ALS Paragon

GC/MS Volatiles

Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200205808

Work Order Number: 0903060

1. This report consists of 2 water samples. The samples were received cool and intact by ALS Paragon on 03/10/09. All aqueous samples were free of headspace prior to analysis.

2. These samples were prepared according to SW-846, 3rd Edition procedures. Specifically, the water samples were prepared by purging 10 mL using purge and trap procedures based on Method 5030C.

3. The samples were analyzed using GC/MS with an RTX-624, RTX-VMS, or equivalent capillary column according to SOP 525 Revision 12 based on SW-846 Method 8260B. All positive results were quantitated against the initial calibration standards using the internal standard technique. The identification of positive results was achieved by a comparison of the retention time and mass spectrum of the sample versus the daily calibration standard.

4. All initial calibration criteria for SPCC's and CCC's were met. If average response factors were used in the initial calibration, %RSD was ≤15%. If linear or higher order regression calibrations were used in the initial calibration, the coefficient of determination (r^2) ≥0.99.

5. All initial calibrations are verified by comparing a second source standard calibration verification (ICV) against the calibration curve. All target compounds in the second source verification had a %D of less than 25%.

6. All criteria for SPCC's and CCC's were met in daily (continuing) calibration verifications (CCV).

7. Methylene chloride, acetone and 2-butanone are common laboratory contaminants. In order to minimize the levels of these compounds detected in the gc/ms analysis, ALS Paragon has designated its volatile laboratory as a restricted access area. In addition, the laboratory has been equipped with a dedicated, air intake and exhaust system that operates under positive pressure in order to minimize cross contamination of these compounds. Due to fluctuations in ambient laboratory conditions, reported sample values for common laboratory contaminants may be due to lab contamination even if the compound in question is not detected in the associated method blank.

   All method blank criteria were met.

8. All laboratory control sample and laboratory control sample duplicate recoveries and RPDs were within the acceptance criteria.

9. Since a sample from this order number was not the selected quality control (QC) sample, matrix specific QC results are not included in this report.

10. The samples were analyzed within the established holding time.

11. All surrogate recoveries were within acceptance criteria.

12. All internal standard recoveries were within acceptance criteria.

13. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in SOP 939 Revision 3.

The data contained in the following report have been reviewed and approved by the personnel listed below. In addition, ALS Paragon certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.

SLJ — 3-24-09

Sharon L. Jobes
Organics Primary Data Reviewer — Date

Stan D. White — 3-24-09

Organics Final Data Reviewer — Date

ALS Paragon
Data Qualifier Flags
Chromatography and Mass Spectrometry

U or ND:	**This flag indicates that the compound was analyzed for but not detected.**
J:	**This flag indicates an estimated value. This flag is used as follows : (1) when estimating a concentration for tentatively identified compounds (TICs) where a 1:1 response is assumed; (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 reporting limit (RL) but greater than the method detection limit (MDL); (3) when the retention time data indicate the presence of a compound that meets the GC identification criteria, and the result is less than the RL but greater than the MDL; and (4) the reported value is estimated.**
B:	**This flag is used when the analyte is detected in the associated method blank as well as in the sample. It indicates probable blank contamination and warns the data user. This flag shall be used for a tentatively identified compound (TIC) as well as for a positively identified target compound.**
E:	**This flag identifies compounds whose concentration exceeds the upper level of the calibration range.**
A:	**This flag indicates that a tentatively identified compound is a suspected aldol-condensation product.**
X:	**This flag indicates that the analyte was diluted below an accurate quantitation level.**
***:**	**This flag indicates that a spike recovery is equal to or outside the control criteria used.**
+:	**This flag indicates that the relative percent difference (RPD) equals or exceeds the control criteria.**

ALS Paragon

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: Complaint 200205808
Client Project Number:
Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Angely WW 1	0903060-1		WATER	09-Mar-09	9:56
Angely WW 2	0903060-2		WATER	09-Mar-09	10:30
Trip Blank	0903060-3		WATER	09-Mar-09	

Paragon Analytics
LIMS Version: 6.252A

Date Printed: Monday, March 23, 2009

Paragon Analytics
A Division of DataChem Laboratories, Inc.

225 Commerce Drive Fort Collins, CO 80524
800-443-1511 or (970) 490-1511 (970) 490-1522 Fax

Accession Number (LAB ID) 0903060

Chain-of-Custody Date 9 March 09 Page 1 of 1

Originator: Retain pink copy!

Project Name/No.: _____ **Sampler(s):** _____ Turnaround (circle one) **Standard** or **Rush** (Due 14 days) Dispose: Date 30 days or **Return to Client**

Report To: Peter Gintautas
Phone: 719-846-3091
Fax:
E-mail: peter.gintautas@state.co.us
Company: Colo. Oil & Gas Cons. Comm.
Address:

Complaint 2002-04738

Circle method (right); provide additional information as needed (comments).

Sample ID	Date	Time *	Lab ID	Matrix	Preservative (indicate type... HCl, etc.)	No. of Containers	VOCs SW8260B	BTEX (only) SW8021B	SVOCs SW8270C	8C Pesticides SW8081A	PCBs SW8082	Herbicides SW8151A	Explosives SW8330	TCLP Organics SW1311 SW8260B 8270C 8081A 8151A	TCLP Metals SW1311 Hg SW6010B 7470	Total Metals by ICP Hg SW6010B 7470 7471 E200.7	Dissolved Metals by ICP Hg SW6010B 7470 E200.7	Total Metals by ICP/MS SW6020A E200.8	Dissolved Metals by ICP/MS SW6020A E200.8	Hexavalent Chromium SW7196A	Inorganic Anions SW9056 E300.0 (specify in comments)	Solids: Total E160.3 TDS E160.1 SS E160.2	pH SW9040B SW9045C	TPH SW8015B GRO DRO (circle one or both)	Gross Alpha / Beta SW9310 E900.0	Actinides by Paragon SOP Pu / U / Am / Th / Cm / __	Tritium E906.0	Total Alpha-Emitting Radium SW9315 E903.0	Radium 226 E903.1	Radium 228 E904.0	Strontium 90 (Total RadioSr) D5811-00	Gamma Isotopes E901.1	Radon 222 SM7510Rn	Anion Cation Balance	SAR calculation
Angely WW 1	9 March 09	09:56	1	W	none	5		X								X		X		X	X	X	X								X	X
					HCl	3	X																										
					H_2SO_4	1					X																							
					~~Nitric~~ Acid	1				X																								
Angely WW 2	9 March 09	10:30	2	W	none	2										X		X		X	X	X	X								X	X
Trip Blank			3																													

* **Time Zone:** EST CST MST PST **Matrix Key:** O = oil, S = soil, NS = non-soil solid, W = water, L = liquid, E = extract, F = filter

Comments:
Filter + preserve metals upon receipt
Anions = Br, Cl, F, NO_2, NO_3, SO_4
200.7 = Ba, Be, B, Ca, Cr, Cu, Fe, Li, Mg, Mn, Ni, K, Na, Zn, Sr
200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Tl, U

Form 202r6.xls (6/16/06)

Relinquished By: (1)	Relinquished By: (2)
Signature	Signature
Printed Name Peter Gintautas	Printed Name
Date 9 March 09 Time 16:30	Date Time
Company COGCC	Company

Received By: (1)	Received By: (2)
Signature	Signature
Printed Name	Printed Name
Date 3-10-09 Time 1010	Date Time
Company ACS	Company

CONDITION OF SAMPLE UPON RECEIPT FORM **Paragon Analytics**

Client: COC G Workorder No: 0903060

Project Manager: AW Initials: CM Date: 3-10-09

1. Does this project require any **special handling** in addition to standard Paragon procedures?		YES	(NO)
2. Are custody **seals** on **shipping containers** intact?	NONE	(YES)	NO
3. Are Custody seals on **sample containers** intact?	(NONE)	YES	NO
4. Is there a **COC (Chain-of-Custody) present** or other representative documents?		(YES)	NO
5. Are the **COC and bottle labels complete and legible**?		(YES)	NO
6. Is the **COC in agreement** with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		(YES)	NO
7. Were **airbills / shipping documents** present and/or removable?	DROP OFF	(YES)	NO
8. Are all aqueous **samples requiring preservation preserved correctly?** (excluding volatiles)	N/A	(YES)	NO
9. Are all aqueous **non-preserved samples pH 4-9**?	N/A	(YES)	NO
10. Is there **sufficient sample** for the requested analyses?		(YES)	NO
11. Were all samples placed in the **proper containers** for the requested analyses?		(YES)	NO
12. Are all samples within **holding times** for the requested analyses?		(YES)	NO
13. Were all sample containers received **intact**? (not broken or leaking, etc.)		(YES)	NO
14. Are all samples requiring **no** headspace (**VOC, GRO, RSK/MEE, Rx CN/S, radon**) headspace free? **Size of bubble:** ____ < green pea ✓ > green pea	(N/A)	YES	(NO)
15. Do perchlorate LCMS-MS samples **have** headspace? (at least 1/3 of container required)	(N/A)	YES	NO
16. Were samples checked for and free from the presence of **residual chlorine?** (Applicable when PM has indicated samples are from a chlorinated water source; note if field preservation with sodium thiosulfate was not observed.)	(N/A)	YES	NO
17. Were the samples **shipped on ice**?		(YES)	NO
18. Were cooler temperatures measured at 0.1-6.0°C? **IR gun used*:** (#2) #4	RAD ONLY	(YES)	NO

Cooler #:	1
Temperature (°C):	2.8
No. of custody seals on cooler:	1
DOT Survey/ Acceptance Information — External µR/hr reading:	12
DOT Survey/ Acceptance Information — Background µR/hr reading:	11

Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? **YES / NO / NA** (If no, see Form 008.)

Additional Information: PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

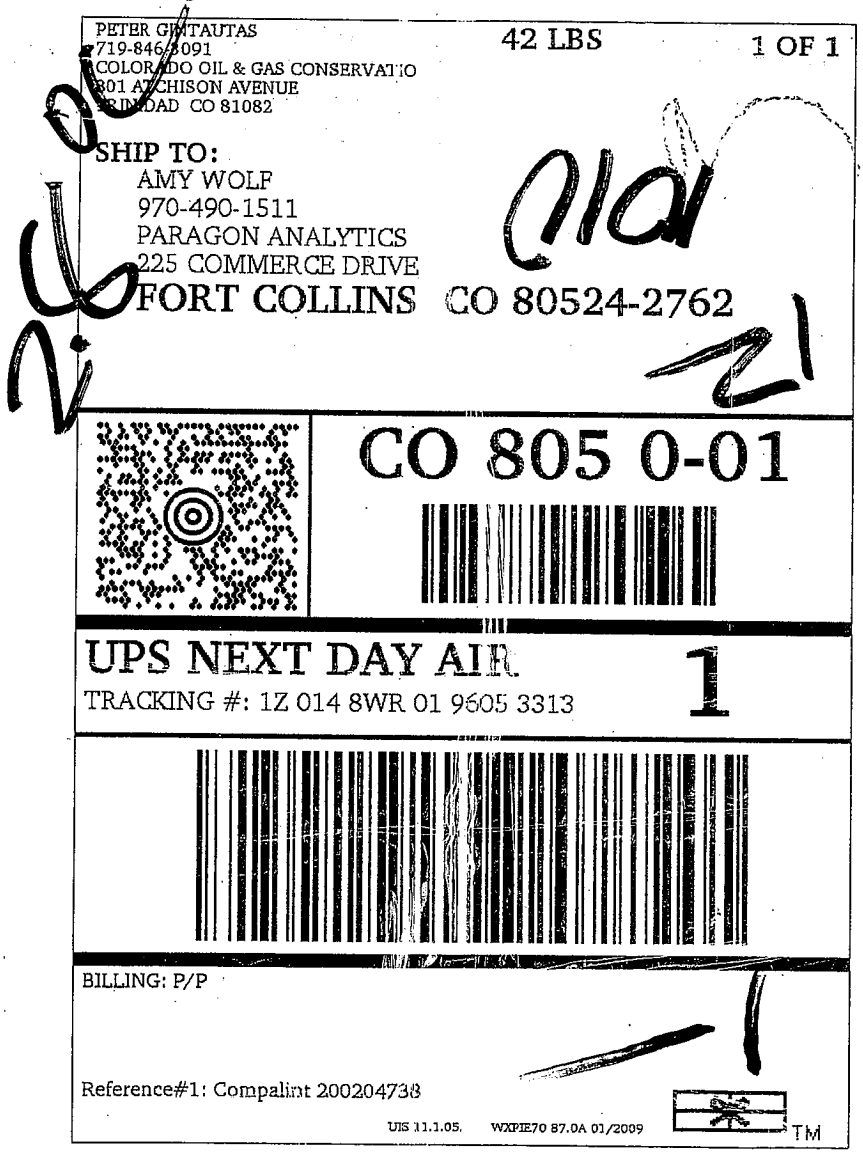
3 voa vials for VL = Headspace <green pea #4 #5 #6

3 vails for methane - #7 #8 #9 #7 huge Bubble809 Small bubbles

If applicable, was the client contacted? (YES) / NO / NA Contact: Peter Gintautas Date/Time: 3/10/09 e-mail

Project Manager Signature / Date: 3/10/09

*IR Gun #2: Oakton, SN 29922500201-0066 *IR Gun #4: Oakton, SN 2372220101-0002



PETER GINTAUTAS
719-846-3091
COLORADO OIL & GAS CONSERVATIO
201 ATCHISON AVENUE
TRINIDAD CO 81082

42 LBS

1 OF 1

SHIP TO:
AMY WOLF
970-490-1511
PARAGON ANALYTICS
225 COMMERCE DRIVE
FORT COLLINS CO 80524-2762

CO 805 0-01

UPS NEXT DAY AIR

TRACKING #: 1Z 014 8WR 01 9605 3313

1

BILLING: P/P

Reference#1: Compalint 200204738

UIS 11.1.05. WXPIE70 87.0A 01/2009

TM

FOLD HERE

GC/MS Volatiles

Method SW8260_25B

Method Blank

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13745

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROET	1	1	1	U	
67-64-1	ACETONE	1	10	10	U	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	1	1	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Method Blank

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13745

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Method Blank

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13745

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	27.1		25	108	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	24.9		25	100	80 - 124
2037-26-5	TOLUENE-D8	24		25	96	81 - 119

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25

Tentatively Identified Compounds

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID:
Lab ID: VL090310-3MB

Sample Matrix: WATER
%Moisture: N/A
Date Collected: N/A
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Clean DF: 1
File Name: C13745

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
		NONE DETECTED	1			U

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID: Angely WW 1
Lab ID: 0903060-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received
File Name: C13753

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1	1	1	U	
67-64-1	ACETONE	1	10	10	U	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	1	1	U	
75-09-2	METHYLENE CHLORIDE	1	1	1	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID: Angely WW 1
Lab ID: 0903060-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received
File Name: C13753

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID: Angely WW 1
Lab ID: 0903060-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received
File Name: C13753

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	25.8		25	103	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	25.4		25	101	80 - 124
2037-26-5	TOLUENE-D8	22.9		25	92	81 - 119

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25

Tentatively Identified Compounds

Lab Name: ALS Paragon

Work Order Number: 0903060

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200205808

Field ID: Angely WW 1
Lab ID: 0903060-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Clean DF: 1
File Name: C13753

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
		NONE DETECTED	1			U

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID: Trip Blank
Lab ID: 0903060-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received
File Name: C13752

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
75-71-8	DICHLORODIFLUOROMETHANE	1	1	1	U	
74-87-3	CHLOROMETHANE	1	1	1	U	
75-01-4	VINYL CHLORIDE	1	1	1	U	
74-83-9	BROMOMETHANE	1	1	1	U	
75-00-3	CHLOROETHANE	1	1	1	U	
75-69-4	TRICHLOROFLUOROMETHANE	1	1	1	U	
75-35-4	1,1-DICHLOROETHENE	1	1	1	U	
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHANE	1	1	1	U	
67-64-1	ACETONE	1	10	10	U	
74-88-4	IODOMETHANE	1	1	1	U	
75-15-0	CARBON DISULFIDE	1	0.2	1	J	
75-09-2	METHYLENE CHLORIDE	1	1	1	U	
156-60-5	TRANS-1,2-DICHLOROETHENE	1	1	1	U	
1634-04-4	METHYL TERTIARY BUTYL ETHER	1	1	1	U	
75-34-3	1,1-DICHLOROETHANE	1	1	1	U	
108-05-4	VINYL ACETATE	1	2	2	U	
156-59-2	CIS-1,2-DICHLOROETHENE	1	1	1	U	
78-93-3	2-BUTANONE	1	10	10	U	
74-97-5	BROMOCHLOROMETHANE	1	1	1	U	
67-66-3	CHLOROFORM	1	1	1	U	
71-55-6	1,1,1-TRICHLOROETHANE	1	1	1	U	
594-20-7	2,2-DICHLOROPROPANE	1	1	1	U	
56-23-5	CARBON TETRACHLORIDE	1	1	1	U	
563-58-6	1,1-DICHLOROPROPENE	1	1	1	U	
107-06-2	1,2-DICHLOROETHANE	1	1	1	U	
71-43-2	BENZENE	1	1	1	U	
79-01-6	TRICHLOROETHENE	1	1	1	U	

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID: Trip Blank
Lab ID: 0903060-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received
File Name: C13752

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

78-87-5	1,2-DICHLOROPROPANE	1	1	1	U	
74-95-3	DIBROMOMETHANE	1	1	1	U	
75-27-4	BROMODICHLOROMETHANE	1	1	1	U	
10061-01-5	CIS-1,3-DICHLOROPROPENE	1	1	1	U	
108-10-1	4-METHYL-2-PENTANONE	1	10	10	U	
108-88-3	TOLUENE	1	1	1	U	
10061-02-6	TRANS-1,3-DICHLOROPROPENE	1	1	1	U	
79-00-5	1,1,2-TRICHLOROETHANE	1	1	1	U	
591-78-6	2-HEXANONE	1	10	10	U	
127-18-4	TETRACHLOROETHENE	1	1	1	U	
142-28-9	1,3-DICHLOROPROPANE	1	1	1	U	
124-48-1	DIBROMOCHLOROMETHANE	1	1	1	U	
106-93-4	1,2-DIBROMOETHANE	1	1	1	U	
544-10-5	1-CHLOROHEXANE	1	1	1	U	
108-90-7	CHLOROBENZENE	1	1	1	U	
630-20-6	1,1,1,2-TETRACHLOROETHANE	1	1	1	U	
100-41-4	ETHYLBENZENE	1	1	1	U	
136777-61-2	M+P-XYLENE	1	1	1	U	
95-47-6	O-XYLENE	1	1	1	U	
100-42-5	STYRENE	1	1	1	U	
75-25-2	BROMOFORM	1	1	1	U	
98-82-8	ISOPROPYLBENZENE	1	1	1	U	
96-18-4	1,2,3-TRICHLOROPROPANE	1	1	1	U	
79-34-5	1,1,2,2-TETRACHLOROETHANE	1	1	1	U	
108-86-1	BROMOBENZENE	1	1	1	U	
103-65-1	N-PROPYLBENZENE	1	1	1	U	
95-49-8	2-CHLOROTOLUENE	1	1	1	U	
108-67-8	1,3,5-TRIMETHYLBENZENE	1	1	1	U	
106-43-4	4-CHLOROTOLUENE	1	1	1	U	

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Field ID: Trip Blank
Lab ID: 0903060-3

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09
Prep Method: SW5030 Rev C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received
File Name: C13752

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

98-06-6	TERT-BUTYLBENZENE	1	1	1	U	
95-63-6	1,2,4-TRIMETHYLBENZENE	1	1	1	U	
135-98-8	SEC-BUTYLBENZENE	1	1	1	U	
541-73-1	1,3-DICHLOROBENZENE	1	1	1	U	
99-87-6	P-ISOPROPYLTOLUENE	1	1	1	U	
106-46-7	1,4-DICHLOROBENZENE	1	1	1	U	
104-51-8	N-BUTYLBENZENE	1	1	1	U	
95-50-1	1,2-DICHLOROBENZENE	1	1	1	U	
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	1	2	2	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	1	1	U	
87-68-3	HEXACHLOROBUTADIENE	1	1	1	U	
91-20-3	NAPHTHALENE	1	1	1	U	
87-61-6	1,2,3-TRICHLOROBENZENE	1	1	1	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	26.2		25	105	78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	25.2		25	101	80 - 124
2037-26-5	TOLUENE-D8	23.1		25	92	81 - 119

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25

Tentatively Identified Compounds

Lab Name: ALS Paragon

Work Order Number: 0903060

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200205808

Field ID: Trip Blank
Lab ID: 0903060-3

Sample Matrix: WATER
%Moisture: N/A
Date Collected: 09-Mar-09
Date Extracted: 10-Mar-09
Date Analyzed: 10-Mar-09

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: As Received

Sample Aliquot: 10 ml
Final Volume: 10 ml
Clean DF: 1
File Name: C13752

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
		NONE DETECTED	1			U

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/10/2009
Date Analyzed: 03/10/2009
Prep Method: SW5030C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13741

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
75-71-8	DICHLORODIFLUOROMETHANE	10	8.79	1		88	38 - 131%
74-87-3	CHLOROMETHANE	10	9.53	1		95	62 - 141%
75-01-4	VINYL CHLORIDE	10	9.19	1		92	77 - 124%
74-83-9	BROMOMETHANE	10	9.02	1		90	76 - 133%
75-00-3	CHLOROETHANE	10	8.73	1		87	81 - 130%
75-69-4	TRICHLOROFLUOROMETHANE	10	9.63	1		96	84 - 146%
75-35-4	1,1-DICHLOROETHENE	10	10.2	1		102	75 - 126%
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	10	9.28	1		93	71 - 144%
67-64-1	ACETONE	40	37.6	10		94	50 - 150%
74-88-4	IODOMETHANE	10	9.87	1		99	76 - 116%
75-15-0	CARBON DISULFIDE	10	10	1		100	68 - 129%
75-09-2	METHYLENE CHLORIDE	10	10.1	1		101	22 - 146%
156-60-5	TRANS-1,2-DICHLOROETHENE	10	9.98	1		100	76 - 135%
1634-04-4	METHYL TERTIARY BUTYL ETHER	20	20	1		100	75 - 125%
75-34-3	1,1-DICHLOROETHANE	10	10.3	1		103	77 - 131%
108-05-4	VINYL ACETATE	10	8.8	2		88	56 - 151%
156-59-2	CIS-1,2-DICHLOROETHENE	10	9.93	1		99	81 - 121%
78-93-3	2-BUTANONE	40	40.1	10		100	50 - 150%
74-97-5	BROMOCHLOROMETHANE	10	9.81	1		98	85 - 126%
67-66-3	CHLOROFORM	10	9.94	1		99	84 - 125%
71-55-6	1,1,1-TRICHLOROETHANE	10	10.1	1		101	82 - 129%
594-20-7	2,2-DICHLOROPROPANE	10	11.1	1		111	79 - 130%
56-23-5	CARBON TETRACHLORIDE	10	10.2	1		102	83 - 135%
563-58-6	1,1-DICHLOROPROPENE	10	10.5	1		105	85 - 127%
107-06-2	1,2-DICHLOROETHANE	10	9.93	1		99	84 - 126%
71-43-2	BENZENE	10	9.96	1		100	82 - 122%

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/10/2009
Date Analyzed: 03/10/2009
Prep Method: SW5030C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13741

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
79-01-6	TRICHLOROETHENE	10	9.91	1		99	82 - 121%
78-87-5	1,2-DICHLOROPROPANE	10	9.54	1		95	81 - 121%
74-95-3	DIBROMOMETHANE	10	9.71	1		97	81 - 125%
75-27-4	BROMODICHLOROMETHANE	10	9.6	1		96	82 - 120%
10061-01-5	CIS-1,3-DICHLOROPROPENE	10	9.67	1		97	79 - 120%
108-10-1	4-METHYL-2-PENTANONE	40	41	10		102	50 - 150%
108-88-3	TOLUENE	10	9.22	1		92	83 - 121%
10061-02-6	TRANS-1,3-DICHLOROPROPENE	10	9.08	1		91	78 - 113%
79-00-5	1,1,2-TRICHLOROETHANE	10	9.77	1		98	82 - 122%
591-78-6	2-HEXANONE	40	33.7	10		84	50 - 150%
127-18-4	TETRACHLOROETHENE	10	9.1	1		91	79 - 136%
142-28-9	1,3-DICHLOROPROPANE	10	9.08	1		91	80 - 126%
124-48-1	DIBROMOCHLOROMETHANE	10	8.63	1		86	80 - 123%
106-93-4	1,2-DIBROMOETHANE	10	8.65	1		87	85 - 124%
544-10-5	1-CHLOROHEXANE	10	9.37	1		94	77 - 135%
108-90-7	CHLOROBENZENE	10	8.71	1		87	82 - 121%
630-20-6	1,1,1,2-TETRACHLOROETHANE	10	9.62	1		96	85 - 128%
100-41-4	ETHYLBENZENE	10	9.17	1		92	83 - 126%
136777-61-	M+P-XYLENE	20	18	1		90	82 - 129%
95-47-6	O-XYLENE	10	9.15	1		92	87 - 132%
100-42-5	STYRENE	10	8.81	1		88	82 - 123%
75-25-2	BROMOFORM	10	8.74	1		87	79 - 118%
98-82-8	ISOPROPYLBENZENE	10	9.06	1		91	75 - 132%
96-18-4	1,2,3-TRICHLOROPROPANE	10	8.76	1		88	77 - 128%
79-34-5	1,1,2,2-TETRACHLOROETHANE	10	9.87	1		99	74 - 130%
108-86-1	BROMOBENZENE	10	9.83	1		98	78 - 124%
103-65-1	N-PROPYLBENZENE	10	9.24	1		92	75 - 134%

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/10/2009
Date Analyzed: 03/10/2009
Prep Method: SW5030C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13741

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
95-49-8	2-CHLOROTOLUENE	10	8.87	1		89	77 - 128%
108-67-8	1,3,5-TRIMETHYLBENZENE	10	9.03	1		90	77 - 131%
106-43-4	4-CHLOROTOLUENE	10	9.84	1		98	79 - 128%
98-06-6	TERT-BUTYLBENZENE	10	9.61	1		96	76 - 134%
95-63-6	1,2,4-TRIMETHYLBENZENE	10	9.82	1		98	80 - 138%
135-98-8	SEC-BUTYLBENZENE	10	9.12	1		91	73 - 135%
541-73-1	1,3-DICHLOROBENZENE	10	10.1	1		101	79 - 126%
99-87-6	P-ISOPROPYLTOLUENE	10	9.01	1		90	72 - 132%
106-46-7	1,4-DICHLOROBENZENE	10	9.79	1		98	81 - 125%
104-51-8	N-BUTYLBENZENE	10	9.41	1		94	77 - 141%
95-50-1	1,2-DICHLOROBENZENE	10	9.84	1		98	82 - 128%
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	10	9.06	2		91	64 - 134%
120-82-1	1,2,4-TRICHLOROBENZENE	10	9.24	1		92	80 - 128%
87-68-3	HEXACHLOROBUTADIENE	10	9.32	1		93	70 - 136%
91-20-3	NAPHTHALENE	10	9.3	1		93	78 - 125%
87-61-6	1,2,3-TRICHLOROBENZENE	10	9.37	1		94	79 - 131%

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/10/2009
Date Analyzed: 03/10/2009
Prep Method: SW5030C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13742

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
75-71-8	DICHLORODIFLUOROMETHANE	10	8.63	1		86	20	2
74-87-3	CHLOROMETHANE	10	9.52	1		95	20	0
75-01-4	VINYL CHLORIDE	10	9.05	1		90	20	2
74-83-9	BROMOMETHANE	10	9.07	1		91	20	1
75-00-3	CHLOROETHANE	10	8.9	1		89	20	2
75-69-4	TRICHLOROFLUOROMETHANE	10	9.51	1		95	20	1
75-35-4	1,1-DICHLOROETHENE	10	9.88	1		99	20	3
76-13-1	1,1,2-TRICHLORO-1,2,2-TRIFLUOROETHA	10	9.3	1		93	20	0
67-64-1	ACETONE	40	39.5	10		99	30	5
74-88-4	IODOMETHANE	10	9.77	1		98	20	1
75-15-0	CARBON DISULFIDE	10	9.95	1		100	20	1
75-09-2	METHYLENE CHLORIDE	10	10	1		100	20	1
156-60-5	TRANS-1,2-DICHLOROETHENE	10	10	1		100	20	0
1634-04-4	METHYL TERTIARY BUTYL ETHER	20	20.3	1		102	20	1
75-34-3	1,1-DICHLOROETHANE	10	10.3	1		103	20	0
108-05-4	VINYL ACETATE	10	9.53	2		95	20	8
156-59-2	CIS-1,2-DICHLOROETHENE	10	10.1	1		101	20	2
78-93-3	2-BUTANONE	40	41.9	10		105	30	4
74-97-5	BROMOCHLOROMETHANE	10	9.56	1		96	20	3
67-66-3	CHLOROFORM	10	9.77	1		98	20	2
71-55-6	1,1,1-TRICHLOROETHANE	10	9.98	1		100	20	1
594-20-7	2,2-DICHLOROPROPANE	10	11.1	1		111	20	0
56-23-5	CARBON TETRACHLORIDE	10	9.97	1		100	20	2
563-58-6	1,1-DICHLOROPROPENE	10	10.5	1		105	20	0
107-06-2	1,2-DICHLOROETHANE	10	10.1	1		101	20	2
71-43-2	BENZENE	10	9.96	1		100	20	0
79-01-6	TRICHLOROETHENE	10	9.96	1		100	20	1

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/10/2009
Date Analyzed: 03/10/2009
Prep Method: SW5030C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13742

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
78-87-5	1,2-DICHLOROPROPANE	10	9.76	1		98	20	2
74-95-3	DIBROMOMETHANE	10	9.78	1		98	20	1
75-27-4	BROMODICHLOROMETHANE	10	9.6	1		96	20	0
10061-01-5	CIS-1,3-DICHLOROPROPENE	10	9.71	1		97	20	0
108-10-1	4-METHYL-2-PENTANONE	40	42.8	10		107	30	4
108-88-3	TOLUENE	10	9.37	1		94	20	2
10061-02-6	TRANS-1,3-DICHLOROPROPENE	10	8.93	1		89	20	2
79-00-5	1,1,2-TRICHLOROETHANE	10	9.74	1		97	20	0
591-78-6	2-HEXANONE	40	35	10		87	30	4
127-18-4	TETRACHLOROETHENE	10	9.11	1		91	20	0
142-28-9	1,3-DICHLOROPROPANE	10	8.93	1		89	20	2
124-48-1	DIBROMOCHLOROMETHANE	10	8.5	1		85	20	1
106-93-4	1,2-DIBROMOETHANE	10	8.64	1		86	20	0
544-10-5	1-CHLOROHEXANE	10	9.06	1		91	20	3
108-90-7	CHLOROBENZENE	10	9	1		90	20	3
630-20-6	1,1,1,2-TETRACHLOROETHANE	10	9.43	1		94	20	2
100-41-4	ETHYLBENZENE	10	9.43	1		94	20	3
136777-61-	M+P-XYLENE	20	18.8	1		94	20	5
95-47-6	O-XYLENE	10	9.61	1		96	20	5
100-42-5	STYRENE	10	9.22	1		92	20	5
75-25-2	BROMOFORM	10	8.73	1		87	20	0
98-82-8	ISOPROPYLBENZENE	10	9.52	1		95	20	5
96-18-4	1,2,3-TRICHLOROPROPANE	10	9.11	1		91	20	4
79-34-5	1,1,2,2-TETRACHLOROETHANE	10	9.48	1		95	20	4
108-86-1	BROMOBENZENE	10	9.95	1		100	20	1
103-65-1	N-PROPYLBENZENE	10	9.51	1		95	20	3
95-49-8	2-CHLOROTOLUENE	10	9.14	1		91	20	3

Data Package ID: *VL0903060-1*

GC/MS Volatiles

Method SW8260_25B

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903060
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200205808

Lab ID: VL090310-3LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/10/2009
Date Analyzed: 03/10/2009
Prep Method: SW5030C

Prep Batch: VL090310-3
QCBatchID: VL090310-3-3
Run ID: VL090310-3A
Cleanup: NONE
Basis: N/A
File Name: C13742

Sample Aliquot: 10 ml
Final Volume: 10 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
108-67-8	1,3,5-TRIMETHYLBENZENE	10	9.07	1		91	20	1
106-43-4	4-CHLOROTOLUENE	10	9.9	1		99	20	1
98-06-6	TERT-BUTYLBENZENE	10	10	1		100	20	4
95-63-6	1,2,4-TRIMETHYLBENZENE	10	10.1	1		101	20	3
135-98-8	SEC-BUTYLBENZENE	10	9.31	1		93	20	2
541-73-1	1,3-DICHLOROBENZENE	10	10.1	1		101	20	1
99-87-6	P-ISOPROPYLTOLUENE	10	9.25	1		92	20	3
106-46-7	1,4-DICHLOROBENZENE	10	10.1	1		101	20	3
104-51-8	N-BUTYLBENZENE	10	9.31	1		93	20	1
95-50-1	1,2-DICHLOROBENZENE	10	10	1		100	20	2
96-12-8	1,2-DIBROMO-3-CHLOROPROPANE	10	8.44	2		84	20	7
120-82-1	1,2,4-TRICHLOROBENZENE	10	9.46	1		95	20	2
87-68-3	HEXACHLOROBUTADIENE	10	9.17	1		92	20	2
91-20-3	NAPHTHALENE	10	9.59	1		96	20	3
87-61-6	1,2,3-TRICHLOROBENZENE	10	9.53	1		95	20	2

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
460-00-4	4-BROMOFLUOROBENZENE	25	102		106		78 - 129
1868-53-7	DIBROMOFLUOROMETHANE	25	96		96		80 - 124
2037-26-5	TOLUENE-D8	25	94		94		81 - 119

Data Package ID: *VL0903060-1*

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\031009\C13745.D Vial: 16
Acq On : 10 Mar 2009 13:34 Operator: sdw-sop525r12
Sample : VL090310-3MB Inst : CSS Instr
Misc : 10ml UN-htd purge water Multiplr: 1.00
MS Integration Params: ettics.p
Quant Time: Mar 10 13:55 2009 Quant Results File: 022309W.RES

Quant Method : C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title : GC/MS Volatiles (S.O.P. 525)
Last Update : Tue Feb 24 11:49:28 2009
Response via : Initial Calibration
DataAcq Meth : 022309W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.32	96	1311657	25.00	ppb	0.00
53) Chlorobenzene-d5	12.46	82	498456	25.00	ppb	0.00
73) 1,4-Dichlorobenzene-d4	14.47	152	357616	25.00	ppb	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	8.50	113	372668	24.92	ppb	0.00
Spiked Amount 25.000	Range 80 - 124		Recovery = 99.68%			
39) 1,2-dichloroethane-d4	8.97	65	260648	25.53	ppb	0.00
Spiked Amount 25.000	Range 62 - 139		Recovery = 102.12%			
54) Toluene-d8	11.01	98	1263746	24.02	ppb	0.00
Spiked Amount 25.000	Range 81 - 119		Recovery = 96.08%			
74) 4-Bromofluorobenzene	13.50	95	475880	27.06	ppb	0.00
Spiked Amount 25.000	Range 78 - 129		Recovery = 108.24%			
Target Compounds						Qvalue
52) 4-Methyl-2-Pentanone	11.01	43	8137	Below Cal	#	1
84) 1,2,4-Trimethylbenzene	14.13	105	1793	Below Cal	#	32

All < MDL

SMW 3/10/09

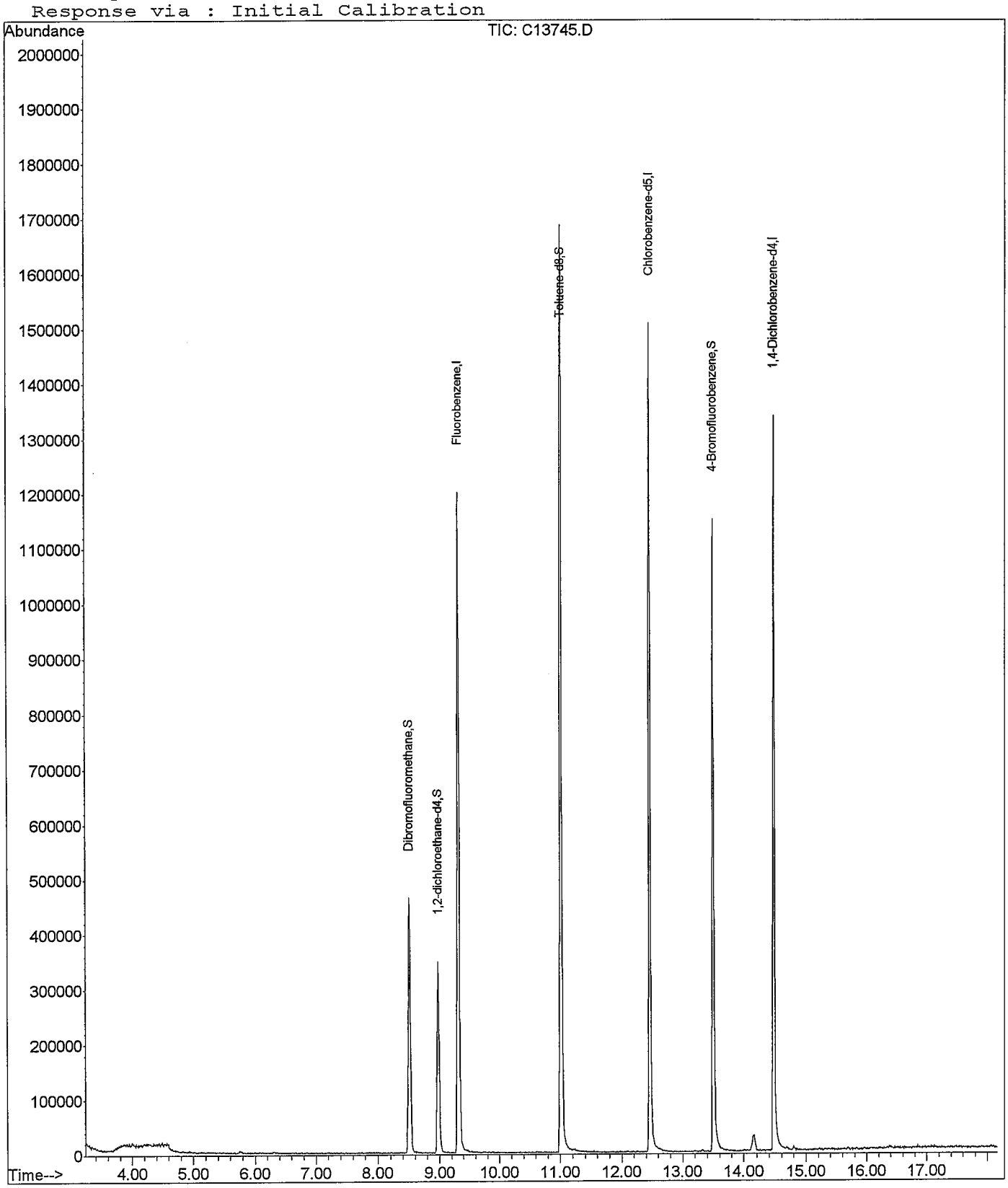
(#) = qualifier out of range (m) = manual integration
C13745.D 022309W.M Tue Mar 10 12:55:59 2009 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\031009\C13745.D
Acq On : 10 Mar 2009 13:34
Sample : VL090310-3MB
Misc : 10ml UN-htd purge water
MS Integration Params: ettics.p
Quant Time: Mar 10 13:55 2009

Vial: 16
Operator: sdw-sop525r12
Inst : CSS Instr
Multiplr: 1.00
Quant Results File: 022309W.RES

Method : C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title : GC/MS Volatiles (S.O.P. 525)
Last Update : Tue Feb 24 11:49:28 2009
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: sdw-sop525r12 Date Acquired: 10 Mar 2009 13:34
Data File: C:\HPCHEM\1\DATA\031009\C13745.D
Name: VL090310-3MB
Misc: 10ml UN-htd purge water
Method: C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title: GC/MS Volatiles (S.O.P. 525)
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

C13745.D 022309W.M Tue Mar 10 12:56:26 2009

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\031009\C13753.D Vial: 24
Acq On : 10 Mar 2009 16:42 Operator: sdw-sop525r12
Sample : 0903060-1 Inst : CSS Instr
Misc : 10ml UN-htd purge water Multiplr: 1.00
MS Integration Params: ettics.p
Quant Time: Mar 10 17:02 2009 Quant Results File: 022309W.RES

Quant Method : C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title : GC/MS Volatiles (S.O.P. 525)
Last Update : Tue Feb 24 11:49:28 2009
Response via : Initial Calibration
DataAcq Meth : 022309W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.32	96	1298183	25.00	ppb	0.00
53) Chlorobenzene-d5	12.46	82	502632	25.00	ppb	0.00
73) 1,4-Dichlorobenzene-d4	14.47	152	365764	25.00	ppb	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	8.51	113	375526	25.37	ppb	0.00
Spiked Amount 25.000	Range 80 - 124		Recovery = 101.48%			
39) 1,2-dichloroethane-d4	8.98	65	254030	25.14	ppb	0.00
Spiked Amount 25.000	Range 62 - 139		Recovery = 100.56%			
54) Toluene-d8	11.01	98	1216463	22.93	ppb	0.00
Spiked Amount 25.000	Range 81 - 119		Recovery = 91.72%			
74) 4-Bromofluorobenzene	13.50	95	463857	25.79	ppb	0.00
Spiked Amount 25.000	Range 78 - 129		Recovery = 103.16%			
Target Compounds						Qvalue
3) Chloromethane	3.72	50	1311	Below Cal	#	62
12) Acetone	5.63	58	1230	Below Cal		1
52) 4-Methyl-2-Pentanone	10.89	43	1192	Below Cal	#	54

All < MDL

3/10/09

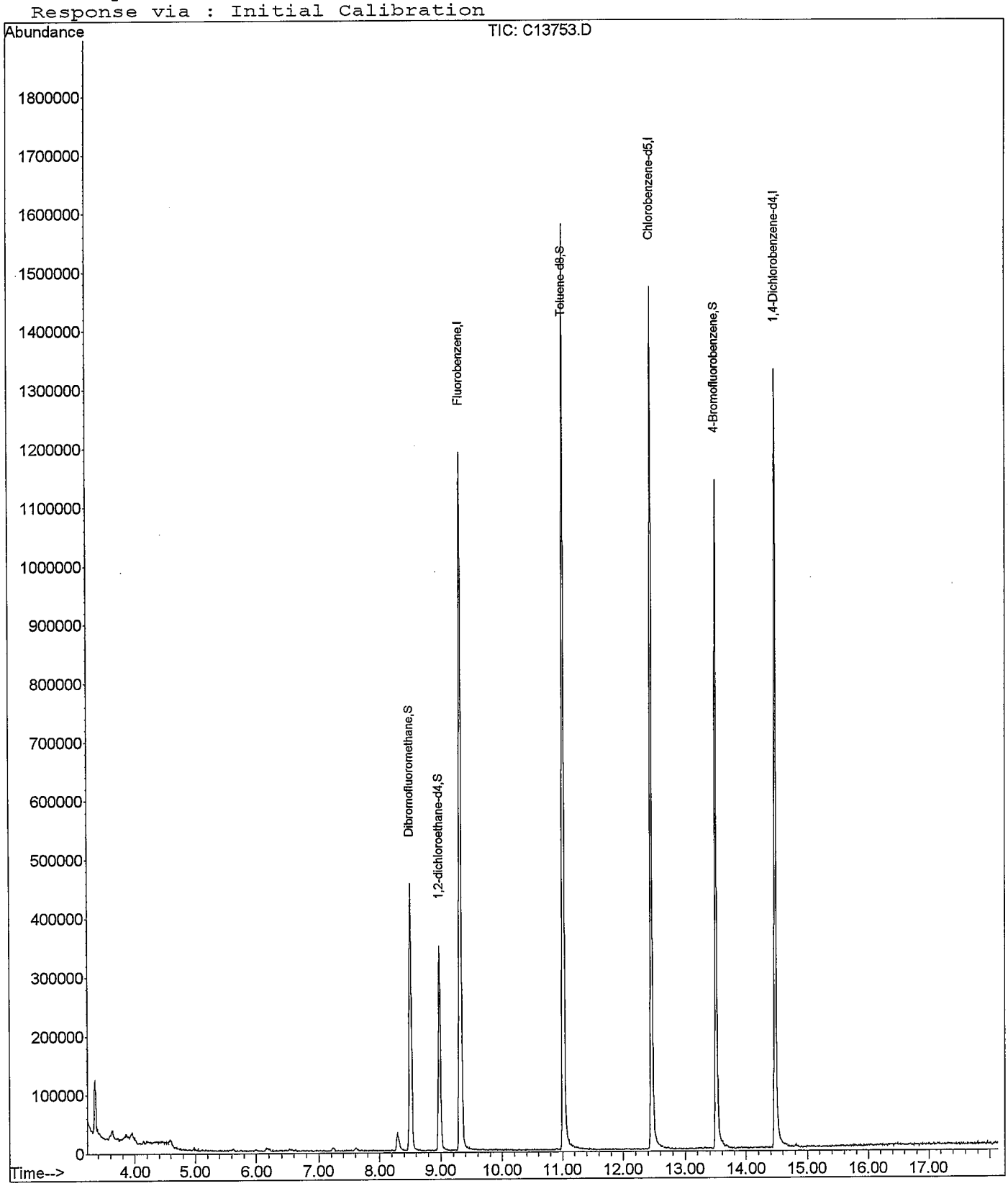
(#) = qualifier out of range (m) = manual integration
C13753.D 022309W.M Tue Mar 10 16:02:13 2009 Page 1

Quantitation Report

Data File : C:\HPCHEM\1\DATA\031009\C13753.D
Acq On : 10 Mar 2009 16:42
Sample : 0903060-1
Misc : 10ml UN-htd purge water
MS Integration Params: ettics.p
Quant Time: Mar 10 17:02 2009

Vial: 24
Operator: sdw-sop525r12
Inst : CSS Instr
Multiplr: 1.00
Quant Results File: 022309W.RES

Method : C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title : GC/MS Volatiles (S.O.P. 525)
Last Update : Tue Feb 24 11:49:28 2009
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Operator ID: sdw-sop525r12 Date Acquired: 10 Mar 2009 16:42
Data File: C:\HPCHEM\1\DATA\031009\C13753.D
Name: 0903060-1
Misc: 10ml UN-htd purge water
Method: C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title: GC/MS Volatiles (S.O.P. 525)
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

C13753.D 022309W.M Tue Mar 10 16:02:36 2009

Quantitation Report (Not Reviewed)

Data File : C:\HPCHEM\1\DATA\031009\C13752.D Vial: 23
Acq On : 10 Mar 2009 16:18 Operator: sdw-sop525r12
Sample : 0903060-3 Inst : CSS Instr
Misc : 10ml UN-htd purge water Multiplr: 1.00
MS Integration Params: ettics.p
Quant Time: Mar 10 16:36 2009 Quant Results File: 022309W.RES

Quant Method : C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title : GC/MS Volatiles (S.O.P. 525)
Last Update : Tue Feb 24 11:49:28 2009
Response via : Initial Calibration
DataAcq Meth : 022309W

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) Fluorobenzene	9.32	96	1306380	25.00	ppb	0.00
53) Chlorobenzene-d5	12.46	82	508664	25.00	ppb	0.00
73) 1,4-Dichlorobenzene-d4	14.47	152	362991	25.00	ppb	0.00
System Monitoring Compounds						
34) Dibromofluoromethane	8.51	113	375414	25.20	ppb	0.00
Spiked Amount 25.000	Range 80 - 124		Recovery =	100.80%		
39) 1,2-dichloroethane-d4	8.98	65	254489	25.03	ppb	0.00
Spiked Amount 25.000	Range 62 - 139		Recovery =	100.12%		
54) Toluene-d8	11.01	98	1239754	23.09	ppb	0.00
Spiked Amount 25.000	Range 81 - 119		Recovery =	92.36%		
74) 4-Bromofluorobenzene	13.50	95	467414	26.18	ppb	0.00
Spiked Amount 25.000	Range 78 - 129		Recovery =	104.72%		
Target Compounds						Qvalue
14) Carbon Disulfide	5.99	76	13745	0.20	ppb ~~#~~	89
15) Allyl chloride	5.99	76	13745	1.32	ppb no #	1
52) 4-Methyl-2-Pentanone	11.01	43	7793	Below Cal	~~NA~~ #	1

All < RL

sdw 3/10/09

(#) = qualifier out of range (m) = manual integration
C13752.D 022309W.M Tue Mar 10 15:37:02 2009 Page 1

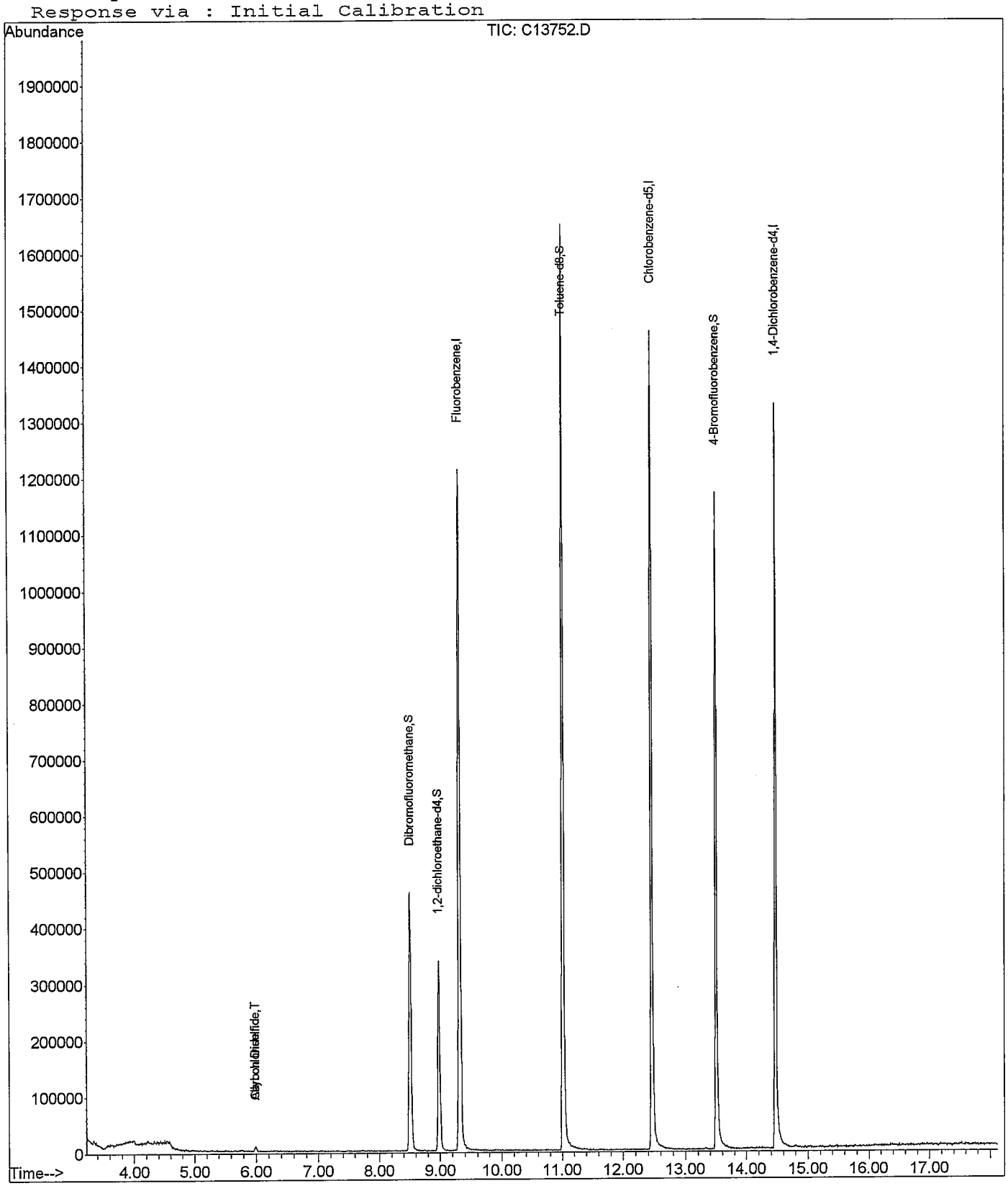
Quantitation Report

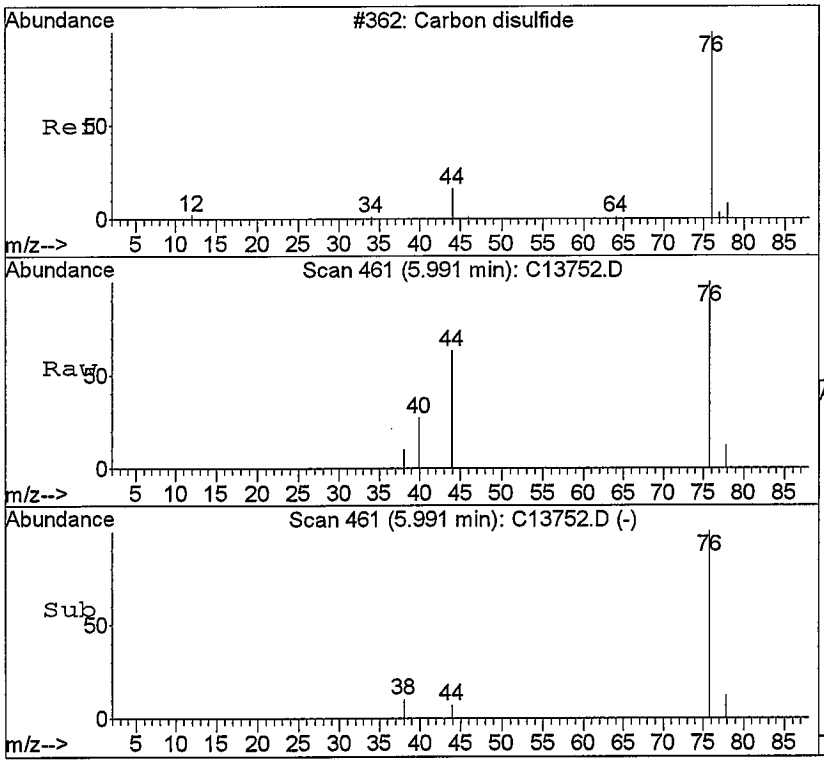
Data File : C:\HPCHEM\1\DATA\031009\C13752.D
Acq On : 10 Mar 2009 16:18
Sample : 0903060-3
Misc : 10ml UN-htd purge water
MS Integration Params: ettics.p
Quant Time: Mar 10 16:36 2009

Vial: 23
Operator: sdw-sop525r12
Inst : CSS Instr
Multiplr: 1.00

Quant Results File: 022309W.RES

Method : C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title : GC/MS Volatiles (S.O.P. 525)
Last Update : Tue Feb 24 11:49:28 2009
Response via : Initial Calibration

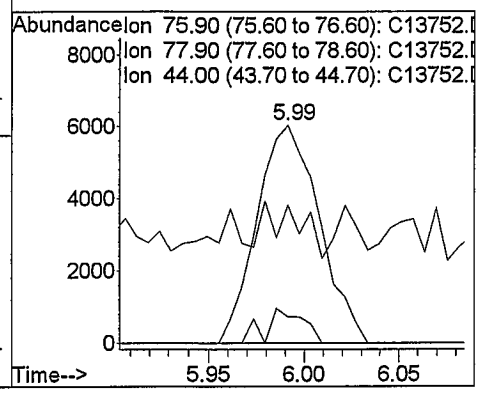


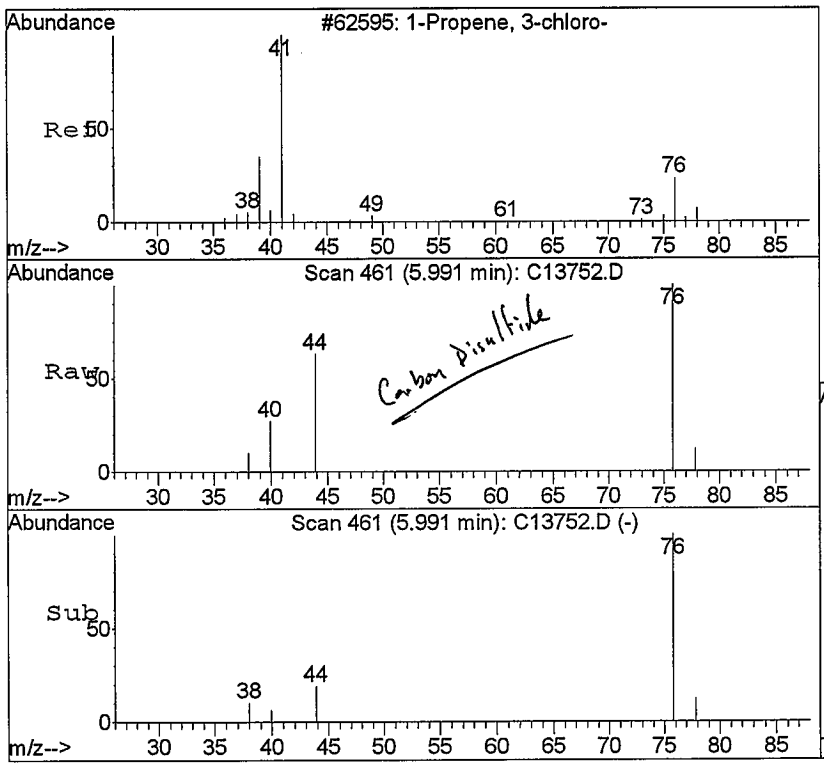


#14
Carbon Disulfide
Concen: 0.20 ppb
RT: 5.99 min Scan# 461
Delta R.T. 0.01 min
Lab File: C13752.D
Acq: 10 Mar 2009 16:18

Tgt Ion: 76 Resp: 13745

Ion	Ratio	Lower	Upper
76	100		
78	11.9	5.3	12.5
44	17.9	7.7	17.9#

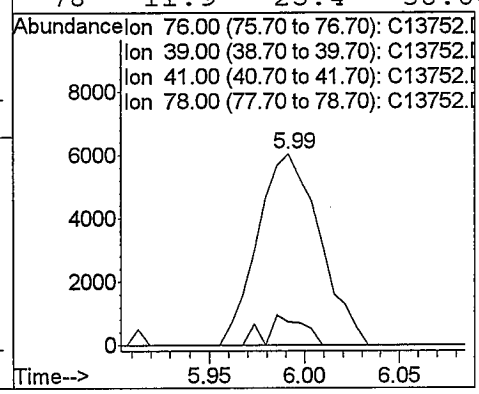




#15
Allyl chloride
Concen: 1.32 ppb
RT: 5.99 min ~~Scan# 461~~
Delta R.T. -0.13 min
Lab File: C13752.D
Acq: 10 Mar 2009 16:18

Tgt Ion: 76 Resp: 13745

Ion	Ratio	Lower	Upper
76	100		
39	0.0	166.6	250.0#
41	0.0	311.5	467.3#
78	11.9	25.4	38.0#



Tentatively Identified Compound (LSC) summary

Operator ID: sdw-sop525r12 Date Acquired: 10 Mar 2009 16:18
Data File: C:\HPCHEM\1\DATA\031009\C13752.D
Name: 0903060-3
Misc: 10ml UN-htd purge water
Method: C:\HPCHEM\1\METHODS\022309W.M (RTE Integrator)
Title: GC/MS Volatiles (S.O.P. 525)
Library Searched: C:\DATABASE\NBS75K.L

TIC Top Hit name	RT	EstConc	Units	Area	IntStd	ISRT	ISArea	ISConc

C13752.D 022309W.M Tue Mar 10 15:37:29 2009