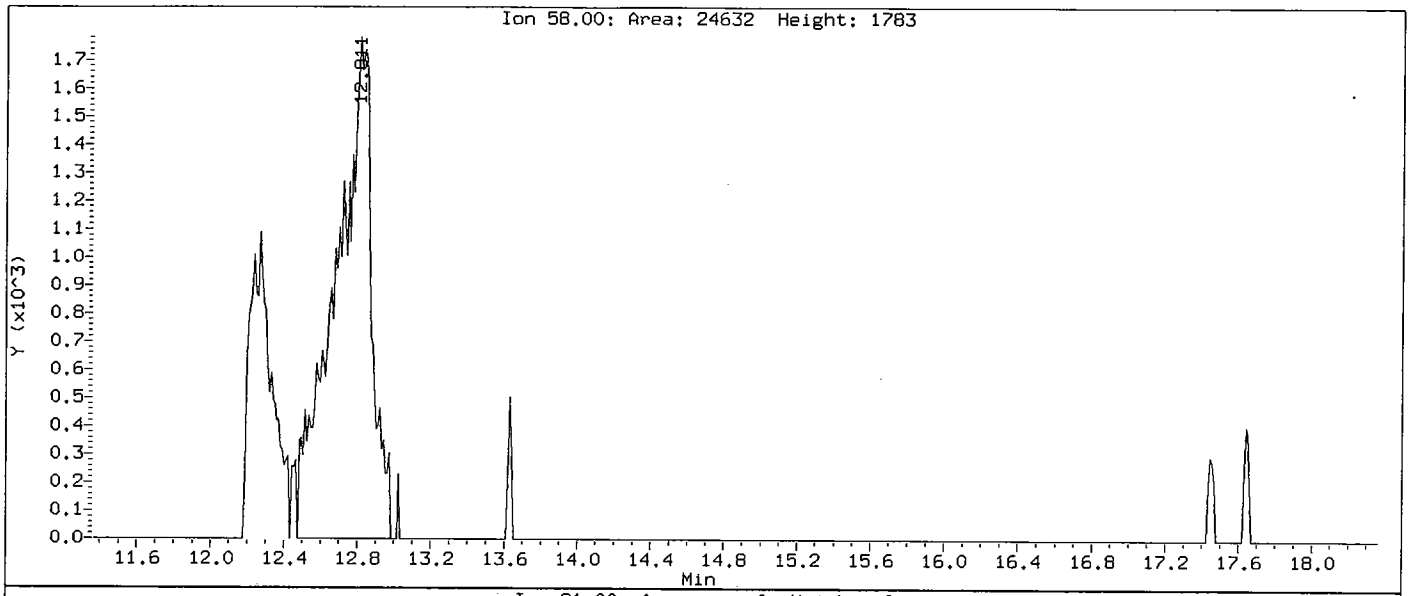
Indeno(1,2,3-c,d)pyrene CAS Number 193-39-5 Area = 40013 Manually integrated

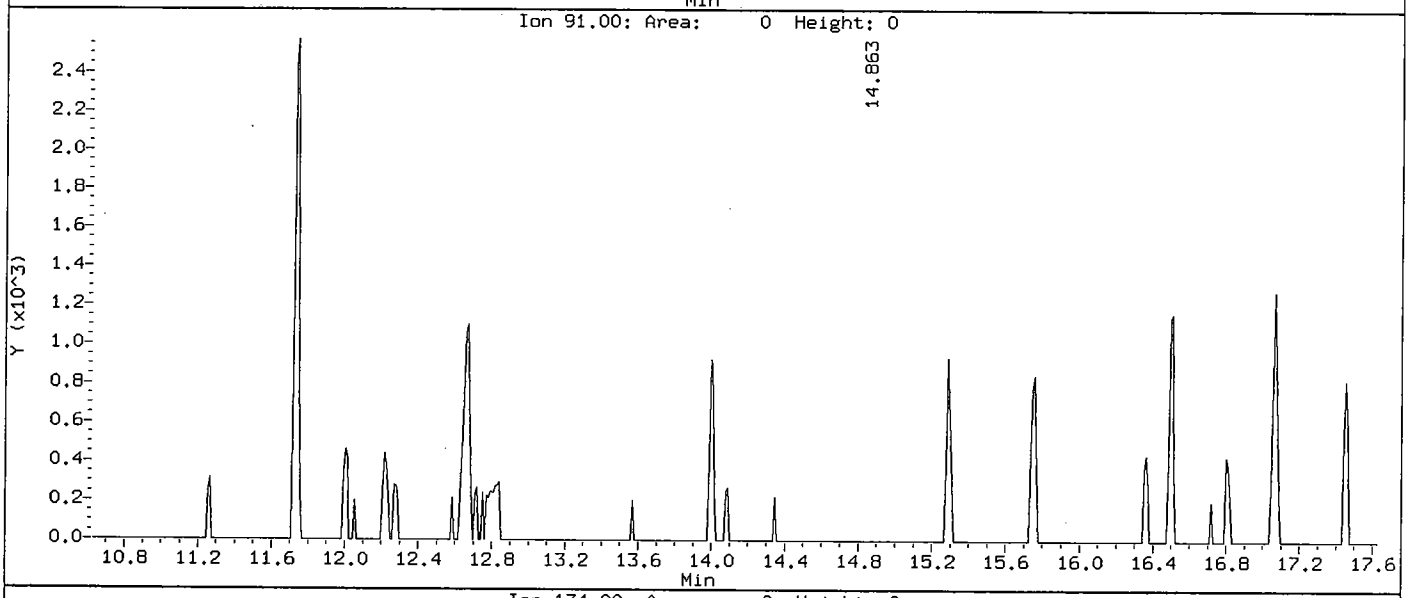


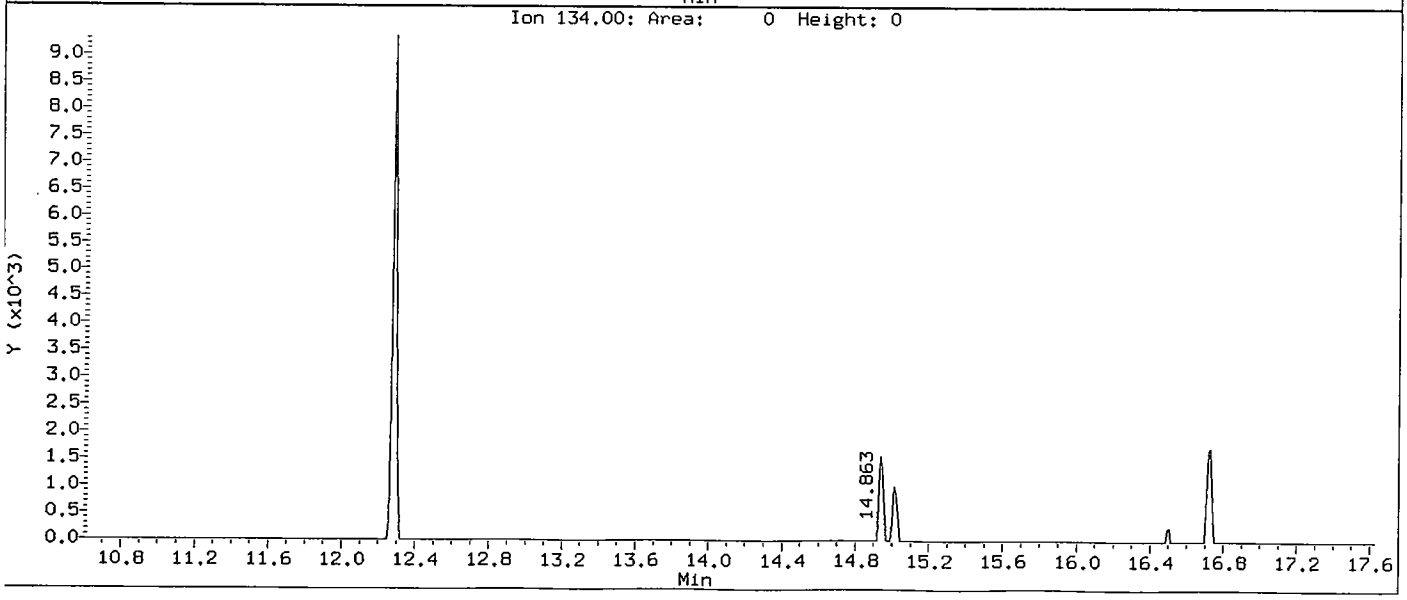
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 32.01
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Injection Date: 11-NOV-2009 14:49
Instrument: 5972hp60.i
Client Sample ID: SSTD010

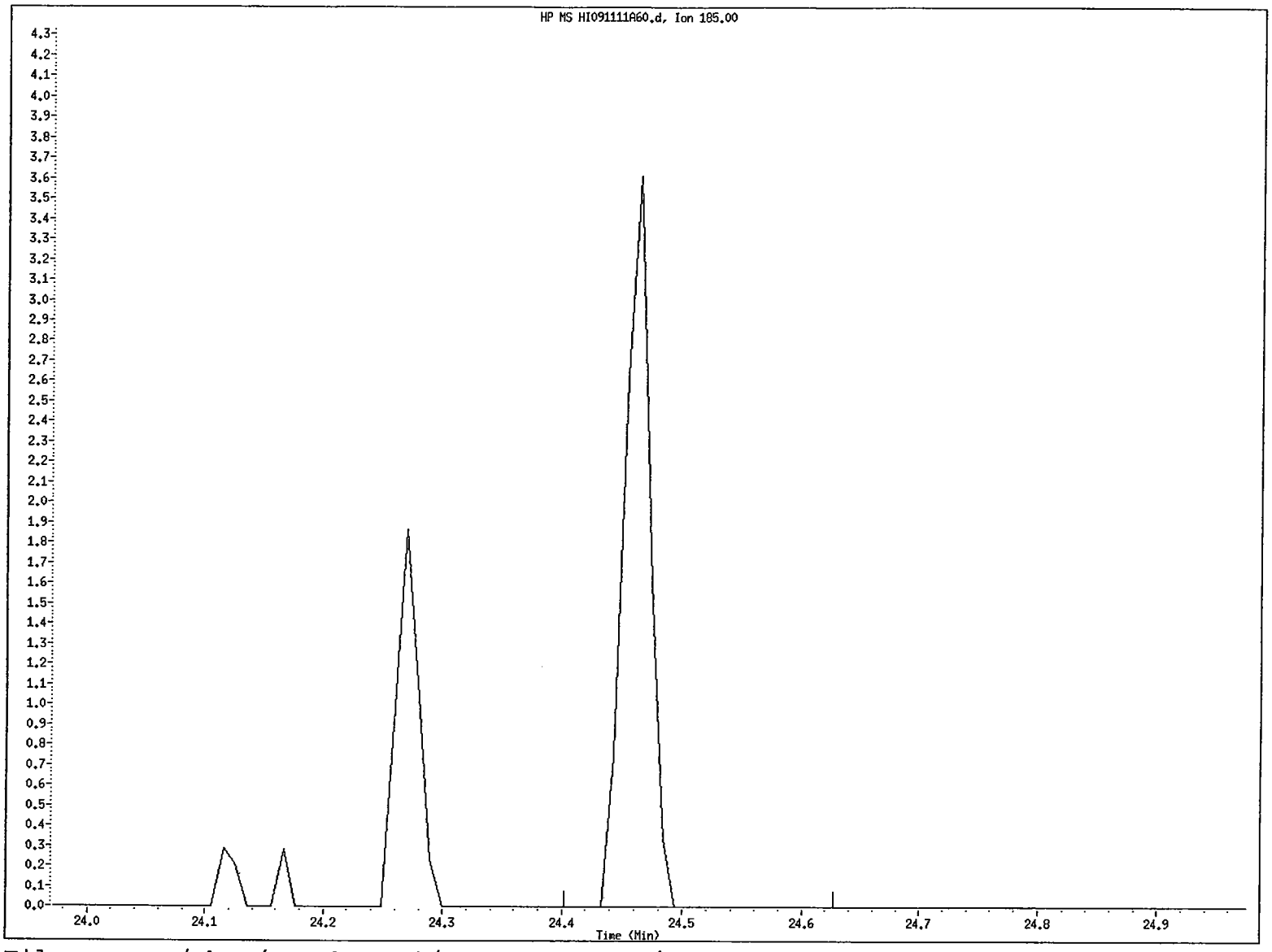
Compound: a,a-Dimethylphenethylamine
CAS Number: 122-09-8





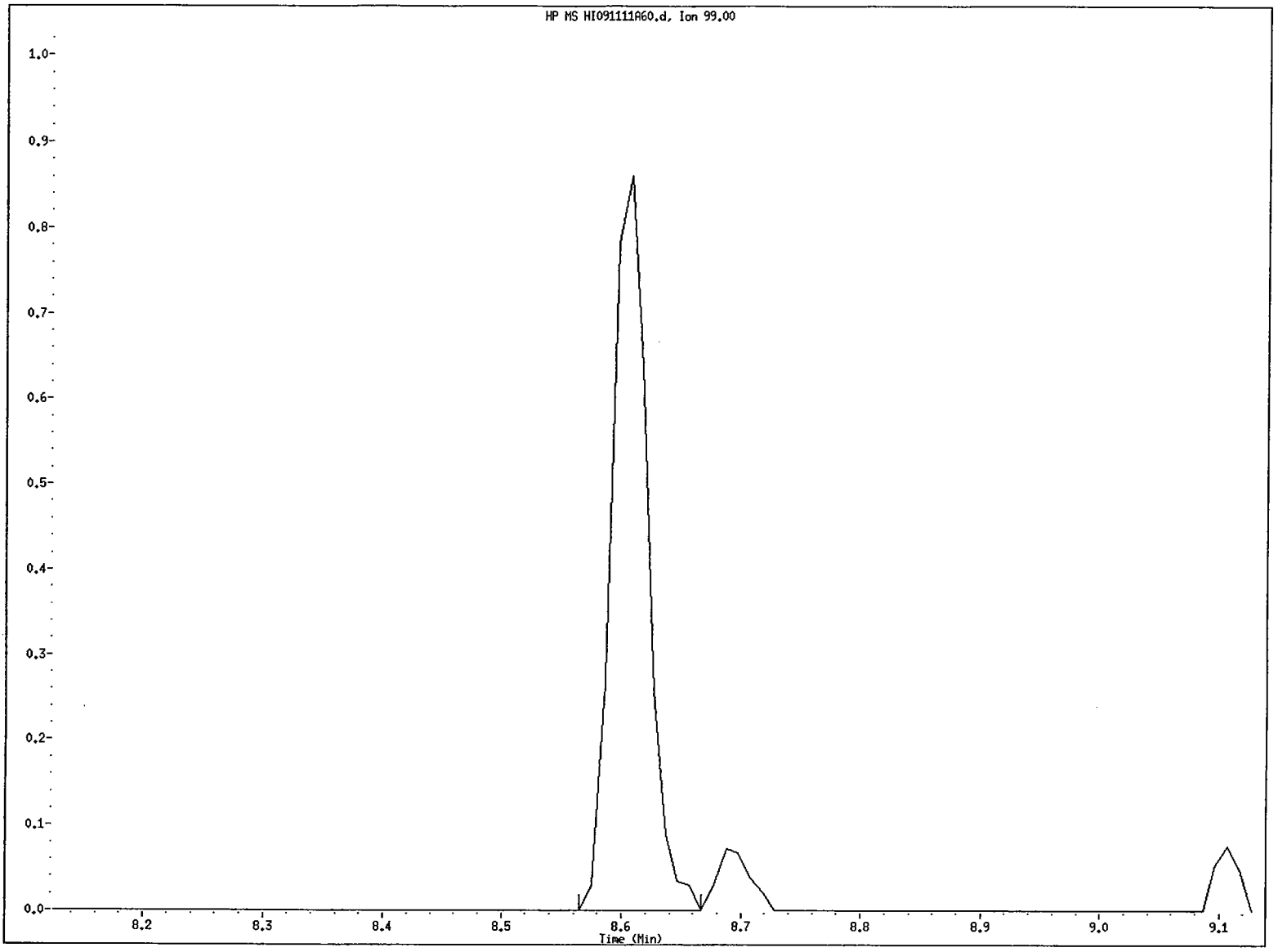


Aramite CAS Number 140-57-8 Area = 5466 Manually integrated



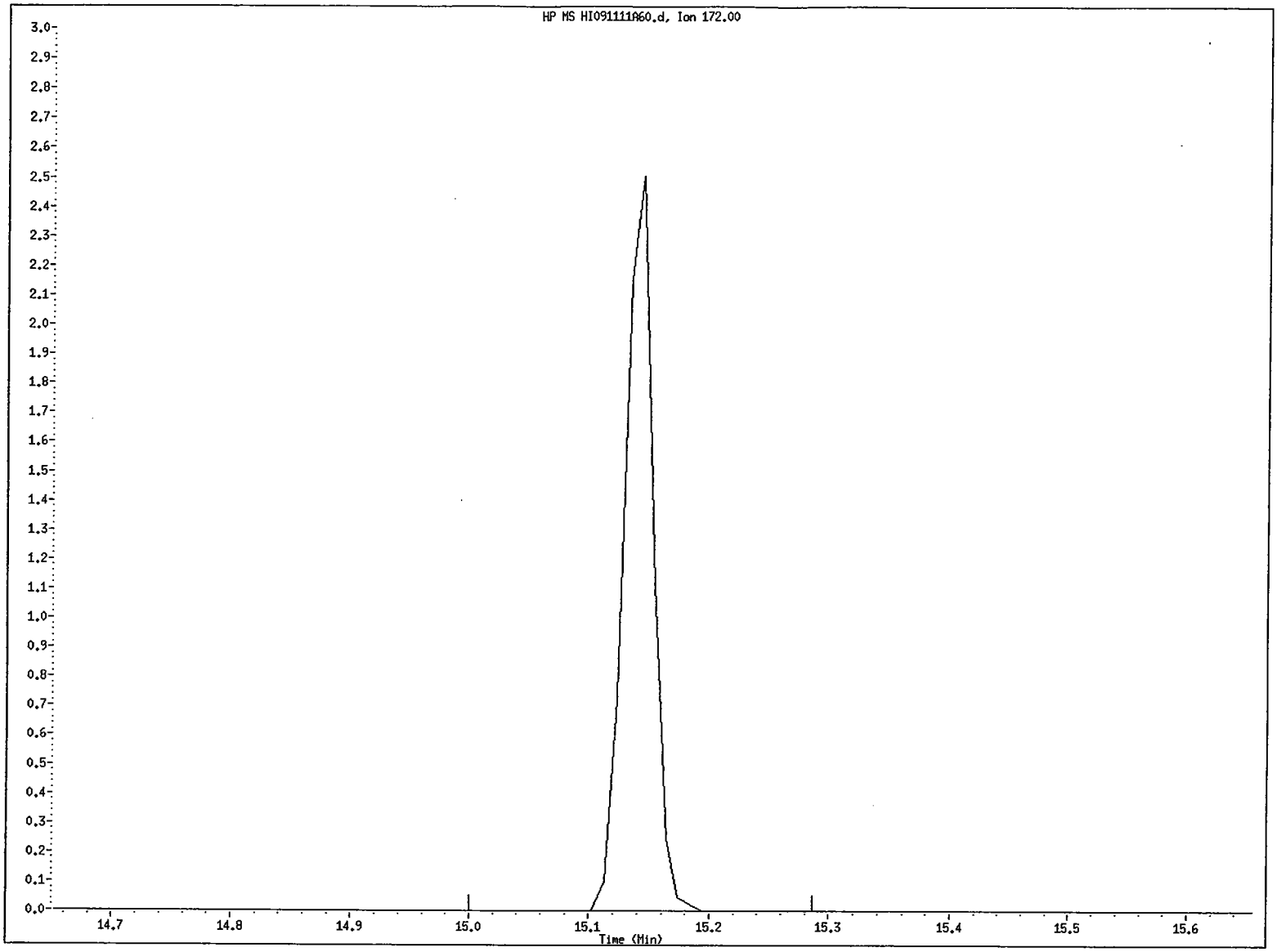
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 24.46
Operator ID: 2650

Phenol-d5 CAS Number 4165-62-2 Area = 18307 User selected hit



File name: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
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Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 8.61
Operator ID: 2650

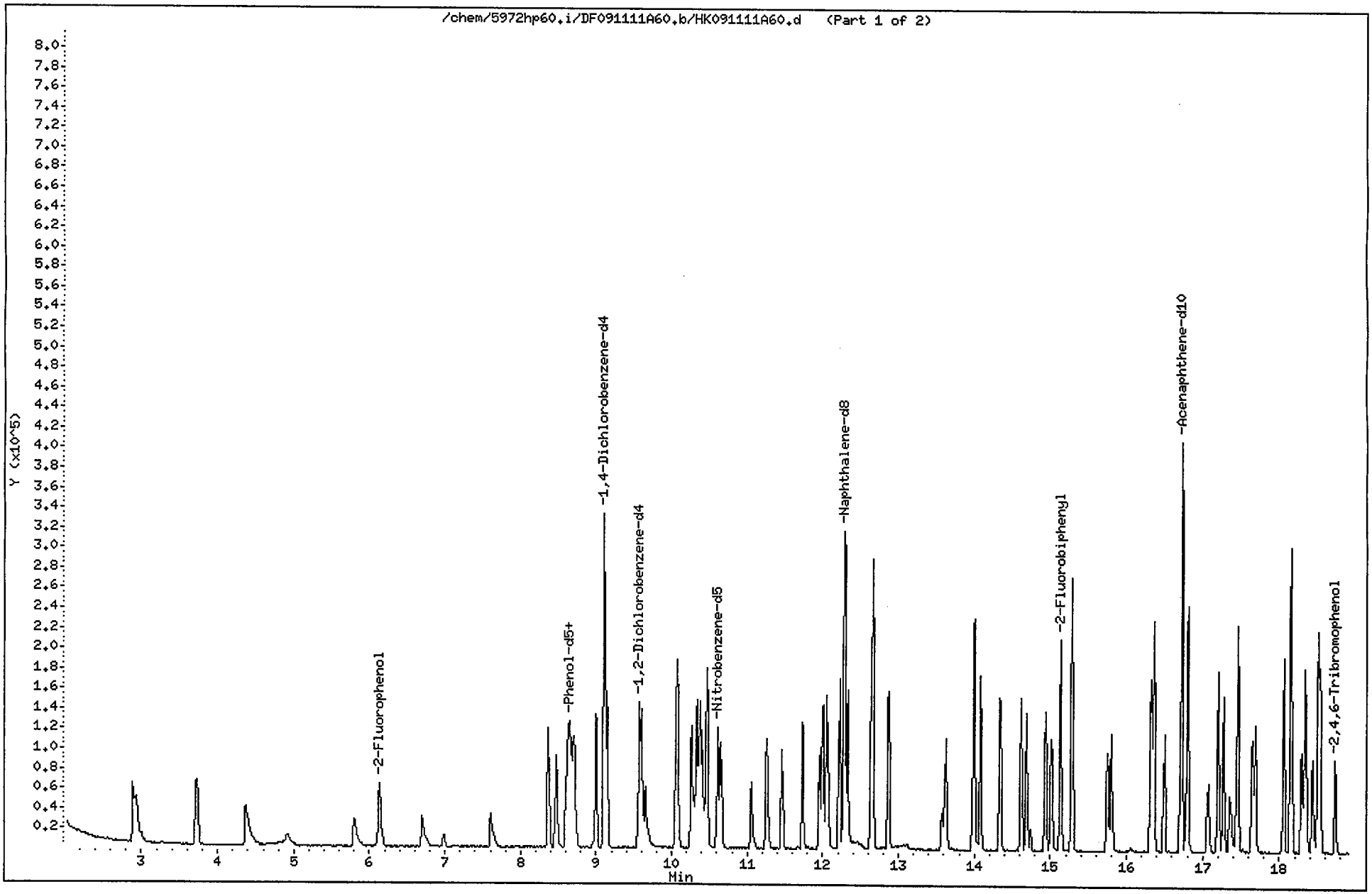
2-Fluorobiphenyl CAS Number 321-60-8 Area = 42353 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/HI091111A60.d
Client ID: SSTD010
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:49
Retention Time: 15.14
Operator ID: 2650

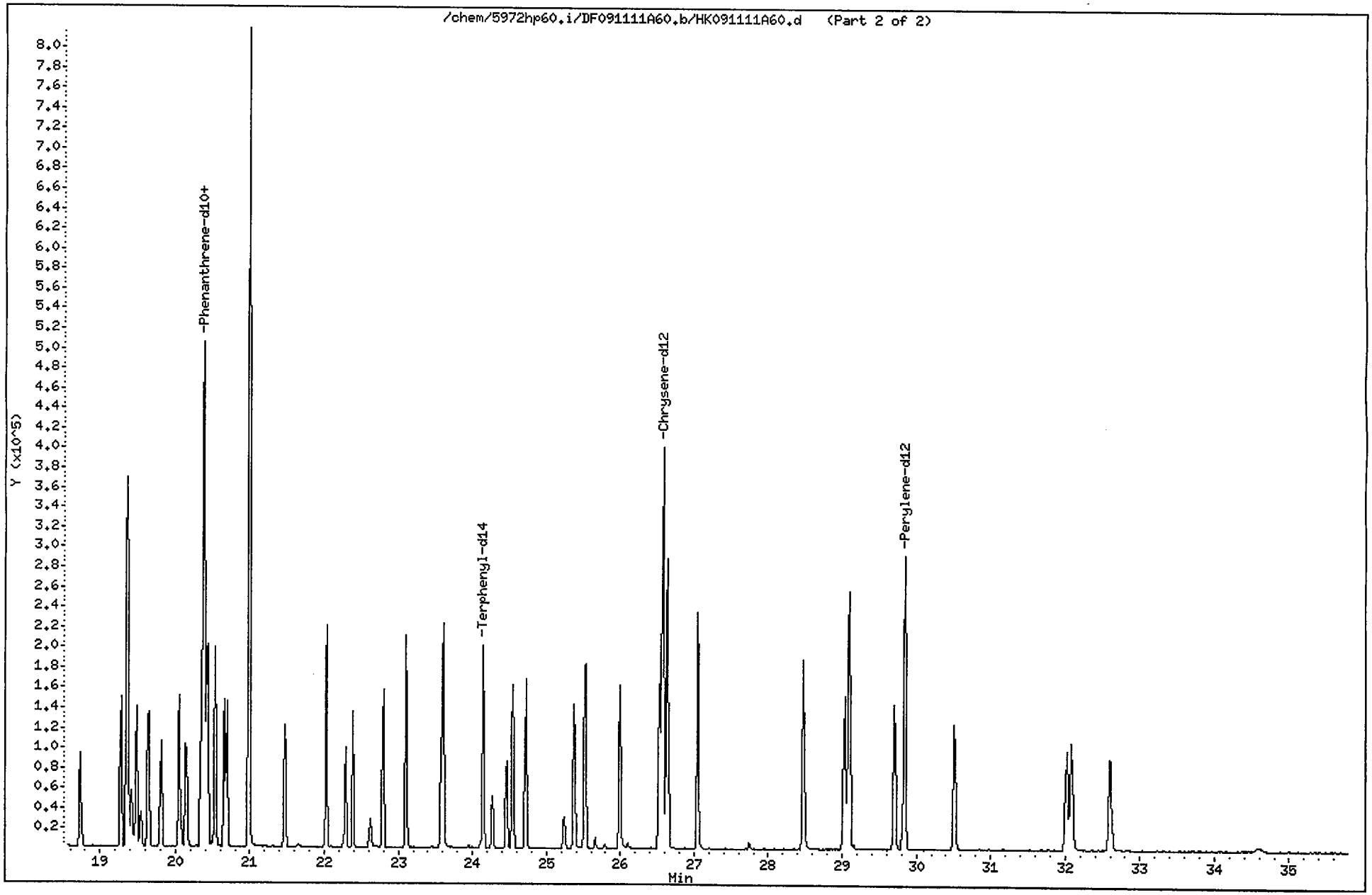
Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Date : 11-NOV-2009 16:23
Client ID: SSTD020
Sample Info: SSTD020:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Date : 11-NOV-2009 16:23
Client ID: SSTD020
Sample Info: SSTD020:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Report Date: 12-Nov-2009 17:32

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Lab Smp Id: SSTD020 Client Smp ID: SSTD020
Inj Date : 11-NOV-2009 16:23
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD020:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 12-Nov-2009 17:31 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 16:23 Cal File: HK091111A60.d
Als bottle: 6 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.109	9.104	(1.000)	87579	40.0000		
*	2 Naphthalene-d8	136	12.280	12.296	(1.000)	235470	40.0000		
*	3 Acenaphthene-d10	164	16.720	16.736	(1.000)	169323	40.0000		
*	4 Phenanthrene-d10	188	20.383	20.388	(1.000)	349498	40.0000		
*	5 Chrysene-d12	240	26.572	26.588	(1.000)	298120	40.0000		
*	6 Perylene-d12	264	29.846	29.852	(1.000)	274330	40.0000		
$	7 2-Fluorophenol	112	6.131	6.137	(0.673)	42971	20.0000	21.3	
$	8 Phenol-d5	99	8.607	8.623	(0.945)	49285	20.0000	19.7	
$	9 2-Chlorophenol-d4	132	8.658	8.664	(0.951)	40449	20.0000	20.0	2560
$	10 1,2-Dichlorobenzene-d4	152	9.569	9.565	(1.051)	37057	20.0000	20.2	8346(H)
$	11 Nitrobenzene-d5	82	10.612	10.618	(0.864)	49416	20.0000	20.7	
$	12 2-Fluorobiphenyl	172	15.134	15.150	(0.905)	114134	20.0000	20.5	
$	13 2,4,6-Tribromophenol	330	18.735	18.752	(1.121)	17911	20.0000	19.0	(M)
$	14 Terphenyl-d14	244	24.147	24.153	(0.909)	110642	20.0000	20.2	
	15 N-Nitrosodimethylamine	42	2.940	2.935	(0.323)	38425	20.0000	21.0	9373

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Pw
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Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.888	2.884	(0.317)	41931	20.0000	19.5	9669
17 Ethylmethacrylate	69	3.727	3.723	(0.409)	38009	20.0000	20.5	9597
18 2-Picoline	93	4.372	4.357	(0.480)	42292	20.0000	20.3	9794
19 Nitrosomethylethylamine	88	4.914	4.899	(0.539)	17331	20.0000	21.3	9196 (M)
20 Methyl Methanesulfonate	80	5.794	5.789	(0.636)	35733	20.0000	20.9	9441
21 N-Nitrosodiethylamine	102	6.694	6.680	(0.735)	17322	20.0000	20.8	9442
22 Ethyl Methanesulfonate	79	7.605	7.590	(0.835)	36608	20.0000	20.2	9691
23 Phenol	94	8.638	8.654	(0.948)	48953	20.0000	19.7	
24 Aniline	93	8.474	8.480	(0.930)	57140	20.0000	20.6	9694
25 Bis(2-chloroethyl)ether	93	8.720	8.715	(0.957)	38975	20.0000	20.1	
26 Pentachloroethane	167	8.372	8.368	(0.919)	30253	20.0000	20.0	9372
27 2-Chlorophenol	128	8.699	8.695	(0.955)	40468	20.0000	20.3	8906
28 1,3-Dichlorobenzene	146	9.006	9.002	(0.989)	56427	20.0000	20.6	
29 1,4-Dichlorobenzene	146	9.149	9.145	(1.004)	56712	20.0000	20.1	
30 Benzyl Alcohol	108	9.651	9.657	(1.060)	20602	20.0000	18.5	
31 1,2-Dichlorobenzene	146	9.600	9.605	(1.054)	52621	20.0000	20.4	
32 2-Methylphenol	108	10.070	10.086	(1.106)	33840	20.0000	21.2	
33 2,2'-oxybis(1-Chloropropane)	45	10.060	10.056	(1.104)	67196	20.0000	20.0	9070
34 N-Nitrosopyrrolidine	100	10.295	10.332	(1.130)	17846	20.0000	20.4	6600
35 3-Methylphenol	108	10.469	10.495	(1.149)	72599	40.0000	40.0	
36 4-Methylphenol	108	10.469	10.495	(1.149)	72599	40.0000	40.0	
37 3-4-Methylphenol	108	10.469	10.495	(1.149)	72599	40.0000	39.8	8682
38 N-Nitroso-di-N-propylamine	70	10.408	10.424	(1.143)	31902	20.0000	21.1	8708
39 Acetophenone	105	10.265	10.270	(0.836)	57287	20.0000	21.4	0 (M)
40 N-Nitrosomorpholine	116	10.367	10.383	(1.138)	7071	20.0000	20.0	8794
41 o-Toluidine	106	10.377	10.383	(1.139)	59401	20.0000	20.5	9012
42 Hexachloroethane	117	10.336	10.332	(1.135)	24135	20.0000	20.6	9082
43 Nitrobenzene	77	10.653	10.659	(0.868)	52727	20.0000	22.1	9809
44 N-Nitrosopiperidine	114	11.052	11.068	(0.900)	17949	20.0000	20.7	9707
45 Isophorone	82	11.257	11.273	(0.917)	82149	20.0000	20.9	9727
46 2-Nitrophenol	139	11.462	11.467	(0.933)	25589	20.0000	20.6	8812
47 2,4-Dimethylphenol	122	11.738	11.754	(0.956)	31127	20.0000	20.6	8824
48 Benzoic Acid	122	12.086	12.224	(0.984)	22819	100.000	94.5	8401
49 o,o,o-Triethylphosphorothioat	198	12.004	12.010	(0.977)	27236	20.0000	19.8	8888
50 Bis(2-chloroethoxy)methane	93	11.953	11.969	(0.973)	47710	20.0000	20.0	9174
51 2,4-Dichlorophenol	162	12.055	12.071	(0.982)	46032	20.0000	20.2	
52 1,2,4-Trichlorobenzene	180	12.219	12.224	(0.995)	57458	20.0000	20.5	
53 Naphthalene	128	12.331	12.337	(1.004)	99117	20.0000	20.4	9323
54 4-Chloroaniline	127	12.659	12.664	(1.031)	43710	20.0000	19.5	8908
55 2,6-Dichlorophenol	162	12.638	12.644	(1.029)	47185	20.0000	20.2	
56 Hexachloropropene	213	12.659	12.664	(1.031)	42477	20.0000	20.8	9343
57 Hexachlorobutadiene	225	12.873	12.869	(1.048)	32818	20.0000	20.7	9266
58 N-Nitroso-di-n-butylamine	84	13.620	13.636	(1.109)	25510	20.0000	20.3	9556
60 4-Chloro-3-methylphenol	107	13.988	13.994	(1.139)	36201	20.0000	20.1	8433
61 Safrole	162	13.999	14.015	(1.140)	40817	20.0000	20.0	9221
62 2-Methylnaphthalene	141	14.081	14.097	(1.147)	66628	20.0000	20.2	
63 1-Methylnaphthalene	142	14.347	14.352	(1.168)	72870	20.0000	20.2	

Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
64 Hexachlorocyclopentadiene	237	14.684	14.700	(0.878)	40803	20.0000	20.5	9099
65 1,2,4,5-Tetrachlorobenzene	216	14.623	14.629	(0.875)	52810	20.0000	20.7	9570
66 2,4,6-Trichlorophenol	196	14.940	14.946	(0.894)	37679	20.0000	20.2	
67 2,4,5-Trichlorophenol	196	15.012	15.028	(0.898)	40806	20.0000	20.1	
68 Isosafrole	162	14.746	14.741	(0.882)	6593	20.0000	20.0	
69 2-Chloronaphthalene	162	15.288	15.294	(0.914)	128995	20.0000	20.1	
70 2-Nitroaniline	65	15.748	15.764	(0.942)	30175	20.0000	20.4	9548
71 1,4-Napthoquinone	158	15.799	15.815	(0.945)	38198	20.0000	25.1	9486
72 Dimethylphthalate	163	16.362	16.378	(0.979)	115113	20.0000	20.1	9183
73 1,3-Dinitrobenzene	168	16.362	16.368	(0.979)	22460	20.0000	20.3	0 (M)
74 2,6-Dinitrotoluene	165	16.495	16.521	(0.987)	28358	20.0000	19.9	9279
75 Acenaphthylene	152	16.321	16.327	(0.976)	130343	20.0000	20.4	9782
76 3-Nitroaniline	138	16.812	16.828	(1.006)	22251	20.0000	20.3	9504
77 Acenaphthene	154	16.792	16.808	(1.004)	75614	20.0000	20.0	9487
78 2,4-Dinitrophenol	184	17.068	17.084	(1.021)	23002	20.0000	19.9	
79 4-Nitrophenol	139	17.354	17.391	(1.038)	18893	20.0000	19.8	9527
80 Pentachlorobenzene	250	17.272	17.289	(1.033)	43424	20.0000	20.0	9608
81 2,4-Dinitrotoluene	165	17.457	17.483	(1.044)	38880	20.0000	20.1	7662
82 Dibenzofuran	168	17.201	17.217	(1.029)	134935	20.0000	20.3	9331
83 1-Naphthylamine	143	17.457	17.473	(1.044)	67560	20.0000	20.2	
84 2,3,4,6-Tetrachlorophenol	232	17.692	17.708	(1.058)	30140	20.0000	20.0	9417
85 2-Naphthylamine	143	17.651	17.667	(1.056)	71900	20.0000	20.2	
86 Diethylphthalate	149	18.142	18.168	(1.085)	110842	20.0000	20.2	8967
87 Zinophos	97	18.336	18.363	(1.097)	23137	20.0000	19.9	8982
88 4-Chlorophenyl-phenylether	204	18.163	18.168	(1.086)	57059	20.0000	20.3	7430
89 5-Nitro-o-toluidine	152	18.296	18.322	(1.094)	28447	20.0000	19.9	7277
90 Fluorene	166	18.060	18.076	(1.080)	104728	20.0000	20.1	7722
91 4-Nitroaniline	138	18.357	18.404	(1.098)	22055	20.0000	20.2	9072
92 4,6-Dinitro-2-methylphenol	198	18.439	18.465	(0.905)	28103	20.0000	20.5	0 (M)
93 N-Nitrosodiphenylamine	169	18.510	18.526	(0.908)	88554	20.0000	20.4	9404
95 1,2-Diphenylhydrazine	77	18.531	18.547	(1.108)	110938	20.0000	20.5	9233
96 Sulfotep	322	19.278	19.294	(1.153)	13668	20.0000	18.0	9078
97 1,3,5-Trinitrobenzene	75	19.411	19.478	(0.952)	37188	20.0000	22.7	8891
98 Diallate (trans isomer)	86	19.360	19.365	(0.950)	28568	10.0000	9.94	
99 Diallate (trans) part of total	86	19.360	19.365	(0.950)	28568	10.0000	9.94	9206
100 Phorate	75	19.370	19.376	(0.950)	57772	20.0000	19.8	8853
101 Phenacetin	108	19.482	19.539	(0.956)	48136	20.0000	20.8	9152
102 Diallate (cis isomer)	86	19.544	19.549	(0.959)	7817	10.0000	10.1	
103 Diallate (cis) part of total	86	19.544	19.549	(0.959)	7817	10.0000	10.1	9146
104 4-Bromophenyl-phenylether	248	19.360	19.365	(0.950)	30206	20.0000	20.2	8137
105 Hexachlorobenzene	284	19.646	19.652	(0.964)	34700	20.0000	19.6	9488
106 Dimethoate	87	19.810	19.856	(0.972)	27745	20.0000	22.8	9730
107 4-Aminobiphenyl	169	20.055	20.071	(0.984)	102927	20.0000	20.5	0 (M)
108 Pentachlorophenol	266	20.147	20.163	(0.988)	23909	20.0000	20.0	8379
109 Pentachloronitrobenzene	237	20.342	20.368	(0.998)	14339	20.0000	20.0	7630
110 Pronamide	173	20.393	20.419	(1.000)	55864	20.0000	19.8	9309
111 Disulfoton	88	20.659	20.665	(1.014)	37312	20.0000	20.8	9543

Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
112 Phenanthrene	178	20.434	20.450	(1.002)	161921	20.0000	20.5	
113 Anthracene	178	20.536	20.552	(1.008)	163425	20.0000	20.6	
114 Carbazole	167	20.996	21.033	(1.030)	674969	20.0000	19.6	9357
115 Methyl Parathion	109	21.467	21.483	(1.053)	30067	20.0000	22.8	9681
116 Di-n-butylphthalate	149	22.030	22.046	(1.081)	179577	20.0000	20.6	9702
117 Parathion	109	22.388	22.394	(1.098)	20243	20.0000	21.1	8397
118 4-Nitroquinoline-1-oxide	190	22.285	22.312	(1.093)	18647	20.0000	20.1	9279
119 Methapyrilene	97	22.613	22.629	(1.109)	12556	20.0000	21.6	9602
120 Isodrin	193	22.797	22.803	(1.118)	21208	20.0000	20.4	9369
121 Fluoranthene	202	23.104	23.120	(1.133)	160599	20.0000	20.9	9221
122 Benzidine	184	23.574	23.591	(0.887)	71705	20.0000	21.0	8480
123 Pyrene	202	23.605	23.621	(0.888)	175042	20.0000	20.6	9335
124 p-Dimethylaminoazobenzene	225	24.546	24.562	(0.924)	30139	20.0000	20.8	9521
125 Chlorobenzilate	251	24.720	24.736	(0.930)	44811	20.0000	19.2	9842
126 Kepone	272	Compound Not Detected.						
127 Famfur	218	Compound Not Detected.						
128 Butylbenzylphthalate	149	25.529	25.534	(0.961)	84433	20.0000	20.0	9463
129 3,3'-Dimethylbenzidine	212	25.375	25.381	(0.955)	82055	20.0000	20.8	9518
130 2-Acetylaminofluorene	181	25.989	26.025	(0.978)	74382	20.0000	19.9	9468
131 3,3'-Dichlorobenzidine	252	26.644	26.660	(1.003)	54593	20.0000	19.3	8233
132 bis(2-ethylhexyl)Phthalate	149	27.043	27.048	(1.018)	110061	20.0000	19.4	9509
133 Benzo(a)anthracene	228	26.531	26.547	(0.998)	145312	20.0000	20.4	
134 Chrysene	228	26.633	26.649	(1.002)	141782	20.0000	20.5	
135 Di-n-octylphthalate	149	28.475	28.481	(0.954)	179989	20.0000	18.8	
136 7,12-Dimethylbenz(a)anthracene	256	29.099	29.125	(0.975)	65660	20.0000	19.7	8588
137 Benzo(b)fluoranthene	252	29.027	29.054	(0.973)	141055	20.0000	18.2	(H)
138 Benzo(k)fluoranthene	252	29.078	29.115	(0.974)	145627	20.0000	21.5	(H)
139 Benzo(a)pyrene	252	29.703	29.729	(0.995)	129743	20.0000	20.3	
140 3-Methylcholanthrene	268	30.511	30.537	(1.022)	65109	20.0000	19.6	9236
141 Indeno(1,2,3-c,d)pyrene	276	32.025	32.051	(1.073)	114033	20.0000	18.5	0 (M)
142 Dibenzo(a,h)anthracene	278	32.086	32.113	(1.075)	115408	20.0000	19.1	8973
143 Benzo(g,h,i)perylene	276	32.608	32.645	(1.093)	114069	20.0000	19.0	8376
198 4-Chlorophenol	128	Compound Not Detected.						
199 2,5-Dichlorophenol	162	Compound Not Detected.						
M 144 Diallate Total	86				36385	20.0000	19.9	0
201 a,a-Dimethylphenethylamine	58	13.109	13.882	(1.067)	48997	20.0000	20.1	0 (aM)
202 Aramite	185	24.465	24.470	(0.921)	14812	20.0000	19.8	9506

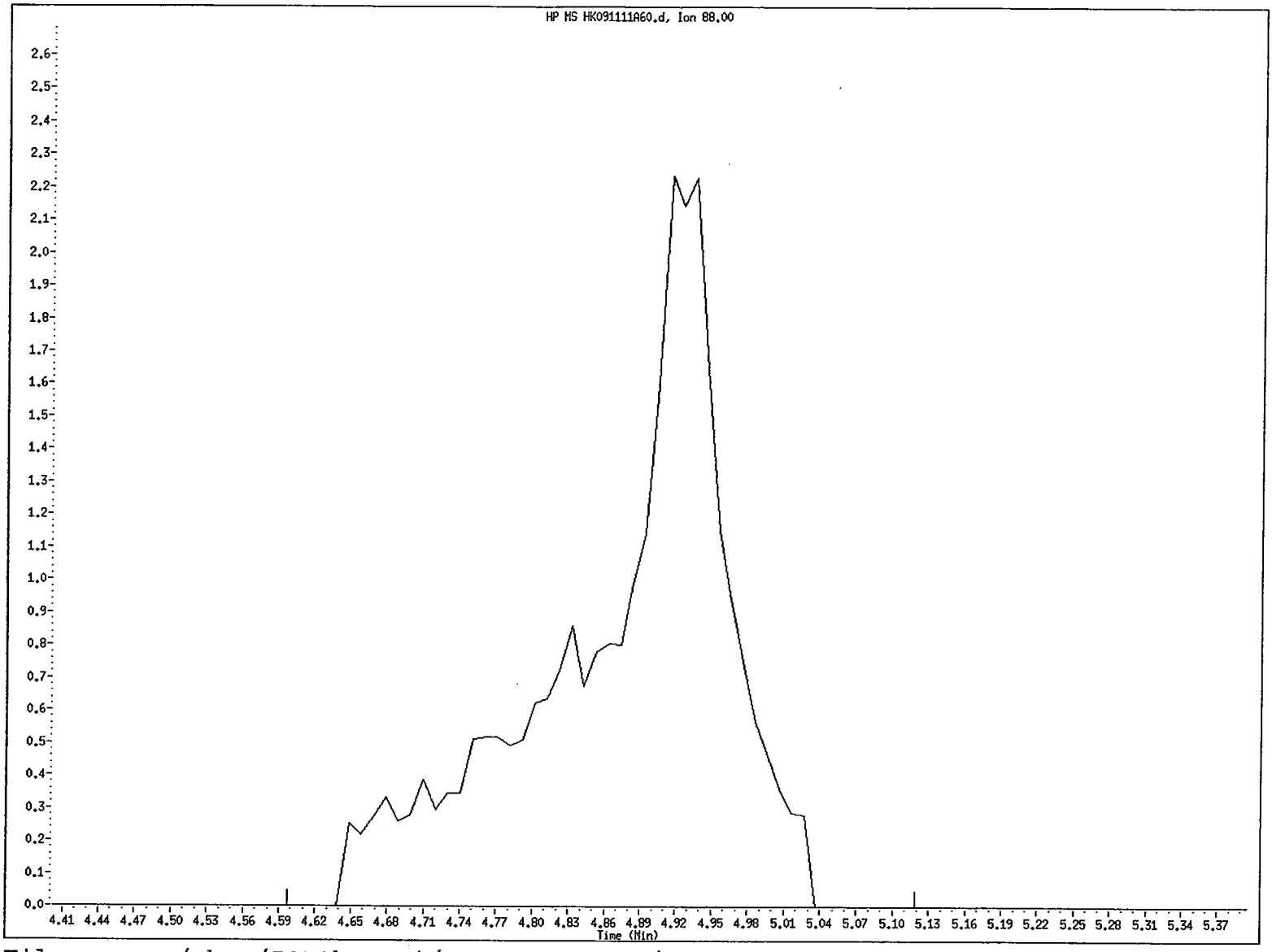
0 a/J/J/J

Pm 11/13/09

QC Flag Legend

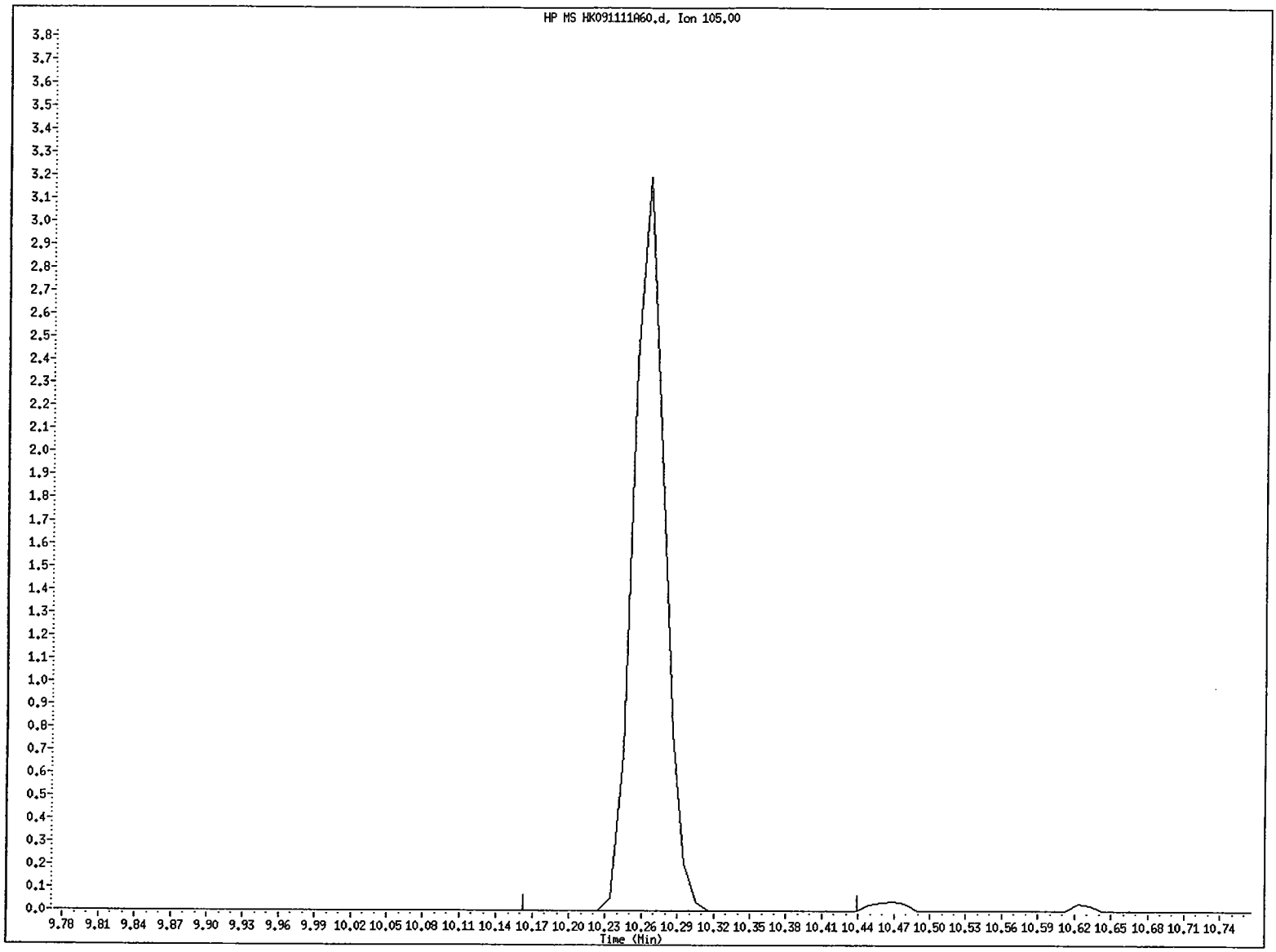
a - Target compound detected but, quantitated amount
Below Limit Of Quantitation(BLOQ).
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Nitrosomethylethylamine CAS Number 10595-95-6 Area = 17331 Manually integrated



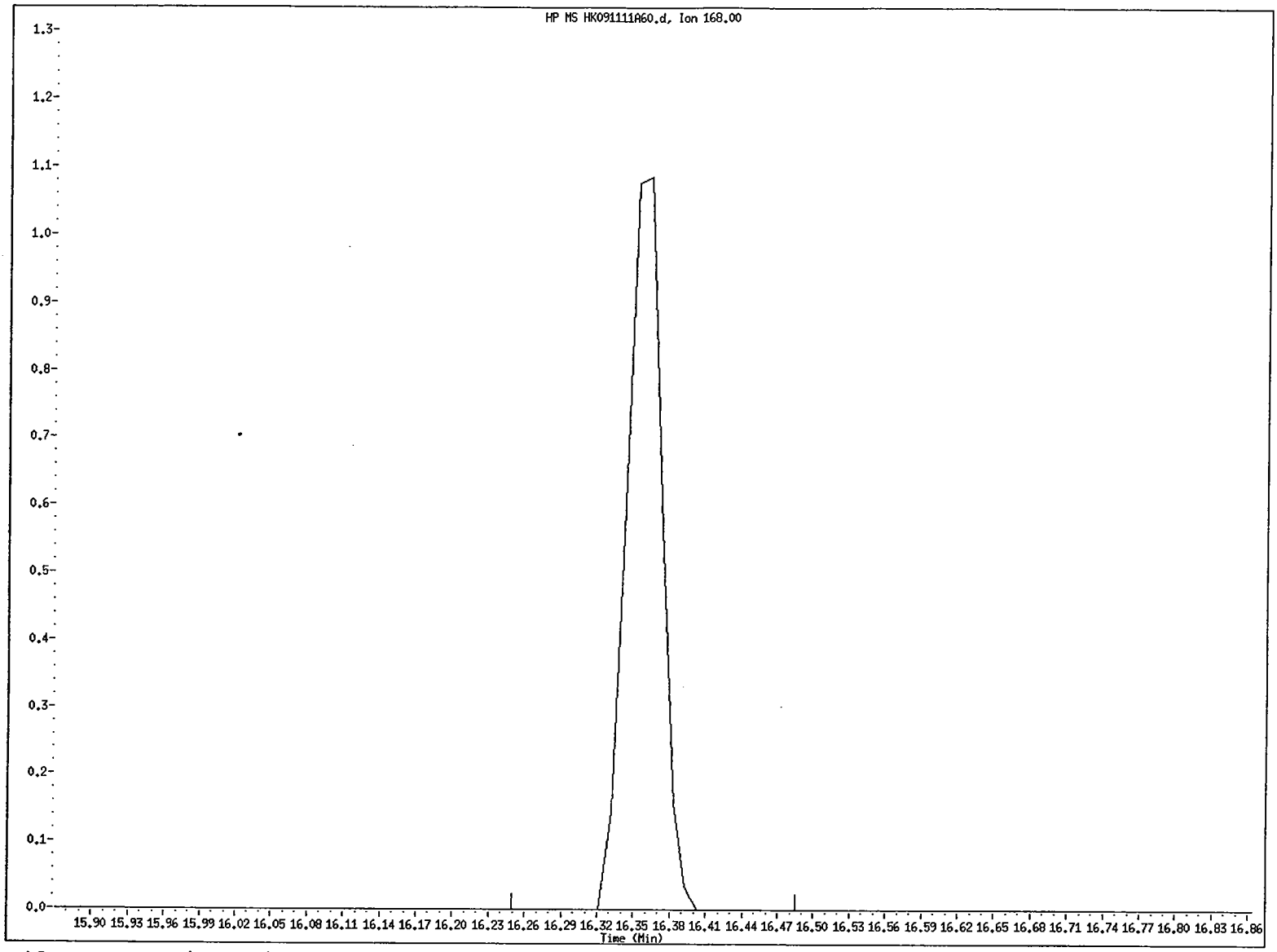
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Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 4.91
Operator ID: 2650

Acetophenone CAS Number 98-86-2 Area = 57287 Manually integrated



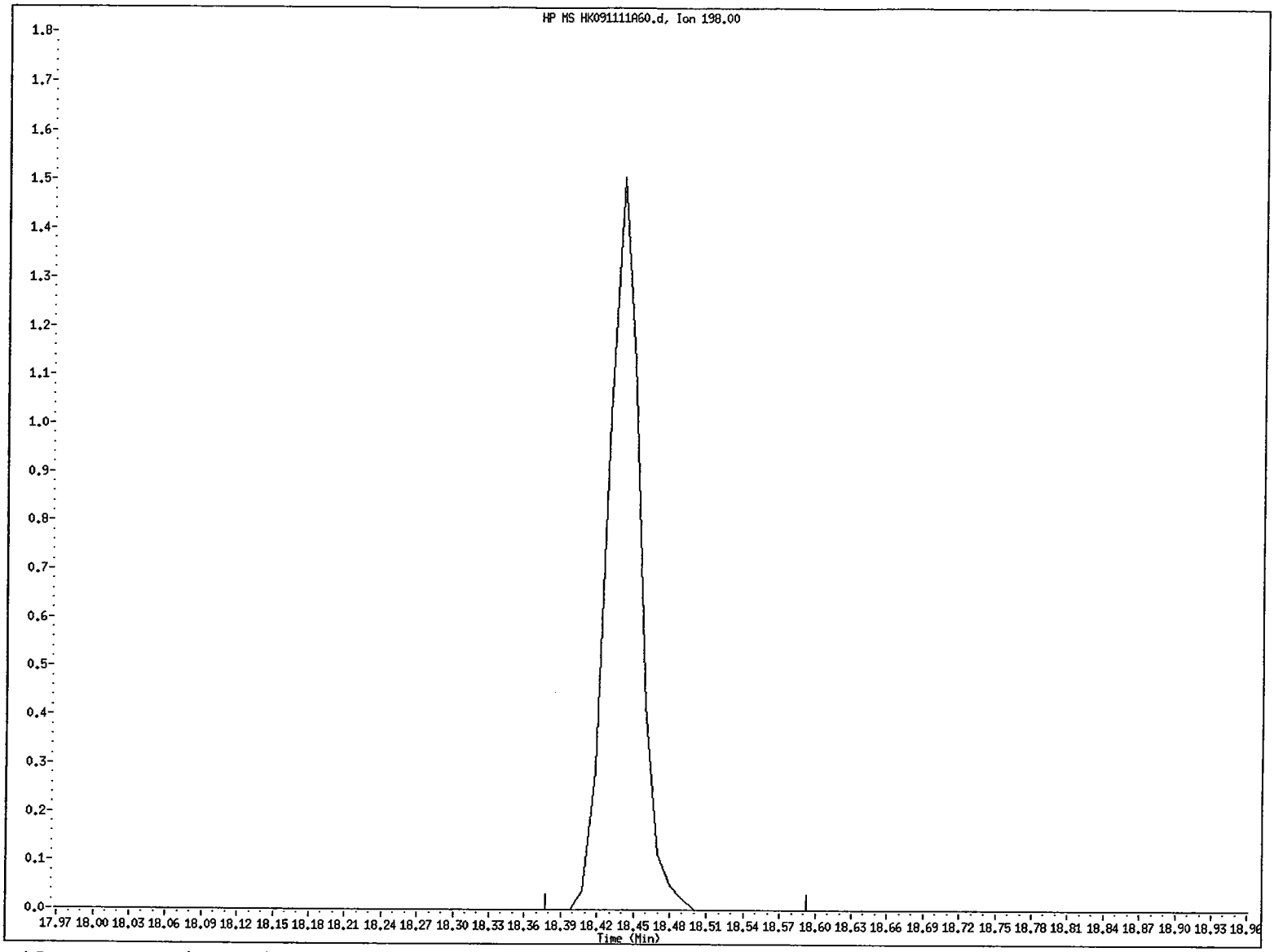
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Instrument ID: 5972hp60.i
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Retention Time: 10.26
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 22460 Manually integrated



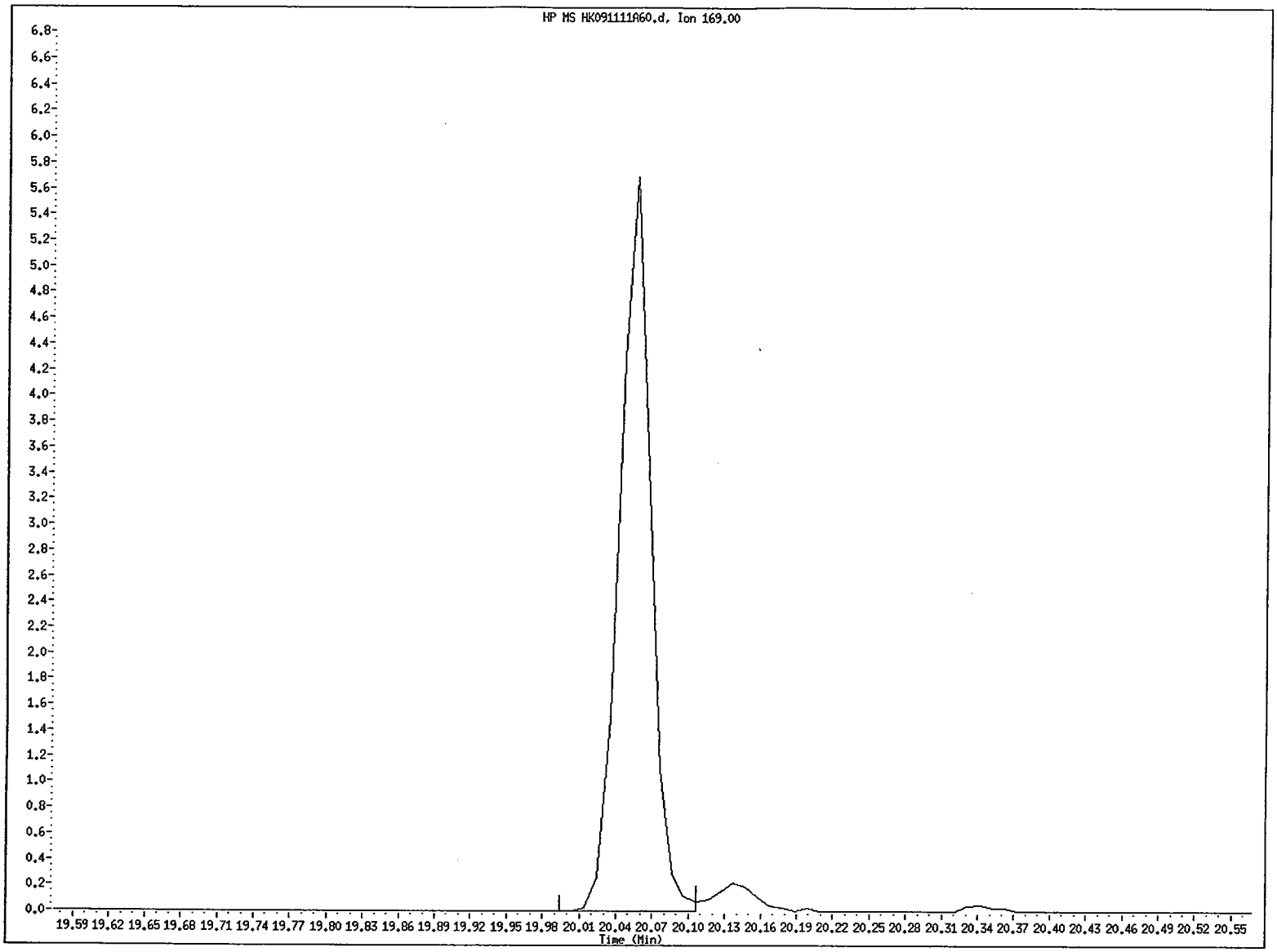
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Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 16.36
Operator ID: 2650

4,6-Dinitro-2-methylphenol CAS Number 534-52-1 Area = 28103 Manually integrate



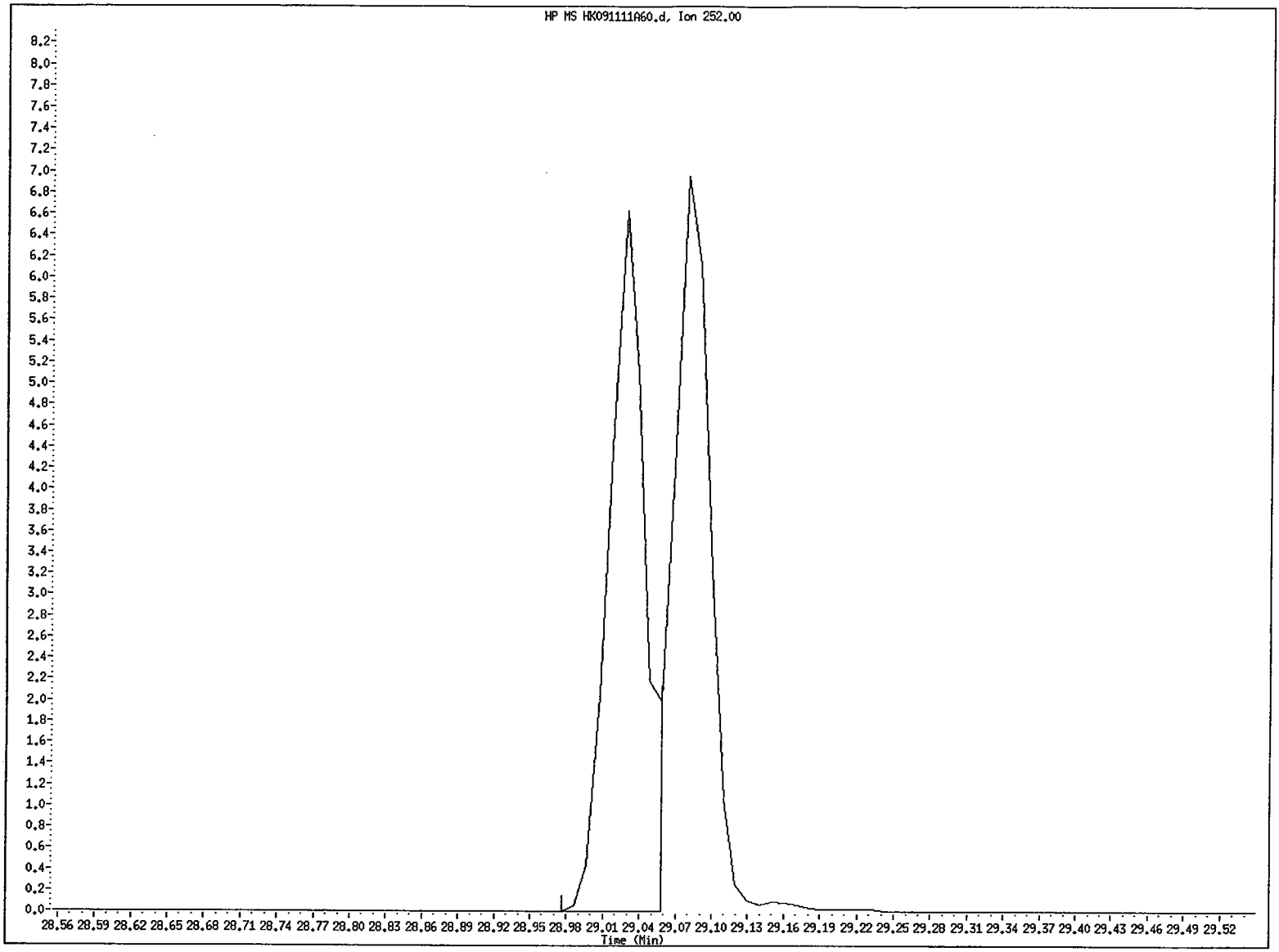
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Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 18.44
Operator ID: 2650

4-Aminobiphenyl CAS Number 92-67-1 Area = 102927 Manually integrated



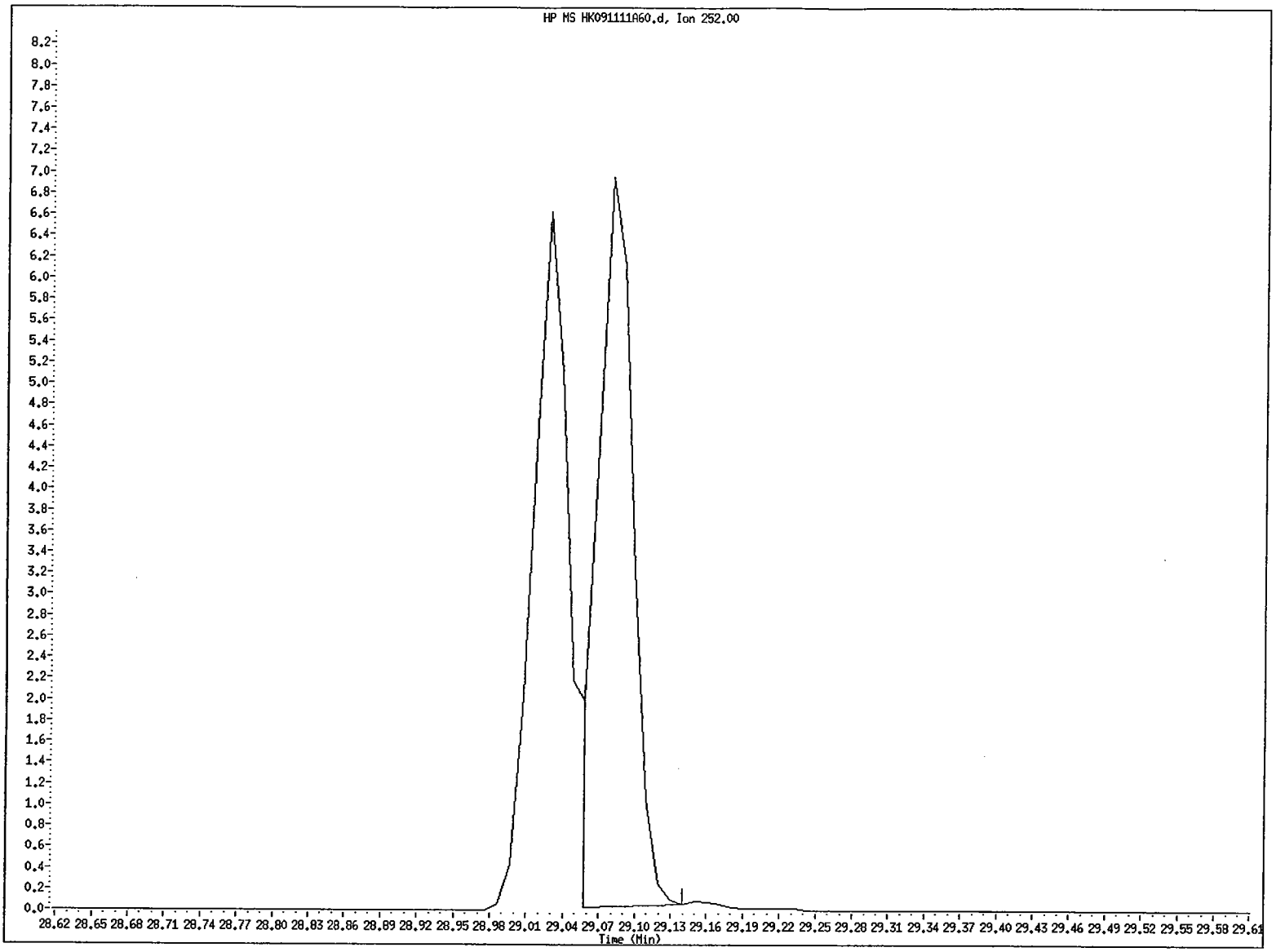
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Retention Time: 20.06
Operator ID: 2650

Benzo(b)fluoranthene CAS Number 205-99-2 Area = 141055 User selected hit



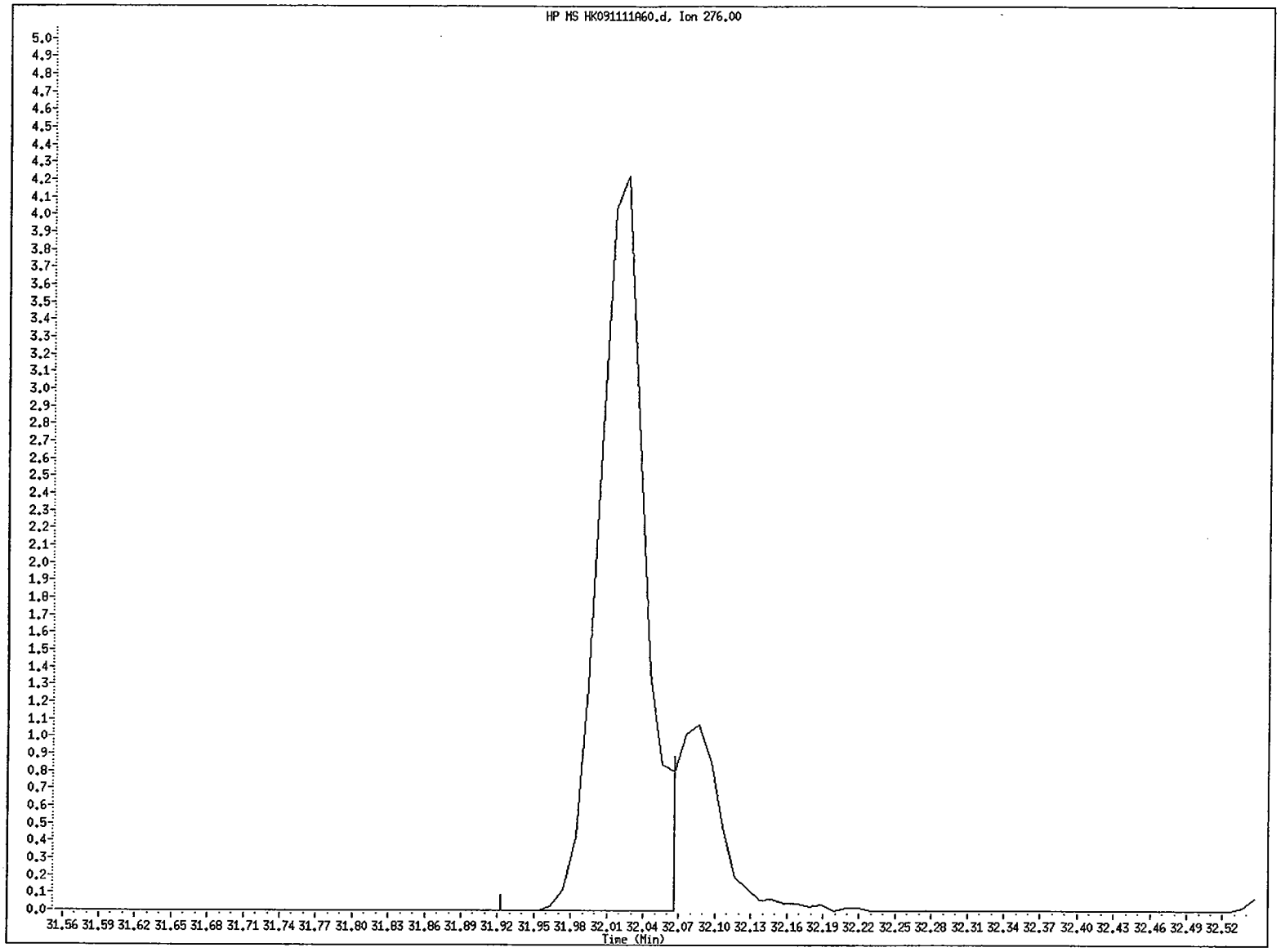
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 29.03
Operator ID: 2650

Benzo(k)fluoranthene CAS Number 207-08-9 Area = 145627 User selected hit



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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 29.08
Operator ID: 2650

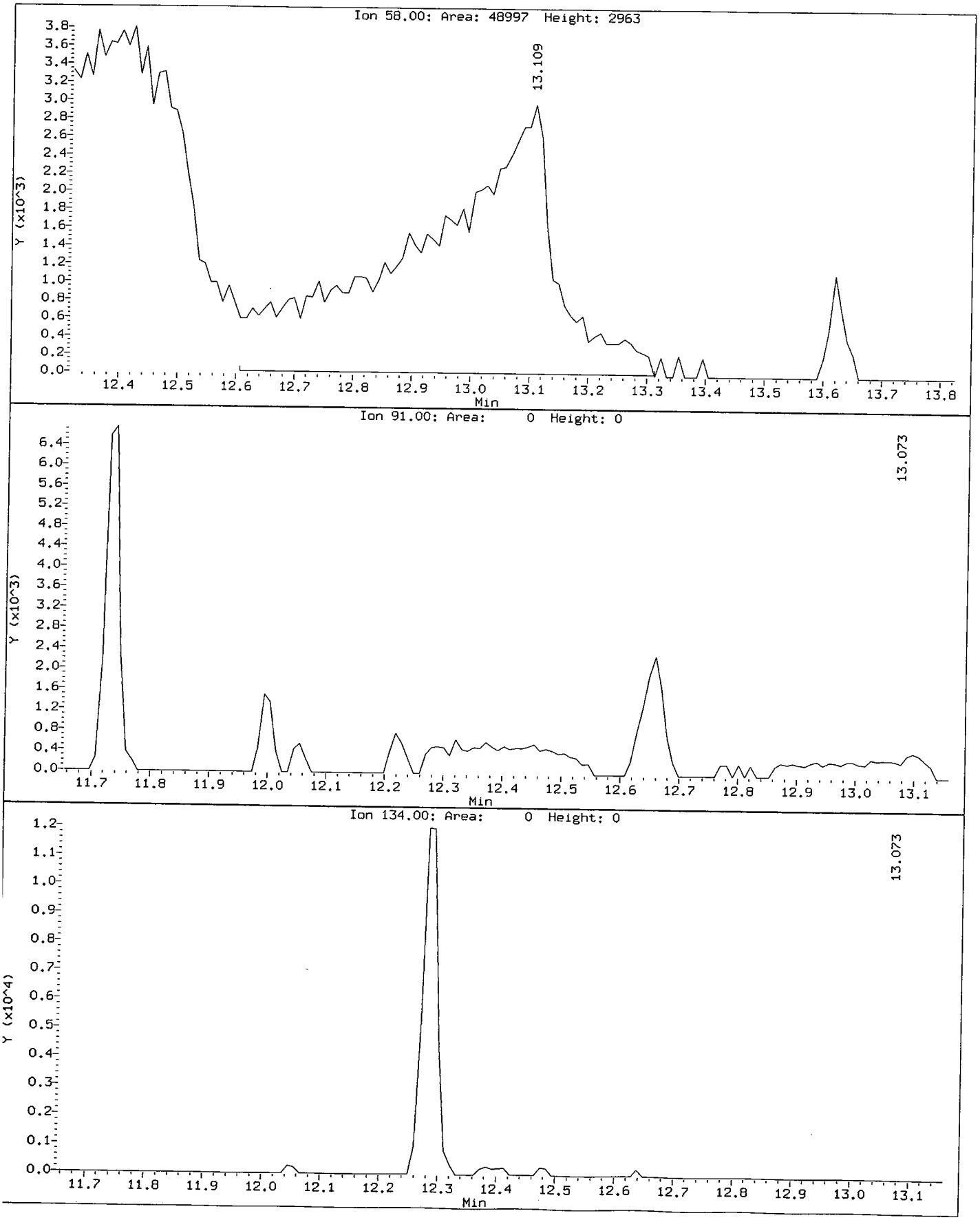
Indeno(1,2,3-c,d)pyrene CAS Number 193-39-5 Area = 114033 Manually integrated



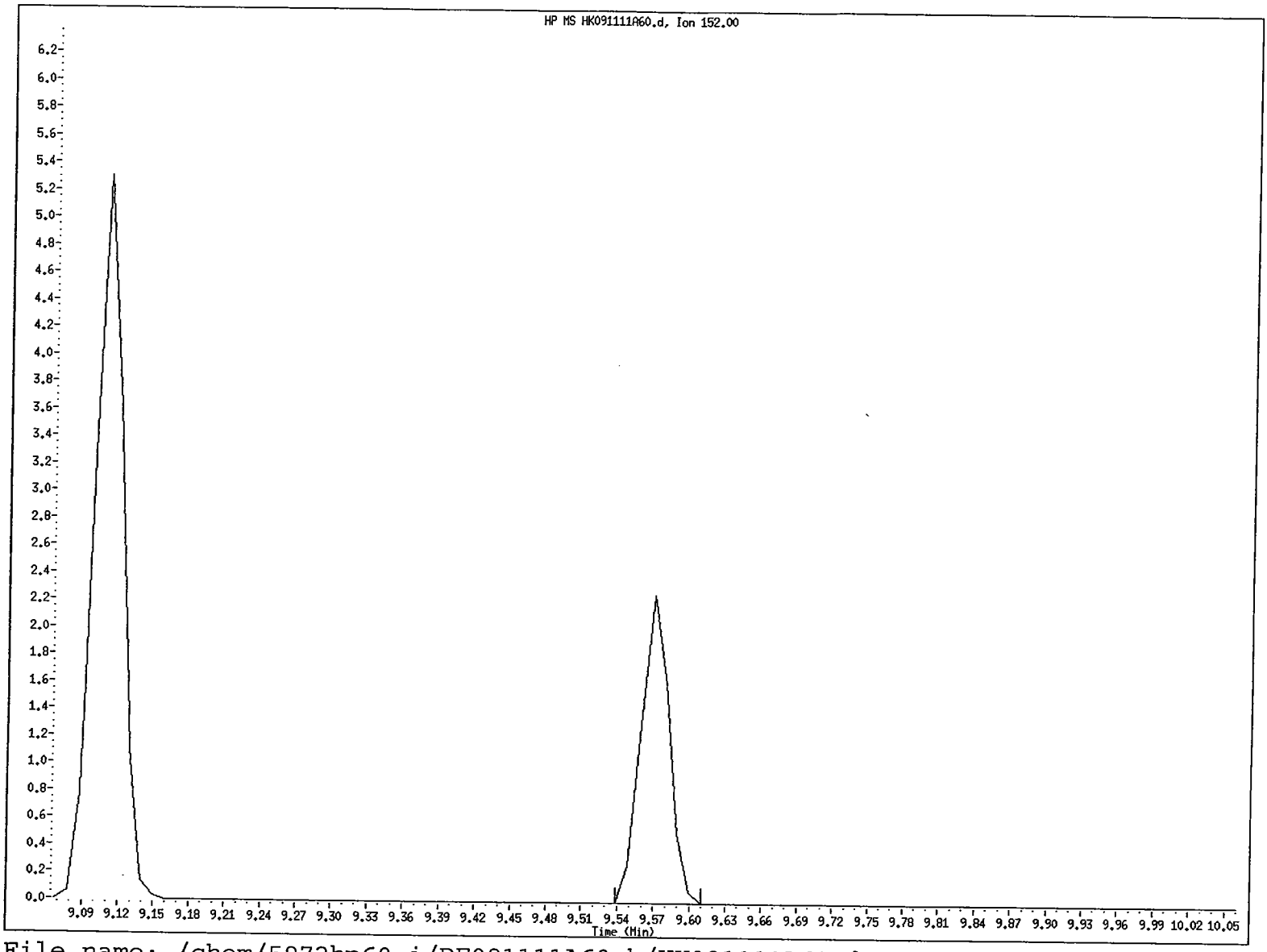
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 32.02
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HK091111A60.d
Injection Date: 11-NOV-2009 16:23
Instrument: 5972hp60.i
Client Sample ID: SSTD020

Compound: a,a-Dimethylphenethylamine
CAS Number: 122-09-8

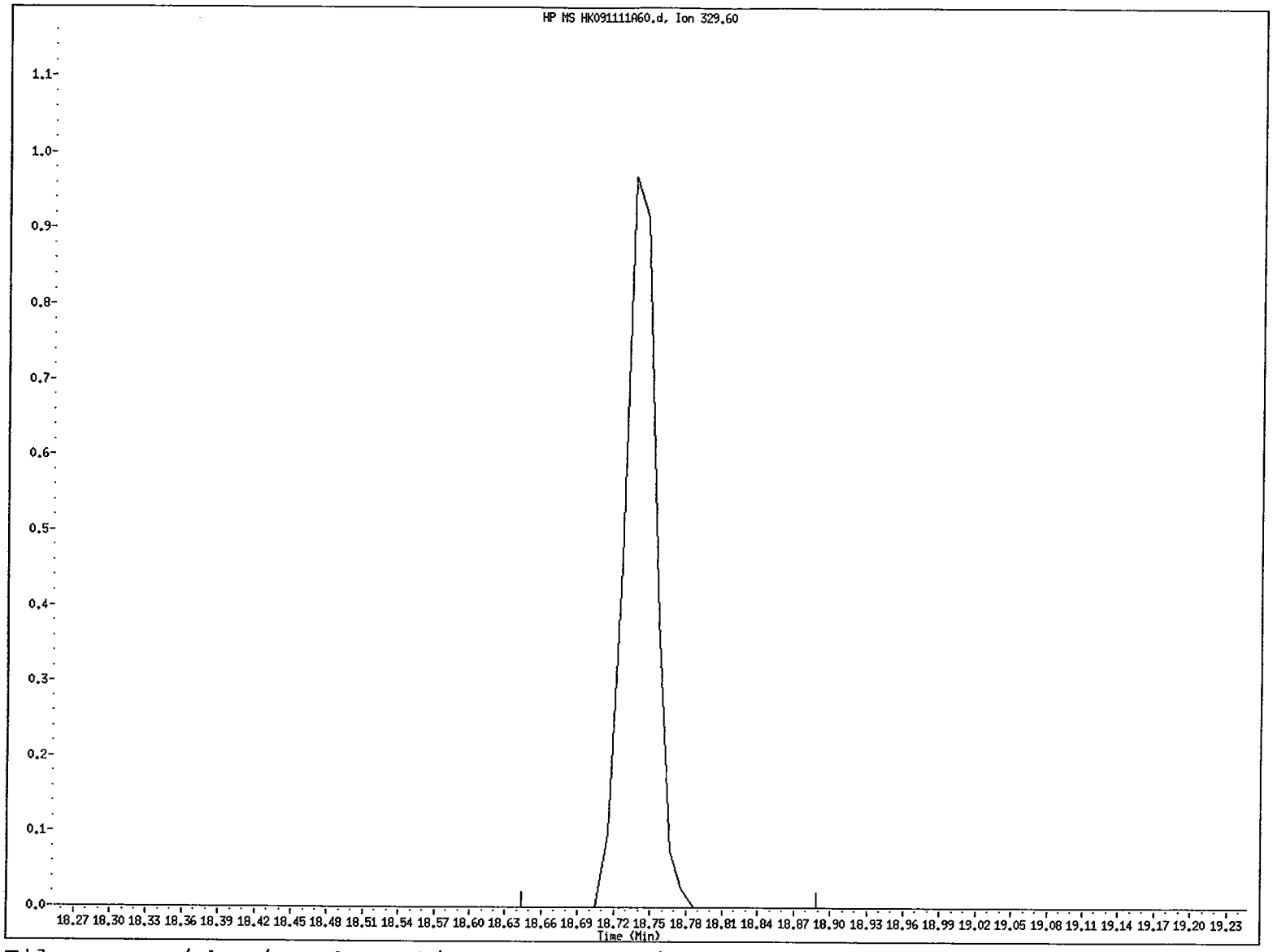


1,2-Dichlorobenzene-d4 CAS Number 2199-69-1 Area = 37057 User selected hit



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Client ID: SSTD020
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 9.57
Operator ID: 2650

2,4,6-Tribromophenol CAS Number 118-79-6 Area = 17911 Manually integrated

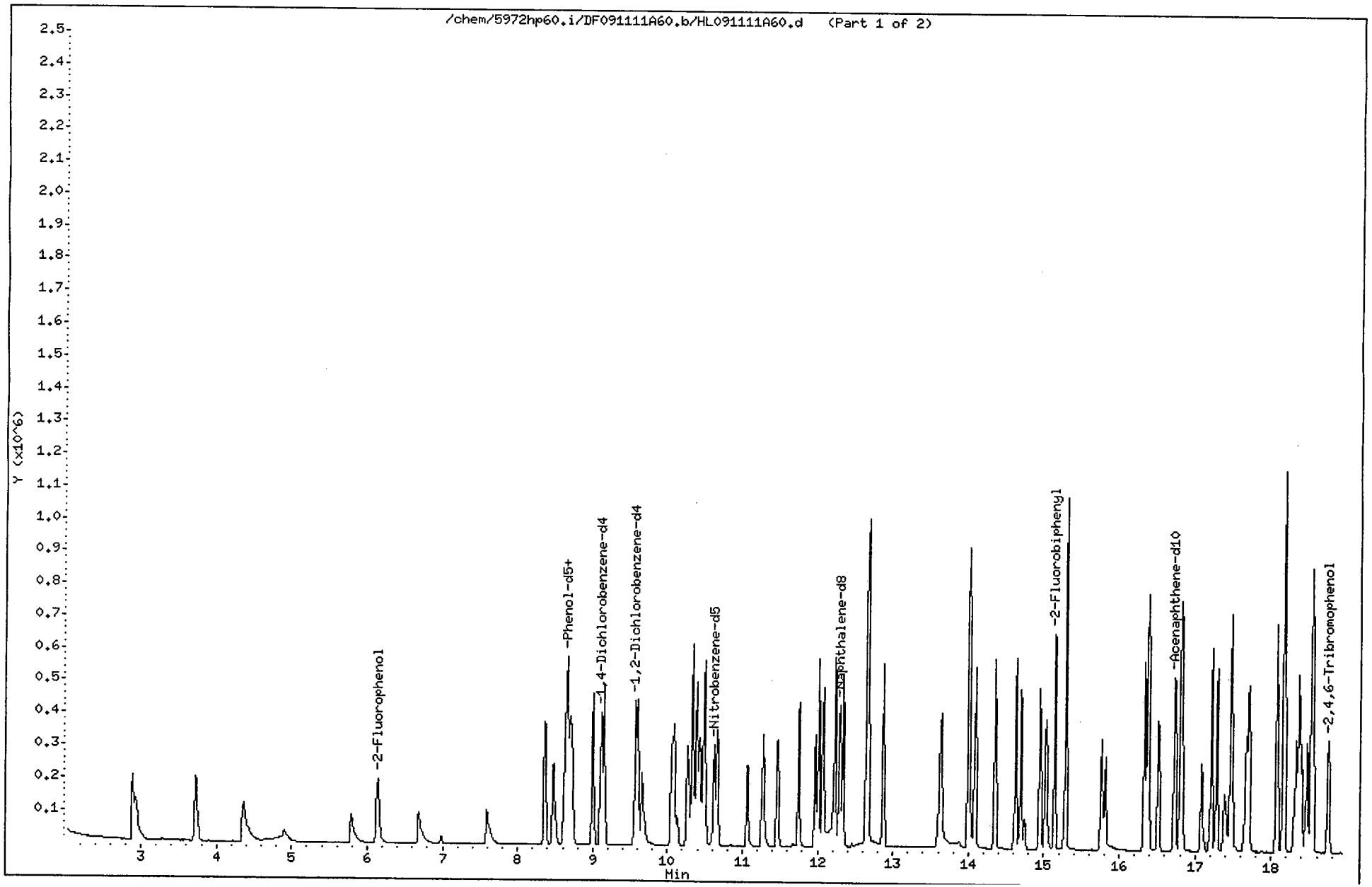


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Injection Date and Time: 11-NOV-2009 16:23
Retention Time: 18.74
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Date : 11-NOV-2009 17:10
Client ID: SSTD050
Sample Info: SSTD050:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

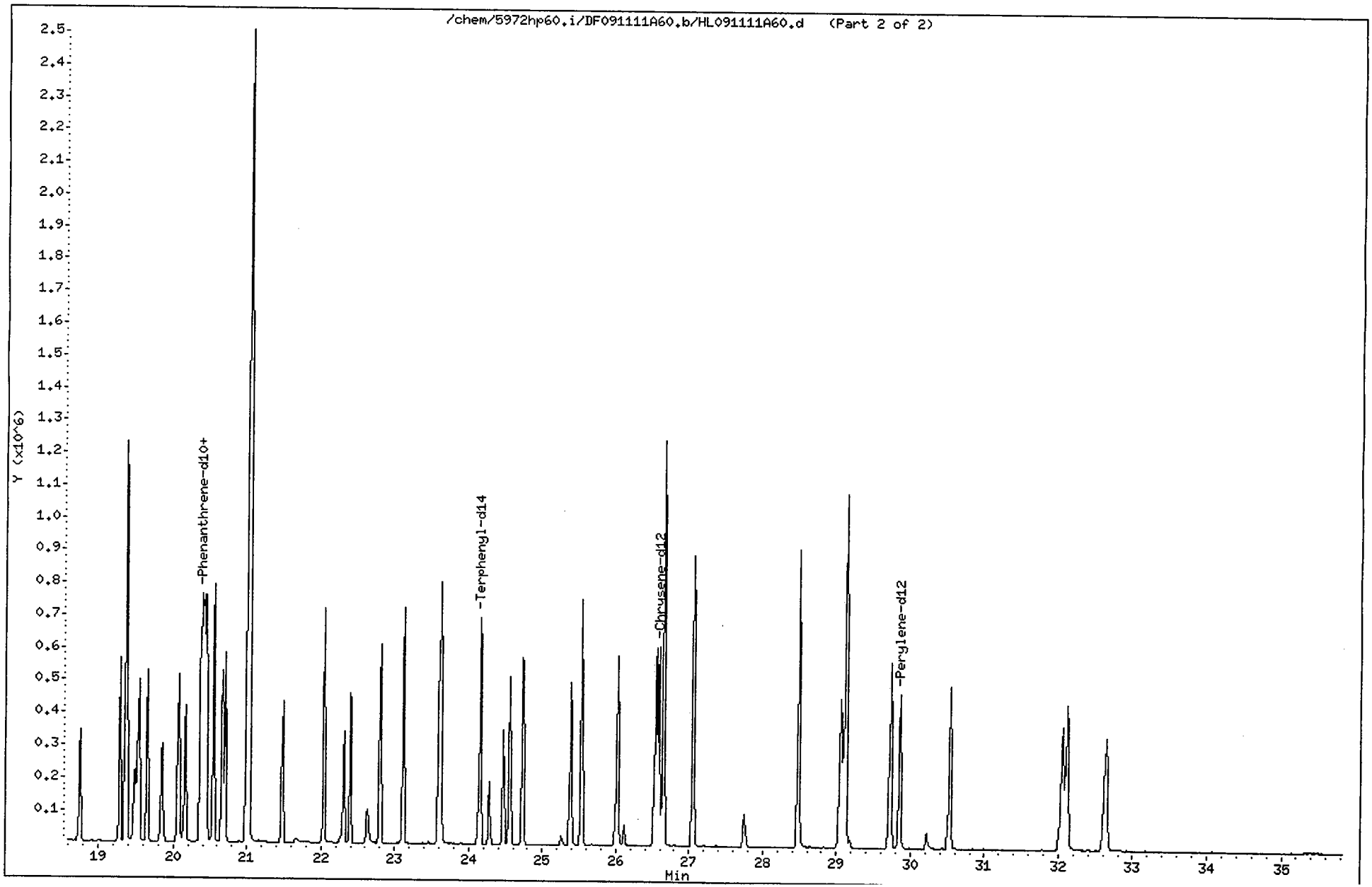
Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Date : 11-NOV-2009 17:10
Client ID: SSTD050
Sample Info: SSTD050:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Report Date: 12-Nov-2009 17:26

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Lab Smp Id: SSTD050 Client Smp ID: SSTD050
Inj Date : 11-NOV-2009 17:10
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD050:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 12-Nov-2009 17:26 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 7 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.104	9.104	(1.000)	114244	40.0000		
*	2 Naphthalene-d8	136	12.296	12.296	(1.000)	331817	40.0000		
*	3 Acenaphthene-d10	164	16.736	16.736	(1.000)	243896	40.0000		
*	4 Phenanthrene-d10	188	20.388	20.388	(1.000)	536899	40.0000		
*	5 Chrysene-d12	240	26.588	26.588	(1.000)	454952	40.0000		
*	6 Perylene-d12	264	29.852	29.852	(1.000)	442699	40.0000		
$	7 2-Fluorophenol	112	6.137	6.137	(0.674)	130892	50.0000	49.8	
$	8 Phenol-d5	99	8.623	8.623	(0.947)	160673	50.0000	49.4	
$	9 2-Chlorophenol-d4	132	8.664	8.664	(0.952)	130418	50.0000	49.6	2697
$	10 1,2-Dichlorobenzene-d4	152	9.565	9.565	(1.051)	121693	50.0000	50.8	8550
$	11 Nitrobenzene-d5	82	10.618	10.618	(0.864)	165630	50.0000	49.4	
$	12 2-Fluorobiphenyl	172	15.150	15.150	(0.905)	406001	50.0000	50.5	
$	13 2,4,6-Tribromophenol	330	18.752	18.752	(1.120)	68414	50.0000	50.4	
$	14 Terphenyl-d14	244	24.153	24.153	(0.908)	408587	50.0000	49.0	
	15 N-Nitrosodimethylamine	42	2.935	2.935	(0.322)	125924	50.0000	52.2	9534

Data File: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Report Date: 12-Nov-2009 17:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.884	2.884	(0.317)	139984	50.0000	50.0	9670
17 Ethylmethacrylate	69	3.723	3.723	(0.409)	119428	50.0000	49.6	9626
18 2-Picoline	93	4.357	4.357	(0.479)	137122	50.0000	50.4	9718
19 Nitrosomethylethylamine	88	4.899	4.899	(0.538)	56656	50.0000	52.7	9697(M)
20 Methyl Methanesulfonate	80	5.789	5.789	(0.636)	117267	50.0000	52.2	9679
21 N-Nitrosodiethylamine	102	6.680	6.680	(0.734)	58250	50.0000	53.0	9632
22 Ethyl Methanesulfonate	79	7.590	7.590	(0.834)	122393	50.0000	51.5	9807
23 Phenol	94	8.654	8.654	(0.951)	166358	50.0000	51.1	
24 Aniline	93	8.480	8.480	(0.931)	188318	50.0000	51.6	9679
25 Bis(2-chloroethyl)ether	93	8.715	8.715	(0.957)	133238	50.0000	52.2	
26 Pentachloroethane	167	8.368	8.368	(0.919)	101020	50.0000	51.1	9356
27 2-Chlorophenol	128	8.695	8.695	(0.955)	132842	50.0000	51.0	8689
28 1,3-Dichlorobenzene	146	9.002	9.002	(0.989)	182255	50.0000	50.9	
29 1,4-Dichlorobenzene	146	9.145	9.145	(1.004)	187477	50.0000	50.8	
30 Benzyl Alcohol	108	9.657	9.657	(1.061)	75765	50.0000	51.7	
31 1,2-Dichlorobenzene	146	9.605	9.605	(1.055)	173164	50.0000	51.2	
32 2-Methylphenol	108	10.086	10.086	(1.108)	92789	50.0000	45.5	
33 2,2'-oxybis(1-Chloropropane)	45	10.056	10.056	(1.105)	225761	50.0000	51.3	9516
34 N-Nitrosopyrrolidine	100	10.332	10.332	(1.135)	63270	50.0000	54.6	7198
35 3-Methylphenol	108	10.495	10.495	(1.153)	244140	100.000	102	
36 4-Methylphenol	108	10.495	10.495	(1.153)	244140	100.000	102	
37 3-4-Methylphenol	108	10.495	10.495	(1.153)	245836	100.000	103	8654
38 N-Nitroso-di-N-propylamine	70	10.424	10.424	(1.145)	106830	50.0000	53.4	8588
39 Acetophenone	105	10.270	10.270	(0.835)	186279	50.0000	49.6	0(M)
40 N-Nitrosomorpholine	116	10.383	10.383	(1.140)	25646	50.0000	54.6	8724
41 o-Toluidine	106	10.383	10.383	(1.140)	198346	50.0000	52.1	8560
42 Hexachloroethane	117	10.332	10.332	(1.135)	79342	50.0000	51.5	9309
43 Nitrobenzene	77	10.659	10.659	(0.867)	167237	50.0000	49.9	9780
44 N-Nitrosopiperidine	114	11.068	11.068	(0.900)	64267	50.0000	52.1	9771
45 Isophorone	82	11.273	11.273	(0.917)	282591	50.0000	50.9	9726
46 2-Nitrophenol	139	11.467	11.467	(0.933)	90641	50.0000	51.4	8990
47 2,4-Dimethylphenol	122	11.754	11.754	(0.956)	107216	50.0000	50.3	8790
48 Benzoic Acid	122	12.224	12.224	(0.994)	91588	250.000	266	5599(AM)
49 o,o,o-Triethylphosphorothioat	198	12.010	12.010	(0.977)	97207	50.0000	50.2	8975
50 Bis(2-chloroethoxy)methane	93	11.969	11.969	(0.973)	164396	50.0000	49.1	9526
51 2,4-Dichlorophenol	162	12.071	12.071	(0.982)	163995	50.0000	51.0	
52 1,2,4-Trichlorobenzene	180	12.224	12.224	(0.994)	200830	50.0000	50.7	
53 Naphthalene	128	12.337	12.337	(1.003)	333463	50.0000	48.8	9531
54 4-Chloroaniline	127	12.664	12.664	(1.030)	158365	50.0000	50.2	9022
55 2,6-Dichlorophenol	162	12.644	12.644	(1.028)	163771	50.0000	49.9	
56 Hexachloropropene	213	12.664	12.664	(1.030)	148827	50.0000	51.4	9401
57 Hexachlorobutadiene	225	12.869	12.869	(1.047)	114449	50.0000	51.1	9294
58 N-Nitroso-di-n-butylamine	84	13.636	13.636	(1.109)	91986	50.0000	51.6	9695
60 4-Chloro-3-methylphenol	107	13.994	13.994	(1.138)	123978	50.0000	49.0	8597
61 Safrole	162	14.015	14.015	(1.140)	145372	50.0000	50.5	9329
62 2-Methylnaphthalene	141	14.097	14.097	(1.146)	232359	50.0000	50.0	
63 1-Methylnaphthalene	142	14.352	14.352	(1.167)	251748	50.0000	49.6	

Data File: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Report Date: 12-Nov-2009 17:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
64 Hexachlorocyclopentadiene	237	14.700	14.700	(0.878)	148099	50.0000	51.4	9274
65 1,2,4,5-Tetrachlorobenzene	216	14.629	14.629	(0.874)	189058	50.0000	51.2	9481
66 2,4,6-Trichlorophenol	196	14.946	14.946	(0.893)	134954	50.0000	50.1	
67 2,4,5-Trichlorophenol	196	15.028	15.028	(0.898)	146429	50.0000	50.0	
68 Isosafrole	162	14.741	14.741	(0.881)	24505	50.0000	51.2	
69 2-Chloronaphthalene	162	15.294	15.294	(0.914)	465770	50.0000	50.2	
70 2-Nitroaniline	65	15.764	15.764	(0.942)	108565	50.0000	50.8	9668
71 1,4-Napthoquinone	158	15.815	15.815	(0.945)	100993	50.0000	46.8	9416
72 Dimethylphthalate	163	16.378	16.378	(0.979)	422998	50.0000	51.1	9288
73 1,3-Dinitrobenzene	168	16.368	16.368	(0.978)	83002	50.0000	51.8	0(M)
74 2,6-Dinitrotoluene	165	16.521	16.521	(0.987)	105171	50.0000	51.0	9486
75 Acenaphthylene	152	16.327	16.327	(0.976)	462667	50.0000	50.2	8442
76 3-Nitroaniline	138	16.828	16.828	(1.006)	81842	50.0000	51.5	9706
77 Acenaphthene	154	16.808	16.808	(1.004)	274893	50.0000	50.3	9542
78 2,4-Dinitrophenol	184	17.084	17.084	(1.021)	89320	50.0000	53.0	
79 4-Nitrophenol	139	17.391	17.391	(1.039)	72217	50.0000	52.2	9645
80 Pentachlorobenzene	250	17.289	17.289	(1.033)	161339	50.0000	51.3	9700
81 2,4-Dinitrotoluene	165	17.483	17.483	(1.045)	142286	50.0000	50.8	7680
82 Dibenzofuran	168	17.217	17.217	(1.029)	486261	50.0000	50.6	9179
83 1-Naphthylamine	143	17.473	17.473	(1.044)	249362	50.0000	51.5	
84 2,3,4,6-Tetrachlorophenol	232	17.708	17.708	(1.058)	113657	50.0000	51.9	9455
85 2-Naphthylamine	143	17.667	17.667	(1.056)	259922	50.0000	50.6	
86 Diethylphthalate	149	18.168	18.168	(1.086)	403560	50.0000	51.0	7929
87 Zinophos	97	18.363	18.363	(1.097)	87193	50.0000	51.8	8986
88 4-Chlorophenyl-phenylether	204	18.168	18.168	(1.086)	207363	50.0000	51.0	7704
89 5-Nitro-o-toluidine	152	18.322	18.322	(1.095)	107963	50.0000	52.0	7692
90 Fluorene	166	18.076	18.076	(1.080)	379937	50.0000	50.6	7684
91 4-Nitroaniline	138	18.404	18.404	(1.100)	83495	50.0000	52.5	9068
92 4,6-Dinitro-2-methylphenol	198	18.465	18.465	(0.906)	110271	50.0000	51.9	9091
93 N-Nitrosodiphenylamine	169	18.526	18.526	(0.909)	325356	50.0000	48.9	9075
95 1,2-Diphenylhydrazine	77	18.547	18.547	(1.108)	381559	50.0000	49.1	9217
96 Sulfotep	322	19.294	19.294	(1.153)	54847	50.0000	50.1	8706
97 1,3,5-Trinitrobenzene	75	19.478	19.478	(0.955)	125096	50.0000	49.7	8881
98 Diallate (trans isomer)	86	19.365	19.365	(0.950)	108538	25.0000	24.6	
99 Diallate (trans) part of total	86	19.365	19.365	(0.950)	108538	25.0000	24.6	9414
100 Phorate	75	19.376	19.376	(0.950)	214496	50.0000	48.2	9423
101 Phenacetin	108	19.539	19.539	(0.958)	180278	50.0000	50.6	8811
102 Diallate (cis isomer)	86	19.549	19.549	(0.959)	30213	25.0000	25.3	
103 Diallate (cis) part of total	86	19.549	19.549	(0.959)	30213	25.0000	25.3	7336(H)
104 4-Bromophenyl-phenylether	248	19.365	19.365	(0.950)	116557	50.0000	50.6	8554
105 Hexachlorobenzene	284	19.652	19.652	(0.964)	134812	50.0000	49.6	9472
106 Dimethoate	87	19.856	19.856	(0.974)	99722	50.0000	52.9	9795
107 4-Aminobiphenyl	169	20.071	20.071	(0.984)	390392	50.0000	50.4	0(M)
108 Pentachlorophenol	266	20.163	20.163	(0.989)	93886	50.0000	50.9	8408
109 Pentachloronitrobenzene	237	20.368	20.368	(0.999)	55787	50.0000	50.4	7535
110 Pronamide	173	20.419	20.419	(1.002)	215785	50.0000	49.8	9400
111 Disulfoton	88	20.665	20.665	(1.014)	138146	50.0000	50.0	9504

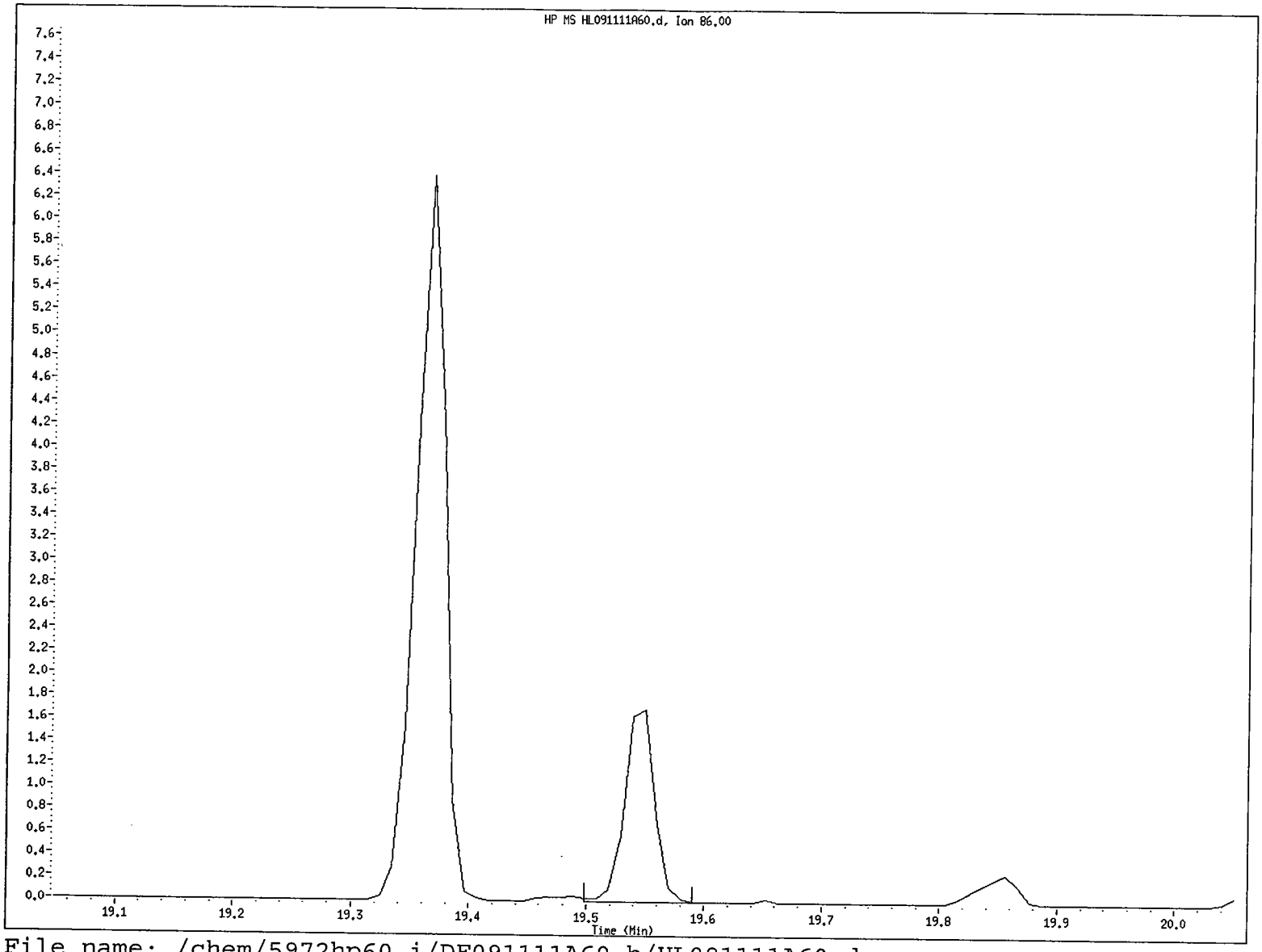
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Report Date: 12-Nov-2009 17:26

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
112 Phenanthrene	178	20.450	20.450	(1.003)	597732	50.0000	49.3	
113 Anthracene	178	20.552	20.552	(1.008)	611189	50.0000	50.2	
114 Carbazole	167	21.033	21.033	(1.032)	2745410	50.0000	51.6	9480
115 Methyl Parathion	109	21.483	21.483	(1.054)	108422	50.0000	52.9	9561
116 Di-n-butylphthalate	149	22.046	22.046	(1.081)	658944	50.0000	49.3	9639
117 Parathion	109	22.394	22.394	(1.098)	74256	50.0000	50.4	8441
118 4-Nitroquinoline-1-oxide	190	22.312	22.312	(1.094)	80458	50.0000	55.3	8653
119 Methapyrilene	97	22.629	22.629	(1.110)	47058	50.0000	52.2	9711
120 Isodrin	193	22.803	22.803	(1.118)	79334	50.0000	49.7	9321
121 Fluoranthene	202	23.120	23.120	(1.134)	585210	50.0000	49.7	9170
122 Benzidine	184	23.591	23.591	(0.887)	278505	50.0000	52.8	8480
123 Pyrene	202	23.621	23.621	(0.888)	649268	50.0000	50.1	9288
124 p-Dimethylaminoazobenzene	225	24.562	24.562	(0.924)	111650	50.0000	50.5	9321
125 Chlorobenzilate	251	24.736	24.736	(0.930)	172330	50.0000	48.7	9385
126 Kepone	272	Compound Not Detected.						
127 Famfur	218	Compound Not Detected.						
128 Butylbenzylphthalate	149	25.534	25.534	(0.960)	314461	50.0000	49.0	9543
129 3,3'-Dimethylbenzidine	212	25.381	25.381	(0.955)	308152	50.0000	51.0	9507
130 2-Acetylaminofluorene	181	26.025	26.025	(0.979)	292328	50.0000	51.1	9280
131 3,3'-Dichlorobenzidine	252	26.660	26.660	(1.003)	224181	50.0000	51.6	8084
132 bis(2-ethylhexyl)Phthalate	149	27.048	27.048	(1.017)	434748	50.0000	50.1	9510
133 Benzo(a)anthracene	228	26.547	26.547	(0.998)	545348	50.0000	50.1	
134 Chrysene	228	26.649	26.649	(1.002)	538964	50.0000	51.0	
135 Di-n-octylphthalate	149	28.481	28.481	(0.954)	761333	50.0000	49.3	
136 7,12-Dimethylbenz(a)anthracene	256	29.125	29.125	(0.976)	269126	50.0000	50.1	8403
137 Benzo(b)fluoranthene	252	29.054	29.054	(0.973)	604984	50.0000	48.8	
138 Benzo(k)fluoranthene	252	29.115	29.115	(0.975)	570701	50.0000	51.9	(H)
139 Benzo(a)pyrene	252	29.729	29.729	(0.996)	522222	50.0000	50.6	
140 3-Methylcholanthrene	268	30.537	30.537	(1.023)	271373	50.0000	50.6	9172
141 Indeno(1,2,3-c,d)pyrene	276	32.051	32.051	(1.074)	480547	50.0000	48.6	0(M)
142 Dibenzo(a,h)anthracene	278	32.113	32.113	(1.076)	483475	50.0000	49.7	8728
143 Benzo(g,h,i)perylene	276	32.645	32.645	(1.094)	470015	50.0000	48.9	8341
198 4-Chlorophenol	128	Compound Not Detected.						
199 2,5-Dichlorophenol	162	Compound Not Detected.						
M 144 Diallate Total	86				138751	50.0000	49.6	0
201 a,a-Dimethylphenethylamine	58	13.882	13.882	(1.129)	179273	50.0000	49.2	0(aM)
202 Aramite	185	24.470	24.470	(0.920)	56850	50.0000	49.8	9352

QC Flag Legend

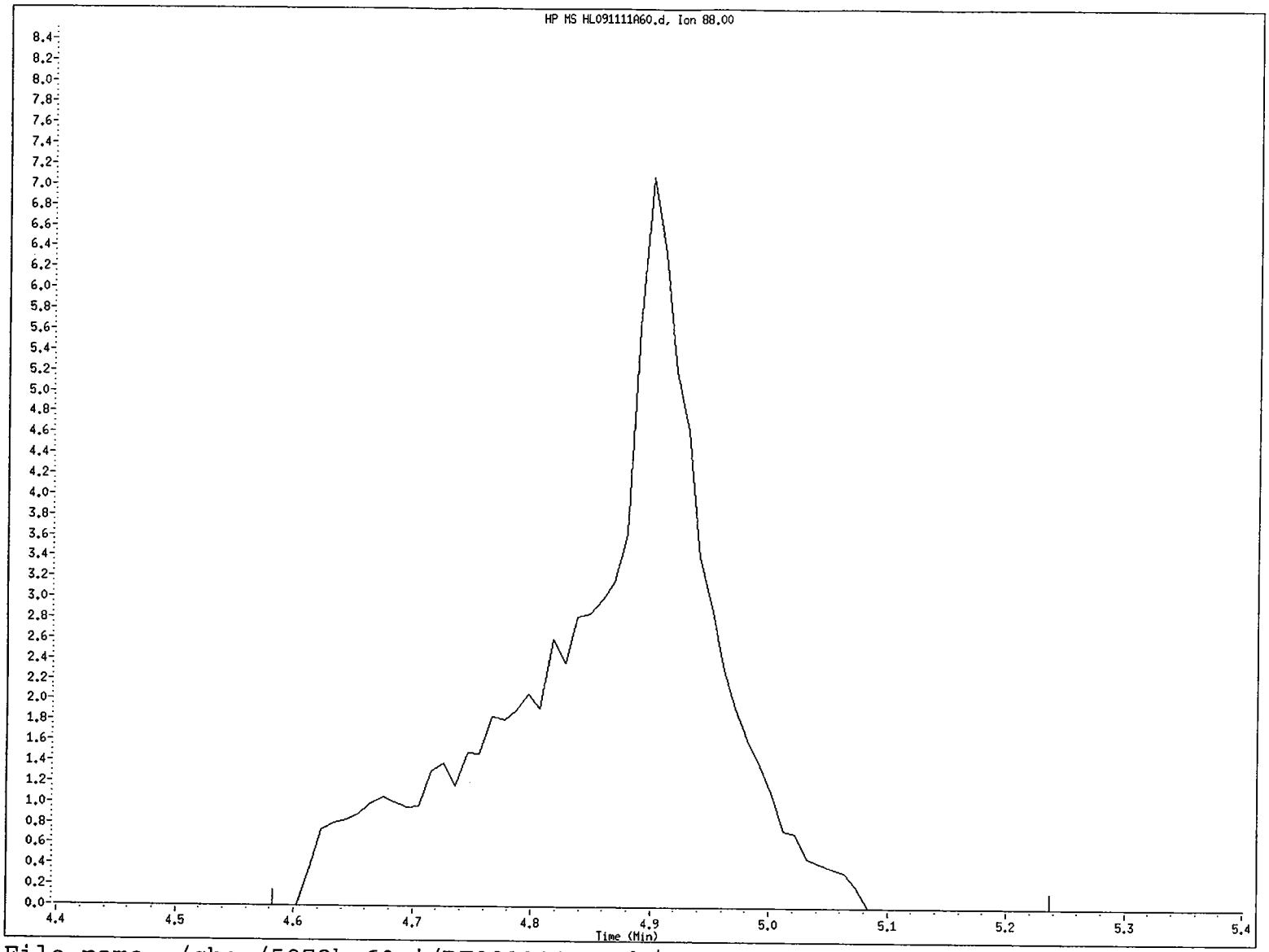
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A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Diallate (cis) part of total CAS Number 17708-57-5 Area = 30213 User selected



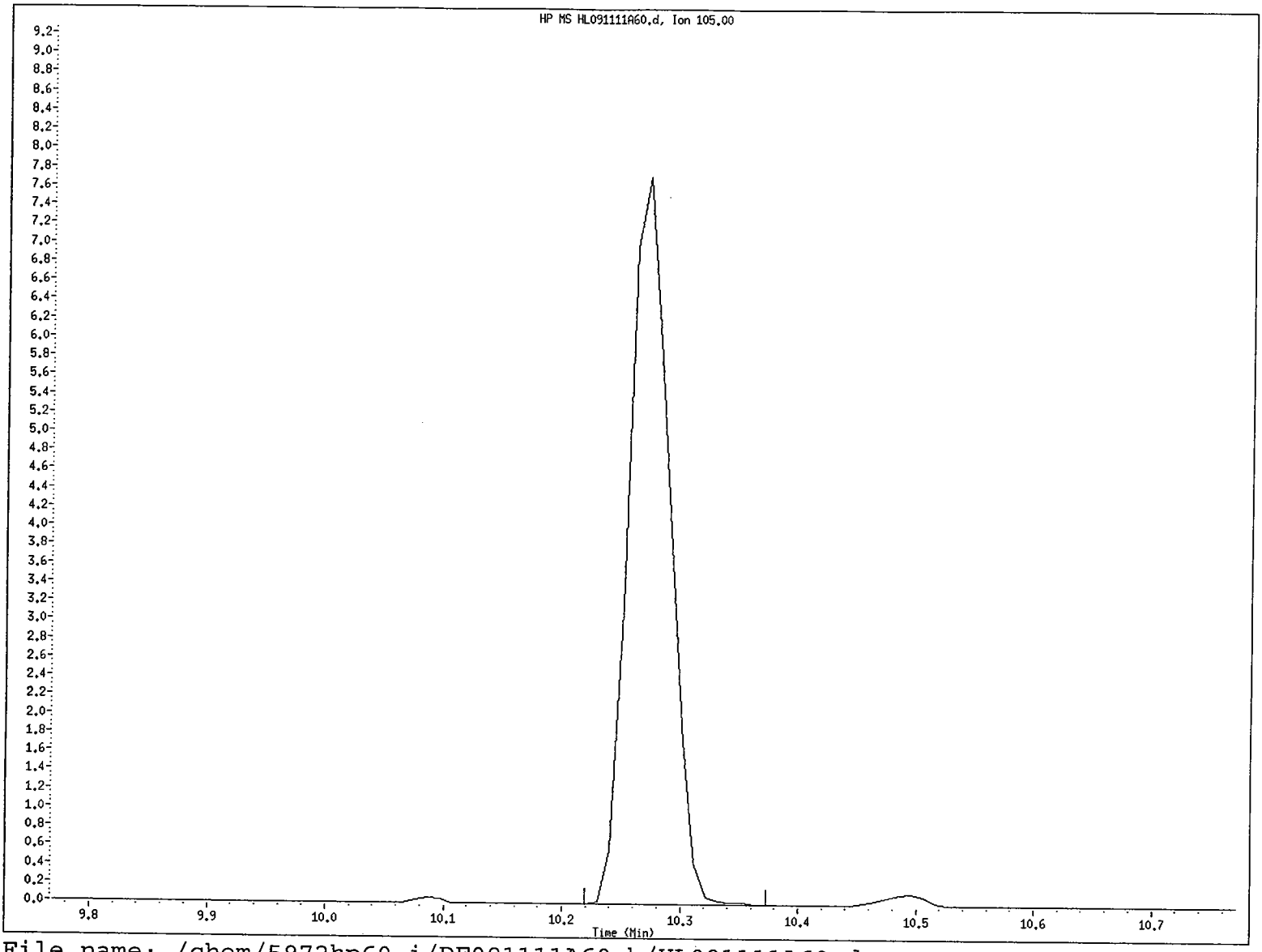
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 19.55
Operator ID: 2650

Nitrosomethylethylamine CAS Number 10595-95-6 Area = 56656 Manually integrated



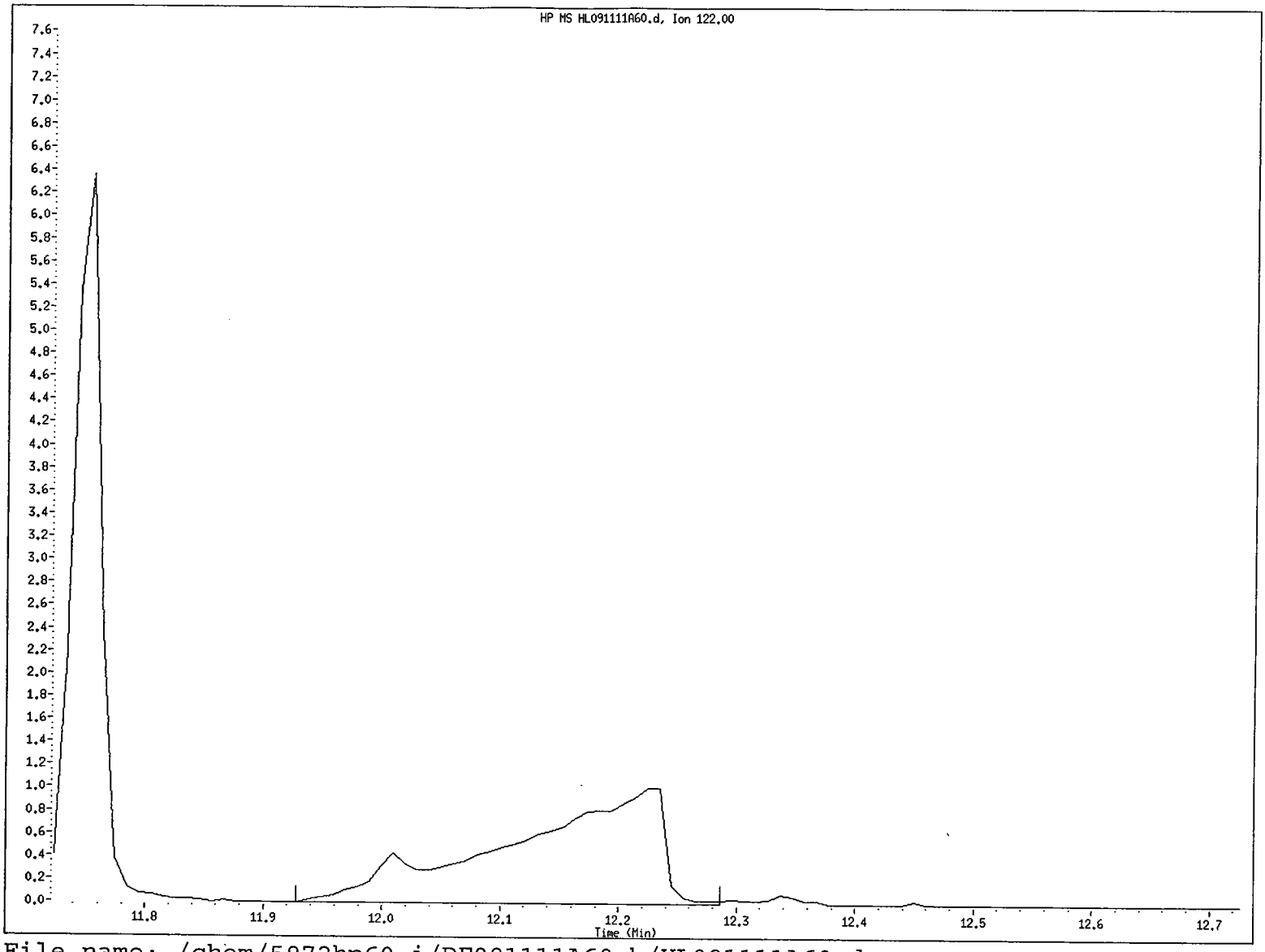
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Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 4.90
Operator ID: 2650

Acetophenone CAS Number 98-86-2 Area = 186279 Manually integrated



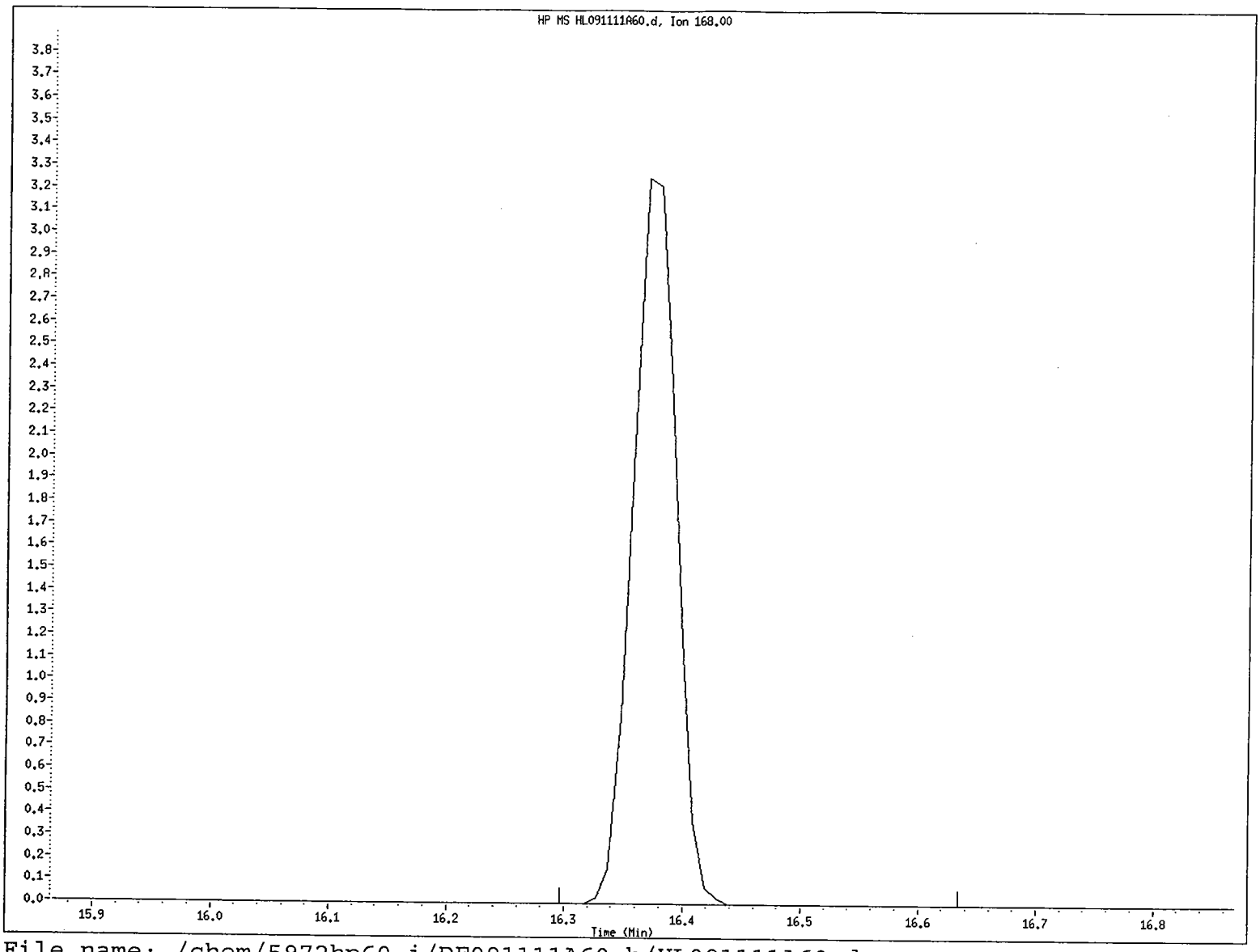
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 10.27
Operator ID: 2650

Benzoic Acid CAS Number 65-85-0 Area = 91588 Manually integrated



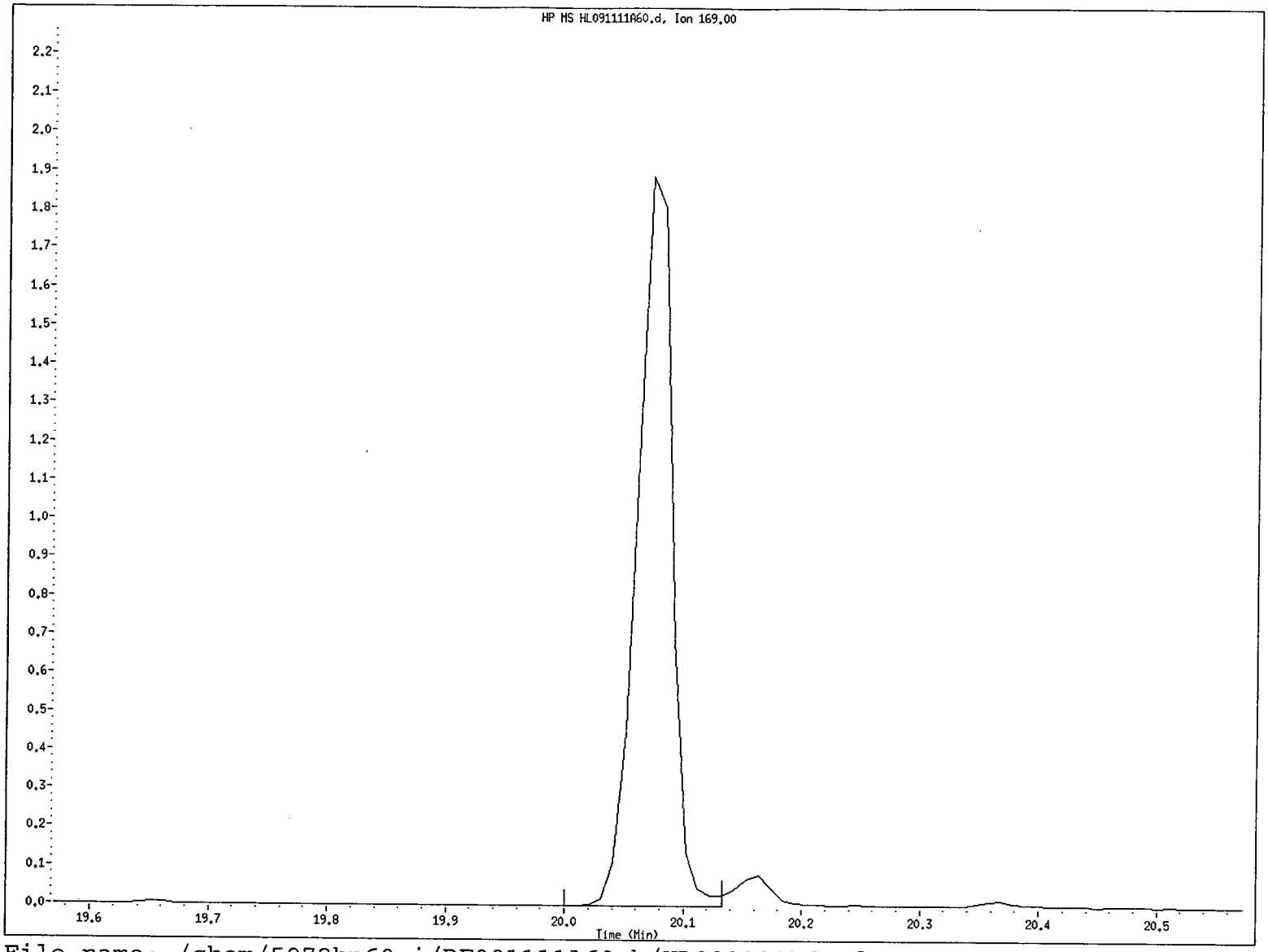
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Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 12.22
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 83002 Manually integrated



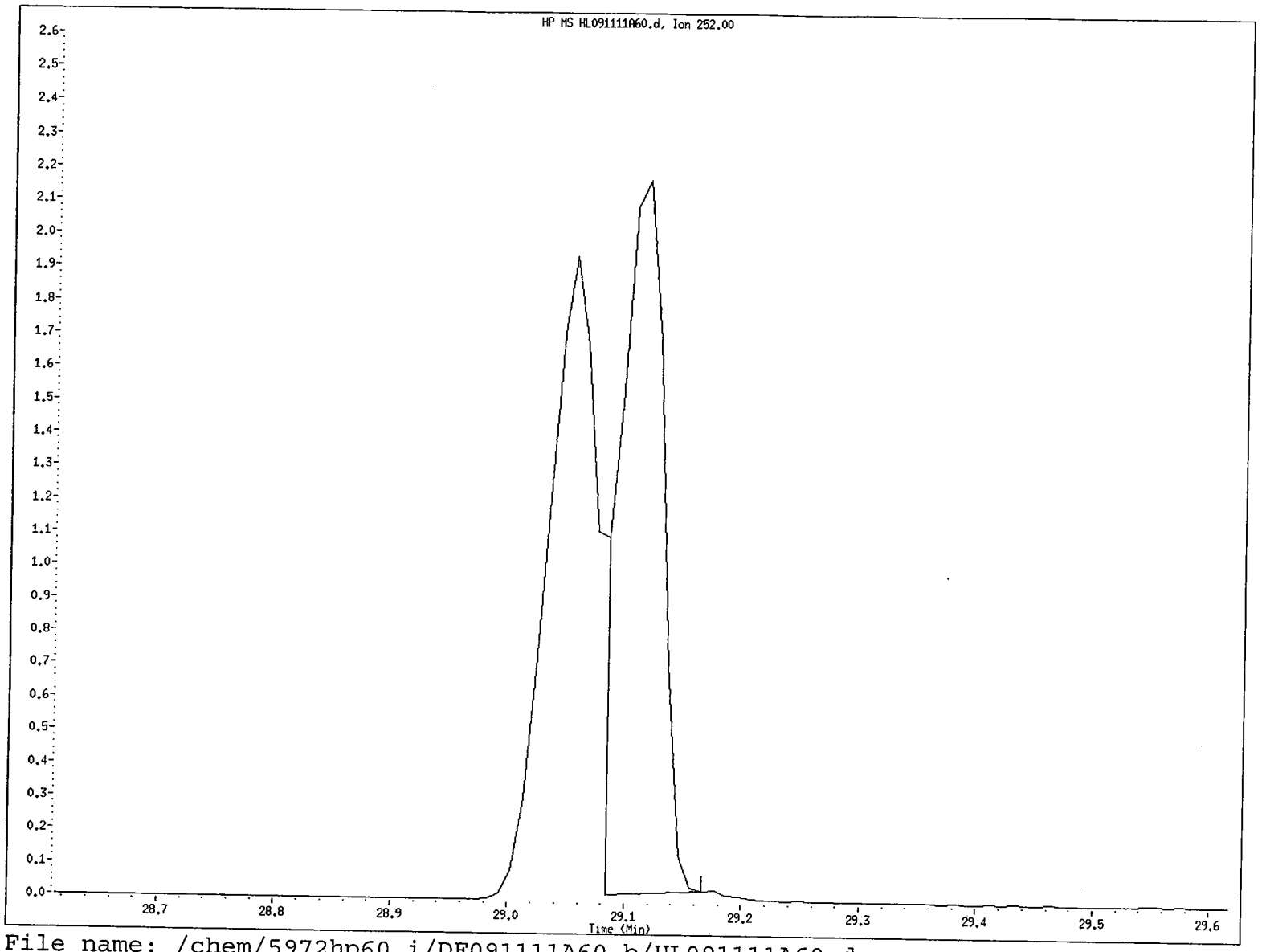
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Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 16.37
Operator ID: 2650

4-Aminobiphenyl CAS Number 92-67-1 Area = 390392 Manually integrated



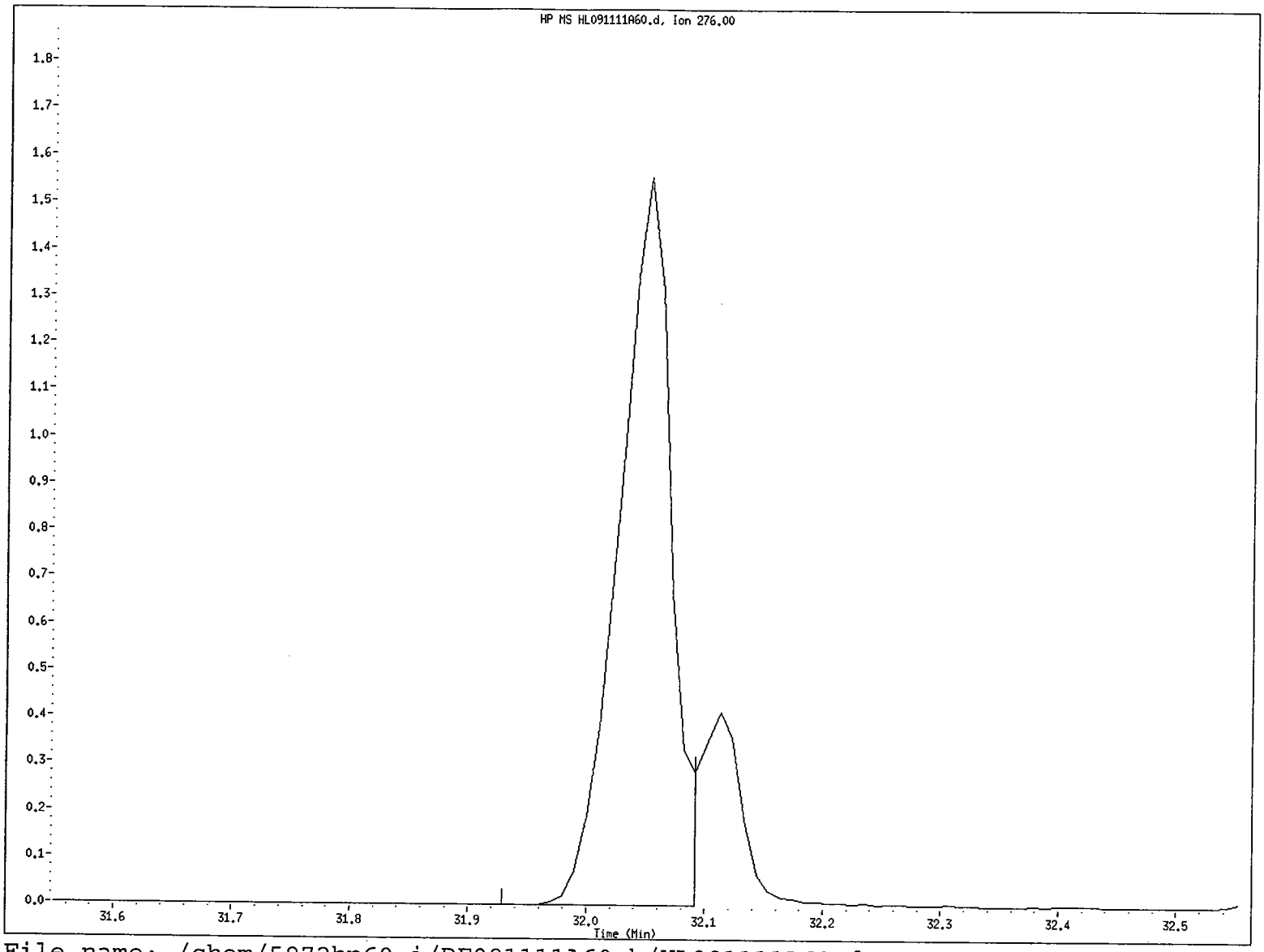
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Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 20.07
Operator ID: 2650

Benzo(k)fluoranthene CAS Number 207-08-9 Area = 570701 User selected hit



File name: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 29.12
Operator ID: 2650

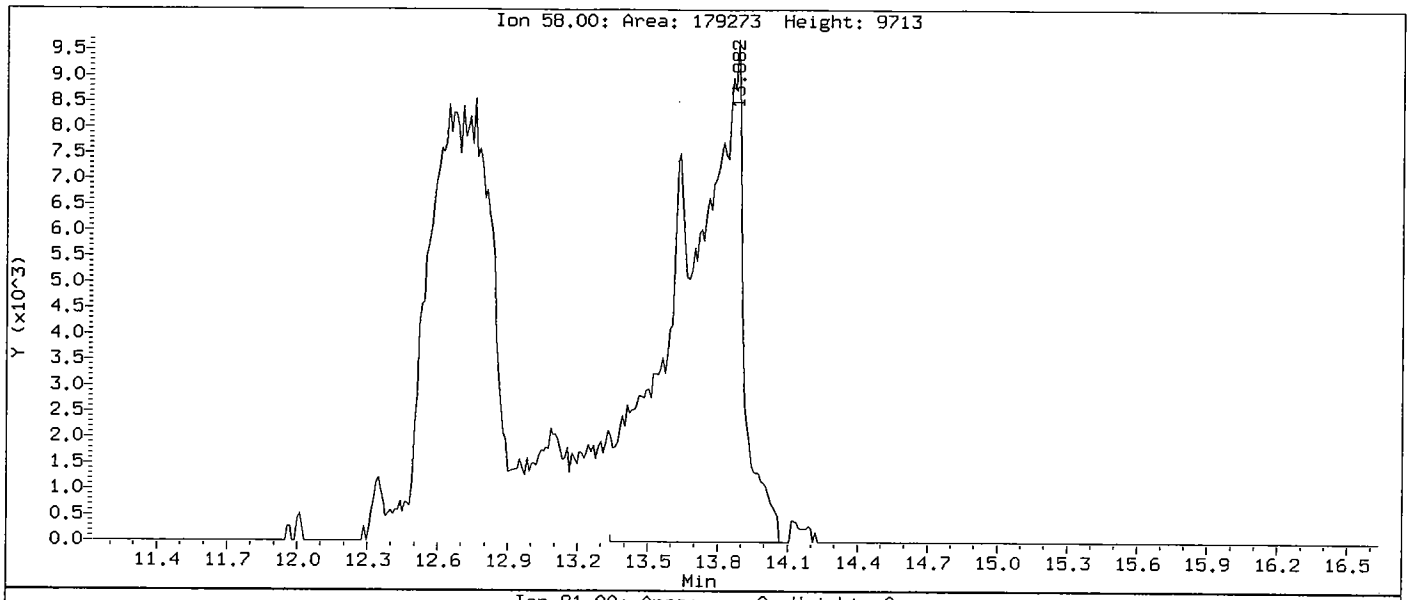
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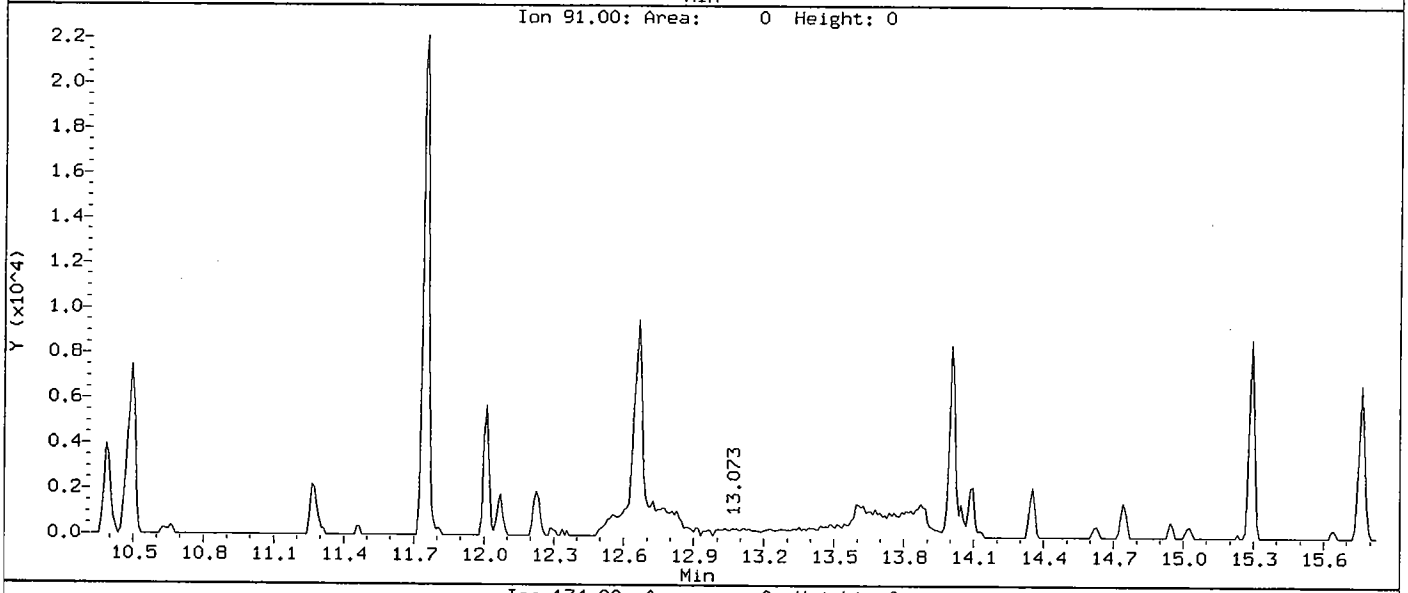


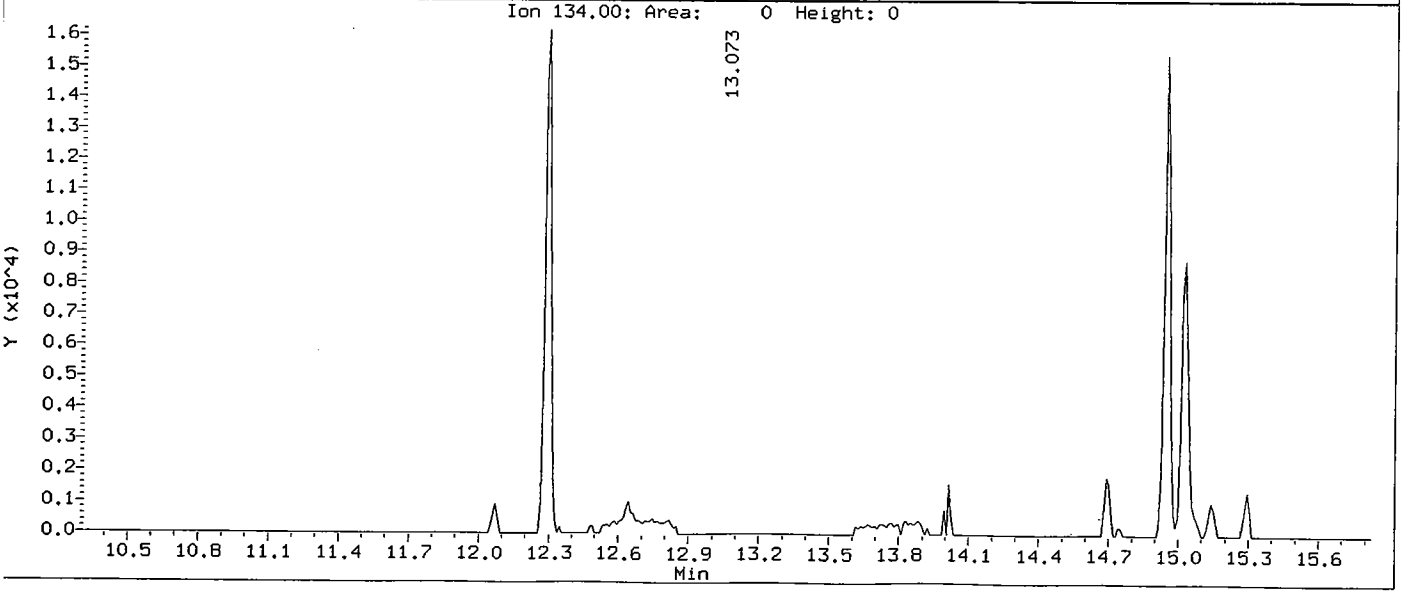
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Injection Date and Time: 11-NOV-2009 17:10
Retention Time: 32.05
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HL091111A60.d
Injection Date: 11-NOV-2009 17:10
Instrument: 5972hp60.i
Client Sample ID: SSTD050

Compound: a,a-Dimethylphenethylamine
CAS Number: 122-09-8



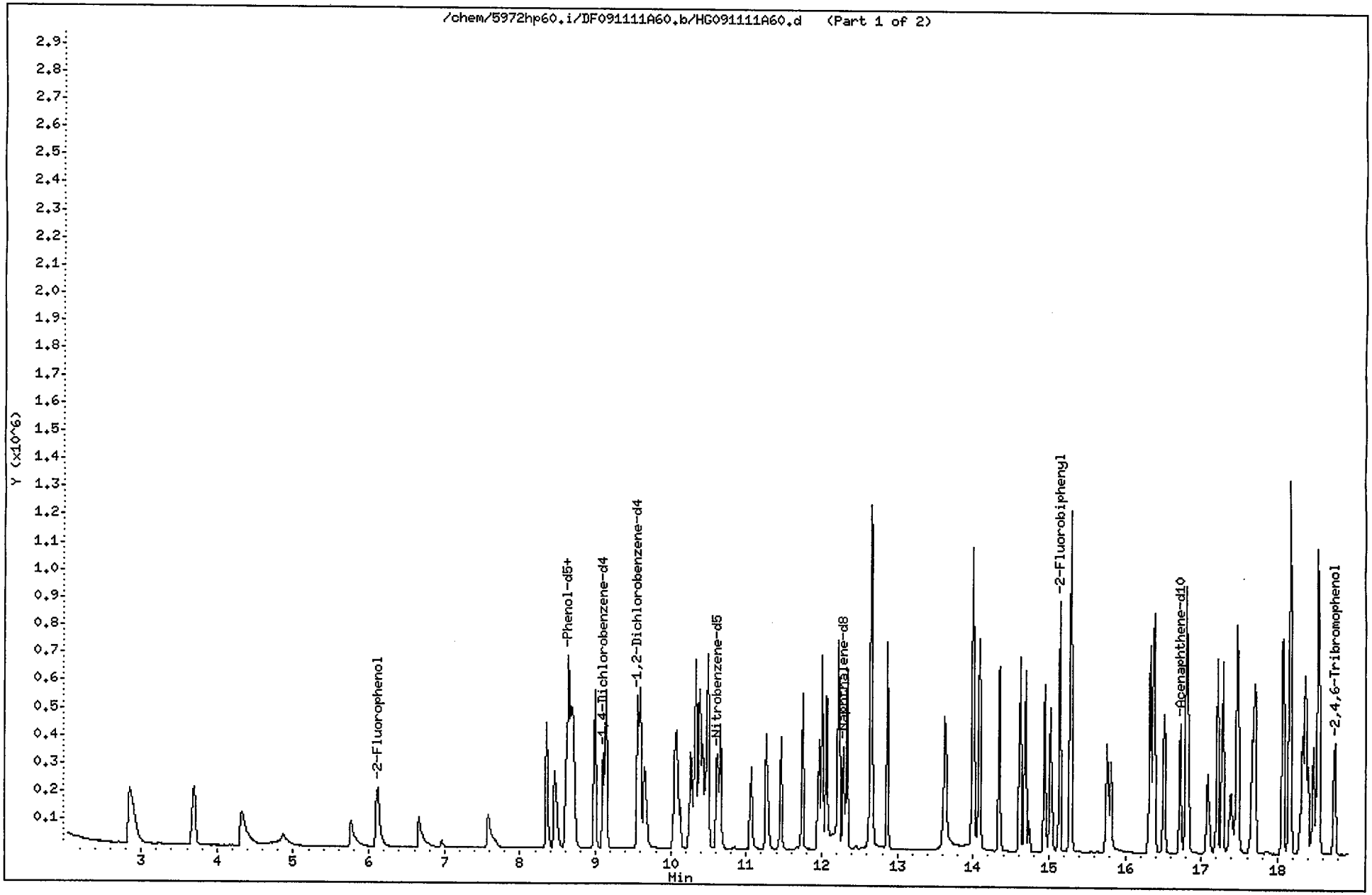




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Date : 11-NOV-2009 13:14
Client ID: SSTD080
Sample Info: SSTD080;2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

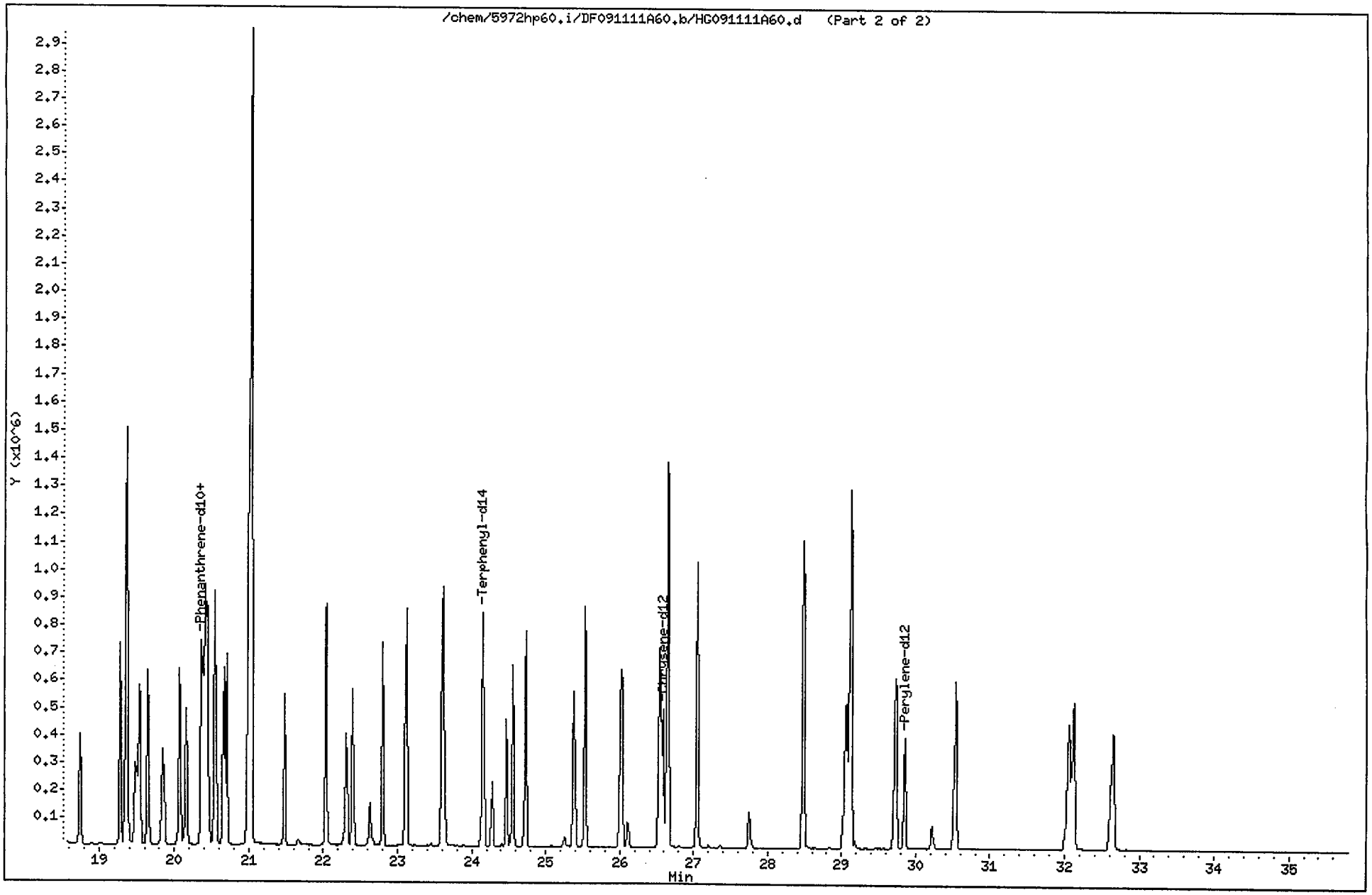
Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



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Client ID: SSTD080
Sample Info: SSTD080:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Report Date: 12-Nov-2009 17:32

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 11-NOV-2009 13:14
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD080:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 12-Nov-2009 17:31 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 13:14 Cal File: HG091111A60.d
Als bottle: 2 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.103	9.104	(1.000)	98834	40.0000		
*	2 Naphthalene-d8	136	12.285	12.296	(1.000)	279125	40.0000		
*	3 Acenaphthene-d10	164	16.725	16.736	(1.000)	201690	40.0000		
*	4 Phenanthrene-d10	188	20.387	20.388	(1.000)	424248	40.0000		
*	5 Chrysene-d12	240	26.587	26.588	(1.000)	357391	40.0000		
*	6 Perylene-d12	264	29.850	29.852	(1.000)	346329	40.0000		
$	7 2-Fluorophenol	112	6.116	6.137	(0.672)	178565	80.0000	80.0	
$	8 Phenol-d5	99	8.612	8.623	(0.946)	224356	80.0000	80.0	
$	9 2-Chlorophenol-d4	132	8.653	8.664	(0.951)	178725	80.0000	80.0	2712
$	10 1,2-Dichlorobenzene-d4	152	9.563	9.565	(1.051)	161221	80.0000	80.0	8609
$	11 Nitrobenzene-d5	82	10.617	10.618	(0.864)	217453	80.0000	80.0	
$	12 2-Fluorobiphenyl	172	15.139	15.150	(0.905)	513129	80.0000	80.0	
$	13 2,4,6-Tribromophenol	330	18.750	18.752	(1.121)	87459	80.0000	80.0	
$	14 Terphenyl-d14	244	24.162	24.153	(0.909)	500422	80.0000	80.0	
	15 N-Nitrosodimethylamine	42	2.903	2.935	(0.319)	161112	80.0000	80.0	9431

Data File: /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.852	2.884	(0.313)	195344	80.0000	80.0	9701
17 Ethylmethacrylate	69	3.691	3.723	(0.405)	167277	80.0000	80.0	9555
18 2-Picoline	93	4.325	4.357	(0.475)	191557	80.0000	80.0	9570 (M)
19 Nitrosomethylethylamine	88	4.867	4.899	(0.535)	76681	80.0000	80.0	9486 (M)
20 Methyl Methanesulfonate	80	5.758	5.789	(0.632)	150427	80.0000	80.0	9640
21 N-Nitrosodiethylamine	102	6.658	6.680	(0.731)	75201	80.0000	80.0	9628
22 Ethyl Methanesulfonate	79	7.579	7.590	(0.833)	160308	80.0000	80.0	9765
23 Phenol	94	8.643	8.654	(0.949)	222228	80.0000	80.0	
24 Aniline	93	8.469	8.480	(0.930)	246608	80.0000	80.0	9500
25 Bis(2-chloroethyl)ether	93	8.714	8.715	(0.957)	173959	80.0000	80.0	
26 Pentachloroethane	167	8.356	8.368	(0.918)	131850	80.0000	80.0	9342
27 2-Chlorophenol	128	8.683	8.695	(0.954)	176732	80.0000	80.0	9325
28 1,3-Dichlorobenzene	146	8.990	9.002	(0.988)	242054	80.0000	80.0	
29 1,4-Dichlorobenzene	146	9.144	9.145	(1.004)	249472	80.0000	80.0	
30 Benzyl Alcohol	108	9.645	9.657	(1.060)	104672	80.0000	80.0	
31 1,2-Dichlorobenzene	146	9.594	9.605	(1.054)	226266	80.0000	80.0	
32 2-Methylphenol	108	10.085	10.086	(1.108)	107996	80.0000	80.0	
33 2,2'-oxybis(1-Chloropropane)	45	10.054	10.056	(1.105)	296613	80.0000	80.0	9409
34 N-Nitrosopyrrolidine	100	10.331	10.332	(1.135)	79857	80.0000	80.0	6929
35 3-Methylphenol	108	10.494	10.495	(1.153)	318502	160.000	160	
36 4-Methylphenol	108	10.494	10.495	(1.153)	318502	160.000	160	
37 3-4-Methylphenol	108	10.494	10.495	(1.153)	320900	160.000	160	8802
38 N-Nitroso-di-N-propylamine	70	10.423	10.424	(1.145)	132626	80.0000	80.0	8687
39 Acetophenone	105	10.259	10.270	(0.835)	237874	80.0000	80.0	0 (M)
40 N-Nitrosomorpholine	116	10.382	10.383	(1.140)	32456	80.0000	80.0	8708
41 o-Toluidine	106	10.382	10.383	(1.140)	254952	80.0000	80.0	8435
42 Hexachloroethane	117	10.320	10.332	(1.134)	103579	80.0000	80.0	9450
43 Nitrobenzene	77	10.658	10.659	(0.868)	216252	80.0000	80.0	9757
44 N-Nitrosopiperidine	114	11.057	11.068	(0.900)	81838	80.0000	80.0	9759
45 Isophorone	82	11.262	11.273	(0.917)	355587	80.0000	80.0	9742
46 2-Nitrophenol	139	11.456	11.467	(0.933)	114803	80.0000	80.0	8884
47 2,4-Dimethylphenol	122	11.742	11.754	(0.956)	141792	80.0000	80.0	8790
48 Benzoic Acid	122	12.223	12.224	(0.995)	119740	400.000	400	5607 (AM)
49 o,o,o-Triethylphosphorothioat	198	12.008	12.010	(0.977)	124079	80.0000	80.0	8962
50 Bis(2-chloroethoxy)methane	93	11.957	11.969	(0.973)	215968	80.0000	80.0	9347
51 2,4-Dichlorophenol	162	12.070	12.071	(0.983)	210365	80.0000	80.0	
52 1,2,4-Trichlorobenzene	180	12.223	12.224	(0.995)	255281	80.0000	80.0	
53 Naphthalene	128	12.336	12.337	(1.004)	438647	80.0000	80.0	9763
54 4-Chloroaniline	127	12.663	12.664	(1.031)	206503	80.0000	80.0	8939
55 2,6-Dichlorophenol	162	12.643	12.644	(1.029)	212947	80.0000	80.0	
56 Hexachloropropene	213	12.663	12.664	(1.031)	183918	80.0000	80.0	9500
57 Hexachlorobutadiene	225	12.868	12.869	(1.047)	141850	80.0000	80.0	9313
58 N-Nitroso-di-n-butylamine	84	13.625	13.636	(1.109)	116667	80.0000	80.0	9648
60 4-Chloro-3-methylphenol	107	13.993	13.994	(1.139)	165347	80.0000	80.0	8601
61 Safrole	162	14.003	14.015	(1.140)	183798	80.0000	80.0	9035
62 2-Methylnaphthalene	141	14.085	14.097	(1.147)	301163	80.0000	80.0	
63 1-Methylnaphthalene	142	14.351	14.352	(1.168)	327503	80.0000	80.0	(H)

Data File: /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
64 Hexachlorocyclopentadiene	237	14.689	14.700	(0.878)	182765	80.0000	80.0	9387
65 1,2,4,5-Tetrachlorobenzene	216	14.617	14.629	(0.874)	235302	80.0000	80.0	9314
66 2,4,6-Trichlorophenol	196	14.945	14.946	(0.894)	173283	80.0000	80.0	
67 2,4,5-Trichlorophenol	196	15.016	15.028	(0.898)	191717	80.0000	80.0	
68 Isosafrole	162	14.740	14.741	(0.881)	30797	80.0000	80.0	
69 2-Chloronaphthalene	162	15.292	15.294	(0.914)	587467	80.0000	80.0	
70 2-Nitroaniline	65	15.763	15.764	(0.943)	138063	80.0000	80.0	9754
71 1,4-Napthoquinone	158	15.814	15.815	(0.946)	134929	80.0000	80.0	9407
72 Dimethylphthalate	163	16.377	16.378	(0.979)	531258	80.0000	80.0	9170
73 1,3-Dinitrobenzene	168	16.367	16.368	(0.979)	104095	80.0000	80.0	0 (M)
74 2,6-Dinitrotoluene	165	16.510	16.521	(0.987)	133512	80.0000	80.0	9506
75 Acenaphthylene	152	16.326	16.327	(0.976)	586221	80.0000	80.0	8521
76 3-Nitroaniline	138	16.827	16.828	(1.006)	105190	80.0000	80.0	9793
77 Acenaphthene	154	16.806	16.808	(1.005)	352787	80.0000	80.0	9558
78 2,4-Dinitrophenol	184	17.083	17.084	(1.021)	113187	80.0000	80.0	
79 4-Nitrophenol	139	17.390	17.391	(1.040)	92953	80.0000	80.0	9668
80 Pentachlorobenzene	250	17.277	17.289	(1.033)	201312	80.0000	80.0	9636
81 2,4-Dinitrotoluene	165	17.482	17.483	(1.045)	180877	80.0000	80.0	7485
82 Dibenzofuran	168	17.216	17.217	(1.029)	614935	80.0000	80.0	8987
83 1-Naphthylamine	143	17.471	17.473	(1.045)	316141	80.0000	80.0	
84 2,3,4,6-Tetrachlorophenol	232	17.707	17.708	(1.059)	141652	80.0000	80.0	9258
85 2-Naphthylamine	143	17.666	17.667	(1.056)	336373	80.0000	80.0	
86 Diethylphthalate	149	18.167	18.168	(1.086)	507608	80.0000	80.0	8106
87 Zinophos	97	18.362	18.363	(1.098)	107970	80.0000	80.0	8999
88 4-Chlorophenyl-phenylether	204	18.167	18.168	(1.086)	258503	80.0000	80.0	7609
89 5-Nitro-o-toluidine	152	18.321	18.322	(1.095)	136187	80.0000	80.0	7657
90 Fluorene	166	18.075	18.076	(1.081)	477764	80.0000	80.0	7663
91 4-Nitroaniline	138	18.402	18.404	(1.100)	106406	80.0000	80.0	9262
92 4,6-Dinitro-2-methylphenol	198	18.464	18.465	(0.906)	134784	80.0000	80.0	8935
93 N-Nitrosodiphenylamine	169	18.525	18.526	(0.909)	410827	80.0000	80.0	8800
95 1,2-Diphenylhydrazine	77	18.546	18.547	(1.109)	474206	80.0000	80.0	9178
96 Sulfotep	322	19.282	19.294	(1.153)	72031	80.0000	80.0	9134
97 1,3,5-Trinitrobenzene	75	19.487	19.478	(0.956)	159648	80.0000	80.0	8942
98 Diallate (trans isomer)	86	19.364	19.365	(0.950)	138578	40.0000	40.0	
99 Diallate (trans) part of total	86	19.364	19.365	(0.950)	138578	40.0000	40.0	8723
100 Phorate	75	19.374	19.376	(0.950)	269945	80.0000	80.0	9172
101 Phenacetin	108	19.538	19.539	(0.958)	220310	80.0000	80.0	8740
102 Diallate (cis isomer)	86	19.538	19.549	(0.958)	37806	40.0000	40.0	
103 Diallate (cis) part of total	86	19.538	19.549	(0.958)	37806	40.0000	40.0	6717 (H)
104 4-Bromophenyl-phenylether	248	19.364	19.365	(0.950)	143819	80.0000	80.0	8489
105 Hexachlorobenzene	284	19.651	19.652	(0.964)	166986	80.0000	80.0	9533
106 Dimethoate	87	19.855	19.856	(0.974)	128302	80.0000	80.0	9813
107 4-Aminobiphenyl	169	20.070	20.071	(0.984)	491844	80.0000	80.0	0 (M)
108 Pentachlorophenol	266	20.162	20.163	(0.989)	117651	80.0000	80.0	8218
109 Pentachloronitrobenzene	237	20.367	20.368	(0.999)	67715	80.0000	80.0	7173
110 Pronamide	173	20.418	20.419	(1.002)	269693	80.0000	80.0	9389
111 Disulfoton	88	20.663	20.665	(1.014)	176289	80.0000	80.0	9571

Data File: /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Report Date: 12-Nov-2009 17:32

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
112 Phenanthrene	178	20.449	20.450	(1.003)	746013	80.0000	80.0	
113 Anthracene	178	20.551	20.552	(1.008)	766607	80.0000	80.0	
114 Carbazole	167	21.032	21.033	(1.032)	3552109	80.0000	80.0	9552
115 Methyl Parathion	109	21.482	21.483	(1.054)	135716	80.0000	80.0	9554
116 Di-n-butylphthalate	149	22.045	22.046	(1.081)	830170	80.0000	80.0	9660
117 Parathion	109	22.403	22.394	(1.099)	92572	80.0000	80.0	7830
118 4-Nitroquinoline-1-oxide	190	22.311	22.312	(1.094)	103653	80.0000	80.0	8501
119 Methapyrilene	97	22.628	22.629	(1.110)	64279	80.0000	80.0	9707
120 Isodrin	193	22.802	22.803	(1.118)	97214	80.0000	80.0	9297
121 Fluoranthene	202	23.119	23.120	(1.134)	714313	80.0000	80.0	9263
122 Benzidine	184	23.600	23.591	(0.888)	333937	80.0000	80.0	8339
123 Pyrene	202	23.620	23.621	(0.888)	774624	80.0000	80.0	9407
124 p-Dimethylaminoazobenzene	225	24.561	24.562	(0.924)	138865	80.0000	80.0	9376
125 Chlorobenzilate	251	24.735	24.736	(0.930)	220755	80.0000	80.0	9601
126 Kepone	272	Compound Not Detected.						
127 Famfur	218	Compound Not Detected.						
128 Butylbenzylphthalate	149	25.533	25.534	(0.960)	390850	80.0000	80.0	9613
129 3,3'-Dimethylbenzidine	212	25.380	25.381	(0.955)	370766	80.0000	80.0	9566
130 2-Acetylaminofluorene	181	26.024	26.025	(0.979)	359730	80.0000	80.0	9347
131 3,3'-Dichlorobenzidine	252	26.658	26.660	(1.003)	275961	80.0000	80.0	8254
132 bis(2-ethylhexyl)Phthalate	149	27.057	27.048	(1.018)	543839	80.0000	80.0	9411
133 Benzo(a)anthracene	228	26.546	26.547	(0.998)	657360	80.0000	80.0	
134 Chrysene	228	26.648	26.649	(1.002)	642289	80.0000	80.0	
135 Di-n-octylphthalate	149	28.480	28.481	(0.954)	958961	80.0000	80.0	
136 7,12-Dimethylbenz(a)anthracene	256	29.124	29.125	(0.976)	327681	80.0000	80.0	8590
137 Benzo(b)fluoranthene	252	29.063	29.054	(0.974)	701219	80.0000	80.0	
138 Benzo(k)fluoranthene	252	29.114	29.115	(0.975)	713158	80.0000	80.0	
139 Benzo(a)pyrene	252	29.728	29.729	(0.996)	624664	80.0000	80.0	
140 3-Methylcholanthrene	268	30.536	30.537	(1.023)	335134	80.0000	80.0	9271
141 Indeno(1,2,3-c,d)pyrene	276	32.060	32.051	(1.074)	587935	80.0000	80.0	8925
142 Dibenzo(a,h)anthracene	278	32.122	32.113	(1.076)	587998	80.0000	80.0	8711
143 Benzo(g,h,i)perylene	276	32.654	32.645	(1.094)	586056	80.0000	80.0	8365
198 4-Chlorophenol	128	Compound Not Detected.						
199 2,5-Dichlorophenol	162	Compound Not Detected.						
M 144 Diallate Total	86				176384	80.0000	80.0	0
201 a,a-Dimethylphenethylamine	58	13.962	13.882	(1.137)	272823	80.0000	80.0	2386(M)
202 Aramite	185	24.469	24.470	(0.920)	72941	80.0000	80.0	9405

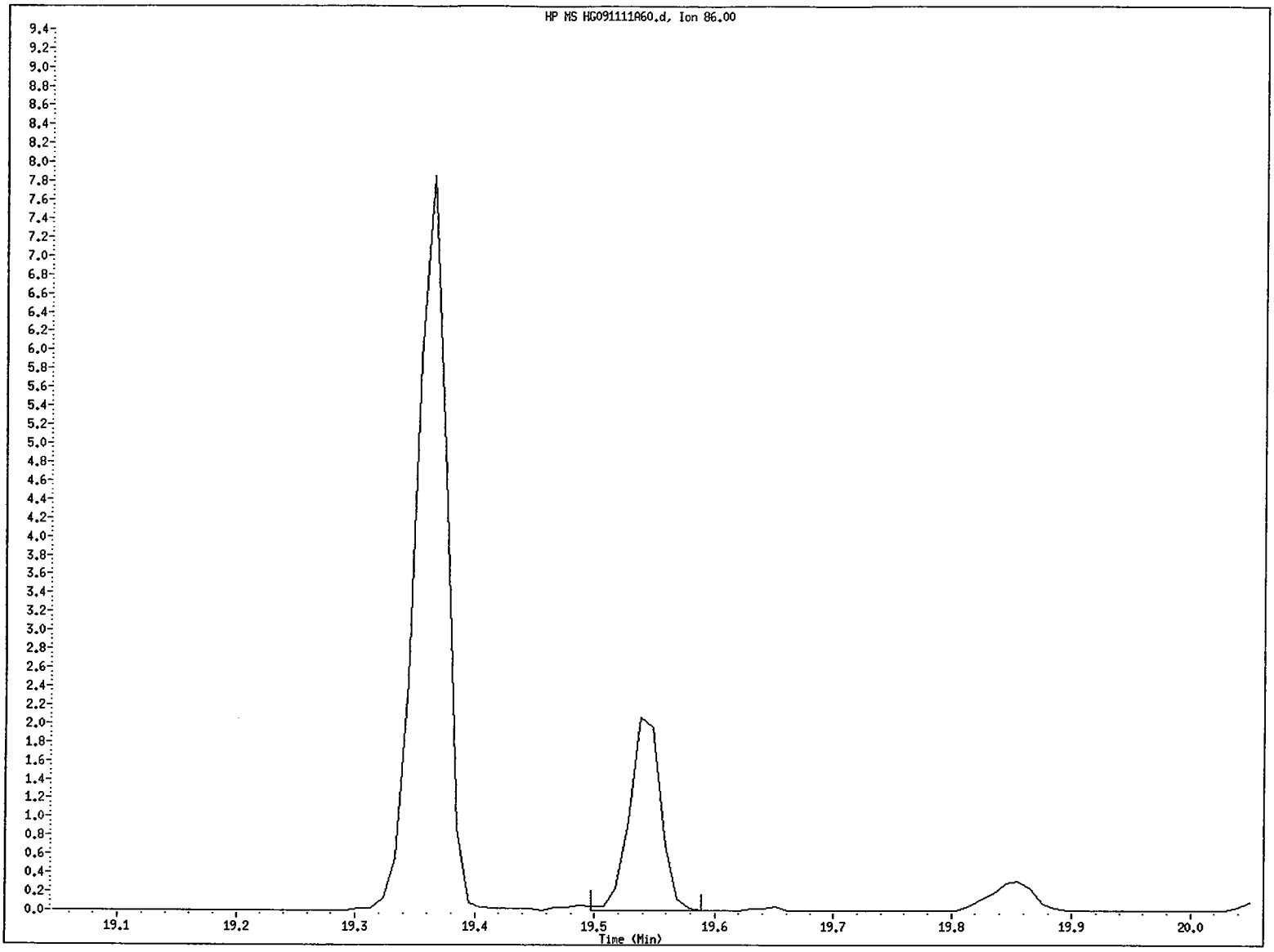
10/11/09

Pw 11/13/09

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

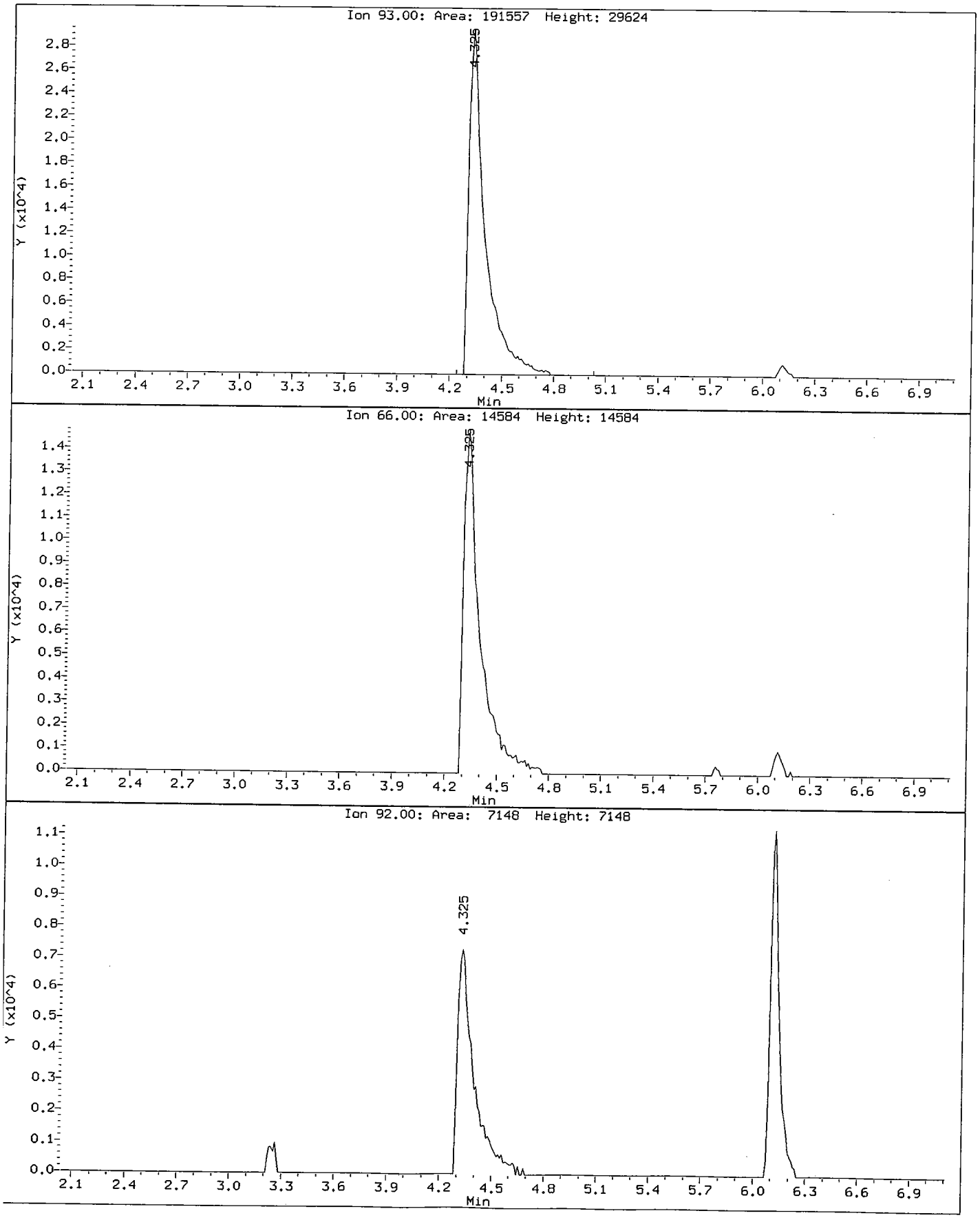
Diallate (cis) part of total CAS Number 17708-57-5 Area = 37806 User selected



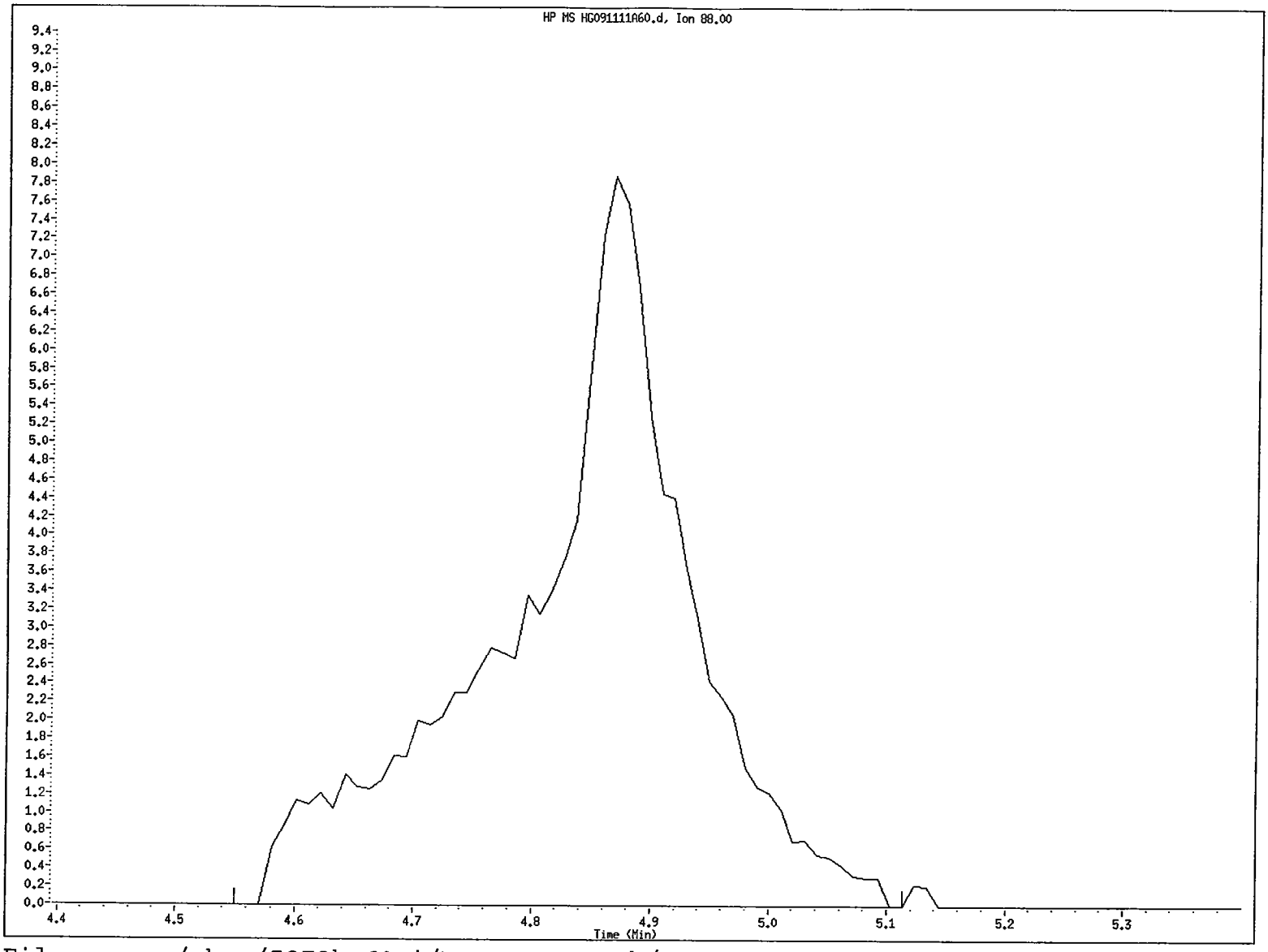
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 19.54
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Injection Date: 11-NOV-2009 13:14
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: 2-Picoline
CAS Number: 109-06-8

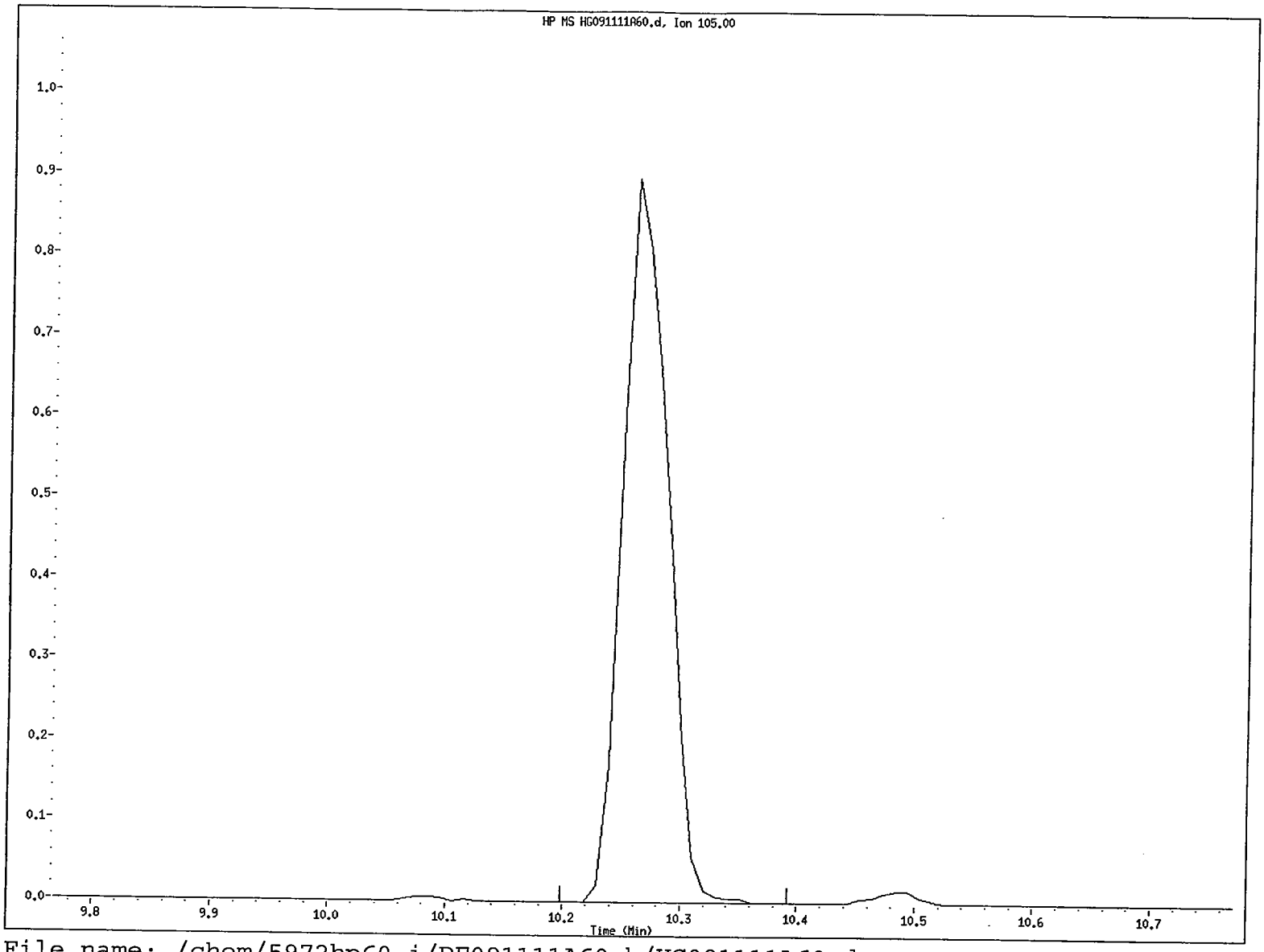


Nitrosomethylethylamine CAS Number 10595-95-6 Area = 76681 Manually integrated



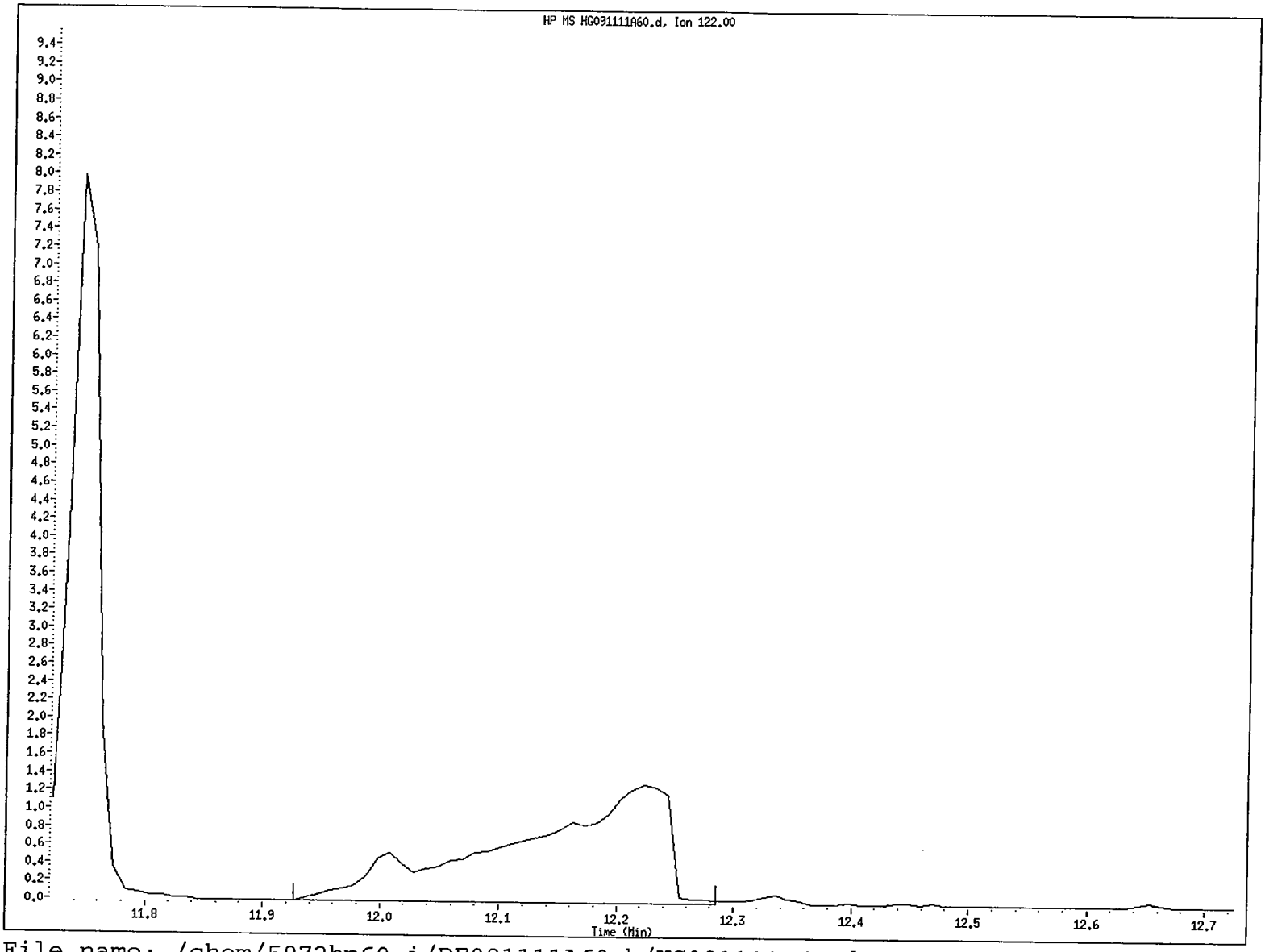
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 4.87
Operator ID: 2650

Acetophenone CAS Number 98-86-2 Area = 237874 Manually integrated



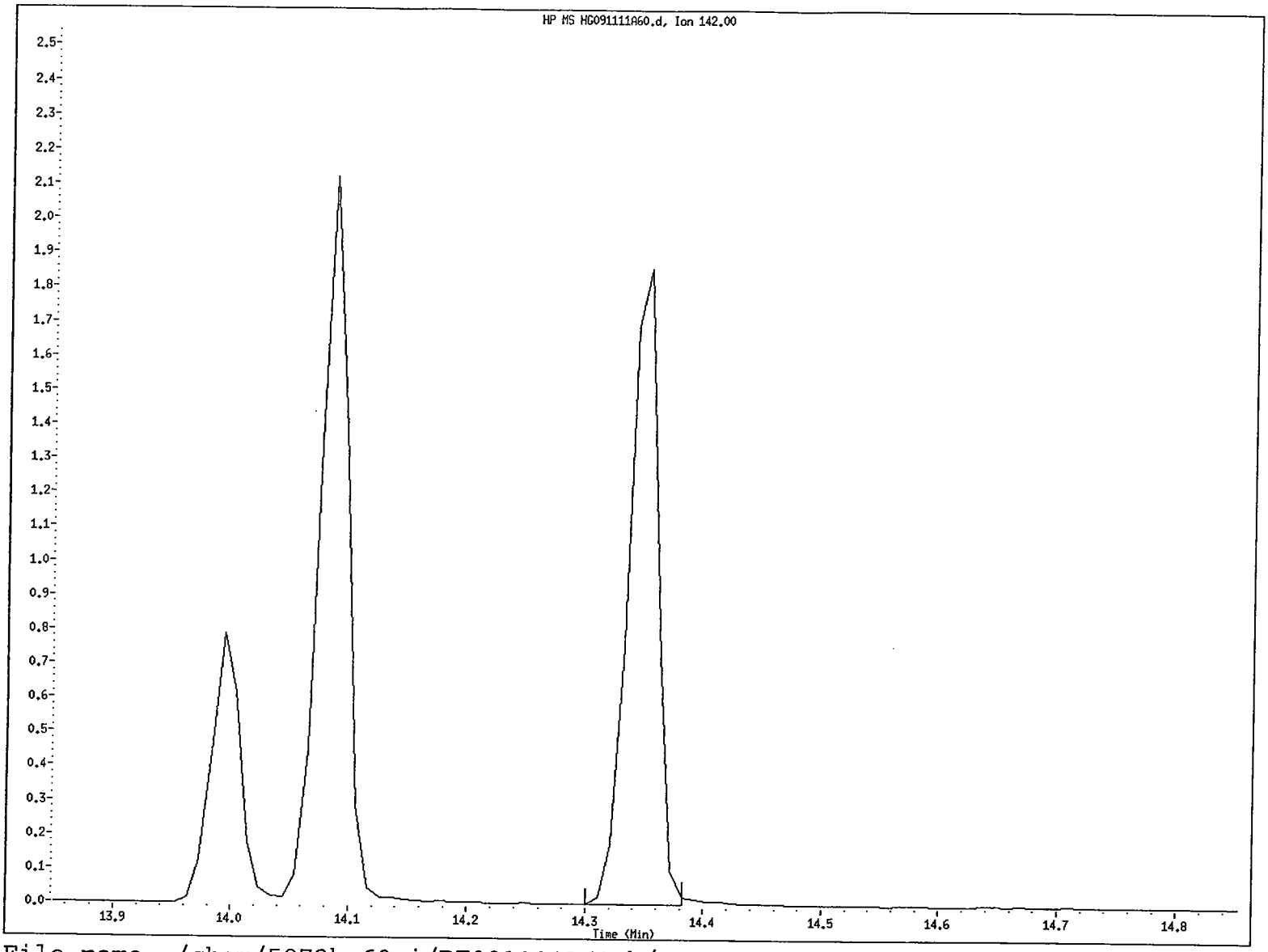
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Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 10.26
Operator ID: 2650

Benzoic Acid CAS Number 65-85-0 Area = 119740 Manually integrated



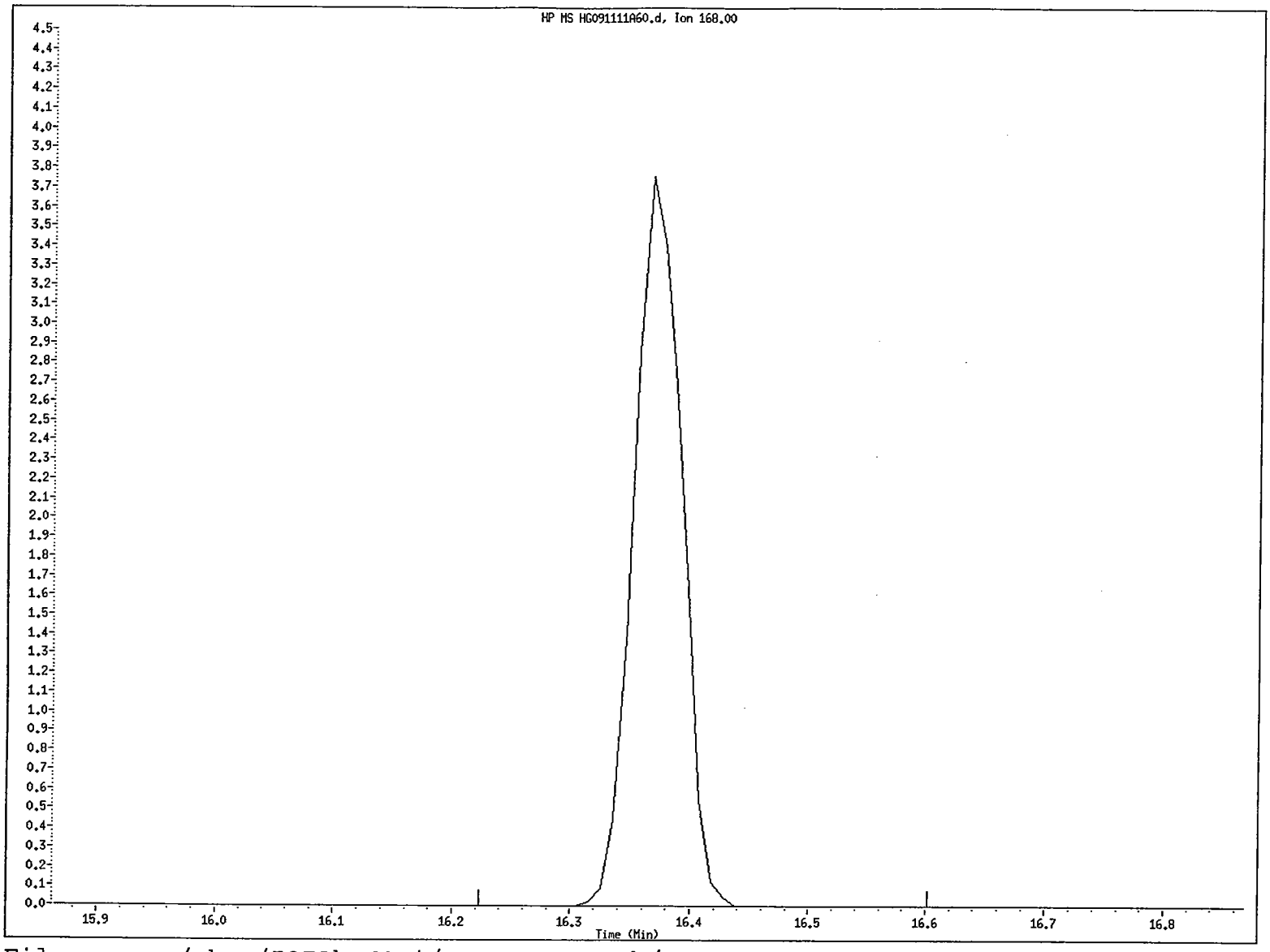
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Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 12.22
Operator ID: 2650

1-Methylnaphthalene CAS Number 90-12-0 Area = 327503 User selected hit



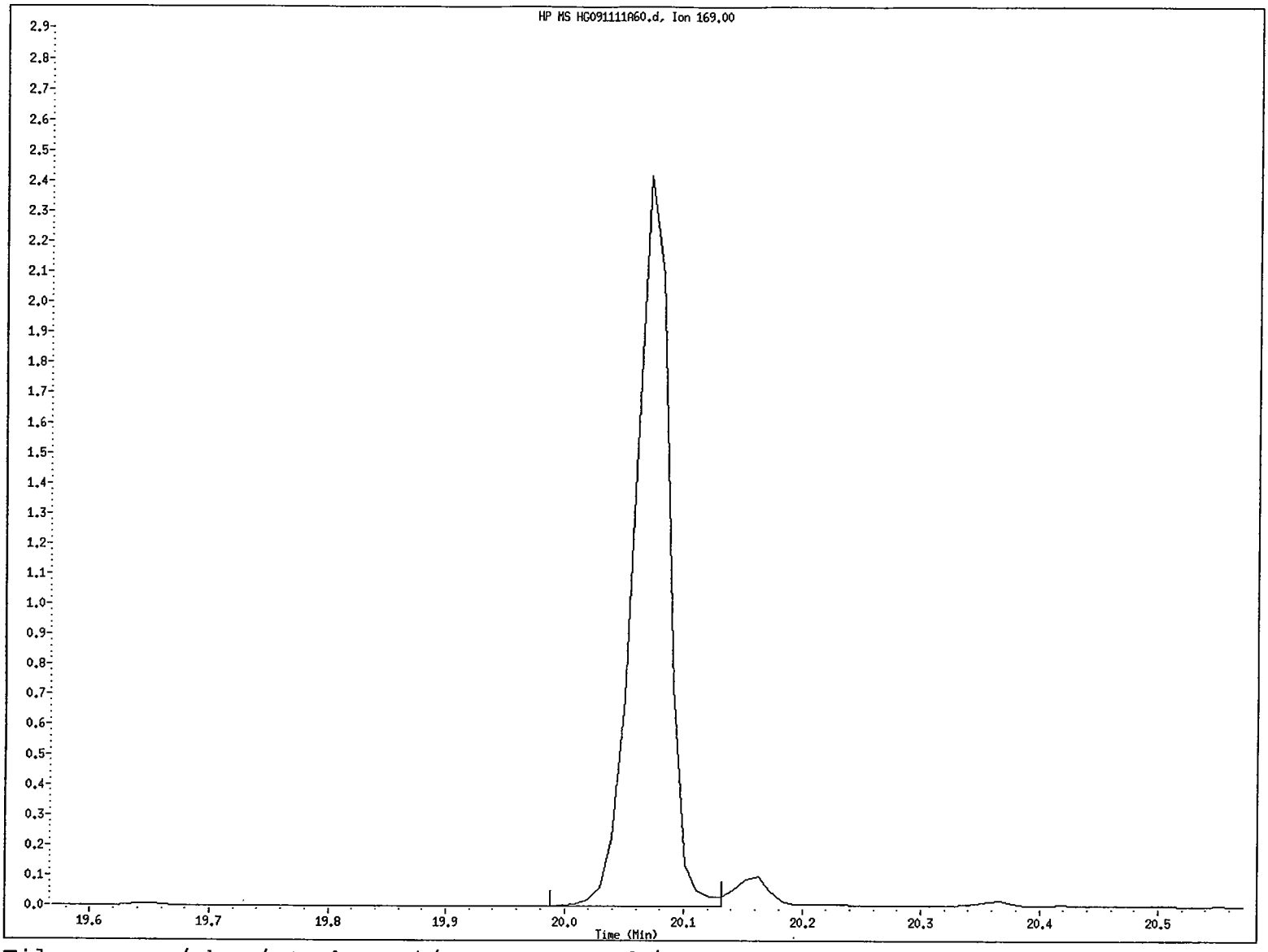
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Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 14.35
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 104095 Manually integrated



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Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 16.37
Operator ID: 2650

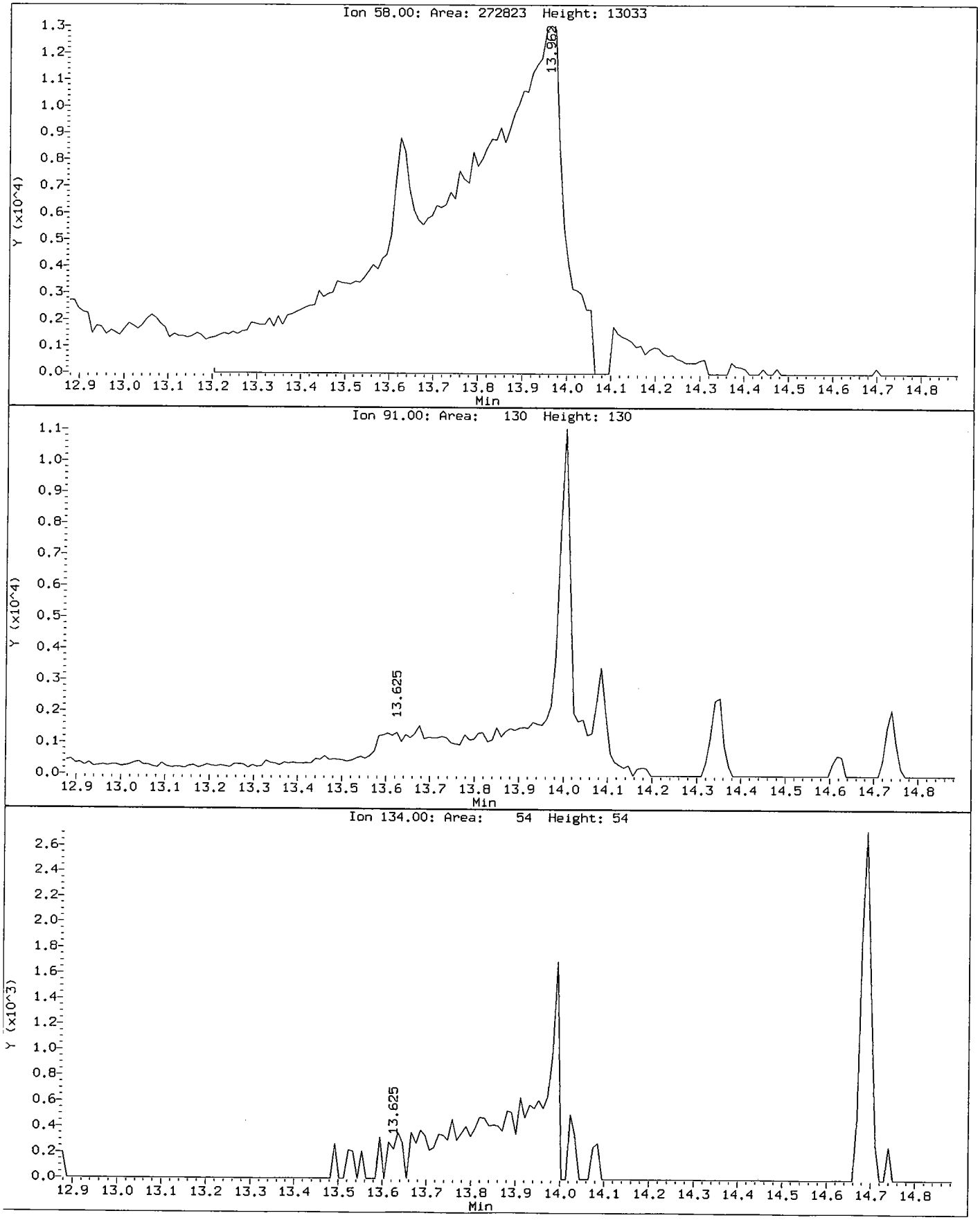
4-Aminobiphenyl CAS Number 92-67-1 Area = 491844 Manually integrated



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Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 13:14
Retention Time: 20.07
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HG091111A60.d
Injection Date: 11-NOV-2009 13:14
Instrument: 5972hp60.i
Client Sample ID: SSTD080

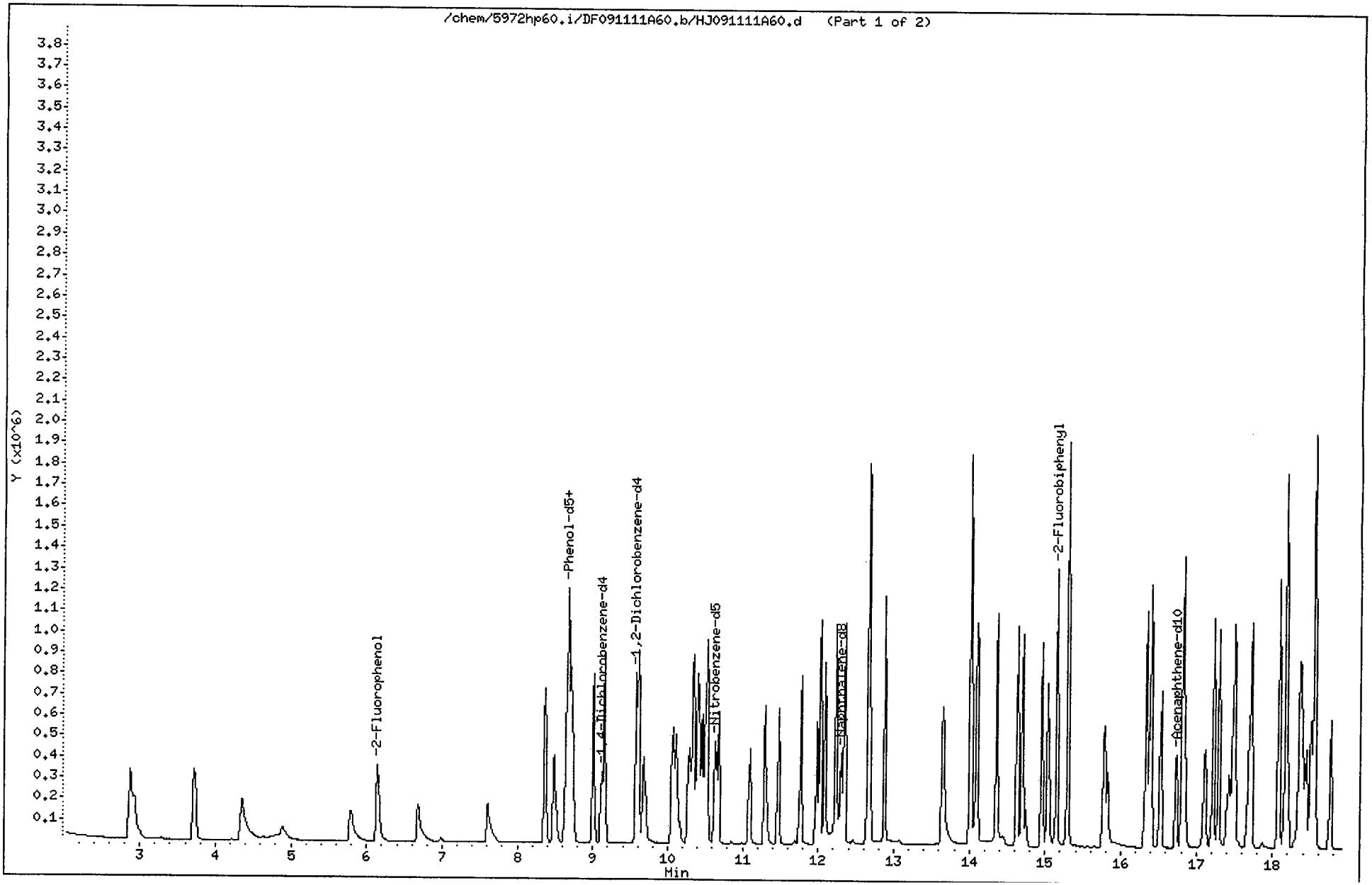
Compound: a,a-Dimethylphenethylamine
CAS Number: 122-09-8



Data File: /chem/5972hp60.i/DF091111A60.b/HJ091111A60.d
Date : 11-NOV-2009 15:36
Client ID: SSTD120
Sample Info: SSTD120;2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

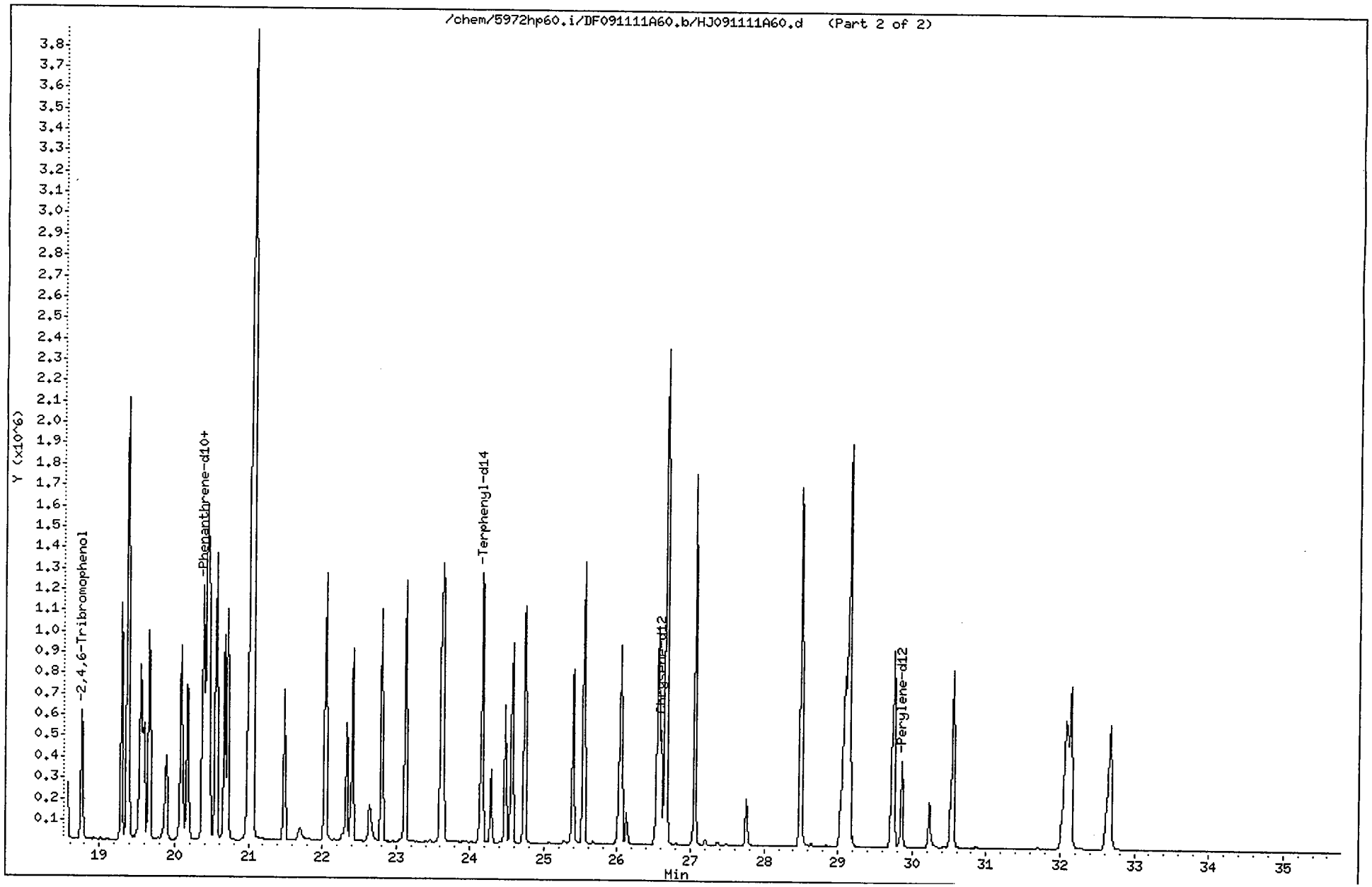
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HJ091111A60.d
Date : 11-NOV-2009 15:36
Client ID: SSTD120
Sample Info: SSTD120:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HJ091111A60.d
Report Date: 12-Nov-2009 17:19

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/HJ091111A60.d
Lab Smp Id: SSTD120 Client Smp ID: SSTD120
Inj Date : 11-NOV-2009 15:36
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD120:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 12-Nov-2009 17:19 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 15:36 Cal File: HJ091111A60.d
Als bottle: 5 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.114	9.114	(1.000)	96073	40.0000		
* 2 Naphthalene-d8	136	12.296	12.296	(1.000)	273940	40.0000		
* 3 Acenaphthene-d10	164	16.736	16.736	(1.000)	208704	40.0000		
* 4 Phenanthrene-d10	188	20.398	20.398	(1.000)	455728	40.0000		
* 5 Chrysene-d12	240	26.598	26.598	(1.000)	383423	40.0000		
* 6 Perylene-d12	264	29.861	29.861	(1.000)	360525	40.0000		
$ 7 2-Fluorophenol	112	6.147	6.147	(0.674)	251326	120.000	114	
$ 8 Phenol-d5	99	8.643	8.643	(0.948)	327941	120.000	120	
$ 9 2-Chlorophenol-d4	132	8.674	8.674	(0.952)	258675	120.000	117	2580
$ 10 1,2-Dichlorobenzene-d4	152	9.574	9.574	(1.050)	233063	120.000	116	8569
$ 11 Nitrobenzene-d5	82	10.638	10.638	(0.865)	324063	120.000	117	
$ 12 2-Fluorobiphenyl	172	15.150	15.150	(0.905)	808018	120.000	117	
$ 13 2,4,6-Tribromophenol	330	18.771	18.771	(1.122)	141785	120.000	122	
$ 14 Terphenyl-d14	244	24.163	24.163	(0.908)	816035	120.000	116	
15 N-Nitrosodimethylamine	42	2.935	2.935	(0.322)	236532	120.000	117	9476

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.873	2.873	(0.315)	279737	120.000	119	9707
17 Ethylmethacrylate	69	3.722	3.722	(0.408)	233868	120.000	115	9637
18 2-Picoline	93	4.357	4.357	(0.478)	268352	120.000	117	9677
19 Nitrosomethylethylamine	88	4.899	4.899	(0.538)	109106	120.000	121	9682 (M)
20 Methyl Methanesulfonate	80	5.789	5.789	(0.635)	219212	120.000	116	9679
21 N-Nitrosodiethylamine	102	6.679	6.679	(0.733)	110122	120.000	119	9600
22 Ethyl Methanesulfonate	79	7.610	7.610	(0.835)	236259	120.000	118	9851
23 Phenol	94	8.674	8.674	(0.952)	326408	120.000	119	
24 Aniline	93	8.490	8.490	(0.932)	357809	120.000	117	9229
25 Bis(2-chloroethyl)ether	93	8.725	8.725	(0.957)	246960	120.000	115	
26 Pentachloroethane	167	8.367	8.367	(0.918)	195389	120.000	117	9433
27 2-Chlorophenol	128	8.705	8.705	(0.955)	253906	120.000	116	9062
28 1,3-Dichlorobenzene	146	9.012	9.012	(0.989)	350254	120.000	116	
29 1,4-Dichlorobenzene	146	9.155	9.155	(1.004)	361907	120.000	116	
30 Benzyl Alcohol	108	9.677	9.677	(1.062)	154024	120.000	125	
31 1,2-Dichlorobenzene	146	9.605	9.605	(1.054)	330724	120.000	116	
32 2-Methylphenol	108	10.116	10.116	(1.110)	220841	120.000	129	
33 2,2'-oxybis(1-Chloropropane)	45	10.065	10.065	(1.104)	435754	120.000	118	9415
34 N-Nitrosopyrrolidine	100	10.382	10.382	(1.139)	122037	120.000	125	7612
35 3-Methylphenol	108	10.526	10.526	(1.155)	471471	240.000	235	
36 4-Methylphenol	108	10.526	10.526	(1.155)	471471	240.000	235	
37 3-4-Methylphenol	108	10.526	10.526	(1.155)	475000	240.000	236	9346
38 N-Nitroso-di-N-propylamine	70	10.464	10.464	(1.148)	198611	120.000	118	9039
39 Acetophenone	105	10.280	10.280	(0.836)	355899	120.000	115	0 (M)
40 N-Nitrosomorpholine	116	10.423	10.423	(1.144)	48439	120.000	123	8739
41 o-Toluidine	106	10.403	10.403	(1.141)	378425	120.000	118	8710
42 Hexachloroethane	117	10.341	10.341	(1.135)	152597	120.000	118	9101
43 Nitrobenzene	77	10.679	10.679	(0.869)	314043	120.000	113	9760
44 N-Nitrosopiperidine	114	11.099	11.099	(0.903)	124825	120.000	123	9784
45 Isophorone	82	11.293	11.293	(0.918)	536762	120.000	117	9628
46 2-Nitrophenol	139	11.477	11.477	(0.933)	172445	120.000	118	8892
47 2,4-Dimethylphenol	122	11.774	11.774	(0.958)	206856	120.000	118	8822
48 Benzoic Acid	122	12.347	12.347	(1.004)	185209	600.000	651	5075 (AMH)
49 o,o,o-Triethylphosphorothioat	198	12.030	12.030	(0.978)	191994	120.000	120	9008
50 Bis(2-chloroethoxy)methane	93	11.978	11.978	(0.974)	334027	120.000	121	9210
51 2,4-Dichlorophenol	162	12.091	12.091	(0.983)	324525	120.000	122	
52 1,2,4-Trichlorobenzene	180	12.234	12.234	(0.995)	391125	120.000	120	
53 Naphthalene	128	12.347	12.347	(1.004)	673638	120.000	119	9434
54 4-Chloroaniline	127	12.684	12.684	(1.032)	319107	120.000	122	8918
55 2,6-Dichlorophenol	162	12.654	12.654	(1.029)	324434	120.000	120	
56 Hexachloropropene	213	12.674	12.674	(1.031)	288663	120.000	121	9505
57 Hexachlorobutadiene	225	12.879	12.879	(1.047)	221572	120.000	120	9328
58 N-Nitroso-di-n-butylamine	84	13.646	13.646	(1.110)	177354	120.000	120	9663
59 p-Phenylenediamine	108	13.646	13.646	(0.815)	178495	120.000	105	(H)
60 4-Chloro-3-methylphenol	107	14.014	14.014	(1.140)	252474	120.000	121	8282
61 Safrole	162	14.014	14.014	(1.140)	291696	120.000	123	8504
62 2-Methylnaphthalene	141	14.096	14.096	(1.146)	460773	120.000	120	

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Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
63 1-Methylnaphthalene	142	14.362	14.362	(1.168)	502592	120.000	120	
64 Hexachlorocyclopentadiene	237	14.700	14.700	(0.878)	290626	120.000	118	9412
65 1,2,4,5-Tetrachlorobenzene	216	14.638	14.638	(0.875)	374628	120.000	118	9636
66 2,4,6-Trichlorophenol	196	14.955	14.955	(0.894)	273493	120.000	119	
67 2,4,5-Trichlorophenol	196	15.037	15.037	(0.899)	301377	120.000	120	
68 Isosafrole	162	14.751	14.751	(0.881)	48289	120.000	118	
69 2-Chloronaphthalene	162	15.303	15.303	(0.914)	943199	120.000	119	
70 2-Nitroaniline	65	15.784	15.784	(0.943)	213769	120.000	117	9784
71 1,4-Napthoquinone	158	15.825	15.825	(0.946)	173994	120.000	94.1	9619
72 Dimethylphthalate	163	16.398	16.398	(0.980)	835397	120.000	118	9104
73 1,3-Dinitrobenzene	168	16.398	16.398	(0.980)	164797	120.000	120	0 (M)
74 2,6-Dinitrotoluene	165	16.531	16.531	(0.988)	210301	120.000	119	9482
75 Acenaphthylene	152	16.337	16.337	(0.976)	925344	120.000	117	8697
76 3-Nitroaniline	138	16.858	16.858	(1.007)	159664	120.000	118	9734
77 Acenaphthene	154	16.817	16.817	(1.005)	549086	120.000	117	9621
78 2,4-Dinitrophenol	184	17.114	17.114	(1.023)	182155	120.000	126	
79 4-Nitrophenol	139	17.421	17.421	(1.041)	147319	120.000	124	9530
80 Pentachlorobenzene	250	17.298	17.298	(1.034)	324554	120.000	120	9729
81 2,4-Dinitrotoluene	165	17.503	17.503	(1.046)	287734	120.000	120	7696
82 Dibenzofuran	168	17.227	17.227	(1.029)	966935	120.000	118	9065
83 1-Naphthylamine	143	17.493	17.493	(1.045)	476286	120.000	115	
84 2,3,4,6-Tetrachlorophenol	232	17.718	17.718	(1.059)	226162	120.000	121	9552
85 2-Naphthylamine	143	17.697	17.697	(1.057)	498991	120.000	114	
86 Diethylphthalate	149	18.188	18.188	(1.087)	795510	120.000	117	8814
87 Zinophos	97	18.383	18.383	(1.098)	167080	120.000	116	8957
88 4-Chlorophenyl-phenylether	204	18.178	18.178	(1.086)	417341	120.000	120	7523
89 5-Nitro-o-toluidine	152	18.352	18.352	(1.097)	215710	120.000	121	7929
90 Fluorene	166	18.086	18.086	(1.081)	764018	120.000	119	7699
91 4-Nitroaniline	138	18.444	18.444	(1.102)	165465	120.000	122	9206
92 4,6-Dinitro-2-methylphenol	198	18.505	18.505	(0.907)	221147	120.000	123	8581
93 N-Nitrosodiphenylamine	169	18.546	18.546	(0.909)	662956	120.000	117	7963
95 1,2-Diphenylhydrazine	77	18.557	18.557	(1.109)	767498	120.000	115	9146
96 Sulfotep	322	19.303	19.303	(1.153)	116741	120.000	124	8455
97 1,3,5-Trinitrobenzene	75	19.539	19.539	(0.958)	248615	120.000	116	8850
98 Diallate (trans isomer)	86	19.375	19.375	(0.950)	218391	60.0000	58.4	
99 Diallate (trans) part of total	86	19.375	19.375	(0.950)	218391	60.0000	58.4	8875
100 Phorate	75	19.395	19.395	(0.951)	421517	120.000	112	7074
101 Phenacetin	108	19.590	19.590	(0.960)	341549	120.000	113	9100
102 Diallate (cis isomer)	86	19.549	19.549	(0.958)	60206	60.0000	59.5	
103 Diallate (cis) part of total	86	19.549	19.549	(0.958)	60206	60.0000	59.4	9625
104 4-Bromophenyl-phenylether	248	19.375	19.375	(0.950)	232867	120.000	119	8678
105 Hexachlorobenzene	284	19.661	19.661	(0.964)	276535	120.000	120	9435
106 Dimethoate	87	19.897	19.897	(0.975)	165893	120.000	104	9824
107 4-Aminobiphenyl	169	20.091	20.091	(0.985)	783634	120.000	119	0 (M)
108 Pentachlorophenol	266	20.183	20.183	(0.989)	193519	120.000	124	8026
109 Pentachloronitrobenzene	237	20.388	20.388	(0.999)	113308	120.000	121	7592
110 Pronamide	173	20.439	20.439	(1.002)	440068	120.000	120	9348

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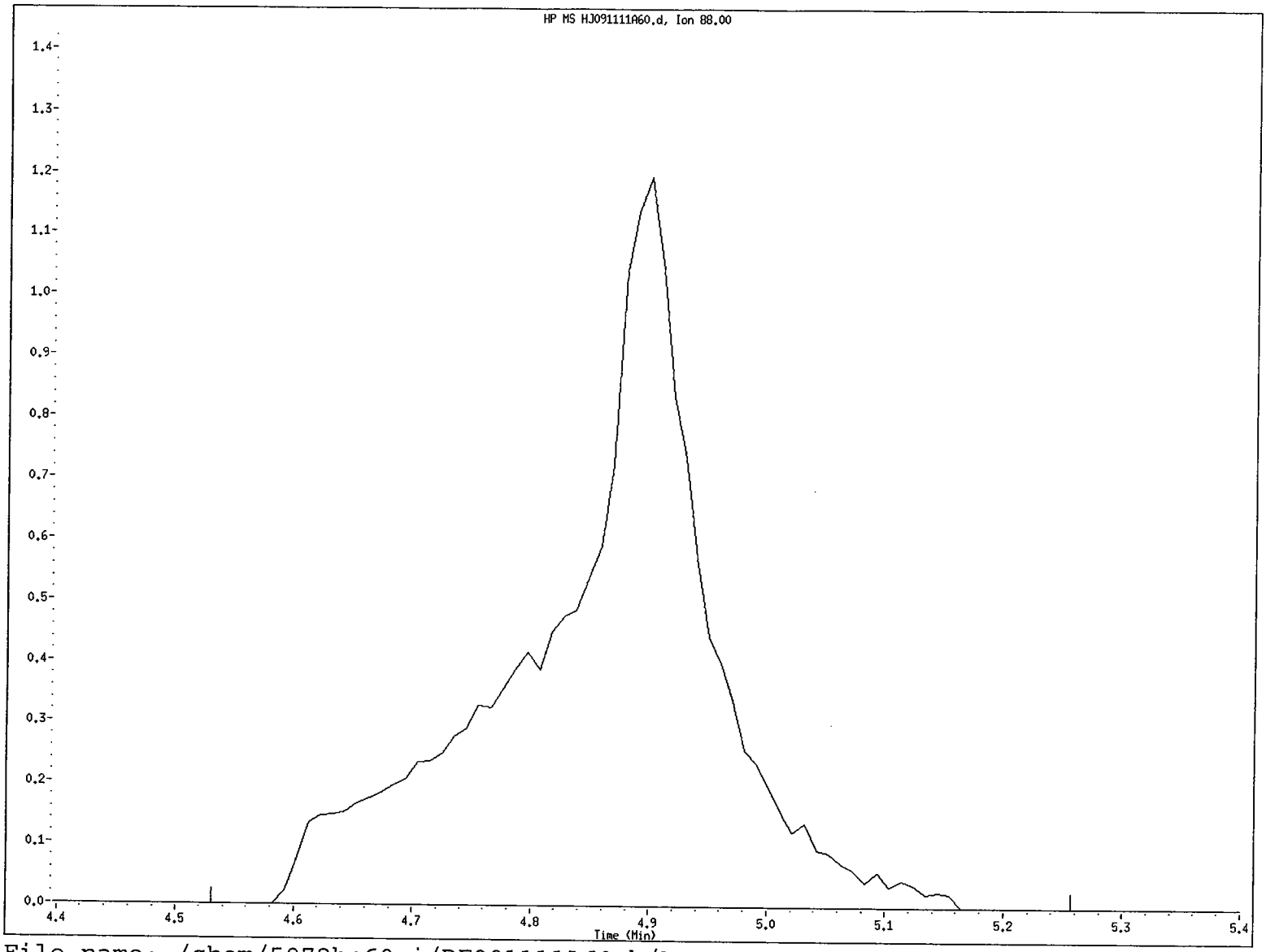
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
111	Disulfoton	88	20.674	20.674	(1.014)	273712	120.000	117	9558
112	Phenanthrene	178	20.459	20.459	(1.003)	1213368	120.000	118	
113	Anthracene	178	20.562	20.562	(1.008)	1211613	120.000	117	
114	Carbazole	167	21.063	21.063	(1.033)	5729546	120.000	127	9584
115	Methyl Parathion	109	21.493	21.493	(1.054)	185494	120.000	107	9516
116	Di-n-butylphthalate	149	22.045	22.045	(1.081)	1316850	120.000	116	9661
117	Parathion	109	22.413	22.413	(1.099)	146509	120.000	117	7956
118	4-Nitroquinoline-1-oxide	190	22.332	22.332	(1.095)	152902	120.000	124	8330
119	Methapyrilene	97	22.639	22.639	(1.110)	89272	120.000	116	9532
120	Isodrin	193	22.812	22.812	(1.118)	162864	120.000	120	9072
121	Fluoranthene	202	23.130	23.130	(1.134)	1173117	120.000	117	9278
122	Benzidine	184	23.610	23.610	(0.888)	533649	120.000	120	8363
123	Pyrene	202	23.631	23.631	(0.888)	1267003	120.000	116	9394
124	p-Dimethylaminoazobenzene	225	24.572	24.572	(0.924)	211388	120.000	113	9275
125	Chlorobenzilate	251	24.746	24.746	(0.930)	355535	120.000	119	9329
126	Kepone	272	Compound Not Detected.						
127	Famfur	218	Compound Not Detected.						
128	Butylbenzylphthalate	149	25.544	25.544	(0.960)	627861	120.000	116	9518
129	3,3'-Dimethylbenzidine	212	25.401	25.401	(0.955)	584192	120.000	115	9434
130	2-Acetylaminofluorene	181	26.056	26.056	(0.980)	572583	120.000	119	9286
131	3,3'-Dichlorobenzidine	252	26.669	26.669	(1.003)	456874	120.000	125	8397
132	bis(2-ethylhexyl)Phthalate	149	27.058	27.058	(1.017)	857894	120.000	117	9472
133	Benzo(a)anthracene	228	26.557	26.557	(0.998)	1084350	120.000	118	
134	Chrysene	228	26.669	26.669	(1.003)	1059656	120.000	119	
135	Di-n-octylphthalate	149	28.490	28.490	(0.954)	1567406	120.000	125	
136	7,12-Dimethylbenz(a)anthracene	256	29.155	29.155	(0.976)	543325	120.000	124	8511
137	Benzo(b)fluoranthene	252	29.094	29.094	(0.974)	1309790	120.000	130	
138	Benzo(k)fluoranthene	252	29.155	29.155	(0.976)	1033818	120.000	115	(H)
139	Benzo(a)pyrene	252	29.749	29.749	(0.996)	1008697	120.000	120	
140	3-Methylcholanthrene	268	30.557	30.557	(1.023)	529317	120.000	121	9114
141	Indeno(1,2,3-c,d)pyrene	276	32.081	32.081	(1.074)	1025344	120.000	127	8648
142	Dibenzo(a,h)anthracene	278	32.143	32.143	(1.076)	935595	120.000	118	8779
143	Benzo(g,h,i)perylene	276	32.685	32.685	(1.095)	946223	120.000	121	8230
198	4-Chlorophenol	128	Compound Not Detected.						
199	2,5-Dichlorophenol	162	Compound Not Detected.						
M 144	Diallate Total	86				278597	120.000	117	0
201	a,a-Dimethylphenethylamine	58	14.444	14.444	(1.175)	301863	120.000	100	7900(M)
202	Aramite	185	24.480	24.480	(0.920)	111275	120.000	116	9106(H)

pw 11/13/09

QC Flag Legend

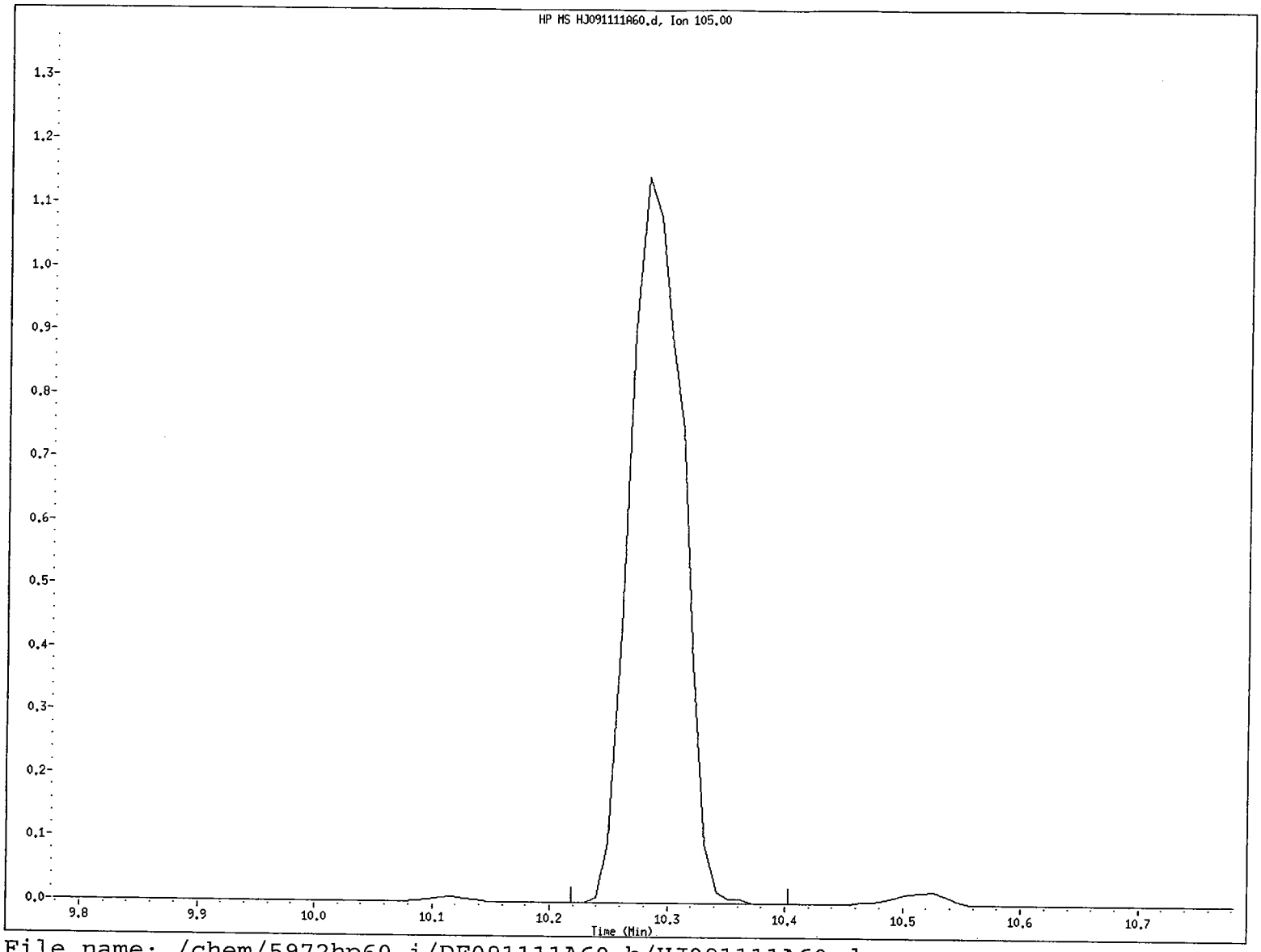
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Nitrosomethylethylamine CAS Number 10595-95-6 Area = 109106 Manually integrate



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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 4.90
Operator ID: 2650

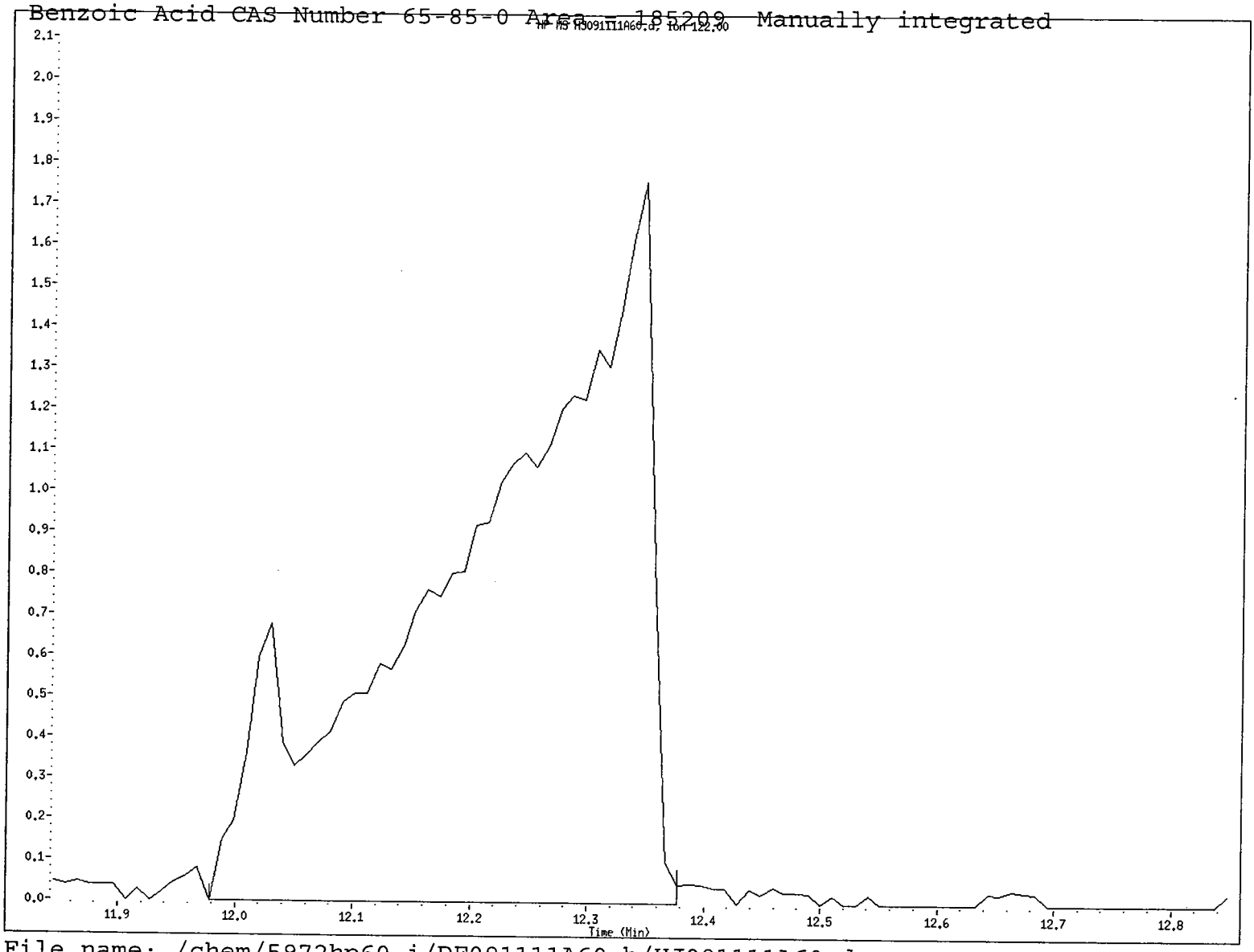
Acetophenone CAS Number 98-86-2 Area = 355899 Manually integrated



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Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 10.28
Operator ID: 2650

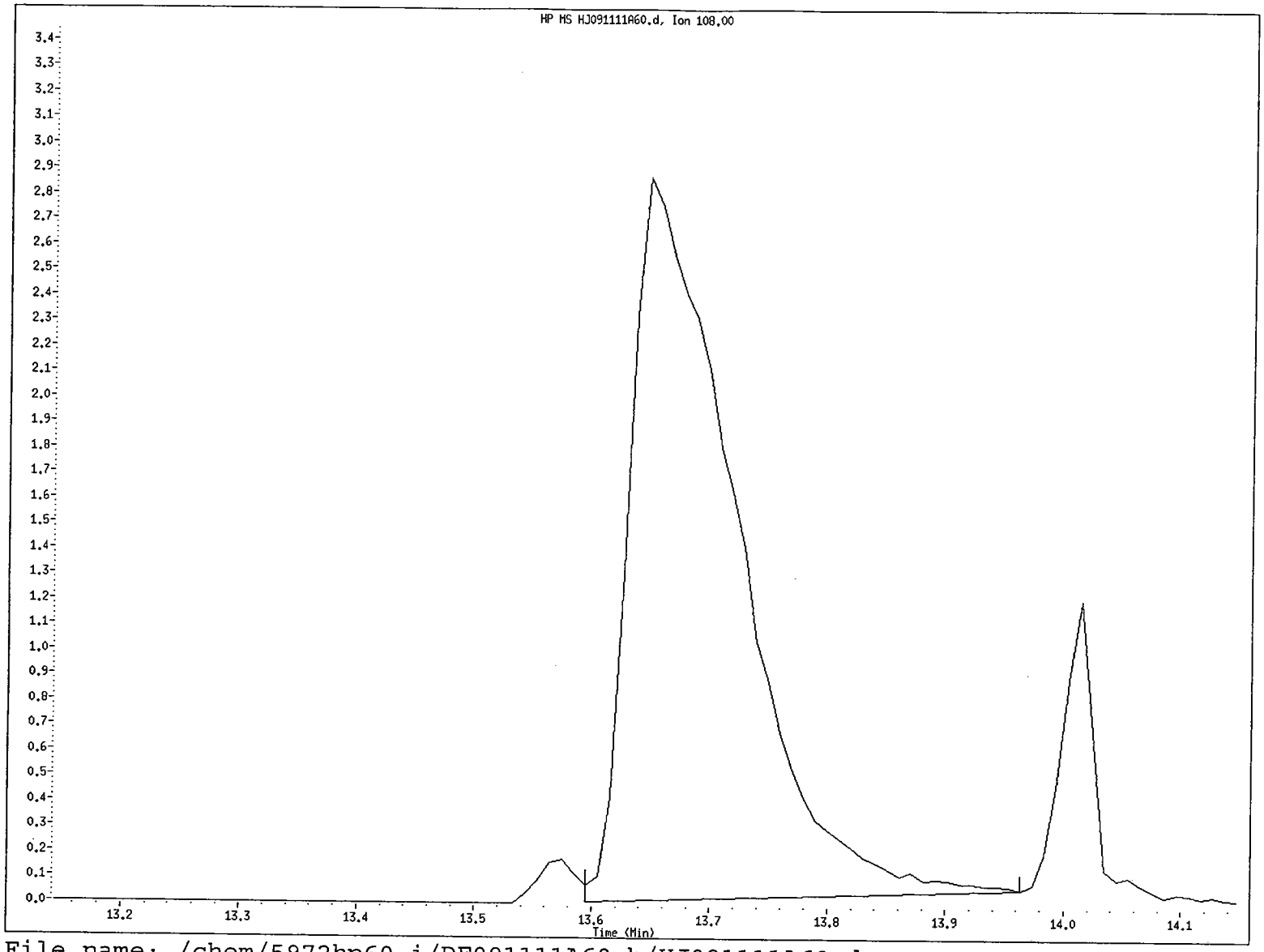
Benzoic Acid CAS Number 65-85-0 Area = 185209 User selected hit

Benzoic Acid CAS Number 65-85-0 Area = 185209 Manually integrated



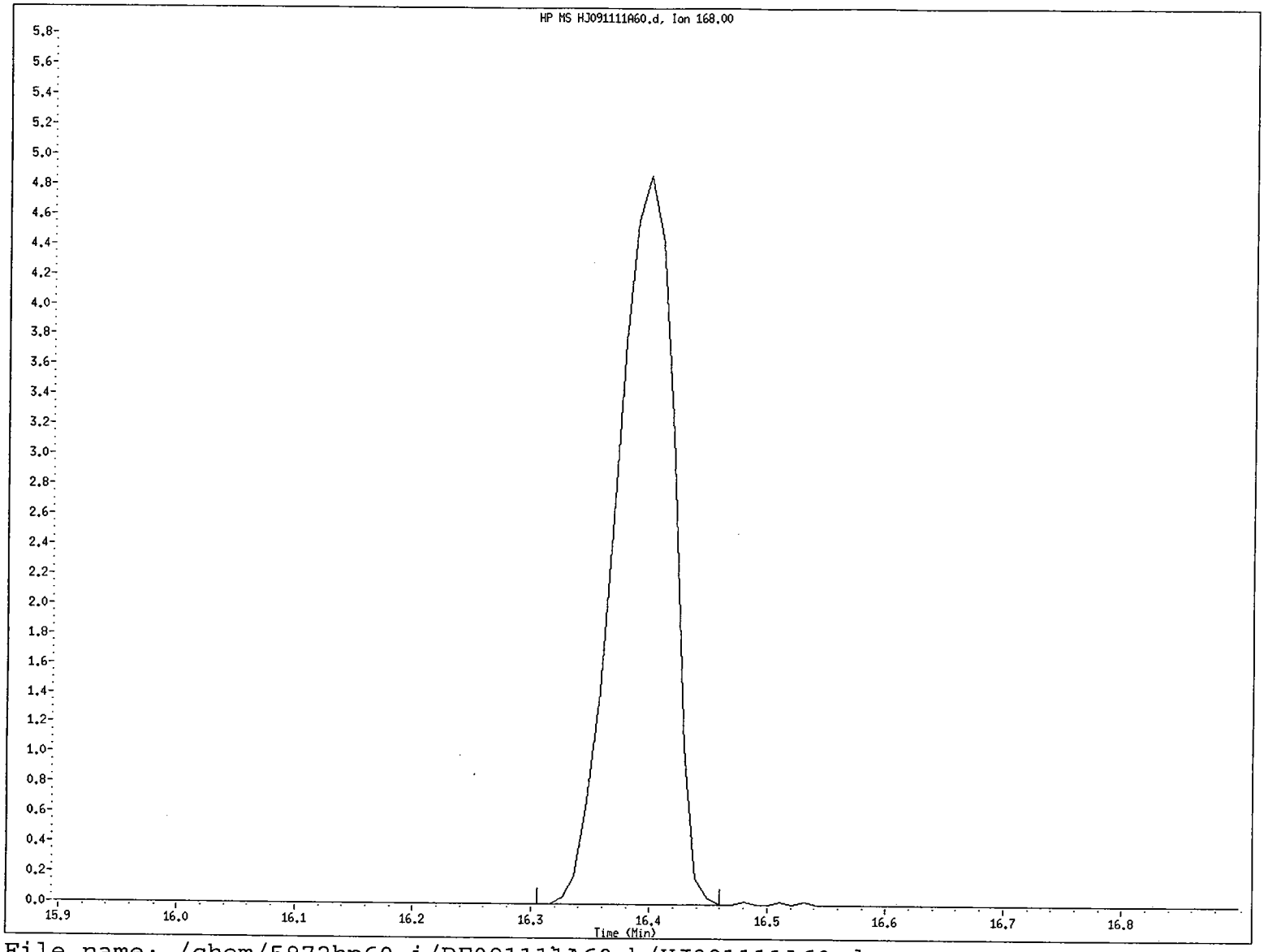
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Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 12.35
Operator ID: 2650

p-Phenylenediamine CAS Number 106-50-3 Area = 178495 User selected hit



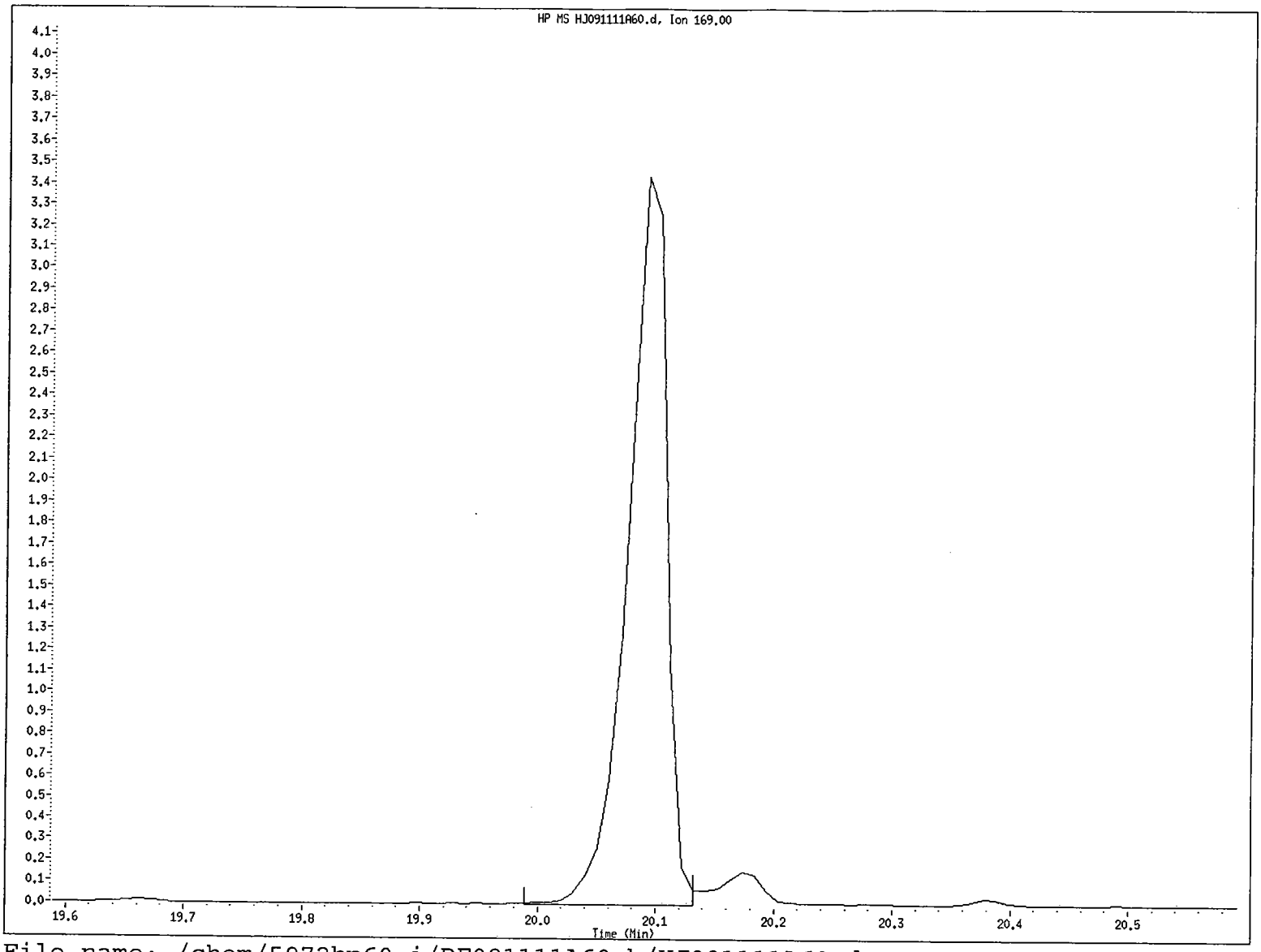
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Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 13.65
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 164797 Manually integrated



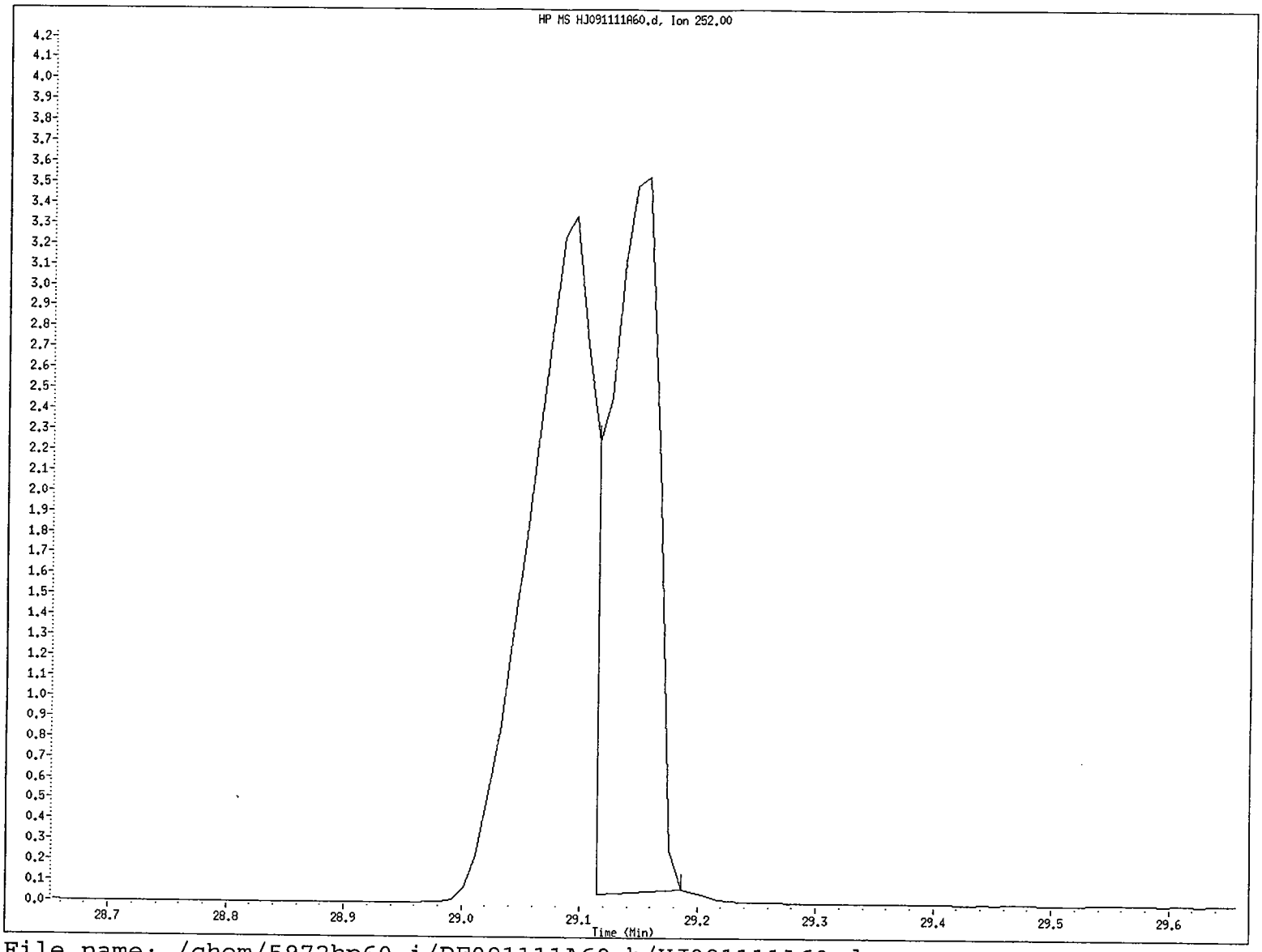
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Client ID: SSTD120
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 16.40
Operator ID: 2650

4-Aminobiphenyl CAS Number 92-67-1 Area = 783634 Manually integrated



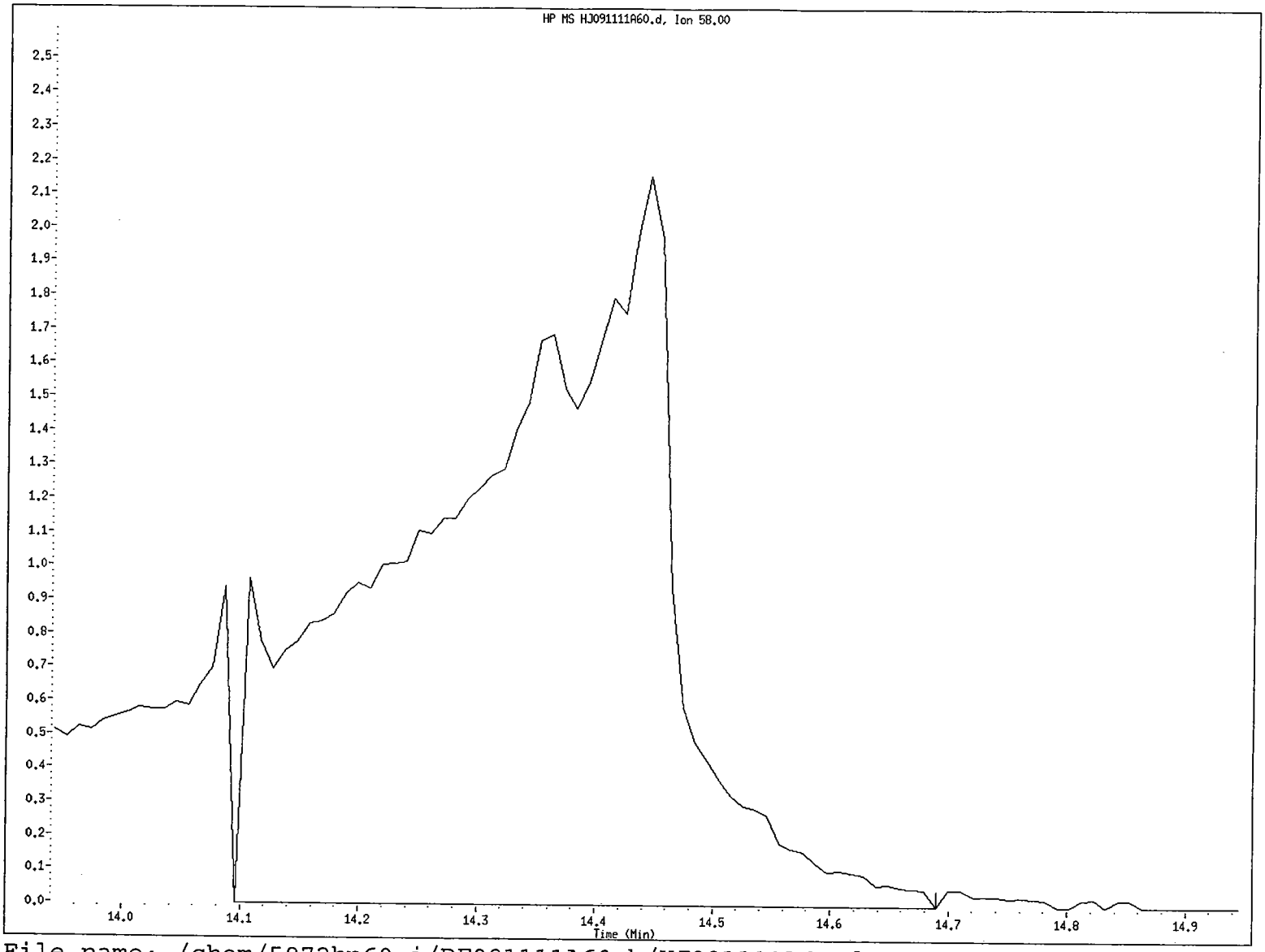
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Client ID: SSTD120
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 20.09
Operator ID: 2650

Benzo(k)fluoranthene CAS Number 207-08-9 Area = 1033818 User selected hit



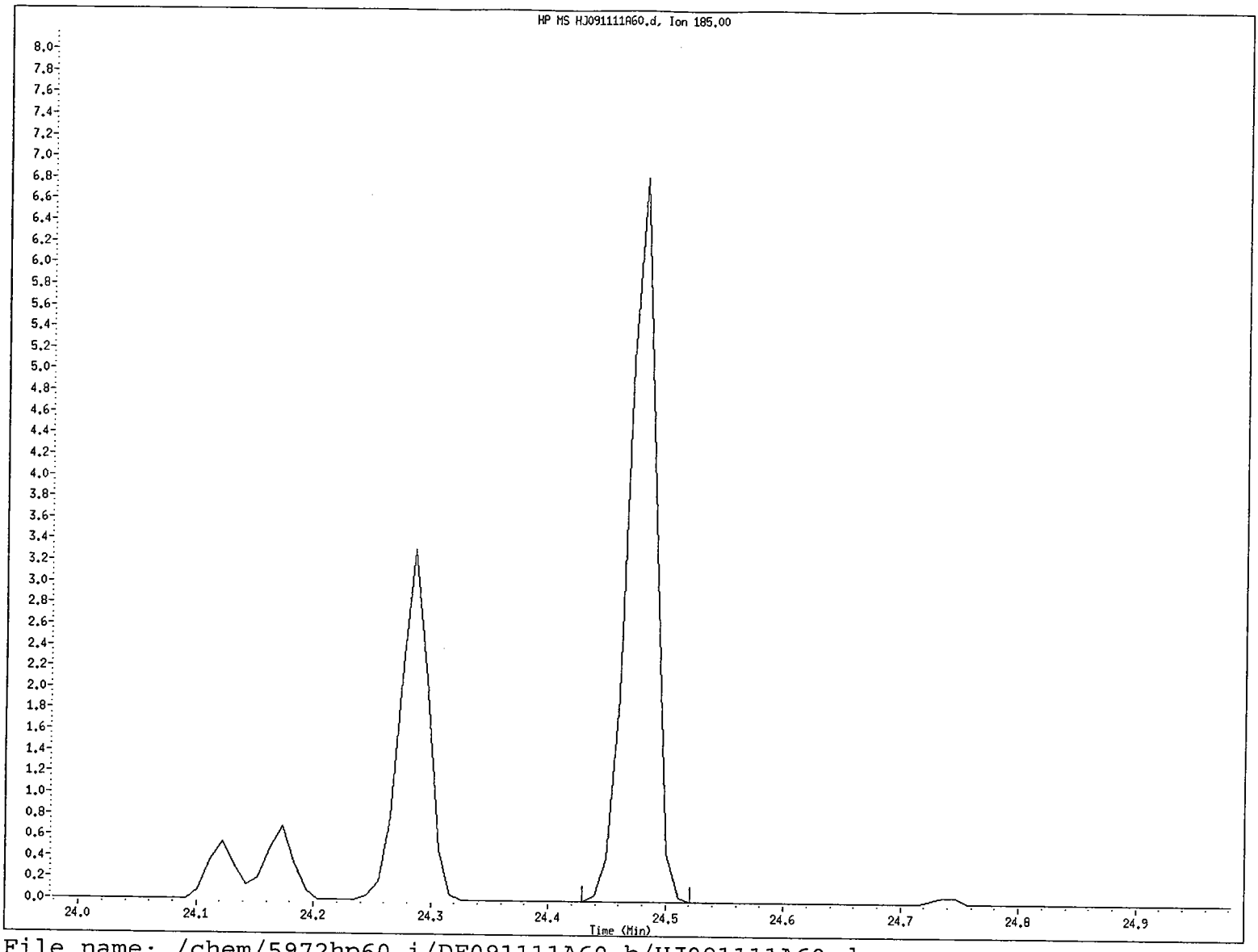
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Client ID: SSTD120
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 29.16
Operator ID: 2650

a,a-Dimethylphenethylamine CAS Number 122-09-8 Area = 301863 Manually integrat



File name: /chem/5972hp60.i/DF091111A60.b/HJ091111A60.d
Client ID: SSTD120
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 14.44
Operator ID: 2650

Aramite CAS Number 140-57-8 Area = 111275 User selected hit

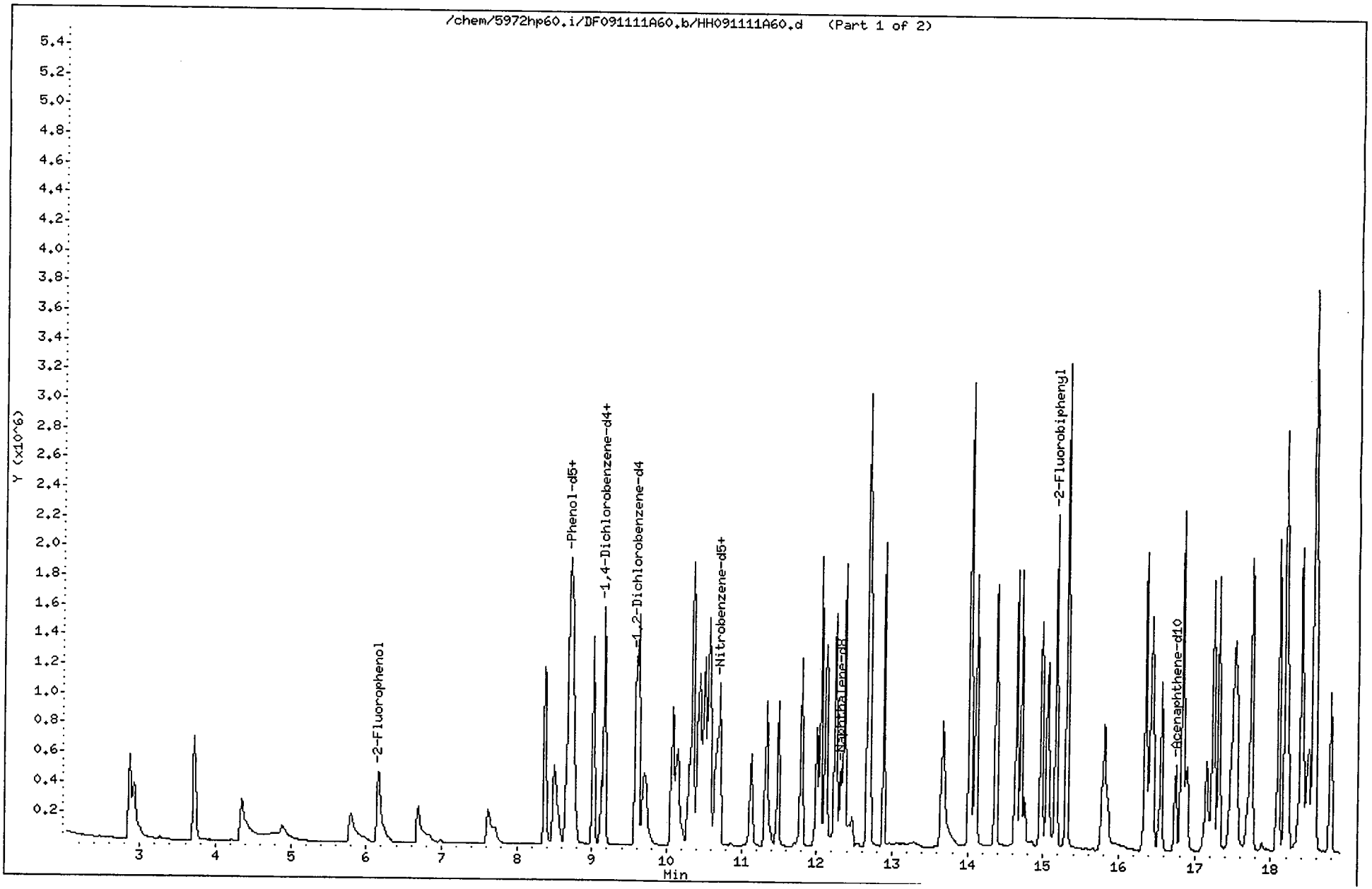


File name: /chem/5972hp60.i/DF091111A60.b/HJ091111A60.d
Client ID: SSTD120
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 15:36
Retention Time: 24.48
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Date : 11-NOV-2009 14:01
Client ID: SSTD160
Sample Info: SSTD160:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

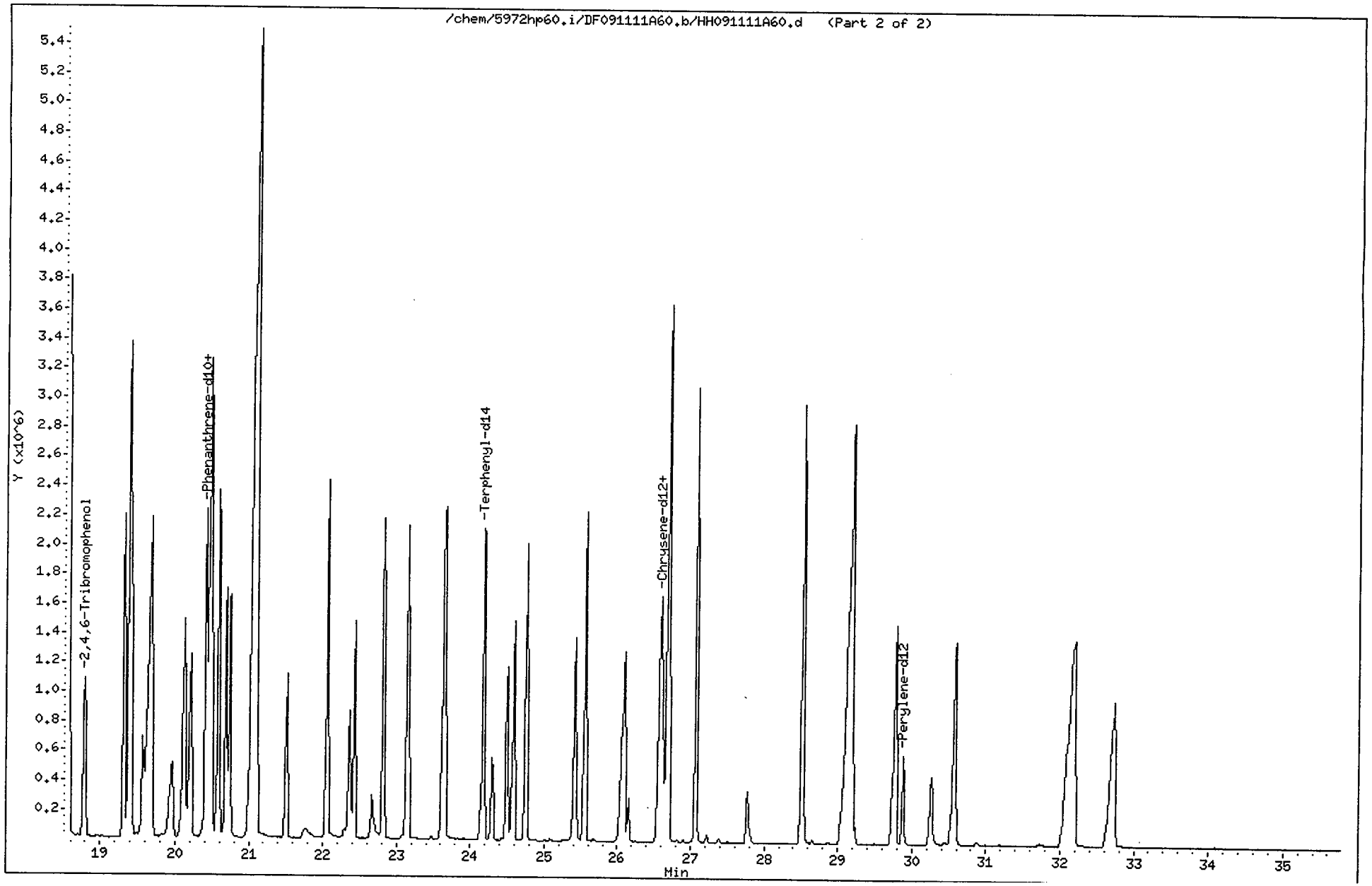
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Date : 11-NOV-2009 14:01
Client ID: SSTD160
Sample Info: SSTD160:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Report Date: 12-Nov-2009 17:14

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Lab Smp Id: SSTD160 Client Smp ID: SSTD160
Inj Date : 11-NOV-2009 14:01
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD160:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 12-Nov-2009 17:14 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 14:01 Cal File: HH091111A60.d
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.124	9.104	(1.000)	134515	40.0000		
*	2 Naphthalene-d8	136	12.316	12.296	(1.000)	396648	40.0000		
*	3 Acenaphthene-d10	164	16.745	16.736	(1.000)	294144	40.0000		
*	4 Phenanthrene-d10	188	20.418	20.388	(1.000)	670222	40.0000		
*	5 Chrysene-d12	240	26.628	26.588	(1.000)	554262	40.0000		
*	6 Perylene-d12	264	29.881	29.852	(1.000)	524496	40.0000		
$	7 2-Fluorophenol	112	6.167	6.137	(0.676)	466926	160.000	157	
$	8 Phenol-d5	99	8.684	8.623	(0.952)	635554	160.000	163	(A)
$	9 2-Chlorophenol-d4	132	8.684	8.664	(0.952)	509905	160.000	164	2636 (A)
$	10 1,2-Dichlorobenzene-d4	152	9.584	9.565	(1.050)	441344	160.000	160	8722 (A)
$	11 Nitrobenzene-d5	82	10.658	10.618	(0.865)	598561	160.000	157	
$	12 2-Fluorobiphenyl	172	15.170	15.150	(0.906)	1532430	160.000	162	(A)
$	13 2,4,6-Tribromophenol	330	18.792	18.752	(1.122)	280860	160.000	168	(A)
$	14 Terphenyl-d14	244	24.193	24.153	(0.909)	1519429	160.000	158	
	15 N-Nitrosodimethylamine	42	2.924	2.935	(0.320)	426341	160.000	158	9395

Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Report Date: 12-Nov-2009 17:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.863	2.884	(0.314)	518952	160.000	158	9715
17 Ethylmethacrylate	69	3.722	3.723	(0.408)	416704	160.000	153	9577
18 2-Picoline	93	4.346	4.357	(0.476)	508727	160.000	158	9642 (M)
19 Nitrosomethylethylamine	88	4.888	4.899	(0.536)	217065	160.000	163	9648 (AM)
20 Methyl Methanesulfonate	80	5.799	5.789	(0.636)	424001	160.000	163	9627 (AM)
21 N-Nitrosodiethylamine	102	6.689	6.680	(0.733)	217798	160.000	165	9631 (AM)
22 Ethyl Methanesulfonate	79	7.620	7.590	(0.835)	454121	160.000	163	9755 (AM)
23 Phenol	94	8.704	8.654	(0.954)	642892	160.000	165	(A)
24 Aniline	93	8.500	8.480	(0.932)	682109	160.000	161	9047 (A)
25 Bis(2-chloroethyl)ether	93	8.735	8.715	(0.957)	500006	160.000	164	(A)
26 Pentachloroethane	167	8.377	8.368	(0.918)	357768	160.000	160	9324
27 2-Chlorophenol	128	8.725	8.695	(0.956)	509263	160.000	164	8163 (A)
28 1,3-Dichlorobenzene	146	9.021	9.002	(0.989)	651578	160.000	159	
29 1,4-Dichlorobenzene	146	9.165	9.145	(1.004)	680272	160.000	160	(A)
30 Benzyl Alcohol	108	9.697	9.657	(1.063)	293272	160.000	162	(A)
31 1,2-Dichlorobenzene	146	9.625	9.605	(1.055)	637030	160.000	163	(A)
32 2-Methylphenol	108	10.147	10.086	(1.112)	418092	160.000	188	(A)
33 2,2'-oxybis(1-Chloropropane)	45	10.075	10.056	(1.104)	822455	160.000	161	9468 (A)
34 N-Nitrosopyrrolidine	100	10.454	10.332	(1.146)	234708	160.000	166	6047 (A)
35 3-Methylphenol	108	10.566	10.495	(1.158)	935661	320.000	332	(A)
36 4-Methylphenol	108	10.566	10.495	(1.158)	935661	320.000	332	(A)
37 3-4-Methylphenol	108	10.566	10.495	(1.158)	939429	320.000	332	8856 (A)
38 N-Nitroso-di-N-propylamine	70	10.505	10.424	(1.151)	391415	160.000	166	8475 (A)
39 Acetophenone	105	10.331	10.270	(0.839)	675649	160.000	160	0 (M)
40 N-Nitrosomorpholine	116	10.474	10.383	(1.148)	98213	160.000	168	0 (AM)
41 o-Toluidine	106	10.423	10.383	(1.142)	731777	160.000	164	8784 (A)
42 Hexachloroethane	117	10.341	10.332	(1.133)	277391	160.000	159	9415
43 Nitrobenzene	77	10.709	10.659	(0.870)	574651	160.000	155	9684
44 N-Nitrosopiperidine	114	11.139	11.068	(0.904)	233688	160.000	160	9704 (A)
45 Isophorone	82	11.334	11.273	(0.920)	1018585	160.000	161	9213 (A)
46 2-Nitrophenol	139	11.497	11.467	(0.934)	332433	160.000	161	9061 (A)
47 2,4-Dimethylphenol	122	11.804	11.754	(0.958)	404158	160.000	160	8854 (A)
48 Benzoic Acid	122	12.469	12.224	(1.012)	362316	800.000	825	8255 (AM)
49 o,o,o-Triethylphosphorothioat	198	12.050	12.010	(0.978)	366651	160.000	163	8975 (A)
50 Bis(2-chloroethoxy)methane	93	11.999	11.969	(0.974)	623081	160.000	161	9294 (A)
51 2,4-Dichlorophenol	162	12.121	12.071	(0.984)	618280	160.000	163	(A)
52 1,2,4-Trichlorobenzene	180	12.244	12.224	(0.994)	731099	160.000	161	(A)
53 Naphthalene	128	12.367	12.337	(1.004)	1312461	160.000	164	9778 (A)
54 4-Chloroaniline	127	12.704	12.664	(1.032)	627557	160.000	165	8936 (A)
55 2,6-Dichlorophenol	162	12.674	12.644	(1.029)	641311	160.000	165	(A)
56 Hexachloropropene	213	12.674	12.664	(1.029)	533975	160.000	162	9336 (A)
57 Hexachlorobutadiene	225	12.889	12.869	(1.047)	413898	160.000	162	9291 (A)
58 N-Nitroso-di-n-butylamine	84	13.666	13.636	(1.110)	340178	160.000	162	9627 (A)
59 p-Phenylenediamine	108	13.697	13.606	(0.818)	308582	160.000	139	(H)
60 4-Chloro-3-methylphenol	107	14.034	13.994	(1.140)	512478	160.000	167	8248 (A)
61 Safrole	162	14.034	14.015	(1.140)	557284	160.000	165	8851 (A)
62 2-Methylnaphthalene	141	14.116	14.097	(1.146)	865533	160.000	161	(A)

Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Report Date: 12-Nov-2009 17:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
63 1-Methylnaphthalene	142	14.382	14.352	(1.168)	975908	160.000	164	(A)
64 Hexachlorocyclopentadiene	237	14.710	14.700	(0.878)	541320	160.000	161	9421 (A)
65 1,2,4,5-Tetrachlorobenzene	216	14.648	14.629	(0.875)	681319	160.000	159	9334
66 2,4,6-Trichlorophenol	196	14.976	14.946	(0.894)	522725	160.000	163	(A)
67 2,4,5-Trichlorophenol	196	15.057	15.028	(0.899)	578786	160.000	163	(A)
68 Isosafrole	162	14.751	14.741	(0.881)	92415	160.000	162	(A)
69 2-Chloronaphthalene	162	15.313	15.294	(0.914)	1794112	160.000	164	(A)
70 2-Nitroaniline	65	15.804	15.764	(0.944)	395973	160.000	159	9744
71 1,4-Napthoquinone	158	15.845	15.815	(0.946)	278947	160.000	133	9597
72 Dimethylphthalate	163	16.439	16.378	(0.982)	1564216	160.000	161	9028 (A)
73 1,3-Dinitrobenzene	168	16.449	16.368	(0.982)	310526	160.000	162	0 (AM)
74 2,6-Dinitrotoluene	165	16.561	16.521	(0.989)	395524	160.000	161	9545 (A)
75 Acenaphthylene	152	16.357	16.327	(0.977)	1762348	160.000	162	9334 (A)
76 3-Nitroaniline	138	16.899	16.828	(1.009)	306282	160.000	160	9756
77 Acenaphthene	154	16.838	16.808	(1.005)	1048622	160.000	162	9672 (A)
78 2,4-Dinitrophenol	184	17.155	17.084	(1.024)	350650	160.000	165	(A)
79 4-Nitrophenol	139	17.482	17.391	(1.044)	269017	160.000	159	8934
80 Pentachlorobenzene	250	17.318	17.289	(1.034)	604597	160.000	162	9722 (A)
81 2,4-Dinitrotoluene	165	17.543	17.483	(1.048)	539952	160.000	162	7845 (A)
82 Dibenzofuran	168	17.247	17.217	(1.030)	1814814	160.000	161	8723 (A)
83 1-Naphthylamine	143	17.513	17.473	(1.046)	909960	160.000	159	
84 2,3,4,6-Tetrachlorophenol	232	17.758	17.708	(1.060)	425327	160.000	162	9434 (A)
85 2-Naphthylamine	143	17.738	17.667	(1.059)	972077	160.000	159	
86 Diethylphthalate	149	18.208	18.168	(1.087)	1520861	160.000	162	8989 (A)
87 Zinophos	97	18.403	18.363	(1.099)	320479	160.000	161	8888 (A)
88 4-Chlorophenyl-phenylether	204	18.198	18.168	(1.087)	771981	160.000	162	7254 (A)
89 5-Nitro-o-toluidine	152	18.403	18.322	(1.099)	404411	160.000	161	7659 (A)
90 Fluorene	166	18.106	18.076	(1.081)	1453839	160.000	163	7684 (A)
91 4-Nitroaniline	138	18.495	18.404	(1.104)	287556	160.000	154	8007
92 4,6-Dinitro-2-methylphenol	198	18.556	18.465	(0.909)	416386	160.000	158	0 (M)
93 N-Nitrosodiphenylamine	169	18.577	18.526	(0.910)	1294526	160.000	160	7849
95 1,2-Diphenylhydrazine	77	18.587	18.547	(1.110)	1554073	160.000	169	9159 (A)
96 Sulfotep	322	19.324	19.294	(1.154)	238944	160.000	170	8941 (A)
97 1,3,5-Trinitrobenzene	75	19.641	19.478	(0.962)	471083	160.000	154	8679
98 Diallate (trans isomer)	86	19.395	19.365	(0.950)	427022	80.0000	79.0	
99 Diallate (trans) part of total	86	19.395	19.365	(0.950)	427022	80.0000	79.0	8785
100 Phorate	75	19.416	19.376	(0.951)	818120	160.000	157	7766
101 Phenacetin	108	19.682	19.539	(0.964)	695248	160.000	160	8939
102 Diallate (cis isomer)	86	19.569	19.549	(0.958)	106243	80.0000	75.3	
103 Diallate (cis) part of total	86	19.569	19.549	(0.958)	106658	80.0000	75.5	9413
104 4-Bromophenyl-phenylether	248	19.395	19.365	(0.950)	443613	160.000	158	8712
105 Hexachlorobenzene	284	19.692	19.652	(0.964)	536871	160.000	161	9421 (A)
106 Dimethoate	87	19.958	19.856	(0.977)	281269	160.000	131	9808
107 4-Aminobiphenyl	169	20.132	20.071	(0.986)	1503115	160.000	157	0 (M)
108 Pentachlorophenol	266	20.214	20.163	(0.990)	372528	160.000	160	8363 (A)
109 Pentachloronitrobenzene	237	20.418	20.368	(1.000)	216562	160.000	161	7254 (A)
110 Pronamide	173	20.480	20.419	(1.003)	848485	160.000	160	9210

11/13/09

Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Report Date: 12-Nov-2009 17:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
111 Disulfoton	88	20.694	20.665	(1.014)	518522	160.000	154	9183
112 Phenanthrene	178	20.490	20.450	(1.004)	2338441	160.000	159	
113 Anthracene	178	20.592	20.552	(1.009)	2293362	160.000	156	
114 Carbazole	167	21.114	21.033	(1.034)	10642988	160.000	156	9599
115 Methyl Parathion	109	21.513	21.483	(1.054)	338304	160.000	141	9615
116 Di-n-butylphthalate	149	22.065	22.046	(1.081)	2504694	160.000	156	9703
117 Parathion	109	22.434	22.394	(1.099)	279367	160.000	156	8299
118 4-Nitroquinoline-1-oxide	190	22.372	22.312	(1.096)	288771	160.000	150	7865
119 Methapyrilene	97	22.659	22.629	(1.110)	161928	160.000	142	9583
120 Isodrin	193	22.822	22.803	(1.118)	307117	160.000	160	9272
121 Fluoranthene	202	23.160	23.120	(1.134)	2183412	160.000	157	9282
122 Benzidine	184	23.641	23.591	(0.888)	964823	160.000	154	8387
123 Pyrene	202	23.661	23.621	(0.889)	2371409	160.000	159	9468
124 p-Dimethylaminoazobenzene	225	24.592	24.562	(0.924)	393782	160.000	153	9039
125 Chlorobenzilate	251	24.766	24.736	(0.930)	685539	160.000	160	9443(A)
126 Kepone	272	Compound Not Detected.						
127 Famfur	218	Compound Not Detected.						
128 Butylbenzylphthalate	149	25.564	25.534	(0.960)	1225762	160.000	161	9513(A)
129 3,3'-Dimethylbenzidine	212	25.421	25.381	(0.955)	1152140	160.000	160	9560(A)
130 2-Acetylaminofluorene	181	26.106	26.025	(0.980)	1095477	160.000	158	9126
131 3,3'-Dichlorobenzidine	252	26.700	26.660	(1.003)	856942	160.000	160	8369(A)
132 bis(2-ethylhexyl)Phthalate	149	27.078	27.048	(1.017)	1716332	160.000	161	9394(A)
133 Benzo(a)anthracene	228	26.587	26.547	(0.998)	2033985	160.000	160	
134 Chrysene	228	26.700	26.649	(1.003)	1917433	160.000	157	
135 Di-n-octylphthalate	149	28.521	28.481	(0.954)	3033001	160.000	163	(A)
136 7,12-Dimethylbenz(a)anthracene	256	29.196	29.125	(0.977)	1019665	160.000	162	8660(A)
137 Benzo(b)fluoranthene	252	29.145	29.054	(0.975)	2847707	160.000	183	(A)
138 Benzo(k)fluoranthene	252	29.196	29.115	(0.977)	1584294	160.000	135	(MH) 2
139 Benzo(a)pyrene	252	29.779	29.729	(0.997)	1920576	160.000	161	(A)
140 3-Methylcholanthrene	268	30.587	30.537	(1.024)	1029377	160.000	161	9191(A)
141 Indeno(1,2,3-c,d)pyrene	276	32.132	32.051	(1.075)	2135218	160.000	174	8692(AM)
142 Dibenzo(a,h)anthracene	278	32.194	32.113	(1.077)	1944339	160.000	167	9298(A)
143 Benzo(g,h,i)perylene	276	32.736	32.645	(1.096)	1895228	160.000	165	8369(A)
198 4-Chlorophenol	128	Compound Not Detected.						
199 2,5-Dichlorophenol	162	Compound Not Detected.						
M 144 Diallate Total	86				533680	160.000	156	0
201 a,a-Dimethylphenethylamine	58	14.863	13.882	(1.207)	569118	160.000	135	2560(M) 1
202 Aramite	185	24.500	24.470	(0.920)	213018	160.000	155	8989(H)

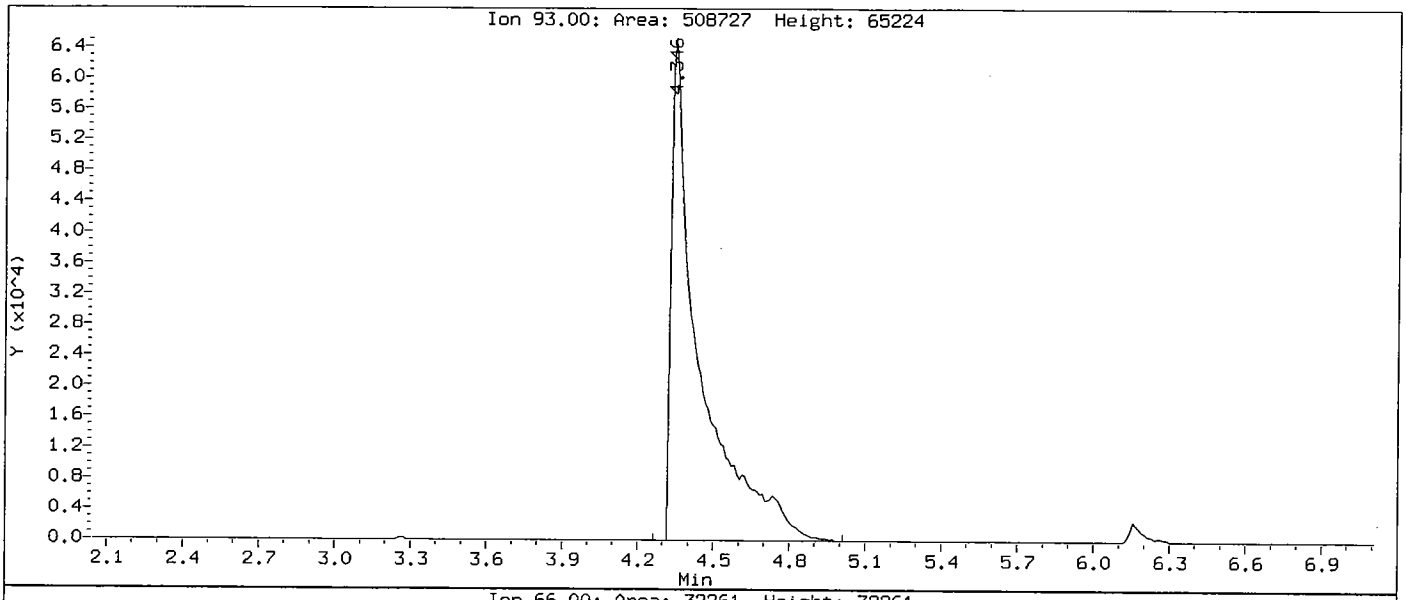
Rev JS 11/19/09

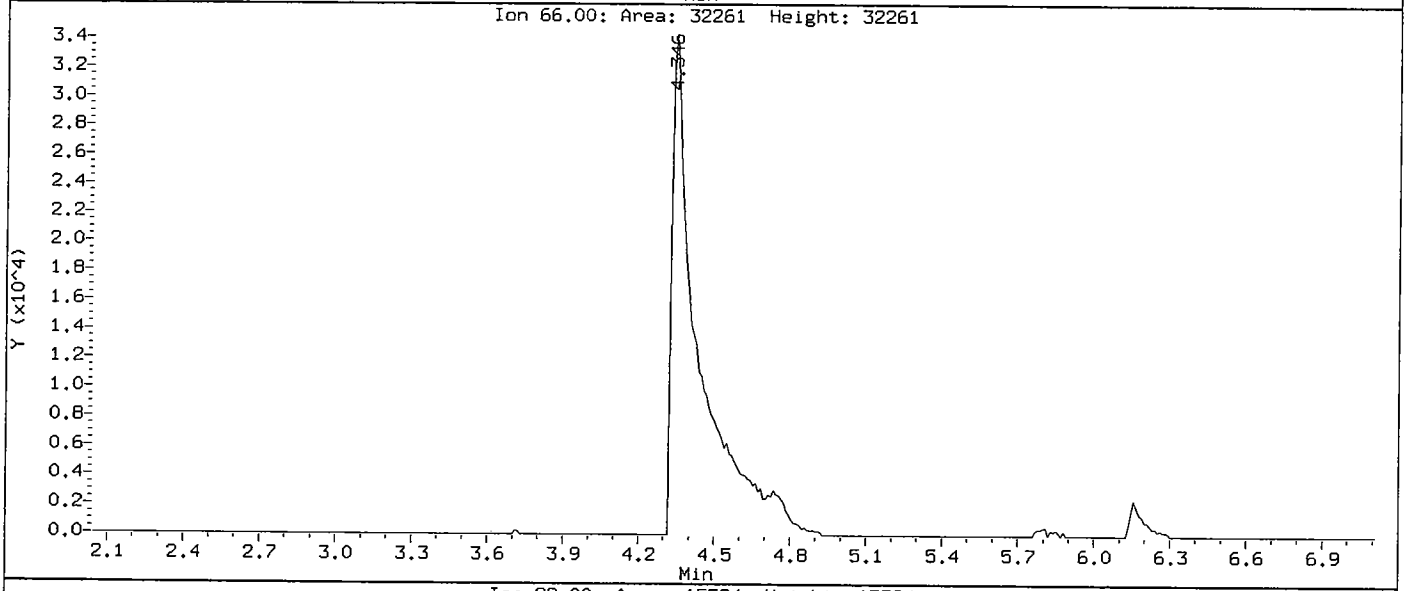
QC Flag Legend

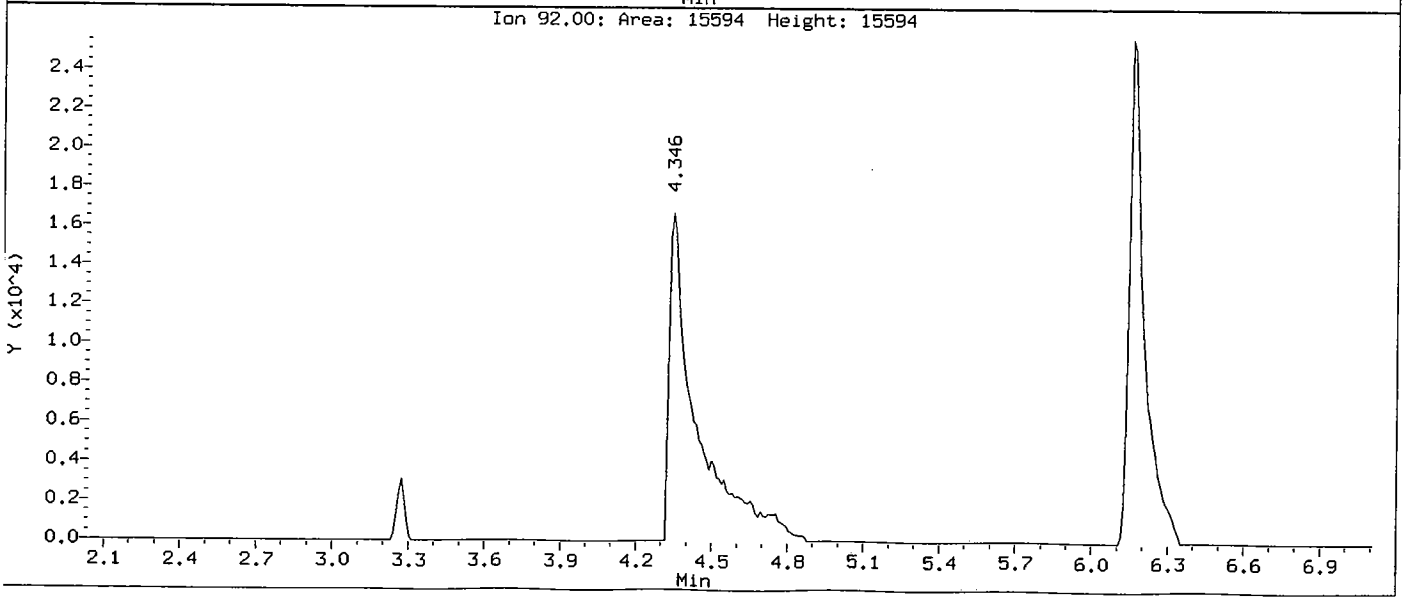
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Injection Date: 11-NOV-2009 14:01
Instrument: 5972hp60.i
Client Sample ID: SSTD160

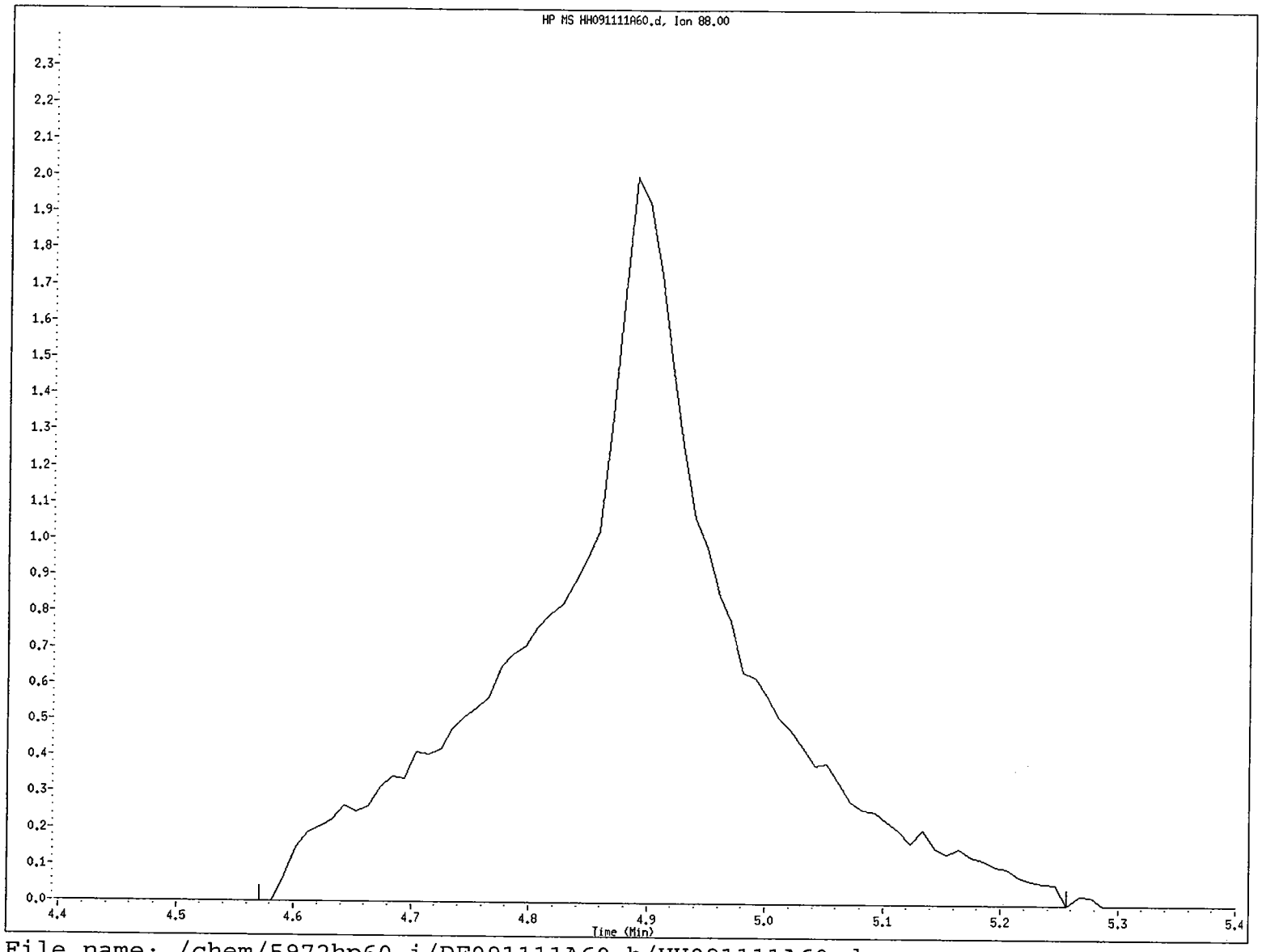
Compound: 2-Picoline
CAS Number: 109-06-8





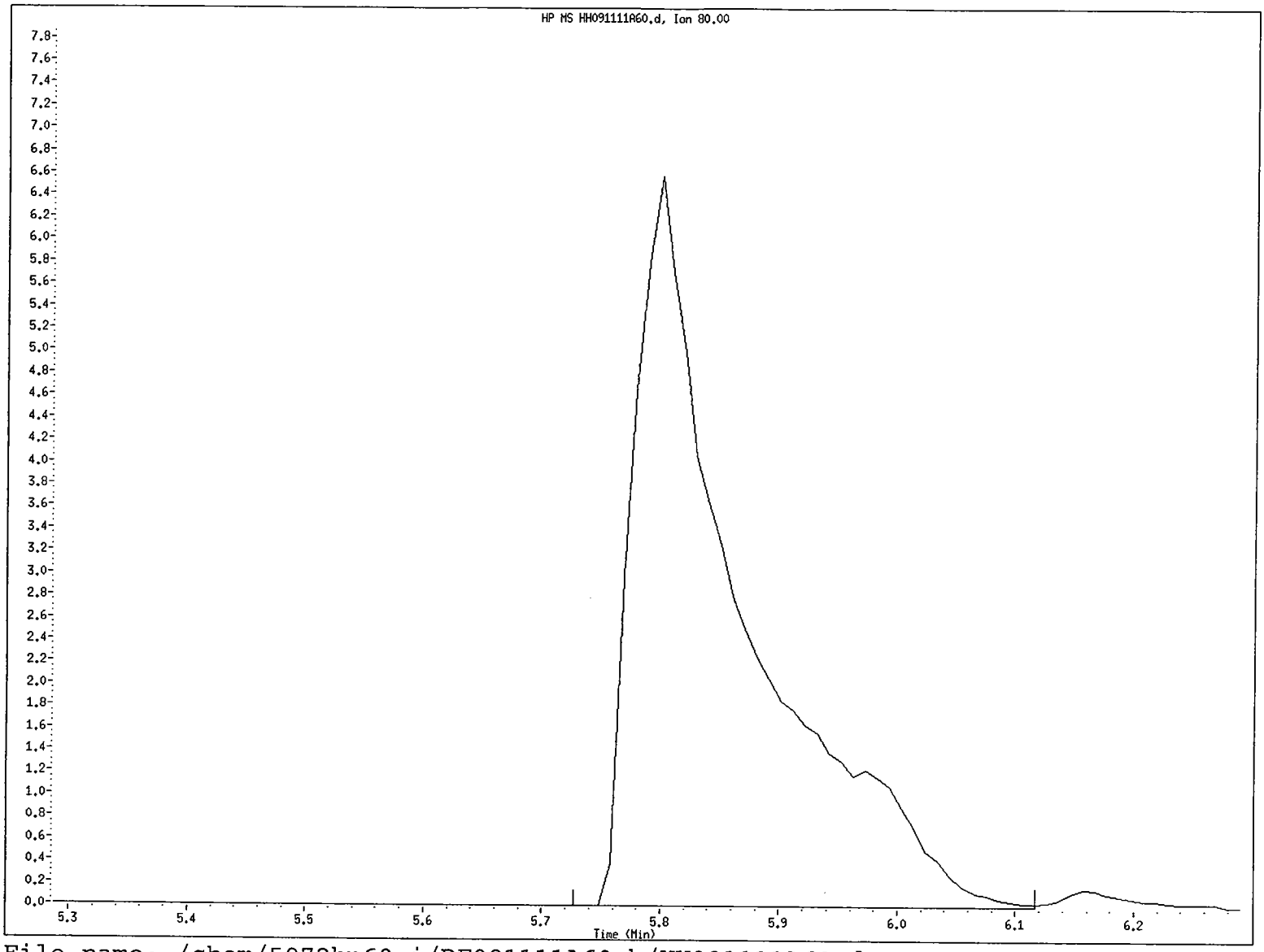


Nitrosomethylethylamine CAS Number 10595-95-6 Area = 217065 Manually integrate



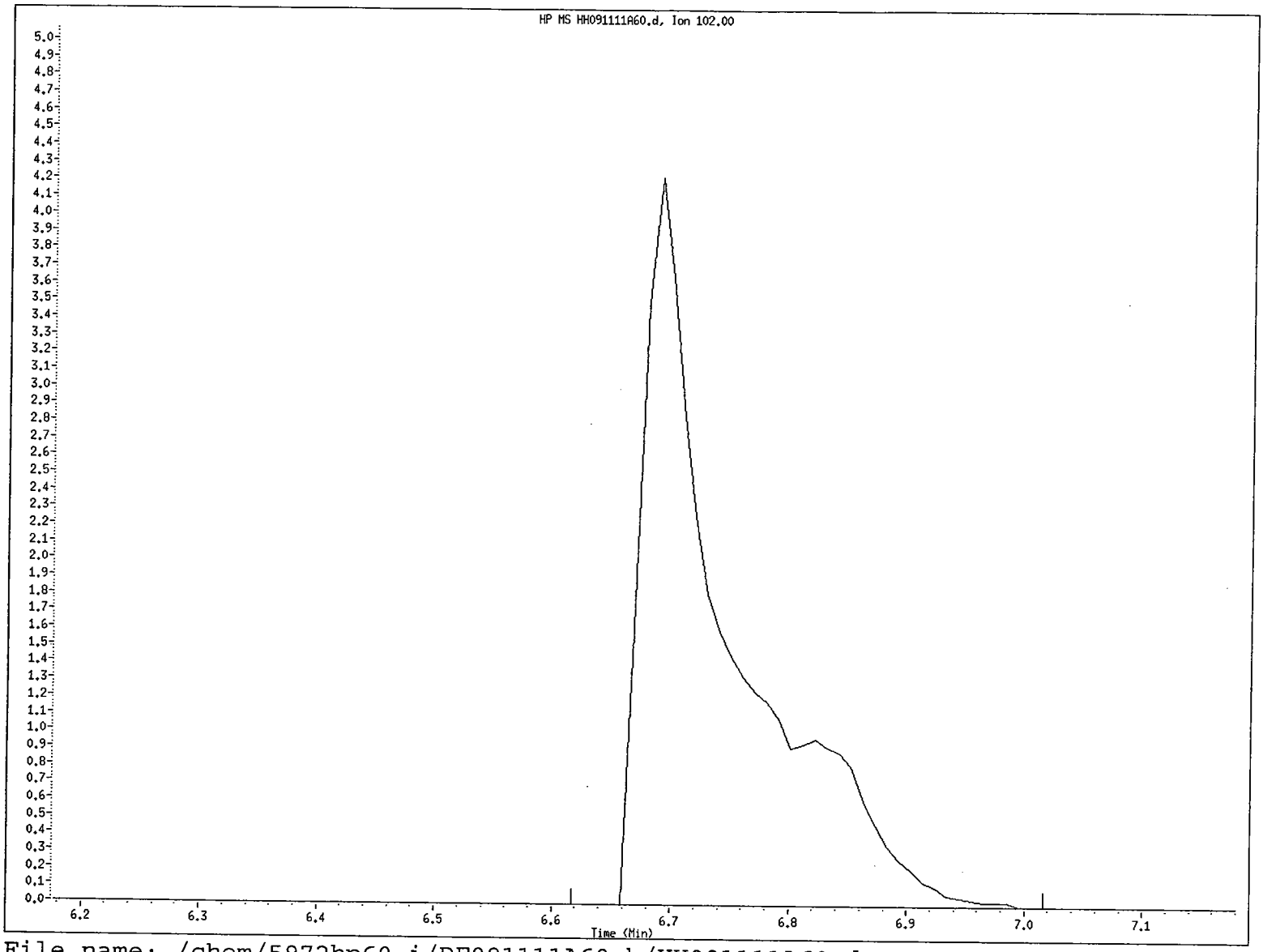
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 4.89
Operator ID: 2650

Methyl Methanesulfonate CAS Number 66-27-3 Area = 424001 Manually integrated



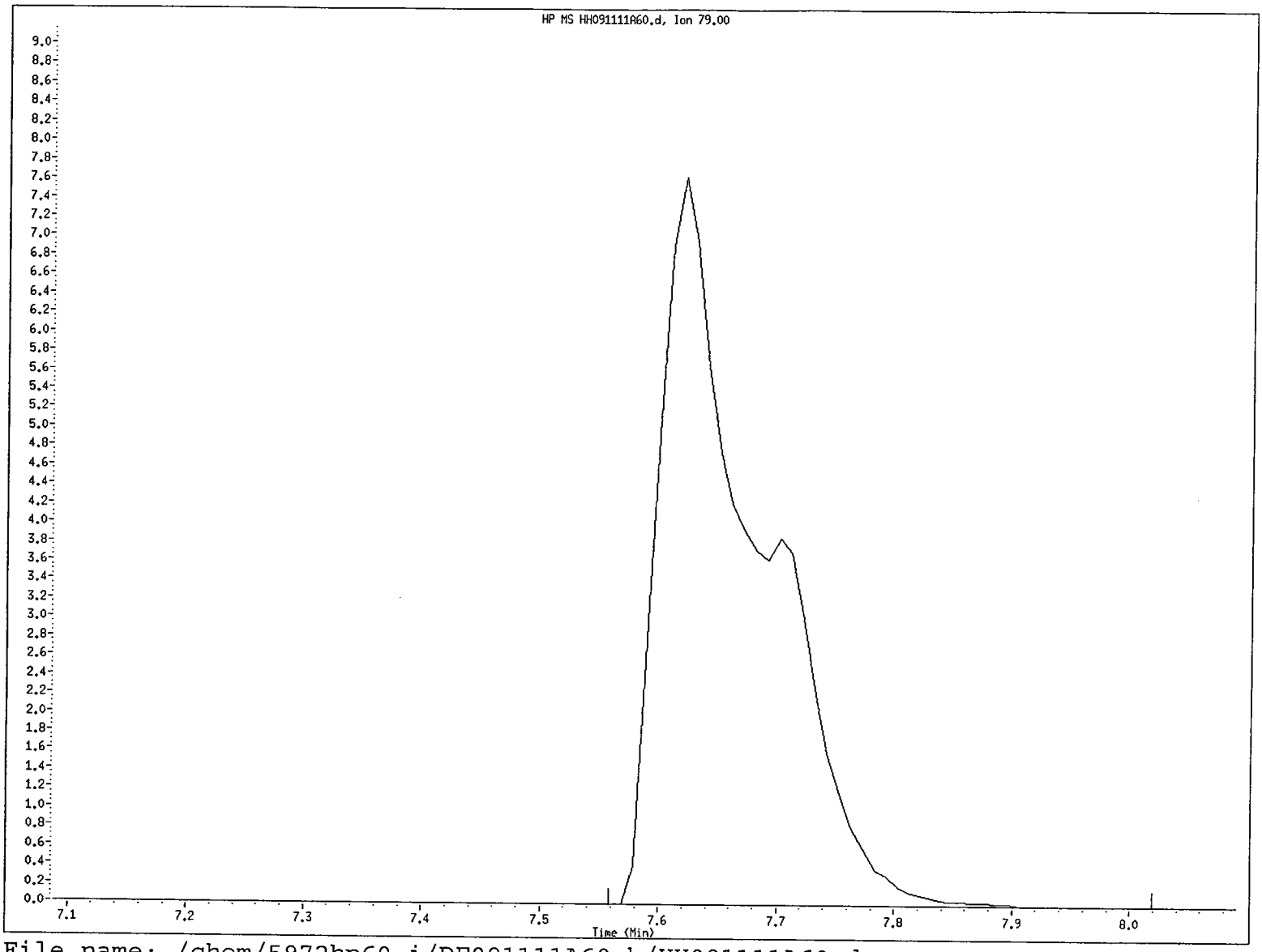
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Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 5.80
Operator ID: 2650

N-Nitrosodiethylamine CAS Number 55-18-5 Area = 217798 Manually integrated



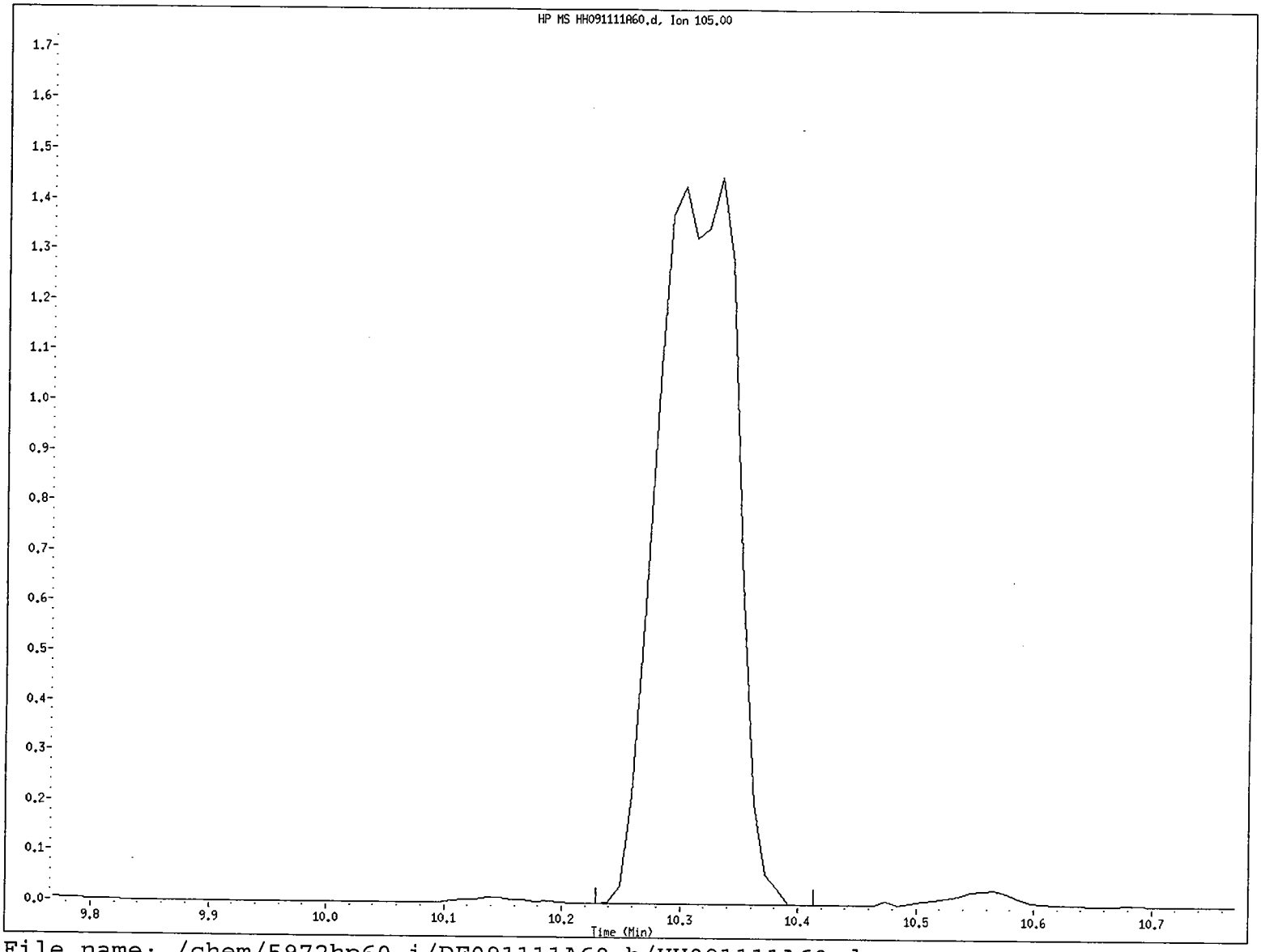
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Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 6.69
Operator ID: 2650

Ethyl Methanesulfonate CAS Number 62-50-0 Area = 454121 Manually integrated



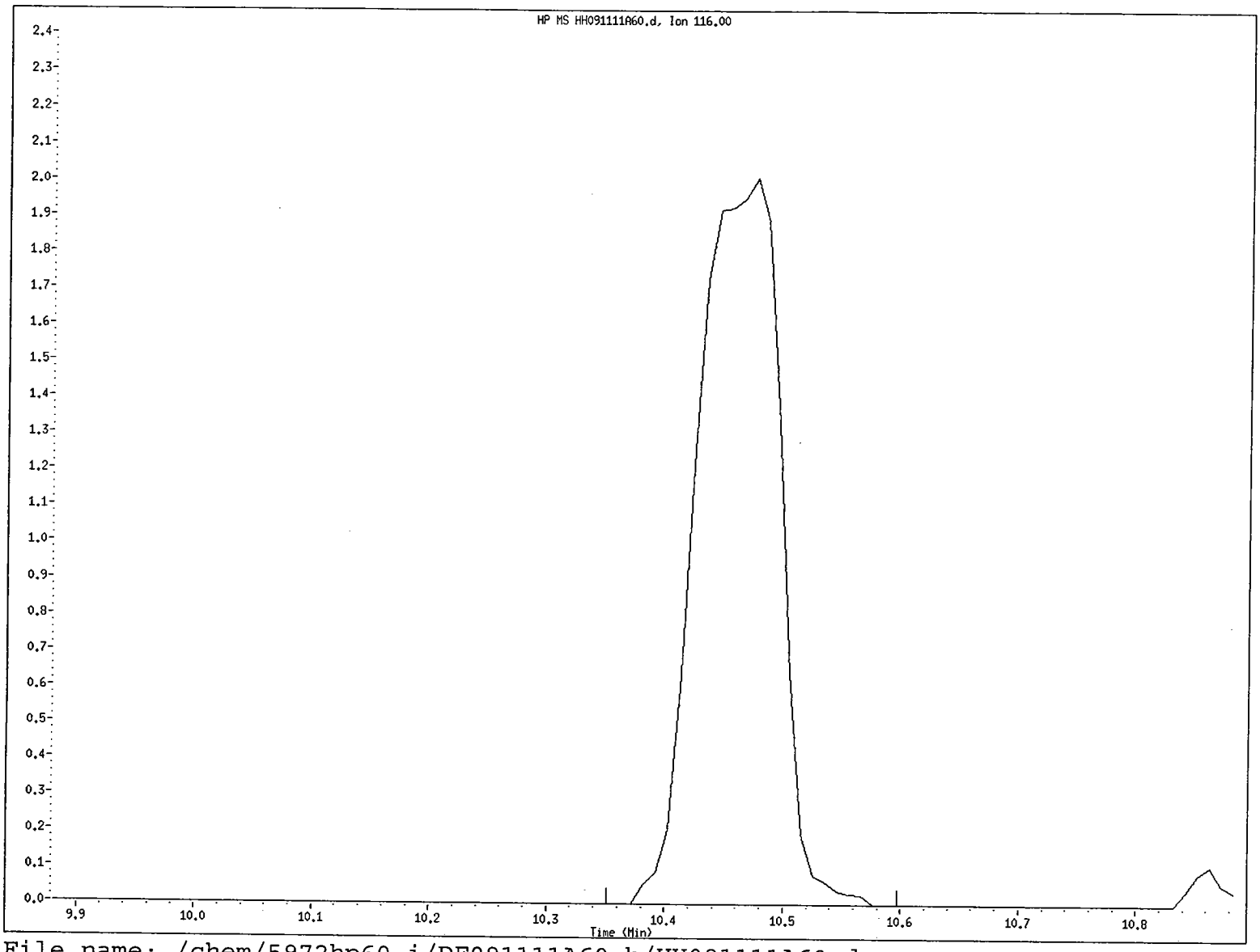
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 7.62
Operator ID: 2650

Acetophenone CAS Number 98-86-2 Area = 675649 Manually integrated



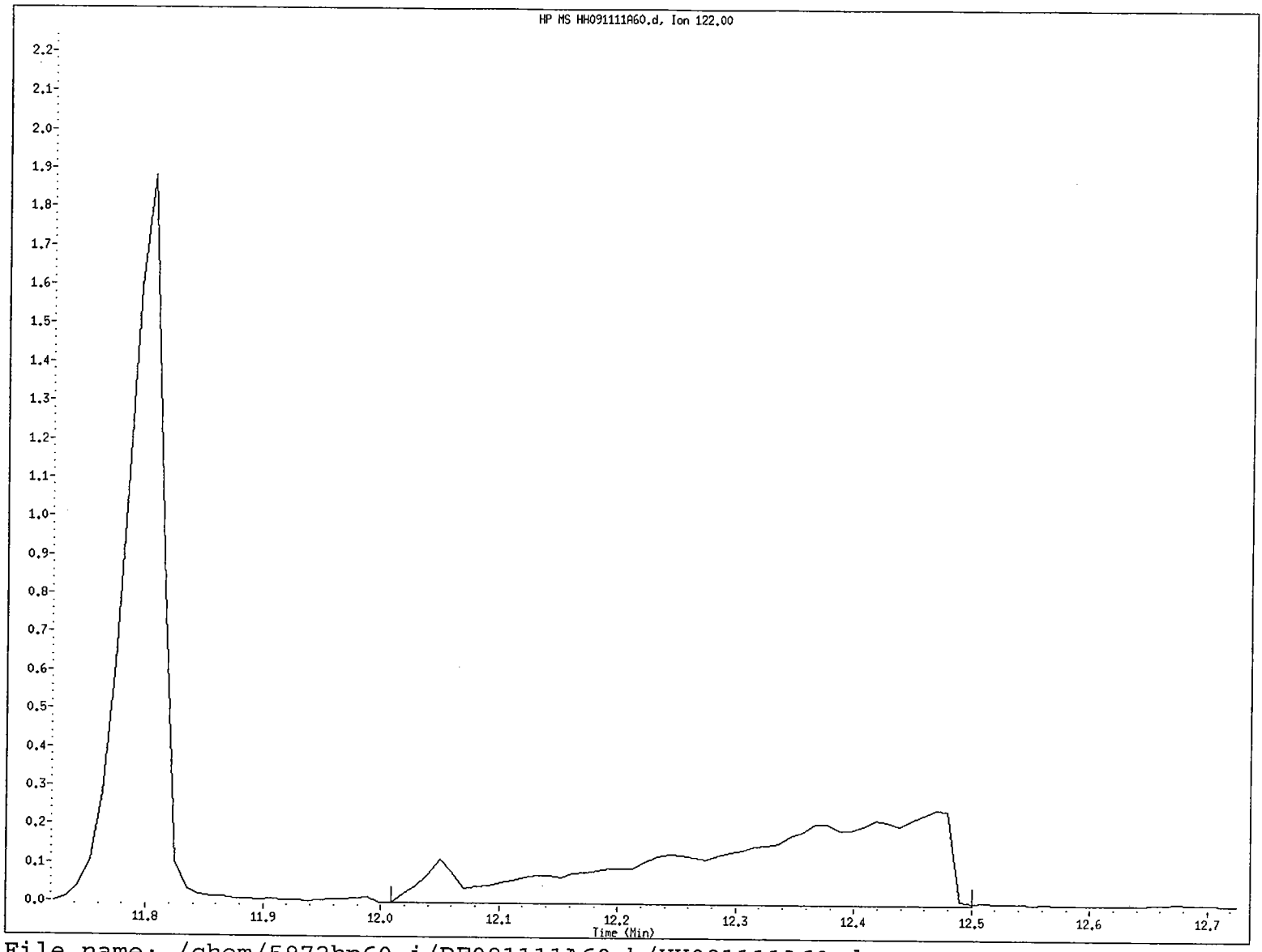
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 10.33
Operator ID: 2650

N-Nitrosomorpholine CAS Number 59-89-2 Area = 98213 Manually integrated



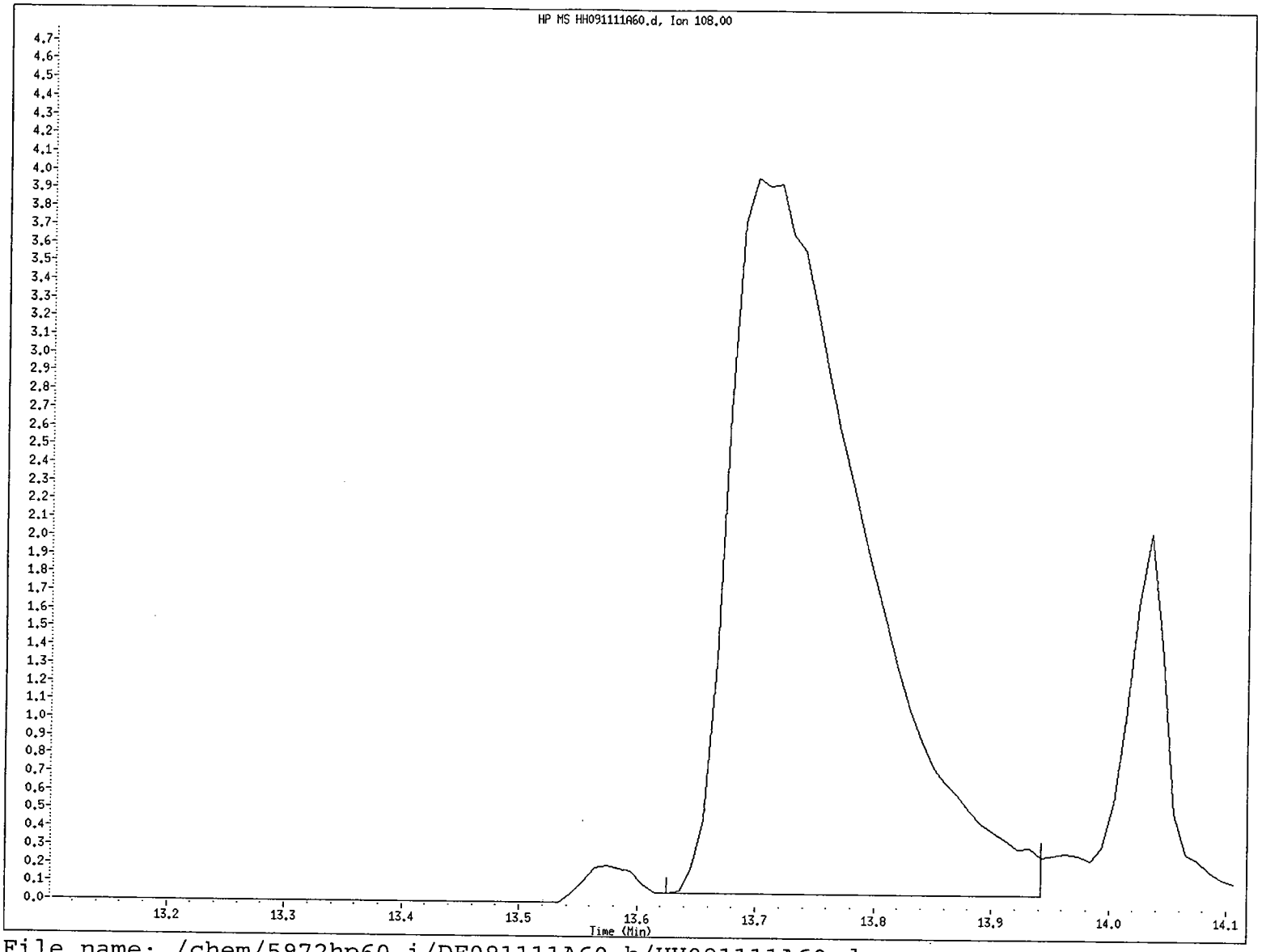
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 10.47
Operator ID: 2650

Benzoic Acid CAS Number 65-85-0 Area = 362316 Manually integrated



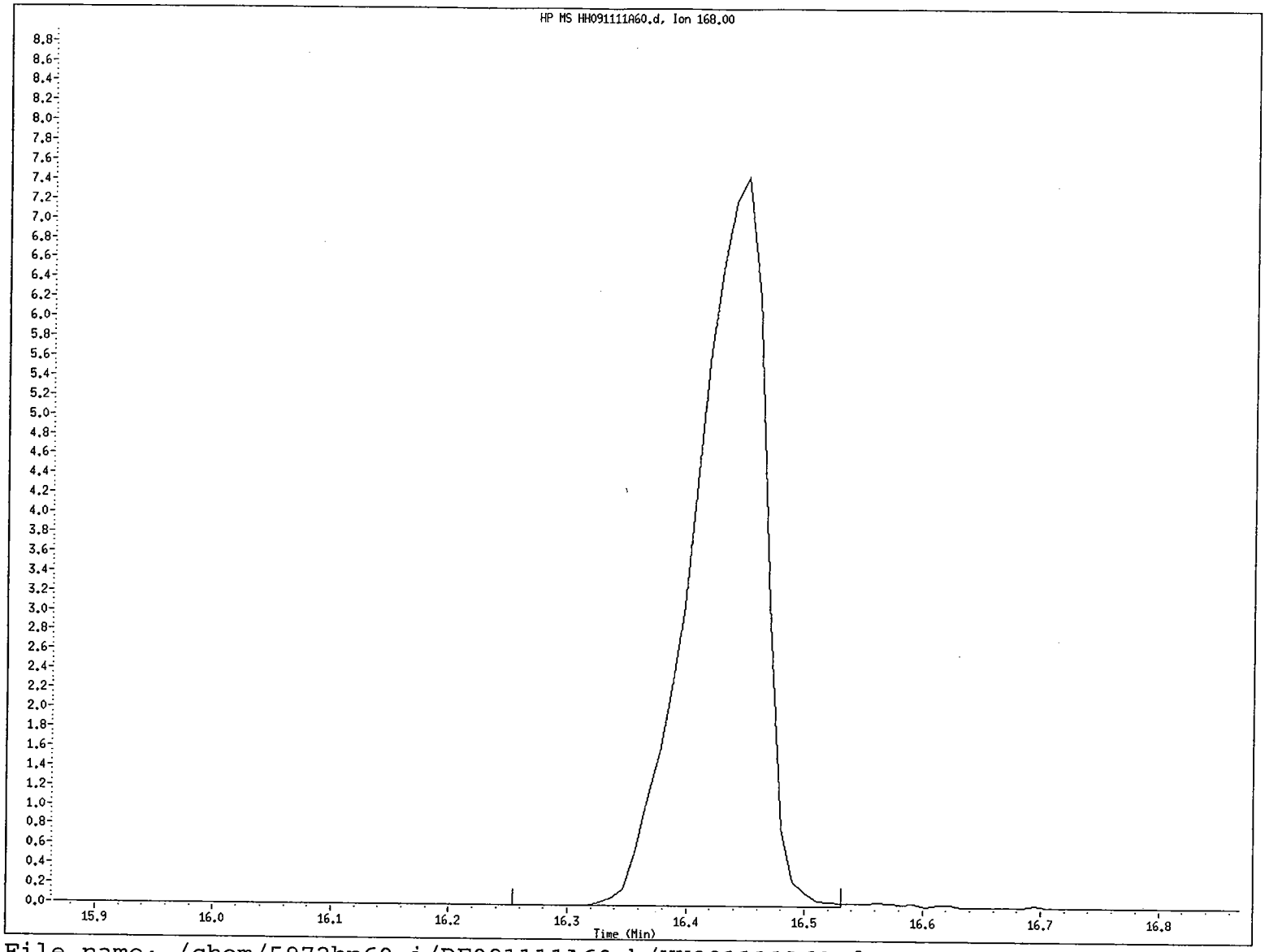
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 12.47
Operator ID: 2650

p-Phenylenediamine CAS Number 106-50-3 Area = 308582 User selected hit



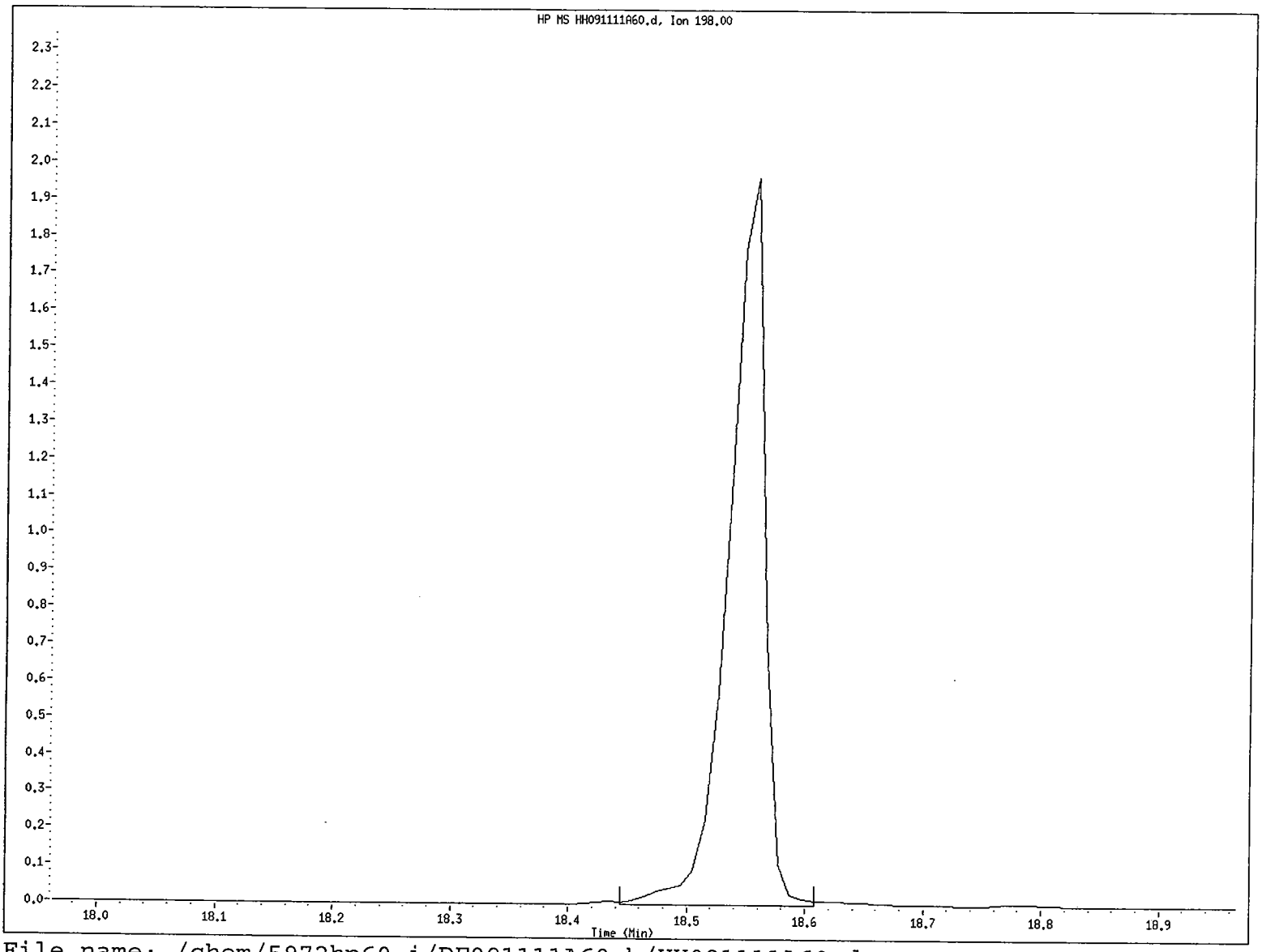
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 13.70
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 310526 Manually integrated



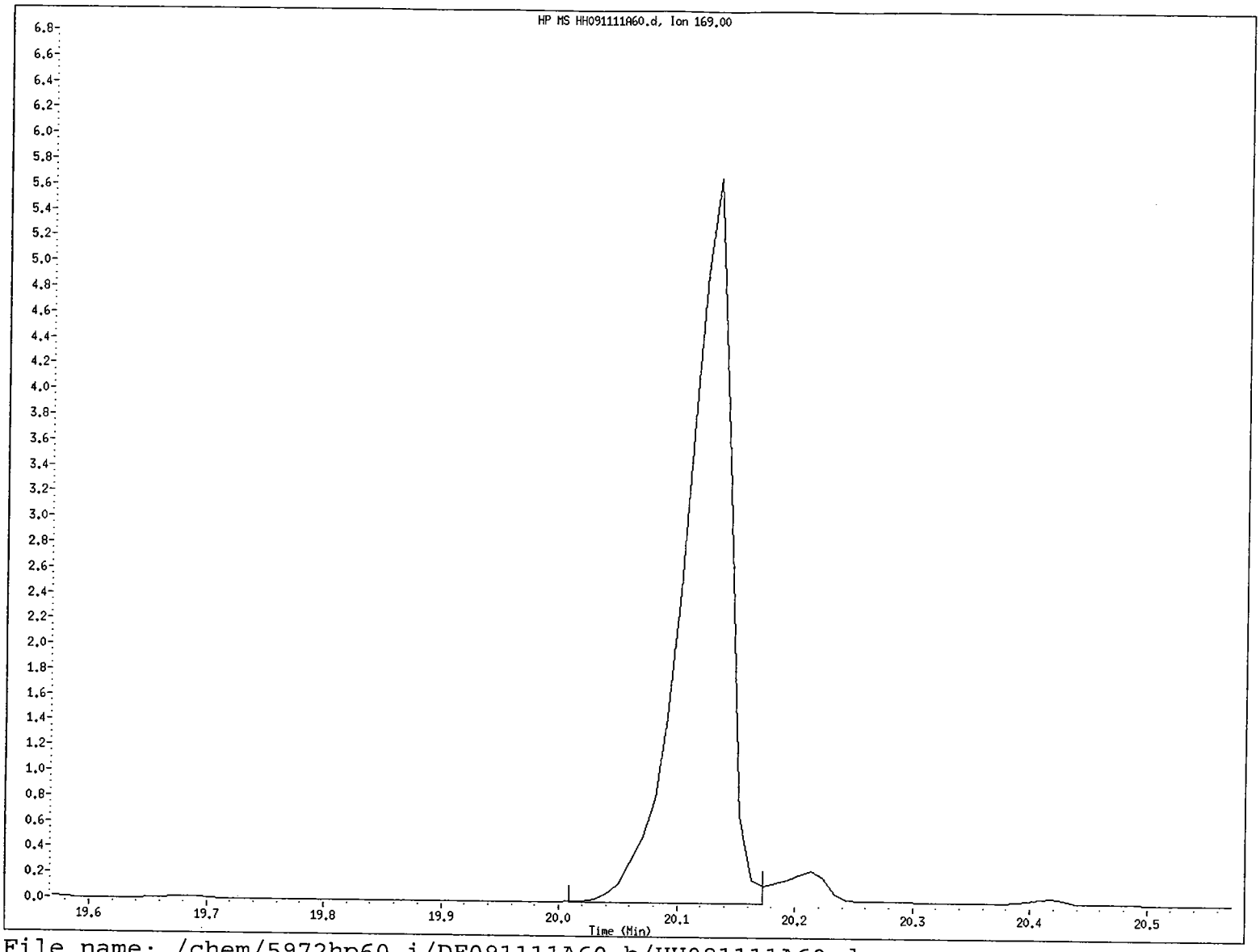
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 16.45
Operator ID: 2650

4,6-Dinitro-2-methylphenol CAS Number 534-52-1 Area = 416386 Manually integrat



File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 18.56
Operator ID: 2650

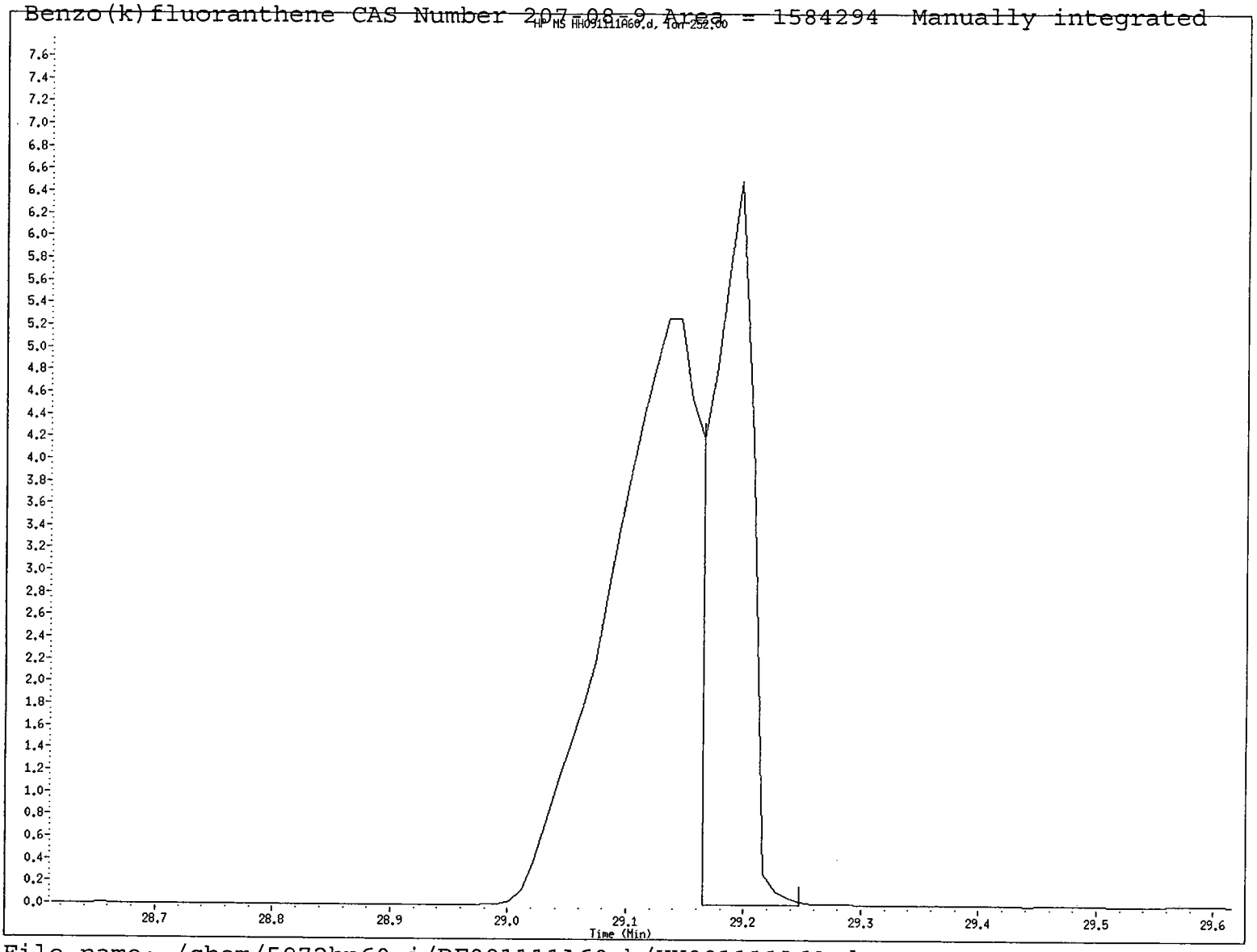
4-Aminobiphenyl CAS Number 92-67-1 Area = 1503115 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 20.13
Operator ID: 2650

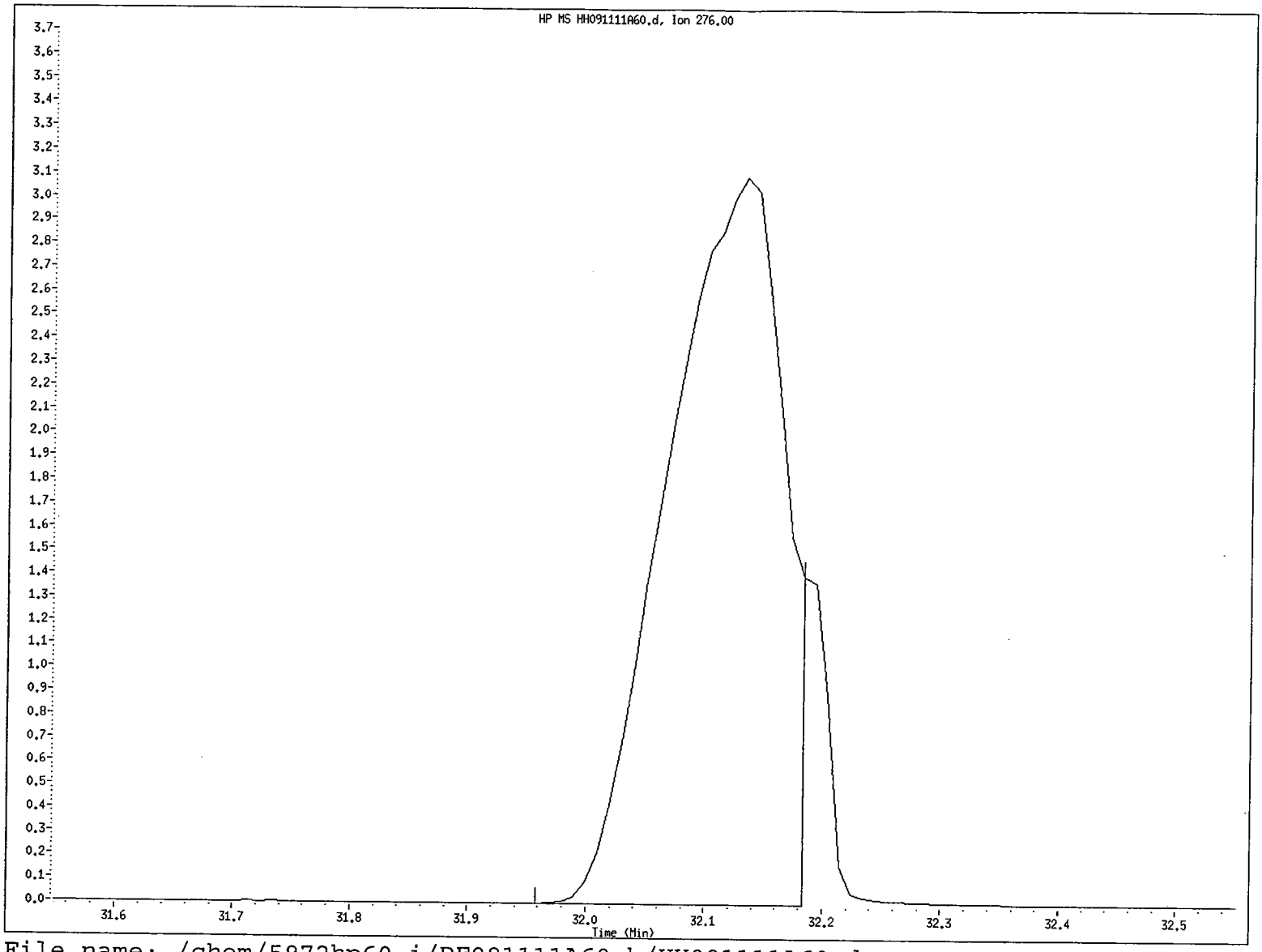
Benzo(k)fluoranthene CAS Number 207-08-9 Area = 1584294 User selected hit

Benzo(k)fluoranthene CAS Number 207-08-9 Area = 1584294 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 29.20
Operator ID: 2650

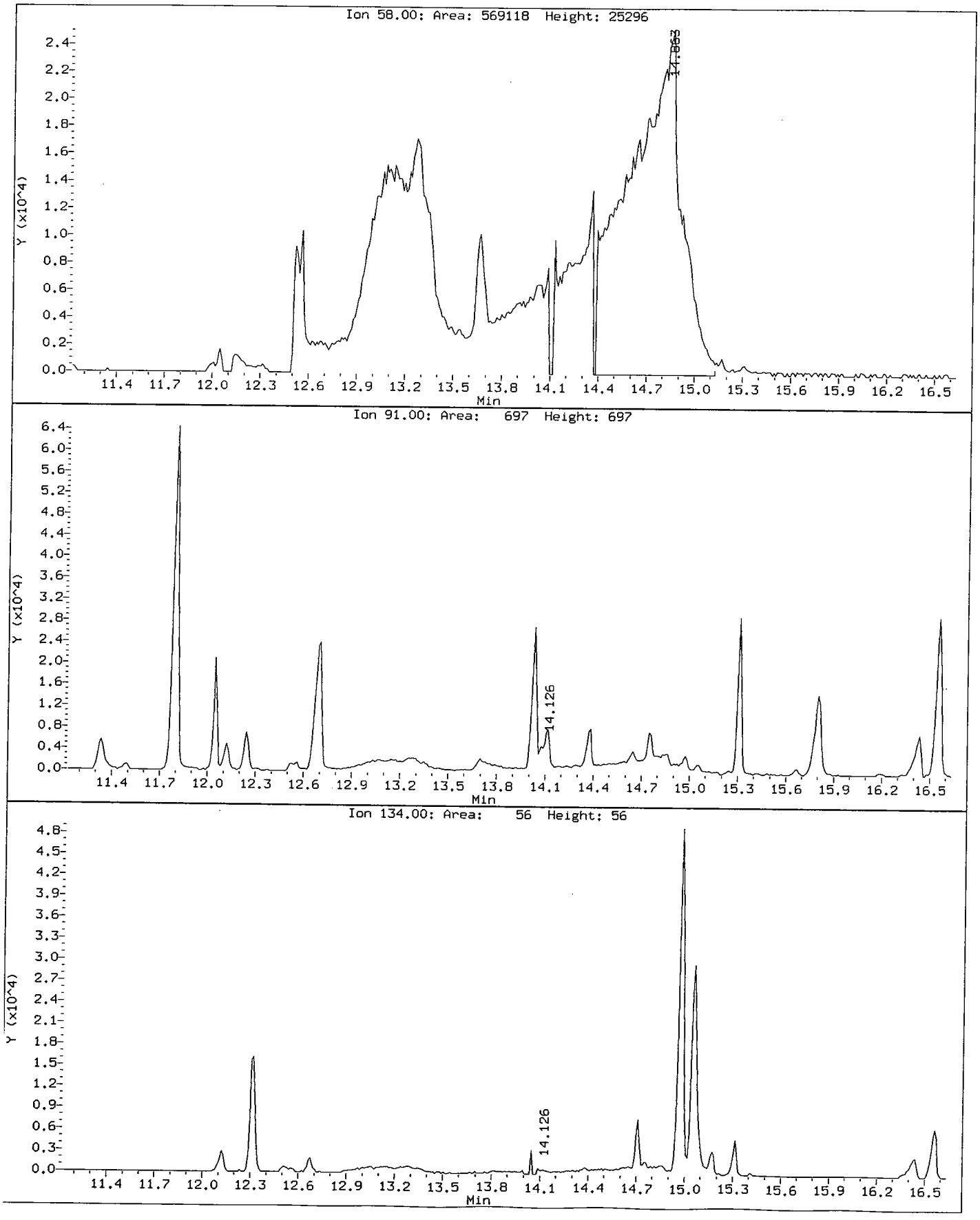
Indeno(1,2,3-c,d)pyrene CAS Number 193-39-5 Area = 2135218 Manually integrated



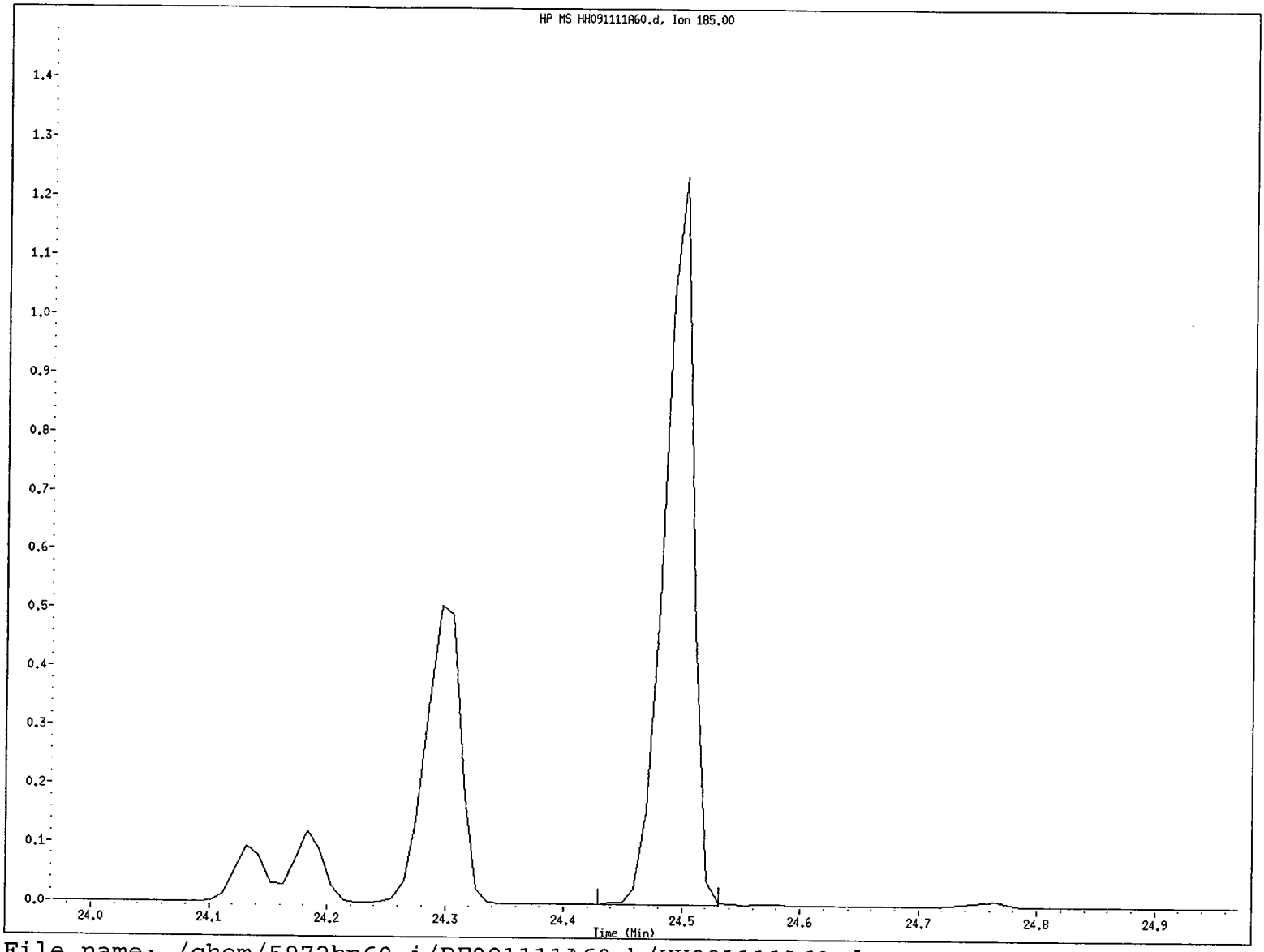
File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 32.13
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Injection Date: 11-NOV-2009 14:01
Instrument: 5972hp60.i
Client Sample ID: SSTD160

Compound: a,a-Dimethylphenethylamine
CAS Number: 122-09-8



Aramite CAS Number 140-57-8 Area = 213018 User selected hit



File name: /chem/5972hp60.i/DF091111A60.b/HH091111A60.d
Client ID: SSTD160
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 14:01
Retention Time: 24.50
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

CompuChem

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: CLP080VAL
Level: LOW
Data Type: MS DATA
SpikeList File: 2ndAPIX.spk
Sublist File: 2ndsource.sub
Client SDG: DF091111A60
Fraction: SV
Client Smp ID: CLP080VAL
Operator: 2650
SampleType: LCS
Quant Type: ISTD
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: CLP OLM04

SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
15 N-Nitrosodimethyla	80.0	87.6	109.46	70-130
16 Pyridine	0.0800	0.00	*	70-130
18 2-Picoline	0.0800	0.00	*	70-130
19 Nitrosomethylethy	0.0800	0.00	*	70-130
20 Methyl Methanesul	0.0800	0.00	*	70-130
21 N-Nitrosodiethyla	0.0800	0.00	*	70-130
22 Ethyl Methanesulf	0.0800	0.00	*	70-130
23 Phenol	80.0	87.1	108.88	70-130
24 Aniline	0.0800	0.00	*	70-130
25 Bis(2-chloroethyl)	80.0	82.0	102.52	70-130
26 Pentachloroethane	0.0800	0.00	*	70-130
27 2-Chlorophenol	80.0	89.3	111.59	70-130
28 1,3-Dichlorobenzen	80.0	88.4	110.45	70-130
29 1,4-Dichlorobenzen	80.0	88.5	110.65	70-130
30 Benzyl Alcohol	80.0	83.2	103.99	70-130
31 1,2-Dichlorobenzen	80.0	87.4	109.23	70-130
32 2-Methylphenol	80.0	95.4	119.21	70-130
33 2,2'-oxybis(1-Chlo	80.0	81.1	101.41	70-130
34 N-Nitrosopyrrolid	0.0800	0.00	*	70-130
39 Acetophenone	160	87.9	[redacted]	70-130
35 3-Methylphenol	80.0	87.1	108.92	70-130
36 4-Methylphenol	80.0	87.1	108.92	70-130
38 N-Nitroso-di-N-pro	80.0	80.3	100.35	70-130
40 N-Nitrosomorpholi	0.0800	0.00	*	70-130
41 o-Toluidine	0.0800	0.00	*	70-130
42 Hexachloroethane	80.0	89.8	112.21	70-130
43 Nitrobenzene	80.0	89.1	111.36	70-130
44 N-Nitrosopiperidi	0.0800	0.00	*	70-130
45 Isophorone	80.0	61.0	76.21	70-130
46 2-Nitrophenol	80.0	91.8	114.80	70-130
47 2,4-Dimethylphenol	80.0	80.3	100.44	70-130
49 o,o,o-Triethylpho	0.0800	0.00	*	70-130
50 Bis(2-chloroethoxy	80.0	81.2	101.57	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
51 2,4-Dichlorophenol	80.0	93.3	116.64	70-130
52 1,2,4-Trichloroben	80.0	91.2	113.96	70-130
53 Naphthalene	80.0	85.9	107.36	70-130
54 4-Chloroaniline	80.0	28.0	[illegible]	70-130
55 2,6-Dichlorophenol	0.0800	0.00	*	70-130
56 Hexachloropropene	0.0800	0.00	*	70-130
57 Hexachlorobutadien	80.0	92.1	115.11	70-130
58 N-Nitroso-di-n-bu	0.0800	0.00	*	70-130
59 p-Phenylenediamine	0.0800	0.00	*	70-130
60 4-Chloro-3-methylp	80.0	91.9	114.90	70-130
61 Safrole	0.0800	0.00	*	70-130
62 2-Methylnaphthalen	80.0	84.4	105.52	70-130
63 1-Methylnaphthale	0.0800	0.00	*	70-130
64 Hexachlorocyclopen	80.0	79.0	98.80	70-130
65 1,2,4,5-Tetrachlo	0.0800	0.00	*	70-130
66 2,4,6-Trichlorophe	80.0	91.4	114.27	70-130
67 2,4,5-Trichlorophe	80.0	93.0	116.21	70-130
68 Isosafrole	0.160	0.00	*	70-130
69 2-Chloronaphthalen	80.0	59.2	74.06	70-130
70 2-Nitroaniline	80.0	89.4	111.80	70-130
71 1,4-Napthoquinone	0.0800	0.00	*	70-130
72 Dimethylphthalate	80.0	83.2	103.99	70-130
73 1,3-Dinitrobenzene	0.0800	0.00	*	70-130
74 2,6-Dinitrotoluene	80.0	90.0	112.46	70-130
75 Acenaphthylene	80.0	86.1	107.67	70-130
76 3-Nitroaniline	80.0	83.9	104.88	70-130
77 Acenaphthene	80.0	87.4	109.29	70-130
78 2,4-Dinitrophenol	80.0	94.8	118.55	70-130
79 4-Nitrophenol	80.0	93.8	117.23	70-130
80 Pentachlorobenzene	0.0800	0.00	*	70-130
81 2,4-Dinitrotoluene	80.0	91.1	113.85	70-130
82 Dibenzofuran	80.0	88.4	110.51	70-130
83 1-Naphthylamine	0.0800	0.00	*	70-130
84 2,3,4,6-Tetrachlor	80.0	1.92	2.40*	70-130
85 2-Naphthylamine	0.0800	0.00	*	70-130
86 Diethylphthalate	80.0	89.8	112.29	70-130
87 Zinophos	0.0800	0.00	*	70-130
88 4-Chlorophenyl-phe	80.0	85.2	106.47	70-130
89 5-Nitro-o-toluidi	0.0800	0.00	*	70-130
90 Fluorene	80.0	87.8	109.80	70-130
91 4-Nitroaniline	80.0	90.9	113.62	70-130
92 4,6-Dinitro-2-meth	80.0	108	[illegible]	70-130
93 N-Nitrosodiphenyla	80.0	57.6	72.02	70-130
95 1,2-Diphenylhydra	0.0800	0.00	*	70-130
96 Sulfotep	0.0800	0.00	*	70-130
97 1,3,5-Trinitroben	0.0800	0.00	*	70-130
98 Diallate (trans i	0.0800	0.00	*	70-130

108, 52

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS	
100 Phorate	0.0800	0.00	*	70-130	
101 Phenacetin	0.0800	0.00	*	70-130	
102 Diallate (cis iso	0.0800	0.00	*	70-130	
104 4-Bromophenyl-phen	80.0	91.0	113.82	70-130	
105 Hexachlorobenzene	80.0	96.4	120.57	70-130	
106 Dimethoate	0.0800	0.00	*	70-130	
107 4-Aminobiphenyl	0.0800	0.00	*	70-130	
108 Pentachlorophenol	80.0	97.9	122.36	70-130	
109 Pentachloronitrob	0.0800	0.00	*	70-130	
110 Pronamide	0.0800	0.00	*	70-130	
111 Disulfoton	0.0800	0.00	*	70-130	
112 Phenanthrene	80.0	96.3	120.35	70-130	
113 Anthracene	80.0	89.4	111.81	70-130	
114 Carbazole	80.0	18.9	23.66*	70-130	[illegible]
115 Methyl Parathion	0.0800	0.00	*	70-130	
116 Di-n-butylphthalat	80.0	93.0	116.27	70-130	
117 Parathion	0.0800	0.00	*	70-130	
118 4-Nitroquinoline-	0.0800	0.00	*	70-130	
119 Methapyrilene	0.0800	0.00	*	70-130	
120 Isodrin	0.0800	0.00	*	70-130	
121 Fluoranthene	80.0	101	126.39	70-130	
122 Benzidine	80.0	36.4	45.58*	70-130	[illegible]
123 Pyrene	80.0	87.5	109.40	70-130	
124 p-Dimethylaminoaz	0.0800	0.00	*	70-130	
125 Chlorobenzilate	0.0800	0.00	*	70-130	
128 Butylbenzylphthala	80.0	79.7	99.67	70-130	
129 3,3'-Dimethylbenz	0.0800	0.00	*	70-130	
130 2-Acetylaminofluo	0.0800	0.00	*	70-130	
131 3,3'-Dichlorobenzi	80.0	96.1	120.13	70-130	
132 bis(2-ethylhexyl)P	80.0	84.4	105.56	70-130	
133 Benzo(a)anthracene	80.0	87.2	108.98	70-130	
134 Chrysene	80.0	89.0	111.20	70-130	
135 Di-n-octylphthalat	80.0	83.8	104.71	70-130	
136 7,12-Dimethylbenz	0.0800	0.00	*	70-130	
137 Benzo(b)fluoranthe	80.0	82.5	103.14	70-130	
138 Benzo(k)fluoranthe	80.0	89.7	112.15	70-130	
139 Benzo(a)pyrene	80.0	82.8	103.56	70-130	
140 3-Methylcholanthr	0.0800	0.00	*	70-130	
141 Indeno(1,2,3-c,d)p	80.0	83.1	103.83	70-130	
142 Dibenzo(a,h)anthra	80.0	88.4	110.46	70-130	
143 Benzo(g,h,i)peryle	80.0	89.6	112.00	70-130	

Data File: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Report Date: 13-Nov-2009 11:47

CompuChem

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SSTD80VAL
Level: LOW
Data Type: MS DATA
SpikeList File: 2IXAMINPNBENZ.spk
Sublist File: 2IXAMINPNBENZ.sub
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: REMAINDER

Client SDG: DF091111A60
Fraction: SV
Client Smp ID: SSTD80VAL
Operator: 2650
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
19 Nitrosomethylethyl	80.0	94.2	117.77	70-130
20 Methyl Methanesulf	80.0	89.5	111.91	70-130
21 N-Nitrosodiethylam	80.0	92.9	116.11	70-130
22 Ethyl Methanesulfo	80.0	90.8	113.56	70-130
34 N-Nitrosopyrrolidi	80.0	97.2	121.45	70-130
40 N-Nitrosomorpholin	80.0	104	129.87	70-130
44 N-Nitrosopiperidin	80.0	88.9	111.13	70-130
49 o,o,o-Triethylphos	80.0	87.4	109.29	70-130
53 Naphthalene	80.0	99.3	124.19	70-130
55 2,6-Dichlorophenol	80.0	84.3	105.43	70-130
58 N-Nitroso-di-n-but	80.0	89.6	112.02	70-130
75 Acenaphthylene	80.0	99.2	123.95	70-130
77 Acenaphthene	80.0	98.3	122.93	70-130
83 1-Naphthylamine	80.0	96.6	120.75	70-130
84 2,3,4,6-Tetrachlor	80.0	82.5	103.10	70-130
85 2-Naphthylamine	80.0	103	128.93	70-130
87 Zinophos	80.0	93.5	116.91	70-130
90 Fluorene	80.0	101	126.22	70-130
93 N-Nitrosodiphenyla	80.0	101	126.22	70-130
96 Sulfotep	80.0	103	128.34	70-130
100 Phorate	80.0	89.0	111.19	70-130
106 Dimethoate	80.0	125	156.26*	70-130
111 Disulfoton	80.0	102	127.72	70-130
112 Phenanthrene	80.0	107	133.91*	70-130
113 Anthracene	80.0	107	134.22*	70-130
115 Methyl Parathion	80.0	119	148.92*	70-130
117 Parathion	80.0	103	129.33	70-130
121 Fluoranthene	80.0	112	140.61*	70-130
122 Benzidine	80.0	144	180.28*	70-130
123 Pyrene	80.0	95.8	119.74	70-130
124 p-Dimethylaminoazo	80.0	101	126.10	70-130
125 Chlorobenzilate	80.0	88.4	110.50	70-130
129 3,3'-Dimethylbenzi	80.0	92.1	115.10	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Report Date: 13-Nov-2009 11:47

SPIKE	COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
131	3,3'-Dichlorobenzi	80.0	97.5	121.91	70-130
133	Benzo(a)anthracene	80.0	98.7	123.43	70-130
134	Chrysene	80.0	99.8	124.70	70-130
137	Benzo(b)fluoranthe	80.0	105	131.59*	70-130
138	Benzo(k)fluoranthe	80.0	101	126.50	70-130
139	Benzo(a)pyrene	80.0	103	128.70	70-130
141	Indeno(1,2,3-c,d)p	80.0	109	136.40*	70-130
142	Dibenzo(a,h)anthra	80.0	104	130.63*	70-130
143	Benzo(g,h,i)peryle	80.0	104	130.65*	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Report Date: 13-Nov-2009 12:13

CompuChem

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SSTD80VAL7
Level: LOW
Data Type: MS DATA
SpikeList File: 2ndAPIXacdext.spk
Sublist File: 2ndAPIXacdext.sub
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: ACID EXTRACTABLES

Client SDG: DF091111A60
Fraction: SV
Client Smp ID: SSTD80VAL7
Operator: 2650
SampleType: LCS
Quant Type: ISTD

SPIKE	COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
23	Phenol	80.0	93.6	116.94	70-130
27	2-Chlorophenol	80.0	91.9	114.85	70-130
32	2-Methylphenol	80.0	106	[illegible]	70-130
35	3-Methylphenol	80.0	95.5	119.33	70-130
36	4-Methylphenol	80.0	95.5	119.33	70-130
46	2-Nitrophenol	80.0	92.9	116.10	70-130
47	2,4-Dimethylphenol	80.0	99.2	124.01	70-130
51	2,4-Dichlorophenol	80.0	95.6	119.53	70-130
60	4-Chloro-3-methylp	80.0	95.6	119.53	70-130
66	2,4,6-Trichlorophe	80.0	97.5	121.83	70-130
67	2,4,5-Trichlorophe	80.0	101	126.50	70-130
78	2,4-Dinitrophenol	80.0	105	[illegible]	70-130
79	4-Nitrophenol	80.0	95.4	119.28	70-130
92	4,6-Dinitro-2-meth	80.0	113	[illegible]	70-130
108	Pentachlorophenol	80.0	117	[illegible]	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/YRC091111A60.d
Report Date: 13-Nov-2009 12:00

CompuChem

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SSTD80VAL6
Level: LOW
Data Type: MS DATA
SpikeList File: 2ndAPIXbseext.spk
Sublist File: 2ndAPIXbseext.sub
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: BASIC EXTRACTABLES

Client SDG: DF091111A60
Fraction: SV
Client Smp ID: SSTD80VAL6
Operator: 2650
SampleType: LCS
Quant Type: ISTD

SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
24 Aniline	80.0	89.9	112.36	70-130
54 4-Chloroaniline	80.0	86.8	108.52	70-130
70 2-Nitroaniline	80.0	91.2	114.05	70-130
76 3-Nitroaniline	80.0	92.9	116.18	70-130
91 4-Nitroaniline	80.0	92.7	115.83	70-130
114 Carbazole	80.0	18.9	23.66	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Report Date: 13-Nov-2009 11:55

CompuChem

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SSTD80VAL4
Level: LOW
Data Type: MS DATA
SpikeList File: 2ndAPIXBN2.spk
Sublist File: 2ndAPIXBN2.sub
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: BN2

Client SDG: DF091111A60
Fraction: SV
Client Smp ID: SSTD80VAL4
Operator: 2650
SampleType: LCS
Quant Type: ISTD

	SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
15	N-Nitrosodimethyla	80.0	95.4	119.20	70-130
25	Bis(2-chloroethyl)	80.0	89.8	112.26	70-130
33	2,2'-oxybis(1-Chlo	80.0	95.6	119.55	70-130
38	N-Nitroso-di-N-pro	80.0	91.3	114.10	70-130
50	Bis(2-chloroethoxy	80.0	92.7	115.93	70-130
72	Dimethylphthalate	80.0	89.6	112.03	70-130
86	Diethylphthalate	80.0	93.6	116.96	70-130
88	4-Chlorophenyl-phe	80.0	91.8	114.79	70-130
93	N-Nitrosodiphenyla	80.0	50.5	63.09*	70-130
104	4-Bromophenyl-phen	80.0	89.2	111.55	70-130
116	Di-n-butylphthalat	80.0	99.9	124.83	70-130
128	Butylbenzylphthala	80.0	92.4	115.45	70-130
132	bis(2-ethylhexyl)P	80.0	96.3	120.43	70-130
135	Di-n-octylphthalat	80.0	93.2	116.50	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/VRC091111A60.d
Report Date: 13-Nov-2009 11:53

CompuChem

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SSTD80VAL3
Level: LOW
Data Type: MS DATA
SpikeList File: 2ndAPIXBN1.spk
Sublist File: 2ndAPIXBN1.sub
Client SDG: DF091111A60
Fraction: SV
Client Smp ID: SSTD80VAL3
Operator: 2650
SampleType: LCS
Quant Type: ISTD
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: BN1

	SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
28	1,3-Dichlorobenzen	80.0	93.0	116.29	70-130
29	1,4-Dichlorobenzen	80.0	91.3	114.19	70-130
31	1,2-Dichlorobenzen	80.0	89.8	112.32	70-130
42	Hexachloroethane	80.0	94.6	118.29	70-130
43	Nitrobenzene	80.0	91.8	114.71	70-130
45	Isophorone	80.0	97.0	121.32	70-130
52	1,2,4-Trichloroben	80.0	89.1	111.43	70-130
57	Hexachlorobutadien	80.0	101	126.42	70-130
62	2-Methylnaphthalen	80.0	88.4	110.54	70-130
64	Hexachlorocyclopen	80.0	91.6	114.50	70-130
69	2-Chloronaphthalen	80.0	67.2	83.99	70-130
74	2,6-Dinitrotoluene	80.0	92.9	116.17	70-130
81	2,4-Dinitrotoluene	80.0	92.8	115.95	70-130
82	Dibenzofuran	80.0	94.0	117.45	70-130
105	Hexachlorobenzene	80.0	102	127.46	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Report Date: 13-Nov-2009 11:06

CompuChem

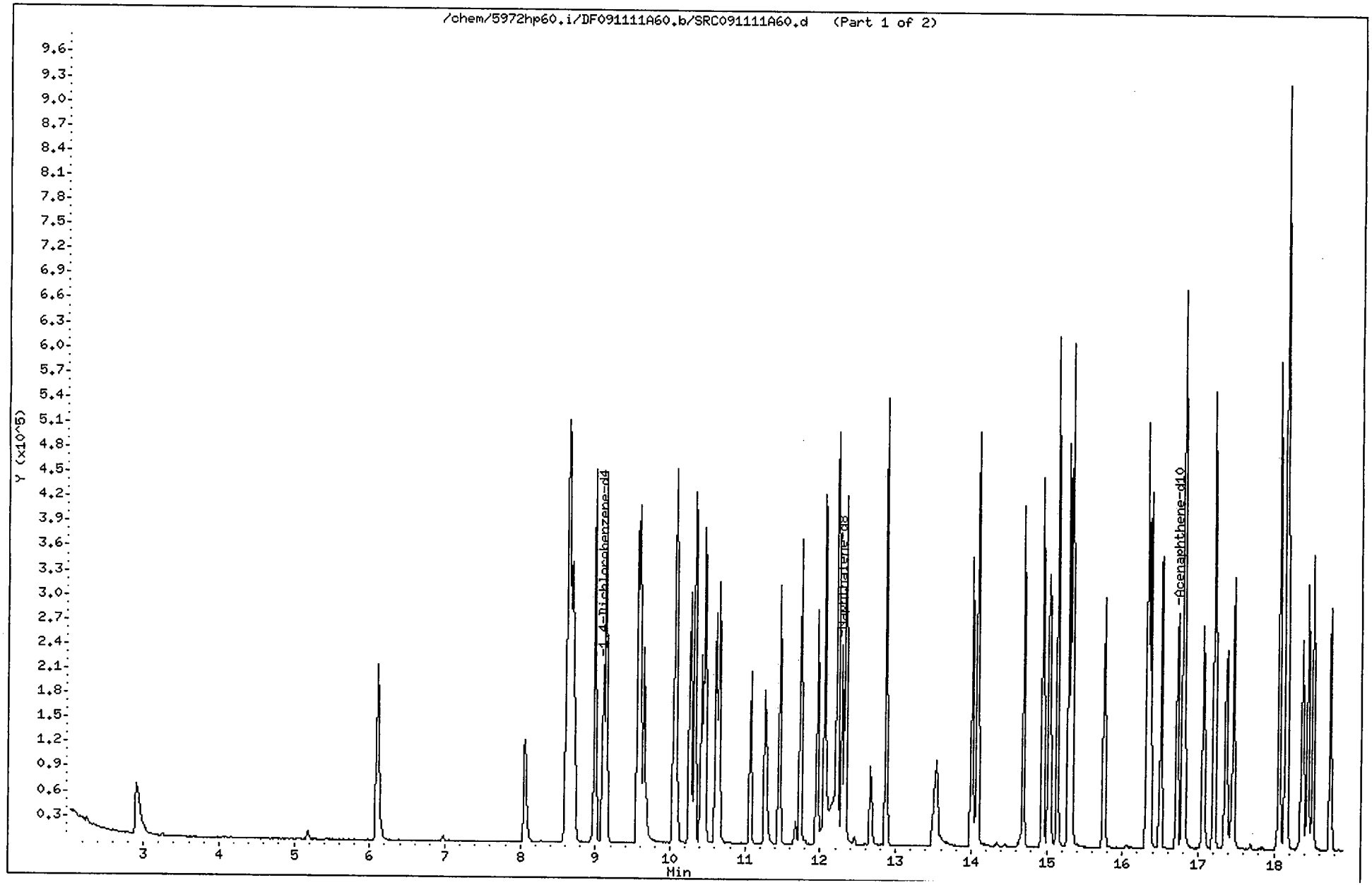
RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: SSTD80VAL5
Level: LOW
Data Type: MS DATA
SpikeList File: 2ndAPIXBN3.spk
Sublist File: 2ndAPIXBN3.sub
Client SDG: DF091111A60
Fraction: SV
Client Smp ID: SSTD80VAL5
Operator: 2650
SampleType: LCS
Quant Type: ISTD
Method File: /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Misc Info: BN3

SPIKE COMPOUND	AMOUNT ADDED NG	AMOUNT RECOVERED NG	% RECOVERED	LIMITS
16 Pyridine	80.0	91.2	114.05	70-130
26 Pentachloroethane	80.0	81.0	101.21	70-130
41 o-Toluidine	80.0	84.2	105.19	70-130
56 Hexachloropropene	80.0	90.0	112.51	70-130
63 1-Methylnaphthalen	80.0	85.4	106.69	70-130
65 1,2,4,5-Tetrachlor	80.0	92.1	115.13	70-130
73 1,3-Dinitrobenzene	80.0	89.7	112.14	70-130
80 Pentachlorobenzene	80.0	92.5	115.58	70-130
89 5-Nitro-o-toluidin	80.0	89.5	111.86	70-130
97 1,3,5-Trinitrobenz	80.0	108	135.32*	70-130
107 4-Aminobiphenyl	80.0	102	126.90	70-130
109 Pentachloronitrobe	80.0	102	127.22	70-130
120 Isodrin	80.0	104	130.13*	70-130
130 2-Acetylaminofluor	80.0	94.4	117.94	70-130

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Date : 11-NOV-2009 17:57
Client ID: CLP080VAL
Sample Info: CLP080VAL:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

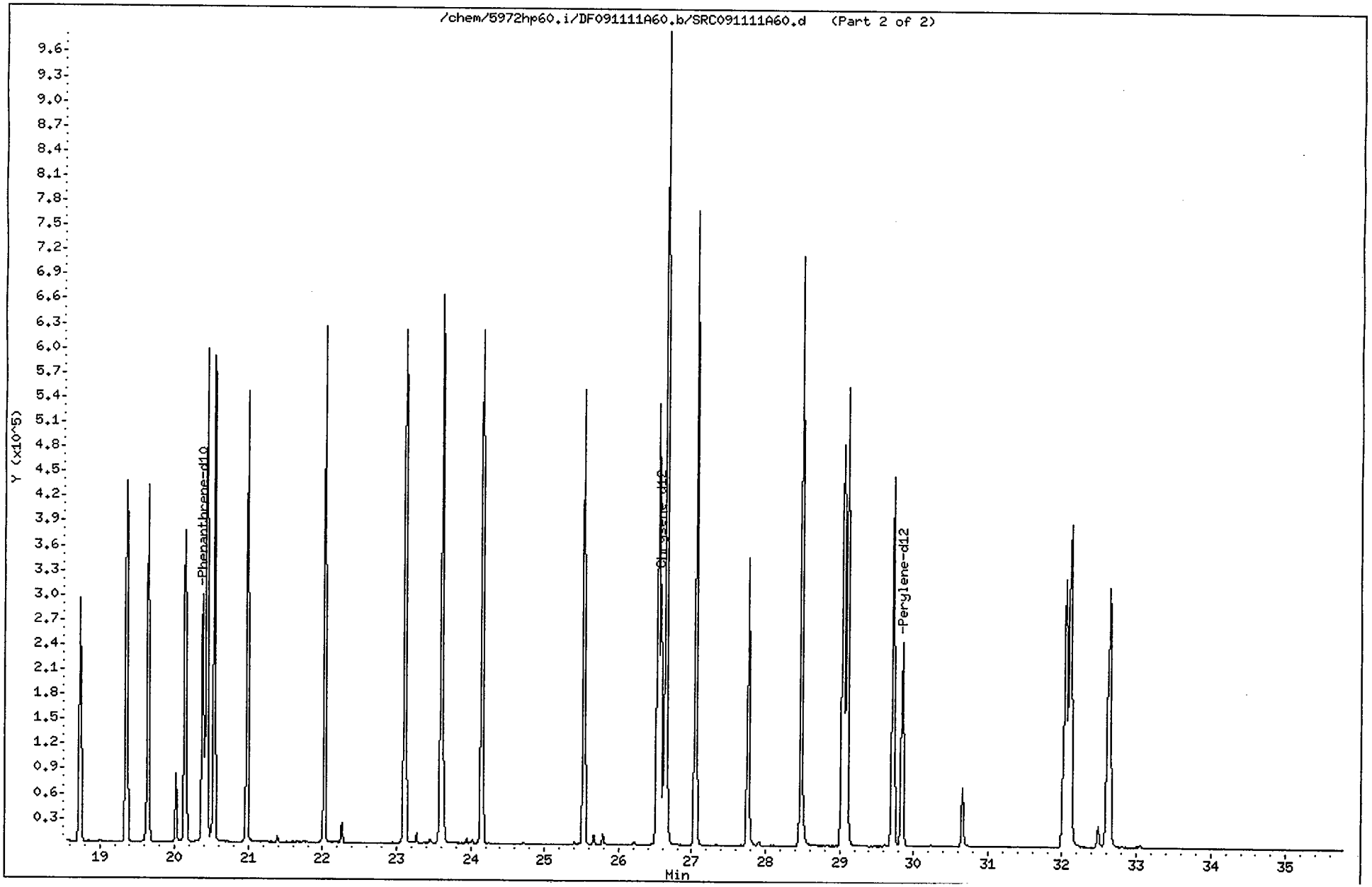
Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Date : 11-NOV-2009 17:57
Client ID: CLP080VAL
Sample Info: CLP080VAL:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Lab Smp Id: CLP080VAL Client Smp ID: CLP080VAL
Inj Date : 11-NOV-2009 17:57
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : CLP080VAL:2650
Misc Info : CLP OLM04
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 12:13 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 8 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2ndsource.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.104	9.104	(1.000)	63420	40.0000		
* 2 Naphthalene-d8	136	12.285	12.296	(1.000)	168311	40.0000		
* 3 Acenaphthene-d10	164	16.725	16.736	(1.000)	122003	40.0000		
* 4 Phenanthrene-d10	188	20.378	20.388	(1.000)	239416	40.0000		
* 5 Chrysene-d12	240	26.577	26.588	(1.000)	230942	40.0000		
* 6 Perylene-d12	264	29.841	29.852	(1.000)	222023	40.0000		
15 N-Nitrosodimethylamine	42	2.914	2.935	(0.320)	117159	87.5687	43.8	9552
16 Pyridine	79	Compound Not Detected.						
17 Ethylmethacrylate	69	Compound Not Detected.						
18 2-Picoline	93	Compound Not Detected.						
19 Nitrosomethylethylamine	88	Compound Not Detected.						
20 Methyl Methanesulfonate	80	Compound Not Detected.						
21 N-Nitrosodiethylamine	102	Compound Not Detected.						
22 Ethyl Methanesulfonate	79	Compound Not Detected.						
23 Phenol	94	8.633	8.654	(0.948)	157293	87.1044	43.6	
24 Aniline	93	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
25 Bis(2-chloroethyl)ether	93	8.715	8.715	(0.957)	116286	82.0127	41.0	
26 Pentachloroethane	167	Compound Not Detected.						
27 2-Chlorophenol	128	8.684	8.695	(0.954)	129088	89.2760	44.6	8907
28 1,3-Dichlorobenzene	146	8.991	9.002	(0.988)	175740	88.3578	44.2	
29 1,4-Dichlorobenzene	146	9.134	9.145	(1.003)	181395	88.5233	44.3	
30 Benzyl Alcohol	108	9.646	9.657	(1.060)	67665	83.1921	41.6	
31 1,2-Dichlorobenzene	146	9.595	9.605	(1.054)	164081	87.3870	43.7	
32 2-Methylphenol	108	10.076	10.086	(1.107)	108041	95.3660	47.7	
33 2,2'-oxybis(1-Chloropropane)	45	10.055	10.056	(1.105)	198018	81.1280	40.6	9226
34 N-Nitrosopyrrolidine	100	Compound Not Detected.						
35 3-Methylphenol	108	10.454	10.495	(1.148)	115209	87.1357	43.6	
36 4-Methylphenol	108	10.454	10.495	(1.148)	115209	87.1357	43.6	
38 N-Nitroso-di-N-propylamine	70	10.413	10.424	(1.144)	89153	80.2778	40.1	8476
39 Acetophenone	105	10.260	10.270	(0.835)	167539	87.9005	44.0	0 (RM)
40 N-Nitrosomorpholine	116	Compound Not Detected.						
41 o-Toluidine	106	Compound Not Detected.						
42 Hexachloroethane	117	10.321	10.332	(1.134)	76739	89.7646	44.9	9465
43 Nitrobenzene	77	10.648	10.659	(0.867)	151529	89.0889	44.5	9736
44 N-Nitrosopiperidine	114	Compound Not Detected.						
45 Isophorone	82	11.262	11.273	(0.917)	171669	60.9691	30.5	9677
46 2-Nitrophenol	139	11.457	11.467	(0.933)	82116	91.8438	45.9	8895
47 2,4-Dimethylphenol	122	11.733	11.754	(0.955)	86811	80.3494	40.2	8766
48 Benzoic Acid	122	12.183	12.224	(0.992)	81275	464.885	232	7213(A)
49 o,o,o-Triethylphosphorothioat	198	Compound Not Detected.						
50 Bis(2-chloroethoxy)methane	93	11.958	11.969	(0.973)	138103	81.2536	40.6	8743
51 2,4-Dichlorophenol	162	12.060	12.071	(0.982)	152236	93.3124	46.6	
52 1,2,4-Trichlorobenzene	180	12.224	12.224	(0.995)	183240	91.1675	45.6	
53 Naphthalene	128	12.336	12.337	(1.004)	297517	85.8874	42.9	9738
54 4-Chloroaniline	127	12.664	12.664	(1.031)	44854	28.0292	14.0	8814(R)
55 2,6-Dichlorophenol	162	Compound Not Detected.						
56 Hexachloropropene	213	Compound Not Detected.						
57 Hexachlorobutadiene	225	12.868	12.869	(1.047)	104677	92.0844	46.0	9305
58 N-Nitroso-di-n-butylamine	84	Compound Not Detected.						
59 p-Phenylenediamine	108	Compound Not Detected.						
60 4-Chloro-3-methylphenol	107	14.004	13.994	(1.140)	118030	91.9236	46.0	9817
61 Safrole	162	Compound Not Detected.						
62 2-Methylnaphthalene	141	14.086	14.097	(1.147)	199060	84.4152	42.2	
63 1-Methylnaphthalene	142	Compound Not Detected.						
64 Hexachlorocyclopentadiene	237	14.690	14.700	(0.878)	113816	79.0409	39.5	9131
65 1,2,4,5-Tetrachlorobenzene	216	Compound Not Detected.						
66 2,4,6-Trichlorophenol	196	14.945	14.946	(0.894)	123204	91.4198	45.7	
67 2,4,5-Trichlorophenol	196	15.027	15.028	(0.898)	136089	92.9691	46.5	
68 Isosafrole	162	Compound Not Detected.						
69 2-Chloronaphthalene	162	15.283	15.294	(0.914)	274697	59.2469	29.6	
70 2-Nitroaniline	65	15.753	15.764	(0.942)	95675	89.4379	44.7	9637
71 1,4-Napthoquinone	158	Compound Not Detected.						
72 Dimethylphthalate	163	16.367	16.378	(0.979)	344219	83.1901	41.6	8334
73 1,3-Dinitrobenzene	168	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
74 2,6-Dinitrotoluene	165	16.511	16.521	(0.987)	92720	89.9709	45.0	9484
75 Acenaphthylene	152	16.326	16.327	(0.976)	396727	86.1387	43.1	9484
76 3-Nitroaniline	138	16.817	16.828	(1.006)	66637	83.9041	42.0	9600
77 Acenaphthene	154	16.797	16.808	(1.004)	238935	87.4341	43.7	9539
78 2,4-Dinitrophenol	184	17.063	17.084	(1.020)	79932	94.8375	47.4	
79 4-Nitrophenol	139	17.370	17.391	(1.039)	64871	93.7833	46.9	8402
80 Pentachlorobenzene	250	Compound Not Detected.						
81 2,4-Dinitrotoluene	165	17.462	17.483	(1.044)	127539	91.0800	45.5	7630
82 Dibenzofuran	168	17.206	17.217	(1.029)	424479	88.4063	44.2	9297
83 1-Naphthylamine	143	Compound Not Detected.						
84 2,3,4,6-Tetrachlorophenol	232	17.687	17.708	(1.057)	2101	1.91975	0.960	8651(aR)
85 2-Naphthylamine	143	Compound Not Detected.						
86 Diethylphthalate	149	18.147	18.168	(1.085)	355832	89.8301	44.9	8836
87 Zinophos	97	Compound Not Detected.						
88 4-Chlorophenyl-phenylether	204	18.168	18.168	(1.086)	173332	85.1720	42.6	7320
89 5-Nitro-o-toluidine	152	Compound Not Detected.						
90 Fluorene	166	18.066	18.076	(1.080)	329950	87.8375	43.9	7685
91 4-Nitroaniline	138	18.372	18.404	(1.098)	72331	90.8970	45.4	8940
92 4,6-Dinitro-2-methylphenol	198	18.444	18.465	(0.905)	102524	108.217	54.1	8922(R)
93 N-Nitrosodiphenylamine	169	18.516	18.526	(0.909)	170889	57.6199	28.8	8863
95 1,2-Diphenylhydrazine	77	Compound Not Detected.						
96 Sulfotep	322	Compound Not Detected.						
97 1,3,5-Trinitrobenzene	75	Compound Not Detected.						
98 Diallate (trans isomer)	86	Compound Not Detected.						
100 Phorate	75	Compound Not Detected.						
101 Phenacetin	108	Compound Not Detected.						
102 Diallate (cis isomer)	86	Compound Not Detected.						
104 4-Bromophenyl-phenylether	248	19.365	19.365	(0.950)	93563	91.0569	45.5	9111
105 Hexachlorobenzene	284	19.651	19.652	(0.964)	116950	96.4548	48.2	9435
106 Dimethoate	87	Compound Not Detected.						
107 4-Aminobiphenyl	169	Compound Not Detected.						
108 Pentachlorophenol	266	20.142	20.163	(0.988)	80517	97.8906	48.9	8646
109 Pentachloronitrobenzene	237	Compound Not Detected.						
110 Pronamide	173	Compound Not Detected.						
111 Disulfoton	88	Compound Not Detected.						
112 Phenanthrene	178	20.439	20.450	(1.003)	520210	96.2825	48.1	
113 Anthracene	178	20.531	20.552	(1.008)	485967	89.4508	44.7	
114 Carbazole	167	20.981	21.033	(1.030)	448823	18.9276	9.46	9394(R)
115 Methyl Parathion	109	Compound Not Detected.						
116 Di-n-butylphthalate	149	22.025	22.046	(1.081)	554511	93.0186	46.5	9607
117 Parathion	109	Compound Not Detected.						
118 4-Nitroquinoline-1-oxide	190	Compound Not Detected.						
119 Methapyrilene	97	Compound Not Detected.						
120 Isodrin	193	Compound Not Detected.						
121 Fluoranthene	202	23.109	23.120	(1.134)	531326	101.114	50.6	9243
122 Benzidine	184	23.580	23.591	(0.887)	97475	36.4209	18.2	8385(R)
123 Pyrene	202	23.610	23.621	(0.888)	575364	87.5180	43.8	9420
124 p-Dimethylaminoazobenzene	225	Compound Not Detected.						

Data File: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Report Date: 13-Nov-2009 12:16

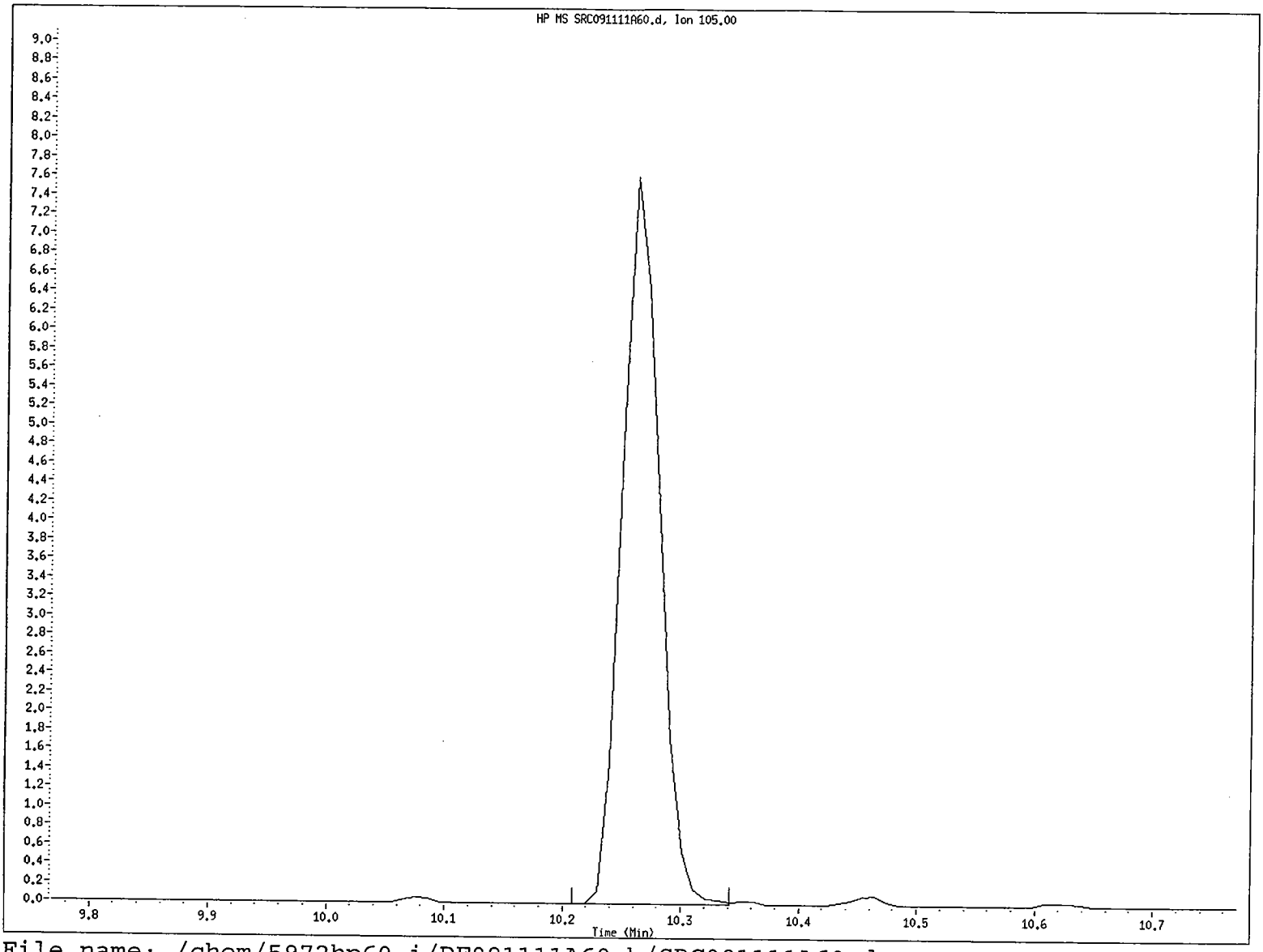
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
125 Chlorobenzilate	251	Compound Not Detected.						
127 Famfur	218	Compound Not Detected.						
128 Butylbenzylphthalate	149	25.534	25.534	(0.961)	259695	79.7385	39.9	9427
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
130 2-Acetylaminofluorene	181	Compound Not Detected.						
131 3,3'-Dichlorobenzidine	252	26.649	26.660	(1.003)	211955	96.1043	48.0	8337
132 bis(2-ethylhexyl)Phthalate	149	27.048	27.048	(1.018)	372146	84.4456	42.2	9532
133 Benzo(a)anthracene	228	26.536	26.547	(0.998)	482104	87.1869	43.6	
134 Chrysene	228	26.639	26.649	(1.002)	477495	88.9632	44.5	
135 Di-n-octylphthalate	149	28.480	28.481	(0.954)	648321	83.7699	41.9	
136 7,12-Dimethylbenz(a)anthracene	256	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	29.043	29.054	(0.973)	513332	82.5104	41.2	
138 Benzo(k)fluoranthene	252	29.104	29.115	(0.975)	495113	89.7228	44.9	
139 Benzo(a)pyrene	252	29.718	29.729	(0.996)	428597	82.8463	41.4	
140 3-Methylcholanthrene	268	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	32.040	32.051	(1.074)	412044	83.0618	41.5	0(M)
142 Dibenzo(a,h)anthracene	278	32.112	32.113	(1.076)	430702	88.3664	44.2	9258
143 Benzo(g,h,i)perylene	276	32.634	32.645	(1.094)	432052	89.5968	44.8	8469

1 MP 11/13/09

QC Flag Legend

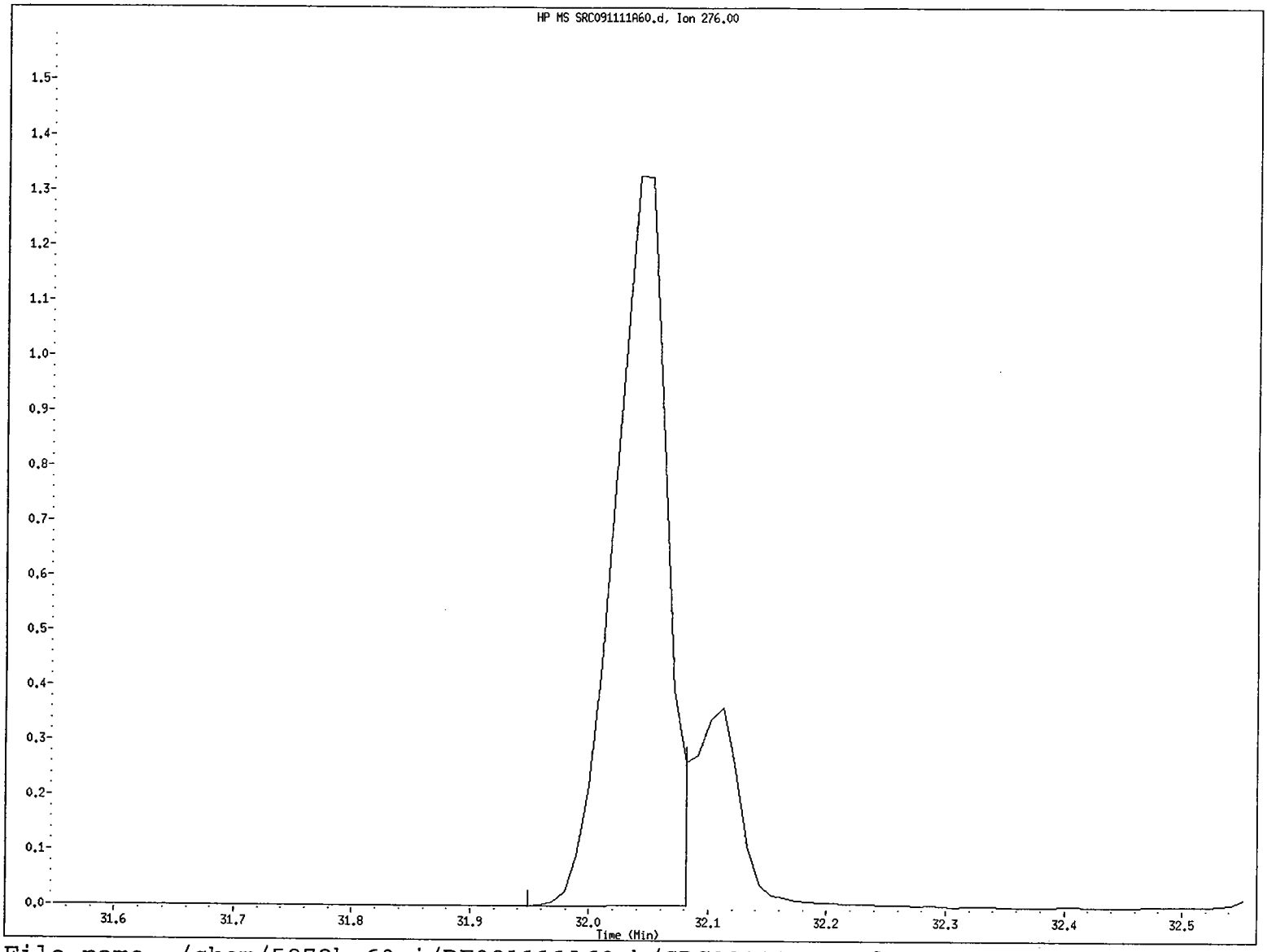
a - Target compound detected but, quantitated amount Below Limit Of Quantitation(BLOQ).
A - Target compound detected but, quantitated amount exceeded maximum amount.
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Acetophenone CAS Number 98-86-2 Area = 167539 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Client ID: CLP080VAL
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 17:57
Retention Time: 10.26
Operator ID: 2650

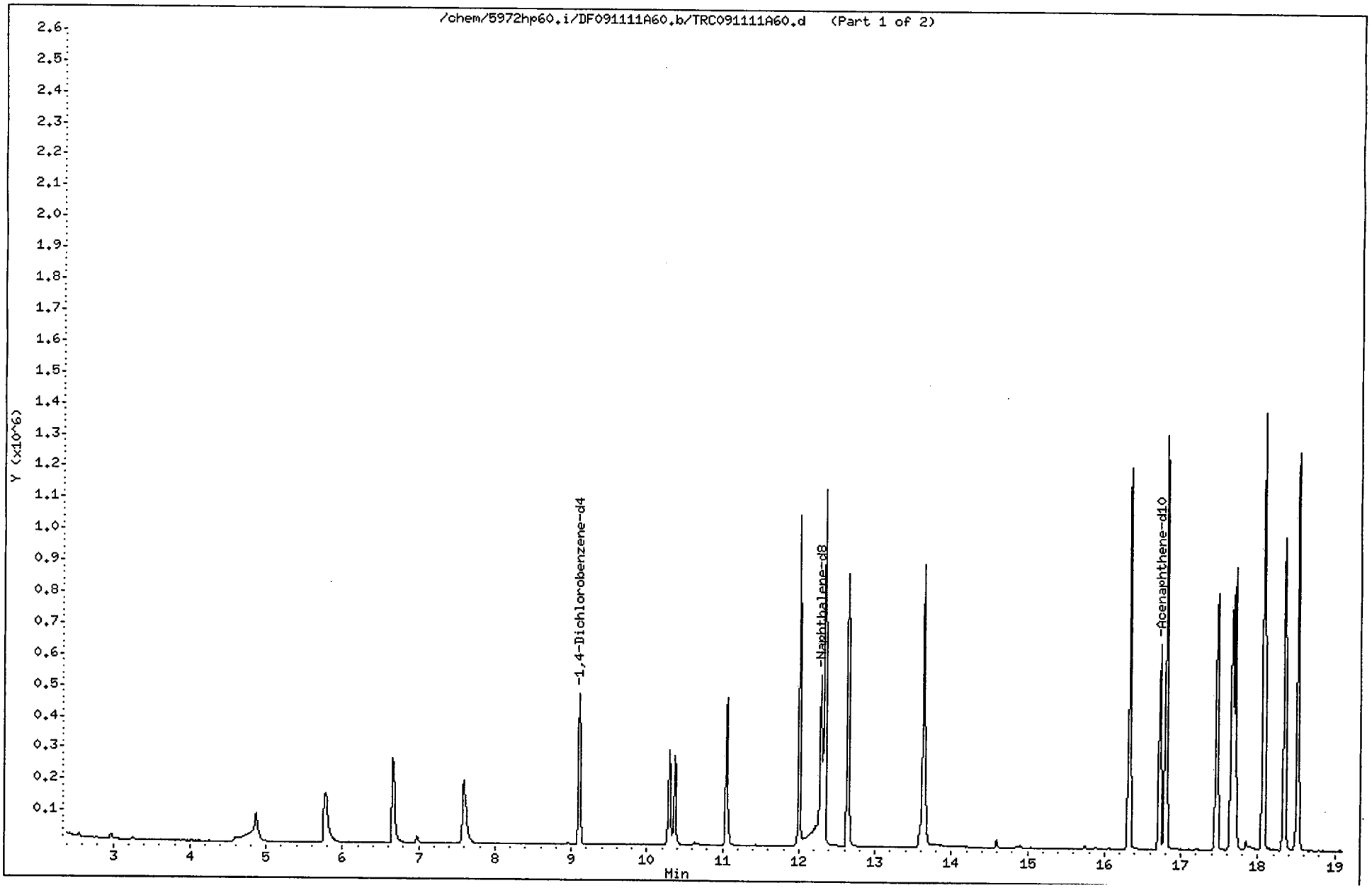
Indeno(1,2,3-c,d)pyrene CAS Number 193-39-5 Area = 412044 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/SRC091111A60.d
Client ID: CLP080VAL
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 17:57
Retention Time: 32.04
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Date : 11-NOV-2009 18:45
Client ID: SSTD80VAL
Sample Info: SSTD80VAL:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

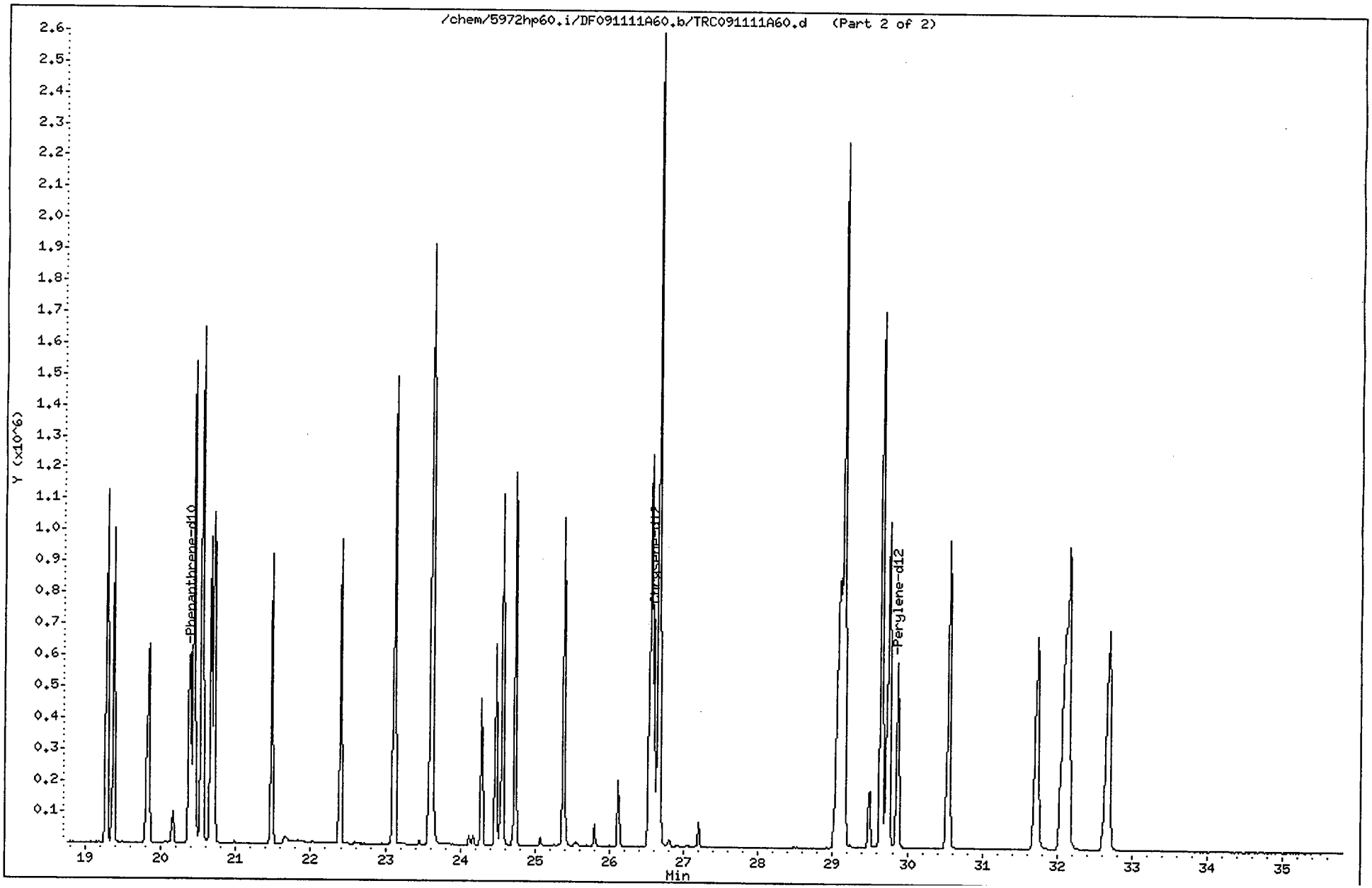
Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Date : 11-NOV-2009 18:45
Client ID: SSTD80VAL
Sample Info: SSTD80VAL:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Report Date: 13-Nov-2009 11:47

CompuChem

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Data file : /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Lab Smp Id: SSTD80VAL Client Smp ID: SSTD80VAL
Inj Date : 11-NOV-2009 18:45
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD80VAL:2650
Misc Info : REMAINDER
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 11:07 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 9 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2IXAMINPNBENZ.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.103	9.104	(1.000)	126608	40.0000		
* 2 Naphthalene-d8	136	12.284	12.296	(1.000)	378611	40.0000		
* 3 Acenaphthene-d10	164	16.725	16.736	(1.000)	278722	40.0000		
* 4 Phenanthrene-d10	188	20.377	20.388	(1.000)	553538	40.0000		
* 5 Chrysene-d12	240	26.597	26.588	(1.000)	533008	40.0000		
* 6 Perylene-d12	264	29.871	29.852	(1.000)	503946	40.0000		
19 Nitrosomethylethylamine	88	4.867	4.899	(0.535)	112153	94.2184	47.1	9768(M)
20 Methyl Methanesulfonate	80	5.778	5.789	(0.635)	223078	89.5309	44.8	9543
21 N-Nitrosodiethylamine	102	6.658	6.680	(0.731)	113047	92.8919	46.4	9593
22 Ethyl Methanesulfonate	79	7.589	7.590	(0.834)	239279	90.8455	45.4	9804
34 N-Nitrosopyrrolidine	100	10.300	10.332	(1.131)	124810	97.1632	48.6	7524
40 N-Nitrosomorpholine	116	10.371	10.383	(1.139)	54093	103.895	51.9	8778
44 N-Nitrosopiperidine	114	11.057	11.068	(0.900)	125037	88.9063	44.4	9765
49 o,o,o-Triethylphosphorothioat	198	12.008	12.010	(0.977)	193128	87.4360	43.7	8937
53 Naphthalene	128	12.346	12.337	(1.005)	774145	99.3480	49.7	9649

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Data File: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Report Date: 13-Nov-2009 11:47

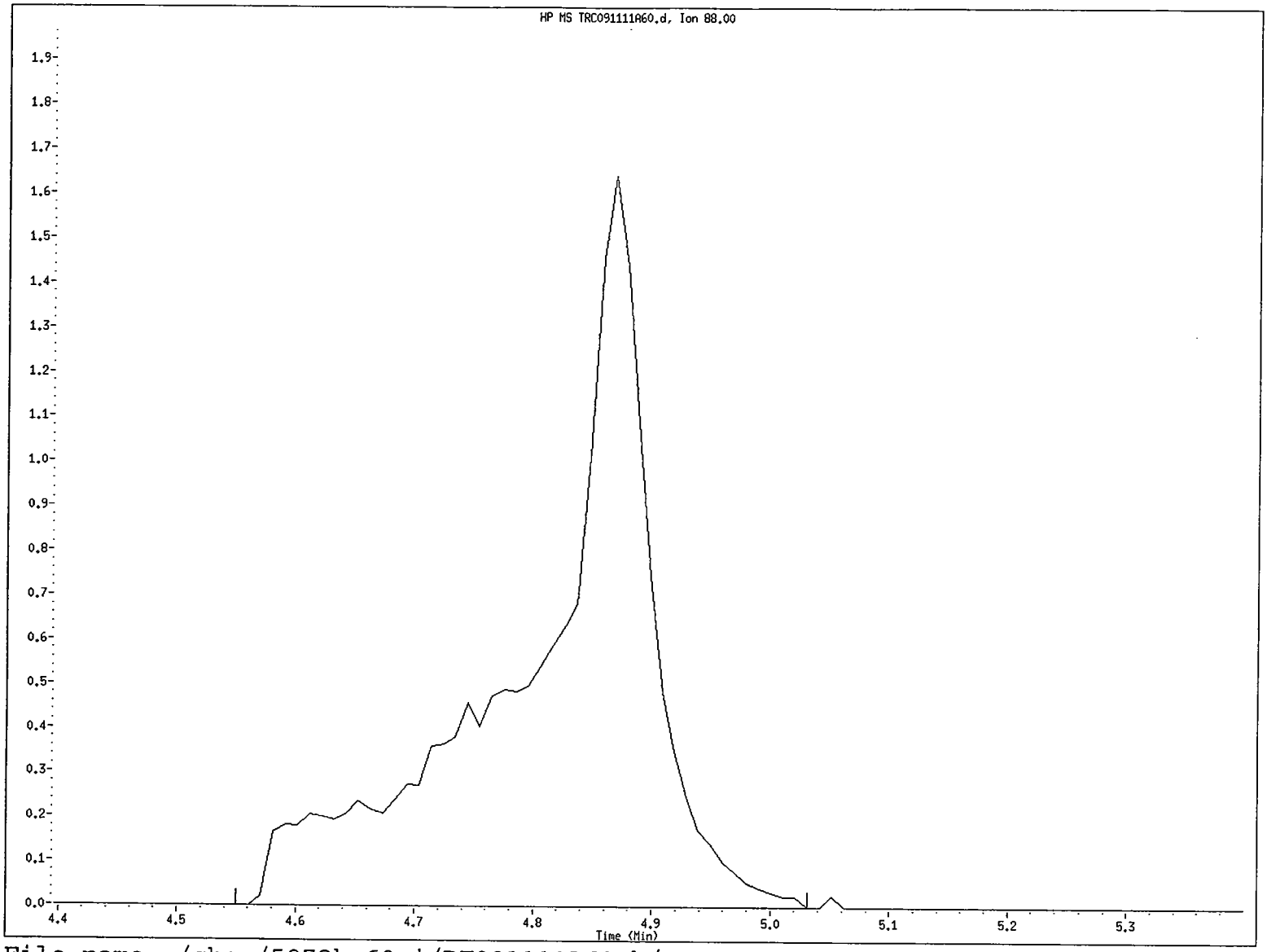
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
55	2,6-Dichlorophenol	162	12.643	12.644	(1.029)	315890	84.3440	42.2	
58	N-Nitroso-di-n-butylamine	84	13.635	13.636	(1.110)	182282	89.6147	44.8	9640
75	Acenaphthylene	152	16.336	16.327	(0.977)	1043345	99.1594	49.6	9633
77	Acenaphthene	154	16.806	16.808	(1.005)	613960	98.3423	49.2	9670
83	1-Naphthylamine	143	17.471	17.473	(1.045)	534632	96.6031	48.3	
84	2,3,4,6-Tetrachlorophenol	232	17.707	17.708	(1.059)	206216	82.4783	41.2	9368
85	2-Naphthylamine	143	17.666	17.667	(1.056)	605234	103.146	51.6	
87	Zinophos	97	18.351	18.363	(1.097)	179969	93.5306	46.8	8943
90	Fluorene	166	18.075	18.076	(1.081)	866508	100.973	50.5	7743
93	N-Nitrosodiphenylamine	169	18.525	18.526	(0.909)	692409	100.978	50.5	9413
96	Sulfotep	322	19.292	19.294	(1.154)	128507	102.674	51.3	8843
100	Phorate	75	19.374	19.376	(0.951)	407642	88.9534	44.5	6244
106	Dimethoate	87	19.845	19.856	(0.974)	243095	125.011	62.5	9829(R)
111	Disulfoton	88	20.663	20.665	(1.014)	290833	102.175	51.1	9516
112	Phenanthrene	178	20.448	20.450	(1.004)	1338198	107.126	53.6	(R)
113	Anthracene	178	20.551	20.552	(1.009)	1348768	107.379	53.7	(R)
115	Methyl Parathion	109	21.482	21.483	(1.054)	251537	119.137	59.6	9642(R)
117	Parathion	109	22.402	22.394	(1.099)	157266	103.466	51.7	8386
121	Fluoranthene	202	23.129	23.120	(1.135)	1366657	112.490	56.2	9210(R)
122	Benzidine	184	23.620	23.591	(0.888)	890872	144.225	72.1	8440(R)
123	Pyrene	202	23.630	23.621	(0.888)	1453421	95.7890	47.9	9456
124	p-Dimethylaminoazobenzene	225	24.571	24.562	(0.924)	261248	100.881	50.4	9334
125	Chlorobenzilate	251	24.745	24.736	(0.930)	366591	88.4032	44.2	9130
129	3,3'-Dimethylbenzidine	212	25.390	25.381	(0.955)	652028	92.0762	46.0	9529
131	3,3'-Dichlorobenzidine	252	26.669	26.660	(1.003)	496450	97.5313	48.8	8299
133	Benzo(a)anthracene	228	26.556	26.547	(0.998)	1260167	98.7434	49.4	
134	Chrysene	228	26.669	26.649	(1.003)	1235765	99.7577	49.9	
136	7,12-Dimethylbenz(a)anthracene	256	29.155	29.125	(0.976)	594554	97.2598	48.6	8684
137	Benzo(b)fluoranthene	252	29.083	29.054	(0.974)	1486599	105.273	52.6	(R)
138	Benzo(k)fluoranthene	252	29.155	29.115	(0.976)	1267567	101.201	50.6	
139	Benzo(a)pyrene	252	29.758	29.729	(0.996)	1208978	102.957	51.5	
140	3-Methylcholanthrene	268	30.556	30.537	(1.023)	629040	103.023	51.5	9290
141	Indeno(1,2,3-c,d)pyrene	276	32.101	32.051	(1.075)	1228690	109.122	54.6	0(RM)
142	Dibenzo(a,h)anthracene	278	32.162	32.113	(1.077)	1156097	104.501	52.2	8094(R)
143	Benzo(g,h,i)perylene	276	32.694	32.645	(1.095)	1143993	104.519	52.2	8301(R)

1 on ul/3/4

QC Flag Legend

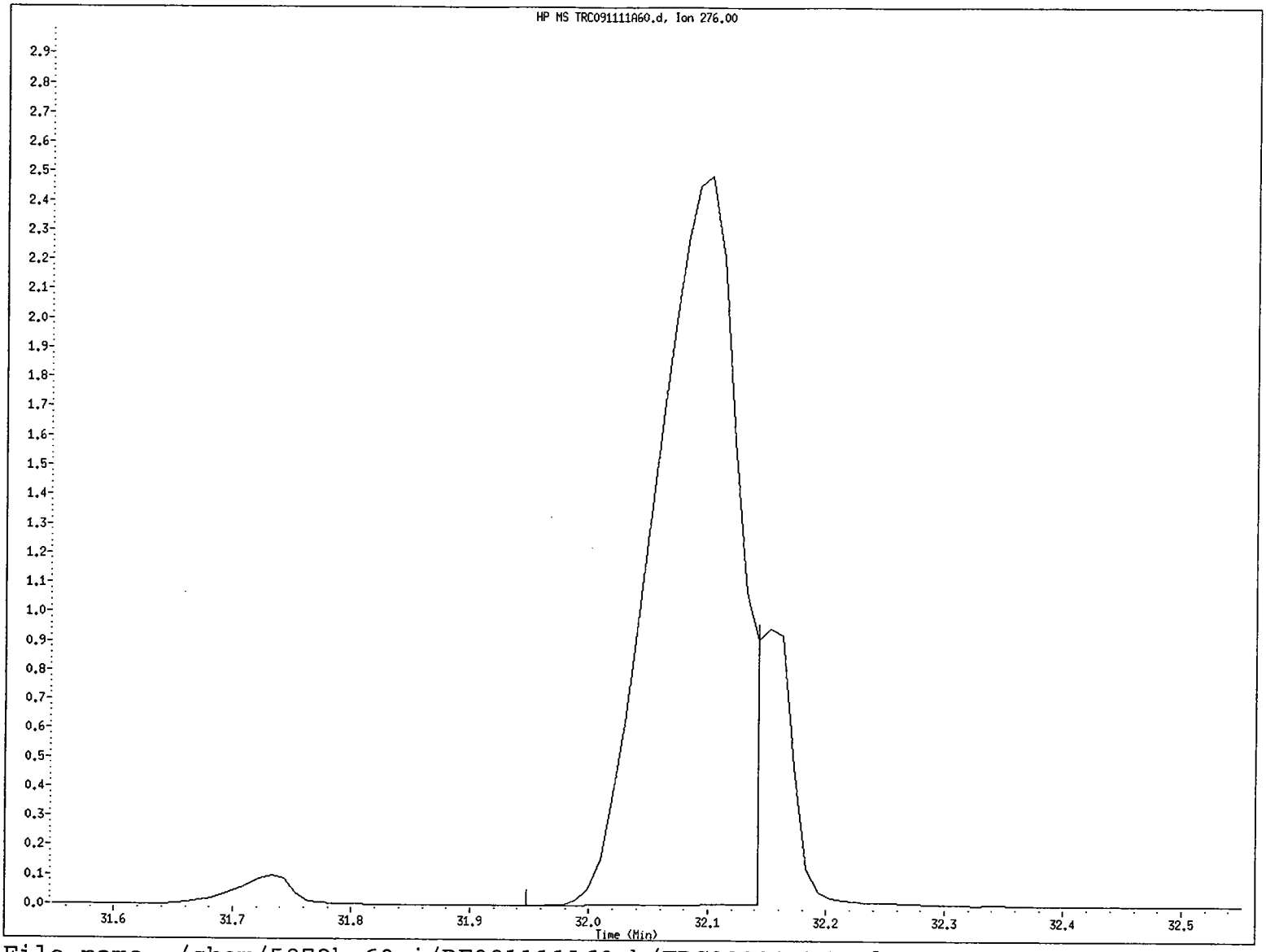
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Nitrosomethylethylamine CAS Number 10595-95-6 Area = 112153 Manually integrate



File name: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Client ID: SSTD80VAL
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 18:45
Retention Time: 4.87
Operator ID: 2650

Indeno(1,2,3-c,d)pyrene CAS Number 193-39-5 Area = 1228690 Manually integrated

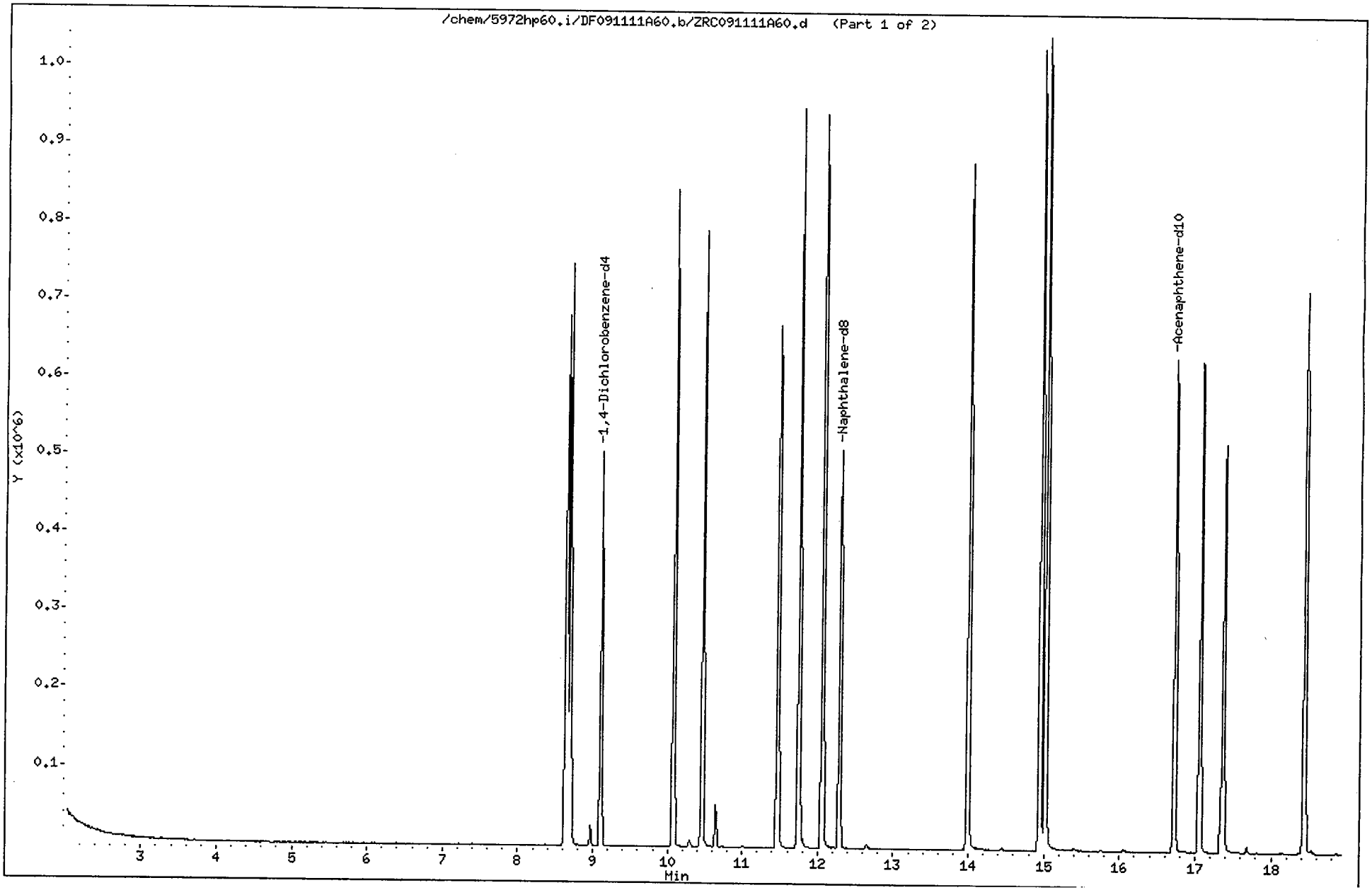


File name: /chem/5972hp60.i/DF091111A60.b/TRC091111A60.d
Client ID: SSTD80VAL
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 18:45
Retention Time: 32.10
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Date : 11-NOV-2009 23:28
Client ID: SSTD80VAL7
Sample Info: SSTD80VAL7:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

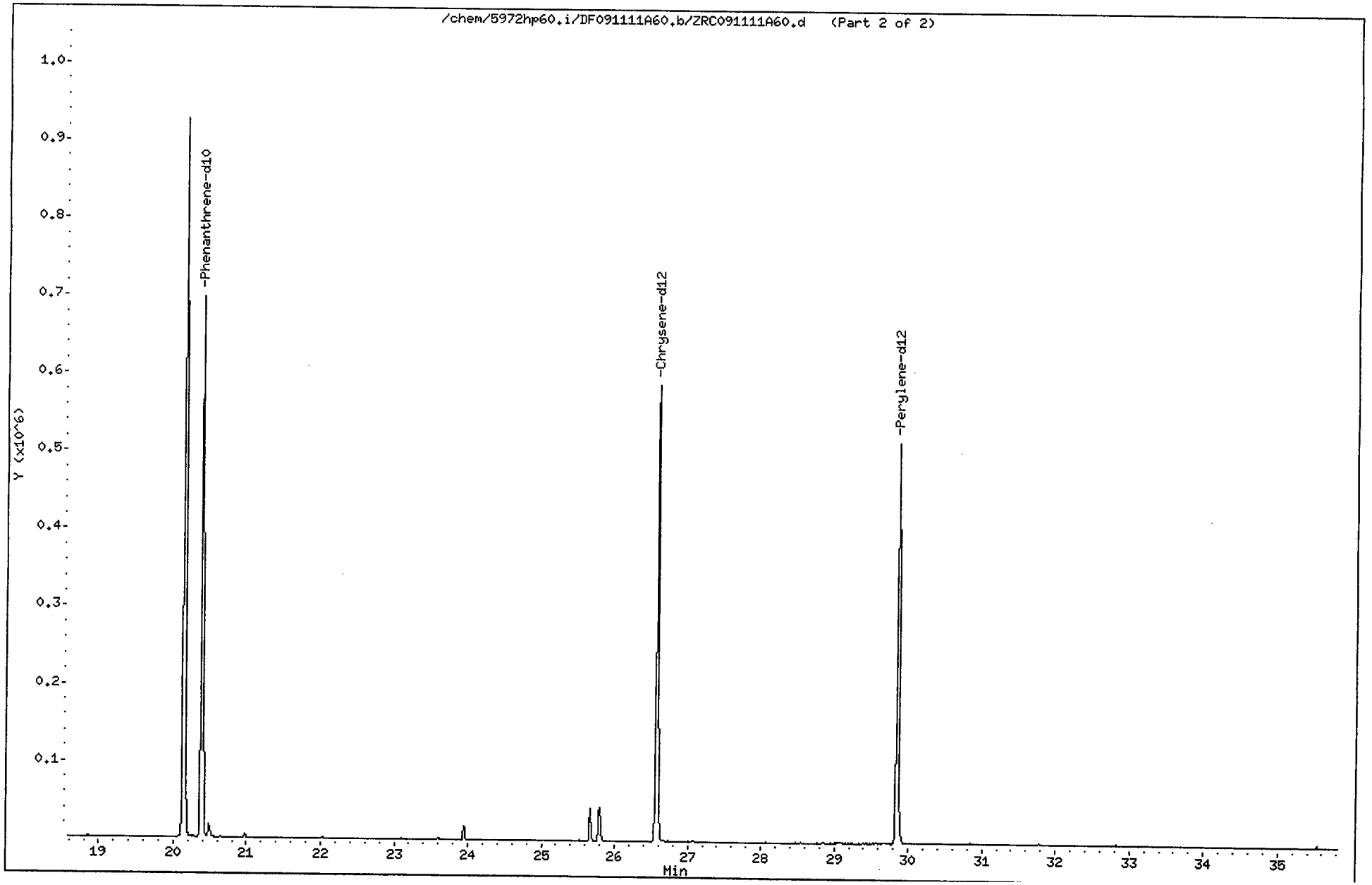
Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Date : 11-NOV-2009 23:28
Client ID: SSTD80VAL7
Sample Info: SSTD80VAL7:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Report Date: 13-Nov-2009 12:14

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Data file : /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Lab Smp Id: SSTD80VAL7 Client Smp ID: SSTD80VAL7
Inj Date : 11-NOV-2009 23:28
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD80VAL7:2650
Misc Info : ACID EXTRACTABLES
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 12:13 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 15 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2ndAPIXacdext.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.110	9.104	(1.000)	129438	40.0000		
* 2 Naphthalene-d8	136	12.292	12.296	(1.000)	370206	40.0000		
* 3 Acenaphthene-d10	164	16.721	16.736	(1.000)	273621	40.0000		
* 4 Phenanthrene-d10	188	20.384	20.388	(1.000)	520824	40.0000		
* 5 Chrysene-d12	240	26.584	26.588	(1.000)	492827	40.0000		
* 6 Perylene-d12	264	29.857	29.852	(1.000)	488007	40.0000		
23 Phenol	94	8.649	8.654	(0.949)	344791	93.5516	46.8	(M)
27 2-Chlorophenol	128	8.690	8.695	(0.954)	271146	91.8790	45.9	9081
32 2-Methylphenol	108	10.082	10.086	(1.107)	244786	105.866	52.9	(R)
35 3-Methylphenol	108	10.470	10.495	(1.149)	257619	95.4668	47.7	
36 4-Methylphenol	108	10.470	10.495	(1.149)	257619	95.4668	47.7	
46 2-Nitrophenol	139	11.473	11.467	(0.933)	182654	92.8796	46.4	9013
47 2,4-Dimethylphenol	122	11.749	11.754	(0.956)	235763	99.2093	49.6	8757
51 2,4-Dichlorophenol	162	12.056	12.071	(0.981)	343140	95.6230	47.8	
60 4-Chloro-3-methylphenol	107	14.000	13.994	(1.139)	270070	95.6268	47.8	9815

11/13/09

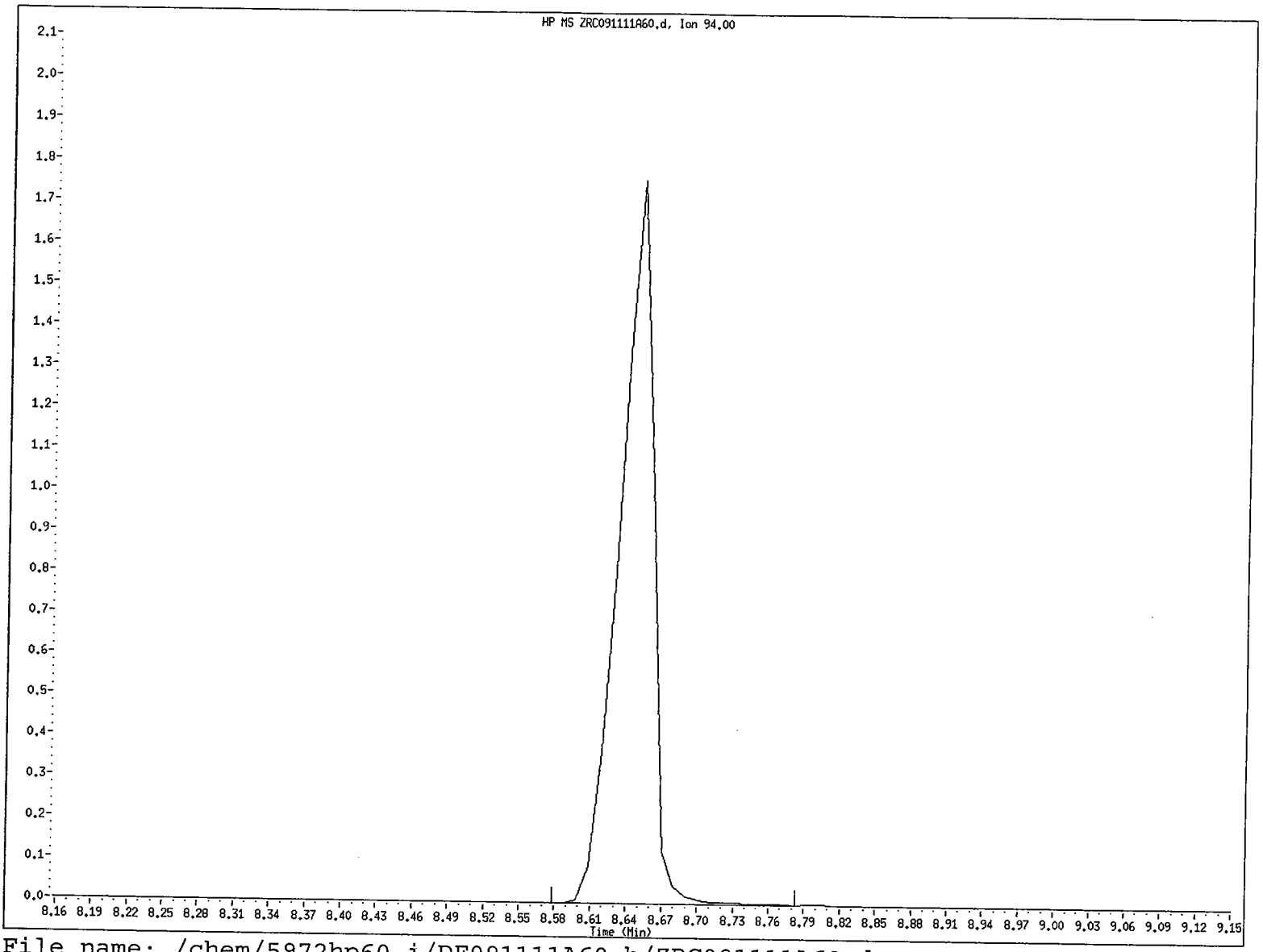
Data File: /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Report Date: 13-Nov-2009 12:14

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
66 2,4,6-Trichlorophenol	196	14.941	14.946	(0.894)	294593	97.4673	48.7	
67 2,4,5-Trichlorophenol	196	15.023	15.028	(0.898)	332233	101.200	50.6	
78 2,4-Dinitrophenol	184	17.069	17.084	(1.021)	198850	105.198	52.6	(R)
79 4-Nitrophenol	139	17.376	17.391	(1.039)	148034	95.4239	47.7	9773
92 4,6-Dinitro-2-methylphenol	198	18.440	18.465	(0.905)	233767	113.427	56.7	8562(R)
108 Pentachlorophenol	266	20.149	20.163	(0.988)	209472	117.069	58.5	8575(R)

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

Phenol CAS Number 108-95-2 Area = 344791 Manually integrated

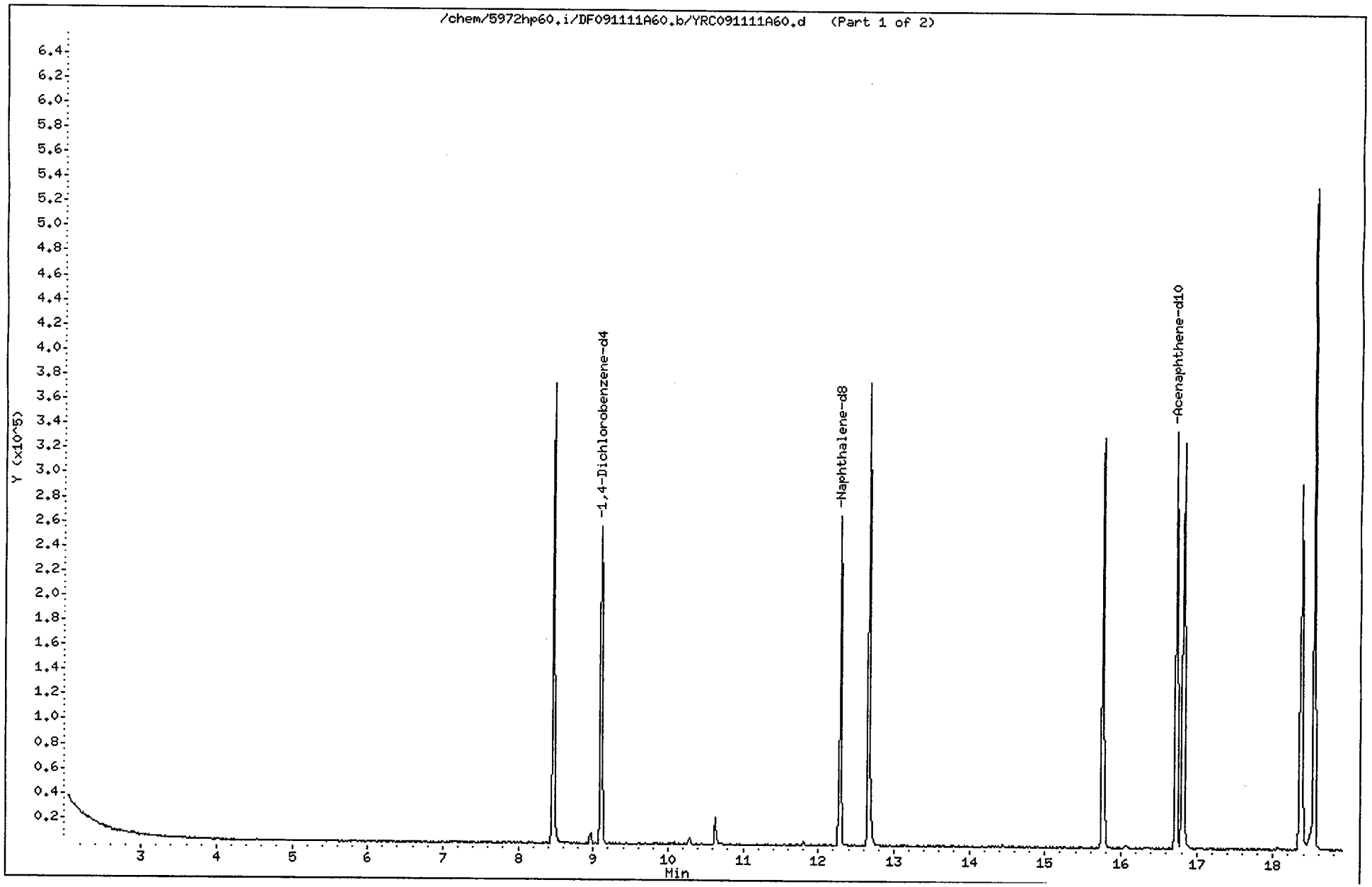


File name: /chem/5972hp60.i/DF091111A60.b/ZRC091111A60.d
Client ID: SSTD80VAL7
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 23:28
Retention Time: 8.65
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/YRC091111A60.d
Date : 11-NOV-2009 22:41
Client ID: SSTD80VAL6
Sample Info: SSTD80VAL6:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

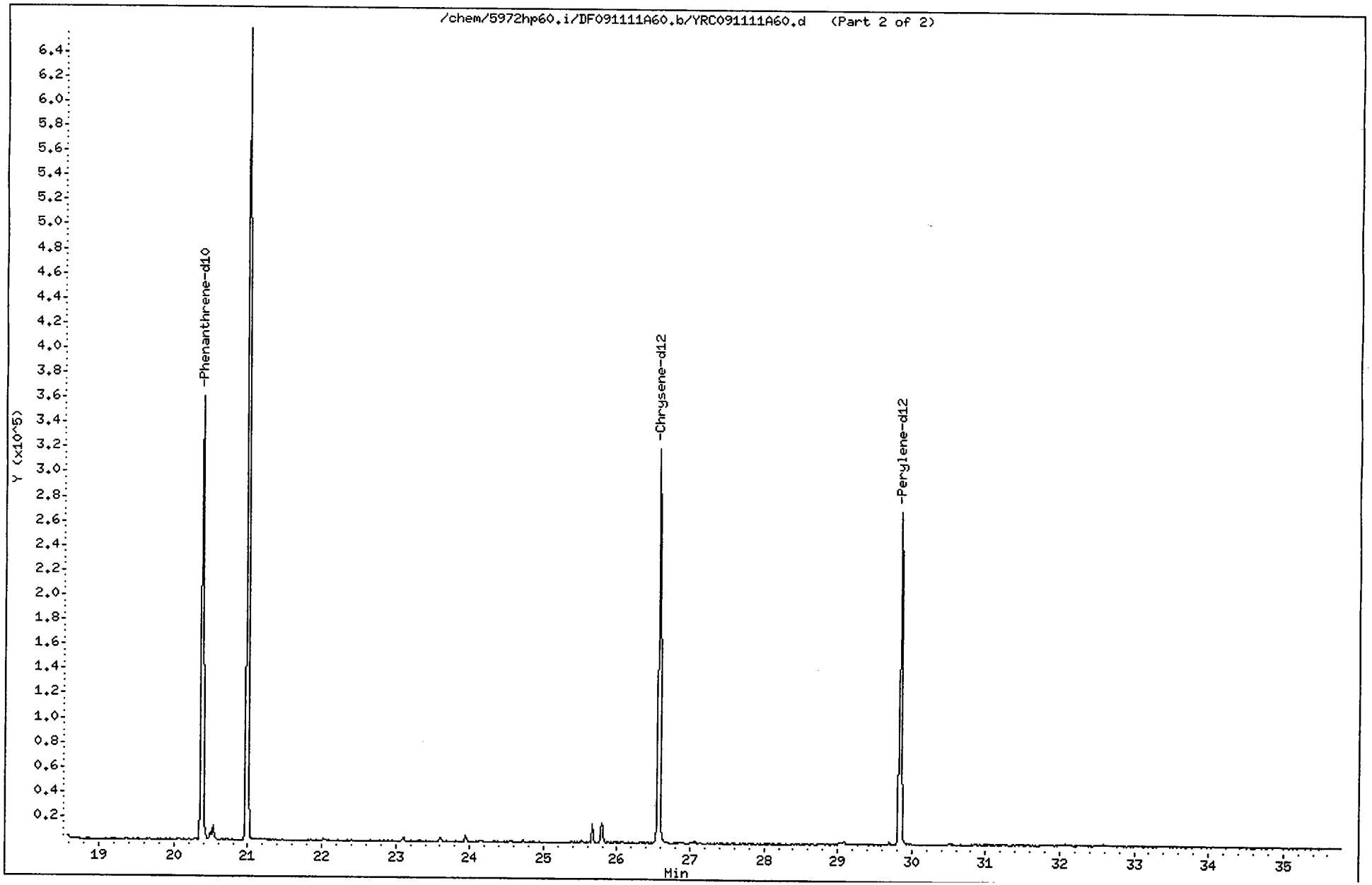
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/YRC091111A60.d
Date : 11-NOV-2009 22:41
Client ID: SSTD80VAL6
Sample Info: SSTD80VAL6;2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/YRC091111A60.d
Report Date: 13-Nov-2009 12:01

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Data file : /chem/5972hp60.i/DF091111A60.b/YRC091111A60.d
Lab Smp Id: SSTD80VAL6 Client Smp ID: SSTD80VAL6
Inj Date : 11-NOV-2009 22:41
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD80VAL6:2650
Misc Info : BASIC EXTRACTABLES
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 11:07 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 14 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2ndAPIXbseext.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
* 1	1,4-Dichlorobenzene-d4	152	9.104	9.104	(1.000)	68864	40.0000		
* 2	Naphthalene-d8	136	12.286	12.296	(1.000)	188082	40.0000		
* 3	Acenaphthene-d10	164	16.726	16.736	(1.000)	134956	40.0000		
* 4	Phenanthrene-d10	188	20.378	20.388	(1.000)	270021	40.0000		
* 5	Chrysene-d12	240	26.568	26.588	(1.000)	245158	40.0000		
* 6	Perylene-d12	264	29.841	29.852	(1.000)	238933	40.0000		
24	Aniline	93	8.470	8.480	(0.930)	197620	89.8888	44.9	9691
54	4-Chloroaniline	127	12.664	12.664	(1.031)	155247	86.8157	43.4	8726
70	2-Nitroaniline	65	15.764	15.764	(0.943)	107962	91.2373	45.6	9705
76	3-Nitroaniline	138	16.818	16.828	(1.006)	81654	92.9444	46.5	9696
91	4-Nitroaniline	138	18.373	18.404	(1.098)	81568	92.6666	46.3	8456
114	Carbazole	167	20.992	21.033	(1.030)	506217	18.9284	9.46	9376(R)

dp 11/13/9

Data File: /chem/5972hp60.i/DF091111A60.b/YRC091111A60.d
Report Date: 13-Nov-2009 12:01

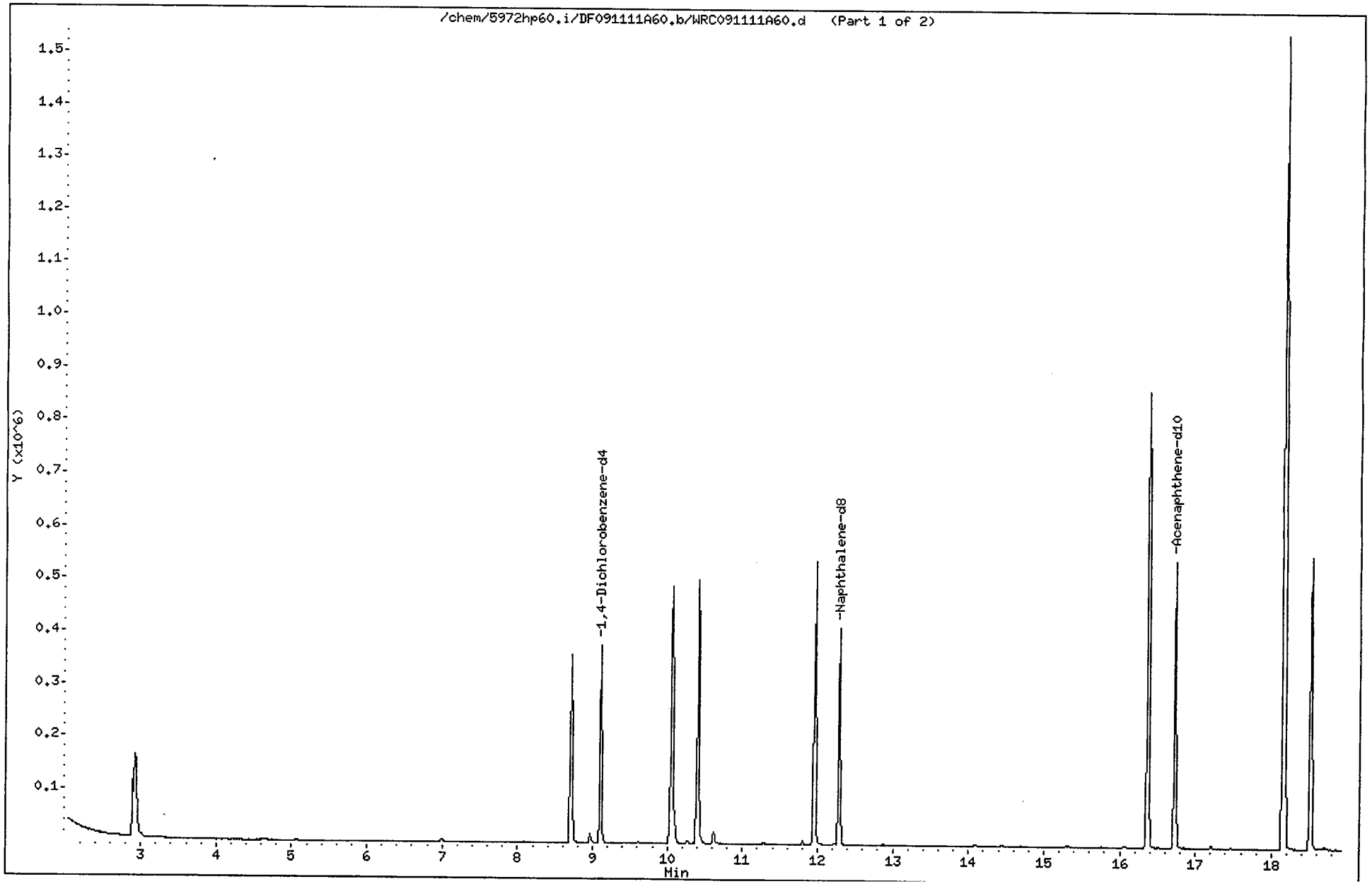
QC Flag Legend

R - Spike/Surrogate failed recovery limits.

Data File: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Date : 11-NOV-2009 21:07
Client ID: SSTD80VAL4
Sample Info: SSTD80VAL4:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

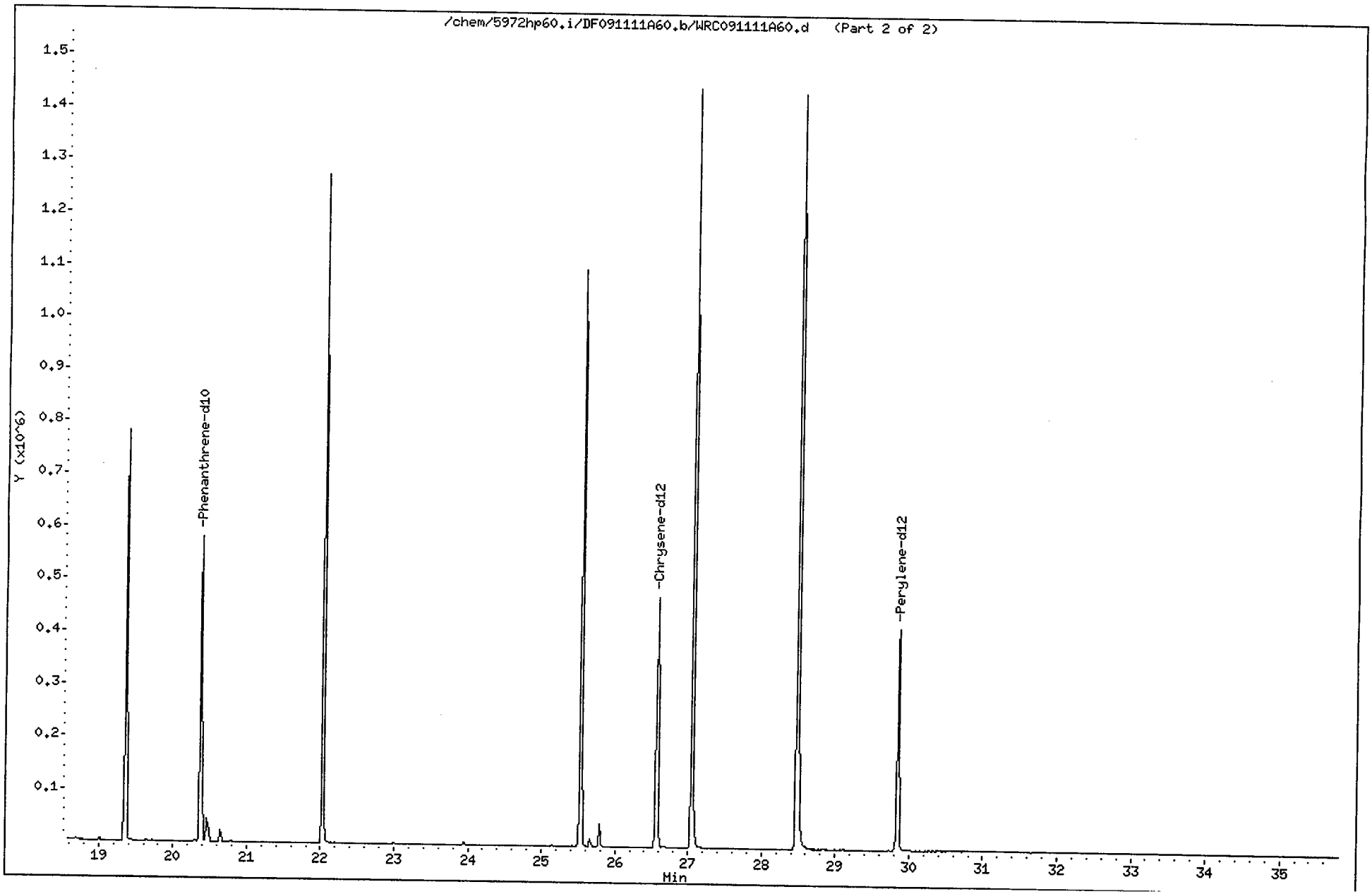
Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Date : 11-NOV-2009 21:07
Client ID: SSTD80VAL4
Sample Info: SSTD80VAL4:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Report Date: 13-Nov-2009 11:56

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Lab Smp Id: SSTD80VAL4 Client Smp ID: SSTD80VAL4
Inj Date : 11-NOV-2009 21:07
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD80VAL4:2650
Misc Info : BN2
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 11:07 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 12 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2ndAPIXBN2.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
* 1 1,4-Dichlorobenzene-d4	152	9.104	9.104	(1.000)	104490	40.0000		
* 2 Naphthalene-d8	136	12.285	12.296	(1.000)	293738	40.0000		
* 3 Acenaphthene-d10	164	16.725	16.736	(1.000)	215366	40.0000		
* 4 Phenanthrene-d10	188	20.378	20.388	(1.000)	419945	40.0000		
* 5 Chrysene-d12	240	26.577	26.588	(1.000)	396443	40.0000		
* 6 Perylene-d12	264	29.851	29.852	(1.000)	389671	40.0000		
15 N-Nitrosodimethylamine	42	2.924	2.935	(0.321)	210207	95.3613	47.7	9554 (M)
25 Bis(2-chloroethyl)ether	93	8.715	8.715	(0.957)	209794	89.8046	44.9	(M)
33 2,2'-oxybis(1-Chloropropane)	45	10.055	10.056	(1.105)	384624	95.6431	47.8	9456
38 N-Nitroso-di-N-propylamine	70	10.403	10.424	(1.143)	167025	91.2835	45.6	8416
50 Bis(2-chloroethoxy)methane	93	11.958	11.969	(0.973)	275109	92.7464	46.4	9656
72 Dimethylphthalate	163	16.367	16.378	(0.979)	654635	89.6250	44.8	9459
86 Diethylphthalate	149	18.158	18.168	(1.086)	654280	93.5694	46.8	8590
88 4-Chlorophenyl-phenylether	204	18.168	18.168	(1.086)	329897	91.8311	45.9	7588
93 N-Nitrosodiphenylamine	169	18.516	18.526	(0.909)	262554	50.4705	25.2	9599 (R)

2 of 4/13

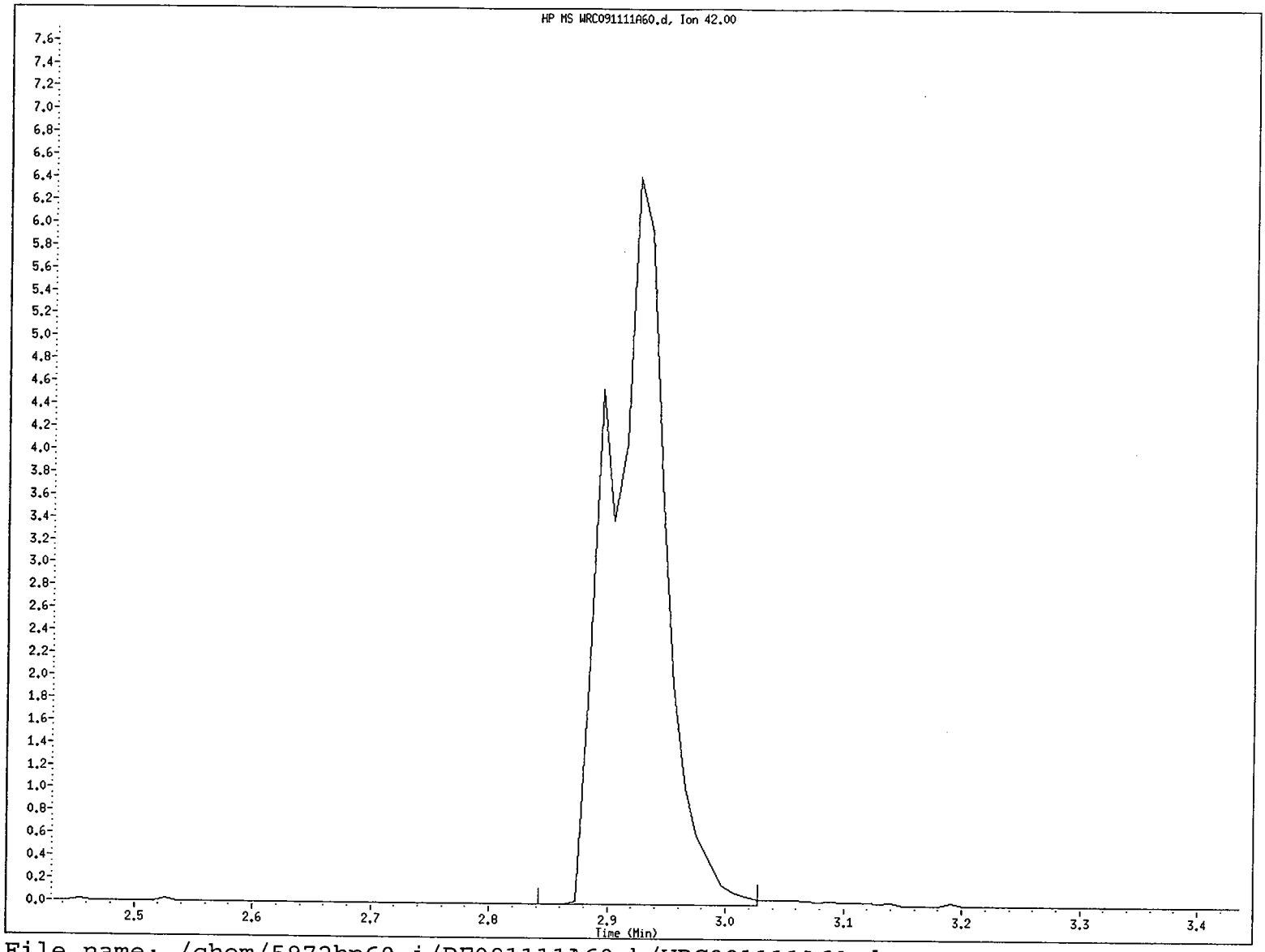
Data File: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Report Date: 13-Nov-2009 11:56

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
104 4-Bromophenyl-phenylether	248	19.365	19.365	(0.950)	160839	89.2402	44.6	9505
116 Di-n-butylphthalate	149	22.035	22.046	(1.081)	1044179	99.8608	49.9	9706
128 Butylbenzylphthalate	149	25.534	25.534	(0.961)	516379	92.3624	46.2	9622
132 bis(2-ethylhexyl)Phthalate	149	27.058	27.048	(1.018)	728823	96.3403	48.2	9460
135 Di-n-octylphthalate	149	28.480	28.481	(0.954)	1265944	93.1993	46.6	

QC Flag Legend

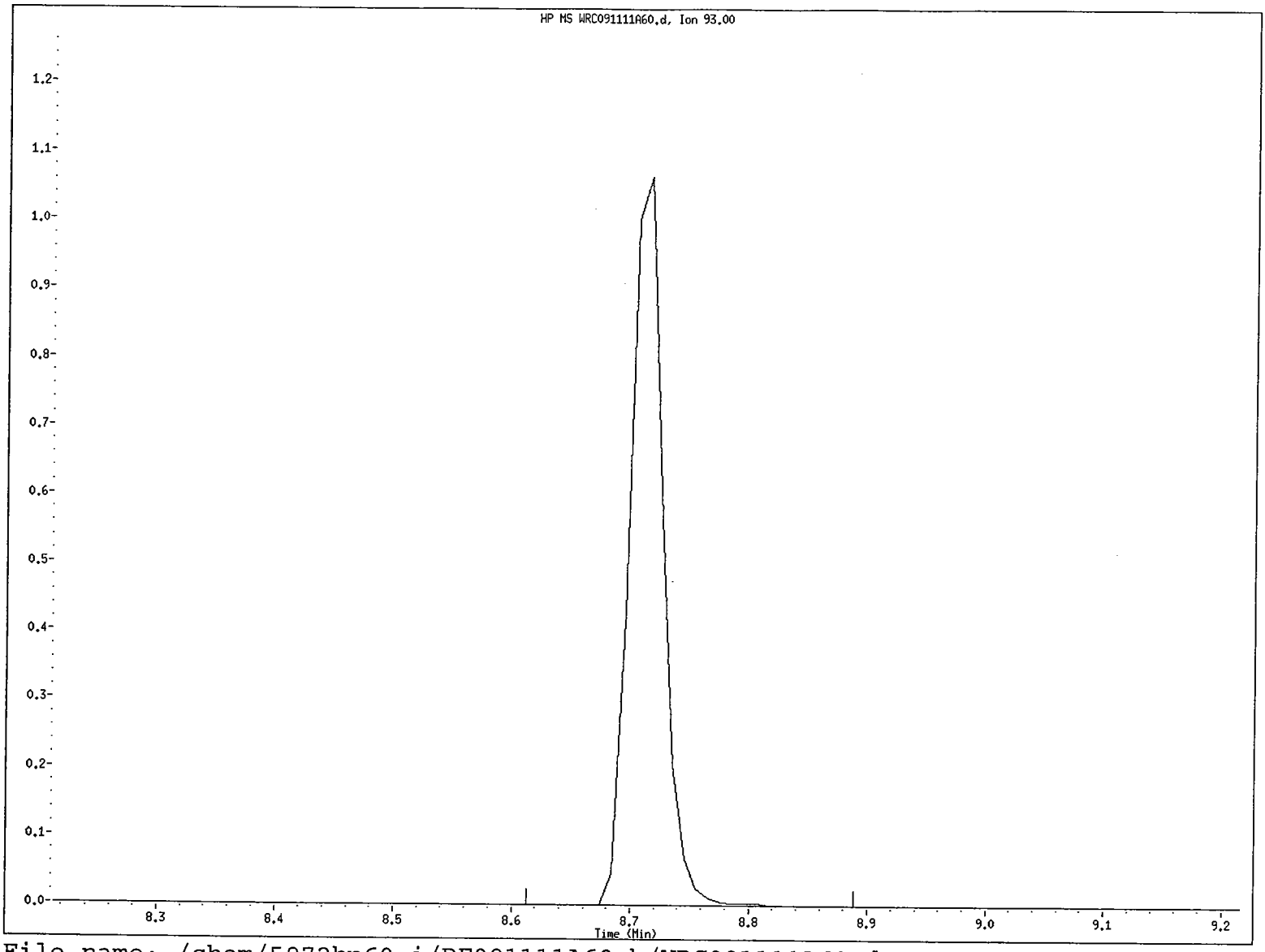
R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

N-Nitrosodimethylamine CAS Number 62-75-9 Area = 210207 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Client ID: SSTD80VAL4
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 21:07
Retention Time: 2.92
Operator ID: 2650

Bis(2-chloroethyl)ether CAS Number 111-44-4 Area = 209794 Manually integrated

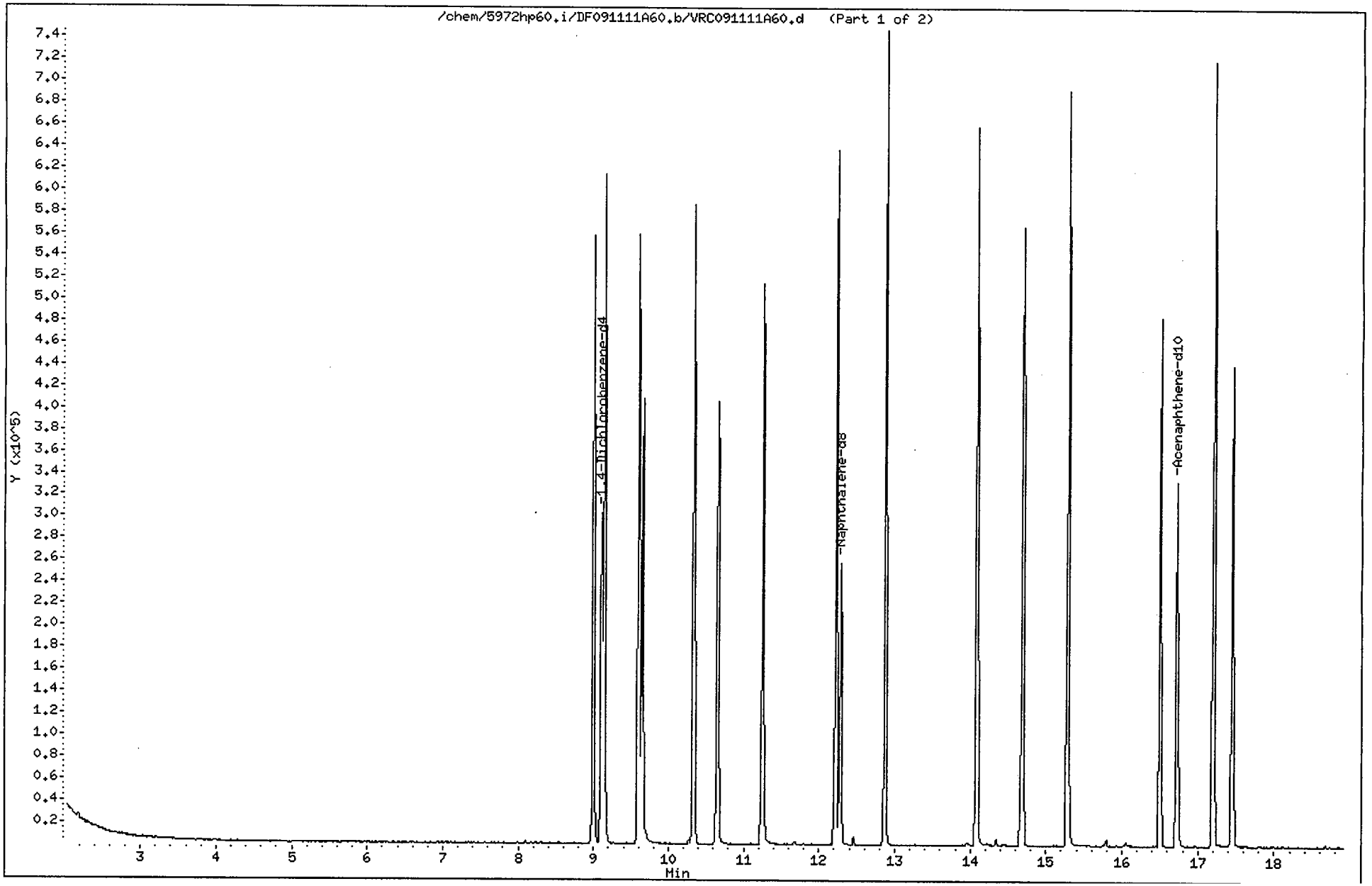


File name: /chem/5972hp60.i/DF091111A60.b/WRC091111A60.d
Client ID: SSTD80VAL4
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 21:07
Retention Time: 8.71
Operator ID: 2650

Data File: /chem/5972hp60.i/DF091111A60.b/VRC091111A60.d
Date : 11-NOV-2009 20:19
Client ID: SSTD80VAL3
Sample Info: SSTD80VAL3:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

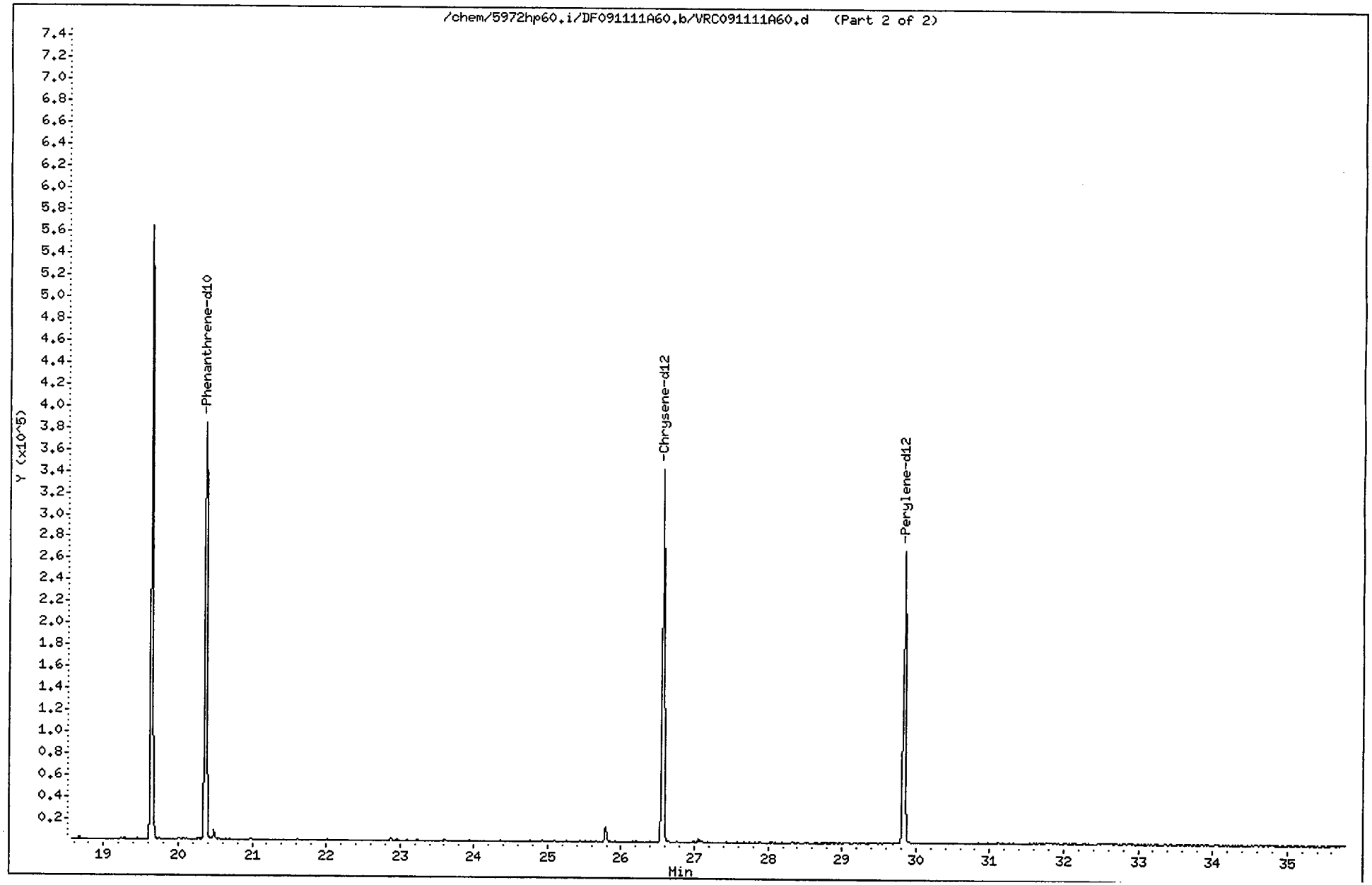
Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/VRC091111A60.d
Date : 11-NOV-2009 20:19
Client ID: SSTD80VAL3
Sample Info: SSTD80VAL3:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/VRC091111A60.d
Report Date: 13-Nov-2009 11:53

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Data file : /chem/5972hp60.i/DF091111A60.b/VRC091111A60.d
Lab Smp Id: SSTD80VAL3 Client Smp ID: SSTD80VAL3
Inj Date : 11-NOV-2009 20:19
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD80VAL3:2650
Misc Info : BN1
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 11:07 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 11 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2ndAPIXBN1.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.103	9.104	(1.000)	77731	40.0000		
*	2 Naphthalene-d8	136	12.285	12.296	(1.000)	208219	40.0000		
*	3 Acenaphthene-d10	164	16.715	16.736	(1.000)	147267	40.0000		
*	4 Phenanthrene-d10	188	20.367	20.388	(1.000)	279734	40.0000		
*	5 Chrysene-d12	240	26.567	26.588	(1.000)	262840	40.0000		
*	6 Perylene-d12	264	29.841	29.852	(1.000)	240040	40.0000		
	28 1,3-Dichlorobenzene	146	9.001	9.002	(0.989)	226791	93.0320	46.5	
	29 1,4-Dichlorobenzene	146	9.144	9.145	(1.004)	229423	91.3485	45.7	
	31 1,2-Dichlorobenzene	146	9.594	9.605	(1.054)	206794	89.8584	44.9	
	42 Hexachloroethane	117	10.331	10.332	(1.135)	99158	94.6343	47.3	9250
	43 Nitrobenzene	77	10.648	10.659	(0.867)	193098	91.7694	45.9	9794
	45 Isophorone	82	11.242	11.273	(0.915)	338085	97.0591	48.5	9801
	52 1,2,4-Trichlorobenzene	180	12.224	12.224	(0.995)	221653	89.1426	44.6	
	57 Hexachlorobutadiene	225	12.868	12.869	(1.047)	142231	101.140	50.6	9326
	62 2-Methylnaphthalene	141	14.086	14.097	(1.147)	257982	88.4337	44.2	

11/13/9

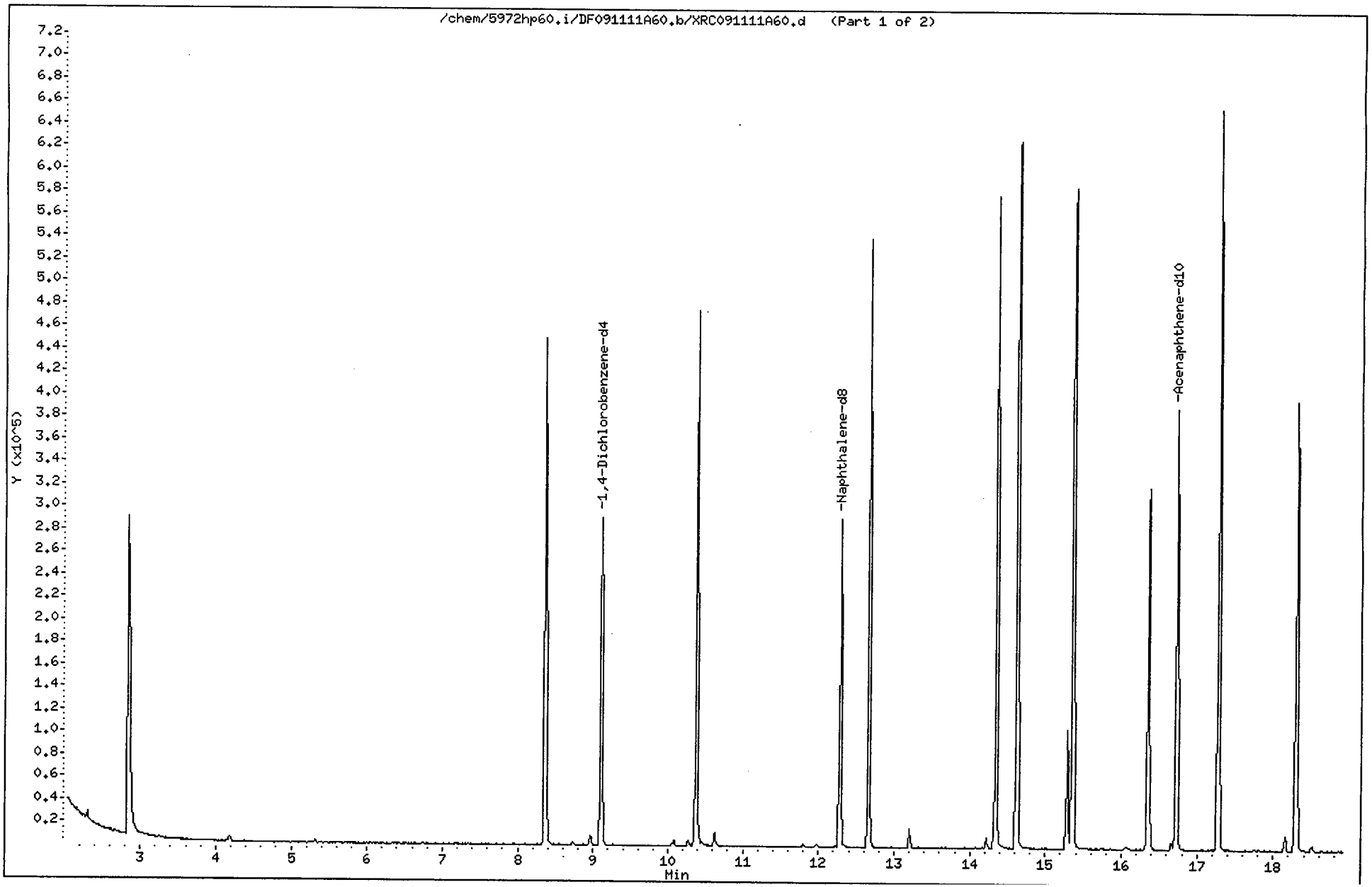
Data File: /chem/5972hp60.i/DF091111A60.b/VRC091111A60.d
Report Date: 13-Nov-2009 11:53

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
64 Hexachlorocyclopentadiene	237	14.689	14.700	(0.879)	159221	91.6039	45.8	9221
69 2-Chloronaphthalene	162	15.283	15.294	(0.914)	376048	67.1923	33.6	
74 2,6-Dinitrotoluene	165	16.500	16.521	(0.987)	115604	92.9322	46.5	9408
81 2,4-Dinitrotoluene	165	17.452	17.483	(1.044)	156785	92.7576	46.4	7624
82 Dibenzofuran	168	17.206	17.217	(1.029)	544547	93.9566	47.0	9271
105 Hexachlorobenzene	284	19.651	19.652	(0.965)	144458	101.970	51.0	9417

Data File: /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Date : 11-NOV-2009 21:54
Client ID: SSTD80VAL5
Sample Info: SSTD80VAL5:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

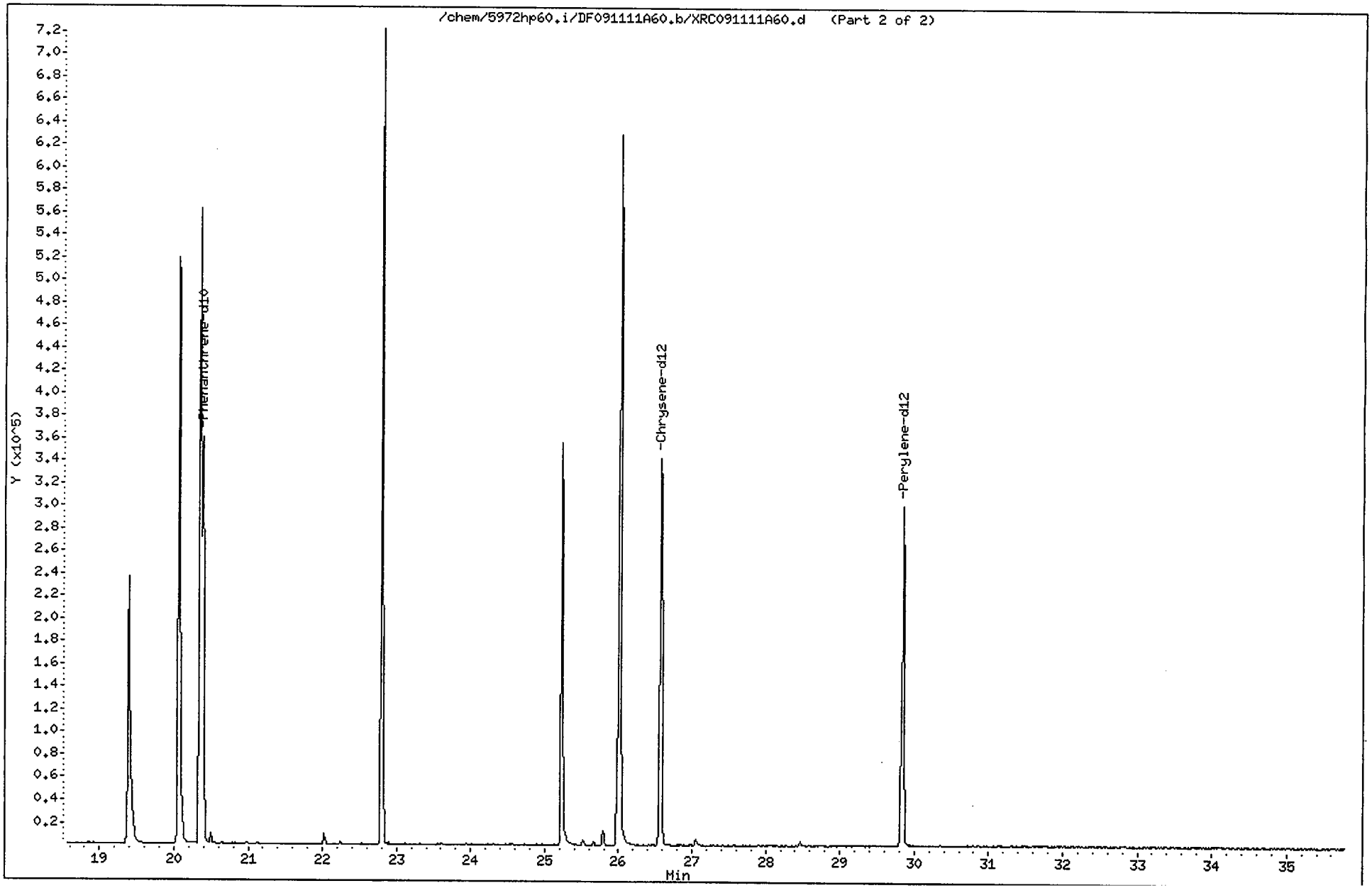
Instrument: 5972hp60.i

Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Date : 11-NOV-2009 21:54
Client ID: SSTD80VAL5
Sample Info: SSTD80VAL5:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Report Date: 13-Nov-2009 11:07

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Lab Smp Id: SSTD80VAL5 Client Smp ID: SSTD80VAL5
Inj Date : 11-NOV-2009 21:54
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD80VAL5:2650
Misc Info : BN3
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DF091111A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 11:07 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 13 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: 2ndAPIXBN3.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.104	9.104	(1.000)	78108	40.0000		
*	2 Naphthalene-d8	136	12.285	12.296	(1.000)	210019	40.0000		
*	3 Acenaphthene-d10	164	16.725	16.736	(1.000)	156468	40.0000		
*	4 Phenanthrene-d10	188	20.388	20.388	(1.000)	301306	40.0000		
*	5 Chrysene-d12	240	26.567	26.588	(1.000)	279916	40.0000		
*	6 Perylene-d12	264	29.841	29.852	(1.000)	270339	40.0000		
	16 Pyridine	79	2.843	2.884	(0.312)	174563	91.2412	45.6	9673
	26 Pentachloroethane	167	8.357	8.368	(0.918)	109496	80.9694	40.5	9448
	41 o-Toluidine	106	10.372	10.383	(1.139)	219185	84.1514	42.1	8979
	56 Hexachloropropene	213	12.664	12.664	(1.031)	165045	90.0054	45.0	9517
	63 1-Methylnaphthalene	142	14.352	14.352	(1.168)	274107	85.3541	42.7	
	65 1,2,4,5-Tetrachlorobenzene	216	14.628	14.629	(0.875)	218124	92.1020	46.0	9518
	73 1,3-Dinitrobenzene	168	16.357	16.368	(0.978)	92244	89.7087	44.8	8903
	80 Pentachlorobenzene	250	17.278	17.289	(1.033)	186622	92.4674	46.2	9586
	89 5-Nitro-o-toluidine	152	18.301	18.322	(1.094)	119240	89.4896	44.7	8444

Data File: /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Report Date: 13-Nov-2009 11:07

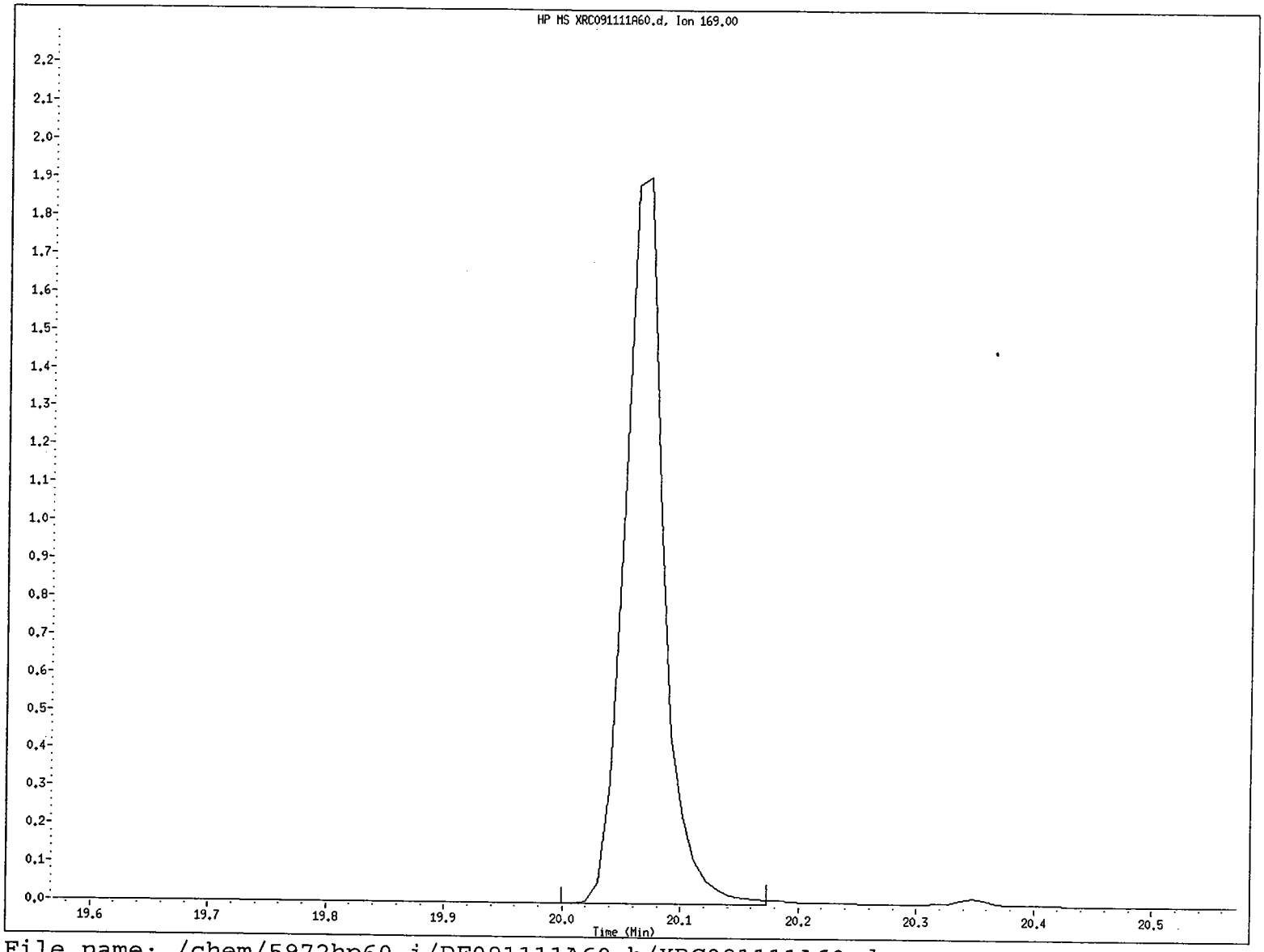
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
97	1,3,5-Trinitrobenzene	75	19.396	19.478	(0.951)	152942	108.256	54.1	9090(R)
107	4-Aminobiphenyl	169	20.071	20.071	(0.984)	440868	101.521	50.8	0(M)
109	Pentachloronitrobenzene	237	20.347	20.368	(0.998)	63166	101.778	50.9	7641
120	Isodrin	193	22.802	22.803	(1.118)	93295	104.101	52.0	9380(R)
130	2-Acetylaminofluorene	181	26.015	26.025	(0.979)	331825	94.3508	47.2	9400

11/13/09

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

4-Aminobiphenyl CAS Number 92-67-1 Area = 440868 Manually integrated



File name: /chem/5972hp60.i/DF091111A60.b/XRC091111A60.d
Client ID: SSTD80VAL5
Instrument ID: 5972hp60.i
Injection Date and Time: 11-NOV-2009 21:54
Retention Time: 20.07
Operator ID: 2650

COMPUCHEM a Division of Liberty Analytical Corp
GC/MS SEMIVOLATILE RUN LOG
COMPUCHEM LOGBOOK 4 V (4) 20 (5972hp60)

DATE 11/11/09 INITIAL TIME OF TUNE 1250 SHIFT/S (A) ✓ (B) ____ (C) ____
TIME TUNE EXPIRES 0050
METHOD: 625 8270C 8270D OLC03.2 OLM04.3 SOM01.2 (Circle One) or Other: APIX SIM: (Y/N)
PREVENTIVE MAINTENANCE Front liner / Septum / Seal / Replaced column

	SEQUENCE#		FILENAME		DATE	TIME	CLIENT ID	SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS
1			DF091111A60D	/	11/11/09	1250	DFTPP	—	2µL	2650	SCD=LCD
2			HG091111A60D	/	/ /	1314	SSTD080	—			62564 2/25/10 + 61860 11/30/09
3			HH091111A60D	/	/ /	1401	SSTD100	—			66 2/28/10
4			HI091111A60D	/	/ /	1449	SSTD010	—			61 2/28/10
5			HJ091111A60D	/	/ /	1536	SSTD120	—			65 2/28/10
6			HK091111A60D	/	/ /	1623	SSTD020	—			62 2/28/10
7			HL091111A60D	/	/ /	1710	SSTD050	—			63 2/28/10
8			SRC	/	/ /	1757	CLP080VAL	—			62248 12/5/09
9			TRC	/	/ /	1845	SSTD80VAL	—			62382 3/12/10
10			URC	/	/ /	1932	SSTD80VAL2	—			23 2/12/10
11			VRC	/	/ /	2019	3	—			25
12			WRC	/	/ /	2107	4	—			27 1/31/10
13			XRC	/	/ /	2154	5	—			29 2/12/10
14			YRC	/	/ /	2241	6	—			42
15			ZRC	/	/ /	2328	7	—			46
16					/ /						
17					/ /						
18					/ /						
19					/ /						
20					/ /						
21					/ /						
22					/ /						
23					/ /						
24					/ /						

MW 11/12/09

DFTPP Lot #/Exp. Date: 7055 62518 4/22/10
Calibration STD Lot#/Exp. Date: See Comments
Internal STD Lot#/Exp. Date: 8W 62517 4/21/10
Methylene Chloride Lot#/Exp. Date: H05402 5/31/10
Column Type: RTX-5MS 0.32mm

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: DP DATE 11/12/09
5/19/09: jr

b. Continuing Calibration Data (Form VII SV)

If more than one instrument is used, forms shall be arranged in order by instrument. If multiple continuing calibrations from the same instrument are used, they shall be in chronological order.

(1) Reconstructed Ion Chromatograms and quantitation reports for all continuing (12-hour) calibrations. Spectra not required.

(2) EICPs displaying each manual integration.

FORM 7B
SEMIVOLATILE CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8270C

Lab Code: LIBRTY Case No.: SAS No.: SDG No.: 0910165

Instrument ID: 5972HP60 Calibration Date: 11/12/09 Time: 1444

Lab File ID: HG091112A60 Init. Calib. Date(s): 11/11/09 11/11/09

Init. Calib. Times: 1314 1710

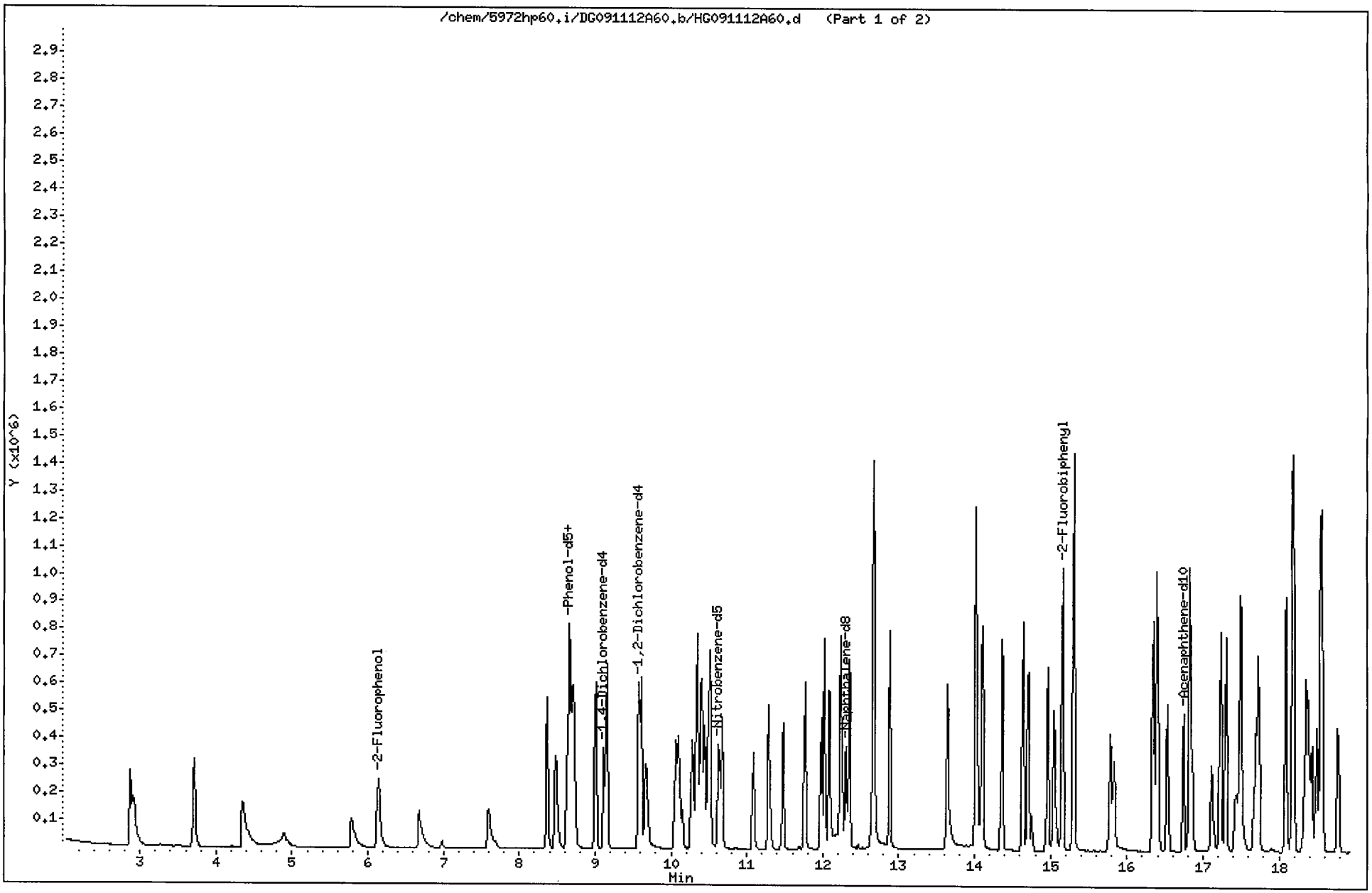
GC Column: RTX-5MS ID: 0.32 (mm)

COMPOUND	RRF OR AMOUNT	RRF80.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Phenol	1.1390000	1.1763017	0.01	3.27	20.00	AVRG
2-Chlorophenol	0.9120000	0.9172467	0.01	0.58	90.00	AVRG
3-Methylphenol	0.8340000	0.8500202	0.01	1.92	90.00	AVRG
4-Methylphenol	0.8340000	0.8500202	0.01	1.92	90.00	AVRG
Acetophenone	0.4530000	0.4568239	0.01	0.84	90.00	AVRG
Hexachloroethane	0.5390000	0.5463760	0.01	1.37	90.00	AVRG
Nitrobenzene	0.4040000	0.3905506	0.01	-3.33	90.00	AVRG
2,4-Dichlorophenol	0.3880000	0.4013048	0.01	3.43	20.00	AVRG
Dimethylphthalate	1.3560000	1.3576965	0.01	0.12	90.00	AVRG
4-Nitrophenol	0.2270000	0.2477618	0.05	9.15	90.00	AVRG
Dibenzofuran	1.5740000	1.5881336	0.01	0.90	90.00	AVRG
Diethylphthalate	1.2990000	1.3019831	0.01	0.23	90.00	AVRG
N-Nitrosodiphenylamine	0.4960000	0.4932466	0.01	-0.56	20.00	AVRG
Di-n-butylphthalate	0.9960000	0.9971407	0.01	0.11	90.00	AVRG
Fluoranthene	0.8780000	0.9059016	0.01	3.18	20.00	AVRG
Pyrene	1.1390000	1.1444509	0.01	0.48	90.00	AVRG
Butylbenzylphthalate	0.5640000	0.5653950	0.01	0.25	90.00	AVRG
3,3'-Dimethylbenzidine	0.5320000	0.5297677	0.01	-0.42	90.00	AVRG
bis(2-ethylhexyl)Phthalate	0.7630000	0.7747632	0.01	1.54	90.00	AVRG
Benzo(a)anthracene	0.9580000	0.9677012	0.01	1.01	90.00	AVRG
Di-n-octylphthalate	1.3940000	1.4921155	0.01	7.04	20.00	AVRG
Benzo(b)fluoranthene	1.1210000	1.1951148	0.01	6.61	90.00	AVRG
Benzo(k)fluoranthene	0.9940000	1.0185363	0.01	2.47	90.00	AVRG
Benzo(a)pyrene	0.9320000	0.9572006	0.01	2.70	20.00	AVRG
Indeno(1,2,3-c,d)pyrene	0.8940000	0.9002982	0.01	0.70	90.00	AVRG
Dibenzo(a,h)anthracene	0.8780000	0.9054949	0.01	3.13	90.00	AVRG
2-Fluorophenol	0.9200000	0.9340491	0.01	1.53	90.00	AVRG
Phenol-d5	1.1370000	1.1974693	0.01	5.32	90.00	AVRG
Nitrobenzene-d5	0.4040000	0.4009808	0.01	-0.75	90.00	AVRG
2-Fluorobiphenyl	1.3190000	1.3122805	0.01	-0.51	90.00	AVRG
2,4,6-Tribromophenol	0.2230000	0.2307386	0.01	3.47	90.00	AVRG
Terphenyl-d14	0.7320000	0.7534702	0.01	2.93	90.00	AVRG

FORM VII SV

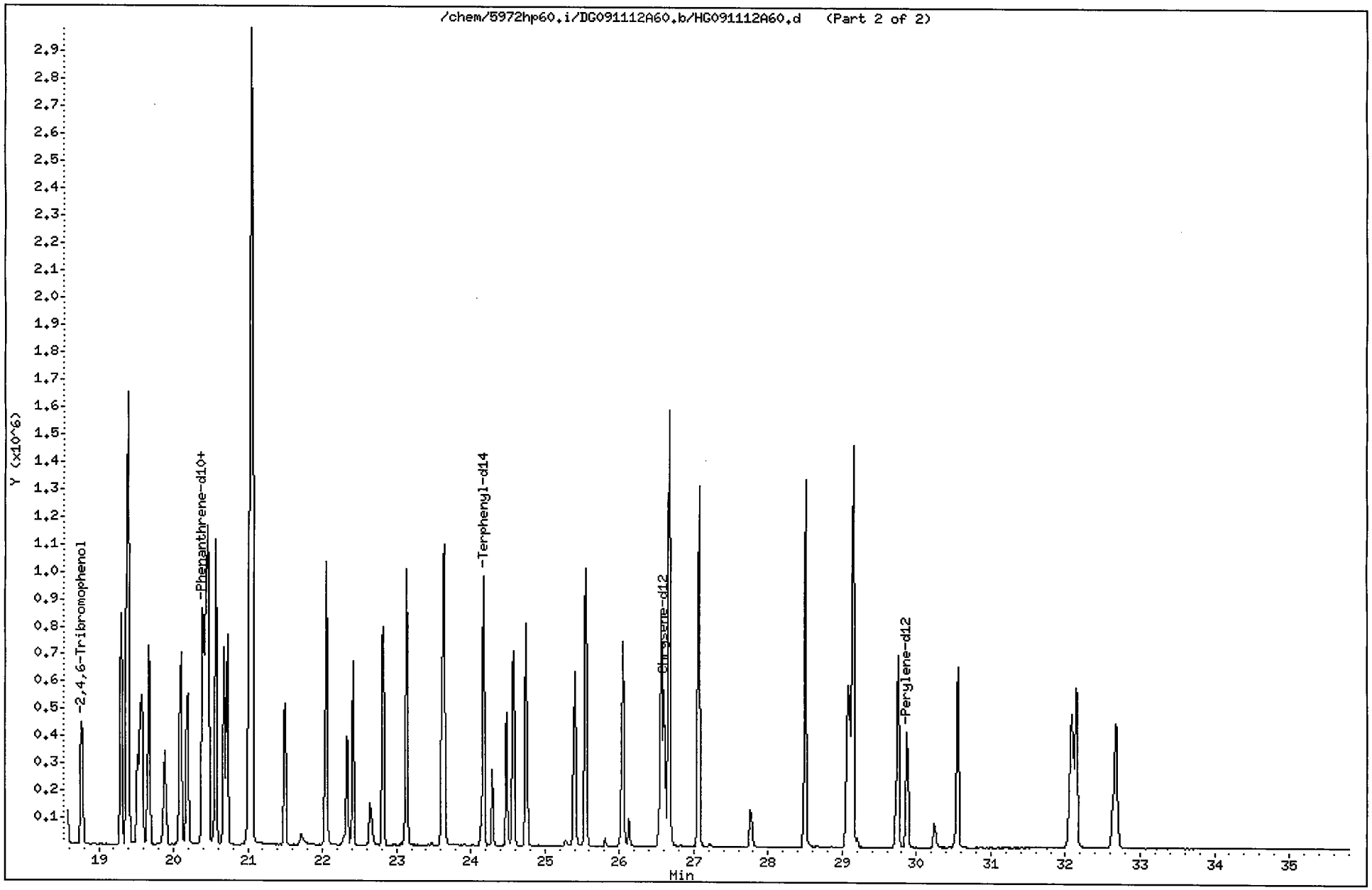
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Date : 12-NOV-2009 14:44
Client ID: SSTD080
Sample Info: SSTD080:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Date : 12-NOV-2009 14:44
Client ID: SSTD080
Sample Info: SSTD080:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Report Date: 13-Nov-2009 16:10

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX
Data file : /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Lab Smp Id: SSTD080 Client Smp ID: SSTD080
Inj Date : 12-NOV-2009 14:44
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : SSTD080:2650
Misc Info :
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 16:10 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: all.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.114	9.114	(1.000)	101712	40.0000		
*	2 Naphthalene-d8	136	12.306	12.306	(1.000)	291701	40.0000		
*	3 Acenaphthene-d10	164	16.746	16.746	(1.000)	223842	40.0000		
*	4 Phenanthrene-d10	188	20.408	20.408	(1.000)	481241	40.0000		
*	5 Chrysene-d12	240	26.608	26.608	(1.000)	411285	40.0000		
*	6 Perylene-d12	264	29.872	29.872	(1.000)	377260	40.0000		
$	7 2-Fluorophenol	112	6.147	6.147	(0.674)	190008	80.0000	81.2	
$	8 Phenol-d5	99	8.633	8.633	(0.947)	243594	80.0000	84.2	
$	9 2-Chlorophenol-d4	132	8.674	8.674	(0.952)	188964	80.0000	80.6	2682
$	10 1,2-Dichlorobenzene-d4	152	9.574	9.574	(1.050)	175508	80.0000	82.3	8474
$	11 Nitrobenzene-d5	82	10.628	10.628	(0.864)	233933	80.0000	79.4	
$	12 2-Fluorobiphenyl	172	15.160	15.160	(0.905)	587487	80.0000	79.6	
$	13 2,4,6-Tribromophenol	330	18.782	18.782	(1.122)	103298	80.0000	82.9	
$	14 Terphenyl-d14	244	24.173	24.173	(0.908)	619782	80.0000	82.3	
	15 N-Nitrosodimethylamine	42	2.924	2.924	(0.321)	165944	80.0000	77.3	9393

Data File: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Report Date: 13-Nov-2009 16:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	AMOUNTS ON-COL (NG)	SIMILARITY
16 Pyridine	79	2.873	2.873	(0.315)	199459	80.0000	80.1	9725
17 Ethylmethacrylate	69	3.712	3.712	(0.407)	168943	80.0000	78.8	9565
18 2-Picoline	93	4.346	4.346	(0.477)	197078	80.0000	81.3	9637
19 Nitrosomethylethylamine	88	4.889	4.889	(0.536)	81071	80.0000	84.8	9563(M)
20 Methyl Methanesulfonate	80	5.789	5.789	(0.635)	159433	80.0000	79.6	9541
21 N-Nitrosodiethylamine	102	6.679	6.679	(0.733)	82037	80.0000	83.9	9697
22 Ethyl Methanesulfonate	79	7.600	7.600	(0.834)	170598	80.0000	80.6	9733
23 Phenol	94	8.664	8.664	(0.951)	239288	80.0000	82.6	
24 Aniline	93	8.480	8.480	(0.930)	268739	80.0000	82.8	8824
25 Bis(2-chloroethyl)ether	93	8.725	8.725	(0.957)	183508	80.0000	80.7	
26 Pentachloroethane	167	8.367	8.367	(0.918)	142373	80.0000	80.8	9412
27 2-Chlorophenol	128	8.705	8.705	(0.955)	186590	80.0000	80.5	9025
28 1,3-Dichlorobenzene	146	9.012	9.012	(0.989)	258539	80.0000	81.0	
29 1,4-Dichlorobenzene	146	9.155	9.155	(1.004)	267692	80.0000	81.4	
30 Benzyl Alcohol	108	9.666	9.666	(1.061)	109318	80.0000	83.8	
31 1,2-Dichlorobenzene	146	9.605	9.605	(1.054)	243328	80.0000	80.8	
32 2-Methylphenol	108	10.106	10.106	(1.109)	128840	80.0000	70.9	
33 2,2'-oxybis(1-Chloropropane)	45	10.065	10.065	(1.104)	318923	80.0000	81.5	9488
34 N-Nitrosopyrrolidine	100	10.362	10.362	(1.137)	90427	80.0000	87.6	6979
35 3-Methylphenol	108	10.515	10.515	(1.154)	345829	160.000	163	
36 4-Methylphenol	108	10.515	10.515	(1.154)	345829	160.000	163	
37 3-4-Methylphenol	108	10.515	10.515	(1.154)	345829	160.000	162	8831
38 N-Nitroso-di-N-propylamine	70	10.444	10.444	(1.146)	145312	80.0000	81.6	8746
39 Acetophenone	105	10.280	10.280	(0.835)	266512	80.0000	80.7	0(M)
40 N-Nitrosomorpholine	116	10.403	10.403	(1.141)	36878	80.0000	88.2	8815
41 o-Toluidine	106	10.403	10.403	(1.141)	280822	80.0000	82.8	8521
42 Hexachloroethane	117	10.342	10.342	(1.135)	111146	80.0000	81.1	9151
43 Nitrobenzene	77	10.679	10.679	(0.868)	227848	80.0000	77.3	9585
44 N-Nitrosopiperidine	114	11.078	11.078	(0.900)	93039	80.0000	85.9	9774
45 Isophorone	82	11.283	11.283	(0.917)	392556	80.0000	80.4	9649
46 2-Nitrophenol	139	11.477	11.477	(0.933)	128925	80.0000	83.2	9007
47 2,4-Dimethylphenol	122	11.764	11.764	(0.956)	154422	80.0000	82.5	8809
48 Benzoic Acid	122	12.265	12.265	(0.997)	89919	400.000	297	7514(A)
49 o,o,o-Triethylphosphorothioat	198	12.019	12.019	(0.977)	137947	80.0000	81.1	8990
50 Bis(2-chloroethoxy)methane	93	11.978	11.978	(0.973)	232027	80.0000	78.8	9692
51 2,4-Dichlorophenol	162	12.091	12.091	(0.983)	234122	80.0000	82.8	
52 1,2,4-Trichlorobenzene	180	12.234	12.234	(0.994)	284611	80.0000	81.7	
53 Naphthalene	128	12.347	12.347	(1.003)	481932	80.0000	80.3	9652
54 4-Chloroaniline	127	12.684	12.684	(1.031)	231538	80.0000	83.5	8796
55 2,6-Dichlorophenol	162	12.654	12.654	(1.028)	238419	80.0000	82.6	
56 Hexachloropropene	213	12.674	12.674	(1.030)	205716	80.0000	80.8	9464
57 Hexachlorobutadiene	225	12.879	12.879	(1.047)	160955	80.0000	81.7	9309
58 N-Nitroso-di-n-butylamine	84	13.646	13.646	(1.109)	127143	80.0000	81.1	9646
60 4-Chloro-3-methylphenol	107	14.014	14.014	(1.139)	194786	80.0000	87.5	8175
61 Safrole	162	14.025	14.025	(1.140)	208236	80.0000	82.2	8946
62 2-Methylnaphthalene	141	14.106	14.106	(1.146)	333842	80.0000	81.7	
63 1-Methylnaphthalene	142	14.362	14.362	(1.167)	368220	80.0000	82.6	

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Per 11/13/09

Data File: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Report Date: 13-Nov-2009 16:10

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY
64 Hexachlorocyclopentadiene	237	14.710	14.710	(0.878)	201854	80.0000	76.4	9431
65 1,2,4,5-Tetrachlorobenzene	216	14.638	14.638	(0.874)	270470	80.0000	79.8	9426
66 2,4,6-Trichlorophenol	196	14.966	14.966	(0.894)	194957	80.0000	78.8	
67 2,4,5-Trichlorophenol	196	15.048	15.048	(0.899)	217603	80.0000	81.0	
68 Isosafrole	162	14.751	14.751	(0.881)	35323	80.0000	80.5	
69 2-Chloronaphthalene	162	15.303	15.303	(0.914)	669404	80.0000	78.7	
70 2-Nitroaniline	65	15.784	15.784	(0.943)	153953	80.0000	78.4	9718
71 1,4-Napthoquinone	158	15.835	15.835	(0.946)	153114	80.0000	77.2	9421
72 Dimethylphthalate	163	16.398	16.398	(0.979)	607819	80.0000	80.1	9164
73 1,3-Dinitrobenzene	168	16.398	16.398	(0.979)	121223	80.0000	82.4	0(M)
74 2,6-Dinitrotoluene	165	16.531	16.531	(0.987)	150334	80.0000	79.5	9487
75 Acenaphthylene	152	16.347	16.347	(0.976)	669426	80.0000	79.2	8440
76 3-Nitroaniline	138	16.858	16.858	(1.007)	118847	80.0000	81.6	9767
77 Acenaphthene	154	16.828	16.828	(1.005)	398523	80.0000	79.5	9591
78 2,4-Dinitrophenol	184	17.114	17.114	(1.022)	126894	80.0000	82.0	
79 4-Nitrophenol	139	17.431	17.431	(1.041)	110919	80.0000	87.4	8678
80 Pentachlorobenzene	250	17.298	17.298	(1.033)	233220	80.0000	80.8	9643
81 2,4-Dinitrotoluene	165	17.503	17.503	(1.045)	209746	80.0000	81.6	7667
82 Dibenzofuran	168	17.237	17.237	(1.029)	710982	80.0000	80.7	8941
83 1-Naphthylamine	143	17.493	17.493	(1.045)	361674	80.0000	81.4	
84 2,3,4,6-Tetrachlorophenol	232	17.728	17.728	(1.059)	164865	80.0000	82.1	9477
85 2-Naphthylamine	143	17.697	17.697	(1.057)	378882	80.0000	80.4	
86 Diethylphthalate	149	18.188	18.188	(1.086)	582877	80.0000	80.2	7846
87 Zinophos	97	18.383	18.383	(1.098)	123370	80.0000	79.8	8930
88 4-Chlorophenyl-phenylether	204	18.188	18.188	(1.086)	301415	80.0000	80.7	7533
89 5-Nitro-o-toluidine	152	18.352	18.352	(1.096)	160184	80.0000	84.0	8378
90 Fluorene	166	18.096	18.096	(1.081)	554029	80.0000	80.4	7641
91 4-Nitroaniline	138	18.434	18.434	(1.101)	124190	80.0000	85.1	9151
92 4,6-Dinitro-2-methylphenol	198	18.495	18.495	(0.906)	156813	80.0000	82.3	8827
93 N-Nitrosodiphenylamine	169	18.546	18.546	(0.909)	474741	80.0000	79.6	8710
95 1,2-Diphenylhydrazine	77	18.567	18.567	(1.109)	532144	80.0000	74.6	9167
96 Sulfotep	322	19.303	19.303	(1.153)	82542	80.0000	82.1	9164
97 1,3,5-Trinitrobenzene	75	19.518	19.518	(0.956)	181748	80.0000	80.5	9020
98 Diallate (trans isomer)	86	19.385	19.385	(0.950)	156162	40.0000	39.6	
99 Diallate (trans) part of total	86	19.385	19.385	(0.950)	156162	40.0000	39.6	9122
100 Phorate	75	19.396	19.396	(0.950)	302052	80.0000	75.8	9183
101 Phenacetin	108	19.580	19.580	(0.959)	258187	80.0000	80.9	9046
102 Diallate (cis isomer)	86	19.559	19.559	(0.958)	44877	40.0000	42.0	
103 Diallate (cis) part of total	86	19.559	19.559	(0.958)	44877	40.0000	42.0	7541(H)
104 4-Bromophenyl-phenylether	248	19.385	19.385	(0.950)	170583	80.0000	82.6	8615
105 Hexachlorobenzene	284	19.672	19.672	(0.964)	198390	80.0000	81.4	9513
106 Dimethoate	87	19.887	19.887	(0.974)	134596	80.0000	79.6	9818
107 4-Aminobiphenyl	169	20.101	20.101	(0.985)	542529	80.0000	78.2	0(M)
108 Pentachlorophenol	266	20.194	20.194	(0.989)	139313	80.0000	84.3	8164
109 Pentachloronitrobenzene	237	20.388	20.388	(0.999)	78672	80.0000	79.4	7269
110 Pronamide	173	20.449	20.449	(1.002)	314299	80.0000	81.0	9190
111 Disulfoton	88	20.685	20.685	(1.014)	202382	80.0000	81.8	9537

Per 11/13/09

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Report Date: 13-Nov-2009 16:10

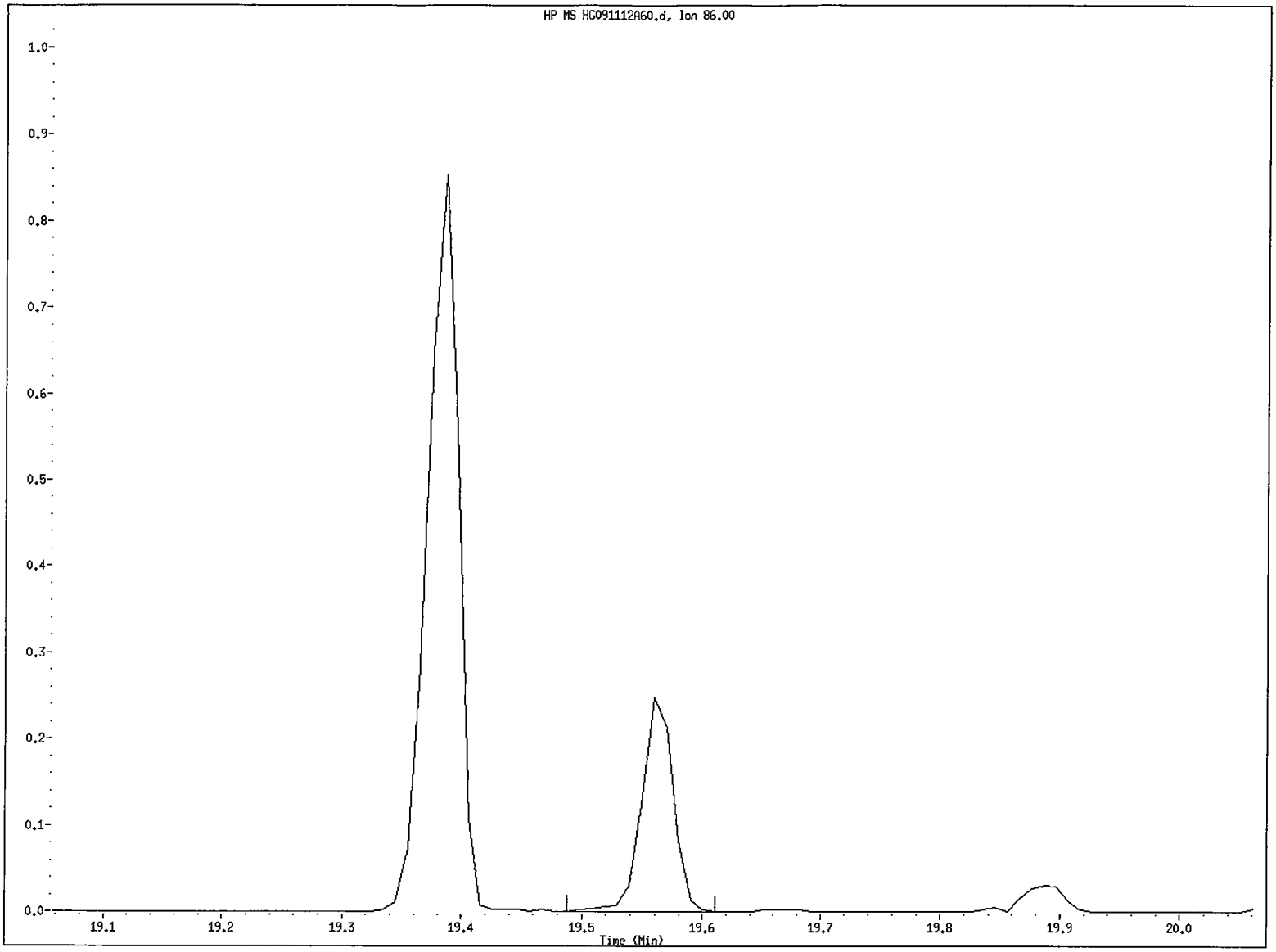
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (NG)	ON-COL (NG)	SIMILARITY	
112	Phenanthrene	178	20.470	20.470	(1.003)	882461	80.0000	81.2		
113	Anthracene	178	20.572	20.572	(1.008)	878634	80.0000	80.4		
114	Carbazole	167	21.053	21.053	(1.032)	3769854	80.0000	79.1	9530	
115	Methyl Parathion	109	21.503	21.503	(1.054)	143608	80.0000	78.2	9430	
116	Di-n-butylphthalate	149	22.055	22.055	(1.081)	959730	80.0000	80.1	9700	
117	Parathion	109	22.414	22.414	(1.098)	106223	80.0000	80.4	7888	
118	4-Nitroquinoline-1-oxide	190	22.342	22.342	(1.095)	108866	80.0000	83.5	8400	
119	Methapyrilene	97	22.649	22.649	(1.110)	68087	80.0000	84.2	9702	
120	Isodrin	193	22.823	22.823	(1.118)	115443	80.0000	80.6	9125	
121	Fluoranthene	202	23.140	23.140	(1.134)	871914	80.0000	82.5	9229	
122	Benzidine	184	23.621	23.621	(0.888)	396922	80.0000	83.3	8336	
123	Pyrene	202	23.641	23.641	(0.888)	941391	80.0000	80.4	9373	
124	p-Dimethylaminoazobenzene	225	24.582	24.582	(0.924)	161171	80.0000	80.6	9321	
125	Chlorobenzilate	251	24.756	24.756	(0.930)	263731	80.0000	82.4	9228	
126	Kepone	272	Compound Not Detected.							
127	Famfur	218	Compound Not Detected.							
128	Butylbenzylphthalate	149	25.554	25.554	(0.960)	465077	80.0000	80.2	9464	
129	3,3'-Dimethylbenzidine	212	25.411	25.411	(0.955)	435771	80.0000	79.7	9387	
130	2-Acetylaminofluorene	181	26.056	26.056	(0.979)	415846	80.0000	80.5	9212	
131	3,3'-Dichlorobenzidine	252	26.680	26.680	(1.003)	328751	80.0000	83.7	8303	
132	bis(2-ethylhexyl)Phthalate	149	27.068	27.068	(1.017)	637297	80.0000	81.2	9465	
133	Benzo(a)anthracene	228	26.567	26.567	(0.998)	796002	80.0000	80.8		
134	Chrysene	228	26.669	26.669	(1.002)	772610	80.0000	80.8		
135	Di-n-octylphthalate	149	28.501	28.501	(0.954)	1125831	80.0000	85.6		
136	7,12-Dimethylbenz(a)anthracene	256	29.155	29.155	(0.976)	391157	80.0000	85.5	8339	
137	Benzo(b)fluoranthene	252	29.084	29.084	(0.974)	901738	80.0000	85.3		
138	Benzo(k)fluoranthene	252	29.145	29.145	(0.976)	768506	80.0000	82.0		
139	Benzo(a)pyrene	252	29.749	29.749	(0.996)	722227	80.0000	82.2		
140	3-Methylcholanthrene	268	30.557	30.557	(1.023)	378335	80.0000	82.8	9246	
141	Indeno(1,2,3-c,d)pyrene	276	32.081	32.081	(1.074)	679293	80.0000	80.6	0(M)	
142	Dibenzo(a,h)anthracene	278	32.153	32.153	(1.076)	683214	80.0000	82.5	9107	
143	Benzo(g,h,i)perylene	276	32.685	32.685	(1.094)	664407	80.0000	81.1	8324	
198	4-Chlorophenol	128	Compound Not Detected.							
199	2,5-Dichlorophenol	162	Compound Not Detected.							
M 144	Diallate Total	86				201039	80.0000	80.1	0	
201	a,a-Dimethylphenethylamine	58	14.065	14.065	(1.143)	211802	80.0000	66.1	0(M)	
202	Aramite	185	24.490	24.490	(0.920)	84221	80.0000	81.7	9150(H)	

pm 11/13/09

QC Flag Legend

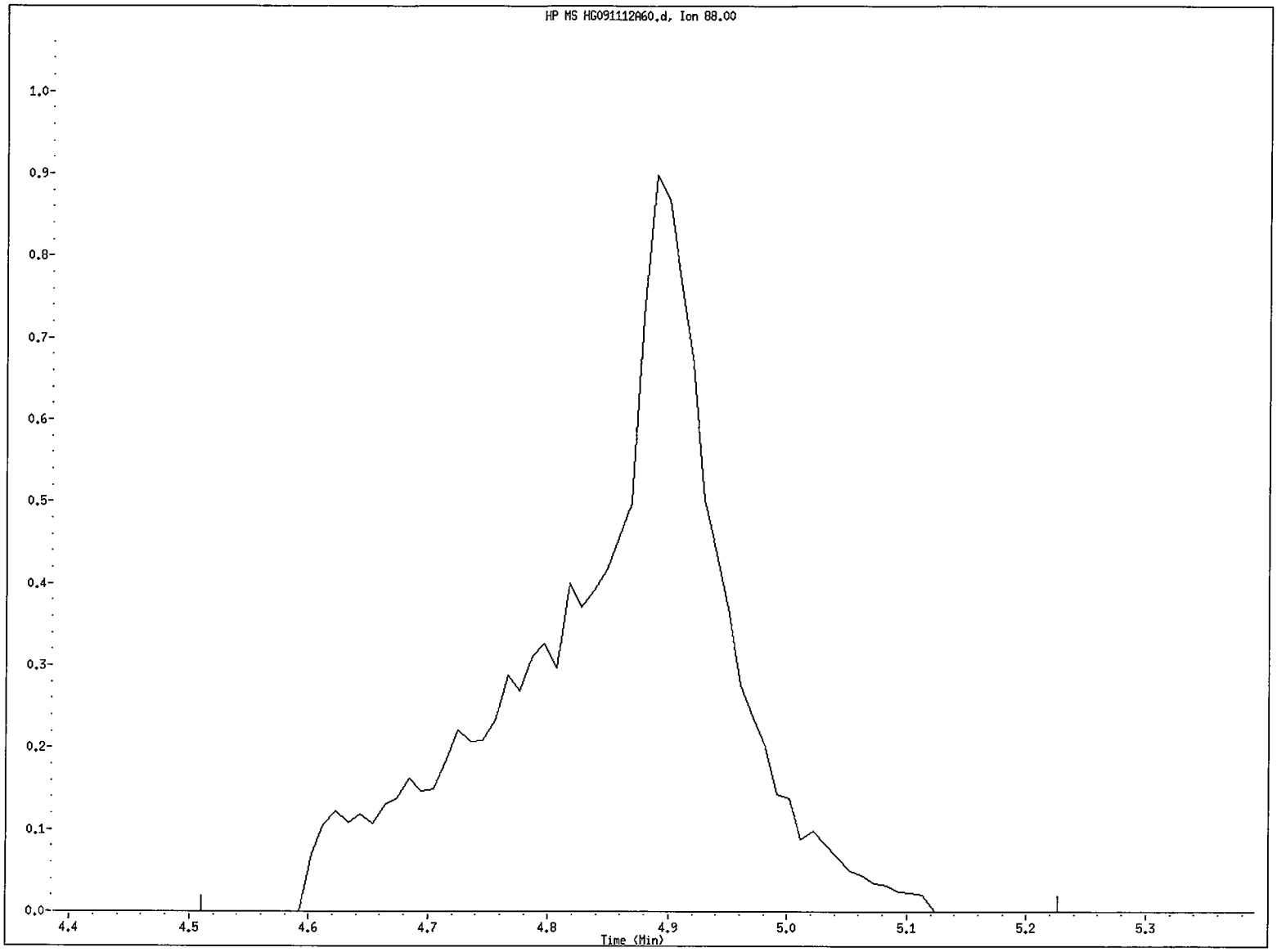
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.
H - Operator selected an alternate compound hit.

Diallate (cis) part of total CAS Number 17708-57-5 Area = 44877 User selected



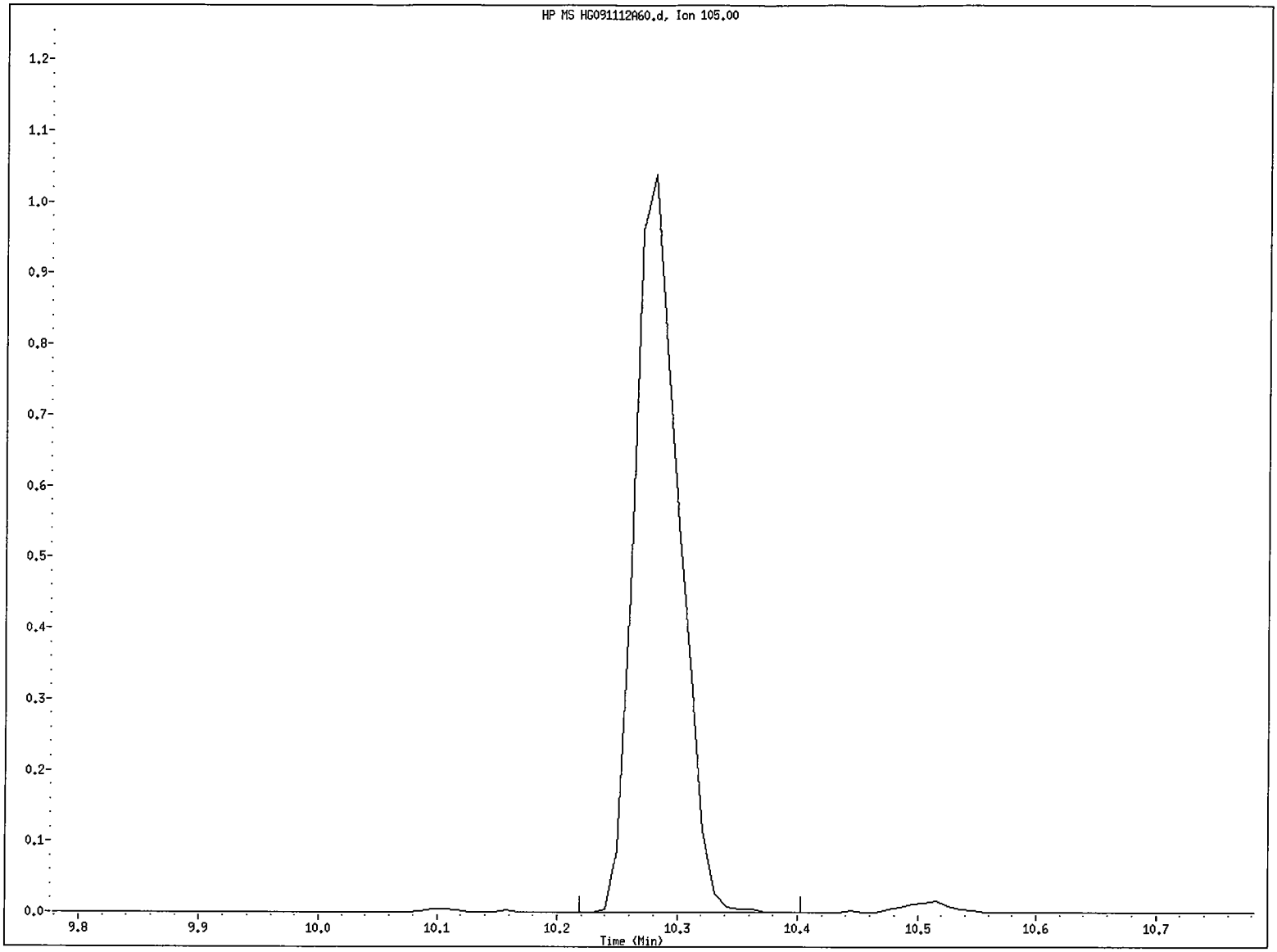
File name: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 19.56
Operator ID: 2650

Nitrosomethylethylamine CAS Number 10595-95-6 Area = 81071 Manually integrated



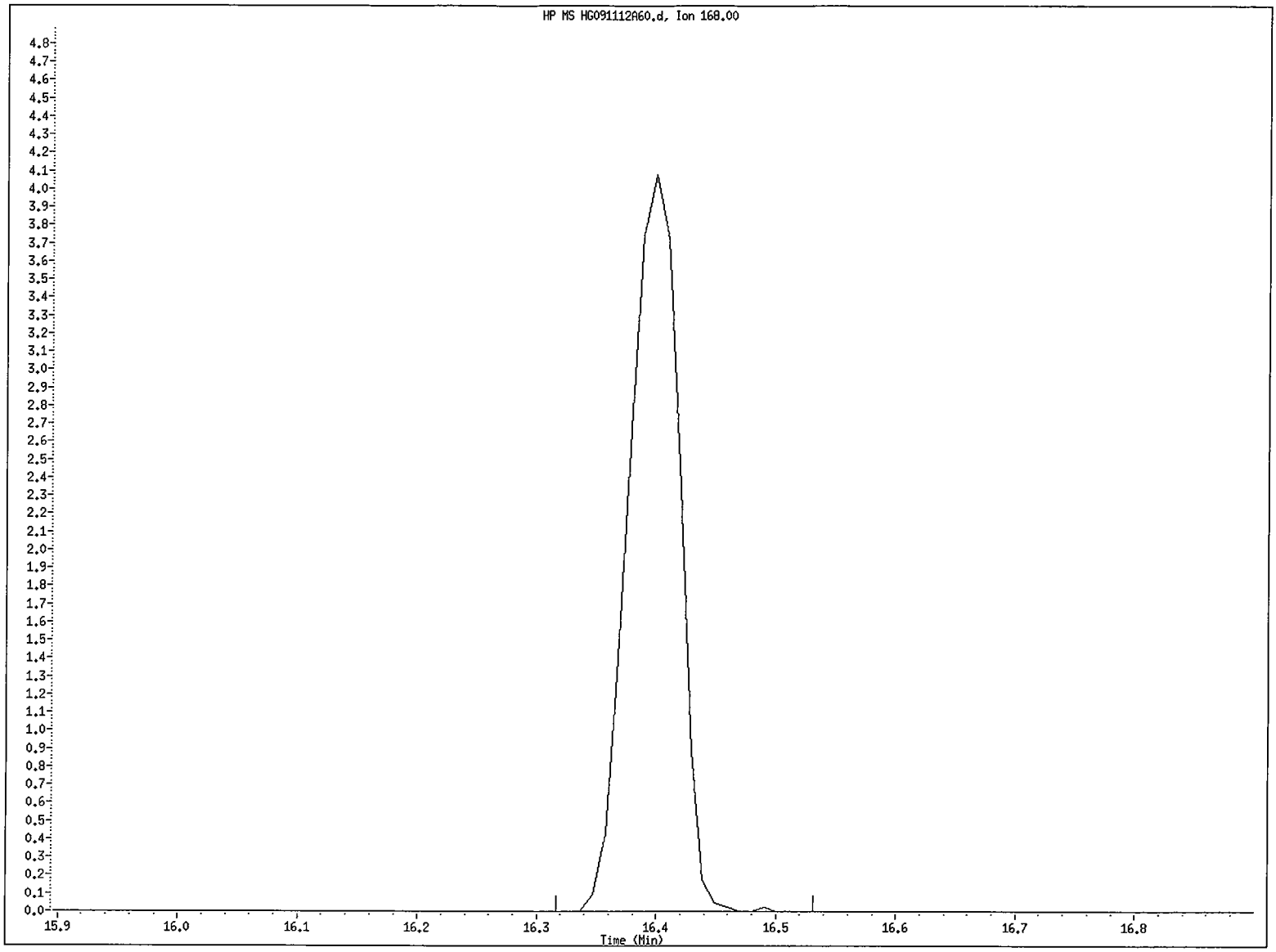
File name: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 4.89
Operator ID: 2650

Acetophenone CAS Number 98-86-2 Area = 266512 Manually integrated



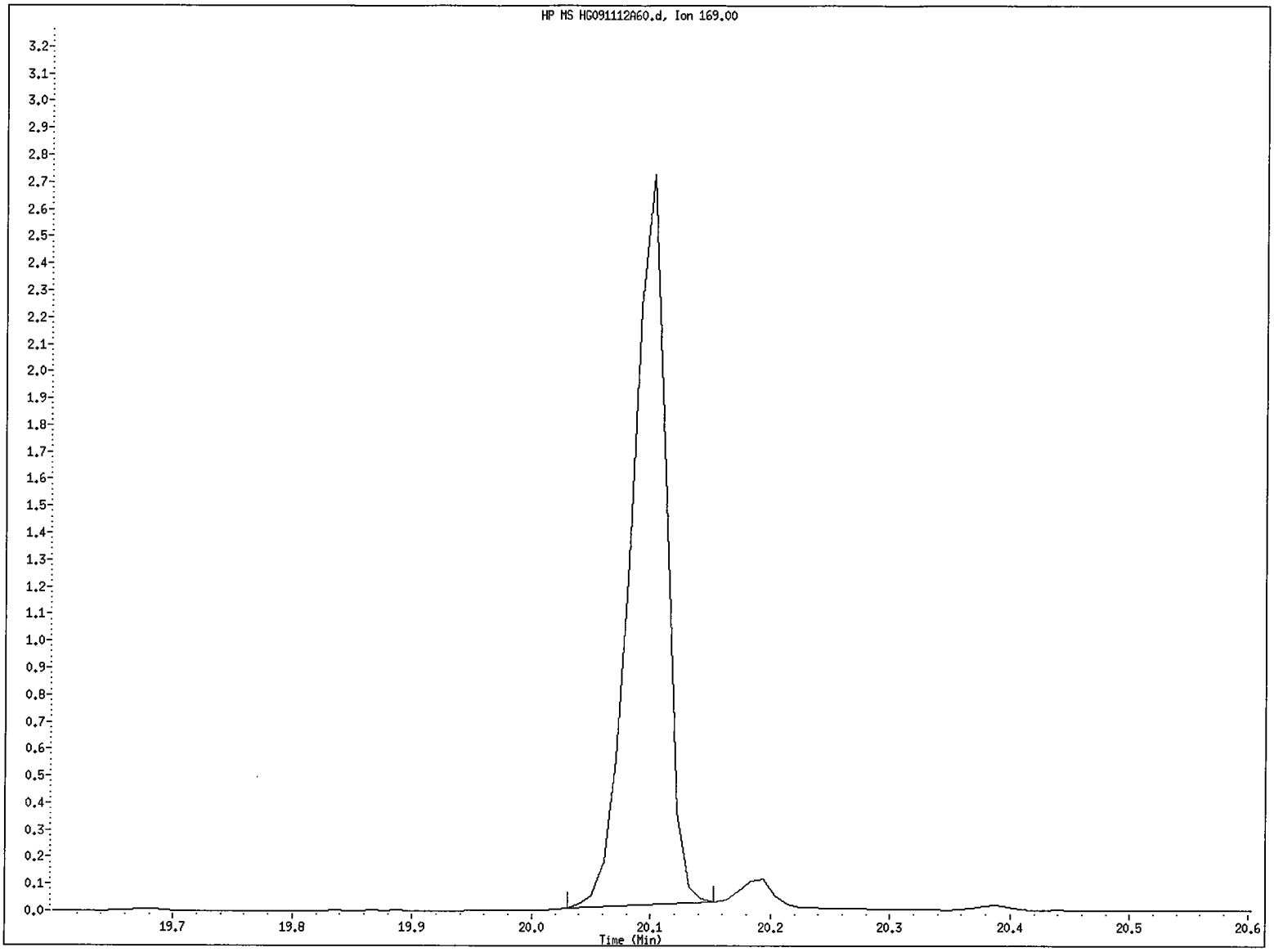
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Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 10.28
Operator ID: 2650

1,3-Dinitrobenzene CAS Number 99-65-0 Area = 121223 Manually integrated



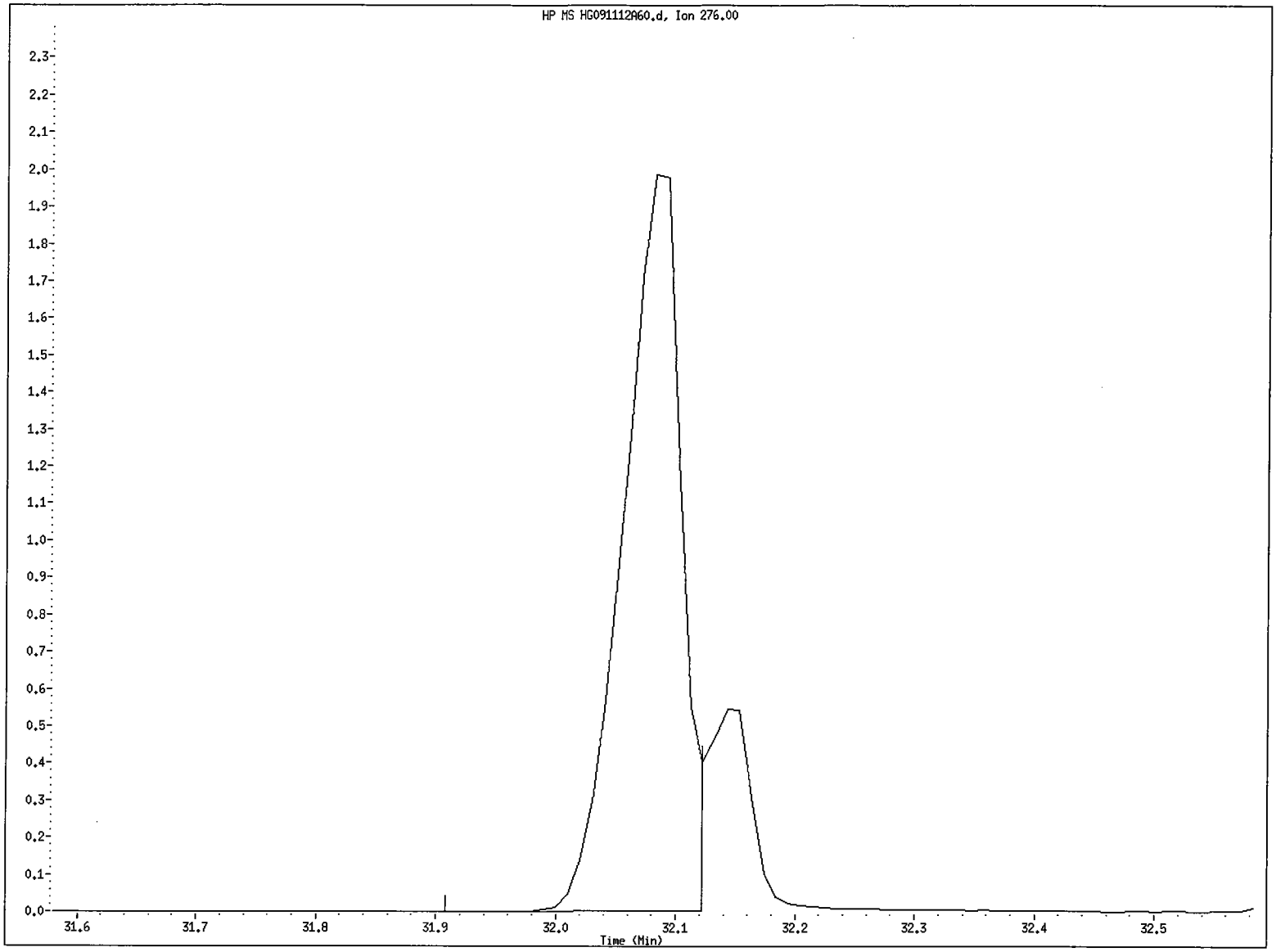
File name: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 16.40
Operator ID: 2650

4-Aminobiphenyl CAS Number 92-67-1 Area = 542529 Manually integrated



File name: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 20.10
Operator ID: 2650

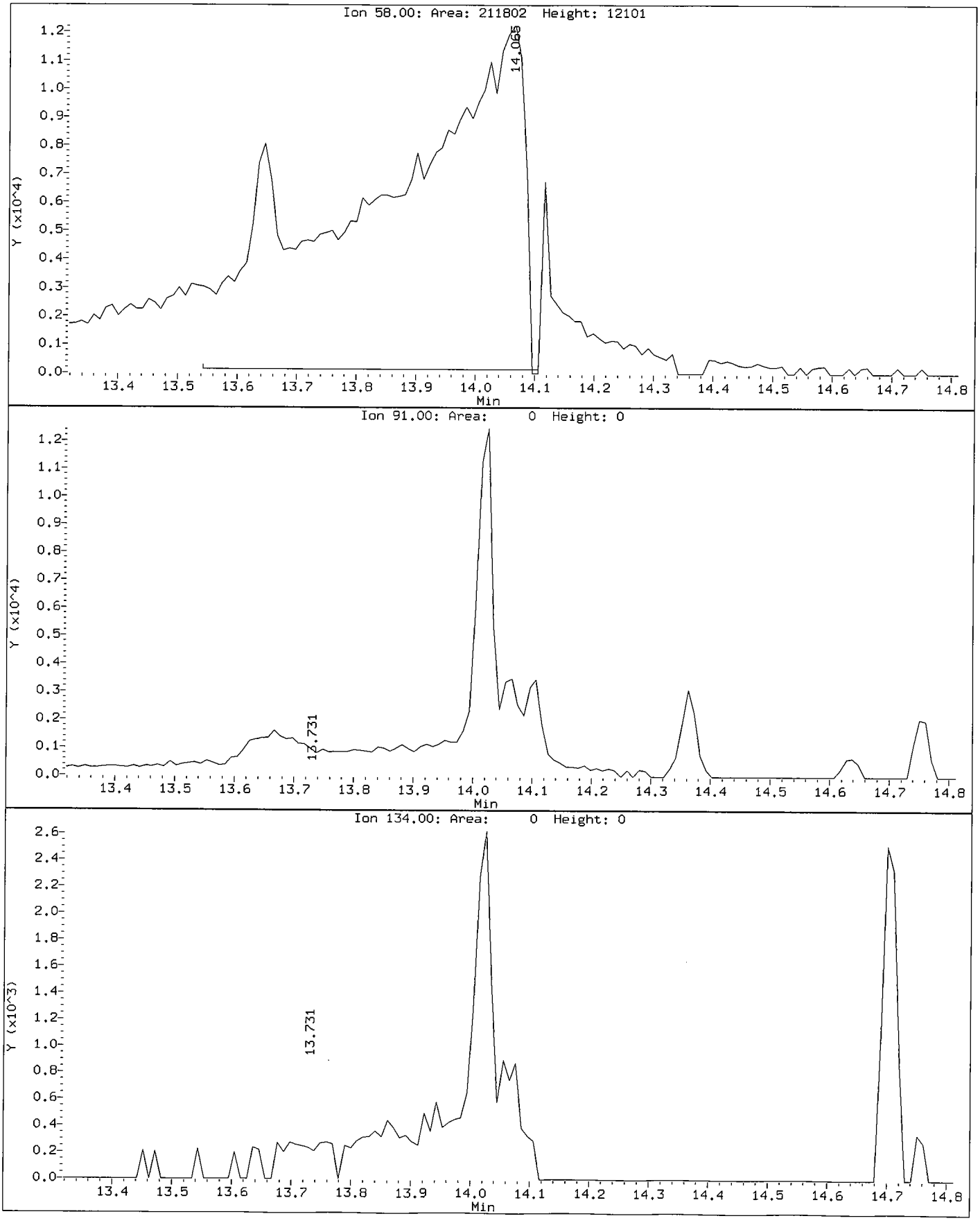
Indeno(1,2,3-c,d)pyrene CAS Number 193-39-5 Area = 679293 Manually integrated



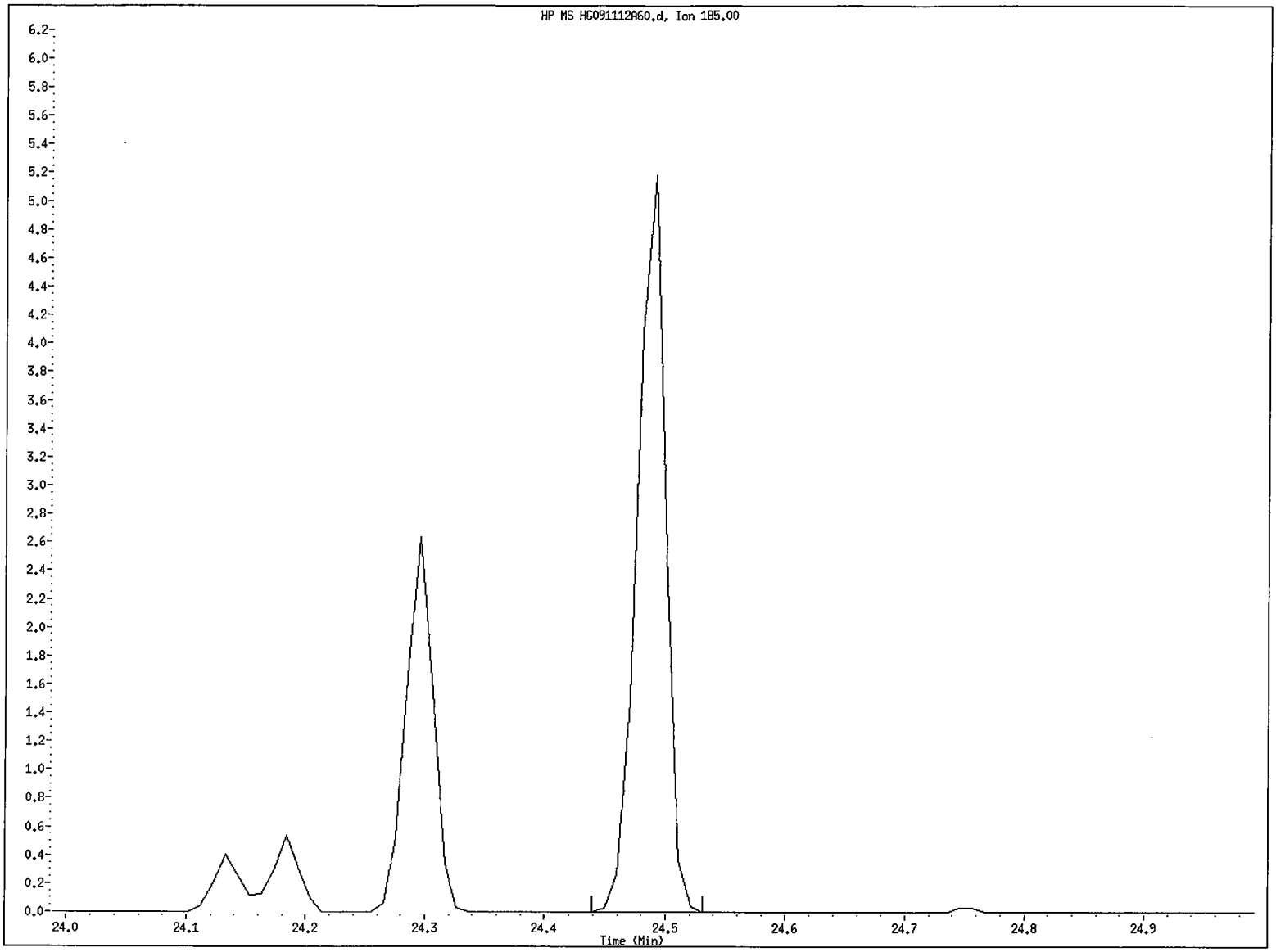
File name: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 32.08
Operator ID: 2650

Data File: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Injection Date: 12-NOV-2009 14:44
Instrument: 5972hp60.i
Client Sample ID: SSTD080

Compound: a,a-Dimethylphenethylamine
CAS Number: 122-09-8



Aramite CAS Number 140-57-8 Area = 84221 User selected hit



File name: /chem/5972hp60.i/DG091112A60.b/HG091112A60.d
Client ID: SSTD080
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 14:44
Retention Time: 24.49
Operator ID: 2650

COMPUCHEM a Division of Liberty Analytical Corp

GC/MS SEMIVOLATILE RUN LOG

COMPUCHEM LOGBOOK 4 V (4) 20 (5972hp60)

DATE 11/12/09 INITIAL TIME OF TUNE ~~1316~~ 1421 (TMP 11/12/09) SHIFT/S (A) ✓ (B) ____ (C) ____

TIME TUNE EXPIRES ~~0116 0221~~

METHOD: 625 8270C 8270D OLC03.2 OLM04.3 SOM01.2 (Circle One) or Other: API X SIM: (Y/N)

PREVENTIVE MAINTENANCE NONE

	SEQUENCE#	FILENAME		DATE	TIME (TMP 11/12/09)	CLIENT ID	SDG#	AMOUNT INJECTED	CHEMIST	COMMENTS
1		DF091112A60	✓	11/12/09	~~1316~~ 1421	DFTPP	—	3µL	2650	SCD=LC1
2		HG091112A60	✓	/ /	1444	SSTD050	—			Carbazole 61860 11/30/09
3		9102249-BLKA60	✓	/ /	1532	SBLKKV	0910165			
4		↓ BS	✓	/ /	1619	SKVLCS				
5		0910165-01	✓	/ /	1706	13MWS				
6		9102249-MS	✓	/ /	1754	SMS				
7		↓ MSD	✓	/ /	1841	SMSD				
8		0910165-02	✓	/ /	1929	1				
9		03	✓	/ /	2022	2				
10		04	✓	/ /	2112	3				
11		05	✓	/ /	2159	4				
12		06	✓	/ /	2247	DUP				
13		07	✓	/ ↓	2335	6				
14		08	✓	11/13/09	0022	7				
15				/ /						
16				/ /						
17				/ /						
18				/ /						
19				/ /						
20				/ /				B	11/13/09	
21				/ /						
22				/ /						
23				/ /						
24				/ /						

DFTPP Lot #/Exp. Date: 2655 62518 4/22/10

Calibration STD Lot#/Exp. Date: API X 62564 2/28/10

Internal STD Lot#/Exp. Date: 8270 625/7 4/21/10

Methylene Chloride Lot#/Exp. Date: H05402 3/31/10

Column Type: RTX-5MS 0.32m

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: B DATE 11/13/09

5/19/09: jr

4. Raw QC Data

   a. DFTPP/PFTBA Data

   b. Blank Data

   c. Laboratory Control Sample Data

   d. Matrix Spike Data

   e. Matrix Spike Duplicate Data

a. DFTPP/PFTBA Data

For each 12 hour period, per instrument utilized, include:

- Bar Graph spectrum and Tabulated Relative Abundances

- Mass listing

- Reconstructed ion chromatogram

- Tailing Factors for Benzidine and Pentachlorophenol

- Determination of DDT Breakdown

-PFTBA (FC-43) Scan

Data File: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d

Date : 11-NOV-2009 12:50

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:2650

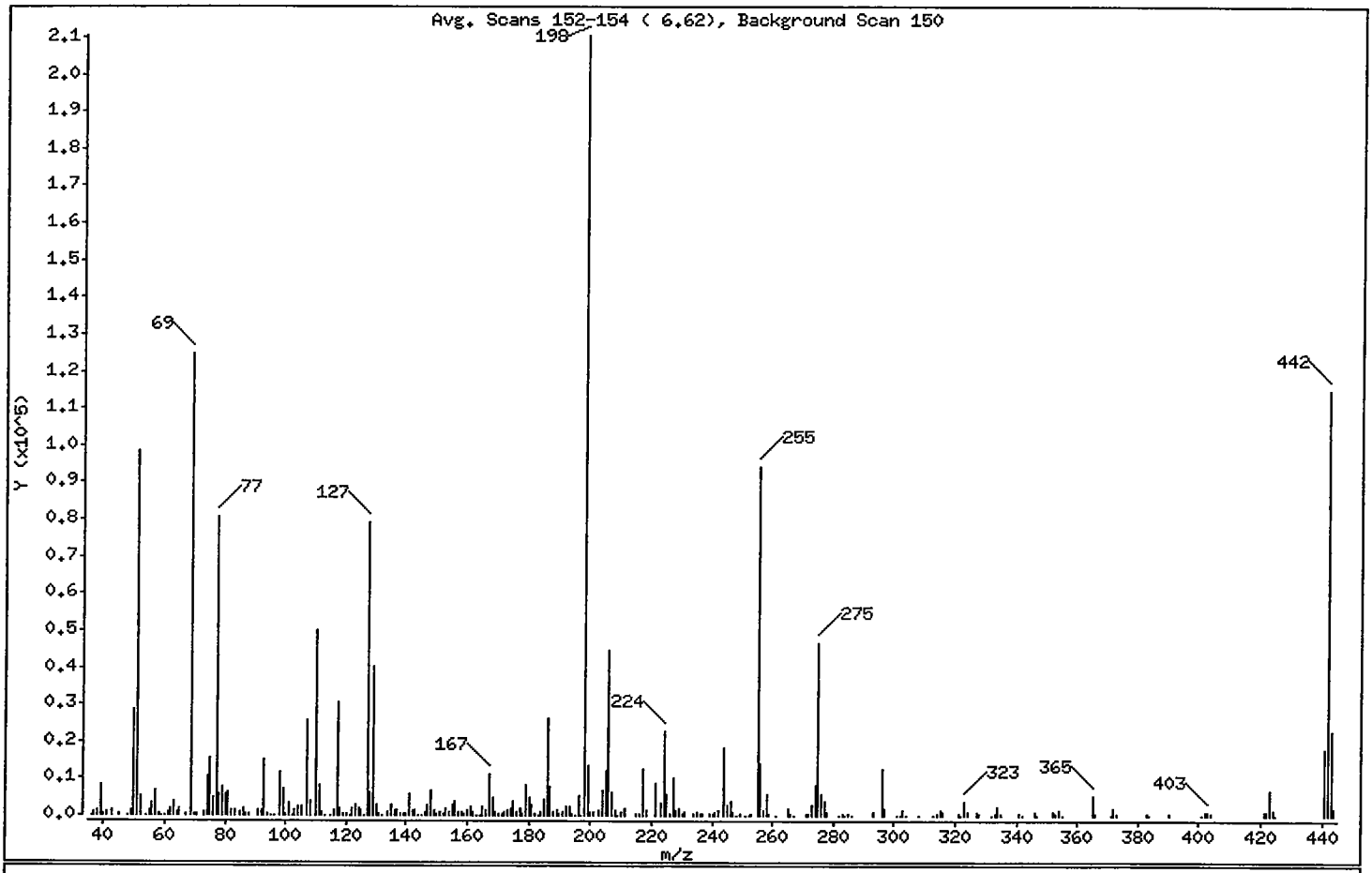
Volume Injected (uL): 2.0

Operator: 2650

Column phase: RTX-5MS

Column diameter: 0.32

1 Decafluorotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	46.71
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	59.20
70	Less than 2.00% of mass 69	0.34 (0.57)
127	25.00 - 75.00% of mass 198	37.62
197	Less than 1.00% of mass 198	0.07
199	5.00 - 9.00% of mass 198	6.55
275	10.00 - 30.00% of mass 198	22.04
365	Greater than 0.75% of mass 198	2.61
441	Present, but less than mass 443	8.43
442	40.00 - 110.00% of mass 198	54.68
443	15.00 - 24.00% of mass 442	10.79 (19.74)

Data File: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d

Date : 11-NOV-2009 12:50

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:2650

Volume Injected (uL): 2.0

Operator: 2650

Column phase: RTX-5MS

Column diameter: 0.32

Data File: DF091111A60.d

Spectrum: Avg. Scans 152-154 (6.62), Background Scan 150

Location of Maximum: 198.00

Number of points: 263

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	92	117.00	30536	184.00	917	267.00	169
37.00	1099	118.00	2026	185.00	4201	271.00	499
38.00	1556	119.00	373	186.00	26008	272.00	276
39.00	8310	120.00	541	187.00	7647	273.00	3131
40.00	585	121.00	167	188.00	966	274.00	8064
41.00	1190	122.00	1873	189.00	1560	275.00	46392
43.00	1330	123.00	2819	190.00	444	276.00	5943
45.00	434	124.00	1849	191.00	949	277.00	3981
48.00	55	125.00	1257	192.00	2389	278.00	740
49.00	1438	126.00	153	193.00	2597	282.00	170
50.00	28456	127.00	79176	194.00	483	283.00	421
51.00	98304	128.00	6413	195.00	156	284.00	205
52.00	5153	129.00	40232	196.00	5163	285.00	543
54.00	144	130.00	2936	197.00	155	286.00	142
55.00	1432	131.00	715	198.00	210432	293.00	852
56.00	3507	132.00	210	199.00	13789	296.00	12559
57.00	6971	134.00	1130	200.00	988	297.00	1787
58.00	531	135.00	3119	201.00	1069	301.00	164
59.00	16	136.00	1243	203.00	1485	302.00	147
60.00	61	137.00	1416	204.00	6579	303.00	1247
61.00	920	138.00	320	205.00	12157	304.00	171
62.00	1738	139.00	378	206.00	44824	308.00	140
63.00	3676	140.00	588	207.00	6110	313.00	222
64.00	1054	141.00	5686	208.00	1590	314.00	644
65.00	2002	142.00	1387	209.00	223	315.00	1469
67.00	339	143.00	1379	210.00	873	316.00	876
69.00	124600	144.00	216	211.00	1798	321.00	385
70.00	715	145.00	158	215.00	475	322.00	201
71.00	343	146.00	919	216.00	547	323.00	4013
73.00	941	147.00	3065	217.00	12418	324.00	880
74.00	10859	148.00	6865	218.00	1500	327.00	1000
75.00	15353	149.00	1494	221.00	8695	328.00	512
76.00	5035	150.00	245	223.00	3432	332.00	220
77.00	80728	151.00	772	224.00	22704	333.00	330
78.00	5659	152.00	499	225.00	5938	334.00	2250

Data File: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d

Date : 11-NOV-2009 12:50

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:2650

Volume Injected (uL): 2.0

Operator: 2650

Column phase: RTX-5MS

Column diameter: 0.32

Data File: DF091111A60.d

Spectrum: Avg. Scans 152-154 (6.62), Background Scan 150

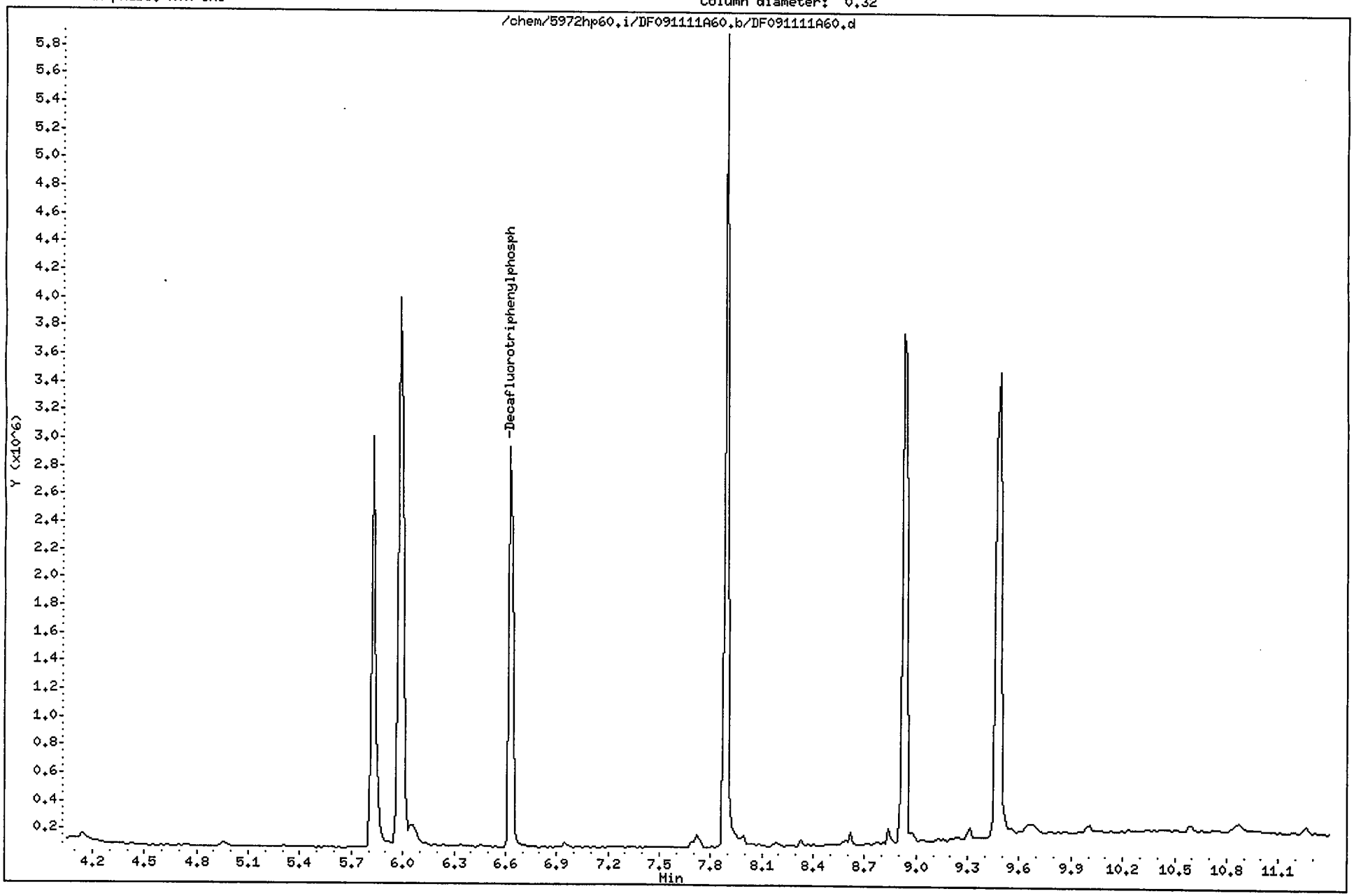
Location of Maximum: 198.00

Number of points: 263

m/z	Y	m/z	Y	m/z	Y	m/z	Y
79.00	7933	153.00	1718	226.00	405	335.00	714
80.00	5976	154.00	1001	227.00	10134	341.00	492
81.00	6542	155.00	2936	228.00	1492	342.00	138
82.00	1256	156.00	4030	229.00	1934	346.00	864
83.00	1536	157.00	998	230.00	354	347.00	138
85.00	918	158.00	876	231.00	779	352.00	1140
86.00	2123	159.00	645	234.00	532	353.00	718
87.00	705	160.00	1613	235.00	808	354.00	1481
88.00	266	161.00	2426	236.00	674	355.00	229
91.00	1291	162.00	801	237.00	634	365.00	5485
92.00	1652	163.00	137	239.00	606	366.00	648
93.00	15021	164.00	200	240.00	377	371.00	220
94.00	680	165.00	2530	241.00	761	372.00	2122
95.00	88	166.00	1593	242.00	1339	373.00	308
96.00	129	167.00	11078	244.00	18400	383.00	466
98.00	11529	168.00	5050	245.00	2783	384.00	168
99.00	7186	169.00	770	246.00	3700	390.00	244
100.00	564	170.00	597	247.00	859	401.00	214
101.00	3513	171.00	443	248.00	173	402.00	742
102.00	183	172.00	1073	249.00	522	403.00	1127
103.00	1548	173.00	1362	251.00	141	404.00	492
104.00	2350	174.00	2109	252.00	163	421.00	997
105.00	2266	175.00	3984	253.00	480	422.00	736
107.00	25616	176.00	1034	255.00	93928	423.00	6921
108.00	4023	177.00	2103	256.00	14261	424.00	1327
110.00	50096	178.00	453	257.00	1257	425.00	155
111.00	8188	179.00	8411	258.00	5919	441.00	17752
112.00	1117	180.00	4804	259.00	553	442.00	115080
113.00	237	181.00	2690	261.00	135	443.00	22712
115.00	59	182.00	592	265.00	2007	444.00	1875
116.00	1364	183.00	153	266.00	504		

Data File: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d
Date : 11-NOV-2009 12:50
Client ID: DFTPP
Sample Info: DFTPP:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



TAILING FACTOR and DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 80% of mass 198	46.71		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	59.20		PASS
70	Less than 2% of mass 69	0.34	(0.57)	PASS
127	25 - 75% of mass 198	37.62		PASS
197	0 - 1% of mass 198	0.07		PASS
199	5 - 9% of mass 198	6.55		PASS
275	10 - 30% of mass 198	22.04		PASS
365	Greater than 0.75% of mass 198	2.61		PASS
441	Present, but less than mass 443	8.43	(78.15)	PASS
442	40 - 110 % of mass 198	54.68		PASS
443	15 - 24% of mass 442	10.79	(19.74)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.9	5.0	PASS
Benzidine	0.0	3.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1264562			N/A
4,4-DDE	2186	0.2	20.0	PASS
4,4-DDD	11670	0.9	20.0	PASS
4,4-DDD + DDE	13856	1.1	20.0	PASS

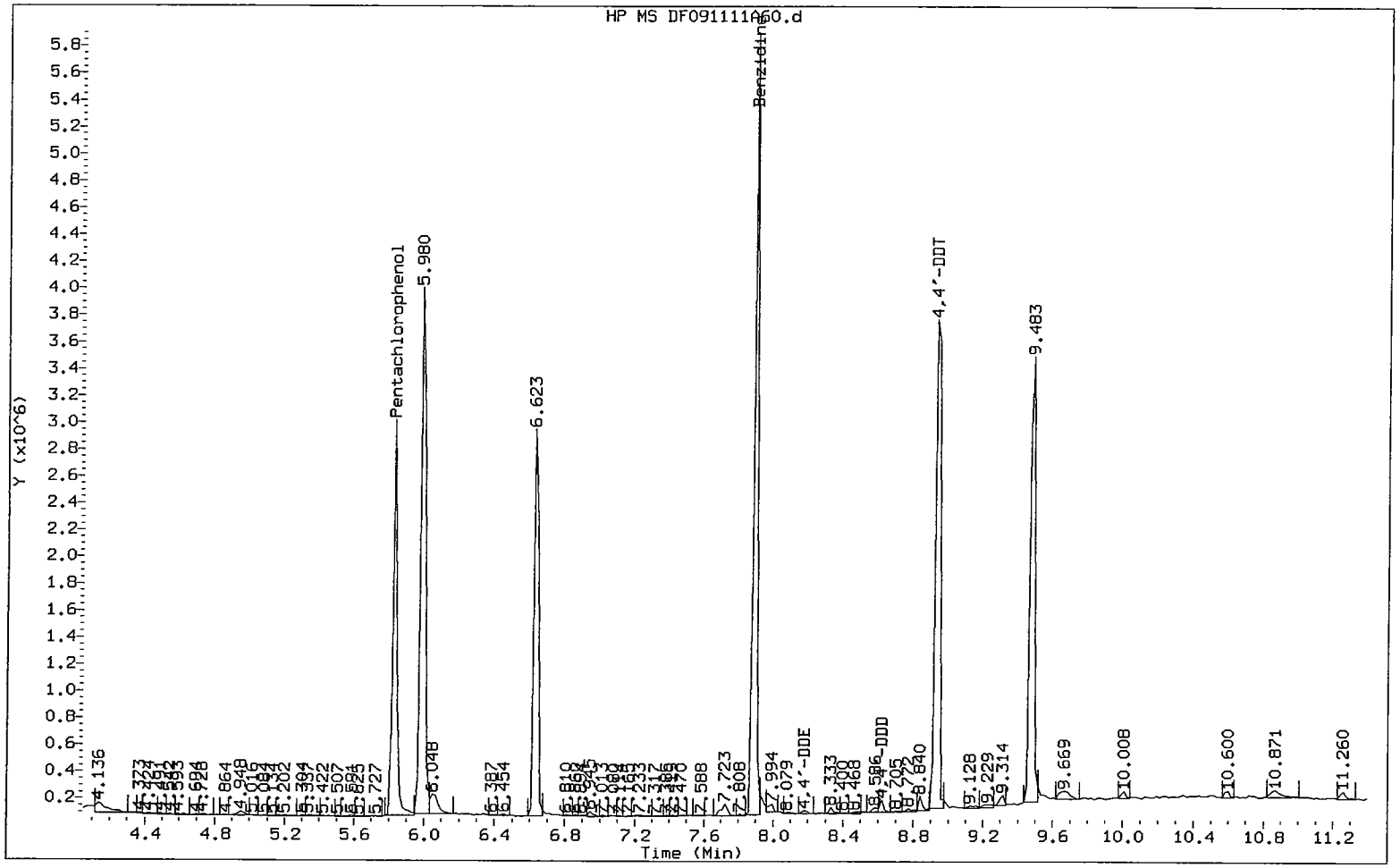
Tuning Sample, /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d

*** PASSED ***

TAILING FACTOR and DEGRADATION SAMPLE AND GRAPHIC REPORT

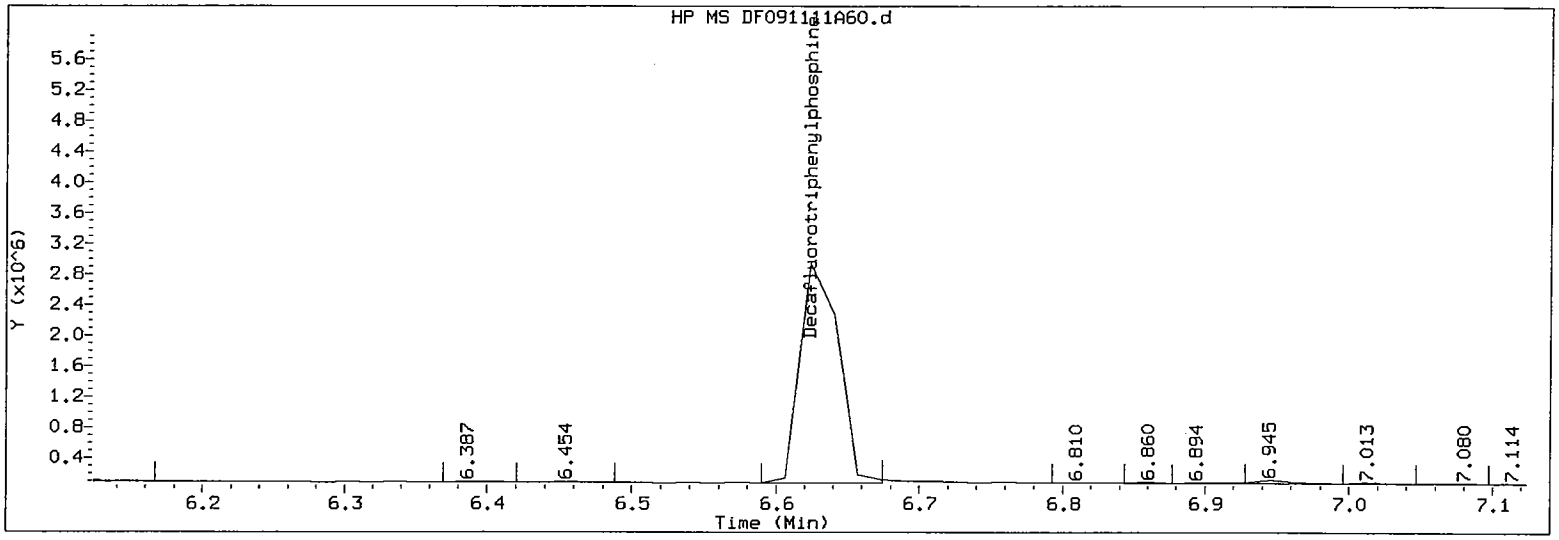
Report Date: 11/12/2009 07:41

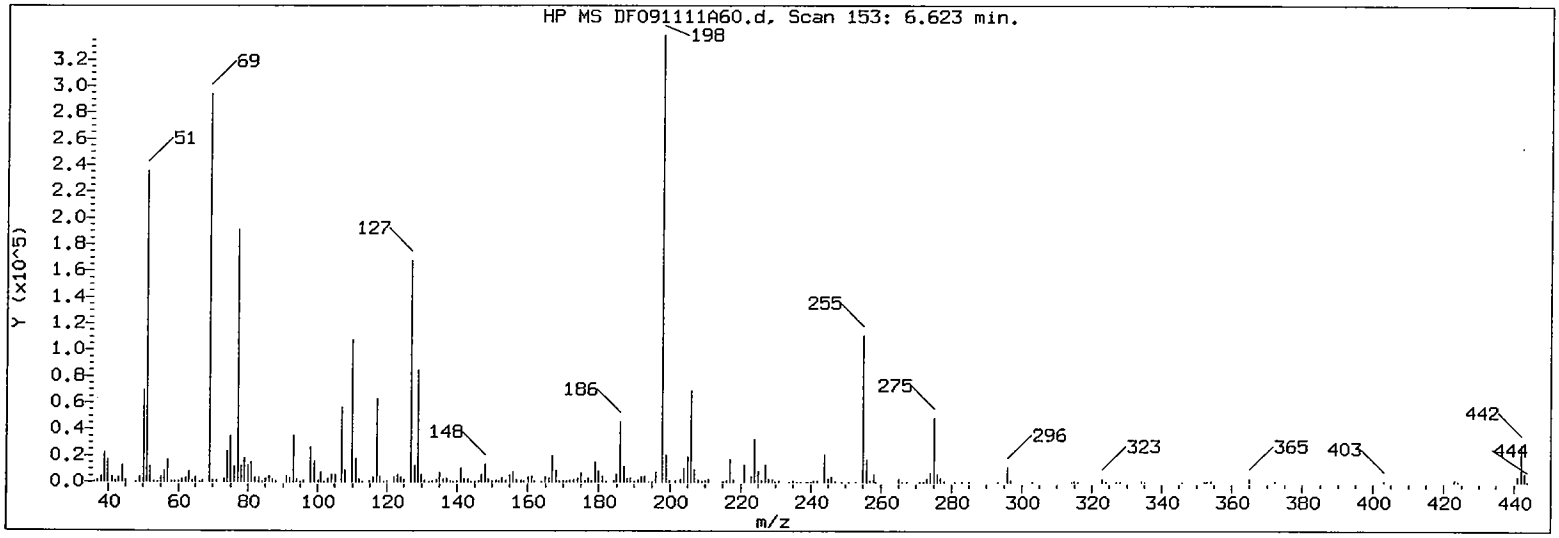
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Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m Inst: 5972hp60
Injection Date: 11-NOV-2009 12:50 Operator: 2650
Sample Info: DFTPP DFTPP:2650
Misc Info:



Report Date: 11/12/2009 07:41

Datafile Analyzed: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d
Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m Inst: 5972hp60
Injection Date: 11-NOV-2009 12:50 Operator: 2650
Sample Info: DFTPP DFTPP:2650
Misc Info:



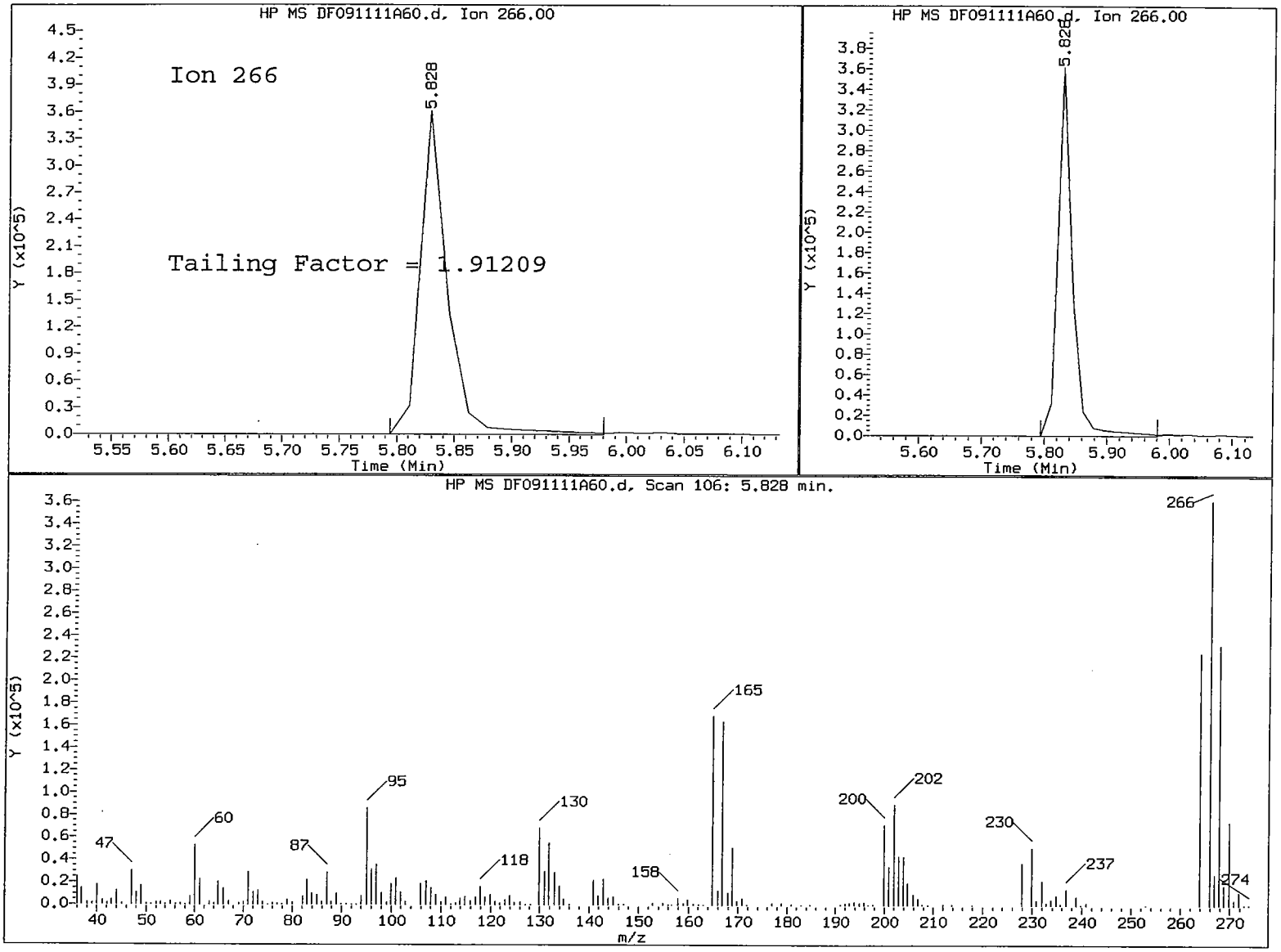


DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 80% of mass 198	46.71		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	59.20		PASS
70	Less than 2% of mass 69	0.34	(0.57)	PASS
127	25 - 75% of mass 198	37.62		PASS
197	0 - 1% of mass 198	0.07		PASS
199	5 - 9% of mass 198	6.55		PASS
275	10 - 30% of mass 198	22.04		PASS
365	Greater than 0.75% of mass 198	2.61		PASS
441	Present, but less than mass 443	8.43	(78.15)	PASS
442	40 - 110% of mass 198	54.68		PASS
443	15 - 24% of mass 442	10.79	(19.74)	PASS

Report Date: 11/12/2009 07:41

Datafile Analyzed: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d
Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 11-NOV-2009 12:50 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



Pentachlorophenol
==========

Exp. RT =	5.990
Found RT =	5.828

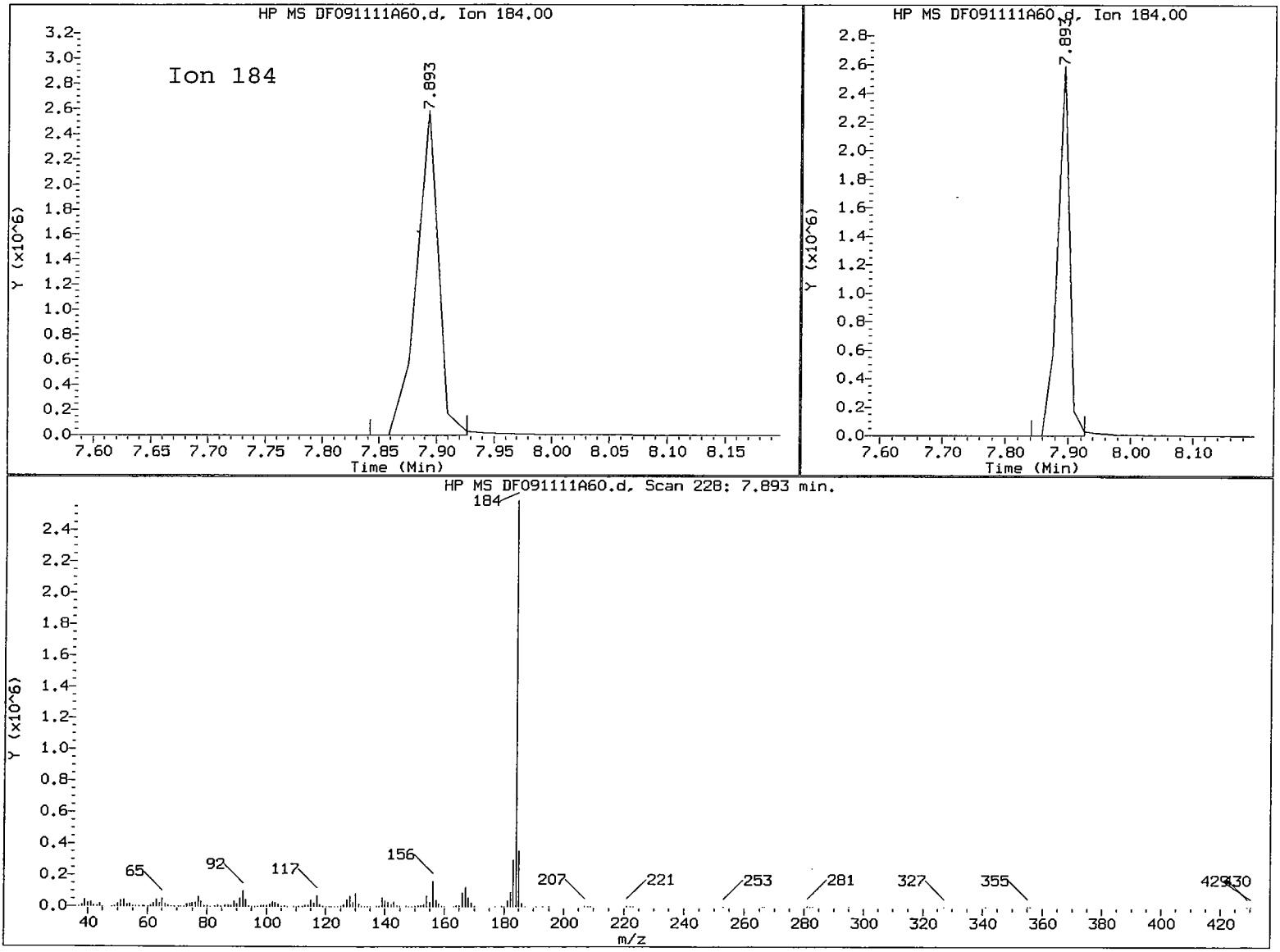
Mass	Area	Ratio
266	589793	100.00

Tailing factor for Pentachlorophenol OK

Tailing Factor = 1.9 Maximum Allowed = 5.0

Report Date: 11/12/2009 07:41

Datafile Analyzed: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d
Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 11-NOV-2009 12:50 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



Benzidine
=========
Exp. RT = 8.021
Found RT = 7.893

Mass	Area	Ratio
184	3416267	100.00

Tailing factor for Benzidine OK

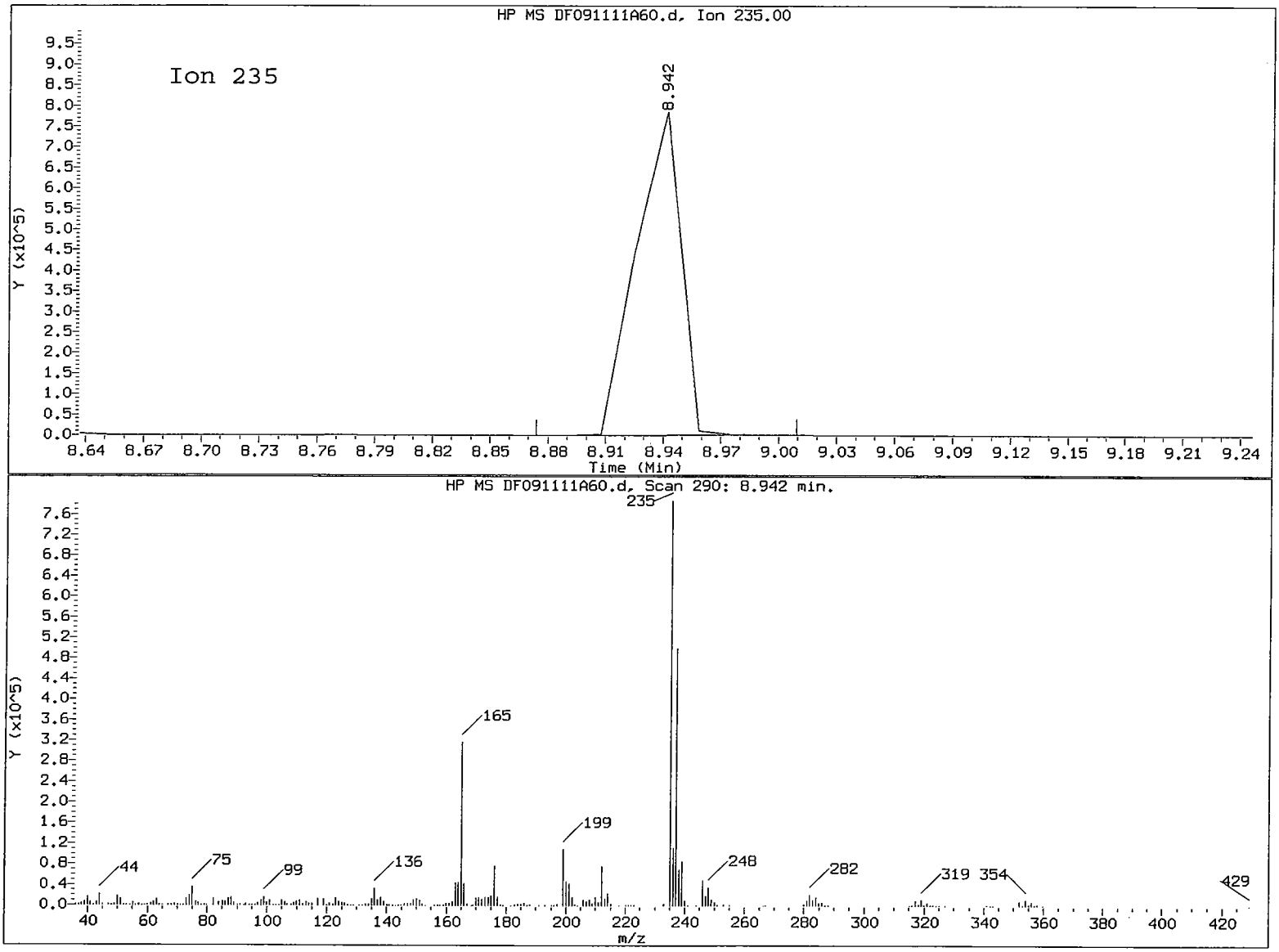
Tailing Factor = 0.0 Maximum Allowed = 3.0

If Tailing Factor < 1.0, then it is assumed that the peak is not tailing and a Tailing Factor of zero is reported.

Tailing Factor = 0.00000

Report Date: 11/12/2009 07:41

Datafile Analyzed: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d
Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 11-NOV-2009 12:50 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:

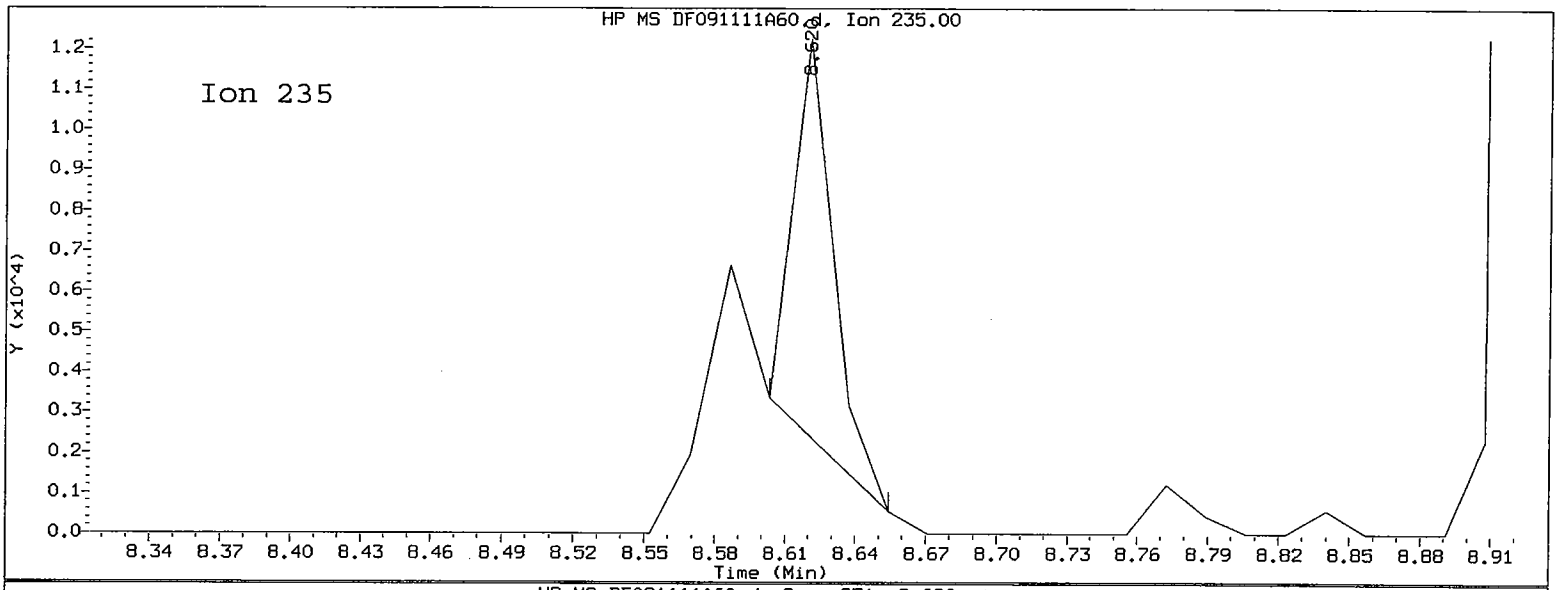


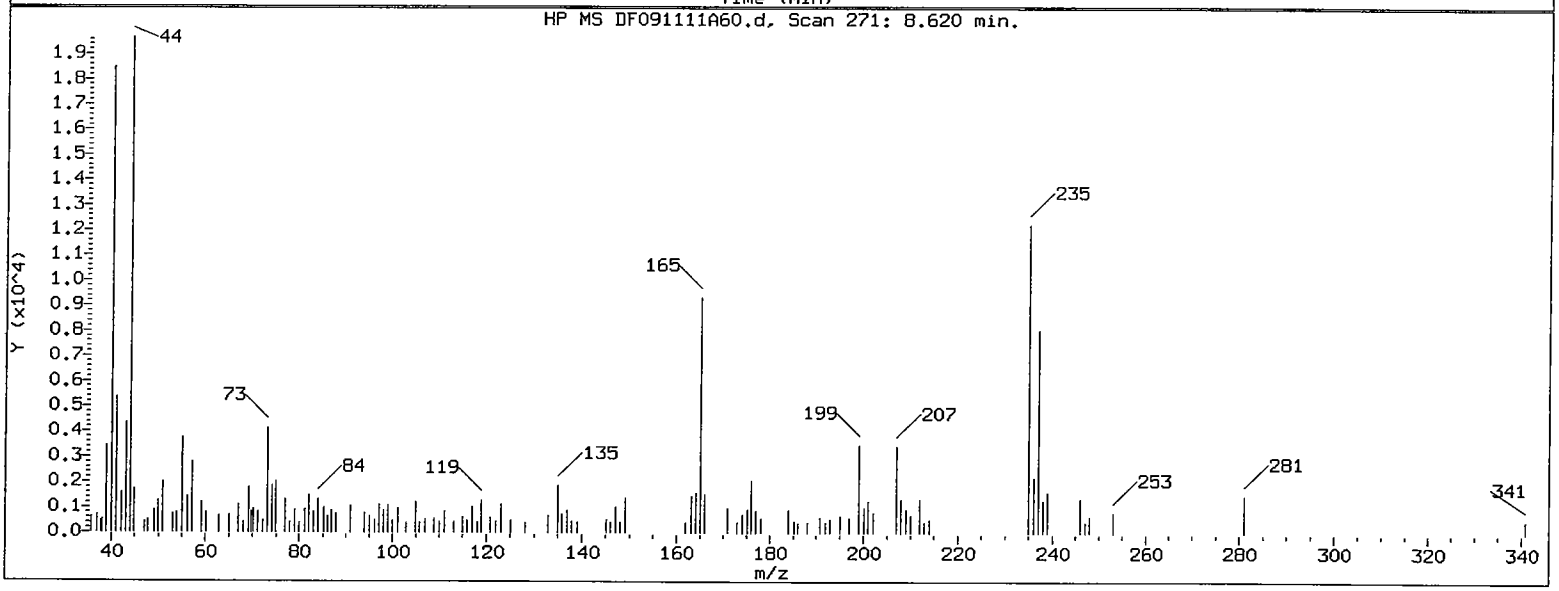
4,4'-DDT
========
Exp. RT = 9.594
Found RT = 8.942

Mass	Area	Ratio
235	1264562	100.00

Report Date: 11/12/2009 07:41

Datafile Analyzed: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d
Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 11-NOV-2009 12:50 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



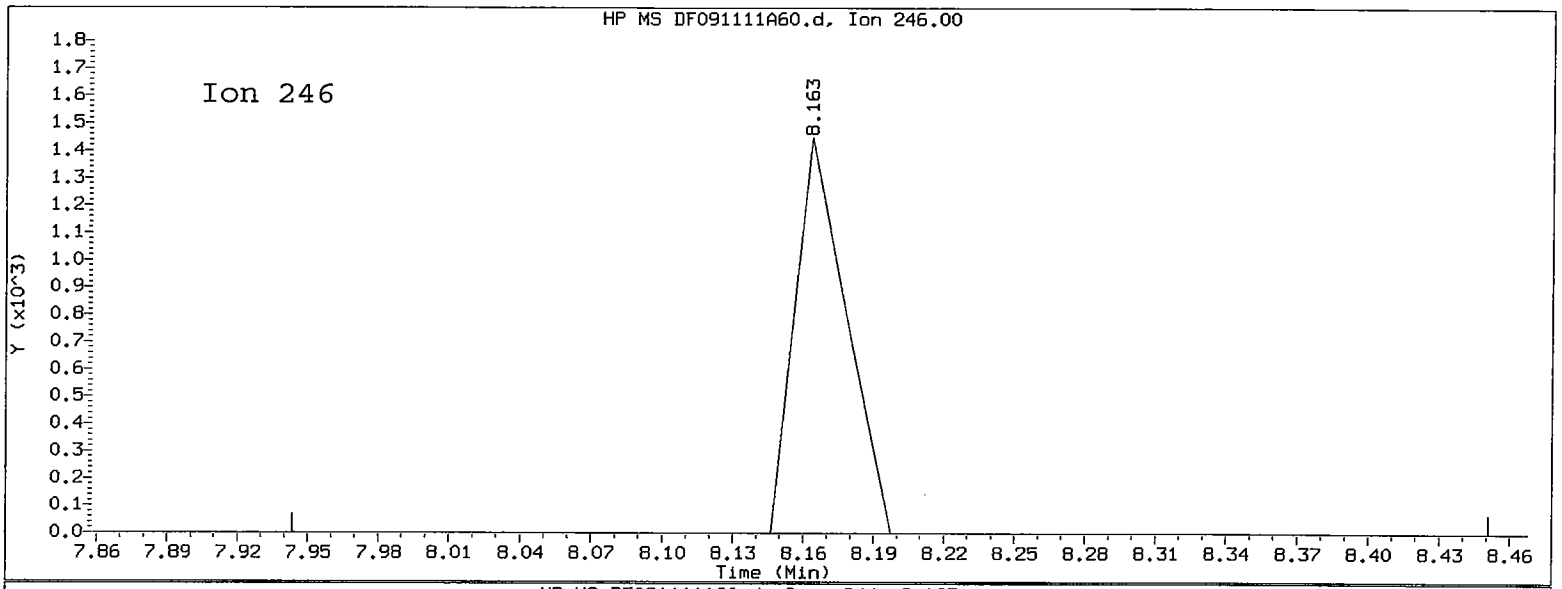


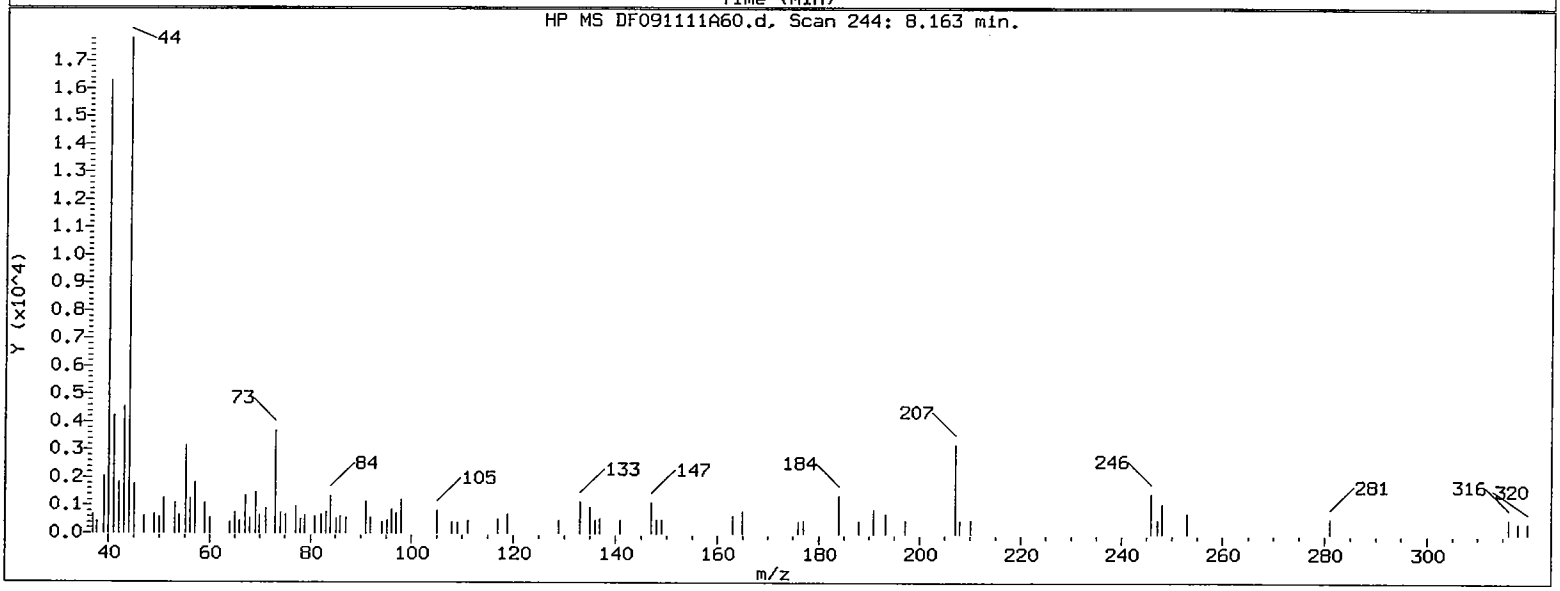
4,4'-DDD
========
Exp. RT = 9.289
Found RT = 8.620

Mass	Area	Ratio
235	11670	100.00

Report Date: 11/12/2009 07:41

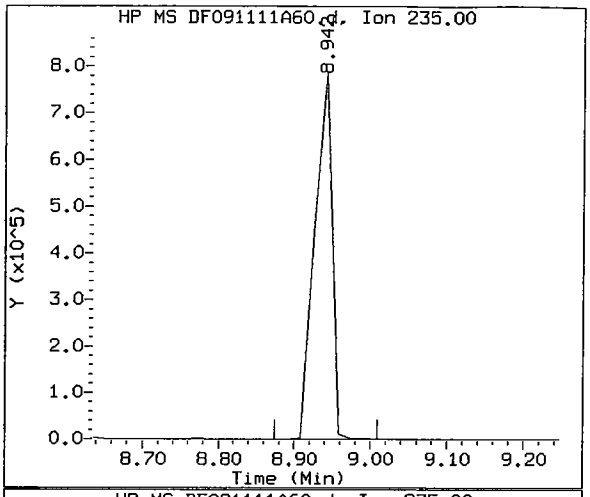
Datafile Analyzed: /chem/5972hp60.i/DF091111A60.b/DF091111A60.d/DF091111A60.d
Method Used: /chem/5972hp60.i/DF091111A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 11-NOV-2009 12:50 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



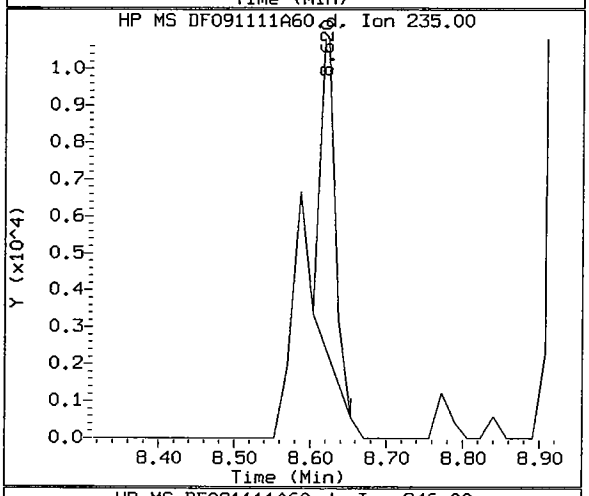


4,4'-DDE
========
 Exp. RT = 9.289
Found RT = 8.163

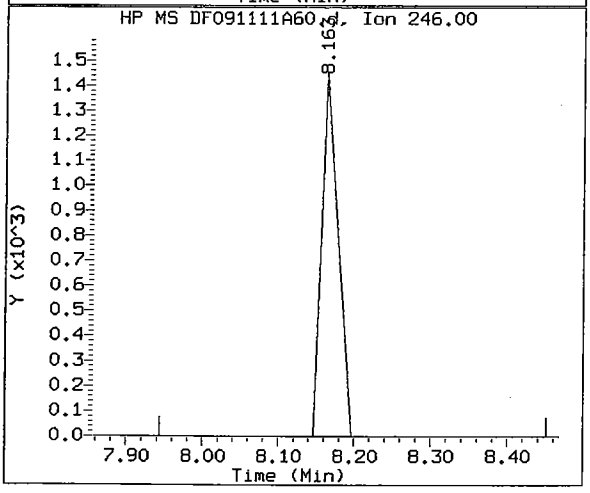
Mass	Area	Ratio
246	2186	100.00



Compound: 4,4'-DDT
Quant Mass: 235
RT: 8.942
Area: 1264562



Compound: 4,4'-DDD
Quant Mass: 235
RT: 8.620
Area: 11670



Compound: 4,4'-DDE
Quant Mass: 246
RT: 8.163
Area: 2186

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1264562			N/A
4,4-DDE	2186	0.2	20.0	PASS
4,4-DDD	11670	0.9	20.0	PASS
4,4-DDD + DDE	13856	1.1	20.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

Data File: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d

Date : 12-NOV-2009 14:21

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:2650

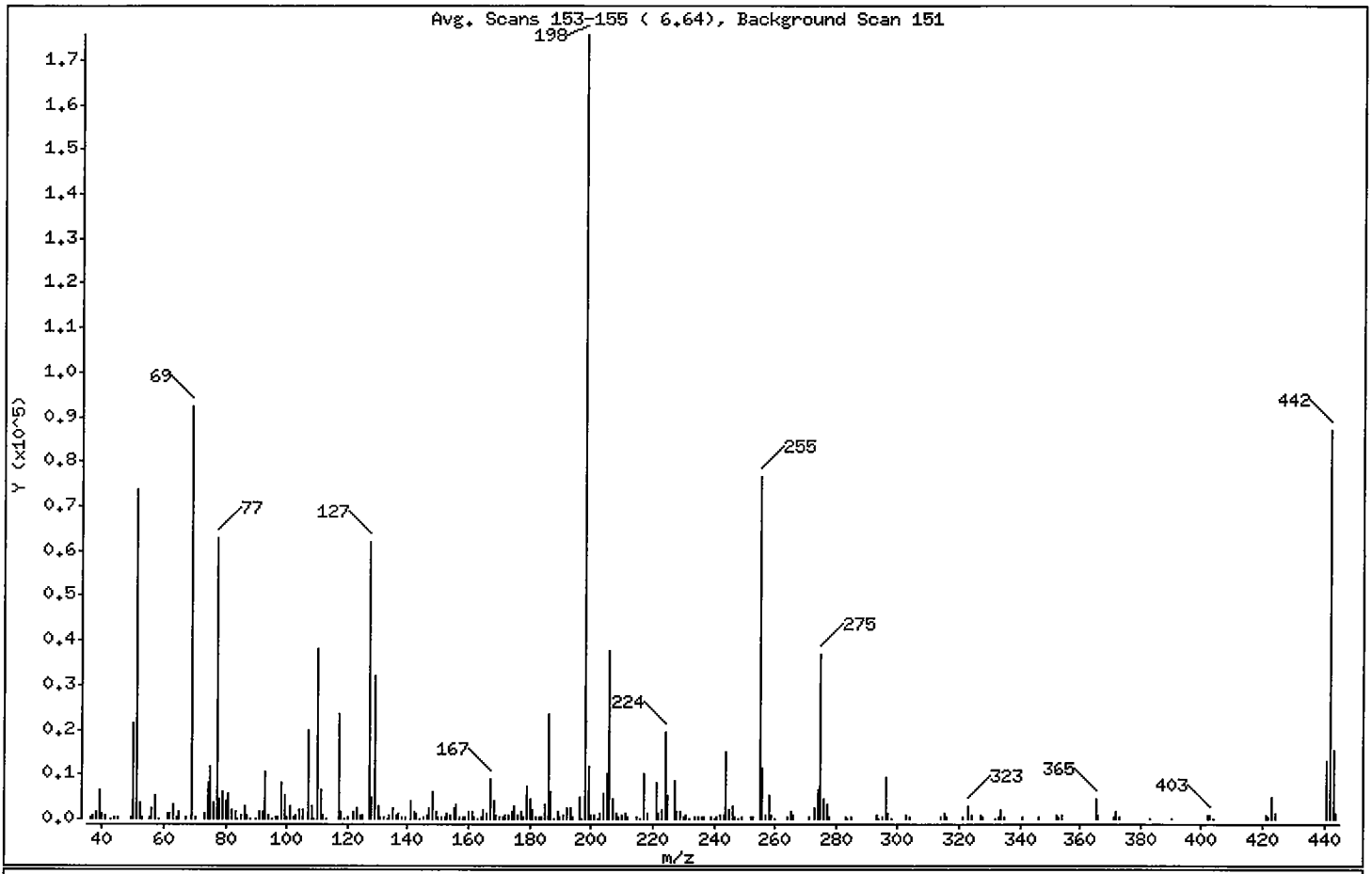
Volume Injected (uL): 2.0

Operator: 2650

Column phase: RTX-5MS

Column diameter: 0.32

1 Decafluorotriphenylphosphine



m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
51	30.00 - 80.00% of mass 198	41.93
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	52.54
70	Less than 2.00% of mass 69	0.15 (0.28)
127	25.00 - 75.00% of mass 198	35.32
197	Less than 1.00% of mass 198	0.10
199	5.00 - 9.00% of mass 198	6.61
275	10.00 - 30.00% of mass 198	20.89
365	Greater than 0.75% of mass 198	2.46
441	Present, but less than mass 443	7.32
442	40.00 - 110.00% of mass 198	49.59
443	15.00 - 24.00% of mass 442	8.81 (17.77)

Data File: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d

Date : 12-NOV-2009 14:21

Client ID: DFTPP

Instrument: 5972hp60.i

Sample Info: DFTPP:2650

Volume Injected (uL): 2.0

Operator: 2650

Column phase: RTX-5MS

Column diameter: 0.32

Data File: DF091112A60.d
Spectrum: Avg. Scans 153-155 (6.64), Background Scan 151
Location of Maximum: 198.00
Number of points: 251

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	407	112.00	826	181.00	1956	255.00	76328
37.00	993	113.00	188	182.00	380	256.00	11159
38.00	1725	117.00	23392	183.00	233	257.00	855
39.00	6551	118.00	1616	184.00	561	258.00	5160
40.00	1349	119.00	199	185.00	3160	259.00	800
41.00	674	120.00	227	186.00	23312	260.00	150
43.00	35	122.00	1739	187.00	6228	264.00	478
44.00	526	123.00	2264	188.00	157	265.00	1523
45.00	380	124.00	976	189.00	1513	266.00	627
49.00	506	125.00	935	190.00	263	271.00	539
50.00	21408	127.00	62024	191.00	668	273.00	2564
51.00	73632	128.00	4927	192.00	2361	274.00	6295
52.00	3765	129.00	31848	193.00	2498	275.00	36688
53.00	307	130.00	2698	194.00	456	276.00	4282
55.00	439	131.00	334	196.00	4845	277.00	3137
56.00	2389	132.00	239	197.00	182	278.00	513
57.00	5229	133.00	176	198.00	175616	283.00	273
58.00	170	134.00	628	199.00	11604	284.00	143
61.00	1027	135.00	2520	200.00	858	285.00	357
62.00	1139	136.00	935	201.00	783	293.00	624
63.00	3058	137.00	1408	202.00	66	294.00	141
64.00	422	138.00	230	203.00	1274	295.00	204
65.00	1624	139.00	222	204.00	5820	296.00	9457
67.00	345	141.00	4073	205.00	10304	297.00	1311
69.00	92280	142.00	1418	206.00	37496	298.00	145
70.00	261	143.00	1092	207.00	4483	303.00	988
73.00	1252	144.00	193	208.00	1309	304.00	310
74.00	8240	145.00	260	209.00	477	314.00	445
75.00	11706	146.00	744	210.00	675	315.00	1148
76.00	3494	147.00	2365	211.00	1372	316.00	469
77.00	62904	148.00	6006	212.00	226	321.00	224
78.00	4477	149.00	1584	215.00	437	323.00	2749
79.00	6090	150.00	226	216.00	147	324.00	608
80.00	3961	151.00	356	217.00	10110	327.00	678
81.00	5718	152.00	317	218.00	1395	328.00	211

Data File: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d

Date : 12-NOV-2009 14:21

Client ID: DFTPP Instrument: 5972hp60.i

Sample Info: DFTPP:2650

Volume Injected (uL): 2.0 Operator: 2650

Column phase: RTX-5MS Column diameter: 0.32

Data File: DF091112A60.d

Spectrum: Avg. Scans 153-155 (6.64), Background Scan 151

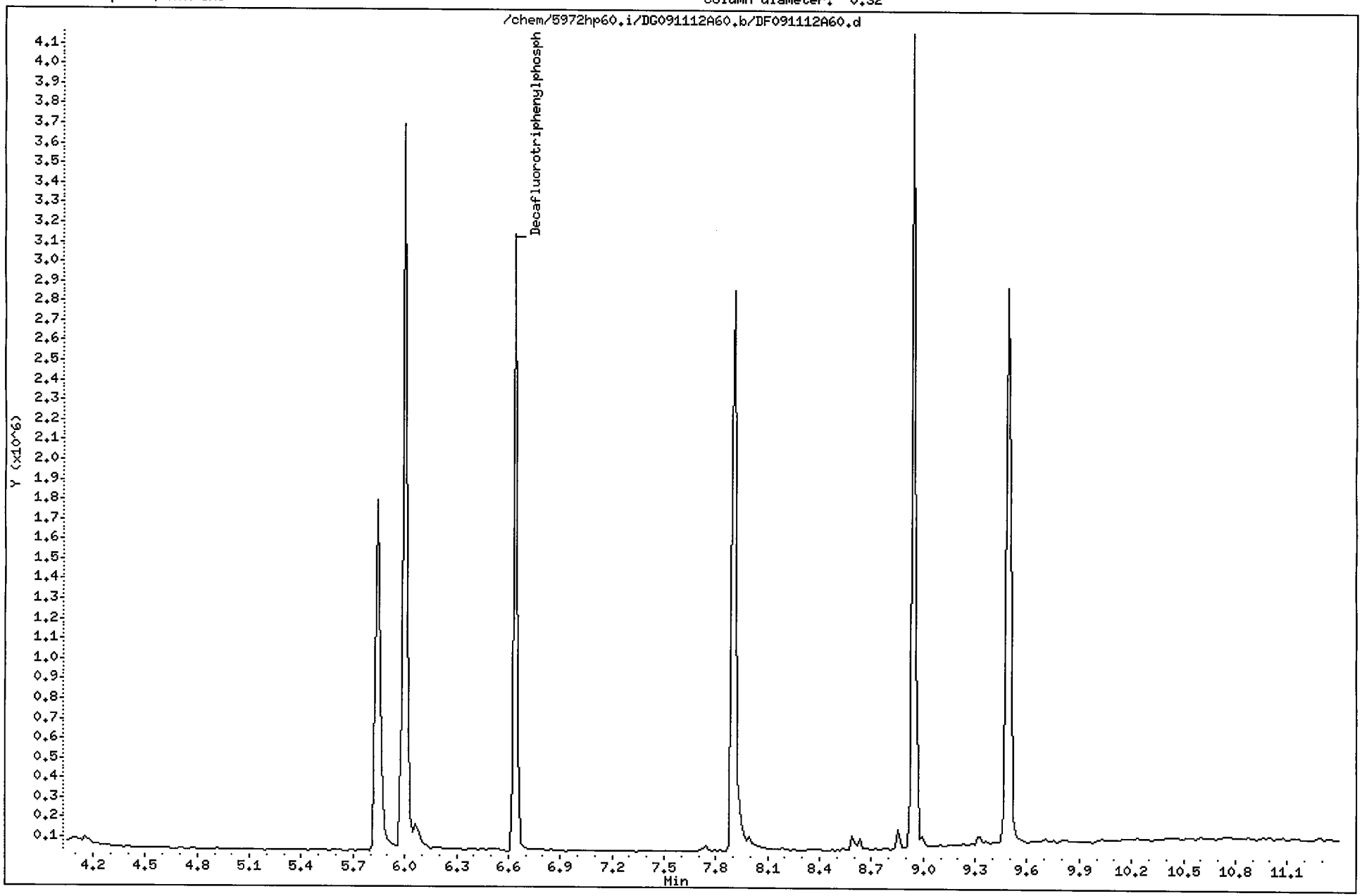
Location of Maximum: 198.00

Number of points: 251

m/z	Y	m/z	Y	m/z	Y	m/z	Y
82.00	1842	153.00	1293	221.00	8244	332.00	160
83.00	1508	154.00	645	222.00	1226	333.00	293
84.00	94	155.00	2579	223.00	2065	334.00	2217
85.00	974	156.00	3325	224.00	19592	335.00	484
86.00	2770	157.00	464	225.00	5060	341.00	449
87.00	688	158.00	556	227.00	8645	346.00	553
88.00	157	159.00	573	228.00	1475	352.00	880
90.00	134	160.00	1608	229.00	1566	353.00	559
91.00	1487	161.00	1779	230.00	277	354.00	796
92.00	1548	162.00	554	231.00	794	365.00	4312
93.00	10530	163.00	191	232.00	135	366.00	786
94.00	667	164.00	314	234.00	325	371.00	352
95.00	146	165.00	2211	235.00	465	372.00	1499
96.00	540	166.00	1060	236.00	403	373.00	322
97.00	235	167.00	8816	237.00	458	383.00	144
98.00	8112	168.00	4235	239.00	331	390.00	144
99.00	5448	169.00	609	240.00	190	402.00	689
100.00	433	170.00	309	241.00	417	403.00	693
101.00	2712	171.00	423	242.00	985	404.00	172
102.00	219	172.00	732	243.00	865	421.00	671
103.00	731	173.00	855	244.00	14892	422.00	604
104.00	2123	174.00	1766	245.00	1969	423.00	4772
105.00	2053	175.00	3023	246.00	2936	424.00	1097
107.00	19744	176.00	938	247.00	491	441.00	12850
108.00	2659	177.00	1593	248.00	167	442.00	87096
109.00	182	178.00	226	249.00	423	443.00	15474
110.00	38024	179.00	7087	252.00	537	444.00	1361
111.00	6628	180.00	4326	253.00	439		

Data File: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d
Date : 12-NOV-2009 14:21
Client ID: DFTPP
Sample Info: DFTPP:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



TAILING FACTOR and DEGRADATION SUMMARY RESULTS

DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 80% of mass 198	41.93		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	52.54		PASS
70	Less than 2% of mass 69	0.15	(0.28)	PASS
127	25 - 75% of mass 198	35.32		PASS
197	0 - 1% of mass 198	0.10		PASS
199	5 - 9% of mass 198	6.61		PASS
275	10 - 30% of mass 198	20.89		PASS
365	Greater than 0.75% of mass 198	2.46		PASS
441	Present, but less than mass 443	7.32	(83.04)	PASS
442	40 - 110 % of mass 198	49.59		PASS
443	15 - 24% of mass 442	8.81	(17.77)	PASS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.2	5.0	PASS
Benzidine	0.0	3.0	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	941696			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	15980	1.7	20.0	PASS
4,4-DDD + DDE	15980	1.7	20.0	PASS

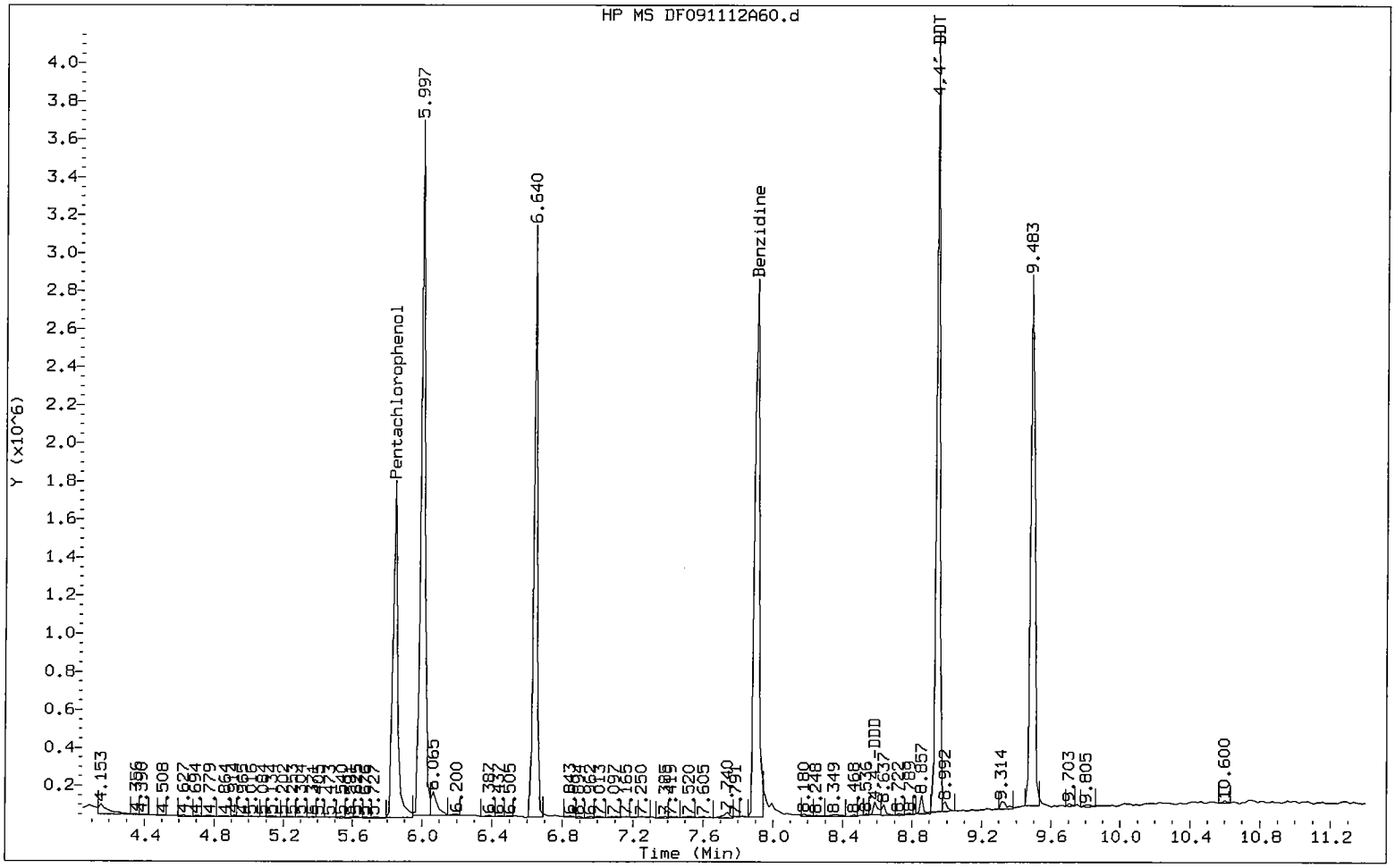
Tuning Sample, /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d

*** PASSED ***

TAILING FACTOR and DEGRADATION SAMPLE AND GRAPHIC REPORT

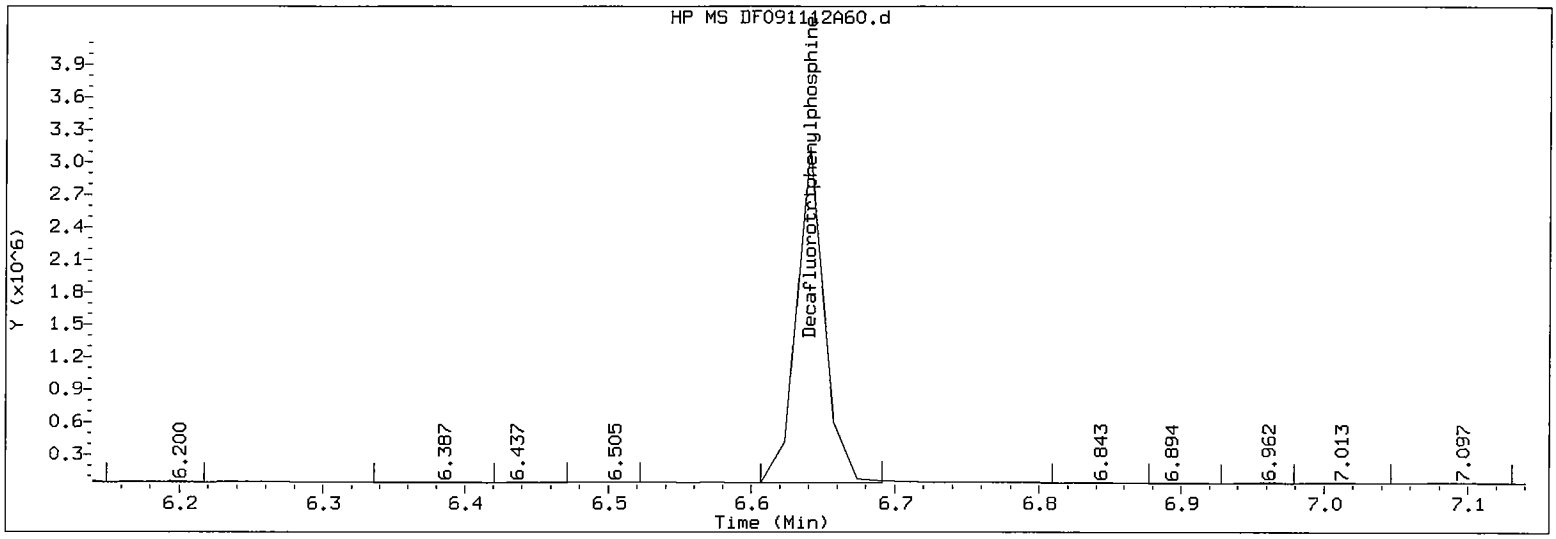
Report Date: 11/12/2009 15:26

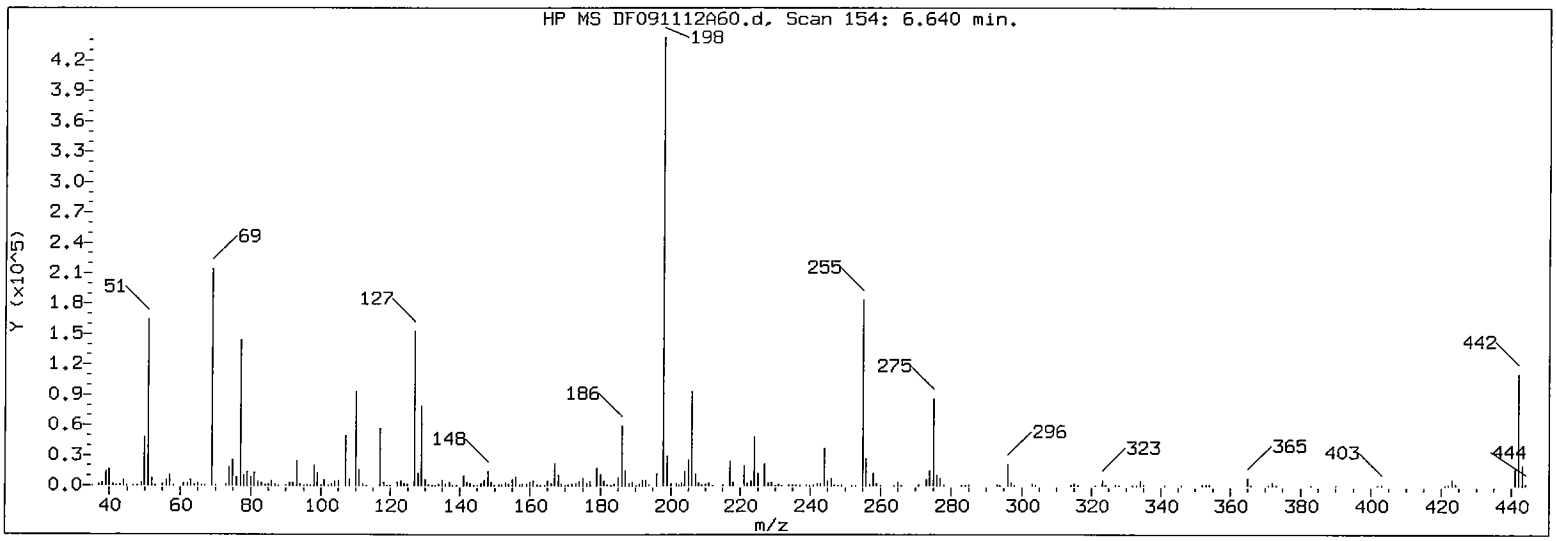
Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m Inst: 5972hp60
Injection Date: 12-NOV-2009 14:21 Operator: 2650
Sample Info: DFTPP DFTPP:2650
Misc Info:



Report Date: 11/12/2009 15:26

Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m Inst: 5972hp60
Injection Date: 12-NOV-2009 14:21 Operator: 2650
Sample Info: DFTPP DFTPP:2650
Misc Info:



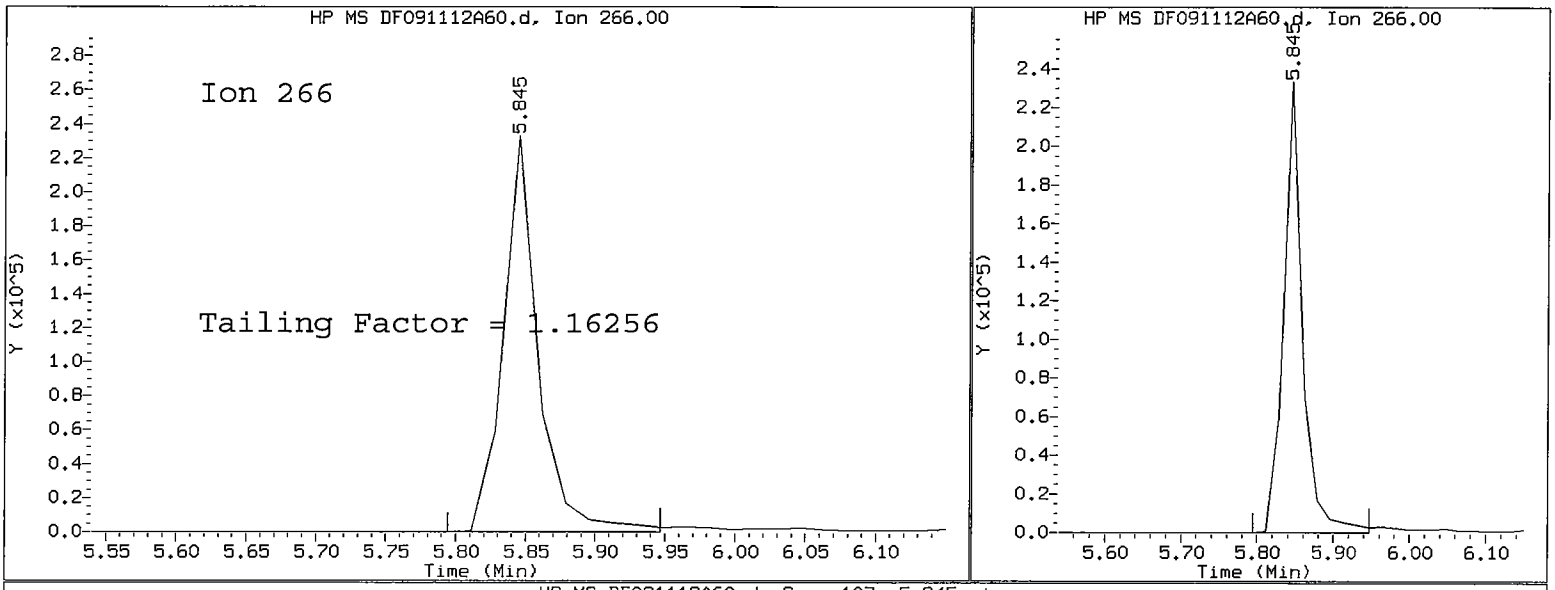


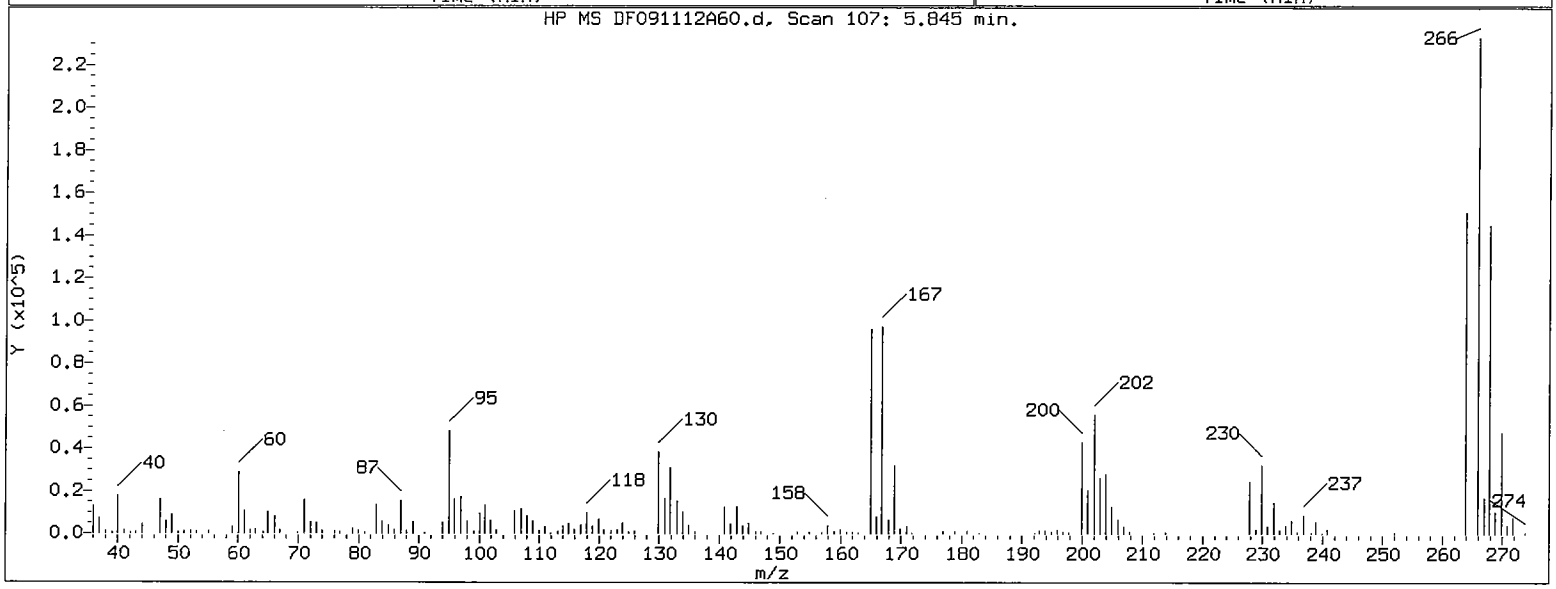
DECAFLUOROTRIPHENYLPHOSPHINE Ion Abundance/Ratio Criteria Chart

Ion	Abundance Criteria	Base Peak	Other	Test
198	Base Peak, 100% relative abundance	100.00		PASS
51	30 - 80% of mass 198	41.93		PASS
68	Less than 2% of mass 69	0.00	(0.00)	PASS
69	Mass 69 relative abundance	52.54		PASS
70	Less than 2% of mass 69	0.15	(0.28)	PASS
127	25 - 75% of mass 198	35.32		PASS
197	0 - 1% of mass 198	0.10		PASS
199	5 - 9% of mass 198	6.61		PASS
275	10 - 30% of mass 198	20.89		PASS
365	Greater than 0.75% of mass 198	2.46		PASS
441	Present, but less than mass 443	7.32	(83.04)	PASS
442	40 - 110% of mass 198	49.59		PASS
443	15 - 24% of mass 442	8.81	(17.77)	PASS

Report Date: 11/12/2009 15:26

Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-NOV-2009 14:21 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:





Pentachlorophenol
==========
Exp. RT = 5.990
Found RT = 5.845

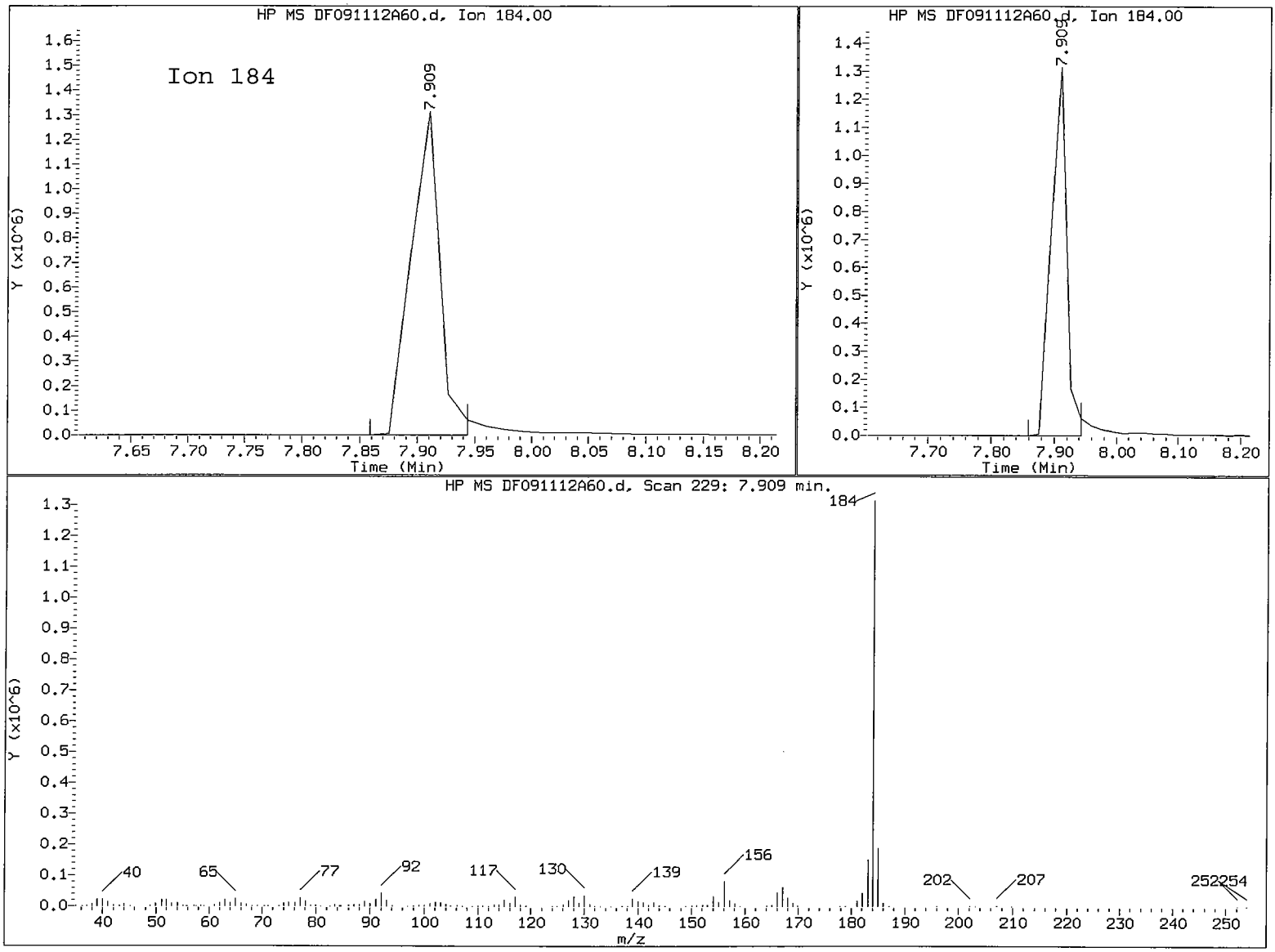
Mass	Area	Ratio
266	404381	100.00

Tailing factor for Pentachlorophenol OK

Tailing Factor = 1.2 Maximum Allowed = 5.0

Report Date: 11/12/2009 15:26

Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-NOV-2009 14:21 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



Benzidine
=========
Exp. RT = 8.021
Found RT = 7.909

Mass	Area	Ratio
184	2280451	100.00

Tailing factor for Benzidine OK

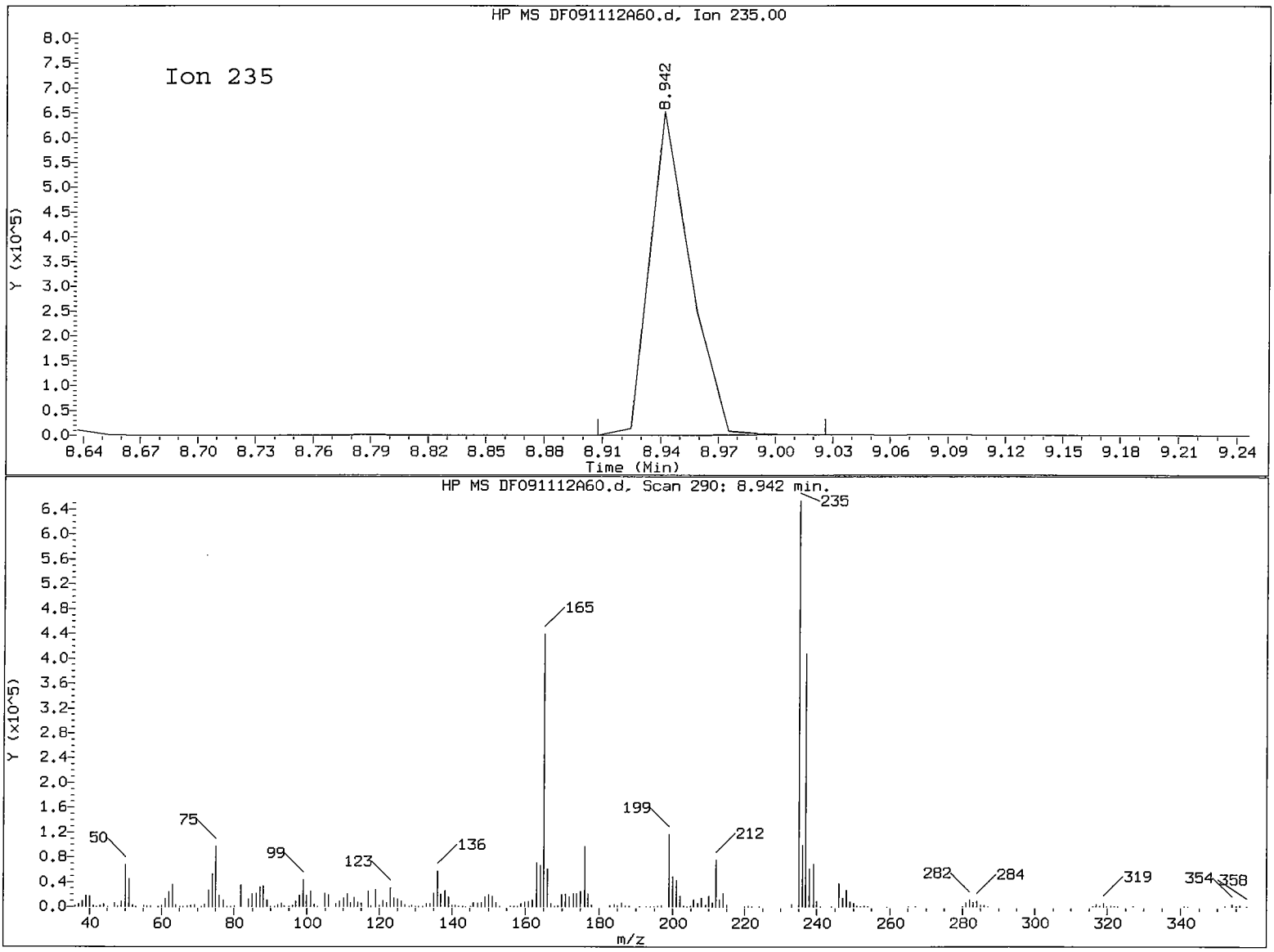
Tailing Factor = 0.0 Maximum Allowed = 3.0

If Tailing Factor < 1.0, then it is assumed that the peak is not tailing and a Tailing Factor of zero is reported.

```
Tailing Factor = 0.00000
```

Report Date: 11/12/2009 15:26

Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-NOV-2009 14:21 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:

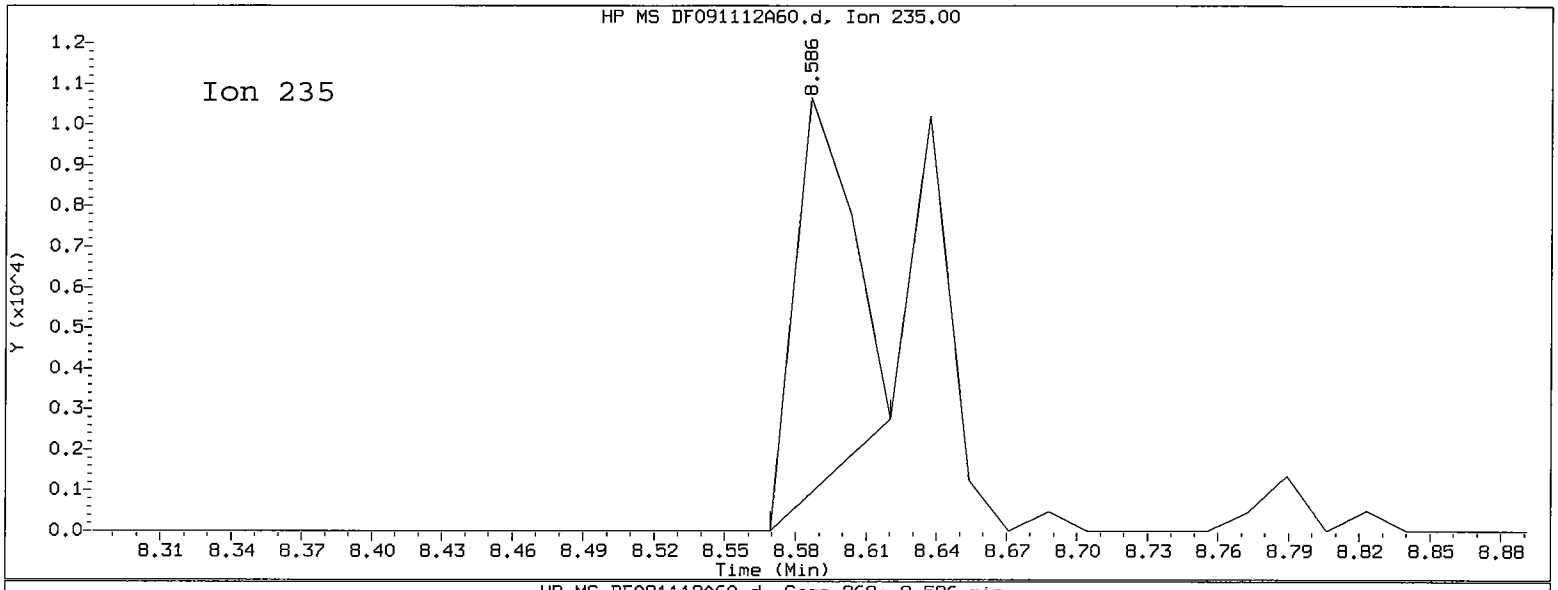


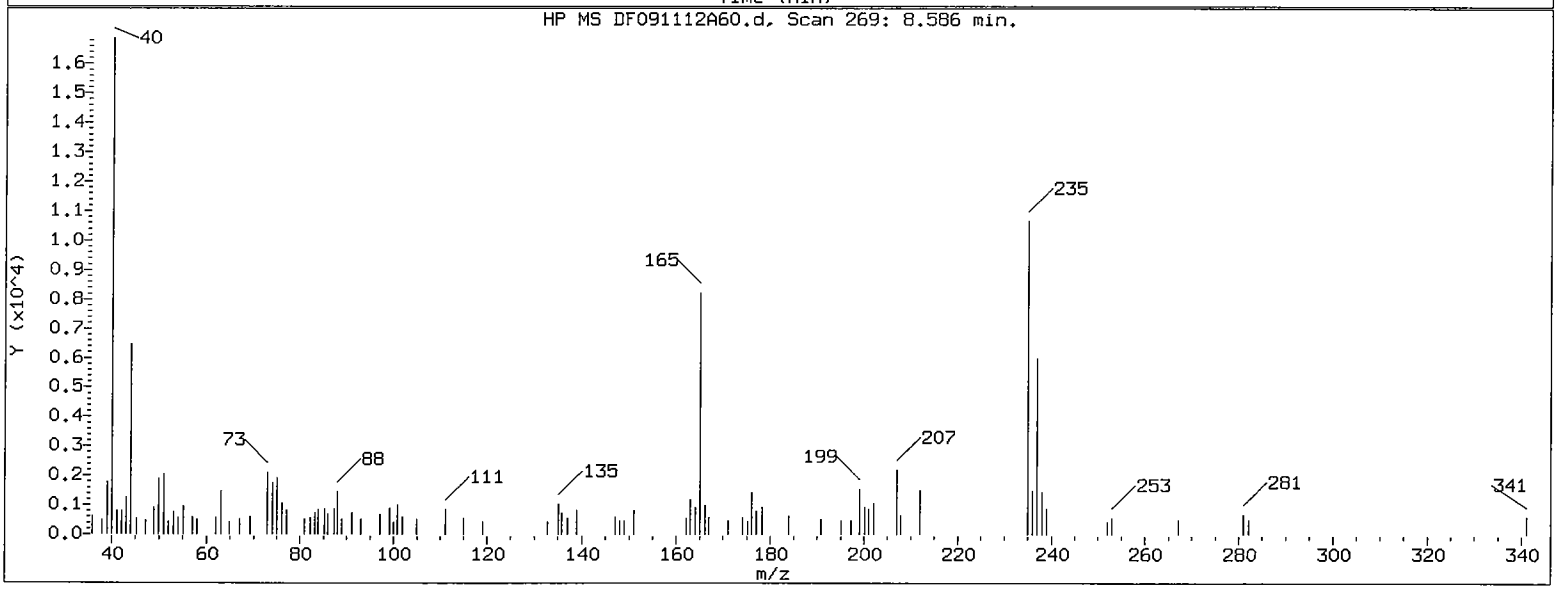
4,4'-DDT
========
Exp. RT = 9.594
Found RT = 8.942

Mass	Area	Ratio
235	941696	100.00

Report Date: 11/12/2009 15:26

Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-NOV-2009 14:21 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



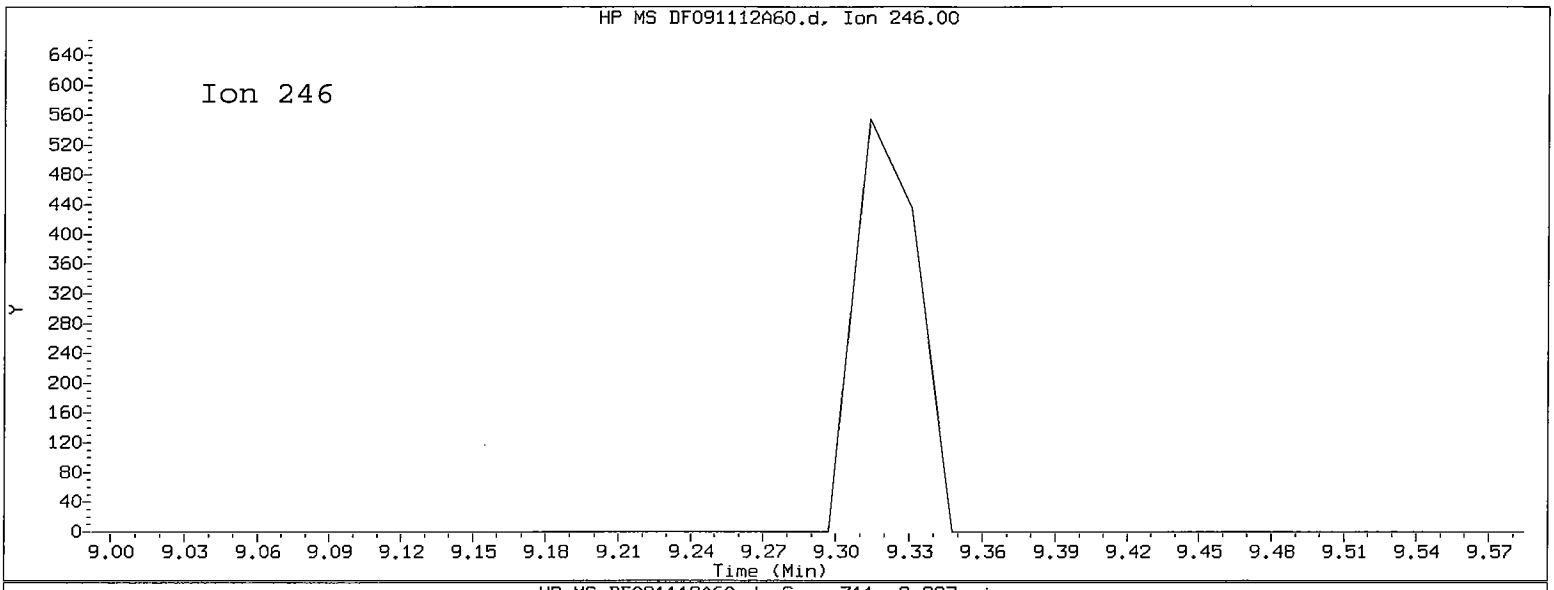


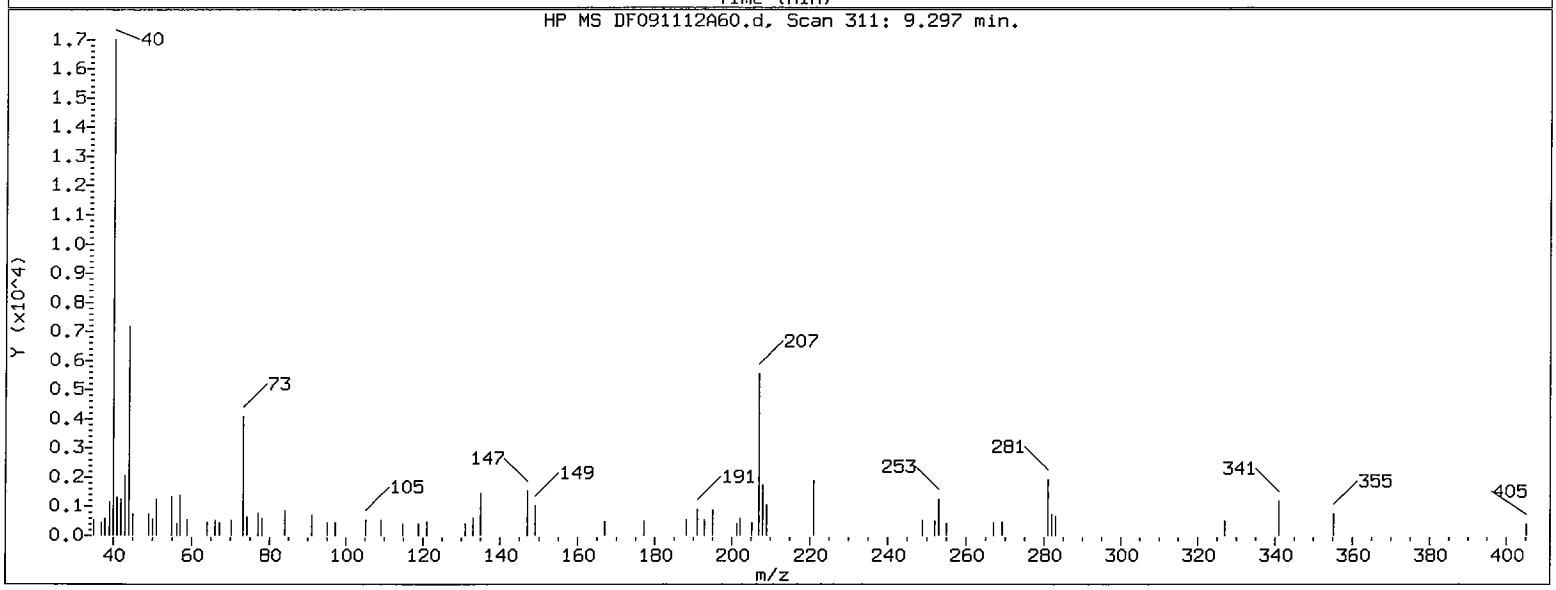
4,4'-DDD
========
Exp. RT = 9.289
Found RT = 8.586

Mass	Area	Ratio
235	15980	100.00

Report Date: 11/12/2009 15:26

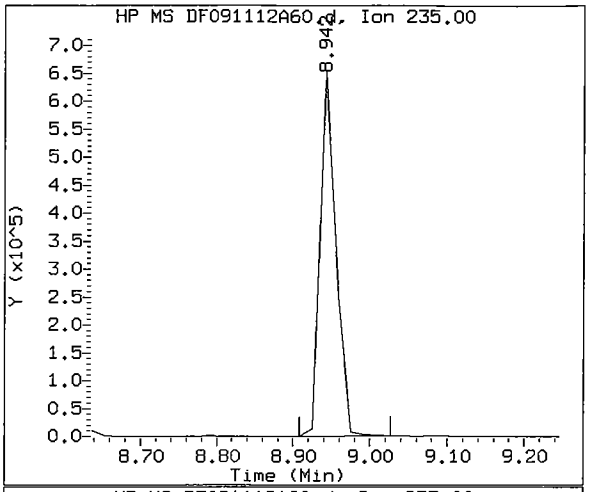
Datafile Analyzed: /chem/5972hp60.i/DG091112A60.b/DF091112A60.d/DF091112A60.d
Method Used: /chem/5972hp60.i/DG091112A60.b/dftpp8270C.m/BrkDwnTF.m Inst: 5972h
Injection Date: 12-NOV-2009 14:21 Operator:
Sample Info: DFTPP DFTPP:2650
Misc Info:



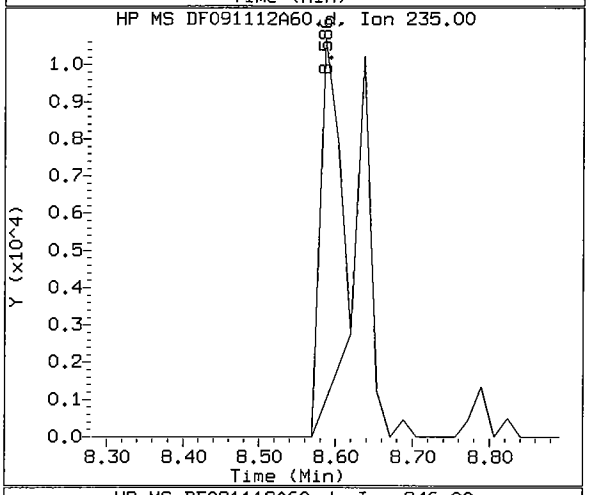


4,4'-DDE
========
Exp. RT = 9.289
Found RT = 0.000

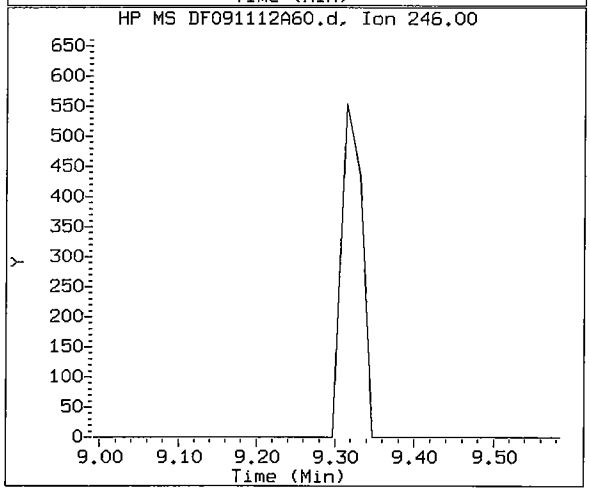
Mass	Area	Ratio
246	0	0.00



Compound: 4,4'-DDT
Quant Mass: 235
RT: 8.942
Area: 941696



Compound: 4,4'-DDD
Quant Mass: 235
RT: 8.586
Area: 15980



Compound: 4,4'-DDE
Quant Mass: 246
RT: 0.000
Area: 0

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	941696			N/A
4,4-DDE	0	0.0	20.0	PASS
4,4-DDD	15980	1.7	20.0	PASS
4,4-DDD + DDE	15980	1.7	20.0	PASS

****

TUNE SAMPLE *** PASSED *** DDT BREAKDOWN TEST

****

b. Blank Data

Arranged in chronological order, by extraction date.

- Tabulated Results (Form I SV)

- Tentatively Identified Compounds (Form I SV-TIC)

- Reconstructed Ion Chromatogram and quantitation report.

- Target compound spectra with lab-generated standard spectra.

- Quantitation/Calculation of TIC concentrations.

- GC/MS library search spectra for TICs.

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SBLKKV

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-BLK1

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102249-BLKA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

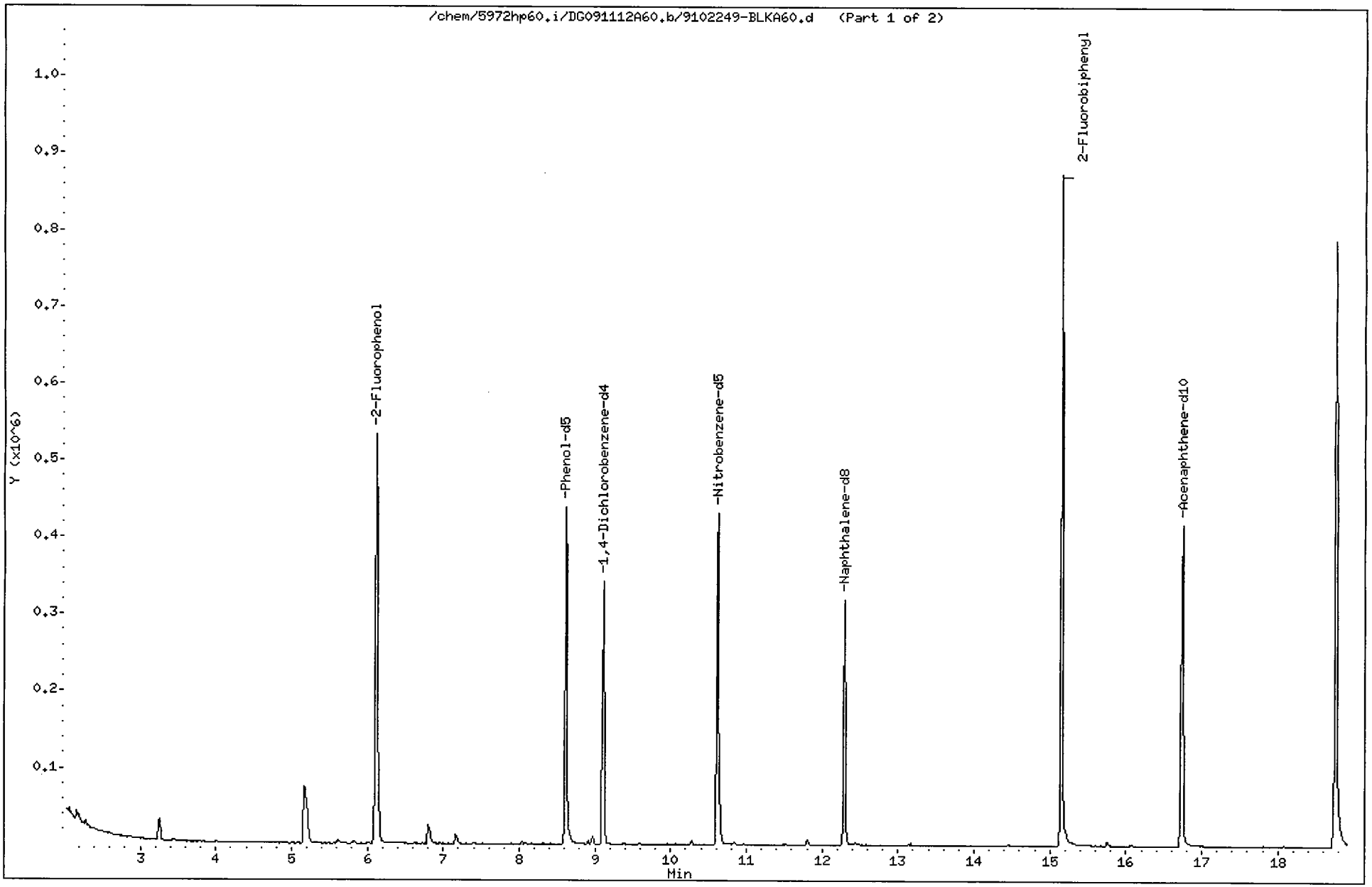
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	5.00	U
95-57-8	2-Chlorophenol	5.00	U
108-39-4	3-Methylphenol	10.0	U
106-44-5	4-Methylphenol	10.0	U
98-86-2	Acetophenone	5.00	U
67-72-1	Hexachloroethane	5.00	U
98-95-3	Nitrobenzene	5.00	U
120-83-2	2,4-Dichlorophenol	5.00	U
131-11-3	Dimethylphthalate	5.00	U
100-02-7	4-Nitrophenol	10.0	U
132-64-9	Dibenzofuran	5.00	U
84-66-2	Diethylphthalate	5.00	U
86-30-6	N-Nitrosodiphenylamine (1)	5.00	U
84-74-2	Di-n-butylphthalate	5.00	U
206-44-0	Fluoranthene	5.00	U
129-00-0	Pyrene	5.00	U
85-68-7	Butylbenzylphthalate	5.00	U
119-93-7	3,3'-Dimethylbenzidine	5.00	U
117-81-7	bis(2-ethylhexyl)Phthalate	5.00	U
56-55-3	Benzo(a)anthracene	5.00	U
117-84-0	Di-n-octylphthalate	5.00	U
205-99-2	Benzo(b)fluoranthene	5.00	U
207-08-9	Benzo(k)fluoranthene	5.00	U
50-32-8	Benzo(a)pyrene	5.00	U
193-39-5	Indeno(1,2,3-c,d)pyrene	5.00	U
53-70-3	Dibenzo(a,h)anthracene	5.00	U

(1) - Cannot be separated from Diphenylamine

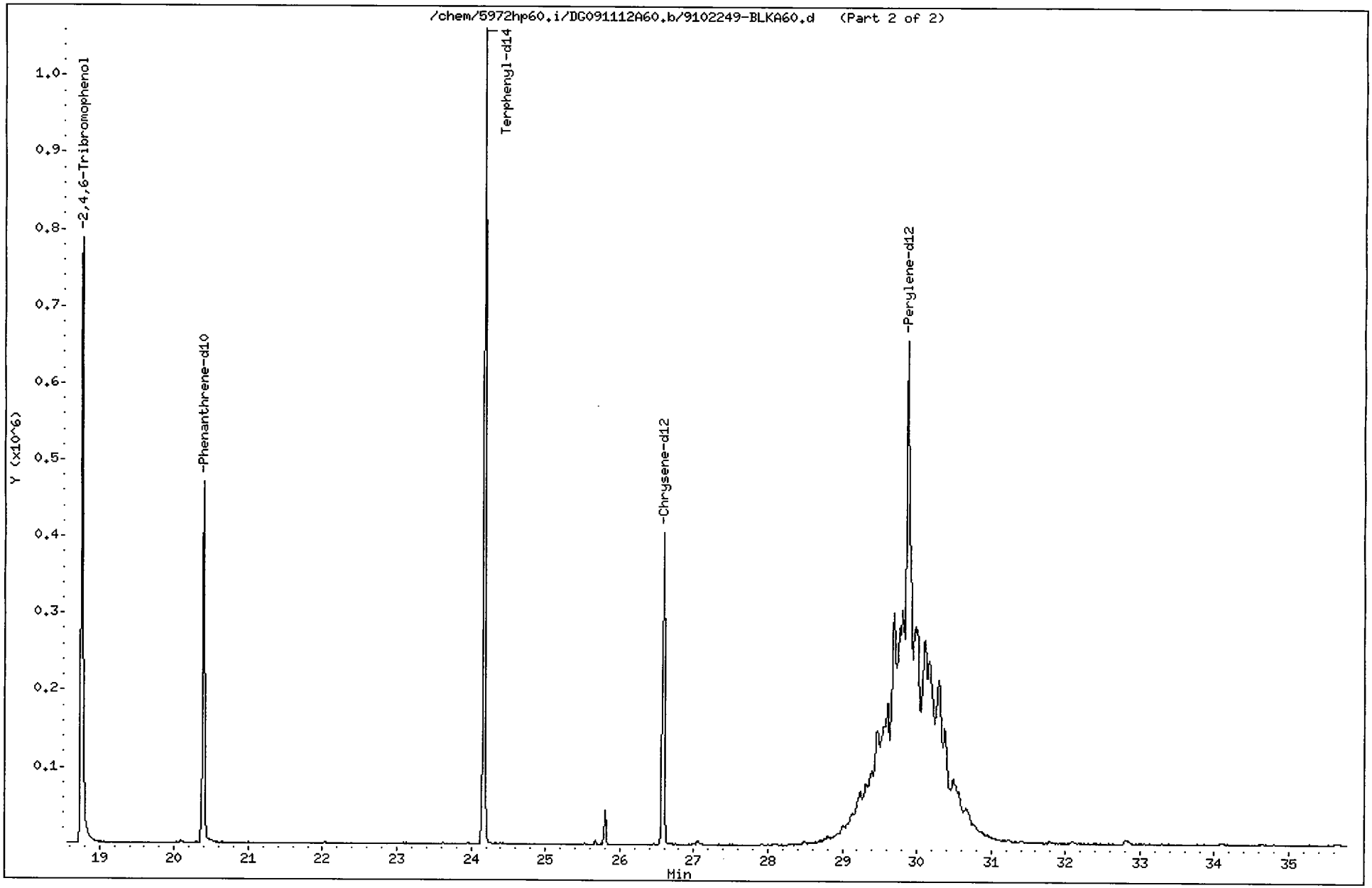
Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BLKA60.d
Date : 12-NOV-2009 15:32
Client ID: SBLKKV
Sample Info: 9102249-BLK1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BLKA60.d
Date : 12-NOV-2009 15:32
Client ID: SBLKKV
Sample Info: 9102249-BLK1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BLKA60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/9102249-BLKA60.d
Lab Smp Id: 9102249-BLK1 Client Smp ID: SBLKKV
Inj Date : 12-NOV-2009 15:32
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 9102249-BLK1:2650
Misc Info : SBLKKV
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 15:36 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.107	9.114	(1.000)	95300	40.0000		
*	2 Naphthalene-d8	136	12.299	12.306	(1.000)	258227	40.0000		
*	3 Acenaphthene-d10	164	16.739	16.746	(1.000)	191829	40.0000		
*	4 Phenanthrene-d10	188	20.392	20.408	(1.000)	399067	40.0000		
*	5 Chrysene-d12	240	26.591	26.608	(1.000)	333606	40.0000		
*	6 Perylene-d12	264	29.865	29.872	(1.000)	353705	40.0000		
$	7 2-Fluorophenol	112	6.120	6.147	(0.672)	302753	138.047	69.0	
$	8 Phenol-d5	99	8.616	8.633	(0.946)	225892	83.3505	41.7	
$	11 Nitrobenzene-d5	82	10.621	10.628	(0.864)	235987	90.4911	45.2	
$	12 2-Fluorobiphenyl	172	15.154	15.160	(0.905)	536152	84.7275	42.4	
$	13 2,4,6-Tribromophenol	330	18.765	18.782	(1.121)	187892	176.022	88.0	(A)
$	14 Terphenyl-d14	244	24.177	24.173	(0.909)	615045	100.700	50.3	
	23 Phenol	94	Compound Not Detected.						
	27 2-Chlorophenol	128	Compound Not Detected.						
	35 3-Methylphenol	108	Compound Not Detected.						

on 11/13/09

Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BLKA60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	Compound Not Detected.						
39 Acetophenone	105	Compound Not Detected.						
42 Hexachloroethane	117	Compound Not Detected.						
43 Nitrobenzene	77	Compound Not Detected.						
51 2,4-Dichlorophenol	162	Compound Not Detected.						
72 Dimethylphthalate	163	Compound Not Detected.						
79 4-Nitrophenol	139	Compound Not Detected.						
82 Dibenzofuran	168	Compound Not Detected.						
86 Diethylphthalate	149	Compound Not Detected.						
93 N-Nitrosodiphenylamine	169	Compound Not Detected.						
116 Di-n-butylphthalate	149	Compound Not Detected.						
121 Fluoranthene	202	Compound Not Detected.						
123 Pyrene	202	Compound Not Detected.						
128 Butylbenzylphthalate	149	Compound Not Detected.						
129 3,3'-Dimethylbenzidine	212	Compound Not Detected.						
132 bis(2-ethylhexyl)Phthalate	149	Compound Not Detected.						
133 Benzo(a)anthracene	228	Compound Not Detected.						
135 Di-n-octylphthalate	149	Compound Not Detected.						
137 Benzo(b)fluoranthene	252	Compound Not Detected.						
138 Benzo(k)fluoranthene	252	Compound Not Detected.						
139 Benzo(a)pyrene	252	Compound Not Detected.						
141 Indeno(1,2,3-c,d)pyrene	276	Compound Not Detected.						
142 Dibenzo(a,h)anthracene	278	Compound Not Detected.						

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.

CompuChem

ASSIGNED TO: M Lott - B Patterson EXTRACTION WORKSHEET DATE EXTRACTED/POSTED: 10/23/09

SEMI-VOLATILE WATER

EMP ID NUMBER: 2502, -2713 Method 3510C (for 8270C, 8270D or 625) 10-23-2 BATCH NO.: 9102249

079A

	COMPUCHEM NUMBER	CLIENT SAMPLE ID	QC SAMPLE TYPE	SAMPLE VOLUME (mL)	FINAL VOLUME (mL)	Adjusted pH ANA	Adjusted pH BASE	COMMENTS
1	0910165-01	13MW5	SAMPLE	1000	1.0	1.6	13.0	QC
2	0910165-02	13MW1	SAMPLE	1000	1.0	1.6	13.0	
3	0910165-03	13MW2	SAMPLE	975	1.0	1.6	13.0	
4	0910165-04	13MW3	SAMPLE	1000	1.0	1.6	13.0	
5	0910165-05	13MW4	SAMPLE	1000	1.0	1.6	13.0	
6	0910165-06	13MWDUP	SAMPLE	900	1.0	1.6	13.0	
7	0910165-07	13MW6	SAMPLE	1000	1.0	1.6	13.0	
8	0910165-08	13MW7	SAMPLE	1000	1.0	1.6	13.0	
9	9102249-BLK1	SBLKKV	MB	1000	1.0	1.6	13.0	
10	9102249-BS1	SKVLCS	LCS	1000	1.0	1.6	13.0	
11	9102249-MS1	13MW5MS	MS	975	1.0	1.6	13.0	
12	9102249-MSD1	13MW5MSD	MSD	1000	1.0	1.6	13.0	
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								

AA 10/23/09

AA 10/23/09

		8270C	8270D or 625
SURROGATE	NO.	393	
	AMT.	0.5mL	
	LOT	090209-37	
SPIKE	NO.		VALID.
	AMT.		0.5 mL
	LOT		62501/62502

FINAL VOLUME VERIFIED: [signature]

REVIEWED BY: [signature]

SURROGATE & SPIKE ADDED BY: BFP / 10/23/09 (Initials / Date)

Analyst initials. Extracted ML, BP KD BFP N2 AA Bottle up AA

Witness ML / 10-23-09 (Initials / Date)

Manufacturer and lot number of reagents/solvents used CH_2Cl_2 - H35504, Na_2SO_4 - 2XX6-581-3, NaOH - 2XX6-567-4, H_2SO_4 - 68764

REV. 9/15/09: RM

323

c. Laboratory Control Sample Data

Arranged in chronological order, by extraction date.

- Tabulated Results (Form I SV)

- Reconstructed Ion Chromatogram and quantitation report

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

SKVLCS

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-BS

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102249-BSA60

Level: (low/med) LOW Date Received: _____

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

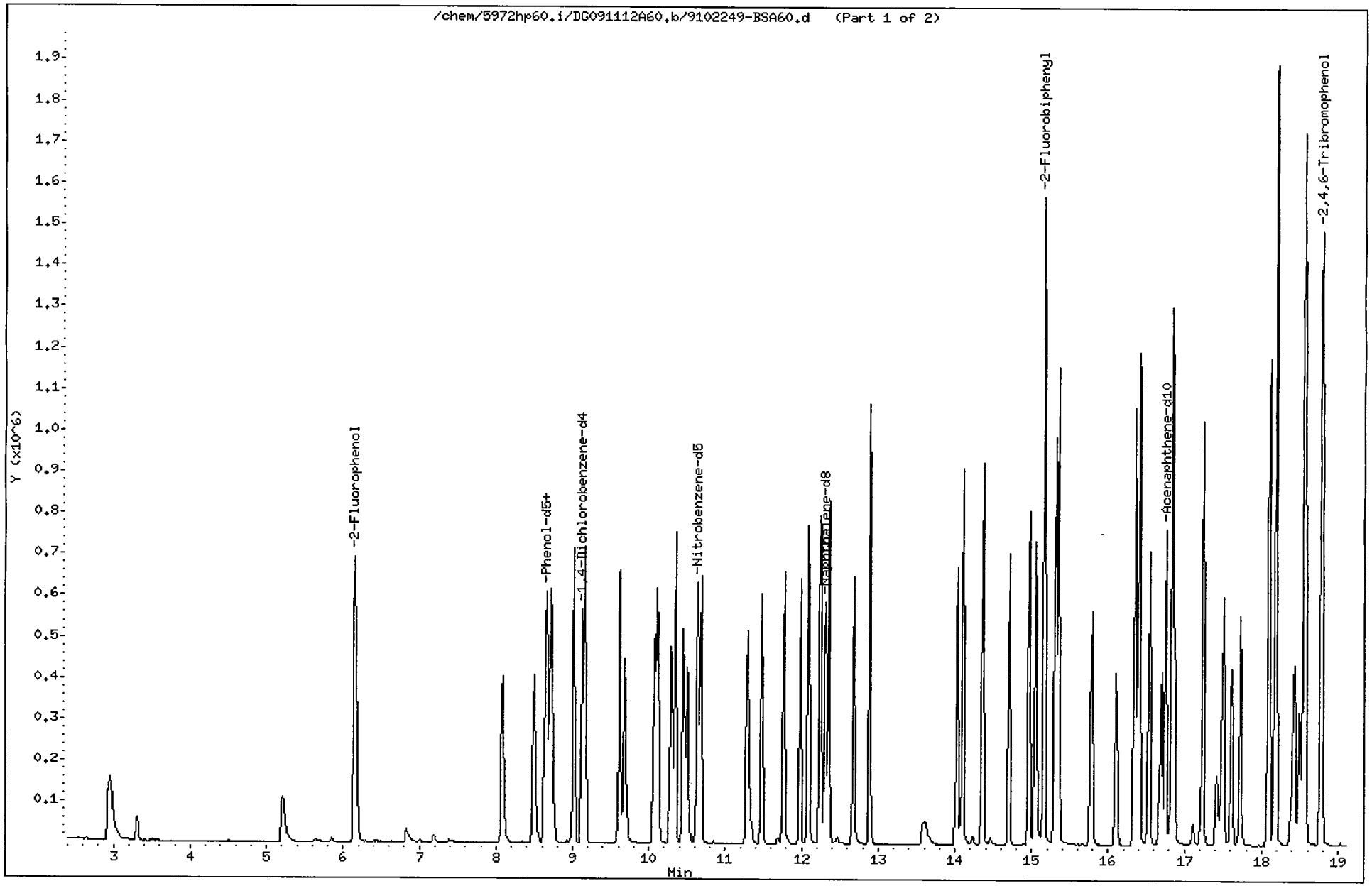
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	16.2	
95-57-8	2-Chlorophenol	29.4	
108-39-4	3-Methylphenol	27.7	
106-44-5	4-Methylphenol	27.7	
98-86-2	Acetophenone	32.6	
67-72-1	Hexachloroethane	28.6	
98-95-3	Nitrobenzene	30.8	
120-83-2	2,4-Dichlorophenol	32.2	
131-11-3	Dimethylphthalate	33.1	
100-02-7	4-Nitrophenol	14.3	
132-64-9	Dibenzofuran	34.2	
84-66-2	Diethylphthalate	33.7	
86-30-6	N-Nitrosodiphenylamine (1)	37.6	
84-74-2	Di-n-butylphthalate	34.8	
206-44-0	Fluoranthene	37.4	
129-00-0	Pyrene	37.5	
85-68-7	Butylbenzylphthalate	37.1	
119-93-7	3,3'-Dimethylbenzidine	33.2	
117-81-7	bis(2-ethylhexyl)Phthalate	38.9	
56-55-3	Benzo(a)anthracene	36.8	
117-84-0	Di-n-octylphthalate	39.3	
205-99-2	Benzo(b)fluoranthene	35.4	
207-08-9	Benzo(k)fluoranthene	36.3	
50-32-8	Benzo(a)pyrene	37.4	
193-39-5	Indeno(1,2,3-c,d)pyrene	31.9	
53-70-3	Dibenzo(a,h)anthracene	30.8	

(1) - Cannot be separated from Diphenylamine

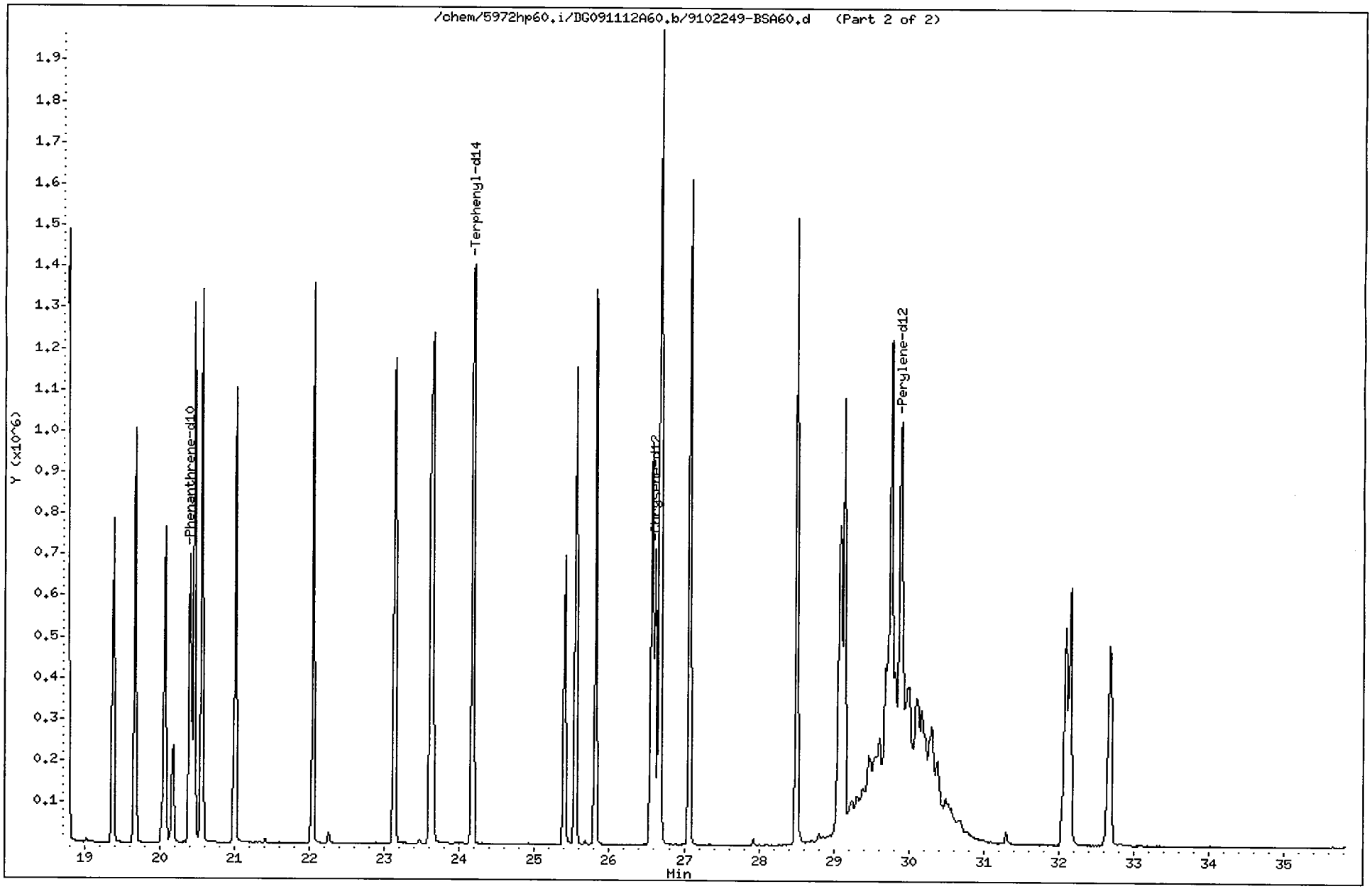
Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BSA60.d
Date : 12-NOV-2009 16:19
Client ID: SKVLCS
Sample Info: 9102249-BS1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BSA60.d
Date : 12-NOV-2009 16:19
Client ID: SKVLCS
Sample Info: 9102249-BS1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BSA60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/9102249-BSA60.d
Lab Smp Id: 9102249-BS Client Smp ID: SKVLCS
Inj Date : 12-NOV-2009 16:19
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 9102249-BS1:2650
Misc Info : SKVLCS
Comment   : 2008 MDLS SOIL/ 2007 WATER
Method   : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 16:02 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 4 QC Sample: LCS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.128	9.114	(1.000)	162944	40.0000		
*	2 Naphthalene-d8	136	12.310	12.306	(1.000)	459587	40.0000		
*	3 Acenaphthene-d10	164	16.750	16.746	(1.000)	340236	40.0000		
*	4 Phenanthrene-d10	188	20.402	20.408	(1.000)	682696	40.0000		
*	5 Chrysene-d12	240	26.612	26.608	(1.000)	552667	40.0000		
*	6 Perylene-d12	264	29.875	29.872	(1.000)	524390	40.0000		
$	7 2-Fluorophenol	112	6.161	6.147	(0.675)	457954	122.128	61.1	
$	8 Phenol-d5	99	8.657	8.633	(0.948)	379586	81.9166	41.0	
$	11 Nitrobenzene-d5	82	10.632	10.628	(0.864)	393071	84.6882	42.3	
$	12 2-Fluorobiphenyl	172	15.164	15.160	(0.905)	942346	83.9616	42.0	
$	13 2,4,6-Tribromophenol	330	18.786	18.782	(1.122)	361760	191.079	95.5	(A)
$	14 Terphenyl-d14	244	24.187	24.173	(0.909)	936700	92.5745	46.3	
	23 Phenol	94	8.678	8.664	(0.951)	150660	32.4726	16.2	
	27 2-Chlorophenol	128	8.719	8.705	(0.955)	218603	58.8427	29.4	8612
	35 3-Methylphenol	108	10.499	10.515	(1.150)	188004	55.3433	27.7	

Data File: /chem/5972hp60.i/DG091112A60.b/9102249-BSA60.d
Report Date: 13-Nov-2009 16:02

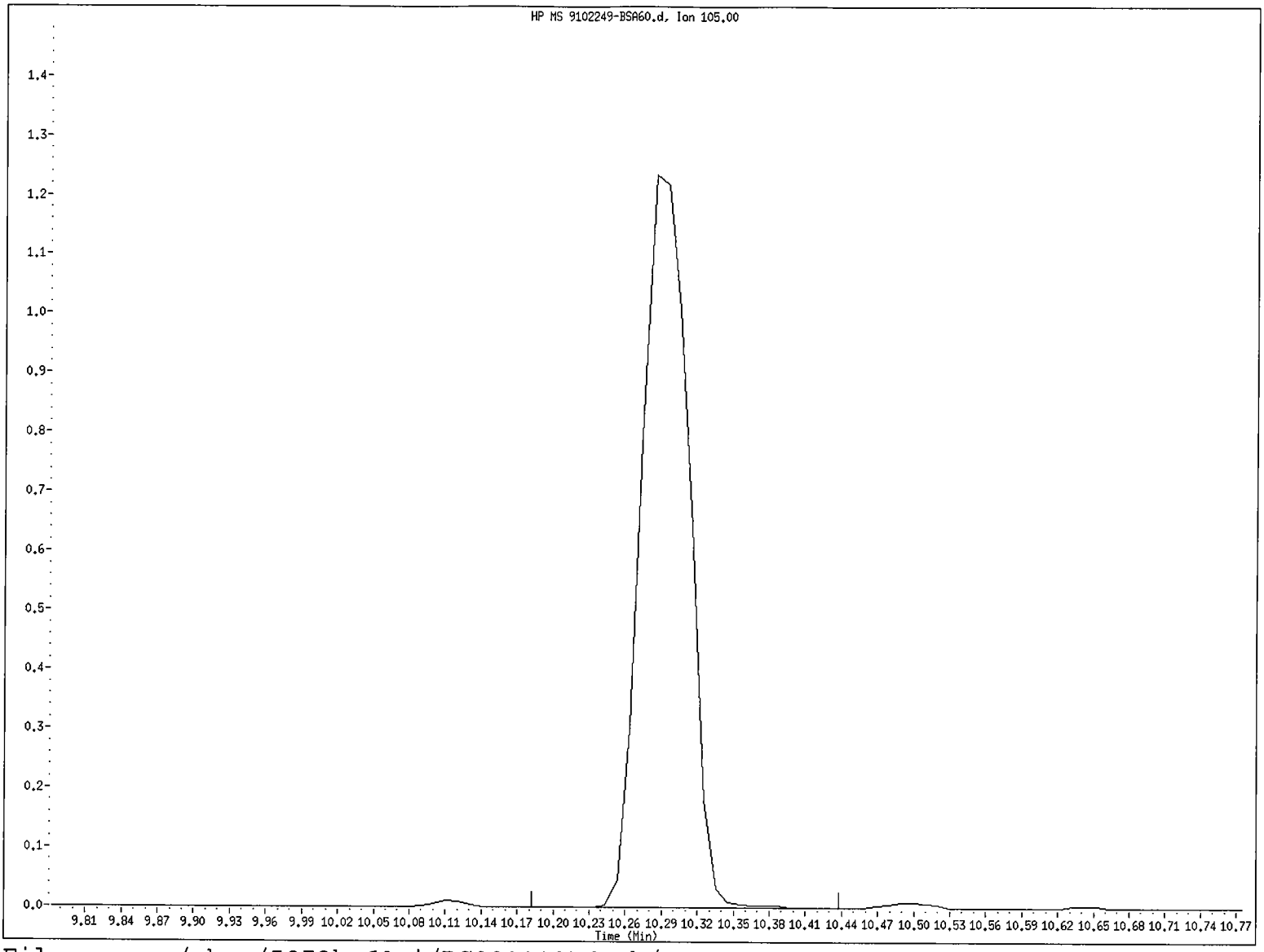
Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	10.499	10.515	(1.150)	188004	55.3433	27.7	
39 Acetophenone	105	10.284	10.280	(0.835)	338932	65.1227	32.6	0(M)
42 Hexachloroethane	117	10.345	10.342	(1.133)	125427	57.1042	28.6	9246
43 Nitrobenzene	77	10.683	10.679	(0.868)	286250	61.6337	30.8	9807
51 2,4-Dichlorophenol	162	12.085	12.091	(0.982)	286919	64.4060	32.2	
72 Dimethylphthalate	163	16.412	16.398	(0.980)	763618	66.1764	33.1	9265
79 4-Nitrophenol	139	17.415	17.431	(1.040)	55350	28.6934	14.3	9694
82 Dibenzofuran	168	17.241	17.237	(1.029)	915387	68.3631	34.2	9017
86 Diethylphthalate	149	18.192	18.188	(1.086)	744237	67.3718	33.7	8349
93 N-Nitrosodiphenylamine	169	18.550	18.546	(0.909)	636207	75.2286	37.6	8374
116 Di-n-butylphthalate	149	22.049	22.055	(1.081)	1183402	69.6174	34.8	9696
121 Fluoranthene	202	23.144	23.140	(1.134)	1120007	74.7474	37.4	9058
123 Pyrene	202	23.645	23.641	(0.889)	1178723	74.9214	37.5	9221
128 Butylbenzylphthalate	149	25.558	25.554	(0.960)	578475	74.2213	37.1	9345
129 3,3'-Dimethylbenzidine	212	25.405	25.411	(0.955)	486826	66.3018	33.2	9445
132 bis(2-ethylhexyl)Phthalate	149	27.072	27.068	(1.017)	820104	77.7628	38.9	9428
133 Benzo(a)anthracene	228	26.571	26.567	(0.998)	973847	73.5937	36.8	
135 Di-n-octylphthalate	149	28.505	28.501	(0.954)	1438567	78.6995	39.3	
137 Benzo(b)fluoranthene	252	29.077	29.084	(0.973)	1039248	70.7251	35.4	
138 Benzo(k)fluoranthene	252	29.139	29.145	(0.975)	947094	72.6667	36.3	
139 Benzo(a)pyrene	252	29.763	29.749	(0.996)	913214	74.7378	37.4	
141 Indeno(1,2,3-c,d)pyrene	276	32.085	32.081	(1.074)	747449	63.7945	31.9	8845
142 Dibenzo(a,h)anthracene	278	32.157	32.153	(1.076)	708726	61.5648	30.8	8397

10/14/13/4

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Acetophenone CAS Number 98-86-2 Area = 338932 Manually integrated



File name: /chem/5972hp60.i/DG091112A60.b/9102249-BSA60.d
Client ID: SKVLCS
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 16:19
Retention Time: 10.28
Operator ID: 2650

d. Matrix Spike Data

- Tabulated Results (Form I SV)

- Reconstructed Ion Chromatogram and quantitation report

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW5MS

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-MS

Sample wt/vol: 975 (g/mL) ML Lab File ID: 9102249-MSA60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

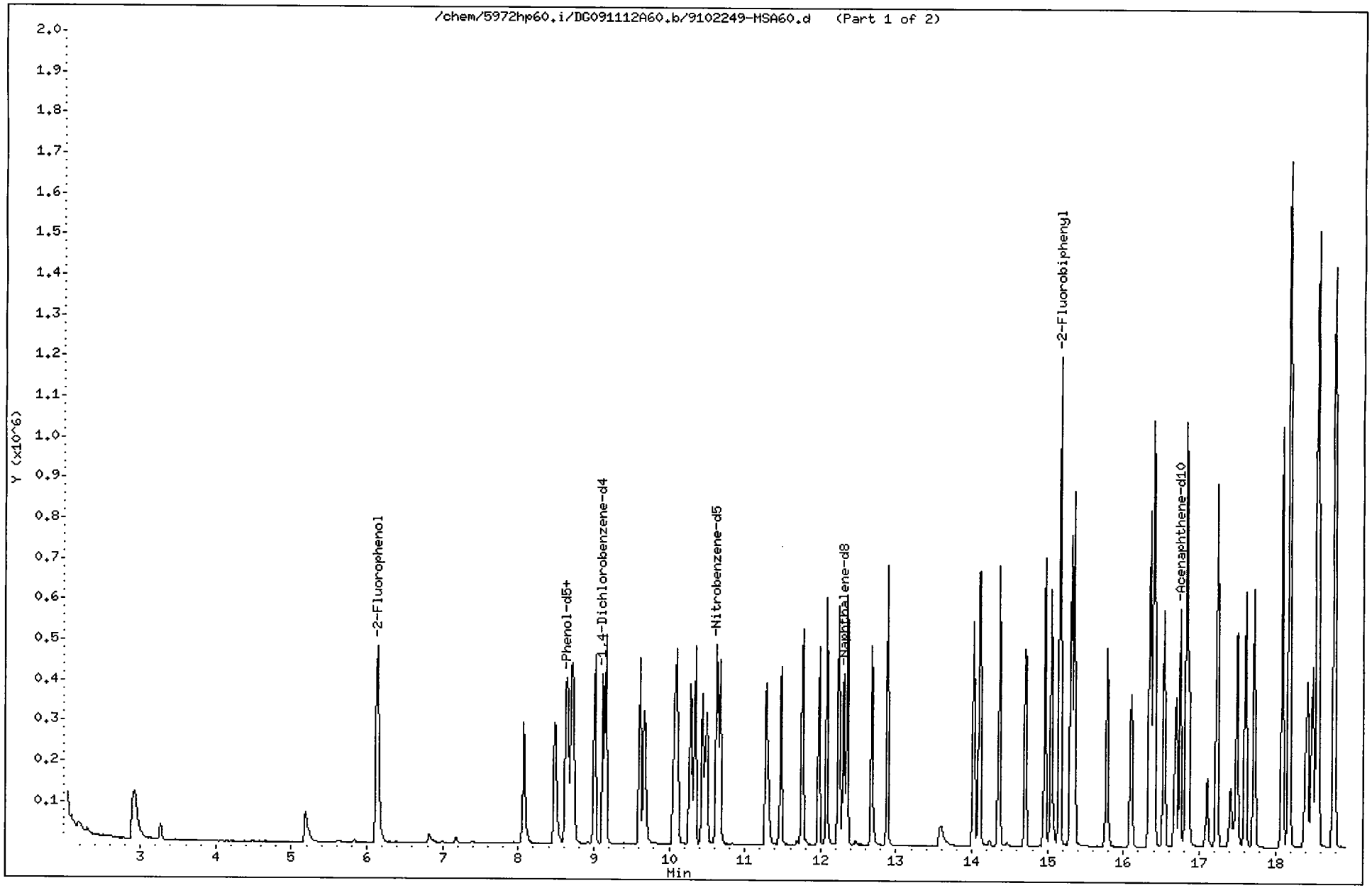
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	16.0	
95-57-8	2-Chlorophenol	30.7	
108-39-4	3-Methylphenol	28.0	
106-44-5	4-Methylphenol	28.0	
98-86-2	Acetophenone	34.0	
67-72-1	Hexachloroethane	25.7	
98-95-3	Nitrobenzene	33.0	
120-83-2	2,4-Dichlorophenol	34.9	
131-11-3	Dimethylphthalate	36.9	
100-02-7	4-Nitrophenol	17.2	
132-64-9	Dibenzofuran	37.0	
84-66-2	Diethylphthalate	37.4	
86-30-6	N-Nitrosodiphenylamine (1)	39.5	
84-74-2	Di-n-butylphthalate	37.1	
206-44-0	Fluoranthene	42.8	
129-00-0	Pyrene	39.1	
85-68-7	Butylbenzylphthalate	37.9	
119-93-7	3,3'-Dimethylbenzidine	37.1	
117-81-7	bis(2-ethylhexyl)Phthalate	39.4	
56-55-3	Benzo(a)anthracene	40.2	
117-84-0	Di-n-octylphthalate	39.0	
205-99-2	Benzo(b)fluoranthene	36.9	
207-08-9	Benzo(k)fluoranthene	40.4	
50-32-8	Benzo(a)pyrene	41.0	
193-39-5	Indeno(1,2,3-c,d)pyrene	38.4	
53-70-3	Dibenzo(a,h)anthracene	40.7	

(1) - Cannot be separated from Diphenylamine

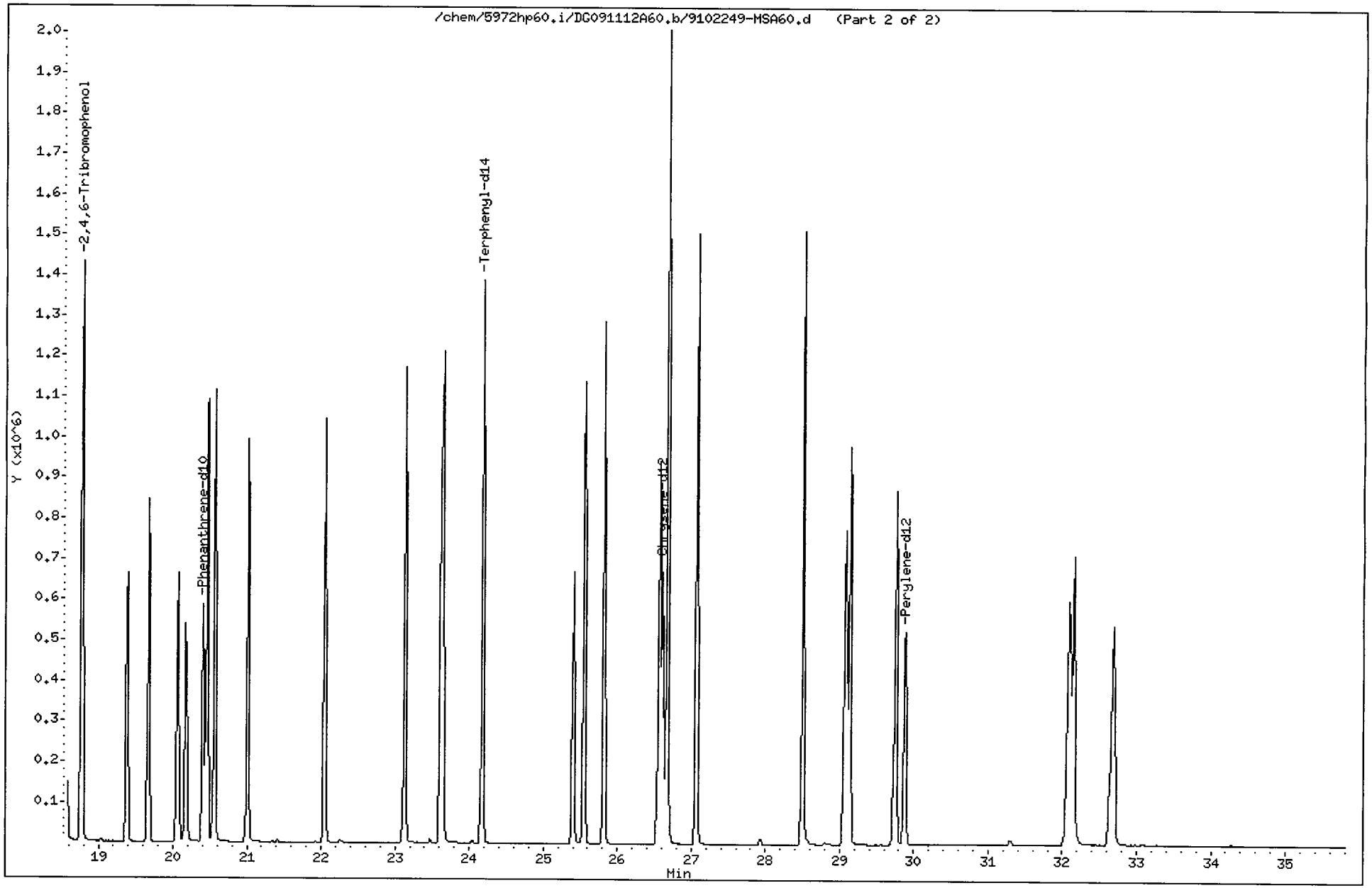
Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Date : 12-NOV-2009 17:54
Client ID: 13MW5MS
Sample Info: 9102249-MS1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Date : 12-NOV-2009 17:54
Client ID: 13MW5MS
Sample Info: 9102249-MS1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Lab Smp Id: 9102249-MS Client Smp ID: 13MW5MS
Inj Date : 12-NOV-2009 17:54
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 9102249-MS1:2650
Misc Info : 13MW5MS
Comment   : 2008 MDLS SOIL/ 2007 WATER
Method   : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 16:02 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 6 QC Sample: MS
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	975.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.114	9.114	(1.000)	119070	40.0000		
*	2 Naphthalene-d8	136	12.306	12.306	(1.000)	337197	40.0000		
*	3 Acenaphthene-d10	164	16.746	16.746	(1.000)	259591	40.0000		
*	4 Phenanthrene-d10	188	20.408	20.408	(1.000)	556199	40.0000		
*	5 Chrysene-d12	240	26.608	26.608	(1.000)	505054	40.0000		
*	6 Perylene-d12	264	29.882	29.872	(1.000)	489806	40.0000		
$	7 2-Fluorophenol	112	6.137	6.147	(0.673)	315353	115.087	59.0	
$	8 Phenol-d5	99	8.633	8.633	(0.947)	264472	78.1048	40.0	
$	11 Nitrobenzene-d5	82	10.628	10.628	(0.864)	285059	83.7087	42.9	
$	12 2-Fluorobiphenyl	172	15.160	15.160	(0.905)	708183	82.7002	42.4	
$	13 2,4,6-Tribromophenol	330	18.782	18.782	(1.122)	321239	222.387	114	(A)
$	14 Terphenyl-d14	244	24.183	24.173	(0.909)	837531	90.5769	46.4	
	23 Phenol	94	8.664	8.664	(0.951)	105602	31.1478	16.0	
	27 2-Chlorophenol	128	8.705	8.705	(0.955)	162602	59.8961	30.7	9202
	35 3-Methylphenol	108	10.495	10.515	(1.152)	135660	54.6494	28.0	

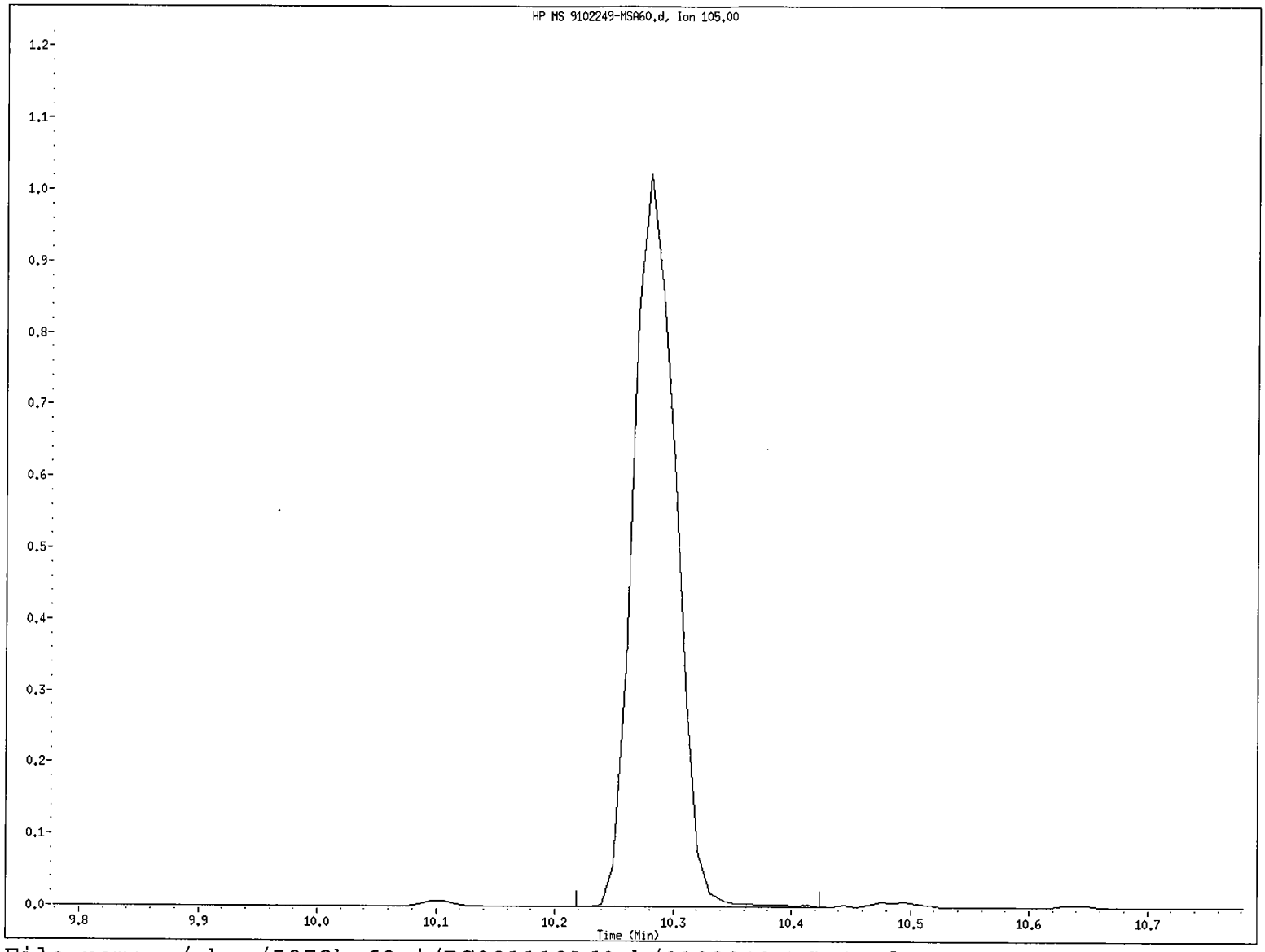
Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	10.495	10.515	(1.152)	135660	54.6494	28.0	
39 Acetophenone	105	10.280	10.280	(0.835)	253587	66.4096	34.0	0(M)
42 Hexachloroethane	117	10.341	10.342	(1.135)	80450	50.1232	25.7	9207
43 Nitrobenzene	77	10.669	10.679	(0.867)	219557	64.4323	33.0	9779
51 2,4-Dichlorophenol	162	12.081	12.091	(0.982)	222483	68.0687	34.9	
72 Dimethylphthalate	163	16.398	16.398	(0.979)	633400	71.9442	36.9	8905
79 4-Nitrophenol	139	17.411	17.431	(1.040)	49340	33.5239	17.2	9655
82 Dibenzofuran	168	17.237	17.237	(1.029)	738165	72.2539	37.0	9105
86 Diethylphthalate	149	18.188	18.188	(1.086)	614868	72.9524	37.4	8238
93 N-Nitrosodiphenylamine	169	18.557	18.546	(0.909)	530263	76.9614	39.5	8033
116 Di-n-butylphthalate	149	22.055	22.055	(1.081)	1002170	72.3642	37.1	9607
121 Fluoranthene	202	23.140	23.140	(1.134)	1019013	83.4742	42.8	9191
123 Pyrene	202	23.641	23.641	(0.888)	1096829	76.2885	39.1	9309
128 Butylbenzylphthalate	149	25.554	25.554	(0.960)	526253	73.8864	37.9	9479
129 3,3'-Dimethylbenzidine	212	25.411	25.411	(0.955)	485553	72.3625	37.1	9374
132 bis(2-ethylhexyl)Phthalate	149	27.068	27.068	(1.017)	739753	76.7566	39.4	9492
133 Benzo(a)anthracene	228	26.567	26.567	(0.998)	948332	78.4217	40.2	
135 Di-n-octylphthalate	149	28.501	28.501	(0.954)	1297911	76.0181	39.0	
137 Benzo(b)fluoranthene	252	29.074	29.084	(0.973)	988000	71.9849	36.9	
138 Benzo(k)fluoranthene	252	29.135	29.145	(0.975)	960334	78.8851	40.4	
139 Benzo(a)pyrene	252	29.759	29.749	(0.996)	911816	79.8923	41.0	
141 Indeno(1,2,3-c,d)pyrene	276	32.092	32.081	(1.074)	818965	74.8337	38.4	8892
142 Dibenzo(a,h)anthracene	278	32.153	32.153	(1.076)	854257	79.4461	40.7	0(M)

QC Flag Legend

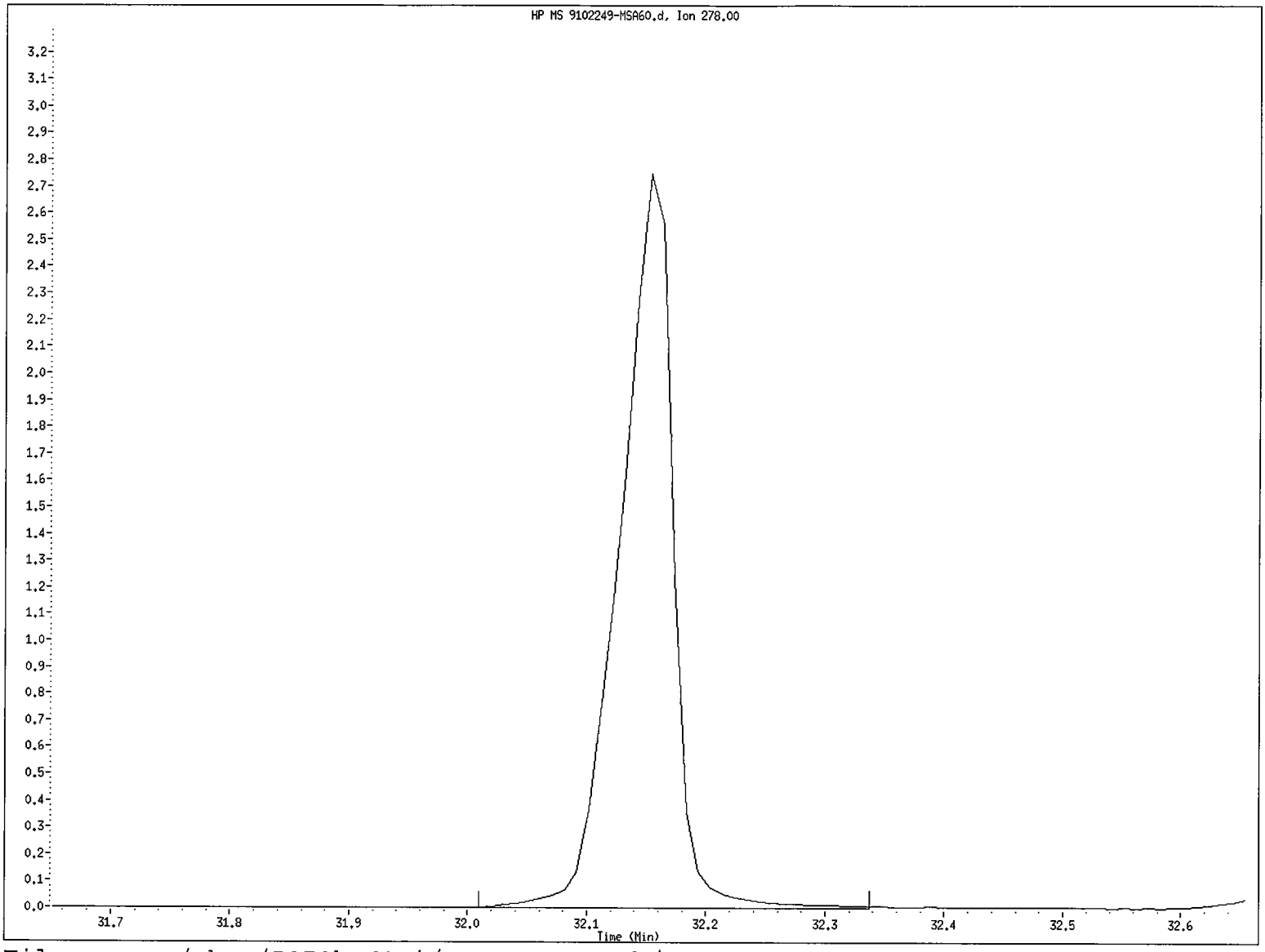
A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Acetophenone CAS Number 98-86-2 Area = 253587 Manually integrated



File name: /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Client ID: 13MW5MS
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 17:54
Retention Time: 10.28
Operator ID: 2650

Dibenzo(a,h)anthracene CAS Number 53-70-3 Area = 854257 Manually integrated



File name: /chem/5972hp60.i/DG091112A60.b/9102249-MSA60.d
Client ID: 13MW5MS
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 17:54
Retention Time: 32.15
Operator ID: 2650

e. Matrix Spike Duplicate Data

- Tabulated Results (Form I SV)

- Reconstructed Ion Chromatogram and quantitation report

FORM 1
SEMIVOLATILE ORGANICS ANALYSIS DATA SHEET

CLIENT SAMPLE NO.

13MW5MSD

Lab Name: COMPUCHEM Method: 8270C

Lab Code: LIBRTY Case No.: UNIT 13 SAS No.: SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102249-MSD

Sample wt/vol: 1000 (g/mL) ML Lab File ID: 9102249-MSDA60

Level: (low/med) LOW Date Received: 10/21/09

% Moisture: _____ decanted: (Y/N)___ Date Extracted:10/23/09

Concentrated Extract Volume: 1000(uL) Date Analyzed: 11/12/09

Injection Volume: 2.0(uL) Dilution Factor: 1.0

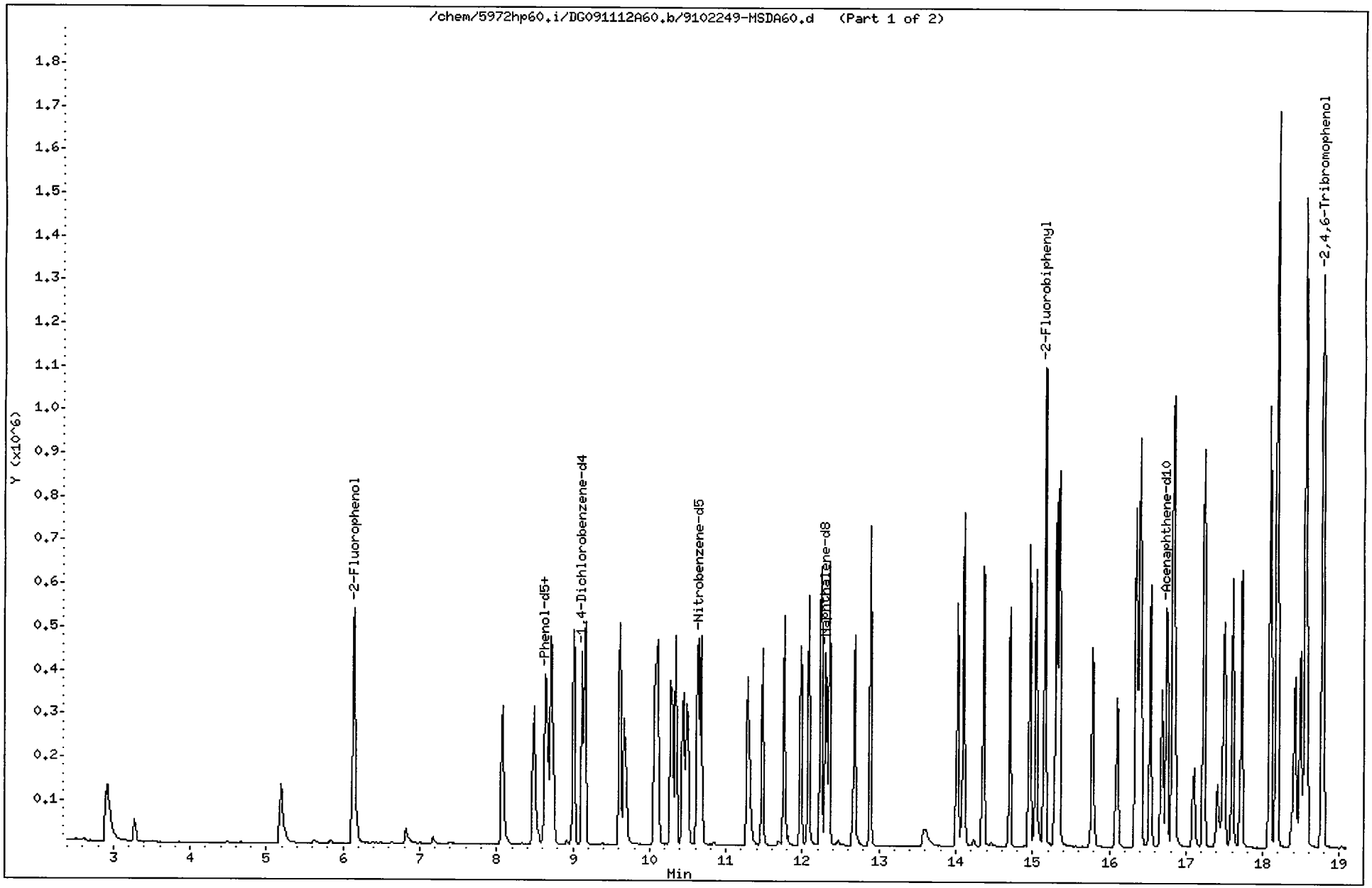
GPC Cleanup: (Y/N) N pH: ___

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
108-95-2	Phenol	15.5	
95-57-8	2-Chlorophenol	30.5	
108-39-4	3-Methylphenol	27.6	
106-44-5	4-Methylphenol	27.6	
98-86-2	Acetophenone	33.3	
67-72-1	Hexachloroethane	26.1	
98-95-3	Nitrobenzene	32.2	
120-83-2	2,4-Dichlorophenol	33.4	
131-11-3	Dimethylphthalate	34.6	
100-02-7	4-Nitrophenol	16.1	
132-64-9	Dibenzofuran	35.1	
84-66-2	Diethylphthalate	34.8	
86-30-6	N-Nitrosodiphenylamine (1)	37.4	
84-74-2	Di-n-butylphthalate	35.1	
206-44-0	Fluoranthene	40.0	
129-00-0	Pyrene	38.7	
85-68-7	Butylbenzylphthalate	37.0	
119-93-7	3,3'-Dimethylbenzidine	36.8	
117-81-7	bis(2-ethylhexyl)Phthalate	37.3	
56-55-3	Benzo(a)anthracene	38.7	
117-84-0	Di-n-octylphthalate	37.1	
205-99-2	Benzo(b)fluoranthene	35.2	
207-08-9	Benzo(k)fluoranthene	39.4	
50-32-8	Benzo(a)pyrene	39.2	
193-39-5	Indeno(1,2,3-c,d)pyrene	39.6	
53-70-3	Dibenzo(a,h)anthracene	39.3	

(1) - Cannot be separated from Diphenylamine

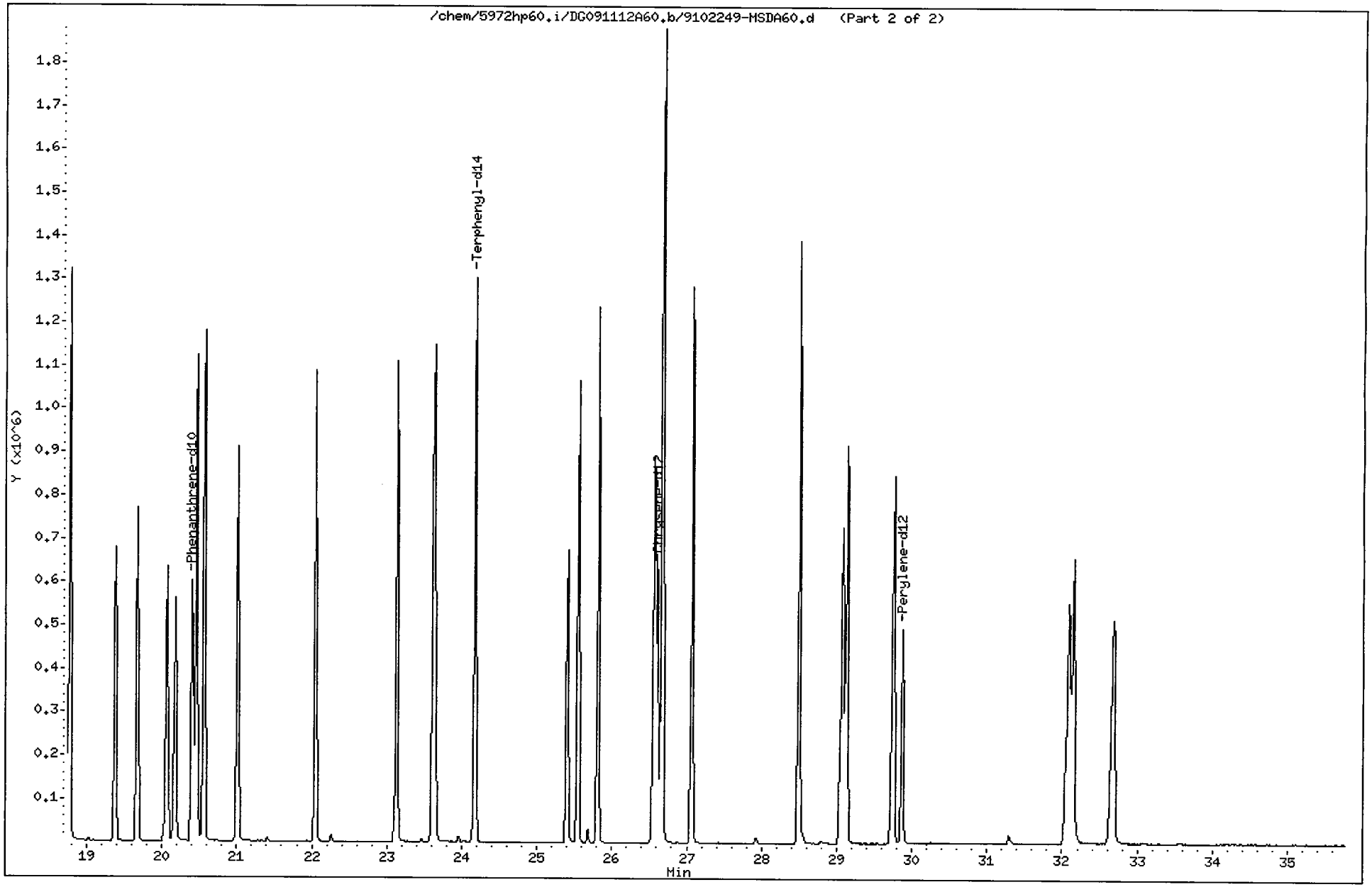
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Date : 12-NOV-2009 18:41
Client ID: 13MW5MSD
Sample Info: 9102249-MSD1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSDA60.d
Date : 12-NOV-2009 18:41
Client ID: 13MW5MSD
Sample Info: 9102249-MSD1:2650
Volume Injected (uL): 2.0
Column phase: RTX-5MS

Instrument: 5972hp60.i
Operator: 2650
Column diameter: 0.32



Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSDA60.d
Report Date: 13-Nov-2009 16:02

CompuChem

Semivolatile Report SW-846 Method 8270C Appendix IX

Data file : /chem/5972hp60.i/DG091112A60.b/9102249-MSDA60.d
Lab Smp Id: 9102249-MSD Client Smp ID: 13MW5MSD
Inj Date : 12-NOV-2009 18:41
Operator : 2650 Inst ID: 5972hp60.i
Smp Info : 9102249-MSD1:2650
Misc Info : 13MW5MSD
Comment : 2008 MDLS SOIL/ 2007 WATER
Method : /chem/5972hp60.i/DG091112A60.b/8270CIXv16.m
Meth Date : 13-Nov-2009 16:02 byrd Quant Type: ISTD
Cal Date : 11-NOV-2009 17:10 Cal File: HL091111A60.d
Als bottle: 7 QC Sample: MSD
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: HWMU13a.sub
Target Version: 3.50

Concentration Formula: Amt * DF * Vt/(Vo * Vi) * CpndVariable

Name	Value	Description
DF	1.00000	Dilution Factor
Vt	1000.00000	Volume of final extract (uL)
Vo	1000.00000	Volume of sample extracted (mL)
Vi	2.00000	Volume injected (uL)

Cpnd Variable Local Compound Variable

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
*	1 1,4-Dichlorobenzene-d4	152	9.120	9.114	(1.000)	121523	40.0000		
*	2 Naphthalene-d8	136	12.302	12.306	(1.000)	346489	40.0000		
*	3 Acenaphthene-d10	164	16.752	16.746	(1.000)	266954	40.0000		
*	4 Phenanthrene-d10	188	20.404	20.408	(1.000)	560205	40.0000		
*	5 Chrysene-d12	240	26.604	26.608	(1.000)	471020	40.0000		
*	6 Perylene-d12	264	29.878	29.872	(1.000)	456705	40.0000		
$	7 2-Fluorophenol	112	6.143	6.147	(0.674)	325268	116.309	58.2	
$	8 Phenol-d5	99	8.639	8.633	(0.947)	266756	77.1891	38.6	
$	11 Nitrobenzene-d5	82	10.634	10.628	(0.864)	291187	83.2151	41.6	
$	12 2-Fluorobiphenyl	172	15.166	15.160	(0.905)	705210	80.0816	40.0	
$	13 2,4,6-Tribromophenol	330	18.778	18.782	(1.121)	304239	204.810	102	(A)
$	14 Terphenyl-d14	244	24.179	24.173	(0.909)	780834	90.5469	45.3	
	23 Phenol	94	8.660	8.664	(0.950)	107220	30.9866	15.5	
	27 2-Chlorophenol	128	8.711	8.705	(0.955)	168865	60.9475	30.5	8783
	35 3-Methylphenol	108	10.491	10.515	(1.150)	139772	55.1693	27.6	

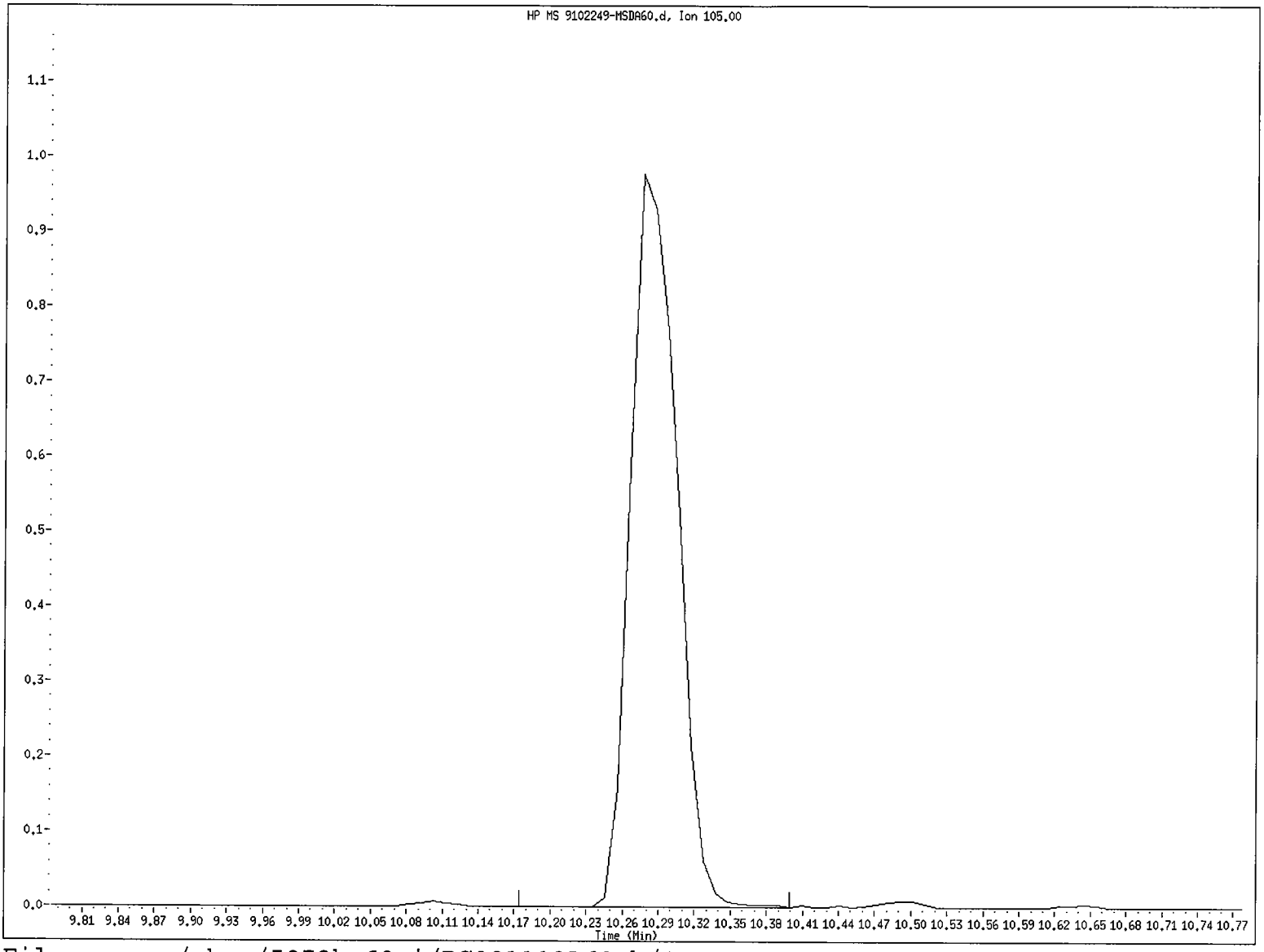
Data File: /chem/5972hp60.i/DG091112A60.b/9102249-MSDA60.d
Report Date: 13-Nov-2009 16:02

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (NG)	CONCENTRATIONS FINAL (ug/L)	SIMILARITY
36 4-Methylphenol	108	10.491	10.515	(1.150)	139772	55.1693	27.6	
39 Acetophenone	105	10.276	10.280	(0.835)	261704	66.6974	33.3	0(M)
42 Hexachloroethane	117	10.338	10.342	(1.133)	85430	52.1515	26.1	9415
43 Nitrobenzene	77	10.675	10.679	(0.868)	225890	64.5131	32.2	9821
51 2,4-Dichlorophenol	162	12.077	12.091	(0.982)	224416	66.8188	33.4	
72 Dimethylphthalate	163	16.404	16.398	(0.979)	626368	69.1831	34.6	9373
79 4-Nitrophenol	139	17.407	17.431	(1.039)	48784	32.2319	16.1	9673
82 Dibenzofuran	168	17.233	17.237	(1.029)	737969	70.2423	35.1	9167
86 Diethylphthalate	149	18.184	18.188	(1.085)	603212	69.5955	34.8	8175
93 N-Nitrosodiphenylamine	169	18.553	18.546	(0.909)	519458	74.8540	37.4	8380
116 Di-n-butylphthalate	149	22.051	22.055	(1.081)	978921	70.1800	35.1	9717
121 Fluoranthene	202	23.136	23.140	(1.134)	983650	80.0012	40.0	9194
123 Pyrene	202	23.637	23.641	(0.888)	1038966	77.4854	38.7	9352
128 Butylbenzylphthalate	149	25.550	25.554	(0.960)	491606	74.0092	37.0	9524
129 3,3'-Dimethylbenzidine	212	25.407	25.411	(0.955)	460356	73.5647	36.8	9434
132 bis(2-ethylhexyl)Phthalate	149	27.064	27.068	(1.017)	671411	74.6992	37.3	9462
133 Benzo(a)anthracene	228	26.563	26.567	(0.998)	872365	77.3522	38.7	
135 Di-n-octylphthalate	149	28.497	28.501	(0.954)	1181179	74.1952	37.1	
137 Benzo(b)fluoranthene	252	29.080	29.084	(0.973)	900526	70.3670	35.2	
138 Benzo(k)fluoranthene	252	29.131	29.145	(0.975)	895417	78.8835	39.4	
139 Benzo(a)pyrene	252	29.755	29.749	(0.996)	833704	78.3426	39.2	
141 Indeno(1,2,3-c,d)pyrene	276	32.088	32.081	(1.074)	807530	79.1368	39.6	8792
142 Dibenzo(a,h)anthracene	278	32.149	32.153	(1.076)	789002	78.6956	39.3	8426

QC Flag Legend

A - Target compound detected but, quantitated amount exceeded maximum amount.
M - Compound response manually integrated.

Acetophenone CAS Number 98-86-2 Area = 261704 Manually integrated



File name: /chem/5972hp60.i/DG091112A60.b/9102249-MSDA60.d
Client ID: 13MW5MSD
Instrument ID: 5972hp60.i
Injection Date and Time: 12-NOV-2009 18:41
Retention Time: 10.28
Operator ID: 2650

CompuChem

A Division Of

Liberty Analytical Corp.

11/16/2009

JANET FRAZIER

DRAPER

2206 SOUTH MAIN STREET

BLACKSBURG, VA 24060

Subject:

Report of Data - Project: RAAP SEMI-ANNUAL MONITORING 2009, WorkOrder: 0910165

Attn.: JANET FRAZIER

Enclosed are the results of analytical work performed in accordance with the referenced account number. This report covers sample(s) appearing on the listing.

Thank you for selecting CompuChem for your sample analysis. If you should have questions or require additional analytical services, please contact your representative at 1-800-833-5097

Sincerely,

Compuchem

a division of Liberty Analytical Corporation

Attachment

TOTAL NUMBER

OF PAGES _____

501 Madison Avenue, Cary, NC 27513 Tel: 919-379-4100 Fax: 919-379-4050

CompuChem, a division of Liberty Analytical

Client: DRAPER **Work:** 0910165

Project: RAAP SEMI-ANNUAL MONITORING 2009/B03204-07 **Sdg:** 0910165

Lab ID	Client ID	Matrix	Date Sampled	Date Received
0910165-01	13MW5	Water	10/19/2009 08:50	10/21/2009 16:00
0910165-02	13MW1	Water	10/20/2009 08:50	10/21/2009 16:00
0910165-03	13MW2	Water	10/20/2009 09:30	10/21/2009 16:00
0910165-04	13MW3	Water	10/19/2009 07:40	10/21/2009 16:00
0910165-05	13MW4	Water	10/20/2009 08:05	10/21/2009 16:00
0910165-06	13MWDUP	Water	10/20/2009 08:20	10/21/2009 16:00
0910165-07	13MW6	Water	10/19/2009 10:30	10/21/2009 16:00
0910165-08	13MW7	Water	10/19/2009 11:30	10/21/2009 16:00

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA SUMMARY PACKAGE

HPLC by SW846

The sample data summary package shall contain data for all samples in one Sample Delivery Group (SDG) of the Case, as follows:

A. SDG Narrative

B. Tabulated target compound results (Form I)

C. Surrogate spike analysis results (Form II)

D. Spike results MS / MSD / LCS (Form III)

E. Blank data (Form IV)
Tabulated blank results (Form I)

LAB CODE: LIBRTY

METHOD: 8330-8332

SDG #: 0910165

A. SDG Narrative

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 0910165
PROTOCOL: SW-846 8330 & 8332

SAMPLE IDENTIFICATIONS: 13MW1, 13MW2, 13MW3, 13MW4, 14MW5, 13MW6, 13MW7, 13MWDUP

The eight water samples listed above were received intact, refrigerated between -0.1 and 2.3°C, with proper documentation, in sealed shipping containers, on October 21, 2009. The samples were scheduled for the requested analyses of the explosives fraction. Methods 8330 and 8332, for 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,6-Dinitrotoluene, 2,4-Dinitrotoluene, and Nitroglycerin only, were used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. This portion of the SDG narrative deals with the explosives analysis only. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for SDG # 0910165 are included in the sample data sections.

Explosives

Extraction and analysis holding time requirements were met for the samples. Sample 13MW2 was re-extracted outside of holding time, due to surrogate failure in the sample. Both sets of data are reported.

No target analytes confirmed above the Quantitation Limit (QL) in the samples.

All QC criteria were met for all initial and continuing calibration standards associated to this SDG.

All of the surrogates met recovery and retention time criteria, with the exception of 13MW2.

The associated method blank met all quality control criteria.

Duplicate matrix spikes (MS/MSD) were performed with sample 13MW5, and met recovery and precision criteria. The associated Laboratory Control Samples (LCS) prepared and analyzed along with the samples met recovery criteria.

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 his/her designee, as verified by the following signature.

Teresa Amentt Jennings

Teresa Amentt Jennings
GC/HPLC Data Reviewer
November 13, 2009

GC and GC/MS Column and Trap Specifications Table

SDG #: 0910165

COLUMNS

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	GC Laboratory				
	Restek	RTX-5	0.53	1.0	30
	Restek	RTX-SMS	0.53	1.0	30
	Restek	clpest	0.32	0.5	30
	Restek	clpest2	0.32	0.42	30
	J&W	DB-210	0.53	1.0	30
	J&W	GS-GASPRO	0.32	N/A	30
	GC Volatiles Laboratory				
	Restek	RTX-Volatiles	0.53	2.0	30
	GC/MS Volatiles Laboratory				
	Restek	RTX-VMS	0.18	1.0	20
	Supelco	SPB-624	0.32	1.8	60
	Supelco	SPB-624	0.53	3.0	75
	Phenomonex	ZB-624	0.32	1.8	60
	GC/MS Semivolatiles Laboratory				
	Restek	RTX-5MS	0.32	0.25	30
	HPLC Laboratory				
	Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
	Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
✓	Restek	Pinnacle Cyano	4.6	5.0	25 cm
✓	Restek	Allure C18	4.6	5.0	25 cm

TRAPS

GC and GC/MS Volatiles Laboratory	
Supelco J (BETXTRAP™)	* 7.7 cm Carbopack C
	* 1.2 cm Carbopack B
Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons)
	* 6 cm of Carboxen 1000 (Carbon molecular sieves)
	* 1 cm of Carboxen 1001 (Carbon molecular sieves)

Rev. 22

CompuChem

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CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

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Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

H - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

M1 - The compound was not found by the automatic integration routine.

M2 - The compound was incorrectly integrated by the automatic integration routine.

M3 - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

Revision 7 (12/6/2005)

DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the higher of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the higher of the two values, although the choice could be a project specific issue. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses are not combined on a single Form I.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

B. Form I

Organic Analysis Data Sheet (OADS)
- All samples in alphanumeric order
- Matrix Spike/Matrix Spike Duplicate
- Laboratory Control Sample(s)

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-02

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2RE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03RE1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/26/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW3

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-04

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW4

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-05

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-01

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MS

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.7	
99-65-0	1,3-Dinitrobenzene	7.4	
606-20-2	2,6-Dinitrotoluene	12	
121-14-2	2,4-Dinitrotoluene	8.0	

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MSD

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MSD1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.9	
99-65-0	1,3-Dinitrobenzene	7.7	
606-20-2	2,6-Dinitrotoluene	12	
121-14-2	2,4-Dinitrotoluene	7.8	

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-07

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW7

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-08

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-06

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PKZLCS

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received:

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.7	
99-65-0	1,3-Dinitrobenzene	7.3	
606-20-2	2,6-Dinitrotoluene	11	
121-14-2	2,4-Dinitrotoluene	7.2	

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PLILCS

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102615-BS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received:

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/26/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.5	
99-65-0	1,3-Dinitrobenzene	7.1	
606-20-2	2,6-Dinitrotoluene	11	
121-14-2	2,4-Dinitrotoluene	7.6	

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-02

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2RE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03RE1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/30/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW3

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-04

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW4

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-05

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-01

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MS

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MS2

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	18	

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MSD

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MSD2

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	18	

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-07

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW7

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-08

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-06

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PLALCS

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BS2

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	21	

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PMOLCS

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9103004-BS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/30/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	17	

FORM I PEST

C. Form II

Surrogate spike analysis

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

GC Column(1): C18 ID: 4.60 (mm)

	EPA SAMPLE NO.	S1 %REC #	S2 %REC #	S3 %REC #	S4 %REC #	S5 %REC #	S6 %REC #	TOT OUT
01	PBLKKZ	77						0
02	PKZLCS	88						0
03	13MW5MS	89						0
04	13MW5MSD	91						0
05	13MW5	76						0
06	13MW1	95						0
07	13MW2	0 *						1
08	13MW3	96						0
09	13MW4	91						0
10	13MWDUP	93						0
11	13MW6	90						0
12	13MW7	92						0
13	PBLKLI	88						0
14	PLILCS	87						0
15	13MW2RE	94						0
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 = 1,4-Dinitrobenzene (39-132)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

GC Column(1): PINNACLE CYANO ID: 4.60 (mm)

	EPA SAMPLE NO.	S1 %REC #	S2 %REC #	S3 %REC #	S4 %REC #	S5 %REC #	S6 %REC #	TOT OUT
01	PBLKKZ	88						0
02	PLALCS	97						0
03	13MW5MS	100						0
04	13MW5MSD	100						0
05	13MW5	81						0
06	13MW1	110						0
07	13MW2	6.6 *						1
08	13MW3	100						0
09	13MW4	100						0
10	13MWDUP	100						0
11	13MW6	99						0
12	13MW7	100						0
13	PBLKMO	100						0
14	PMOLCS	100						0
15	13MW2RE	98						0
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 = 1,4-Dinitrobenzene (50-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

D. Form III

Matrix Spike/Matrix Spike Duplicate/ Laboratory Control Sample(s) results

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix Spike - EPA Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,3,5-Trinitrobenzene	8.0	0.0	6.7	84	50-150
1,3-Dinitrobenzene	8.0	0.0	7.4	92	50-150
2,6-Dinitrotoluene	12	0.0	12	100	50-150
2,4-Dinitrotoluene	8.0	0.0	8.0	100	50-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,3,5-Trinitrobenzene	8.0	6.9	86	3	30	50-150
1,3-Dinitrobenzene	8.0	7.7	96	4	30	50-150
2,6-Dinitrotoluene	12	12	100	0	30	50-150
2,4-Dinitrotoluene	8.0	7.8	98	2	30	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PKZLCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,3,5-Trinitrobenzene	8.0	6.7	84	50-150
1,3-Dinitrobenzene	8.0	7.3	91	50-150
2,6-Dinitrotoluene	12	11	92	50-150
2,4-Dinitrotoluene	8.0	7.2	90	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PLILCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,3,5-Trinitrobenzene	8.0	6.5	81	50-150
1,3-Dinitrobenzene	8.0	7.1	89	50-150
2,6-Dinitrotoluene	12	11	92	50-150
2,4-Dinitrotoluene	8.0	7.6	95	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix Spike - EPA Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Nitroglycerin	20	0.0	18	90	50-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Nitroglycerin	20	18	90	0	40	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PLALCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Nitroglycerin	20	21	110	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PMOLCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Nitroglycerin	20	17	85	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

_____

FORM III PEST-1

E. Form IV

Method Blank Results
Form IV, Form I

Method blank summary, OADS,
- In chronological order of analysis

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9102307-BLK1 Lab File ID: 014H9102307-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/23/09

Date Analyzed (1): 10/24/09 Date Analyzed (2):

Time Analyzed (1): 2141 Time Analyzed (2):

Instrument ID (1): A11001 Instrument ID (2):

GC Column (1): C18 ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PKZLCS	9102307-BS1	10/24/09	
02	13MW5MS	9102307-MS1	10/24/09	
03	13MW5MSD	9102307-MSD1	10/24/09	
04	13MW5	0910165-01	10/25/09	
05	13MW1	0910165-02	10/25/09	
06	13MW2	0910165-03	10/25/09	
07	13MW3	0910165-04	10/25/09	
08	13MW4	0910165-05	10/25/09	
09	13MWDUP	0910165-06	10/25/09	
10	13MW6	0910165-07	10/25/09	
11	13MW7	0910165-08	10/25/09	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS: _____

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKLI

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9102615-BLK1 Lab File ID: 044H9102615-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/26/09

Date Analyzed (1): 10/27/09 Date Analyzed (2):

Time Analyzed (1): 1859 Time Analyzed (2):

Instrument ID (1): A11001 Instrument ID (2):

GC Column (1): C18 ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLILCS	9102615-BS1	10/27/09	
02	13MW2RE	0910165-03RE1	10/27/09	
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKLI

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102615-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/26/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9102307-BLK1 Lab File ID: 035H9102307-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/23/09

Date Analyzed (1): 10/29/09 Date Analyzed (2):

Time Analyzed (1): 1214 Time Analyzed (2):

Instrument ID (1): A11002 Instrument ID (2):

GC Column (1): PINNACLE CYANO ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLALCS	9102307-BS2	10/29/09	
02	13MW5MS	9102307-MS2	10/29/09	
03	13MW5MSD	9102307-MSD2	10/29/09	
04	13MW5	0910165-01	10/29/09	
05	13MW1	0910165-02	10/29/09	
06	13MW2	0910165-03	10/29/09	
07	13MW3	0910165-04	10/29/09	
08	13MW4	0910165-05	10/29/09	
09	13MWDUP	0910165-06	10/29/09	
10	13MW6	0910165-07	10/29/09	
11	13MW7	0910165-08	10/29/09	
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKMO

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9103004-BLK1 Lab File ID: 070H9111020-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/30/09

Date Analyzed (1): 11/12/09 Date Analyzed (2):

Time Analyzed (1): 0933 Time Analyzed (2):

Instrument ID (1): A11002 Instrument ID (2):

GC Column (1): PINNACLE CYANO ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PMOLCS	9103004-BS1	11/12/09	
02	13MW2RE	0910165-03RE1	11/12/09	
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKMO

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9103004-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/30/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

CompuChem, a Division of Liberty Analytical Corporation

I. SAMPLE DATA PACKAGE

HPLC by SW-846

The sample data package shall include data for all analyses of all samples in one Sample Delivery Group (SDG), including field samples, dilutions, reanalysis, blanks, matrix spikes, matrix spike duplicates, and laboratory control samples. The sample data package consists of the following:

A. SDG Narrative

B. Chain-of-Custody Documentation

C. SDG Data

LAB CODE: LIBRTY

METHOD: 8330-8332

SDG #: 0910105

A. SDG Narrative

CompuChem

a division of Liberty Analytical Corporation
501 Madison Avenue
Cary, N.C. 27513
Tel: 919/379-4100 Fax: 919/379-4050

SDG NARRATIVE
SDG # 0910165
PROTOCOL: SW-846 8330 & 8332

SAMPLE IDENTIFICATIONS: 13MW1, 13MW2, 13MW3, 13MW4, 14MW5, 13MW6, 13MW7, 13MWDUP

The eight water samples listed above were received intact, refrigerated between -0.1 and 2.3°C, with proper documentation, in sealed shipping containers, on October 21, 2009. The samples were scheduled for the requested analyses of the explosives fraction. Methods 8330 and 8332, for 1,3,5-Trinitrobenzene, 1,3-Dinitrobenzene, 2,6-Dinitrotoluene, 2,4-Dinitrotoluene, and Nitroglycerin only, were used to prepare and analyze the samples, with the exceptions and/or additions requested by the client. This portion of the SDG narrative deals with the explosives analysis only. All pertinent Quality Assurance notices are included in the narrative section and all pertinent Laboratory notices for SDG # 0910165 are included in the sample data sections.

Explosives

Extraction and analysis holding time requirements were met for the samples. Sample 13MW2 was re-extracted outside of holding time, due to surrogate failure in the sample. Both sets of data are reported.

No target analytes confirmed above the Quantitation Limit (QL) in the samples.

All QC criteria were met for all initial and continuing calibration standards associated to this SDG.

All of the surrogates met recovery and retention time criteria, with the exception of 13MW2.

The associated method blank met all quality control criteria.

Duplicate matrix spikes (MS/MSD) were performed with sample 13MW5, and met recovery and precision criteria. The associated Laboratory Control Samples (LCS) prepared and analyzed along with the samples met recovery criteria.

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 his/her designee, as verified by the following signature.

Teresa Amentt Jennings

Teresa Amentt Jennings
GC/HPLC Data Reviewer
November 13, 2009

GC and GC/MS Column and Trap Specifications Table

SDG #: 0910165

COLUMNS

Columns Utilized	Brand Name	Coating Material	ID (mm)	Film Thickness (um)	Length (m)
	GC Laboratory				
	Restek	RTX-5	0.53	1.0	30
	Restek	RTX-SMS	0.53	1.0	30
	Restek	clpest	0.32	0.5	30
	Restek	clpest2	0.32	0.42	30
	J&W	DB-210	0.53	1.0	30
	J&W	GS-GASPRO	0.32	N/A	30
	GC Volatiles Laboratory				
	Restek	RTX-Volatiles	0.53	2.0	30
	GC/MS Volatiles Laboratory				
	Restek	RTX-VMS	0.18	1.0	20
	Supelco	SPB-624	0.32	1.8	60
	Supelco	SPB-624	0.53	3.0	75
	Phenomonex	ZB-624	0.32	1.8	60
	GC/MS Semivolatiles Laboratory				
	Restek	RTX-5MS	0.32	0.25	30
	HPLC Laboratory				
	Supelco	Supelcosil LC-PAH	4.6	5.0	15 cm
	Supelco	Discovery RP Amide C16	4.6	5.0	25 cm
✓	Restek	Pinnacle Cyano	4.6	5.0	25 cm
✓	Restek	Allure C18	4.6	5.0	25 cm

TRAPS

GC and GC/MS Volatiles Laboratory	
Supelco J (BETXTRAP™)	* 7.7 cm Carbopack C
	* 1.2 cm Carbopack B
Supelco K (Vocarb3000)	* 10 cm of Carbopack B (Graphitized Carbons)
	* 6 cm of Carboxen 1000 (Carbon molecular sieves)
	* 1 cm of Carboxen 1001 (Carbon molecular sieves)

Rev. 22

CompuChem

a division of Liberty Analytical Corporation

CompuChem's Pagination Convention

As required by the EPA CLP Statement of Work (SOW) documents, data to be delivered must be paginated (by machine or hand). In the event that the initial numbering is incorrect (a page numbered twice or a page skipped, for example), it is CompuChem's policy to add an alphabetic suffix to a page number when necessary (e.g., 100A, 100B, etc.).

CompuChem

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Notification Regarding Manual Editing/Integration Flags

In some instances, manual adjustments to the software output are necessary to provide accurate data. These manual integrations are performed by the data reviewers, GC/MS operators, or GC chemists. An Extracted Ion Current Profile (EICP) or a GC chromatographic peak has been provided for the manual integration performed on each compound to demonstrate the accuracy of that process. The manual integrations are flagged on the quantitation report in the far right column beyond the FINAL concentration for GC/MS analysis, and in the "Flags" column for GC analysis. The manual editing/integration flags are:

M - Denotes that a manual integration has been performed for this compound. The manual integration was performed in order to provide the most accurate area count possible for the peak.

H - Denotes that the data reviewer, GC/MS operator, or GC Chemist has chosen an alternate peak within the retention time window from that chosen by the software for that compound. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

MH - Denotes that an alternate peak has been chosen within the retention time window from that chosen by the software for that compound and also a manual integration of the chosen peak has been performed. The manual integration was performed in order to provide the most accurate area count possible for the peak.

L - Denotes that a data reviewer or GC/MS operator has selected an alternate library search. This is typically done when an additional tentatively identified compound (TIC) has been added to the number of peaks searched. No manual integration is performed in choosing an alternate peak. The software still performs the integration.

ML - Denotes that an alternate library search has been selected and a manual integration has also been performed. This is typically done when an additional TIC has been added and the TIC peak also required a manual integration.

The EPA CLP SOW documents require additional explanations for manual editing/integration. In the accompanying raw data packages, additional codes have been applied to the "M" flag and carry the following meanings;

M1 - The compound was not found by the automatic integration routine.

M2 - The compound was incorrectly integrated by the automatic integration routine.

M3 - The co-eluting compounds were incorrectly integrated by the automatic integration routine.

These codes will appear in the GC/MS and GC raw data.

Revision 7 (12/6/2005)

DATA REPORTING QUALIFIERS

On the Form I, under the column labeled "Q" for qualifier, each result is flagged with the specific data reporting qualifiers listed below, as appropriate. Up to five qualifiers may be reported on Form I for each compound. The qualifiers used are:

U : This flag indicates the compound was analyzed for but not detected. The Contract Required Quantitation Limit (CRQL), or reporting limit, will be adjusted to reflect any dilution and, for soils, the percent moisture.

J : This flag indicates an estimated value. The flag is used as detailed below:

1. When estimating a concentration for tentatively identified compounds (TICs) where a response factor of 1:1 is assumed for the TIC analyte,

2. When the mass spectral and retention time data indicate the presence of a compound that meets the volatile and semivolatile GC/MS identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero, and

3. When the retention time data indicate the presence of a compound that meets the pesticide and/or Aroclor or other GC or HPLC identification criteria, and the result is less than the adjusted CRQL (or Reporting Limit) but greater than zero. For example, if the CRQL (or Reporting Limit) is 10 µg/L, but a concentration of 3 µg/L is calculated, it is reported as 3J.

N : This flag indicates presumptive evidence of a compound. This flag is only used for TICs, where the identification is based on a mass spectral library search and must be used with the J flag. For generic characterization of a TIC such as "chlorinated hydrocarbon" (or for an "unknown," with no matches ≥ 85% in the SOM01.2 SOW document), the N flag is not used.

P : In the EPA's Contract Laboratory Program (CLP), this flag is used for a pesticide/Aroclor target analyte, when there is greater than 25% difference for detected concentrations between the two GC columns. The lower of the two values is reported on the Form I and flagged with a P.
For SW-846 GC and HPLC analyses, when the Relative Percent Difference (RPD) is greater than 40% and there is no evidence of chromatographic anomalies or interferences, then the higher of the two values is reported and flagged with a P. When the RPD is equal to or less than 40%, our policy is to also report the higher of the two values, although the choice could be a project specific issue. For certain HPLC analyses, if one of the HPLC columns displays co-elution of target analytes, all results are reported from a primary column displaying no co-elution. Results are still flagged with a P if the RPD between columns is greater than 40%.

C : This flag applies to GC or HPLC results where the identification has been confirmed by GC/MS. If GC/MS confirmation was attempted but was unsuccessful, this flag is not applied; a laboratory-defined flag is used instead (see the X/Y/Z qualifier.)

DATA REPORTING QUALIFIERS (continued)

B : This flag is used when the analyte is found in the associated blank as well as in the sample. It indicates probable blank contamination and warns the data user to take appropriate action. This flag is used for a TIC as well as for a positively identified target compound. The combination of flags BU or UB is not an allowable policy. Blank contaminants are flagged B only when they are detected in the sample.

E : This flag identifies compounds whose concentrations exceed the upper level of the calibration range of the instrument for that specific analysis. If one or more compounds have a concentration greater than the upper level of the calibration range, the sample or extract will be diluted and reanalyzed. All such compounds with a concentration greater than the upper level of the calibration range will have the result flagged with an E on Form I for the original analysis.

D : If a sample or extract is reanalyzed at a higher dilution factor, for example when the concentration of an analyte exceeds the upper calibration range, the DL suffix is appended to the sample number on the Form I for the more diluted sample, and **all** reported concentrations on that Form I are flagged with the D flag. This flag alerts data users that any discrepancies between the reported concentrations may be due to dilution of the sample or extract.

NOTE 1: The D flag is not applied to compounds which are not detected in the sample analysis i.e. compounds reported with the CRQL (or Reporting Limit) and the U flag.

NOTE 2: Separate Forms I are used for reporting the original analysis (Client Sample No. XXXXX) and the more diluted sample analysis (Client Sample No. XXXXXDL) i.e. the results from both analyses are not combined on a single Form I.

A: This flag indicates that a TIC is a suspected aldol-condensation product.

S: In the SOM01.2 SOW document, this flag is used to indicate an estimated value for Aroclor target compounds where a valid 5-point initial calibration was not performed prior to the analytes detection in a sample. If an "S" flag is used for a specific Aroclor, then a reanalysis of the sample is required after a valid 5-point calibration is performed for the detected Aroclor.

X/Y/Z : Other specific flags may be required to properly define the results. If used, the flags will be fully described in the SDG Narrative. The laboratory-defined flags are limited to X, Y, and Z.

B. Chains-of-Custody

The laboratory shall include a copy of the Chain-of-Custody (CoC) documentation for all of the samples in the SDG. The CoC documents shall be arranged in increasing Client Sample ID number order, considering both letters and numbers.

CHAIN OF CUSTODY RECORD

Laboratory: CompuChem Environmental, 501 Madison Avenue, Cary, NC 27513/Cathy Dover, Manager/1-800-833-5097

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:** RAAP, Radford, Virginia **Location:** HWMU13/Open Burning Ground **Event:** 2009 2nd Semi Annual Ground Water Monitoi **DAA JN:** B03204-07 **Lab JN:**	**Project Specific (PS) QC:** ☑YES ☐NO **Sample Collection for Project Complete?** ☑YES ☐NO **Carrier:** NC Courier Service **Tracking Number:**		

Box 1: Matrix
SW 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 ☐NO
Bill: ☐Client ☑Consultant
Preserved and shipped on ice: ☑YES ☐NO

Box 4 - Sample Type				G	G	G	G	G	G				
Box 3 - Filtered/Unfiltered				U	U	U	U	U	U				
Required pH of Sample								<2	<2				
Box 2 - Preservative				H	H	H	H	B	B				
Box 5 - Sample Container Type				2-1L A		1-500ml P 250ml	2-1L A	1-500 ml P (plastic liters)					
Sample ID	**Date: 2009**	**Time**	**Box 1: Matrix**	**Number of Bottles** 4x 10/19/09	**8332/3535 - Nitroglycerine / 8330 - Explosives**	**EPA 314.0 - Perchlorate** (7/12 6/09)	**8270C/3520C - Semivolatile**	**ICP 6010B/3005A (Metals-Total)**	**7470A (Mercury-Total)**	**Metals/Hg pH**			
13MW1	10/20	1040	GW	7	X	X	X	X	X	X	<2		0910165-02
13MW2	10/20	0930	GW	7	X	X	X	X	X	X	<2		-03
13MW3	10/19	0740	GW	7	X	X	X	X	X	X	<2		-04
13MW4	10/20	0805	GW	7	X	X	X	X	X	X	<2		-05
13MWDUP	10/20	0820	GW	7	X	X	X	X	X	X	<2		-06
13MW5	10/19	0850	GW	42	X	X	X	X	X	X	<2		0910165-01 USE FOR QC
13MW6	10/19	1030	GW	7	X	X	X	X	X	X	<2		-07
13MW7	10/19	1130	GW	7	X	X	X	X	X	X	<2		-08

GENERAL NOTES:
1. **Only report results at or above this permit limit.**
2. **Level 4 with EDD & PDF**

Residual Chlorine Present?
Yes _____ No ✓

Clients Special Instructions: level 4 with edd and PDF. -1.2°C, 2.3°C, 0.1°C, 1.7°C, -1.1°C, 0.2°C, -0.1°C

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): Dale Slaughter	Date: 10/19/09	#1 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	#2 Relinquished by (Signature): Dale Slaughter	Date: 10/21/09	Sample Storage Time Requested:
Sampler Signature: Dale Slaughter	Time: 0600	Company Name: DAA	Time: 0800	Company Name: DAA	Time: 1110	
Sampler Name (Print): Tyler Emery	Date: 10/19/09	#1 Received by (Signature): Dale Slaughter	Date: 10/21/09	#2 Received by (Signature): Eli Curles	Date: 10/21/09	30 DYS ORG/6 MTHS INORG
Sampler Signature: Tyler Emery	Time: 0600	Company Name: DAA	Time: 0800	Company Name: N.C. Courier	Time: 1110	

Tony Dover CompuChem 10/21/09 1000

~~BAWF~~ HWMU13 q. sub

ANALYTICAL METHOD: 8270C
TYPE METHOD: GCMS
CLASS: SEMIVOLATILE

No.	PARAMETER	CAS RN	Permit QL (ug/l)
1.	✓ 2,4-dichlorophenol	120-83-2	
2.	✓ 3,3'-dimethylbenzidine	119-93-7	
3.	✓ 2-chlorophenol	95-57-8	
4.	✓ 3-methylphenol	108-39-4	
5.	✓ 4-methylphenol	106-44-5	
6.	✓ 4-nitrophenol	100-02-7	
7.	✓ acetophenone	98-86-2	
8.	✓ benzo(a)anthracene	56-55-3	
9.	✓ benzo(a)pyrene	50-32-8	
10.	✓ benzo[b]fluoranthene	205-99-2	
11.	✓ benzo[k]fluoranthene	207-08-9	
12.	✓ bis(2-Ethylhexyl)phthalate	117-81-7	
13.	✓ butyl benzyl phthalate	85-68-7	
14.	✓ dibenz(a,h)anthracene	53-70-3	
15.	✓ dibenzofuran	132-64-9	
16.	✓ di-n-butyl phthalate	84-74-2	
17.	✓ diethyl phthalate	84-66-2	
18.	✓ dimethyl phthalate	131-11-3	
19.	✓ di-n-octyl phthalate	117-84-0	
20.	✓ diphenylamine n-nitrosodiphenylamine	122-39-4	
21.	✓ fluoranthene	206-44-0	
22.	✓ indeno[1,2,3-cd]pyrene	193-39-5	
23.	✓ nitrobenzene	98-95-3	
24.	✓ phenol	108-95-2	
25.	✓ pyrene	129-00-0	

26. ✓ Hexachloroethane.

JCF
10-6-09

.\\bbg-files\projects\admin\divisions\envr\templates\bburg eteam temp\field events\raap\sample event set up\semi-annual events\hwmu-13\hwmu13-target analyte list gw (new) 2007 10.doc
Revised July 18, 2005 - JCF
Revised November, 2005 - new permit - JCF

WO#0910165

ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: SEE BELOW
CLASS: TOTAL

Method SW 846-6010B

No.	PARAMETER	CAS RN	for 6010 use: Permit QL (ug/l)	6010
1.	Antimony	7440-36-0	5	10
2.	Arsenic	7440-38-2	5	10
3.	Barium	7440-39-3	1	200
4.	Cadmium	7440-43-9	1	5
5.	Chromium	7440-47-3	5	10
6.	Lead	7440-92-1	5	3
7.	Nickel	7440-02-0	5	40
8.	Selenium	7782-49-2	5	5
9.	Silver	7440-22-4	2	5
10.	Zinc	7440-66-6	5	20

Method SW 7470A/CVAA

11.	Mercury	7439-97-6	0.5

.p:\admin\divisions\envr\templates\bburg eteam temp\field events\raap\sample event set up\semi-annual events\hwmu-13\hwmu13-target analyte list gw (new) 2007 10.doc
Revised July 18, 2005 - JCF
Revised November, 2005 - new permit - JCF
Revised Oct 10, 2009

ANALYTICAL METHOD: 314.0
TYPE METHOD: GC

No.	PARAMETER	CAS RN
1.	Perchlorate	14797-73-0

ANALYTICAL METHOD: SEE BELOW
TYPE METHOD: GC/ HPLC

Method 8330:

No.	PARAMETER	CAS RN
1.	1,3,5-trinitrobenzene (1,3,5-TNB)	99-35-4
2.	1,3-dinitrobenzene (1,3-DNB)	99-65-0
3.	2,4-dinitrotoluene (2,4-DNT)	121-14-2
4.	2,6-dinitrotoluene (2,6-DNT)	606-20-2

Method 8332:

No.	PARAMETER	CAS RN
1.	Nitroglycerin	55-63-0

Unit 13/0BG7

Draper Aden Associates
Engineering ♦ Surveying ♦ Environmental Services

2206 S. Main Street
Blacksburg, Virginia 24060
(540) 552-0444 Fax: (540) 552-0291
daa@daa.com www.daa.com

MEMORANDUM

To:	Cathy Dover, CompuChem
From:	~~Kathy Olsen, DAA~~ Ken C. / DAA
Date:	Oct. 1st, 2009
Project Name:	RAAP-Radford Arsenal
Job No.:	B03204-07
Subject:	Sample kit order-Second Semi Annual 2009 Semiannual Monitoring
cc:	***Please deliver on or before October 14th, 2009*** ✓

Please separate samples by landfill unit.

HWMU-13:
8 wells plus MS/MSD:

- 8330 (2-1L ambers no preservative) ✓
- 8332/3535 (2-1L ambers no preservative) ✓
- EPA 314 (perchlorate only) ✓
- 8270C/3520C SV/no preservative (2-1L ambers) ✓
- ICP 6010B/3005A/7470A (1-Total Metals & Mercury w/ HNO3 pH<2) ✓

Radford AAP/Solid/Hazardous Waste Management Units and Well Identifications

HWMU-13

13MW1
13MW2
13MW3
13MW4
13MWDUP
13MW5 (QC Well)
13MW6
13MW7

OK
JUC
9-6-09

WORK ORDER

0910165

Printed: 11/13/2009 9:18:31AM

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Reviewed**

Report To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone: (540)552-0444
Fax: -

Invoice To:
DRAPER
JANET FRAZIER
2206 SOUTH MAIN STREET
BLACKSBURG, VA 24060
Phone :(540)552-0444
Fax: -

Date Due:	11/10/2009 00:00 (20 day TAT)		
Received By:	Cathy Dover	Date Received:	10/21/2009 16:00
Logged In By:	Cathy Dover	Date Logged In:	10/21/2009 21:04

J & B Flags?: NO	TICS?:NO	Spike Level: FULL Spike	Deliverable: **Style 9**	EDD : DRAPER ACCESS + ERIS

USE 0910165-01 FOR QC*SVOC 8270C=HWMU13a.SUB*6020MTL=Sb,As,Ba,Cd,Cr,Pb,Ni,Se,Ag & Zn + Hg 7470 (SPECIAL LIMITS-Ba & Cd @ 1 ppb)*PERCHLORATE NEEDS 4 ug/L STD.*8330=HWMU13.SUB*8332=NITROGLYCERIN ONLY*NEEDS UNIT 13 NOTED ON FORM 1s

Analysis	Due	TAT	Expires	Received	Comments
0910165-01 13MW5 [Water] Sampled 10/19/2009 08:50 Eastern					**USE FOR QC**
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 08:50	10/21/2009 16:00	
0910165-02 13MW1 [Water] Sampled 10/20/2009 08:50 Eastern					
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:50	10/21/2009 16:00	
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:50	10/21/2009 16:00	
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:50	10/21/2009 16:00	

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Reviewed**

Analysis	Due	TAT	Expires	Comments
0910165-03 13MW2 [Water] Sampled 10/20/2009 09:30 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 09:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 09:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 09:30	10/21/2009 16:00
0910165-04 13MW3 [Water] Sampled 10/19/2009 07:40 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 07:40	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 07:40	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 07:40	10/21/2009 16:00
0910165-05 13MW4 [Water] Sampled 10/20/2009 08:05 Eastern				
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:05	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:05	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:05	10/21/2009 16:00
0910165-06 13MWDUP [Water] Sampled 10/20/2009 08:20 Eastern				
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/18/2010 08:20	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/27/2009 08:20	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/17/2009 08:20	10/21/2009 16:00

0910165

COMPUCHEM

Client:	**DRAPER**	**Project Manager:**	**Cathy Dover**
Project:	**RAAP SEMI-ANNUAL MONITORING 2009/B03**	**Project Number:**	**RAAP SEMI-ANNUAL MONITORING 2009/B**
SDG:	**0910165** **CASE:**	**Status:**	**Reported**

Analysis	Due	TAT	Expires	Comments
0910165-07 13MW6 [Water] Sampled 10/19/2009 10:30 Eastern				
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 10:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 10:30	10/21/2009 16:00
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 10:30	10/21/2009 16:00
0910165-08 13MW7 [Water] Sampled 10/19/2009 11:30 Eastern				
SVOC 8270C FULL	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
6020 ICP MS	11/10/2009 16:00	20	04/17/2010 11:30	10/21/2009 16:00
7470A/7471A Mercury	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
IC 314.0 Perchlorate Water	11/10/2009 16:00	20	11/16/2009 11:30	10/21/2009 16:00
GC-8332- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00
GC-8330- SOLID PHASE EXPLOSIVE	11/10/2009 16:00	20	10/26/2009 11:30	10/21/2009 16:00

CompuChem, a Division of Liberty Analytical Corp.

EXTRACT COC

10-23-1

DEPT: EXTR **DATE:** 10-23-09

BATCH: 9102307

	COMPUCHEM NUMBER	CLIENT SAMPLE ID	PARAMETER	
1	0910165-01	13MW5		
2	0910165-02	13MW1		
3	0910165-03	13MW2		
4	0910165-04	13MW3		
5	0910165-05	13MW4		
6	0910165-06	13MWDUP		
7	0910165-07	13MW6		
8	0910165-08	13MW7		
9	9102307-BLK1	PBLKKZ		
10	9102307-BS1	PKZLCS		
11	9102307-BS2	PLALCS		
12	9102307-MS1	13MW5MS		
13	9102307-MS2	13MW5MS		
14	9102307-MSD1	13MW5MSD		
15	9102307-MSD2	13MW5MSD		
16				
17				
18				
19				
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24				
25				
26				
27				
28				
	RELINQUISHED BY	DATE/TIME	REC. BY	REASON
	T. WILLIAMS	10/23/09 1650	GC REFRIG. #3	Storage
	GC Ref 3	~~10/23/09~~ 10/24/09 1310	Audrey	
	Audrey	~~10/23/09~~ 10/24/09 1315	gc ref 4	
		a/v 10/24/09		

TAJ 11/3/09

Rev. 7/28/03:dce

CompuChem, a Division of Liberty Analytical Corp.

EXTRACT COC

10-26-1

DEPT: EXTR **DATE:** 10-26-09

BATCH: 9102615

	COMPUCHEM NUMBER	CLIENT SAMPLE ID	PARAMETER	
1	0910165-03RE1	13MW2		
2	9102615-BLK1	PBLKLI		
3	9102615-BS1	PLILCS		
4				
5				
6				
7				
8				
9				
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25				
26				
27				
28				
	RELINQUISHED BY	DATE/TIME	REC. BY	REASON
	T. WILLIAMS	10/26/09 1300	GC REFRIG #3	STORAGE
	GC Refrig 3	10/26/09 10/26/09 15 1430	auelloso	
	Auelloso	10/26/09 1432	gc ref #4	

TAJ 10/26/09

Rev. 7/28/03:dce

CompuChem, a Division of Liberty Analytical Corp.

EXTRACT COC

DEPT: EXTR **DATE:** _____

BATCH: _____

	COMPUCHEM NUMBER	CLIENT SAMPLE ID	PARAMETER	
1	0910165-03RE2	13MW2		
2	9111020-BLK1	PBLKOU		
3	9111020-BS1	POULCS		
4				
5				
6				
7				
8				
9				
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25				
26				
27				
28				
	RELINQUISHED BY	DATE/TIME	REC. BY	REASON
	[signature]	11/11/09 1150	GC Ref #3	temp storage
	[signature]	11/11/09 1200	[signature]	[signature]
	[signature]	11/11/09 1300	[signature]	

Rev. 7/28/03:dce

TAJ 11/13/09

C. SDG Data

1. QC Summary
2. Sample Data
3. Standards Data
4. Raw QC Data

LAB CODE: LIBRTY

METHOD: 8330-8332

SDG #: 0910105

1. QC Summary

a. Surrogate Percent Recovery Summary (Form II)

b. Matrix Spike/Matrix Spike Duplicate/
Laboratory Control Sample(s) Summary
(Form III)

c. Method Blank Summary (Form IV)

a. Surrogate Percent Recovery Summary

(Form II)

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

GC Column(1): C18 ID: 4.60 (mm)

	EPA SAMPLE NO.	S1 %REC #	S2 %REC #	S3 %REC #	S4 %REC #	S5 %REC #	S6 %REC #	TOT OUT
01	PBLKKZ	77						0
02	PKZLCS	88						0
03	13MW5MS	89						0
04	13MW5MSD	91						0
05	13MW5	76						0
06	13MW1	95						0
07	13MW2	0 *						1
08	13MW3	96						0
09	13MW4	91						0
10	13MWDUP	93						0
11	13MW6	90						0
12	13MW7	92						0
13	PBLKLI	88						0
14	PLILCS	87						0
15	13MW2RE	94						0
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 = 1,4-Dinitrobenzene (39-132)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

2E
WATER PESTICIDE SURROGATE RECOVERY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

GC Column(1): PINNACLE CYANO ID: 4.60 (mm)

	EPA SAMPLE NO.	S1 %REC #	S2 %REC #	S3 %REC #	S4 %REC #	S5 %REC #	S6 %REC #	TOT OUT
01	PBLKKZ	88						0
02	PLALCS	97						0
03	13MW5MS	100						0
04	13MW5MSD	100						0
05	13MW5	81						0
06	13MW1	110						0
07	13MW2	6.6 *						1
08	13MW3	100						0
09	13MW4	100						0
10	13MWDUP	100						0
11	13MW6	99						0
12	13MW7	100						0
13	PBLKMO	100						0
14	PMOLCS	100						0
15	13MW2RE	98						0
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								

ADVISORY
QC LIMITS

S1 = 1,4-Dinitrobenzene (50-150)

Column to be used to flag recovery values
* Values outside of QC limits
D Surrogate diluted out

b. Matrix Spike/Matrix Spike Duplicate/
Laboratory Control Sample(s) Summary

(Form III)

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix Spike - EPA Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,3,5-Trinitrobenzene	8.0	0.0	6.7	84	50-150
1,3-Dinitrobenzene	8.0	0.0	7.4	92	50-150
2,6-Dinitrotoluene	12	0.0	12	100	50-150
2,4-Dinitrotoluene	8.0	0.0	8.0	100	50-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,3,5-Trinitrobenzene	8.0	6.9	86	3	30	50-150
1,3-Dinitrobenzene	8.0	7.7	96	4	30	50-150
2,6-Dinitrotoluene	12	12	100	0	30	50-150
2,4-Dinitrotoluene	8.0	7.8	98	2	30	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 4 outside limits
Spike Recovery: 0 out of 8 outside limits

COMMENTS: _____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PKZLCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,3,5-Trinitrobenzene	8.0	6.7	84	50-150
1,3-Dinitrobenzene	8.0	7.3	91	50-150
2,6-Dinitrotoluene	12	11	92	50-150
2,4-Dinitrotoluene	8.0	7.2	90	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PLILCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
1,3,5-Trinitrobenzene	8.0	6.5	81	50-150
1,3-Dinitrobenzene	8.0	7.1	89	50-150
2,6-Dinitrotoluene	12	11	92	50-150
2,4-Dinitrotoluene	8.0	7.6	95	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 4 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E

WATER PESTICIDE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix Spike - EPA Sample No.: 13MW5

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
Nitroglycerin	20	0.0	18	90	50-150

COMPOUND	SPIKE ADDED (ug/L)	MSD CONCENTRATION (ug/L)	MSD % REC #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Nitroglycerin	20	18	90	0	40	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 1 outside limits
Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PLALCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Nitroglycerin	20	21	110	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

_____

FORM III PEST-1

3E
WATER PESTICIDE LAB CONTROL SAMPLE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

LCS ID: PMOLCS

COMPOUND	SPIKE ADDED (ug/L)	LCS CONCENTRATION (ug/L)	LCS % REC #	QC. LIMITS REC.
Nitroglycerin	20	17	85	50-150

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

Spike Recovery: 0 out of 1 outside limits

COMMENTS: _____

_____

FORM III PEST-1

c. Method Blank Summary (Form IV)

If more than a single form is necessary, forms shall be arranged in chronological order by date of analysis of the blanks and by instrument.

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9102307-BLK1 Lab File ID: 014H9102307-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/23/09

Date Analyzed (1): 10/24/09 Date Analyzed (2):

Time Analyzed (1): 2141 Time Analyzed (2):

Instrument ID (1): A11001 Instrument ID (2):

GC Column (1): C18 ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PKZLCS	9102307-BS1	10/24/09	
02	13MW5MS	9102307-MS1	10/24/09	
03	13MW5MSD	9102307-MSD1	10/24/09	
04	13MW5	0910165-01	10/25/09	
05	13MW1	0910165-02	10/25/09	
06	13MW2	0910165-03	10/25/09	
07	13MW3	0910165-04	10/25/09	
08	13MW4	0910165-05	10/25/09	
09	13MWDUP	0910165-06	10/25/09	
10	13MW6	0910165-07	10/25/09	
11	13MW7	0910165-08	10/25/09	
12				
13				
14				
15				
16				
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21				
22				
23				
24				
25				
26				

COMMENTS: _____

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKLI

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9102615-BLK1 Lab File ID: 044H9102615-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/26/09

Date Analyzed (1): 10/27/09 Date Analyzed (2):

Time Analyzed (1): 1859 Time Analyzed (2):

Instrument ID (1): A11001 Instrument ID (2):

GC Column (1): C18 ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLILCS	9102615-BS1	10/27/09	
02	13MW2RE	0910165-03RE1	10/27/09	
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
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26				

COMMENTS:

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9102307-BLK1 Lab File ID: 035H9102307-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/23/09

Date Analyzed (1): 10/29/09 Date Analyzed (2):

Time Analyzed (1): 1214 Time Analyzed (2):

Instrument ID (1): A11002 Instrument ID (2):

GC Column (1): PINNACLE CYANO ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PLALCS	9102307-BS2	10/29/09	
02	13MW5MS	9102307-MS2	10/29/09	
03	13MW5MSD	9102307-MSD2	10/29/09	
04	13MW5	0910165-01	10/29/09	
05	13MW1	0910165-02	10/29/09	
06	13MW2	0910165-03	10/29/09	
07	13MW3	0910165-04	10/29/09	
08	13MW4	0910165-05	10/29/09	
09	13MWDUP	0910165-06	10/29/09	
10	13MW6	0910165-07	10/29/09	
11	13MW7	0910165-08	10/29/09	
12				
13				
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26				

COMMENTS: _____

4C

PESTICIDE METHOD BLANK SUMMARY

EPA SAMPLE NO.

PBLKMO

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Lab Sample ID: 9103004-BLK1 Lab File ID: 070H9111020-BLK1

Matrix (soil/water) WATER Extraction:(SepF/Cont/Sonc) SOLIDPHASE

Sulfur Cleanup (Y/N) N Date Extracted: 10/30/09

Date Analyzed (1): 11/12/09 Date Analyzed (2):

Time Analyzed (1): 0933 Time Analyzed (2):

Instrument ID (1): A11002 Instrument ID (2):

GC Column (1): PINNACLE CYANO ID: 4.60(mm) GC Column (2): ID:

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED 1	DATE ANALYZED 2
01	PMOLCS	9103004-BS1	11/12/09	
02	13MW2RE	0910165-03RE1	11/12/09	
03				
04				
05				
06				
07				
08				
09				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				
21				
22				
23				
24				
25				
26				

COMMENTS:

2. Sample Data

Sample data shall be arranged in packets with the Organic Analysis Data Sheet (Form I), followed by the raw data for HPLC samples. These sample packets shall be placed in increasing Client Sample ID number order, considering both letters and numbers.

a. Target Analyte Results

Tabulated results (identification and quantitation) shall be included.

b. Copies of HPLC Chromatograms

Positively identified compounds shall be labeled with the names of compounds, either directly out from the peak on the chromatogram, or on a printout of retention times on the data system printout if retention times are printed over the peak on the chromatogram. Included for each sample, dilutions, and reanalysis. The chromatogram shall contain the following header information: Client Sample ID number, volume injected (uL), date and time of injection, HPLC column ID, and HPLC instrument ID.

d. Data System Printout

A printout of retention time and corresponding peak height or peak area shall accompany each chromatogram. Where edits have been made, initialing, dating, and integration time range are required.

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-02

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW1

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-02

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

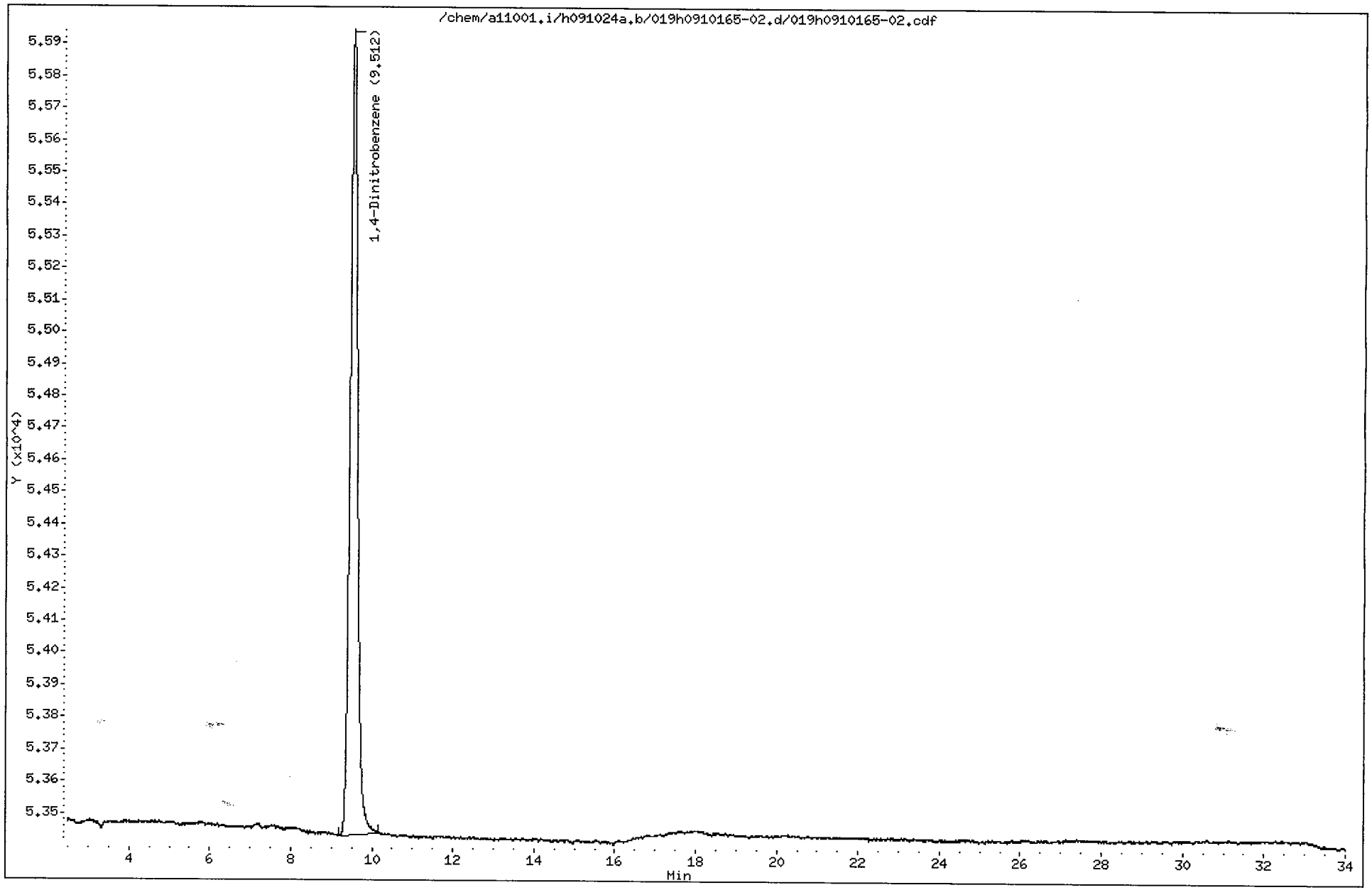
GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024a.b/019h0910165-02.d
Date : 25-OCT-2009 00:40
Client ID: 13MW1
Sample Info: 0910165-02
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-02 Client Smp Id : 13MW1
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 00:40 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : 13MW1

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.00			601								
2.23			986								
9.51	9.24	9.64	32059	3360	1,4-Dinitrobenzene	9.541373	19.08275		95.4	39 - 132	

Kett 10/26/09

Data File: /chem/a11002.i/h091016d.b/040h0910165-02.d

Date : 29-OCT-2009 14:48

Client ID: 13MW1

Instrument: a11002.i

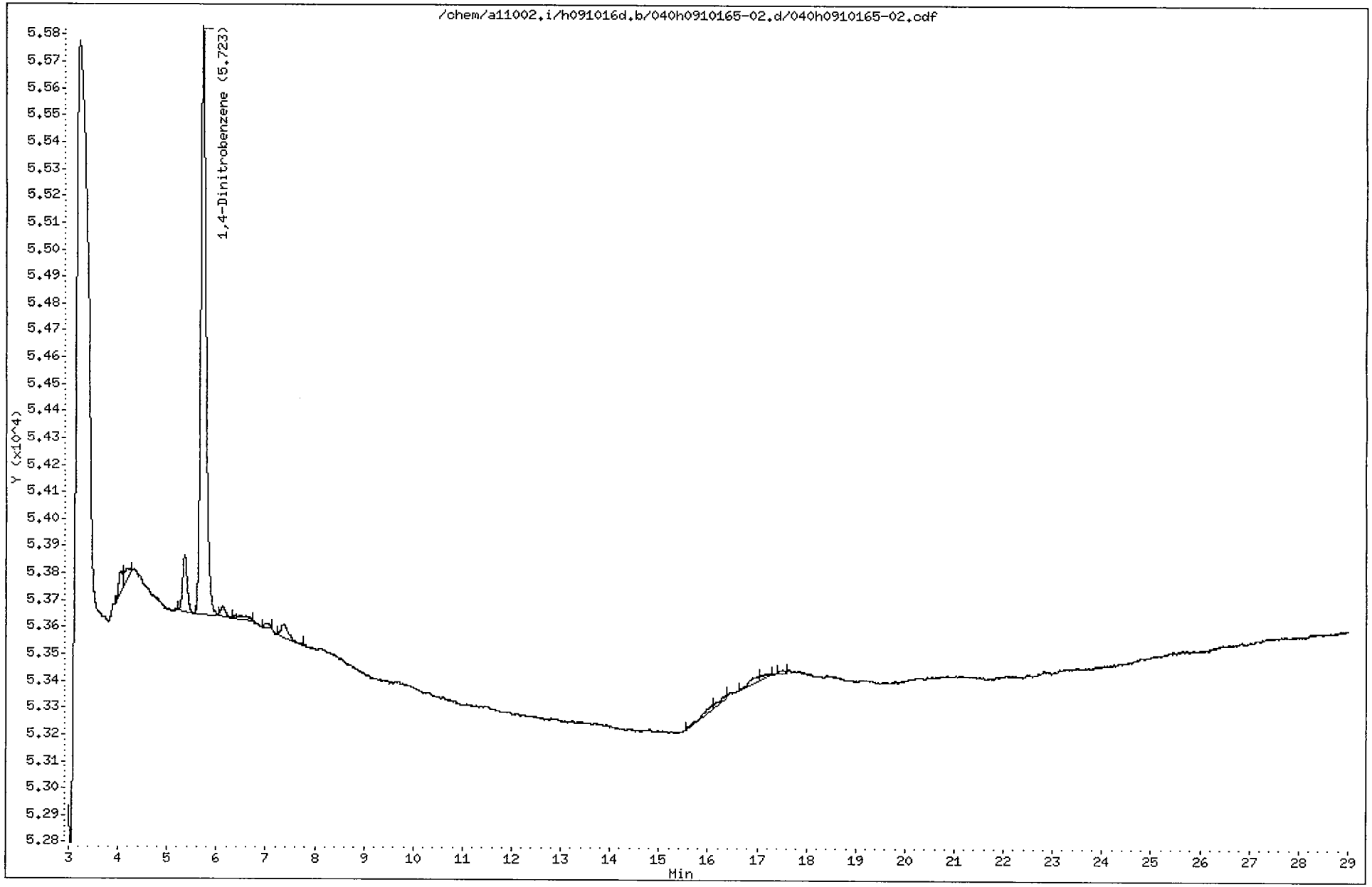
Sample Info: 0910165-02

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-02
Client Smp Id : 13MW1
Sample Type : SAMPLE
Sublist : nitro
Inj Date : 29-OCT-2009 14:48
Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW1

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.07			466								
4.19			363								
5.36			1359								
5.72	5.20	6.20	15874	1506	1,4-Dinitrobenzene	10.53806	21.07612		105.4	50 - 150	
6.12			243								
6.38			283								
7.02			104								
7.38			518								
16.09			365								
16.37			218								
17.00			333								
17.17			176								
17.46			100								

KCK 10/30/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024b.b/022h0910165-03.d

Date : 25-OCT-2009 02:28

Client ID: 13MW2

Instrument: a11001.i

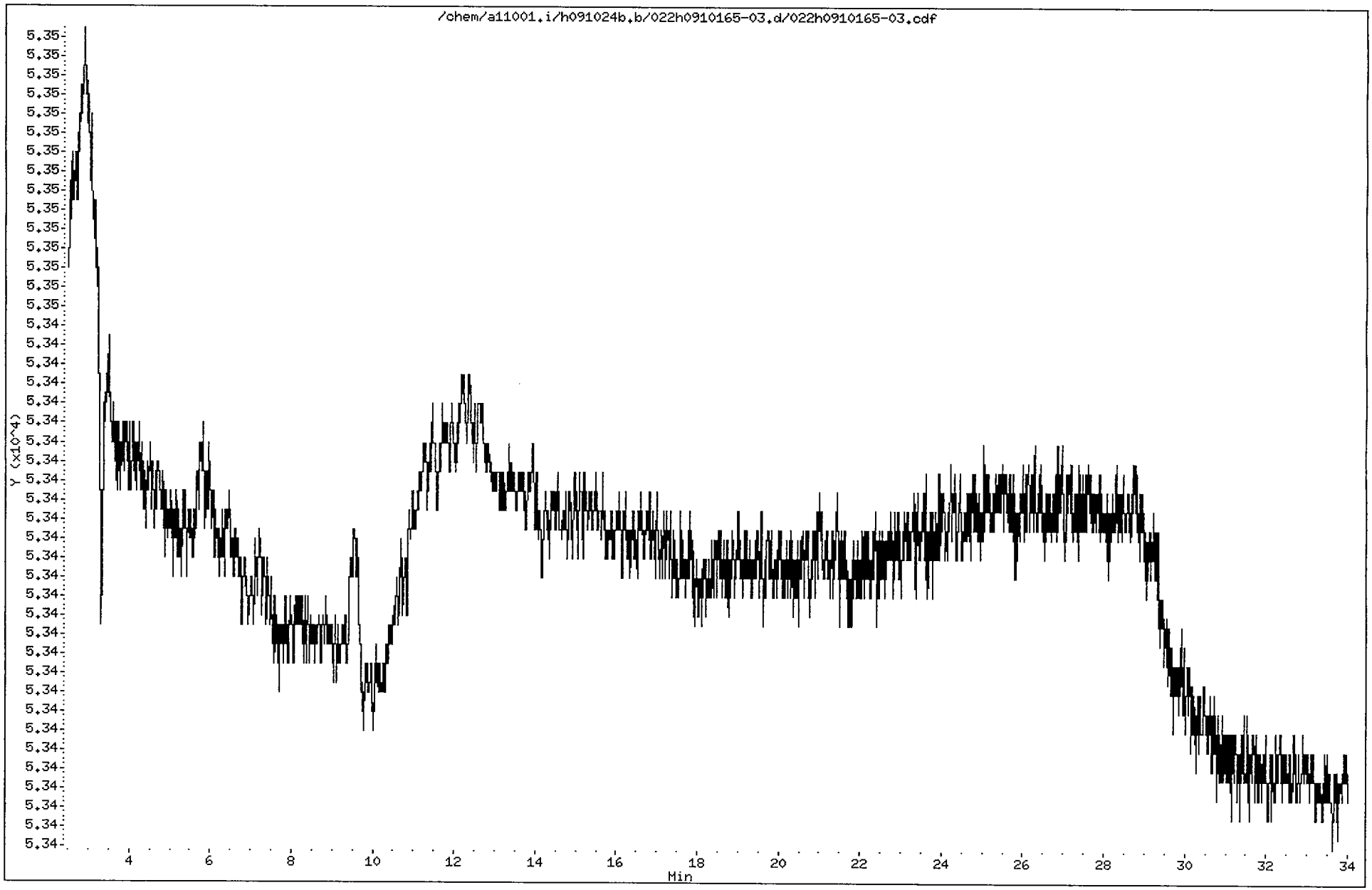
Sample Info: 0910165-03

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-03 Client Smp Id : 13MW2
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 02:28 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : 13MW2

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.24		2672								

KCH 10/28/09

Data File: /chem/a11002.i/h091016d.b/041h0910165-03.d

Date : 29-OCT-2009 15:19

Client ID: 13MW2

Instrument: a11002.i

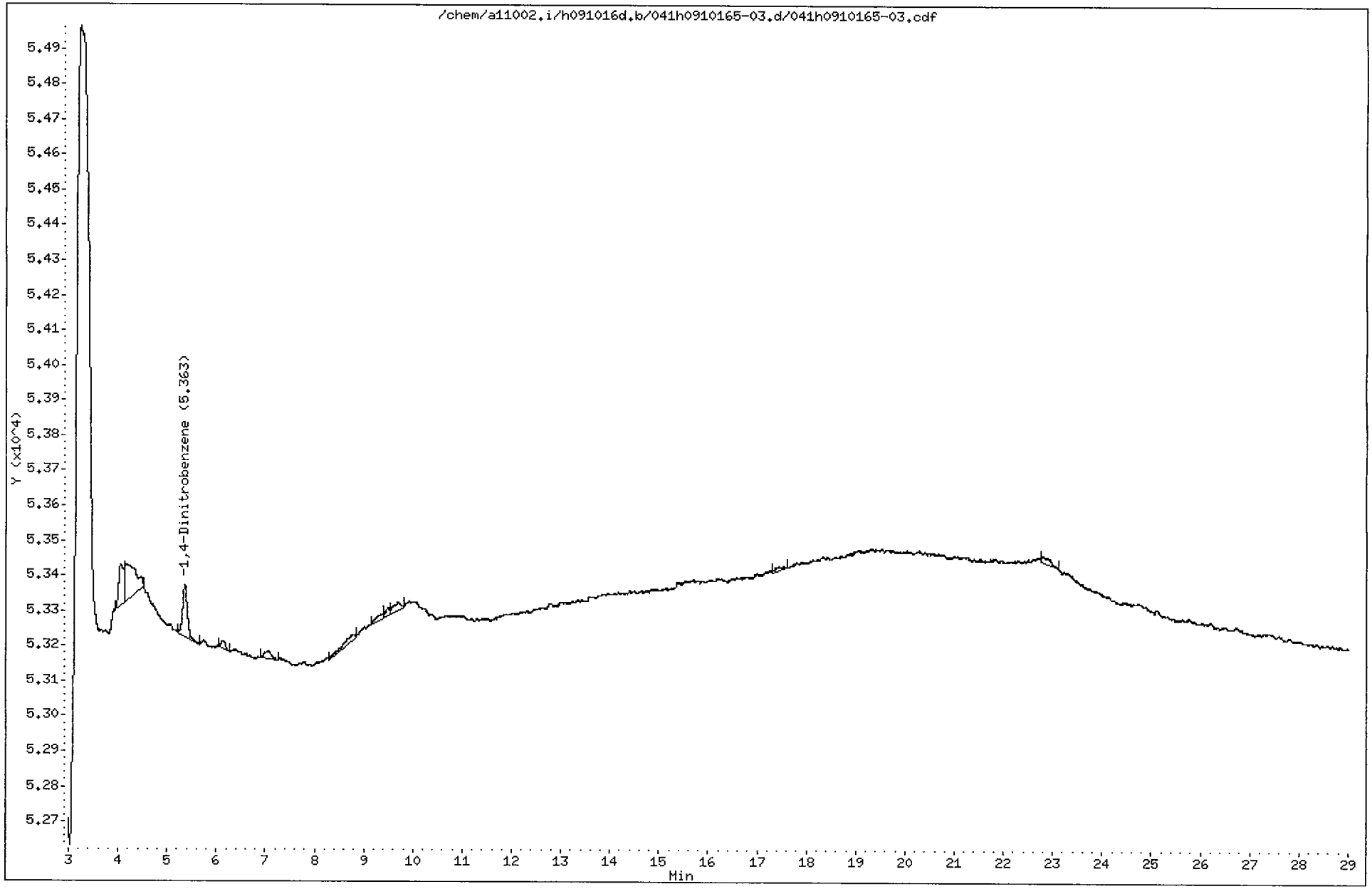
Sample Info: 0910165-03

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-03
Client Smp Id : 13MW2
Sample Type : SAMPLE
Sublist : nitro
Inj Date : 29-OCT-2009 15:19
Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW2

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.06			806								
4.18			1465								
5.36	5.20	6.20	991	1506	1,4-Dinitrobenzene	0.657969	1.315938		6.6*	50 - 150	R
6.16			141								
7.07			253								
8.79			322								
9.39			200								
9.49			146								
9.70			249								
17.42			122								
22.79			262								



1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2RE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03RE1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/26/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW2RE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-03RE1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/30/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024d.b/046h0910165-03RE1.d

Date : 27-OCT-2009 20:11

Client ID: 13MW2RE

Instrument: a11001.i

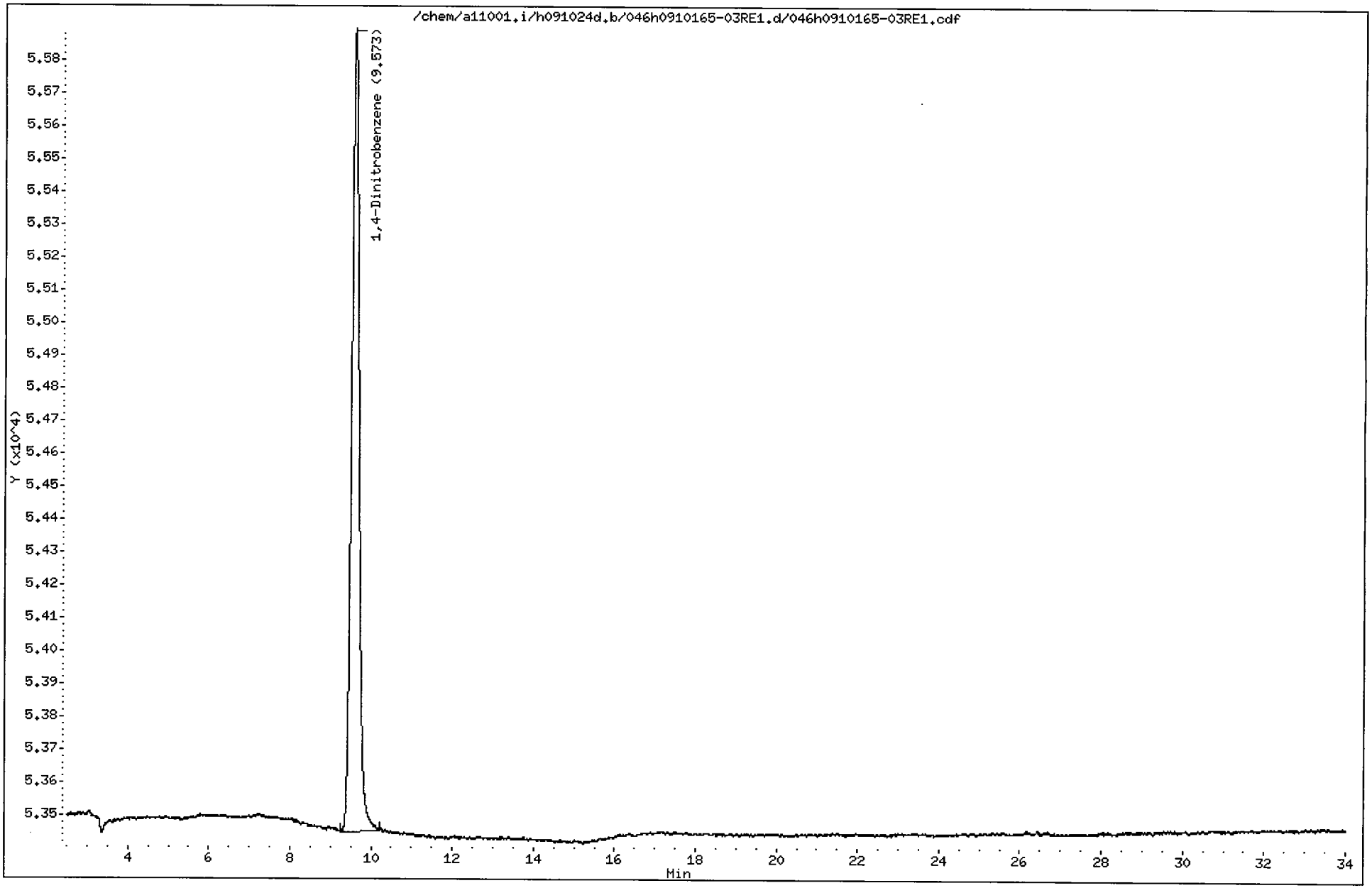
Sample Info: 0910165-03RE1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-03RE1 Client Smp Id : 13MW2RE
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 27-OCT-2009 20:11 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024d.b/8330_10uL_v3split.m
Misc. Info : 13MW2RE

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.04			1144								
2.23			635								
9.57	9.32	9.72	31432	3360	1,4-Dinitrobenzene	9.354678	18.70936		93.5	39 - 132	

TAJ for KEH
11/13/09

Data File: /chem/a11002.i/h091016k.b/072h0910165-03RE1.d

Date : 12-NOV-2009 10:35

Client ID: 13MW2RE

Instrument: a11002.i

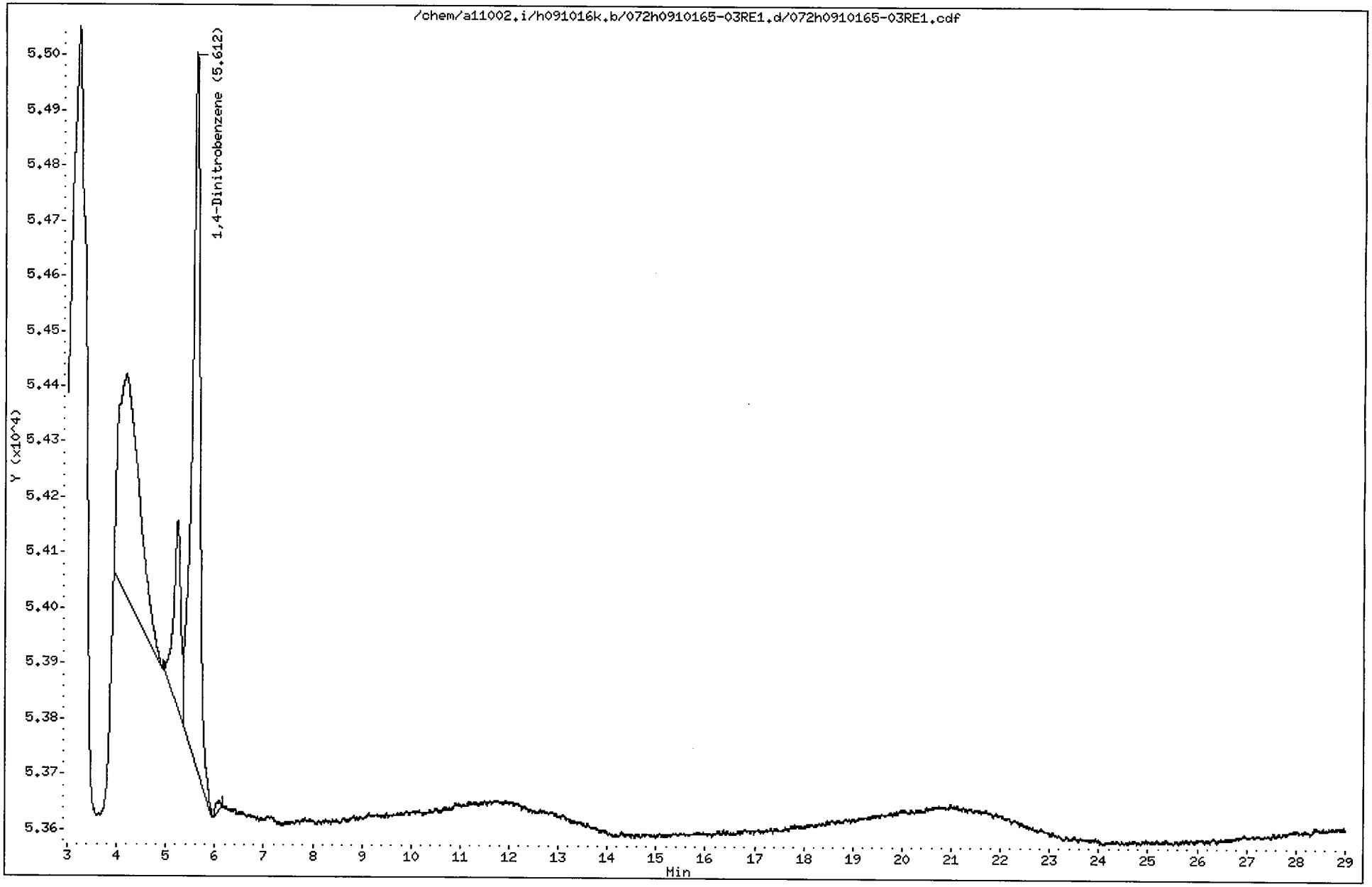
Sample Info: 0910165-03RE1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-03RE1 Client Smp Id : 13MW2RE
Sample Type : SAMPLE Sublist : nitro
Inj Date : 12-NOV-2009 10:35 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016k.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW2RE

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.20			11824								
5.24			3437								
5.61	5.20	6.20	14757	1506	1,4-Dinitrobenzene	9.796346	19.59269		98.0	50 - 150	
6.04			123								

TAJ for KEH
11/13/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW3

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-04

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW3

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-04

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

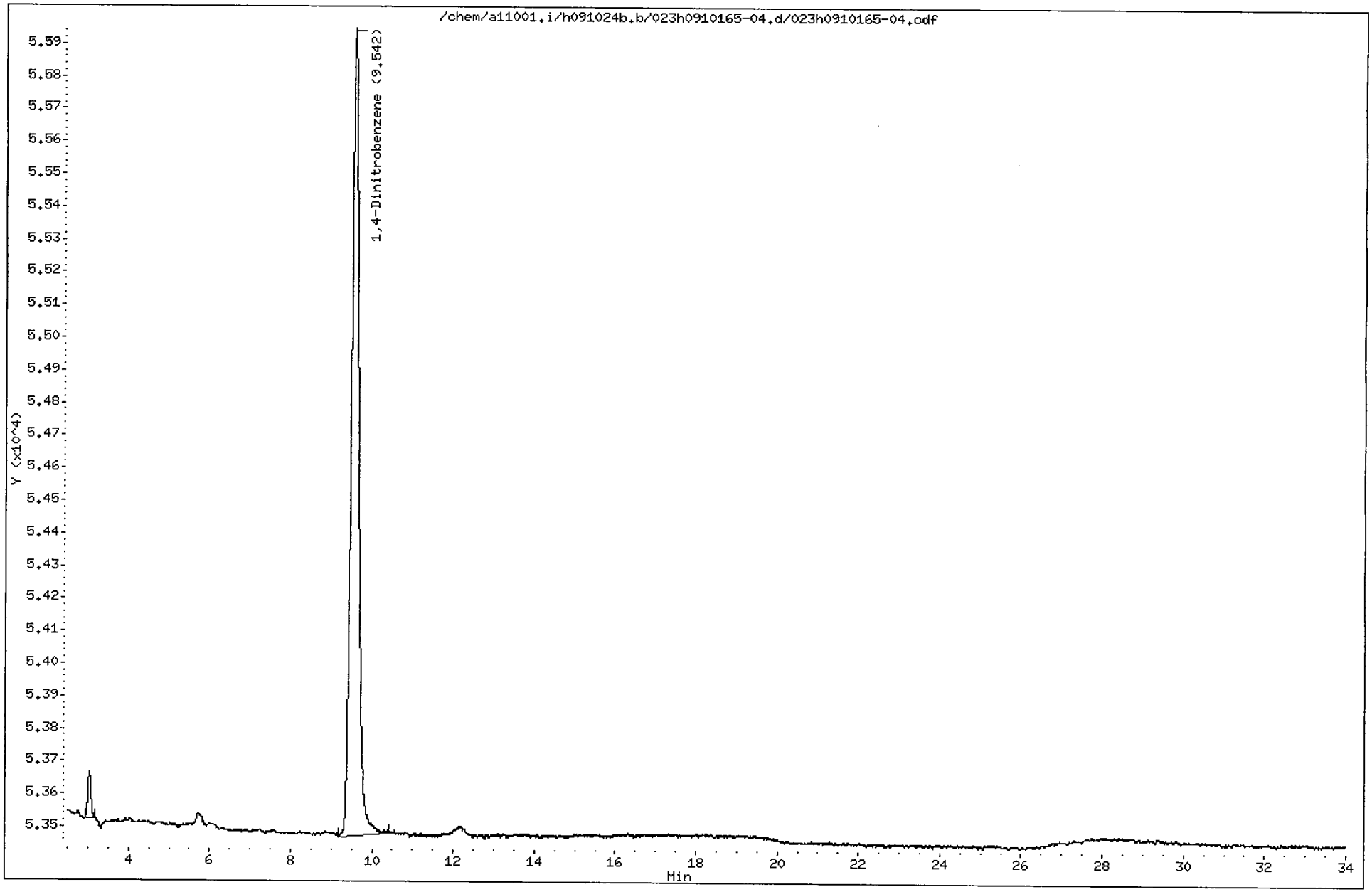
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024b.b/023h0910165-04.d
Date : 25-OCT-2009 03:04
Client ID: 13MW3
Sample Info: 0910165-04
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-04 Client Smp Id : 13MW3
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 03:04 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : 13MW3

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			1468								
3.04			781								
9.54	9.26	9.66	32177	3360	1,4-Dinitrobenzene	9.576432	19.15286		95.8	39 - 132	

10/28/09

Data File: /chem/a11002.i/h091016e.b/044h0910165-04.d

Date : 29-OCT-2009 16:51

Client ID: 13MW3

Sample Info: 0910165-04

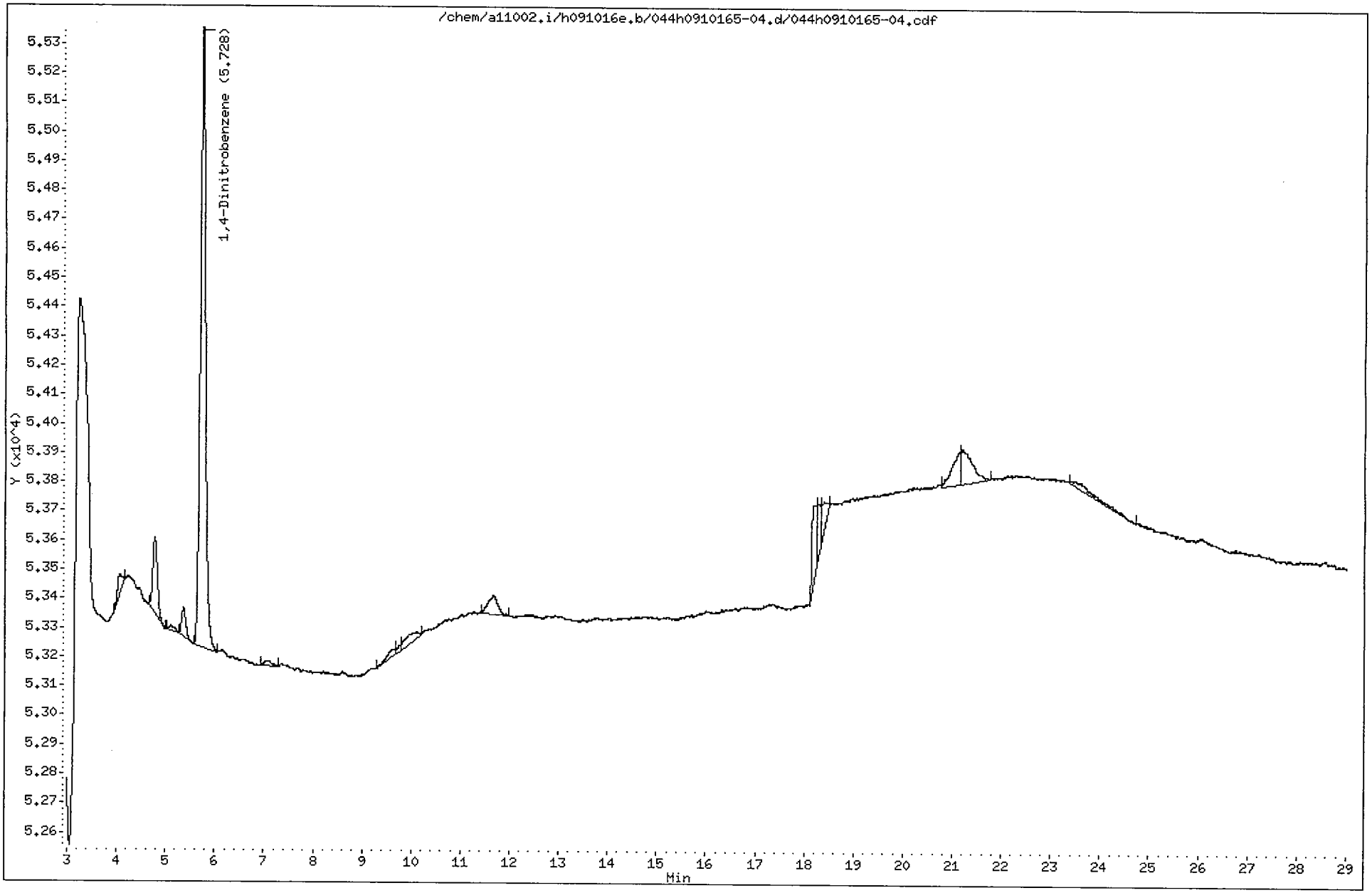
Volume Injected (uL): 10.0

Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-04
Client Smp Id : 13MW3
Sample Type : SAMPLE
Sublist : nitro
Inj Date : 29-OCT-2009 16:51
Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW3

Method Type: undefined

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.07		470								
4.78		1754								
5.12		144								
5.36		600								
5.73	5.20 6.20	15385	1506	1,4-Dinitrobenzene	10.21307	20.42615		102.1	50 - 150	
7.06		193								
9.65		328								
9.76		113								
10.12		549								
11.66		876								
18.17		1594								
18.25		867								
18.38		814								
21.12		1337								
21.19		1921								
23.39		696								

10/30/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW4

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-05

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW4

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-05

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024b.b/024h0910165-05.d

Date : 25-OCT-2009 03:40

Client ID: 13MW4

Sample Info: 0910165-05

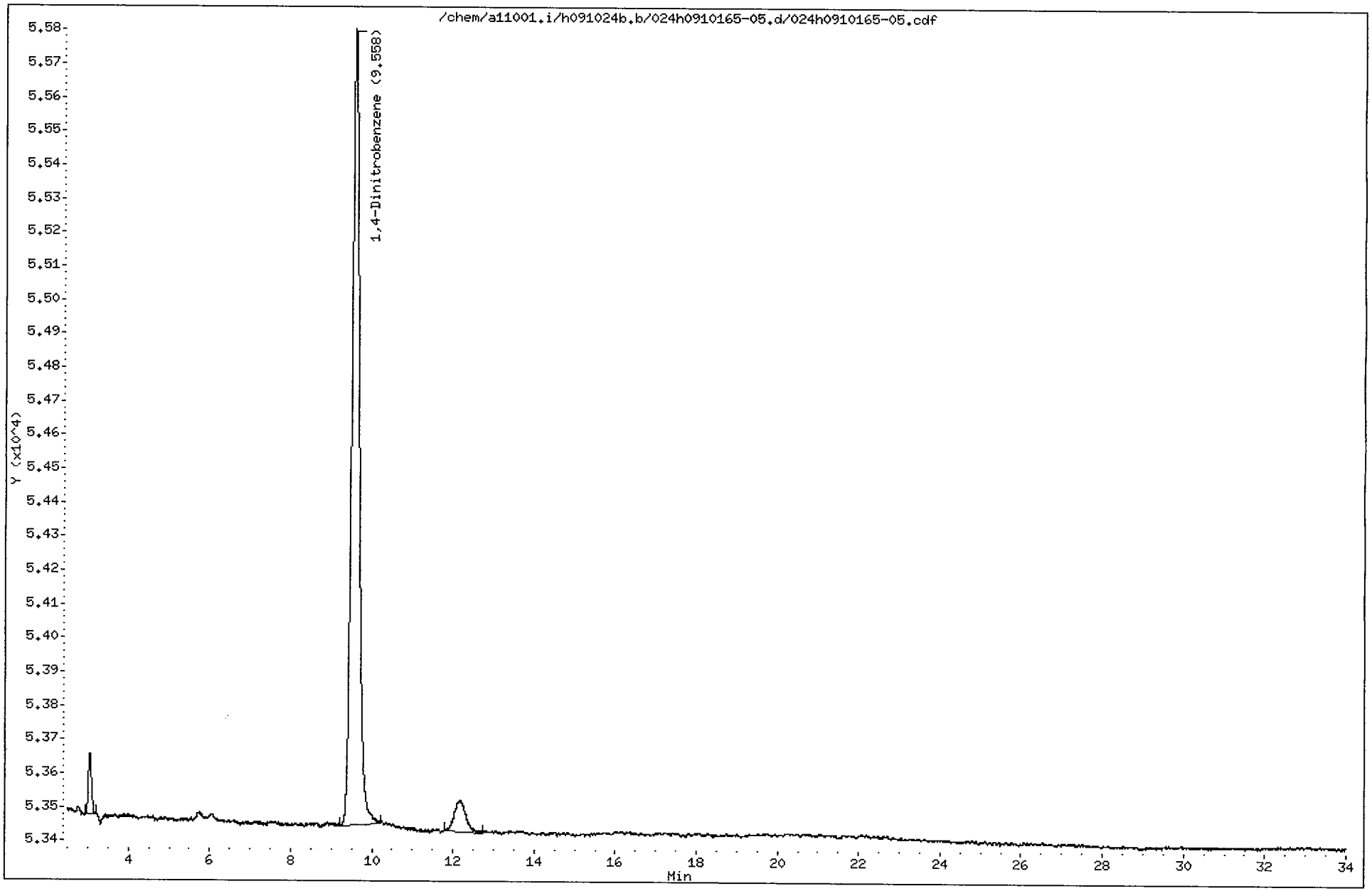
Volume Injected (uL): 10.0

Column phase: C18

Instrument: a11001.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-05 Client Smp Id : 13MW4
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 03:40 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : 13MW4

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.04			898								
2.24			624								
3.05			996								
9.56	9.26	9.66	30477	3360	1,4-Dinitrobenzene	9.070589	18.14118		90.7	39 - 132	
12.18			1859								

10/28/09

Data File: /chem/a11002.i/h091016e.b/045h0910165-05.d

Date : 29-OCT-2009 17:22

Client ID: 13MW4

Sample Info: 0910165-05

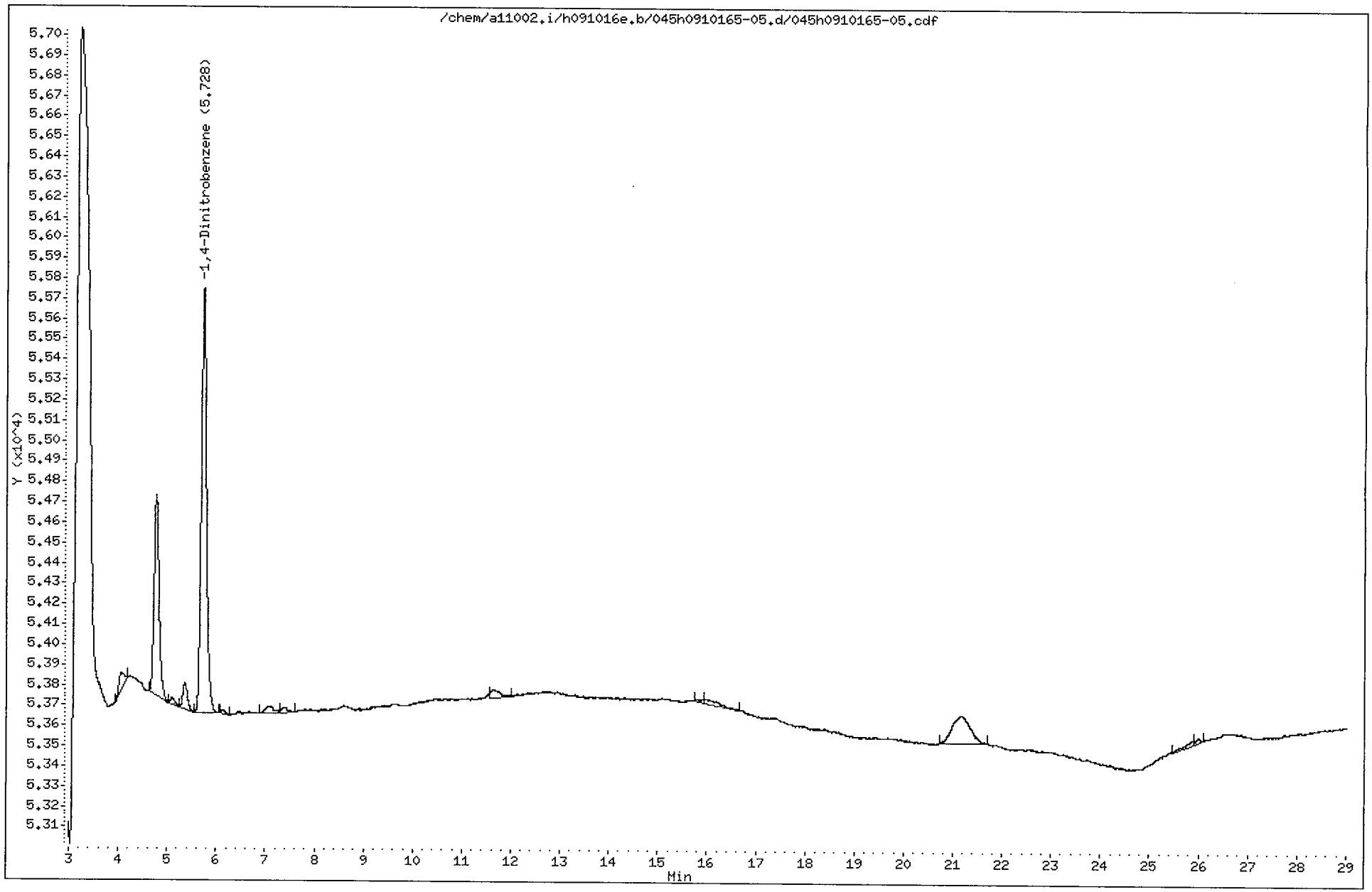
Volume Injected (uL): 10.0

Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-05 Client Smp Id : 13MW4
Sample Type : SAMPLE Sublist : nitro
Inj Date : 29-OCT-2009 17:22 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW4

Method Type: undefined

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.07		656								
4.77		6963								
5.11		215								
5.36		838								
5.73	5.20 6.20	15167	1506	1,4-Dinitrobenzene	10.06839	20.13678		100.7	50 - 150	
6.14		109								
7.08		434								
7.41		233								
11.64		530								
15.79		170								
16.00		552								
21.17		3529								
25.89		347								
26.01		146								



1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-01

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-01

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

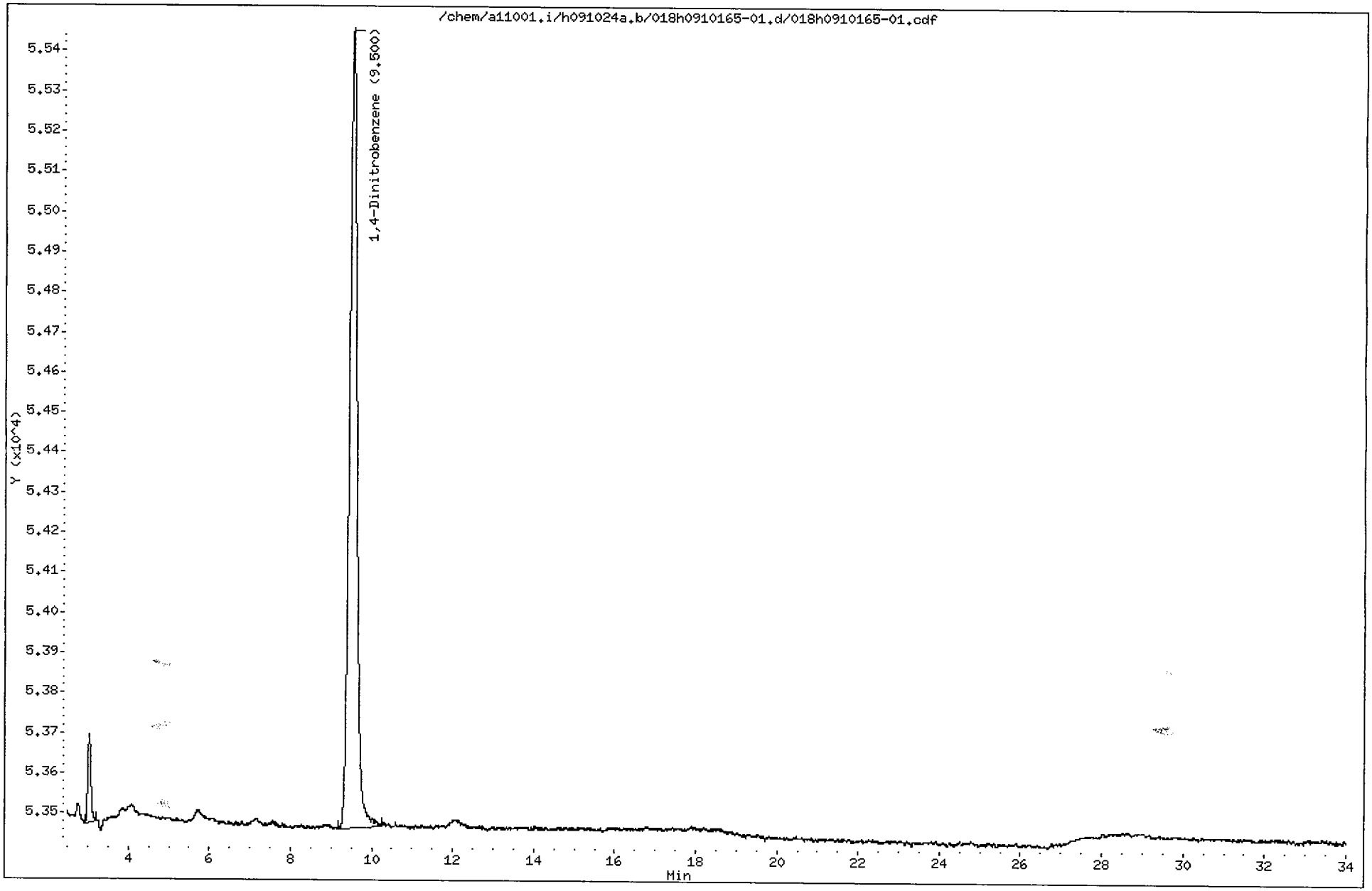
GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024a.b/018h0910165-01.d
Date : 25-OCT-2009 00:04
Client ID: 13MW5
Sample Info: 0910165-01
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-01 Client Smp Id : 13MW5
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 00:04 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : 13MW5

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.09			851								
2.23			2596								
3.04			1195								
9.50	9.24	9.64	25602	3360	1,4-Dinitrobenzene	7.619724	15.23945		76.2	39 - 132	

KEH 10/26/09

Data File: /chem/a11002.i/h091016d.b/039h0910165-01.d

Page 1

Date : 29-OCT-2009 14:17

Client ID: 13MW5

Instrument: a11002.i

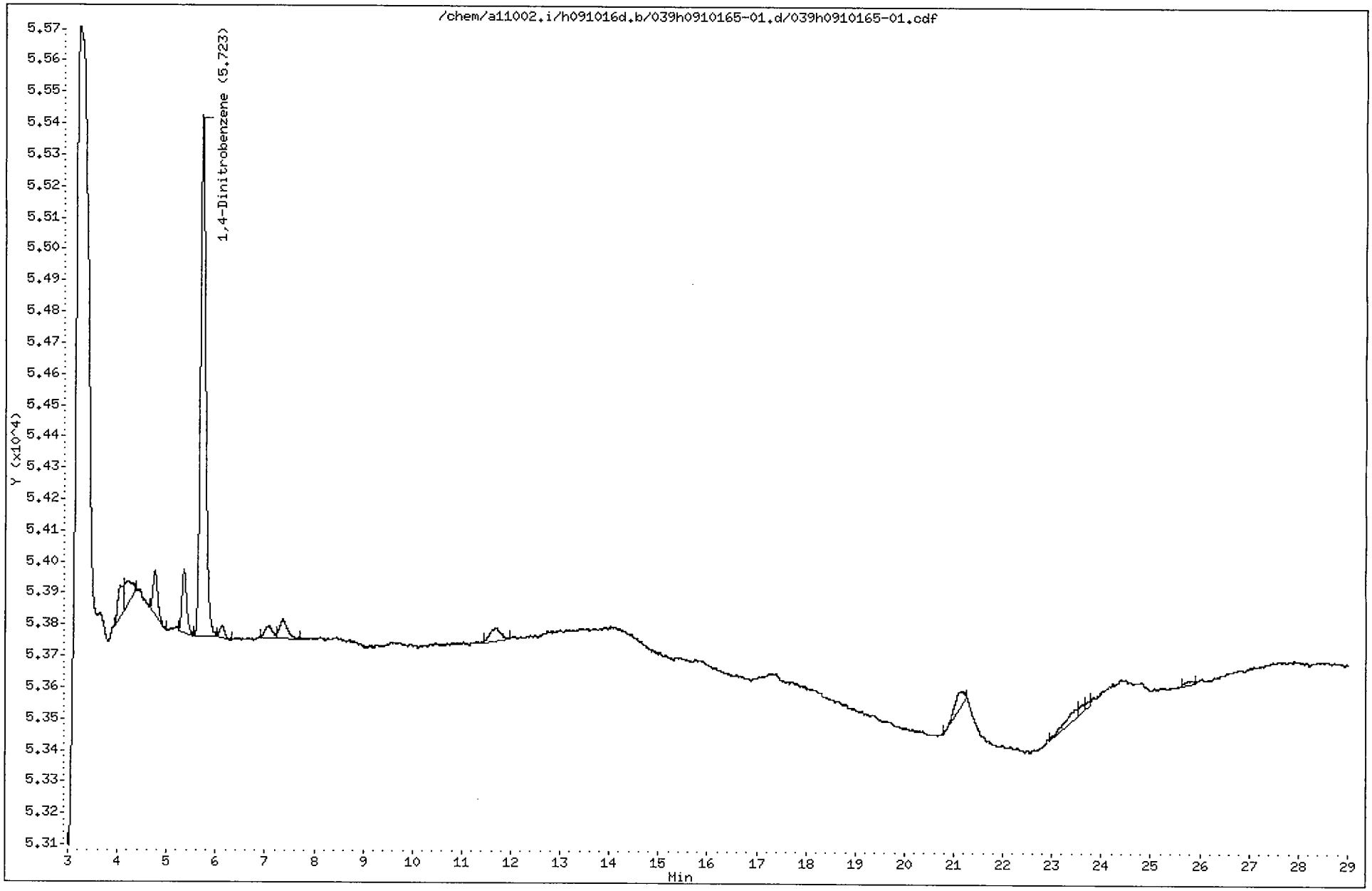
Sample Info: 0910165-01

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-01 Client Smp Id : 13MW5
Sample Type : SAMPLE Sublist : nitro
Inj Date : 29-OCT-2009 14:17 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW5

Method Type: undefined

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
0.37		182								
4.06		692								
4.23		833								
4.77		917								
5.35		1312								
5.72	5.20 6.20	12155	1506	1,4-Dinitrobenzene	8.069190	16.13838		80.7	50 - 150	
6.13		299								
7.09		441								
7.37		672								
11.69		665								
21.16		737								
23.46		564								
23.63		199								
23.76		113								
25.76		146								

KEH 10/30/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-07

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW6

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-07

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024b.b/026h0910165-07.d

Date : 25-OCT-2009 04:51

Client ID: 13MW6

Instrument: a11001.i

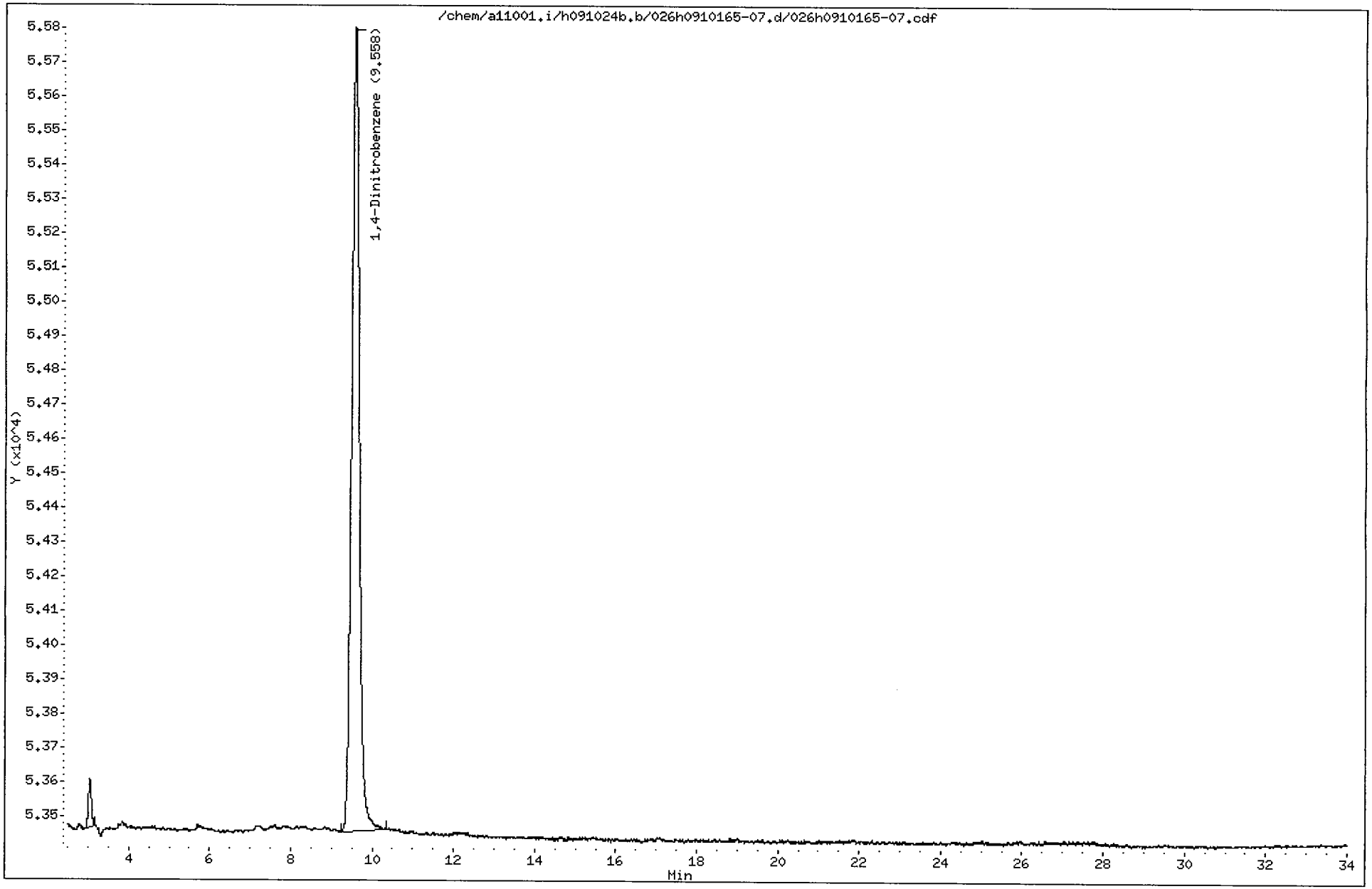
Sample Info: 0910165-07

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-07 Client Smp Id : 13MW6
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 04:51 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : 13MW6

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			1650								
3.05			760								
9.56	9.26	9.66	30385	3360	1,4-Dinitrobenzene	9.043148	18.08630		90.4	39 - 132	

KEL 10/28/09

Data File: /chem/a11002.i/h091016e.b/047h0910165-07.d

Date : 29-OCT-2009 18:24

Client ID: 13MW6

Instrument: a11002.i

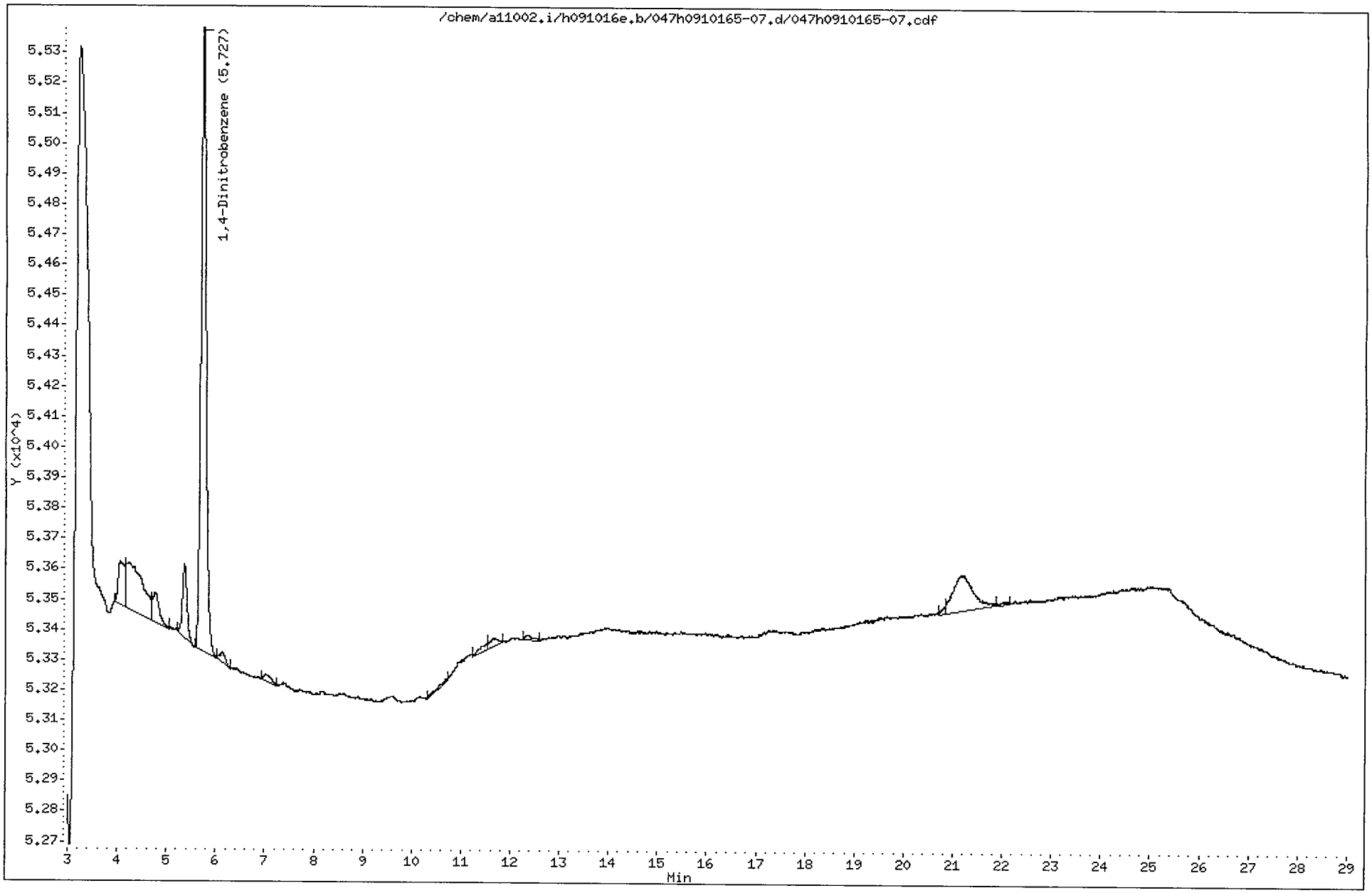
Sample Info: 0910165-07

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-07 Client Smp Id : 13MW6
Sample Type : SAMPLE Sublist : nitro
Inj Date : 29-OCT-2009 18:24 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW6

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.06			1282								
4.25			3742								
4.77			932								
5.36			1587								
5.73	5.20	6.20	14840	1506	1,4-Dinitrobenzene	9.851644	19.70329		98.5	50 - 150	
6.13			219								
7.03			250								
10.70			136								
11.52			277								
11.65			331								
12.33			210								
20.82			113								
21.14			3379								
22.01			107								

10/30/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW7

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-08

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW7

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-08

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

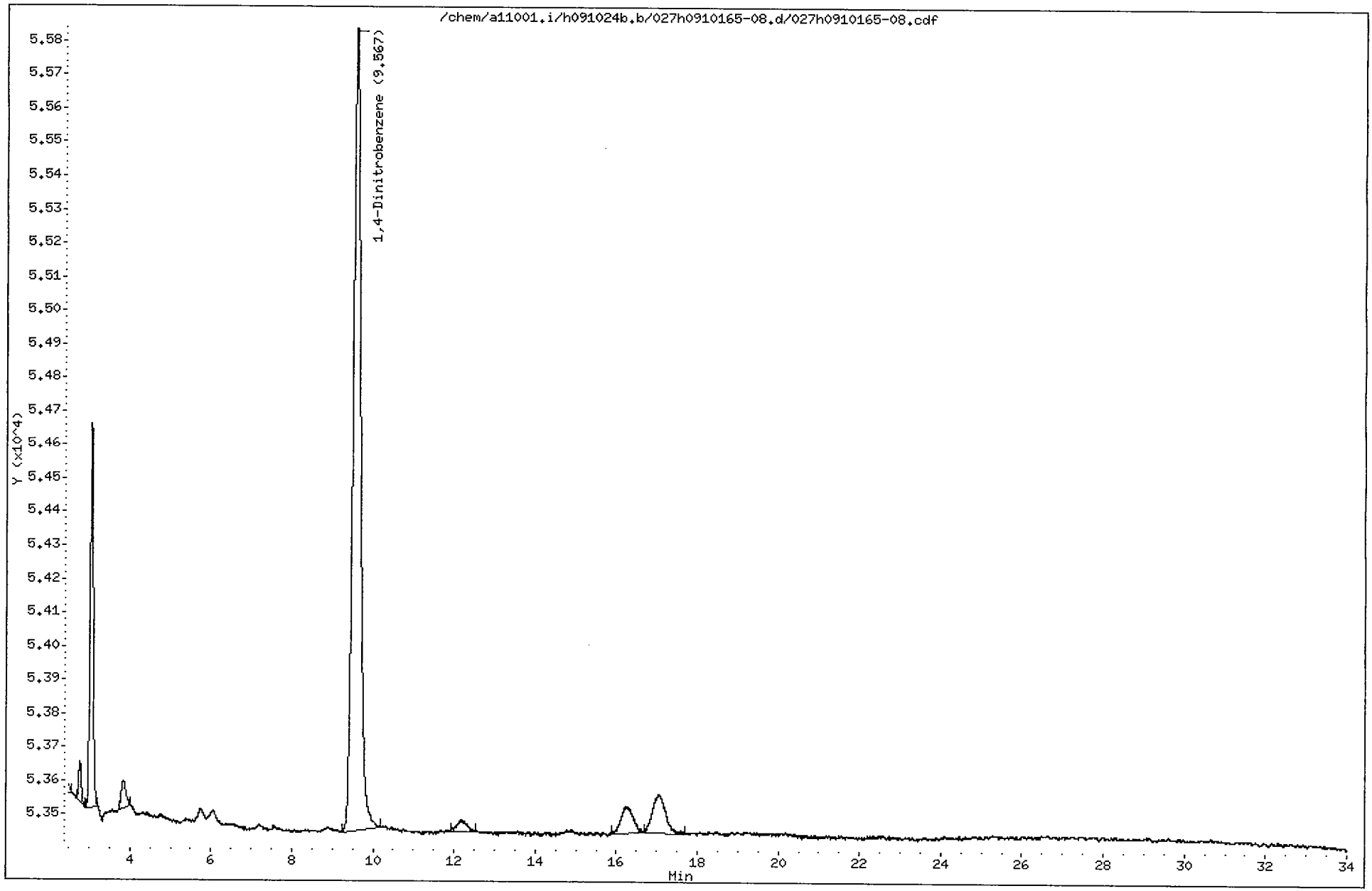
GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024b.b/027h0910165-08.d
Date : 25-OCT-2009 05:27
Client ID: 13MW7
Sample Info: 0910165-08
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-08 Client Smp Id : 13MW7
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 05:27 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : 13MW7

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

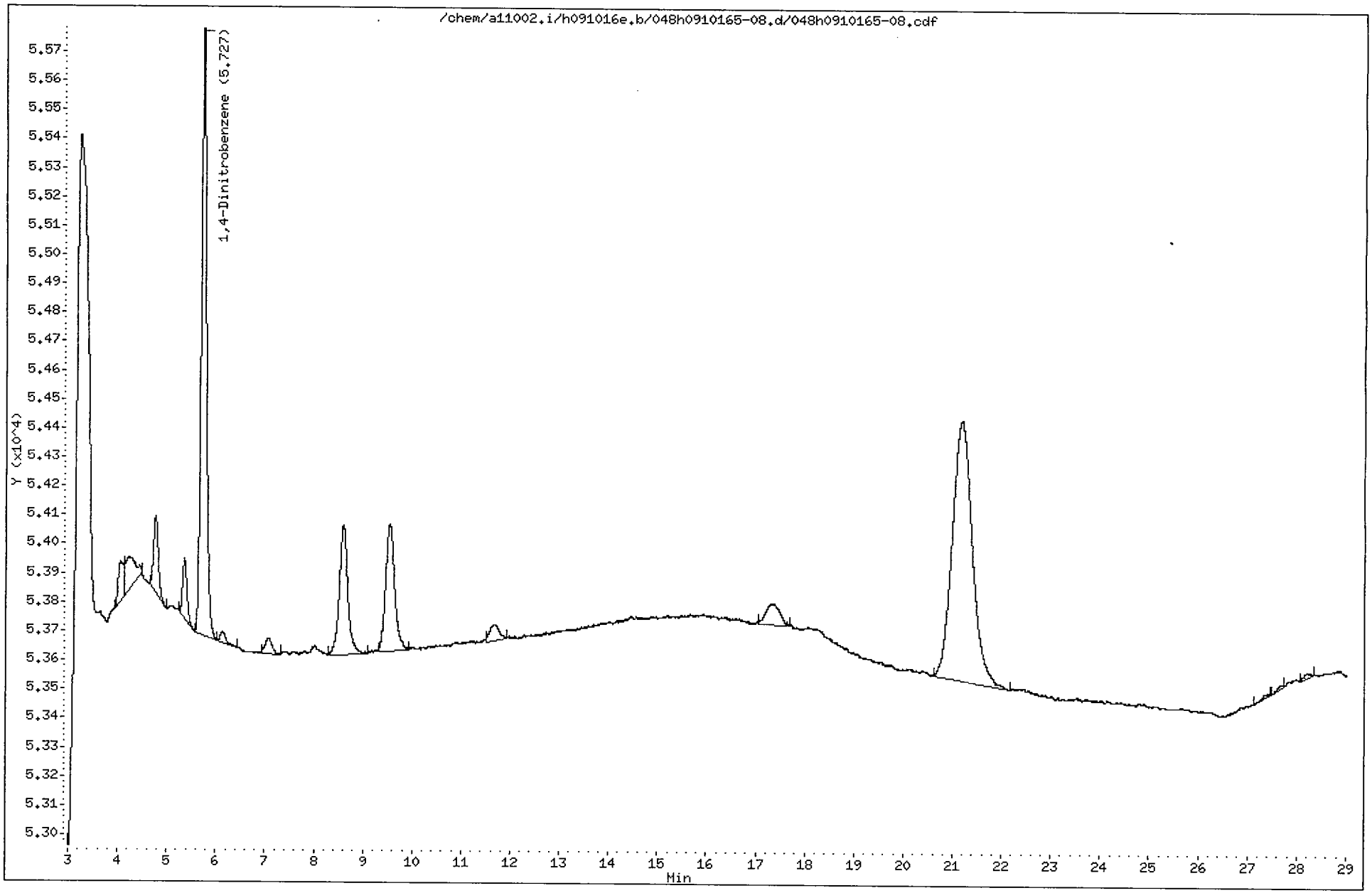
DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			1356								
2.43			546								
2.78			544								
3.05			6215								
3.84			651								
9.57	9.26	9.66	30795	3360	1,4-Dinitrobenzene	9.165127	18.33025		91.7	39 - 132	
12.19			599								
16.29			1695								
17.05			2563								

10/28/09

Data File: /chem/a11002.i/h091016e.b/048h0910165-08.d
Date : 29-OCT-2009 18:55
Client ID: 13MW7
Sample Info: 0910165-08
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-08 Client Smp Id : 13MW7
Sample Type : SAMPLE Sublist : nitro
Inj Date : 29-OCT-2009 18:55 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW7

Method Type: undefined

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.06		1016								
4.23		1585								
4.77		1829								
5.36		1265								
5.73	5.20 6.20	15158	1506	1,4-Dinitrobenzene	10.06275	20.12549		100.6	50 - 150	
6.14		298								
7.08		506								
8.59		5330								
9.54		5533								
11.65		741								
17.31		1452								
21.18		25526								
27.42		136								
27.72		118								
28.22		153								



1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-06

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MWDUP

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 0910165-06

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024b.b/025h0910165-06.d

Date : 25-OCT-2009 04:15

Client ID: 13MWDUP

Instrument: a11001.i

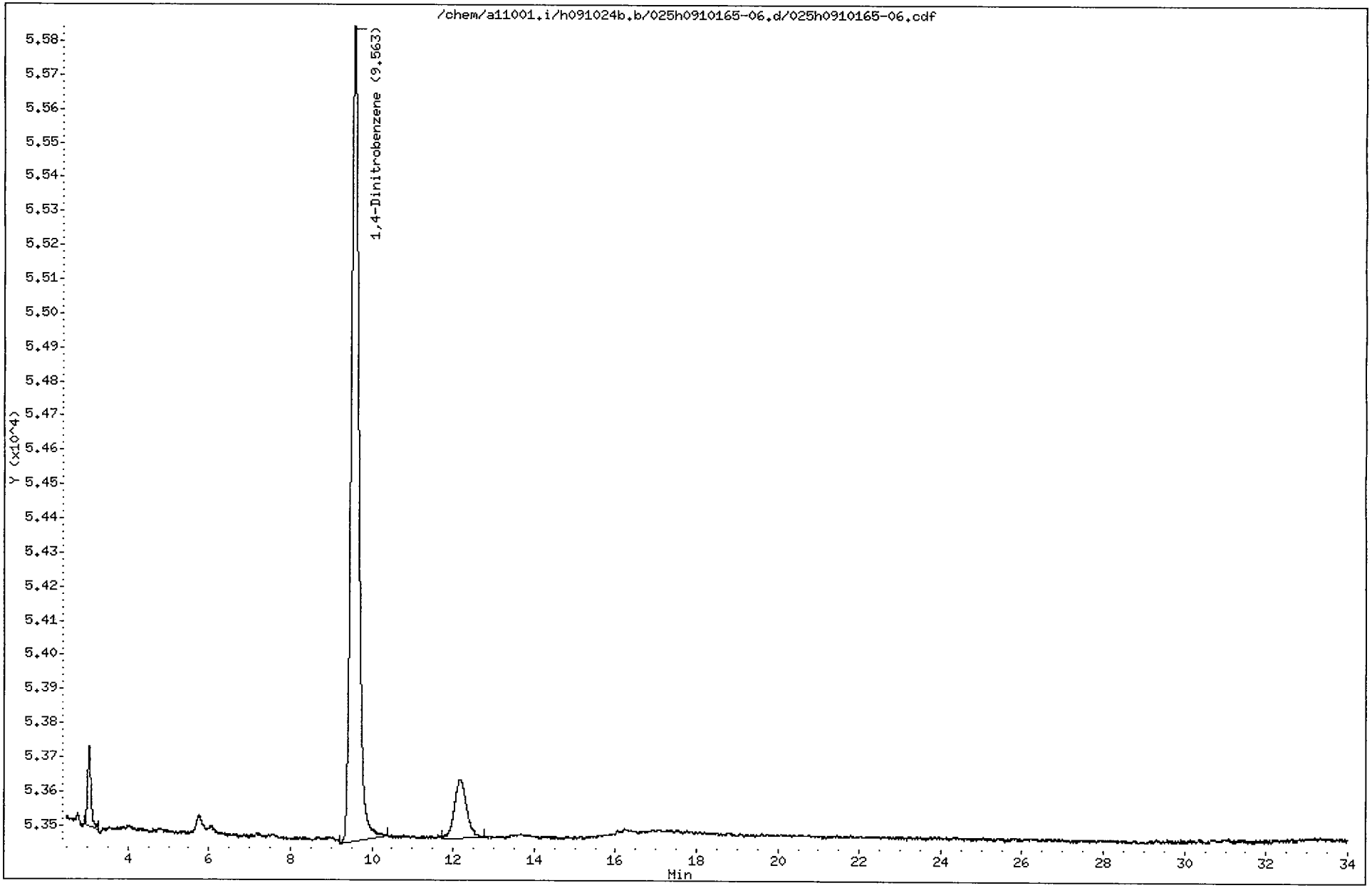
Sample Info: 0910165-06

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-06 Client Smp Id : 13MWDUP
Sample Type : SAMPLE Sublist : HWMU13
Inj Date : 25-OCT-2009 04:15 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : 13MWDUP

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

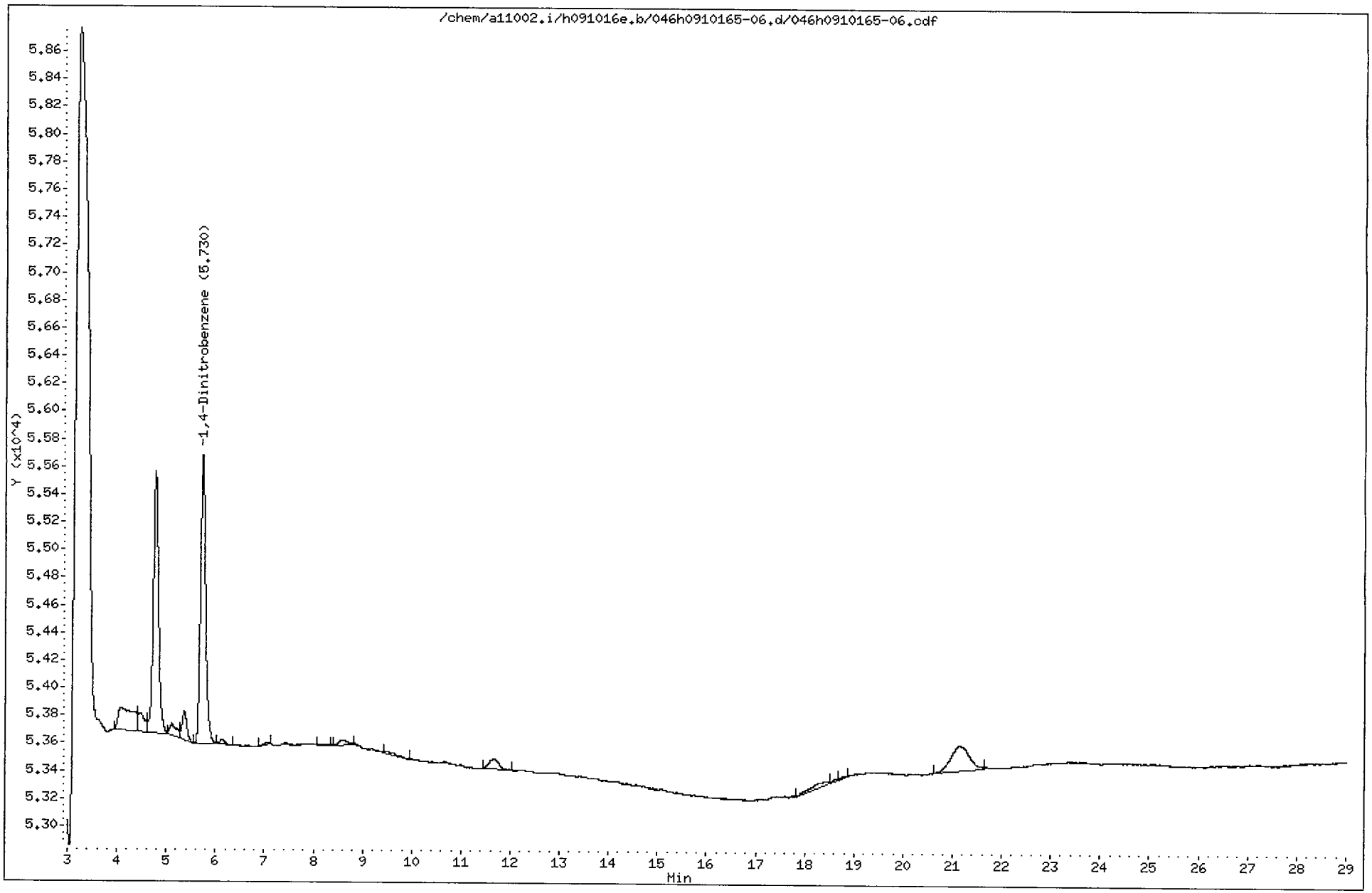
DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			1425								
3.05			1390								
9.56	9.26	9.66	31152	3360	1,4-Dinitrobenzene	9.271301	18.54260		92.7	39 - 132	
12.19			3563								

10/28/09

Data File: /chem/a11002.i/h091016e.b/046h0910165-06.d
Date : 29-OCT-2009 17:53
Client ID: 13MWDUP
Sample Info: 0910165-06
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 0910165-06 Client Smp Id : 13MWDUP
Sample Type : SAMPLE Sublist : nitro
Inj Date : 29-OCT-2009 17:53 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : 13MWDUP

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.07			3643								
4.47			1229								
4.78			13863								
5.11			808								
5.36			1385								
5.73	5.20	6.20	15227	1506	1,4-Dinitrobenzene	10.10829	20.21657		101.1	50 - 150	
6.15			269								
7.05			122								
8.15			103								
8.60			404								
9.46			249								
11.66			1063								
18.46			879								
18.66			142								
18.83			135								
21.14			4924								

KEH 10/30/09

3. Standards Data

a. Initial Calibration Data of HPLC (Form VI)

b. Continuing Verification Summary (Form VII)

c. Analytical Sequence (Form VIII)

d. Chromatograms and Data System Printouts

a. Initial Calibration Data
(Form VI)

If more than one instrument is used, forms shall be arranged in order by instrument. Multiple initial calibrations from the same instrument shall be in chronological order. Within each initial calibration, the standards are in order by level.

FORM 6
8330 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date(s): 10/24/09 10/24/09

Column: C18 ID: 4.60 (mm) Calibration Time(s): 1430 1654

LAB FILE ID: RF1.25: 006HFULL1HRF6.25: 005HFULL2HRF12.5: 004HFULL3H
RF31.25: 003HFULL4RF62.5: 002HFULL5H

COMPOUND	RF1.25	RF6.25	RF12.5	RF31.25	RF62.5
1,3,5-Trinitrobenzene	2763.200	2561.600	2628.600	2635.280	2668.400
1,3-Dinitrobenzene	3600.000	3528.400	3649.200	3795.440	3769.240
2,6-Dinitrotoluene	1900.000	1731.800	1756.500	1740.800	1766.580
2,4-Dinitrotoluene	3776.000	3493.200	3346.200	3348.160	3435.000
1,4-Dinitrobenzene	3396.000	3282.200	3351.250	3376.200	3394.420

FORM 6
8330 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date(s): 10/24/09 10/24/09

Column: C18 ID: 4.60 (mm) Calibration Time(s): 1430 1654

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
1,3,5-Trinitrobenzene	AVRG	2651.44800	2.8
1,3-Dinitrobenzene	AVRG	3668.52800	3.1
2,6-Dinitrotoluene	AVRG	1779.17600	3.9
2,4-Dinitrotoluene	AVRG	3479.80000	5.1
1,4-Dinitrobenzene	AVRG	3360.03000	1.4

FORM 6
8330 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date(s): 10/24/09 10/24/09

Column: C18 ID: 4.60 (mm) Calibration Time(s): 1430 1654

LAB FILE ID: RT1: 006HFULL1HA RT2: 005HFULL2HA RT3: 004HFULL3HA
RT4: 003HFULL4HA RT5: 002HFULL5HA

COMPOUND	RT1	RT2	RT3	RT4	RT5
1,3,5-Trinitrobenzene	8.232	8.228	8.228	8.233	8.247
1,3-Dinitrobenzene	10.277	10.268	10.277	10.285	10.300
2,6-Dinitrotoluene	17.308	17.310	17.315	17.327	17.362
2,4-Dinitrotoluene	17.832	17.855	17.863	17.875	17.918
1,4-Dinitrobenzene	9.437	9.435	9.438	9.447	9.460

FORM 6
8330 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date(s): 10/24/09 10/24/09

Column: C18 ID: 4.60 (mm) Calibration Time(s): 1430 1654

COMPOUND	MEAN RT	RT WINDOW FROM	RT WINDOW TO
1,3,5-Trinitrobenzene	8.234	8.033	8.433
1,3-Dinitrobenzene	10.281	10.083	10.483
2,6-Dinitrotoluene	17.324	17.027	17.627
2,4-Dinitrotoluene	17.869	17.577	18.177
1,4-Dinitrobenzene	9.443	9.244	9.644

FORM 6
8332 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date(s): 10/16/09 10/16/09

Column: PINNACLE CYANO ID: 4.60 (mm) Calibration Time(s): 1753 1956

LAB FILE ID: RF5: 006H83321HA RF10: 005H83322HA RF20: 004H83323HA
RF50: 003H83324HA RF100: 002H83325HA

COMPOUND	RF5	RF10	RF20	RF50	RF100
Nitroglycerin	1200.125	1161.600	1179.138	1160.795	1140.770
1,4-Dinitrobenzene	1241.500	1312.200	1599.900	1624.420	1753.860

FORM 6
8332 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date(s): 10/16/09 10/16/09

Column: PINNACLE CYANO ID: 4.60 (mm) Calibration Time(s): 1753 1956

COMPOUND	CURVE	COEFFICENT A1	%RSD OR R^2
Nitroglycerin	AVRG	1168.48550	1.9
1,4-Dinitrobenzene	AVRG	1506.37800	14.5

FORM 6
8332 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date(s): 10/16/09 10/16/09

Column: PINNACLE CYANO ID: 4.60 (mm) Calibration Time(s): 1753 1956

LAB FILE ID: RT1: 006H83321HA RT2: 005H83322HA RT3: 004H83323HA
RT4: 003H83324HA RT5: 002H83325HA

COMPOUND	RT1	RT2	RT3	RT4	RT5
Nitroglycerin	10.387	10.382	10.380	10.375	10.372
1,4-Dinitrobenzene	5.588	5.588	5.595	5.593	5.590

FORM 6
8332 INITIAL CALIBRATION DATA

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date(s): 10/16/09 10/16/09

Column: PINNACLE CYANO ID: 4.60 (mm) Calibration Time(s): 1753 1956

COMPOUND	MEAN RT	RT WINDOW FROM	RT WINDOW TO
Nitroglycerin	10.379	9.880	10.880
1,4-Dinitrobenzene	5.591	5.095	6.095

b. Continuing Calibration Verification Summary (Form VII)

For all continuing calibration verification standards, on all instruments, in chronological order by instrument.

FORM 7B
8330 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date: 10/24/09 Time: 1805

Lab File ID: 008HFULL4HB Init. Calib. Date(s): 10/24/09 10/24/09

Init. Calib. Times: 1430 1654

GC Column: C18 ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF31.250 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,3,5-Trinitrobenzene	2651.4160	2660.1600	0.01	0.33	15.00	AVRG
1,3-Dinitrobenzene	3668.4560	3920.6200	0.01	6.87	15.00	AVRG
2,6-Dinitrotoluene	1779.1360	1767.5840	0.01	-0.65	15.00	AVRG
2,4-Dinitrotoluene	3479.7120	3422.3880	0.01	-1.65	15.00	AVRG
1,4-Dinitrobenzene	3360.0140	3436.8990	0.01	2.29	15.00	AVRG

FORM 7B
8330 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date: 10/25/09 Time: 0116

Lab File ID: 020HFULL4HC Init. Calib. Date(s): 10/24/09 10/24/09

Init. Calib. Times: 1430 1654

GC Column: C18 ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF31.250 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,3,5-Trinitrobenzene	2651.4160	2734.1080	0.01	3.12	15.00	AVRG
1,3-Dinitrobenzene	3668.4560	3888.6560	0.01	6.00	15.00	AVRG
2,6-Dinitrotoluene	1779.1360	1841.9140	0.01	3.53	15.00	AVRG
2,4-Dinitrotoluene	3479.7120	3524.5920	0.01	1.29	15.00	AVRG
1,4-Dinitrobenzene	3360.0140	3493.9540	0.01	3.99	15.00	AVRG

FORM 7B
8330 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date: 10/27/09 Time: 1037

Lab File ID: 033HFULL4HD Init. Calib. Date(s): 10/24/09 10/24/09

Init. Calib. Times: 1430 1654

GC Column: C18 ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF31.250 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,3,5-Trinitrobenzene	2651.4160	2739.8160	0.01	3.33	15.00	AVRG
1,3-Dinitrobenzene	3668.4560	3895.2920	0.01	6.18	15.00	AVRG
2,6-Dinitrotoluene	1779.1360	1840.8420	0.01	3.47	15.00	AVRG
2,4-Dinitrotoluene	3479.7120	3547.3880	0.01	1.94	15.00	AVRG
1,4-Dinitrobenzene	3360.0140	3476.8010	0.01	3.48	15.00	AVRG

FORM 7B
8330 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date: 10/27/09 Time: 1748

Lab File ID: 042HFULL4HE Init. Calib. Date(s): 10/24/09 10/24/09

Init. Calib. Times: 1430 1654

GC Column: C18 ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF31.250 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,3,5-Trinitrobenzene	2651.4160	2678.0080	0.01	1.00	15.00	AVRG
1,3-Dinitrobenzene	3668.4560	3909.7480	0.01	6.58	15.00	AVRG
2,6-Dinitrotoluene	1779.1360	1747.9960	0.01	-1.75	15.00	AVRG
2,4-Dinitrotoluene	3479.7120	3443.1200	0.01	-1.05	15.00	AVRG
1,4-Dinitrobenzene	3360.0140	3436.2850	0.01	2.27	15.00	AVRG

FORM 7B
8330 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11001 Calibration Date: 10/27/09 Time: 2123

Lab File ID: 048HFULL4HF Init. Calib. Date(s): 10/24/09 10/24/09

Init. Calib. Times: 1430 1654

GC Column: C18 ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF31.250 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
1,3,5-Trinitrobenzene	2651.4160	2740.5040	0.01	3.36	15.00	AVRG
1,3-Dinitrobenzene	3668.4560	4011.3640	0.01	9.35	15.00	AVRG
2,6-Dinitrotoluene	1779.1360	1744.5640	0.01	-1.94	15.00	AVRG
2,4-Dinitrotoluene	3479.7120	3500.5160	0.01	0.60	15.00	AVRG
1,4-Dinitrobenzene	3360.0140	3478.2650	0.01	3.52	15.00	AVRG

FORM 7B
8332 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date: 10/29/09 Time: 1022

Lab File ID: 033H8332MHD Init. Calib. Date(s): 10/16/09 10/16/09

Init. Calib. Times: 1753 1956

GC Column: PINNACLE CYANO ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF50.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Nitroglycerin	1168.4860	1167.3450	0.01	-0.10	15.00	AVRG
1,4-Dinitrobenzene	1506.3760	1672.7290	0.01	11.04	40.00	AVRG

FORM VII 8332

FORM 7B
8332 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date: 10/29/09 Time: 1550

Lab File ID: 042H8332MHE Init. Calib. Date(s): 10/16/09 10/16/09

Init. Calib. Times: 1753 1956

GC Column: PINNACLE CYANO ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF50.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Nitroglycerin	1168.4860	1197.2345	0.01	2.46	15.00	AVRG
1,4-Dinitrobenzene	1506.3760	1735.8270	0.01	15.23	40.00	AVRG

FORM 7B
8332 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date: 10/29/09 Time: 1926

Lab File ID: 049H8332MHF Init. Calib. Date(s): 10/16/09 10/16/09

Init. Calib. Times: 1753 1956

GC Column: PINNACLE CYANO ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF50.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Nitroglycerin	1168.4860	1196.7340	0.01	2.42	15.00	AVRG
1,4-Dinitrobenzene	1506.3760	1752.9650	0.01	16.37	40.00	AVRG

FORM 7B
8332 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date: 11/12/09 Time: 0832

Lab File ID: 068H8332MHI Init. Calib. Date(s): 10/16/09 10/16/09

Init. Calib. Times: 1753 1956

GC Column: PINNACLE CYANO ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF50.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Nitroglycerin	1168.4860	1126.1055	0.01	-3.63	15.00	AVRG
1,4-Dinitrobenzene	1506.3760	1551.3750	0.01	2.99	40.00	AVRG

FORM 7B
8332 CALIBRATION VERIFICATION SUMMARY

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Instrument ID: A11002 Calibration Date: 11/12/09 Time: 1106

Lab File ID: 073H8332MHJ Init. Calib. Date(s): 10/16/09 10/16/09

Init. Calib. Times: 1753 1956

GC Column: PINNACLE CYANO ID: 4.60 (mm)

COMPOUND	RRF OR AMOUNT	RRF50.000 OR AMOUNT	MIN RRF	%D OR %DRIFT	MAX %D OR %DRIFT	CURV TYPE
Nitroglycerin	1168.4860	1144.7965	0.01	-2.03	15.00	AVRG
1,4-Dinitrobenzene	1506.3760	1597.9120	0.01	6.08	40.00	AVRG

FORM VII 8332

c. Analytical Sequence (Form VIII)

For all instruments, in chronological order by instrument

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

GC Column: PINNACLE CYANO ID: 4.60 (mm) Init. Calib. Date(s): 10/16/09 10/16/

Instrument ID: A11002

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 5.59

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT #	RT #
01	83325HA	83325HA	10/16/09	1753	5.59	
02	83324HA	83324HA	10/16/09	1824	5.59	
03	83323HA	83323HA	10/16/09	1854	5.59	
04	83322HA	83322HA	10/16/09	1925	5.59	
05	83321HA	83321HA	10/16/09	1956	5.59	
06	8332MHD	8332MHD	10/29/09	1022	5.70	
07	LIBLKHD	LIBLKHD	10/29/09	1052	5.71	
08	PBLKKZ	9102307-BLK1	10/29/09	1214	5.73	
09	PLALCS	9102307-BS2	10/29/09	1244	5.72	
10	13MW5MS	9102307-MS2	10/29/09	1315	5.72	
11	13MW5MSD	9102307-MSD2	10/29/09	1346	5.72	
12	13MW5	0910165-01	10/29/09	1417	5.72	
13	13MW1	0910165-02	10/29/09	1448	5.72	
14	13MW2	0910165-03	10/29/09	1519	5.36	
15	8332MHE	8332MHE	10/29/09	1550	5.71	
16	LIBLKHE	LIBLKHE	10/29/09	1620	5.71	
17	13MW3	0910165-04	10/29/09	1651	5.73	
18	13MW4	0910165-05	10/29/09	1722	5.73	
19	13MWDUP	0910165-06	10/29/09	1753	5.73	
20	13MW6	0910165-07	10/29/09	1824	5.73	
21	13MW7	0910165-08	10/29/09	1855	5.73	
22	8332MHF	8332MHF	10/29/09	1926	5.71	
23	LIBLKHF	LIBLKHF	10/29/09	1957	5.71	
24	8332MHI	8332MHI	11/12/09	0832	5.61	
25	LIBLKHI	LIBLKHI	11/12/09	0903	5.61	
26	PBLKMO	9103004-BLK1	11/12/09	0933	5.61	
27	PMOLCS	9103004-BS1	11/12/09	1004	5.61	
28	13MW2RE	0910165-03RE	11/12/09	1035	5.61	
29	8332MHJ	8332MHJ	11/12/09	1106	5.61	
30	LIBLKHJ	LIBLKHJ	11/12/09	1137	5.61	
31						
32						

QC LIMITS
S1 = 1,4-Dinitrobenzene (+/- 0.50 MINUTES)

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

FORM VIII PEST

8D
PESTICIDE ANALYTICAL SEQUENCE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

GC Column: C18 ID: 4.60 (mm) Init. Calib. Date(s): 10/24/09 10/24/09

Instrument ID: A11001

THE ANALYTICAL SEQUENCE OF PERFORMANCE EVALUATION MIXTURES, BLANKS, SAMPLES, AND STANDARDS IS GIVEN BELOW:

MEAN SURROGATE RT FROM INITIAL CALIBRATION
S1 : 9.44

	EPA SAMPLE NO.	LAB SAMPLE ID	DATE ANALYZED	TIME ANALYZED	S1 RT	#	RT	#
01	FULL5HA	FULL5HA	10/24/09	1430	9.46			
02	FULL4HA	FULL4HA	10/24/09	1506	9.45			
03	FULL3HA	FULL3HA	10/24/09	1542	9.44			
04	FULL2HA	FULL2HA	10/24/09	1618	9.44			
05	FULL1HA	FULL1HA	10/24/09	1654	9.44			
06	FULL4HB	FULL4HB	10/24/09	1805	9.43			
07	LIBLKHB	LIBLKHB	10/24/09	1841	9.44			
08	PBLKKZ	9102307-BLK1	10/24/09	2141	9.47			
09	PKZLCS	9102307-BS1	10/24/09	2217	9.48			
10	13MW5MS	9102307-MS1	10/24/09	2252	9.49			
11	13MW5MSD	9102307-MSD1	10/24/09	2328	9.49			
12	13MW5	0910165-01	10/25/09	0004	9.50			
13	13MW1	0910165-02	10/25/09	0040	9.51			
14	FULL4HC	FULL4HC	10/25/09	0116	9.49			
15	LIBLKHC	LIBLKHC	10/25/09	0152	9.50			
16	13MW2	0910165-03	10/25/09	0228				
17	13MW3	0910165-04	10/25/09	0304	9.54			
18	13MW4	0910165-05	10/25/09	0340	9.56			
19	13MWDUP	0910165-06	10/25/09	0415	9.56			
20	13MW6	0910165-07	10/25/09	0451	9.56			
21	13MW7	0910165-08	10/25/09	0527	9.57			
22	FULL4HD	FULL4HD	10/27/09	1037	9.52			
23	LIBLKHD	LIBLKHD	10/27/09	1112	9.52			
24	FULL4HE	FULL4HE	10/27/09	1748	9.54			
25	LIBLKHE	LIBLKHE	10/27/09	1824	9.55			
26	PBLKLI	9102615-BLK1	10/27/09	1859	9.57			
27	PLILCS	9102615-BS1	10/27/09	1935	9.58			
28	13MW2RE	0910165-03RE	10/27/09	2011	9.57			
29	FULL4HF	FULL4HF	10/27/09	2123	9.55			
30	LIBLKHF	LIBLKHF	10/27/09	2159	9.54			
31								
32								

QC LIMITS
S1 = 1,4-Dinitrobenzene (+/- 0.20 MINUTES)

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

FORM VIII PEST

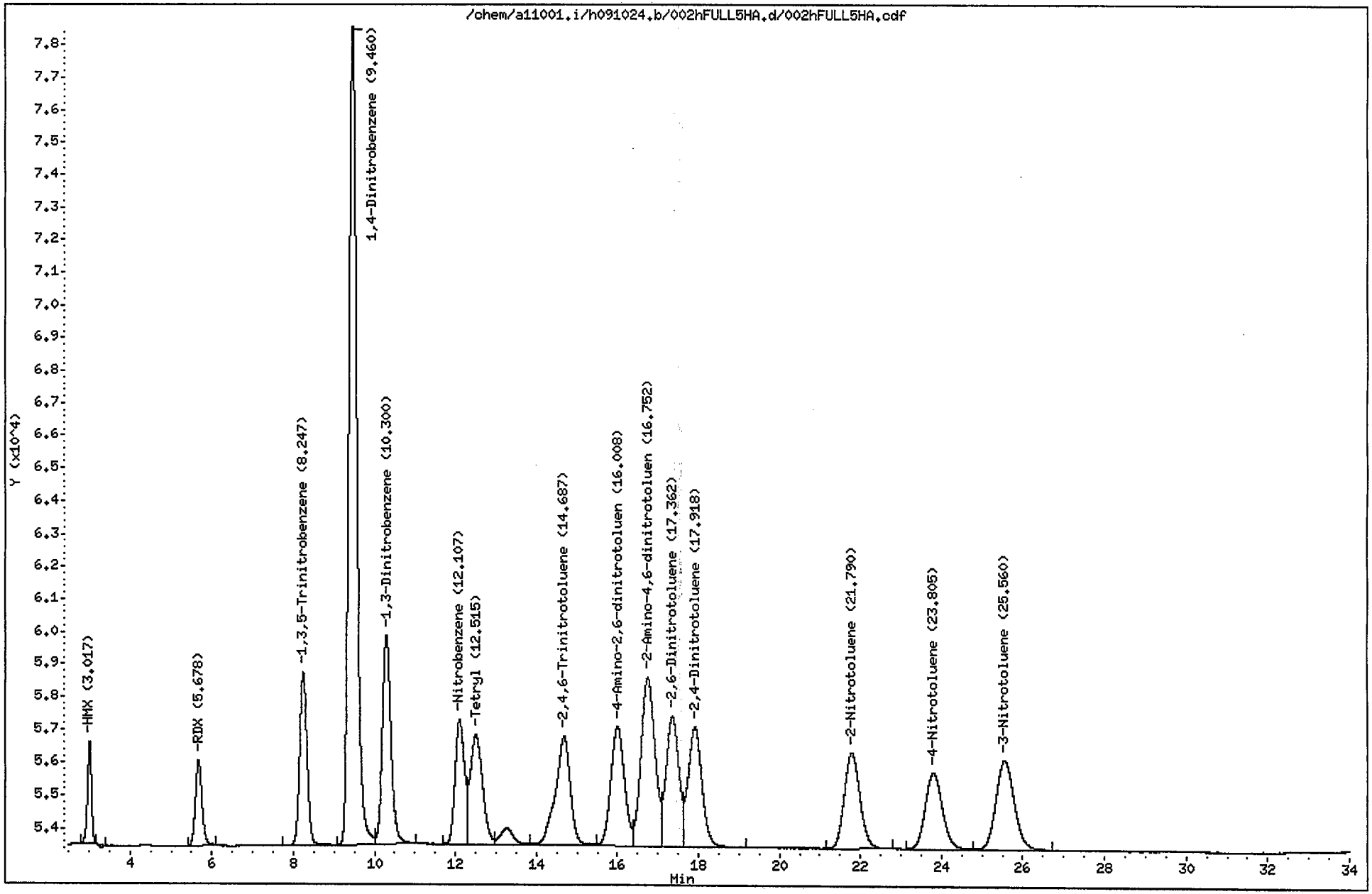
d. Chromatograms and Data System Printouts

For all methods, standards packages shall include
The following:

- Initial Calibration Standards
- Second Source Initial Calibration Verifications (if required by client)
- Continuing Calibration Verification Standards
- The quantitation report must include the Client Sample ID number.
- The chromatograms shall include the following: Client Sample ID number for the standard, labeled standard peaks, volume injected, for each standard, date and time of injection, HPLC column identifier, and HPLC instrument identifier

Data File: /chem/a11001.i/h091024.b/002hFULL5HA.d
Date : 24-OCT-2009 14:30
Client ID: FULL5HA
Sample Info: FULL5HA
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

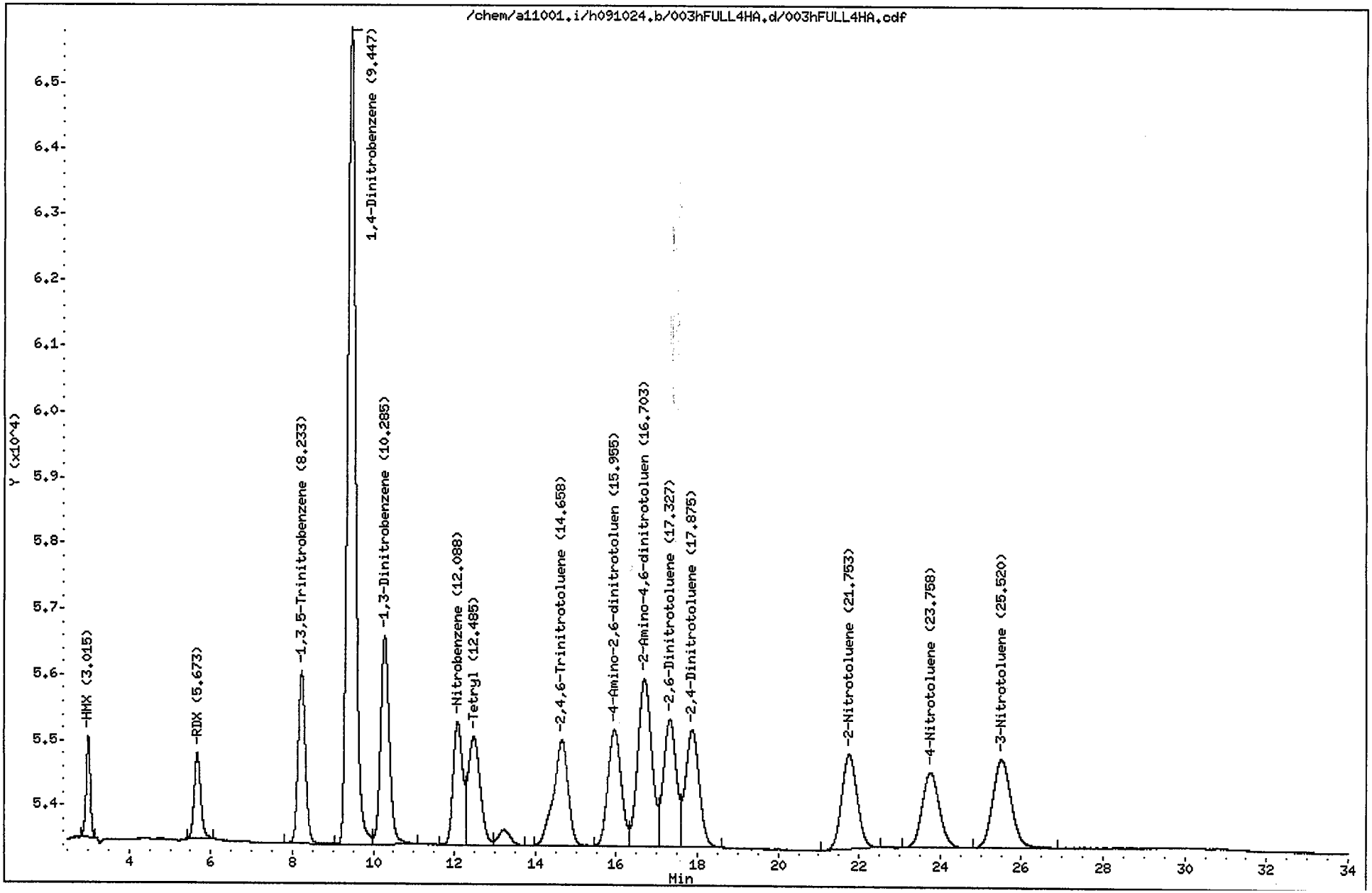
Lab Smp Id : FULL5HA Client Smp Id : FULL5HA
Sample Type : INITIAL CAL: Level 5 Sublist : all
Inj. Date : 24-OCT-2009 14:30 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
2.19			4851					
3.02	2.92	3.12	21231	832	HMX	25.00000	849.2000	
3.31			526					
5.68	5.57	5.77	28784	1079	RDX	25.00000	1151.360	
8.25	8.03	8.43	66711	2651	1,3,5-Trinitrobenzene	25.00000	2668.400	
9.46	9.25	9.65	339442	3360	1,4-Dinitrobenzene	100.0000	3394.420	
10.30	10.08	10.48	94232	3668	1,3-Dinitrobenzene	25.00000	3769.240	
12.11	11.89	12.29	61411	2430	Nitrobenzene	25.00000	2456.400	
12.52	12.28	12.68	70220	1342	Tetryl	50.00000	1404.380	
13.26			11265					
14.69	14.46	14.86	85226	3328	2,4,6-Trinitrotoluene	25.00000	3409.000	
16.01	15.76	16.16	84433	1674	4-Amino-2,6-dinitrotoluene	50.00000	1688.640	
16.75	16.49	16.89	123133	2471	2-Amino-4,6-dinitrotoluene	50.00000	2462.640	
17.36	17.03	17.63	88329	1779	2,6-Dinitrotoluene	50.00000	1766.580	
17.92	17.57	18.17	85876	3480	2,4-Dinitrotoluene	25.00000	3435.000	
21.79	21.44	22.04	78666	1639	2-Nitrotoluene	50.00000	1573.300	
23.80	23.44	24.04	68372	1380	4-Nitrotoluene	50.00000	1367.420	
25.56	25.21	25.81	85063	1718	3-Nitrotoluene	50.00000	1701.240	

AW 10/26/09

Data File: /chem/a11001.i/h091024.b/003hFULL4HA.d
Date : 24-OCT-2009 15:06
Client ID: FULL4HA
Sample Info: FULL4HA
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

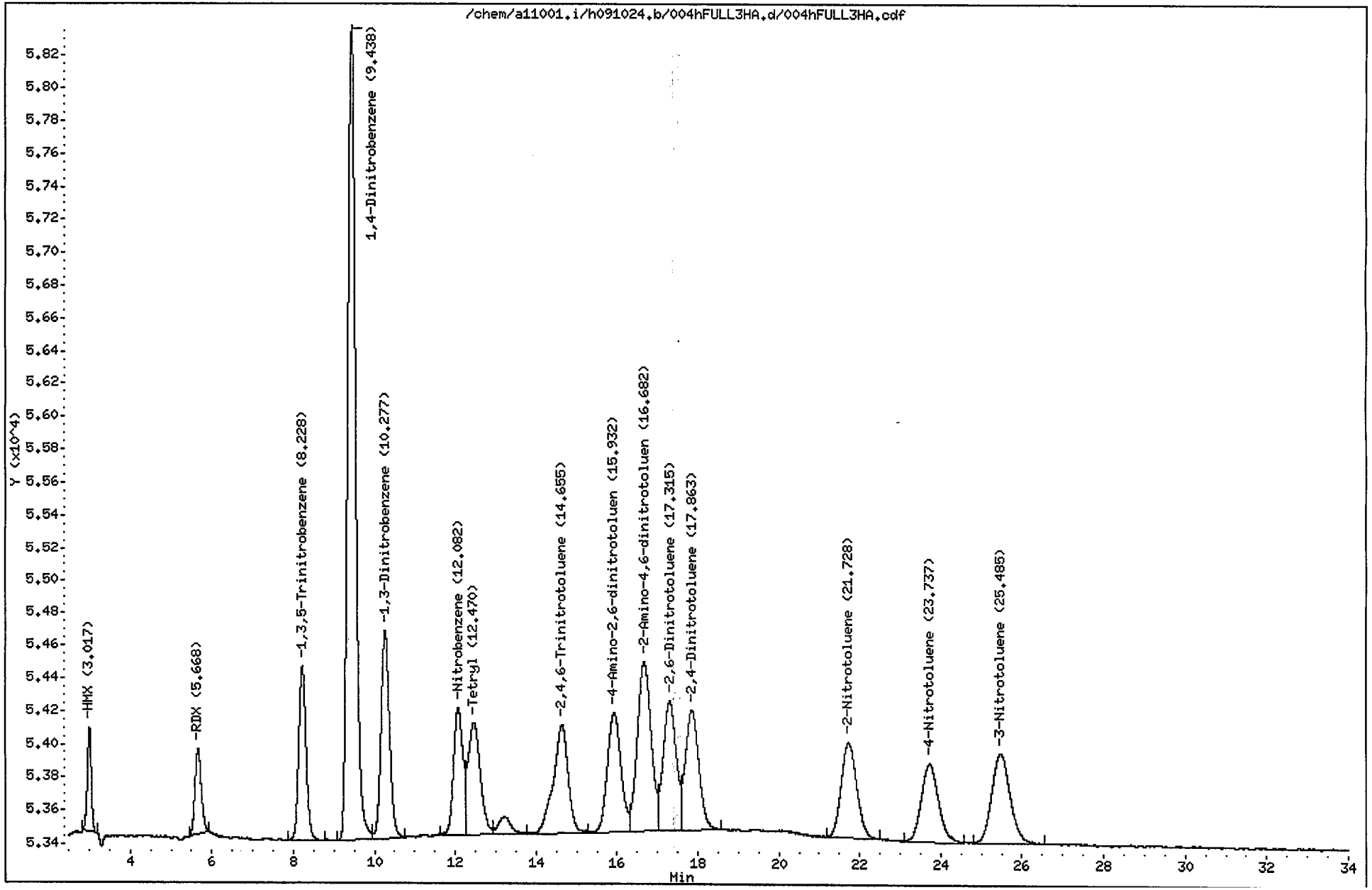
Lab Smp Id : FULL4HA Client Smp Id : FULL4HA
Sample Type : INITIAL CAL: Level 4 Sublist : all
Inj Date : 24-OCT-2009 15:06 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
2.03			567					
2.21			2651					
3.02	2.92	3.12	10454	832	HMX	12.50000	836.2400	
5.67	5.57	5.77	14415	1079	RDX	12.50000	1153.120	
8.23	8.03	8.43	32941	2651	1,3,5-Trinitrobenzene	12.50000	2635.280	
9.45	9.25	9.65	168811	3360	1,4-Dinitrobenzene	50.00000	3376.200	
10.28	10.08	10.48	47444	3668	1,3-Dinitrobenzene	12.50000	3795.440	
12.09	11.89	12.29	30600	2430	Nitrobenzene	12.50000	2447.920	
12.48	12.28	12.68	34414	1342	Tetryl	25.00000	1376.520	
13.23			4923					
14.66	14.46	14.86	40499	3328	2,4,6-Trinitrotoluene	12.50000	3239.920	
15.96	15.76	16.16	41169	1674	4-Amino-2,6-dinitrotoluene	25.00000	1646.720	
16.70	16.49	16.89	61006	2471	2-Amino-4,6-dinitrotoluene	25.00000	2440.200	
17.33	17.03	17.63	43520	1779	2,6-Dinitrotoluene	25.00000	1740.800	
17.88	17.57	18.17	41852	3480	2,4-Dinitrotoluene	12.50000	3348.160	
21.75	21.44	22.04	38226	1639	2-Nitrotoluene	25.00000	1529.040	
23.76	23.44	24.04	34023	1380	4-Nitrotoluene	25.00000	1360.880	
25.52	25.21	25.81	42624	1718	3-Nitrotoluene	25.00000	1704.920	

10/26/09

Data File: /chem/a11001.i/h091024.b/004hFULL3HA.d
Date : 24-OCT-2009 15:42
Client ID: FULL3HA
Sample Info: FULL3HA
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : FULL3HA Client Smp Id : FULL3HA
Sample Type : INITIAL CAL: Level 3 Sublist : all
Inj Date : 24-OCT-2009 15:42 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
2.22			2973					
3.02	2.92	3.12	4125	832	HMX	5.000000	824.8000	
5.67	5.57	5.77	5527	1079	RDX	5.000000	1105.200	
8.23	8.03	8.43	13144	2651	1,3,5-Trinitrobenzene	5.000000	2628.600	
9.44	9.25	9.65	67025	3360	1,4-Dinitrobenzene	20.00000	3351.250	
10.28	10.08	10.48	18247	3668	1,3-Dinitrobenzene	5.000000	3649.200	
12.08	11.89	12.29	12361	2430	Nitrobenzene	5.000000	2472.000	
12.47	12.28	12.68	14020	1342	Tetryl	10.00000	1402.000	
13.24			2211					
14.66	14.46	14.86	16572	3328	2,4,6-Trinitrotoluene	5.000000	3314.400	
15.93	15.76	16.16	16668	1674	4-Amino-2,6-dinitrotoluene	10.00000	1666.800	
16.68	16.49	16.89	24377	2471	2-Amino-4,6-dinitrotoluene	10.00000	2437.700	
17.32	17.03	17.63	17566	1779	2,6-Dinitrotoluene	10.00000	1756.500	
17.86	17.57	18.17	16731	3480	2,4-Dinitrotoluene	5.000000	3346.200	
21.73	21.44	22.04	15128	1639	2-Nitrotoluene	10.00000	1512.700	
23.74	23.44	24.04	13769	1380	4-Nitrotoluene	10.00000	1376.900	
25.48	25.21	25.81	17089	1718	3-Nitrotoluene	10.00000	1708.800	

10/26/09

Data File: /chem/a11001.i/h091024.b/005hFULL2HA.d

Date : 24-OCT-2009 16:18

Client ID: FULL2HA

Instrument: a11001.i

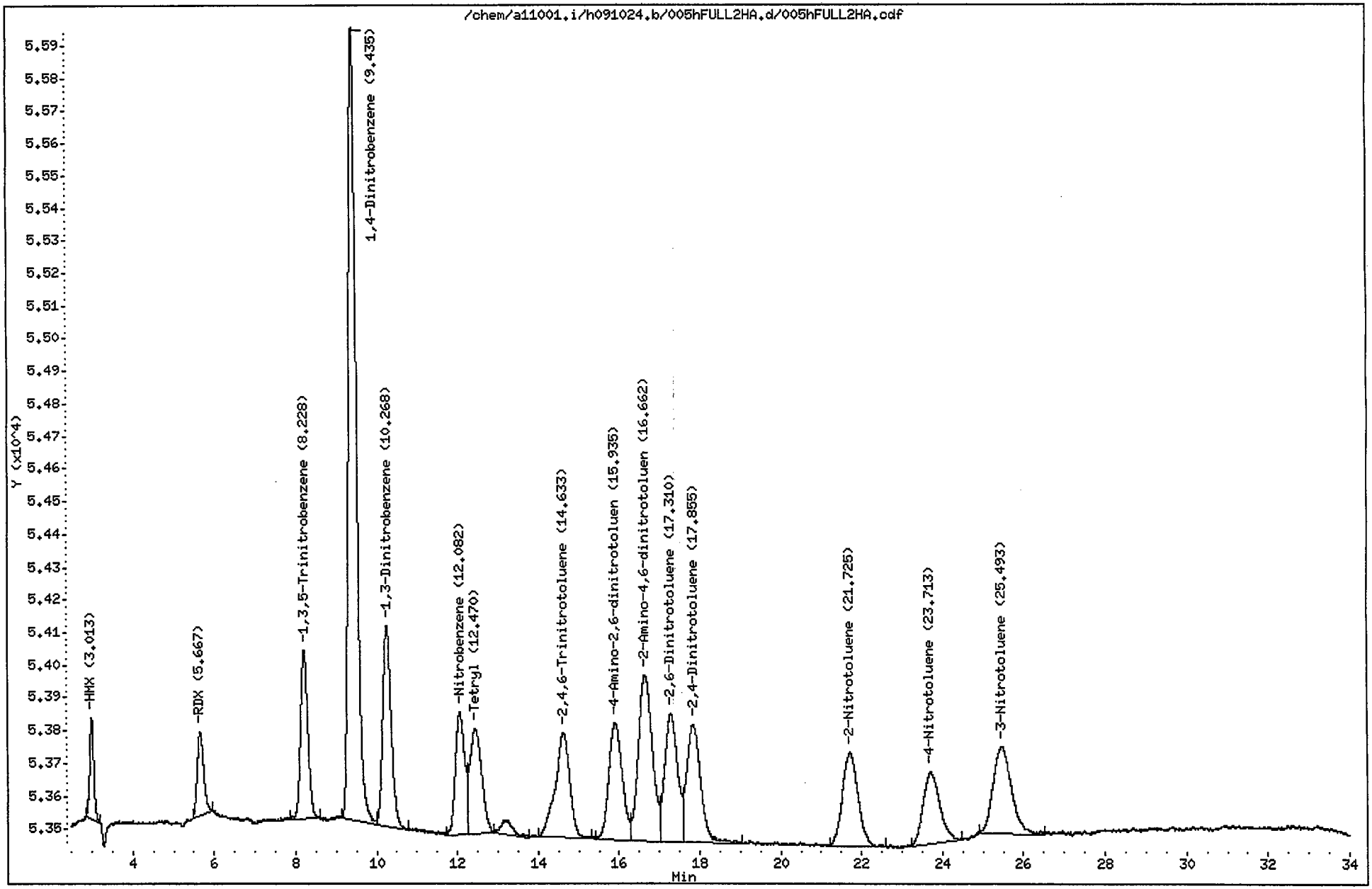
Sample Info: FULL2HA

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : FULL2HA Client Smp Id : FULL2HA
Sample Type : INITIAL CAL: Level 2 Sublist : all
Inj Date : 24-OCT-2009 16:18 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
2.21			2680					
3.01	2.92	3.12	2145	832	HMX	2.500000	858.0000	
5.67	5.57	5.77	2774	1079	RDX	2.500000	1109.600	
8.23	8.03	8.43	6404	2651	1,3,5-Trinitrobenzene	2.500000	2561.600	
9.44	9.25	9.65	32822	3360	1,4-Dinitrobenzene	10.00000	3282.200	
10.27	10.08	10.48	8821	3668	1,3-Dinitrobenzene	2.500000	3528.400	
12.08	11.89	12.29	6122	2430	Nitrobenzene	2.500000	2448.800	
12.47	12.28	12.68	6367	1342	Tetryl	5.000000	1273.400	
13.20			866					
14.63	14.46	14.86	7969	3328	2,4,6-Trinitrotoluene	2.500000	3187.200	
15.94	15.76	16.16	8311	1674	4-Amino-2,6-dinitrotoluene	5.000000	1662.000	
16.66	16.49	16.89	12392	2471	2-Amino-4,6-dinitrotoluene	5.000000	2478.200	
17.31	17.03	17.63	8660	1779	2,6-Dinitrotoluene	5.000000	1731.800	
17.86	17.57	18.17	8733	3480	2,4-Dinitrotoluene	2.500000	3493.200	
21.72	21.44	22.04	7795	1639	2-Nitrotoluene	5.000000	1559.000	
23.71	23.44	24.04	6373	1380	4-Nitrotoluene	5.000000	1274.400	
25.49	25.21	25.81	8252	1718	3-Nitrotoluene	5.000000	1650.400	

10/26/09

Data File: /chem/a11001.i/h091024.b/006hFULL1HA.d

Date : 24-OCT-2009 16:54

Client ID: FULL1HA

Instrument: a11001.i

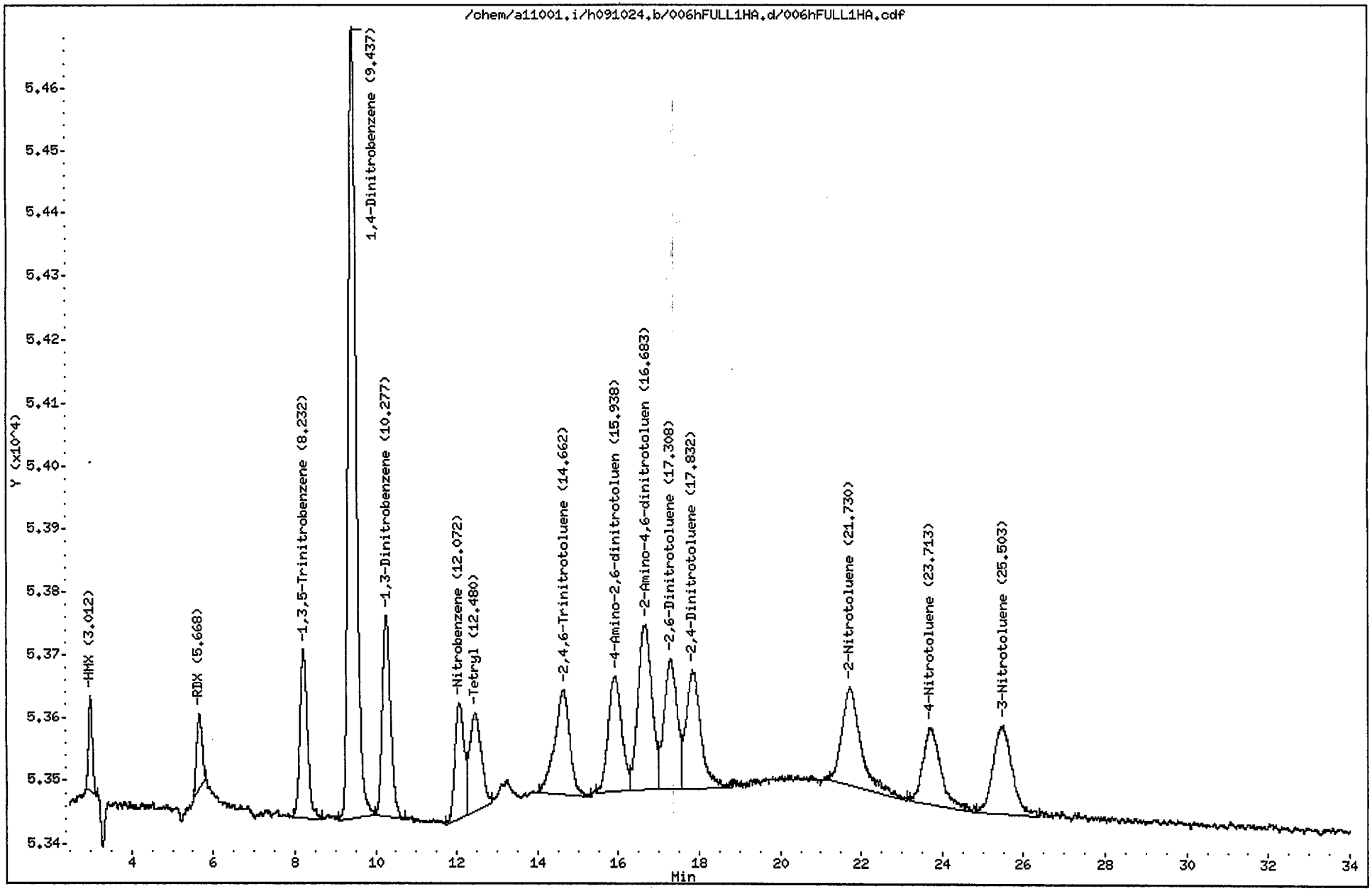
Sample Info: FULL1HA

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : FULL1HA Client Smp Id : FULL1HA
Sample Type : INITIAL CAL: Level 1 Sublist : all
Inj Date : 24-OCT-2009 16:54 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
2.02			612					
2.22			2595					
3.01	2.92	3.12	988	832	HMX	1.250000	789.6000	
5.67	5.57	5.77	1095	1079	RDX	1.250000	876.0000	
8.23	8.03	8.43	3454	2651	1,3,5-Trinitrobenzene	1.250000	2763.200	
9.44	9.25	9.65	16980	3360	1,4-Dinitrobenzene	5.000000	3396.000	
10.28	10.08	10.48	4500	3668	1,3-Dinitrobenzene	1.250000	3600.000	
12.07	11.89	12.29	2904	2430	Nitrobenzene	1.250000	2323.200	
12.48	12.28	12.68	3141	1342	Tetryl	2.500000	1256.000	
14.66	14.46	14.86	4362	3328	2,4,6-Trinitrotoluene	1.250000	3489.600	
15.94	15.76	16.16	4261	1674	4-Amino-2,6-dinitrotoluene	2.500000	1704.400	
16.68	16.49	16.89	6343	2471	2-Amino-4,6-dinitrotoluene	2.500000	2536.800	
17.31	17.03	17.63	4751	1779	2,6-Dinitrotoluene	2.500000	1900.000	
17.83	17.57	18.17	4721	3480	2,4-Dinitrotoluene	1.250000	3776.000	
21.73	21.44	22.04	5049	1639	2-Nitrotoluene	2.500000	2019.200	
23.71	23.44	24.04	3801	1380	4-Nitrotoluene	2.500000	1520.000	
25.50	25.21	25.81	4562	1718	3-Nitrotoluene	2.500000	1824.400	

ALW 10/26/09

Data File: /chem/a11001.i/h091024.b/007h8330CHKHA.d

Page 1

Date : 24-OCT-2009 17:29

Client ID: 8330CHKHA

Instrument: a11001.i

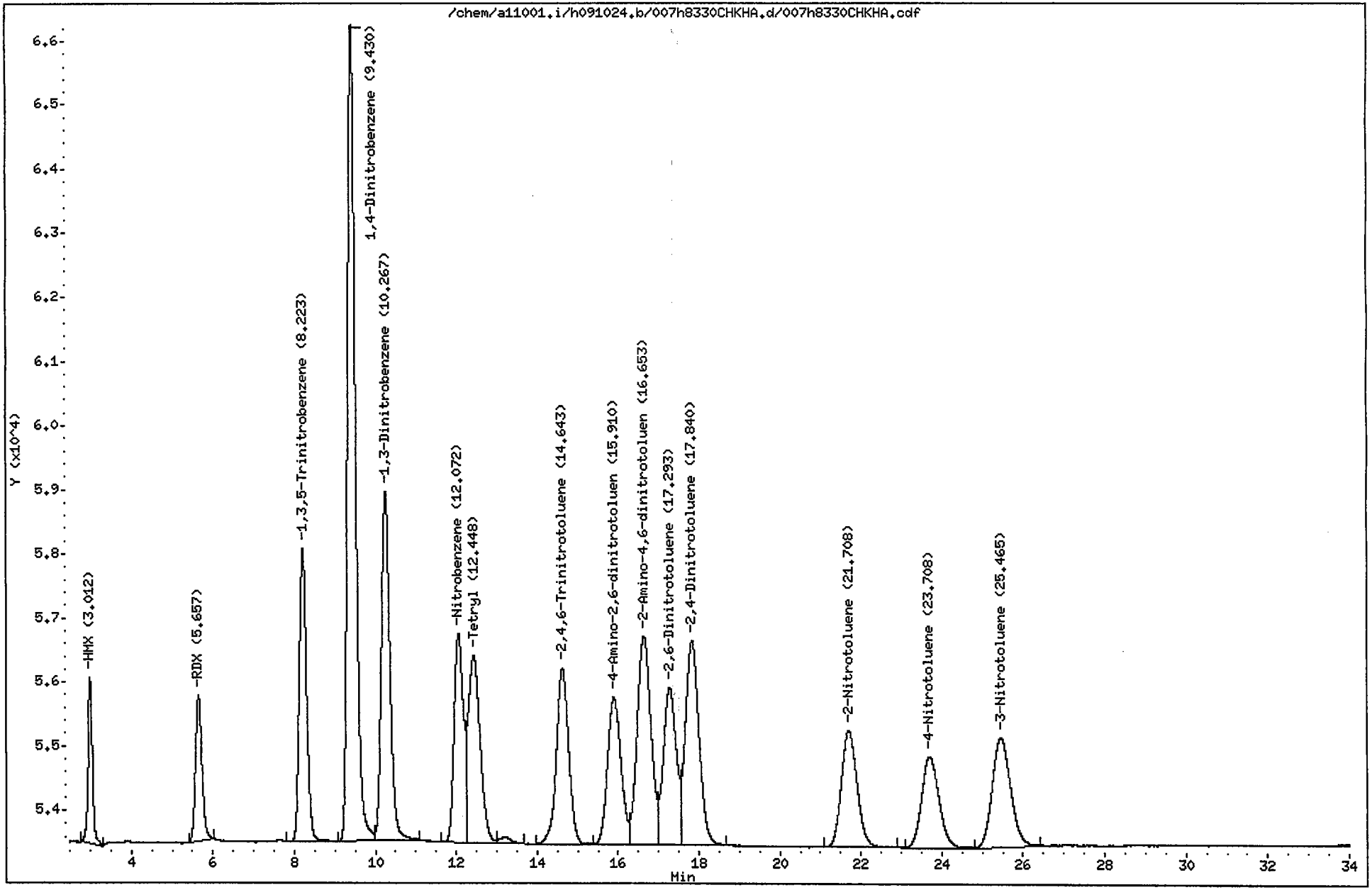
Sample Info: 8330CHKHA

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 8330CHKHA Client Smp Id : 8330CHKHA
Sample Type : QCCHECK Sublist : all
Inj Date : 24-OCT-2009 17:29 Inst ID : A11001
Operator : 2646 Spike Sublist : qccheck
Method : /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc. Info : None

RT	AREA
2.03	984
2.21	1686
3.01	18728
5.66	24679
8.22	56805
9.43	171993
10.27	79537
12.07	51875
12.45	58537
13.20	1906
14.64	57130
15.91	52339
16.65	76659
17.29	53037
17.84	74006
21.71	48565
23.71	41235
25.46	52179

AW 10/26/09

CompuChem

RECOVERY REPORT

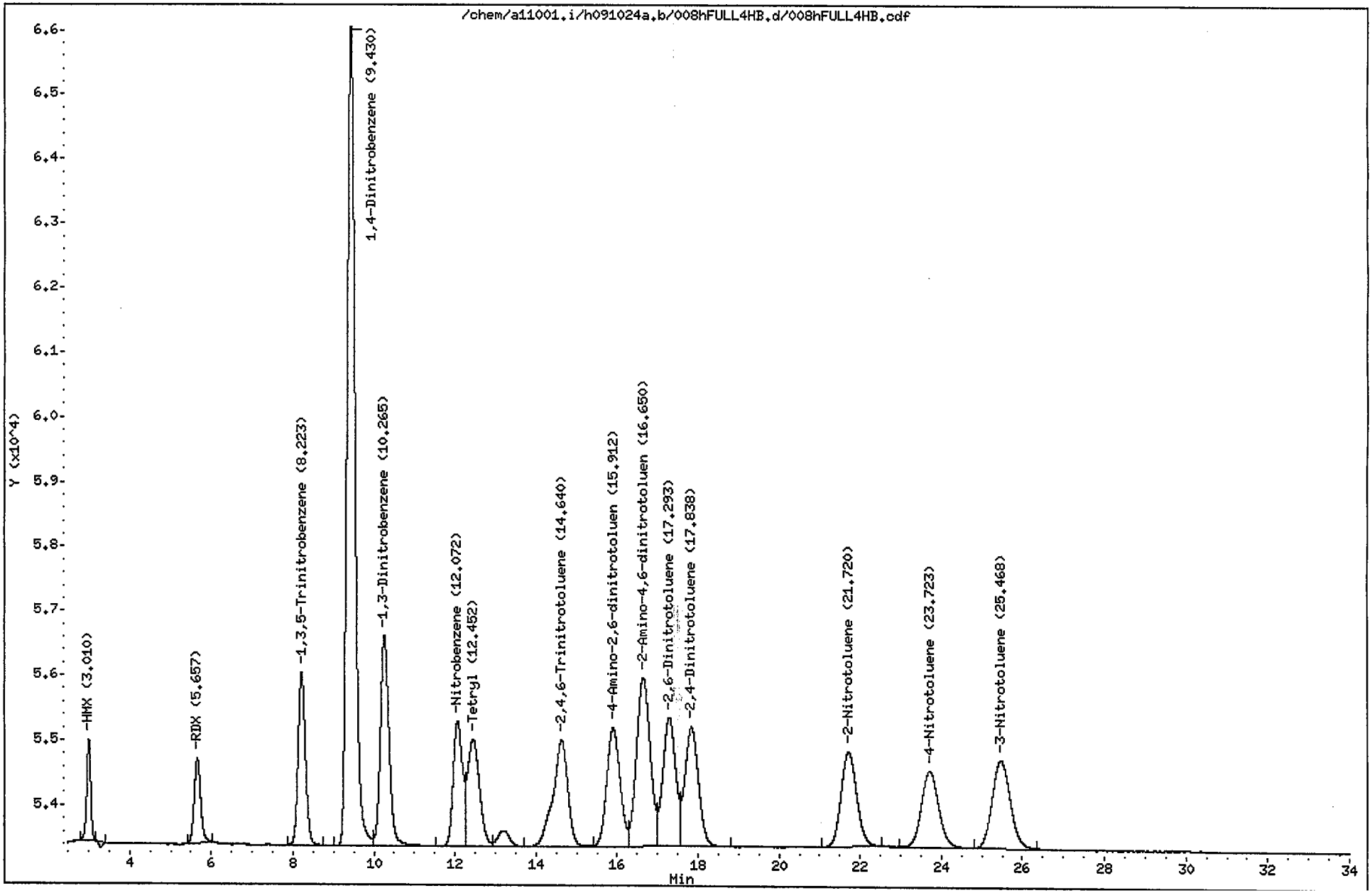
Client Name:
Client SDG: h091024
Sample Matrix: LIQUID
Fraction: 8330
Lab Smp Id: 8330CHKHA
Client Smp ID: 8330CHKHA
Level: LOW
Operator: 2646
Data Type: LC DATA
SampleType: QCCHECK
SpikeList File: qccheck.spk
Quant Type: ESTD
Sublist File: all.sub
Method File: /chem/a11001.i/h091024.b/8330_10uL_v3split.m
Misc Info: None

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
1 HMX	2.0	2.2	112.59	80-120
3 1,3,5-Trinitrobenz	2.0	2.1	107.12	80-120
4 RDX	2.0	2.3	114.35	80-120
5 1,3-Dinitrobenzene	2.0	2.2	108.40	80-120
7 2,4,6-Trinitrotolu	2.0	1.7	85.83	80-120
8 Tetryl	3.0	4.4	145.34*	80-120
6 Nitrobenzene	2.0	2.1	106.75	80-120
9 2,4-Dinitrotoluene	2.0	2.1	106.34	80-120
11 2,6-Dinitrotoluene	3.0	3.0	99.36	80-120
10 2-Amino-4,6-dinitr	3.0	3.1	103.40	80-120
19 4-Amino-2,6-dinitr	3.0	3.1	104.24	80-120
20 2-Nitrotoluene	3.0	3.0	98.78	80-120
21 4-Nitrotoluene	3.0	3.0	99.60	80-120
22 3-Nitrotoluene	3.0	3.0	101.24	80-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 23 1,4-Dinitrobenzene	10	5.1	51.19	39-132

Data File: /chem/a11001.i/h091024a.b/008hFULL4HB.d
Date : 24-OCT-2009 18:05
Client ID: FULL4HB
Sample Info: FULL4HB
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

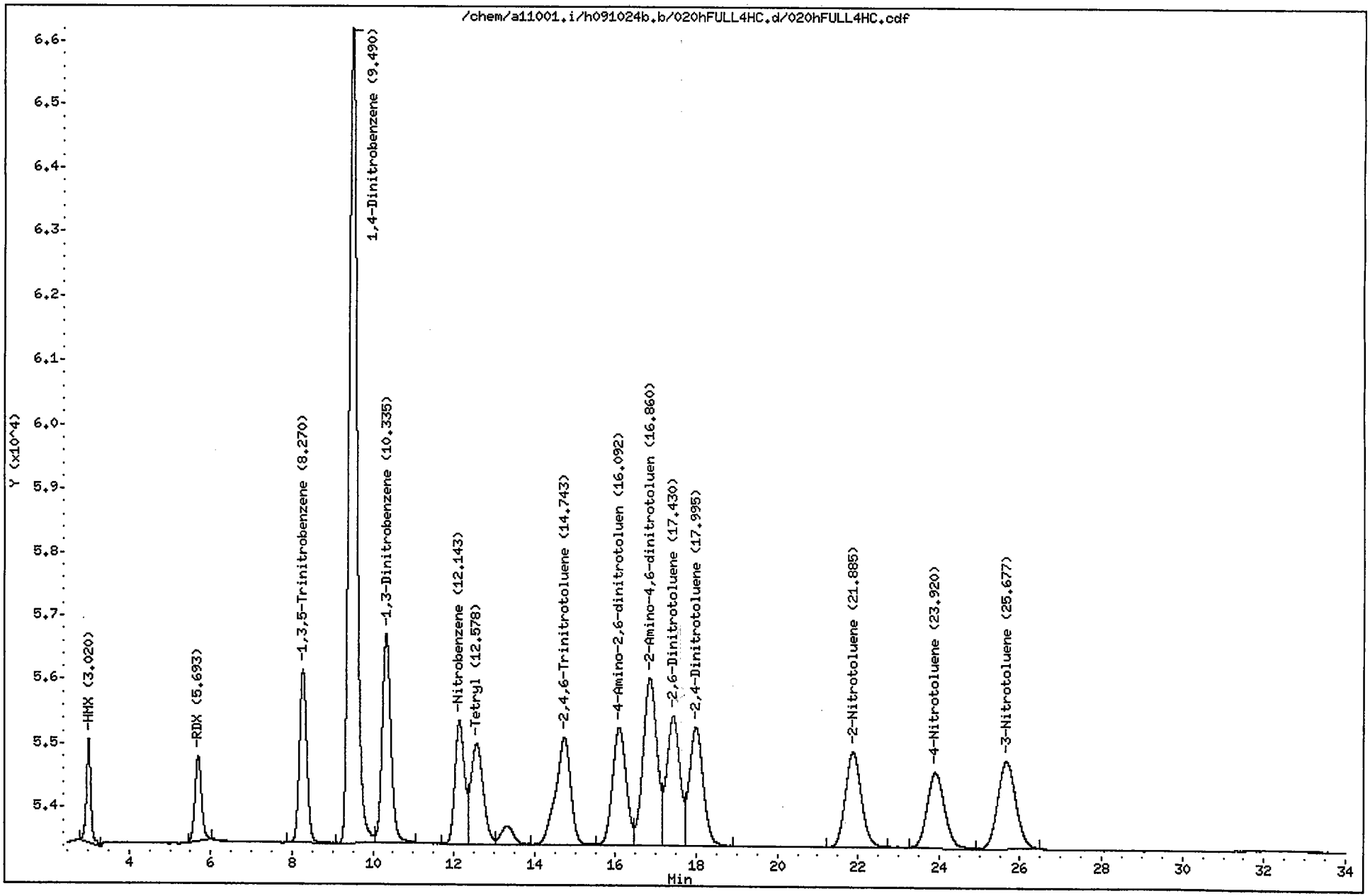
Lab Smp Id : FULL4HB Client Smp Id : FULL4HB
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 24-OCT-2009 18:05 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
2.07			613								
2.20			3254								
3.01	2.91	3.11	10605	832	HMX	12.50000	848.3600	-2.0	15.0		
3.31			501								
5.66	5.57	5.77	14437	1079	RDX	12.50000	1154.952	-7.0	15.0		
8.22	8.03	8.43	33252	2651	1,3,5-Trinitrobenzene	12.50000	2660.160	-0.3	15.0		
9.43	9.24	9.64	171845	3360	1,4-Dinitrobenzene	50.00000	3436.899	-2.3	15.0		
10.26	10.08	10.48	49008	3668	1,3-Dinitrobenzene	12.50000	3920.620	-6.9	15.0		
12.07	11.88	12.28	31131	2430	Nitrobenzene	12.50000	2490.488	-2.5	15.0		
12.45	12.28	12.68	34047	1342	Tetryl	25.00000	1361.878	-1.5	15.0		
13.20			4873								
14.64	14.46	14.86	41794	3328	2,4,6-Trinitrotoluene	12.50000	3343.552	-0.5	15.0		
15.91	15.74	16.14	41892	1674	4-Amino-2,6-dinitrotoluene	25.00000	1675.668	-0.1	15.0		
16.65	16.48	16.88	62009	2471	2-Amino-4,6-dinitrotoluene	25.00000	2480.358	-0.4	15.0		
17.29	17.02	17.62	44190	1779	2,6-Dinitrotoluene	25.00000	1767.584	0.6	15.0		
17.84	17.56	18.16	42780	3480	2,4-Dinitrotoluene	12.50000	3422.388	1.7	15.0		
21.72	21.44	22.04	39154	1639	2-Nitrotoluene	25.00000	1566.164	4.4	15.0		
23.72	23.44	24.04	35124	1380	4-Nitrotoluene	25.00000	1404.944	-1.8	15.0		
25.47	25.20	25.80	42644	1718	3-Nitrotoluene	25.00000	1705.776	0.7	15.0		

10/26/09

Data File: /chem/a11001.i/h091024b.b/020hFULL4HC.d
Date : 25-OCT-2009 01:16
Client ID: FULL4HC
Sample Info: FULL4HC
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : FULL4HC Client Smp Id : FULL4HC
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 25-OCT-2009 01:16 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : None

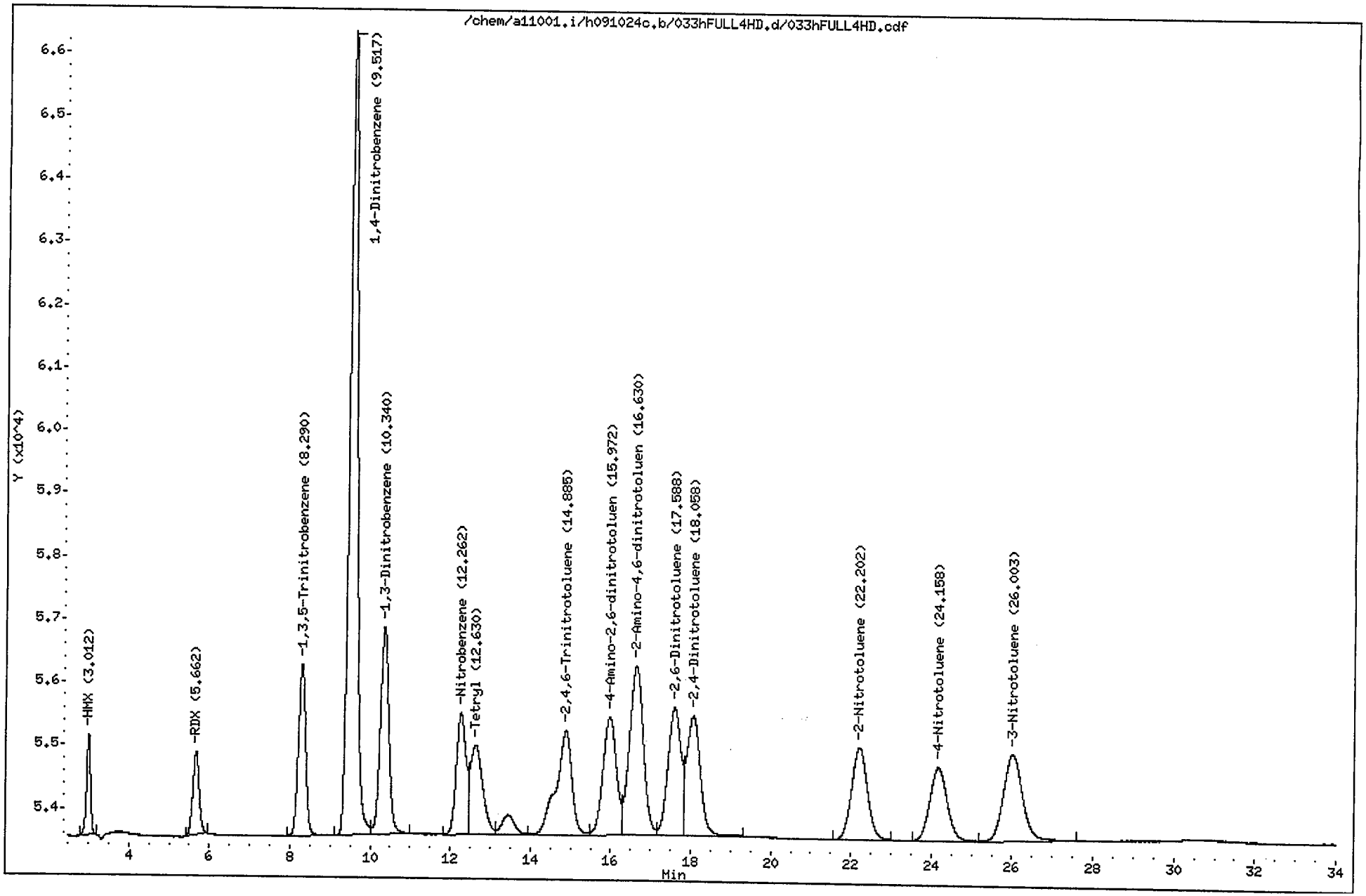
RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
2.21			2718								
3.02	2.92	3.12	11952	832	HMX	12.50000	956.1360	-14.9	15.0		
5.69	5.58	5.78	14644	1079	RDX	12.50000	1171.548	-8.6	15.0		
8.27	8.05	8.45	34176	2651	1,3,5-Trinitrobenzene	12.50000	2734.108	-3.1	15.0		
9.49	9.26	9.66	174698	3360	1,4-Dinitrobenzene	50.00000	3493.954	-4.0	15.0		
10.34	10.10	10.50	48608	3668	1,3-Dinitrobenzene	12.50000	3888.656	-6.0	15.0		
12.14	11.91	12.31	31882	2430	Nitrobenzene	12.50000	2550.532	-5.0	15.0		
12.58	12.32	12.72	33496	1342	Tetryl	25.00000	1339.854	0.2	15.0		
13.32			5973								
14.74	14.49	14.89	43164	3328	2,4,6-Trinitrotoluene	12.50000	3453.112	-3.8	15.0		
16.09	16.04	16.44	42988	1674	4-Amino-2,6-dinitrotoluene	25.00000	1719.540	-2.7	15.0		
16.86	16.82	17.22	63157	2471	2-Amino-4,6-dinitrotoluene	25.00000	2526.264	-2.2	15.0		
17.43	17.06	17.66	46048	1779	2,6-Dinitrotoluene	25.00000	1841.914	-3.5	15.0		
18.00	17.62	18.22	44057	3480	2,4-Dinitrotoluene	12.50000	3524.592	-1.3	15.0		
21.88	21.50	22.10	40502	1639	2-Nitrotoluene	25.00000	1620.100	1.2	15.0		
23.92	23.50	24.10	35551	1380	4-Nitrotoluene	25.00000	1422.060	-3.0	15.0		
25.68	25.27	25.87	43034	1718	3-Nitrotoluene	25.00000	1721.360	-0.2	15.0		

AW 10/26/09

Data File: /chem/a11001.i/h091024c.b/033hFULL4HD.d
Date : 27-OCT-2009 10:37
Client ID: FULL4HD
Sample Info: FULL4HD
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i

Operator: 2646
Column diameter: 4.60



CompuChem

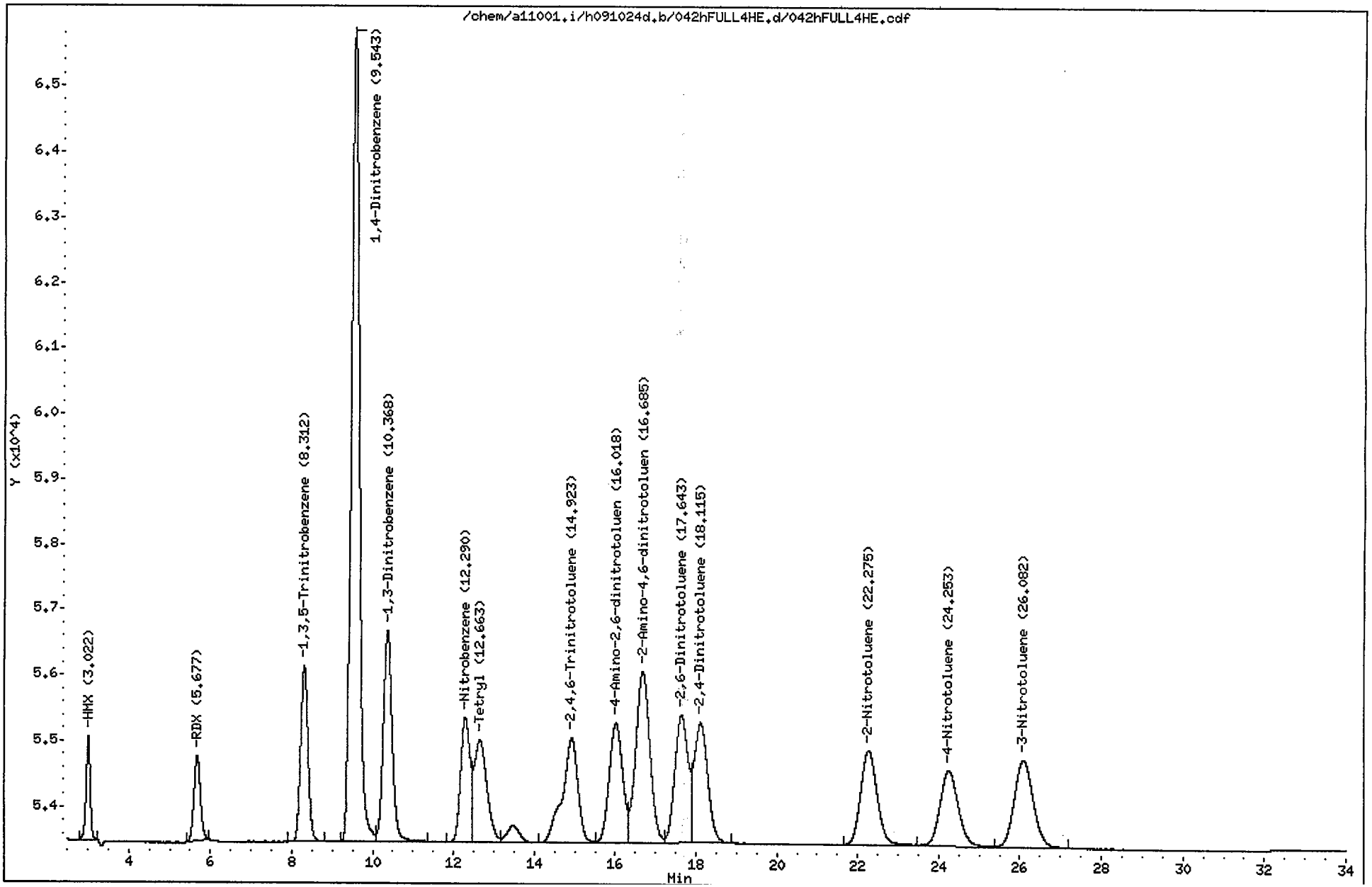
Lab Smp Id : FULL4HD Client Smp Id : FULL4HD
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 27-OCT-2009 10:37 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024c.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
2.14			1298								
2.22			803								
3.01	2.91	3.11	10864	832	HMX	12.50000	869.1440	-4.5	15.0		
5.66	5.56	5.76	14379	1079	RDX	12.50000	1150.296	-6.6	15.0		
8.29	8.09	8.49	34248	2651	1,3,5-Trinitrobenzene	12.50000	2739.816	-3.4	15.0		
9.52	9.32	9.72	173840	3360	1,4-Dinitrobenzene	50.00000	3476.801	-3.5	15.0		
10.34	10.14	10.54	48691	3668	1,3-Dinitrobenzene	12.50000	3895.292	-6.2	15.0		
12.26	12.06	12.46	31941	2430	Nitrobenzene	12.50000	2555.268	-5.2	15.0		
12.63	12.43	12.83	31108	1342	Tetryl	25.00000	1244.304	7.3	15.0		
13.45			6909								
14.88	14.68	15.08	45618	3328	2,4,6-Trinitrotoluene	12.50000	3649.472	-9.7	15.0		
15.97	15.77	16.17	43646	1674	4-Amino-2,6-dinitrotoluene	25.00000	1745.822	-4.3	15.0		
16.63	16.43	16.83	65464	2471	2-Amino-4,6-dinitrotoluene	25.00000	2618.580	-6.0	15.0		
17.59	17.29	17.89	46021	1779	2,6-Dinitrotoluene	25.00000	1840.842	-3.5	15.0		
18.06	17.76	18.36	44342	3480	2,4-Dinitrotoluene	12.50000	3547.388	-1.9	15.0		
22.20	21.90	22.50	39853	1639	2-Nitrotoluene	25.00000	1594.130	2.7	15.0		
24.16	23.86	24.46	34564	1380	4-Nitrotoluene	25.00000	1382.542	-0.2	15.0		
26.00	25.70	26.30	44830	1718	3-Nitrotoluene	25.00000	1793.204	-4.4	15.0		

10/27/09

Data File: /chem/a11001.i/h091024d.b/042hFULL4HE.d
Date : 27-OCT-2009 17:48
Client ID: FULL4HE
Sample Info: FULL4HE
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

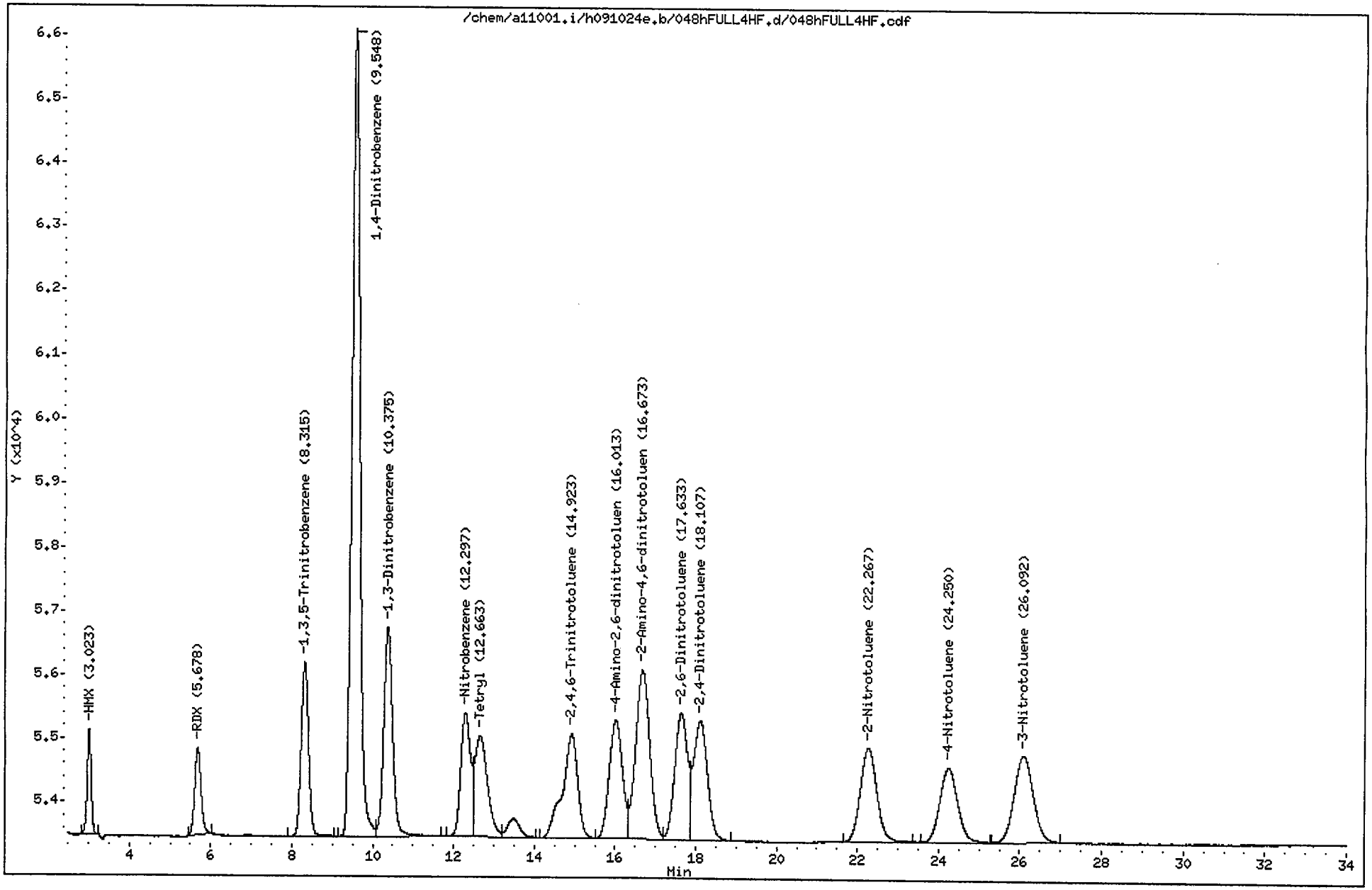
Lab Smp Id : FULL4HE Client Smp Id : FULL4HE
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 27-OCT-2009 17:48 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024d.b/8330_10uL_v3split.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
2.14			893								
2.22			1060								
3.02	2.91	3.11	10800	832	HMX	12.50000	863.9680	-3.8	15.0		
5.68	5.57	5.77	14058	1079	RDX	12.50000	1124.604	-4.2	15.0		
8.31	8.10	8.50	33475	2651	1,3,5-Trinitrobenzene	12.50000	2678.008	-1.0	15.0		
9.54	9.32	9.72	171814	3360	1,4-Dinitrobenzene	50.00000	3436.285	-2.3	15.0		
10.37	10.15	10.55	48872	3668	1,3-Dinitrobenzene	12.50000	3909.748	-6.6	15.0		
12.29	12.07	12.47	31594	2430	Nitrobenzene	12.50000	2527.480	-4.0	15.0		
12.66	12.44	12.84	33318	1342	Tetryl	25.00000	1332.704	0.7	15.0		
13.47			5407								
14.92	14.70	15.10	42001	3328	2,4,6-Trinitrotoluene	12.50000	3360.092	-1.0	15.0		
16.02	15.78	16.18	41926	1674	4-Amino-2,6-dinitrotoluene	25.00000	1677.030	-0.2	15.0		
16.68	16.44	16.84	63399	2471	2-Amino-4,6-dinitrotoluene	25.00000	2535.954	-2.6	15.0		
17.64	17.30	17.90	43700	1779	2,6-Dinitrotoluene	25.00000	1747.996	1.7	15.0		
18.12	17.77	18.37	43039	3480	2,4-Dinitrotoluene	12.50000	3443.120	1.1	15.0		
22.28	21.92	22.52	40989	1639	2-Nitrotoluene	25.00000	1639.558	0.0	15.0		
24.25	23.88	24.48	36226	1380	4-Nitrotoluene	25.00000	1449.026	-5.0	15.0		
26.08	25.72	26.32	43013	1718	3-Nitrotoluene	25.00000	1720.506	-0.1	15.0		

DLW 10/27/09 28
DLW 10/28/09

Data File: /chem/a11001.i/h091024e.b/048hFULL4HF.d
Date : 27-OCT-2009 21:23
Client ID: FULL4HF
Sample Info: FULL4HF
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : FULL4HF Client Smp Id : FULL4HF
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 27-OCT-2009 21:23 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024e.b/8330_10uL_v3split.m
Misc. Info : None

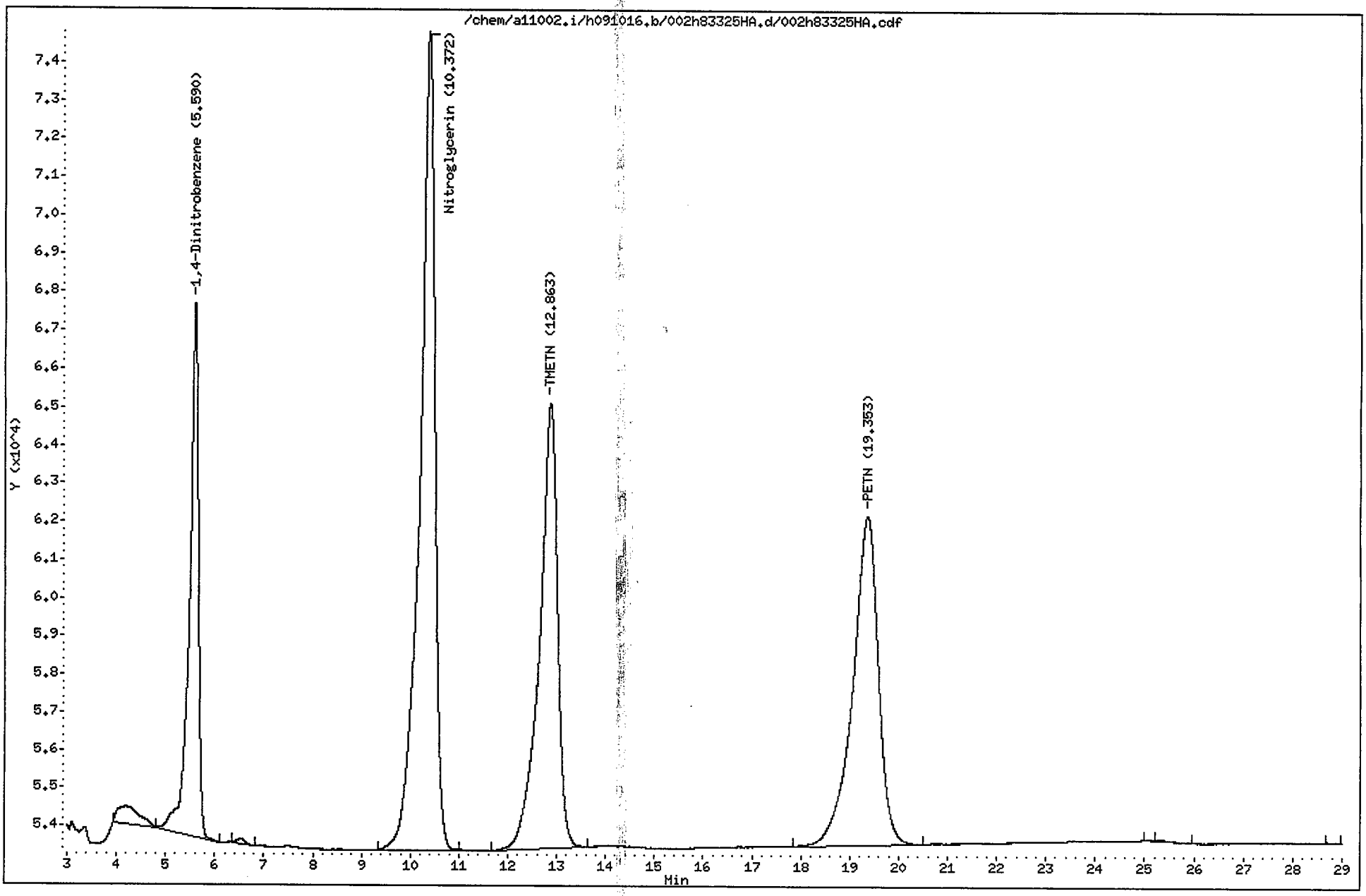
RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
2.15			876								
2.22			1399								
3.02	2.91	3.11	11051	832	HMX	12.50000	884.1120	-6.3	15.0		
5.68	5.56	5.76	14693	1079	RDX	12.50000	1175.404	-8.9	15.0		
8.32	8.10	8.50	34256	2651	1,3,5-Trinitrobenzene	12.50000	2740.504	-3.4	15.0		
9.55	9.32	9.72	173913	3360	1,4-Dinitrobenzene	50.00000	3478.265	-3.5	15.0		
10.38	10.15	10.55	50142	3668	1,3-Dinitrobenzene	12.50000	4011.364	-9.4	15.0		
12.30	12.07	12.47	32041	2430	Nitrobenzene	12.50000	2563.264	-5.5	15.0		
12.66	12.44	12.84	34054	1342	Tetryl	25.00000	1362.154	-1.5	15.0		
13.49			6203								
14.92	14.69	15.09	42159	3328	2,4,6-Trinitrotoluene	12.50000	3372.736	-1.3	15.0		
16.01	15.78	16.18	42000	1674	4-Amino-2,6-dinitrotoluene	25.00000	1679.982	-0.4	15.0		
16.67	16.44	16.84	63752	2471	2-Amino-4,6-dinitrotoluene	25.00000	2550.086	-3.2	15.0		
17.63	17.30	17.90	43614	1779	2,6-Dinitrotoluene	25.00000	1744.564	1.9	15.0		
18.11	17.77	18.37	43756	3480	2,4-Dinitrotoluene	12.50000	3500.516	-0.6	15.0		
22.27	21.91	22.51	41318	1639	2-Nitrotoluene	25.00000	1652.716	-0.8	15.0		
24.25	23.88	24.48	35256	1380	4-Nitrotoluene	25.00000	1410.228	-2.2	15.0		
26.09	25.72	26.32	43380	1718	3-Nitrotoluene	25.00000	1735.196	-1.0	15.0		

AW 10/28/09

Data File: /chem/a11002.i/h091016.b/002h83325HA.d
Date : 16-OCT-2009 17:53
Client ID: 83325HA
Sample Info: 83325HA
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 83325HA Client Smp Id : 83325HA
Sample Type : INITIAL CAL: Level 5 Sublist : all
Inj Date : 16-OCT-2009 17:53 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc. Info : None

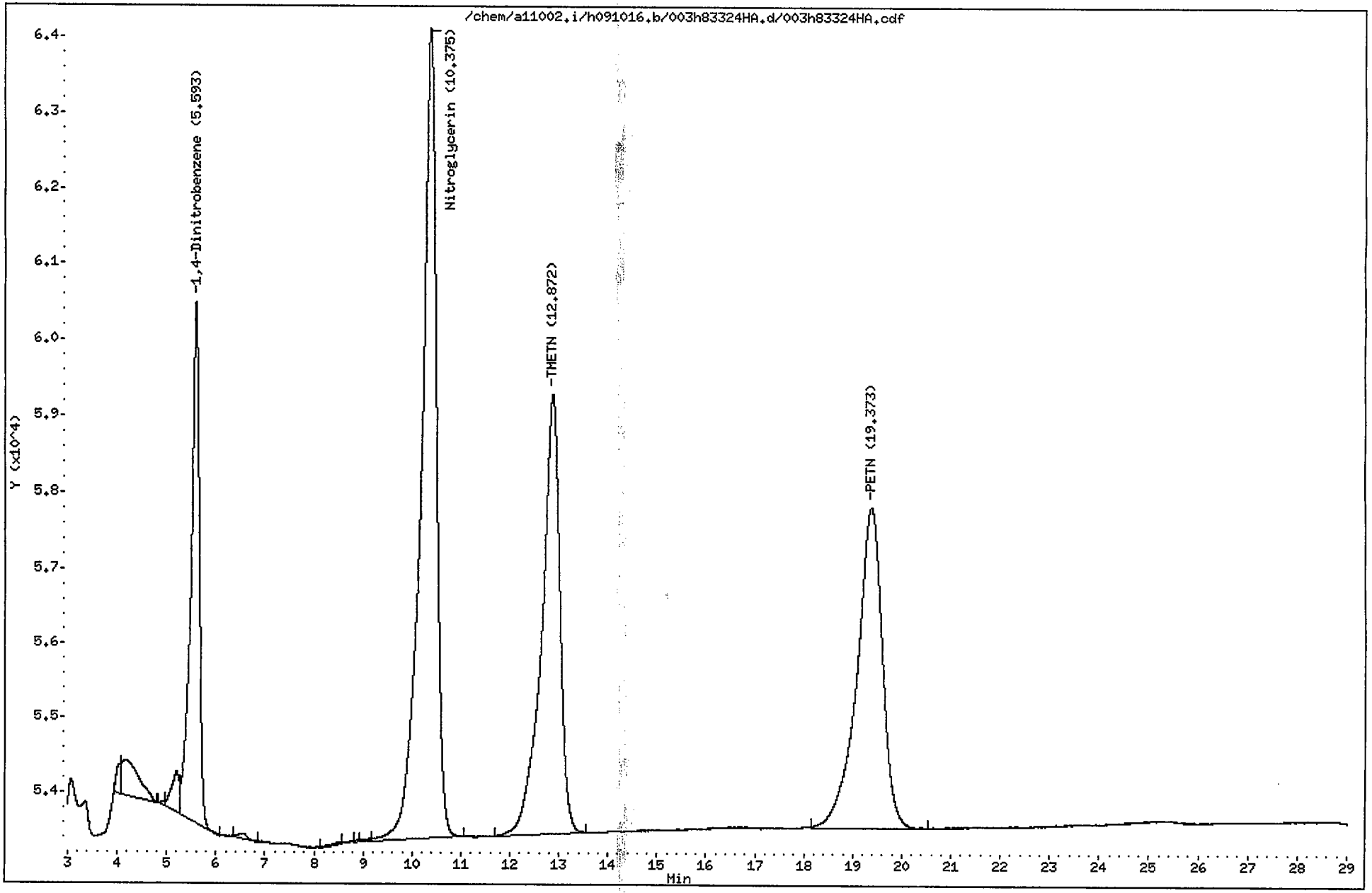
RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
4.21			13956					
5.59	5.09	6.09	175386	1506	1,4-Dinitrobenzene	100.0000	1753.860	
6.54			1681					
10.37	9.88	10.88	456308	1168	Nitroglycerin	400.0000	1140.770	
12.86	12.37	13.37	300375	1212	TMETN	250.0000	1201.500	
19.35	18.88	19.88	316910	1236	PETN	250.0000	1267.636	
25.04			197					
25.27			636					
28.69			153					

10/19/09

Data File: /chem/a11002.i/h091016.b/003h83324HA.d
Date : 16-OCT-2009 18:24
Client ID: 83324HA
Sample Info: 83324HA
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 83324HA Client Smp Id : 83324HA
Sample Type : INITIAL CAL: Level 4 Sublist : all
Inj Date : 16-OCT-2009 18:24 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc. Info : None

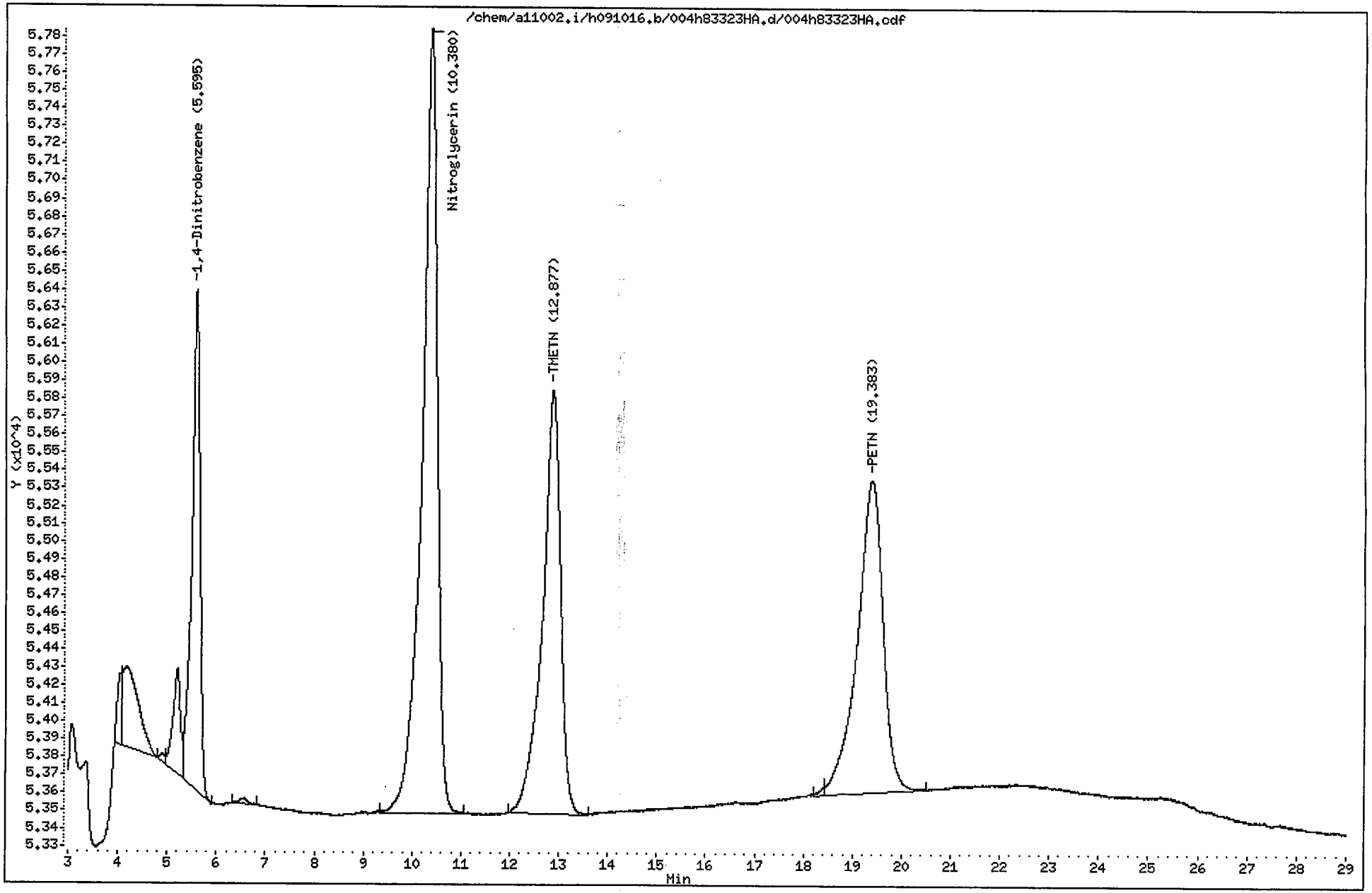
RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
4.06			2260					
4.19			11627					
4.91			204					
5.21			5949					
5.59	5.09	6.09	81221	1506	1,4-Dinitrobenzene	50.00000	1624.420	
6.53			857					
8.54			227					
8.90			115					
9.15			336					
10.38	9.88	10.88	232159	1168	Nitroglycerin	200.0000	1160.795	
12.87	12.37	13.37	151885	1212	TMETN	125.0000	1215.080	
19.37	18.88	19.88	155897	1236	PETN	125.0000	1247.168	

10/19/09

Data File: /chem/a11002.i/h091016.b/004h83323HA.d
Date : 16-OCT-2009 18:54
Client ID: 83323HA
Sample Info: 83323HA
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 83323HA Client Smp Id : 83323HA
Sample Type : INITIAL CAL: Level 3 Sublist : all
Inj Date : 16-OCT-2009 18:54 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc. Info : None

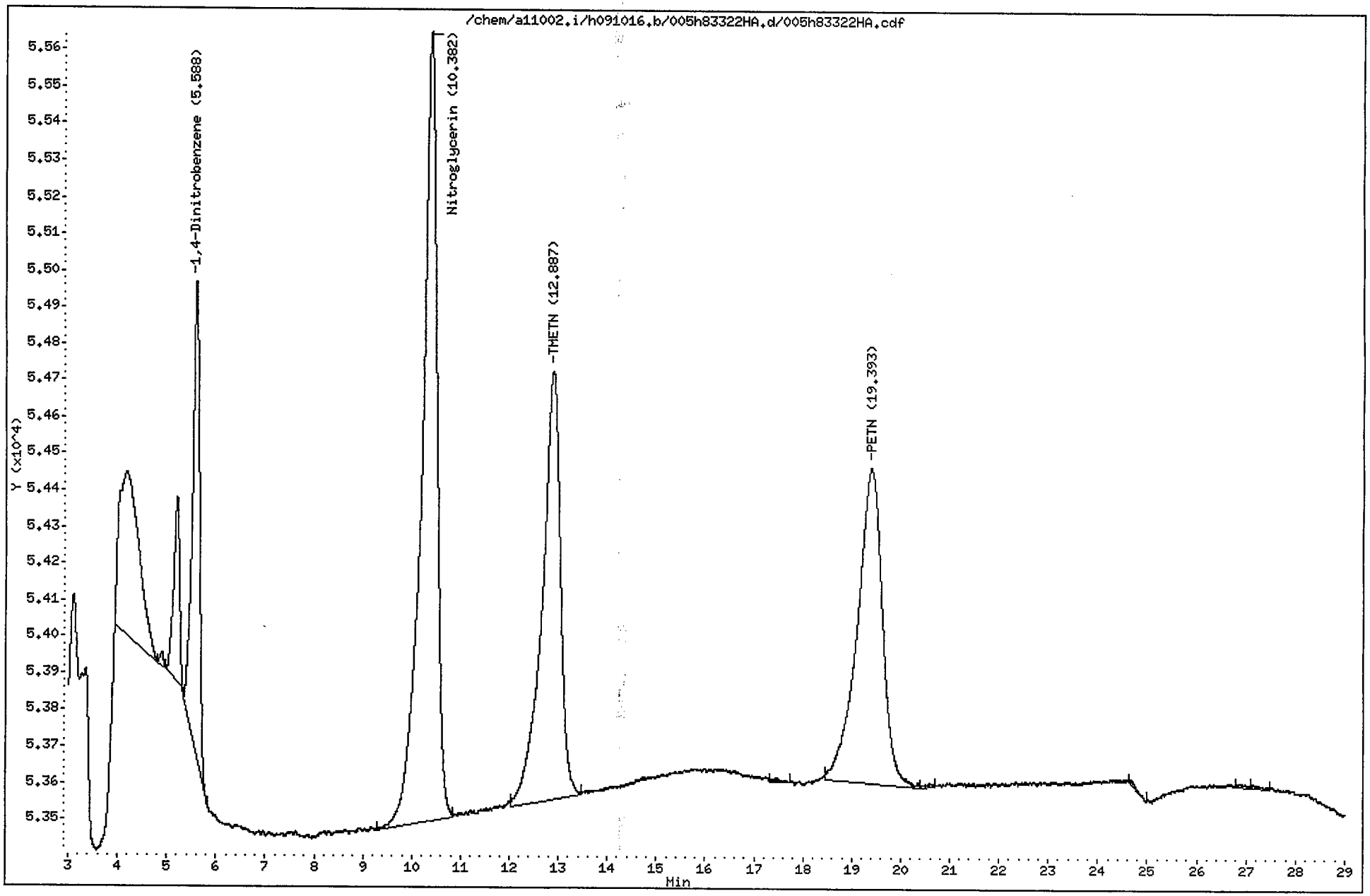
RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
4.05			2332					
4.20			10294					
4.91			327					
5.20			6172					
5.60	5.09	6.09	31999	1506	1,4-Dinitrobenzene	20.00000	1599.900	
6.58			391					
10.38	9.88	10.88	94332	1168	Nitroglycerin	80.00000	1179.138	
12.88	12.37	13.37	60624	1212	TMETN	50.00000	1212.480	
18.42			318					
19.38	18.88	19.88	63907	1236	PETN	50.00000	1278.140	

10/19/09

Data File: /chem/a11002.i/h091016.b/005h83322HA.d
Date : 16-OCT-2009 19:25
Client ID: 83322HA
Sample Info: 83322HA
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 83322HA Client Smp Id : 83322HA
Sample Type : INITIAL CAL: Level 2 Sublist : all
Inj Date : 16-OCT-2009 19:25 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc. Info : None

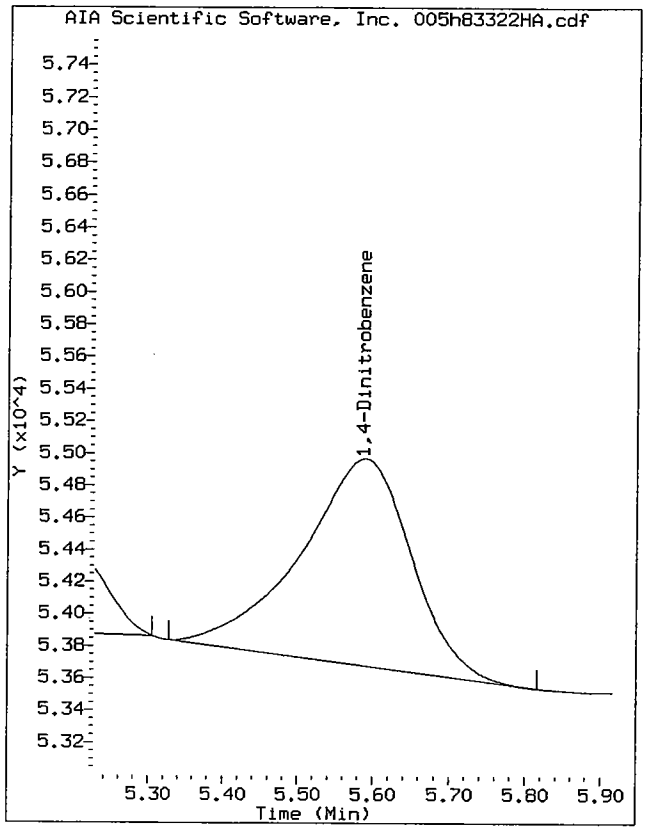
RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
4.18		12658					
4.89		183					
5.19		4204					
5.59	5.09 6.09	13122	1506	1,4-Dinitrobenzene	10.00000	1312.200	M_2
10.38	9.88 10.88	46465	1168	Nitroglycerin	40.00000	1161.600	
12.89	12.37 13.37	30339	1212	TMETN	25.00000	1213.560	
17.40		110					
19.39	18.88 19.88	30890	1236	PETN	25.00000	1235.560	
20.59		103					
24.69		125					
26.86		106					
27.13		115					

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Manually Integrated Peaks

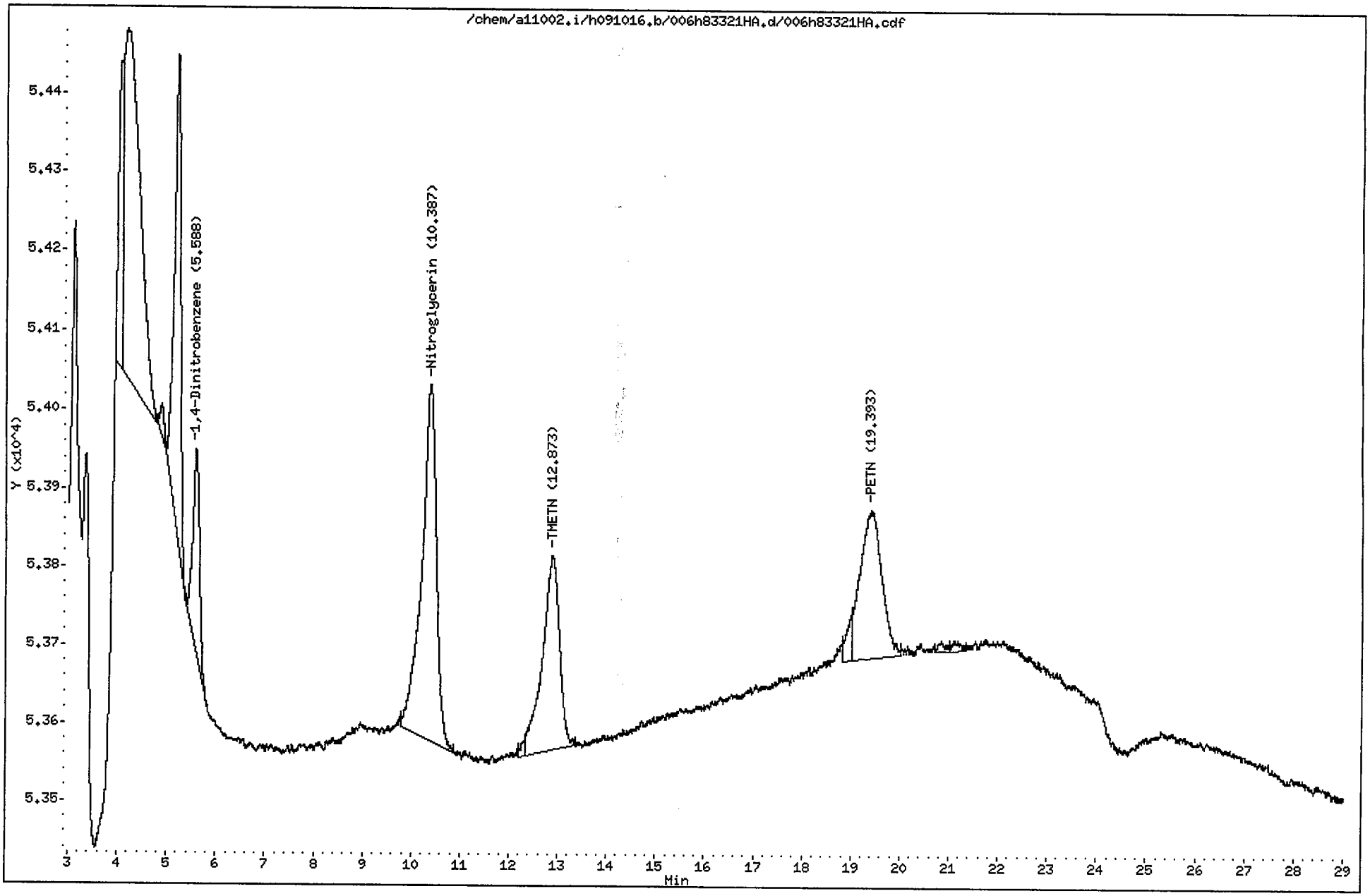


Start: 5.33 Stop: 5.82

Data File: /chem/a11002.i/h091016.b/006h83321HA.d
Date : 16-OCT-2009 19:56
Client ID: 83321HA
Sample Info: 83321HA
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

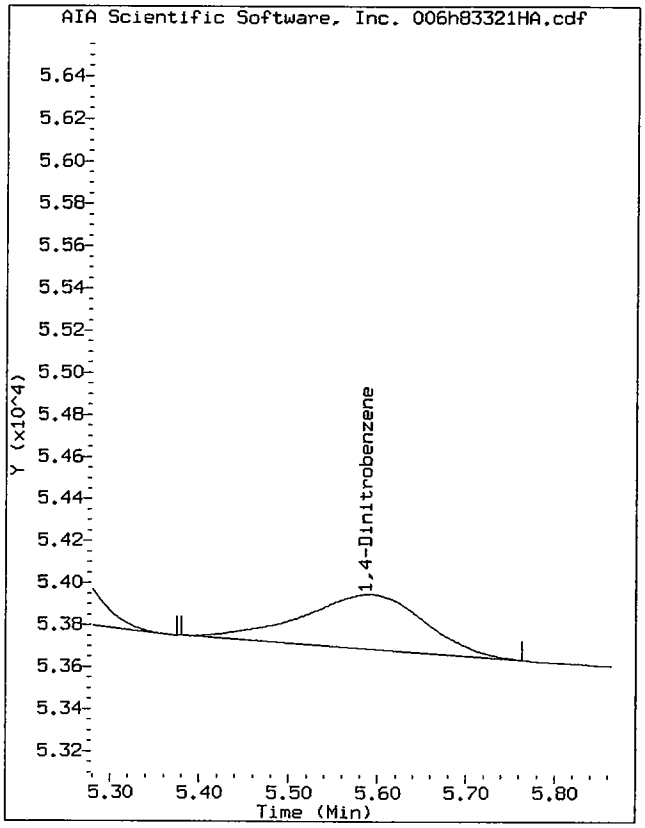
Lab Smp Id : 83321HA Client Smp Id : 83321HA
Sample Type : INITIAL CAL: Level 1 Sublist : all
Inj Date : 16-OCT-2009 19:56 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc. Info : None

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	RF	FLAGS
4.05		2330					
4.17		9984					
4.89		220					
5.20		5594					
5.59	5.09 6.09	2483	1506	1,4-Dinitrobenzene	2.000000	1241.500	M2
10.39	9.88 10.88	9602	1168	Nitroglycerin	8.000000	1200.125	
12.30		102					
12.87	12.37 13.37	6097	1212	TMETN	5.000000	1219.400	
19.00		489					
19.39	18.88 19.88	5757	1236	PETN	5.000000	1151.400	
20.79		129					
21.11		143					

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Manually Integrated Peaks

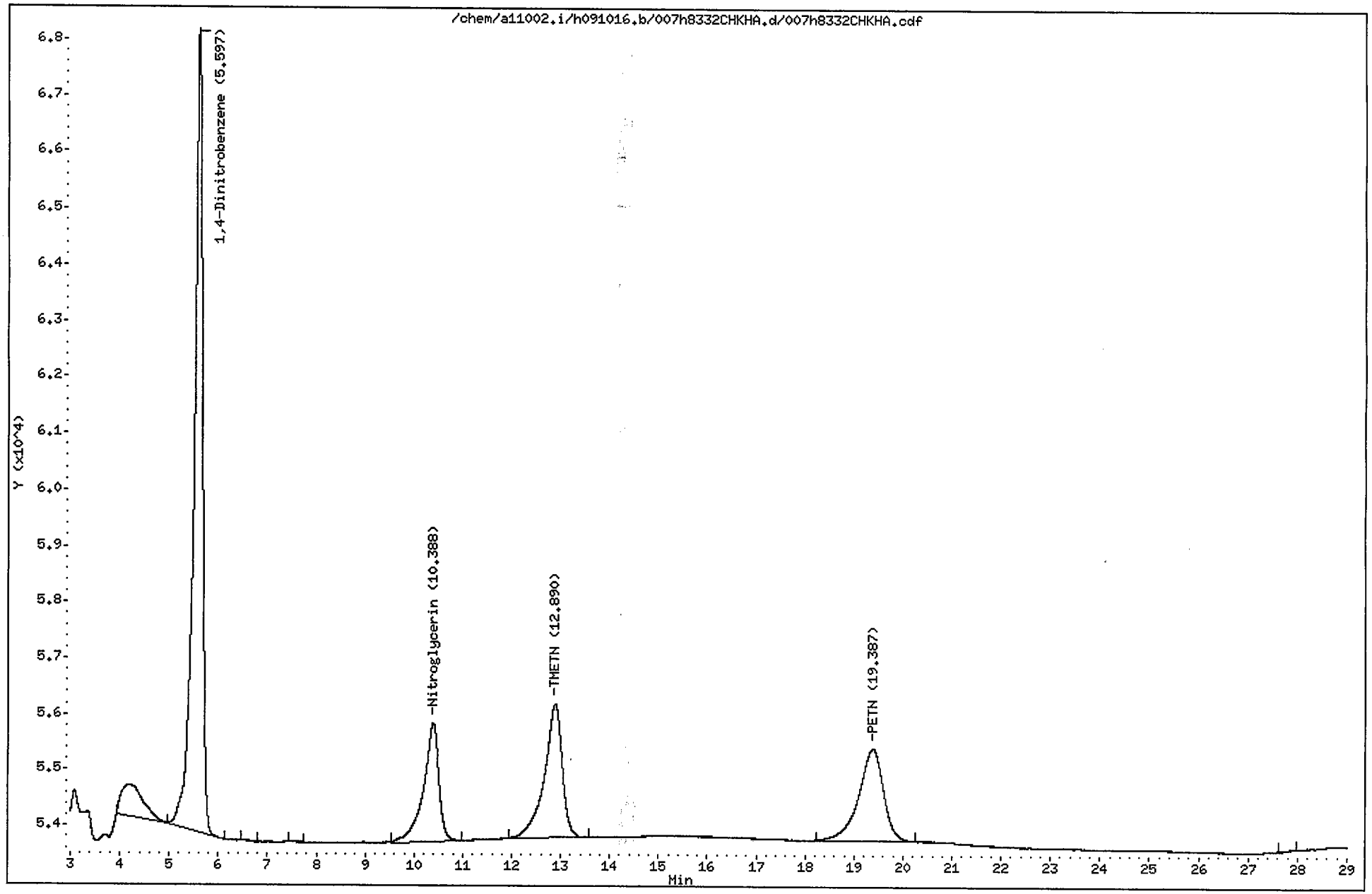


Start: 5.38 Stop: 5.76

Data File: /chem/a11002.i/h091016.b/007h8332CHKHA.d
Date : 16-OCT-2009 20:27
Client ID: 8332CHKHA
Sample Info: 8332CHKHA
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 8332CHKHA
Client Smp Id : 8332CHKHA
Sample Type : QCCHECK
Sublist : all
Inj Date : 16-OCT-2009 20:27
Inst ID : A11002
Operator : 2646
Spike Sublist : qccheck
Method : /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc. Info : None

RT	AREA
4.20	17421
5.60	172585
6.57	243
7.55	159
10.39	46493
12.89	61764
19.39	59085
27.95	114

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CompuChem

RECOVERY REPORT

Client Name:
Client SDG: h091016
Sample Matrix: LIQUID
Fraction: 8332
Lab Smp Id: 8332CHKHA
Client Smp ID: 8332CHKHA
Level: LOW
Operator: 2646
Data Type: LC DATA
SampleType: QCCHECK
SpikeList File: qccheck.spk
Quant Type: ESTD
Sublist File: all.sub
Method File: /chem/a11002.i/h091016.b/8332TPconf_10uL_v2.m
Misc Info: None

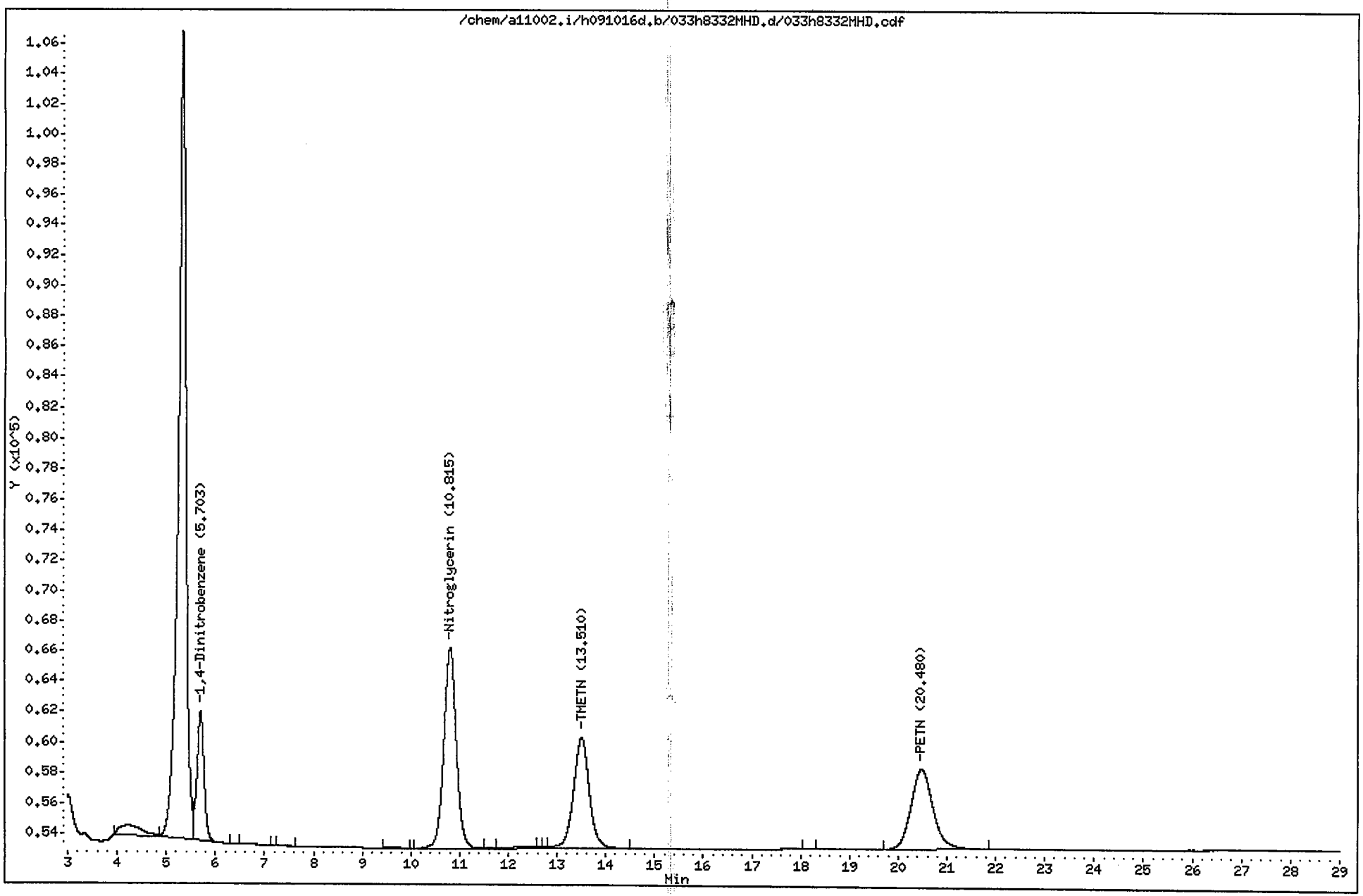
SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
10 Nitroglycerin	5.0	4.0	79.58	50-150
24 TMETN	5.0	5.1	101.89	50-150
25 PETN	5.0	4.8	95.61	50-150

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
$ 7 1,4-Dinitrobenzene	10	11	114.57	50-150

Data File: /chem/a11002.i/h091016d.b/033h8332MHD.d
Date : 29-OCT-2009 10:22
Client ID: 8332MHD
Sample Info: 8332MHD
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 8332MHD Client Smp Id : 8332MHD
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 29-OCT-2009 10:22 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : None

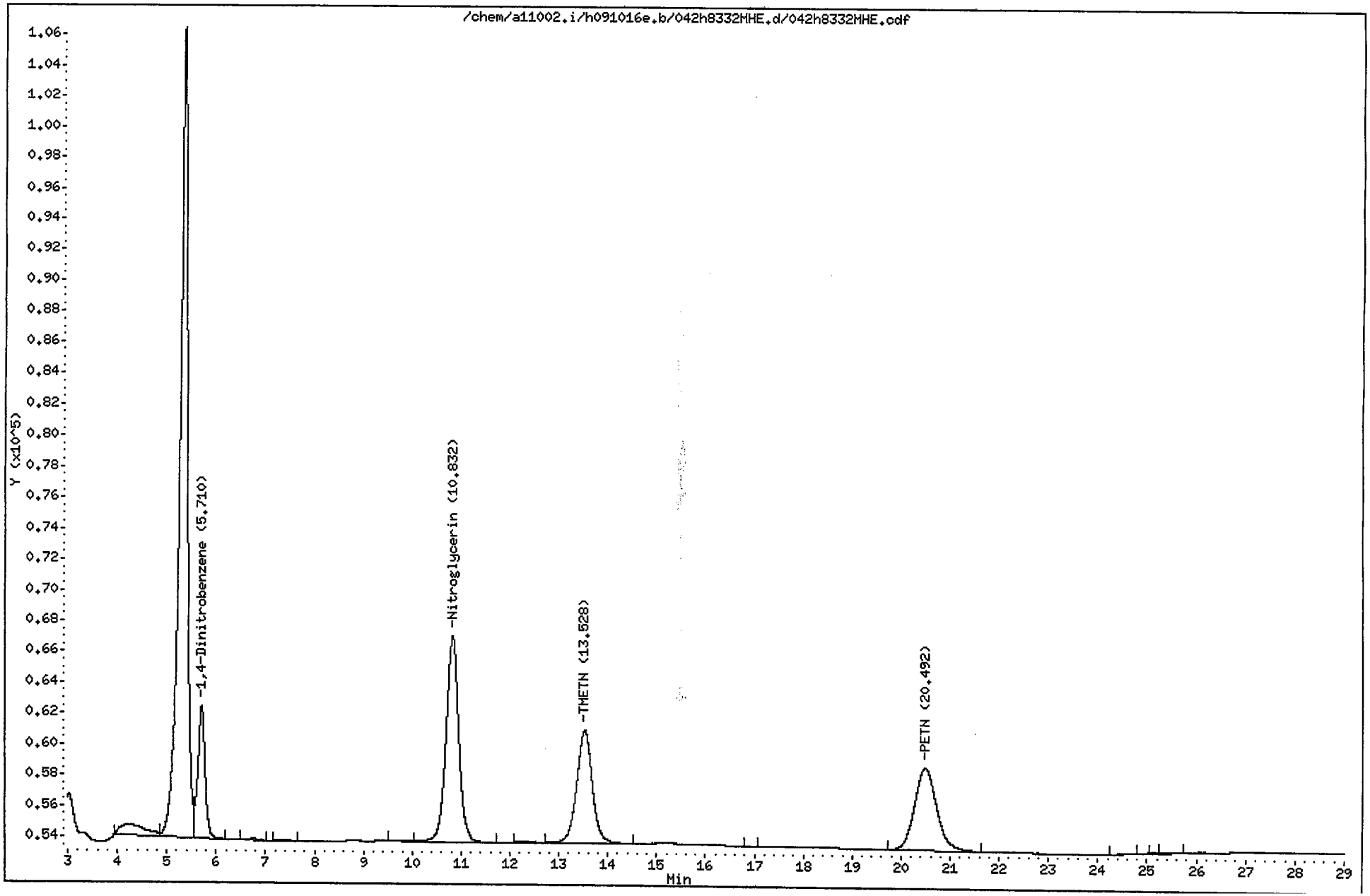
RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
4.25		18633								
5.34		573683								
5.70	5.20 6.20	83636	1506	1,4-Dinitrobenzene	50.00000	1672.729	-11.1	40.0		
6.74		1484								
7.37		431								
9.64		761								
10.82	10.32 11.32	233470	1168	Nitroglycerin	200.0000	1167.345	0.1	15.0		
11.63		286								
12.36		4491								
12.65		774								
12.77		772								
13.51	13.01 14.01	162956	1212	TMETN	125.0000	1303.648	-7.6	40.0		
18.11		115								
20.48	19.98 20.98	161733	1236	PETN	125.0000	1293.864	-4.7	40.0		

10/29/09

Data File: /chem/a11002.i/h091016e.b/042h8332MHE.d
Date : 29-OCT-2009 15:50
Client ID: 8332MHE
Sample Info: 8332MHE
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 8332MHE Client Smp Id : 8332MHE
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 29-OCT-2009 15:50 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : None

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
4.26		24842								
5.34		575627								
5.71	5.20 6.20	86791	1506	1,4-Dinitrobenzene	50.00000	1735.827	-15.3	40.0		
6.75		1102								
7.36		528								
9.67		962								
10.83	10.32 11.32	239447	1168	Nitroglycerin	200.0000	1197.235	-2.5	15.0		
12.33		1218								
13.53	13.01 14.01	160939	1212	TMETN	125.0000	1287.512	-6.2	40.0		
16.84		120								
20.49	19.98 20.98	163853	1236	PETN	125.0000	1310.821	-6.1	40.0		
24.77		403								
25.04		407								
25.23		368								
25.59		782								

10/30/09

Data File: /chem/a11002.i/h091016f.b/049h8332MHF.d

Date : 29-OCT-2009 19:26

Client ID: 8332MHF

Sample Info: 8332MHF

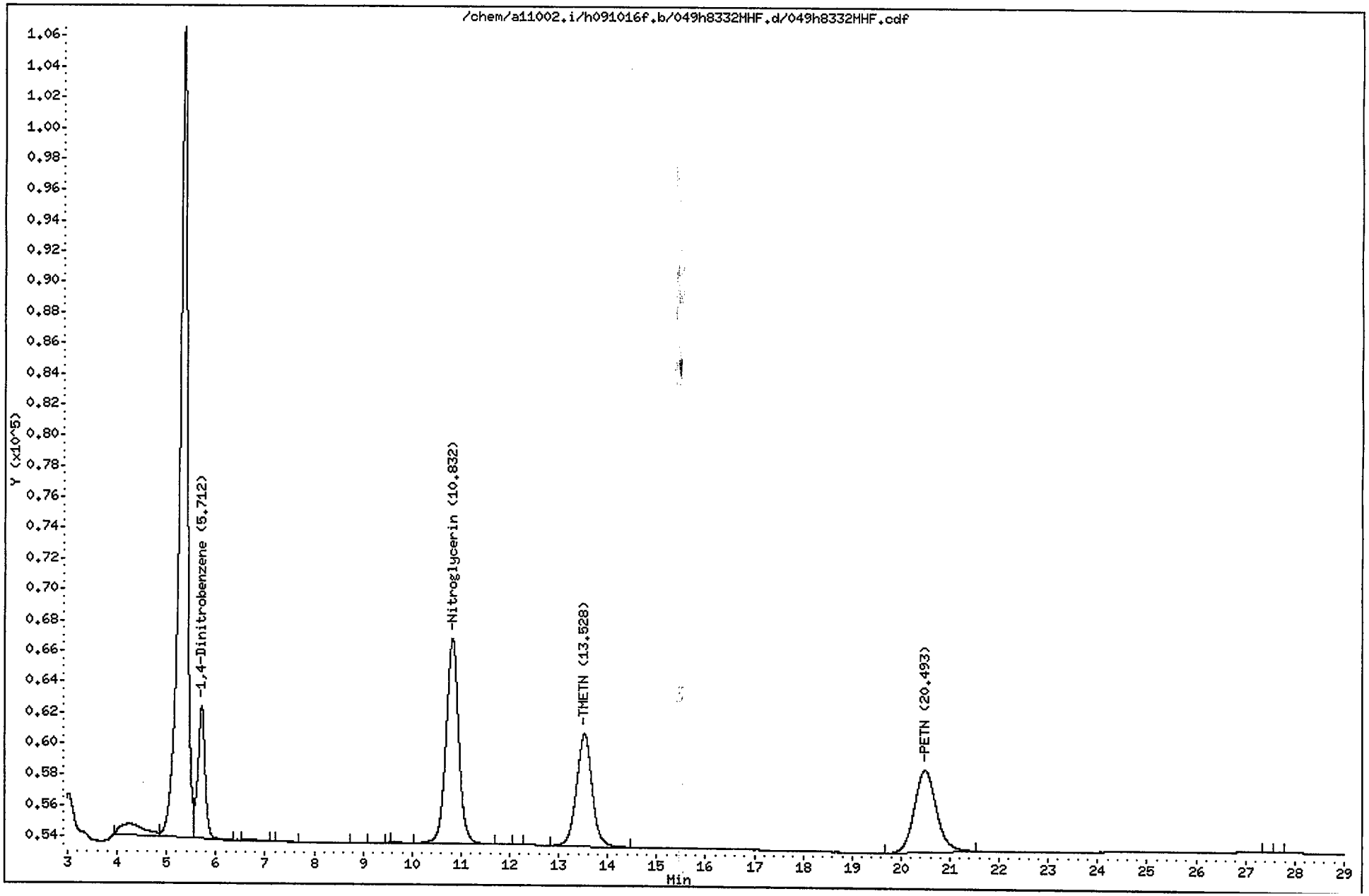
Volume Injected (uL): 10.0

Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : 8332MHF Client Smp Id : 8332MHF
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 29-OCT-2009 19:26 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016f.b/8332TPconf_10uL_v2.m
Misc. Info : None

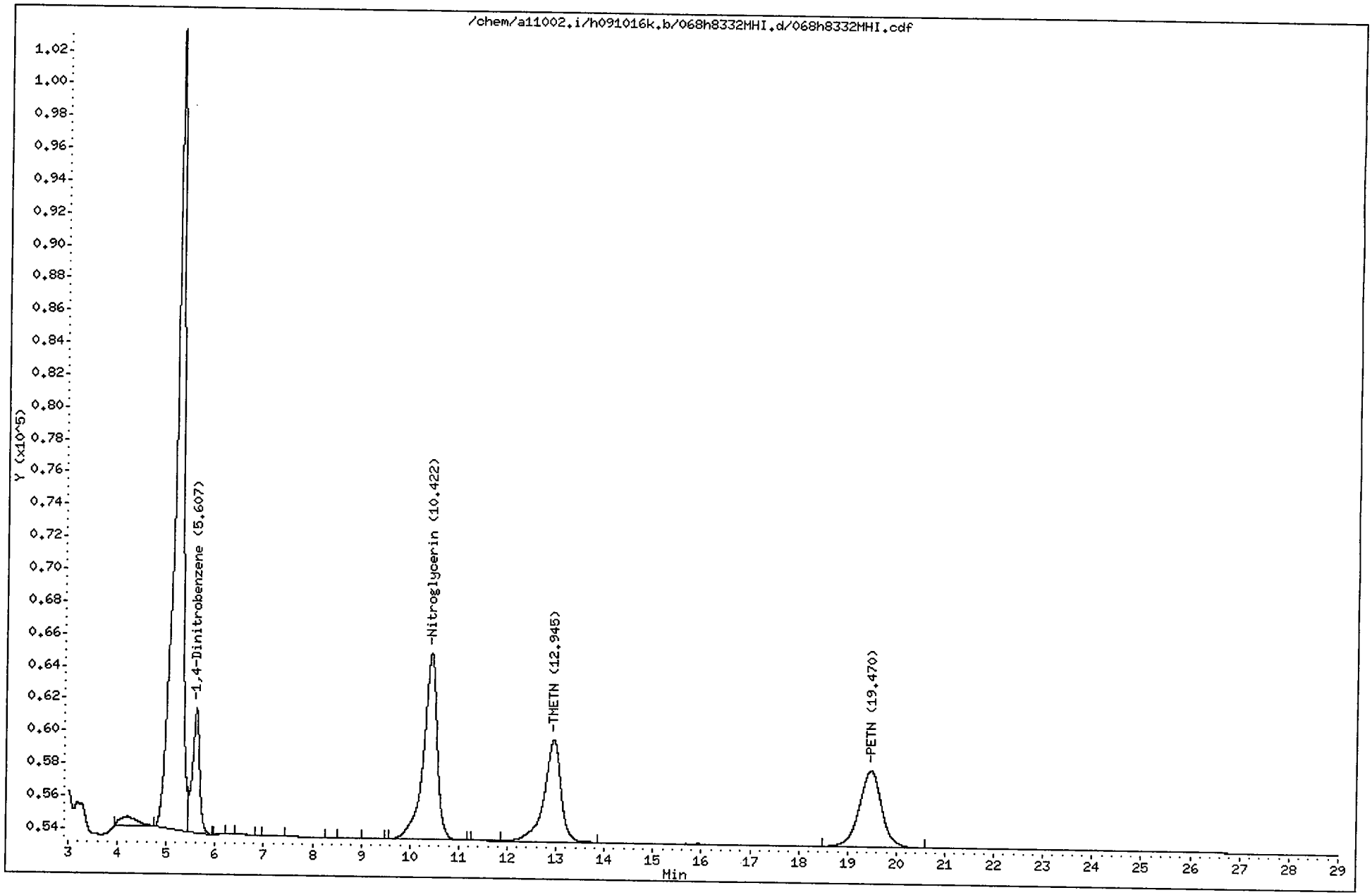
RT	RT WINDOW	AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
4.24		25465								
5.34		577844								
5.71	5.20 6.20	87648	1506	1,4-Dinitrobenzene	50.00000	1752.965	-16.4	40.0		
6.75		993								
7.36		490								
8.80		170								
9.55		133								
9.67		704								
10.83	10.32 11.32	239347	1168	Nitroglycerin	200.0000	1196.734	-2.5	15.0		
12.20		105								
13.53	13.01 14.01	158682	1212	TMETN	125.0000	1269.456	-4.7	40.0		
20.49	19.98 20.98	163461	1236	PETN	125.0000	1307.690	-5.8	40.0		
27.46		158								
27.60		111								

10/30/09

Data File: /chem/a11002.i/h091016k.b/068h8332MHI.d
Date : 12-NOV-2009 08:32
Client ID: 8332MHI
Sample Info: 8332MHI
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

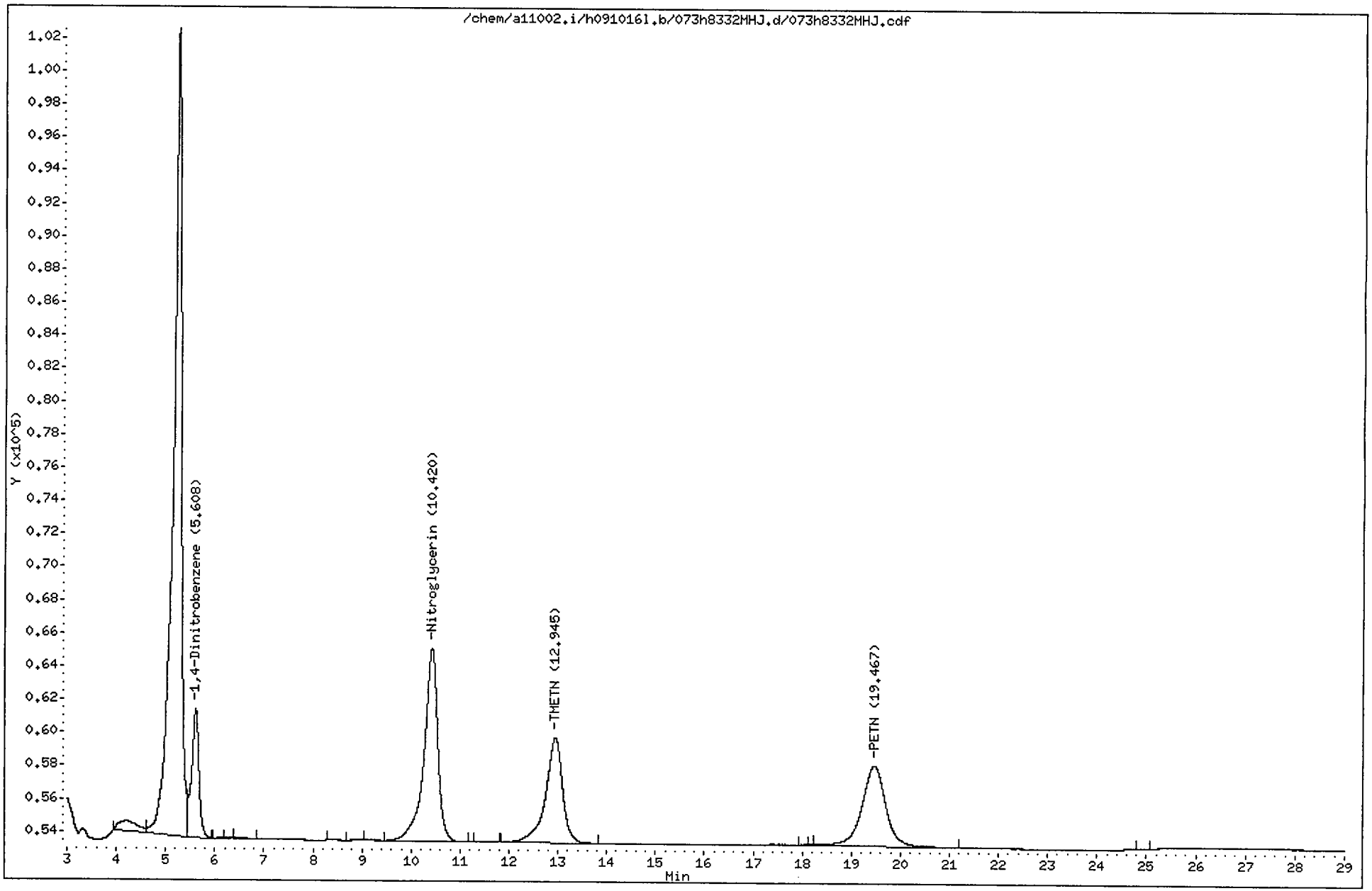
Lab Smp Id : 8332MHI Client Smp Id : 8332MHI
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 12-NOV-2009 08:32 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016k.b/8332TPconf_10uL_v2.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
4.21			14839								
5.23			581213								
5.61	5.20	6.20	77569	1506	1,4-Dinitrobenzene	50.00000	1551.375	-3.0	40.0		
6.10			307								
6.57			854								
7.13			473								
8.37			105								
9.18			576								
10.42	10.32	11.32	225221	1168	Nitroglycerin	200.0000	1126.106	3.6	15.0		
11.53			1383								
12.94	12.43	13.43	152256	1212	TMETN	125.0000	1218.049	-0.5	40.0		
19.47	19.28	20.28	153509	1236	PETN	125.0000	1228.072	0.6	40.0		

TAJ 11/13/09

Data File: /chem/a11002.i/h0910161.b/073h8332MHJ.d
Date : 12-NOV-2009 11:06
Client ID: 8332MHJ
Sample Info: 8332MHJ
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 8332MHJ Client Smp Id : 8332MHJ
Sample Type : CONT CAL: Level 4 Sublist : all
Inj Date : 12-NOV-2009 11:06 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h0910161.b/8332TPconf_10uL_v2.m
Misc. Info : None

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	STD AMT ON-COLUMN (Ng)	CCAL RF	%D	%D LIMIT	FLAGS	
4.21			17727								
5.24			581113								
5.61	5.20	6.20	79896	1506	1,4-Dinitrobenzene	50.00000	1597.912	-6.1	40.0		
6.09			310								
6.56			979								
8.38			210								
9.19			423								
10.42	10.32	11.32	228959	1168	Nitroglycerin	200.0000	1144.797	2.0	15.0		
11.54			859								
12.94	12.43	13.43	153253	1212	TMETN	125.0000	1226.028	-1.2	40.0		
17.98			111								
18.18			115								
19.47	19.28	20.28	164059	1236	PETN	125.0000	1312.471	-6.2	40.0		
25.06			139								

TAJ for KEH
11/13/09

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 E 9

Instrument ID A11001

DATE 10/24/09

Sequence ID: h091024

Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO (8330) 8330A 8330B 8332 Other_____

		FILE NAME		DATE	CompuChem #	CASE/SDG #	CHEMIST	COMMENTS/ETC/DISPOSITION
1		1		10/24/09	LIBLK	62418	2646	
2		2		/ /	FULL5HA	62419		
3		3		/ /	4			2X: 500µl standard/500µl 50:50 MeOH:ACN
4		4		/ /	3			5X: 200µl 800µl
5		5		/ /	2			10X: 100µl 900µl
6		6		/ /	1			20X: 50µl 950µl
7		7		/ /	8330CHKHA	62420		
8				/ /				
9				/ /				
10				/ /				
11				/ /				
12				/ /				
13				/ /				
14				/ /				
15				/ /				
16				/ /				
17				/ /				
18				/ /				
19				/ /				
20				/ /				QW 10/24/09

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: TM DATE 10/26/09

08/21/09: jr

COMPUCHEM a Division of Liberty Analytical Corp

HPLC RUN LOG

LOGBOOK 5 E 9

Instrument ID A11001 DATE 10/24/09

Sequence ID: h091024a Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO (8330) 8330A 8330B 8332 Other_____

	CALIB. STD	FILE NAME	RESULTS	DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		8	\	10/24/09	FULL4HB	62419	2646	2X: 500µl standard / 500µl 50:50 MeOH:ACN
2		9	\	/ /	LIBLKHB	62418		
3		10	/	/ /	9102019-BLK1	0910142		
4		11	/	/ /	BS1	↓		
5		12	/	/ /	BSD1	↓		
6		13	/	/ /	0910142-01	↓		
7		14	/	/ /	9102307-BLK1	0910165		
8		15	/	/ /	BS1	↓		
9		16	/	/ /	MS1	↓		
10		17	/	/ ↓	MSD1	↓		
11		18	/	10/25/09	0910165-01	↓		
12		19	/	/ ↓	↓ 02	↓	↓	
13				/ /				
14				/ /				
15				/ /				
16				/ /				
17				/ /				
18				/ /				
19				/ /				
20				/ /				QW 10/24/09

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REVIEWED BY: TRP DATE 10/26/09

08/21/09: jr

COMPUCHEM a Division of Liberty Analytical Corp

HPLC RUN LOG

LOGBOOK 5 E 9

Instrument ID A11001 DATE 10/25/09

Sequence ID: h091024 b&c Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO (8330) 8330A 8330B 8332 Other

		FILE NAME		DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		20		10/25/09	FULL4HC	62419	2646	2X: 500µl standard/500µl 50:50 MeOH:ACN
2		21		/ /	LIBLKHC	62418		
3	/	22	SF	/ /	0910165-03	0910165		
4		23	/	/ /	04			
5		24	/	/ /	05			
6		25	/	/ /	06			
7		26	/	/ /	07			
8		27	/	/ /	08			
9		28		/ /	8330LIBLKZ686	62521		Standard QC Lot Test
10		29		/ /	8330CAL2686	22		2X: 500µl std/500µl 50:50 MeOH:ACN
11		30		/ /	8330QCCHKZ686	23		
12	qd	31		/ /	FULL4HD	62419		2X: 500µl standard/500µl 50:50 MeOH:ACN ? mobile phase went dry
13	/	32		/ 27 dlv 10/26/09	LIBLKHD	62418		
14		33		10/26/09	FULL4HD	62419	2646	2X: 500µl std/500µl 50:50 MeOH:ACN - updated RT
15		34		/	LIBLKHD	62418		
16				/ /				
17				/ /				
18				/ /				
19				/ /				
20				/ /				dlv 10/27/09

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REVIEWED BY: KEH DATE 10/26/09

08/21/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 E 9

Instrument ID A11001 DATE 10/27/09

Sequence ID: h091024c (continued) Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO (8330) 8330A 8330B 8332 Other_____

	TCDL	FILE NAME	RUN LOG	DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		35	✓	10/27/09	9101314-BLK1	0909245	2646	
2		36	✓	/ /	↓ BS1	↓		
3		37	✓	/ /	9101311-BLK1	0909224		
4		38	✓	/ /	↓ BS1	↓		
5		39	✓	/ /	0909245-05	0909245		
6		40	✓	/ /	↓ NV 10/27/09 06	↓		
7		41	✓	/ /	0909224-15	0909224		
8				/ /				
9				/ /				
10				/ /				
11				/ /				
12				/ /				
13				/ /				
14				/ /				
15				/ /				
16				/ /				
17				/ /				
18				/ /				
19				/ /				
20				/ /				alv 10/27/09

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REVIEWED BY: KEH DATE 10/28/09

08/21/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 E 9

Instrument ID A11001 DATE 10/27/09

Sequence ID: h091024d Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO (8330) 8330A 8330B 8332 Other_____

		FILE NAME	RE-RUN	DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		42		10/27/09	FULL4HE	62419	2624	2X: 500µl std/500µl MeOH:ACN (50:50)
2		43		/ /	LIBLKHE	62418		
3		44		/ /	9102615-BLK1	0910165		
4		45		/ /	+ BS1			
5		46		/ / AW 10/27/09	DUP 0910165-BSD1	↓		
6		47		/ /	8330CAL21686	62524	↓	2X: 500µl std/500µl 50:50 MeOH:ACN
7				/ /				
8				/ /				
9				/ /				
10				/ /				
11				/ /				
12				/ /				
13				/ /				
14				/ /				
15				/ /				
16				/ /				
17				/ /				
18				/ /				
19				/ /				
20				/ /				AW 10/27/09

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: KEH DATE 10/28/09

08/21/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 E 9

Instrument ID A11001 DATE 10/27/09

Sequence ID: h091024e Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO (8330) 8330A 8330B 8332 Other_____

	FD	FILE NAME	POS	DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1		48		10/27/09	FULL4HF	62419	2646	2X: 500µl ptd / 500µl 50:50 MeOH:ACN
2		49		↓	LIBLKHF	62418	↓	
3				/ /				
4				/ /				
5				/ /				
6				/ /				
7				/ /				
8				/ /				
9				/ /				
10				/ /				
11				/ /				
12				/ /				
13				/ /				
14				/ /				
15				/ /				
16				/ /				
17				/ /				
18				/ /				
19				/ /				
20				/ /				

KEH 10/28/09

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: KEH DATE 10/28/09

08/21/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 F 7

Instrument ID A11002

DATE 10/16/09

Sequence ID: h091016

Column: Primary (Confirmation)

Method: 610 8310 MIDCO 8330 8330A 8330B (8332) Other

Amt. Inj. 10 µL

Maintenance:

	SEQUENCE #	FILE NAME	DATE	CompuChem #	CASE/SDG #	CHEMIST	COMMENTS/CODE/DISPOSITION
1	N/A	1	10/6/09	LIBLK	62419	2646	
2		2	/ /	83325HA	62507		
3		3	/ /	4			2X: 500µl standard / 500µl ACN
4		4	/ /	3			5X: 200µl / 800µl
5		5	/ /	2			10X: 100µl / 900µl
6		6	/ /	1			50X: 20µl / 980µl
7		7	/ /	83325HCHKHA	62506		
8			/ /	ALW 10/16/09			
9			/ /				
10			/ /				
11			/ /				
12			/ /				
13			/ /				
14			/ /				
15			/ /				
16			/ /				
17			/ /				
18			/ /				
19			/ /				
20			/ /				

adv 10/16/09

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: DM DATE 10/19/09

07/29/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 F 7

Instrument ID A11002 DATE 10/29/09
Sequence ID: h0910160 Amt. Inj. 10 µL

Column: Primary (Confirmation) Method: 610 8310 MIDCO 8330 8330A 8330B (8332) Other _____

Maintenance: _____

	SEQUENCE #	FILE NAME	DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1	N/A	32	10 29 09	LIBLK	62419	ZG46	
2		33	/ /	8332MHD	62507		2X: 500µl, std in 500µl MeOH (updated RT)
3		34	/ /	LIBLKHD	62419		
4		35	/ /	9102307-BLK1	0910165		
5		36	/ /	BS2			
6		37	/ /	MS2			
7		38	/ /	MSD2			
8		39	/ /	0910165-01			
9		40	/ /	02			
10		41	/ /	03			
11			/ /				
12			/ /				
13			/ /				
14			/ /				
15			/ /				
16			/ /				
17			/ /				
18			/ /				
19			/ /				
20			/ /				

qdw 10/29/09

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: _____ DATE 10/30/09

07/29/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 F 7

Instrument ID A11002

DATE 10/29/09

Sequence ID: h 091016e&f

Amt. Inj. 10 µL

Column: Primary (Confirmation)

Method: 610 8310 MIDCO 8330 8330A 8330B (8332) Other

Maintenance:

#	SEQUENCE #		FILE NAME		DATE	CompuChem # Rev. 07/29/09	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1	N/A	✓	42	✓	10/29/09	✓ 8332MHE	62507	2646	2X: 500µl std/500µl MeOH
2		✓	43	✓	/ /	LIBLKHE	62419		
3		✓	44	✓	/ /	0910165-04	0910165		
4			45	✓	/ /	05			
5			46	✓	/ /	06			
6			47	✓	/ /	07			
7			48	✓	/ /	08			
8			49	✓	/ /	B332MHF	62507		2X: 500µl std/500µl MeOH
9			50	✓	/ /	LIBCKHF	62419		
10					/ /				
11					/ /				
12					/ /				
13					/ /				
14					/ /				
15					/ /				
16					/ /				
17					/ /				
18					/ /				
19					/ /				
20					/ /				

AW 10/30/09

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REVIEWED BY: KEA DATE 10/30/09

07/29/09: jr

COMPUCHEM a Division of Liberty Analytical Corp
HPLC RUN LOG
LOGBOOK 5 F 7

Instrument ID A11002 DATE 11/12/09

Sequence ID: h0910116K+L Amt. Inj. 10 µL

Column: (Primary) Confirmation Method: 610 8310 MIDCO 8330 8330A 8330B (8332) Other _____

Maintenance: _____

	SEQUENCE #		FILE NAME		DATE	CompuChem #	CASE/SDG#	CHEMIST	COMMENTS(ETC.)/DISPOSITION
1	67		LIBLK		11/12/09	62419	NA	2660	
2	68		8332MH1	/	/ /	62507			
3	69		LIBLKH1	/	/ /	62419			
4	70		9111020-BLK1	/	/ /	0910165			RE2
5	71		↓ -BS1	/	/ /				↓
6	72		0910165-03RE2	/	/ /	↓			
7	73		8332MHJ	/	/ /	62507			
8	74		LIBLKHJ	/	/ /	62419			
9					/ /				
10					/ /				
11					/ /				
12					/ /				
13					/ /				
14					/ /				
15					/ /				
16					/ /				
17					/ /				
18					/ /				
19					/ /				
20					/ /				TAJ 11/13/09

The presence of the Chemist's/Analyst's employee ID number, or signature, on this run log attests that strict compliance with the method's SOP has occurred. Any SOP deviations require documentation by the responsible chemist/analyst together with the chemist's/analyst's initials and the initials of the lab supervisor and a QA department representative, signifying approval of the deviation.

REVIEWED BY: TMF DATE 11/13/09

07/29/09: jr

Supervisor/Manager Review: _____ pages ____ to ____ Date _____

4. Raw QC Data

    a. Blank Data

    b. Laboratory Control Sample Data

    c. Matrix Spike Data

    d. Matrix Spike Duplicate Data

a. Blank Data

Arranged by type of blank (method, then instrument), and shall be in chronological order, by instrument.

- Tabulated Results (Form I)
- Chromatograms and date system printout(s) by instrument used for analysis

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKKZ

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11001.i/h091024a.b/014h9102307-BLK1.d

Date : 24-OCT-2009 21:41

Client ID: PBLKKZ

Instrument: a11001.i

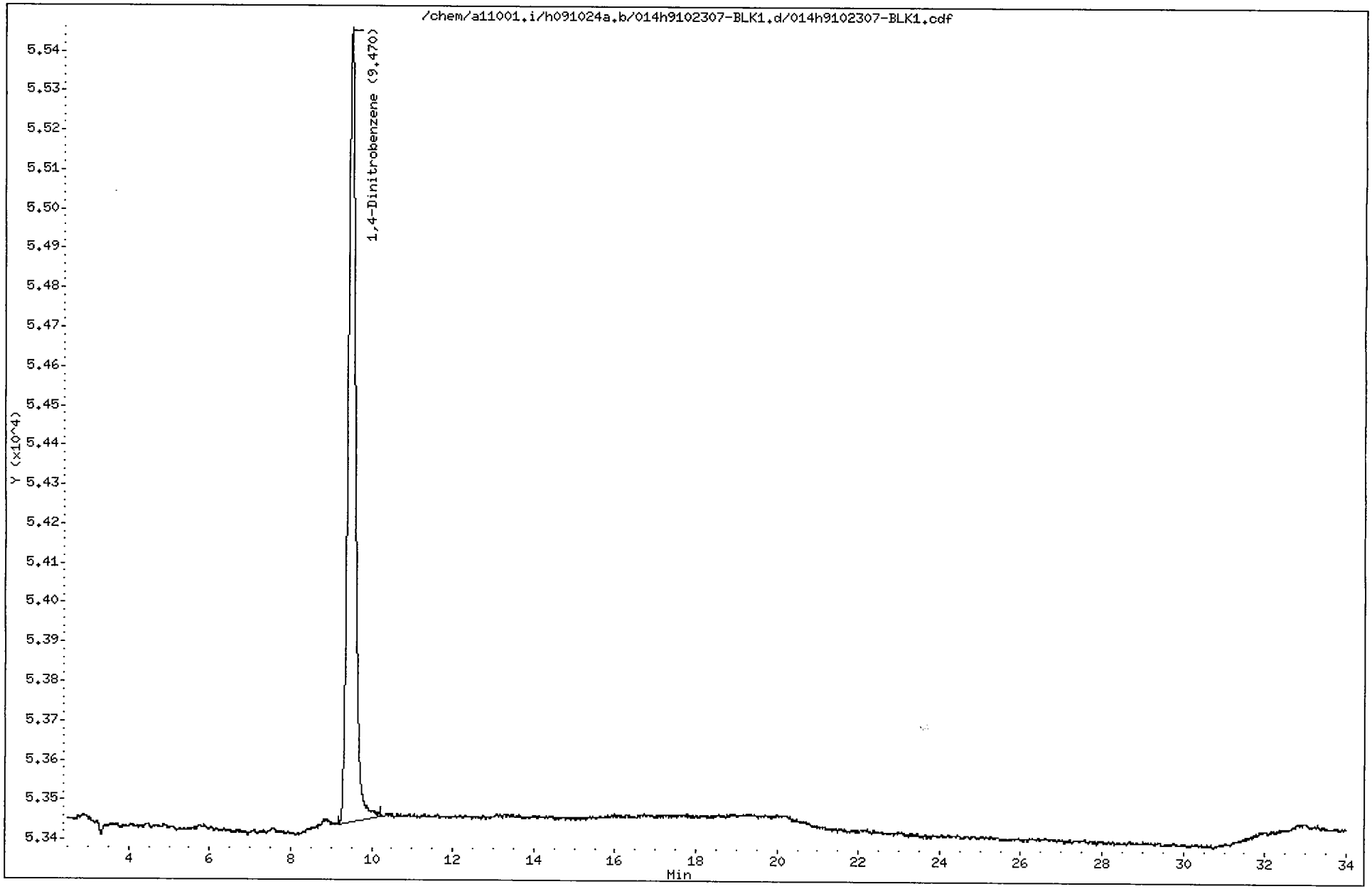
Sample Info: 9102307-BLK1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-BLK1 Client Smp Id : PBLKKZ
Sample Type : BLANK Sublist : HWMU13
Inj Date : 24-OCT-2009 21:41 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : PBLKKZ

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.07			657								
2.23			1851								
9.47	9.24	9.64	25785	3360	1,4-Dinitrobenzene	7.673890	15.34778		76.7	39 - 132	

jeff 10/26/09

Data File: /chem/a11002.i/h091016d.b/035h9102307-BLK1.d

Date : 29-OCT-2009 12:14

Client ID: PBLKKZ

Instrument: a11002.i

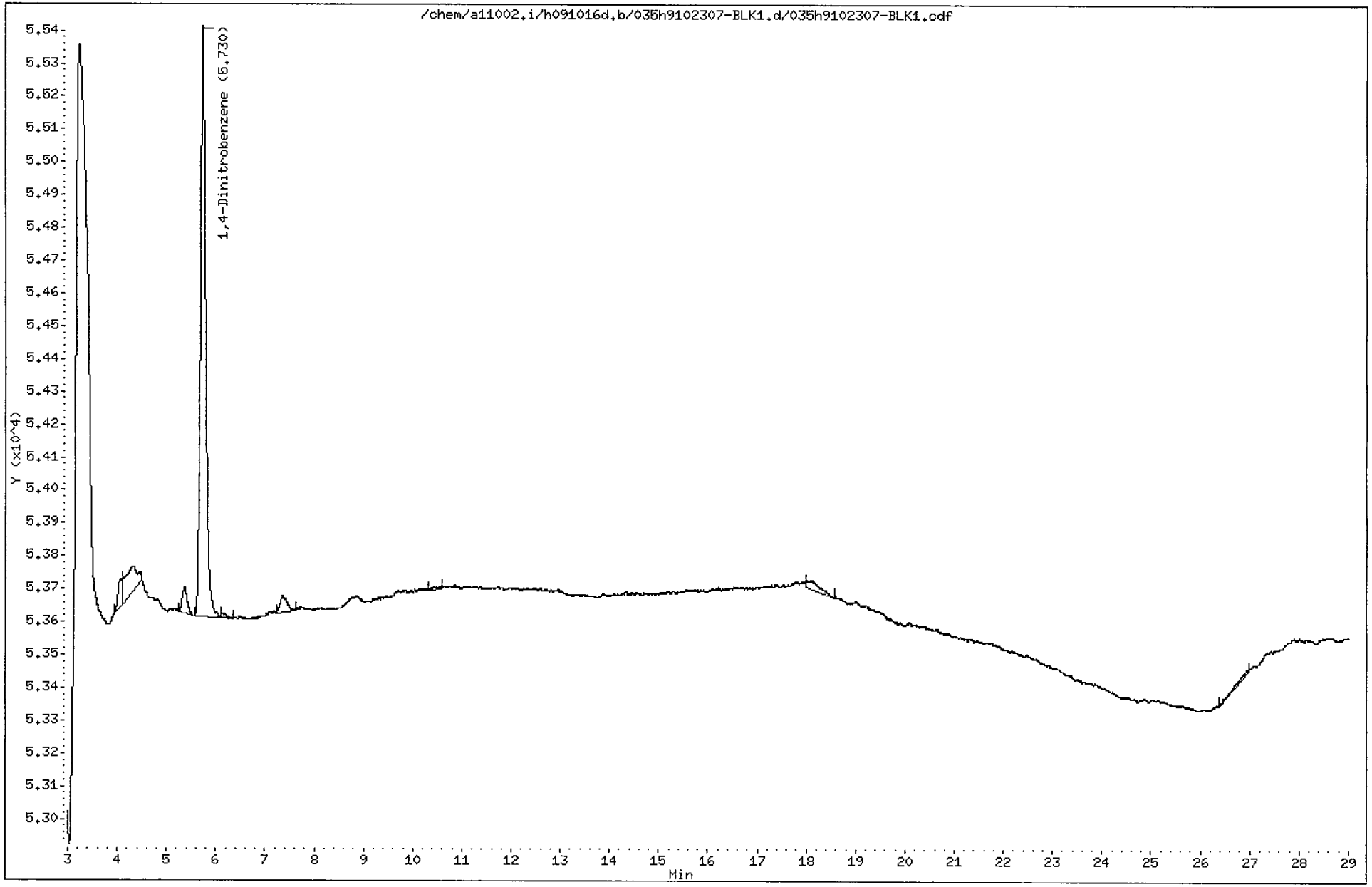
Sample Info: 9102307-BLK1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-BLK1 Client Smp Id : PBLKKZ
Sample Type : BLANK Sublist : nitro
Inj Date : 29-OCT-2009 12:14 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : PBLKKZ

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.07			436								
4.33			1423								
5.37			556								
5.73	5.20	6.20	13250	1506	1,4-Dinitrobenzene	8.796199	17.59240		88.0	50 - 150	
6.14			110								
7.37			506								
10.42			108								
18.09			536								
26.95			160								

10/30/09

ASSIGNED TO: T. WILLIAMS

EMP ID NUMBER: 1289

COMPUCHEM
EXTRACTION WORKSHEET
EXPLOSIVE IN WATER BY SOLID PHASE EXTRACTION
Method 3535 FOR METHOD 8330

10-23-1

DATE EXTRACTED/POSTED: 10-23-09

BATCH NO.: 9102307

239

	COMPUCHEM NUMBER	CLIENT SAMPLE ID	QC SAMPLE TYPE	SAMPLE VOLUME (ml)	1082 FINAL VOLUME (ml)	COMMENTS
1	0910165-01	13MW5	SAMPLE	500	10.0	QC
2	0910165-02	13MW1	SAMPLE	500	10.0	
3	0910165-03	13MW2	SAMPLE	500	10.0	
4	0910165-04	13MW3	SAMPLE	500	10.0	
5	0910165-05	13MW4	SAMPLE	500	10.0	
6	0910165-06	13MWDUP	SAMPLE	500	10.0	
7	0910165-07	13MW6	SAMPLE	500	10.0	
8	0910165-08	13MW7	SAMPLE	500	10.0	
9	9102307-BLK1	PBLKKZ	MB	500	10.0	
10	9102307-BS1	PKZLCS	LCS	500	10.0	
11	9102307-BS2	PLALCS	LCS-8332	500	10.0	8332 SPIKE LOT # 012609-03
12	9102307-MS1	13MW5MS	MS	500	10.0	
13	9102307-MS2	13MW5MS	MS-8332	500	10.0	
14	9102307-MSD1	13MW5MSD	MSD	500	10.0	
15	9102307-MSD2	13MW5MSD	MSD-8332	500	10.0	
16						
17						
18						
19						
20						
21						
22						
23						
24						
25						
26						

TMW 10-23-09

TMW 10-23-09

TMW 10-23-09

		Explosive	SURROGATE/SPIKE ADDED BY	
SURROGATE	No.	1,4-DNB		
	Amt.	1.0 ml		
	Lot #	62503	INITIALS	DATE 10-23-09
SPIKE	No.	8330Full		
	Amt.	1.0 ml	Witness	TMW / 10-23-09
	Lot #	62309	Initials	Date

FINAL VOLUME VERIFIED T. M. W. Williams

SUPERVISOR REVIEWED

Manufacturer and lot number of reagents/solvents used ACN-67680

Rev. 7/24/03:dce

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKLI

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102615-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/26/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

Data File: /chem/a11001.i/h091024d.b/044h9102615-BLK1.d

Date : 27-OCT-2009 18:59

Client ID: PBLKLI

Instrument: a11001.i

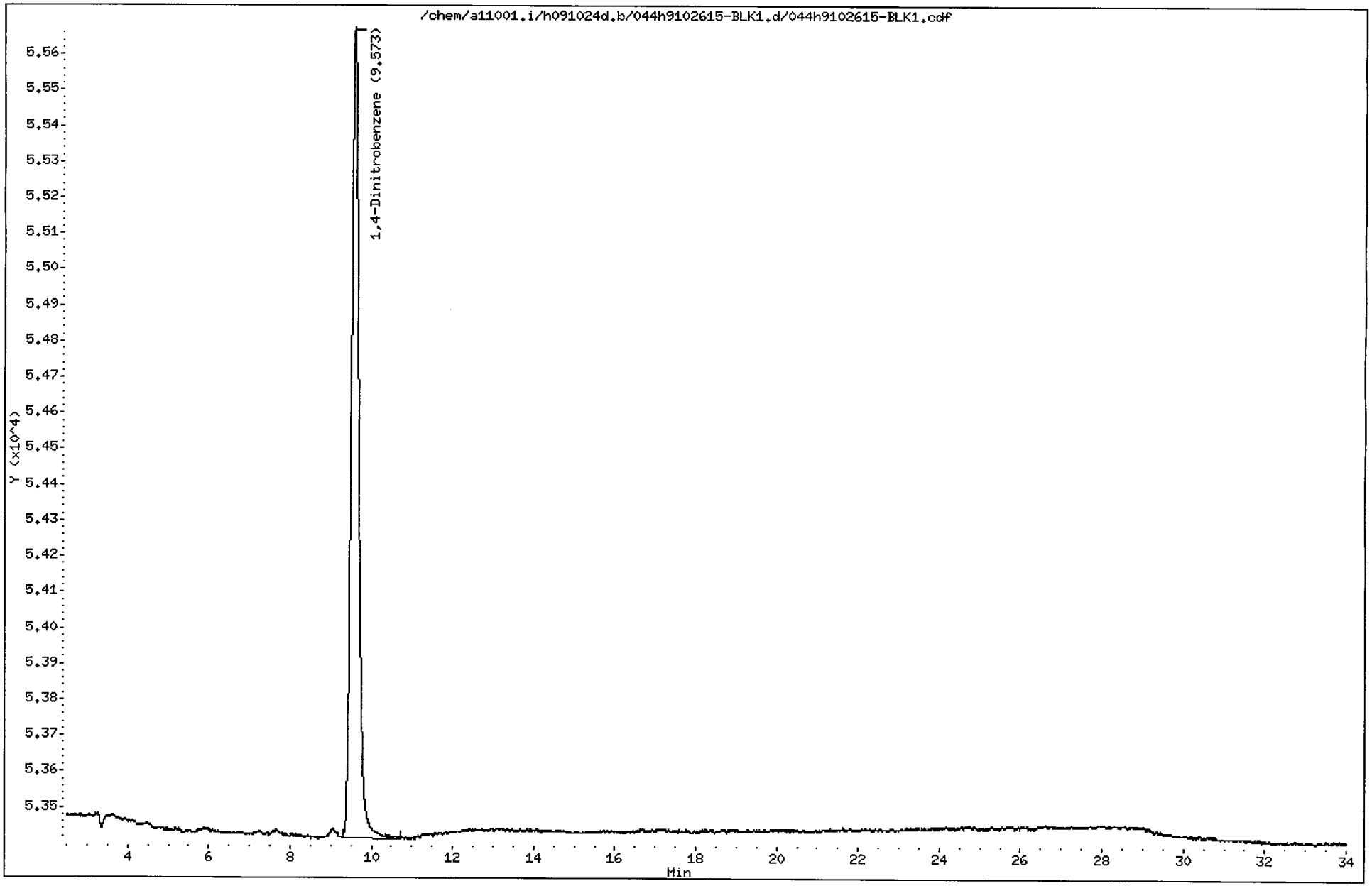
Sample Info: 9102615-BLK1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102615-BLK1 Client Smp Id : PBLKLI
Sample Type : BLANK Sublist : HWMU13
Inj Date : 27-OCT-2009 18:59 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024d.b/8330_10uL_v3split.m
Misc. Info : PBLKLI

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.01			855								
2.23			1556								
9.57	9.32	9.72	29416	3360	1,4-Dinitrobenzene	8.754386	17.50877		87.5	39 - 132	

TAS for KEH
11/13/09

ASSIGNED TO: T. WILLIAMS

EMP ID NUMBER: 1289

COMPUCHEM
EXTRACTION WORKSHEET
EXPLOSIVE IN WATER BY SOLID PHASE EXTRACTION
Method 3535 FOR METHOD 8330

10-26-1

DATE EXTRACTED/POSTED: 10-26-09

BATCH NO.: 9102615 243

	COMPUCHEM SAMPLE NUMBER	CLIENT SAMPLE ID	QC SAMPLE TYPE	SAMPLE VOLUME (mL)	FINAL VOLUME (mL) - 1082	COMMENTS
1	0910165-03RE1	13MW2	SAMPLE	500	10.0	
2	9102615-BLK1	PBLKLI	MB	500	10.0	
3	9102615-BS1	PLILCS	LCS -8330	500	10.0	
4						
5						
6						
7						
8						
9						
10						
11						
12						
13						
14						
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22						
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24						
25						
26						

TMW 10-26-09

TMW 10-26-09

		Explosive	SURROGATE/SPIKE ADDED BY
SURROGATE	No.	1,4-DNB	BFP / 10-26-09
	Amt.	1.0 ml	INITIALS DATE
	Lot #	62503	
SPIKE	No.	8330Full	Witness TMW / 10-26-09
	Amt.	1.0 ml	Initials Date
	Lot #	62309	

FINAL VOLUME VERIFIED T. Williams

SUPERVISOR REVIEWED

Manufacturer and lot number of reagents/solvents used ACN - 67680

Rev. 7/24/03:dce

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PBLKMO

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9103004-BLK1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/30/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11002.i/h091016k.b/070h9111020-BLK1.d

Date : 12-NOV-2009 09:33

Client ID: PBLKMO

Instrument: a11002.i

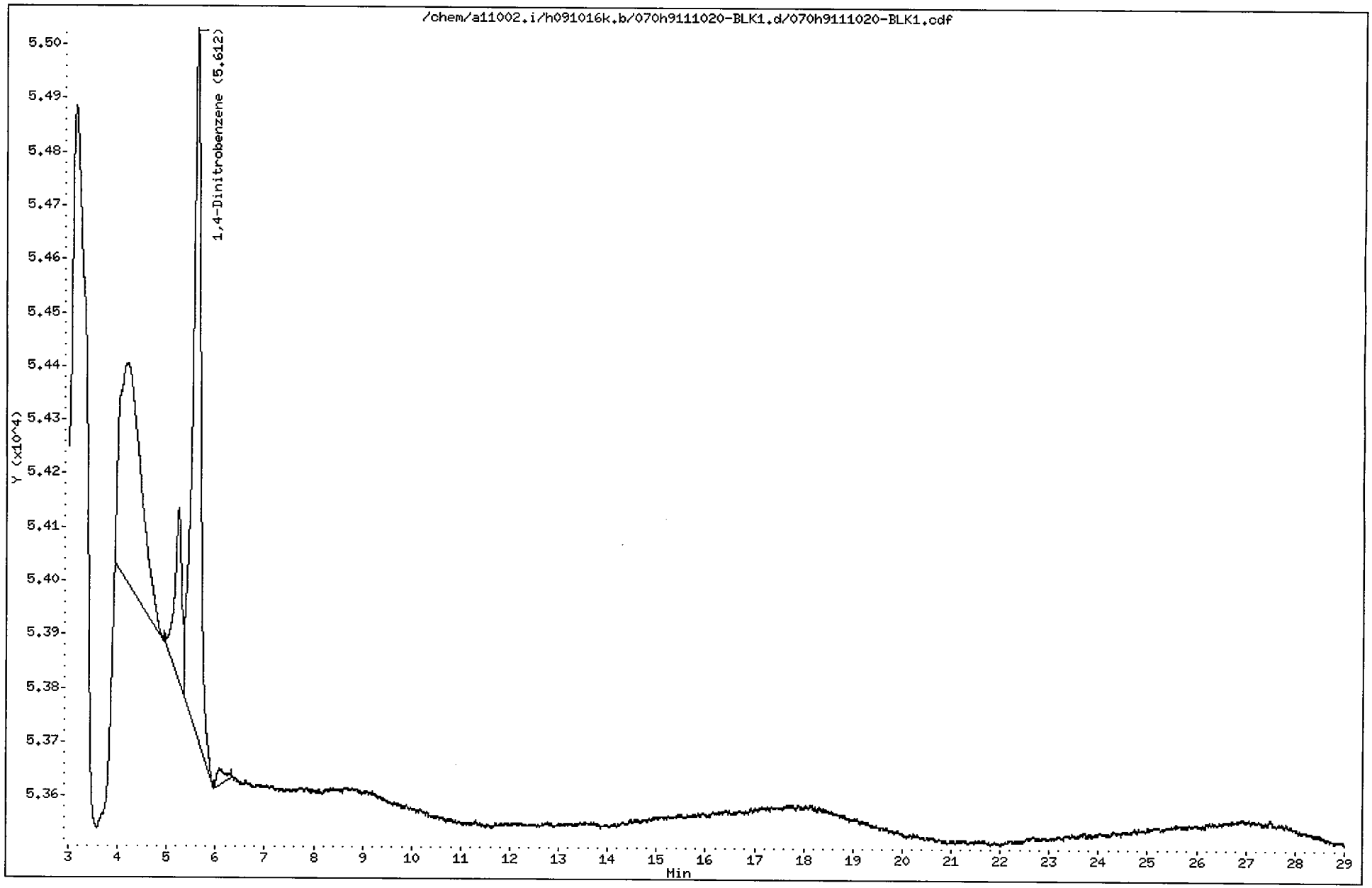
Sample Info: 9103004-BLK1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 9103004-BLK1 Client Smp Id : PBLKMO
Sample Type : BLANK Sublist : nitro
Inj Date : 12-NOV-2009 09:33 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016k.b/8332TPconf_10uL_v2.m
Misc. Info : PBLKMO

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.18			12508								
5.24			3189								
5.61	5.20	6.20	15235	1506	1,4-Dinitrobenzene	10.11300	20.22600		101.1	50 - 150	
6.08			354								

TAJ for KEH
11/13/09

ASSIGNED TO: R. McKay

EMP ID NUMBER: 2171

COMPUCHEM
EXTRACTION WORKSHEET
EXPLOSIVE IN WATER BY SOLID PHASE EXTRACTION
Method 3535 FOR METHOD 8330

DATE EXTRACTED/POSTED: 11-11-09

BATCH NO.: ~~9111020~~ ~~11-11~~ 9111020

1082

	COMPUCHEM NUMBER	CLIENT SAMPLE ID	QC SAMPLE TYPE	SAMPLE VOLUME (ml)	FINAL VOLUME (ml)	COMMENTS
1	0910165-03RE2	13MW2	SAMPLE	500	10.0	
2	9111020-BLK1	PBLKOU	MB	500	10.0	
3	9111020-BS1	POULCS	LCS - 8332	500	10.0	
4						
5						
6						
7						
8						
9						
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25						
26						

			Explosives	SURROGATE & SPIKE ADDED BY	
	SURROGATE	No.	1,4-DNB		FINAL VOLUME VERIFIED
		Amt.	1.0 ml		
		Lot #	62503	INITIALS: RM / DATE: 11-11-09	SUPERVISOR REVIEWED
	SPIKE	No.	8332		
		Amt.	1.0 ml	Witness: BFP / 11/11/09	
		Lot #	012609-03	Initials / Date	

Manufacturer and lot number of reagents/solvents used ACN - 67680

Rev. 7/24/03:dce

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHB

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHB

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

Data File: /chem/a11001.i/h091024a.b/009hLIBLKHB.d

Date : 24-OCT-2009 18:41

Client ID: LIBLKHB

Instrument: a11001.i

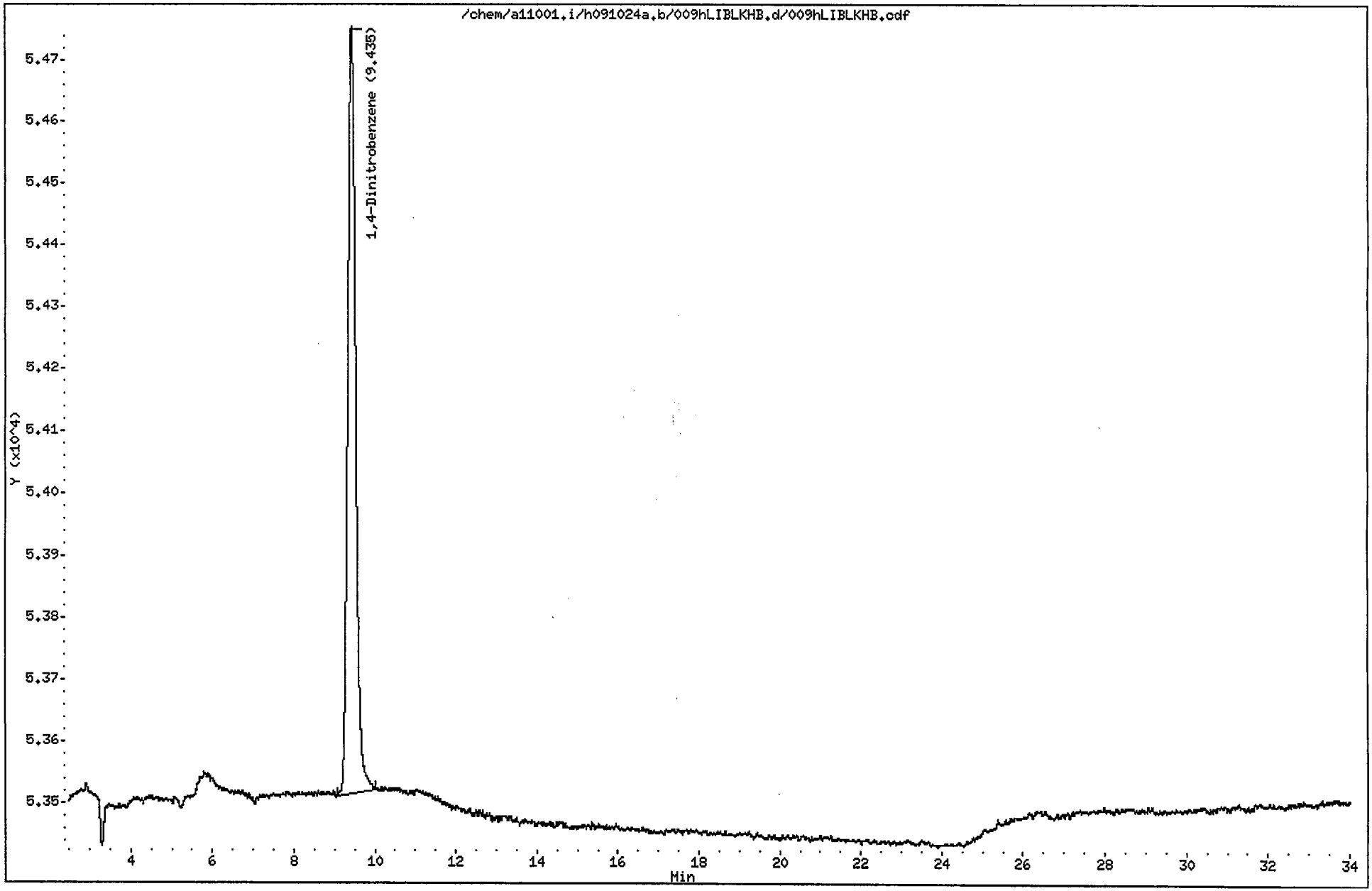
Sample Info: LIBLKHB

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHB Client Smp Id : LIBLKHB
Sample Type : INSTBLANK Sublist : all
Inj Date : 24-OCT-2009 18:41 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : None

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
2.22			2890						
9.44	9.24	9.64	16930	3360	1,4-Dinitrobenzene	5.038586	10.07717		

AW 10/26/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHC

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHC

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/25/09

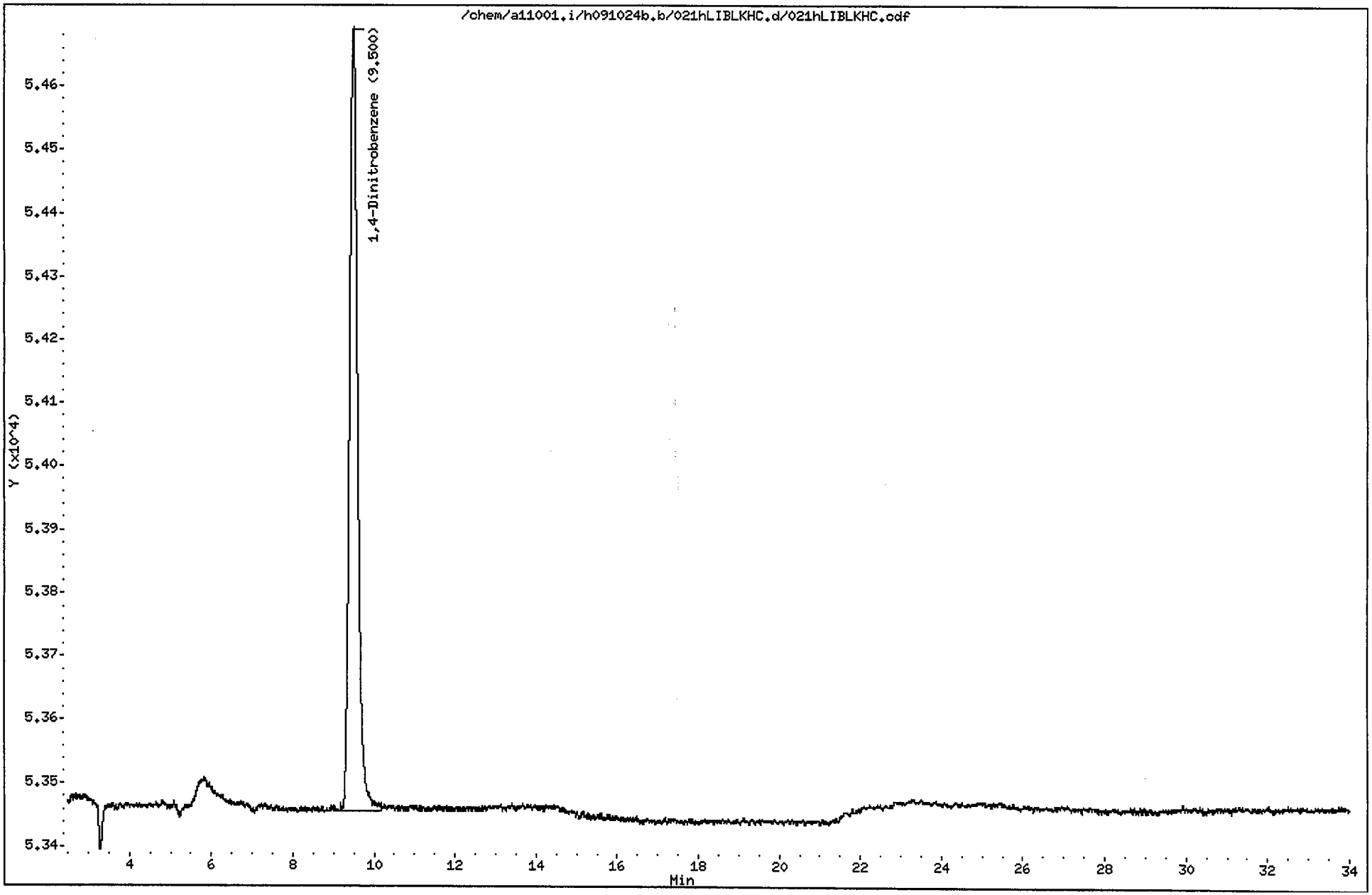
Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

Data File: /chem/a11001.i/h091024b.b/021hLIBLKHC.d
Date : 25-OCT-2009 01:52
Client ID: LIBLKHC
Sample Info: LIBLKHC
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHC Client Smp Id : LIBLKHC
Sample Type : INSTBLANK Sublist : all
Inj Date : 25-OCT-2009 01:52 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024b.b/8330_10uL_v3split.m
Misc. Info : None

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
2.01			557						
2.21			2340						
9.50	9.26	9.66	17120	3360	1,4-Dinitrobenzene	5.095341	10.19068		

ADN 10/26/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHD

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHD

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) _____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.50	U
99-65-0	1,3-Dinitrobenzene	2.50	U
606-20-2	2,6-Dinitrotoluene	5.00	U
121-14-2	2,4-Dinitrotoluene	5.00	U

Data File: /chem/a11001.i/h091024c.b/034hLIBLKHD.d

Date : 27-OCT-2009 11:12

Client ID: LIBLKHD

Sample Info: LIBLKHD

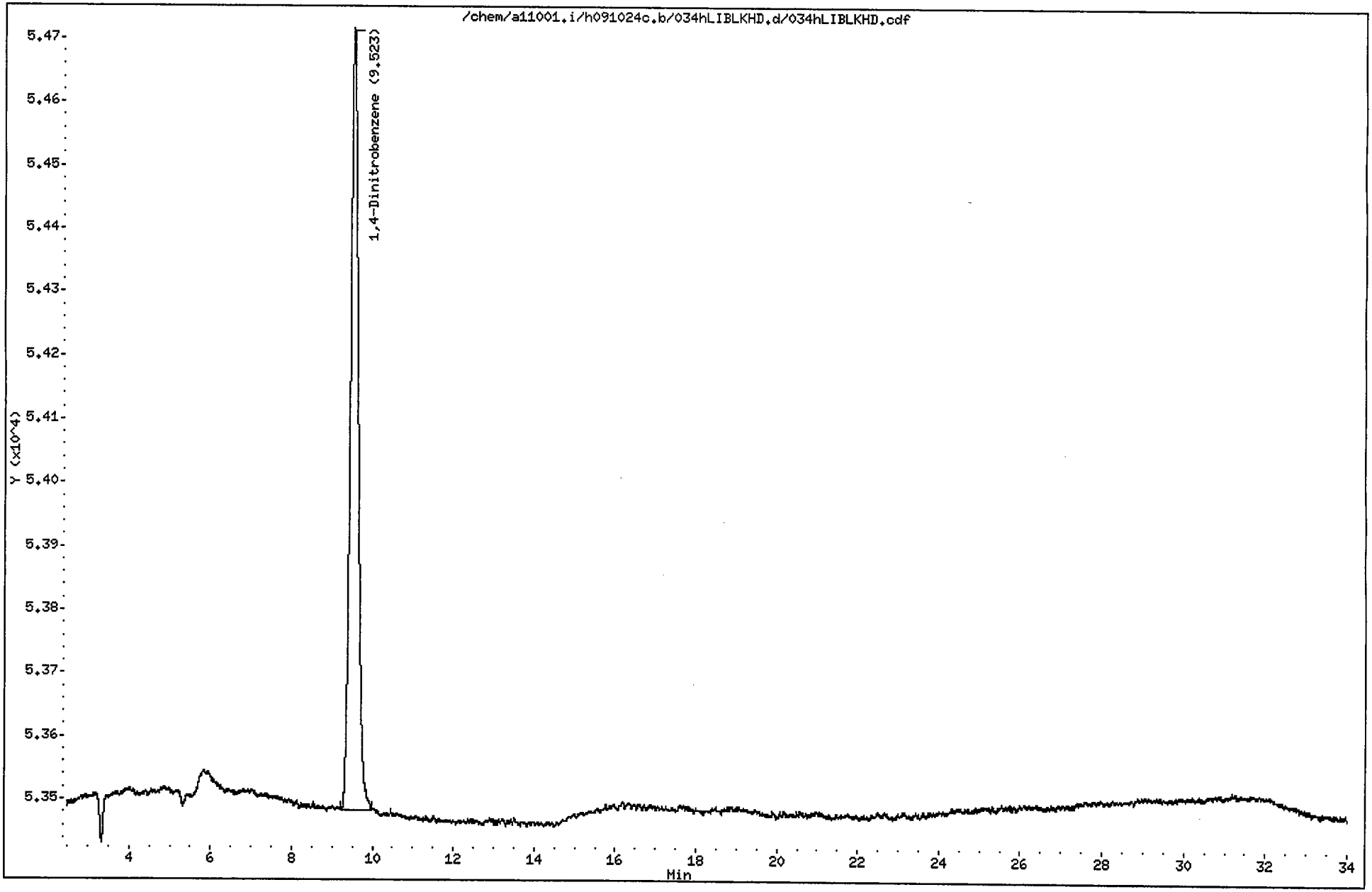
Volume Injected (uL): 10.0

Column phase: C18

Instrument: a11001.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHD Client Smp Id : LIBLKHD
Sample Type : INSTBLANK Sublist : all
Inj Date : 27-OCT-2009 11:12 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024c.b/8330_10uL_v3split.m
Misc. Info : None

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
2.22			3186						
9.52	9.32	9.72	16775	3360	1,4-Dinitrobenzene	4.992426	9.984851		

10/27/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHE

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHE

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

Data File: /chem/a11001.i/h091024d.b/043hLIBLKHE.d

Page 1

Date : 27-OCT-2009 18:24

Client ID: LIBLKHE

Instrument: a11001.i

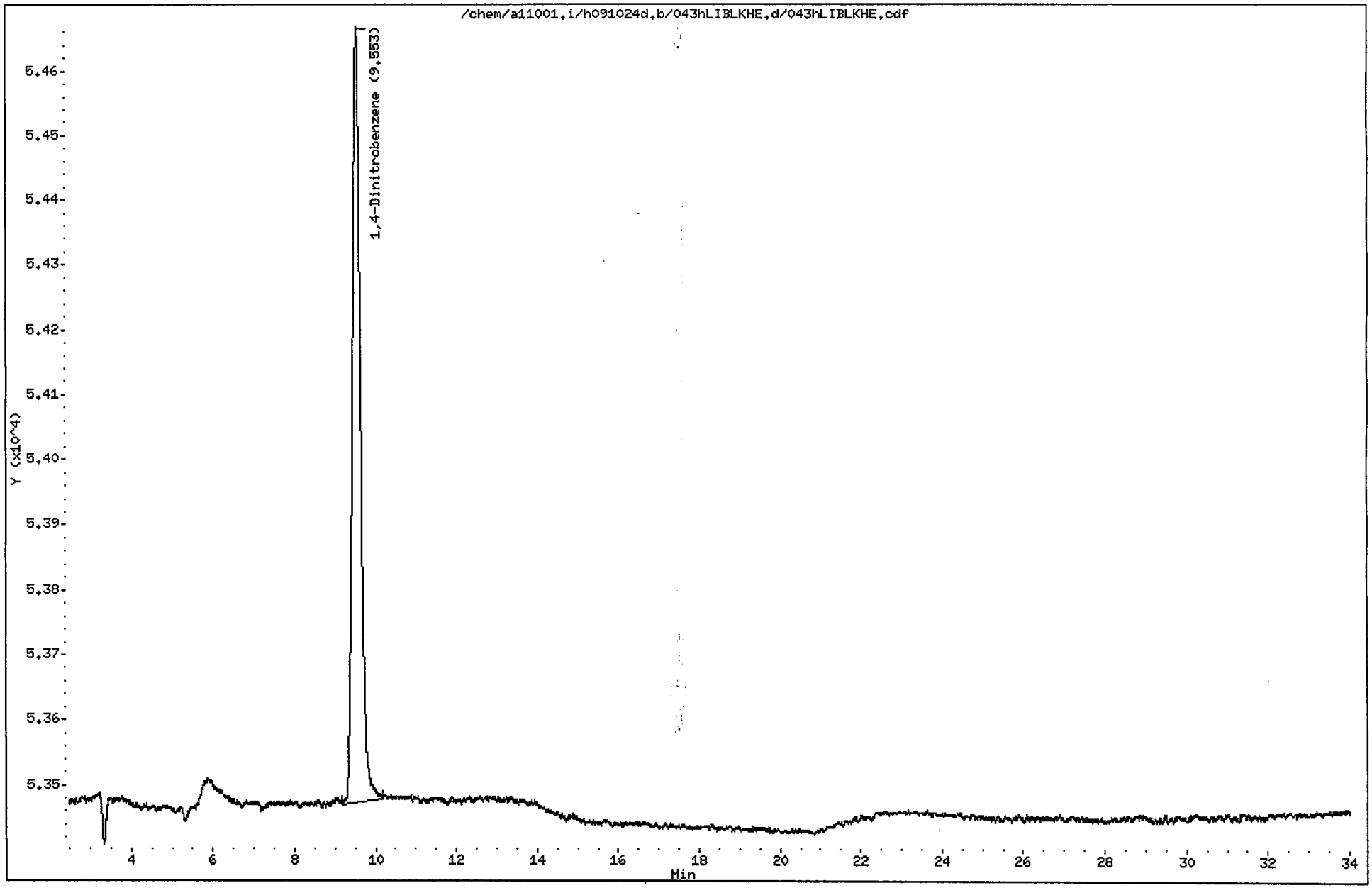
Sample Info: LIBLKHE

Volume Injected (uL): 10.0

Operator: 2646

Column phase: C18

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHE Client Smp Id : LIBLKHE
Sample Type : INSTBLANK Sublist : all
Inj Date : 27-OCT-2009 18:24 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024d.b/8330_10uL_v3split.m
Misc. Info : None

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
2.05			1148						
2.23			1500						
9.55	9.32	9.72	16763	3360	1,4-Dinitrobenzene	4.989003	9.978006		

AW 10/28/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHF

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHF

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

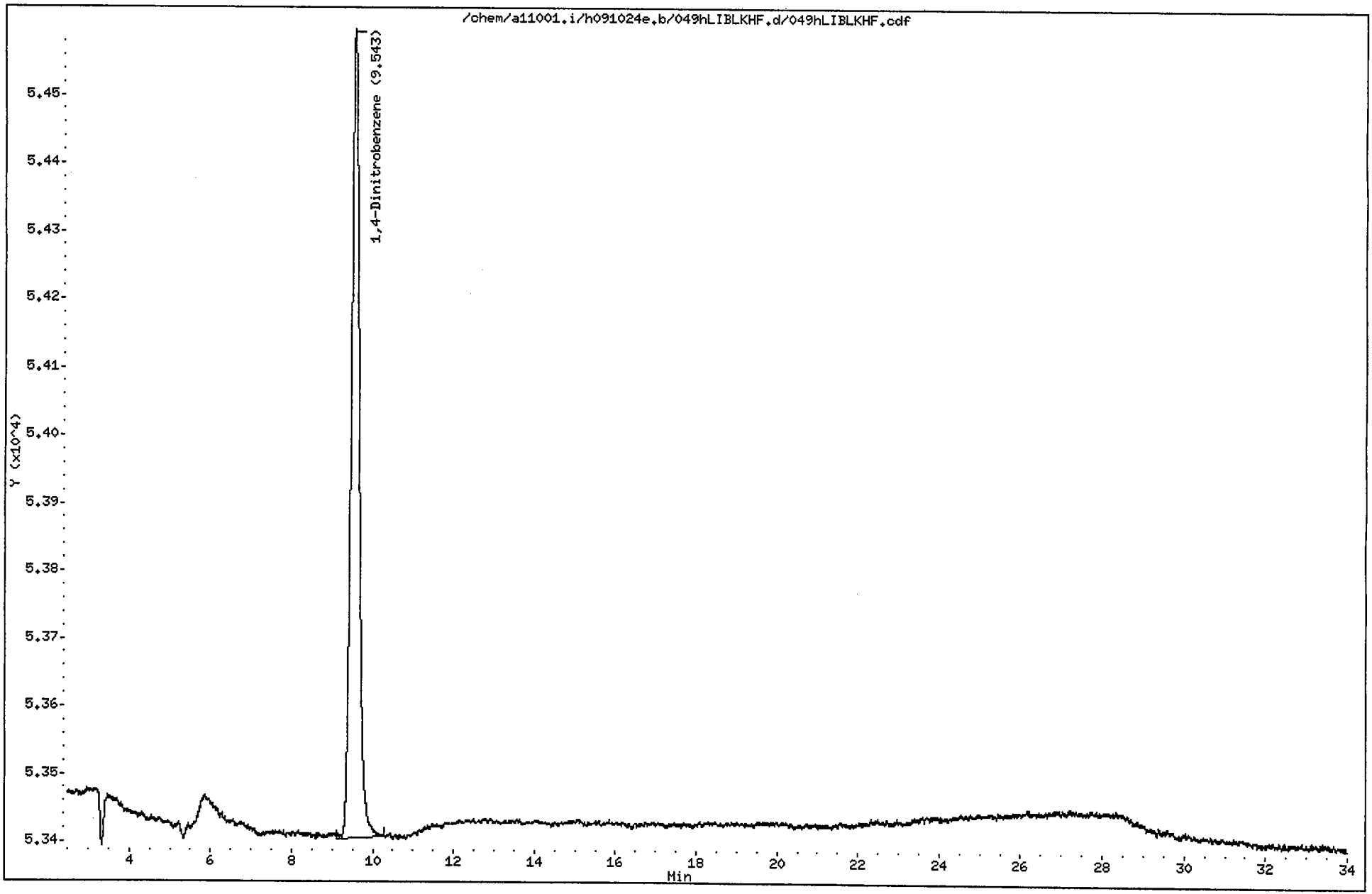
Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	2.5	U
99-65-0	1,3-Dinitrobenzene	2.5	U
606-20-2	2,6-Dinitrotoluene	5.0	U
121-14-2	2,4-Dinitrotoluene	5.0	U

Data File: /chem/a11001.i/h091024e.b/049hLIBLKHF.d
Date : 27-OCT-2009 21:59
Client ID: LIBLKHF
Sample Info: LIBLKHF
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHF Client Smp Id : LIBLKHF
Sample Type : INSTBLANK Sublist : all
Inj Date : 27-OCT-2009 21:59 Inst ID : A11001
Operator : 2646
Method : /chem/a11001.i/h091024e.b/8330_10uL_v3split.m
Misc. Info : None

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
2.22			3007						
9.54	9.32	9.72	16749	3360	1,4-Dinitrobenzene	4.984747	9.969494		

10/28/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHD

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHD

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) _____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11002.i/h091016d.b/034hLIBLKHD.d

Date : 29-OCT-2009 10:52

Client ID: LIBLKHD

Sample Info: LIBLKHD

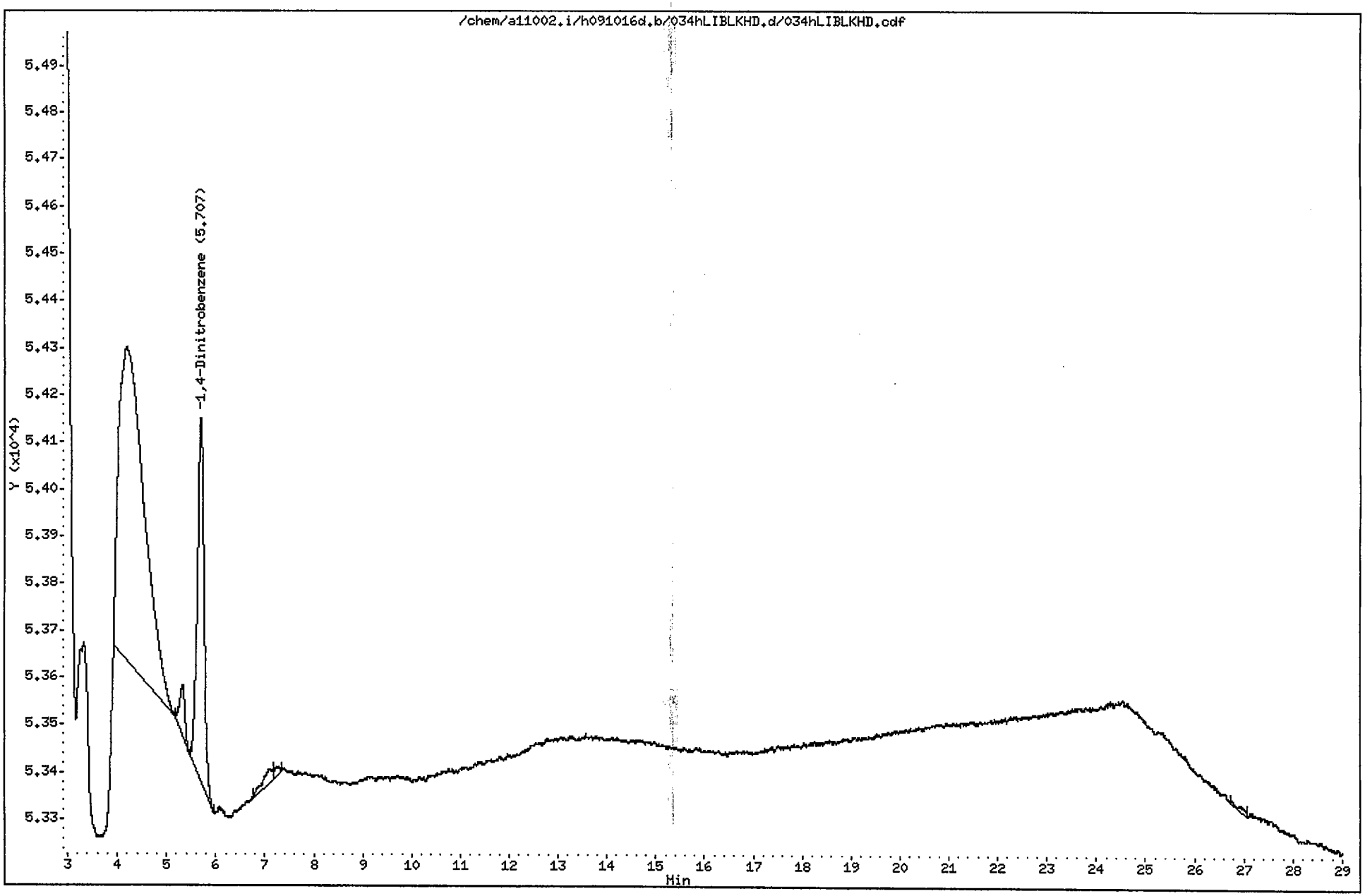
Volume Injected (uL): 10.0

Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHD Client Smp Id : LIBLKHD
Sample Type : INSTBLANK Sublist : all
Inj Date : 29-OCT-2009 10:52 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : None

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
4.21			23918						
5.34			768						
5.71	5.20	6.20	7256	1506	1,4-Dinitrobenzene	4.816553	9.633107		
7.12			479						
7.26			123						
26.77			108						

10/29/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHE

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHE

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11002.i/h091016e.b/043hLIBLKHE.d

Date : 29-OCT-2009 16:20

Client ID: LIBLKHE

Instrument: a11002.i

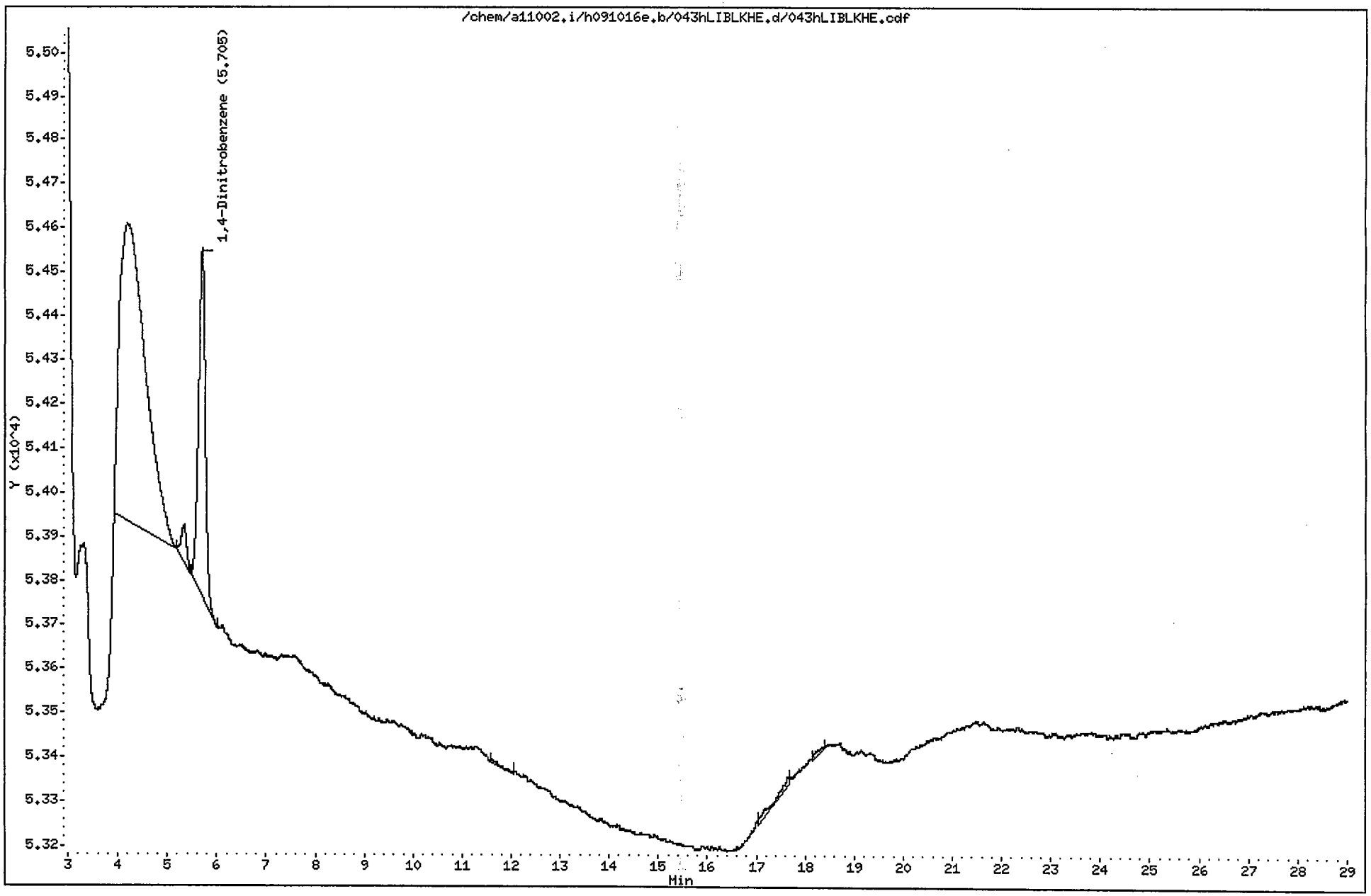
Sample Info: LIBLKHE

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHE Client Smp Id : LIBLKHE
Sample Type : INSTBLANK Sublist : all
Inj Date : 29-OCT-2009 16:20 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016e.b/8332TPconf_10uL_v2.m
Misc. Info : None

Method Type: undefined

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
4.20		24525						
5.34		625						
5.70	5.20 6.20	7487	1506	1,4-Dinitrobenzene	4.970432	9.940865		
11.62		107						
17.64		424						
18.36		115						

10/30/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHF

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHF

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11002.i/h091016f.b/050hLIBLKHF.d

Date : 29-OCT-2009 19:57

Client ID: LIBLKHF

Instrument: a11002.i

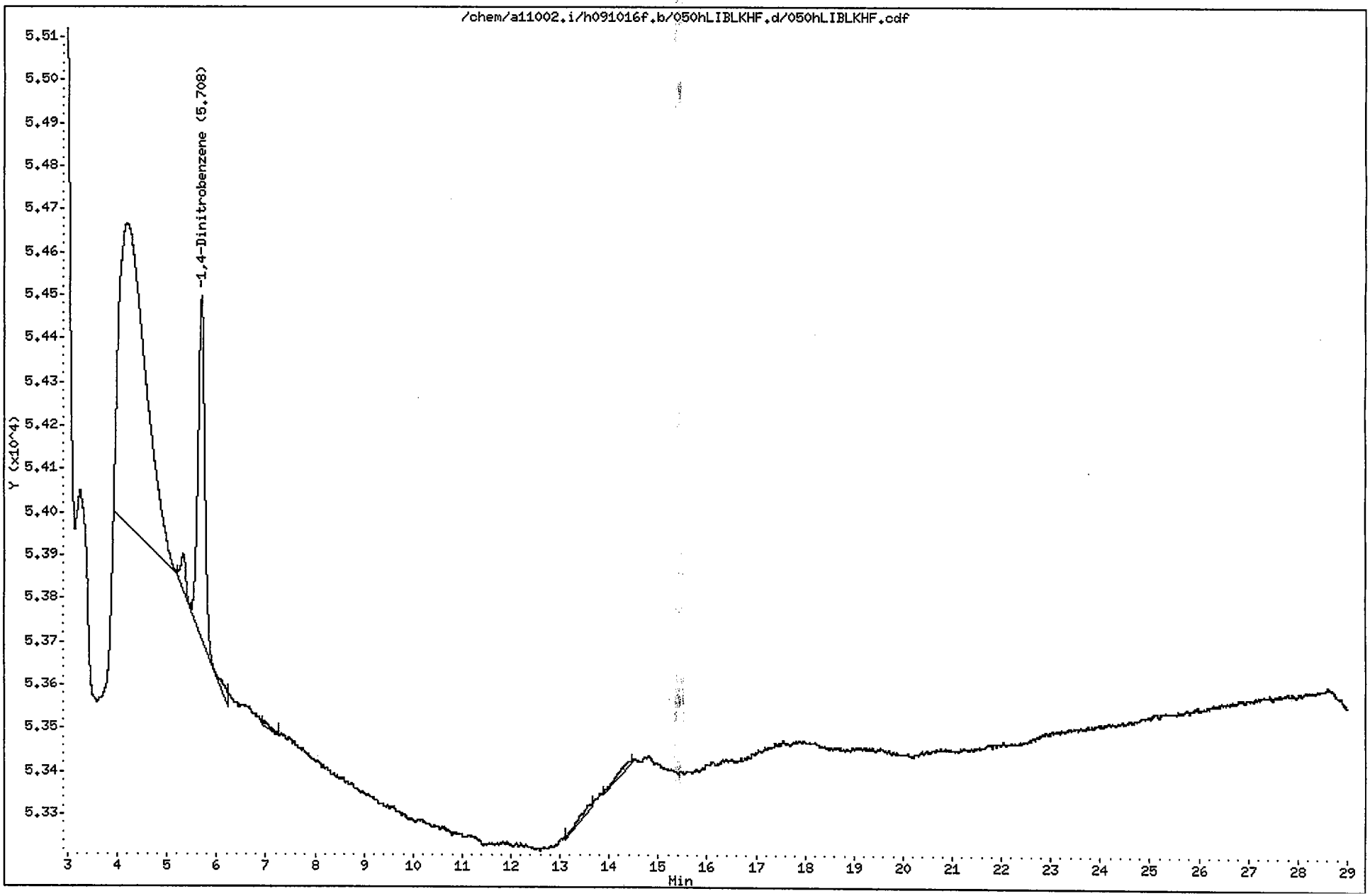
Sample Info: LIBLKHF

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHF Client Smp Id : LIBLKHF
Sample Type : INSTBLANK Sublist : all
Inj Date : 29-OCT-2009 19:57 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016f.b/8332TPconf_10uL_v2.m
Misc. Info : None

Method Type: undefined

RT	RT WINDOW	AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
4.20		25972						
5.34		581						
5.71	5.20 6.20	7729	1506	1,4-Dinitrobenzene	5.130552	10.26110		
6.97		108						
13.65		271						
14.44		287						

AW 10/30/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHI

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHI

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

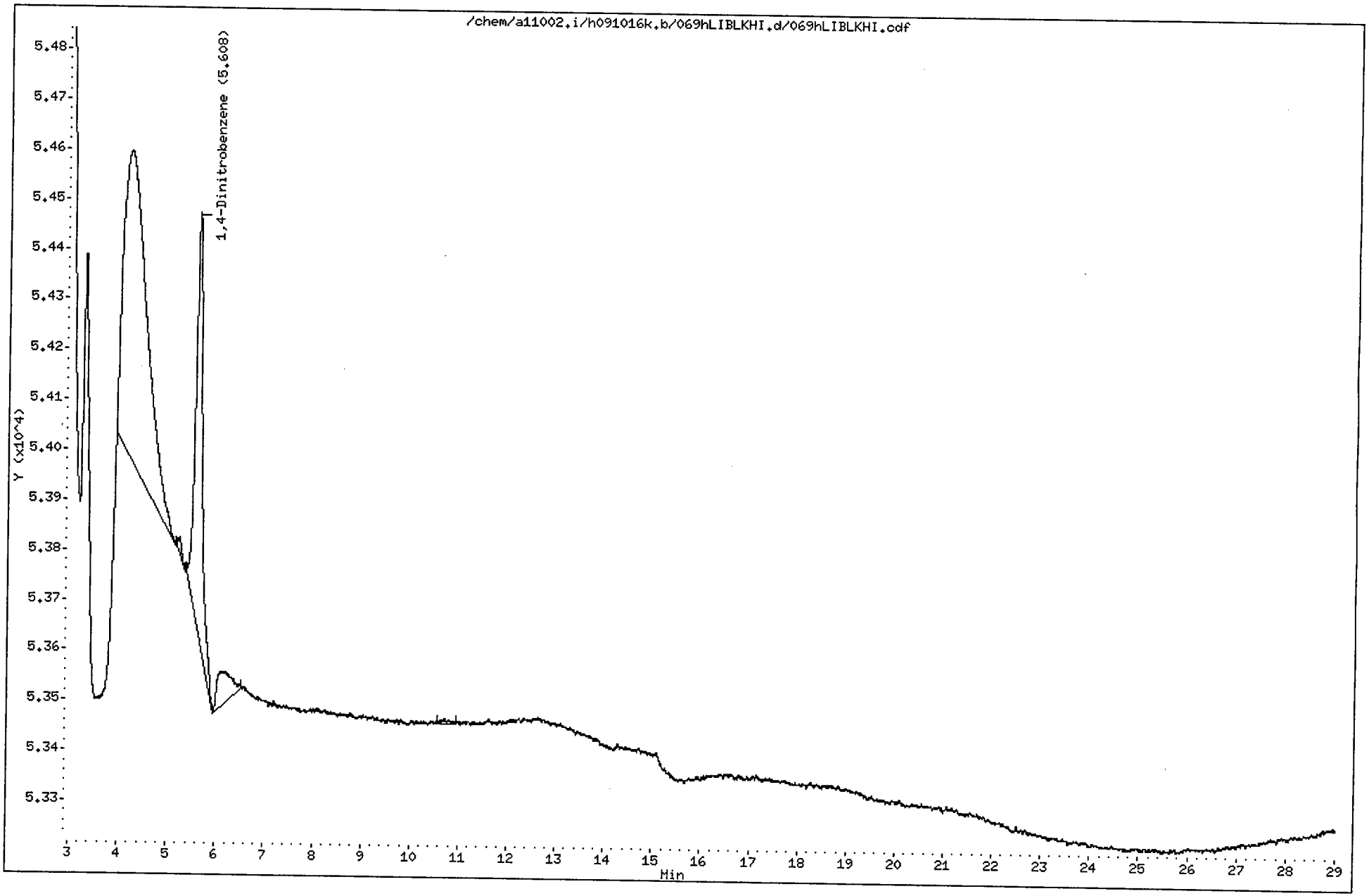
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11002.i/h091016k.b/069hLIBLKHI.d
Date : 12-NOV-2009 09:03
Client ID: LIBLKHI
Sample Info: LIBLKHI
Volume Injected (uL): 10.0
Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHI
Client Smp Id : LIBLKHI
Sample Type : INSTBLANK
Sublist : all
Inj Date : 12-NOV-2009 09:03
Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h091016k.b/8332TPconf_10uL_v2.m
Misc. Info : None

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
4.19			20640						
5.24			168						
5.61	5.20	6.20	8479	1506	1,4-Dinitrobenzene	5.628534	11.25707		
6.11			1369						
10.59			111						

TAJ 11/13/09

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GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

LIBLKHJ

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: LIBLKHJ

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) ____ Date Extracted:_____

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	16	U

FORM I PEST

Data File: /chem/a11002.i/h0910161.b/074hLIBLKHJ.d

Date : 12-NOV-2009 11:37

Client ID: LIBLKHJ

Sample Info: LIBLKHJ

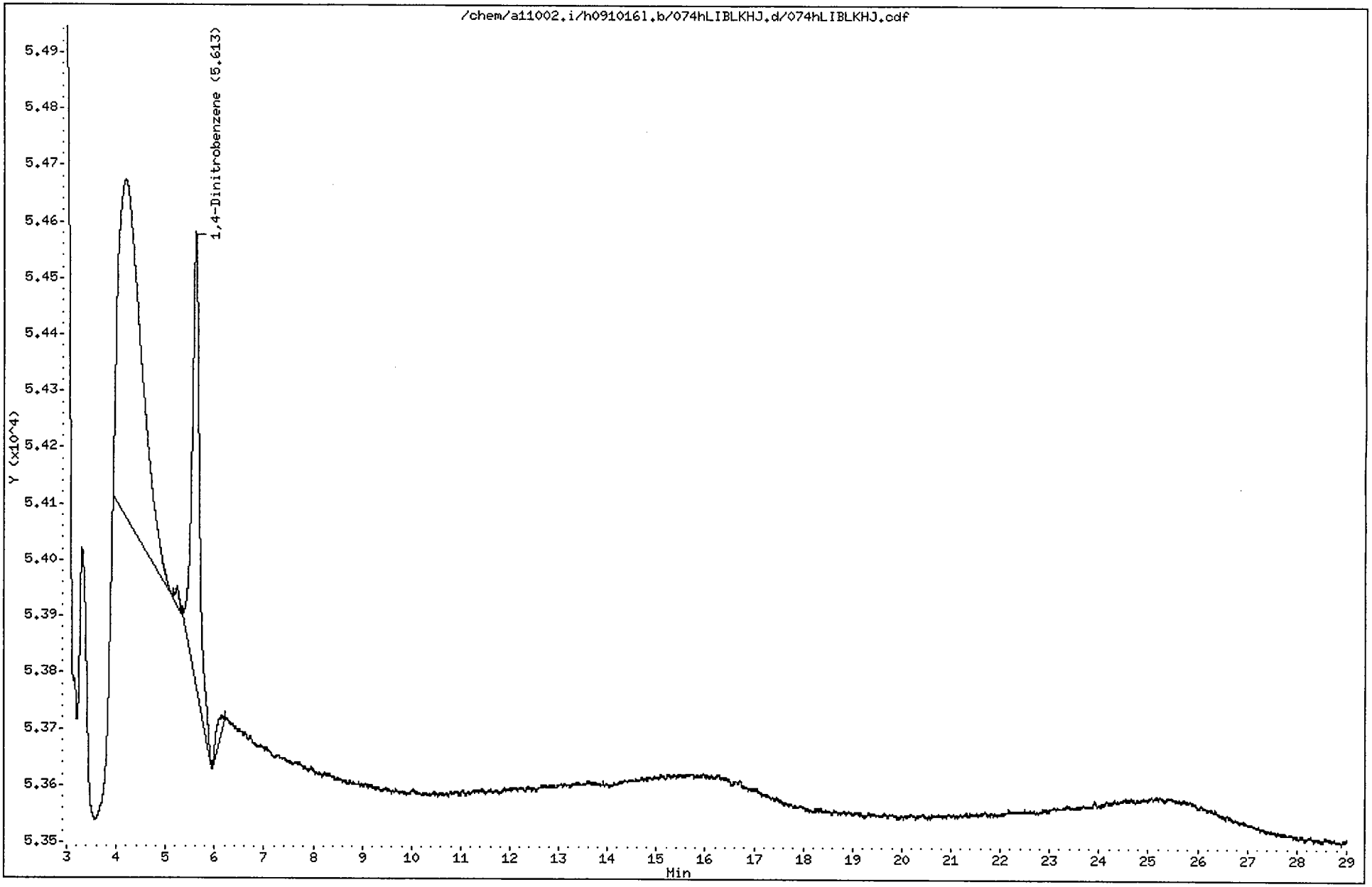
Volume Injected (uL): 10.0

Column phase: PINNACLE CYANO

Instrument: a11002.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : LIBLKHJ Client Smp Id : LIBLKHJ
Sample Type : INSTBLANK Sublist : all
Inj Date : 12-NOV-2009 11:37 Inst ID : A11002
Operator : 2646
Method : /chem/a11002.i/h0910161.b/8332TPconf_10uL_v2.m
Misc. Info : None

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	FLAGS
4.18			19870						
5.25			168						
5.61	5.20	6.20	8445	1506	1,4-Dinitrobenzene	5.606428	11.21286		
6.11			359						

TAJ 11/13/09

b. Laboratory Control Sample Data

Arranged in chronological order, by extraction date.

- Tabulated Results (Form I)

- Chromatograms and data system printout(s)

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PKZLCS

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received:

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

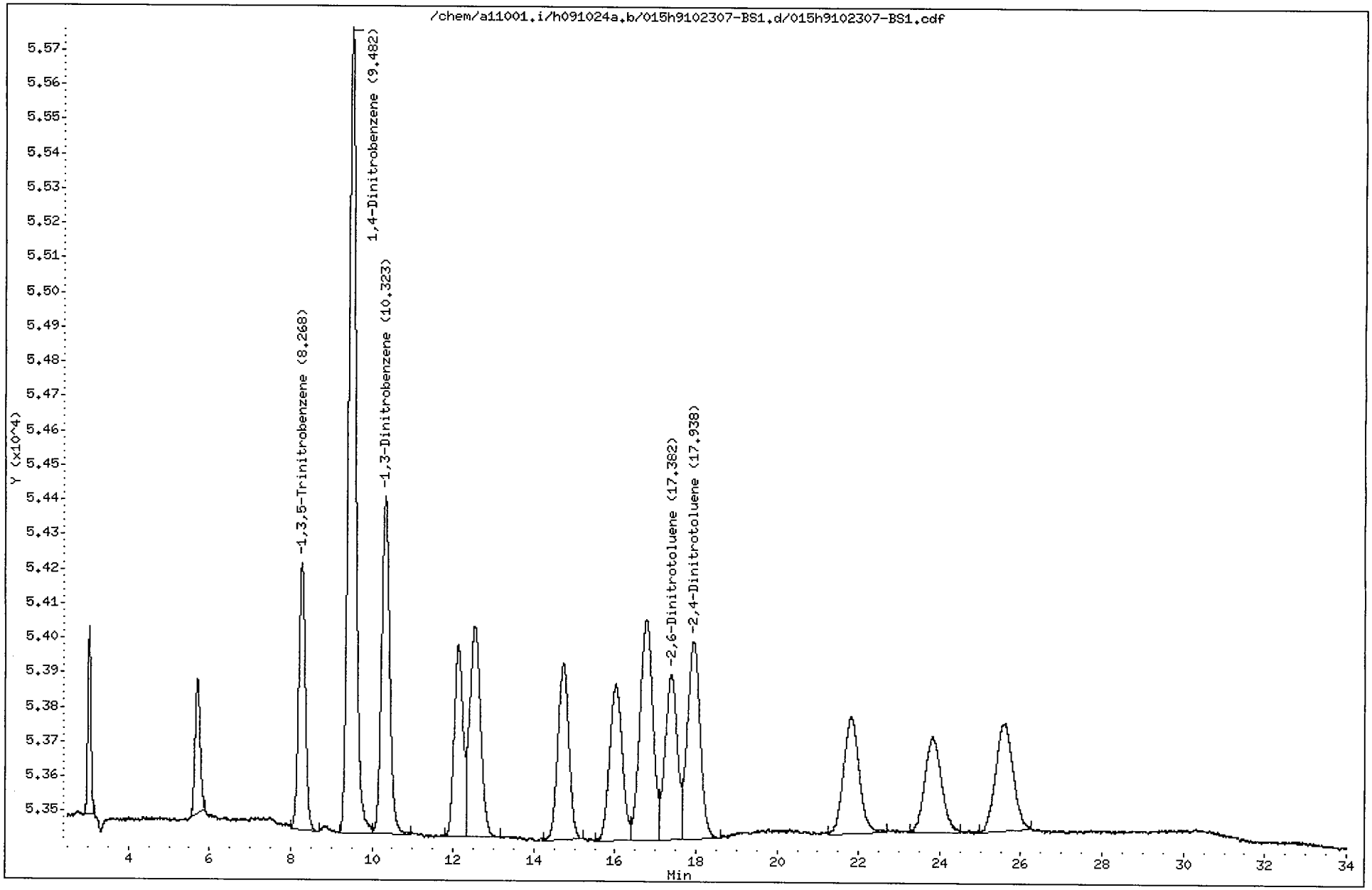
Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.7	
99-65-0	1,3-Dinitrobenzene	7.3	
606-20-2	2,6-Dinitrotoluene	11	
121-14-2	2,4-Dinitrotoluene	7.2	

Data File: /chem/a11001.i/h091024a.b/015h9102307-BS1.d
Date : 24-OCT-2009 22:17
Client ID: PKZLCS
Sample Info: 9102307-BS1
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-BS1 Client Smp Id : PKZLCS
Sample Type : LCS Sublist : HWMU13
Inj Date : 24-OCT-2009 22:17 Inst ID : A11001
Operator : 2646 Spike Sublist : HWMU13
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : PKZLCS

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			1810								
3.03			2859								
5.70			3363								
8.27	8.03	8.43	8871	2651	1,3,5-Trinitrobenzene	3.345342	6.690684	2.500000	83.6	50 - 150	
9.48	9.24	9.64	29737	3360	1,4-Dinitrobenzene	8.849921	17.69984		88.5	39 - 132	
10.32	10.08	10.48	13429	3668	1,3-Dinitrobenzene	3.660596	7.321193	2.500000	91.5	50 - 150	
12.13			8444								
12.54			11576								
14.73			9665								
16.02			9946								
16.76			14330								
17.38	17.02	17.62	9915	1779	2,6-Dinitrotoluene	5.572804	11.14561	5.000000	92.9	50 - 150	
17.94	17.56	18.16	12586	3480	2,4-Dinitrotoluene	3.616875	7.233749	5.000000	90.4	50 - 150	
21.81			8937								
23.83			7825								
25.61			9179								

KEH 10/26/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PLILCS

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102615-BS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received:

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/26/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/27/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.5	
99-65-0	1,3-Dinitrobenzene	7.1	
606-20-2	2,6-Dinitrotoluene	11	
121-14-2	2,4-Dinitrotoluene	7.6	

Data File: /chem/a11001.i/h091024d.b/045h9102615-BS1.d

Date : 27-OCT-2009 19:35

Client ID: PLILCS

Sample Info: 9102615-BS1

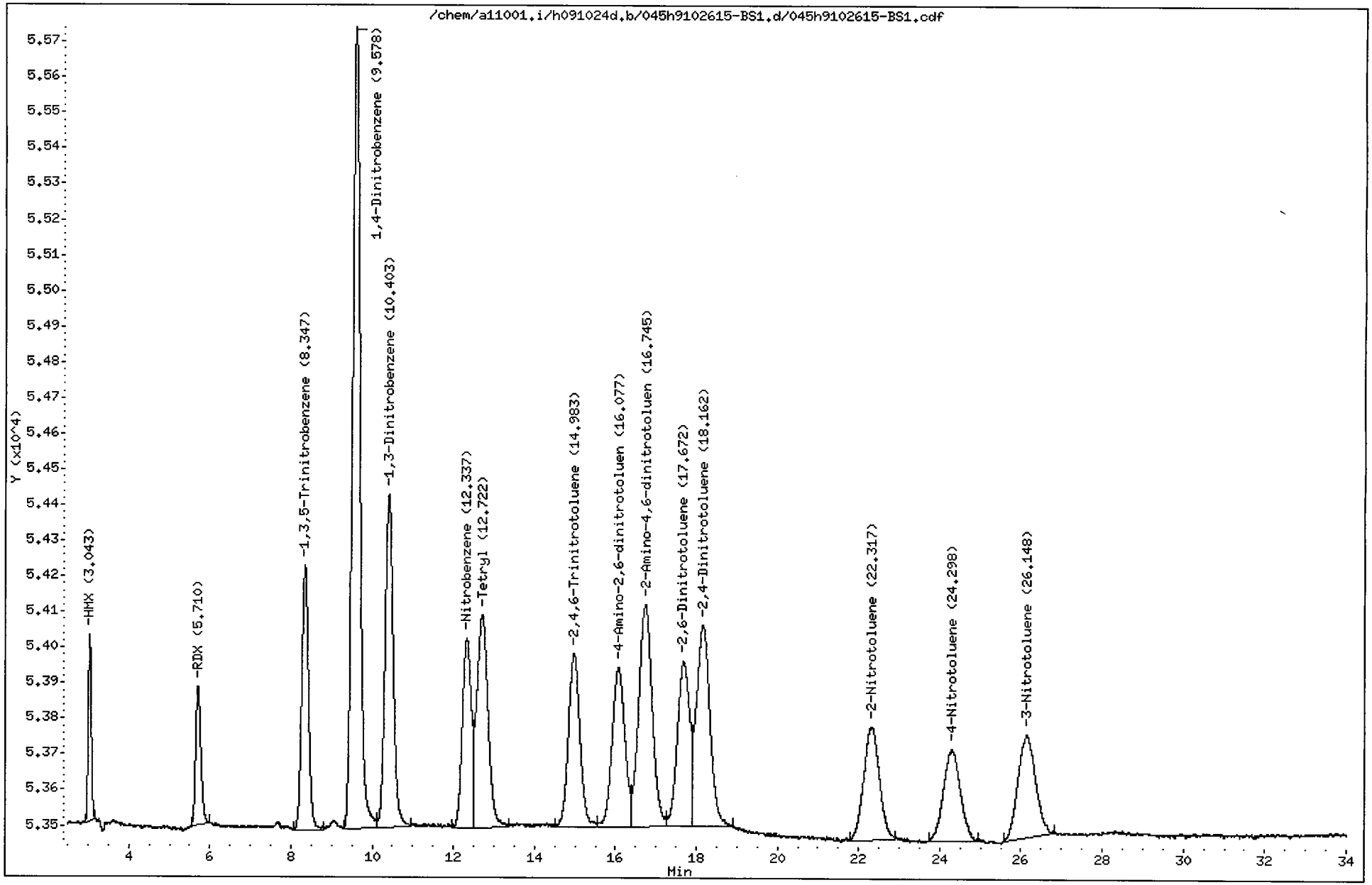
Volume Injected (uL): 10.0

Column phase: C18

Instrument: a11001.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102615-BS1 Client Smp Id : PLILCS
Sample Type : LCS Sublist : HWMU13
Inj Date : 27-OCT-2009 19:35 Inst ID : A11001
Operator : 2646 Spike Sublist : all
Method : /chem/a11001.i/h091024d.b/8330_10uL_v3split.m
Misc. Info : PLILCS

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.03			903								
2.24			694								
3.04			2759								
5.71			3469								
8.35	8.10	8.50	8658	2651	1,3,5-Trinitrobenzene	3.265386	6.530771	2.500000	81.6	50 - 150	
9.58	9.32	9.72	29105	3360	1,4-Dinitrobenzene	8.662125	17.32425		86.6	39 - 132	
10.40	10.15	10.55	13053	3668	1,3-Dinitrobenzene	3.558103	7.116206	2.500000	89.0	50 - 150	
12.34			8358								
12.72			11389								
14.98			9618								
16.08			9829								
16.75			14633								
17.67	17.30	17.90	9857	1779	2,6-Dinitrotoluene	5.539643	11.07929	5.000000	92.3	50 - 150	
18.16	17.77	18.37	13242	3480	2,4-Dinitrotoluene	3.805391	7.610782	5.000000	95.1	50 - 150	
22.32			8564								
24.30			7415								
26.15			8666								

TAJ for KEH
11/13/09

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PLALCS

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-BS2

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	21	

FORM I PEST

Data File: /chem/a11002.i/h091016d.b/036h9102307-BS2.d

Page 1

Date : 29-OCT-2009 12:44

Client ID: PLALCS

Instrument: a11002.i

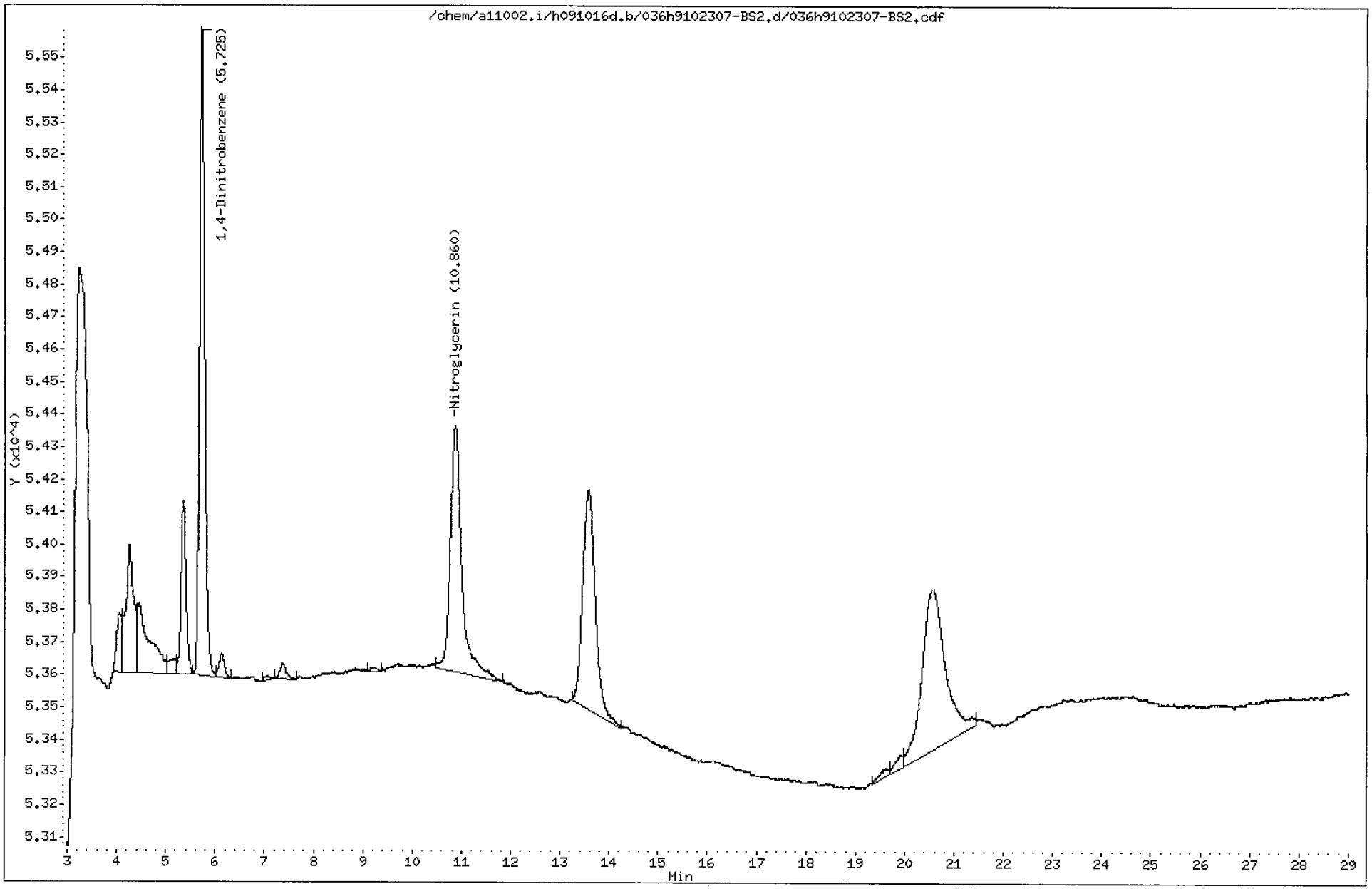
Sample Info: 9102307-BS2

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-BS2 Client Smp Id : PLALCS
Sample Type : LCS Sublist : nitro
Inj Date : 29-OCT-2009 12:44 Inst ID : A11002
Operator : 2646 Spike Sublist : NITRO
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : PLALCS

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.06			1284								
4.26			4296								
4.46			3876								
5.14			474								
5.36			3676								
5.72	5.20	6.20	14631	1506	1,4-Dinitrobenzene	9.712436	19.42487		97.1	50 - 150	
6.14			596								
7.02			115								
7.38			489								
9.21			127								
10.86	10.32	11.32	12253	1168	Nitroglycerin	10.48601	20.97202	16.00000	104.9	50 - 150	
13.57			11957								
19.64			367								
19.93			494								
20.56			16298								



1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

PMOLCS

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9103004-BS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: _____

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/30/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 11/12/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	17	

FORM I PEST

Data File: /chem/a11002.i/h091016k.b/071h9111020-BS1.d

Date : 12-NOV-2009 10:04

Client ID: PMOLCS

Instrument: a11002.i

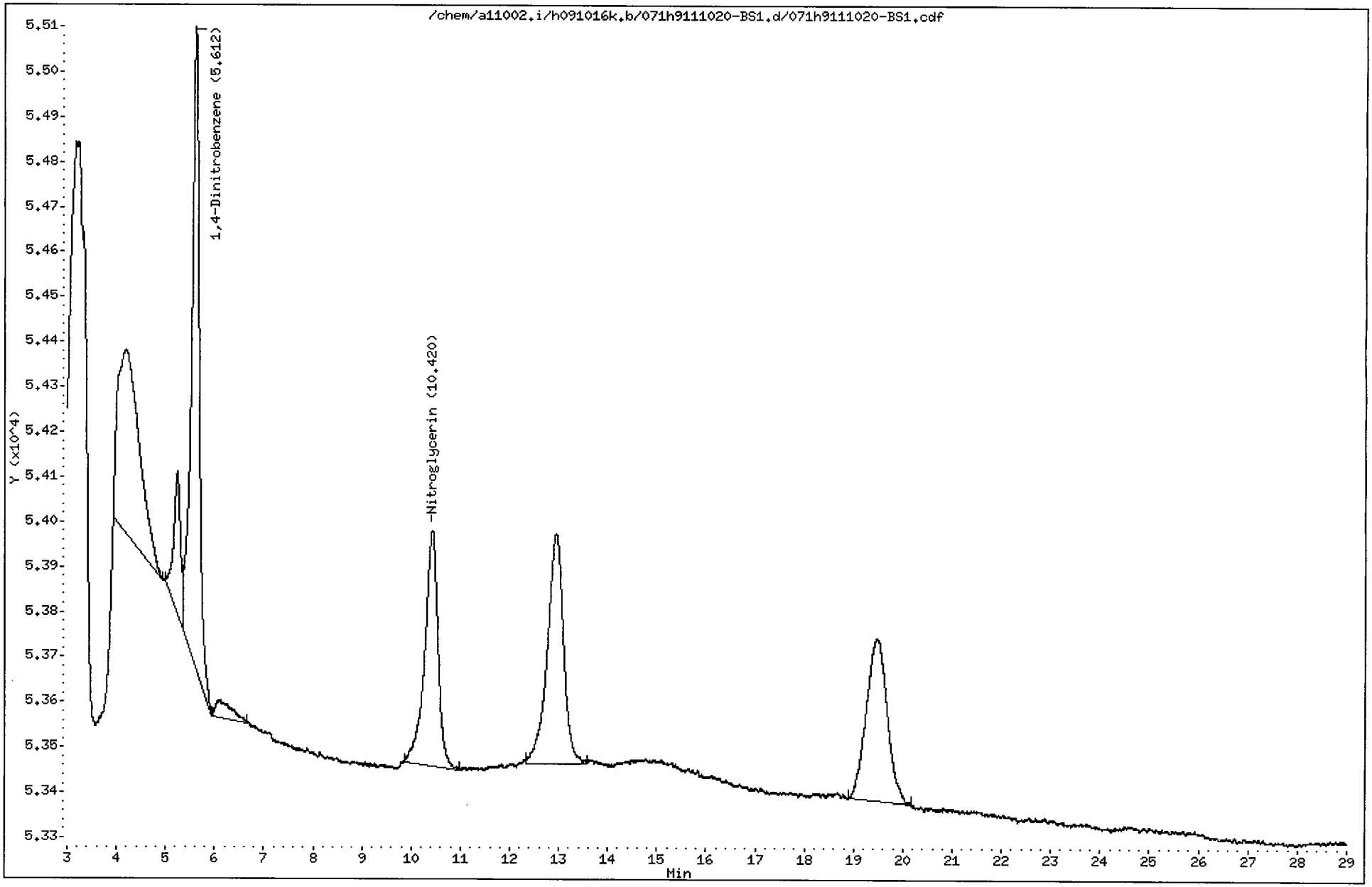
Sample Info: 9103004-BS1

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 9103004-BS1 Client Smp Id : PMOLCS
Sample Type : LCS Sublist : nitro
Inj Date : 12-NOV-2009 10:04 Inst ID : A11002
Operator : 2646 Spike Sublist : NITRO
Method : /chem/a11002.i/h091016k.b/8332TPconf_10uL_v2.m
Misc. Info : PMOLCS

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.20			12553								
5.24			2989								
5.61	5.20	6.20	15773	1506	1,4-Dinitrobenzene	10.47094	20.94189		104.7	50 - 150	
6.10			920								
10.42	10.32	11.32	9880	1168	Nitroglycerin	8.455646	16.91129	16.00000	84.6	50 - 150	
12.94			11750								
19.48			10745								

TAJ for KEH 11/13/09

c. Matrix Spike Data

- Tabulated Results (Form I)

- Chromatograms and data system printout(s)

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MS

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MS1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.7	
99-65-0	1,3-Dinitrobenzene	7.4	
606-20-2	2,6-Dinitrotoluene	12	
121-14-2	2,4-Dinitrotoluene	8.0	

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MS

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MS2

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

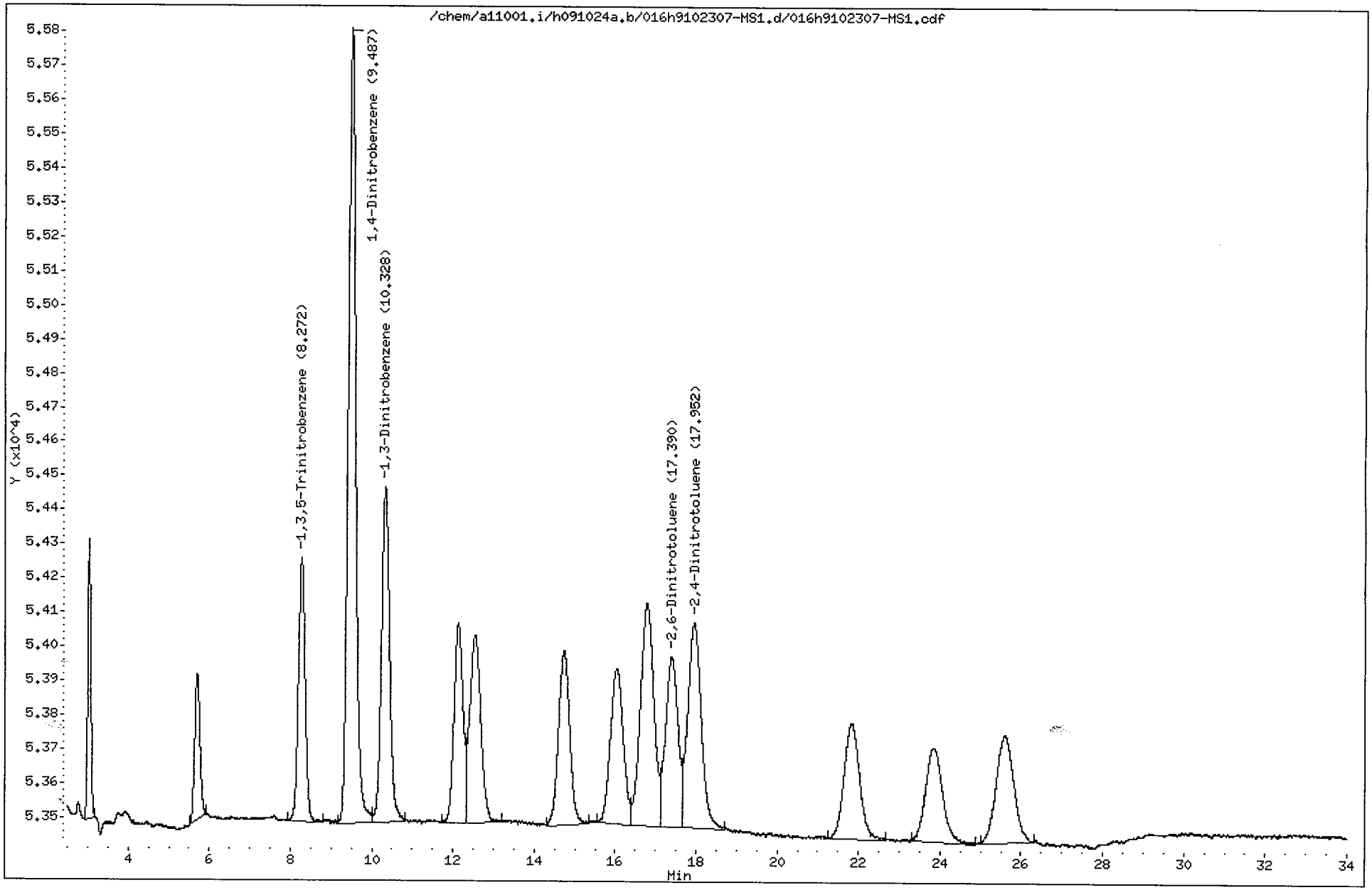
GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	18	

FORM I PEST

Data File: /chem/a11001.i/h091024a.b/016h9102307-MS1.d
Date : 24-OCT-2009 22:52
Client ID: 13MW5MS
Sample Info: 9102307-MS1
Volume Injected (uL): 10.0
Column phase: C18

Instrument: a11001.i
Operator: 2646
Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-MS1 Client Smp Id : 13MW5MS
Sample Type : MS Sublist : HWMU13
Inj Date : 24-OCT-2009 22:52 Inst ID : A11001
Operator : 2646 Spike Sublist : HWMU13
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : 13MW5MS

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			1522								
3.03			4324								
5.70			3784								
8.27	8.03	8.43	8909	2651	1,3,5-Trinitrobenzene	3.360051	6.720102	2.500000	84.0	50 - 150	
9.49	9.24	9.64	29827	3360	1,4-Dinitrobenzene	8.876706	17.75341		88.8	39 - 132	
10.33	10.08	10.48	13614	3668	1,3-Dinitrobenzene	3.710753	7.421505	2.500000	92.8	50 - 150	
12.13			9033								
12.55			10392								
14.72			9707								
16.05			10036								
16.78			14953								
17.39	17.02	17.62	10624	1779	2,6-Dinitrotoluene	5.971304	11.94261	5.000000	99.5	50 - 150	
17.95	17.56	18.16	14023	3480	2,4-Dinitrotoluene	4.029542	8.059084	5.000000	100.7	50 - 150	
21.83			9026								
23.82			8127								
25.59			9460								



Data File: /chem/a11002.i/h091016d.b/037h9102307-MS2.d

Date : 29-OCT-2009 13:15

Client ID: 13MW5MS

Instrument: a11002.i

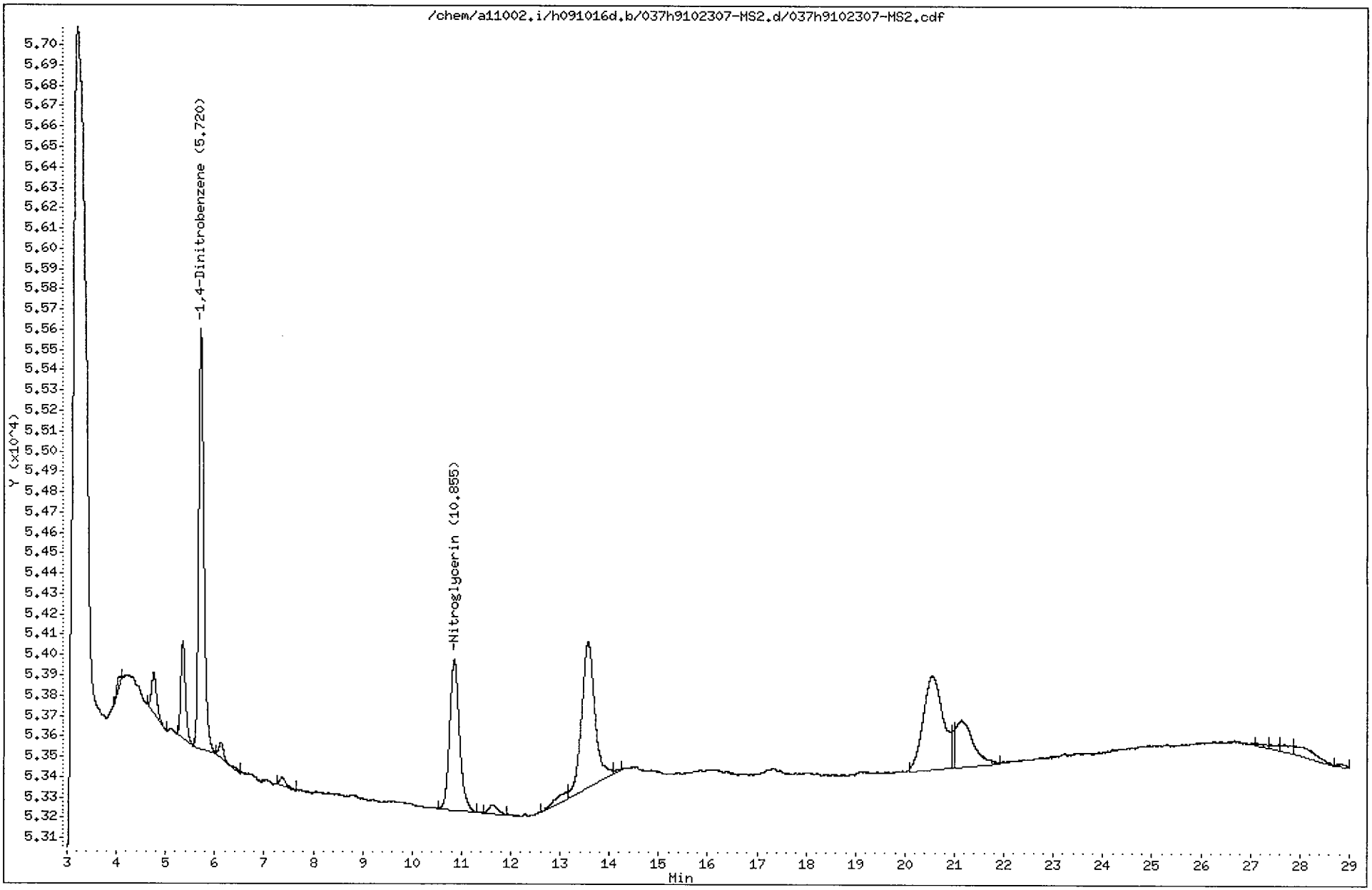
Sample Info: 9102307-MS2

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60

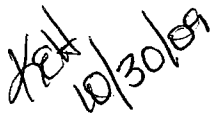


CompuChem

Lab Smp Id : 9102307-MS2 Client Smp Id : 13MW5MS
Sample Type : MS Sublist : nitro
Inj Date : 29-OCT-2009 13:15 Inst ID : A11002
Operator : 2646 Spike Sublist : NITRO
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW5MS

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.07			237								
4.76			1484								
5.35			3133								
5.72	5.20	6.20	15091	1506	1,4-Dinitrobenzene	10.01837	20.03674		100.2	50 - 150	
6.13			734								
7.36			382								
10.86	10.32	11.32	10359	1168	Nitroglycerin	8.864894	17.72979	16.00000	88.6	50 - 150	
11.64			624								
13.15			691								
13.57			13579								
14.18			109								
20.57			12859								
20.99			646								
21.14			5543								
27.14			186								
27.40			297								
27.68			568								
27.93			1413								
28.82			136								



d. Matrix Spike Duplicate Data

- Tabulated Results (Form I)

- Chromatograms and data system printout(s)

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MSD

Lab Name: COMPUCHEM Contract: 8330

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MSD1

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/24/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
99-35-4	1,3,5-Trinitrobenzene	6.9	
99-65-0	1,3-Dinitrobenzene	7.7	
606-20-2	2,6-Dinitrotoluene	12	
121-14-2	2,4-Dinitrotoluene	7.8	

FORM I PEST

1D

GC EXTRACTABLE ORGANICS ANALYSIS DATA SHEET

EPA SAMPLE NO.

13MW5MSD

Lab Name: COMPUCHEM Contract: 8332

Lab Code: LIBRTY Case No.: SAS No.: UNIT 13 SDG No.: 0910165

Matrix: (soil/water) WATER Lab Sample ID: 9102307-MSD2

Sample wt/vol: 500.0 (g/ml) ML Lab File ID: _____

% Moisture: _____ decanted: (Y/N)___ Date Received: 10/21/09

Extraction: (SepF/Cont/Sonc) SOLIDPHASE Date Extracted:10/23/09

Concentrated Extract Volume: 10000(ul) Date Analyzed: 10/29/09

Injection Volume: 10.0(uL) Dilution Factor: 1.0

GPC Cleanup: (Y/N) N pH: ___ Sulfur Cleanup: (Y/N) N

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) UG/L	Q
55-63-0	Nitroglycerin	18	

FORM I PEST

Data File: /chem/a11001.i/h091024a.b/017h9102307-MSD1.d

Date : 24-OCT-2009 23:28

Client ID: 13MW5MSD

Sample Info: 9102307-MSD1

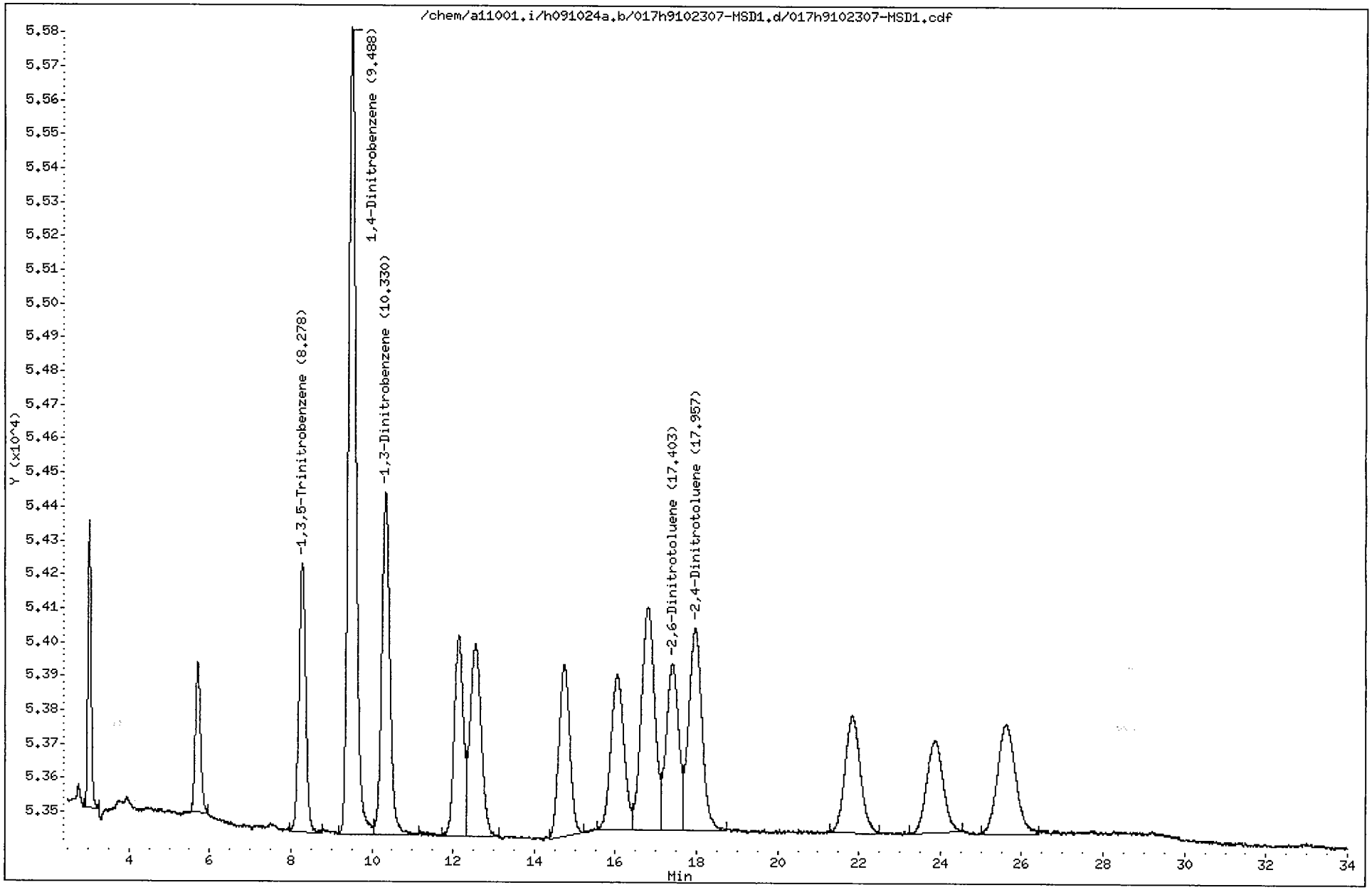
Volume Injected (uL): 10.0

Column phase: C18

Instrument: a11001.i

Operator: 2646

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-MSD1 Client Smp Id : 13MW5MSD
Sample Type : MSD Sublist : HWMU13
Inj Date : 24-OCT-2009 23:28 Inst ID : A11001
Operator : 2646 Spike Sublist : HWMU13
Method : /chem/a11001.i/h091024a.b/8330_10uL_v3split.m
Misc. Info : 13MW5MSD

Formula: Conc=(Area/RF) * DF * (Uf * Vt/(Vi * Vo))

DF Dilution Factor: 1.0 Uf GPC Unit Factor: 1
Vt Final Volume: 10000(ul) Vi Injection Volume: 10(ul)
Vo Sample Volume: 500.0(ml)

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
2.23			2026								
3.03			4601								
5.70			3953								
8.28	8.03	8.43	9202	2651	1,3,5-Trinitrobenzene	3.470179	6.940359	2.500000	86.8	50 - 150	
9.49	9.24	9.64	30509	3360	1,4-Dinitrobenzene	9.079681	18.15936		90.8	39 - 132	
10.33	10.08	10.48	14088	3668	1,3-Dinitrobenzene	3.840232	7.680465	2.500000	96.0	50 - 150	
12.14			9251								
12.55			10806								
14.73			9500								
16.05			10222								
16.80			15104								
17.40	17.02	17.62	10433	1779	2,6-Dinitrotoluene	5.863951	11.72790	5.000000	97.7	50 - 150	
17.96	17.56	18.16	13569	3480	2,4-Dinitrotoluene	3.899362	7.798724	5.000000	97.5	50 - 150	
21.83			9052								
23.87			7705								
25.61			9981								

KCH 10/26/09

Data File: /chem/a11002.i/h091016d.b/038h9102307-MSD2.d

Page 1

Date : 29-OCT-2009 13:46

Client ID: 13MW5MSD

Instrument: a11002.i

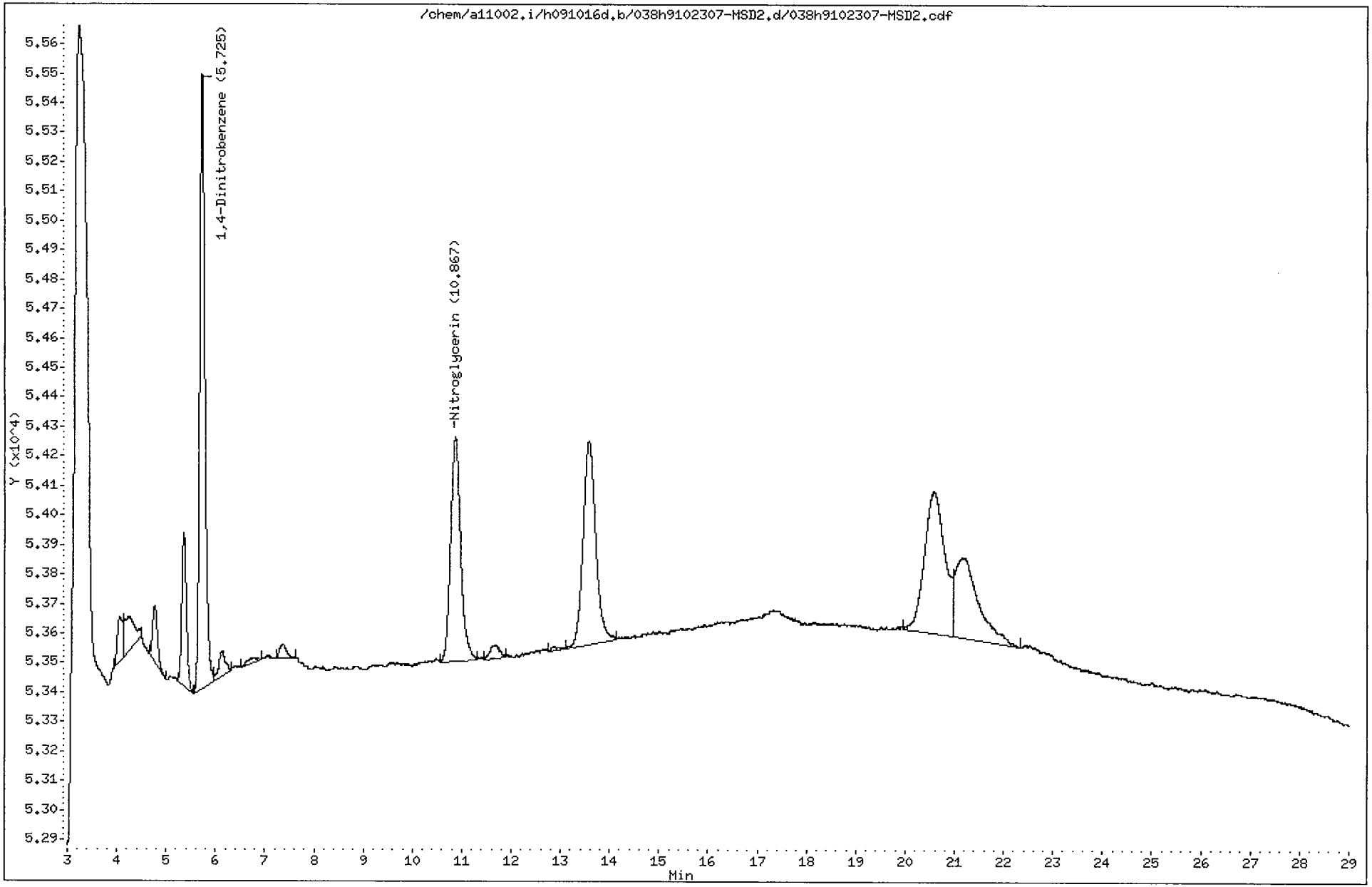
Sample Info: 9102307-MSD2

Volume Injected (uL): 10.0

Operator: 2646

Column phase: PINNACLE CYANO

Column diameter: 4.60



CompuChem

Lab Smp Id : 9102307-MSD2 Client Smp Id : 13MW5MSD
Sample Type : MSD Sublist : nitro
Inj Date : 29-OCT-2009 13:46 Inst ID : A11002
Operator : 2646 Spike Sublist : NITRO
Method : /chem/a11002.i/h091016d.b/8332TPconf_10uL_v2.m
Misc. Info : 13MW5MSD

Method Type: undefined

RT	RT WINDOW		AREA	QUANT RF	COMPOUND	CONCENTRATIONS ON-COLUMN (Ng)	CONCENTRATIONS FINAL (ug/L)	ADJUSTED PQL (ug/L)	% REC	RECOVERY LIMITS	FLAGS
4.06			1091								
4.25			1752								
4.77			1333								
5.36			3348								
5.72	5.20	6.20	15195	1506	1,4-Dinitrobenzene	10.08711	20.17422		100.9	50 - 150	
6.14			803								
6.79			262								
7.38			472								
10.87	10.32	11.32	10612	1168	Nitroglycerin	9.081542	18.16308	16.00000	90.8	50 - 150	
11.69			605								
12.85			135								
13.58			12241								
20.59			14009								
21.14			9172								

10/30/09

10/19/04

B03204-07
DAS/TQE

General Notes

Weather - Sunny, 50's
PPE - Eye Protection, Nitrile gloves, Cotton suits, Hard Hats
Calibrations - YSI 650 MDS
pH - 4.00 = 4.00, 7.00 = 7.00, 10.00 = 9.98
Conductivity reads 1413 us in 1413 us std
DO % = 100

- Dedicated tubing and well skirts used at each well
- All equipment deconed between each well
- Purge water disposed of at dedicated location onsite
- All samples collected, stored and transported in coolers on ice

Static Water Level Table - Unit 13

WELL	DTW	Post Purge DTW	Notes
13MW1	21.57	21.73	
13MW2	21.72	22.88	
13MW3	13.39	~~13.41~~ 10/19/04 13.41	
13MW4	16.83	16.90 DS	
13MW5	17.07	17.14	
13MW6	16.73	16.80	
13MW7	16.23	16.34	

13MW3

DTW - 13.39
Post Purge DTW - 13.41
Begin Purge (0707)
Initial Purge - Clear

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(mV)	Purge K	Desc	DTW
(0710)	14.08	536	6.79	6.69	242.0	0.3 gal/min	Clear	13.42
(0715)	13.72	556	5.86	6.80	240.3	"	Clear	13.42
(0720)	13.65	566	5.52	6.83	239.7	"	Clear	13.41
(0725)	13.54	567	5.33	6.82	237.0	"	Clear	13.41
(0730)	13.67	566	5.24	6.82	236.3	"	Clear	13.41
(0735)	13.75	563	5.23	6.83	234.1	"	Clear	
(0735)	Readings Stable			6.79	228.6		Post Purge Reading	
(0750)	14.11	548	5.25	(144)				

B03204-07
DAS/TQE

13MW3 (cont)

Sample Time (0740)
Samples Collected: (3) 8260, (1) 3140, (2) 8270, (1) TM, (3) 8332-8330

13MW5

DTW - 17.07
Post Purge DTW - 17.14
Begin Purge (0814)
Initial Purge - Clear

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(mV)	Purge K	Desc	DTW
(0815)	13.46	613	5.34	6.93	212.5	0.3 gal/min	Clear	17.10
(0820)	13.56	634	4.12	6.98	206.8	"	Clear	17.10
(0825)	13.61	640	4.04	6.91	204.7	"	Clear	17.09
(0830)	13.69	637	4.29	6.88	204.2	"	Clear	17.09
(0835)	13.70	628	4.44	6.85	203.6	"	Clear	17.09
(0840)	13.63	625	4.51	6.84	201.4	"	Clear	17.10
(0845)	13.53	620	4.60	6.84	201.8	"	Clear	
(0845)	Readings Stable							
(0930)	13.78	605	4.71	6.84	194.4		Post Purge Reading	

Sample Time (0850)
Samples Collected: (9) 8260, (3) 3140, (6) 8270, (3) TM, (9) 8332/8330

13MW6

DTW - 16.73
Post Purge DTW - 16.80
Begin Purge (0953)
Initial Purge - Clear

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(mV)	Purge K	Desc	DTW
(0955)	13.21	742	3.54	6.92	188.5	0.3 gal/min	Clear	16.80
(1000)	13.12	752	3.01	6.92	185.4	"	Clear	16.80
(1005)	13.24	769	2.66	6.92	182.0	"	Clear	16.80
(1010)	13.33	775	2.62	6.92	180.6	"	Clear	16.79
(1015)	13.19	777	2.53	6.92	179.4	"	Clear	16.79
(1020)	13.22	777	2.47	6.92	178.6	"	Clear	16.79
(1025)	13.17	777	2.43	6.92	177.4	"	Clear	16.79
(1025)	Readings Stable							
(1042)	13.41	777	2.45	6.90	(145) 174.3		Post Purge Reading	

13MW6 (cont.)

Sample Time (1030)
Samples Collected: (3)8260, (2)8270, (1)TM, (1)314.0, (3)8332/8330

13MW7

DTW - 16.23 Begin Purge (1052)
Post Purge DTW - 16.34 Initial Purge - Clear ✓

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(MV)	Purge K	Desc	DTW
(1055)	14.14	532	4.89	6.90	182.5	0.3 l/min	Clear	16.33
(1100)	14.19	601	2.72	6.84	174.9	"	Clear	16.33
(1105)	14.28	648	1.50	6.83	169.1	"	Clear	
(1110)	14.47	667	1.25	6.83	165.4	"	Clear	16.33
(1115)	14.69	675	1.21	6.83	162.6	"	Clear	16.33
(1120)	14.83	673	1.14	6.81	160.5	"	Clear	
(1125)	14.94	671	1.17	6.79	159.3	"	Clear	
(1125)	Readings Stable							
(1140)	14.62	668	1.23	6.77	157.4		Post Purge Reading	

Sample Time (1130)
Samples Collected: (3)8260, (2)8270, (1)TM, (1)314.0, (3)8332/8330

Static Water Level Table - Unit 7

WELL	DTW	Post Purge DTW	Notes
7W12B	24.84	24.86	
7W9C	14.52	16.77	
7W10B	15.57	16.00	
7W10C	21.59	22.86	✓
7W13	19.28	21.05	
7MW6	26.41	31.55	
7W11B	25.15	25.18	
7WCA	24.71	25.63	
7W9B	~~24.60~~ 22.68		SWL ONLY
7W11	24.42		"
7MW5	24.95		"

7W12B

DTW - 24.84 Begin Purge (1227)
Post Purge DTW - 24.86 Initial Purge -

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(MV)	Purge K	Desc	DTW
(1228)	14.26	616	8.21	7.08	168.4	0.3 l/min	Clear	24.8
(1230)	14.31	616	7.96	7.06	168.9	"	Clear	
(1235)	14.27	616	7.76	7.03	167.8	"	Clear	
(1240)	14.33	617	7.70	7.02	167.7	"	Clear	
(1245)	14.41	616	7.64	7.00	166.5	"	Clear	24.84
(1250)	14.46	616	7.63	7.00	166.1	"	Clear	
(1255)	14.50	616	7.65	7.00	165.8	"	Clear	
(1255)	Readings Stable							
(1316)	14.65	619	7.70	7.01	161.7		Post Purge Reading	

Sample Time (1300)
Samples Collected: (2)8270, (1)TM, (1)CN

7W9C

DTW - 14.52 Begin Purge (1334)
Post Purge DTW - 16.77 Initial Purge - Clear

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(MV)	Purge K	Desc	DTW
(1335)	13.41	1073	2.61	6.85	60.7	0.3 l/min	Clear	15.61
(1340)	13.38	1077	2.05	6.78	71.8	"	Clear	15.72
(1345)	13.70	1085	1.58	6.77	83.7	"	Clear	15.81
(1350)	13.80	1091	1.50	6.77	90.0	"	Clear	15.90
(1355)	14.03	1096	1.36	6.76	93.2	"	Clear	16.02
(1400)	14.29	1098	1.27	6.76	91.6	"	Clear	16.07
(1405)	14.42	1102	1.24	6.75	90.1	"	Clear	16.14
(1405)	Readings Stable							
(1423)	14.63	1102	1.30	6.69	90.5		Post Purge Reading	

Sample Time (1410)
Samples Collected: (2)8270, (1)TM, (1)CN

7W10B

DTW - 15.57 Begin Purge (1438)
Post Purge DTW - 16.00 Initial Purge - Clear

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(MV)	Purge K	Desc	DTW
(1440)	13.53	832	3.55	6.82	122.7	0.34 min	Clear	16.18
(1445)	13.44	828	2.84	6.75	128.0	"	Clear	15.98
(1450)	13.31	815	2.40	6.74	128.3	"	Clear	15.98
(1455)	13.37	813	2.22	6.76	126.5	"	Clear	15.93
(1500)	13.29	811	2.09	6.77	125.9	"	Clear	15.87 ✓
(1505)	13.44	808	1.96	6.77	125.0	"	Clear	15.87
(1510)	13.57	806	1.95	6.77	124.6	"	Clear	15.85
(1510)	Readings Stable							
(1528)	13.78	797	1.88	6.80	125.8	Post Purge Reading		

Sample Time (1515)
Samples Collected: (2)8270, (1)TM, (1)CN

7W10C

DTW - 21.59 Begin Purge (1546)
Post Purge DTW - 22.86 Initial Purge - Clear

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(MV)	Purge K	Desc	DTW
(1541)	13.25	719	2.35	7.16	-52.0	0.34 min	Clear	21.85
(1545)	13.22	719	1.60	7.07	-27.1	"	Clear	22.03 ✓
(1550)	13.19	720	1.17	7.05	-4.8	"	Clear	22.19
(1555)	13.11	721	1.04	7.05	5.7	"	Clear	22.26
(1600)	13.00	721	0.90	7.04	24.8	"	Clear	22.53
(1610)	12.89	720	0.84	7.04	23.2	"	Clear	22.61
(1615)	12.83	720	0.80	7.04	26.0	"	Clear	22.70
(1615)	Readings Stable							
(1634)	12.58	717	0.79	7.06	32.3	Post Purge Reading		

Sample Time (1620)
Samples Collected: (3)8270, (1)TM, (1)CN

General Notes

Weather - Sunny, 60s
PPE - Eye Protection, Nitrile gloves, Cotton suits
Calibrations - YSI 650 MDS
pH - 4.00 = 4.00, 7.00 = 7.00, 10.00 = 10.00
Conductivity reads 1413 us in 1413 us std
DO% = 100

- Dedicated tubing and well skirts used at each well
- All equipment deconed between each well
- Purge water disposed of at dedicated location onsite
- All samples collected, stored and transported on ice in coolers

13MW4

DTW - 16.83 Begin Purge (0727) ✓
Post Purge DTW - 16.90 Initial Purge -

Time	Temp(C)	Cond(us)	DO mg/L	pH	ORP(MV)	Purge K	Desc	DT
(0730)	13.36	477	5.51	6.47	228.4	0.34 min	Clear	16.
(0735)	13.14	525	2.94	7.03	200.6	"	Clear	
(0740)	13.40	545	2.36	7.10	194.8	"	Clear	16.
(0745)	13.70	564	2.20	7.14	188.2	"	Clear	
(0750)	13.84	569	2.19	7.14	182.9	"	Clear	16.8
(0755)	13.93	571	2.10	7.13	178.3	"	Clear	
(0800)	13.98	570	2.07	7.12	176.5	"	Clear	
(0800)	Readings Stable							
(0839)	14.10	520	3.15	6.71	170.6	Post Purge Reading		

Sample Time (0805)
Samples Collected: (3)8260, (2)8270, (1)TM, (1)314.0, (3)8332/833

13WDUP

Sample Time (0820)
Samples Collected: (3)8260, (2)8270, (1)TM, (1)314.0, (3)8332/8330
* Dup samples collected at 13MW4

13MW2

DTW - 21.76 Begin Purge (0853)

Post Purge DTW - 2288 Initial Purge - Clear

Time	Temp(C°)	Cond(us)	DO mg/L	pH	ORP(mv)	PurgeK	Desc	DTW
(0855)	12.98	663	5.67	6.85	170.3	0.3 L/min	Clear	22.10
(0900)	13.01	667	4.30	6.85	165.8	"	Clear	22.28
(0905)	13.01	669	3.50	6.86	161.5	"	Clear	22.38 ✓
(0910)	12.87	671	3.29	6.86	159.8	"	Clear	22.50
(0915)	12.63	672	3.16	6.86	157.2	"	Clear	22.59
(0920)	12.49	671	3.13	6.86	156.7	"	Clear	22.61
(0925)	12.25	672	3.12	6.86	155.3	"	Clear	22.64
(0925)	Readings Stable							
(0946)	12.31	665	3.22	6.85	151.5	Post Purge Reading		

Sample Time (0930)

Samples Collected: (3)8260, (2)8270, (1)TM, (1)314.0, (3)8332/8330

13MW1

DTW - 21.58 Begin Purge (0959) ✓

Post Purge DTW - 21.73 Initial Purge - Clear

Time	Temp(C°)	Cond(us)	DO mg/L	pH	ORP(mv)	PurgeK	Desc	DTW
(1000)	12.56	593	6.90	6.82	157.9	0.3 L/min	Clear	21.71
(1005)	12.56	645	5.41	6.80	152.2	"	Clear	21.70
(1010)	12.74	667	4.67	6.80	147.0	"	Clear	21.66
(1015)	12.79	690	4.34	6.81	143.1	"	Clear	21.66
(1020)	12.90	706	4.20	6.81	139.8	"	Clear	
(1025)	13.06	714	4.09	6.81	137.2	"	Clear	21.64
(1030)	13.18	719	3.99	6.81	135.6	"	Clear	
(1035)	13.27	722	3.90	6.81	132.6	"	Clear	
(1035)	Readings Stable							
(1057)	13.51	725	3.64	6.83	131.2	Post Purge Reading		

Sample Time (1040)

Samples Collected: (3)8260, (2)8270, (1)TM, (1)314.0, (3)8332/8330

7W13

DTW - 19.28 Begin Purge (1123)

Post Purge DTW - 21.05 Initial Purge - Clear

Time	Temp(C°)	Cond(us)	DO mg/L	pH	ORP(mv)	PurgeK	Desc	DTW
(1125)	13.89	1383	4.39	7.28	-6.6	0.3 L/min	Clear	20.6
(1130)	13.84	1398	2.01	7.23	-41.8	"	Clear	20.8
(1135)	13.99	1398	1.62	7.21	-42.4	"	Clear	21.0
(1140)	14.23	1399	1.61	7.20	-36.0	"	Clear	21.1
(1145)	14.59	1398	1.62	7.20	-31.7	"	Clear	21.0
(1150)	14.80	1398	1.65	7.21	-28.9	"	Clear	20.9
(1155)	14.93	1397	1.64	7.21	-30.0	"	Clear	20.8
(1155)	Readings Stable							
(1213)	14.64	1393	1.83	7.2	-19.7	Post Purge Reading		

Sample Time (1200)

Samples Collected: (2)8270, (1)TM, (1)CN

7MW6

DTW - 26.41 Begin Purge (1231)

Post Purge DTW - 31.55 Initial Purge - Clear

Time	Temp(C°)	Cond(us)	DO mg/L	pH	ORP(mv)	PurgeK	Desc	DTW
(1235)	14.43	1679	1.70	7.30	-23.2	0.3 L/min	Clear	28.76
(1240)	14.75	1715	1.23	7.15	-44.7	"	Clear	29.66
(1245)	15.10	1731	1.05	7.09	-55.1	"	Clear	29.66
(1250)	15.15	1732	0.95	7.08	-60.7	"	Clear	29.89
(1255)	15.34	1716	0.94	7.07	-64.8	"	Clear	30.10
(1300)	15.64	1700	0.95	7.08	-65.7	"	Clear	30.45
(1305)	15.76	1688	0.95	7.10	-64.2	"	Clear	30.77
(1305)	Readings Stable							
(1324)	15.43	1656	0.98	7.07	-61.7	Post Purge Reading		

Sample Time (1310)

Samples Collected: (2)8270, (1)TM, (1)CN