



GC/MS Semivolatiles Case Narrative

Colorado Oil & Gas Conservation Commission DCU6-Orphan

Work Order Number: 1007167

1. This report consists of 1 water sample. The sample was received cool and intact by ALS on 07/16/10.
2. The sample was prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water samples were 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 16 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 $\leq 15\%$. 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. Matrix spikes and matrix spike duplicates could not be performed because of insufficient sample. A laboratory control sample and laboratory control sample duplicate were performed instead.



10. The sample was extracted and analyzed within the established holding time.


11. All surrogate recoveries were within acceptance limits with the following exceptions:

Surrogate	Sample	Direction
2,4,6-Tribromophenol	LCS, LCSD	High

The re-analysis of these samples confirmed the original surrogate analysis. No further action was taken.

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 certifies that the analyses reported herein are true, complete and correct within the limits of the methods employed.



Sharon L. Jones
Organics Primary Data Reviewer

7-30-10
Date



Joe [unclear]
Organics Final Data Reviewer

July 30, 2010
Date



ALS
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 Laboratory Group -- FC

Sample Number(s) Cross-Reference Table

Paragon OrderNum: 1007167

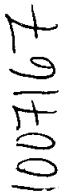
Client Name: COGCC

Client Project Name: DCU6-Orphan

Client Project Number:

Client PO Number: OE PHA 11000000014

Client Sample Number	Lab Sample Number	COC Number	Matrix	Date Collected	Time Collected
DCU #6	1007167-1		WATER	15-Jul-10	12:00
Trip Blank	1007167-2		WATER	15-Jul-10	

Form 202r7 (5/19/09)



CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC
Project Manager: ARWWorkorder No: 1007167
Initials: LAS Date: 7/16/10

1. Does this project require any special handling in addition to standard Paragon procedures?		YES	<input checked="" type="radio"/> NO
2. Are custody seals on shipping containers intact?	NONE	<input checked="" type="radio"/> YES	<input type="radio"/> NO
3. Are Custody seals on sample containers intact?	<input checked="" type="radio"/> NONE	YES	NO
4. Is there a COC (Chain-of-Custody) present or other representative documents?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
5. Are the COC and bottle labels complete and legible?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
6. Is the COC in agreement with samples received? (IDs, dates, times, no. of samples, no. of containers, matrix, requested analyses, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> NO
7. Were airbills / shipping documents present and/or removable?	DROP OFF	<input checked="" type="radio"/> YES	<input type="radio"/> NO
8. Are all aqueous samples requiring preservation preserved correctly? (excluding volatiles)	N/A	YES	<input checked="" type="radio"/> NO
9. Are all aqueous non-preserved samples pH 4-9?	N/A	<input checked="" type="radio"/> YES	<input type="radio"/> NO
10. Is there sufficient sample for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
11. Were all samples placed in the proper containers for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
12. Are all samples within holding times for the requested analyses?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
13. Were all sample containers received intact ? (not broken or leaking, etc.)		<input checked="" type="radio"/> YES	<input type="radio"/> NO
14. Are all samples requiring no headspace (VOC, GRO, RSK/MEE, Rx CN/S, radon) headspace free? Size of bubble: <input checked="" type="checkbox"/> < green pea <input type="checkbox"/> > green pea	N/A	YES	<input checked="" type="radio"/> NO
15. Do perchlorate LCMS-MS samples have headspace ? (at least 1/3 of container required)	<input checked="" type="radio"/> N/A	YES	<input type="radio"/> 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.)	<input checked="" type="radio"/> N/A	YES	<input type="radio"/> NO
17. Were the samples shipped on ice ?		<input checked="" type="radio"/> YES	<input type="radio"/> NO
18. Were cooler temperatures measured at 0.1-6.0°C?	IR gun used*: <input checked="" type="radio"/> #2 <input type="radio"/> #4	RAD ONLY	<input checked="" type="radio"/> YES <input type="radio"/> NO
Cooler #: <u>1</u>			
Temperature (°C): <u>2.6</u>			
No. of custody seals on cooler: <u>2</u>			
External µR/hr reading: <u>12</u>			
Background µR/hr reading: <u>10</u>			
Were external µR/hr readings ≤ two times background and within DOT acceptance criteria? <input checked="" type="radio"/> YES <input type="radio"/> NO <input type="radio"/> NA (If no, see Form 008.)			

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

*8 1007167-1-10 (DCU#6) 125ml amber initial pH = 7
0.4mL H₂SO₄ (Lot #49245) added by LAS @ 1040 7/16/10
Final pH < 2

*14 1007167-1-5, 1-6 40mL vials for GRO have headspace < pea size

If applicable, was the client contacted? ☒ YES ☐ NO ☐ NA Contact: Linda Sping Drouke Date/Time: 7/19/10Project Manager Signature / Date: [Signature] 7/19/10

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Method: SW3520 Rev C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1986

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: SV1007167-1

Date Printed: Friday, July 30, 2010

ALS Laboratory Group -- FC

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LIMS Version: 6.389A

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Method: SW3520 Rev C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1986

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: SV1007167-1

Date Printed: Friday, July 30, 2010

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LIMS Version: 6.389A

GC/MS Semi-volatiles

Method SW8270D

Method Blank

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Method: SW3520 Rev C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1986

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	63.6		75	85	23 - 100
321-60-8	2-FLUOROBIPHENYL	46.1		50	92	21 - 106
367-12-4	2-FLUOROPHENOL	66		75	88	21 - 100
4165-60-0	NITROBENZENE-D5	44.3		50	89	34 - 111
4165-62-2	PHENOL-D5	69.1		75	92	15 - 104
1718-51-0	TERPHENYL-D14	53.1		50	106	33 - 111

Data Package ID: SV1007167-1

Date Printed: Friday, July 30, 2010

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LIMS Version: 6.389A

GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Field ID:

Lab ID: EX100720-4MB

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: As Received

Sample Aliquot: 1000 ml

Final Volume: 1 ml

Clean DF: 1

File Name: R1986

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
	4.02	OXYGENATED HYDROCARBON1	1	8.4	UG/L	J

Data Package ID: SV1007167-1

Date Printed: Friday, July 30, 2010

ALS Laboratory Group -- FC

LIMS Version: 6.389A

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GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Field ID: DCU #6

Lab ID: 1007167-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 15-Jul-10

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Method: SW3520 Rev C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: As Received

File Name: R1981

Sample Aliquot: 1045 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	9.6	9.6	U	
62-75-9	N-NITROSODIMETHYLAMINE	1	9.6	9.6	U	
62-53-3	ANILINE	1	9.6	9.6	U	
108-95-2	PHENOL	1	9.6	9.6	U	
111-44-4	BIS(2-CHLOROETHYL)ETHER	1	9.6	9.6	U	
95-57-8	2-CHLOROPHENOL	1	9.6	9.6	U	
541-73-1	1,3-DICHLOROBENZENE	1	9.6	9.6	U	
106-46-7	1,4-DICHLOROBENZENE	1	9.6	9.6	U	
95-50-1	1,2-DICHLOROBENZENE	1	9.6	9.6	U	
100-51-6	BENZYL ALCOHOL	1	9.6	9.6	U	
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	1	9.6	9.6	U	
95-48-7	2-METHYLPHENOL	1	9.6	9.6	U	
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	1	9.6	9.6	U	
108-39-4	3+4-METHYLPHENOL	1	9.6	9.6	U	
67-72-1	HEXACHLOROETHANE	1	9.6	9.6	U	
98-95-3	NITROBENZENE	1	9.6	9.6	U	
78-59-1	ISOPHORONE	1	9.6	9.6	U	
88-75-5	2-NITROPHENOL	1	9.6	9.6	U	
105-67-9	2,4-DIMETHYLPHENOL	1	9.6	9.6	U	
111-91-1	BIS(2-CHLOROETHOXY)METHANE	1	9.6	9.6	U	
120-83-2	2,4-DICHLOROPHENOL	1	9.6	9.6	U	
65-85-0	BENZOIC ACID	1	48	48	U	
120-82-1	1,2,4-TRICHLOROBENZENE	1	9.6	9.6	U	
91-20-3	NAPHTHALENE	1	9.6	9.6	U	
106-47-8	4-CHLOROANILINE	1	9.6	9.6	U	
87-68-3	HEXACHLOROBUTADIENE	1	9.6	9.6	U	
59-50-7	4-CHLORO-3-METHYLPHENOL	1	9.6	9.6	U	

Data Package ID: SV1007167-1

Date Printed: Friday, July 30, 2010

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GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Field ID: DCU #6

Lab ID: 1007167-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 15-Jul-10

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Method: SW3520 Rev C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: As Received

File Name: R1981

Sample Aliquot: 1045 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

91-57-6	2-METHYLNAPHTHALENE	1	9.6	9.6	U	
90-12-0	1-METHYLNAPHTHALENE	1	9.6	9.6	U	
77-47-4	HEXACHLOROCYCLOPENTADIENE	1	9.6	9.6	U	
88-06-2	2,4,6-TRICHLOROPHENOL	1	9.6	9.6	U	
95-95-4	2,4,5-TRICHLOROPHENOL	1	9.6	9.6	U	
91-58-7	2-CHLORONAPHTHALENE	1	9.6	9.6	U	
88-74-4	2-NITROANILINE	1	19	19	U	
131-11-3	DIMETHYL PHTHALATE	1	9.6	9.6	U	
606-20-2	2,6-DINITROTOLUENE	1	9.6	9.6	U	
208-96-8	ACENAPHTHYLENE	1	9.6	9.6	U	
99-09-2	3-NITROANILINE	1	19	19	U	
83-32-9	ACENAPHTHENE	1	9.6	9.6	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	9.6	9.6	U	
121-14-2	2,4-DINITROTOLUENE	1	9.6	9.6	U	
84-66-2	DIETHYL PHTHALATE	1	9.6	9.6	U	
86-73-7	FLUORENE	1	9.6	9.6	U	
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	1	9.6	9.6	U	
100-01-6	4-NITROANILINE	1	19	19	U	
103-33-3	AZOBENZENE	1	9.6	9.6	U	
534-52-1	4,6-DINITRO-2-METHYLPHENOL	1	19	19	U	
86-30-6	N-NITROSODIPHENYLAMINE	1	9.6	9.6	U	
101-55-3	4-BROMOPHENYL PHENYL ETHER	1	9.6	9.6	U	
118-74-1	HEXACHLOROBENZENE	1	9.6	9.6	U	
58-90-2	2,3,4,6-TETRACHLOROPHENOL	1	9.6	9.6	U	
87-86-5	PENTACHLOROPHENOL	1	19	19	U	
85-01-8	PHENANTHRENE	1	9.6	9.6	U	
120-12-7	ANTHRACENE	1	9.6	9.6	U	

Data Package ID: SV1007167-1

Date Printed: Friday, July 30, 2010

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LIMS Version: 6.389A

GC/MS Semi-volatiles

Method SW8270D

Sample Results

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Field ID: DCU #6

Lab ID: 1007167-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 15-Jul-10

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Method: SW3520 Rev C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: As Received

File Name: R1981

Sample Aliquot: 1045 ml

Final Volume: 1 ml

Result Units: UG/L

Clean DF: 1

86-74-8	CARBAZOLE	1	9.6	9.6	U	
84-74-2	DI-N-BUTYL PHTHALATE	1	9.6	9.6	U	
206-44-0	FLUORANTHENE	1	9.6	9.6	U	
129-00-0	PYRENE	1	9.6	9.6	U	
85-68-7	BUTYL BENZYL PHTHALATE	1	9.6	9.6	U	
56-55-3	BENZO(A)ANTHRACENE	1	9.6	9.6	U	
91-94-1	3,3'-DICHLOROBENZIDINE	1	9.6	9.6	U	
218-01-9	CHRYSENE	1	9.6	9.6	U	
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	1	9.6	9.6	U	
117-84-0	DI-N-OCTYL PHTHALATE	1	9.6	9.6	U	
205-99-2	BENZO(B)FLUORANTHENE	1	9.6	9.6	U	
207-08-9	BENZO(K)FLUORANTHENE	1	9.6	9.6	U	
50-32-8	BENZO(A)PYRENE	1	9.6	9.6	U	
193-39-5	INDENO(1,2,3-CD)PYRENE	1	9.6	9.6	U	
53-70-3	DIBENZO(A,H)ANTHRACENE	1	9.6	9.6	U	
191-24-2	BENZO(G,H,I)PERYLENE	1	9.6	9.6	U	

Surrogate Recovery

CASNO	Surrogate Analyte	Result	Flag	Spike Amount	Percent Recovery	Control Limits
118-79-6	2,4,6-TRIBROMOPHENOL	61		71.8	85	23 - 100
321-60-8	2-FLUOROBIPHENYL	40.3		47.8	84	21 - 106
367-12-4	2-FLUOROPHENOL	54.8		71.8	76	21 - 100
4165-60-0	NITROBENZENE-D5	39		47.8	82	34 - 111
4165-62-2	PHENOL-D5	57.2		71.8	80	15 - 104
1718-51-0	TERPHENYL-D14	52.6		47.8	110	33 - 111

Data Package ID: SV1007167-1

Date Printed: Friday, July 30, 2010

ALS Laboratory Group -- FC

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GC/MS Semi-volatiles

Method SW8270

Tentatively Identified Compounds

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Field ID:	DCU #6
Lab ID:	1007167-1

Sample Matrix: WATER

% Moisture: N/A

Date Collected: 15-Jul-10

Date Extracted: 20-Jul-10

Date Analyzed: 28-Jul-10

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: As Received

Sample Aliquot: 1045 ml

Final Volume: 1 ml

Clean DF: 1

File Name: R1981

CASNO	Retention Time	Target Analyte	Dilution Factor	Result	Units	Qualifier
	4.03	OXYGENATED HYDROCARBON1	1	7.9	UG/L	B,J

Data Package ID: SV1007167-1

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 07/20/2010

Date Analyzed: 07/28/2010

Prep Method: SW3520C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1987

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	100	72.2	10		72	10 - 108%
62-75-9	N-NITROSODIMETHYLAMINE	100	87.4	10		87	26 - 110%
62-53-3	ANILINE	100	80.1	10		80	25 - 125%
108-95-2	PHENOL	60	51.9	10		87	49 - 101%
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	49.9	10		83	37 - 110%
95-57-8	2-CHLOROPHENOL	60	48.3	10		81	37 - 106%
541-73-1	1,3-DICHLOROBENZENE	100	73.9	10		74	32 - 98%
106-46-7	1,4-DICHLOROBENZENE	100	72.9	10		73	32 - 98%
95-50-1	1,2-DICHLOROBENZENE	100	74.7	10		75	33 - 102%
100-51-6	BENZYL ALCOHOL	100	88.6	10		89	30 - 112%
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	48.5	10		81	26 - 131%
95-48-7	2-METHYLPHENOL	60	51.8	10		86	38 - 109%
621-64-7	N-NITROSO-DI-N-PROPYLAMINE	100	91.2	10		91	34 - 128%
108-39-4	3+4-METHYLPHENOL	60	49.3	10		82	32 - 110%
67-72-1	HEXACHLOROETHANE	60	46.3	10		77	28 - 94%
98-95-3	NITROBENZENE	60	50.1	10		83	44 - 109%
78-59-1	ISOPHORONE	60	54.4	10		91	50 - 112%
88-75-5	2-NITROPHENOL	60	51.9	10		87	39 - 113%
105-67-9	2,4-DIMETHYLPHENOL	60	46.7	10		78	28 - 109%
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	54.2	10		90	46 - 107%
120-83-2	2,4-DICHLOROPHENOL	60	56.4	10		94	48 - 105%
65-85-0	BENZOIC ACID	100	72	50		72	10 - 125%
120-82-1	1,2,4-TRICHLOROBENZENE	100	79.2	10		79	37 - 107%
91-20-3	NAPHTHALENE	60	49.5	10		82	39 - 102%
106-47-8	4-CHLOROANILINE	100	87.5	10		88	15 - 109%
87-68-3	HEXACHLOROBUTADIENE	60	47.1	10		78	27 - 103%

Data Package ID: SV1007167-1

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GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 07/20/2010

Date Analyzed: 07/28/2010

Prep Method: SW3520C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1987

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	58.5	10		97	47 - 111%
91-57-6	2-METHYLNAPHTHALENE	100	84.9	10		85	46 - 104%
90-12-0	1-METHYLNAPHTHALENE	100	83.9	10		84	46 - 104%
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	10.8	10		18	10 - 125%
88-06-2	2,4,6-TRICHLOROPHENOL	60	57.1	10		95	49 - 113%
95-95-4	2,4,5-TRICHLOROPHENOL	60	57.9	10		96	49 - 111%
91-58-7	2-CHLORONAPHTHALENE	60	51.2	10		85	36 - 137%
88-74-4	2-NITROANILINE	100	96.7	20		97	48 - 115%
131-11-3	DIMETHYL PHTHALATE	60	56.1	10		93	25 - 127%
606-20-2	2,6-DINITROTOLUENE	60	56.1	10		94	49 - 117%
208-96-8	ACENAPHTHYLENE	60	54.2	10		90	50 - 107%
99-09-2	3-NITROANILINE	100	95	20		95	19 - 126%
83-32-9	ACENAPHTHENE	60	53.6	10		89	47 - 108%
51-28-5	2,4-DINITROPHENOL	60	60.7	20		101	14 - 138%
100-02-7	4-NITROPHENOL	60	54.3	20		91	21 - 119%
132-64-9	DIBENZOFURAN	100	89.4	10		89	54 - 107%
121-14-2	2,4-DINITROTOLUENE	60	60.3	10		100	51 - 118%
84-66-2	DIETHYL PHTHALATE	60	56.7	10		94	41 - 118%
86-73-7	FLUORENE	60	54.2	10		90	50 - 112%
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	55.7	10		93	50 - 111%
100-01-6	4-NITROANILINE	100	85.2	20		85	36 - 118%
103-33-3	AZOBENZENE	100	95.4	10		95	21 - 137%
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	60.6	20		101	40 - 130%
86-30-6	N-NITROSODIPHENYLAMINE	100	78.1	10		78	48 - 111%
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	54.6	10		91	52 - 113%
118-74-1	HEXACHLOROBENZENE	60	52.4	10		87	52 - 112%
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	98.3	10		98	23 - 112%

Data Package ID: SV1007167-1

GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4LCS

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 07/20/2010

Date Analyzed: 07/28/2010

Prep Method: SW3520C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1987

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	55.9	20		93	38 - 117%
85-01-8	PHENANTHRENE	60	54.2	10		90	51 - 117%
120-12-7	ANTHRACENE	60	53.4	10		89	54 - 112%
86-74-8	CARBAZOLE	100	90.2	10		90	48 - 117%
84-74-2	DI-N-BUTYL PHTHALATE	60	52.6	10		88	54 - 116%
206-44-0	FLUORANTHENE	60	54.2	10		90	54 - 116%
129-00-0	PYRENE	60	51.5	10		86	49 - 128%
85-68-7	BUTYL BENZYL PHTHALATE	60	52.6	10		88	46 - 116%
56-55-3	BENZO(A)ANTHRACENE	60	54.5	10		91	56 - 109%
91-94-1	3,3'-DICHLOROBENZIDINE	60	37.9	10		63	19 - 111%
218-01-9	CHRYSENE	60	54.2	10		90	55 - 109%
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	52.7	10		88	42 - 126%
117-84-0	DI-N-OCTYL PHTHALATE	60	53.6	10		89	37 - 137%
205-99-2	BENZO(B)FLUORANTHENE	60	54.6	10		91	45 - 118%
207-08-9	BENZO(K)FLUORANTHENE	60	59.1	10		98	45 - 124%
50-32-8	BENZO(A)PYRENE	60	53.5	10		89	53 - 110%
193-39-5	INDENO(1,2,3-CD)PYRENE	60	56.6	10		94	43 - 125%
53-70-3	DIBENZO(A,H)ANTHRACENE	60	59	10		98	42 - 127%
191-24-2	BENZO(G,H,I)PERYLENE	60	55.2	10		92	38 - 123%

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GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 07/20/2010

Date Analyzed: 07/28/2010

Prep Method: SW3520C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1988

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	100	64	10		64	20	12
62-75-9	N-NITROSODIMETHYLAMINE	100	84.3	10		84	20	4
62-53-3	ANILINE	100	79.2	10		79	20	1
108-95-2	PHENOL	60	50.6	10		84	20	3
111-44-4	BIS(2-CHLOROETHYL)ETHER	60	48.4	10		81	20	3
95-57-8	2-CHLOROPHENOL	60	46.5	10		78	20	4
541-73-1	1,3-DICHLOROBENZENE	100	69.1	10		69	20	7
106-46-7	1,4-DICHLOROBENZENE	100	68.8	10		69	20	6
95-50-1	1,2-DICHLOROBENZENE	100	71.2	10		71	20	5
100-51-6	BENZYL ALCOHOL	100	85.6	10		86	20	4
108-60-1	BIS(2-CHLOROISOPROPYL)ETHER	60	46.7	10		78	20	4
95-48-7	2-METHYLPHENOL	60	48.8	10		81	20	6
621-64-7	N-NITroso-DI-N-PROPYLAMINE	100	88	10		88	20	4
108-39-4	3+4-METHYLPHENOL	60	47.4	10		79	20	4
67-72-1	HEXACHLOROETHANE	60	43.5	10		72	20	6
98-95-3	NITROBENZENE	60	47.8	10		80	20	5
78-59-1	ISOPHORONE	60	51.4	10		86	20	6
88-75-5	2-NITROPHENOL	60	51.6	10		86	20	1
105-67-9	2,4-DIMETHYLPHENOL	60	45.3	10		75	20	3
111-91-1	BIS(2-CHLOROETHOXY)METHANE	60	52.3	10		87	20	4
120-83-2	2,4-DICHLOROPHENOL	60	54.1	10		90	20	4
65-85-0	BENZOIC ACID	100	64.2	50		64	20	12
120-82-1	1,2,4-TRICHLOROBENZENE	100	77.9	10		78	20	2
91-20-3	NAPHTHALENE	60	48.4	10		81	20	2
106-47-8	4-CHLOROANILINE	100	87.7	10		88	20	0
87-68-3	HEXACHLOROBUTADIENE	60	45.5	10		76	20	3
59-50-7	4-CHLORO-3-METHYLPHENOL	60	56.3	10		94	20	4

Data Package ID: SV1007167-1

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GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 07/20/2010

Date Analyzed: 07/28/2010

Prep Method: SW3520C

Prep Batch: EX100720-4

QCBatchID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1988

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	100	83.3	10		83	20	2
90-12-0	1-METHYLNAPHTHALENE	100	81.1	10		81	20	3
77-47-4	HEXACHLOROCYCLOPENTADIENE	60	11.7	10		19	20	8
88-06-2	2,4,6-TRICHLOROPHENOL	60	57.4	10		96	20	1
95-95-4	2,4,5-TRICHLOROPHENOL	60	58.3	10		97	20	1
91-58-7	2-CHLORONAPHTHALENE	60	50.8	10		85	20	1
88-74-4	2-NITROANILINE	100	100	20		100	20	4
131-11-3	DIMETHYL PHTHALATE	60	57.1	10		95	20	2
606-20-2	2,6-DINITROTOLUENE	60	56.5	10		94	20	1
208-96-8	ACENAPHTHYLENE	60	53.3	10		89	20	2
99-09-2	3-NITROANILINE	100	101	20		101	20	6
83-32-9	ACENAPHTHENE	60	53	10		88	20	1
51-28-5	2,4-DINITROPHENOL	60	65	20		108	20	7
100-02-7	4-NITROPHENOL	60	61.3	20		102	20	12
132-64-9	DIBENZOFURAN	100	89.4	10		89	20	0
121-14-2	2,4-DINITROTOLUENE	60	60.6	10		101	20	1
84-66-2	DIETHYL PHTHALATE	60	56.7	10		95	20	0
86-73-7	FLUORENE	60	54.7	10		91	20	1
7005-72-3	4-CHLOROPHENYL PHENYL ETHER	60	56.3	10		94	20	1
100-01-6	4-NITROANILINE	100	94.4	20		94	20	10
103-33-3	AZOBENZENE	100	95.5	10		96	20	0
534-52-1	4,6-DINITRO-2-METHYLPHENOL	60	61.2	20		102	20	1
86-30-6	N-NITROSODIPHENYLAMINE	100	79.4	10		79	20	2
101-55-3	4-BROMOPHENYL PHENYL ETHER	60	54.6	10		91	20	0
118-74-1	HEXACHLOROBENZENE	60	53.3	10		89	20	2
58-90-2	2,3,4,6-TETRACHLOROPHENOL	100	101	10		101	20	2
87-86-5	PENTACHLOROPHENOL	60	59.3	20		99	20	6

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GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

Lab ID: EX100720-4LCSD

Sample Matrix: WATER

% Moisture: N/A

Date Collected: N/A

Date Extracted: 07/20/2010

Date Analyzed: 07/28/2010

Prep Method: SW3520C

Prep Batch: EX100720-4

QC Batch ID: EX100720-4-2

Run ID: SV100728-3

Cleanup: NONE

Basis: N/A

File Name: R1988

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	54.8	10		91	20	1
120-12-7	ANTHRACENE	60	53.4	10		89	20	0
86-74-8	CARBAZOLE	100	91.9	10		92	20	2
84-74-2	DI-N-BUTYL PHTHALATE	60	53.1	10		88	20	1
206-44-0	FLUORANTHENE	60	55.5	10		93	20	2
129-00-0	PYRENE	60	49.2	10		82	20	5
85-68-7	BUTYL BENZYL PHTHALATE	60	50.9	10		85	20	3
56-55-3	BENZO(A)ANTHRACENE	60	54.7	10		91	20	0
91-94-1	3,3'-DICHLOOROBENZIDINE	60	39	10		65	20	3
218-01-9	CHRYSENE	60	54.5	10		91	20	1
117-81-7	BIS(2-ETHYLHEXYL)PHTHALATE	60	51.7	10		86	20	2
117-84-0	DI-N-OCTYL PHTHALATE	60	55.2	10		92	20	3
205-99-2	BENZO(B)FLUORANTHENE	60	55.9	10		93	20	2
207-08-9	BENZO(K)FLUORANTHENE	60	56.2	10		94	20	5
50-32-8	BENZO(A)PYRENE	60	53.7	10		90	20	1
193-39-5	INDENO(1,2,3-CD)PYRENE	60	57.2	10		95	20	1
53-70-3	DIBENZO(A,H)ANTHRACENE	60	60.8	10		101	20	3
191-24-2	BENZO(G,H,I)PERYLENE	60	55.3	10		92	20	0

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GC/MS Semi-volatiles

Method SW8270D

Laboratory Control Sample and Laboratory Control Sample Duplicate

Lab Name: ALS Laboratory Group -- FC

Work Order Number: 1007167

Client Name: COGCC

ClientProject ID: DCU6-Orphan

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	104	*	106	*	23 - 100
321-60-8	2-FLUOROBIPHENYL	50	92		89		21 - 106
367-12-4	2-FLUOROPHENOL	75	82		78		21 - 100
4165-60-0	NITROBENZENE-D5	50	89		85		34 - 111
4165-62-2	PHENOL-D5	75	87		86		15 - 104
1718-51-0	TERPHENYL-D14	50	100		95		33 - 111

Data Package ID: SV1007167-1

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Data File : C:\HPCHEM\1\DATA\072810\R1986.D

Vial: 16

Acq On : 28 Jul 2010 7:09 pm

Operator: jk SOP 506 Rev

Sample : EX100720-4MB

Inst : HPSV-3

Misc : WATER EX100720-4

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jul 29 11:30 2010

Quant Results File: 071210S3.RES

Quant Method : C:\HPCHEM\1\METHODS\071210S3.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Jul 29 11:16:33 2010

Response via : Initial Calibration

DataAcq Meth : 071210S3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.16	152	247875 ✓	40.00	ng/uL	0.00
25) Naphthalene-d8	7.37	136	946197 ✓	40.00	ng/uL	0.00
42) Acenaphthene-d10	8.92	164	443881 ✓	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.20	188	777788 ✓	40.00	ng/uL	0.00
80) Chrysene-d12	12.46	240	772799 ✓	40.00	ng/uL	-0.02
91) Perylene-d12	13.91	264	570155 ✓	40.00	ng/uL	-0.03

System Monitoring Compounds

5) 2-Fluorophenol	4.72	112	634368	65.95	ng/uL	0.00
Spiked Amount	75.000	Range	21 - 100	Recovery	=	87.93% ✓
6) 2-Chlorophenol-d4	5.93	132	528633	69.72	ng/uL	-0.01
Spiked Amount	75.000	Range	33 - 110	Recovery	=	92.96%
8) Phenol-d5	5.75	99	939341	69.08	ng/uL	-0.01
Spiked Amount	75.000	Range	15 - 104	Recovery	=	92.11% ✓
15) 1,2-Dichlorobenzene-d4	6.32	152	236239	45.13	ng/uL	-0.01
Spiked Amount	50.000	Range	16 - 110	Recovery	=	90.26%
26) Nitrobenzene-d5	6.69	82	605010	44.26	ng/uL	-0.01
Spiked Amount	50.000	Range	34 - 111	Recovery	=	88.52% ✓
46) 2-Fluorobiphenyl	8.31	172	654073	46.08	ng/uL	0.00
Spiked Amount	50.000	Range	21 - 106	Recovery	=	92.16% ✓
68) 2,4,6-Tribromophenol	9.60	330	125712	63.58	ng/uL	0.00
Spiked Amount	75.000	Range	23 - 100	Recovery	=	84.77% ✓
83) p-Terphenyl-d14	11.52	244	792430	53.07	ng/uL	0.00
Spiked Amount	50.000	Range	33 - 111	Recovery	=	106.14% ✓

Target Compounds

Qvalue

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

R1986.D 071210S3.M Thu Jul 29 11:30:26 2010

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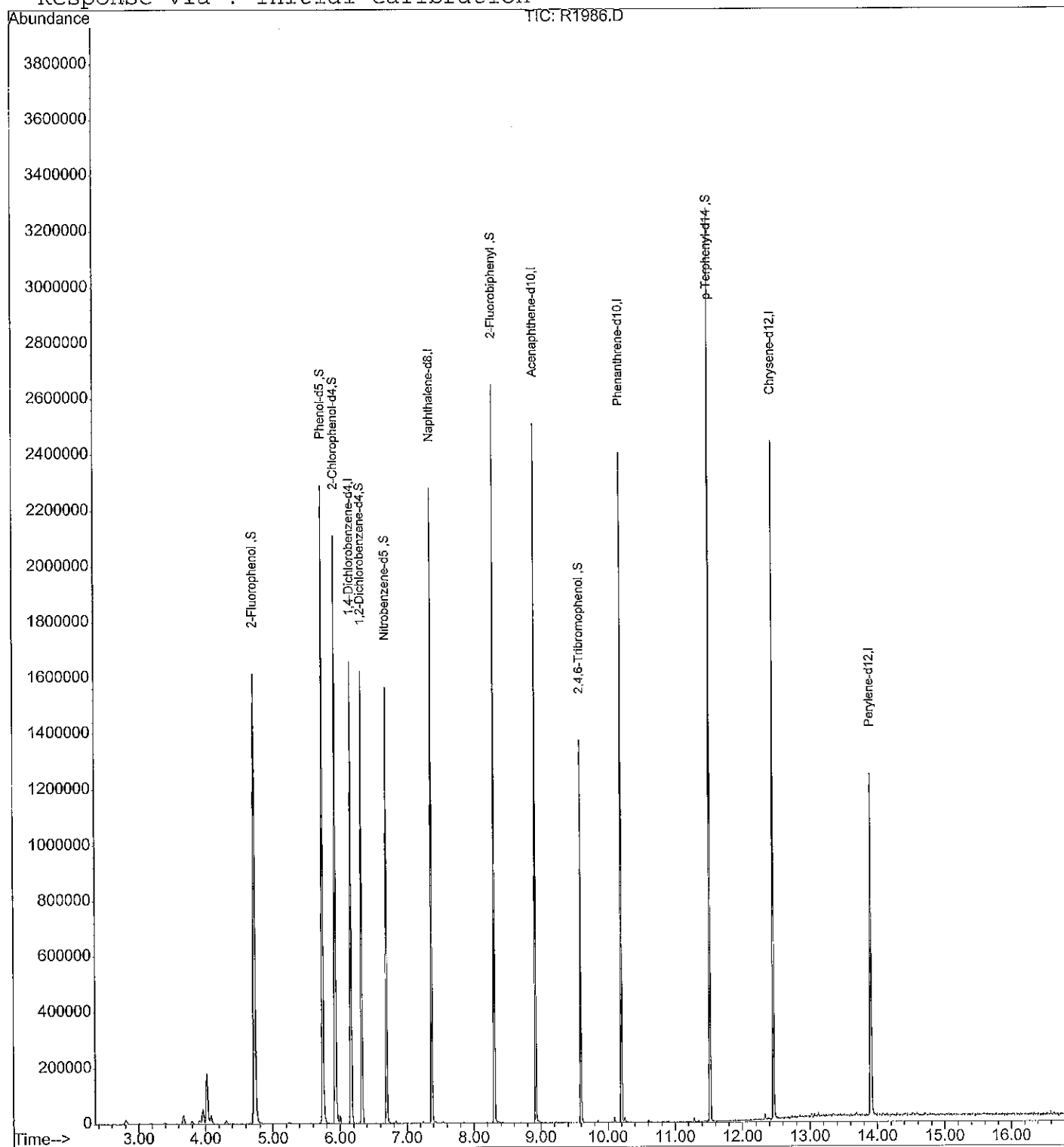
Quantitation Report

Data File : C:\HPCHEM\1\DATA\072810\R1986.D
 Acq On : 28 Jul 2010 7:09 pm
 Sample : EX100720-4MB
 Misc : WATER EX100720-4
 MS Integration Params: LSCINT.P
 Quant Time: Jul 29 11:30 2010

Vial: 16
 Operator: jk SOP 506
 Inst : HPSV-3
 Multiplr: 1.00

Quant Results File: 071210S3.RES

Method : C:\HPCHEM\1\METHODS\071210S3.M (RTE Integrator)
 Title : GC-MS Semivolatiles SOP no. 506
 Last Update : Thu Jul 29 11:16:33 2010
 Response via : Initial Calibration



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\072810\R1986.D
Acq On : 28 Jul 2010 7:09 pm
Sample : EX100720-4MB
Misc : WATER EX100720-4
MS Integration Params: RTEINT.P

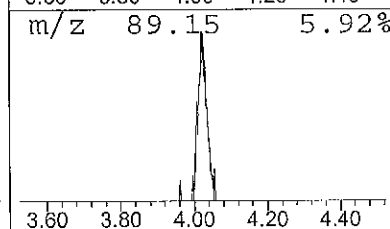
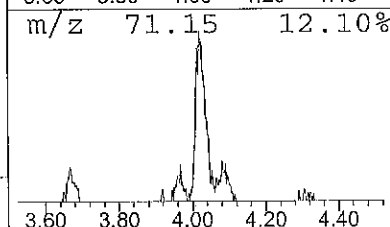
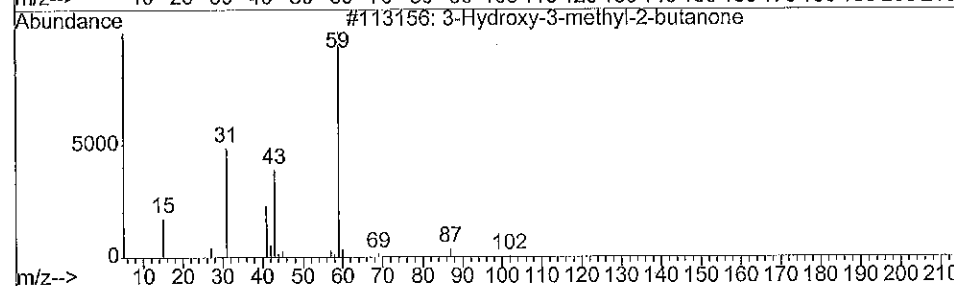
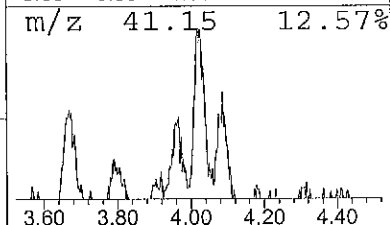
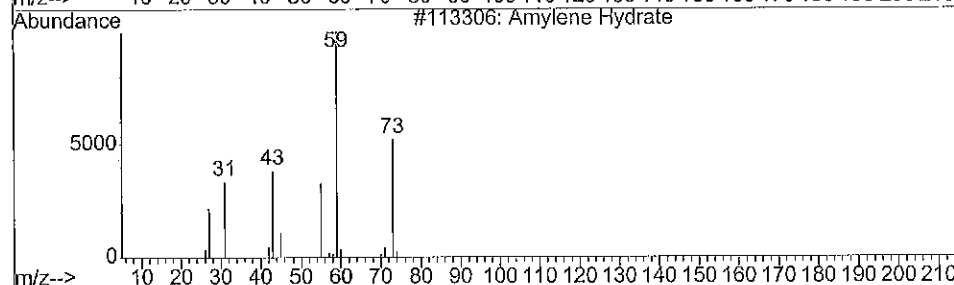
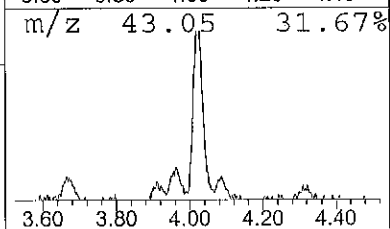
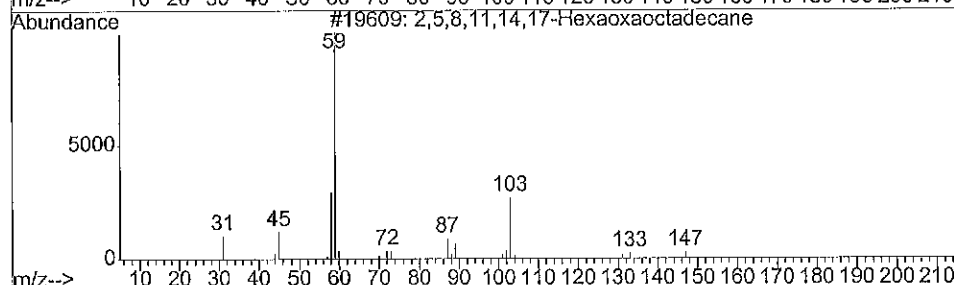
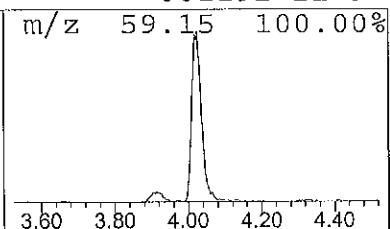
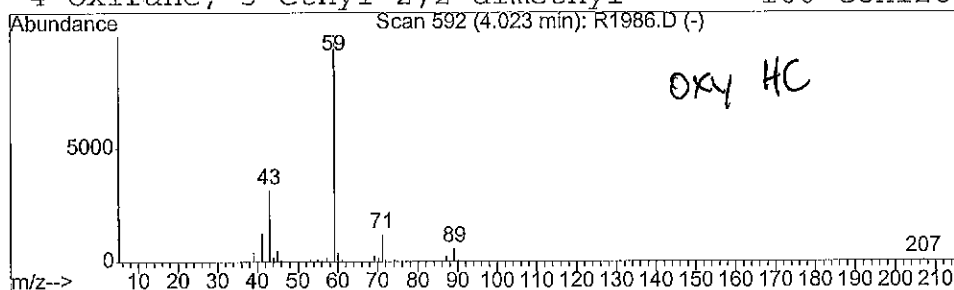
Vial: 16
Operator: jk SOP 50
Inst : HPSV-3
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\071210S3.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : C:\DATABASE\nist98.1

Peak Number 1 2,5,8,11,14,17-Hexaoxaoctadeca Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.02	8.44 ng/uL	389945	1,4-Dichlorobenzene-d4	6.16

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1	2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	39		
2	Amylene Hydrate	88	C5H12O	000075-85-4	9		
3	3-Hydroxy-3-methyl-2-butanone	102	C5H10O2	000115-22-0	9		
4	Oxirane, 3-ethyl-2,2-dimethyl-	100	C6H12O	001192-22-9	9		



Data File : C:\HPCHEM\1\DATA\072810\R1981.D

Vial: 11

Acq On : 28 Jul 2010 4:28 pm

Operator: jk SOP 506 Rev

Sample : 1007167-1

Inst : HPSV-3

Misc : WATER EX100720-4

Multiplr: 1.00

MS Integration Params: LSCINT.P

Quant Time: Jul 29 11:29 2010

Quant Results File: 071210S3.RES

Quant Method : C:\HPCHEM\1\METHODS\071210S3.M (RTE Integrator)

Title : GC-MS Semivolatiles SOP no. 506

Last Update : Thu Jul 29 11:16:33 2010

Response via : Initial Calibration

DataAcq Meth : 071210S3

Internal Standards	R.T.	QIon	Response	Conc	Units	Dev(Min)
1) 1,4-Dichlorobenzene-d4	6.17	152	257733✓	40.00	ng/uL	0.00
25) Naphthalene-d8	7.38	136	932935✓	40.00	ng/uL	0.00
42) Acenaphthene-d10	8.93	164	429984✓	40.00	ng/uL	0.00
69) Phenanthrene-d10	10.21	188	759730✓	40.00	ng/uL	0.00
80) Chrysene-d12	12.48	240	714539✓	40.00	ng/uL	0.00
91) Perylene-d12	13.93	264	467972✓	40.00	ng/uL	0.00

System Monitoring Compounds

5) 2-Fluorophenol	4.73	112	572649	57.26	ng/uL	0.00
Spiked Amount 75.000	Range 21 - 100		Recovery =	76.35%	✓	
6) 2-Chlorophenol-d4	5.94	132	480876	61.00	ng/uL	0.00
Spiked Amount 75.000	Range 33 - 110		Recovery =	81.33%		
8) Phenol-d5	5.75	99	844987	59.76	ng/uL	-0.01
Spiked Amount 75.000	Range 15 - 104		Recovery =	79.68%	✓	
15) 1,2-Dichlorobenzene-d4	6.33	152	216159	39.72	ng/uL	0.00
Spiked Amount 50.000	Range 16 - 110		Recovery =	79.44%		
26) Nitrobenzene-d5	6.70	82	549583	40.78	ng/uL	0.00
Spiked Amount 50.000	Range 34 - 111		Recovery =	81.56%	✓	
46) 2-Fluorobiphenyl	8.31	172	579206	42.13	ng/uL	0.00
Spiked Amount 50.000	Range 21 - 106		Recovery =	84.26%	✓	
68) 2,4,6-Tribromophenol	9.60	330	122079	63.74	ng/uL	0.00
Spiked Amount 75.000	Range 23 - 100		Recovery =	84.99%	✓	
83) p-Terphenyl-d14	11.53	244	758783	54.96	ng/uL	0.00
Spiked Amount 50.000	Range 33 - 111		Recovery =	109.92%	✓	

Target Compounds

Qvalue

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

R1981.D 071210S3.M Thu Jul 29 11:29:03 2010

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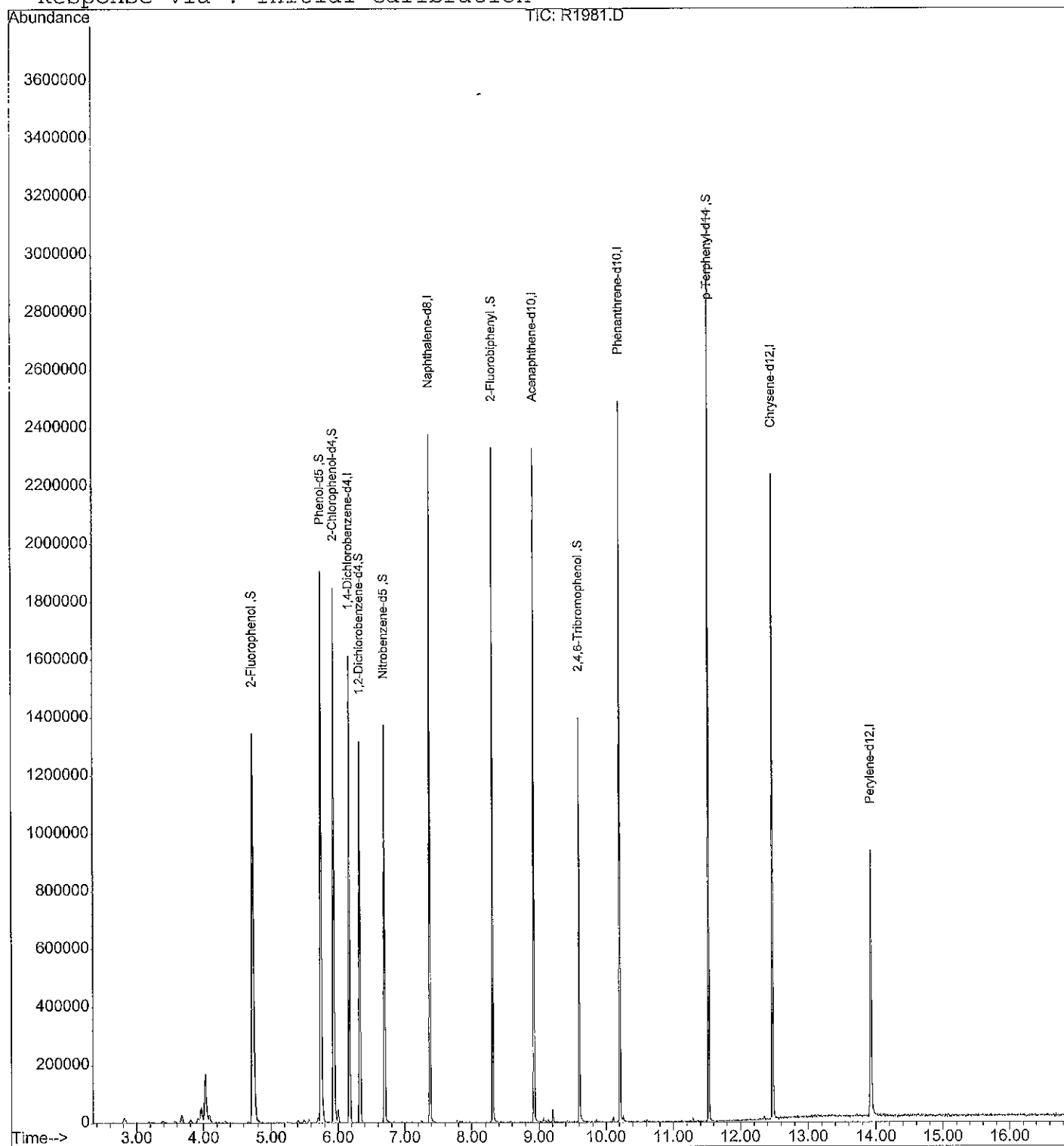
Quantitation Report

Data File : C:\HPCHEM\1\DATA\072810\R1981.D
 Acq On : 28 Jul 2010 4:28 pm
 Sample : 1007167-1
 Misc : WATER EX100720-4
 MS Integration Params: LSCINT.P
 Quant Time: Jul 29 11:29 2010

Vial: 11
 Operator: jk SOP 506
 Inst : HPSV-3
 Multiplr: 1.00

Quant Results File: 071210S3.RES

Method : C:\HPCHEM\1\METHODS\071210S3.M (RTE Integrator)
 Title : GC-MS Semivolatiles SOP no. 506
 Last Update : Thu Jul 29 11:16:33 2010
 Response via : Initial Calibration



Library Search Compound Report

Data File : C:\HPCHEM\1\DATA\072810\R1981.D
Acq On : 28 Jul 2010 4:28 pm
Sample : 1007167-1
Misc : WATER EX100720-4
MS Integration Params: RTEINT.P

Vial: 11
Operator: jk SOP 50
Inst : HPSV-3
Multiplr: 1.00

Quant Method : C:\HPCHEM\1\METHODS\071210S3.M (RTE Integrator)
Title : GC-MS Semivolatiles SOP no. 506
Library : C:\DATABASE\nist98.1

Peak Number 1 2-Hexanone, 3-hydroxy-3,5-dime Concentration Rank 2

R.T.	EstConc	Area	Relative to ISTD	R.T.
4.03	8.23 ng/uL	390261	1,4-Dichlorobenzene-d4	6.17

Hit#	of	5	Tentative ID	MW	MolForm	CAS#	Qual
1			2-Hexanone, 3-hydroxy-3,5-dimethyl-	144	C8H16O2	006321-14-8	39
2			2,5,8,11,14,17-Hexaoxaoctadecane	266	C12H26O6	001191-87-3	38
3			2-Pentanol, 2-methyl-	102	C6H14O	000590-36-3	38
4			4-Pentene-2-ol, 2-methyl	100	C6H12O	000624-97-5	36

