received 02/29/2011
Complaint 200339399

ALS Environmental

# GC/MS Semivolatiles

## Case Narrative

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# Colorado Oil & Gas Conservation Commission

## Complaint 200339399

### Work Order Number: 1202195

1. This report consists of 1 water sample. The sample was received cool and intact by ALS on 02/16/12.

2. The sample was prepared and analyzed according to SW-846, 3rd Edition procedures. Specifically, the water sample was extracted using continuous liquid-liquid extractors, according to SW-846 Method 3520C utilizing SOP 617 Revision 14.

3. The extracts were analyzed using GC/MS with a DB-5MS capillary column according to SOP 506 Revision 19 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 were met. If average response factors were used in the initial calibration, %RSD was ≤20%. 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 ≤30%.

6. All compounds in each of the daily (continuing) calibration verifications were within 20%D with the exceptions of bis(2-chloroisopropyl)ether and 2-nitroaniline and which were out high. These compounds were not detected in the associated sample.

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 times.

11. All surrogate recoveries were within acceptance criteria.

12. All internal standard recoveries were within acceptance criteria.

13. Manual integrations are performed when needed to provide consistent and defensible data following the guidelines in SOP 939 Revision 4.

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.

Emily Hellickson — 24 Feb. 12
Emily Hellickson — Date
Organics Primary Data Reviewer

Eric Baylis — 2/27/12
Organics Final Data Reviewer — 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 Environmental -- FC

## Sample Number(s) Cross-Reference Table

**OrderNum:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**Client Project Name:** Complaint 200339399
**Client Project Number:**
**Client PO Number:** PHA 12-10

| Client Sample Number | Lab Sample Number | COC Number | Matrix | Date Collected | Time Collected |
|---|---|---|---|---|---|
| 705325 Nosaka WW | 1202195-1 | | WATER | 14-Feb-12 | 14:17 |

# ALS Laboratory Group

225 Commerce Drive, Fort Collins, Colorado 80524
TF: (800) 443-1511 PH: (970) 490-1511 FX: (970) 490-1522

## Chain-of-Custody

Form 202r8

WORKORDER # 1202195

PAGE 1 of 1

DISPOSAL: By Lab or Return to Client

| | | | |
|---|---|---|---|
| PROJECT NAME | Complaints 20033939 + 20033940 | SAMPLER | PTG |
| PROJECT No | | SITE ID | |
| | | EDD FORMAT | |
| COMPANY NAME | | PURCHASE ORDER | |
| SEND REPORT TO | Peter Gintautas | BILL TO COMPANY | |
| ADDRESS | PO Box 108 | INVOICE ATTN TO | |
| CITY / STATE / ZIP | Trinidad CO 81082 | ADDRESS | |
| PHONE | 719-846-3091 | CITY / STATE / ZIP | |
| FAX | | PHONE | |
| E-MAIL | peter.gintautas@state.co.us | FAX | |
| | | E-MAIL | |
| | | DATE | 15 Feb 2012 |
| | | TURNAROUND | 14 days |

| Lab ID | Field ID | Matrix | Sample Date | Sample Time | # Bottles | Pres | QC | 8260_25 + TICs | TOC | Dissolved Metals | Alk. (Tot, HCO3, CO3) | pH | Cond. | TDS | Anions | SAR calc. | Cation Anion Balance | Diss. Gases | 8270 + 1,4-dioxane |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Complaint 20033940 2 | | | | | | | | | | | | | | | | | | |
| | 707183 Steiner UW | W | 14 Feb | 14:47 | 3 | 1 | | X | | | | | | | | | | | |
| | Trip Blank | W | 14 Feb | 06:30 | 2 | 1 | | X | | | | | | | | | | | |
| | 707183 Steiner UW | W | 14 Feb | 14:47 | 1 | 3 | | | X | | | | | | | | | | |
| | 707183 Steiner UW | W | 14 Feb | 14:47 | 6 | 8 | | | | X | X | X | X | X | X | X | X | X | X |
| | | | | | | | | | | | | | | | | | | | |
| | Complaint 20033939 | | 14 | | | | | | | | | | | | | | | | |
| (1) | 705325 Nosaka UW | W | 14 Feb | 14:17 | 3 | 1 | | X | | | | | | | | | | | |
| ↓ | 705325 Nosaka UW | W | 14 Feb | 14:17 | 1 | 3 | | | X | | | | | | | | | | |
| ↓ | 705325 Nosaka UW | W | 14 Feb | 14:17 | 6 | 8 | | | | X | X | X | X | X | X | X | X | X | X |
| | | | | | | | | | | | | | | | | | | | |

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

For metals or anions, please detail analytes below.

**Comments:** Dissolved metals = Filter + preserve upon receipt.
Anions = Br, Cl, F, $NO_2$, $NO_3$, $PO_4$, $SO_4$
200.8 - 6020-11, Be, 200.7 - 6010C
200.8 - 6020-16 $Na$ 200.8, $Th$ - 200.8

| QC PACKAGE (check below) | |
|---|---|
| X | LEVEL II (Standard QC) |
| | LEVEL III (Std QC + forms) |
| | LEVEL IV (Std QC + forms + raw data) |
| | |

Preservative Key: 1-HCl 2-HNO3 3-H2SO4 4-NaOH 5-NaHSO4 7-Other 8-4 degrees C 9-5035

| | SIGNATURE | PRINTED NAME | DATE | TIME |
|---|---|---|---|---|
| RELINQUISHED BY | | Peter Gintautas | 15 Feb 12 | 12:15 |
| RECEIVED BY | | Lauren Schmitz | 2/16/12 | 0925 |
| RELINQUISHED BY | | | | |
| RECEIVED BY | | | | |
| RELINQUISHED BY | | | | |
| RECEIVED BY | | | | |

# CONDITION OF SAMPLE UPON RECEIPT FORM

Client: COGCC Workorder No: 1202195

Project Manager: ARW Initials: LAS Date: 2/16/12

| | | | |
|---|---|---|---|
| 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 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**: X < 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): | 1.6 | | | | | | | |
| No. of custody seals on cooler: | 1 | | | | | | | |
| 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 ~~I~~nformation:** PROVIDE DETAILS BELOW FOR A NO RESPONSE TO ANY QUESTION ABOVE, EXCEPT #1 AND #16.

(*14) 1202195-1-6(705325 Nosaka) for Diss. Gases arrived with headspace ≤ pea-size.

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

**Project Manager Signature / Date:** C. Wolf 2/16/12

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

Form 201r22.xls (6/1/09)

From: (719) 846-3091
Peter Gintautas
Colo. Oil & Gas Cons. Comm.
213 Corundum RD

Trinidad, CO 81082

Origin ID: PUBA

FedEx Express

J12101112190225

BILL SENDER

SHIP TO: (970) 490-1511
Amy Wolf
ALS Laboratory Group
225 COMMERCE DR

FORT COLLINS, CO 80524

Ship Date: 15FEB12
ActWgt: 34.0 LB
CAD: 4076443/INET3250

Delivery Address Bar Code

Ref # Complaint 200339399
Invoice #
PO #
Dept #

THU - 16 FEB A2
PRIORITY OVERNIGHT

TRK# 7932 3213 0507
0201

80524
CO-US
DEN

72 FTCA

512G18F59/A278

1.9

120219S

# GC/MS Semi-volatiles

## Method SW8270D

## Method Blank

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9MB

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12
**Prep Method:** SW3520 Rev C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14576

**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 |
|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-DIOXANE | 1 | 10 | 10 | U | |
| 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 | |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Method Blank

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9MB

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12
**Prep Method:** SW3520 Rev C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-2
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14576

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

| | | | | | | |
|---|---|---|---|---|---|---|
| 59-50-7 | 4-CHLORO-3-METHYLPHENOL | 1 | 10 | 10 | U | |
| 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 | |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Method Blank

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9MB

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12
**Prep Method:** SW3520 Rev C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-2
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14576

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

| | | | | | | |
|---|---|---|---|---|---|---|
| 120-12-7 | ANTHRACENE | 1 | 10 | 10 | U | |
| 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 | 52.4 | | 75 | 70 | 42 - 117 |
| 321-60-8 | 2-FLUOROBIPHENYL | 41.9 | | 50 | 84 | 55 - 108 |
| 367-12-4 | 2-FLUOROPHENOL | 56.3 | | 75 | 75 | 46 - 105 |
| 4165-60-0 | NITROBENZENE-D5 | 43.4 | | 50 | 87 | 53 - 111 |
| 4165-62-2 | PHENOL-D5 | 58.1 | | 75 | 77 | 50 - 109 |
| 1718-51-0 | TERPHENYL-D14 | 43.4 | | 50 | 87 | 34 - 139 |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270

## Tentatively Identified Compounds

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Field ID:**

**Lab ID:** EX120216-9MB

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-2
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** As Received

**Sample Aliquot:** 1000 ml
**Final Volume:** 1 ml
**Clean DF:** 1
**File Name:** P14576

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

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270 Revision D

## Sample Results

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Field ID:** 705325 Nosaka WW
**Lab ID:** 1202195-1

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** 14-Feb-12
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12
**Prep Method:** SW3520 Rev C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** As Received
**File Name:** P14580

**Analyst:** Eric Bayless
**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 |
|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-DIOXANE | 1 | 9.6 | 9.6 | U | |
| 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 | |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270 Revision D

## Sample Results

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Field ID:** 705325 Nosaka WW
**Lab ID:** 1202195-1

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** 14-Feb-12
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12
**Prep Method:** SW3520 Rev C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-2
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** As Received
**File Name:** P14580

**Analyst:** Eric Bayless
**Sample Aliquot:** 1045 ML
**Final Volume:** 1 ML
**Result Units:** UG/L
**Clean DF:** 1

| | | | | | | |
|---|---|---|---|---|---|---|
| 59-50-7 | 4-CHLORO-3-METHYLPHENOL | 1 | 9.6 | 9.6 | U | |
| 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 | |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270 Revision D

## Sample Results

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Field ID:** 705325 Nosaka WW
**Lab ID:** 1202195-1

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** 14-Feb-12
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12
**Prep Method:** SW3520 Rev C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-2
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** As Received
**File Name:** P14580

**Analyst:** Eric Bayless
**Sample Aliquot:** 1045 ML
**Final Volume:** 1 ML
**Result Units:** UG/L
**Clean DF:** 1

| | | | | | | |
|---|---|---|---|---|---|---|
| 120-12-7 | ANTHRACENE | 1 | 9.6 | 9.6 | U | |
| 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 | 51.4 | | 71.8 | 72 | 42 - 117 |
| 321-60-8 | 2-FLUOROBIPHENYL | 43.7 | | 49.8 | 88 | 55 - 108 |
| 367-12-4 | 2-FLUOROPHENOL | 60.7 | | 71.8 | 85 | 46 - 105 |
| 4165-60-0 | NITROBENZENE-D5 | 47.4 | | 49.8 | 95 | 53 - 111 |
| 4165-62-2 | PHENOL-D5 | 60.8 | | 71.8 | 85 | 50 - 109 |
| 1718-51-0 | TERPHENYL-D14 | 43.3 | | 49.8 | 87 | 34 - 139 |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270

## Tentatively Identified Compounds

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Field ID:** 705325 Nosaka WW
**Lab ID:** 1202195-1

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** 14-Feb-12
**Date Extracted:** 16-Feb-12
**Date Analyzed:** 20-Feb-12

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-2
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** As Received

**Sample Aliquot:** 1045 ml
**Final Volume:** 1 ml
**Clean DF:** 1
**File Name:** P14580

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

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** ALS Environmental -- FC

**Work Order Number:** 1202195

**Client Name:** Colorado Oil & Gas Conservation Commission

**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9LCS

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 02/16/2012
**Date Analyzed:** 02/20/2012
**Prep Method:** SW3520C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14577

**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 |
|---|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-DIOXANE | 59.9 | 49.6 | 10 | | 83 | 30 - 130% |
| 110-86-1 | PYRIDINE | 60 | 44.2 | 10 | | 74 | 10 - 101% |
| 62-75-9 | N-NITROSODIMETHYLAMINE | 60 | 49.4 | 10 | | 82 | 57 - 119% |
| 62-53-3 | ANILINE | 60 | 48.5 | 10 | | 81 | 38 - 116% |
| 108-95-2 | PHENOL | 60 | 49.8 | 10 | | 83 | 60 - 102% |
| 111-44-4 | BIS(2-CHLOROETHYL)ETHER | 60 | 50.7 | 10 | | 85 | 62 - 103% |
| 95-57-8 | 2-CHLOROPHENOL | 60 | 48 | 10 | | 80 | 64 - 100% |
| 541-73-1 | 1,3-DICHLOROBENZENE | 60 | 45.3 | 10 | | 76 | 49 - 95% |
| 106-46-7 | 1,4-DICHLOROBENZENE | 60 | 45.4 | 10 | | 76 | 54 - 94% |
| 95-50-1 | 1,2-DICHLOROBENZENE | 60 | 46.4 | 10 | | 77 | 54 - 97% |
| 100-51-6 | BENZYL ALCOHOL | 60 | 47.8 | 10 | | 80 | 66 - 105% |
| 108-60-1 | BIS(2-CHLOROISOPROPYL)ETHER | 60 | 51.6 | 10 | | 86 | 60 - 107% |
| 95-48-7 | 2-METHYLPHENOL | 60 | 48.1 | 10 | | 80 | 63 - 103% |
| 621-64-7 | N-NITROSO-DI-N-PROPYLAMINE | 60 | 53.2 | 10 | | 89 | 62 - 113% |
| 108-39-4 | 3+4-METHYLPHENOL | 60 | 47.1 | 10 | | 79 | 54 - 106% |
| 67-72-1 | HEXACHLOROETHANE | 60 | 47.5 | 10 | | 79 | 47 - 95% |
| 98-95-3 | NITROBENZENE | 60 | 52.6 | 10 | | 88 | 36 - 107% |
| 78-59-1 | ISOPHORONE | 60 | 50 | 10 | | 83 | 58 - 102% |
| 88-75-5 | 2-NITROPHENOL | 60 | 56.4 | 10 | | 94 | 69 - 108% |
| 105-67-9 | 2,4-DIMETHYLPHENOL | 60 | 47.5 | 10 | | 79 | 57 - 101% |
| 111-91-1 | BIS(2-CHLOROETHOXY)METHANE | 60 | 49.8 | 10 | | 83 | 59 - 97% |
| 120-83-2 | 2,4-DICHLOROPHENOL | 60 | 49.9 | 10 | | 83 | 61 - 99% |
| 65-85-0 | BENZOIC ACID | 100 | 60.1 | 50 | | 60 | 28 - 87% |
| 120-82-1 | 1,2,4-TRICHLOROBENZENE | 60 | 42 | 10 | | 70 | 47 - 92% |
| 91-20-3 | NAPHTHALENE | 60 | 48.5 | 10 | | 81 | 58 - 92% |
| 106-47-8 | 4-CHLOROANILINE | 60 | 50.2 | 10 | | 84 | 37 - 119% |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** ALS Environmental -- FC
**Work Order Number:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9LCS

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 02/16/2012
**Date Analyzed:** 02/20/2012
**Prep Method:** SW3520C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14577

**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 |
|---|---|---|---|---|---|---|---|
| 87-68-3 | HEXACHLOROBUTADIENE | 60 | 43 | 10 | | 72 | 43 - 93% |
| 59-50-7 | 4-CHLORO-3-METHYLPHENOL | 60 | 53.7 | 10 | | 89 | 61 - 105% |
| 91-57-6 | 2-METHYLNAPHTHALENE | 60 | 47.3 | 10 | | 79 | 57 - 97% |
| 90-12-0 | 1-METHYLNAPHTHALENE | 60 | 47.5 | 10 | | 79 | 58 - 101% |
| 77-47-4 | HEXACHLOROCYCLOPENTADIENE | 60 | 16 | 10 | | 27 | 3 - 56% |
| 88-06-2 | 2,4,6-TRICHLOROPHENOL | 60 | 51.9 | 10 | | 87 | 61 - 110% |
| 95-95-4 | 2,4,5-TRICHLOROPHENOL | 60 | 53.9 | 10 | | 90 | 62 - 109% |
| 91-58-7 | 2-CHLORONAPHTHALENE | 60 | 50.5 | 10 | | 84 | 67 - 101% |
| 88-74-4 | 2-NITROANILINE | 60 | 65.2 | 20 | | 109 | 68 - 120% |
| 131-11-3 | DIMETHYL PHTHALATE | 60 | 54.6 | 10 | | 91 | 70 - 109% |
| 606-20-2 | 2,6-DINITROTOLUENE | 60 | 60.7 | 10 | | 101 | 69 - 111% |
| 208-96-8 | ACENAPHTHYLENE | 60 | 53.2 | 10 | | 89 | 67 - 108% |
| 99-09-2 | 3-NITROANILINE | 60 | 58.1 | 20 | | 97 | 60 - 124% |
| 83-32-9 | ACENAPHTHENE | 60 | 54.5 | 10 | | 91 | 60 - 108% |
| 51-28-5 | 2,4-DINITROPHENOL | 60 | 61.7 | 20 | | 103 | 55 - 126% |
| 100-02-7 | 4-NITROPHENOL | 60 | 54.9 | 20 | | 91 | 24 - 128% |
| 132-64-9 | DIBENZOFURAN | 60 | 52.3 | 10 | | 87 | 67 - 107% |
| 121-14-2 | 2,4-DINITROTOLUENE | 60 | 62.9 | 10 | | 105 | 46 - 114% |
| 84-66-2 | DIETHYL PHTHALATE | 60 | 55.6 | 10 | | 93 | 71 - 113% |
| 86-73-7 | FLUORENE | 60 | 54.9 | 10 | | 92 | 72 - 106% |
| 7005-72-3 | 4-CHLOROPHENYL PHENYL ETHER | 60 | 52.8 | 10 | | 88 | 69 - 107% |
| 100-01-6 | 4-NITROANILINE | 60 | 63.8 | 20 | | 106 | 64 - 122% |
| 103-33-3 | AZOBENZENE | 60 | 55.4 | 10 | | 92 | 71 - 110% |
| 534-52-1 | 4,6-DINITRO-2-METHYLPHENOL | 60 | 61.5 | 20 | | 103 | 63 - 123% |
| 86-30-6 | N-NITROSODIPHENYLAMINE | 60 | 48.1 | 10 | | 80 | 57 - 102% |
| 101-55-3 | 4-BROMOPHENYL PHENYL ETHER | 60 | 48.8 | 10 | | 81 | 67 - 108% |
| 118-74-1 | HEXACHLOROBENZENE | 60 | 47 | 10 | | 78 | 48 - 115% |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** ALS Environmental -- FC
**Work Order Number:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9LCS

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 02/16/2012
**Date Analyzed:** 02/20/2012
**Prep Method:** SW3520C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14577

**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 |
|---|---|---|---|---|---|---|---|
| 58-90-2 | 2,3,4,6-TETRACHLOROPHENOL | 100 | 87.3 | 10 | | 87 | 67 - 116% |
| 87-86-5 | PENTACHLOROPHENOL | 60 | 50.4 | 20 | | 84 | 40 - 114% |
| 85-01-8 | PHENANTHRENE | 60 | 54.9 | 10 | | 92 | 73 - 108% |
| 120-12-7 | ANTHRACENE | 60 | 54.9 | 10 | | 92 | 72 - 108% |
| 86-74-8 | CARBAZOLE | 60 | 57.5 | 10 | | 96 | 68 - 112% |
| 84-74-2 | DI-N-BUTYL PHTHALATE | 60 | 55 | 10 | | 92 | 71 - 114% |
| 206-44-0 | FLUORANTHENE | 60 | 55.7 | 10 | | 93 | 71 - 111% |
| 129-00-0 | PYRENE | 60 | 53.6 | 10 | | 89 | 60 - 113% |
| 85-68-7 | BUTYL BENZYL PHTHALATE | 60 | 58.7 | 10 | | 98 | 66 - 115% |
| 56-55-3 | BENZO(A)ANTHRACENE | 60 | 52.9 | 10 | | 88 | 69 - 107% |
| 91-94-1 | 3,3'-DICHLOROBENZIDINE | 60 | 49.9 | 10 | | 83 | -8 - 136% |
| 218-01-9 | CHRYSENE | 60 | 54.7 | 10 | | 91 | 69 - 111% |
| 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 60 | 57.2 | 10 | | 95 | 61 - 121% |
| 117-84-0 | DI-N-OCTYL PHTHALATE | 60 | 57.5 | 10 | | 96 | 66 - 119% |
| 205-99-2 | BENZO(B)FLUORANTHENE | 60 | 54.7 | 10 | | 91 | 68 - 110% |
| 207-08-9 | BENZO(K)FLUORANTHENE | 60 | 53.8 | 10 | | 90 | 68 - 110% |
| 50-32-8 | BENZO(A)PYRENE | 60 | 50.7 | 10 | | 84 | 62 - 104% |
| 193-39-5 | INDENO(1,2,3-CD)PYRENE | 60 | 49.4 | 10 | | 82 | 57 - 121% |
| 53-70-3 | DIBENZO(A,H)ANTHRACENE | 60 | 50.6 | 10 | | 84 | 60 - 124% |
| 191-24-2 | BENZO(G,H,I)PERYLENE | 60 | 46.4 | 10 | | 77 | 52 - 124% |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** ALS Environmental -- FC
**Work Order Number:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9LCSD

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 02/16/2012
**Date Analyzed:** 02/20/2012
**Prep Method:** SW3520C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14578

**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 |
|---|---|---|---|---|---|---|---|---|
| 123-91-1 | 1,4-DIOXANE | 59.9 | 46.7 | 10 | | 78 | 50 | 6 |
| 110-86-1 | PYRIDINE | 60 | 41.8 | 10 | | 70 | 20 | 6 |
| 62-75-9 | N-NITROSODIMETHYLAMINE | 60 | 49.3 | 10 | | 82 | 20 | 0 |
| 62-53-3 | ANILINE | 60 | 49.7 | 10 | | 83 | 20 | 2 |
| 108-95-2 | PHENOL | 60 | 49.8 | 10 | | 83 | 20 | 0 |
| 111-44-4 | BIS(2-CHLOROETHYL)ETHER | 60 | 51.1 | 10 | | 85 | 20 | 1 |
| 95-57-8 | 2-CHLOROPHENOL | 60 | 48.2 | 10 | | 80 | 20 | 0 |
| 541-73-1 | 1,3-DICHLOROBENZENE | 60 | 45.1 | 10 | | 75 | 20 | 1 |
| 106-46-7 | 1,4-DICHLOROBENZENE | 60 | 45.7 | 10 | | 76 | 20 | 1 |
| 95-50-1 | 1,2-DICHLOROBENZENE | 60 | 46.6 | 10 | | 78 | 20 | 0 |
| 100-51-6 | BENZYL ALCOHOL | 60 | 48.9 | 10 | | 82 | 20 | 2 |
| 108-60-1 | BIS(2-CHLOROISOPROPYL)ETHER | 60 | 52 | 10 | | 87 | 20 | 1 |
| 95-48-7 | 2-METHYLPHENOL | 60 | 48.3 | 10 | | 81 | 20 | 0 |
| 621-64-7 | N-NITROSO-DI-N-PROPYLAMINE | 60 | 53.6 | 10 | | 89 | 20 | 1 |
| 108-39-4 | 3+4-METHYLPHENOL | 60 | 47.5 | 10 | | 79 | 20 | 1 |
| 67-72-1 | HEXACHLOROETHANE | 60 | 47.2 | 10 | | 79 | 20 | 1 |
| 98-95-3 | NITROBENZENE | 60 | 53.8 | 10 | | 90 | 20 | 2 |
| 78-59-1 | ISOPHORONE | 60 | 50.2 | 10 | | 84 | 20 | 0 |
| 88-75-5 | 2-NITROPHENOL | 60 | 57.2 | 10 | | 95 | 20 | 1 |
| 105-67-9 | 2,4-DIMETHYLPHENOL | 60 | 47.8 | 10 | | 80 | 20 | 1 |
| 111-91-1 | BIS(2-CHLOROETHOXY)METHANE | 60 | 50.6 | 10 | | 84 | 20 | 2 |
| 120-83-2 | 2,4-DICHLOROPHENOL | 60 | 49.9 | 10 | | 83 | 20 | 0 |
| 65-85-0 | BENZOIC ACID | 100 | 56.9 | 50 | | 57 | 20 | 5 |
| 120-82-1 | 1,2,4-TRICHLOROBENZENE | 60 | 42.2 | 10 | | 70 | 20 | 0 |
| 91-20-3 | NAPHTHALENE | 60 | 49.1 | 10 | | 82 | 20 | 1 |
| 106-47-8 | 4-CHLOROANILINE | 60 | 50.1 | 10 | | 84 | 20 | 0 |
| 87-68-3 | HEXACHLOROBUTADIENE | 60 | 43.1 | 10 | | 72 | 20 | 0 |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** ALS Environmental -- FC
**Work Order Number:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9LCSD

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 02/16/2012
**Date Analyzed:** 02/20/2012
**Prep Method:** SW3520C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14578

**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 |
|---|---|---|---|---|---|---|---|---|
| 59-50-7 | 4-CHLORO-3-METHYLPHENOL | 60 | 54.7 | 10 | | 91 | 20 | 2 |
| 91-57-6 | 2-METHYLNAPHTHALENE | 60 | 47.9 | 10 | | 80 | 20 | 1 |
| 90-12-0 | 1-METHYLNAPHTHALENE | 60 | 48.7 | 10 | | 81 | 20 | 2 |
| 77-47-4 | HEXACHLOROCYCLOPENTADIENE | 60 | 14.2 | 10 | | 24 | 20 | 12 |
| 88-06-2 | 2,4,6-TRICHLOROPHENOL | 60 | 51.5 | 10 | | 86 | 20 | 1 |
| 95-95-4 | 2,4,5-TRICHLOROPHENOL | 60 | 53.2 | 10 | | 89 | 20 | 1 |
| 91-58-7 | 2-CHLORONAPHTHALENE | 60 | 50.6 | 10 | | 84 | 20 | 0 |
| 88-74-4 | 2-NITROANILINE | 60 | 63.6 | 20 | | 106 | 20 | 2 |
| 131-11-3 | DIMETHYL PHTHALATE | 60 | 54 | 10 | | 90 | 20 | 1 |
| 606-20-2 | 2,6-DINITROTOLUENE | 60 | 59.9 | 10 | | 100 | 20 | 1 |
| 208-96-8 | ACENAPHTHYLENE | 60 | 52.9 | 10 | | 88 | 20 | 1 |
| 99-09-2 | 3-NITROANILINE | 60 | 56.6 | 20 | | 94 | 20 | 3 |
| 83-32-9 | ACENAPHTHENE | 60 | 54 | 10 | | 90 | 20 | 1 |
| 51-28-5 | 2,4-DINITROPHENOL | 60 | 59.3 | 20 | | 99 | 20 | 4 |
| 100-02-7 | 4-NITROPHENOL | 60 | 53.5 | 20 | | 89 | 20 | 2 |
| 132-64-9 | DIBENZOFURAN | 60 | 51.7 | 10 | | 86 | 20 | 1 |
| 121-14-2 | 2,4-DINITROTOLUENE | 60 | 61.4 | 10 | | 102 | 20 | 2 |
| 84-66-2 | DIETHYL PHTHALATE | 60 | 53.7 | 10 | | 90 | 20 | 3 |
| 86-73-7 | FLUORENE | 60 | 53.9 | 10 | | 90 | 20 | 2 |
| 7005-72-3 | 4-CHLOROPHENYL PHENYL ETHER | 60 | 51.5 | 10 | | 86 | 20 | 2 |
| 100-01-6 | 4-NITROANILINE | 60 | 59.7 | 20 | | 99 | 20 | 7 |
| 103-33-3 | AZOBENZENE | 60 | 54.2 | 10 | | 90 | 20 | 2 |
| 534-52-1 | 4,6-DINITRO-2-METHYLPHENOL | 60 | 58.6 | 20 | | 98 | 20 | 5 |
| 86-30-6 | N-NITROSODIPHENYLAMINE | 60 | 45.4 | 10 | | 76 | 20 | 6 |
| 101-55-3 | 4-BROMOPHENYL PHENYL ETHER | 60 | 48.6 | 10 | | 81 | 20 | 1 |
| 118-74-1 | HEXACHLOROBENZENE | 60 | 46.2 | 10 | | 77 | 20 | 2 |
| 58-90-2 | 2,3,4,6-TETRACHLOROPHENOL | 100 | 85.5 | 10 | | 86 | 20 | 2 |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** ALS Environmental -- FC
**Work Order Number:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**ClientProject ID:** Complaint 200339399

**Lab ID:** EX120216-9LCSD

**Sample Matrix:** WATER
**% Moisture:** N/A
**Date Collected:** N/A
**Date Extracted:** 02/16/2012
**Date Analyzed:** 02/20/2012
**Prep Method:** SW3520C

**Prep Batch:** EX120216-9
**QCBatchID:** EX120216-9-1
**Run ID:** SV120220-2
**Cleanup:** NONE
**Basis:** N/A
**File Name:** P14578

**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 |
|---|---|---|---|---|---|---|---|---|
| 87-86-5 | PENTACHLOROPHENOL | 60 | 49.1 | 20 | | 82 | 20 | 3 |
| 85-01-8 | PHENANTHRENE | 60 | 54.1 | 10 | | 90 | 20 | 1 |
| 120-12-7 | ANTHRACENE | 60 | 54.2 | 10 | | 90 | 20 | 1 |
| 86-74-8 | CARBAZOLE | 60 | 56.7 | 10 | | 94 | 20 | 1 |
| 84-74-2 | DI-N-BUTYL PHTHALATE | 60 | 55 | 10 | | 92 | 20 | 0 |
| 206-44-0 | FLUORANTHENE | 60 | 54.6 | 10 | | 91 | 20 | 2 |
| 129-00-0 | PYRENE | 60 | 55.3 | 10 | | 92 | 20 | 3 |
| 85-68-7 | BUTYL BENZYL PHTHALATE | 60 | 61 | 10 | | 102 | 20 | 4 |
| 56-55-3 | BENZO(A)ANTHRACENE | 60 | 52.7 | 10 | | 88 | 20 | 0 |
| 91-94-1 | 3,3'-DICHLOROBENZIDINE | 60 | 47.2 | 10 | | 79 | 20 | 6 |
| 218-01-9 | CHRYSENE | 60 | 54.1 | 10 | | 90 | 20 | 1 |
| 117-81-7 | BIS(2-ETHYLHEXYL)PHTHALATE | 60 | 57.8 | 10 | | 96 | 20 | 1 |
| 117-84-0 | DI-N-OCTYL PHTHALATE | 60 | 56.4 | 10 | | 94 | 20 | 2 |
| 205-99-2 | BENZO(B)FLUORANTHENE | 60 | 53.4 | 10 | | 89 | 20 | 2 |
| 207-08-9 | BENZO(K)FLUORANTHENE | 60 | 56.7 | 10 | | 94 | 20 | 5 |
| 50-32-8 | BENZO(A)PYRENE | 60 | 50.1 | 10 | | 83 | 20 | 1 |
| 193-39-5 | INDENO(1,2,3-CD)PYRENE | 60 | 48.9 | 10 | | 82 | 20 | 1 |
| 53-70-3 | DIBENZO(A,H)ANTHRACENE | 60 | 49.9 | 10 | | 83 | 20 | 1 |
| 191-24-2 | BENZO(G,H,I)PERYLENE | 60 | 45.7 | 10 | | 76 | 20 | 1 |

**Data Package ID:** *SV1202195-1*

# GC/MS Semi-volatiles

## Method SW8270D

## Laboratory Control Sample and Laboratory Control Sample Duplicate

**Lab Name:** **ALS Environmental -- FC**
**Work Order Number:** 1202195
**Client Name:** Colorado Oil & Gas Conservation Commission
**ClientProject ID:** Complaint 200339399

## 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 | 77 | | 75 | | 42 - 117 |
| 321-60-8 | 2-FLUOROBIPHENYL | 50 | 87 | | 86 | | 55 - 108 |
| 367-12-4 | 2-FLUOROPHENOL | 75 | 84 | | 82 | | 46 - 105 |
| 4165-60-0 | NITROBENZENE-D5 | 50 | 94 | | 93 | | 53 - 111 |
| 4165-62-2 | PHENOL-D5 | 75 | 86 | | 85 | | 50 - 109 |
| 1718-51-0 | TERPHENYL-D14 | 50 | 85 | | 87 | | 34 - 139 |

**Data Package ID:** *SV1202195-1*

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14576.D
Acq On : 20 Feb 2012 2:02 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9MB
Misc : WATER EX120216-9
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 14:26:42 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 6.498 | 152 | 450223 | 40.00 | ng/ul | 0.00 |
| 25) Naphthalene-d8 | 7.876 | 136 | 1630201 | 40.00 | ng/ul | 0.00 |
| 42) Acenaphthene-d10 | 9.513 | 164 | 785210 | 40.00 | ng/ul | 0.00 |
| 70) Phenanthrene-d10 | 10.813 | 188 | 1280955 | 40.00 | ng/ul | 0.00 |
| 80) Chrysene-d12 | 13.105 | 240 | 1451146 | 40.00 | ng/ul | 0.00 |
| 91) Perylene-d12 | 14.695 | 264 | 1214815 | 40.00 | ng/ul | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 5) 2-Fluorophenol | 4.703 | 112 | 749912 | 56.31 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 46 - 105 | | Recovery = 75.08% | | | |
| 6) 2-Chlorophenol-d4 | 6.218 | 132 | 785954 | 58.67 | ng/ul | -0.01 |
| Spiked Amount 75.000 | Range 33 - 110 | | Recovery = 78.23% | | | |
| 7) Phenol-d5 | 5.979 | 99 | 982658 | 58.07 | ng/ul | -0.01 |
| Spiked Amount 75.000 | Range 50 - 109 | | Recovery = 77.43% | | | |
| 15) 1,2-Dichlorobenzene-d4 | 6.681 | 152 | 363102 | 37.93 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 16 - 110 | | Recovery = 75.86% | | | |
| 26) Nitrobenzene-d5 | 7.125 | 82 | 528962 | 43.40 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 53 - 111 | | Recovery = 86.80% | | | |
| 46) 2-Fluorobiphenyl | 8.876 | 172 | 1070266 | 41.89 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 55 - 108 | | Recovery = 83.78% | | | |
| 71) 2,4,6-Tribromophenol | 10.199 | 330 | 148358 | 52.42 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 42 - 117 | | Recovery = 69.89% | | | |
| 83) p-Terphenyl-d14 | 12.136 | 244 | 1190217 | 43.43 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 34 - 139 | | Recovery = 86.86% | | | |

| Target Compounds | Qvalue |
|---|---|

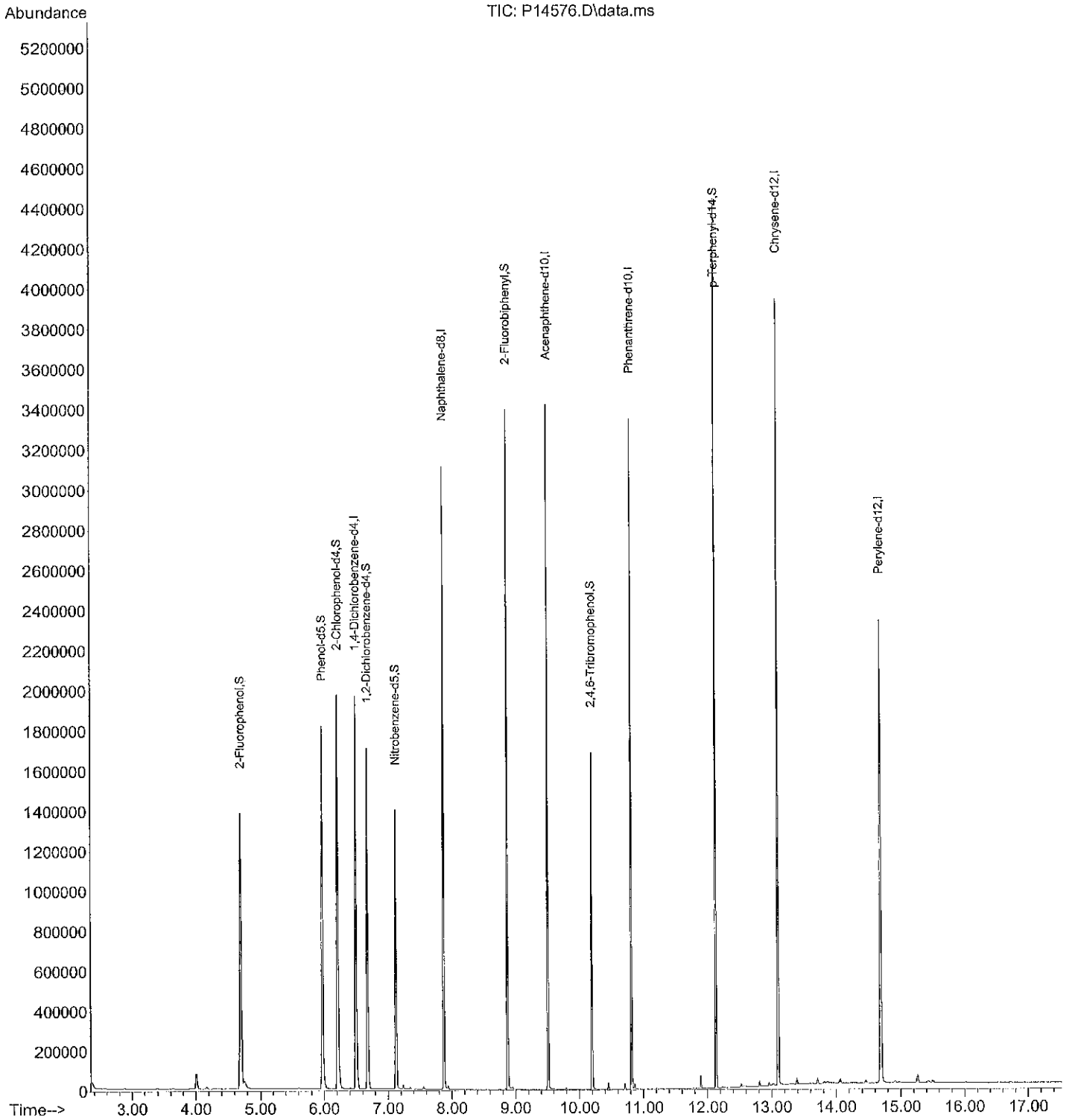
(#) = qualifier out of range (m) = manual integration (+) = signals summed

EB 2/20/12

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14576.D
Acq On : 20 Feb 2012 2:02 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9MB
Misc : WATER EX120216-9
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Feb 20 14:26:42 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\022012\\
Data File : P14576.D
Acq On : 20 Feb 2012 2:02 pmm
Operator : EB SOP506 Rev.166
Sample : EX120216-9MB
Misc : WATER EX120216-9
ALS Vial : 3 Sample Multiplier: 11

EB 2/21/12

Quant Method : C:\msdchem\1\METHODS\020912S2.MM
Quant Title :

TIC Library : C:\Database\NIST05.LL
TIC Integration Parameters: rteint.pp

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14577.D
Acq On : 20 Feb 2012 2:26 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCS
Misc : WATER EX120216-9
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 14:48:25 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 6.500 | 152 | 437981 | 40.00 | ng/ul | 0.00 |
| 25) Naphthalene-d8 | 7.879 | 136 | 1573955 | 40.00 | ng/ul | 0.00 |
| 42) Acenaphthene-d10 | 9.515 | 164 | 774490 | 40.00 | ng/ul | 0.00 |
| 70) Phenanthrene-d10 | 10.816 | 188 | 1393470 | 40.00 | ng/ul | 0.00 |
| 80) Chrysene-d12 | 13.110 | 240 | 1535788 | 40.00 | ng/ul | 0.00 |
| 91) Perylene-d12 | 14.700 | 264 | 1363010 | 40.00 | ng/ul | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 5) 2-Fluorophenol | 4.703 | 112 | 818523 | 63.19 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 46 - 105 | | Recovery = 84.25% | | | |
| 6) 2-Chlorophenol-d4 | 6.224 | 132 | 836427 | 64.18 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 33 - 110 | | Recovery = 85.57% | | | |
| 7) Phenol-d5 | 5.988 | 99 | 1061775 | 64.50 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 50 - 109 | | Recovery = 86.00% | | | |
| 15) 1,2-Dichlorobenzene-d4 | 6.684 | 152 | 386276 | 41.48 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 16 - 110 | | Recovery = 82.96% | | | |
| 26) Nitrobenzene-d5 | 7.131 | 82 | 550772 | 46.81 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 53 - 111 | | Recovery = 93.62% | | | |
| 46) 2-Fluorobiphenyl | 8.879 | 172 | 1094403 | 43.42 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 55 - 108 | | Recovery = 86.84% | | | |
| 71) 2,4,6-Tribromophenol | 10.201 | 330 | 177487 | 57.65 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 42 - 117 | | Recovery = 76.87% | | | |
| 83) p-Terphenyl-d14 | 12.136 | 244 | 1231428 | 42.45 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 34 - 139 | | Recovery = 84.90% | | | |
| **Target Compounds** | | | | | | Qvalue |
| 2) 1,4-Dioxane | 2.560 | 88 | 291744m | 49.64 | ng/ul | |
| 3) n-Nitrosodimethylamine | 2.989 | 74 | 418009m | 49.39 | ng/ul | |
| 4) Pyridine | 3.054 | 79 | 648588m | 44.18 | ng/ul | |
| 8) Phenol | 6.007 | 94 | 826425 | 49.79 | ng/ul# | 32 |
| 9) Aniline | 6.109 | 93 | 1028357 | 48.50 | ng/ul# | 31 |
| 10) Bis(2-chloroethyl)ether | 6.159 | 93 | 641426 | 50.72 | ng/ul# | 96 |
| 11) Tetramethylurea | 6.246 | 72 | 10533 | N.D. | | |
| 12) 2-Chlorophenol | 6.246 | 128 | 679556 | 48.03 | ng/ul | 90 |
| 13) 1,3-Dichlorobenzene | 6.435 | 146 | 739839 | 45.35 | ng/ul | 94 |
| 14) 1,4-Dichlorobenzene | 6.522 | 146 | 731515 | 45.42 | ng/ul# | 93 |
| 16) Benzyl Alcohol | 6.640 | 108 | 413099 | 47.75 | ng/ul# | 61 |
| 17) 1,2-Dichlorobenzene | 6.699 | 146 | 691466 | 46.41 | ng/ul | 94 |
| 18) 2-Methylphenol | 6.739 | 107 | 520156 | 48.07 | ng/ul# | 68 |
| 19) Bis(2-Chloroisopropyl)... | 6.783 | 45 | 750770 | 51.55 | ng/ul# | 46 |
| 20) 3+4-Methylphenol | 6.916 | 108 | 622810 | 47.10 | ng/ul# | 34 |
| 21) n-Nitroso-di-n-propyla... | 6.944 | 70 | 438826 | 53.18 | ng/ul# | 89 |
| 22) N-Methylaniline | 0.000 | 106 | 0 | N.D. | | |
| 23) Hexachloroethane | 7.081 | 117 | 266197 | 47.49 | ng/ul | 90 |
| 24) N,N-Dimethylaniline | 0.000 | 120 | 0 | N.D. | | |
| 27) Nitrobenzene | 7.152 | 123 | 329584 | 52.65 | ng/ul# | 26 |
| 28) Isophorone | 7.395 | 82 | 1121212 | 50.02 | ng/ul# | 92 |
| 29) n-Ethylaniline | 7.469 | 106 | 1307 | N.D. | | |
| 30) 2-Nitrophenol | 7.481 | 139 | 361793 | 56.38 | ng/ul# | 73 |
| 31) 2,4-Dimethylphenol | 7.485 | 107 | 547732 | 47.49 | ng/ul# | 38 |
| 32) Bis(2-Chloroethoxy)met... | 7.590 | 93 | 699355 | 49.78 | ng/ul | 99 |
| 33) Benzoic acid | 7.578 | 105 | 317687 | 60.12 | ng/ul# | 52 |

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14577.D
Acq On : 20 Feb 2012 2:26 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCS
Misc : WATER EX120216-9
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 14:48:25 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 34) 2,4-Dichlorophenol | 7.717 | 162 | 538248 | 49.86 ng/ul | 98 |
| 35) 1,2,4-Trichlorobenzene | 7.811 | 180 | 545059 | 42.03 ng/ul | 98 |
| 36) Naphthalene | 7.901 | 128 | 1847507 | 48.51 ng/ul | 99 |
| 37) 4-Chloroaniline | 7.938 | 127 | 771031 | 50.22 ng/ul# | 88 |
| 38) Hexachlorobutadiene | 7.994 | 225 | 293253 | 43.01 ng/ul | 99 |
| 39) 4-Chloro-3-methylphenol | 8.366 | 107 | 497979 | 53.67 ng/ul# | 80 |
| 40) 2-Methylnaphthalene | 8.559 | 142 | 1192594 | 47.31 ng/ul# | 87 |
| 41) 1-Methylnaphthalene | 8.655 | 142 | 1121674 | 47.54 ng/ul# | 89 |
| 43) Hexachlorocyclopentadiene | 8.686 | 237 | 94601 | 16.00 ng/ul# | 97 |
| 44) 2,4,6-Trichlorophenol | 8.804 | 196 | 369293 | 51.94 ng/ul# | 91 |
| 45) 2,4,5-Trichlorophenol | 8.838 | 196 | 399290 | 53.93 ng/ul# | 94 |
| 47) 2-Chloronaphthalene | 9.015 | 162 | 1094199 | 50.51 ng/ul | 93 |
| 48) 2-Nitroaniline | 9.093 | 65 | 308253 | 65.16 ng/ul# | 74 |
| 49) 1,4-Dinitrobenzene | 9.214 | 168 | 204735 | 60.51 ng/ul | 90 |
| 50) Dimethylphthalate | 9.226 | 163 | 1224991 | 54.56 ng/ul | 100 |
| 51) 1,3-Dinitrobenzene | 9.279 | 168 | 230870 | 61.92 ng/ul# | 61 |
| 52) 2,6-Dinitrotoluene | 9.298 | 165 | 303702 | 60.70 ng/ul# | 73 |
| 53) 1,2-Dinitrobenzene | 9.360 | 168 | 146476 | 59.90 ng/ul# | 55 |
| 54) Acenaphthylene | 9.397 | 152 | 1755296 | 53.18 ng/ul# | 98 |
| 55) 3-Nitroaniline | 9.459 | 138 | 306997 | 58.11 ng/ul# | 81 |
| 56) Acenaphthene | 9.546 | 154 | 1104623 | 54.48 ng/ul | 99 |
| 57) 2,4-Dinitrophenol | 9.543 | 184 | 171713 | 61.68 ng/ul# | 74 |
| 58) 4-Nitrophenol | 9.559 | 109 | 124035 | 54.88 ng/ul# | 2 |
| 59) 2,4-Dinitrotoluene | 9.655 | 165 | 403189 | 62.91 ng/ul# | 60 |
| 60) Dibenzofuran | 9.692 | 168 | 1458858 | 52.33 ng/ul | 88 |
| 61) 2,3,5,6-Tetrachlorophenol | 9.748 | 232 | 505439 | 90.17 ng/ul | 94 |
| 62) 2,3,4,6-Tetrachlorophenol | 9.785 | 232 | 493408 | 87.27 ng/ul# | 93 |
| 63) Diethylphthalate | 9.826 | 149 | 1227262 | 55.62 ng/ul | 99 |
| 64) 4-Chlorophenyl phenyl ... | 9.962 | 204 | 602832 | 52.77 ng/ul | 93 |
| 65) Fluorene | 9.996 | 166 | 1263786 | 54.92 ng/ul | 100 |
| 66) 4-Nitroaniline | 9.999 | 138 | 321781 | 63.77 ng/ul# | 54 |
| 67) 4,6-Dinitro-2-methylph... | 10.009 | 198 | 242281 | 61.50 ng/ul | 96 |
| 68) n-Nitrosodiphenylamine | 10.065 | 169 | 975813 | 48.05 ng/ul | 99 |
| 69) Azobenzene | 10.105 | 77 | 1067027 | 55.43 ng/ul# | 82 |
| 72) 4-Bromophenyl phenyl e... | 10.394 | 248 | 345495 | 48.85 ng/ul | 89 |
| 73) Hexachlorobenzene | 10.468 | 284 | 359077 | 47.02 ng/ul# | 85 |
| 74) Pentachlorophenol | 10.627 | 266 | 263146 | 50.41 ng/ul | 96 |
| 75) Phenanthrene | 10.838 | 178 | 1889662 | 54.93 ng/ul | 98 |
| 76) Anthracene | 10.881 | 178 | 1920704 | 54.92 ng/ul | 99 |
| 77) Carbazole | 11.002 | 167 | 1890634 | 57.49 ng/ul | 96 |
| 78) Di-n-butylphthalate | 11.210 | 149 | 2407533 | 55.01 ng/ul# | 96 |
| 79) Fluoranthene | 11.859 | 202 | 2370643 | 55.73 ng/ul# | 91 |
| 81) Benzidine | 11.937 | 184 | 1566163 | 70.52 ng/ul# | 96 |
| 82) Pyrene | 12.067 | 202 | 2425556 | 53.55 ng/ul# | 95 |
| 84) Butylbenzylphthalate | 12.508 | 149 | 974482 | 58.70 ng/ul | 91 |
| 85) Bis(2-ethylhexyl) adipate | 12.511 | 129 | 832492 | 57.02 ng/ul | 89 |
| 86) Bis(2-ethylhexyl)phtha... | 12.958 | 149 | 1523699 | 57.17 ng/ul | 98 |
| 87) 3,3'-Dichlorobenzidine | 13.033 | 252 | 741332 | 49.95 ng/ul# | 98 |
| 88) Benzo[a]anthracene | 13.098 | 228 | 2251146 | 52.89 ng/ul | 96 |
| 89) Chrysene | 13.138 | 228 | 2149643 | 54.65 ng/ul | 99 |
| 90) Di-n-octylphthalate | 13.561 | 149 | 2523531 | 57.46 ng/ul | 98 |
| 92) Benzo[b]fluoranthene | 14.213 | 252 | 2285200 | 54.68 ng/ul# | 92 |

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14577.D
Acq On : 20 Feb 2012 2:26 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCS
Misc : WATER EX120216-9
ALS Vial : 4 Sample Multiplier: 1

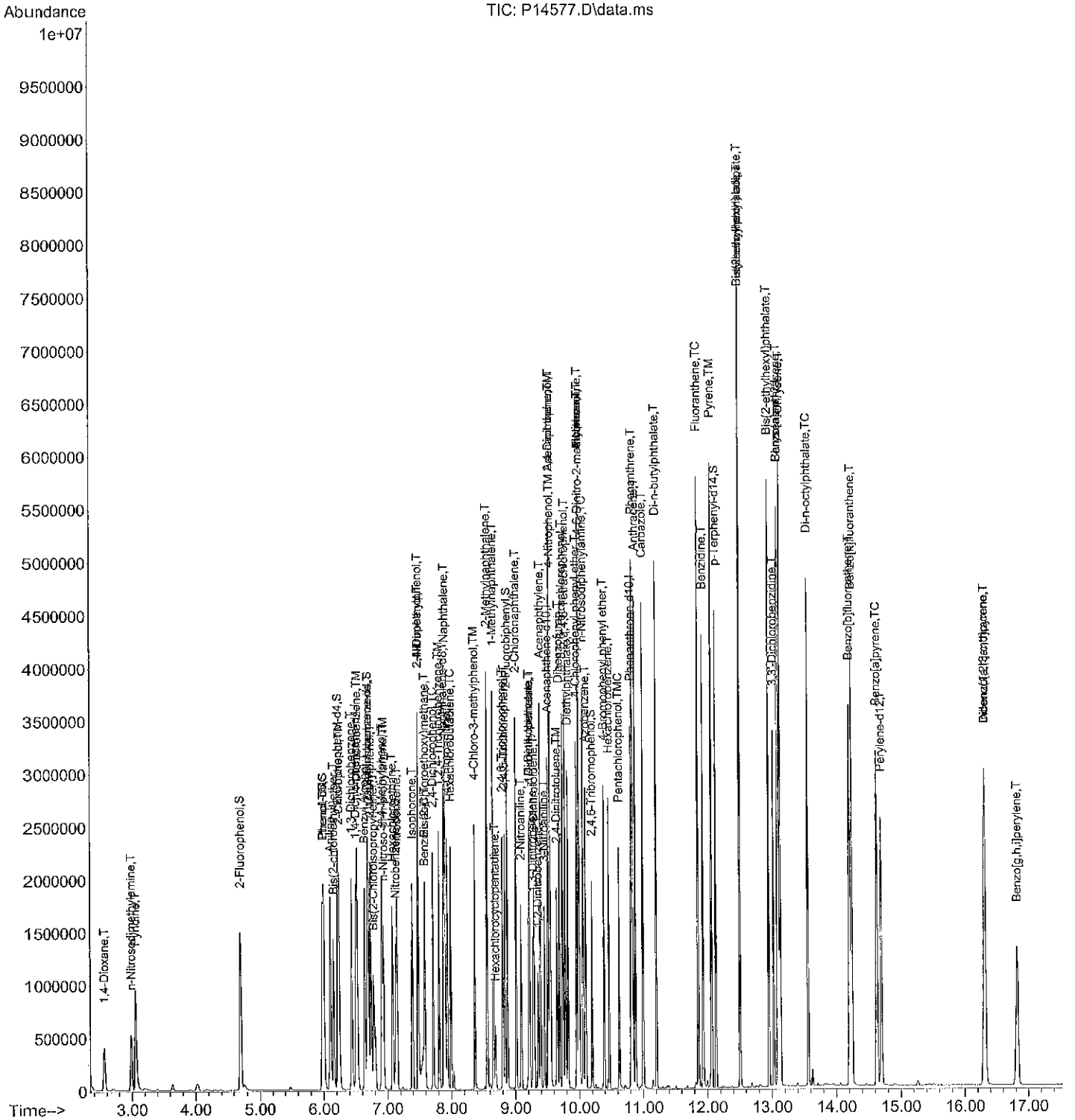
Quant Time: Feb 20 14:48:25 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 93) Benzo[k]fluoranthene | 14.247 | 252 | 1986078 | 53.75 | ng/ul# | 91 |
| 94) Benzo[a]pyrene | 14.635 | 252 | 1848649 | 50.68 | ng/ul# | 92 |
| 95) Indeno(1,2,3-c,d)pyrene | 16.327 | 276 | 1520662 | 49.37 | ng/ul# | 79 |
| 96) Dibenzo[a,h]anthracene | 16.324 | 278 | 1300156 | 50.57 | ng/ul# | 73 |
| 97) Benzo[g,h,i]perylene | 16.830 | 276 | 1135016 | 46.36 | ng/ul# | 81 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14577.D
Acq On : 20 Feb 2012 2:26 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCS
Misc : WATER EX120216-9
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Feb 20 14:48:25 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14578.D
Acq On : 20 Feb 2012 2:51 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCSD
Misc : WATER EX120216-9
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:12:21 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 6.501 | 152 | 443164 | 40.00 | ng/ul | 0.00 |
| 25) Naphthalene-d8 | 7.879 | 136 | 1585011 | 40.00 | ng/ul | 0.00 |
| 42) Acenaphthene-d10 | 9.516 | 164 | 790388 | 40.00 | ng/ul | 0.00 |
| 70) Phenanthrene-d10 | 10.817 | 188 | 1395963 | 40.00 | ng/ul | 0.00 |
| 80) Chrysene-d12 | 13.111 | 240 | 1461912 | 40.00 | ng/ul | 0.00 |
| 91) Perylene-d12 | 14.701 | 264 | 1211971 | 40.00 | ng/ul | 0.00 |
| **System Monitoring Compounds** | | | | | | |
| 5) 2-Fluorophenol | 4.706 | 112 | 810886 | 61.86 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 46 - 105 | | Recovery = 82.48% | | | |
| 6) 2-Chlorophenol-d4 | 6.225 | 132 | 834397 | 63.28 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 33 - 110 | | Recovery = 84.37% | | | |
| 7) Phenol-d5 | 5.989 | 99 | 1059376 | 63.60 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 50 - 109 | | Recovery = 84.80% | | | |
| 15) 1,2-Dichlorobenzene-d4 | 6.681 | 152 | 383410 | 40.69 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 16 - 110 | | Recovery = 81.38% | | | |
| 26) Nitrobenzene-d5 | 7.128 | 82 | 551823 | 46.57 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 53 - 111 | | Recovery = 93.14% | | | |
| 46) 2-Fluorobiphenyl | 8.876 | 172 | 1103576 | 42.91 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 55 - 108 | | Recovery = 85.82% | | | |
| 71) 2,4,6-Tribromophenol | 10.202 | 330 | 174286 | 56.51 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 42 - 117 | | Recovery = 75.35% | | | |
| 83) p-Terphenyl-d14 | 12.133 | 244 | 1198220 | 43.40 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 34 - 139 | | Recovery = 86.80% | | | |

| Target Compounds | | | | | | Qvalue |
|---|---|---|---|---|---|---|
| 2) 1,4-Dioxane | 2.561 | 88 | 277883m | 46.73 | ng/ul | |
| 3) n-Nitrosodimethylamine | 2.993 | 74 | 422086 | 49.29 | ng/ul# | 28 |
| 4) Pyridine | 3.055 | 79 | 620420m | 41.77 | ng/ul | |
| 8) Phenol | 6.007 | 94 | 835697 | 49.76 | ng/ul# | 32 |
| 9) Aniline | 6.107 | 93 | 1065577 | 49.67 | ng/ul# | 31 |
| 10) Bis(2-chloroethyl)ether | 6.159 | 93 | 653378 | 51.07 | ng/ul# | 95 |
| 11) Tetramethylurea | 6.243 | 72 | 10342 | N.D. | | |
| 12) 2-Chlorophenol | 6.243 | 128 | 689519 | 48.17 | ng/ul | 90 |
| 13) 1,3-Dichlorobenzene | 6.433 | 146 | 743913 | 45.06 | ng/ul | 94 |
| 14) 1,4-Dichlorobenzene | 6.523 | 146 | 745533 | 45.75 | ng/ul# | 93 |
| 16) Benzyl Alcohol | 6.641 | 108 | 428206 | 48.92 | ng/ul# | 60 |
| 17) 1,2-Dichlorobenzene | 6.700 | 146 | 703146 | 46.64 | ng/ul | 94 |
| 18) 2-Methylphenol | 6.740 | 107 | 528942 | 48.31 | ng/ul# | 67 |
| 19) Bis(2-Chloroisopropyl)... | 6.784 | 45 | 766491 | 52.02 | ng/ul# | 45 |
| 20) 3+4-Methylphenol | 6.914 | 108 | 635982 | 47.54 | ng/ul# | 34 |
| 21) n-Nitroso-di-n-propyla... | 6.942 | 70 | 447914 | 53.64 | ng/ul# | 89 |
| 22) N-Methylaniline | 0.000 | 106 | 0 | N.D. | | |
| 23) Hexachloroethane | 7.078 | 117 | 267909 | 47.24 | ng/ul | 90 |
| 24) N,N-Dimethylaniline | 0.000 | 120 | 0 | N.D. | | |
| 27) Nitrobenzene | 7.150 | 123 | 339046 | 53.78 | ng/ul# | 24 |
| 28) Isophorone | 7.392 | 82 | 1132336 | 50.17 | ng/ul# | 92 |
| 29) n-Ethylaniline | 7.594 | 106 | 34171 | N.D. | | |
| 30) 2-Nitrophenol | 7.482 | 139 | 369428 | 57.17 | ng/ul# | 73 |
| 31) 2,4-Dimethylphenol | 7.485 | 107 | 555214 | 47.80 | ng/ul# | 40 |
| 32) Bis(2-Chloroethoxy)met... | 7.591 | 93 | 715711 | 50.59 | ng/ul | 99 |
| 33) Benzoic acid | 7.575 | 105 | 297977 | 56.91 | ng/ul# | 13 |

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14578.D
Acq On : 20 Feb 2012 2:51 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCSD
Misc : WATER EX120216-9
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:12:21 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 34) 2,4-Dichlorophenol | 7.715 | 162 | 542476 | 49.90 ng/ul | 98 |
| 35) 1,2,4-Trichlorobenzene | 7.811 | 180 | 551622 | 42.24 ng/ul | 98 |
| 36) Naphthalene | 7.901 | 128 | 1881634 | 49.06 ng/ul | 100 |
| 37) 4-Chloroaniline | 7.935 | 127 | 774757 | 50.11 ng/ul# | 88 |
| 38) Hexachlorobutadiene | 7.994 | 225 | 296095 | 43.12 ng/ul | 99 |
| 39) 4-Chloro-3-methylphenol | 8.367 | 107 | 511152 | 54.70 ng/ul# | 81 |
| 40) 2-Methylnaphthalene | 8.559 | 142 | 1215173 | 47.87 ng/ul# | 87 |
| 41) 1-Methylnaphthalene | 8.656 | 142 | 1157988 | 48.74 ng/ul# | 88 |
| 43) Hexachlorocyclopentadiene | 8.687 | 237 | 85949 | 14.25 ng/ul# | 98 |
| 44) 2,4,6-Trichlorophenol | 8.802 | 196 | 373883 | 51.53 ng/ul# | 91 |
| 45) 2,4,5-Trichlorophenol | 8.836 | 196 | 401974 | 53.20 ng/ul# | 94 |
| 47) 2-Chloronaphthalene | 9.013 | 162 | 1119071 | 50.62 ng/ul | 94 |
| 48) 2-Nitroaniline | 9.093 | 65 | 307077 | 63.60 ng/ul# | 73 |
| 49) 1,4-Dinitrobenzene | 9.211 | 168 | 205731 | 59.68 ng/ul | 91 |
| 50) Dimethylphthalate | 9.227 | 163 | 1238294 | 54.05 ng/ul | 100 |
| 51) 1,3-Dinitrobenzene | 9.280 | 168 | 231560 | 60.86 ng/ul# | 61 |
| 52) 2,6-Dinitrotoluene | 9.295 | 165 | 305580 | 59.85 ng/ul# | 73 |
| 53) 1,2-Dinitrobenzene | 9.360 | 168 | 147540 | 59.12 ng/ul# | 53 |
| 54) Acenaphthylene | 9.398 | 152 | 1781381 | 52.88 ng/ul# | 98 |
| 55) 3-Nitroaniline | 9.460 | 138 | 305398 | 56.64 ng/ul# | 80 |
| 56) Acenaphthene | 9.547 | 154 | 1116464 | 53.96 ng/ul | 98 |
| 57) 2,4-Dinitrophenol | 9.544 | 184 | 168420 | 59.28 ng/ul# | 75 |
| 58) 4-Nitrophenol | 9.559 | 109 | 123462 | 53.53 ng/ul# | 4 |
| 59) 2,4-Dinitrotoluene | 9.652 | 165 | 401452 | 61.38 ng/ul# | 61 |
| 60) Dibenzofuran | 9.693 | 168 | 1469886 | 51.67 ng/ul | 87 |
| 61) 2,3,5,6-Tetrachlorophenol | 9.745 | 232 | 503937 | 88.09 ng/ul | 95 |
| 62) 2,3,4,6-Tetrachlorophenol | 9.783 | 232 | 493492 | 85.53 ng/ul# | 93 |
| 63) Diethylphthalate | 9.826 | 149 | 1209478 | 53.71 ng/ul | 99 |
| 64) 4-Chlorophenyl phenyl ... | 9.963 | 204 | 600265 | 51.49 ng/ul | 92 |
| 65) Fluorene | 9.994 | 166 | 1265970 | 53.91 ng/ul | 100 |
| 66) 4-Nitroaniline | 9.997 | 138 | 307337 | 59.68 ng/ul# | 55 |
| 67) 4,6-Dinitro-2-methylph... | 10.009 | 198 | 235701 | 58.63 ng/ul | 96 |
| 68) n-Nitrosodiphenylamine | 10.062 | 169 | 941595 | 45.44 ng/ul | 100 |
| 69) Azobenzene | 10.103 | 77 | 1065386 | 54.23 ng/ul# | 82 |
| 72) 4-Bromophenyl phenyl e... | 10.391 | 248 | 344049 | 48.56 ng/ul | 89 |
| 73) Hexachlorobenzene | 10.469 | 284 | 353101 | 46.16 ng/ul# | 85 |
| 74) Pentachlorophenol | 10.627 | 266 | 256617 | 49.07 ng/ul | 96 |
| 75) Phenanthrene | 10.838 | 178 | 1866305 | 54.15 ng/ul | 98 |
| 76) Anthracene | 10.882 | 178 | 1897736 | 54.17 ng/ul | 99 |
| 77) Carbazole | 11.003 | 167 | 1866396 | 56.65 ng/ul | 96 |
| 78) Di-n-butylphthalate | 11.211 | 149 | 2409610 | 54.96 ng/ul# | 96 |
| 79) Fluoranthene | 11.860 | 202 | 2327010 | 54.61 ng/ul# | 91 |
| 81) Benzidine | 11.934 | 184 | 1476794 | 69.86 ng/ul# | 95 |
| 82) Pyrene | 12.068 | 202 | 2384872 | 55.32 ng/ul# | 95 |
| 84) Butylbenzylphthalate | 12.509 | 149 | 956779 | 61.00 ng/ul | 91 |
| 85) Bis(2-ethylhexyl) adipate | 12.509 | 129 | 816160 | 59.14 ng/ul | 89 |
| 86) Bis(2-ethylhexyl)phtha... | 12.959 | 149 | 1467529 | 57.85 ng/ul | 98 |
| 87) 3,3'-Dichlorobenzidine | 13.030 | 252 | 666900 | 47.21 ng/ul# | 98 |
| 88) Benzo[a]anthracene | 13.096 | 228 | 2136726 | 52.74 ng/ul | 96 |
| 89) Chrysene | 13.136 | 228 | 2025705 | 54.11 ng/ul | 98 |
| 90) Di-n-octylphthalate | 13.561 | 149 | 2357298 | 56.39 ng/ul | 99 |
| 92) Benzo[b]fluoranthene | 14.213 | 252 | 1983238 | 53.37 ng/ul# | 90 |

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14578.D
Acq On : 20 Feb 2012 2:51 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCSD
Misc : WATER EX120216-9
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:12:21 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

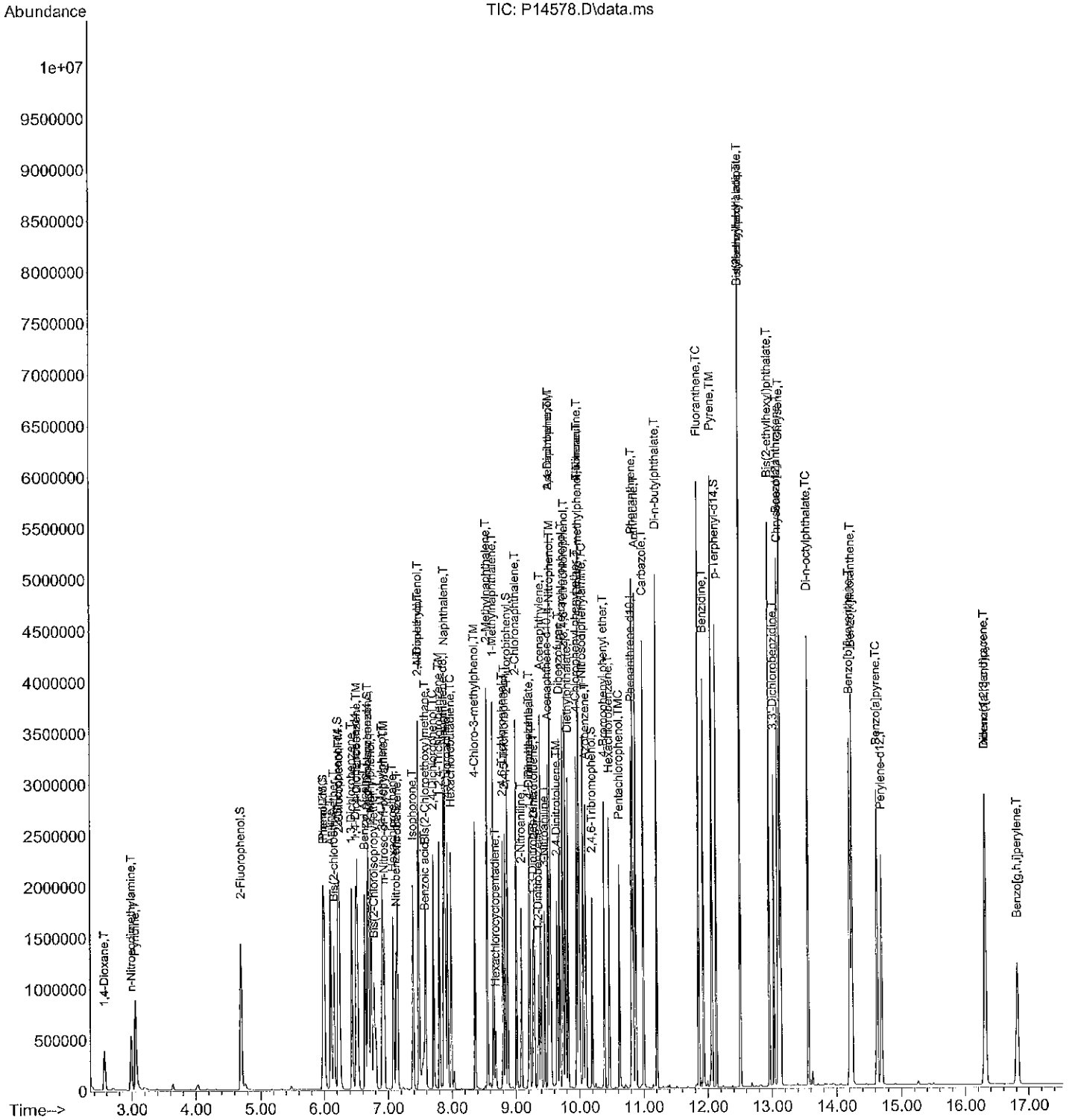
| Internal Standards | R.T. | QIon | Response | Conc Units | Dev(Min) |
|---|---|---|---|---|---|
| 93) Benzo[k]fluoranthene | 14.247 | 252 | 1861438 | 56.66 ng/ul# | 94 |
| 94) Benzo[a]pyrene | 14.632 | 252 | 1623896 | 50.06 ng/ul# | 92 |
| 95) Indeno(1,2,3-c,d)pyrene | 16.321 | 276 | 1339469 | 48.90 ng/ul# | 79 |
| 96) Dibenzo[a,h]anthracene | 16.318 | 278 | 1141945 | 49.95 ng/ul# | 73 |
| 97) Benzo[g,h,i]perylene | 16.821 | 276 | 995373 | 45.73 ng/ul# | 81 |

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14578.D
Acq On : 20 Feb 2012 2:51 pm
Operator : EB SOP506 Rev.16
Sample : EX120216-9LCSD
Misc : WATER EX120216-9
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Feb 20 15:12:21 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration



Quantitation Report (QT Reviewed)

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14580.D
Acq On : 20 Feb 2012 3:40 pm
Operator : EB SOP506 Rev.16
Sample : 1202195-1
Misc : WATER EX120216-9
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 16:03:45 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration

| Internal Standards | R.T. | QIon | Response | Conc | Units | Dev(Min) |
|---|---|---|---|---|---|---|
| 1) 1,4-Dichlorobenzene-d4 | 6.498 | 152 | 461149 | 40.00 | ng/ul | 0.00 |
| 25) Naphthalene-d8 | 7.877 | 136 | 1666595 | 40.00 | ng/ul | 0.00 |
| 42) Acenaphthene-d10 | 9.510 | 164 | 823683 | 40.00 | ng/ul | 0.00 |
| 70) Phenanthrene-d10 | 10.814 | 188 | 1404896 | 40.00 | ng/ul | 0.00 |
| 80) Chrysene-d12 | 13.111 | 240 | 1537847 | 40.00 | ng/ul | 0.00 |
| 91) Perylene-d12 | 14.704 | 264 | 1268927 | 40.00 | ng/ul | 0.01 |
| **System Monitoring Compounds** | | | | | | |
| 5) 2-Fluorophenol | 4.704 | 112 | 865850 | 63.48 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 46 - 105 | | Recovery = 84.64% | | | |
| 6) 2-Chlorophenol-d4 | 6.219 | 132 | 894974 | 65.22 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 33 - 110 | | Recovery = 86.96% | | | |
| 7) Phenol-d5 | 5.980 | 99 | 1101026 | 63.52 | ng/ul | -0.01 |
| Spiked Amount 75.000 | Range 50 - 109 | | Recovery = 84.69% | | | |
| 15) 1,2-Dichlorobenzene-d4 | 6.678 | 152 | 439566 | 44.83 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 16 - 110 | | Recovery = 89.66% | | | |
| 26) Nitrobenzene-d5 | 7.122 | 82 | 617759 | 49.58 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 53 - 111 | | Recovery = 99.16% | | | |
| 46) 2-Fluorobiphenyl | 8.876 | 172 | 1223402 | 45.64 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 55 - 108 | | Recovery = 91.28% | | | |
| 71) 2,4,6-Tribromophenol | 10.199 | 330 | 166636 | 53.68 | ng/ul | 0.00 |
| Spiked Amount 75.000 | Range 42 - 117 | | Recovery = 71.57% | | | |
| 83) p-Terphenyl-d14 | 12.137 | 244 | 1314154 | 45.25 | ng/ul | 0.00 |
| Spiked Amount 50.000 | Range 34 - 139 | | Recovery = 90.50% | | | |

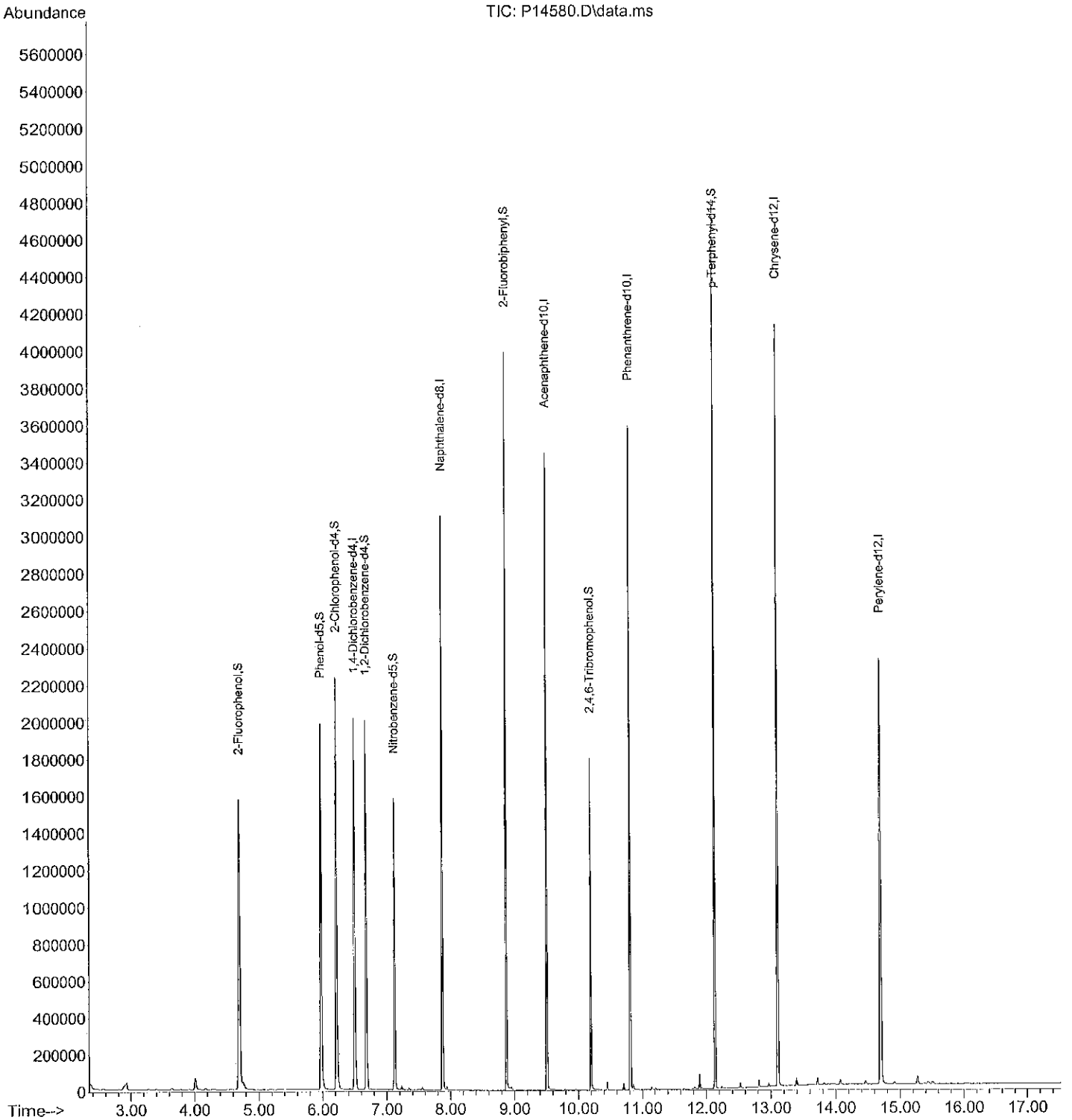
| Target Compounds | Qvalue |
|---|---|

(#) = qualifier out of range (m) = manual integration (+) = signals summed

EB 2/20/12

Data Path : C:\msdchem\1\DATA\022012\
Data File : P14580.D
Acq On : 20 Feb 2012 3:40 pm
Operator : EB SOP506 Rev.16
Sample : 1202195-1
Misc : WATER EX120216-9
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Feb 20 16:03:45 2012
Quant Method : C:\msdchem\1\METHODS\020912S2.M
Quant Title :
QLast Update : Mon Feb 20 12:17:07 2012
Response via : Initial Calibration



Tentatively Identified Compound (LSC) summary

Data Path : C:\msdchem\1\DATA\022012\\
Data File : P14580.D
Acq On : 20 Feb 2012 3:40 pmm
Operator : EB SOP506, Rev.166
Sample : 1202195-11 ab 2/20/12
Misc : WATER EXI20216-9B
ALS Vial : 7 Sample Multiplier: 11

Quant Method : C:\msdchem\1\METHODS\020912S2.MM
Quant Title :

TIC Library : C:\Database\NIST05.LL
TIC Integration Parameters: rteint.pp

| TIC Top Hit name | RT | EstConc | Units | Response | --Internal Standard--- # | RT | Resp | Conc |
|---|---|---|---|---|---|---|---|---|

No Library Search Compounds Detected
**********