ALS Paragon

GC/MS Semivolatiles

Case Narrative

Colorado Oil & Gas Conservation Commission

Complaint 200204222

Work Order Number: 0902200

1. This report consists of 1 water sample. The sample was received cool and intact by ALS Paragon on 02/25/09.

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 samples were extracted and analyzed within the established holding times.

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.

SJ

Sharon L Jobes
Organics Primary Data Reviewer

3-9-09
Date

Joe Hostettler

Organics Final Data Reviewer

March 6, 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: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
Client Project Name: Complaint 200204222
Client Project Number:
Client PO Number: OE PHA 09000000004

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
Dasko WW	0902200-1		WATER	24-Feb-09	14:37
Trip Blank	0902200-2		WATER	24-Feb-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) 0902200

Chain-of-Custody Date 24Feb2009 Page 1 of 1

Originator: Retain pink copy!

Project Name/No.: ______ Sampler(s): Gintautas Turnaround (circle one) **Standard** or **Rush (Due ______)** (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 200204222

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~~ methane, ethane, ethene	~~BTEX (only)~~ ~~SW8021B~~ 8260 25 Full + TICs	SVOCs (SW8270C) - Full + TICs	OC Pesticides SW8081A	PCBs SW8082	Herbicides SW8151A	~~Explosives~~ ~~SW8330~~ TOC	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~~ ~~Alkaline Digest~~ Y / N Total Alkalinity, HCO3, CO3	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
Dasko WW	24Feb09	14:37	1	W	none	9	X	X	X								X		X	X	X	X	X	X										X	X
" "	" "	14:37	↓	W	H_2SO_4	1							X																						
Trip Blank			2	W	HCl	2		X																											

* 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	Peter Gintautas	Signature	
Printed Name	P. Gintautas	Printed Name	
Date	24Feb2009 Time 17:25	Date	Time
Company	Colo. Oil & Gas Cons. Comm.	Company	
Received By: (1)		**Received By: (2)**	
Signature	Lara J Orban	Signature	
Printed Name	Lara J Orban	Printed Name	
Date	2/25/09 Time 1030	Date	Time
Company	ALS Paragon	Company	

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

Client: COGCC Workorder No: 0902200

Project Manager: AW Initials: LJO Date: 2/25/09

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 x > 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):	1.6							
No. of custody seals on cooler:	2							
DOT Survey/ Acceptance Information — External µR/hr reading:	14							
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 125ml amber for toc analysis had no identification label.

* The 500ml poly for metals analysis was received unpreserved.

+ Sample #2 (Trip Blank) 2 of 2 40ml vial contain headspace > pea.

If applicable, was the client contacted? (YES) / NO / NA Contact: Peter Cointantas Date/Time: e-mail 2/25/09

Project Manager Signature / Date: 2/25/09

*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: 0902200

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204222

Lab ID: EX090228-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5426

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: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Paragon

Work Order Number: 0902200

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204222

Lab ID: EX090228-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5426

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: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2MB

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5426

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	52.1		75	69	23 - 100
321-60-8	2-FLUOROBIPHENYL	42.7		50	85	21 - 106
367-12-4	2-FLUOROPHENOL	49		75	65	21 - 100
4165-60-0	NITROBENZENE-D5	39		50	78	34 - 111
4165-62-2	PHENOL-D5	49.3		75	66	15 - 104
1718-51-0	TERPHENYL-D14	40.4		50	81	33 - 111

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Field ID:
Lab ID: EX090228-2MB

Sample Matrix: WATER
%Moisture: N/A
Date Collected: N/A
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1000 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N5426

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
	4.06	OXYGENATED HYDROCARBON1	1	7.6	UG/L	J

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Field ID: Dasko WW
Lab ID: 0902200-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 24-Feb-09
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: As Received
File Name: N5429

Sample Aliquot: 1060 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	9.4	9.4	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.4	9.4	U	
62-53-3	ANILINE	1	9.4	9.4	U	
108-95-2	PHENOL	1	9.4	9.4	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.4	9.4	U	
95-57-8	2-CHLOROPHENOL	1	9.4	9.4	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.4	9.4	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.4	9.4	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.4	9.4	U	
100-51-6	BENZYL ALCOHOL	1	9.4	9.4	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.4	9.4	U	
95-48-7	2-METHYLPHENOL	1	9.4	9.4	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.4	9.4	U	
108-39-4	3+4-METHYLPHENOL	1	9.4	9.4	U	
67-72-1	HEXACHLOROETHANE	1	9.4	9.4	U	
98-95-3	NITROBENZENE	1	9.4	9.4	U	
78-59-1	ISOPHORONE	1	9.4	9.4	U	
88-75-5	2-NITROPHENOL	1	9.4	9.4	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.4	9.4	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.4	9.4	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.4	9.4	U	
65-85-0	BENZOIC ACID	1	47	47	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.4	9.4	U	
91-20-3	NAPHTHALENE	1	9.4	9.4	U	
106-47-8	4-CHLOROANILINE	1	9.4	9.4	U	
87-68-3	HEXACHLOROBUTADIENE	1	9.4	9.4	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.4	9.4	U	

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Field ID: Dasko WW
Lab ID: 0902200-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 24-Feb-09
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: As Received
File Name: N5429

Sample Aliquot: 1060 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

91-57-6	2-METHYLNAPHTHALENE	1	9.4	9.4	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.4	9.4	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.4	9.4	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.4	9.4	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.4	9.4	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.4	9.4	U	
88-74-4	2-NITROANILINE	1	19	19	U	
131-11-3	DIMETHYL PHTHALATE	1	9.4	9.4	U	
606-20-2	2,6-DINITROTOLUENE	1	9.4	9.4	U	
208-96-8	ACENAPHTHYLENE	1	9.4	9.4	U	
99-09-2	3-NITROANILINE	1	19	19	U	
83-32-9	ACENAPHTHENE	1	9.4	9.4	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	9.4	9.4	U	
121-14-2	2,4-DINITROTOLUENE	1	9.4	9.4	U	
84-66-2	DIETHYL PHTHALATE	1	9.4	9.4	U	
86-73-7	FLUORENE	1	9.4	9.4	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.4	9.4	U	
100-01-6	4-NITROANILINE	1	19	19	U	
103-33-3	AZOBENZENE	1	9.4	9.4	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.4	9.4	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.4	9.4	U	
118-74-1	HEXACHLOROBENZENE	1	9.4	9.4	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.4	9.4	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	U	
85-01-8	PHENANTHRENE	1	9.4	9.4	U	
120-12-7	ANTHRACENE	1	9.4	9.4	U	

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Field ID: Dasko WW
Lab ID: 0902200-1

Sample Matrix: WATER
% Moisture: N/A
Date Collected: 24-Feb-09
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09
Prep Method: SW3520 Rev C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: As Received
File Name: N5429

Sample Aliquot: 1060 ml
Final Volume: 1 ml
Result Units: UG/L
Clean DF: 1

86-74-8	CARBAZOLE	1	9.4	9.4	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.4	9.4	U	
206-44-0	FLUORANTHENE	1	9.4	9.4	U	
129-00-0	PYRENE	1	9.4	9.4	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.4	9.4	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.4	9.4	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.4	9.4	U	
218-01-9	CHRYSENE	1	9.4	9.4	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.4	9.4	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.4	9.4	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.4	9.4	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.4	9.4	U	
50-32-8	BENZO(A)PYRENE	1	9.4	9.4	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.4	9.4	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.4	9.4	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.4	9.4	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	48.4		70.8	68	23 - 100
321-60-8	2-FLUOROBIPHENYL	38.4		47.2	81	21 - 106
367-12-4	2-FLUOROPHENOL	44.2		70.8	62	21 - 100
4165-60-0	NITROBENZENE-D5	35.7		47.2	76	34 - 111
4165-62-2	PHENOL-D5	44.4		70.8	63	15 - 104
1718-51-0	TERPHENYL-D14	39.6		47.2	84	33 - 111

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Paragon

Work Order Number: 0902200

Client Name: Colorado Oil & Gas Conservation Commission

ClientProject ID: Complaint 200204222

Field ID: Dasko WW
Lab ID: 0902200-1

Sample Matrix: WATER
%Moisture: N/A
Date Collected: 24-Feb-09
Date Extracted: 28-Feb-09
Date Analyzed: 03-Mar-09

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: As Received

Sample Aliquot: 1060 ml
Final Volume: 1 ml
Clean DF: 1
File Name: N5429

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
	4.06	OXYGENATED HYDROCARBON1	1	14	UG/L	B,J

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02/28/2009
Date Analyzed: 03/03/2009
Prep Method: SW3520C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5427

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	39	10		65	10 - 108%
62-75-9	N-NITROSODIMETHYLAMINE	60	45.3	10		75	26 - 110%
62-53-3	ANILINE	60	43	10		72	25 - 125%
108-95-2	PHENOL	60	40.4	10		67	49 - 101%
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	40.6	10		68	37 - 110%
95-57-8	2-CHLOROPHENOL	60	42.3	10		71	37 - 106%
541-73-1	1,3-DICHLOROBENZENE	60	39.4	10		66	32 - 98%
106-46-7	1,4-DICHLOROBENZENE	60	41.2	10		69	32 - 98%
95-50-1	1,2-DICHLOROBENZENE	60	41.9	10		70	33 - 102%
100-51-6	BENZYL ALCOHOL	60	45.3	10		76	30 - 112%
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	39.4	10		66	26 - 131%
95-48-7	2-METHYLPHENOL	60	44.2	10		74	38 - 109%
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	48.8	10		81	34 - 128%
108-39-4	3+4-METHYLPHENOL	60	46.8	10		78	32 - 110%
67-72-1	HEXACHLOROETHANE	60	40.5	10		68	28 - 94%
98-95-3	NITROBENZENE	60	49.9	10		83	44 - 109%
78-59-1	ISOPHORONE	60	45.4	10		76	50 - 112%
88-75-5	2-NITROPHENOL	60	40.8	10		68	39 - 113%
105-67-9	2,4-DIMETHYLPHENOL	60	42.7	10		71	28 - 109%
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	38.3	10		64	46 - 107%
120-83-2	2,4-DICHLOROPHENOL	60	43.1	10		72	48 - 105%
65-85-0	BENZOIC ACID	100	52.7	50		53	10 - 125%
120-82-1	1,2,4-TRICHLOROBENZENE	60	37.1	10		62	37 - 107%
91-20-3	NAPHTHALENE	60	40.4	10		67	39 - 102%
106-47-8	4-CHLOROANILINE	60	40.8	10		68	15 - 109%
87-68-3	HEXACHLOROBUTADIENE	60	37.6	10		63	27 - 103%

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02/28/2009
Date Analyzed: 03/03/2009
Prep Method: SW3520C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5427

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	49.7	10		83	47 - 111%
91-57-6	2-METHYLNAPHTHALENE	60	41.5	10		69	46 - 104%
90-12-0	1-METHYLNAPHTHALENE	60	43.3	10		72	46 - 104%
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	11.7	10		20	10 - 125%
88-06-2	2,4,6-TRICHLOROPHENOL	60	48.5	10		81	49 - 113%
95-95-4	2,4,5-TRICHLOROPHENOL	60	45.2	10		75	49 - 111%
91-58-7	2-CHLORONAPHTHALENE	60	44.6	10		74	36 - 137%
88-74-4	2-NITROANILINE	60	54.7	20		91	48 - 115%
131-11-3	DIMETHYL PHTHALATE	60	51.2	10		85	25 - 127%
606-20-2	2,6-DINITROTOLUENE	60	51.1	10		85	49 - 117%
208-96-8	ACENAPHTHYLENE	60	48.7	10		81	50 - 107%
99-09-2	3-NITROANILINE	60	51.9	20		87	19 - 126%
83-32-9	ACENAPHTHENE	60	50.3	10		84	47 - 108%
51-28-5	2,4-DINITROPHENOL	60	48.7	20		81	14 - 138%
100-02-7	4-NITROPHENOL	60	70.1	20		117	21 - 119%
132-64-9	DIBENZOFURAN	60	49.7	10		83	54 - 107%
121-14-2	2,4-DINITROTOLUENE	60	54.3	10		90	51 - 118%
84-66-2	DIETHYL PHTHALATE	60	54	10		90	41 - 118%
86-73-7	FLUORENE	60	51.8	10		86	50 - 112%
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	49.7	10		83	50 - 111%
100-01-6	4-NITROANILINE	60	51	20		85	36 - 118%
103-33-3	AZOBENZENE	60	51.9	10		87	21 - 137%
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	52.8	20		88	40 - 130%
86-30-6	N-NITROSODIPHENYLAMINE	60	44.9	10		75	48 - 111%
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	48.6	10		81	52 - 113%
118-74-1	HEXACHLOROBENZENE	60	47	10		78	52 - 112%
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	85.5	10		86	23 - 112%

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2LCS

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02/28/2009
Date Analyzed: 03/03/2009
Prep Method: SW3520C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5427

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	48.8	20		81	38 - 117%
85-01-8	PHENANTHRENE	60	51.4	10		86	51 - 117%
120-12-7	ANTHRACENE	60	50.8	10		85	54 - 112%
86-74-8	CARBAZOLE	60	52.5	10		88	48 - 117%
84-74-2	DI-N-BUTYL PHTHALATE	60	54.6	10		91	54 - 116%
206-44-0	FLUORANTHENE	60	51.9	10		86	54 - 116%
129-00-0	PYRENE	60	43.9	10		73	49 - 128%
85-68-7	BUTYL BENZYL PHTHALATE	60	48.5	10		81	46 - 116%
56-55-3	BENZO(A)ANTHRACENE	60	48.3	10		81	56 - 109%
91-94-1	3,3'-DICHLOROBENZIDINE	60	47.1	10		79	19 - 111%
218-01-9	CHRYSENE	60	49.7	10		83	55 - 109%
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	54.5	10		91	42 - 126%
117-84-0	DI-N-OCTYL PHTHALATE	60	57.9	10		96	37 - 137%
205-99-2	BENZO(B)FLUORANTHENE	60	54.3	10		90	45 - 118%
207-08-9	BENZO(K)FLUORANTHENE	60	51.7	10		86	45 - 124%
50-32-8	BENZO(A)PYRENE	60	45.1	10		75	53 - 110%
193-39-5	INDENO(1,2,3-CD)PYRENE	60	37.4	10		62	43 - 125%
53-70-3	DIBENZO(A,H)ANTHRACENE	60	39	10		65	42 - 127%
191-24-2	BENZO(G,H,I)PERYLENE	60	34.9	10		58	38 - 123%

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02/28/2009
Date Analyzed: 03/03/2009
Prep Method: SW3520C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5428

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	39.9	10		66	20	2
62-75-9	N-NITROSODIMETHYLAMINE	60	48.9	10		81	20	8
62-53-3	ANILINE	60	45.4	10		76	20	5
108-95-2	PHENOL	60	44.4	10		74	20	9
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	44.5	10		74	20	9
95-57-8	2-CHLOROPHENOL	60	45.6	10		76	20	7
541-73-1	1,3-DICHLOROBENZENE	60	42.8	10		71	20	8
106-46-7	1,4-DICHLOROBENZENE	60	45	10		75	20	9
95-50-1	1,2-DICHLOROBENZENE	60	45.7	10		76	20	9
100-51-6	BENZYL ALCOHOL	60	49.5	10		82	20	9
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	43	10		72	20	9
95-48-7	2-METHYLPHENOL	60	48.4	10		81	20	9
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	60	52.4	10		87	20	7
108-39-4	3+4-METHYLPHENOL	60	50.2	10		84	20	7
67-72-1	HEXACHLOROETHANE	60	44	10		73	20	8
98-95-3	NITROBENZENE	60	54.8	10		91	20	9
78-59-1	ISOPHORONE	60	48.1	10		80	20	6
88-75-5	2-NITROPHENOL	60	44.5	10		74	20	9
105-67-9	2,4-DIMETHYLPHENOL	60	45.9	10		76	20	7
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	41.2	10		69	20	7
120-83-2	2,4-DICHLOROPHENOL	60	45.9	10		77	20	6
65-85-0	BENZOIC ACID	100	60.1	50		60	20	13
120-82-1	1,2,4-TRICHLOROBENZENE	60	40.6	10		68	20	9
91-20-3	NAPHTHALENE	60	44	10		73	20	8
106-47-8	4-CHLOROANILINE	60	44.4	10		74	20	8
87-68-3	HEXACHLOROBUTADIENE	60	41.9	10		70	20	11
59-50-7	4-CHLORO-3-METHYLPHENOL	60	51.5	10		86	20	4

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02/28/2009
Date Analyzed: 03/03/2009
Prep Method: SW3520C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5428

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	45.2	10		75	20	8
90-12-0	1-METHYLNAPHTHALENE	60	46	10		77	20	6
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	11	10		18	20	7
88-06-2	2,4,6-TRICHLOROPHENOL	60	50.4	10		84	20	4
95-95-4	2,4,5-TRICHLOROPHENOL	60	46.1	10		77	20	2
91-58-7	2-CHLORONAPHTHALENE	60	46.5	10		77	20	4
88-74-4	2-NITROANILINE	60	56.4	20		94	20	3
131-11-3	DIMETHYL PHTHALATE	60	52.2	10		87	20	2
606-20-2	2,6-DINITROTOLUENE	60	51.5	10		86	20	1
208-96-8	ACENAPHTHYLENE	60	50.2	10		84	20	3
99-09-2	3-NITROANILINE	60	53.5	20		89	20	3
83-32-9	ACENAPHTHENE	60	52	10		87	20	3
51-28-5	2,4-DINITROPHENOL	60	49.5	20		83	20	2
100-02-7	4-NITROPHENOL	60	71.5	20		119	20	2
132-64-9	DIBENZOFURAN	60	51.2	10		85	20	3
121-14-2	2,4-DINITROTOLUENE	60	55.6	10		93	20	2
84-66-2	DIETHYL PHTHALATE	60	54.3	10		91	20	1
86-73-7	FLUORENE	60	53	10		88	20	2
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	50.8	10		85	20	2
100-01-6	4-NITROANILINE	60	52.3	20		87	20	2
103-33-3	AZOBENZENE	60	53.3	10		89	20	3
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	52.9	20		88	20	0
86-30-6	N-NITROSODIPHENYLAMINE	60	45.6	10		76	20	2
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	49.4	10		82	20	2
118-74-1	HEXACHLOROBENZENE	60	48.5	10		81	20	3
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	87.6	10		88	20	2
87-86-5	PENTACHLOROPHENOL	60	49.6	20		83	20	2

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Paragon
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

Lab ID: EX090228-2LCSD

Sample Matrix: WATER
% Moisture: N/A
Date Collected: N/A
Date Extracted: 02/28/2009
Date Analyzed: 03/03/2009
Prep Method: SW3520C

Prep Batch: EX090228-2
QCBatchID: EX090228-2-2
Run ID: SV090303-1
Cleanup: NONE
Basis: N/A
File Name: N5428

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	52.4	10		87	20	2
120-12-7	ANTHRACENE	60	51.2	10		85	20	1
86-74-8	CARBAZOLE	60	52.4	10		87	20	0
84-74-2	DI-N-BUTYL PHTHALATE	60	53.9	10		90	20	1
206-44-0	FLUORANTHENE	60	51.4	10		86	20	1
129-00-0	PYRENE	60	46.5	10		78	20	6
85-68-7	BUTYL BENZYL PHTHALATE	60	51.5	10		86	20	6
56-55-3	BENZO(A)ANTHRACENE	60	49.8	10		83	20	3
91-94-1	3,3'-DICHLOROBENZIDINE	60	47.5	10		79	20	1
218-01-9	CHRYSENE	60	50.6	10		84	20	2
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	56.6	10		94	20	4
117-84-0	DI-N-OCTYL PHTHALATE	60	60.2	10		100	20	4
205-99-2	BENZO(B)FLUORANTHENE	60	54.2	10		90	20	0
207-08-9	BENZO(K)FLUORANTHENE	60	52	10		87	20	1
50-32-8	BENZO(A)PYRENE	60	45.5	10		76	20	1
193-39-5	INDENO(1,2,3-CD)PYRENE	60	35.7	10		60	20	5
53-70-3	DIBENZO(A,H)ANTHRACENE	60	37.6	10		63	20	4
191-24-2	BENZO(G,H,I)PERYLENE	60	32.9	10		55	20	6

Data Package ID: *SV0902200-1*

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: **ALS Paragon**
Work Order Number: 0902200
Client Name: Colorado Oil & Gas Conservation Commission
ClientProject ID: Complaint 200204222

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	84		87		23 - 100
321-60-8	2-FLUOROBIPHENYL	50	73		76		21 - 106
367-12-4	2-FLUOROPHENOL	75	67		74		21 - 100
4165-60-0	NITROBENZENE-D5	50	71		78		34 - 111
4165-62-2	PHENOL-D5	75	69		73		15 - 104
1718-51-0	TERPHENYL-D14	50	70		74		33 - 111

Data Package ID: *SV0902200-1*

Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\030309\N5426.D Vial: 15
Acq On : 3 Mar 2009 6:01 pm Operator: JK SOP 506 Rev
Sample : EX090228-2MB Inst : GC/MS Ins
Misc : WATER EX090228-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 3 18:33 2009 Quant Results File: 022409S1.RES

Quant Method : D:\HPCHEM\1\METHODS\022409S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Tue Mar 03 13:07:04 2009
Response via : Initial Calibration
DataAcq Meth : 022409S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.04	152	326435	40.00	ng/uL	0.00
24) Naphthalene-d8	7.24	136	1106027	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.79	164	498085	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.07	188	744158	40.00	ng/uL	0.00
80) Chrysene-d12	12.38	240	803252	40.00	ng/uL	0.00
91) Perylene-d12	14.08	264	581004	40.00	ng/uL	0.00
System Monitoring Compounds						
5) 2-Fluorophenol	4.67	112	553259	49.00	ng/uL	0.00
Spiked Amount 75.000	Range 21 - 100		Recovery = 65.33%			
6) 2-Chlorophenol-d4	5.81	132	549084	55.54	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 74.05%			
8) Phenol-d5	5.61	99	667759	49.26	ng/uL	0.00
Spiked Amount 75.000	Range 15 - 104		Recovery = 65.68%			
15) 1,2-Dichlorobenzene-d4	6.19	152	251343	36.24	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 72.48%			
25) Nitrobenzene-d5	6.56	82	382894	38.97	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 111		Recovery = 77.94%			
46) 2-Fluorobiphenyl	8.16	172	682637	42.65	ng/uL	0.00
Spiked Amount 50.000	Range 21 - 106		Recovery = 85.30%			
68) 2,4,6-Tribromophenol	9.46	330	102987	52.10	ng/uL	0.00
Spiked Amount 75.000	Range 23 - 100		Recovery = 69.47%			
83) p-Terphenyl-d14	11.39	244	734668	40.40	ng/uL	0.00
Spiked Amount 50.000	Range 33 - 111		Recovery = 80.80%			

Target Compounds Qvalue

(#) = qualifier out of range (m) = manual integration
N5426.D 022409S1.M Tue Mar 03 18:33:28 2009 Page 1

3-5-09

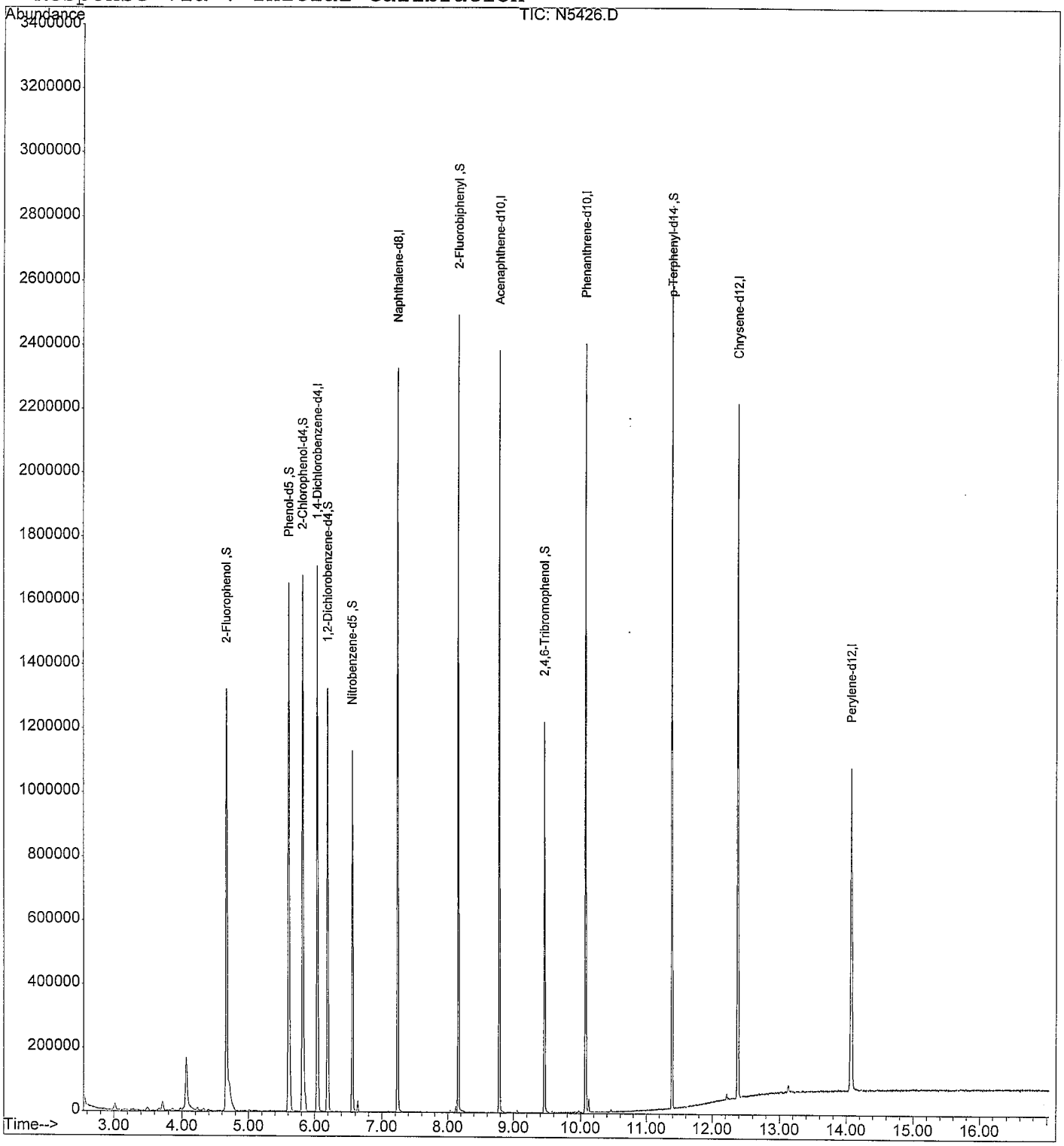
Quantitation Report

Data File : D:\HPCHEM\1\DATA\030309\N5426.D
Acq On : 3 Mar 2009 6:01 pm
Sample : EX090228-2MB
Misc : WATER EX090228-2
MS Integration Params: RTEINT.P
Quant Time: Mar 3 18:33 2009

Vial: 15
Operator: JK SOP 506
Inst : GC/MS Ins
Multiplr: 1.00

Quant Results File: 022409S1.RES

Method : D:\HPCHEM\1\METHODS\022409S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Tue Mar 03 13:07:04 2009
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\030309\N5426.D
Acq On : 3 Mar 2009 6:01 pm
Sample : EX090228-2MB
Misc : WATER EX090228-2
MS Integration Params: LSCINT.P

Vial: 15
Operator: JK SOP 50
Inst : GC/MS Ins
Multiplr: 1.00

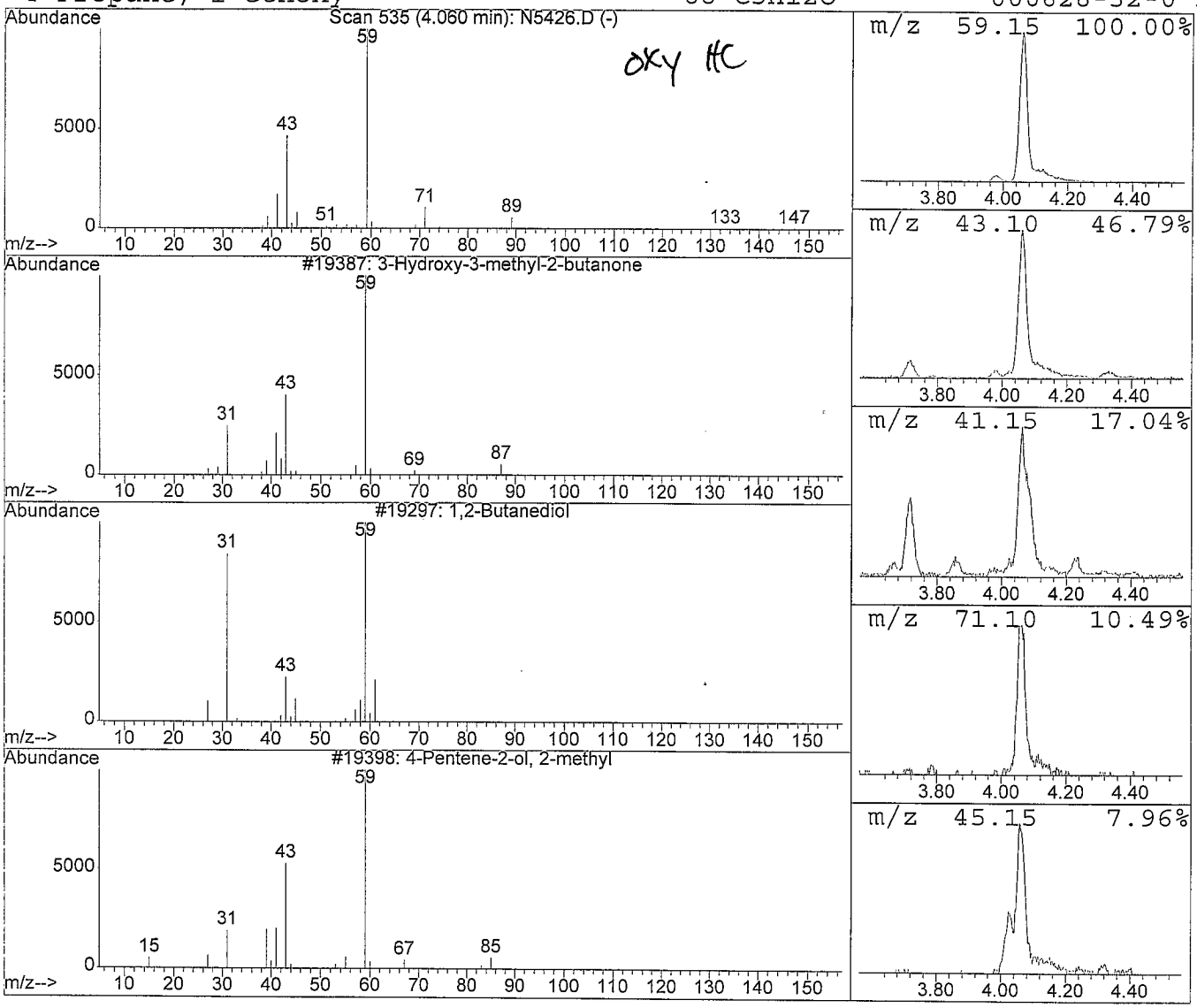
Quant Method : D:\HPCHEM\1\METHODS\022409S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : D:\DATABASE\NIST98.L

****

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

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.06	7.59 ng/uL	377833	1,4-Dichlorobenzene-d4	6.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	45
2	1,2-Butanediol	90	C4H10O2	000584-03-2	45
3	4-Pentene-2-ol, 2-methyl	100	C6H12O	000624-97-5	38
4	Propane, 1-ethoxy-	88	C5H12O	000628-32-0	38



Quantitation Report (Not Reviewed)

Data File : D:\HPCHEM\1\DATA\030309\N5429.D Vial: 18
Acq On : 3 Mar 2009 7:13 pm Operator: JK SOP 506 Rev
Sample : 0902200-1 Inst : GC/MS Ins
Misc : WATER EX090228-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 4 10:40 2009 Quant Results File: 022409S1.RES

Quant Method : D:\HPCHEM\1\METHODS\022409S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Tue Mar 03 13:07:04 2009
Response via : Initial Calibration
DataAcq Meth : 022409S1

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.04	152	320042	40.00	ng/uL	0.00
24) Naphthalene-d8	7.23	136	1127816	40.00	ng/uL	0.00
41) Acenaphthene-d10	8.79	164	509812	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.07	188	790320	40.00	ng/uL	0.00
80) Chrysene-d12	12.39	240	836158	40.00	ng/uL	0.00
91) Perylene-d12	14.09	264	504777	40.00	ng/uL	0.02
System Monitoring Compounds						
5) 2-Fluorophenol	4.66	112	518584	46.85	ng/uL	0.00
Spiked Amount 75.000	Range 21 - 100		Recovery = 62.47%			
6) 2-Chlorophenol-d4	5.81	132	529091	54.58	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery = 72.77%			
8) Phenol-d5	5.60	99	625771	47.08	ng/uL	-0.01
Spiked Amount 75.000	Range 15 - 104		Recovery = 62.77%			
15) 1,2-Dichlorobenzene-d4	6.19	152	244420	35.95	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery = 71.90%			
25) Nitrobenzene-d5	6.56	82	379467	37.88	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 111		Recovery = 75.76%			
46) 2-Fluorobiphenyl	8.16	172	667268	40.73	ng/uL	0.00
Spiked Amount 50.000	Range 21 - 106		Recovery = 81.46%			
68) 2,4,6-Tribromophenol	9.46	330	103762	51.28	ng/uL	0.00
Spiked Amount 75.000	Range 23 - 100		Recovery = 68.37%			
83) p-Terphenyl-d14	11.39	244	794731	41.99	ng/uL	0.00
Spiked Amount 50.000	Range 33 - 111		Recovery = 83.98%			

Target Compounds Qvalue

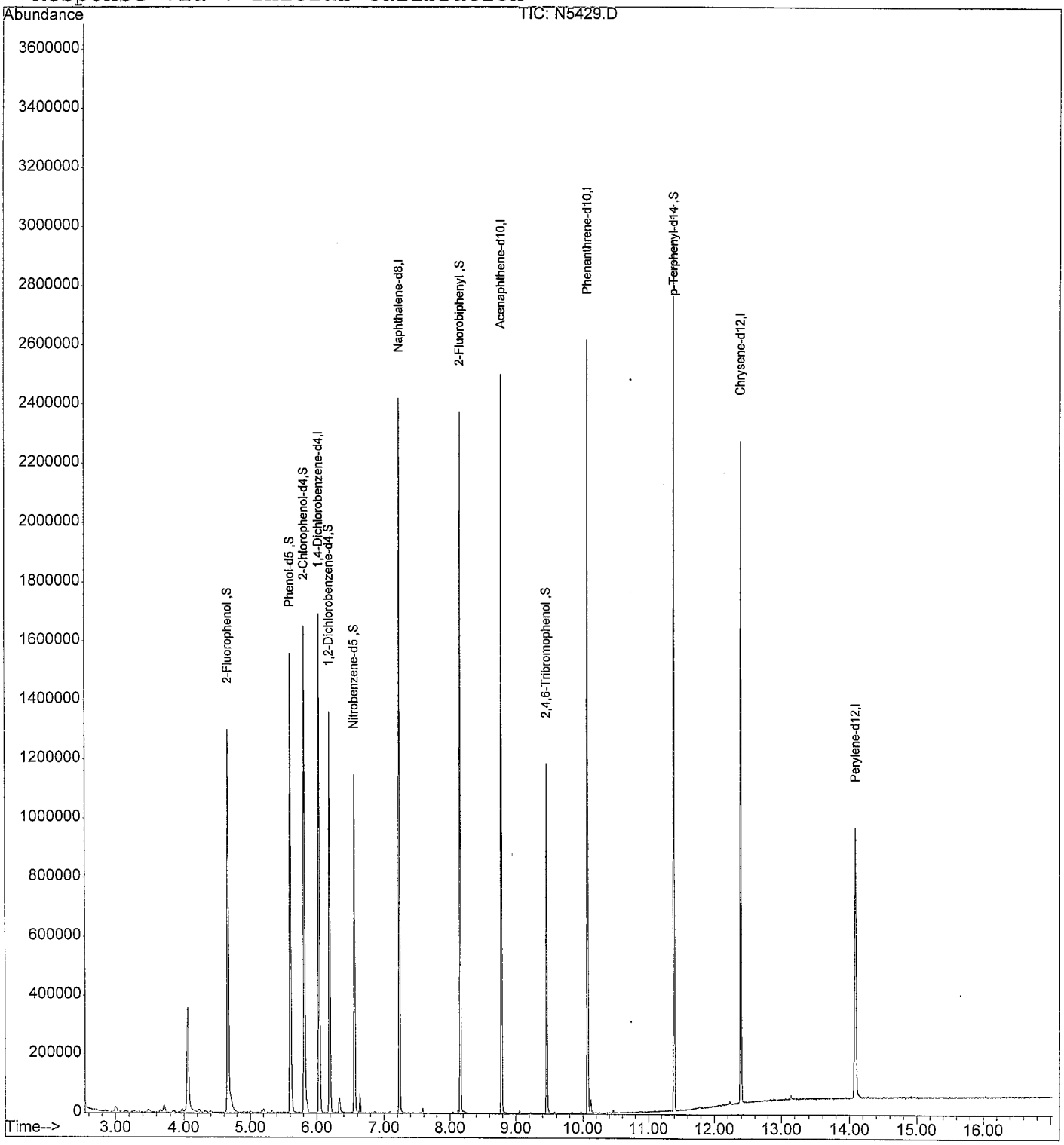
(#) = qualifier out of range (m) = manual integration
N5429.D 022409S1.M Wed Mar 04 10:40:36 2009 Page 1

3-5-09

Quantitation Report

Data File : D:\HPCHEM\1\DATA\030309\N5429.D Vial: 18
Acq On : 3 Mar 2009 7:13 pm Operator: JK SOP 506
Sample : 0902200-1 Inst : GC/MS Ins
Misc : WATER EX090228-2 Multiplr: 1.00
MS Integration Params: RTEINT.P
Quant Time: Mar 4 10:40 2009 Quant Results File: 022409S1.RES

Method : D:\HPCHEM\1\METHODS\022409S1.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Last Update : Tue Mar 03 13:07:04 2009
Response via : Initial Calibration



Library Search Compound Report

Data File : D:\HPCHEM\1\DATA\030309\N5429.D
Acq On : 3 Mar 2009 7:13 pm
Sample : 0902200-1
Misc : WATER EX090228-2
MS Integration Params: LSCINT.P

Vial: 18
Operator: JK SOP 50
Inst : GC/MS Ins
Multiplr: 1.00

Quant Method : D:\HPCHEM\1\METHODS\022409S1.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.
4.06	14.96 ng/uL	731720	1,4-Dichlorobenzene-d4	6.04

Hit# of 5	Tentative ID	MW	MolForm	CAS#	Qual
1	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	38
2	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	38
3	1,2-Butanediol	90	C4H10O2	000584-03-2	38
4	4-Pentene-2-ol, 2-methyl	100	C6H12O	000624-97-5	36