ALS Paragon

GC/MS Semivolatiles

Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200206467

Work Order Number: 0903159

1. This report consists of 1 water sample. The sample was received cool and intact by ALS Paragon on 03/20/09.

2. The sample was prepared and analyzed according to SW-846, 3rd Edition protocol utilizing SOP. Specifically, the water sample was extracted using continuous liquid-liquid extractors, according to SW-846 Method 3520C utilizing SOP 617 Revision 13.

3. The extracts were analyzed using GC/MS with a DB-5.625 capillary column according to SOP 506 Revision 15 based on SW-846 Method 8270D. 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 calibration standards are verified by comparing a second source standard initial calibration verification (ICV) against the calibration curve. All target compounds in the second source verification had a %D of less than 25%.

6. All SPCC and CCC criteria were met in each of the daily (continuing) calibration verifications.

7. 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 sample was extracted and analyzed within the established holding time.

11. All surrogate recoveries were within acceptance criteria.

12. All internal standard recoveries were within acceptance criteria.

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
Sharon L. Jobes
Organics Primary Data Reviewer

3-31-09
Date

Joe Westbrook
Organics Final Data Reviewer

March 31, 2009
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: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: Complaint 200206467
Client Project Number:
Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Kosslyn 090319	0903159-1		WATER	19-Mar-09	13:45
Trip Blank	0903159-2		WATER	20-Mar-09	

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) 0903159

Chain-of-Custody Date 3/19/09 Page 1 of 1 **Originator: Retain pink copy!**

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

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

Complaints: PULSIFER WW: 200204502
VANAELSTYN WW: 200204503

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

Analyses (columns): VOCs SW8260B _25 Full + TICs; ~~BTEX (only) SW8021~~ Methane, ethane, ethene; SVOCs SW8270C _Full + TICs; OC Pesticides SW8081A; PCBs SW8082; Herbicides SW8151A; ~~Explosives~~ TOC 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~~ Alkalinity Total, HCO_3, CO_3; Inorganic Anions SW9056 (E300.0) (specify in comments); Solids: Total E160.3 (TDS E160.1) TSS E160.2; (pH) SW9040B SW9045C; ~~TPH SW8015B GRO DRO (circle one or both)~~ Conductivity; 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 SW9320 E904.0; Strontium 90 (Total RadioSr) D5811-00; Gamma Isotopes E901.1; Radon 222 SM7510Rn; SAR Calc.; Anion Cation Balance

Sample ID	Date	Time *	Lab ID	Matrix	Preservative (indicate type... HCl, etc.)	No. of Containers	VOCs	Methane, ethane, ethene	SVOCs	OC Pesticides	PCBs	Herbicides	TOC	TCLP Organics	TCLP Metals	Total Metals ICP Hg	Dissolved Metals ICP Hg	Total Metals ICP/MS	Dissolved Metals ICP/MS	Alkalinity	Inorganic Anions	Solids	pH	Conductivity	Gross Alpha/Beta	Actinides	Tritium	Total Alpha-Emitting Radium	Radium 226	Radium 228	Strontium 90	Gamma Isotopes	Radon 222	SAR Calc.	Anion Cation Balance
GORDONROSS 090319	3/19/09	10:05		W	None HCl H_2SO_4	10	X	X	X				X				X		X	X	X	X	X	X										X	X
PULSIFER 090319	↓	11:05		↓	↓	↓	X	X	X				X				X		X	X	X	X	X	X										X	X
VANAELSTYN 090319	↓	12:40		↓	↓	↓	X	X	X				X				X		X	X	X	X	X	X										X	X
KOSSLYN 090319	↓	13:45	(1)	↓	↓	↓	X	X	X				X				X		X	X	X	X	X	X										X	X
Trip Blank 03/20/09			(2)			~~2~~ 3 03/20/09																													

* **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, Mn, Mg, Ni, K, Na, Sr, Zn
200.8 = Sb, As, Cd, Pb, Mo, Se, Ag, Tl, U

Relinquished By: (1)	Relinquished By: (2)
Signature [signature]	Signature
Printed Name Christa E. Whitmore	Printed Name
Date 3/19/09 Time 16:30	Date Time
Company Whetstone Associates	Company

Received By: (1)	Received By: (2)
Signature [signature]	Signature
Printed Name Lara J Orban	Printed Name
Date 3/20/09 Time ~~0930~~ 1008 03/20/09	Date Time
Company ALS Paragon	Company

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

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

Client: COGCC Workorder No: 0903159

Project Manager: AW Initials: LSO Date: 3/20/09

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):	2.2							
No. of custody seals on cooler:	1							
DOT Survey/ Acceptance Information — External µR/hr reading:	13							
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.

* the 500ml poly For metals analysis needs to be filtered and preserved in house.

If applicable, was the client contacted? **YES / NO / (NA)** Contact: _____ Date/Time: _____

Project Manager Signature / Date: [signature] 3/23/09

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

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903159

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200206467

Lab ID: EX090324-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5703

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	DF	Result	Reporting Limit	Result Qualifier	EPA Qualifier
110-86-1	PYRIDINE	1	10	10	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	10	10	U	
62-53-3	ANILINE	1	10	10	U	
108-95-2	PHENOL	1	10	10	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	10	10	U	
95-57-8	2-CHLOROPHENOL	1	10	10	U	
541-73-1	1,3-DICHLOROBENZENE	1	10	10	U	
106-46-7	1,4-DICHLOROBENZENE	1	10	10	U	
95-50-1	1,2-DICHLOROBENZENE	1	10	10	U	
100-51-6	BENZYL ALCOHOL	1	10	10	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	10	10	U	
95-48-7	2-METHYLPHENOL	1	10	10	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	10	10	U	
108-39-4	3+4-METHYLPHENOL	1	10	10	U	
67-72-1	HEXACHLOROETHANE	1	10	10	U	
98-95-3	NITROBENZENE	1	10	10	U	
78-59-1	ISOPHORONE	1	10	10	U	
88-75-5	2-NITROPHENOL	1	10	10	U	
105-67-9	2,4-DIMETHYLPHENOL	1	10	10	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	10	10	U	
120-83-2	2,4-DICHLOROPHENOL	1	10	10	U	
65-85-0	BENZOIC ACID	1	50	50	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	10	10	U	
91-20-3	NAPHTHALENE	1	10	10	U	
106-47-8	4-CHLOROANILINE	1	10	10	U	
87-68-3	HEXACHLOROBUTADIENE	1	10	10	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	10	10	U	

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0903159

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200206467

Lab ID: EX090324-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5703

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

91-57-6	2-METHYLNAPHTHALENE	1	10	10	U	
90-12-0	1-METHYLNAPHTHALENE	1	10	10	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	10	10	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	10	10	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	10	10	U	
91-58-7	2-CHLORONAPHTHALENE	1	10	10	U	
88-74-4	2-NITROANILINE	1	20	20	U	
131-11-3	DIMETHYL PHTHALATE	1	10	10	U	
606-20-2	2,6-DINITROTOLUENE	1	10	10	U	
208-96-8	ACENAPHTHYLENE	1	10	10	U	
99-09-2	3-NITROANILINE	1	20	20	U	
83-32-9	ACENAPHTHENE	1	10	10	U	
51-28-5	2,4-DINITROPHENOL	1	20	20	U	
100-02-7	4-NITROPHENOL	1	20	20	U	
132-64-9	DIBENZOFURAN	1	10	10	U	
121-14-2	2,4-DINITROTOLUENE	1	10	10	U	
84-66-2	DIETHYL PHTHALATE	1	10	10	U	
86-73-7	FLUORENE	1	10	10	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	10	10	U	
100-01-6	4-NITROANILINE	1	20	20	U	
103-33-3	AZOBENZENE	1	10	10	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	20	20	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	10	10	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	10	10	U	
118-74-1	HEXACHLOROBENZENE	1	10	10	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	10	10	U	
87-86-5	PENTACHLOROPHENOL	1	20	20	U	
85-01-8	PHENANTHRENE	1	10	10	U	
120-12-7	ANTHRACENE	1	10	10	U	

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5703

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

86-74-8	CARBAZOLE	1	10	10	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	10	10	U	
206-44-0	FLUORANTHENE	1	10	10	U	
129-00-0	PYRENE	1	10	10	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	10	10	U	
56-55-3	BENZO(A)ANTHRACENE	1	10	10	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	10	10	U	
218-01-9	CHRYSENE	1	10	10	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	10	10	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	10	10	U	
205-99-2	BENZO(B)FLUORANTHENE	1	10	10	U	
207-08-9	BENZO(K)FLUORANTHENE	1	10	10	U	
50-32-8	BENZO(A)PYRENE	1	10	10	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	10	10	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	10	10	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	10	10	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	49.9		75	67	23 - 100
321-60-8	2-FLUOROBIPHENYL	45.4		50	91	21 - 106
367-12-4	2-FLUOROPHENOL	70.7		75	94	21 - 100
4165-60-0	NITROBENZENE-D5	47		50	94	34 - 111
4165-62-2	PHENOL-D5	71.6		75	96	15 - 104
1718-51-0	TERPHENYL-D14	51		50	102	33 - 111

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Paragon

Work Order Number: 0903159

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200206467

Field ID:

Lab ID: EX090324-2MB

Sample Matrix: WATER
%Moisture: N/A
Date Collected: N/A
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N5703

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
	3.91	OXYGENATED HYDROCARBON1	1	11	UG/L	J

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Field ID: Kosslyn 090319
Lab ID: 0903159-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Mar-09
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: As Received
File Name: N5709

Sample Aliquot: 1070 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Dilution Factor	Result	Reporting Limit	Result Qualifier	EPA Qualifier
110-86-1	PYRIDINE	1	9.3	9.3	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.3	9.3	U	
62-53-3	ANILINE	1	9.3	9.3	U	
108-95-2	PHENOL	1	9.3	9.3	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.3	9.3	U	
95-57-8	2-CHLOROPHENOL	1	9.3	9.3	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.3	9.3	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.3	9.3	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.3	9.3	U	
100-51-6	BENZYL ALCOHOL	1	9.3	9.3	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.3	9.3	U	
95-48-7	2-METHYLPHENOL	1	9.3	9.3	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.3	9.3	U	
108-39-4	3+4-METHYLPHENOL	1	9.3	9.3	U	
67-72-1	HEXACHLOROETHANE	1	9.3	9.3	U	
98-95-3	NITROBENZENE	1	9.3	9.3	U	
78-59-1	ISOPHORONE	1	9.3	9.3	U	
88-75-5	2-NITROPHENOL	1	9.3	9.3	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.3	9.3	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.3	9.3	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.3	9.3	U	
65-85-0	BENZOIC ACID	1	47	47	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.3	9.3	U	
91-20-3	NAPHTHALENE	1	9.3	9.3	U	
106-47-8	4-CHLOROANILINE	1	9.3	9.3	U	
87-68-3	HEXACHLOROBUTADIENE	1	9.3	9.3	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.3	9.3	U	

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Field ID: Kosslyn 090319
Lab ID: 0903159-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Mar-09
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: As Received
File Name: N5709

Sample Aliquot: 1070 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

91-57-6	2-METHYLNAPHTHALENE	1	9.3	9.3	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.3	9.3	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.3	9.3	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.3	9.3	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.3	9.3	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.3	9.3	U	
88-74-4	2-NITROANILINE	1	19	19	U	
131-11-3	DIMETHYL PHTHALATE	1	9.3	9.3	U	
606-20-2	2,6-DINITROTOLUENE	1	9.3	9.3	U	
208-96-8	ACENAPHTHYLENE	1	9.3	9.3	U	
99-09-2	3-NITROANILINE	1	19	19	U	
83-32-9	ACENAPHTHENE	1	9.3	9.3	U	
51-28-5	2,4-DINITROPHENOL	1	19	19	U	
100-02-7	4-NITROPHENOL	1	19	19	U	
132-64-9	DIBENZOFURAN	1	9.3	9.3	U	
121-14-2	2,4-DINITROTOLUENE	1	9.3	9.3	U	
84-66-2	DIETHYL PHTHALATE	1	9.3	9.3	U	
86-73-7	FLUORENE	1	9.3	9.3	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.3	9.3	U	
100-01-6	4-NITROANILINE	1	19	19	U	
103-33-3	AZOBENZENE	1	9.3	9.3	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.3	9.3	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.3	9.3	U	
118-74-1	HEXACHLOROBENZENE	1	9.3	9.3	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.3	9.3	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	U	
85-01-8	PHENANTHRENE	1	9.3	9.3	U	
120-12-7	ANTHRACENE	1	9.3	9.3	U	

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Field ID: Kosslyn 090319
Lab ID: 0903159-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Mar-09
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: As Received
File Name: N5709

Sample Aliquot: 1070 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

86-74-8	CARBAZOLE	1	9.3	9.3	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.3	9.3	U	
206-44-0	FLUORANTHENE	1	9.3	9.3	U	
129-00-0	PYRENE	1	9.3	9.3	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.3	9.3	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.3	9.3	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.3	9.3	U	
218-01-9	CHRYSENE	1	9.3	9.3	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.3	9.3	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.3	9.3	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.3	9.3	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.3	9.3	U	
50-32-8	BENZO(A)PYRENE	1	9.3	9.3	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.3	9.3	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.3	9.3	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.3	9.3	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	45		70.1	64	23 - 100
321-60-8	2-FLUOROBIPHENYL	41		46.7	88	21 - 106
367-12-4	2-FLUOROPHENOL	61.4		70.1	88	21 - 100
4165-60-0	NITROBENZENE-D5	41.4		46.7	89	34 - 111
4165-62-2	PHENOL-D5	62.8		70.1	90	15 - 104
1718-51-0	TERPHENYL-D14	48.6		46.7	104	33 - 111

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Paragon

Work Order Number: 0903159

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200206467

Field ID: Kosslyn 090319
Lab ID: 0903159-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 19-Mar-09
Date Extracted: 24-Mar-09
Date Analyzed: 28-Mar-09

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1070 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N5709

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
	3.91	OXYGENATED HYDROCARBON1	1	19	UG/L	B,J

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/28/2009
Prep Method: SW3520C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5704

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
110-86-1	PYRIDINE	60	42	10		70	10 - 108%
62-75-9	N-NITROSODIMETHYLAMINE	60	53.5	10		89	26 - 110%
62-53-3	ANILINE	60	50.3	10		84	25 - 125%
108-95-2	PHENOL	60	52	10		87	49 - 101%
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	51.9	10		86	37 - 110%
95-57-8	2-CHLOROPHENOL	60	49.9	10		83	37 - 106%
541-73-1	1,3-DICHLOROBENZENE	60	45.9	10		76	32 - 98%
106-46-7	1,4-DICHLOROBENZENE	60	46.1	10		77	32 - 98%
95-50-1	1,2-DICHLOROBENZENE	60	46.9	10		78	33 - 102%
100-51-6	BENZYL ALCOHOL	60	53	10		88	30 - 112%
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	50.1	10		83	26 - 131%
95-48-7	2-METHYLPHENOL	60	50.6	10		84	38 - 109%
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	52.1	10		87	34 - 128%
108-39-4	3+4-METHYLPHENOL	60	49.3	10		82	32 - 110%
67-72-1	HEXACHLOROETHANE	60	45.3	10		76	28 - 94%
98-95-3	NITROBENZENE	60	32.2	10		54	44 - 109%
78-59-1	ISOPHORONE	60	45.7	10		76	50 - 112%
88-75-5	2-NITROPHENOL	60	44.4	10		74	39 - 113%
105-67-9	2,4-DIMETHYLPHENOL	60	42.1	10		70	28 - 109%
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	45.9	10		76	46 - 107%
120-83-2	2,4-DICHLOROPHENOL	60	45	10		75	48 - 105%
65-85-0	BENZOIC ACID	100	41.9	50	J	42	10 - 125%
120-82-1	1,2,4-TRICHLOROBENZENE	60	39.6	10		66	37 - 107%
91-20-3	NAPHTHALENE	60	43.5	10		72	39 - 102%
106-47-8	4-CHLOROANILINE	60	45.2	10		75	15 - 109%
87-68-3	HEXACHLOROBUTADIENE	60	37.7	10		63	27 - 103%

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/28/2009
Prep Method: SW3520C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5704

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
59-50-7	4-CHLORO-3-METHYLPHENOL	60	48.6	10		81	47 - 111%
91-57-6	2-METHYLNAPHTHALENE	60	43.3	10		72	46 - 104%
90-12-0	1-METHYLNAPHTHALENE	60	49.7	10		83	46 - 104%
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	13.8	10		23	10 - 125%
88-06-2	2,4,6-TRICHLOROPHENOL	60	51.6	10		86	49 - 113%
95-95-4	2,4,5-TRICHLOROPHENOL	60	54.5	10		91	49 - 111%
91-58-7	2-CHLORONAPHTHALENE	60	50.3	10		84	36 - 137%
88-74-4	2-NITROANILINE	60	59.7	20		99	48 - 115%
131-11-3	DIMETHYL PHTHALATE	60	53.7	10		89	25 - 127%
606-20-2	2,6-DINITROTOLUENE	60	56.4	10		94	49 - 117%
208-96-8	ACENAPHTHYLENE	60	53.6	10		89	50 - 107%
99-09-2	3-NITROANILINE	60	58.2	20		97	19 - 126%
83-32-9	ACENAPHTHENE	60	53	10		88	47 - 108%
51-28-5	2,4-DINITROPHENOL	60	51.3	20		86	14 - 138%
100-02-7	4-NITROPHENOL	60	52	20		87	21 - 119%
132-64-9	DIBENZOFURAN	60	53	10		88	54 - 107%
121-14-2	2,4-DINITROTOLUENE	60	54.5	10		91	51 - 118%
84-66-2	DIETHYL PHTHALATE	60	56.3	10		94	41 - 118%
86-73-7	FLUORENE	60	53.3	10		89	50 - 112%
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	53	10		88	50 - 111%
100-01-6	4-NITROANILINE	60	55.2	20		92	36 - 118%
103-33-3	AZOBENZENE	60	55.3	10		92	21 - 137%
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	54.5	20		91	40 - 130%
86-30-6	N-NITROSODIPHENYLAMINE	60	47.4	10		79	48 - 111%
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	52	10		87	52 - 113%
118-74-1	HEXACHLOROBENZENE	60	50.7	10		84	52 - 112%
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	88.5	10		88	23 - 112%

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/28/2009
Prep Method: SW3520C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5704

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCS Result	Reporting Limit	Result Qualifier	LCS % Rec.	Control Limits
87-86-5	PENTACHLOROPHENOL	60	53.1	20		88	38 - 117%
85-01-8	PHENANTHRENE	60	55	10		92	51 - 117%
120-12-7	ANTHRACENE	60	54.4	10		91	54 - 112%
86-74-8	CARBAZOLE	60	56.7	10		95	48 - 117%
84-74-2	DI-N-BUTYL PHTHALATE	60	55.8	10		93	54 - 116%
206-44-0	FLUORANTHENE	60	53.8	10		90	54 - 116%
129-00-0	PYRENE	60	52.6	10		88	49 - 128%
85-68-7	BUTYL BENZYL PHTHALATE	60	54.9	10		92	46 - 116%
56-55-3	BENZO(A)ANTHRACENE	60	54.2	10		90	56 - 109%
91-94-1	3,3'-DICHLOROBENZIDINE	60	28.2	10		47	19 - 111%
218-01-9	CHRYSENE	60	55.6	10		93	55 - 109%
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	55.4	10		92	42 - 126%
117-84-0	DI-N-OCTYL PHTHALATE	60	55.7	10		93	37 - 137%
205-99-2	BENZO(B)FLUORANTHENE	60	54.9	10		92	45 - 118%
207-08-9	BENZO(K)FLUORANTHENE	60	55.9	10		93	45 - 124%
50-32-8	BENZO(A)PYRENE	60	49.5	10		83	53 - 110%
193-39-5	INDENO(1,2,3-CD)PYRENE	60	56.3	10		94	43 - 125%
53-70-3	DIBENZO(A,H)ANTHRACENE	60	58.6	10		98	42 - 127%
191-24-2	BENZO(G,H,I)PERYLENE	60	57	10		95	38 - 123%

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/28/2009
Prep Method: SW3520C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5705

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
110-86-1	PYRIDINE	60	40	10		67	20	5
62-75-9	N-NITROSODIMETHYLAMINE	60	54.1	10		90	20	1
62-53-3	ANILINE	60	45.9	10		76	20	9
108-95-2	PHENOL	60	53	10		88	20	2
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	53.5	10		89	20	3
95-57-8	2-CHLOROPHENOL	60	50.9	10		85	20	2
541-73-1	1,3-DICHLOROBENZENE	60	47.7	10		79	20	4
106-46-7	1,4-DICHLOROBENZENE	60	47.8	10		80	20	4
95-50-1	1,2-DICHLOROBENZENE	60	49	10		82	20	4
100-51-6	BENZYL ALCOHOL	60	52.7	10		88	20	1
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	51.6	10		86	20	3
95-48-7	2-METHYLPHENOL	60	50.9	10		85	20	1
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	52.7	10		88	20	1
108-39-4	3+4-METHYLPHENOL	60	50	10		83	20	1
67-72-1	HEXACHLOROETHANE	60	47.3	10		79	20	4
98-95-3	NITROBENZENE	60	34.2	10		57	20	6
78-59-1	ISOPHORONE	60	46.6	10		78	20	2
88-75-5	2-NITROPHENOL	60	46.7	10		78	20	5
105-67-9	2,4-DIMETHYLPHENOL	60	38	10		63	20	10
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	47.4	10		79	20	3
120-83-2	2,4-DICHLOROPHENOL	60	46.8	10		78	20	4
65-85-0	BENZOIC ACID	100	34.7	50	J	35	20	19
120-82-1	1,2,4-TRICHLOROBENZENE	60	41.9	10		70	20	6
91-20-3	NAPHTHALENE	60	45.4	10		76	20	4
106-47-8	4-CHLOROANILINE	60	44.9	10		75	20	1
87-68-3	HEXACHLOROBUTADIENE	60	40	10		67	20	6
59-50-7	4-CHLORO-3-METHYLPHENOL	60	49.2	10		82	20	1

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/28/2009
Prep Method: SW3520C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5705

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
91-57-6	2-METHYLNAPHTHALENE	60	44.6	10		74	20	3
90-12-0	1-METHYLNAPHTHALENE	60	50.7	10		85	20	2
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	15.3	10		26	20	10
88-06-2	2,4,6-TRICHLOROPHENOL	60	52.4	10		87	20	1
95-95-4	2,4,5-TRICHLOROPHENOL	60	54	10		90	20	1
91-58-7	2-CHLORONAPHTHALENE	60	51	10		85	20	1
88-74-4	2-NITROANILINE	60	58.9	20		98	20	1
131-11-3	DIMETHYL PHTHALATE	60	53.1	10		89	20	1
606-20-2	2,6-DINITROTOLUENE	60	55.7	10		93	20	1
208-96-8	ACENAPHTHYLENE	60	53.8	10		90	20	0
99-09-2	3-NITROANILINE	60	56.7	20		95	20	3
83-32-9	ACENAPHTHENE	60	52.8	10		88	20	0
51-28-5	2,4-DINITROPHENOL	60	51.6	20		86	20	0
100-02-7	4-NITROPHENOL	60	48.9	20		81	20	6
132-64-9	DIBENZOFURAN	60	52.7	10		88	20	1
121-14-2	2,4-DINITROTOLUENE	60	52.4	10		87	20	4
84-66-2	DIETHYL PHTHALATE	60	54.3	10		91	20	4
86-73-7	FLUORENE	60	52.2	10		87	20	2
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	52.3	10		87	20	1
100-01-6	4-NITROANILINE	60	51.3	20		86	20	7
103-33-3	AZOBENZENE	60	53.2	10		89	20	4
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	54.9	20		92	20	1
86-30-6	N-NITROSODIPHENYLAMINE	60	46.5	10		77	20	2
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	53.1	10		89	20	2
118-74-1	HEXACHLOROBENZENE	60	52.1	10		87	20	3
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	89.6	10		90	20	1
87-86-5	PENTACHLOROPHENOL	60	53	20		88	20	0

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Lab ID: EX090324-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 03/24/2009
Date Analyzed: 03/28/2009
Prep Method: SW3520C

Prep Batch: EX090324-2
QCBatchID: EX090324-2-1
Run ID: SV090328-1
Cleanup: NONE
Basis: N/A
File Name: N5705

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

CASNO	Target Analyte	Spike Added	LCSD Result	Reporting Limit	Result Qualifier	LCSD % Rec.	RPD Limit	RPD
85-01-8	PHENANTHRENE	60	54.6	10		91	20	1
120-12-7	ANTHRACENE	60	54.2	10		90	20	0
86-74-8	CARBAZOLE	60	54.9	10		92	20	3
84-74-2	DI-N-BUTYL PHTHALATE	60	54.9	10		91	20	2
206-44-0	FLUORANTHENE	60	53.4	10		89	20	1
129-00-0	PYRENE	60	52.5	10		87	20	0
85-68-7	BUTYL BENZYL PHTHALATE	60	55.5	10		92	20	1
56-55-3	BENZO(A)ANTHRACENE	60	54.5	10		91	20	1
91-94-1	3,3'-DICHLOROBENZIDINE	60	26.5	10		44	20	6
218-01-9	CHRYSENE	60	54.6	10		91	20	2
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	55.7	10		93	20	1
117-84-0	DI-N-OCTYL PHTHALATE	60	55.5	10		92	20	1
205-99-2	BENZO(B)FLUORANTHENE	60	57.2	10		95	20	4
207-08-9	BENZO(K)FLUORANTHENE	60	56.2	10		94	20	0
50-32-8	BENZO(A)PYRENE	60	49.3	10		82	20	0
193-39-5	INDENO(1,2,3-CD)PYRENE	60	54.3	10		91	20	4
53-70-3	DIBENZO(A,H)ANTHRACENE	60	56.2	10		94	20	4
191-24-2	BENZO(G,H,I)PERYLENE	60	53.6	10		89	20	6

Data Package ID: *SV0903159-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: **ALS Paragon**
Work Order Number: 0903159
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200206467

Surrogate Recovery LCS/LCSD

CASNO	Target Analyte	Spike Added	LCS % Rec.	LCS Flag	LCSD % Rec.	LCSD Flag	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	75	85		84		23 - 100
321-60-8	2-FLUOROBIPHENYL	50	83		84		21 - 106
367-12-4	2-FLUOROPHENOL	75	82		86		21 - 100
4165-60-0	NITROBENZENE-D5	50	74		79		34 - 111
4165-62-2	PHENOL-D5	75	86		88		15 - 104
1718-51-0	TERPHENYL-D14	50	85		85		33 - 111

Data Package ID: *SV0903159-1*

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\032809\N5703.D Vial: 3
Acq On : 28 Mar 2009 3:25 pm Operator: JK SOP 506 Rev
Sample : EX090324-2MB Inst : GC/MS Ins
Misc : WATER EX090324-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 28 15:51 2009 Quant Results File: 032709S1.RES

Quant Method : D:\HPCHEM\1\METHODS\032709S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Sat Mar 28 14:34:56 2009
Response via : Initial Calibration
DataAcq Meth : 032709S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.94	152	287635	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1031485	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.69	164	490555	40.00	ng/uL	0.00
69) Phenanthrene-d10	9.98	188	748538	40.00	ng/uL	0.00
80) Chrysene-d12	12.27	240	813035	40.00	ng/uL	0.00
91) Perylene-d12	13.84	264	609639	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.54	112	574460	70.71	ng/uL	0.00
Spiked Amount 75.000	Range 21 - 100		Recovery = 94.28%			
6) 2-Chlorophenol-d4	5.71	132	583164	69.33	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 92.44%			
8) Phenol-d5	5.51	99	722788	71.64	ng/uL	-0.01
Spiked Amount 75.000	Range 15 - 104		Recovery = 95.52%			
15) 1,2-Dichlorobenzene-d4	6.09	152	279635	44.87	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 89.74%			
25) Nitrobenzene-d5	6.46	82	417511	46.96	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 111		Recovery = 93.92%			
46) 2-Fluorobiphenyl	8.07	172	777809	45.36	ng/uL	0.00
Spiked Amount 50.000	Range 21 - 106		Recovery = 90.72%			
68) 2,4,6-Tribromophenol	9.37	330	96111	49.94	ng/uL	0.00
Spiked Amount 75.000	Range 23 - 100		Recovery = 66.59%			
83) p-Terphenyl-d14	11.30	244	784660	51.04	ng/uL	0.00
Spiked Amount 50.000	Range 33 - 111		Recovery = 102.08%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration

JK 3-31-09

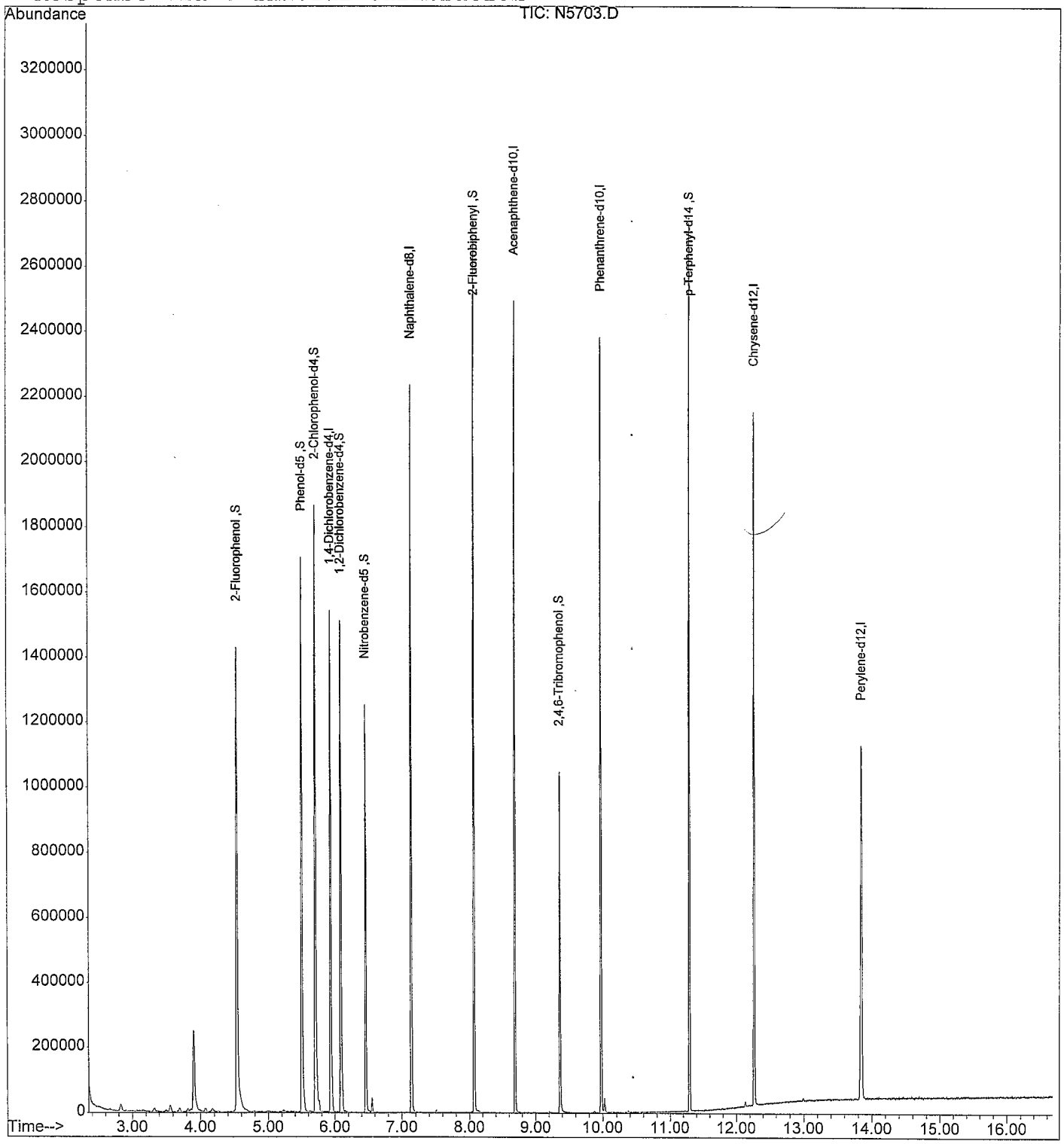
Quantitation Report

Data File : D:\HPCHEM\1\DATA\032809\N5703.D
Acq On : 28 Mar 2009 3:25 pm
Sample : EX090324-2MB
Misc : WATER EX090324-2
MS Integration Params: RTEINT.P
Quant Time: Mar 28 15:51 2009

Vial: 3
Operator: JK SOP 506
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 032709S1.RES

Method : D:\HPCHEM\1\METHODS\032709S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Sat Mar 28 14:34:56 2009
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\032809\N5703.D
Acq On : 28 Mar 2009 3:25 pm
Sample : EX090324-2MB
Misc : WATER EX090324-2
MS Integration Params: LSCINT.P

Vial: 3
Operator: JK SOP 50
Inst : GC/MS Ins
Multiplr: 1.00

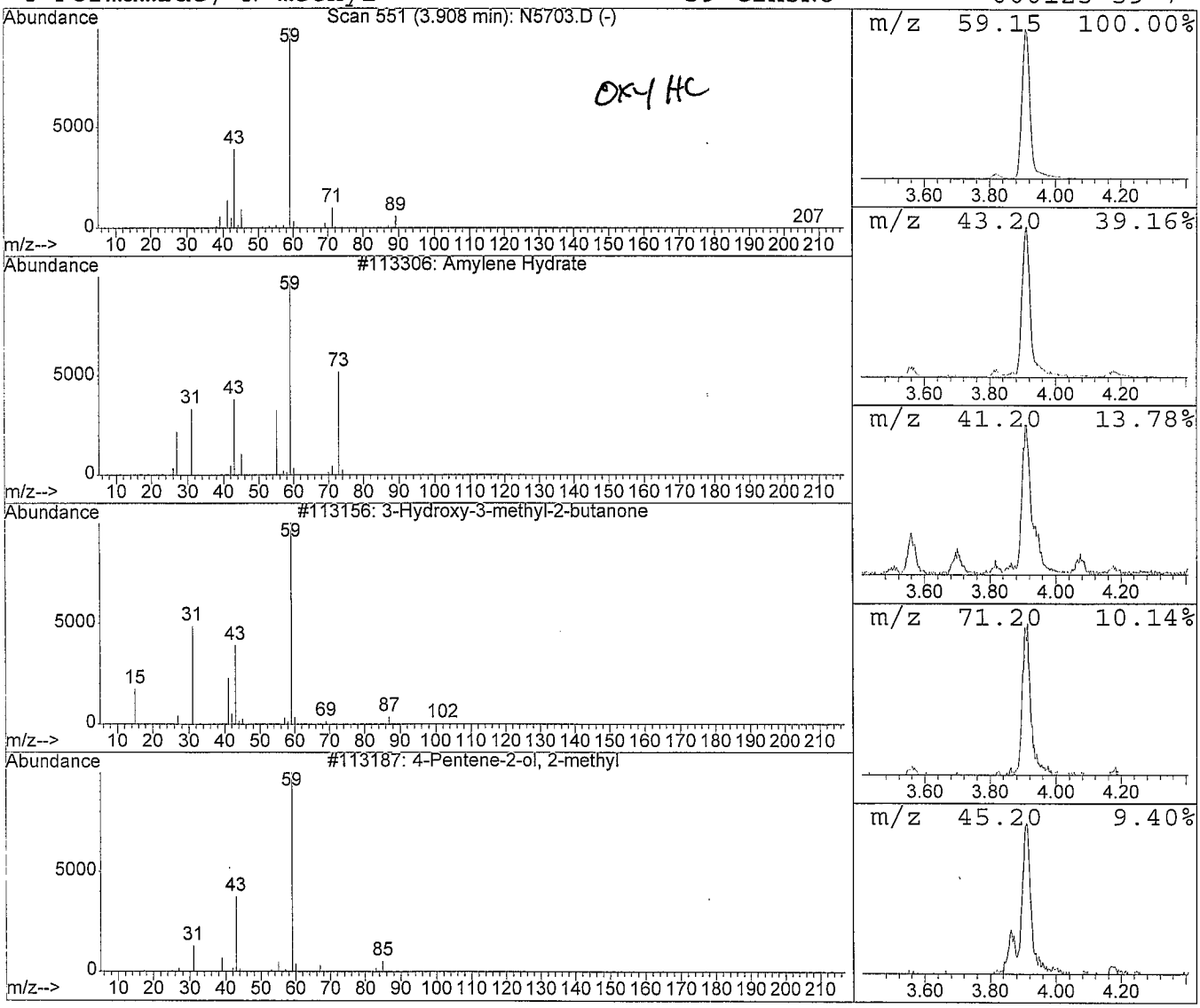
Quant Method : D:\HPCHEM\1\METHODS\032709S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 1 Amylene Hydrate Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.91	10.75 ng/uL	471644	1,4-Dichlorobenzene-d4	5.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	Amylene Hydrate	88	C5H12O	000075-85-4	40
2	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	38
3	4-Pentene-2-ol, 2-methyl	100	C6H12O	000624-97-5	36
4	Formamide, N-methyl-	59	C2H5NO	000123-39-7	9



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\032809\N5709.D Vial: 9
Acq On : 28 Mar 2009 5:50 pm Operator: JK SOP 506 Rev
Sample : 0903159-1 Inst : GC/MS Ins
Misc : WATER EX090324-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:52 2009 Quant Results File: 032709S1.RES

Quant Method : D:\HPCHEM\1\METHODS\032709S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Sat Mar 28 14:34:56 2009
Response via : Initial Calibration
DataAcq Meth : 032709S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	5.94	152	330322	40.00	ng/uL	0.00
24) Naphthalene-d8	7.14	136	1180651	40.00	ng/uL	-0.01
41) Acenaphthene-d10	8.69	164	550816	40.00	ng/uL	-0.01
69) Phenanthrene-d10	9.97	188	870049	40.00	ng/uL	-0.01
80) Chrysene-d12	12.26	240	909797	40.00	ng/uL	-0.02
91) Perylene-d12	13.84	264	684866	40.00	ng/uL	-0.01
System Monitoring Compounds						
5) 2-Fluorophenol	4.54	112	613356	65.74	ng/uL	0.00
Spiked Amount 75.000	Range 21 - 100		Recovery = 87.65%			
6) 2-Chlorophenol-d4	5.71	132	620990	64.29	ng/uL	-0.01
Spiked Amount 75.000	Range 33 - 110		Recovery = 85.72%			
8) Phenol-d5	5.51	99	778705	67.20	ng/uL	-0.01
Spiked Amount 75.000	Range 15 - 104		Recovery = 89.60%			
15) 1,2-Dichlorobenzene-d4	6.09	152	301239	42.09	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 84.18%			
25) Nitrobenzene-d5	6.46	82	450827	44.30	ng/uL	-0.01
Spiked Amount 50.000	Range 34 - 111		Recovery = 88.60%			
46) 2-Fluorobiphenyl	8.07	172	845317	43.90	ng/uL	-0.01
Spiked Amount 50.000	Range 21 - 106		Recovery = 87.80%			
68) 2,4,6-Tribromophenol	9.36	330	103174	48.11	ng/uL	-0.01
Spiked Amount 75.000	Range 23 - 100		Recovery = 64.15%			
83) p-Terphenyl-d14	11.29	244	895031	52.03	ng/uL	-0.01
Spiked Amount 50.000	Range 33 - 111		Recovery = 104.06%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N5709.D 032709S1.M Mon Mar 30 08:52:13 2009 Page 1

3-31-09

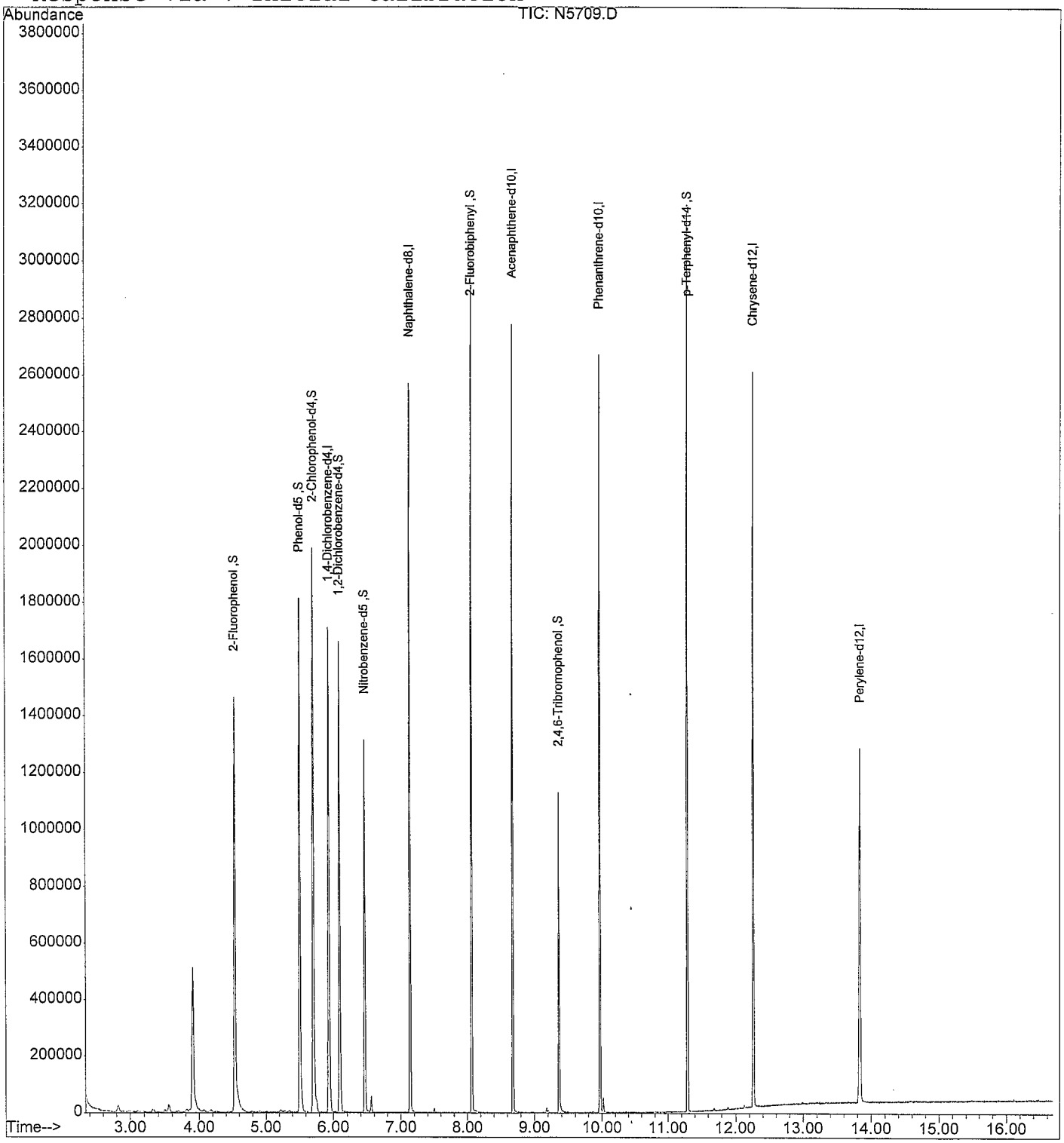
Quantitation Report

Data File : D:\HPCHEM\1\DATA\032809\N5709.D
Acq On : 28 Mar 2009 5:50 pm
Sample : 0903159-1
Misc : WATER EX090324-2
MS Integration Params: RTEINT.P
Quant Time: Mar 30 8:52 2009

Vial: 9
Operator: JK SOP 506
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 032709S1.RES

Method : D:\HPCHEM\1\METHODS\032709S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Sat Mar 28 14:34:56 2009
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\032809\N5709.D
Acq On : 28 Mar 2009 5:50 pm
Sample : 0903159-1
Misc : WATER EX090324-2
MS Integration Params: LSCINT.P

Vial: 9
Operator: JK SOP 50
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : D:\HPCHEM\1\METHODS\032709S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

Peak Number 1 3-Hydroxy-3-methyl-2-butanone Concentration Rank 1

R.T.	EstConc	Area	Relative to ISTD	R.T.
3.91	20.86 ng/uL	1043220	1,4-Dichlorobenzene-d4	5.94

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	45
2	4-Pentene-2-ol, 2-methyl	100	C6H12O	000624-97-5	36
3	Acetamide	59	C2H5NO	000060-35-5	9
4	Formamide, N-methyl-	59	C2H5NO	000123-39-7	9